



SUPPORT SYSTEMS PRODUCT CATALOGUE



A series of red lines forming a geometric shape on the right side of the page. It starts with a short diagonal line from the top right, followed by a horizontal line extending to the right, and then a long diagonal line extending from the horizontal line down towards the bottom left corner.

SUPPORT SYSTEMS
PRODUCT CATALOGUE



At a Glance

INKA is a leading manufacturer of Strut Systems, Pipe Hangers and Supports, offering full-service engineering assistance for its entire product line. With a customer-oriented approach, INKA excels at collaborating with clients, routinely custom-designing solutions to meet their exacting requirements.

Highly accredited, INKA manufactures in compliance with the requirements of numerous certifications, including FM Approved, UL Listed, TSEK, ISO 9001, ISO 14001, ISO 45001, IATF 16949, and GOST.

Based in Istanbul, INKA's industry-leading components are sought by contractors in more than 40 countries around the world.





**Since
1986**



**Export to
+40
Countries**



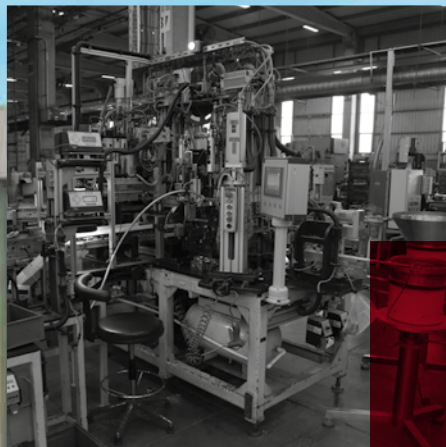
**Wide
Product
Range**



**6.000
Palettes
Warehouse
Capacity**



**Up to
400 t
Eccentric
Press**



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INSTALLATION SYSTEMS

Pipe Hangers & Supports



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Combi Nut M8/M10
and Rubber Lining
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Pipe Clamp with
Combi Nut M8/M10
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Clamp for
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Heavy Duty Pipe Clamp
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Heavy Duty Pipe Clamp
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INSTALLATION SYSTEMS

Pipe Hangers & Supports



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Adjustable Clevis
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Pipe Strap
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Pipe Strap With
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Riser Clamp
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Sliders, Guides, Pipe Rollers, Protection Shields & Saddles



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Sliding Guide
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Heavy Duty
Slide Guide
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Medium Duty Quick
Sliding Support
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Heavy Duty Quick
Sliding Support
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Heavy Duty Slider
Weld or Bolt on Profile
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INSTALLATION SYSTEMS

Sliders, Guides, Pipe Rollers, Protection Shields & Saddles



Sliding Guide
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Adjustable
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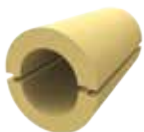


Pipe Covering
Protection Saddle
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Calcium Silicate
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INSTALLATION SYSTEMS

Building Attachments



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INSTALLATION SYSTEMS

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Base Plate
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Iron Socket
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Steel Weldless
Eyenut
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Eye Bolts
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Dual Thread
Screw
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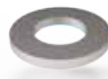
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ISH & ISHR Seismic Cable
Bracing Systems
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MODULAR SUPPORT SYSTEMS

G Profiles, Brackets & Accessories



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IPG4141 - G Profile
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IPG4160 - G Profile
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Technical Data
For G Profile
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IPGD4141
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IPGD4160
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Technical Data For
Double G Profile
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IWKG Single Profile
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IWKDG Double
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IWKGU U Profile
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IPGT4141
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IPGT4160
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MODULAR SUPPORT SYSTEMS

G Profiles, Brackets & Accessories



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IFBLFGD1 Square Washer
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2 Holes Splice Plate
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IFBLFD281
2 Holes Splice Plate
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IFBLFD3122
3 Holes Splice Plate
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IFBLFD31775
3 Holes Swivel Plate
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IFBLFD5235
5 Holes Splice Plate
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IFBLFD41875
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MODULAR SUPPORT SYSTEMS

G Profiles, Brackets & Accessories



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IFBLFD5V1375
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IFBLFD4A135
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IFBLFD5A135
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IFBLFD6A235
6 Holes Tee
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IFBLFD6I85
6 Holes Tee
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IFBL90D24750
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IFBL90D247100
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IFBL90D35590
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MODULAR SUPPORT SYSTEMS

G Profiles, Brackets & Accessories



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IFBL90D35095
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IFBL90D495100
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IFBL90DH490105
4 Holes Corner Angle
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3 Holes Offset Bent
Angle (Right)
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IFBL90D3L4984
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IFBL90D4VL41
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MODULAR SUPPORT SYSTEMS

G Profiles, Brackets & Accessories



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IFBL90D4VL47
4 Holes Corner
Gusset (Left)
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IFBL90D3A90
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Shelf Angle
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IFBL90D4A90
4 Holes Gusseted
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IFBL90D5A47
5 Holes Gusseted
Shelf Angle
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IFBL90D5A41
5 Holes Gusseted
Shelf Angle
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IFBL90D4I55
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IFBL90D5I102
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6 Holes Gusseted
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1 Hole Adjustable
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IFBL90D2S65
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MODULAR SUPPORT SYSTEMS

G Profiles, Brackets & Accessories



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IFBL90D4D5585
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1 Hole Hinged Joint
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IBSMF2
2 Holes Hinged Joint
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IBSMF3M10
1 Hole Joint
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IBSMF3H
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2 Holes Closed
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IFBLACD4
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Angle Connector
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Angle Connector
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Knee Brace
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MODULAR SUPPORT SYSTEMS

G Profiles, Brackets & Accessories



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IFBLCD2D90
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Clevis
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IFBLCD3D135
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IFBLCD4D185
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MODULAR SUPPORT SYSTEMS

G Profiles, Brackets & Accessories



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4 Holes Corner
Connector
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IFBLWD5R41
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5 Holes Corner
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IFBLWD6L41
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IFBLPD43
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MODULAR SUPPORT SYSTEMS

G Profiles, Brackets & Accessories



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IFBLPOD23
2x3 Holes Post
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IFBLPKD23
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IFBLPD22
2x2 Holes Post
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MODULAR SUPPORT SYSTEMS

G Profiles, Brackets & Accessories



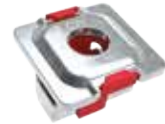
IFBLPY22
2x2 Holes Post
Bases 41x21 Strut
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IFBLPD4D4
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ISGC
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ISOY
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BigFoot Roof
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IPC3020
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IPC3840
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MODULAR SUPPORT SYSTEMS

C Profile Systems



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Technical Data
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IFBL90D4
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IFBLD4
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MODULAR SUPPORT SYSTEMS

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IVPP
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IPU3040
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IPU4050
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Technical Data
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IWKU
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MODULAR SUPPORT SYSTEMS

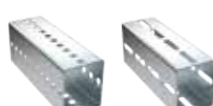
Heavy Duty Profile Systems



IPKD
Square Profile
(Vertical)
p.211



IPK
Square Profile
(Horizontal)
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Technical Data
For Square Profiles
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IWPB
Square
Profile Console
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IFPKDA
Horizontal Profile
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IFPKDAH
Horizontal Profile
Connection Plate
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IFPKDK
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IFPKDH
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IFPKDKH
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IFPKDOH
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IFPKDCT
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IFPKZPK
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Washer
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IPKEB
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IFPKBHM
Beam Section
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IFPKBH
Beam Section
Holder
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MODULAR SUPPORT SYSTEMS

Heavy Duty Profile Systems



ZCKBP
Square Neck Bolt
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ICTK
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IPKT
Cover
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IFPKK
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IFPKC
Pressure Plate
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IFPKDM
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IFPKYM
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IFPKRB
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IFPKTB
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VENTILATION SYSTEMS

Ventilation Systems



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IFFLC
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IKHV
Ventilation
Clamp
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IFHMO2
Ventilation
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IFMAZ
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9KV
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ANCHOR & FIXING SYSTEMS

Anchor & Fixing Sytems



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IDCE
Draw-in Anchor
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IDCA
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IDKL
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IDPL
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IDKLAP
Through Bolt
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IDKLAH
Through Bolt
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IDCAHE
Drop-in
Anchor
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IDCAHECL
Drop-in
Anchor
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IDCAHEHC
Drop-in
Anchor
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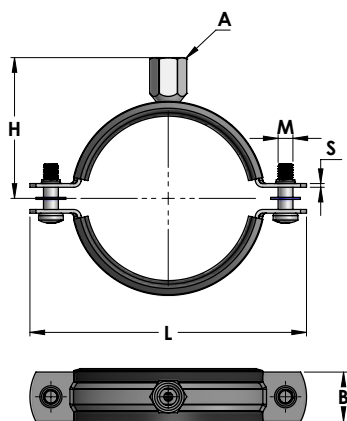
INSTALLATION SYSTEMS





PIPE HANGERS & SUPPORTS





Pipe Clamp with Combi Nut M8/M10 and Rubber Lining

Nominal Size Range

1/8" to 10"

Material

- Carbon Steel
- EPDM Rubber Lining provides noise reduction in accordance with EN 14366, vibration reduction and partial compensation of thermal expansion

Service

- Used for installation of pipes to the walls (vertical/horizontal), ceilings and floors. Connection type is M8 / M10 combi nut.

Installation

- Easy and safe assembly through Philips combi side screws.
- Side screws are protected against loss during assembly with the help of plastic washers.

Ordering

- Specify code or name, nominal size and finish. .

Finish

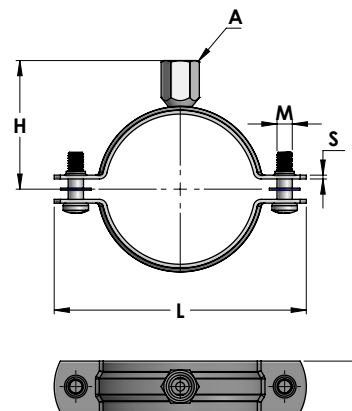
- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 - EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256.

Note: See the page 127 for the details of EPDM Rubber Lining.

Note: The load data published includes a safety factor. (Safety factor= Ratio of ultimate load to the design load.)

Code	HCR Code	Nominal Size		Clamping Range	S × B	A	H	L	M	Breaking Load	Recom. Load	Qty./Box	Weight
		Inch	DN	mm-mm	mm × mm		mm	mm		kN	kN		kg/Box
IKKS006	IKKS006G	1/8"	6	8-11	1.5 × 20	M8 / M10	29.5	50.5	M5	3.9	1.3	100	4.86
IKKS008	IKKS008G	1/4"	8	11-15	1.5 × 20	M8 / M10	32.0	54.5	M5	3.9	1.3	100	5.27
IKKS010	IKKS010G	3/8"	10	16-20	1.5 × 20	M8 / M10	34.0	58.5	M5	3.9	1.3	100	5.72
IKKS015	IKKS015G	1/2"	15	20-24	1.5 × 20	M8 / M10	36.0	62.5	M5	3.9	1.3	100	6.17
IKKS020	IKKS020G	3/4"	20	25-28	1.5 × 20	M8 / M10	39.0	68.5	M5	3.9	1.3	100	6.72
IKKS025	IKKS025G	1"	25	32-35	1.5 × 20	M8 / M10	42.5	76.0	M5	3.9	1.3	100	7.52
IKKS032	IKKS032G	1 1/4"	32	39-46	1.5 × 20	M8 / M10	47.0	91.5	M6	4.8	1.6	50	4.61
IKKS040	IKKS040G	1 1/2"	40	48-53	1.5 × 20	M8 / M10	50.5	99.0	M6	4.8	1.6	50	5.06
IKKS047	IKKS047G	54-58	47	54-58	1.5 × 20	M8 / M10	53.5	105.0	M6	4.8	1.6	50	5.46
IKKS050	IKKS050G	2"	50	59-66	1.5 × 20	M8 / M10	57.0	112.0	M6	4.8	1.6	50	5.86
IKKS055	IKKS055G	67-73	55	67-73	2 × 25	M8 / M10	62.0	125.0	M6	6.9	2.3	25	4.85
IKKS065	IKKS065G	2 1/2"	65	74-80	2 × 25	M8 / M10	66.0	134.0	M6	6.9	2.3	25	5.26
IKKS072	IKKS072G	81-87	72	81-87	2 × 25	M8 / M10	70.0	141.0	M6	6.9	2.3	25	5.45
IKKS080	IKKS080G	3"	80	87-94	2 × 25	M8 / M10	71.5	146.5	M6	6.9	2.3	25	5.71
IKKS085	IKKS085G	95	85	95-98	2 × 25	M8 / M10	75.5	151.0	M6	6.9	2.3	25	6.75
IKKS089	IKKS089G	99-108	89	99-108	2 × 25	M8 / M10	79.5	159.5	M6	6.9	2.3	25	7.25
IKKS100	IKKS100G	4"	100	110-116	2.5 × 25	M8 / M10	85.0	173.0	M6	7.8	2.6	25	7.75
IKKS112	IKKS112G	120-128	112	120-128	2.5 × 25	M8 / M10	91.5	186.0	M6	7.8	2.6	25	8.25
IKKS118	IKKS118G	129-134	118	129-134	2.5 × 25	M8 / M10	94.5	192.0	M6	7.8	2.6	25	8.55
IKKS125	IKKS125G	5"	125	135-143	2.5 × 25	M8 / M10	98.0	203.0	M6	7.8	2.6	25	8.95
IKKS134	IKKS134G	149-161	134	149-161	2.5 × 25	M8 / M10	106.0	215.0	M6	7.8	2.6	25	9.45
IKKS150	IKKS150G	6"	150	162-170	2.5 × 25	M8 / M10	110.5	229.0	M6	7.8	2.6	25	9.95
IKKS185	IKKS185G	198-207	185	198-207	2.5 × 25	M8 / M10	131.0	264.0	M6	7.8	2.6	25	10.28
IKKS200	IKKS200G	8"	200	207-219	2.5 × 25	M8 / M10	138.0	280.7	M6	7.8	2.6	20	10.46
IKKS245	IKKS245G		245	-	2.5 × 25	M8 / M10	150.5	309.0	M6	7.8	2.6	20	11.60
IKKS250	IKKS250G	10"	250	-	2.5 × 25	M8 / M10	162.0	332.0	M6	7.8	2.6	20	12.50

Pipe Clamp with Combi Nut M8/M10 without Rubber Lining



Nominal Size Range

- 3/8" to 10"

Material

- Carbon Steel

Service

- Used for mounting of pipes to the walls (vertical/horizontal), ceilings and floors.
- Connection type is M8 / M10 combi nut.

Installation

- Easy and safe assembly through Philips combi side screws. Side screws are protected against loss during assembly with the help of plastic washers.

Ordering

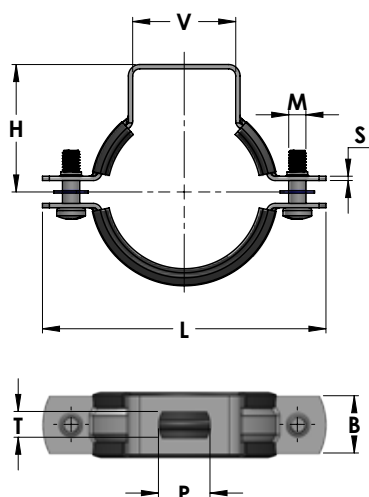
- Specify code or name, nominal size and finish. .

Finish

- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 - EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256.

Note: The load data published includes a safety factor. (Safety factor= Ratio of ultimate load to the design load.)

Code	HCR Code	Nominal Size		Clamping Range	S × B	A	H	L	M	Breaking Load	Recom. Load	Qty./Box	Weight
		Inch	DN										
IKKL010	IKKL010G	3/8"	10	16-19	1.5 × 20	M8 / M10	29.5	50.5	M5	3.9	1.3	100	4.30
IKKL015	IKKL015G	1/2"	15	18-23	1.5 × 20	M8 / M10	32.0	54.5	M5	3.9	1.3	100	4.47
IKKL017	IKKL017G		17	24-26	1.5 × 20	M8 / M10	34.0	58.5	M5	3.9	1.3	100	4.84
IKKL020	IKKL020G	3/4"	20	27-31	1.5 × 20	M8 / M10	36.0	62.5	M5	3.9	1.3	100	5.18
IKKL025	IKKL025G	1"	25	32-37	1.5 × 20	M8 / M10	39.0	68.5	M5	3.9	1.3	100	5.72
IKKL032	IKKL032G	1 1/4"	32	39-44	1.5 × 20	M8 / M10	42.5	76.0	M5	3.9	1.3	100	6.45
IKKL040	IKKL040G	1 1/2"	40	46-54	1.5 × 20	M8 / M10	47.0	91.5	M6	4.8	1.6	50	3.81
IKKL050	IKKL050G	2"	50	54-61	1.5 × 20	M8 / M10	50.5	99.0	M6	4.8	1.6	50	4.11
IKKL053	IKKL053G		53	62-67	1.5 × 20	M8 / M10	53.5	105.0	M6	4.8	1.6	50	4.41
IKKL055	IKKL055G		55	68-74	1.5 × 20	M8 / M10	57.0	112.0	M6	4.8	1.6	50	4.71
IKKL065	IKKL065G	2 1/2"	65	75-82	2 × 25	M8 / M10	62.0	125.0	M6	6.9	2.3	25	3.77
IKKL080	IKKL080G	3"	80	83-89	2 × 25	M8 / M10	66.0	134.0	M6	6.9	2.3	25	4.07
IKKL085	IKKL085G		85	90-98	2 × 25	M8 / M10	70.0	141.0	M6	6.9	2.3	25	4.33
IKKL087	IKKL087G		87	94-102	2 × 25	M8 / M10	71.5	146.5	M6	6.9	2.3	25	4.51
IKKL092	IKKL092G		92	104-109	2 × 25	M8 / M10	75.5	151.0	M6	6.9	2.3	25	4.68
IKKL100	IKKL100G	4"	100	110-117	2 × 25	M8 / M10	79.5	159.5	M6	6.9	2.3	25	4.95
IKKL108	IKKL108G		108	118-127	2.5 × 25	M8 / M10	85.0	173.0	M6	7.8	2.6	25	6.43
IKKL120	IKKL120G		120	129-136	2.5 × 25	M8 / M10	91.5	186.0	M6	7.8	2.6	25	7.00
IKKL125	IKKL125G	5"	125	137-143	2.5 × 25	M8 / M10	94.5	192.0	M6	7.8	2.6	25	7.38
IKKL133	IKKL133G		133	144-153	2.5 × 25	M8 / M10	98.0	203.0	M6	7.8	2.6	25	7.70
IKKL150	IKKL150G	6"	150	159-167	2.5 × 25	M8 / M10	106.0	215.0	M6	7.8	2.6	25	8.30
IKKL160	IKKL160G		160	168-179	2.5 × 25	M8 / M10	110.5	229.0	M6	7.8	2.6	25	8.77
IKKL210	IKKL210G		210	218-226	2.5 × 25	M8 / M10	138.0	280.7	M6	7.8	2.6	20	8.62
IKKL245	IKKL245G		245	-	2.5 × 25	M8 / M10	146.0	300.0	M6	7.8	2.6	20	8.80
IKKL250	IKKL250G	10"	250	-	2.5 × 25	M8 / M10	157.5	323.0	M6	7.8	2.6	20	9.50



Clamp for PVC Pipe

Nominal Size Range

- 2" to 8"

Material

- Carbon Steel
- EPDM Rubber Lining provides noise reduction in accordance with EN 14366, vibration reduction and partial compensation of thermal expansion

Service

- Used for mounting of PVC pipes to the walls (vertical/horizontal), ceilings and floors.

Installation

- Easy and safe assembly through Philips combi side screws.
- Side screws are protected against loss during assembly with the help of plastic washers.

Ordering

- Specify code or name, nominal size and finish.

Finish

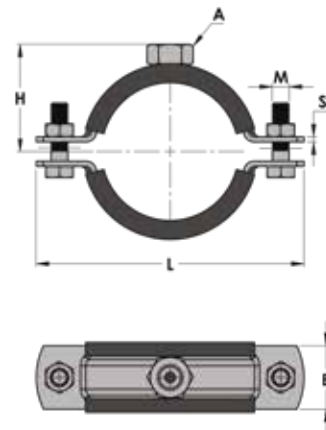
- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 – EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

Note: See the page 127 for the details of EPDM Rubber Lining.

Note: The load data published includes a safety factor. (Safety factor= Ratio of ultimate load to the design load.)

Code	HCR Code	Nominal Size		Clamping Range	S × B	L	H	V	T	P	M	Breaking Load	Recom. Load	Qty./ Box	Weight
		Inch	DN	mm-mm	mm × mm	mm	mm	mm	mm	mm		kN	kN		kg/Box
IKPV050	IKPV050G	2"	50	48-53	1.5 × 20	99.0	44.5	36	9.0	18	M6	1.2	0.4	100	13.3
IKPV075	IKPV075G	-	75	74-80	2 × 25	134.0	59.0	36	9.0	18	M6	1.2	0.4	70	9.7
IKPV100	IKPV100G	4"	100	99-108	2 × 25	159.5	77.5	36	9.0	18	M6	2.0	0.7	50	9.1
IKPV125	IKPV125G	5"	125	120-128	2.5 × 25	186.0	84.0	36	12.5	20	M6	2.0	0.7	50	14.9
IKPV150	IKPV150G	6"	150	149-161	2.5 × 25	215.0	103.0	36	12.5	20	M6	2.0	0.7	40	14.2
IKPV200	IKPV200G	8"	200	198-207	2.5 × 25	264.0	131.0	36	12.5	20	M6	2.0	0.7	25	12.6

Heavy Duty Pipe Clamp With Rubber Profile & Nut



Nominal Size Range

- 1/2" to 20"

Material

- Carbon Steel
- EPDM Rubber Lining provides noise reduction in accordance with EN 14366, vibration reduction and partial compensation of thermal expansion.

Service

- Used for mounting of pipes to the walls (vertical/horizontal), ceilings and floors.

Installation

- Easy and safe assembly through hex head bolt and nut.

Ordering

- Specify code or name, nominal size and finish.

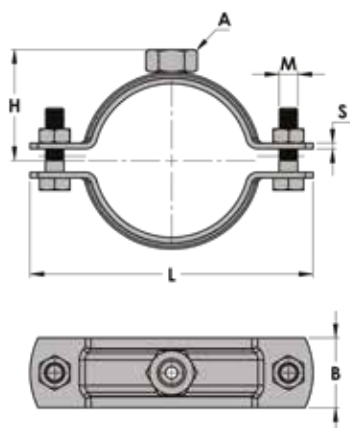
Finish

- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 - EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

Note: See the page 127 for the details of EPDM Rubber Lining.

Note: The load data published includes a safety factor. (Safety factor= Ratio of ultimate load to the design load.)

Code	HCR Code	Nominal Size		Clamping Range	S × B	A	H	L	M	Breaking Load	Recom. Load	Qty./Box	Weight
		Inch	DN										
				mm-mm	mm × mm		mm	mm		kN	kN		kg/Box
IKAI2015	IKAI2015H	1/2"	15	20-24	2.5 × 30	M12	32.0	84.0	M8	11	2.8	50	10.5
IKAI2020	IKAI2020H	3/4"	20	25-30	2.5 × 30	M12	35.0	90.0	M8	11	2.8	50	11.0
IKAI2025	IKAI2025H	1"	25	32-38	2.5 × 30	M12	39.0	98.0	M8	11	2.8	50	11.5
IKAI2032	IKAI2032H	1 1/4"	32	39-46	2.5 × 30	M12	43.0	106.0	M8	11	2.8	50	11.8
IKAI2040	IKAI2040H	1 1/2"	40	48-53	2.5 × 30	M12	47.0	114.0	M8	11	2.8	50	13.8
IKAI2047	IKAI2047H	54-58	47	54-58	2.5 × 30	M12	50.0	120.5	M8	11	2.8	50	14.9
IKAI2050	IKAI2050H	2"	50	59-66	2.5 × 30	M12	53.0	127.0	M8	11	2.8	50	16.0
IKAI2055	IKAI2055H	67-73	55	67-73	3 × 30	M12	58.0	140.0	M10	15	3.8	25	8.4
IKAI2065	IKAI2065H	2 1/2"	65	74-80	3 × 30	M12	62.0	147.5	M10	15	3.8	25	9.0
IKAI2072	IKAI2072H	80-87	72	80-87	3 × 30	M12	66.0	156.5	M10	15	3.8	25	9.5
IKAI2080	IKAI2080H	3"	80	87-94	3 × 30	M12	67.5	160.5	M10	15	3.8	25	9.8
IKAI2085	IKAI2085H	95	85	95-98	3 × 30	M12	71.5	167.5	M10	15	3.8	25	10.3
IKAI2089	IKAI2089H	99-108	89	99-108	3 × 30	M12	75.5	176.5	M10	15	3.8	25	10.5
IKAI2100	IKAI2100H	4"	100	108-116	3 × 30	M12	80.0	183.5	M10	15	3.8	25	11.0
IKAI2112	IKAI2112H	120-129	112	120-129	3 × 30	M12	86.5	198.0	M10	15	3.8	25	12.0
IKAI6118	IKAI6118H	129-135	118	129-135	4 × 40	M16	95.5	222.0	M12	24	6.0	15	15.3
IKAI6125	IKAI6125H	5"	125	135-143	4 × 40	M16	99.0	225.5	M12	24	6.0	15	15.7
IKAI6150	IKAI6150H	6"	150	162-168	4 × 40	M16	106.5	252.0	M12	24	6.0	10	10.9
IKAI6200	IKAI6200H	8"	200	206-220	4 × 40	M16	133.0	312.0	M12	24	6.0	10	13.5
IKAI6250	IKAI6250H	10"	250	260-274	4 × 40	M16	160.5	365.0	M12	24	6.0	10	15.7
The clamps listed below are manufactured without section form.													
IKAI6300	IKAI6300H	12"	300	320-332	5 × 50	M16	186.0	421.0	M16	35.1	11.7	5	13.9
IKAI6350	IKAI6350H	14"	350	351-363	5 × 50	M16	201.5	453.0	M16	35.1	11.7	5	15.0
IKAI6400	IKAI6400H	16"	400	403-415	5 × 50	M16	227.5	504.5	M16	35.1	11.7	5	16.8
IKAI6450	IKAI6450H	18"	450	453-465	7 × 70	M16	244.5	564.2	M16	35.1	11.7	2	11.4
IKAI6500	IKAI6500H	20"	500	510-522	7 × 70	M16	273.5	621.5	M16	35.1	11.7	2	12.4



Heavy Duty Pipe Clamp Without Rubber Profile & Nut

Nominal Size Range

- 3/4" to 20"

Material

- Carbon Steel

Service

- Used for mounting of pipes to the walls (vertical/horizontal), ceilings and floors.

Installation

- Easy and safe assembly through hex head bolt and nut.

Ordering

- Specify code or name, nominal size and finish.

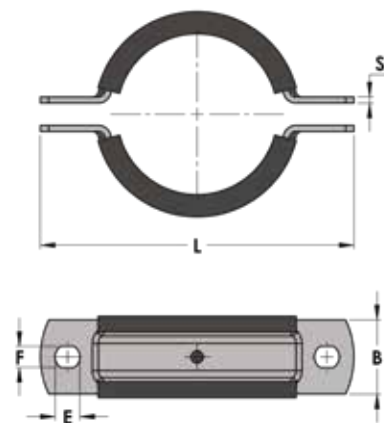
Finish

- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 – EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

Note: The load data published includes a safety factor. (Safety factor= Ratio of ultimate load to the design load.)

Code	HCR Code	Nominal Size		Clamping Range	S × B	A	H	L	M	Breaking Load	Recom. Load	Qty./ Box	Weight
		Inch	DN										
				mm-mm	mm × mm		mm	mm		kN	kN		kg/Box
IKB12020	IKB12020H	3/4"	20	27-31	2.5 × 30	M12	32.0	84.0	M8	11	2.8	50	9.8
IKB12025	IKB12025H	1"	25	32-37	2.5 × 30	M12	35.0	90.0	M8	11	2.8	50	10.0
IKB12032	IKB12032H	1 1/4"	32	39-46	2.5 × 30	M12	39.0	98.0	M8	11	2.8	50	10.5
IKB12040	IKB12040H	1 1/2"	40	47-54	2.5 × 30	M12	43.0	106.0	M8	11	2.8	50	10.8
IKB12050	IKB12050H	2"	50	54-61	2.5 × 30	M12	47.0	114.5	M8	11	2.8	50	12.5
IKB12053	IKB12053H	60-67	53	60-67	2.5 × 30	M12	50.0	120.5	M8	11	2.8	50	13.5
IKB12055	IKB12055H	68-74	55	68-74	2.5 × 30	M12	53.0	127.0	M8	11	2.8	50	14.5
IKB12065	IKB12065H	2 1/2"	65	75-81	3 × 30	M12	58.0	140.0	M10	15	3.8	25	7.4
IKB12080	IKB12080H	3"	80	83-92	3 × 30	M12	62.0	147.5	M10	15	3.8	25	8.0
IKB12085	IKB12085H	90-98	85	90-98	3 × 30	M12	66.0	156.5	M10	15	3.8	25	8.3
IKB12087	IKB12087H	94-104	87	94-104	3 × 30	M12	67.5	160.5	M10	15	3.8	25	8.5
IKB12092	IKB12092H	104-110	92	104-110	3 × 30	M12	71.5	167.5	M10	15	3.8	25	8.8
IKB12100	IKB12100H	4"	100	110-119	3 × 30	M12	75.5	176.5	M10	15	3.8	25	9.0
IKB12108	IKB12108H	117-126	108	117-126	3 × 30	M12	80.0	183.5	M10	15	3.8	25	9.3
IKB12120	IKB12120H	129-140	120	129-140	3 × 30	M12	86.5	198.0	M10	15	3.8	25	10.0
IKB16125	IKB16125H	5"	125	138-143	4 × 40	M16	95.5	222.0	M12	24	6.0	10	9.2
IKB16133	IKB16133H	144-154	133	144-154	4 × 40	M16	99.0	225.5	M12	24	6.0	10	9.5
IKB16165	IKB16165H	169-177	165	169-177	4 × 40	M16	106.5	252.0	M12	24	6.0	10	9.7
IKB16210	IKB16210H	218-230	210	218-230	4 × 40	M16	133.0	312.0	M12	24	6.0	10	11.8
IKB16275	IKB16275H	270-283	275	270-283	4 × 40	M16	160.5	365.0	M12	24	6.0	10	13.8
The clamps listed below are manufactured without section form.													
IKB16315	IKB16315H	12"	300	313-323	5 × 50	M16	186.0	421.0	M16	35.1	11.7	5	13.9
IKB16348	IKB16348H	14"	350	347-357	5 × 50	M16	201.5	453.0	M16	35.1	11.7	5	15.0
IKB16399	IKB16399H	16"	400	397-408	5 × 50	M16	227.5	504.5	M16	35.1	11.7	5	16.8
IKB16450	IKB16450H	18"	450	457-467	7 × 70	M16	244.5	564.2	M16	35.1	11.7	2	11.4
IKB16500	IKB16500H	20"	500	494-510	7 × 70	M16	273.5	621.5	M16	35.1	11.7	2	12.4

Heavy Duty Pipe Clamp without Nuts and Bolts with Rubber Lining



Nominal Size Range

- 1/2" to 20"

Material

- Carbon Steel
- EPDM Rubber Lining provides noise reduction in accordance with EN 14366, vibration reduction and partial compensation of thermal expansion

Service

- Used for mounting of pipes to the walls (vertical/horizontal), ceilings and floors.

Installation

- Without top nut, assembly utilizing threaded rods and nuts suitable to the application and loads, with height adjustment ability.

Ordering

- Specify code or name, nominal size and finish.
- Threaded rods and nuts should be ordered separately.
- Packaging: Unassembled

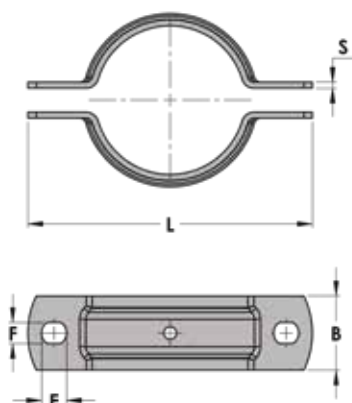
Finish

- Electro-Galvanized in accordance with ASTM B 633 – EN ISO 2081
- High Corrosion Resistant (HCR) details can be found on page 256

Note: See the page 127 for the details of EPDM Rubber Lining.

Note: The load data published includes a safety factor. (Safety factor= Ratio of ultimate load to the design load.)

Code	HCR Code	Nominal Size		Clamping Range	L	S × B	E	F	Breaking Load	Recom. Load	Qty./Box	Weight
		Inch	DN	mm-mm	mm	mm × mm	mm	mm	kN	kN		kg/Box
IKAI015	IKAI015H	1/2"	15	20-24	84.0	2.5 × 30	10	8.5	11	2.8	50	10.2
IKAI020	IKAI020H	3/4"	20	25-30	90.0	2.5 × 30	10	8.5	11	2.8	50	10.7
IKAI025	IKAI025H	1"	25	32-38	98.0	2.5 × 30	10	8.5	11	2.8	50	11.2
IKAI032	IKAI032H	1 1/4"	32	39-46	106.0	2.5 × 30	10	8.5	11	2.8	50	11.5
IKAI040	IKAI040H	1 1/2"	40	48-53	114.5	2.5 × 30	10	8.5	11	2.8	50	13.5
IKAI047	IKAI047H	54-58	47	54-58	120.5	2.5 × 30	10	8.5	11	2.8	50	14.6
IKAI050	IKAI050H	2"	50	59-66	127.0	2.5 × 30	10	8.5	11	2.8	50	15.7
IKAI055	IKAI055H	67-73	55	67-73	143.5	3 × 30	12	10.5	15	3.8	25	8.0
IKAI065	IKAI065H	2 1/2"	65	74-80	152.0	3 × 30	12	10.5	15	3.8	25	8.7
IKAI072	IKAI072H	80-87	72	80-87	160.0	3 × 30	12	10.5	15	3.8	25	9.3
IKAI080	IKAI080H	3"	80	87-94	163.0	3 × 30	12	10.5	15	3.8	25	9.4
IKAI085	IKAI085H	95	85	95-98	171.0	3 × 30	12	10.5	15	3.8	25	10.1
IKAI089	IKAI089H	99-108	89	99-108	179.0	3 × 30	12	10.5	15	3.8	25	10.3
IKAI100	IKAI100H	4"	100	108-116	188.0	3 × 30	12	10.5	15	3.8	25	10.6
IKAI112	IKAI112H	120-129	112	120-129	201.0	3 × 30	12	10.5	15	3.8	25	12.7
IKAI118	IKAI118H	129-135	118	129-135	226.5	4 × 40	14	12.5	24	6.0	15	15.1
IKAI125	IKAI125H	5"	125	135-143	233.5	4 × 40	14	12.5	24	6.0	15	15.5
IKAI150	IKAI150H	6"	150	162-168	256.5	4 × 40	14	12.5	24	6.0	15	15.7
IKAI200	IKAI200H	8"	200	206-220	316.0	4 × 40	14	12.5	24	6.0	10	13.3
IKAI250	IKAI250H	10"	250	260-274	365.0	4 × 40	14	12.5	24	6.0	10	15.5
The clamps listed below are manufactured without section form.												
IKAI300	IKAI300H	12"	300	320-332	421.0	5 × 50	Ø17	-	35.1	11.7	5	13.9
IKAI350	IKAI350H	14"	350	351-363	453.0	5 × 50	Ø17	-	35.1	11.7	5	15.0
IKAI400	IKAI400H	16"	400	403-415	504.5	5 × 50	Ø17	-	35.1	11.7	5	16.8
IKAI450	IKAI450H	18"	450	453-465	564.2	7 × 70	Ø17	-	35.1	11.7	2	11.4
IKAI500	IKAI500H	20"	500	510-522	621.5	7 × 70	Ø17	-	35.1	11.7	2	12.4



Heavy Duty Pipe Clamp without Nut, Bolts, and Rubber Lining

Nominal Size Range

- 3/4" to 20"

Material

- Carbon Steel

Service

- Used for mounting of pipes to the walls (vertical/horizontal), ceilings and floors.

Installation

- Without hanging nut, assembly through threaded rods and nuts suitable to the application and loads, with height adjustment ability.

Ordering

- Specify code or name, nominal size and finish.
- Threaded rods and nuts should be ordered separately.
- Packaging: Unassembled

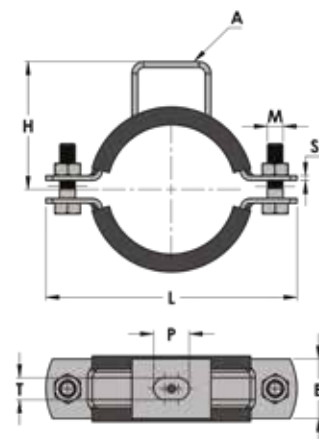
Finish

- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 - EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

Note: The load data published includes a safety factor. (Safety factor= Ratio of ultimate load to the design load.)

Code	HCR Code	Nominal Size		Clamping Range	L	S × B	E	F	Breaking Load	Recom. Load	Qty./ Box	Weight
		Inch	DN									
				mm-mm	mm	mm × mm	mm	mm	kN	kN		kg/Box
IKB1020	IKB1020H	3/4"	20	27-31	84.0	2.5 × 30	10	8.5	11	2.75	50	9.5
IKB1025	IKB1025H	1"	25	32-37	90.0	2.5 × 30	10	8.5	11	2.75	50	9.7
IKB1032	IKB1032H	1 1/4"	32	39-46	98.0	2.5 × 30	10	8.5	11	2.75	50	10.2
IKB1040	IKB1040H	1 1/2"	40	47-54	106.0	2.5 × 30	10	8.5	11	2.75	50	10.5
IKB1050	IKB1050H	2"	50	54-61	114.5	2.5 × 30	10	8.5	11	2.75	50	12.2
IKB1053	IKB1053H	60-67	53	60-67	120.5	2.5 × 30	10	8.5	11	2.75	50	13.2
IKB1055	IKB1055H	68-74	55	68-74	127.0	2.5 × 30	10	8.5	11	2.75	50	14.2
IKB1065	IKB1065H	2 1/2"	65	75-81	140.0	3 × 30	12	10.5	15	3.75	25	7.3
IKB1080	IKB1080H	3"	80	83-92	147.5	3 × 30	12	10.5	15	3.75	25	7.9
IKB1085	IKB1085H	90-98	85	90-98	156.5	3 × 30	12	10.5	15	3.75	25	8.2
IKB1087	IKB1087H	94-104	87	94-104	160.5	3 × 30	12	10.5	15	3.75	25	8.5
IKB1092	IKB1092H	104-110	92	104-110	167.5	3 × 30	12	10.5	15	3.75	25	8.4
IKB1100	IKB1100H	4"	100	110-119	176.5	3 × 30	12	10.5	15	3.75	25	8.9
IKB1108	IKB1108H	117-126	108	117-126	183.5	3 × 30	12	10.5	15	3.75	25	9.1
IKB1120	IKB1120H	129-140	112	129-140	198.0	3 × 30	12	10.5	15	3.75	25	9.9
IKB1125	IKB1125H	5"	125	138-143	222.0	4 × 40	14	12.5	24	6.0	10	9.0
IKB1133	IKB1133H	144-154	133	144-154	225.5	4 × 40	14	12.5	24	6.0	10	9.4
IKB1160	IKB1160H	169-177	160	169-177	252.0	4 × 40	14	12.5	24	6.0	10	9.6
IKB1210	IKB1210H	218-230	210	218-230	312.0	4 × 40	14	12.5	24	6.0	10	11.7
IKB1275	IKB1275H	270-283	275	270-283	365.0	4 × 40	14	12.5	24	6.0	10	13.6
The clamps listed below are manufactured without section form.												
IKB1315	IKB1315H	12"	300	313-323	421.0	5 × 50	17	-	35.1	11.7	5	13.9
IKB1348	IKB1348H	14"	350	347-357	453.0	5 × 50	17	-	35.1	11.7	5	15.0
IKB1399	IKB1399H	16"	400	397-408	504.5	5 × 50	17	-	35.1	11.7	5	16.8
IKB1450	IKB1450H	18"	450	457-467	564.2	7 × 70	17	-	35.1	11.7	2	11.4
IKB1500	IKB1500H	20"	500	494-510	621.5	7 × 70	17	-	35.1	11.7	2	12.4

Heavy Duty Pipe Clamp with Bracket and Rubber Lining



Nominal Size Range

- 1/2" to 20"

Material

- Carbon Steel
- EPDM Rubber Lining provides noise reduction in accordance with EN 14366, vibration reduction and partial compensation of thermal expansion

Service

- Used for mounting of pipes to the walls (vertical/horizontal), ceilings and floors.

Installation

- Vertical adjustments are possible once the pipe is in place.
- The lower nut is used to adjust the pipeline to the required elevation.
- The top nut is used to prevent loosening due to the vibration.
- The top nut should be tightened after adjustment.
- The top nut must securely be tightened to assure proper performance of hanger after adjustment.

Ordering

- Specify code or name, nominal size and finish.

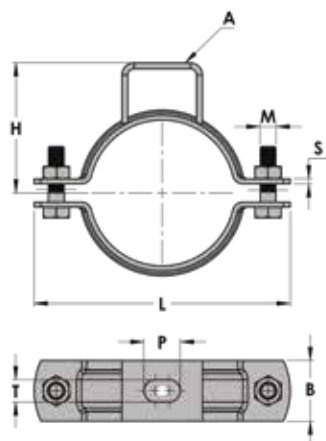
Finish

- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 – EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

Note: See the page 127 for the details of EPDM Rubber Lining.

Note: The load data published includes a safety factor. (Safety factor= Ratio of ultimate load to the design load.)

Code	HCR Code	Nominal Size		Clamping Range	S × B	A	H	L	P × T	M	Breaking Load	Recom. Load	Qty./Box	Weight
		Inch	DN											
				mm-mm	mm × mm	mm × mm	mm	mm	mm × mm		kN	kN		kg/Box
IKAK015	IKAK015H	1/2"	15	20-24	2.5 × 30	3 × 30	34.0	84.0	18×11	M8	11	2.75	50	10.8
IKAK020	IKAK020H	3/4"	20	25-30	2.5 × 30	3 × 30	41.5	90.0	18×11	M8	11	2.75	50	12.0
IKAK025	IKAK025H	1"	25	32-38	2.5 × 30	3 × 30	47.5	98.0	18×11	M8	11	2.75	50	12.5
IKAK032	IKAK032H	1 1/4"	32	39-46	2.5 × 30	3 × 30	53.0	106.0	18×11	M8	11	2.75	50	13.3
IKAK040	IKAK040H	1 1/2"	40	48-53	2.5 × 30	3 × 30	57.5	114.5	18×11	M8	11	2.75	50	14.1
IKAK047	IKAK047H	54-58	47	54-58	2.5 × 30	3 × 30	61.0	120.5	18×11	M8	11	2.75	50	15.3
IKAK050	IKAK050H	2"	50	59-66	2.5 × 30	3 × 30	64.5	127.0	18×11	M8	11	2.75	50	15.8
IKAK055	IKAK055H	67-73	55	67-73	3 × 30	3 × 30	69.5	140.0	18×11	M10	15	3.75	25	9.3
IKAK065	IKAK065H	2 1/2"	65	74-80	3 × 30	3 × 30	74.0	147.0	18×11	M10	15	3.75	25	10.4
IKAK072	IKAK072H	80-87	72	80-87	3 × 30	3 × 30	78.0	156.0	18×11	M10	15	3.75	25	10.8
IKAK080	IKAK080H	3"	80	87-94	3 × 30	3 × 30	79.5	160.0	18×11	M10	15	3.75	25	11.1
IKAK085	IKAK085H	95	85	95-98	3 × 30	3 × 30	84.0	167.0	18×11	M10	15	3.75	25	11.5
IKAK089	IKAK089H	99-108	89	99-108	3 × 30	3 × 30	88.0	176.0	18×11	M10	15	3.75	25	12.2
IKAK100	IKAK100H	4"	100	108-116	3 × 30	3 × 30	92.5	183.0	18×11	M10	15	3.75	25	12.1
IKAK112	IKAK112H	120-129	112	120-129	3 × 30	3 × 30	99.5	198.0	18×11	M10	15	3.75	25	13.1
IKAK118	IKAK118H	129-135	118	129-135	4 × 40	4 × 40	110.5	222.0	24×12.5	M12	24	6.00	10	7.8
IKAK125	IKAK125H	5"	125	135-143	4 × 40	4 × 40	114.0	225.5	24×12.5	M12	24	6.00	10	10.6
IKAK150	IKAK150H	6"	150	162-168	4 × 40	4 × 40	126.5	252.0	24×12.5	M12	24	6.00	10	11.9
IKAK200	IKAK200H	8"	200	206-220	4 × 40	4 × 40	158.0	312.0	24×12.5	M12	24	6.00	10	14.4
IKAK250	IKAK250H	10"	250	260-274	4 × 40	4 × 40	183.0	365.0	24×12.5	M12	24	6.00	10	16.1
The clamps listed below are manufactured without section form.														
IKAK300	IKAK300H	12"	300	320-332	5 × 50	5 × 50	219.0	421.0	19.5×16.5	M16	35.1	11.70	5	14.1
IKAK350	IKAK350H	14"	350	351-363	5 × 50	5 × 50	235.0	453.0	19.5×16.5	M16	35.1	11.70	5	15.0
IKAK400	IKAK400H	16"	400	403-415	5 × 50	5 × 50	261.0	504.5	19.5×16.5	M16	35.1	11.70	5	16.7
IKAK450	IKAK450H	18"	450	453-465	7 × 70	7 × 70	308.0	564.2	Ø23	M16	35.1	11.70	2	11.1
IKAK500	IKAK500H	20"	500	510-522	7 × 70	7 × 70	337.0	621.5	Ø23	M16	35.1	11.70	2	12.5



Heavy Duty Pipe Clamp with Bracket without Rubber Lining

Nominal Size Range

- 3/4" to 20"

Material

- Carbon Steel

Service

- Used for mounting of pipes to the walls (vertical/horizontal), ceilings and floors.

Installation

- Vertical adjustments are possible once the pipe is in place.
- The lower nut is used to adjust the pipeline to the required elevation.
- The top nut is used to prevent loosening due to the vibration.
- The top nut should be tightened after adjustment.
- The top nut must securely be tightened to assure proper performance of hanger after adjustment.

Ordering

- Specify code or name, nominal size and finish.

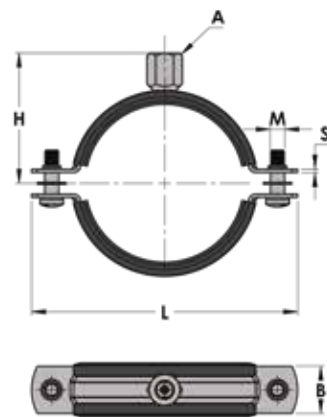
Finish

- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 - EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

Note: The load data published includes a safety factor. (Safety factor= Ratio of ultimate load to the design load.)

Code	HCR Code	Nominal Size		Clamping Range	S × B	A	H	L	P × T	M	Breaking Load	Recom. Load	Qty./ Box	Weight
		Inch	DN								kN	kN		
IKBK020	IKBK020H	3/4"	20	27-31	2.5 × 30	3 × 30	34.0	84.0	18 × 11	M8	11	2.75	50	10.3
IKBK025	IKBK025H	1"	25	32-37	2.5 × 30	3 × 30	41.5	90.0	18 × 11	M8	11	2.75	50	11.5
IKBK032	IKBK032H	1 1/4"	32	39-46	2.5 × 30	3 × 30	47.5	98.0	18 × 11	M8	11	2.75	50	12.0
IKBK040	IKBK040H	1 1/2"	40	47-54	2.5 × 30	3 × 30	53.0	106.0	18 × 11	M8	11	2.75	50	12.8
IKBK050	IKBK050H	2"	50	54-61	2.5 × 30	3 × 30	57.5	114.5	18 × 11	M8	11	2.75	50	13.5
IKBK053	IKBK053H	60-67	53	60-67	2.5 × 30	3 × 30	61.0	120.5	18 × 11	M8	11	2.75	50	15.0
IKBK055	IKBK055H	68-74	55	68-74	2.5 × 30	3 × 30	64.5	127.0	18 × 11	M8	11	2.75	50	15.2
IKBK065	IKBK065H	2 1/2"	65	75-81	3 × 30	3 × 30	69.5	140.0	18 × 11	M10	15	3.75	25	8.8
IKBK080	IKBK080H	3"	80	83-92	3 × 30	3 × 30	74.0	147.0	18 × 11	M10	15	3.75	25	9.5
IKBK085	IKBK085H	90-98	85	90-98	3 × 30	3 × 30	78.0	156.0	18 × 11	M10	15	3.75	25	10.2
IKBK087	IKBK087H	94-104	87	94-104	3 × 30	3 × 30	79.5	160.0	18 × 11	M10	15	3.75	25	10.5
IKBK092	IKBK092H	104-110	92	104-110	3 × 30	3 × 30	84.0	167.0	18 × 11	M10	15	3.75	25	11.0
IKBK100	IKBK100H	4"	100	110-119	3 × 30	3 × 30	88.0	176.0	18 × 11	M10	15	3.75	25	11.5
IKBK108	IKBK108H	117-126	108	117-126	3 × 30	3 × 30	92.5	183.0	18 × 11	M10	15	3.75	25	11.8
IKBK120	IKBK120H	129-140	120	129-140	3 × 30	3 × 30	99.5	198.0	18 × 11	M10	15	3.75	25	12.5
IKBK125	IKBK125H	5"	125	138-143	4 × 40	4 × 40	110.5	222.0	24 × 12.5	M12	24	6.00	10	7.5
IKBK133	IKBK133H	144-154	133	144-154	4 × 40	4 × 40	114.0	225.5	24 × 12.5	M12	24	6.00	10	10.0
IKBK165	IKBK165H	169-177	165	169-177	4 × 40	4 × 40	126.5	252.0	24 × 12.5	M12	24	6.00	10	11.5
IKBK210	IKBK210H	218-230	210	218-230	4 × 40	4 × 40	158.0	312.0	24 × 12.5	M12	24	6.00	10	13.8
IKBK275	IKBK275H	270-283	275	270-283	4 × 40	4 × 40	182.0	365.0	24 × 12.5	M12	24	6.00	10	15.5
The clamps listed below are manufactured without section form.														
IKBK315	IKBK315H	12"	300	313-323	5 × 50	5 × 50	220.0	421.0	19.5 × 16.5	M16	35.1	11.70	5	13.5
IKBK348	IKBK348H	14"	350	347-357	5 × 50	5 × 50	235.0	453.0	19.5 × 16.5	M16	35.1	11.70	5	14.5
IKBK399	IKBK399H	16"	400	397-408	5 × 50	5 × 50	254.5	504.5	19.5 × 16.5	M16	35.1	11.70	5	16.0
IKBK450	IKBK450H	18"	450	457-467	7 × 70	7 × 70	304.5	564.2	Ø23	M16	35.1	11.70	2	10.5
IKBK500	IKBK500H	20"	500	494-510	7 × 70	7 × 70	327.5	621.5	Ø23	M16	35.1	11.70	2	12.0

Stainless Steel Pipe Clamp with Rubber Lining



Nominal Size Range

- 1/8" to 8"

Material

- Stainless Steel in accordance with EN 1.4301 A2
- EPDM Rubber Lining provides noise reduction in accordance with EN 14366, vibration reduction and partial compensation of thermal expansion

Service

- Used for mounting of pipes to the walls (vertical/horizontal), ceilings and floors.

Installation

- Easy and safe assembly through Philips combi side screws.
- Side screws are protected against loss during assembly with the help of plastic washers.

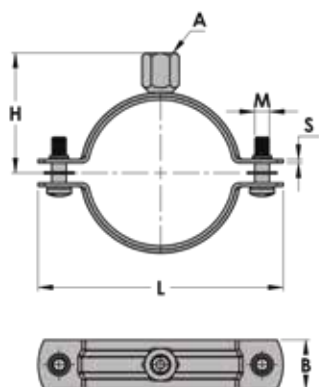
Ordering

- Specify code or name, nominal size and finish.

Note: See the page 127 for the details of EPDM Rubber Lining.

Note: The load data published includes a safety factor. (Safety factor= Ratio of ultimate load to the design load.)

Code	Nominal Size		Clamping Range	S × B	A	H	L	M	Breaking Load	Recom. Load	Qty./Box	Weight
	Inch	DN	mm-mm	mm × mm		mm	mm		kN	kN		kg/Box
IKISR006	1/8"	6	8-11	1.5 × 20	M8	21.5	50.5	M5	4.33	1.26	100	4.3
IKISR008	1/4"	8	11-15	1.5 × 20	M8	24.0	54.5	M5	4.33	1.26	100	4.8
IKISR010	3/8"	10	16-20	1.5 × 20	M8	26.0	58.5	M5	4.33	1.26	100	5.2
IKISR015	1/2"	15	20-24	1.5 × 20	M8	28.0	62.5	M5	4.33	1.26	100	5.7
IKISR020	3/4"	20	25-28	1.5 × 20	M8	31.0	68.5	M5	4.33	1.26	100	6.0
IKISR025	1"	25	32-35	1.5 × 20	M8	34.5	76.0	M5	4.33	1.26	100	7.0
IKISR032	1 1/4"	32	39-46	1.5 × 20	M8	39.0	91.5	M6	5.33	1.55	50	4.4
IKISR040	1 1/2"	40	48-53	1.5 × 20	M8	42.5	99.0	M6	5.33	1.55	50	4.8
IKISR047	54-58		54-58	1.5 × 20	M8	45.5	105.0	M6	5.33	1.55	50	5.2
IKISR050	2"	50	59-66	1.5 × 20	M8	49.0	112.0	M6	5.33	1.55	50	5.6
IKISR055	67-73		67-73	2 × 25	M10	54.0	125.0	M6	7.66	2.23	25	4.9
IKISR065	2 1/2"	65	74-80	2 × 25	M10	58.0	134.0	M6	7.66	2.23	25	5.3
IKISR072	81-87		81-87	2 × 25	M10	62.0	141.0	M6	7.66	2.23	25	5.5
IKISR080	3"	80	87-94	2 × 25	M10	63.5	146.5	M6	7.66	2.23	25	5.8
IKISR085	95		95-98	2 × 25	M10	67.5	151.0	M6	7.66	2.23	25	6.8
IKISR089	99-108		99-108	2 × 25	M10	71.5	159.5	M6	7.66	2.23	25	7.3
IKISR100	4"	100	110-116	2.5 × 25	M10	77.0	173.0	M6	8.66	2.52	25	7.8
IKISR112	120-128		120-128	2.5 × 25	M10	83.5	186.0	M6	8.66	2.52	25	8.3
IKISR118	129-134		129-134	2.5 × 25	M10	86.5	192.0	M6	8.66	2.52	25	8.6
IKISR125	5"	125	135-143	2.5 × 25	M10	90.0	203.0	M6	8.66	2.52	25	9.0
IKISR134	149-161		149-161	2.5 × 25	M10	98.0	215.0	M6	8.66	2.52	25	9.5
IKISR150	6"	150	162-170	2.5 × 25	M10	102.5	229.0	M6	8.66	2.52	25	10.0
IKISR200	8"	200	207-219	2.5 × 25	M10	130.0	280.7	M6	8.66	2.52	20	10.5



Stainless Steel Pipe Clamp without Rubber Lining

Nominal Size Range

- 1/8" to 8"

Material

- Stainless Steel in accordance with EN 1.4301 A2

Service

- Used for mounting of pipes to the walls (vertical/horizontal), ceilings and floors.

Installation

- Easy and safe assembly through Philips combi side screws.
- Side screws are protected against loss during assembly with the help of plastic washers.

Ordering

- Specify code or name, nominal size and finish.

Note: The load data published includes a safety factor. (Safety factor= Ratio of ultimate load to the design load.)

Code	Nominal Size		Clamping Range	S × B	A	H	L	M	Breaking Load	Recom. Load	Qty./Box	Weight
	Inch	DN	mm-mm	mm × mm		mm	mm		kN	kN		kg/Box
IKILR015	1/2"	15	18-23	1.5 × 20	M8	24.0	54.5	M5	4.33	1.26	100	4.0
IKILR017	24-26		24-26	1.5 × 20	M8	26.0	58.5	M5	4.33	1.26	100	4.3
IKILR020	3/4"	20	27-31	1.5 × 20	M8	28.0	62.5	M5	4.33	1.26	100	4.7
IKILR025	1"	25	32-37	1.5 × 20	M8	31.0	68.5	M5	4.33	1.26	100	5.2
IKILR032	1 1/4"	32	39-44	1.5 × 20	M8	34.5	76.0	M5	4.33	1.26	100	5.9
IKILR040	1 1/2"	40	46-54	1.5 × 20	M8	39.0	91.5	M6	5.33	1.55	50	3.6
IKILR050	2"	50	54-61	1.5 × 20	M8	42.5	99.0	M6	5.33	1.55	50	3.9
IKILR053	62-67		62-67	1.5 × 20	M8	45.5	105.0	M6	5.33	1.55	50	4.2
IKILR055	68-74		68-74	1.5 × 20	M8	49.0	112.0	M6	5.33	1.55	50	4.5
IKILR065	2 1/2"	65	75-82	2 × 25	M10	54.0	125.0	M6	7.66	2.23	25	3.7
IKILR080	3"	80	83-89	2 × 25	M10	58.0	134.0	M6	7.66	2.23	25	4.0
IKILR085	90-98		90-98	2 × 25	M10	62.0	141.0	M6	7.66	2.23	25	4.3
IKILR087	94-102		94-102	2 × 25	M10	63.5	146.5	M6	7.66	2.23	25	4.5
IKILR092	104-109		104-109	2 × 25	M10	67.5	151.0	M6	7.66	2.23	25	4.7
IKILR100	4"	100	110-117	2 × 25	M10	71.5	159.5	M6	7.66	2.23	25	5.1
IKILR108	118-127		118-127	2.5 × 25	M10	77.0	173.0	M6	8.66	2.52	25	7.5
IKILR120	129-136		129-136	2.5 × 25	M10	83.5	186.0	M6	8.66	2.52	25	8.0
IKILR125	5"	125	137-143	2.5 × 25	M10	86.5	192.0	M6	8.66	2.52	25	8.3
IKILR133	144-153		144-153	2.5 × 25	M10	90.0	203.0	M6	8.66	2.52	25	8.6
IKILR150	6"	150	159-167	2.5 × 25	M10	98.0	215.0	M6	8.66	2.52	25	9.3
IKILR160	168-179		168-179	2.5 × 25	M10	102.5	229.0	M6	8.66	2.52	25	9.8
IKILR210	218-226		218-226	2.5 × 25	M10	130.0	280.7	M6	8.66	2.52	20	12.1

Pipe Clamp with Nut and Rubber Lining "M Series"

Nominal Size Range

- 1/8" to 6"

Material

- Carbon Steel
- EPDM Rubber Lining provides noise reduction in accordance with EN 14366, vibration reduction and partial compensation of thermal expansion

Service

- Used for installation of pipes to the walls (vertical/horizontal), ceilings and floors.

Installation

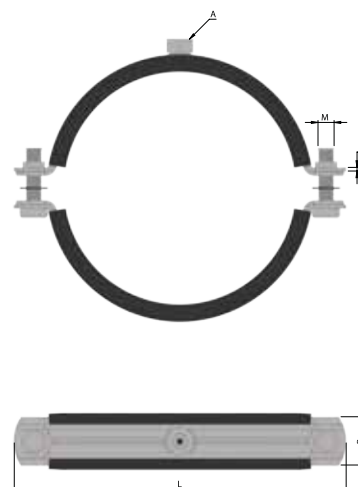
- Easy and safe assembly through Philips combi side screws.
- Side screws are protected against loss during assembly with the help of plastic washers.

Ordering

- Specify code or name, nominal size and finish.

Finish

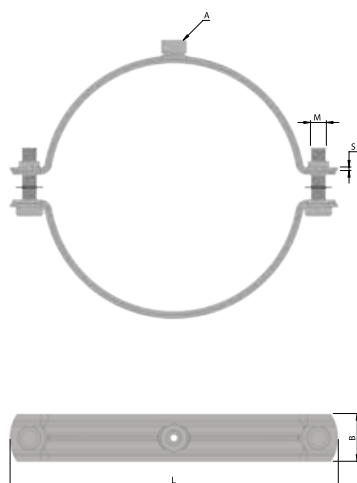
- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256



Note: See the page 127 for the details of EPDM Rubber Lining.

Note: The load data published includes a safety factor. (Safety factor= Ratio of ultimate load to the design load.)

Code	HCR Code	Nominal Size	DN	Clamping Range	S × B	L	Bolt Size	A Nut	Breaking Load	Recom. Load	Weight
				mm - mm	mm × mm		M		kN	kN	kg/100 pcs
IKISM006	IKISM006H	1/8"	6	8 - 11	1 × 20	41,0	ISO 7045 M5x18	M8	3,9	1,3	3,0
IKISM008	IKISM008H	1/4"	8	12 - 15	1 × 20	47,0	ISO 7045 M5x18	M8	3,9	1,3	3,0
IKISM010	IKISM010H	3/8"	10	16 - 19	1 × 20	51,0	ISO 7045 M5x18	M8	3,9	1,3	4,0
IKISM015	IKISM015H	1/2"	15	20 - 23	1 × 20	55,0	ISO 7045 M5x22	M8	3,9	1,3	4,0
IKISM020	IKISM020H	3/4"	20	25 - 28	1 × 20	61,0	ISO 7045 M5x22	M8	3,9	1,3	4,0
IKISM025	IKISM025H	1"	25	32 - 35	1 × 20	68,5	ISO 7045 M5x22	M8	3,9	1,3	5,0
IKISM032	IKISM032H	1 1/4"	32	40 - 45	1 × 20	77,5	ISO 7045 M5x22	M8	4,8	1,6	6,0
IKISM040	IKISM040H	1 1/2"	40	48 - 52	1 × 20	85,0	ISO 7045 M5x22	M8	4,8	1,6	6,0
IKISM047	IKISM047H		47	54 - 58	1 × 20	91,0	ISO 7045 M5x22	M8	4,8	1,6	7,0
IKISM050	IKISM050H	2"	50	60 - 64	1 × 20	98,0	ISO 7045 M5x22	M8	4,8	1,6	7,0
IKISM055	IKISM055H		55	66 - 72	1,5 × 24	113,0	ISO 7045 M6x30	M10	6,9	2,3	13,0
IKISM065	IKISM065H	2 1/2"	65	75 - 80	1,5 × 24	121,0	ISO 7045 M6x30	M10	6,9	2,3	14,0
IKISM072	IKISM072H		72	81 - 87	1,5 × 24	128,5	ISO 7045 M6x30	M10	6,9	2,3	14,0
IKISM080	IKISM080H	3"	80	86 - 91	1,5 × 24	132,5	ISO 7045 M6x30	M10	6,9	2,3	15,0
IKISM089	IKISM089H		89	99 - 108	1,8 × 24	158,0	ISO 7045 M8x35	M10	6,9	2,3	22,0
IKISM100	IKISM100H	4"	100	110 - 115	1,8 × 24	165,0	ISO 7045 M8x35	M10	7,8	2,6	23,0
IKISM115	IKISM115H		115	123 - 128	1,8 × 24	178,0	ISO 7045 M8x35	M10	7,8	2,6	25,0
IKISM118	IKISM118H		118	131 - 137	1,8 × 24	187,0	ISO 7045 M8x35	M10	7,8	2,6	26,0
IKISM125	IKISM125H	5"	125	138 - 144	1,8 × 24	194,0	ISO 7045 M8x35	M10	7,8	2,6	27,0
IKISM134	IKISM134H		134	157 - 163	2 × 24	214,0	ISO 7045 M8x35	M10	7,8	2,6	32,0
IKISM150	IKISM150H	6"	150	164 - 170	2 × 24	220,0	ISO 7045 M8x35	M10	7,8	2,6	33,0



Pipe Clamp with Nut without Rubber Lining "M Series"

Nominal Size Range

- 1/4" to 6"

Material

- Carbon Steel

Service

- Used for mounting of pipes to the walls (vertical/horizontal), ceilings and floors.

Installation

- Easy and safe assembly through Philips combi side screws. Side screws are protected against loss during assembly with the help of plastic washers.

Ordering

- Specify code or name, nominal size and finish.

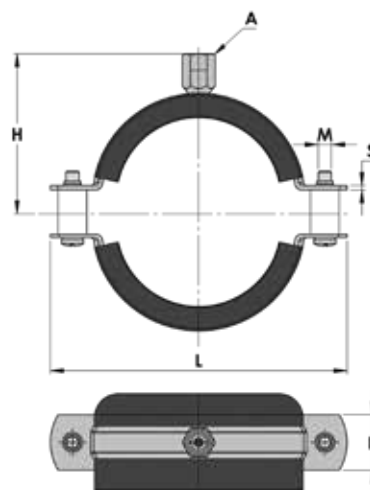
Finish

- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256.

Note: The load data published includes a safety factor. (Safety factor= Ratio of ultimate load to the design load.)

Code	HCR Code	Nominal Size	DN	Clamping Range	S × B	L	Bolt Size	A Nut	Breaking Load	Recom. Load	Weight
				mm - mm	mm × mm		M		kN	kN	kg/100 pcs
IKILM008	IKILM008H	1/4"	8	15 - 17	1 × 20	41,0	ISO 7045 M5x18	M8	3,9	1,3	3,0
IKILM015	IKILM015H	1/2"	15	19 - 22	1 × 20	47,0	ISO 7045 M5x18	M8	3,9	1,3	3,0
IKILM017	IKILM017H		17	23 - 26	1 × 20	51,0	ISO 7045 M5x18	M8	3,9	1,3	3,0
IKILM020	IKILM020H	3/4"	20	27 - 30	1 × 20	55,0	ISO 7045 M5x22	M8	3,9	1,3	4,0
IKILM025	IKILM025H	1"	25	32 - 36	1 × 20	61,0	ISO 7045 M5x22	M8	3,9	1,3	4,0
IKILM032	IKILM032H	1 1/4"	32	39 - 43	1 × 20	68,5	ISO 7045 M5x22	M8	3,9	1,3	4,0
IKILM040	IKILM040H	1 1/2"	40	47 - 52	1 × 20	77,5	ISO 7045 M5x22	M8	4,8	1,6	5,0
IKILM047	IKILM047H		47	55 - 59	1 × 20	85,0	ISO 7045 M5x22	M8	4,8	1,6	5,0
IKILM050	IKILM050H	2"	50	61 - 65	1 × 20	91,0	ISO 7045 M5x22	M8	4,8	1,6	5,0
IKILM055	IKILM055H		55	67 - 72	1 × 20	98,0	ISO 7045 M5x22	M8	4,8	1,6	6,0
IKILM072	IKILM072H		72	75 - 80	1,5 × 24	113,0	ISO 7045 M6x30	M10	6,9	2,3	11,0
IKILM080	IKILM080H	3"	80	83 - 89	1,5 × 24	121,0	ISO 7045 M6x30	M10	6,9	2,3	12,0
IKILM081	IKILM081H		81	90 - 95	1,5 × 24	128,5	ISO 7045 M6x30	M10	6,9	2,3	12,0
IKILM087	IKILM087H		87	94 - 99	1,5 × 24	132,5	ISO 7045 M6x30	M10	6,9	2,3	13,0
IKILM099	IKILM099H		99	112 - 117	1,8 × 24	158,0	ISO 7045 M8x35	M10	6,9	2,3	19,0
IKILM108	IKILM108H		108	119 - 124	1,8 × 24	165,0	ISO 7045 M8x35	M10	7,8	2,6	20,0
IKILM120	IKILM120H		120	132 - 137	1,8 × 24	178,0	ISO 7045 M8x35	M10	7,8	2,6	21,0
IKILM125	IKILM125H	5"	125	140 - 146	1,8 × 24	187,0	ISO 7045 M8x35	M10	7,8	2,6	22,0
IKILM133	IKILM133H		133	147 - 153	1,8 × 24	194,0	ISO 7045 M8x35	M10	7,8	2,6	23,0
IKILM150	IKILM150H	6"	150	166 - 172	2 × 24	214,0	ISO 7045 M8x35	M10	7,8	2,6	27,0
IKILM160	IKILM160H		160	173 - 178	2 × 24	220,0	ISO 7045 M8x35	M10	7,8	2,6	28,0

Silent Clamp



Nominal Size Range

- 1 1/4" to 198-207

Material

- Carbon Steel
- EPDM Rubber Lining provides noise reduction in accordance with EN 14366, vibration reduction and partial compensation of thermal expansion

Service

- Use for mounting of pipes to the walls (vertical) ceilings and floors.

Installation

- Easy and safe assembly through Philips combi side screws.
- Side screws are protected against loss during assembly with the help of plastic washers.

Ordering

- Specify code or name, nominal size and finish.

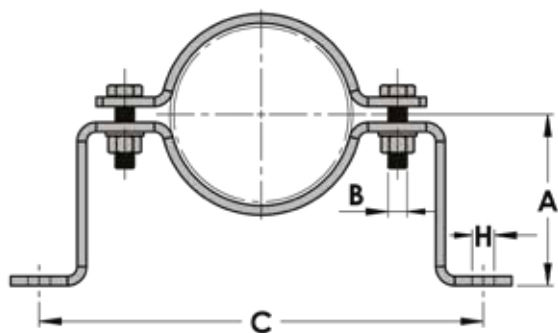
Finish

- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 - EN ISO 2081/EN ISO 4042

Note: See the page 127 for the details of EPDM Rubber Lining.

Code	Nominal Size		Clamping Range	S × B	A	H	L	M	Weight
	Inch	DN	mm-mm	mm × mm		mm	mm		kg/100 Pcs.
IKSSK032	1 1/4"	32	39-46	1.5 × 20	M8/10	47.0	91.5	M6	23
IKSSK040	1 1/2"	40	48-53	1.5 × 20	M8/10	50.5	99.0	M6	25
IKSSK065	2 1/2"	65	74-80	2 × 25	M8/10	66.0	134.0	M6	46
IKSSK080	3"	80	87-94	2 × 25	M8/10	71.5	146.5	M6	50
IKSSK100	4"	100	110-116	2.5 × 25	M8/10	85.0	173.0	M6	70
IKSSK112	4 1/2"	115	120-128	2.5 × 25	M8/10	91.5	186.0	M6	77
IKSSK125	5"	125	135-143	2.5 × 25	M8/10	98.0	203.0	M6	84
IKSSK134	-	-	149-161	2.5 × 25	M8/10	106.0	215.0	M6	92
IKSSK185	-	-	198-207	2.5 × 25	M8/10	131.0	281.0	M6	122

Measuring Range	Home Area [dB(A)]			
Flow rate	0.5	1	2	4
INKA Silent Clamp	18	21	23	25
Clamp for PVC Pipe	24	26	29	32



Offset Clamp

Nominal Size Range

- ½" to 12"

Material

- Carbon Steel in accordance with the MSS SP-58 -TABLE A2/A2M

Service

- Designed to be used in the clamping of pipe lines at a fixed distance away from wall, floor, and ceiling..

Ordering

- Specify code or name, nominal size and finish.

Finish

- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 – EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

Note: The load data published includes a safety factor. (Safety factor= Ratio of ultimate load to the design load.)

Code	HCR Code	Nominal Size		A	B	C	H	Recom. Load	Weight
		Inch	DN	mm		mm	mm	kN	kg/100 Pcs.
IEOPC015	IEOPC015H	½"	15	62	M10	150	11	0.9	50.9
IEOPC020	IEOPC020H	¾"	20	63	M10	150	11	0.9	51.9
IEOPC025	IEOPC025H	1"	25	66	M10	150	11	0.9	54.7
IEOPC032	IEOPC032H	1 ¼"	32	69	M10	170	11	0.9	59.5
IEOPC040	IEOPC040H	1 ½"	40	76	M10	170	11	0.9	62.3
IEOPC050	IEOPC050H	2"	50	81	M10	190	11	1.9	81.1
IEOPC065	IEOPC065H	2 ½"	65	87	M10	220	11	1.9	91.9
IEOPC080	IEOPC080H	3"	80	95	M10	240	11	1.9	101.9
IEOPC090	IEOPC090H	3 ½"	90	101	M10	250	11	1.9	108.6
IEOPC100	IEOPC100H	4"	100	108	M12	280	14	2.7	161.6
IEOPC125	IEOPC125H	5"	125	120	M12	310	14	2.7	182.8
IEOPC150	IEOPC150H	6"	150	135	M12	360	14	3.8	330.3
IEOPC200	IEOPC200H	8"	200	160	M12	420	14	3.8	399.2
IEOPC250	IEOPC250H	10"	250	190	M16	520	21	4.0	638.5
IEOPC300	IEOPC300H	12"	300	215	M16	600	21	5.3	879.6

Adjustable Clevis Hanger



Size Range

- ½" to 36"

Material

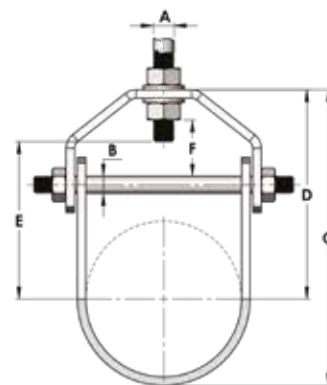
- Carbon Steel in accordance with the MSS SP-58 -TABLE A2/A2M

Service

- Designed for hanging of insulated or bare pipes.

Installation

- Vertical adjustments are possible once the pipe is in place.
- The lower nut is used to adjust the pipeline to the required elevation.
- The top nut is used to prevent loosening due to the vibration.
- The top nut should be tightened after adjustment.
- The top nut must securely be tightened to assure proper performance of hanger after adjustment.



Ordering

- Specify code or name, nominal size and finish.

Finish

- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 - EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

Approvals

- Complies with Manufacturers Standardization Society MSS SP-58 Type 1
- Complies with NFPA-13 Standard for the Installation of Sprinkler Systems.

Certification

- FM Approved and UL listed

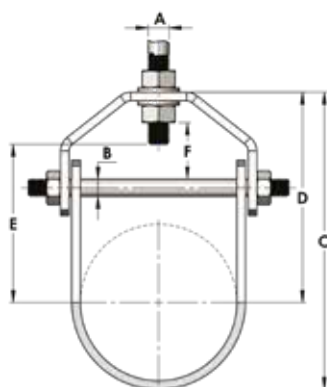
Note: For sizes 14" and larger a spacer sleeve is added over the cross bolt.

Note: EPDM Rubber Lining (For details: See the catalogue page no: 127) can be supplied separately upon request.

Note: The certifications of the products are valid without any lining on them.

Note: The load data published includes a safety factor. (Safety factor= Ratio of ultimate load to the design load.)

Code	HCR Code	Nominal Size		Pipe Size		Size of Steel		A	B	C	D	E	F	Recom. Load	Weight	Cert.
				Std. OD	Max. OD	Upper	Lower									
		Inch	DN	mm	mm	mm × mm	mm × mm									
IEKCHL015	IEKCHL015H	½"	15	21.3	25	3 × 25	3 × 25	M10	M6	66.0	50.0	35.0	10	2.7	14	UL
IEKCHL020	IEKCHL020H	¾"	20	26.6	31	3 × 25	3 × 25	M10	M6	76.0	57.0	42.0	12	2.7	16	FM/UL
IEKCHL025	IEKCHL025H	1"	25	33.4	38	3 × 25	3 × 25	M10	M6	85.0	62.5	47.0	15	2.7	18	FM/UL
IEKCHL032	IEKCHL032H	1 ¼"	32	42.1	46	3 × 25	3 × 25	M10	M6	99.0	72.5	57.0	21	2.7	20	FM/UL
IEKCHL040	IEKCHL040H	1 ½"	40	48.2	52	3 × 25	3 × 25	M10	M8	109.0	79.5	61.0	23	2.7	24	FM/UL
IEKCHL050	IEKCHL050H	2"	50	60.3	64	3 × 25	3 × 25	M10	M8	136.0	100.5	82.0	38	2.7	28	FM/UL
IEKCHL065	IEKCHL065H	2 ½"	65	73.0	80	5 × 30	5 × 30	M12	M10	162.0	116.5	93.0	41	5.0	66	FM/UL
IEKCHL080	IEKCHL080H	3"	80	88.9	93	5 × 30	5 × 30	M12	M10	172.0	120.0	96.0	38	5.0	71	FM/UL
IEKCHL090	IEKCHL090H	3 ½"	90	101.6	106	5 × 30	5 × 30	M12	M10	187.0	128.5	105.0	38	5.0	77	FM/UL
IEKCHL100	IEKCHL100H	4"	100	114.3	119	6 × 30	5 × 30	M16	M10	205.0	140.0	115.0	43	6.3	90	FM/UL
IEKCHL112	IEKCHL112H				128	6 × 30	5 × 30	M16	M10	220.0	150.0	111.0	37	6.3	94	-
IEKCHL125	IEKCHL125H	5"	125	141.3	141	6 × 30	5 × 30	M16	M12	232.0	155.5	117.0	42	6.3	108	FM/UL
IEKCHL134	IEKCHL134H				154	6 × 30	5 × 30	M16	M12	256.0	173.0	134.0	42	6.3	115	-
IEKCHL150	IEKCHL150H	6"	150	168.3	170	6 × 30	5 × 30	M20	M12	264.5	173.5	128.5	37	8.6	156	FM/UL
IEKCHL185	IEKCHL185H				200	6 × 30	5 × 30	M20	M16	302.0	196.0	151.0	40	8.6	254	-
IEKCHL200	IEKCHL200H	8"	200	219.1	221	6 × 30	5 × 30	M20	M16	328.0	211.5	166.0	43	8.9	269	UL
IEKCHL224	IEKCHL224H				252	10 × 50	6 × 50	M20	M20	376.0	243.0	194.0	49	16.0	434	-
IEKCHL250	IEKCHL250H	10"	250	273.0	274	10 × 50	6 × 50	M20	M20	400.0	256.0	207.0	49	16.0	463	UL
IEKCHL280	IEKCHL280H				294	10 × 50	6 × 50	M20	M20	426.0	272.0	207.0	49	16.0	492	-
IEKCHL285	IEKCHL285H				308	10 × 50	6 × 50	M20	M20	441.0	280.0	231.0	58	16.0	507	-
IEKCHL295	IEKCHL295H				314	10 × 50	6 × 50	M20	M20	450.0	286.0	237.0	58	16.0	514	-
IEKCHL298	IEKCHL298H				326	10 × 50	6 × 50	M20	M20	457.0	287.0	238.0	58	16.0	582	-



Adjustable Clevis Hanger



Size Range

- ½" to 36"

Material

- Carbon Steel in accordance with the MSS SP-58 - TABLE A2/A2M

Service

- Designed for suspension of insulated or non-insulated stationary pipes.

Installation

- Vertical adjustments are possible once the pipe is in place.
- The lower nut is used to adjust the pipeline to the required elevation.
- The top nut is used to prevent loosening due to the vibration. The top nut should be tightened after adjustment.
- The top nut must securely be tightened to assure proper performance of hanger after adjustment.

Ordering

- Specify code or name, nominal size and finish.

Finish

- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 - EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

Approvals

- Complies with Manufacturers Standardization Society MSS SP-58 Type 1
- Complies with NFPA-13 Standard for the Installation of Sprinkler Systems.

Certification

- FM approved and UL listed

Note: For sizes 14" and larger a spacer sleeve is added over the cross bolt.

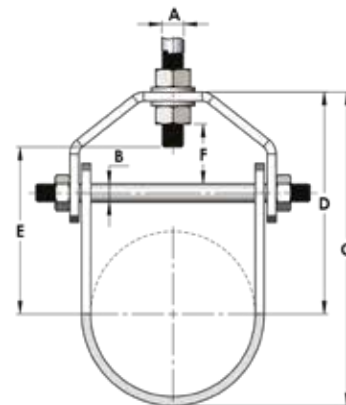
Note: EPDM Rubber Lining (For details: See the catalogue page no: 127) can be supplied separately upon request.

Note: The certifications of the products are valid without any lining on them.

Note: The load data published includes a safety factor. (Safety factor= Ratio of ultimate load to the design load.)

Code	HCR Code	Nominal Size		Pipe Size		Size of Steel		A	B	C	D	E	F	Recom. Load	Weight	Cert.
				Std. OD	Max. OD	Upper	Lower									
		Inch	DN	mm	mm	mm × mm	mm × mm			mm	mm	mm	mm	kN	kg/100 Pcs.	
IEKCHL300	IEKCHL300H	12"	300	323.9	325	10 × 50	6 × 50	M20	M20	470.0	300.5	251	58.0	16.9	533	UL
IEKCHL350	IEKCHL350H	14"	350	355.6	357	12 × 60	6 × 50	M24	M24	517.0	331.5	272	68.0	18.7	788	-
IEKCHL360	IEKCHL360H				376	12 × 60	6 × 50	M24	M24	535.5	340.5	281	70.0	18.7	818	-
IEKCHL372	IEKCHL372H				386	12 × 60	6 × 50	M24	M24	555.0	355.0	296	71.0	18.7	841	-
IEKCHL400	IEKCHL400H	16"	400	406.4	409	12 × 70	6 × 50	M24	M24	560.5	349.5	298	66.0	20.5	980	-
IEKCHL416	IEKCHL416H				431	12 × 70	6 × 50	M24	M24	596.0	373.5	314	86.0	20.5	1,031	-
IEKCHL444	IEKCHL444H				445	12 × 70	6 × 50	M24	M24	625.0	395.0	336	90.0	20.5	1,089	-
IEKCHL450	IEKCHL450H	18"	450	457.2	459	12 × 70	6 × 50	M24	M30	654.5	418.0	359	98.0	21.3	1,263	-
IEKCHL474	IEKCHL474H				488	12 × 70	6 × 50	M24	M30	680.0	429.0	370	96.0	21.3	1,324	-
IEKCHL500	IEKCHL500H	20"	500	508.0	509	20 × 80	10 × 80	M30	M30	720.5	455.0	380	98.0	21.3	2,283	-
IEKCHL520	IEKCHL520H				540	20 × 80	10 × 80	M30	M30	750.0	469.0	394	99.0	21.3	2,383	-
IEKCHL560	IEKCHL560H				580	20 × 80	10 × 80	M30	M30	802.0	501.0	426	105.5	21.3	2,535	-
IEKCHL600	IEKCHL600H	24"	600	609.6	611	20 × 80	10 × 80	M30	M30	828.5	512.0	437	104.0	21.3	2,627	-
IEKCHL620	IEKCHL620H				640	20 × 80	10 × 80	M30	M30	866.0	535.0	460	112.0	21.3	2,733	-
IEKCHL650	IEKCHL650H				674	20 × 80	10 × 80	M30	M30	901.0	553.0	477	116.0	21.3	2,856	-
IEKCHL685	IEKCHL685H				710	20 × 80	10 × 80	M30	M30	956.0	590.0	515	125.0	21.3	2,990	-
IEKCHL750	IEKCHL750H	30"	750	762.0	763	25 × 80	10 × 80	M30	M30	1,004.0	612.0	537	128.0	26.7	3,485	-
IEKCHL780	IEKCHL780H				814	25 × 80	10 × 80	M30	M30	1,069.5	652.0	576	133.0	26.7	3,680	-
IEKCHL820	IEKCHL820H				850	25 × 80	10 × 80	M30	M30	1,100.0	664.0	589	133.0	26.7	3,810	-
IEKCHL860	IEKCHL860H				880	25 × 80	10 × 80	M30	M30	1,134.0	683.0	608	133.0	26.7	3,920	-
IEKCHL900	IEKCHL900H	36"	900	914.4	916	25 × 80	10 × 80	M30	M30	1,170.0	701.0	626	141.0	-	4,050	-
IEKCHL970	IEKCHL970H				1,000	25 × 80	12 × 80	M30	M30	1,283.0	770.0	695	165.0	-	4,740	-
IEKCHL1008	IEKCHL1008H				1,040	25 × 80	12 × 80	M30	M30	1,323.0	790.0	715	165.0	-	4,890	-
IEKCHL1040	IEKCHL1040H				1,080	25 × 80	12 × 80	M30	M30	1,363.0	810.0	738	165.0	-	5,045	-

Adjustable Clevis Hanger "M Series"



Size Range

- ½" to 10"

Material

- Carbon Steel in accordance with the MSS SP-58 - TABLE A2/A2M

Installation

- Vertical adjustments are possible once the pipe is in place.
- The lower nut is used to adjust the pipeline to the required elevation.
- The top nut is used to prevent loosening due to the vibration.
- The top nut should be tightened after adjustment.
- The top nut must securely be tightened to assure proper performance of hanger after adjustment.

Service

- Designed as an economical product for suspension of insulated steel pipes, plastic pipes, copper pipes, glass or GRP pipes.

Ordering

- Specify code or name, nominal size and finish.

Finish

- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 - EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

Approvals

- Complies with Manufacturers Standardization Society MSS SP-58 Type 1

Certification

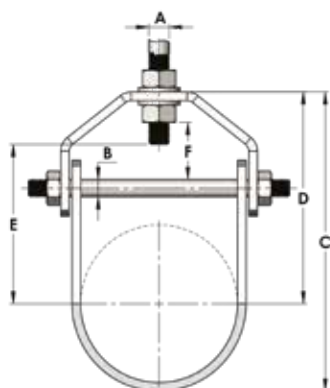
- UL listed

Note: EPDM Rubber Lining (For details: See the catalogue page no: 127) can be supplied separately upon request.

Note: The certifications of the products are valid without any lining on them.

Note: The load data published includes a safety factor. (Safety factor= Ratio of ultimate load to the design load.)

Code	HCR Code	Nominal Size		Pipe Size		Size of Steel		A	B	C	D	E	F	Recom. Load	Weight	Cert.
		Inch	DN	Std. OD	Max. OD	Upper	Lower			mm	mm	mm	mm	kN	kg/100Pcs	
				mm	mm	mm × mm	mm × mm									
IEKCHLM015	IEKCHLM015H	½"	15	21.3	24	2×20	2×20	M10	M6	66	51.5	30	13	0.7	8.2	UL
IEKCHLM020	IEKCHLM020H	¾"	20	26.9	29	2×20	2×20	M10	M6	71	54.0	33	13	0.7	8.7	UL
IEKCHLM025	IEKCHLM025H	1"	25	33.7	35	2×20	2×20	M10	M6	78	58.0	37	14	1.1	9.5	UL
IEKCHLM026	IEKCHLM026H				41	2×20	2×20	M10	M6	84	61.0	40	14	1.1	10.3	UL
IEKCHLM032	IEKCHLM032H	1 ¼"	32	42.4	45	2×20	2×20	M10	M6	88	63.0	42	14	1.1	10.9	UL
IEKCHLM040	IEKCHLM040H	1 ½"	40	48.3	51	2×20	2×20	M10	M8	102	74.0	53	20	1.1	14.3	UL
IEKCHLM041	IEKCHLM041H				55	2×20	2×20	M10	M8	106	76.0	55	20	1.1	14.8	UL
IEKCHLM050	IEKCHLM050H	2"	50	60.3	63	2×20	2×20	M10	M8	121	87.0	66	27	1.1	16.5	UL
IEKCHLM051	IEKCHLM051H				69	2×20	2×20	M10	M8	127	90.0	69	27	1.1	17.2	UL
IEKCHLM065	IEKCHLM065H	2 ½"	65	73.0	75	3×25	3×25	M12	M10	142	101.0	73	29	1.6	34.9	UL
IEKCHLM066	IEKCHLM066H				80	3×25	3×25	M12	M10	151	107.0	80	31	1.6	36.5	UL
IEKCHLM070	IEKCHLM070H				86	3×25	3×25	M12	M10	157	110.0	83	31	1.6	38.2	UL
IEKCHLM080	IEKCHLM080H	3"	80	88.9	91	3×25	3×25	M12	M10	170	121.0	94	39	1.6	39.9	UL
IEKCHLM081	IEKCHLM081H				96	3×25	3×25	M12	M10	175	123.0	96	39	1.6	41.3	UL
IEKCHLM085	IEKCHLM085H				101	3×25	3×25	M12	M10	181	127.0	100	40	1.6	42.3	UL
IEKCHLM090	IEKCHLM090H	3 ½"	90	101.6	104	3×25	3×25	M12	M10	185	129.0	102	41	1.8	43.0	UL
IEKCHLM091	IEKCHLM091H				111	3×25	3×25	M12	M10	192	133.0	106	41	1.8	45.2	UL
IEKCHLM100	IEKCHLM100H	4"	100	114.3	117	5×25	3×25	M12	M10	205	143.0	114	43	2.2	57.3	UL
IEKCHLM101	IEKCHLM101H				122	5×25	3×25	M12	M10	210	145.0	116	43	2.2	58.3	UL
IEKCHLM108	IEKCHLM108H				127	5×25	3×25	M16	M12	220	153.0	115	39	2.2	76.2	UL



Adjustable Clevis Hanger "M Series"



Size Range

- ½" to 10"

Material

- Carbon Steel in accordance with the MSS SP-58 - TABLE A2/A2M

Installation

- Vertical adjustments are possible once the pipe is in place.
- The lower nut is used to adjust the pipeline to the required elevation.
- The top nut is used to prevent loosening due to the vibration.
- The top nut should be tightened after adjustment.
- The top nut must securely be tightened to assure proper performance of hanger after adjustment.

Service

- Designed as an economical product for suspension of insulated steel pipes, plastic pipes, copper pipes, glass or GRP.

Ordering

- Specify code or name, nominal size and finish.

Finish

- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 - EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

Approvals

- Complies with Manufacturers Standardization Society MSS SP-58 Type 1

Certification

- UL listed

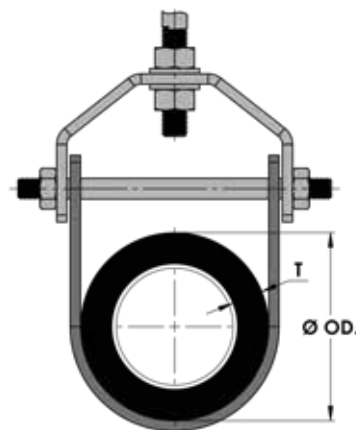
Note: EPDM Rubber Lining (For details: See the catalogue page no: 127) can be supplied separately upon request.

Note: The certifications of the products are valid without any lining on them.

Note: The load data published includes a safety factor. (Safety factor= Ratio of ultimate load to the design load.)

Code	HCR Code	Nominal Size		Pipe Size		Size of Steel		A	B	C	D	E	F	Recom. Load	Weight	Cert.
		Inch	DN	Std. OD	Max. OD	Upper	Lower			mm	mm	mm	mm	kN	kg/100 Pcs.	
				mm	mm	mm × mm	mm × mm									
IEKCHLM112	IEKCHLM112H				134	5×30	3×30	M16	M12	227	156	119	39	2.2	78.0	UL
IEKCHLM124	IEKCHLM124H				140	5×30	3×30	M16	M12	233	159	122	39	2.2	81.0	UL
IEKCHLM125	IEKCHLM125H	5"	125	139.7	145	5×30	3×30	M16	M12	238	162	124	39	2.7	82.3	UL
IEKCHLM126	IEKCHLM126H				152	5×30	3×30	M16	M12	245	165	128	39	2.7	85.1	UL
IEKCHLM130	IEKCHLM130H				158	5×30	3×30	M16	M12	251	168	131	39	2.7	86.7	UL
IEKCHLM148	IEKCHLM148H				165	5×30	3×30	M16	M12	258	172	134	39	2.7	90.0	UL
IEKCHLM150	IEKCHLM150H	6"	150	168.3	173	5×30	5×30	M16	M12	269	177	139	40	3.6	118.0	UL
IEKCHLM151	IEKCHLM151H				179	5×30	5×30	M16	M12	275	180	142	40	3.6	121.2	UL
IEKCHLM160	IEKCHLM160H				186	5×30	5×30	M16	M12	283	184	147	41	3.6	124.1	UL
IEKCHLM174	IEKCHLM174H				194	5×30	5×30	M16	M12	292	189	152	42	3.6	128.8	UL
IEKCHLM180	IEKCHLM180H				203	5×30	5×30	M16	M12	303	196	158	44	3.6	133.5	UL
IEKCHLM190	IEKCHLM190H				210	5×40	5×40	M20	M16	321	210	166	43	5.3	206.8	UL
IEKCHLM195	IEKCHLM195H				219	5×40	5×40	M20	M16	332	217	173	45	5.3	214.3	UL
IEKCHLM200	IEKCHLM200H	8"	200	219.1	224	5×40	5×40	M20	M16	338	221	177	47	5.3	217.3	UL
IEKCHLM201	IEKCHLM201H				232	5×40	5×40	M20	M16	346	225	181	47	5.3	224.0	UL
IEKCHLM220	IEKCHLM220H				244	5×40	5×40	M20	M16	359	232	188	48	5.3	232.1	UL
IEKCHLM226	IEKCHLM226H				252	5×40	5×40	M20	M16	368	237	193	49	5.3	236.6	UL
IEKCHLM240	IEKCHLM240H				261	6×40	6×40	M20	M20	383	246	201	49	6.8	324.4	UL
IEKCHLM245	IEKCHLM245H				272	6×40	6×40	M20	M20	397	254	209	51	6.8	334.5	UL
IEKCHLM250	IEKCHLM250H	10"	250	273.0	279	6×40	6×40	M20	M20	404	258	213	51	6.8	339.0	UL

Selection Tables of Clevis Hangers for Insulated Pipes



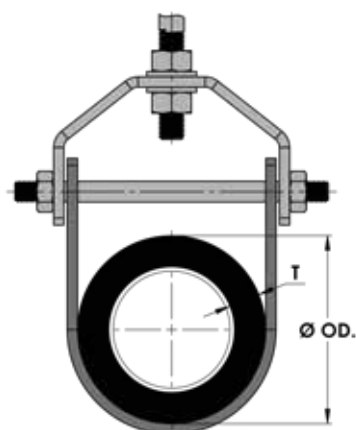
Selection

- Select the Pipe Size, Thickness of Insulation and the Code for Clevis Hanger.

Options for Insulation Inserts

- Polyisocyanurate Insulation Inserts
For details: See the catalogue page no. 100
- Calcium Silicate Inserts
For details: See the catalogue page no. 101
- Rubber Inserts
For details: See the catalogue page no. 102-103

Pipe Size			Insulation Inserts (T=13 mm)		Insulation Inserts (T=19 mm)		Insulation Inserts (T=25 mm)		Insulation Inserts (T=32 mm)	
Inch	DN	OD	Insulation OD	Code	Insulation OD	Code	Insulation OD	Code	Insulation OD	Code
		mm	mm		mm		mm		mm	
½"	15	21.3	47.3	IEKCHLM040	59.3	IEKCHLM050	71.3	IEKCHLM065	85.3	IEKCHLM070
¾"	20	26.9	52.9	IEKCHLM041	64.9	IEKCHLM051	76.9	IEKCHLM066	90.9	IEKCHLM080
1"	25	33.7	59.7	IEKCHLM050	71.7	IEKCHLM065	83.7	IEKCHLM070	97.7	IEKCHLM085
1 ½"	32	42.4	68.4	IEKCHLM051	80.4	IEKCHLM066	92.4	IEKCHLM081	106.4	IEKCHLM091
1 ½"	40	48.3	74.3	IEKCHLM065	86.3	IEKCHLM070	98.3	IEKCHLM085	112.3	IEKCHLM100
2"	50	60.3	86.3	IEKCHLM070	98.3	IEKCHLM085	110.3	IEKCHLM091	124.3	IEKCHLM108
2 ½"	65	73.0	99.0	IEKCHLM085	111.0	IEKCHLM091	123.0	IEKCHLM108	137.0	IEKCHLM124
2 ½"	65	76.1	102.1	IEKCHLM090	114.1	IEKCHLM100	126.1	IEKCHLM108	140.1	IEKCHLM124
3"	80	88.9	114.9	IEKCHLM100	126.9	IEKCHLM108	138.9	IEKCHLM124	152.9	IEKCHLM126
3 ½"	90	101.6	127.6	IEKCHLM112	139.6	IEKCHLM124	151.6	IEKCHLM126	165.6	IEKCHLM148
4"	100	114.3	140.3	IEKCHLM124	152.3	IEKCHLM126	164.3	IEKCHLM148	178.3	IEKCHLM151
5"	125	139.7	165.7	IEKCHLM150	177.7	IEKCHLM151	189.7	IEKCHLM174	203.7	IEKCHLM180
5"	125	141.3	167.3	IEKCHLM150	179.3	IEKCHLM151	191.3	IEKCHLM174	205.3	IEKCHLM190
6"	150	165.1	191.1	IEKCHLM174	203.1	IEKCHLM180	215.1	IEKCHLM195	229.1	IEKCHLM201
6"	150	168.3	194.3	IEKCHLM174	206.3	IEKCHLM190	218.3	IEKCHLM195	232.3	IEKCHLM201
8"	200	219.1	245.1	IEKCHLM226	257.1	IEKCHLM240	269.1	IEKCHLM245	283.1	IEKCHLM280
10"	250	273.0	299.0	IEKCHL285	311.0	IEKCHL295	323.0	IEKCHL300	337.0	IEKCHL350
12"	300	323.9	349.9	IEKCHL350	361.9	IEKCHL360	373.9	IEKCHL360	387.9	IEKCHL400
14"	350	355.6	381.6	IEKCHL372	393.6	IEKCHL400	405.6	IEKCHL400	419.6	IEKCHL416
16"	400	406.4	432.4	IEKCHL444	444.4	IEKCHL444	456.4	IEKCHL450	470.4	IEKCHL474
18"	450	457.2	483.2	IEKCHL474	495.2	IEKCHL500	507.2	IEKCHL500	521.2	IEKCHL520
20"	500	508.0	534.0	IEKCHL520	546.0	IEKCHL560	558.0	IEKCHL560	572.0	IEKCHL560
24"	600	609.1	635.1	IEKCHL620	647.1	IEKCHL650	659.1	IEKCHL650	673.1	IEKCHL650
30"	750	762.0	788.0	IEKCHL780	800.0	IEKCHL780	812.0	IEKCHL780	826.0	IEKCHL820
36"	900	914.4	940.4	IEKCHL970	952.4	IEKCHL970	964.4	IEKCHL970	978.4	IEKCHL970



Selection Tables of Clevis Hangers for Insulated Pipes

Selection

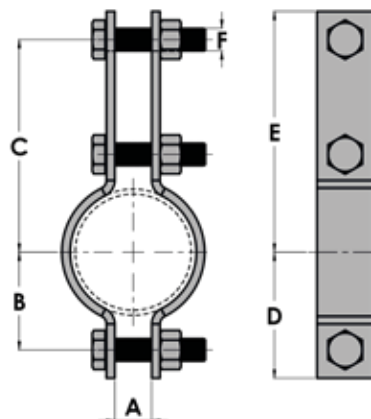
- Select the Pipe Size, Thickness of Insulation and the Code for Clevis Hanger.

Options for Insulation Inserts

- Polyisocyanurate Insulation Inserts
For details: See the catalogue page no. 100
- Calcium Silicate Inserts
For details: See the catalogue page no. 101
- Rubber Support Inserts (RSI)
For details: See the catalogue page no. 102-103

Pipe Size			Insulation Inserts (T=38 mm)		Insulation Inserts (T=50 mm)		Insulation Inserts (T=65 mm)		Insulation Inserts (T=75 mm)	
Inch	DN	OD mm	Insulation OD mm	Code	Insulation OD mm	Code	Insulation OD mm	Code	Insulation OD mm	Code
½"	15	21.3	97.3	IEKCHLM085	121.3	IEKCHLM101	151.3	IEKCHLM126	171.3	IEKCHLM150
¾"	20	26.9	102.9	IEKCHLM090	126.9	IEKCHLM108	156.9	IEKCHLM130	176.9	IEKCHLM151
1"	25	33.7	109.7	IEKCHLM091	133.7	IEKCHLM112	163.7	IEKCHLM148	183.7	IEKCHLM160
1 ¼"	32	42.4	118.4	IEKCHLM101	142.4	IEKCHLM125	172.4	IEKCHLM150	192.4	IEKCHLM174
1 ½"	40	48.3	124.3	IEKCHLM108	148.3	IEKCHLM126	178.3	IEKCHLM151	198.3	IEKCHLM180
2"	50	60.3	136.3	IEKCHLM124	160.3	IEKCHLM148	190.3	IEKCHLM174	210.3	IEKCHLM190
2 ½"	65	73.0	149.0	IEKCHLM126	173.0	IEKCHLM150	203.0	IEKCHLM180	223.0	IEKCHLM200
2 ½"	65	76.1	152.1	IEKCHLM126	176.1	IEKCHLM151	206.1	IEKCHLM190	226.1	IEKCHLM201
3"	80	88.9	164.9	IEKCHLM148	188.9	IEKCHLM174	218.9	IEKCHLM195	238.9	IEKCHLM220
3 ½"	90	101.6	177.6	IEKCHLM151	201.6	IEKCHLM180	231.6	IEKCHLM201	251.6	IEKCHLM226
4"	100	114.3	190.3	IEKCHLM174	214.3	IEKCHLM195	244.3	IEKCHLM220	264.3	IEKCHLM245
5"	125	139.7	215.7	IEKCHLM195	239.7	IEKCHLM220	269.7	IEKCHLM245	289.7	IEKCHL280
5"	125	141.3	217.3	IEKCHLM195	241.3	IEKCHLM220	271.3	IEKCHLM245	291.3	IEKCHL280
6"	150	165.1	241.1	IEKCHLM220	265.1	IEKCHLM245	295.1	IEKCHL285	315.1	IEKCHL300
6"	150	168.3	244.3	IEKCHLM220	268.3	IEKCHLM245	298.3	IEKCHL285	318.3	IEKCHL300
8"	200	219.1	295.1	IEKCHLM285	319.1	IEKCHL298	349.1	IEKCHL350	369.1	IEKCHL360
10"	250	273.0	349.0	IEKCHLM350	373.0	IEKCHL360	403.0	IEKCHL400	423.0	IEKCHL416
12"	300	323.9	399.9	IEKCHLM400	423.9	IEKCHL416	453.9	IEKCHL450	473.9	IEKCHL474
14"	350	355.6	431.6	IEKCHLM444	455.6	IEKCHL450	485.6	IEKCHL474	505.6	IEKCHL500
16"	400	406.4	482.4	IEKCHLM474	506.4	IEKCHL500	536.4	IEKCHL520	556.4	IEKCHL560
18"	450	457.2	533.2	IEKCHLM520	557.2	IEKCHL560	587.2	IEKCHL600	607.2	IEKCHL600
20"	500	508.0	584.0	IEKCHLM600	608.0	IEKCHL600	638.0	IEKCHL620	658.0	IEKCHL650
24"	600	609.1	685.1	IEKCHLM685	709.1	IEKCHL685	739.1	IEKCHL750	759.1	IEKCHL750
30"	750	762.0	838.0	IEKCHLM820	862.0	IEKCHL860	892.0	IEKCHL900	912.0	IEKCHL900
36"	900	914.4	990.4	IEKCHLM970	1,014.4	IEKCHL1008	1,044.4	IEKCHL1040	1,064.4	IEKCHL1040

Double Bolt Pipe Clamp



Size Range

- ½" to 36"

Material

- Carbon Steel in accordance with the MSS SP-58 -TABLE A2/A2M

Service

- Designed for suspension of insulated pipe lines requiring clamp flexibility and up to 100 mm of insulation.

Installation

- Normally used with weldless eye nut or eye rod.

Ordering

- Specify code or name, nominal size and finish.

Finish

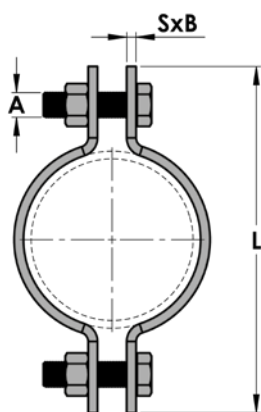
- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 - EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

Approvals

- Complies with Manufacturers Standardization Society MSS SP-58 Type 3

Note: The load data published includes a safety factor. (Safety factor= Ratio of ultimate load to the design load.)

Code	HCR Code	Nominal Size		A	B	C	D	E	F	Recom. Load	Weight
		Inch	DN	mm	mm	mm	mm	mm		kN	kg/100 Pcs.
IEKDBPC015	IEKDBPC015H	½"	15	8	27	60	43	76	M10	4.0	41.3
IEKDBPC020	IEKDBPC020H	¾"	20	16	27	60	43	76	M10	4.0	43.0
IEKDBPC025	IEKDBPC025H	1"	25	16	33	65	49	81	M10	4.0	46.0
IEKDBPC032	IEKDBPC032H	1 ¼"	32	16	38	70	54	86	M10	4.0	49.2
IEKDBPC040	IEKDBPC040H	1 ½"	40	26	46	105	66	125	M16	6.5	128.9
IEKDBPC050	IEKDBPC050H	2"	50	26	53	130	73	150	M16	6.5	142.5
IEKDBPC065	IEKDBPC065H	2 ½"	65	26	63	135	83	155	M16	6.5	150.7
IEKDBPC080	IEKDBPC080H	3"	80	26	69	150	89	170	M16	6.5	160.9
IEKDBPC090	IEKDBPC090H	3 ½"	90	26	76	160	96	180	M16	6.5	169.5
IEKDBPC100	IEKDBPC100H	4"	100	26	91	165	116	190	M20	10.5	356.5
IEKDBPC125	IEKDBPC125H	5"	125	26	105	180	130	205	M20	10.5	387.3
IEKDBPC150	IEKDBPC150H	6"	150	37	122	215	153	246	M22	12.5	629.9
IEKDBPC200	IEKDBPC200H	8"	200	37	150	244	181	275	M22	12.5	721.1
IEKDBPC250	IEKDBPC250H	10"	250	37	183	266	214	297	M24	14.0	984.8
IEKDBPC300	IEKDBPC300H	12"	300	37	210	290	241	321	M24	14.0	1,087.6
IEKDBPC350	IEKDBPC350H	14"	350	51	238	320	278	360	M30	18.5	1,918.9
IEKDBPC400	IEKDBPC400H	16"	400	51	265	350	305	390	M30	18.5	2,089.7
IEKDBPC450	IEKDBPC450H	18"	450	51	292	375	332	415	M30	18.5	2,248.5
IEKDBPC500	IEKDBPC500H	20"	500	51	330	420	375	465	M36	19.5	3,235.8
IEKDBPC600	IEKDBPC600H	24"	600	51	382	472	427	517	M36	19.5	3,637.8
IEKDBPC750	IEKDBPC750H	30"	750	64	468	595	523	650	M36	33.0	6,518.6
IEKDBPC900	IEKDBPC900H	36"	900	70	570	730	640	800	M42	46.0	10,048.2



Steel Pipe Clamp

Size Range

- ½" to 36"

Material

- Carbon Steel in accordance with the MSS SP-58 -TABLE A2/A2M

Service

- Designed to suspend cold and hot pipes where little or no insulation is required.

Installation

- Normally used with weldless eye nut or eye rod.

Ordering

- Specify code or name, nominal size and finish.

Finish

- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 - EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

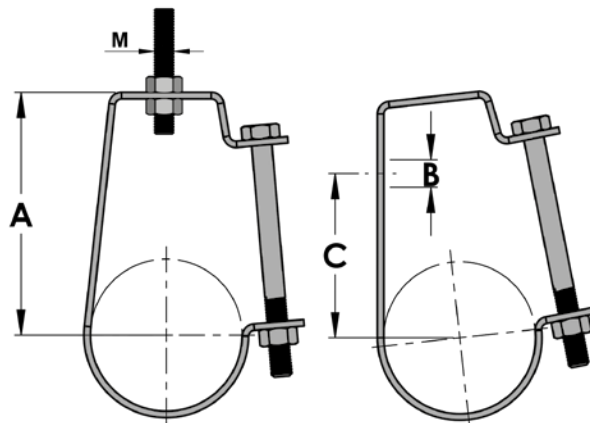
Approvals

- Complies with Manufacturers Standardization Society MSS SP-58 Type 4

Note: The load data published includes a safety factor. (Safety factor= Ratio of ultimate load to the design load.)

Code	HCR Code	Nominal Size		S × B	A	L	Recom. Load	Weight
		Inch	DN	mm × mm		mm	kN	kg/100 Pcs.
IEKSPC015	IEKSPC015H	½"	15	3 × 25	M8	78	2.2	13.6
IEKSPC020	IEKSPC020H	¾"	20	3 × 25	M8	84	2.2	14.8
IEKSPC025	IEKSPC025H	1"	25	3 × 25	M8	96	2.2	16.6
IEKSPC032	IEKSPC032H	1 ¼"	32	3 × 25	M8	100	2.2	17.4
IEKSPC040	IEKSPC040H	1 ½"	40	6 × 25	M8	110	3.5	33.1
IEKSPC050	IEKSPC050H	2"	50	6 × 25	M12	140	4.6	50.0
IEKSPC065	IEKSPC065H	2 ½"	65	6 × 25	M12	164	4.6	57.4
IEKSPC080	IEKSPC080H	3"	80	6 × 25	M12	180	4.6	62.6
IEKSPC090	IEKSPC090H	3 ½"	90	6 × 25	M12	194	4.6	67.4
IEKSPC100	IEKSPC100H	4"	100	6 × 40	M16	225	4.6	104.3
IEKSPC125	IEKSPC125H	5"	125	6 × 40	M16	255	4.6	115.9
IEKSPC150	IEKSPC150H	6"	150	10 × 40	M16	298	7.2	285.2
IEKSPC200	IEKSPC200H	8"	200	10 × 40	M16	356	7.2	337.2
IEKSPC250	IEKSPC250H	10"	250	12 × 50	M24	434	11.0	620.4
IEKSPC300	IEKSPC300H	12"	300	12 × 50	M24	486	11.0	695.4
IEKSPC350	IEKSPC350H	14"	350	12 × 60	M24	530	11.0	956.1
IEKSPC400	IEKSPC400H	16"	400	12 × 60	M24	580	11.0	1,051.5
IEKSPC450	IEKSPC450H	18"	450	16 × 70	M24	660	13.6	1,516.6
IEKSPC500	IEKSPC500H	20"	500	16 × 70	M24	718	13.6	1,652.7
IEKSPC600	IEKSPC600H	24"	600	16 × 80	M30	858	13.6	2,348.9
IEKSPC750	IEKSPC750H	30"	750	20 × 100	M36	1,070	15.6	4,805.0
IEKSPC900	IEKSPC900H	36"	900	25 × 125	M48	1,280	18.8	9,130.0

J-Hanger



Size Range

- ½" to 10"

Material

- Carbon Steel in accordance with the MSS SP-58 -TABLE A2/A2M

Service

- Designed to suspend non-insulated stationary pipes. Side hole allows for wall mounting.

Installation

- Vertical adjustments are possible once the pipe is in place.
- The lower nut is used to adjust the pipeline to the required elevation.
- The top nut is used to prevent loosening due to the vibration.
- The top nut should be tightened after adjustment.
- The top nut must securely be tightened to assure proper performance of hanger after adjustment.

Ordering

- Specify code or name, nominal size and finish.

Finish

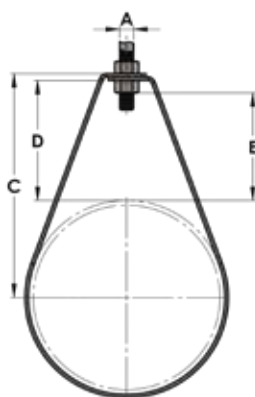
- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 - EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

Approvals

- Complies with Manufacturers Standardization Society MSS SP-58 Type 5

Note: The load data published includes a safety factor. (Safety factor= Ratio of ultimate load to the design load.)

Code	HCR Code	Size		Pipe	M	A	B	C	Recom. Load	Weight
		Inch	DN	OD		mm	mm	mm	kN	kg/100 Pcs.
IEJH015	IEJH015H	½"	15	21.3	M10	67	11	38	1.8	6.5
IEJH020	IEJH020H	¾"	20	26.9	M10	73	11	43	1.8	7.0
IEJH025	IEJH025H	1"	25	33.7	M10	75	11	46	1.8	7.4
IEJH032	IEJH032H	1 ¼"	32	42.4	M10	83	11	53	1.8	9.2
IEJH040	IEJH040H	1 ½"	40	48.3	M10	90	11	62	1.8	9.8
IEJH050	IEJH050H	2"	50	60.3	M10	94	11	65	1.8	10.8
IEJH065	IEJH065H	2 ½"	65	76.1	M12	113	14	81	3.0	12.3
IEJH080	IEJH080H	3"	80	88.9	M12	122	14	89	3.0	13.9
IEJH090	IEJH090H	3 ½"	90	101.6	M12	130	14	95	3.0	23.4
IEJH100	IEJH100H	4"	100	114.3	M16	155	14	118	3.0	26.7
IEJH125	IEJH125H	5"	125	139.7	M16	172	14	130	3.0	31.2
IEJH150	IEJH150H	6"	150	168.3	M18	197	14	148	3.0	36.1
IEJH200	IEJH200H	8"	200	219.1	M20	234	14	176	4.0	44.5
IEJH250	IEJH250H	10"	250	273.0	M20	274	14	190	4.0	55.7



Adjustable Steel Band Hanger



Size Range

- ¾" to 10"

Material

- Carbon Steel in accordance with the MSS SP-58 -TABLE A2/A2M

Service

- Designed to suspend non-insulated stationary pipes and Sprinkler system installation.

Installation

- Vertical adjustments are possible once the pipe is in place.
- The lower nut is used to adjust the pipeline to the required elevation.
- The top nut is used to prevent loosening due to the vibration.
- The top nut should be tightened after adjustment.
- The top nut must securely be tightened to assure proper performance of hanger after adjustment.

Ordering

- Specify code or name, nominal size and finish.

Finish

- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 - EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

Approvals

- Complies with Manufacturers Standardization Society MSS SP-58 Type 7
- Complies with NFPA-13 Standard for the Installation of Sprinkler Systems.

Certification

- FM approved and UL listed.

Note: The load data published includes a safety factor. (Safety factor= Ratio of ultimate load to the design load.)

Code	HCR Code	Size		Pipe	Size of Steel Band	A	C	D	E	Recom. Load	Weight	Cert.
		Inch	DN	OD	Upper		mm	mm	mm	kN	kg/100 Pcs.	
					mm x mm							
IEKSP020	IEKSP020H	¾"	20	26.9	1.5x25	M10	54.5	36.5	28.5	1.7	6.2	FM/UL
IEKSP025	IEKSP025H	1"	25	33.7	1.5x25	M10	63.5	42.5	34.5	1.7	6.9	FM/UL
IEKSP032	IEKSP032H	1 ¼"	32	42.4	1.5x25	M10	70.5	44.5	36.5	1.7	7.8	FM/UL
IEKSP040	IEKSP040H	1 ½"	40	48.3	1.5x25	M10	75.5	46.5	38.5	1.7	8.4	FM/UL
IEKSP050	IEKSP050H	2"	50	60.3	1.5x25	M10	83.5	47.5	39.5	1.7	9.6	FM/UL
IEKSP065	IEKSP065H	2 ½"	65	76.1	2.5x25	M10	100.5	56.5	48.5	2.6	18.8	FM/UL
IEKSP080	IEKSP080H	3"	80	88.9	2.5x25	M10	117.5	66.5	58.5	2.6	21.7	FM/UL
IEKSP100	IEKSP100H	4"	100	114.3	2.5x25	M10	143.5	80.5	72.5	4.4	26.1	FM/UL
IEKSP125	IEKSP125H	5"	125	139.7	3x30	M12	175.0	98.0	88.0	5.5	45.8	FM/UL
IEKSP150	IEKSP150H	6"	150	168.3	3x30	M12	196.0	105.0	95.0	5.5	53.7	FM/UL
IEKSP200	IEKSP200H	8"	200	219.1	3x40	M16	262.0	145.0	132.0	5.5	90.7	FM/UL
IEKSP250	IEKSP250H	10"	250	273.0	3x40	M16	357.5	214.0	201.0	5.5	116.3	FM/UL

Adjustable Steel Band Hanger "M Series"



Nominal Size Range

- 1/2" to 10"

Material

- Carbon Steel in accordance with the MSS SP-58 -TABLE A2/A2M

Service

- Designed to suspend non-insulated stationary pipes and Sprinkler system installation.

Installation

- Vertical adjustments are possible once the pipe is in place.
- The lower nut is used to adjust the pipeline to the required elevation.
- The top nut is used to prevent loosening due to the vibration.
- The top nut should be tightened after adjustment.
- The top nut must securely be tightened to assure proper performance of hanger after adjustment.

Ordering

- Specify code or name, nominal size and finish.

Finish

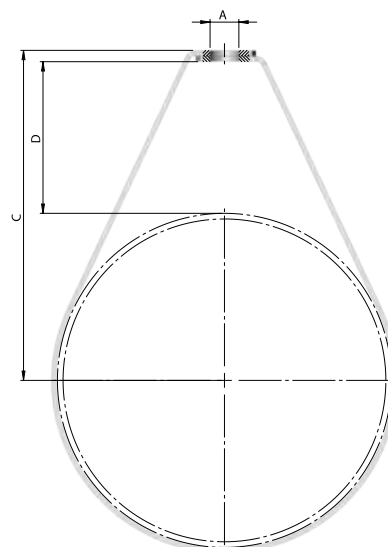
- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 - EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

Approvals

- Complies with Manufacturers Standardization Society MSS SP-58 Type 7
- Complies with NFPA-13 Standard for the Installation of Sprinkler Systems

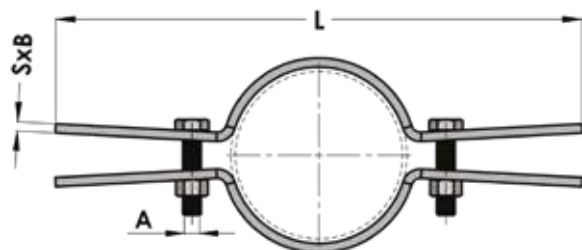
Certification

- FM approved and UL listed



Note: The load data published includes a safety factor. (Safety factor= Ratio of ultimate load to the design load.)

Code	HCR Code	Nominal Size		Size of Steel mm x mm	A	C	D	Max. Recom. Load kN	Weight kg/100 pcs	Certification
		Inch	DN							
IEKSPM015	IEKSPM015H	½"	15	1 x 16	M10	37,6	24,3	1,7	3,0	UL
IEKSPM020	IEKSPM020H	¾"	20	1 x 16	M10	40,2	23,4	1,7	3,2	FM/UL
IEKSPM025	IEKSPM025H	1"	25	1 x 16	M10	44,8	24,7	1,7	3,4	FM/UL
IEKSPM032	IEKSPM032H	1 ¼"	32	1 x 16	M10	57,3	33,6	1,7	3,9	FM/UL
IEKSPM040	IEKSPM040H	1 ½"	40	1 x 16	M10	58,3	31,7	1,7	4,1	FM/UL
IEKSPM050	IEKSPM050H	2"	50	1 x 16	M10	63,5	30	2,6	4,5	FM/UL
IEKSPM065	IEKSPM065H	2 ½"	65	2 x 20	M10	65,5	22	2,6	10,7	FM/UL
IEKSPM080	IEKSPM080H	3"	80	2 x 20	M10	82,7	32,5	4,4	12,6	FM/UL
IEKSPM100	IEKSPM100H	4"	100	2 x 20	M10	116,8	53,7	5,5	16,1	FM/UL
IEKSPM125	IEKSPM125H	5"	125	2 x 30	M12	122,5	46	5,5	27,5	FM/UL
IEKSPM150	IEKSPM150H	6"	150	2 x 30	M12	145,0	55	5,5	32,0	FM/UL
IEKSPM200	IEKSPM200H	8"	200	2.5 x 30	M12	193,4	77,4	5,5	52,4	FM/UL
IEKSPM250	IEKSPM250H	10"	250	2.5 x 30	M16	226,5	81,5	5,5	62,7	UL



Riser Clamp



Nominal Size Range

- ½" to 30"

Material

- Carbon Steel in accordance with the MSS SP-58 - TABLE A2/A2M

Service

- Designed to support or hold the vertical pipe runs. The load is transmitted to the structure by the ears on each side.

Installation

- Clamp is fitted and bolted preferably below a coupling or welded lugs on steel pipe.
- Clamp is designed for standard steel pipe OD. and this must be considered in sizing the riser for other types of piping.

Ordering

- Specify code or name, nominal size and finish.

Finish

- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 - EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

Approvals

- Complies with Manufacturers Standardization Society MSS SP-58 Type 8

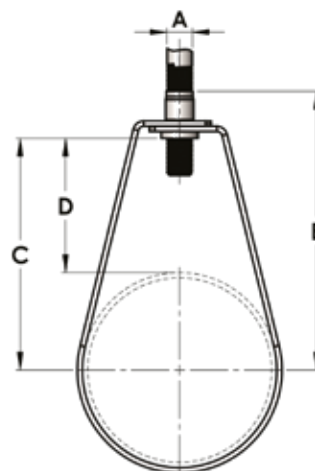
Cerlification

- UL listed.

Note: The load data published includes a safety factor. (Safety factor= Ratio of ultimate load to the design load.)

Code	HCR Code	Nominal Size			Clamping Range	S x B	A	L	Recom. Load	Weight	Cert.
		Inch	mm	OD							
IEKRC015	IEKRC015H	½"	15	21.3	20-22	5 x 30	M10	222	1	61	UL
IEKRC020	IEKRC020H	¾"	20	26.7	25-27	5 x 30	M10	226	1	62	UL
IEKRC025	IEKRC025H	1"	25	33.4	32-34	5 x 30	M10	234	1	65	UL
IEKRC032	IEKRC032H	1 ¼"	32	42.2	41-43	6 x 30	M12	242	1	85	UL
IEKRC040	IEKRC040H	1 ½"	40	48.3	46-49	6 x 30	M12	248	1	88	UL
IEKRC050	IEKRC050H	2"	50	60.3	58-61	6 x 30	M12	260	1	93	UL
IEKRC065	IEKRC065H	2 ½"	65	76.1	74-77	6 x 30	M12	276	1.7	101	UL
IEKRC080	IEKRC080H	3"	80	88.9	85-89	6 x 30	M12	288	2.3	107	UL
IEKRC090	IEKRC090H	3 ½"	90	101.6	98-102	6 x 40	M12	332	3	156	UL
IEKRC100	IEKRC100H	4"	100	114.3	111-115	6 x 40	M12	344	3.5	164	UL
IEKRC125	IEKRC125H	5"	125	141.3	138-142	6 x 50	M12	369	5	220	UL
IEKRC134	IEKRC134H	-	158	158.0	156-160	6 x 50	M12	386	6	230	-
IEKRC150	IEKRC150H	6"	150	168.3	165-169	6 x 50	M12	398	7	246	UL
IEKRC185	IEKRC185	-	192	192.0	188-192	10 x 50	M16	454	9.5	250	-
IEKRC200	IEKRC200H	8"	200	219.1	216-220	10 x 50	M16	480	11	498	UL
IEKRC250	IEKRC250H	10"	250	273.1	270-274	10 x 50	M16	533	11	573	UL
IEKRC300	IEKRC300H	12"	300	323.9	320-324	12 x 60	M16	584	12	896	UL
IEKRC350	IEKRC350H	14"	350	355.6	352-356	12 x 60	M16	616	12	956	-
IEKRC400	IEKRC400H	16"	400	406.4	403-407	16 x 60	M20	667	13	1,408	-
IEKRC450	IEKRC450H	18"	450	457.2	454-458	16 x 60	M20	717	13	1,534	-
IEKRC500	IEKRC500H	20"	500	508.0	505-509	16 x 60	M20	769	13	1,704	-
IEKRC600	IEKRC600H	24"	600	609.6	606-610	16 x 75	M20	870	13	2,428	-
IEKRC750	IEKRC750H	30"	750	762.0	759-763	16 x 75	M20	1,023	13	2,949	-

Adjustable Steel Band Hanger with Knurled Nut



Size Range

- ¾" to 10"

Material

- Carbon Steel in accordance with the MSS SP-58 -TABLE A2/A2M

Service

- Designed to suspend non-insulated stationary pipes and Sprinkler system installation.

Installation

- Vertical adjustments are possible once the pipe is in place.
- The knurled nut provides a gripping surface when adjusting the pipe elevation.

Ordering

- Specify code or name, nominal size and finish.

Finish

- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 - EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

Approvals

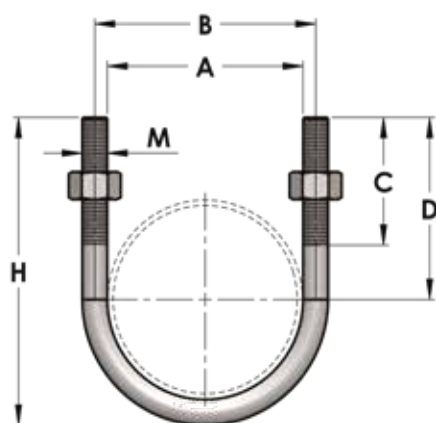
- Complies with Manufacturers Standardization Society MSS SP-58 & MSS SP-69- Type 10
- Complies with NFPA-13 Standard for the Installation of Sprinkler Systems.

Cerlification

- FM approved and UL listed.

Note: The load data published includes a safety factor. (Safety factor= Ratio of ultimate load to the design load.)

Code	HCR Code	Size			Size of Steel Band	A	C	D	E	Recom. Load	Weight	Cert.
		Inch	DN	OD	Upper		mm	mm	mm	kN	kg/100 Pcs.	
					mm × mm							
IEKSS020	IEKSS020H	¾"	20	26.9	1.5 × 25	M10	48.3	33.3	70.3	1.7	7.0	FM/UL
IEKSS025	IEKSS025H	1"	25	33.7	1.5 × 25	M10	57.3	39.3	79.3	1.7	7.8	FM/UL
IEKSS032	IEKSS032H	1 ¼"	32	42.4	1.5 × 25	M10	64.3	41.3	86.3	1.7	8.7	FM/UL
IEKSS040	IEKSS040H	1 ½"	40	48.3	1.5 × 25	M10	69.3	43.3	91.3	1.7	9.3	FM/UL
IEKSS050	IEKSS050H	2"	50	60.3	1.5 × 25	M10	77.3	44.3	99.3	1.7	10.5	FM/UL
IEKSS065	IEKSS065H	2 ½"	65	76.1	2.5 × 25	M10	92.3	53.3	114.3	2.6	19.5	FM/UL
IEKSS080	IEKSS080H	3"	80	88.9	2.5 × 25	M10	109.3	63.3	131.3	2.6	22.4	FM/UL
IEKSS100	IEKSS100H	4"	100	114.0	2.5 × 25	M10	135.3	77.3	157.3	4.4	27.0	FM/UL
IEKSS125	IEKSS125H	5"	125	140.0	3 × 30	M12	165.0	94.0	202.0	5.5	47.5	FM/UL
IEKSS150	IEKSS150H	6"	150	168.0	3 × 30	M12	186.0	101.0	223.0	5.5	54.0	FM/UL
IEKSS200	IEKSS200H	8"	200	219.0	3 × 40	M16	251.0	140.0	288.0	5.5	92.8	FM/UL
IEKSS250	IEKSS250H	10"	250	273.0	3 × 40	M16	346.5	209.0	378.5	5.5	119.2	FM/UL



U-Bolt

Size Range

- ½" to 36"

Material

- Carbon Steel in accordance with the MSS SP-58 -TABLE A2/A2M

Service

- Designed to support or guide the pipe runs.
Supplied with two nuts.

Ordering

- Specify code or name, nominal size and finish.

Finish

- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 - EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

Approvals

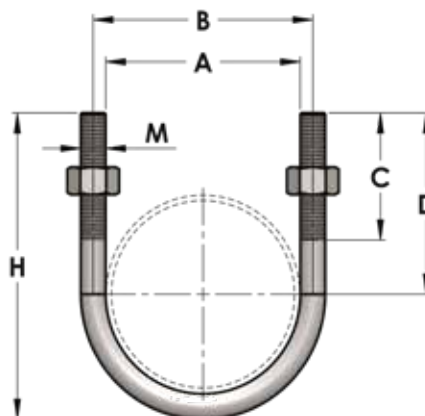
- Complies with Manufacturers Standardization Society MSS SP-58 Type 24

Note: The load data published includes a safety factor. (Safety factor= Ratio of ultimate load to the design load.)

Note: Extra nuts can be supplied separately upon request.

Code	HCR Code	Nominal Size		A	B	C	D	H	M	Recom. Load	Weight
		Inch	DN	mm	mm	mm	mm	mm		kN	kg/100 Pcs.
IRUB06023A	IRUB06023AH	1/2"	15	23	29	30	32.5	50	M6	2.2	2.4
IRUB06030A	IRUB06030AH	3/4"	20	30	36	30	39.0	60	M6	2.2	3.0
IRUB06036A	IRUB06036AH	1"	25	36	42	40	46.0	70	M6	2.2	3.5
IRUB08036A	IRUB08036AH			36	44	40	44.0	70	M8	4.0	6.2
IRUB06046A	IRUB06046AH	1 1/4"	32	46	52	40	51.0	80	M6	2.2	4.1
IRUB10046A	IRUB10046AH			46	56	40	52.0	85	M10	5.4	11.8
IRUB08052A	IRUB08052AH	1 1/2"	40	52	60	40	56.0	90	M8	4.0	8.1
IRUB10052A	IRUB10052AH			52	62	50	59.0	95	M10	5.4	13.2
IRUB08064A	IRUB08064AH	2"	50	64	72	40	60.0	100	M8	4.0	9.1
IRUB10064A	IRUB10064AH			64	74	50	63.0	105	M10	5.4	14.9
IRUB08074A	IRUB08074AH	2 1/2"	65	74	82	50	75.0	120	M8	4.0	10.9
IRUB10078A	IRUB10078AH			78	86	50	73.0	120	M10	5.4	19.2
IRUB12078A	IRUB12078AH			78	90	65	79.0	130	M12	10.0	26.4
IRUB10086A	IRUB10086AH			86	96	55	77.0	130	M10	5.4	18.7
IRUB10094A	IRUB10094AH	3"	80	94	104	55	83.0	140	M10	5.4	20.2
IRUB12094A	IRUB12094AH			94	106	65	86.0	145	M12	10.0	29.9
IRUB10106A	IRUB10106AH	3 1/2"	90	106	116	60	87.0	150	M10	5.4	21.8
IRUB12106A	IRUB12106AH			106	118	65	95.0	160	M12	10.0	33.1
IRUB10118A	IRUB10118AH	4"	100	118	128	60	96.0	165	M10	5.4	24.1
IRUB12118A	IRUB12118AH			118	130	70	104.0	175	M12	10.0	36.4
IRUB12128A	IRUB12128AH			128	140	70	104.0	180	M12	10.0	37.8
IRUB12140A	IRUB12140AH			140	152	70	108.0	190	M12	10.0	40.1
IRUB12146A	IRUB12146AH	5"	125	146	158	70	115.0	200	M12	10.0	42.2
IRUB12154A	IRUB12154AH			154	166	70	121.0	210	M12	10.0	44.4
IRUB12168A	IRUB12168AH			168	180	70	124.0	220	M12	10.0	46.8

U-Bolt



Size Range

- ½" to 36"

Material

- Carbon Steel in accordance with the MSS SP-58 - TABLE A2/A2M

Service

- Designed to support or guide the pipe runs.
- Supplied with two nuts.

Ordering

- Specify code or name, nominal size and finish.

Finish

- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 - EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

Approvals

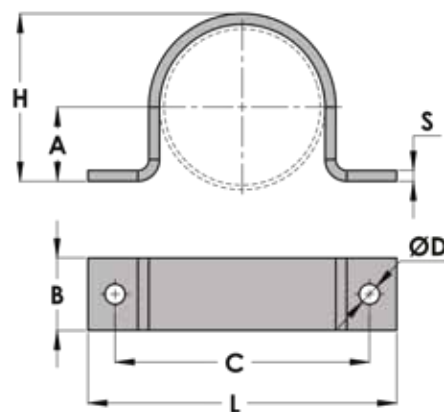
- Complies with Manufacturers Standardization Society MSS SP-58 Type 24

Note: The load data published includes a safety factor. (Safety factor= Ratio of ultimate load to the design load.)

Note: Extra nuts can be supplied separately upon request.

Code	HCR Code	Nominal Size		A	B	C	D	H	M	Recom. Load	Weight
		Inch	DN	mm	mm	mm	mm	mm		kN	kg/100 Pcs.
IRUB16172A	IRUB16172AH	6"	150	172	188	90	138	240	M16	16.3	89.7
IRUB12176A	IRUB12176AH			176	188	70	130	230	M12	10.0	49.0
IRUB12192A	IRUB12192AH			192	204	70	137	245	M12	10.0	52.5
IRUB12224A	IRUB12224AH	8"	200	224	236	70	151	275	M12	10.0	59.4
IRUB16224A	IRUB16224AH			224	240	90	167	295	M16	16.3	111.6
IRUB16248A	IRUB16248AH			248	264	90	180	320	M16	16.3	121.6
IRUB16278A	IRUB16278AH	10"	250	278	294	90	195	350	M16	16.3	133.7
IRUB20278A	IRUB20278AH			278	298	105	201	360	M20	24.5	213.4
IRUB16294A	IRUB16294AH			294	310	90	202	365	M16	16.3	139.8
IRUB16329A	IRUB16329AH	12"	300	329	345	90	219	400	M16	16.3	153.9
IRUB20329A	IRUB20329AH			329	349	110	225	410	M20	24.5	245.0
IRUB16360A	IRUB16360AH	14"	350	360	376	90	234	430	M16	16.3	166.1
IRUB22360A	IRUB22360AH			360	382	110	248	450	M22	34.1	325.1
IRUB16378A	IRUB16378AH			378	394	90	245	450	M16	16.3	174.0
IRUB16415A	IRUB16415AH	16"	400	415	431	90	262	485	M16	16.3	188.3
IRUB24415A	IRUB24415AH			415	439	130	278.5	510	M24	44.5	440.1
IRUB20440A	IRUB20440AH			440	460	110	280	520	M20	24.5	314.4
IRUB20464A	IRUB20464AH	18"	450	464	484	110	293	545	M20	24.5	330.0
IRUB24464A	IRUB24464AH			464	488	130	304	560	M24	44.5	485.3
IRUB20515A	IRUB20515AH	20"	500	515	535	110	318	595	M20	24.5	361.7
IRUB24515A	IRUB24515AH			515	539	130	329	610	M24	44.5	530.8
IRUB20562A	IRUB20562AH			562	582	110	344	645	M20	24.5	392.7
IRUB24615A	IRUB24615AH	24"	600	615	639	130	384	715	M24	44.5	625.1
IRUB24767A	IRUB24767AH	30"	750	768	792	140	462	870	M24	44.5	765.2
IRUB24920A	IRUB24920AH	36"	900	920	944	140	536	1,020	M24	44.5	901.7

Pipe Strap



Nominal Size Range

- ½" to 12"

Material

- Carbon Steel in accordance with the MSS SP-58 - TABLE A2/A2M

Service

- Designed for pipes not subject to expansion or contraction.

Ordering

- Specify code or name, nominal size and finish.

Finish

- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 - EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

Approvals

- Complies with Manufacturers Standardization Society MSS SP-58 & MSS SP-69 - Type 26

Certification

- FM approved

Note: The load data published includes a safety factor. (Safety factor= Ratio of ultimate load to the design load.)

Code	HCR Code	Nominal Size		S × B	A	C	ØD	H	L	Recom. Load	Weight	Cert.
		Inch	DN									
IEKSPS015	IEKSPS015H	½"	15	3 × 40	7.0	56	9	22.0	80	1.8	9.3	-
IEKSPS020	IEKSPS020H	¾"	20	3 × 40	9.5	62	9	27.5	86	1.8	10.6	FM
IEKSPS025	IEKSPS025H	1"	25	3 × 40	13.0	68	9	34.0	92	1.8	12.2	FM
IEKSPS032	IEKSPS032H	1 ¼"	32	3 × 40	17.5	77	9	43.0	101	1.8	14.3	FM
IEKSPS040	IEKSPS040H	1 ½"	40	3 × 40	20.5	83	9	49.0	107	1.8	15.8	FM
IEKSPS050	IEKSPS050H	2"	50	6 × 40	26.5	112	11	64.0	142	1.8	40.3	FM
IEKSPS065	IEKSPS065H	2 ½"	65	6 × 40	34.0	128	11	79.5	158	2.7	48.0	FM
IEKSPS080	IEKSPS080H	3"	80	6 × 40	41.0	140	11	92.5	170	2.7	54.0	FM
IEKSPS090	IEKSPS090H	3 ½"	90	6 × 40	47.0	153	11	105.0	183	2.7	60.2	FM
IEKSPS100	IEKSPS100H	4"	100	6 × 40	53.5	171	13	118.0	207	3.2	68.0	FM
IEKSPS125	IEKSPS125H	5"	125	6 × 40	66.0	196	13	143.0	232	3.2	80.2	FM
IEKSPS150	IEKSPS150H	6"	150	6 × 40	81.0	224	13	172.0	260	3.2	93.9	FM
IEKSPS200	IEKSPS200H	8"	200	6 × 40	106.0	275	13	222.5	311	4.0	118.4	FM
IEKSPS250	IEKSPS250H	10"	250	6 × 40	132.5	330	13	276.5	366	4.5	144.5	FM
IEKSPS300	IEKSPS300H	12"	300	6 × 40	158.5	380	13	327.5	416	4.5	168.8	FM

Pipe Strap "M Series"

Nominal Size Range

- ½" to 20"

Material

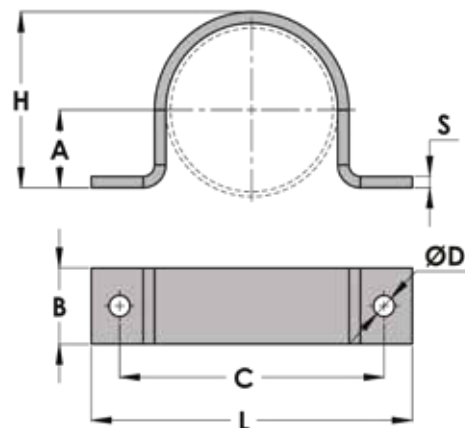
- Carbon Steel in accordance with the MSS SP-58 –TABLE A2/A2M

Service

- Designed as an economical product for pipes not subject to expansion or contraction.

Ordering

- Specify code or name, nominal size and finish.



Finish

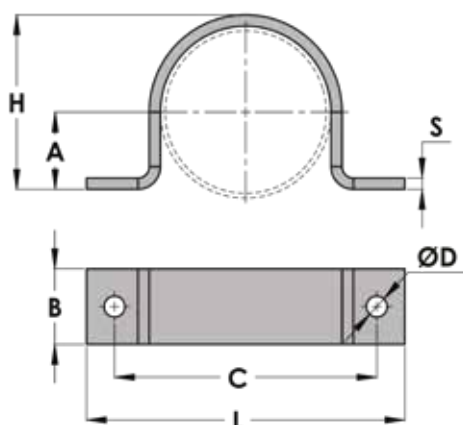
- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 – EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

Approvals

- Complies with Manufacturers Standardization Society MSS SP-58 & MSS SP-69 –Type 26

Note: The load data published includes a safety factor. (Safety factor= Ratio of ultimate load to the design load.)

Code	HCR Code	Nominal Size			S × B	A	C	ØD	H	L	Recom. Load	Weight
		Inch	DN	OD								
IEKSPSM015	IEKSPSM015H	½"	15	21.3	2 × 25	9	55	9	22	80	1.0	3.9
IEKSPSM020	IEKSPSM020H	¾"	20	26.9	2 × 25	12	61	9	28	86	1.0	4.5
IEKSPSM025	IEKSPSM025H	1"	25	33.7	2 × 25	15	67	9	34	92	1.0	5.1
IEKSPSM032	IEKSPSM032H	1 ¼"	32	42.4	2 × 25	19.5	76	9	43	101	1.0	6.1
IEKSPSM040	IEKSPSM040H	1 ½"	40	48.3	2 × 25	22.5	82	9	49	107	1.0	6.7
IEKSPSM045	IEKSPSM045H			53.3	2 × 25	25	87	9	54	112	1.0	7.2
IEKSPSM050	IEKSPSM050H	2"	50	60.3	2 × 25	28.5	94	9	61	119	1.0	7.9
IEKSPSM055	IEKSPSM055H			67.3	2 × 25	32	101	9	68	126	1.0	8.9
IEKSPSM060	IEKSPSM060H			73.0	2 × 25	35	107	9	74	132	1.0	9.5
IEKSPSM065	IEKSPSM065H	2 ½"	65	76.1	3 × 25	35.5	119	11	77	149	1.6	14.6
IEKSPSM070	IEKSPSM070H			83.0	3 × 25	39	126	11	84	156	1.6	15.7
IEKSPSM080	IEKSPSM080H	3"	80	88.9	3 × 25	42	132	11	90	162	1.6	16.6
IEKSPSM085	IEKSPSM085H			93.9	3 × 25	44.5	137	11	95	167	1.6	17.3
IEKSPSM088	IEKSPSM088H			98.0	3 × 25	46.5	141	11	99	171	1.6	17.9
IEKSPSM090	IEKSPSM090H	3 ½"	90	101.6	3 × 25	48	144	11	102	174	1.6	18.4
IEKSPSM095	IEKSPSM095H			110.0	3 × 25	52.5	153	11	111	183	1.6	19.7
IEKSPSM100	IEKSPSM100H	4"	100	114.3	3 × 25	54.5	157	11	115	187	1.6	20.3
IEKSPSM104	IEKSPSM104H			120.0	3 × 25	57.5	163	11	121	193	1.6	21.2
IEKSPSM108	IEKSPSM108H			123.0	3 × 25	59	166	11	124	196	1.6	21.7
IEKSPSM110	IEKSPSM110H			127.3	3 × 25	61	170	11	128	200	1.6	22.3
IEKSPSM115	IEKSPSM115H			135.0	3 × 25	65	178	11	136	208	1.6	23.5
IEKSPSM125	IEKSPSM125H	5"	125	139.7	3 × 25	67	182	11	140	212	1.6	24.1
IEKSPSM140	IEKSPSM140H			143.0	3 × 25	69	186	11	144	216	1.6	24.7



Pipe Strap "M Series"

Nominal Size Range

- ½" to 20"

Material

- Carbon Steel in accordance with the MSS SP-58 - TABLE A2/A2M

Service

- Designed as an economical product for pipes not subject to expansion or contraction.

Finish

- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 - EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

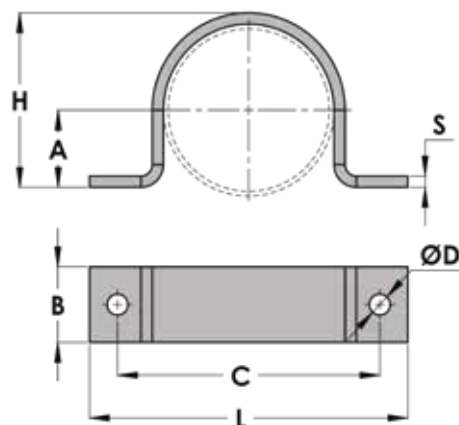
Approvals

- Complies with Manufacturers Standardization Society MSS SP-58 & MSS SP-69 -Type 26

Note: The load data published includes a safety factor. (Safety factor= Ratio of ultimate load to the design load.)

Code	HCR Code	Nominal Size			S × B mm × mm	A mm	C mm	ØD mm	H mm	L mm	Recom. Load kN	Weight kg/100 Pcs.
		Inch	DN	OD								
IEKSPSM144	IEKSPSM144H			148.0	3 × 25	71.5	191	11	149	221	1.6	25.4
IEKSPSM145	IEKSPSM145H			152.0	3 × 25	73.5	195	11	153	225	1.6	26.1
IEKSPSM147	IEKSPSM147H			160.0	3 × 25	77.5	203	11	161	233	1.6	27.3
IEKSPSM149	IEKSPSM149H			164.0	3 × 25	79.5	207	11	165	237	1.6	27.9
IEKSPSM150	IEKSPSM150H	6"	150	168.3	3 × 25	81.5	211	11	169	241	1.6	28.5
IEKSPSM165	IEKSPSM165H			173.0	3 × 25	84.0	216	11	174	246	1.6	29.2
IEKSPSM172	IEKSPSM172H			177.0	3 × 25	86.0	220	11	178	250	1.6	29.8
IEKSPSM178	IEKSPSM178H			181.3	3 × 40	88.0	224	11	182	254	2.2	48.9
IEKSPSM180	IEKSPSM180H			190.0	3 × 40	92.5	233	11	191	263	2.2	51.1
IEKSPSM190	IEKSPSM190H			193.3	3 × 40	94.0	236	11	194	266	2.2	51.8
IEKSPSM192	IEKSPSM192H			201.0	3 × 40	98.0	244	11	202	274	2.2	53.7
IEKSPSM195	IEKSPSM195H			208.0	3 × 40	101.5	251	11	209	281	2.2	55.4
IEKSPSM200	IEKSPSM200H	8"	200	219.1	3 × 40	107.0	262	11	220	292	2.2	58.1
IEKSPSM228	IEKSPSM228H			233.1	5 × 40	112.0	283	13	234	322	2.5	101.7
IEKSPSM240	IEKSPSM240H			245.1	5 × 40	118.0	295	13	246	334	2.5	108.1
IEKSPSM245	IEKSPSM245H			257.1	5 × 40	124.0	307	13	258	346	2.5	112.9
IEKSPSM248	IEKSPSM248H			264.0	5 × 40	127.5	314	13	265	353	2.5	115.7
IEKSPSM250	IEKSPSM250H	10"	250	273.0	5 × 40	132.0	323	13	274	362	2.5	119.3
IEKSPSM276	IEKSPSM276H			285.0	5 × 40	138.0	335	13	286	374	2.5	124.2
IEKSPSM292	IEKSPSM292H			297.0	5 × 40	144.0	347	13	298	386	2.5	129.0
IEKSPSM295	IEKSPSM295H			311.0	5 × 40	151.0	361	13	312	400	2.5	134.6
IEKSPSM300	IEKSPSM300H	12"	300	323.9	5 × 40	157.5	374	13	325	413	2.5	139.8
IEKSPSM334	IEKSPSM334H			339.9	5 × 40	165.5	403	17	341	453	3.0	187.0

Pipe Strap "M Series"



Nominal Size Range

- ½" to 20"

Material

- Carbon Steel in accordance with the MSS SP-58 -TABLE A2/A2M

Service

- Designed as an economical product for pipes not subject to expansion or contraction.

Finish

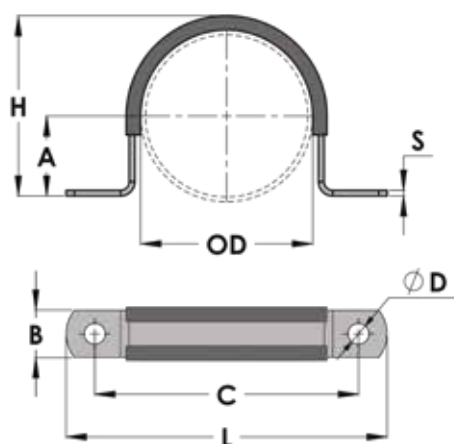
- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 - EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

Approvals

- Complies with Manufacturers Standardization Society MSS SP-58 & MSS SP-69 -Type 26

Note: The load data published includes a safety factor. (Safety factor= Ratio of ultimate load to the design load.)

Code	HCR Code	Nominal Size			S × B mm × mm	A mm	C mm	ØD mm	H mm	L mm	Recom. Load kN	Weight kg/100 Pcs.
		Inch	DN	OD								
IEKSPSM348	IEKSPSM348H			353.9	5 × 50	172.5	417	17	355	467	3	194.0
IEKSPSM350	IEKSPSM350H	14"	350	355.6	5 × 50	173.0	418	17	356	468	3	194.5
IEKSPSM360	IEKSPSM360H			365.9	5 × 50	178.5	429	17	367	479	3	200.0
IEKSPSM370	IEKSPSM370H			375.9	5 × 50	183.5	439	17	377	489	3	205.0
IEKSPSM384	IEKSPSM384H			389.9	5 × 50	190.5	453	17	391	503	3	212.0
IEKSPSM395	IEKSPSM395H			405.9	5 × 50	198.5	469	17	407	519	3	220.1
IEKSPSM400	IEKSPSM400H	16"	400	406.4	5 × 50	198.5	469	17	407	519	3	220.1
IEKSPSM418	IEKSPSM418H			423.9	5 × 50	207.5	487	17	425	537	3	229.1
IEKSPSM425	IEKSPSM425H			436.0	5 × 50	213.5	499	17	437	549	3	235.1
IEKSPSM445	IEKSPSM445H			455.9	5 × 50	223.5	519	17	457	569	3	245.1
IEKSPSM450	IEKSPSM450H	18"	450	457.2	5 × 50	224.0	520	17	458	570	3	245.6
IEKSPSM468	IEKSPSM468H			473.9	5 × 50	232.5	537	17	475	587	3	254.1
IEKSPSM475	IEKSPSM475H			485.0	5 × 50	238.0	548	17	486	598	3	259.7
IEKSPSM500	IEKSPSM500H	20"	500	508.0	5 × 50	249.5	571	17	509	621	3	271.2



Pipe Strap with Rubber Profile "M Series"

Nominal Size Range

- ½" to 12"

Material

- Carbon Steel in accordance with the MSS SP-58 - TABLE A2/A2M
- EPDM Rubber Lining provides noise reduction in accordance with EN 14366, vibration reduction and partial compensation of thermal expansion

Service

- Designed for support of pipes not subject to expansion or contraction.

Finish

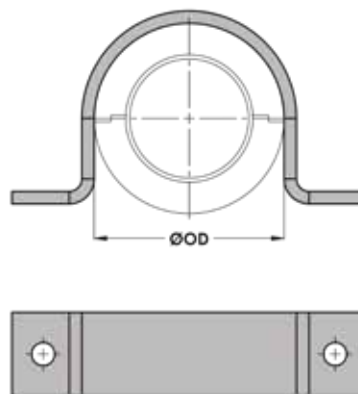
- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 - EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

Note: See the page 127 for the details of EPDM Rubber Lining

Note: The load data published includes a safety factor. (Safety factor= Ratio of ultimate load to the design load.)

Code	HCR Code	Nominal Size			S × B mm × mm	A mm	C mm	ØD mm	H mm	L mm	Recom. Load	Weight kg/100 Pcs.
		Inch	DN	OD								
IEKSPSMR015	IEKSPSMR015H	½"	15	21.3	2 × 25	8.0	59	9	24.0	84	1.0	4.1
IEKSPSMR020	IEKSPSMR020H	¾"	20	26.9	2 × 25	11.0	65	9	30.0	90	1.0	4.7
IEKSPSMR025	IEKSPSMR025H	1"	25	33.7	2 × 25	13.5	71	9	35.5	96	1.0	5.3
IEKSPSMR032	IEKSPSMR032H	1 ¼"	32	42.4	2 × 25	18.0	80	9	44.5	105	1.0	6.3
IEKSPSMR040	IEKSPSMR040H	1 ½"	40	48.3	2 × 25	21.5	86	9	51.0	111	1.0	6.9
IEKSPSMR050	IEKSPSMR050H	2"	50	60.3	2 × 25	27.0	98	9	62.5	123	1.0	8.2
IEKSPSMR065	IEKSPSMR065H	2 ½"	65	76.1	3 × 25	35.5	125	11	81.5	155	1.6	14.9
IEKSPSMR080	IEKSPSMR080H	3"	80	88.9	3 × 25	41.0	138	11	93.5	168	1.6	16.9
IEKSPSMR090	IEKSPSMR090H	3 ½"	90	101.6	3 × 25	47.0	150	11	106.0	180	1.6	18.8
IEKSPSMR100	IEKSPSMR100H	4"	100	114.3	3 × 25	54.0	163	11	119.0	193	1.6	20.7
IEKSPSMR125	IEKSPSMR125H	5"	125	139.7	3 × 25	67.0	190	11	146.0	220	1.6	24.5
IEKSPSMR150	IEKSPSMR150H	6"	150	168.3	3 × 25	82.0	219	11	175.5	249	1.6	29.0
IEKSPSMR200	IEKSPSMR200H	8"	200	219.1	3 × 40	107.5	270	11	226.5	300	2.2	58.6
IEKSPSMR250	IEKSPSMR250H	10"	250	273.0	5 × 40	132.5	331	13	280.5	370	2.5	119.8
IEKSPSMR300	IEKSPSMR300H	12"	300	323.9	5 × 40	156.0	384	13	331.0	423	2.5	140.4

Selection Table Of Pipe Strap For Insulated Pipes



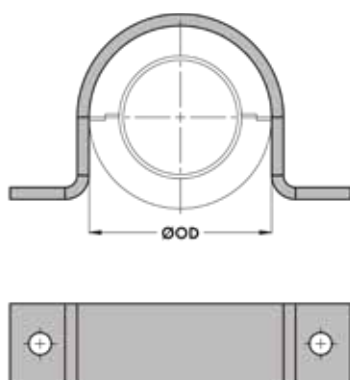
Selection

- Select the Pipe Size, Thickness of Insulation and the Code for Pipe Strap.

Options for Insulation Inserts

- Polyisocyanurate Insulation Inserts
- For details: See the catalogue page no. 100
- Calcium Silicate Inserts
- For details: See the catalogue page no. 101
- Rubber Support Inserts (RSI) For details: See the catalogue page no. 103

Pipe Size			Insulation Inserts (T=13 mm)		Insulation Inserts (T=19 mm)		Insulation Inserts (T=25 mm)		Insulation Inserts (T=32 mm)	
Inch	DN	OD	Insulation OD	Code	Insulation OD	Code	Insulation OD	Code	Insulation OD	Code
		mm	mm		mm		mm		mm	
½"	15	21,3	47.3	IEKSPSM040	59.3	IEKSPSM050	71.3	IEKSPSM060	85.3	IEKSPSM080
¾"	20	26.9	52.9	IEKSPSM045	64.9	IEKSPSM055	76.9	IEKSPSM065	90.9	IEKSPSM085
1"	25	33.7	59.7	IEKSPSM050	71.7	IEKSPSM060	83.7	IEKSPSM070	97.7	IEKSPSM088
1 ¼"	32	42.4	68.4	IEKSPSM055	80.4	IEKSPSM070	92.4	IEKSPSM085	106.4	IEKSPSM095
1 ½"	40	48.3	74.3	IEKSPSM060	86.3	IEKSPSM080	98.3	IEKSPSM088	112.3	IEKSPSM100
2"	50	60.3	86.3	IEKSPSM080	98.3	IEKSPSM088	110.3	IEKSPSM095	124.3	IEKSPSM108
2 ½"	65	73.0	99.0	IEKSPSM088	111.0	IEKSPSM95	123.0	IEKSPSM108	137.0	IEKSPSM125
2 ½"	65	76.1	102.1	IEKSPSM090	114.1	IEKSPSM100	126.1	IEKSPSM110	140.1	IEKSPSM125
3"	80	88.9	114.9	IEKSPSM100	126.9	IEKSPSM110	138.9	IEKSPSM125	152.9	IEKSPSM145
3 ½"	90	101.6	127.6	IEKSPSM110	139.6	IEKSPSM125	151.6	IEKSPSM145	165.6	IEKSPSM150
4"	100	114.3	140.3	IEKSPSM125	152.3	IEKSPSM145	164.3	IEKSPSM149	178.3	IEKSPSM172
5"	125	139.7	165.7	IEKSPSM149	177.7	IEKSPSM172	189.7	IEKSPSM180	203.7	IEKSPSM195
5"	125	141.3	167.3	IEKSPSM150	179.3	IEKSPSM178	191.3	IEKSPSM180	205.3	IEKSPSM195
6"	150	165.1	191.1	IEKSPSM180	203.1	IEKSPSM195	215.1	IEKSPSM200	229.1	IEKSPSM228
6"	150	168.3	194.3	IEKSPSM190	206.3	IEKSPSM195	218.3	IEKSPSM200	232.3	IEKSPSM228
8"	200	219.1	245.1	IEKSPSM240	257.1	IEKSPSM245	269.1	IEKSPSM250	283.1	IEKSPSM276
10"	250	273.0	299.0	IEKSPSM295	311.0	IEKSPSM295	323.0	IEKSPSM300	337.0	IEKSPSM334
12"	300	323.9	349.9	IEKSPSM348	361.9	IEKSPSM360	373.9	IEKSPSM370	387.9	IEKSPSM384
14"	350	355.6	381.6	IEKSPSM384	393.6	IEKSPSM395	405.6	IEKSPSM395	419.6	IEKSPSM418
16"	400	406.4	432.4	IEKSPSM425	444.4	IEKSPSM445	456.4	IEKSPSM450	470.4	IEKSPSM468



Selection Table Of Pipe Strap For Insulated Pipes

Selection

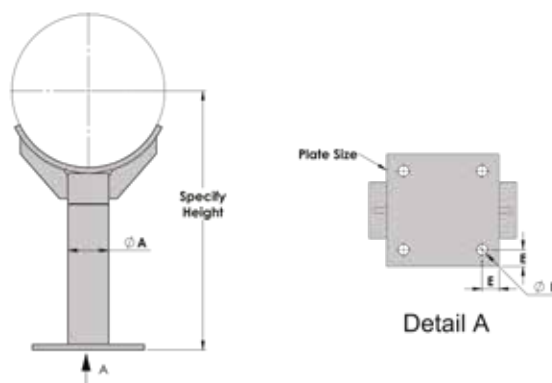
- Select the Pipe Size, Thickness of Insulation and the Code for Pipe Strap.

Options for Insulation Inserts

- Polyisocyanurate Insulation Inserts
- For details: See the catalogue page no. 100
- Calcium Silicate Inserts
- For details: See the catalogue page no. 101
- Rubber Support Inserts (RSI) For details: See the catalogue page no. 103

Pipe Size			Insulation Inserts (T=38 mm)		Insulation Inserts (T=50 mm)		Insulation Inserts (T=65 mm)		Insulation Inserts (T=75 mm)	
Inch	DN	OD mm	Insulation OD mm	Code	Insulation OD mm	Code	Insulation OD mm	Code	Insulation OD mm	Code
½"	15	21,3	97.3	IEKSPSM088	121.3	IEKSPSM104	151.3	IEKSPSM145	171.3	IEKSPSM165
¾"	20	26.9	102.9	IEKSPSM090	126.9	IEKSPSM110	156.9	IEKSPSM147	176.9	IEKSPSM172
1"	25	33.7	109.7	IEKSPSM095	133.7	IEKSPSM115	163.7	IEKSPSM149	183.7	IEKSPSM180
1 ¼"	32	42.4	118.4	IEKSPSM104	142.4	IEKSPSM140	172.4	IEKSPSM165	192.4	IEKSPSM190
1 ½"	40	48.3	124.3	IEKSPSM108	148.3	IEKSPSM144	178.3	IEKSPSM172	198.3	IEKSPSM192
2"	50	60.3	136.3	IEKSPSM115	160.3	IEKSPSM147	190.3	IEKSPSM180	210.3	IEKSPSM200
2 ½"	65	73.0	149.0	IEKSPSM144	173.0	IEKSPSM165	203.0	IEKSPSM195	223.0	IEKSPSM228
2 ½"	65	76.1	152.1	IEKSPSM145	176.1	IEKSPSM172	206.1	IEKSPSM195	226.1	IEKSPSM228
3"	80	88.9	164.9	IEKSPSM149	188.9	IEKSPSM180	218.9	IEKSPSM200	238.9	IEKSPSM240
3 ½"	90	101.6	177.6	IEKSPSM172	201.6	IEKSPSM192	231.6	IEKSPSM228	251.6	IEKSPSM245
4"	100	114.3	190.3	IEKSPSM180	214.3	IEKSPSM200	244.3	IEKSPSM240	264.3	IEKSPSM248
5"	125	139.7	215.7	IEKSPSM200	239.7	IEKSPSM240	269.7	IEKSPSM250	289.7	IEKSPSM292
5"	125	141.3	217.3	IEKSPSM200	241.3	IEKSPSM240	271.3	IEKSPSM250	291.3	IEKSPSM292
6"	150	165.1	241.1	IEKSPSM240	265.1	IEKSPSM250	295.1	IEKSPSM292	315.1	IEKSPSM300
6"	150	168.3	244.3	IEKSPSM240	268.3	IEKSPSM250	298.3	IEKSPSM292	318.3	IEKSPSM300
8"	200	219.1	295.1	IEKSPSM292	319.1	IEKSPSM300	349.1	IEKSPSM348	369.1	IEKSPSM370
10"	250	273.0	349.0	IEKSPSM348	373.0	IEKSPSM370	403.0	IEKSPSM395	423.0	IEKSPSM418
12"	300	323.9	399.9	IEKSPSM395	423.9	IEKSPSM418	453.9	IEKSPSM445	473.9	IEKSPSM468
14"	350	355.6	431.6	IEKSPSM425	455.6	IEKSPSM450	485.6	IEKSPSM475	505.6	IEKSPSM500
16"	400	406.4	482.4	IEKSPSM475	506.4	IEKSPSM500	536,4		556,4	

Pipe Saddle Support



Nominal Size Range

- 1" to 36"

Material

- Carbon Steel in accordance with the MSS SP-58 - TABLE A2/A2M

Service

- Designed to support horizontal pipe from floor stanchion

Ordering

- Specify code or name, nominal size and finish.

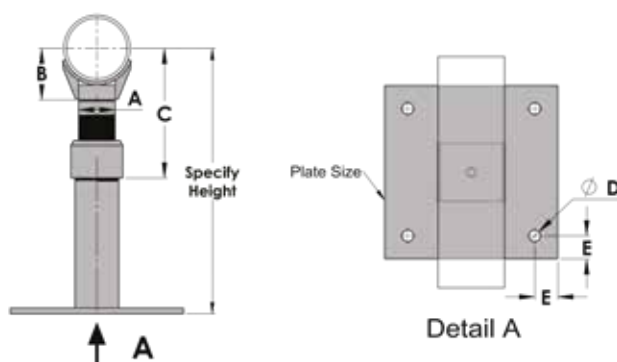
Finish

- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 - EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

Approvals

- Complies with Manufacturers Standardization Society MSS SP-58 Type 36

Code	HCR Code	Nominal Size		ØA	ØD	E	Plate Size	Weight
		Inch	DN	mm	mm	mm	mm × mm × mm	kg/100 Pcs.
IEPSSP025	IEPSSP025H	1"	25	21.3	14	25	6 × 150 × 150	145
IEPSSP032	IEPSSP032H	1 ¼"	32	21.3	14	25	6 × 150 × 150	146
IEPSSP040	IEPSSP040H	1 ½"	40	21.3	14	25	6 × 150 × 150	148
IEPSSP050	IEPSSP050H	2"	50	21.3	14	25	6 × 150 × 150	153
IEPSSP065	IEPSSP065H	2 ½"	65	48.3	14	25	10 × 150 × 150	411
IEPSSP080	IEPSSP080H	3"	80	48.3	14	25	10 × 150 × 150	415
IEPSSP090	IEPSSP090H	3 ½"	90	48.3	14	25	10 × 150 × 150	419
IEPSSP100	IEPSSP100H	4"	100	73.0	20	30	10 × 200 × 200	678
IEPSSP125	IEPSSP125H	5"	125	73.0	20	30	10 × 200 × 200	683
IEPSSP150	IEPSSP150H	6"	150	73.0	20	30	10 × 200 × 200	789
IEPSSP200	IEPSSP200H	8"	200	73.0	20	30	10 × 200 × 200	864
IEPSSP250	IEPSSP250H	10"	250	73.0	20	30	10 × 200 × 200	943
IEPSSP300	IEPSSP300H	12"	300	73.0	20	30	10 × 200 × 200	1,014
IEPSSP350	IEPSSP350H	14"	350	88.9	26	40	12 × 300 × 300	1,993
IEPSSP400	IEPSSP400H	16"	400	88.9	26	40	12 × 300 × 300	2,060
IEPSSP450	IEPSSP450H	18"	450	114.3	26	40	12 × 300 × 300	2,549
IEPSSP500	IEPSSP500H	20"	500	114.3	26	40	12 × 300 × 300	2,640
IEPSSP600	IEPSSP600H	24"	600	114.3	26	40	12 × 300 × 300	2,981
IEPSSP750	IEPSSP750H	30"	750	114.3	26	40	12 × 300 × 300	4,564
IEPSSP900	IEPSSP900H	36"	900	114.3	26	40	12 × 300 × 300	5,154



Adjustable Pipe Saddle Support

Nominal Size Range

- ½" to 36"

Material

- Carbon Steel in accordance with the MSS SP-58 -TABLE A2/A2M

Service

- Stanchion type support where vertical adjustment of stationary pipe is required.

Ordering

- Specify code or name, nominal size and finish.

Finish

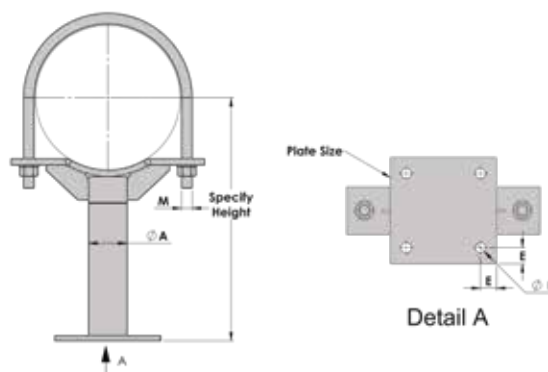
- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 - EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

Approvals

- Complies with Manufacturers Standardization Society MSS SP-58 Type 38

Code	HCR Code	Nominal Size		A	B	C Min.	C Max.	ØD	E	Plate Size	Weight
		Inch	DN	mm	mm	mm	mm	mm	mm	mm × mm × mm	kg/100 Pcs.
IEPSS025	IEPSS025H	1"	25	20	50	145	258	14	25	6 × 150 × 150	380.1
IEPSS032	IEPSS032H	1 ¼"	32	20	55	148	263	14	25	6 × 150 × 150	394.6
IEPSS040	IEPSS040H	1 ½"	40	20	60	154	267	14	25	6 × 150 × 150	397.8
IEPSS050	IEPSS050H	2"	50	20	62	157	272	14	25	6 × 150 × 150	400.5
IEPSS065	IEPSS065H	2 ½"	65	39	65	160	275	20	35	10 × 200 × 200	948.5
IEPSS080	IEPSS080H	3"	80	39	73	170	284	20	35	10 × 200 × 200	952.6
IEPSS090	IEPSS090H	3 ½"	90	39	80	175	290	20	35	10 × 200 × 200	958.0
IEPSS100	IEPSS100H	4"	100	64	90	184	300	20	40	10 × 300 × 300	1,672.8
IEPSS125	IEPSS125H	5"	125	64	105	200	312	20	40	10 × 300 × 300	1,680.5
IEPSS150	IEPSS150H	6"	150	64	120	215	330	20	40	10 × 300 × 300	1,749.9
IEPSS200	IEPSS200H	8"	200	64	165	260	375	20	40	10 × 300 × 300	1,868.8
IEPSS250	IEPSS250H	10"	250	64	192	288	400	20	40	10 × 300 × 300	1,922.3
IEPSS300	IEPSS300H	12"	300	64	215	308	425	20	40	10 × 300 × 300	1,992.1
IEPSS350	IEPSS350H	14"	350	80	273	370	485	24	40	12 × 300 × 300	2,834.0
IEPSS400	IEPSS400H	16"	400	80	300	395	508	24	40	12 × 300 × 300	2,908.0
IEPSS450	IEPSS450H	18"	450	100	345	440	553	29	40	12 × 460 × 460	5,599.2
IEPSS500	IEPSS500H	20"	500	100	368	465	580	29	40	12 × 460 × 460	5,698.9
IEPSS600	IEPSS600H	24"	600	100	450	545	660	29	40	12 × 460 × 460	6,210.6
IEPSS750	IEPSS750H	30"	750	100	530	625	740	29	40	12 × 460 × 460	7,788.2
IEPSS900	IEPSS900H	36"	900	100	610	710	825	29	40	12 × 460 × 460	8,356.5

Pipe Stanchion Saddle



Nominal Size Range

- ¾" to 36"

Material

- Carbon Steel in accordance with the MSS SP-58 -TABLE A2/A2M

Service

- Designed to support horizontal pipe from floor stanchion.

Ordering

- Specify code or name, nominal size and finish.

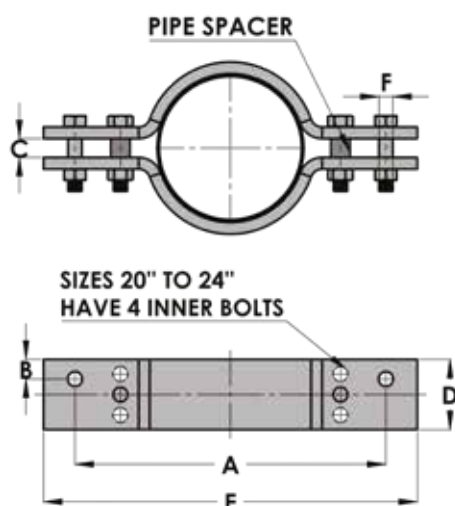
Finish

- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 - EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

Approvals

- Complies with Manufacturers Standardization Society MSS SP-58 Type 37

Code	HCR Code	Nominal Size		ØA	ØD	E	M	Plate Size	Weight
		Inch	DN	mm	mm	mm		mm × mm × mm	kg/100 Pcs.
IEPSSU020	IEPSSU020H	¾"	20	21.3	14	25	M6	6 × 150 × 150	146
IEPSSU025	IEPSSU025H	1"	25	21.3	14	25	M6	6 × 150 × 150	147
IEPSSU032	IEPSSU032H	1 ¼"	32	21.3	14	25	M10	6 × 150 × 150	169
IEPSSU040	IEPSSU040H	1 ½"	40	21.3	14	25	M10	6 × 150 × 150	174
IEPSSU050	IEPSSU050H	2"	50	21.3	14	25	M10	6 × 150 × 150	179
IEPSSU065	IEPSSU065H	2 ½"	65	48.3	14	25	M12	10 × 150 × 150	455
IEPSSU080	IEPSSU080H	3"	80	48.3	14	25	M12	10 × 150 × 150	464
IEPSSU090	IEPSSU090H	3 ½"	90	48.3	14	25	M12	10 × 150 × 150	471
IEPSSU100	IEPSSU100H	4"	100	73.0	20	30	M12	10 × 200 × 200	770
IEPSSU125	IEPSSU125H	5"	125	73.0	20	30	M12	10 × 200 × 200	796
IEPSSU150	IEPSSU150H	6"	150	73.0	20	30	M16	10 × 200 × 200	924
IEPSSU200	IEPSSU200H	8"	200	73.0	20	30	M16	10 × 200 × 200	1,007
IEPSSU250	IEPSSU250H	10"	250	73.0	20	30	M20	10 × 200 × 200	1,191
IEPSSU300	IEPSSU300H	12"	300	73.0	20	30	M20	10 × 200 × 200	1,270
IEPSSU350	IEPSSU350H	14"	350	88.9	26	40	M20	12 × 300 × 300	2,401
IEPSSU400	IEPSSU400H	16"	400	88.9	26	40	M20	12 × 300 × 300	2,516
IEPSSU450	IEPSSU450H	18"	450	114.3	26	40	M24	12 × 300 × 300	3,330
IEPSSU500	IEPSSU500H	20"	500	114.3	26	40	M24	12 × 300 × 300	3,481
IEPSSU600	IEPSSU600H	24"	600	114.3	26	40	M24	12 × 300 × 300	4,091
IEPSSU750	IEPSSU750H	30"	750	114.3	26	40	M24	12 × 300 × 300	4,698
IEPSSU900	IEPSSU900H	36"	900	114.3	26	40	M24	12 × 300 × 300	5,147



Heavy Duty Riser Clamp

Nominal Size Range

- 2" to 24"

Material

- Carbon Steel in accordance with the MSS SP-58 - TABLE A2/A2M

Service

- Designed for supporting and stabilizing vertical pipe runs. Used with weldless eye nut or eye rod. Welded lugs on pipe are required.

Ordering

- Specify code or name, nominal size and finish.

Finish

- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 - EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

Approvals

- Complies with Manufacturers Standardization Society MSS SP-58 Type 42

Note: The load data published includes a safety factor. (Safety factor= Ratio of ultimate load to the design load.)

Code	HCR Code	Pipe Size		A	B	C	D	E	F	Recom. Load	Weight
		Inch	DN	mm	mm	mm	mm	mm		kN	kg/100 Pcs.
IEKHDR050	IEKHDR050H	2"	50	458	33	19	65	559	M12	4.0	730
IEKHDR065	IEKHDR065H	2 ½"	65	508	33	19	65	610	M12	4.0	800
IEKHDR080	IEKHDR080H	3"	80	508	38	19	75	610	M16	6.7	1,250
IEKHDR100	IEKHDR100H	4"	100	560	40	19	80	660	M20	9.8	1,850
IEKHDR125	IEKHDR125H	5"	125	560	50	19	100	660	M20	9.8	2,320
IEKHDR150	IEKHDR150H	6"	150	610	35	26	100	711	M22	13.0	2,560
IEKHDR200	IEKHDR200H	8"	200	686	35	26	120	788	M22	13.0	3,560
IEKHDR250	IEKHDR250H	10"	250	762	40	38	155	915	M30	24.0	6,550
IEKHDR300	IEKHDR300H	12"	300	813	45	45	180	965	M36	34.5	8,330
IEKHDR350	IEKHDR350H	14"	350	864	45	45	180	1,016	M36	34.5	8,800
IEKHDR400	IEKHDR400H	16"	400	914	50	51	200	1,067	M36	40.0	12,180
IEKHDR450	IEKHDR450H	18"	450	991	50	51	230	1,143	M36	40.0	15,010
IEKHDR500	IEKHDR500H	20"	500	1,067	67	64	240	1,283	M48	60.0	24,960
IEKHDR600	IEKHDR600H	24"	600	1,143	67	64	260	1,359	M48	60.0	28,910

***SLIDERS, GUIDES, PIPE ROLLERS,
PROTECTION SHIELDS & SADDLES***





Light Duty Sliding Shoe

Nominal Size Range

- M8 to M10

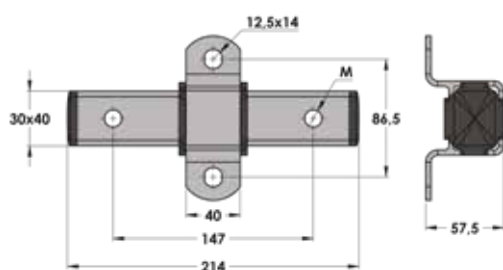
Material

- Glass Fiber Reinforced Polyamide (PA-6 GF30)

Service

- Designed for compensation movements of pipe systems. To be used with INKA pipe support system and various INKA clamps.
- Pipe can either be suspended or supported from below.
- Can also be used for vertical pipes.

Code	Thread Size	Suitable For Profile	A mm	Recom. Load kN	Quantity / Box	Weight
		mm × mm × mm				kg/Box
IWKMP12182760	M8	27 × 18 × 1.2	60	1	200	5.3
IWKMP203840875	M8	38 × 40 × 2	75	1	150	7.7
IWKMP2038401075	M10	38 × 40 × 2	75	1	150	7.5
IWKMP203840152	M10	38 × 40 × 2	152	1	100	10.3



Material

- Glass Fiber Reinforced Polyamide (PA-6 GF30)

Service

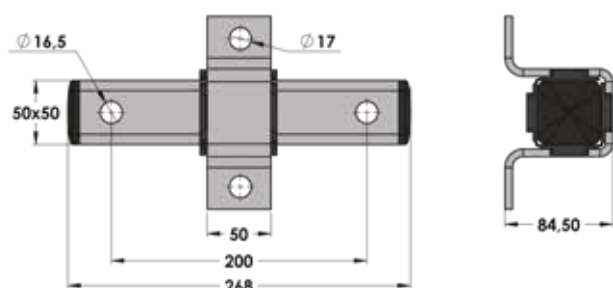
- Designed for compensation movements of pipe systems. To be used with INKA pipe support system and various INKA clamps.

Finish

- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 - EN ISO 2081/EN ISO 4042

Slide Guide

Code	Slide Guide Nominal Size	Slide Bracket Nominal Size	Clamp Connection	Description	Fmax Floor Mount	Fmax Ceiling Mount	Qty./Box	Weight
	mm × mm × mm	mm × mm × mm			kN	kN		kg/Box
IWKMP203040200	38 × 40 × 2	40 × 46.5 × 4	M12	Suitable for double clamp	1.7	1.7	25	20.6



Heavy Duty Slide Guide

Material

- Glass Fiber Reinforced Polyamide (PA-6 GF30)

Service

- Designed for compensation movements of pipe systems. To be used with INKA heavy duty pipe support system and various INKA clamps.

Finish

- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 - EN ISO 2081/EN ISO 4042

Code	Slide Guide Nominal Size	Slide Bracket Nominal Size	Clamp Connection	Description	Fmax Floor Mount	Fmax Ceiling Mount	Qty./Box	Weight
	mm × mm × mm	mm × mm × mm			kN	kN		kg/Box
IWKMP405050250	50 × 50 × 4	50 × 56.5 × 6	M16	Suitable for double clamp	5.5	5.5	10	22.6

Medium Duty Quick Sliding Support

Material

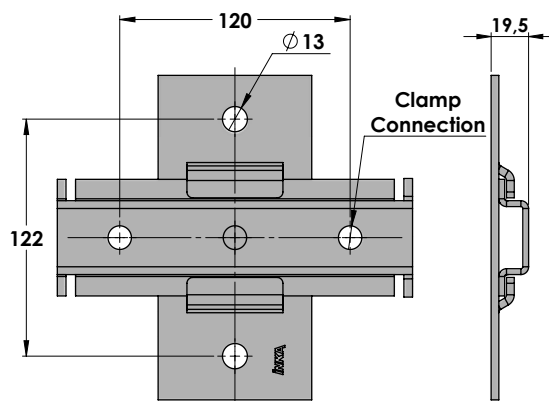
- Carbon Steel

Service

- Designed for compensation movements of pipe systems. To be used with INKA pipe support system and various INKA clamps.
- Up to 3" pipe

Finish

- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 - EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256



Note: The load data published includes a safety factor. (Safety factor= Ratio of ultimate load to the design load.)

Code	HCR Code	Clamp Connection	Description	Fmax Floor Mount	Fmax Ceiling Mount	Qty./Box	Weight
				kN	kN		kg/Box
IWKMQMD10	IWKMQMD10G	M10	Suitable for double clamp	1.6	1.6	20	35
IWKMQMD12	IWKMQMD12G	M12	Suitable for double clamp	1.6	1.6	20	35

Heavy Duty Quick Sliding Support

Material

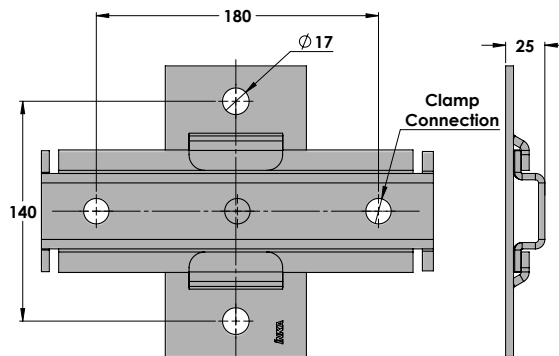
- Carbon Steel

Service

- Designed for compensation movements of pipe systems. To be used with INKA Heavy Duty pipe support system and various INKA clamps.
- For 4"-10" pipes

Finish

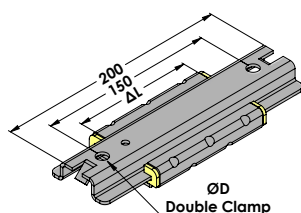
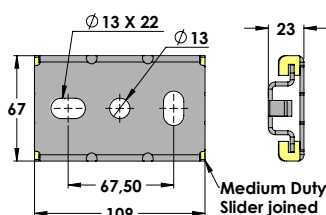
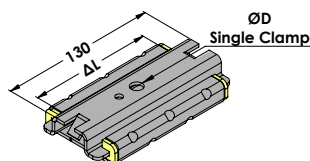
- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 - EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256



Note: The load data published includes a safety factor. (Safety factor= Ratio of ultimate load to the design load.)

Code	HCR Code	Clamp Connection	Description	Fmax Floor Mount	Fmax Ceiling Mount	Qty./Box	Weight
				kN	kN		kg/Box
IWKMQHD12	IWKMQHD12G	M12	Suitable for double clamp	3.5	3.5	15	7.6
IWKMQHD16	IWKMQHD16G	M16	Suitable for double clamp	3.5	3.5	15	7.6

Medium Duty Slider Weld or Bolt on Profile



Material

- Carbon Steel
- Glass Fiber Reinforced Polyamide (PA-6 GF30)

Service

- Designed for compensation movements of pipe systems. To be used with INKA heavy duty pipe support system and various INKA clamps.

Slider allows vibration absorption due to glass fiber reinforced polyamide slider parts.

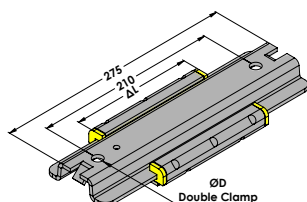
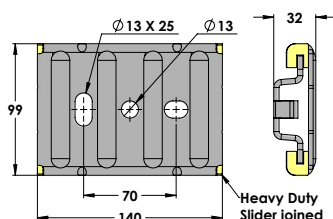
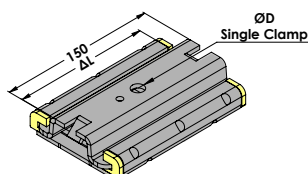
Selectable with various connections as M10/M12

Finish

- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 - EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

Code	HCR Code	Clamp Connection	Description	ØD	L	Fmax Floor Mount	Fmax Ceiling Mount	Weight
				mm	mm	kN	kN	kg/100 Pcs.
IWKM1208510	IWKM1208510G	M10	Suitable for single clamp	10.2	±40	1.2	0.6	44
IWKM1208512	IWKM1208512G	M12	Suitable for single clamp	12.2				44
IWKM1214010	IWKM1214010G	M10	Suitable for double clamp	10.2	±70			54
IWKM1214012	IWKM1214012G	M12	Suitable for double clamp	12.2				54

Heavy Duty Slider Weld or Bolt on Profile



Material

- Carbon Steel
- Plastic >PA-6 GF30<

Service

- Heavy duty sliders designed for compensation movements of pipe systems. To be used with INKA heavy duty pipe support system and various INKA clamps.

Slider allows sound absorption with glass fiber reinforced polyamide slider parts.

Selectable with various connections as M12/M16

Finish

- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 - EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

Code	HCR Code	Clamp Connection	Description	ØD	L	Fmax Floor Mount	Fmax Ceiling Mount	Weight
				mm	mm	kN	kN	kg/100 Pcs.
IWKM509010012	IWKM509010012G	M12	Suitable for single clamp	12.2	±50	9	5	109
IWKM509010016	IWKM509010016G	M16	Suitable for single clamp	16.2				109
IWKM509024512	IWKM509024512G	M12	Suitable for double clamp	12.2	±65			151
IWKM509024516	IWKM509024516G	M16	Suitable for double clamp	16.2				151

Medium Duty Slider Bolt on Square Profile

Material

- Carbon Steel
- Plastic >PA-6 GF30<

Service

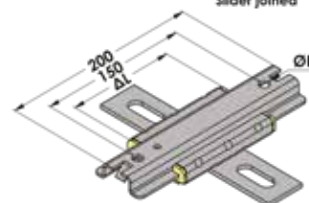
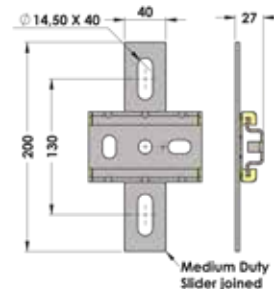
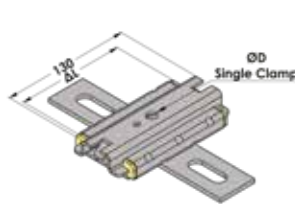
- Designed for compensation movements of pipe systems. To be used with INKA Square Profile and heavy duty pipe support system and various INKA clamps.

Slider allows sound absorption with glass fiber reinforced Polyamid slider parts.

Selectable with various connections as M10/M12

Finish

- Electro-Galvanized in accordance with ASTM B 633/ ASTM F 1941 - EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256



Code	HCR Code	Clamp Connection	Description	ØD	L	Fmax Floor Mount	Fmax Ceiling Mount	Weight
				mm	mm	kN	kN	kg/100 Pcs.
IWKMLK1208510	IWKMLK1208510G	M10	Suitable for single clamp	10.2	±40	1.2	0.6	64.5
IWKMLK1208512	IWKMLK1208512G	M12	Suitable for single clamp	12.2				64.5
IWKMLK1214010	IWKMLK1214010G	M10	Suitable for double clamp	10.2	±70			75.0
IWKMLK1214012	IWKMLK1214012G	M12	Suitable for double clamp	12.2				75.0

Heavy Duty Slider Bolt on Square Profile

Material

- Carbon Steel
- Plastic >PA-6 GF30<

Service

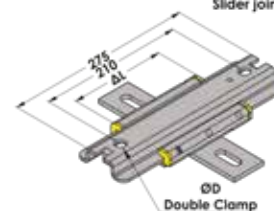
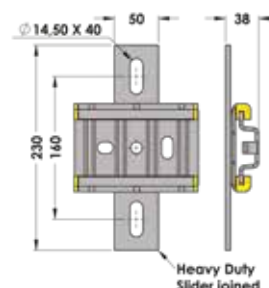
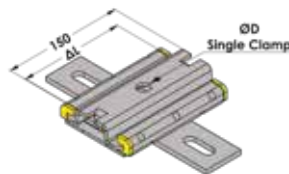
- Heavy duty sliders designed for compensation movements of pipe systems. To be used with INKA Square Profile and heavy duty pipe support system and various INKA clamps.

Slider allows sound absorption with glass fiber reinforced Polyamid slider parts.

Selectable with various connections as M12/M16

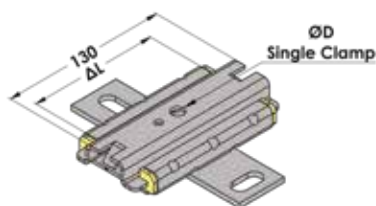
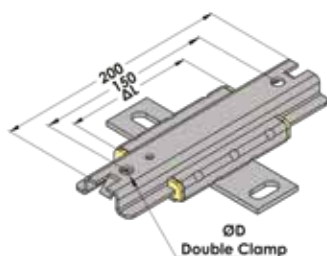
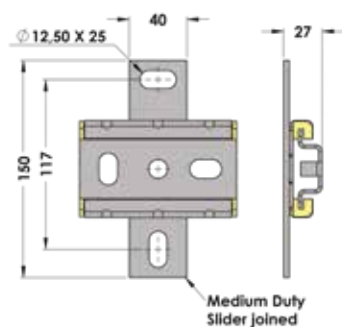
Finish

- Electro-Galvanized in accordance with ASTM B 633/ ASTM F 1941 - EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256



Code	HCR Code	Clamp Connection	Description	ØD	L	Fmax Floor Mount	Fmax Ceiling Mount	Weight
				mm	mm	kN	kN	kg/100 Pcs.
IWKMLK509010012	IWKMLK509010012G	M12	Suitable for single clamp	12.2	±50	9,0	5,0	157
IWKMLK509010016	IWKMLK509010016G	M16	Suitable for single clamp	16.2				157
IWKMLK509024512	IWKMLK509024512G	M12	Suitable for double clamp	12.2	±65			199
IWKMLK509024516	IWKMLK509024516G	M16	Suitable for double clamp	16.2				199

Medium Duty Slider Bolt on G Profile



Material

- Carbon Steel
- Plastic >PA-6 GF30<

Service

- Designed for compensation movements of pipe systems. To be used with INKA G Profile and heavy duty pipe support system and various INKA clamps.

Slider allows sound absorption with glass fiber reinforced Polyamid slider parts.

Selectable with various connections as M10/M12

Finish

- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 – EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

Code	HCR Code	Clamp Connection	Description	ØD	L	Fmax Floor Mount	Fmax Ceiling Mount	Weight
				mm	mm	kN	kN	kg/100 Pcs.
IWKML1208510	IWKML1208510G	M10	Suitable for single clamp	10.2	±40	1.2	0.6	60.5
IWKML1208512	IWKML1208512G	M12	Suitable for single clamp	12.2				60.5
IWKML1214010	IWKML1214010G	M10	Suitable for double clamp	10.2	±70			71.0
IWKML1214012	IWKML1214012G	M12	Suitable for double clamp	12.2				71.0

Heavy Duty Slider Bolt on G Profile

Material

- Carbon Steel
- Plastic >PA-6 GF30<

Service

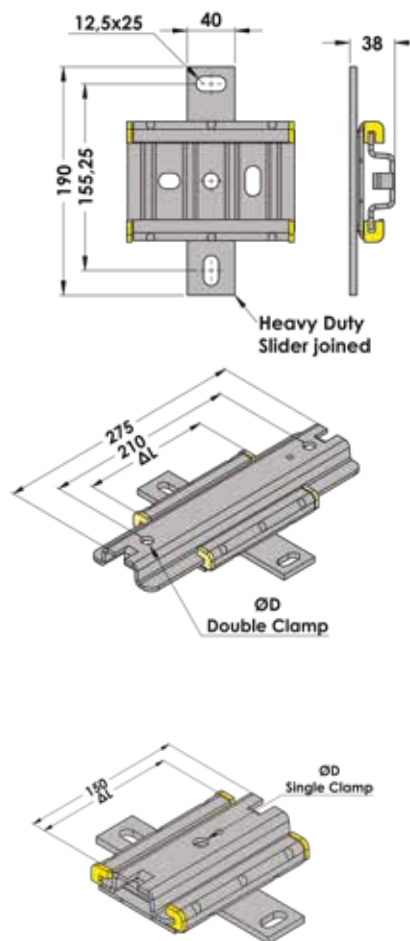
- Heavy duty sliders designed for compensation movements of pipe systems. To be used with INKA G Profile and heavy duty pipe support system and various INKA clamps.

Slider allows sound absorption with glass fiber reinforced Polyamid slider parts.

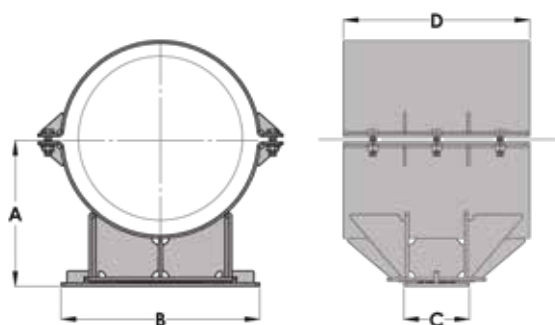
Selectable with various connections as M12/M16

Finish

- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 - EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256



Code	HCR Code	Clamp Connection	Description	ØD	L	Fmax Floor Mount	Fmax Ceiling Mount	Weight
				mm	mm	kN	kN	kg/100 Pcs.
IWKML509010012	IWKML509010012G	M12	Suitable for single clamp	12.2	±50	9	5	141.5
IWKML509010016	IWKML509010016G	M16	Suitable for single clamp	16.2				141.5
IWKML509024512	IWKML509024512G	M12	Suitable for double clamp	12.2	±65			183.0
IWKML509024516	IWKML509024516G	M16	Suitable for double clamp	16.2				183.0



Sliding Guided Support

Material

- Carbon Steel in accordance with the MSS SP-58 -TABLE A2/A2M
- Sliding bearing is PTFE

Welding

- Welding in accordance with EN 3834-2 / ASME Section IX, AWS D1.1

Service

- Designed to insulated or non-insulated stationary pipe allowing axial movements.

Installation

- Specify code or name, nominal size and finish.

Finish

- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 - EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

Approvals

- Complies with Manufacturers standardization society MSS SP 58 & SP 69 - Type 35

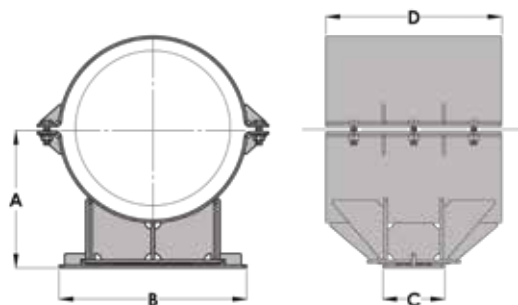
Note: Special size can be designed to meet project requirements.

Note: Anchor holes may be drilled for assembling on concrete. Base plate will be resized according to selected anchor.

Note: The load data published includes a safety factor. (Safety factor= Ratio of ultimate load to the design load.)

Code	HCR Code	Size			A	B	C	D	Vertical Force	Axial Force	Lateral Force	Weight
		Inch	DN	OD (mm)	mm	mm	mm	mm	kN	kN	kN	kg/100 Pcs.
IEFGSN150	IEFGSN150H	6"	150	168.3	385.0	363	160	150	8.4	2.5	2.5	1,700
IEFGSN200	IEFGSN200H	8"	200	219.10	410.5	397	180	200	14.0	4.2	4.2	2,600
IEFGSN250	IEFGSN250H	10"	250	273.0	438.0	434	210	250	23.2	7.0	7.0	3,900
IEFGSN300	IEFGSN300H	12"	300	323.9	463.0	467	220	300	31.4	9.4	9.4	5,200
IEFGSN350	IEFGSN350H	14"	350	356.0	479.0	549	220	350	39.1	11.7	11.7	6,900
IEFGSN400	IEFGSN400H	16"	400	406.0	504.5	583	230	400	51.6	15.5	15.5	9,300
IEFGSN450	IEFGSN450H	18"	450	457.0	530.0	617	260	450	64.2	19.3	19.3	11,100
IEFGSN500	IEFGSN500H	20"	500	508.0	555.5	651	260	500	81.3	24.3	24.3	13,700
IEFGSN550	IEFGSN550H	22"	550	558.8	581.0	685	300	550	97.9	29.3	29.3	15,800
IEFGSN600	IEFGSN600H	24"	600	609.6	606.5	719	300	600	117.7	35.3	35.3	19,400
IEFGSN650	IEFGSN650H	26"	650	660.4	632.0	753	300	650	136.7	41.0	41.0	22,000
IEFGSN700	IEFGSN700H	28"	700	711.2	657.5	787	300	700	157.9	47.3	47.3	25,500
IEFGSN750	IEFGSN750H	30"	750	762.0	719.0	821	300	750	177.5	53.3	53.3	28,300
IEFGSN800	IEFGSN800H	32"	800	812.8	708.5	855	350	800	202.0	60.6	60.6	38,300
IEFGSN850	IEFGSN850H	34"	850	863.6	734.0	889	350	850	224.0	67.2	67.2	42,200
IEFGSN900	IEFGSN900H	36"	900	914.4	759.5	923	350	900	251.8	75.5	75.5	46,200

Sliding Guided Support – Heavy Duty



Material

- Carbon Steel in accordance with the MSS SP-58 – TABLE A2/A2M
- Sling Bear is PTFE

Welding

- Welding in accordance with EN 3834-2 / ASME Section IX, AWS D1.1

Service

- Designed to insulated or non-insulated stationary pipe allowing horizontal movements.

Installation

- Specify code or name, nominal size and finish.

Finish

- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 – EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

Approvals

- Complies with Manufacturers standardization society MSS SP 58 & SP 69 – Type 35

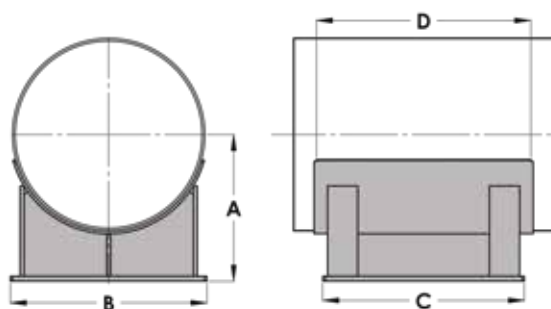
Note: Special size can be designed to meet project requirements.

Note: Anchor holes may be drilled for assembling on concrete. Base plate will be resized according to selected anchor.

Note: The load data published includes a safety factor. (Safety factor= Ratio of ultimate load to the design load.)

Code	HCR Code	Nominal Size			A	B	C	D	Vertical Force	Axial Force	Lateral Force	Weight
		Inch	DN	OD (mm)	mm	mm	mm	mm	kN	kN	kN	kg/100 Pcs.
IEFGSH150	IEFGSH150H	6"	150	168.3	385.0	363	160	150	13.4	4.0	4.0	2,500
IEFGSH200	IEFGSH200H	8"	200	219.1	410.0	397	180	200	22.5	6.8	6.8	3,500
IEFGSH250	IEFGSH250H	10"	250	273.0	438.0	434	210	250	37.1	11.1	11.1	5,000
IEFGSH300	IEFGSH300H	12"	300	323.9	463.0	467	220	300	50.2	15.1	15.1	6,600
IEFGSH350	IEFGSH350H	14"	350	356.0	479.0	549	220	350	62.6	18.7	18.7	8,900
IEFGSH400	IEFGSH400H	16"	400	406.0	504.5	583	230	400	82.6	24.8	24.8	10,800
IEFGSH450	IEFGSH450H	18"	450	457.0	530.0	617	260	450	102.7	30.8	30.8	13,000
IEFGSH500	IEFGSH500H	20"	500	508.0	555.5	651	260	500	130.0	39.0	39.0	17,200
IEFGSH550	IEFGSH550H	22"	550	558.8	581.0	685	300	550	156.6	47.0	47.0	20,200
IEFGSH600	IEFGSH600H	24"	600	609.6	606.5	719	300	600	188.3	56.5	56.5	23,700
IEFGSH650	IEFGSH650H	26"	650	660.4	632.0	753	300	650	218.8	65.6	65.6	30,600
IEFGSH700	IEFGSH700H	28"	700	711.2	657.5	787	300	700	252.7	75.8	75.8	35,400
IEFGSH750	IEFGSH750H	30"	750	762.0	683.0	821	300	750	284.0	85.2	85.2	39,500
IEFGSH800	IEFGSH800H	32"	800	812.8	708.5	855	350	800	323.2	97.0	97.0	45,800
IEFGSH850	IEFGSH850H	34"	850	863.6	734.0	889	350	850	358.0	107.4	107.4	50,500
IEFGSH900	IEFGSH900H	36"	900	914.4	759.5	923	300	900	402.9	120.9	120.9	58,100

Anchor Support



Material

- Carbon Steel in accordance with the MSS SP-58 -TABLE A2/A2M

Welding

- Welding in accordance with EN 3834-2 / ASME Section IX, AWS D1.1

Service

- Designed to support pipes and restrict freedom of movement by anchoring to concrete.

Installation

- Specify code or name, nominal size and finish.

Finish

- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 - EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

Approvals

- Complies with Manufacturers standardization society MSS SP 58 & SP 69 - Type 35

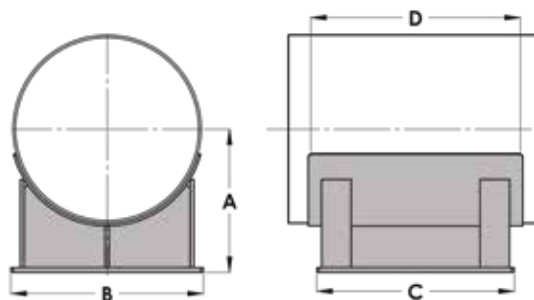
Note: Special size can be designed to meet project requirements.

Note: Anchor holes may be drilled for assembling on concrete. Base plate will be resized according to selected anchor.

Note: The load data published includes a safety factor. (Safety factor= Ratio of ultimate load to the design load.)

Code	HCR Code	Nominal Size			A	B	C	D	Vertical Force	Axial Force	Lateral Force	Weight
		Inch	DN	OD (mm)	mm	mm	mm	mm	kN	kN	kN	kg/100 Pcs.
IEFASN050	IEFASN050H	2"	50	60.3	230.5	74	170	170	1.3	1.3	0.4	500
IEFASN065	IEFASN065H	2½"	65	73.0	237.0	85	175	175	1.9	1.9	0.6	600
IEFASN080	IEFASN080H	3"	80	88.9	245.0	94	230	230	2.5	2.5	0.8	700
IEFASN100	IEFASN100H	4"	100	114.3	257.5	120	230	230	4.0	4.0	1.2	1,000
IEFASN125	IEFASN125H	5"	125	141.3	271.5	145	230	230	6.1	6.1	1.8	1,300
IEFASN150	IEFASN150H	6"	150	168.3	285.0	170	230	230	8.4	8.4	2.5	1,700
IEFASN200	IEFASN200H	8"	200	219.1	310.5	221	250	250	14.0	14.0	4.2	2,500
IEFASN250	IEFASN250H	10"	250	273.0	338.0	293	500	500	23.2	23.2	7.0	6,500
IEFASN300	IEFASN300H	12"	300	323.9	363.0	355	600	600	31.4	31.4	9.4	7,900
IEFASN350	IEFASN350H	14"	350	356.0	379.0	383	650	650	39.1	39.1	11.7	9,000
IEFASN400	IEFASN400H	16"	400	406.0	404.5	429	650	650	51.6	51.6	15.5	10,600
IEFASN450	IEFASN450H	18"	450	457.0	430.0	474	700	700	64.2	64.2	19.3	12,500
IEFASN500	IEFASN500H	20"	500	508.0	455.5	521	750	750	81.3	81.3	24.9	14,300
IEFASN550	IEFASN550H	22"	550	558.8	481.0	566	770	770	97.9	97.9	29.4	16,200
IEFASN600	IEFASN600H	24"	600	609.6	506.5	611	800	800	117.7	117.7	35.3	18,400
IEFASN650	IEFASN650H	26"	650	660.4	532.0	660	850	850	136.7	136.7	41.0	20,600
IEFASN700	IEFASN700H	28"	700	711.2	557.5	706	870	870	157.9	157.9	47.4	23,300
IEFASN750	IEFASN750H	30"	750	762.0	583.0	762	870	870	177.5	177.5	53.3	25,300
IEFASN800	IEFASN800H	32"	800	812.8	608.5	818	950	950	202.0	202.0	60.0	28,200
IEFASN850	IEFASN850H	34"	850	863.6	634.0	854	970	970	224.2	224.2	67.3	30,000
IEFASN900	IEFASN900H	36"	900	914.4	659.5	899	1,000	1,000	251.8	251.8	75.6	33,300

Anchor Support Heavy Duty



Material

- Carbon Steel in accordance with the MSS SP-58 -TABLE A2/A2M

Welding

- Welding in accordance with EN 3834-2 / ASME Section IX, AWS D1.1

Service

- Designed to support pipes and restrict freedom of movement by anchoring to concrete.

Installation

- Specify code or name, nominal size and finish.

Finish

- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 - EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

Approvals

- Complies with Manufacturers standardization society MSS SP 58 & SP 69 - Type 35

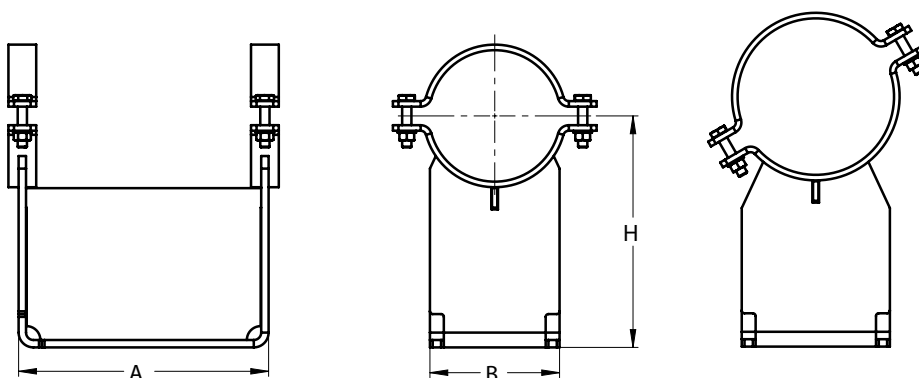
Note: Special size can be designed to meet project requirements.

Note: Anchor holes may be drilled for assembling on concrete. Base plate will be resized according to selected anchor.

Note: The load data published includes a safety factor. (Safety factor= Ratio of ultimate load to the design load.)

Code	HCR Code	Nominal Size			A	B	C	D	Vertical Force	Axial Force	Lateral Force	Weight
		Inch	DN	OD (mm)	mm	mm	mm	mm	kN	kN	kN	kg/100 Pcs.
IEFASH050	IEFASH050H	2"	50	60.3	230.5	74	170	170	2.0	2.0	0.6	500
IEFASH065	IEFASH065H	2½"	65	73.0	237.0	85	175	175	3.0	3.0	0.9	600
IEFASH080	IEFASH080H	3"	80	88.9	245.0	94	230	230	4.0	4.0	1.2	800
IEFASH100	IEFASH100H	4"	100	114.3	257.5	120	230	230	6.4	6.4	1.9	1,100
IEFASH125	IEFASH125H	5"	125	141.3	271.5	145	230	230	9.8	9.8	3.0	1,300
IEFASH150	IEFASH150H	6"	150	168.3	285.0	170	230	230	13.4	13.4	4.0	1,600
IEFASH200	IEFASH200H	8"	200	219.1	310.5	221	250	250	22.5	22.5	6.8	2,300
IEFASH250	IEFASH250H	10"	250	273.0	338.0	293	500	500	37.1	37.1	11.1	6,100
IEFASH300	IEFASH300H	12"	300	323.9	363.0	355	600	600	50.2	50.2	15.0	8,500
IEFASH350	IEFASH350H	14"	350	356.0	379.0	383	650	650	62.6	62.6	18.8	10,400
IEFASH400	IEFASH400H	16"	400	406.0	404.5	429	650	650	82.6	82.6	24.8	11,600
IEFASH450	IEFASH450H	18"	450	457.0	430.0	474	700	700	102.7	102.7	30.8	13,500
IEFASH500	IEFASH500H	20"	500	508.0	455.5	521	750	750	130.0	130.0	39.0	15,700
IEFASH550	IEFASH550H	22"	550	558.8	481.0	566	770	770	156.6	156.6	47.0	17,400
IEFASH600	IEFASH600H	24"	600	609.6	506.5	611	800	800	188.3	188.3	56.5	19,300
IEFASH650	IEFASH650H	26"	650	660.4	532.0	660	850	850	218.8	218.8	65.6	22,200
IEFASH700	IEFASH700H	28"	700	711.2	557.5	706	870	870	252.7	252.7	75.8	24,100
IEFASH750	IEFASH750H	30"	750	762.0	583.0	762	870	870	284.0	284.0	85.2	26,700
IEFASH800	IEFASH800H	32"	800	812.8	608.5	818	950	950	323.2	323.2	96.7	30,600
IEFASH850	IEFASH850H	34"	850	863.6	634.0	854	970	970	358.7	358.7	107.6	32,600
IEFASH900	IEFASH900H	36"	900	914.4	659.5	889	1,000	1,000	402.9	402.9	120.9	35,200

Sliding Support



Material

- Carbon Steel in accordance with the MSS SP-58 -TABLE A2/A2M

Welding

- Welding in accordance with ASME Section IV: ASME Boiler and Pressure Vessel Code and AWS D1.1

Service

- Designed to insulated or non-insulated stationary pipe allowing horizontal movements.

Installation

- Specify code or name, nominal size and finish.

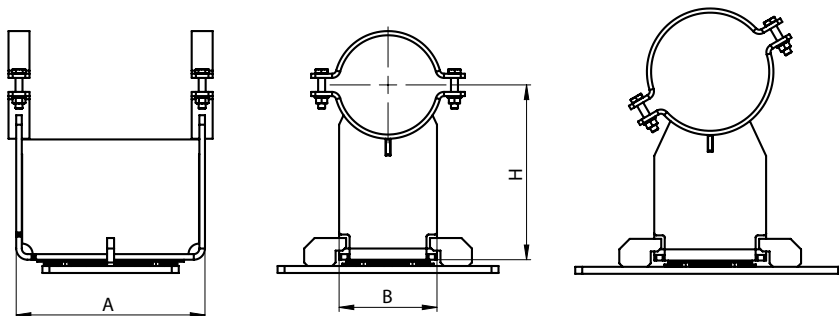
Finish

- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941
- High Corrosion Resistant (HCR) details can be found on page 256

Note: Special sizes can be designed to meet Project requirements

Code	HCR Code	Nominal Size			Clamping Range	A	B	H	Vertical Force	Axial Force	Lateral Force	Weight
		OD (mm)	Inch	DN	Ø mm-mm	mm	mm	mm	kN	kN	kN	kg/100 Pcs.
IESS015	IESS015H	21.3	¾"	15	20-22	150	50	100	2.4	0.9	0.9	132
IESS020	IESS020H	26.7	¾"	20	25-27	170	50	110	2.4	0.9	0.9	156
IESS025	IESS025H	33.4	1"	25	32-34	170	60	120	2.7	1.0	1.0	201
IESS032	IESS032H	42.2	1¼"	32	41-43	170	70	150	2.7	1.0	1.0	252
IESS040	IESS040H	48.3	1½"	40	47-49	170	70	150	2.7	1.0	1.0	252
IESS050	IESS050H	60.3	2"	50	59-61	220	90	170	3.9	1.4	1.4	377
IESS065	IESS065H	73.0	2½"	65	71-73	220	90	170	4.4	1.5	1.5	387
IESS080	IESS080H	88.9	3"	80	87-89	270	120	200	6.0	2.3	2.3	591
IESS090	IESS090H	101.6	3½"	90	100-102	270	120	200	6.0	2.3	2.3	561
IESS100	IESS100H	114.3	4"	100	113-115	270	140	240	9.0	3.4	3.4	813
IESS125	IESS125H	141.3	5"	125	140-142	270	140	250	15.0	5.2	5.2	951
IESS150	IESS150H	168.3	6"	150	167-169	310	160	270	17.0	5.9	5.9	1,125
IESS175	IESS175H	193.7	7½"	175	192-194	310	170	290	17.0	5.9	5.9	1,505
IESS200	IESS200H	219.1	8"	200	218-220	320	200	350	20.0	7.0	7.0	1,914
IESS225	IESS225H	244.5	9½"	225	243-245	320	210	360	23.0	8.0	8.0	2,017
IESS250	IESS250H	273.0	10"	250	271-273	340	220	380	28.0	9.8	9.8	2,569
IESS300	IESS300H	323.9	12"	300	322-324	340	240	400	30.0	10,5	10,5	2,777
IESS350	IESS350H	356.0	14"	350	354-356	400	250	440	35.0	12,2	12,2	3,877
IESS400	IESS400H	406.0	16"	400	404-406	400	280	450	55.0	19,2	19,2	5,369
IESS450	IESS450H	457.0	18"	450	455-457	400	300	500	58.0	20,3	20,3	6,231
IESS500	IESS500H	508.0	20"	500	506-508	400	320	550	60.0	21.0	21.0	6,928

Sliding Guide Support



Material

- Carbon Steel in accordance with the MSS SP-58 -TABLE A2/A2M

Welding

- Welding in accordance with ASME Section IV: ASME Boiler and Pressure Vessel Code and AWS D1.1

Service

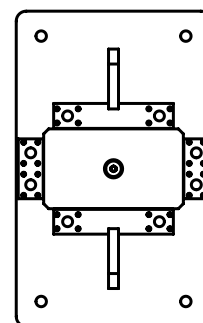
- Designed to insulated or non-insulated stationary pipe allowing axial movements.

Installation

- Specify code or name, nominal size and finish.

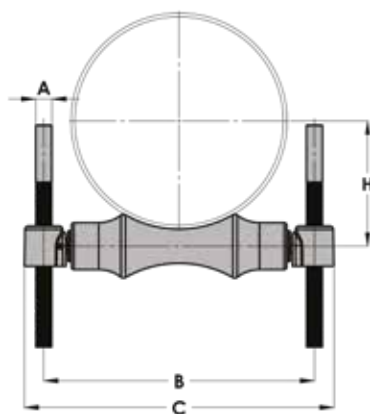
Finish

- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941
- High Corrosion Resistant (HCR) details can be found on page 256



Note: Special sizes can be designed to meet Project requirements

Code	HCR Code	Nominal Size			Clamping Range	A	B	H	Weight
		OD (mm)	Inch	DN	Ø mm-mm	mm	mm	mm	kg/100 Pcs.
IESSG015	IESSG015H	21.3	½"	15	20-22	150	50	100	306
IESSG020	IESSG020H	26.7	¾"	20	25-27	170	50	110	331
IESSG025	IESSG025H	33.4	1"	25	32-34	170	60	120	391
IESSG032	IESSG032H	42.2	1¼"	32	41-43	170	70	150	449
IESSG040	IESSG040H	48.3	1½"	40	47-49	170	70	150	449
IESSG050	IESSG050H	60.3	2"	50	59-61	220	90	170	617
IESSG065	IESSG065H	73.0	2½"	65	71-73	220	90	170	628
IESSG080	IESSG080H	88.9	3"	80	87-89	270	120	200	1,050
IESSG090	IESSG090H	101.6	3½"	90	100-102	270	120	200	1,020
IESSG100	IESSG100H	114.3	4"	100	113-115	270	140	240	1,352
IESSG125	IESSG125H	141.3	5"	125	140-142	270	140	250	1,490
IESSG150	IESSG150H	168.3	6"	150	167-169	310	160	270	1,902
IESSG175	IESSG175H	193.7	7½"	175	192-194	310	170	290	2,302
IESSG200	IESSG200H	219.1	8"	200	218-220	320	200	350	2,788
IESSG225	IESSG225H	244.5	9½"	225	243-245	320	210	360	2,902
IESSG250	IESSG250H	273.0	10"	250	271-273	340	220	380	4,083
IESSG300	IESSG300H	323.9	12"	300	322-324	340	240	400	4,514
IESSG350	IESSG350H	356.0	14"	350	354-356	400	250	440	5,945
IESSG400	IESSG400H	406.0	16"	400	404-406	400	280	450	8,428
IESSG450	IESSG450H	457.0	18"	450	455-457	400	300	500	9,392
IESSG500	IESSG500H	508.0	20"	500	506-508	400	320	550	10,195



Single Pipe Roller

Nominal Size Range

- 1" to 30"

Material

- Steel Axle with Cast Iron Roller / Malleable Sockets (8" and above)
- Steel Axle with Solid Steel Rollers / Malleable Sockets (6" and below)

Service

- Designed to support pipes where axial movements are allowed, and vertical adjustments are required. This combination can also be used as a guide for pipes. Hanger Rod and Nuts are not included.

Ordering

- Specify code or name, nominal size and finish.

Finish

- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 - EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

Approvals

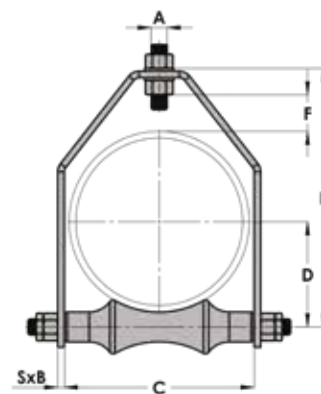
- Complies with Manufacturers Standardization Society MSS SP-58 Type 41

Note: Special size can be designed to meet project requirements.

Note: The load data published includes a safety factor. (Safety factor= Ratio of ultimate load to the design load.)

Code	HCR Code	Pipe Size		A	B	C	H	Recom. Load	Weight
		Inch	mm		mm	mm	mm		
IEFPRS025	IEFPRS025H	1"	25	M10	75	95	26.5	2.7	34
IEFPRS032	IEFPRS032H	1 ¼"	32	M10	85	105	30.5	2.7	37
IEFPRS040	IEFPRS040H	1 ½"	40	M10	90	110	33.5	2.7	38
IEFPRS050	IEFPRS050H	2"	50	M10	102	122	38.5	2.7	39
IEFPRS065	IEFPRS065H	2 ½"	65	M12	124	154	49.0	2.9	80
IEFPRS080	IEFPRS080H	3"	80	M12	140	170	55.5	3.1	85
IEFPRS090	IEFPRS090H	3 ½"	90	M12	156	186	63.5	3.3	95
IEFPRS100	IEFPRS100H	4"	100	M16	175	215	69.5	3.3	147
IEFPRS125	IEFPRS125H	5"	125	M16	205	254	84.5	3.3	220
IEFPRS150	IEFPRS150H	6"	150	M20	245	303	100.0	4.8	345
IEFPRSD200	IEFPRSD200H	8"	200	M24	300	358	129.5	6.0	455
IEFPRSD250	IEFPRSD250H	10"	250	M24	356	414	159.0	7.7	587
IEFPRSD300	IEFPRSD300H	12"	300	M24	402	460	187.5	10.7	810
IEFPRSD350	IEFPRSD350H	14"	350	M24	458	540	209.0	14.0	1460
IEFPRSD400	IEFPRSD400H	16"	400	M30	508	590	234.5	17.7	1715
IEFPRSD450	IEFPRSD450H	18"	450	M30	559	641	263.0	18.7	1900
IEFPRSD500	IEFPRSD500H	20"	500	M30	610	692	291.5	20.3	2350
IEFPRSD600	IEFPRSD600H	24"	600	M39	735	825	350.0	27.5	3150
IEFPRSD750	IEFPRSD750H	30"	750	M39	900	990	438.5	32.5	4400

Adjustable Roller Hanger



Nominal Size Range

- 2" to 24"

Material

- Steel Axle with Cast Iron Roller / Malleable Sockets (8" and above)
- Steel Axle with Solid Steel Rollers / Malleable Sockets (6" and below)

Service

- Designed for pipe lines where horizontal movement may take place due to expansion and contraction. Vertical adjustments are possible once the pipe is in place. The lower nut is used to adjust the pipeline to the required elevation.

Ordering

- Specify code or name, nominal size and finish.

Finish

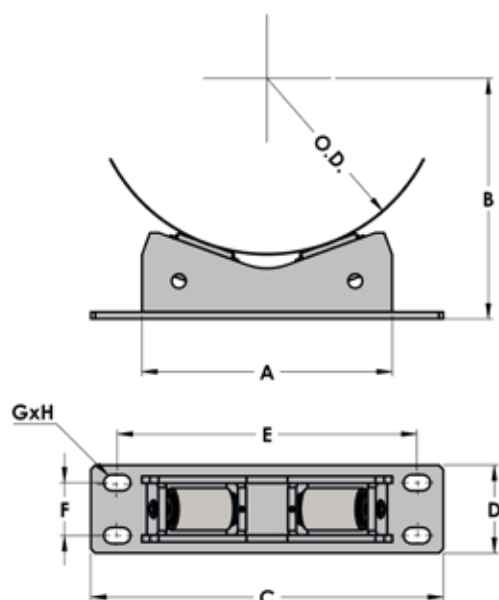
- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 – EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

Approvals

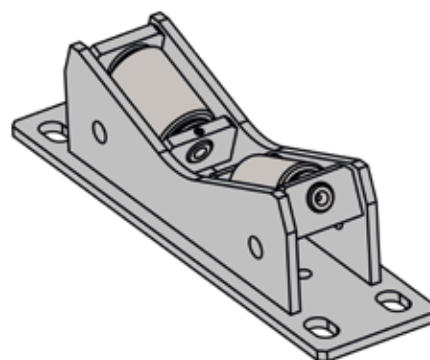
- Complies with Manufacturers Standardization Society MSS SP-58 Type 43

Note: The load data published includes a safety factor. (Safety factor= Ratio of ultimate load to the design load.)

Code	HCR Code	Nominal Size		A	S × B	C	D	E	F	Recom. Load	Weight
		Inch	mm								
IEFRH050	IEFRH050H	2"	50	M12	5 × 25	70.5	39.0	119.5	31.7	0.7	52
IEFRH065	IEFRH065H	2 ½"	65	M12	5 × 25	83.5	49.0	145.5	40.2	1.0	73
IEFRH080	IEFRH080H	3"	80	M12	6 × 30	99.5	55.5	161.5	42.2	1.4	100
IEFRH090	IEFRH090H	3 ½"	90	M12	6 × 30	112.0	63.5	177.5	39.2	1.7	120
IEFRH100	IEFRH100H	4"	100	M16	6 × 40	124.5	70.0	191.5	40.2	2.0	150
IEFRH125	IEFRH125H	5"	125	M16	10 × 45	154.0	84.5	232.0	46.5	3.0	310
IEFRH150	IEFRH150H	6"	150	M20	10 × 50	181.0	101.0	262.0	45.0	3.5	430
IEFRHD200	IEFRHD200H	8"	200	M20	10 × 60	231.5	130.0	323.5	52.5	3.5	690
IEFRHD250	IEFRHD250H	10"	250	M24	10 × 60	285.5	158.8	383.5	52.8	4.3	890
IEFRHD300	IEFRHD300H	12"	300	M24	12 × 60	338.0	187.5	443.5	56.5	5.3	1,300
IEFRHD350	IEFRHD350H	14"	350	M24	12 × 60	370.0	209.3	478.5	53.7	5.3	1,680
IEFRHD400	IEFRHD400H	16"	400	M24	12 × 60	421.0	234.8	528.5	52.7	5.3	1,980
IEFRHD450	IEFRHD450H	18"	450	M30	12 × 75	471.5	263.5	602.5	68.4	6.2	2,470
IEFRHD500	IEFRHD500H	20"	500	M30	16 × 75	522.5	291.7	659.5	68.2	7.0	3,510
IEFRHD600	IEFRHD600H	24"	600	M30	16 × 75	624.0	350.5	799.5	98.4	8.0	4,400



Double Cylinder Roller Support



Size Range

- 8" to 56"

Material

- Carbon Steel in accordance with the MSS SP-58 -TABLE A2/A2M

Service

- Designed to support pipes where axial movements are allowed. Used where vertical adjustments are not necessary.

Ordering

- Specify code or name, nominal size and finish.

Finish

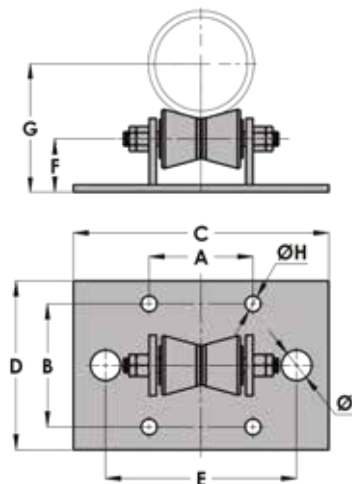
- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 - EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

Note: The given dimensions are subject to change according to requirements

Note: The load data published includes a safety factor. (Safety factor= Ratio of ultimate load to the design load.)

Code	HCR Code	OD	A	B	C	D	E	F	G x H	Recom. Load (kN)			Weight
		mm-mm	mm	mm-mm	mm	mm	mm	mm	mm x mm	Axial	Lateral	Vertical	kg/100 Pcs.
IEFRSH200	IEFRSH200H	200-340	215	164-238	320	90	266	56	14 x 30	-	3.1	9	470
IEFRSH300	IEFRSH300H	320-490	284	228-319	400	100	340	60	18 x 30	-	8.3	24	750
IEFRSH400	IEFRSH400H	380-540	314	261-346	434	100	370	60	18 x 30	-	9.9	29	820
IEFRSH600	IEFRSH600H	530-800	424	349-493	580	130	500	75	22 x 40	-	16.7	47	2,070
IEFRSH750	IEFRSH750H	750-1,000	510	476-609	675	150	595	95	22 x 40	-	30.9	95	3,285
IEFRSH900	IEFRSH900H	1,000-1,440	682	595-829	850	165	770	110	22 x 40	-	40.7	145	5,000

Roller Stand



Nominal Size Range

- 2" to 42"

Material

- Carbon Steel in accordance with the MSS SP-58 -TABLE A2/A2M

Service

- Designed to support pipes where axial movements are allowed. Used where vertical adjustments are not necessary.

Ordering

- Specify code or name, nominal size and finish.

Finish

- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 - EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

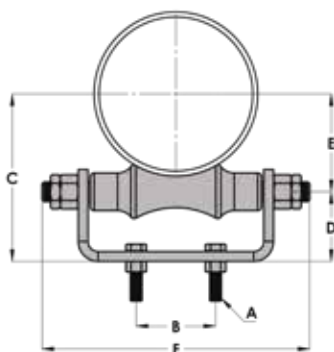
Approvals

- Complies with Manufacturers Standardization Society MSS SP-58 Type 44

Note: Special size can be designed to meet project requirements.

Note: The load data published includes a safety factor. (Safety factor= Ratio of ultimate load to the design load.)

Code	HCR Code	Pipe Size		A	B	C	D	E	F	G	ØH	ØI	Recom. Load	Weight
		Inch	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	kN	kg/100 Pcs.
IEFRS050	IEFRS050H	2"	50	87	102	214	140	160	44	91	13	25	1.7	240
		2½"	65							99				
		3"	80							106				
		3½"	90							112				
IEFRS100	IEFRS100H	4"	100	119	108	252	152	200	51	126	13	25	4.2	320
		5"	125							139				
		6"	150							153				
IEFRS200	IEFRS200H	8"	200	178	127	216	203	102	86	221	17	25	9.4	870
		10"	250							249				
IEFRS300	IEFRS300H	12"	300	230	152	281	203	146	95	287	17	25	13.7	1,490
		14"	350							303				
IEFRS400	IEFRS400H	16"	400	260	165	330	229	175	108	346	21	25	22.0	2,130
		18"	450							373				
		20"	500							399				
IEFRS600	IEFRS600H	24"	600	289	165	340	229	190	111	456	21	25	27.0	2,580
IEFRS750	IEFRS750H	30"	750	362	203	432	279	254	130	554	25	25	33.4	3,970
IEFRS900	IEFRS900H	36"	900	432	229	508	305	304	146	651	32	25	53.4	7,000
		42"	1050							730				



Roller Chair

Nominal Size Range

- 2" to 24"

Material

- Steel Axle with Cast Iron Roller / Malleable Sockets (8" and above)
- Steel Axle with Solid Steel Rollers / Malleable Sockets (6" and below)

Service

- Designed to support pipes where axial movements are allowed. Used where vertical adjustments are not necessary.

Ordering

- Specify code or name, nominal size and finish.

Finish

- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 – EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

Approvals

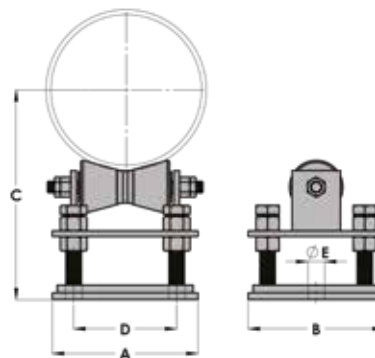
- Complies with Manufacturers Standardization Society MSS SP-58 Type 44

Note: Special size can be designed to meet project requirements.

Note: The load data published includes a safety factor. (Safety factor= Ratio of ultimate load to the design load.)

Code	HCR Code	Nominal Size		A	B	C	D	E	F	Recom. Load	Weight
		Inch	mm		mm	mm	mm	mm	mm	kN	kg/100 Pcs.
IEFRC050	IEFRC050H	2"	50	M10	32	78	38	40	120	1.3	45
IEFRC065	IEFRC065H	2 ½"	65	M10	32	90	41	49	140	2.7	65
IEFRC080	IEFRC080H	3"	80	M10	50	100	45	56	155	2.7	74
IEFRC090	IEFRC090H	3 ½"	90	M12	50	114	51	64	175	2.7	127
IEFRC100	IEFRC100H	4"	100	M12	50	129	59	70	190	3.1	143
IEFRC125	IEFRC125H	5"	125	M12	76	151	64	86	235	3.1	204
IEFRC150	IEFRC150H	6"	150	M12	80	171	70	101	275	4.4	305
IEFRCD200	IEFRCD200H	8"	200	M12	86	207	76	130	340	5.8	486
IEFRCD250	IEFRCD250H	10"	250	M12	130	252	92	160	395	7.6	697
IEFRCD300	IEFRCD300H	12"	300	M12	140	294	105	190	450	10.2	950
IEFRCD350	IEFRCD350H	14"	350	M16	165	332	121	210	500	13.8	1,395
IEFRCD400	IEFRCD400H	16"	400	M16	203	365	127	235	555	17.4	1,800
IEFRCD450	IEFRCD450H	18"	450	M16	230	397	134	264	600	18.7	2,050
IEFRCD500	IEFRCD500H	20"	500	M20	254	438	145	292	680	20.0	2,750
IEFRCD600	IEFRCD600H	24"	600	M20	305	530	178	350	780	26.7	3,750

Adjustable Roller Stand



Nominal Size Range

- 2" to 42"

Material

- Carbon Steel in accordance with the MSS SP-58 -TABLE A2/A2M

Service

- Designed for support of pipe with longitudinal movement and vertical adjustment are required.

Ordering

- Specify code or name, nominal size and finish.

Finish

- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 - EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

Approvals

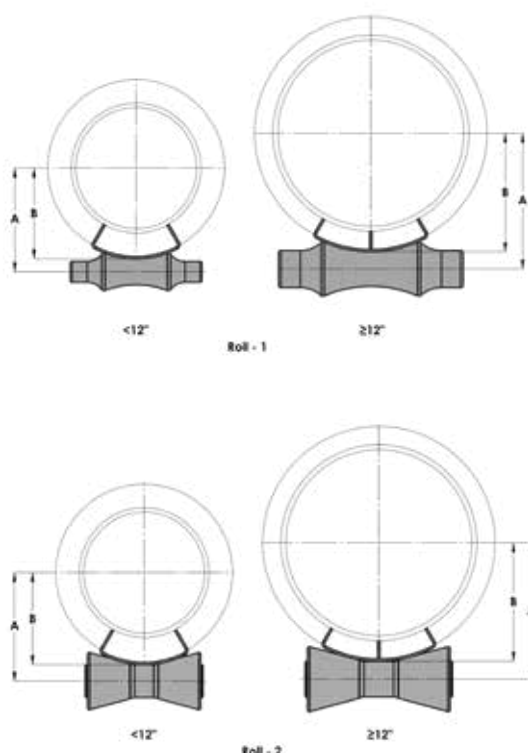
- Complies with Manufacturers Standardization Society MSS SP-58 Type 46

Note: Special size can be designed to meet project requirements.

Note: The load data published includes a safety factor. (Safety factor= Ratio of ultimate load to the design load.)

Code	HCR Code	Pipe Size		A	B	D	ØE	C Min.	C Max.	Recom. Load	Weight
		Inch	mm	mm	mm	mm	mm	mm	mm	kN	kg/100 Pcs.
IEFARSS050	IEFARSS050H	2"	50	125	140	81	17	120	145	1.7	435
		2½"	65					127	153		
		3"	80					134	160		
		3½"	90					141	166		
IEFARSS100	IEFARSS100H	4"	100	150	140	106	17	157	190	4.2	569
		5"	125					170	204		
		6"	150					184	219		
IEFARSS200	IEFARSS200H	8"	200	220	190	168	21	257	300	9.4	1,457
		10"	250					284	328		
IEFARSS300	IEFARSS300H	12"	300	275	215	220	25	326	360	13.7	2,378
		14"	350					342	377		
IEFARSS400	IEFARSS400H	16"	400	310	230	246	25	390	443	22	3,585
		18"	450					417	469		
		20"	500					443	495		
IEFARSS600	IEFARSS600H	24"	600	335	230	271	25	500	552	27.2	4,169
IEFARSS750	IEFARSS750H	30"	750	420	285	335	25	620	678	33.4	8,209
IEFARSS900	IEFARSS900H	36"	900	490	320	403	25	718	746	53	12,215
		42"	1050					798	825		

Pipe Covering Protection Saddle



Nominal Size Range

- 3/4" to 36"

Material

- Carbon Steel in accordance with the MSS SP-58 - TABLE A2/A2M

Service

- Designed to protect covering from tearing. Saddles are 12" (305 mm) long. Center rib is furnished on all saddle sizes 12" (300 mm) and above.

Finish

- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 - EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

Approvals

- Complies with Manufacturers Standardization Society MSS SP-58 & SP-69 - Type 39

Note: The load data published includes a safety factor. (Safety factor= Ratio of ultimate load to the design load.)

Code	HCR Code	Pipe Size		Actual Covering Thickness	Recom. Load	Saddle with Roll 1			Saddle with Roll 2			Weight
		Inch	mm			Roll Code	A	B	Roll Code	A	B	
				mm	kN		mm	mm		mm	mm	kg/100 Pcs.
IEFPS020025	IEFPS020025H	¾"	20.0	25	5.3	IEFSM01080	53.0	41.9	IEFSM02050	59.7	41.9	60
IEFPS020038	IEFPS020038H			38		IEFSM01100	67.5	54.9	IEFSM02100	72.7	54.9	89
IEFPS020050	IEFPS020050H			50		IEFSM01125	81.5	66.9	IEFSM02100	85.2	66.9	115
IEFPS025025	IEFPS025025H	1"	25.0	25	5.3	IEFSM01090	57.9	45.3	IEFSM02050	63.2	45.3	63
IEFPS025038	IEFPS025038H			38		IEFSM01100	70.9	58.3	IEFSM02100	76.3	58.3	91
IEFPS025050	IEFPS025050H			50		IEFSM01125	84.9	70.3	IEFSM02100	88.7	70.3	117
IEFPS032025	IEFPS032025H	1¼"	32.0	25	5.3	IEFSM01090	62.2	49.7	IEFSM02050	67.7	49.7	65
IEFPS032038	IEFPS032038H			38		IEFSM01125	77.2	62.7	IEFSM02100	80.8	62.7	93
IEFPS032050	IEFPS032050H			50		IEFSM01150	90.7	74.7	IEFSM02100	93.2	74.7	121
IEFPS032065	IEFPS032065H			65		IEFSM01200	109.7	89.7	IEFSM02100	108.7	89.7	153
IEFPS040025	IEFPS040025H	1½"	40.0	25	5.3	IEFSM01100	65.2	52.6	IEFSM02100	70.4	52.6	67
IEFPS040038	IEFPS040038H			38	5.3	IEFSM01125	80.2	65.6	IEFSM02100	83.8	65.6	97
IEFPS040050	IEFPS040050H			50	8.0	IEFSM01150	93.6	77.6	IEFSM02100	96.2	77.6	122
IEFPS040065	IEFPS040065H			65	8.0	IEFSM01200	112.7	92.6	IEFSM02200	118.2	92.6	154
IEFPS050025	IEFPS050025H	2"	50.0	25	5.3	IEFSM01100	71.2	58.6	IEFSM02100	76.6	58.6	72
IEFPS050038	IEFPS050038H			38	5.3	IEFSM01125	86.2	71.6	IEFSM02100	90.0	71.6	100
IEFPS050050	IEFPS050050H			50	8.0	IEFSM01150	99.7	83.6	IEFSM02100	102.4	83.6	126
IEFPS050065	IEFPS050065H			65	8.0	IEFSM01200	118.7	98.6	IEFSM02200	124.4	98.6	160
IEFPS050075	IEFPS050075H			75	8.0	IEFSM01200	128.7	108.6	IEFSM02200	134.7	108.6	181

Pipe Covering Protection Saddle

Material

- Carbon Steel in accordance with the MSS SP-58 -TABLE A2/A2M

Service

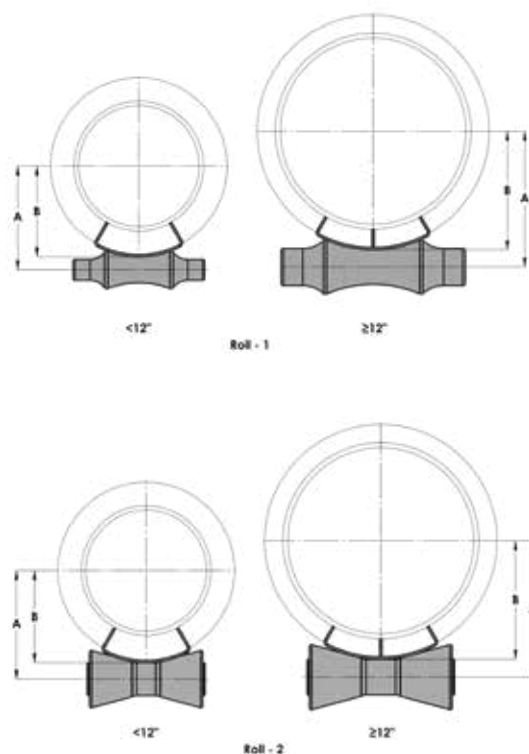
- Designed to protect insulation from crushing. Saddles are 12" (305 mm) long. Center rib is furnished on all saddle sizes 12" (300 mm) and above.

Finish

- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 - EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

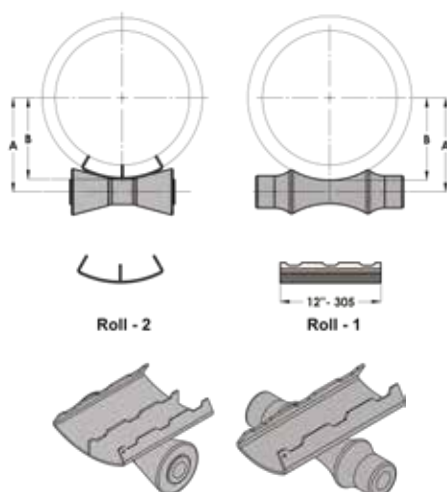
Approvals

- Complies with Manufacturers Standardization Society MSS SP-58 & SP-69 - Type 39



Note: The load data published includes a safety factor. (Safety factor= Ratio of ultimate load to the design load.)

Code	HCR Code	Pipe Size		Actual Covering Thickness mm	Recom. Load kN	Saddle with Roll 1			Saddle with Roll 2			Weight kg/100 Pcs.
		Inch	mm			Roll Code	A	B	Roll Code	A	B	
IEFPS065025	IEFPS065025H	2½"	65.0	25	5.3	IEFSM01125	81.1	66.5	IEFSM02100	84.7	66.5	79
IEFPS065038	IEFPS065038H			38	5.3	IEFSM01150	95.6	79.5	IEFSM02100	98.2	79.5	106
IEFPS065050	IEFPS065050H			50	8.0	IEFSM01200	111.6	91.5	IEFSM02100	110.6	91.5	132
IEFPS065065	IEFPS065065H			65	8.0	IEFSM01200	126.6	106.5	IEFSM02200	132.6	106.5	166
IEFPS065075	IEFPS065075H			75	8.0	IEFSM01250	138.8	116.5	IEFSM02200	142.9	116.5	188
IEFPS080025	IEFPS080025H	3"	80.0	25	5.3	IEFSM01150	89.0	72.9	IEFSM02100	91.4	72.9	82
IEFPS080038	IEFPS080038H			38	5.3	IEFSM01150	102.0	85.9	IEFSM02100	104.8	85.9	112
IEFPS080050	IEFPS080050H			50	8.0	IEFSM01200	118.0	97.9	IEFSM02200	123.7	97.9	138
IEFPS080065	IEFPS080065H			65	8.0	IEFSM01250	135.2	113.0	IEFSM02200	139.2	113.0	169
IEFPS080075	IEFPS080075H			75	8.0	IEFSM01250	145.2	122.9	IEFSM02200	149.5	122.9	191
IEFPS080100	IEFPS080100H			100	8.0	IEFSM01300	173.5	147.9	IEFSM02300	177.7	147.9	247
IEFPS090025	IEFPS090025H	3 ½"	90.0	25	5.3	IEFSM01150	95.3	79.3	IEFSM02100	97.9	79.3	88
IEFPS090038	IEFPS090038H			38	5.3	IEFSM01200	112.3	92.3	IEFSM02100	111.4	92.3	116
IEFPS090050	IEFPS090050H			50	8.0	IEFSM01200	124.3	104.3	IEFSM02200	130.2	104.3	141
IEFPS090065	IEFPS090065H			65	8.0	IEFSM01250	141.6	119.3	IEFSM02200	145.8	119.3	175
IEFPS090075	IEFPS090075H			75	8.0	IEFSM01250	151.6	129.3	IEFSM02200	156.1	129.3	197
IEFPS090100	IEFPS090100H			100	8.0	IEFSM01300	179.8	154.3	IEFSM02300	184.3	154.3	250
IEFPS100025	IEFPS100025H	4"	100.0	25	5.3	IEFSM01150	101.7	85.6	IEFSM02100	104.5	85.6	93
IEFPS100038	IEFPS100038H			38	5.3	IEFSM01200	118.7	98.6	IEFSM02200	124.4	98.6	121
IEFPS100050	IEFPS100050H			50	8.0	IEFSM01200	130.7	110.6	IEFSM02200	136.8	110.6	147
IEFPS100065	IEFPS100065H			65	8.0	IEFSM01250	147.9	125.6	IEFSM02200	152.3	125.6	180
IEFPS100075	IEFPS100075H			75	8.0	IEFSM01250	157.9	135.7	IEFSM02200	162.7	135.7	202
IEFPS100100	IEFPS100100H			100	8.0	IEFSM01300	186.2	160.7	IEFSM02300	190.9	160.7	257



Pipe Covering Protection Saddle

Material

- Carbon Steel in accordance with the MSS SP-58 -TABLE A2/A2M

Service

- Designed to protect insulation from crushing. Saddles are 12" (305 mm) long. Center rib is furnished on all saddle sizes 12" (300 mm) and above.

Finish

- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 - EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

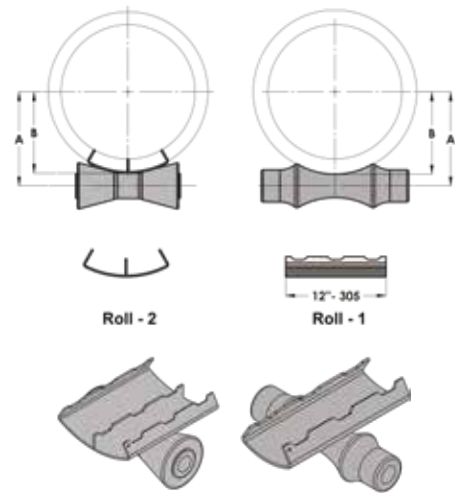
Approvals

- Complies with Manufacturers Standardization Society MSS SP-58 & SP-69 - Type 39

Note: The load data published includes a safety factor. (Safety factor= Ratio of ultimate load to the design load.)

Code	HCR Code	Pipe Size		Actual Covering Thickness	Recom. Load	Saddle with Roll 1			Saddle with Roll 2			Weight
		Inch	mm			Roll Code	A	B	Roll Code	A	B	
IEFPS125025	IEFPS125025H	5"	125	25	5.3	IEFSM01200	118.4	98.3	IEFSM02200	124.1	98.3	102
IEFPS125038	IEFPS125038H			38	5.3	IEFSM01200	131.4	111.3	IEFSM02200	137.5	111.3	130
IEFPS125050	IEFPS125050H			50	8.0	IEFSM01250	145.6	123.4	IEFSM02200	149.9	123.4	156
IEFPS125065	IEFPS125065H			65	8.0	IEFSM01250	160.6	138.3	IEFSM02200	165.5	138.3	189
IEFPS125075	IEFPS125075H			75	8.0	IEFSM01300	173.9	148.3	IEFSM02300	178.1	148.3	211
IEFPS125100	IEFPS125100H			100	8.0	IEFSM01350	204.7	173.3	IEFSM02300	204.0	173.3	264
IEFPS150025	IEFPS150025H	6"	150	25	8.0	IEFSM01250	137.4	115.2	IEFSM02200	141.5	115.2	187
IEFPS150038	IEFPS150038H			38		IEFSM01250	150.4	128.2	IEFSM02200	154.9	128.2	236
IEFPS150050	IEFPS150050H			50		IEFSM01300	165.7	140.2	IEFSM02200	167.3	140.2	279
IEFPS150065	IEFPS150065H			65		IEFSM01300	180.7	155.2	IEFSM02300	185.2	155.2	332
IEFPS150075	IEFPS150075H			75		IEFSM01350	196.5	165.1	IEFSM02300	195.5	165.1	372
IEFPS150100	IEFPS150100H			100		IEFSM01400	221.5	190.1	IEFSM02400	225.3	190.1	461
IEFPS200025	IEFPS200025H	8"	200	25	8.0	IEFSM01300	166.1	140.6	IEFSM02200	167.8	140.6	220
IEFPS200038	IEFPS200038H			38		IEFSM01300	179.1	153.5	IEFSM02300	183.5	153.5	266
IEFPS200050	IEFPS200050H			50		IEFSM01350	196.9	165.5	IEFSM02300	195.9	165.5	312
IEFPS200065	IEFPS200065H			65		IEFSM01400	211.9	180.5	IEFSM02300	211.5	180.5	368
IEFPS200075	IEFPS200075H			75		IEFSM01400	221.9	190.5	IEFSM02400	225.7	190.5	402
IEFPS200100	IEFPS200100H			100		IEFSM01450	250.1	215.5	IEFSM02400	251.6	215.5	491

Pipe Covering Protection Saddle



Material

- Carbon Steel in accordance with the MSS SP-58 -TABLE A2/A2M

Service

- Designed to protect insulation from crushing. Saddles are 12" (305 mm) long. Center rib is furnished on all saddle sizes 12" (300 mm) and above.

Finish

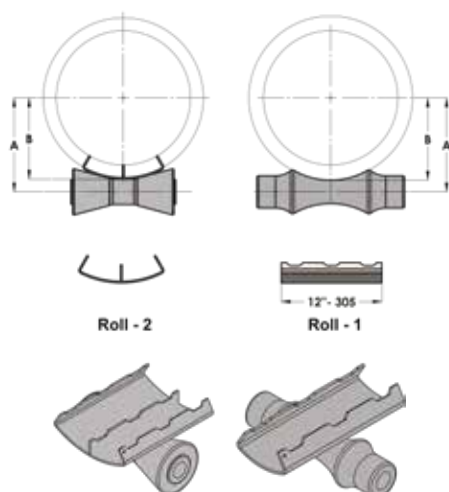
- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 - EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

Approvals

- Complies with Manufacturers Standardization Society MSS SP-58 & SP-69 - Type 39

Note: The load data published includes a safety factor. (Safety factor= Ratio of ultimate load to the design load.)

Code	HCR Code	Pipe Size		Actual Covering Thickness	Recom. Load	Saddle with Roll 1			Saddle with Roll 2			Weight
		Inch	mm			Roll Code	A	B	Roll Code	A	B	
IEFPS250025	IEFPS250025H	10"	250	25	8.0	IEFSM01350	198.8	167.5	IEFSM02300	198.0	167.5	255
IEFPS250038	IEFPS250038H			38		IEFSM01400	211.8	180.5	IEFSM02300	211.4	180.5	304
IEFPS250050	IEFPS250050H			50		IEFSM01400	223.8	192.5	IEFSM02400	227.7	192.5	344
IEFPS250065	IEFPS250065H			65		IEFSM01450	242.0	207.5	IEFSM02400	243.3	207.5	400
IEFPS250075	IEFPS250075H			75		IEFSM01450	252.0	217.5	IEFSM02400	253.6	217.5	439
IEFPS250100	IEFPS250100H			100		IEFSM01500	280.2	242.5	IEFSM02400	279.5	242.5	529
IEFPS300025	IEFPS300025H	12'	300	25	22.3	IEFSM01400	224.3	193.0	IEFSM02400	228.2	193.0	310
IEFPS300038	IEFPS300038H			38		IEFSM01450	240.5	206.0	IEFSM02400	241.7	206.0	380
IEFPS300050	IEFPS300050H			50		IEFSM01450	252.5	218.0	IEFSM02400	254.1	218.0	440
IEFPS300065	IEFPS300065H			65		IEFSM01500	270.7	233.0	IEFSM02400	269.7	233.0	500
IEFPS300075	IEFPS300075H			75		IEFSM01500	280.7	243.0	IEFSM02400	280.0	243.0	550
IEFPS300100	IEFPS300100H			100		IEFSM01600	313.5	268.0	IEFSM02600	307.5	268.0	670
IEFPS350025	IEFPS350025H	14"	350	25	22.2	IEFSM01450	243.3	208.8	IEFSM02400	244.6	208.8	330
IEFPS350038	IEFPS350038H			38		IEFSM01450	256.3	221.8	IEFSM02400	258.1	221.8	400
IEFPS350050	IEFPS350050H			50		IEFSM01500	271.5	233.8	IEFSM02400	270.5	233.8	450
IEFPS350065	IEFPS350065H			65		IEFSM01500	286.5	248.8	IEFSM02400	286.0	248.8	520
IEFPS350075	IEFPS350075H			75		IEFSM01600	304.3	258.8	IEFSM02400	296.4	258.8	580
IEFPS350100	IEFPS350100H			100		IEFSM01600	329.3	283.8	IEFSM02600	323.8	283.8	690



Pipe Covering Protection Saddle

Material

- Carbon Steel in accordance with the MSS SP-58 -TABLE A2/A2M

Service

- Designed to protect insulation from crushing. Saddles are 12" (305 mm) long. Center rib is furnished on all saddle sizes 12" (300 mm) and above.

Finish

- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 - EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

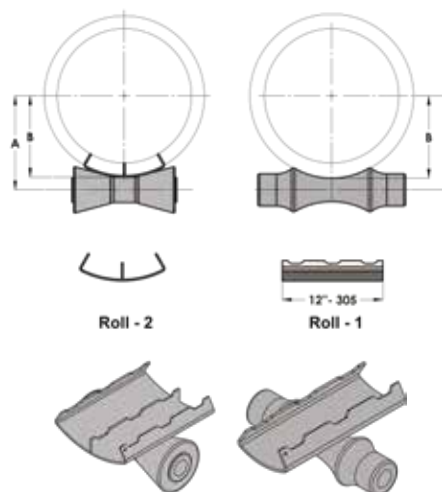
Approvals

- Complies with Manufacturers Standardization Society MSS SP-58 & SP-69 - Type 39

Note: The load data published includes a safety factor. (Safety factor= Ratio of ultimate load to the design load.)

Code	HCR Code	Pipe Size		Actual Covering Thickness	Recom. Load	Saddle with Roll 1			Saddle with Roll 2			Weight
		Inch	mm			Roll Code	A	B	Roll Code	A	B	
IEFPS400025	IEFPS400025H	16"	400	25	22.3	IEFSM01500	271.9	234.2	IEFSM02400	270.9	234.2	360
IEFPS400038	IEFPS400038H			38	22.3	IEFSM01500	284.9	247.2	IEFSM02400	284.4	247.2	430
IEFPS400050	IEFPS400050H			50	22.3	IEFSM01600	304.7	259.2	IEFSM02400	296.8	259.2	490
IEFPS400065	IEFPS400065H			65	32.1	IEFSM01600	319.7	274.2	IEFSM02600	313.9	274.2	550
IEFPS400075	IEFPS400075H			75	32.1	IEFSM01600	329.7	284.2	IEFSM02600	324.2	284.2	610
IEFPS400100	IEFPS400100H			100	32.1	IEFSM01750	366.4	309.2	IEFSM02600	350.1	309.2	720
IEFPS450025	IEFPS450025H	18"	450	25	22.1	IEFSM01600	305.1	259.6	IEFSM02400	297.2	259.6	400
IEFPS450038	IEFPS450038H			38	22.2	IEFSM01600	318.1	272.6	IEFSM02600	312.2	272.6	460
IEFPS450050	IEFPS450050H			50	32.1	IEFSM01600	330.1	284.6	IEFSM02600	324.7	284.6	520
IEFPS450065	IEFPS450065H			65	32.1	IEFSM01600	345.1	299.6	IEFSM02600	340.2	299.6	590
IEFPS450075	IEFPS450075H			75	32.1	IEFSM01750	366.9	309.6	IEFSM02600	350.5	309.6	640
IEFPS450100	IEFPS450100H			100	32.1	IEFSM01750	391.9	334.6	IEFSM02600	376.4	334.6	750
IEFPS500025	IEFPS500025H	20"	500	25	32.2	IEFSM01600	330.5	285.0	IEFSM02600	325.1	285.0	427
IEFPS500038	IEFPS500038H			38	32.1	IEFSM01600	343.5	298.0	IEFSM02600	338.5	298.0	492
IEFPS500050	IEFPS500050H			50	32.1	IEFSM01750	367.2	310.0	IEFSM02600	351.0	310.0	546
IEFPS500065	IEFPS500065H			65	32.1	IEFSM01750	382.3	325.0	IEFSM02600	366.5	325.0	620
IEFPS500075	IEFPS500075H			75	32.1	IEFSM01750	392.2	335.0	IEFSM02600	376.8	335.0	665
IEFPS500100	IEFPS500100H			100	32.1	IEFSM01750	418.2	361.0	IEFSM02750	403.8	361.0	785

Pipe Covering Protection Saddle



Material

- Carbon Steel in accordance with the MSS SP-58 -TABLE A2/A2M

Service

- Designed to protect insulation from crushing. Saddles are 12" (305 mm) long. Center rib is furnished on all saddle sizes 12" (300 mm) and above.

Finish

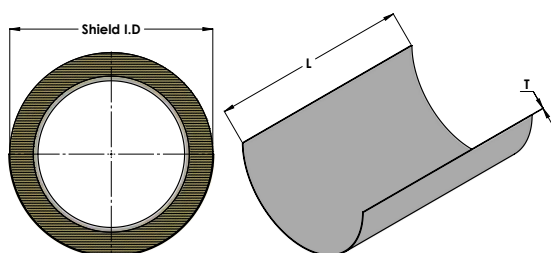
- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 - EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

Approvals

- Complies with Manufacturers Standardization Society MSS SP-58 & SP-69 - Type 39

Note: The load data published includes a safety factor. (Safety factor= Ratio of ultimate load to the design load.)

Code	HCR Code	Pipe Size		Actual Covering Thickness	Recom. Load	Saddle with Roll 1			Saddle with Roll 2			Weight
		Inch	mm			Roll Code	A	B	Roll Code	A	B	
IEFPS600025	IEFPS600025H	24"	600	25	32.1	IEFSM01750	392.8	335.6	IEFSM02600	377.4	335.6	487
IEFPS600038	IEFPS600038H			38		IEFSM01750	405.8	348.6	IEFSM02750	390.9	348.6	550
IEFPS600050	IEFPS600050H			50		IEFSM01750	417.8	360.5	IEFSM02750	403.3	360.5	607
IEFPS600065	IEFPS600065H			65		IEFSM01750	432.8	375.5	IEFSM02750	418.8	375.5	683
IEFPS600075	IEFPS600075H			75		IEFSM01750	443.8	386.5	IEFSM02750	430.2	386.5	728
IEFPS600100	IEFPS600100H			100		IEFSM01750	468.8	411.6	IEFSM02750	456.1	411.6	848
IEFPS750038	IEFPS750038H	30"	750	38	32.1	IEFSM01750	483.2	426.0	IEFSM02750	471.0	426.0	645
IEFPS750050	IEFPS750050H			50		IEFSM01750	495.2	438.0	IEFSM02750	483.5	438.0	702
IEFPS750065	IEFPS750065H			65		IEFSM01750	510.2	453.0	IEFSM02900	501.2	453.0	775
IEFPS750075	IEFPS750075H			75		IEFSM01750	520.3	463.0	IEFSM02900	511.5	463.0	823
IEFPS750100	IEFPS750100H			100		IEFSM01750	545.2	488.0	IEFSM02900	537.4	488.0	943
IEFPS900038	IEFPS900038H	36"	900	38	32.1	IEFSM01750	559.4	502.2	IEFSM02900	552.1	502.2	740
IEFPS900050	IEFPS900050H			50		IEFSM01750	571.4	514.2	IEFSM02900	564.6	514.2	797
IEFPS900065	IEFPS900065H			65		IEFSM01750	586.4	529.2	IEFSM02900	580.1	529.2	870
IEFPS900075	IEFPS900075H			75		IEFSM01750	596.4	539.2	IEFSM02900	590.4	539.2	918
IEFPS900100	IEFPS900100H			100		IEFSM01750	621.4	564.2	IEFSM021200	623.0	564.2	1,038



Insulation Protection Shield

Material

- Carbon Steel in accordance with the MSS SP-58 - TABLE A2/A2M

Service

- Designed to protect insulation from crushing at the support points.

Finish

- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 - EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

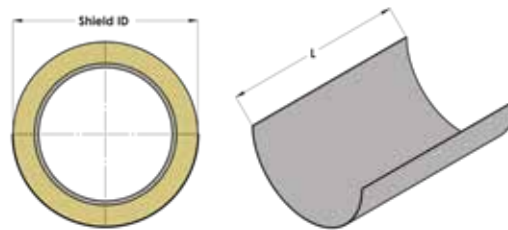
Approvals

- Complies with Manufacturers Standardization Society MSS SP-58 & SP-69 - Type 40

Note: Protection shield thickness listed are for use with band type hangers only. For point loading, increase shield thickness and length. When shields are used with rollers, shield thickness shall be adjusted accordingly and shield lengths shall be increased to keep rolling point of contact within the middle one-third of the shield length. For compressive strengths other than 15 psi (103 kPa), shield dimensions may be adjusted accordingly.

Code	HCR Code	Shield ID	Thickness	L	Weight
		mm	mm	mm	kg/100 Pcs.
IEFIPS04912305	IEFIPS04912305H	49	1.2	305	23
IEFIPS06112305	IEFIPS06112305H	61	1.2	305	28
IEFIPS07512305	IEFIPS07512305H	75	1.2	305	34
IEFIPS08912305	IEFIPS08912305H	89	1.2	305	41
IEFIPS10312305	IEFIPS10312305H	103	1.2	305	47
IEFIPS11512305	IEFIPS11512305H	115	1.2	305	52
IEFIPS12812305	IEFIPS12812305H	128	1.2	305	58
IEFIPS14312305	IEFIPS14312305H	143	1.2	305	65
IEFIPS16915305	IEFIPS16915305H	169	1.5	305	96
IEFIPS19215305	IEFIPS19215305H	192	1.5	305	109
IEFIPS19215457	IEFIPS19215457H	192	1.5	457	163
IEFIPS22015305	IEFIPS22015305H	220	1.5	305	125
IEFIPS22015457	IEFIPS22015457H	220	1.5	457	187
IEFIPS24515457	IEFIPS24515457H	245	1.5	457	208
IEFIPS27415457	IEFIPS27415457H	274	1.5	457	232
IEFIPS29920610	IEFIPS29920610H	299	2.0	610	452
IEFIPS32520610	IEFIPS32520610H	325	2.0	610	491
IEFIPS35620610	IEFIPS35620610H	356	2.0	610	538
IEFIPS37520610	IEFIPS37520610H	375	2.0	610	566
IEFIPS40720610	IEFIPS40720610H	407	2.0	610	614
IEFIPS43220610	IEFIPS43220610H	432	2.0	610	652
IEFIPS45825610	IEFIPS45825610H	458	2.5	610	864
IEFIPS48325610	IEFIPS48325610H	483	2.5	610	911
IEFIPS50825610	IEFIPS50825610H	508	2.5	610	958
IEFIPS53425610	IEFIPS53425610H	534	2.5	610	1,007
IEFIPS55925610	IEFIPS55925610H	559	2.5	610	1,054
IEFIPS58525610	IEFIPS58525610H	585	2.5	610	1,103
IEFIPS61025610	IEFIPS61025610H	610	2.5	610	1,150
IEFIPS66125610	IEFIPS66125610H	661	2.5	610	1,246
IEFIPS68625610	IEFIPS68625610H	686	2.5	610	1,293
IEFIPS71225610	IEFIPS71225610H	712	2.5	610	1,342

Insulation Protection Shield Selection Tables



Material

- Carbon Steel in accordance with the MSS SP-58 -TABLE A2/A2M

Service

- Designed to protect insulation from crushing at the support points.

Finish

- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 - EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

Approvals

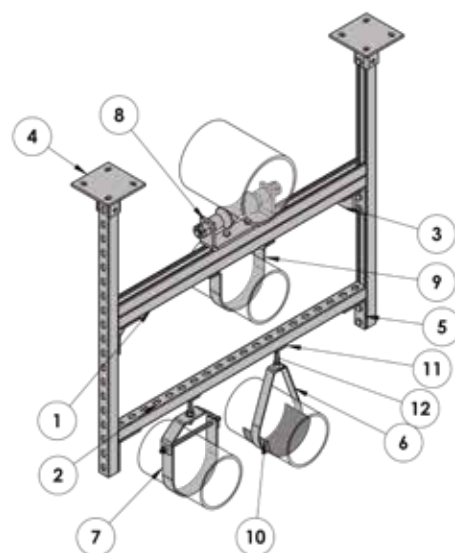
- Complies with Manufacturers Standardization Society MSS SP-58 & SP-69 - Type 40

Note: Protection shield thickness listed are for use with band type hangers only. For point loading, increase shield thickness and length. When shields are used with rollers, shield thickness shall be adjusted accordingly and shield lengths shall be increased to keep rolling point of contact within the middle one-third of the shield length. For compressive strengths other than 15 psi (103 kPa), shield dimensions may be adjusted accordingly.

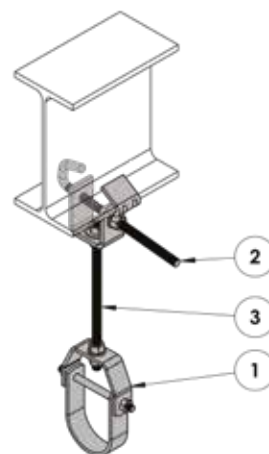
Pipe Size			Insulation Thickness					
Inch	DN	OD (mm)	T: 13 mm	T: 19 mm	T: 25 mm	T: 32 mm	T: 38 mm	T: 50 mm
½"	15	21.3	IEFIPS04912305	IEFIPS06112305	IEFIPS07512305	IEFIPS08912305	IEFIPS10312305	IEFIPS12812305
¾"	20	26.9	IEFIPS06112305	IEFIPS07512305	IEFIPS08912305	IEFIPS10312305	IEFIPS10312305	IEFIPS12812305
1"	25	33.7	IEFIPS06112305	IEFIPS07512305	IEFIPS08912305	IEFIPS10312305	IEFIPS11512305	IEFIPS14312305
1 ¼"	32	42.4	IEFIPS07512305	IEFIPS08912305	IEFIPS10312305	IEFIPS11512305	IEFIPS12812305	IEFIPS14312305
1 ½"	40	48.3	IEFIPS07512305	IEFIPS08912305	IEFIPS10312305	IEFIPS11512305	IEFIPS12812305	IEFIPS16915305
2"	50	60.3	IEFIPS08912305	IEFIPS10312305	IEFIPS11512305	IEFIPS12812305	IEFIPS14312305	IEFIPS16915305
2 ½"	65	73.0	IEFIPS10312305	IEFIPS11512305	IEFIPS12812305	IEFIPS14312305	IEFIPS16915305	IEFIPS19215305
3"	80	88.9	IEFIPS11512305	IEFIPS12812305	IEFIPS14312305	IEFIPS16915305	IEFIPS16915305	IEFIPS19215305
3 1/2"	90	101.6	IEFIPS12812305	IEFIPS14312305	IEFIPS16915305	IEFIPS16915305	IEFIPS19215305	IEFIPS22015305
4"	100	114.3	IEFIPS14312305	IEFIPS16915305	IEFIPS16915305	IEFIPS19215305	IEFIPS19215305	IEFIPS22015305
5"	125	141.3		IEFIPS19215305	IEFIPS19215457	IEFIPS22015457	IEFIPS22015457	IEFIPS24515457
6"	150	168.3		IEFIPS22015305	IEFIPS22015457	IEFIPS24515457	IEFIPS24515457	IEFIPS27415457
8"	200	219.1			IEFIPS27415457	IEFIPS29920610	IEFIPS29920610	IEFIPS32520610
10"	250	273.0			IEFIPS32520610	IEFIPS35620610	IEFIPS35620610	IEFIPS37520610
12"	300	323.9			IEFIPS37520610	IEFIPS40720610	IEFIPS40720610	IEFIPS43220610
14"	350	355.6			IEFIPS40720610		IEFIPS43220610	IEFIPS45825610
16"	400	406.4			IEFIPS45825610		IEFIPS48325610	IEFIPS50825610
18"	450	457.0			IEFIPS50825610		IEFIPS53425610	IEFIPS55925610
20"	500	508.0			IEFIPS55925610		IEFIPS58525610	IEFIPS61025610
24"	600	610.0			IEFIPS66125610		IEFIPS68625610	IEFIPS71225610

Sample Application Drawings

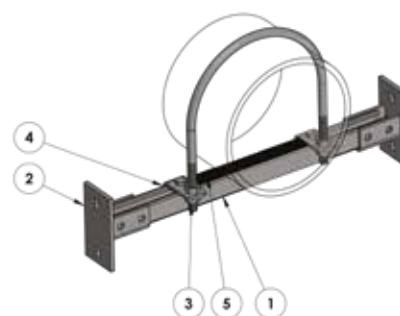
Item No.	Description	Code
1	41x41x2 G Double Profile	IPGD4141202000
2	41x41x2 G Profile	IPG4141202000
3	Universal Shelf Bracket	IFBL90D6W103
4	4x6-Hole Post Bases 41x41 Strut	IFBLPD46
5	4-Hole Corner Angle	IFBL90D490105
6	Adjustable Swivel Ring Steel Band Hanger	IEKSS...
7	Std. Adjustable Clevis Hanger	IEKCHL...
8	Adjustable Roller Stand	IEFRCD...
9	Std. Pipe Strap	IEKSPS...
10	Insulation Protection Shield	IEFIPS...
11	Square Washer With Channel Guide	IFBLFGD113
12	Threaded Rod M12	IRRT122000
13	Hex Nut M12	ZSS0012
14	G Profile Nut	ISGC12
15	Plain Washer M12	ZPS0012



Item No.	Description	Code
1	Std. Adjustable Clevis Hanger	IEKCHL...
2	Side Beam Clamp	IEFABCM...
3	Threaded Rod M12	IRRT122000
4	Plain Washer M12	ZPS0012
5	Hex Nut M12	ZSS0012

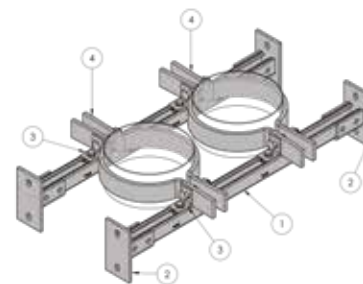


Item No.	Description	Code
1	41x41x2 G Profile	IPG4141202000
2	2x6-Hole Post Bases 41x41 Strut	IFBLPOD26
3	U-Bolt	IRUB...A
4	2-Hole Connector Hanger	IFBL90D2M16
5	G Profile Rubber	ZLIG01
6	Hex Bolt M12	ZCC1230
7	G Profile Nut	ISGC12

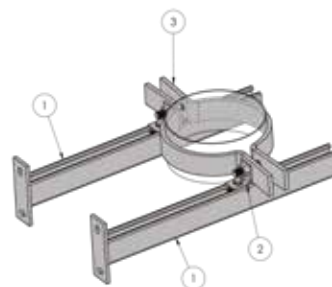


Sample Application Drawings

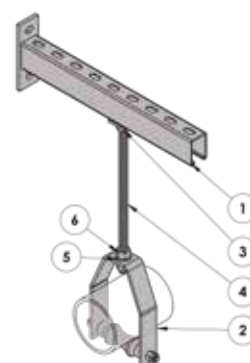
Item No.	Description	Code
1	41x41x2,5 G Profile	IPG414125...
2	2x6 - Hole Post Bases 41x41 Strut	IFBLPOD26
3	90° Connecting Plate	IFBLF90...
4	Riser Clamp	IEKRC...



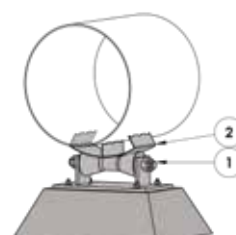
Item No.	Description	Code
1	Single Profile Bracket 41x60 Strut	IWKG60600
2	90° Connecting Plate	IFBLF90...
3	Riser Clamp	IEKRC...



Item No.	Description	Code	Qty.
1	Profile Bracket 41x60 Strut	IWKG60450	1
2	Adjustable Roller Hanger	IEFRHD..	1
3	Square Washer With Channel Guide	IFBLFGD113	1
4	Threaded Rod M12	IRR12	1
5	Plain Washer M12	ZPS0012	2
6	Hex Nut M12	ZSS0012	3



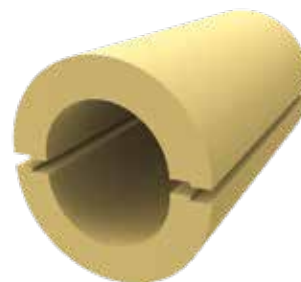
Item No.	Description	Code	Qty.
1	Roller Stand	IEFRS....	1
2	Pipe Covering Protection Saddle	IEFPS...	1



INSULATION INSERTS



Polyisocyanurate Insulation Blocks PIR



Material

- PIR (Polyisocyanurate) is a similar material to PUR (polyurethane). PIR has superior thermal resistance and dimensional stability. PIR is an improvement of previously used PUR boards.

Service

- Suitable for all pipeworks of temperatures -150°C to +130°C
- Low density but high insulating properties
- The lowest thermal permeability compared to other insulation materials
- Prevents the thermal losses in hot or cold pipework
- Long life insulating material
- Easy to application

Technical Properties

- Density;
 - 80 kg/m³ in accordance with ASTM C591
 - 120 kg/m³ in accordance with ASTM C591
 - 200 kg/m³ in accordance with ASTM C591 • IFPCT10
- Temperature resistance -150°C to +130°C
- Compressive Strength;
 - min 600 kPa in accordance with ASTM C591 for Density 80 kg/m³
 - min 1200 kPa in accordance with ASTM C591 for Density 120 kg/m³
 - min 1750 kPa in accordance with ASTM C591 for Density 200 kg/m³
- Thermal Conductivity at 93°C;
 - max. 0.039 W/(m×K) in accordance with ASTM C591 for Density 80 kg/m³
 - max. 0.044 W/(m×K) in accordance with ASTM C591 for Density 120 kg/m³
 - max. 0.044 W/(m×K) in accordance with ASTM C591 for Density 200 kg/m³
- Surface Burning Characteristics;
 - Flame spread index max. 25 in accordance with ASTM E 84
 - Smoke developed index max. 450 in accordance with ASTM E 84

AA BBBB CC DD EEE

Special Item	
Yes	99
No	-

Vapour Barrier	
Yes	IFITB
No	IFITA

Pipe Size	
Nominal (Inch)	between 1/2" 36" (DN15-DN900)
Pipe OD (mm)	Ø10-Ø900

Insulation Thickness (mm)	
Standard thickness	13mm 20mm 30mm 40mm 50mm
Special thickness	between 10mm-100mm

Insulation Length (mm)	
Standard length	50mm 100mm 200mm 250mm 500mm
Special length	between 50mm-600mm

	AA	BBBB	CC	DD	EEE	Code	Description
Examples		IFITB	015	20	050	IFITB01520050	1/2" - 20x50mm Polyisocyanurate Insulation Block w/Vapour Barrier
		IFITA	100	40	100	IFITA10040100	4" - 40x100mm Polyisocyanurate Insulation Block w/o Vapour Barrier
		IFITB	200	50	500	IFITB20050500	8" - 50x500mm Polyisocyanurate Insulation Block w/Vapour Barrier
		IFITB	065	30	050	IFITB06530050	2 1/2" - 30x50mm Polyisocyanurate Insulation Block w/Vapour Barrier
		IFITB	150	50	250	IFITB15050250	6" - 50x250mm Polyisocyanurate Insulation Block w/Vapour Barrier
	99	IFITB	040	32	060	99IFITB04032060	1 1/2" - 32x60mm Polyisocyanurate Insulation Block w/Vapour Barrier
	99	IFITB	067	19	050	99IFITB06719050	Ø67 - 19x50mm Polyisocyanurate Insulation Block w/Vapour Barrier
	99	IFITB	029	13	050	99IFITB02913050	Ø29 - 13x50mm Polyisocyanurate Insulation Block w/Vapour Barrier
	99	IFITB	051	25	060	99IFITB05125060	Ø51 - 25x60mm Polyisocyanurate Insulation Block w/Vapour Barrier
	99	IFITB	300	65	200	99IFITB30065200	12" - 65x200mm Polyisocyanurate Insulation Block w/Vapour Barrier
	99	IFITB	500	75	300	99IFITB50075300	20" - 75x300mm Polyisocyanurate Insulation Block w/Vapour Barrier
	99	IFITB	400	100	250	99IFITB400100250	16" - 100x250mm Polyisocyanurate Insulation Block w/Vapour Barrier
	99	IFITB	900	80	550	99IFITB90080550	36" - 80x550mm Polyisocyanurate Insulation Block w/Vapour Barrier
	99	IFITB	600	90	600	99IFITB60090600	24" - 90x600mm Polyisocyanurate Insulation Block w/Vapour Barrier



Calcium Silicate Insulation Blocks

Material

- Calcium Silicate Complies with ASTM C 533 Type 1

Service

- Designed for a maximum service temperature of 1000°C. This allows for use in a wide range of piping applications as a sound and thermal insulation.

Calcium Silicate's;

- Light weight
- Very low thermal conductivity
- Excellent mechanical strength provides a top insulation throughout the temperature range.

Technical Properties

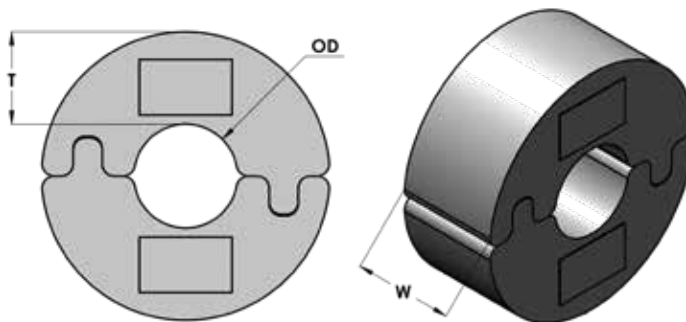
- Density max. 240 kg/m³ in accordance with ASTM C 533
- Service temperature up to 1000 °C
- Compressive Strength min. 690 kPa in accordance with ASTM C 533
- Thermal Conductivity at 200°C max. 0,087 W/(m×K) in accordance with ASTM C 533
- Non-combustibility in accordance with EN 13501-1 A2-s1, d0
- Calcium silicate products with requested lengths greater than 100 mm are manufactured in multiple sections.

AA BBBB CC DD EEE FF

Special Item		Calcium Silicate Insulation Block		Pipe Size		Insulation Thickness (mm)		Insulation Length (mm)		Vapour Barrier	
Yes	99	IFITCS		Nominal (Inch)	between 1/2" - 36" (DN15-DN900)	Standard thickness	13mm 20mm 30mm 40mm 50mm	Standard length	50mm 100mm 200mm 250mm 500mm	Yes	VB
No	-			Pipe OD (mm)	Ø10-Ø900	Special thickness	between 10mm-100mm	Special length	between 50mm-600mm	No	-

	AA	BBBB	CC	DD	EEE	FF	Code	Description
Examples		IFITCS	015	20	050		IFITCS01520050	1/2" - 20x50mm Calcium Silicate Insulation Block w/o Vapour Barrier
		IFITCS	100	40	100	VB	IFITCS10040100VB	4" - 40x100mm Calcium Silicate Insulation Block w/ Vapour Barrier
	99	IFITCS	200	50	500	VB	99IFITCS20050500VB	8" - 50x500mm Calcium Silicate Insulation Block w/Vapour Barrier
		IFITCS	065	30	050	VB	IFITCS06530050VB	2 1/2" - 30x50mm Calcium Silicate Insulation Block w/Vapour Barrier
	99	IFITCS	150	50	250	VB	99IFITCS15050250VB	6" - 50x250mm Calcium Silicate Insulation Block w/Vapour Barrier

Rubber Support Insert



Material

- EPDM 90 Sh.A

Service

- Designed to compensate high bearing forces especially for long span distances. Produced by moulding of reinforced EPDM with the hardness of max. 90 Shore A. Narrower blocks are possible due to compressive strength of EPDM.

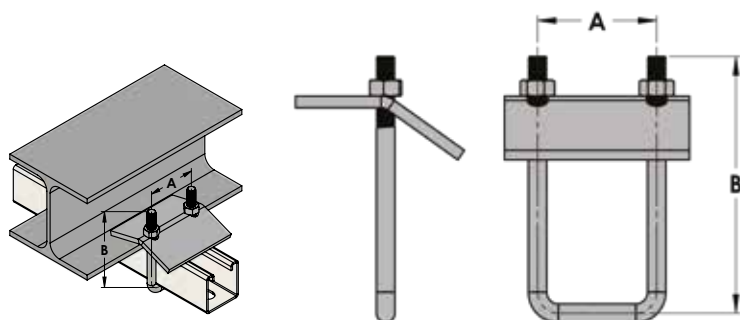
Technical Properties

- Density: 1500 kg/m³
- Temperature Range: -40 °C to 125 °C
- Compressive Strength: 350 kg/cm²
- Thermal Conductivity: 0.16 W/m.K

Pipe Size			Insulation Thickness (T=13 mm)			Insulation Thickness (T=19 mm)			Insulation Thickness (T=25 mm)		
Inch	DN	OD mm	Code	W mm	Insulation OD mm	Code	W mm	Insulation OD mm	Code	W mm	Insulation OD mm
½"	15	21.3	IFITR01513025	25	47.3	IFITR01519025	25	59.3	IFITR01525025	25	71.3
¾"	20	26.9	IFITR02013025	25	52.9	IFITR02019025	25	64.9	IFITR02025025	25	76.9
1"	25	33.7	IFITR02513025	25	59.7	IFITR02519025	25	71.7	IFITR02525025	25	83.7
1 ¼"	32	42.4	IFITR03213025	25	68.4	IFITR03219025	25	80.4	IFITR03225025	25	92.4
1 ½"	40	48.3	IFITR04013025	25	74.3	IFITR04019025	25	86.3	IFITR04025025	25	98.3
2"	50	60.3	IFITR05013025	25	86.3	IFITR05019025	25	98.3	IFITR05025025	25	110.3
2 ½"	65	73.0	IFITR06513038	38	99.0	IFITR06519038	38	111.0	IFITR06525038	38	123.0
3"	80	88.9	IFITR08013038	38	114.9	IFITR08019038	38	126.9	IFITR08025038	38	138.9
4"	100	114.3	IFITR10013038	38	140.3	IFITR10019038	38	152.3	IFITR10025038	38	164.3
5"	125	141.3							IFITR12525040	40	191.3
6"	150	168.3							IFITR15025050	50	218.3
8"	200	219.1							IFITR20025050	50	269.1
10"	250	273.0							IFITR25025050	50	323.0
12"	300	323.9							IFITR30025075	75	373.9
14"	350	355.6							IFITR35025075	75	405.6
16"	400	405.6							IFITR40025075	75	455.6

BUILDING ATTACHMENTS





Pressure Plate with Square Bolt

Material

- Carbon Steel in accordance with the MSS SP-58 -TABLE A2/A2M

Service

- It is used for fixing profiles to structural steel. No drilling and welding necessary. It is very easy to adjust the position of the profile. Supplied as preassembled.

Finish

- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 - EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

Note: The load data published includes a safety factor. (Safety factor= Ratio of ultimate load to the design load.)

Code	HCR Code	Nominal Size	A	B	Suitable Profile	Recom. Load	Qty./Box	Weight
			mm	mm				kg/Box
IFMFC0889	IFMFC0889H	M8	51.5	89	38 / 40	5.4	20	5.6
IFMFC08109	IFMFC08109H	M8	51.5	109	40 / 60	5.9	20	5.9

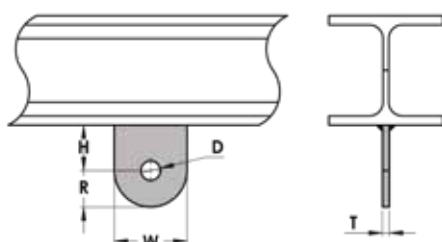


Plate Lug

Material

- Carbon Steel in accordance with the MSS SP-58 -TABLE A2/A2M

Service

- Designed for attaching to steel beams if flexibility at beam is required.

Ordering

- Specify code or name, nominal size and finish.

Finish

- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 - EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

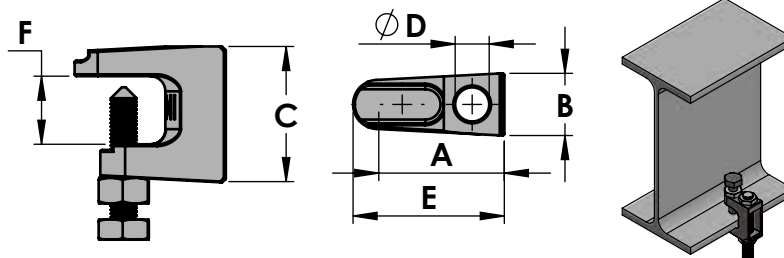
Approvals

- Complies with Manufacturers Standardization Society MSS SP-58 Type 57

Note: The load data published includes a safety factor. (Safety factor= Ratio of ultimate load to the design load.)

Code	HCR Code	Code	HCR Code	ØD	H Short	H Long	R	T	W	Recom. Load	Weight
Short		Long		mm	mm	mm	mm	mm	mm	kN	kg/100 Pcs.
IEFSWLS006	IEFSWLS006H	IEFSWLL006	IEFSWLL006H	17	40	76	32	6	64	6.0	29.5
IEFSWLS009	IEFSWLS009H	IEFSWLL009	IEFSWLL009H	21	40	76	32	6	64	9.5	28.5
IEFSWLS014	IEFSWLS014H	IEFSWLL014	IEFSWLL014H	24	40	76	32	10	64	14.0	47.0
IEFSWLS019	IEFSWLS019H	IEFSWLL019	IEFSWLL019H	29	50	76	32	10	64	19.0	46.0
IEFSWLS026	IEFSWLS026H	IEFSWLL026	IEFSWLL026H	32	50	76	38	12	76	26.0	68.0
IEFSWLS033	IEFSWLS033H	IEFSWLL033	IEFSWLL033H	35	76	102	38	12	76	33.0	85.0
IEFSWLS042	IEFSWLS042H	IEFSWLL042	IEFSWLL042H	38	76	102	50	15	100	42.0	152.0
IEFSWLS061	IEFSWLS061H	IEFSWLL061	IEFSWLL061H	45	76	115	65	20	130	61.0	312.0
IEFSWLS082	IEFSWLS082H	IEFSWLL082	IEFSWLL082H	51	76	115	65	20	130	82.0	305.0
IEFSWLS109	IEFSWLS109H	IEFSWLL109	IEFSWLL109H	60	102	115	75	20	150	109.0	363.0

C-Type Wide Beam Clamp



Nominal Size Range

- M8 to M12

Material

- Malleable iron

Service

- For attaching hanger rod to the top or bottom flange of a beam. Back hole allows rod height adjustment.

Ordering

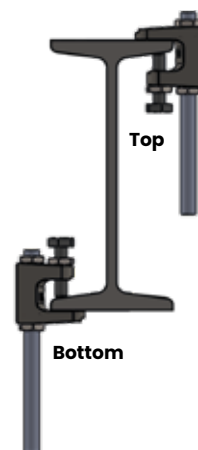
- Specify code or name, nominal size and finish.

Approvals

- Complies with Manufacturers Standardization Society MSS SP-58 Type 19

Finish

- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 - EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256



Note: The load data published includes a safety factor. (Safety factor= Ratio of ultimate load to the design load.)

Note: For non-tapered flanges used Max. Load (Top) values.

Code	HCR Code	Nominal Size	Set-Screw Torque	A	B	C	ØD	E	F	Max. Load (Top)	Max. Load (Bottom)	Weight	Cert.
		Inch	Nm	mm	mm	mm	mm	mm	mm	kN	kN	kg/100 Pcs.	
903867231	903867231H	1/4 - M8	15	33.5	16.5	36.0	9	40	18.0	1.9	1.5	8.0	-
90386720F	90386720FH	3/8 - M10	15	41.5	20.5	46.0	11	50	22.5	3.00	2.4	14.7	FM
90386721	90386721H	1/2 - M12	15	48.0	23.5	54.5	13	58	27.0	4.40	3.5	21.6	FM

Top Beam Clamp

Nominal Size Range

- Max. 19 mm flange thickness of beam

Material

- Carbon Steel

Service

- Designed for attaching hangers on beams.

Set Screw Torque

- Recommended torque for M10 bolt is 7 N-m Caution should be taken not to over tighten the set screw

Ordering

- Specify code or name, nominal size and finish.

Finish

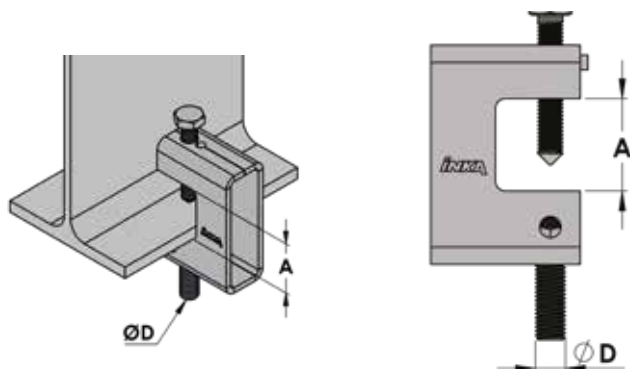
- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 - EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256



Note: The load data published includes a safety factor. (Safety factor= Ratio of ultimate load to the design load.)

Code	HCR Code	ØD	A	Recom. Load	Qty. / Box	Weight
			mm	kN		kg/Box
IFPCT10	IFPCT10G	M10	20.0	2.7	100	11

Steel Beam Clamp



Size Range

- Max. 37 mm flange thickness of beam

Material

- Carbon Steel

Service

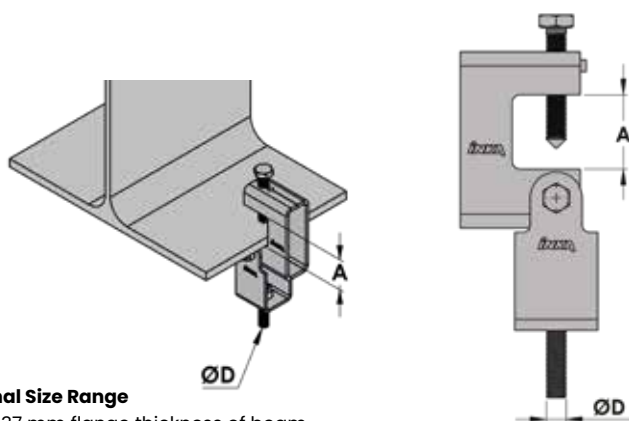
- Designed for attaching hangers on beams.

Finish

- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 – EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

Note: The load data published includes a safety factor. (Safety factor= Ratio of ultimate load to the design load.)

Code	HCR Code	ØD	A	Recom. Load	Qty./Box	Weight
			mm	kN		kg/Box
IFPCM01	IFPCM01H	M10 / M12	37	4.8	25	9.5



Beam Clamp with Swivel

Nominal Size Range

- Max. 37 mm flange thickness of beam

Material

- Carbon Steel

Service

- Designed for attaching hangers on slightly rotated beams. Beam Clamp with Swivel allows more flexibility for attaching hangers.

Ordering

- Specify code or name, nominal size and finish.

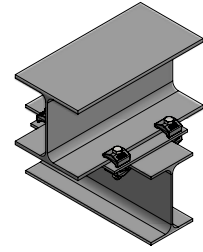
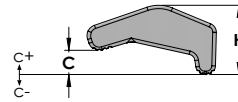
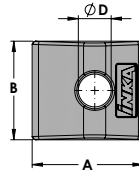
Finish

- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 – EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

Note: The load data published includes a safety factor. (Safety factor= Ratio of ultimate load to the design load.)

Code	HCR Code	ØD	A	Recom. Load	Qty./Box	Weight
			mm	kN		kg/Box
IFPCMD01	IFPCMD01H	M10/M12	37	4.75	25	14

Clamping Plate



Size Range

- M10 to M24

Material

- Wrought iron

Service

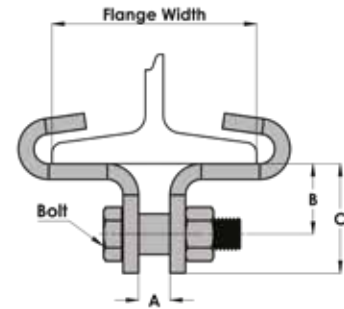
- Designed for attaching plates on beams.

Finish

- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 - EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

Code	HCR Code	A	B	C	ØD	H	C		Weight
		mm	mm	mm	mm	mm	+	-	kg/100 Pcs.
ZPPINK10	ZPPINK10H	36	32	16	11	20	10	6	8.5
ZPPINK12	ZPPINK12H	43	38	19	13	23	14	6	12.7
ZPPINK16	ZPPINK16H	57	50	25	17	30	17	7	26.0
ZPPINK20	ZPPINK20H	71	63	31	21	38	23	11	55.7
ZPPINK24	ZPPINK24H	86	76	38	25	43	23	10	88.8

Center Beam Clamp



Material

- Carbon Steel in accordance with the MSS SP-58 -TABLE A2/A2M

Service

- Clamp centers the load on beam to prevent distortion.

Installation

- Designed to center the load under the beam flanges.

Ordering

- Specify code or name, nominal size and finish.

Finish

- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 - EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

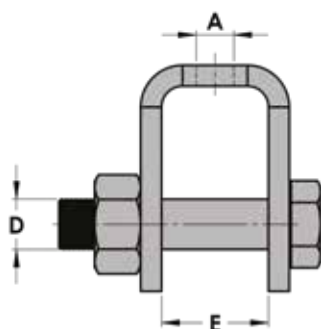
Approvals

- Complies with Manufacturers Standardization Society MSS SP-58 Type 21

Note: The load data published includes a safety factor. (Safety factor= Ratio of ultimate load to the design load.)

Code	HCR Code	Bolt Size	A	B	C	Recom. Load
			mm	mm	mm	kN
IEFBC001	IEFBC001H	M12	13	35	55	4
IEFBC002	IEFBC002H	M16	16	40	60	5
IEFBC003	IEFBC003H	M20	20	45	70	6

Flange Width (mm)	Max Flange Thickness (mm)	Weight (kg/100 Pcs.)		
		IEFBC001	IEFBC002	IEFBC003
76	11	45	76	130
100	13	51	85	142
125	16	57	93	156
150	19	64	103	171
175	22	70	114	189
200	22	77	125	204
225	25	87	140	230
250	25	91	146	239
280	25	95	153	251
300	32	104	167	273



Welded Beam Attachment

Nominal Size Range

- 3/8" to 2"

Material

- Carbon Steel in accordance with the MSS SP-58 -TABLE A2/A2M

Service

- Clamp centers the load on beam to prevent distortion.

Installation

- Designed for attaching hanger rod to the bottom of structural steel where heavy loads and large hanger rod sizes are required.
- Can be welded in place in either the upright or inverted position.

Ordering

- Specify code or name, nominal size and finish.

Finish

- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 - EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

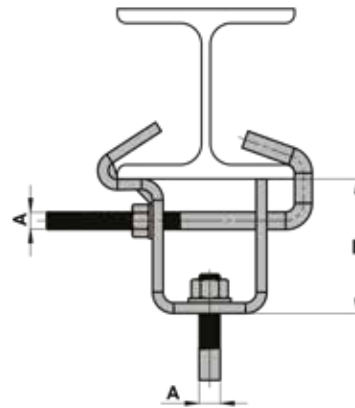
Approvals

- Complies with Manufacturers Standardization Society MSS SP-58 Type 22

Note: The load data published includes a safety factor. (Safety factor= Ratio of ultimate load to the design load.)

Code	HCR Code	Nominal Size		E	D	A	Recom. Load	Weight
		Inch	mm	mm			kN	kg/100 Pcs.
IEFWBA10	IEFWBA10H	3/8"	10	32	M12	M10	3.0	48
IEFWBA15	IEFWBA15H	1/2"	15	32	M16	M12	6.0	56
IEFWBA16	IEFWBA16H	5/8"	16	32	M20	M16	9.5	70
IEFWBA20	IEFWBA20H	3/4"	20	41	M22	M20	14.0	127
IEFWBA22	IEFWBA22H	7/8"	22	51	M24	M22	19.5	177
IEFWBA26	IEFWBA26H	1"	26	51	M30	M24	25.0	290
IEFWBA30	IEFWBA30H	1 1/8"	30	70	M33	M30	33.0	333
IEFWBA32	IEFWBA32H	1 1/4"	32	77	M36	M33	42.0	577
IEFWBA39	IEFWBA39H	1 1/2"	39	90	M42	M39	61.0	1,049
IEFWBA44	IEFWBA44H	1 3/4"	44	95	M48	M45	82.0	1,295
IEFWBA50	IEFWBA50H	2"	50	95	M60	M52	109.0	1,890

Side Beam Clamp



Nominal Size Range

- M10 to M16

Material

- Carbon Steel in accordance with the MSS SP-58 -TABLE A2/A2M

Service

- Designed for various flange widths.

Ordering

- Specify code or name, nominal size and finish.

Finish

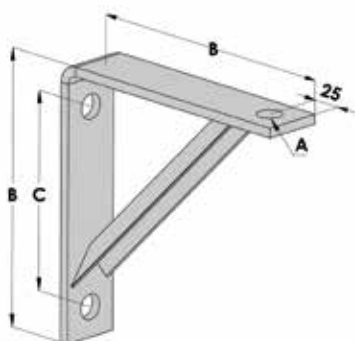
- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 - EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

Approvals

- Complies with Manufacturers Standardization Society MSS SP-58 Type 27

Note: The load data published includes a safety factor. (Safety factor= Ratio of ultimate load to the design load.)

Code	HCR Code	Nominal Size	Flange Width - W		A	B mm	Recom. Load kN	Weight kg/100 Pcs.
			Min. (mm)	Max. (mm)				
IEFABCM10	IEFABCM10H	M10	89	203	M10	66.0	1.3	61
IEFABCM12	IEFABCM12H	M12	89	203	M12	66.0	3.0	75
IEFABCM16	IEFABCM16H	M16	89	203	M16	66.0	4.3	111



Light Welded Steel Bracket

Material

- Carbon Steel in accordance with the MSP SP 58-TABLE A2/A2M

Welding

- Welding in accordance with EN 3834-2 / ASME Section IX, AWS D1.1

Service

- Designed to suspend hanger rod for support of light loads under 3,5 or up to 3,4 kN from a wall or structure.

Installation

- Size and thickness of the back plate is governed by the load to be carried and the nature and conditions of the wall. Back plates furnished upon request.

Ordering

- Specify code or name, nominal size and finish.

Finish

- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 – EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

Approvals

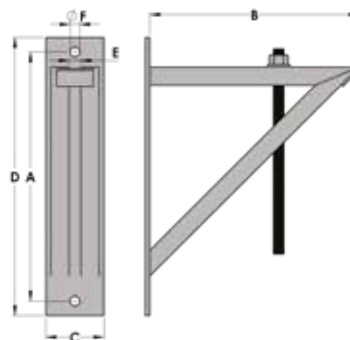
- Complies with Manufacturers Standardization Society MSS SP-58 Type 31

Note: Special size can be designed to meet project requirements.

Note: The load data published includes a safety factor. (Safety factor= Ratio of ultimate load to the design load.)

Code	HCR Code	A	B	C	Recom. Load	Weight
		mm	mm	mm	kN	kg/100 Pcs.
IELWSB230	IELWSB230H	20.5	230	165	3.4	164
IELWSB330	IELWSB330H	20.5	330	266	3.4	244
IELWSB485	IELWSB485H	20.5	485	419	3.4	442

Medium Welded Steel Bracket



Material

- Carbon Steel in accordance with the MSP SP 58-TABLE A2/A2M

Welding

- Welding in accordance with EN 3834-2 / ASME Section IX, AWS D1.1

Service

- Designed to suspend hanger rod for support of medium loads under 6,8 kN from a wall or structure.

Installation

- Size and thickness of the back plate is governed by the load to be carried and the nature and conditions of the wall. Back plates furnished upon request.

Ordering

- Specify code or name, nominal size and finish.

Finish

- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941
- High Corrosion Resistant (HCR) details can be found on page 256

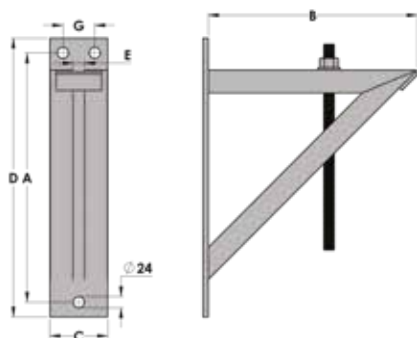
Approvals

- Complies with Manufacturers Standardization Society MSS SP-58 & MSS SP-69-Type 32

Note: Special size can be designed to meet project requirements.

Note: The load data published includes a safety factor. (Safety factor= Ratio of ultimate load to the design load.)

Code	HCR Code	A	B	C	D	E	ØF	Recom. Load	Weight
		mm	mm	mm	mm	mm	mm	kN	kg/100 Pcs.
ITEMWSB305	ITEMWSB305H	390	305	102	458	25.5	21	6.7	665
ITEMWSB458	ITEMWSB458H	545	458	127	610	25.5	21	6.7	1,026
ITEMWSB610	ITEMWSB610H	700	610	127	760	25.5	21	6.7	1,946



Heavy Welded Steel Bracket

Material

- Carbon Steel in accordance with the MSP SP 58-TABLE A2/A2M

Welding

- Welding in accordance with EN 3834-2 / ASME Section IX, AWS D1.1

Service

- Designed to suspend hanger rod for support of heavy loads under 13,6 kN from a wall or structure.

Installation

- Size and thickness of the back plate is governed by the load to be carried and the nature and conditions of the wall. Back plates furnished upon request.

Ordering

- Specify code or name, nominal size and finish.

Finish

- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 – EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

Approvals

- Heavy Welded Steel Bracket: Complies with Manufacturers Standardization Society MSS SP-58 Type 33

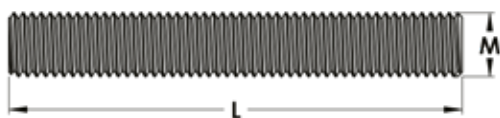
Note: Special size can be designed to meet project requirements.

Note: The load data published includes a safety factor. (Safety factor= Ratio of ultimate load to the design load.)

Code	HCR Code	A	B	C	D	E	ØF	G	Recom. Load	Weight
		mm	mm	mm	mm	mm	mm	mm	kN	kg/100 Pcs.
IEHWSB305	IEHWSB305H	390	305	102	458	25.5	21	–	13.4	798
IEHWSB458	IEHWSB458H	545	458	127	610	25.5	24	70	13.4	1,508
IEHWSB610	IEHWSB610H	700	610	127	760	25.5	27	64	13.4	1,979
IEHWSB760	IEHWSB760H	845	760	127	915	25.5	27	64	13.4	2,438
IEHWSB915	IEHWSB915H	990	915	152	1,065	25.5	27	90	13.4	3,801
IEHWSB1065	IEHWSB1065H	1,170	1,065	152	1,270	25.5	27	90	13.4	4,484

HANGER-ROD ATTACHMENTS





Threaded Rod

Size Range

- M6 to M30

Material

- Carbon Steel

Manufacturing Specification

- ASME B18.31.4M
- EN 898-1

Mechanical Properties

- Bolts, screws and studs with specified property classes - Coarse thread and fine pitch thread (ISO 898-1:2009)

Property Class

- Grade 4.6, 8.8 (Carbon Steel)
- IRR Code is for Grade 4.6 property class

Dimensional Specification

- DIN 13-20 Thread Sizes

Finish

- Electro galvanisation in accordance with ASTM B633/ ASTM F 1941 - EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

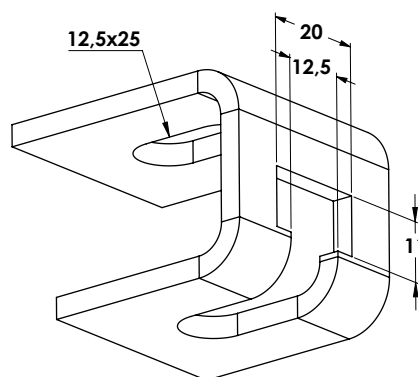
Length Specifications by Finishing

- Electro galvanisation: Rods can be manufactured in length of 1, 2 and 3 meters as a standard. Special length of shorter than 3 meters can be manufactured according the order quantity.
- HCR: Rods can be manufactured maximum 1 meter length and shorter than 1 meter rods can be manufactured according the order quantity.

Note: The load data published includes a safety factor. (Safety factor= Ratio of ultimate load to the design load.)

Code	HCR Code	Size	Rod Size	L	Recom. Load	Weight
		mm	M	mm	kN	kg/100 Pcs.
IRRT061000	IRRT061000G	M6	M6	1,000	3.6	17
IRRT081000	IRRT081000G	M8	M8	1,000	6.6	31
IRRT101000	IRRT101000G	M10	M10	1,000	10.4	49
IRRT121000	IRRT121000G	M12	M12	1,000	15.2	71
IRRT141000	IRRT141000G	M14	M14	1,000	20.7	97
IRRT161000	IRRT161000G	M16	M16	1,000	28.2	130
IRRT181000	IRRT181000G	M18	M18	1,000	34.6	161
IRRT201000	IRRT201000G	M20	M20	1,000	44.1	204
IRRT241000	IRRT241000G	M24	M24	1,000	63.5	293
IRRT301000	IRRT301000G	M30	M30	1,000	100.8	467

Height Adjuster



Material

- Carbon Steel

Ordering

- Specify code or name, nominal size and finish.

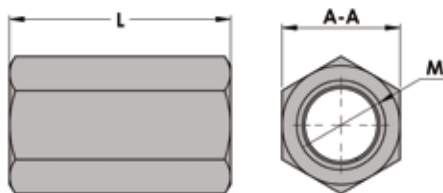
Installation

- Enables using anchors other than drop-in for hangers.

Finish

- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 – EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

Code	HCR Code	Qty./Box	Weight
			kg/Box
IFKA12	IFKA12H	100	11.7



Extension Nut

Material

- Carbon Steel

Service

- It is used for connecting male threaded components to each other.

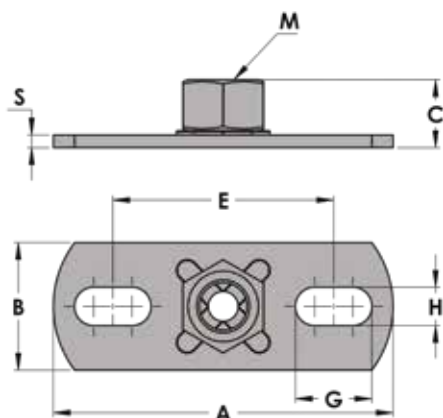
Installation

- Effective thread length should at least be equal to thread diameter. Jam nut is necessary for safety.

Finish

- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 – EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

Code	HCR Code	Nominal Size	A	L	M	Qty./Box	Weight
		mm	mm	mm			kg/Box
ISUA08040	ISUA08040H	M8 x 40	13.0	40.0	M8	300	10.2
ISUA10040	ISUA10040H	M10 x 40	17.0	40.0	M10	250	15.0
ISUA12040	ISUA12040H	M12 x 40	19.0	40.0	M12	250	18.0
ISUA16050	ISUA16050H	M16 x 50	24.0	50.0	M16	100	13.4



Base Plate with Nut

Material

- Carbon Steel

Service

- Baseplates are used for fastening of heavy duty pipe clamps to ceilings, floors and walls

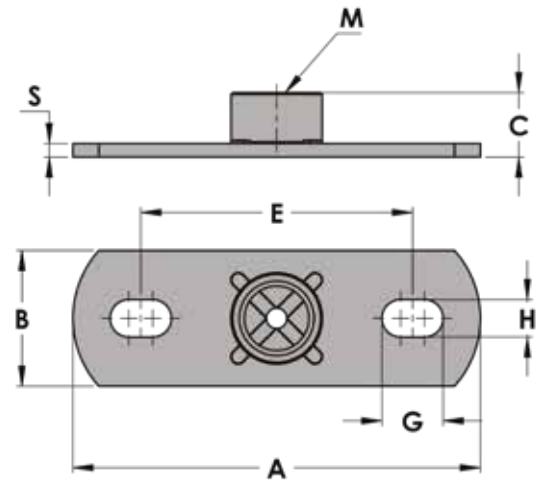
Finish

- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 – EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

Note: The load data published includes a safety factor. (Safety factor= Ratio of ultimate load to the design load.)

Code	HCR Code	Base Plate Size	M/Nut Size	A	B	C	G	H	E	s	Recom. Load	Qty./Box	Weight
		mm x mm x mm	mm	mm	mm	mm	mm	mm	mm	mm	kN		kg/Box
IGL208	IGL208H	3 x 30 x 80	M8	80	30	15	18	9	52	3	2.2	50	2.7
IGL210	IGL210H	3 x 30 x 80	M10	80	30	16	18	9	52	3	2.2	50	3.1
IGL212	IGL212H	3 x 30 x 80	M12	80	30	18	18	9	52	3	2.2	50	3.4
IGS208	IGS208H	4 x 40 x 120	M8	120	40	16	18	11	80	4	3.0	50	7.0
IGS210	IGS210H	4 x 40 x 120	M10	120	40	17	18	11	80	4	3.0	50	7.4
IGS212	IGS212H	4 x 40 x 120	M12	120	40	18	18	11	80	4	3.0	50	7.7
IGS216	IGS216H	4 x 40 x 120	M16	120	40	22	18	11	80	4	3.0	50	8.7

Base Plate with Sleeve



Material

- Carbon Steel

Service

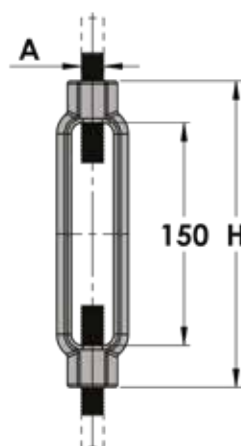
- Baseplates are used for fastening of heavy duty pipe clamps to ceilings, floors and walls

Finish

- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 - EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

Note: The load data published includes a safety factor. (Safety factor= Ratio of ultimate load to the design load.)

Code	HCR Code	Base Plate Size	M / Sleeve Size	A	B	C	G	H	E	s	Recom. Load	Qty./Box	Weight
		mm × mm × mm	inch	mm	mm	mm	mm	mm	mm	mm	kN		kg/Box
IGS2M15	IGS2M15H	4 × 40 × 120	1/2"	120	40	19	18	11	80	4	5	50	8.3
IGS2M20	IGS2M20H	4 × 40 × 120	3/4"	120	40	21	18	11	80	4	5	50	8.6
IGS2M25	IGS2M25H	4 × 40 × 120	1"	120	40	25	18	11	80	4	5	50	11.6


Nominal Size Range

- 3/8" to 2 1/2"

Material

- Forged Steel

Service

- Designed for adjustment up to 150 mm for heavy loads.

Steel Turnbuckle

Ordering

- Specify code or name, nominal size and finish.

Finish

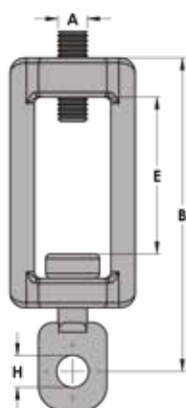
- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 – EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

Approvals

- Complies with Manufacturers Standardization Society MSS SP-58 Type 13

Note: The load data published includes a safety factor. (Safety factor= Ratio of ultimate load to the design load.)

Code	HCR Code	Nominal Size		A	H	Max Load 650°F (343°C)	Max Load 750°F (399°C)	Weight
		Inch	DN			kN	kN	kg/100 Pcs.
IENT010	IENT010H	3/8"	(10)	M10	185	3.2	2.5	19.9
IENT015	IENT015H	1/2"	(15)	M12	190	6.0	4.7	31.1
IENT016	IENT016H	5/8"	(16)	M16	198	9.6	7.5	47.6
IENT020	IENT020H	3/4"	(20)	M20	210	14.3	11.2	68.5
IENT022	IENT022H	7/8"	(22)	M22	218	19.9	15.6	84.1
IENT025	IENT025H	1"	(25)	M24	228	26.2	20.5	122.5
IENT032	IENT032H	1 1/4"	(32)	M30	234	42.2	33.0	204.4
IENT040	IENT040H	1 1/2"	(40)	M36	248	61.4	48.0	298.7
IENT042	IENT042H	1 3/4"	(42)	M42	265	82.7	64.7	494.4
IENT050	IENT050H	2"	(50)	M48	280	109.4	86.0	682.5
IENT056	IENT056H	2 1/4"	(56)	M56	325	143.7	112.5	928.4
IENT065	IENT065H	2 1/2"	(65)	M64	340	177.0	138.5	1,250.7


Size Range

- 1/4" to 3/4"

Material

- Forged Steel

Service

- Designed to provide an adjustable threaded connection for hanger rods.

Swivel Turnbuckle

Ordering

- Specify code or name, nominal size and finish.

Finish

- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 – EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

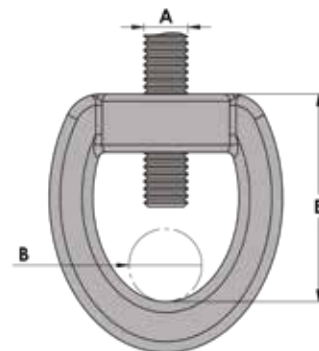
Approvals

- Complies with Manufacturers Standardization Society MSS SP-58 Type 15

Note: The load data published includes a safety factor. (Safety factor= Ratio of ultimate load to the design load.)

Code	HCR Code	Nominal Size	A	B	E	H	Recom. Load	Weight
		Inch		mm	mm	mm	kN	kg/100 Pcs.
IETBA006	IETBA006H	1/4"	M6	64	32	6.5	1.0	4.0
IETBA010	IETBA010H	3/8"	M10	98	48	10.5	3.2	13.1
IETBA012	IETBA012H	1/2"	M12	98	48	10.5	3.2	12.9
IETBA016	IETBA016H	5/8"	M16	124	60	14.0	3.2	33.7
IETBA020	IETBA020H	3/4"	M20	124	60	14.0	3.8	32.7

Malleable Iron Socket



Nominal Size Range

- 1/4" to 7/8"

Material

- Malleable Iron

Service

- Designed for attaching hanger rod to various types of hangers.

Ordering

- Specify code or name, nominal size and finish.

Finish

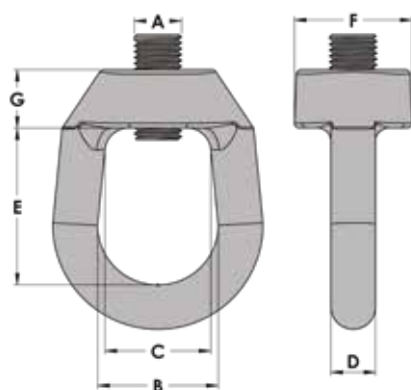
- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 – EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

Approvals

- Complies with Manufacturers Standardization Society MSS SP-58 & MSS SP-69 –Type 16

Note: The load data published includes a safety factor. (Safety factor= Ratio of ultimate load to the design load.)

Code	HCR Code	Nominal Size		A	B	E	Recom. Load	Weight
		Inch	DN		mm	mm		kg/100 Pcs.
IEEYS008	IEEYS008H	1/4"	8	M6	6.5	28.5	1.1	4.5
IEEYS010	IEEYS010H	3/8"	10	M10	6.5	35.0	2.7	7.9
IEEYS015	IEEYS015H	1/2"	15	M12	6.5	40.0	4.5	11.3
IEEYS016	IEEYS016H	5/8"	–	M16	10.5	45.0	6.2	17.1
IEEYS020	IEEYS020H	3/4"	20	M20	12.5	52.0	9.8	23.6
IEEYS022	IEEYS022H	7/8"	–	M22	12.5	60.0	10.2	35.7



Steel Weldless Eyenut

Size Range

- 3/8" to 2 1/2"

Material

- Forged Steel

Service

- Designed to use on high temperature piping installations.

Ordering

- Specify code or name, nominal size and finish.

Finish

- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 – EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

Approvals

- Complies with Manufacturers Standardization Society MSS SP-58 & MSS SP-69 –Type 17

Note: The load data published includes a safety factor. (Safety factor= Ratio of ultimate load to the design load.)

Code	HCR Code	Nominal Size		A	B	C	D	E	F	G	Max Load 650°F 343°C	Max Load 750°F 399°C	Weight
		Inch	DN		mm	mm	mm	mm	mm	mm	kN	kN	kg/100 Pcs.
IEWEN010	IEWEN010H	3/8"	10	M10	38	30	13	51	35	17	3.2	2.5	28
IEWEN015	IEWEN015H	1/2"	15	M12	38	30	13	51	35	17	6.0	4.7	27
IEWEN016	IEWEN016H	5/8"	16	M16	38	30	13	51	35	17	9.6	7.2	26
IEWEN020	IEWEN020H	3/4"	20	M20	38	30	13	51	35	17	12.0	11.2	25
IEWEN022	IEWEN022H	7/8"	22	M22	51	43	19	67	50	25	19.9	15.0	81
IEWEN025	IEWEN025H	1"	25	M24	51	43	19	67	50	25	26.2	20.1	80
IEWEN032	IEWEN032H	1 1/4"	32	M30	63.5	46	25	86	60	32	2.5	33.1	176
IEWEN040	IEWEN040H	1 1/2"	40	M36	63.5	46	25	86	60	32	4.7	48.1	169
IEWEN042	IEWEN042H	1 3/4"	42	M42	102	102	38	160	102	57	7.2	64.8	748
IEWEN050	IEWEN050H	2"	50	M48	102	102	38	160	102	57	11.2	85.7	732
IEWEN056	IEWEN050H	2 1/4"	56	M56	102	102	38	160	102	57	15.0	112.5	708
IEWEN065	IEWEN065H	2 1/2"	65	M64	102	102	38	160	102	57	20.1	138.6	699

Eye Bolts

Nominal Size Range

- M8 to M64

Material

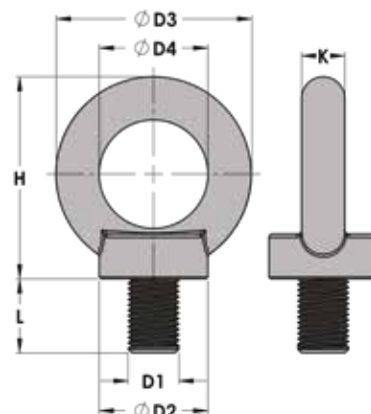
- Forged Steel

Ordering

- Specify code or name, nominal size and finish.

Finish

- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 - EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256



Note: The load data published includes a safety factor. (Safety factor= Ratio of ultimate load to the design load.)

Code	HCR Code	D1	D2	D3	D4	H	K	L	Max. Load One Bolt	Weight
			mm	mm	mm	mm	mm	mm		
IEEB008	IEEB008H	M8	20.0	36.0	20.0	36.0	8.0	15.0	1.0	4.9
IEEB010	IEEB010H	M10	25.0	45.0	25.0	45.0	10.0	18.0	1.6	9.9
IEEB012	IEEB012H	M12	30.0	54.0	30.0	53.0	12.0	22.0	2.3	16.6
IEEB016	IEEB016H	M16	35.0	63.0	35.0	62.0	14.0	27.0	5.0	27.8
IEEB020	IEEB020H	M20	40.0	72.0	40.0	71.0	16.0	30.0	8.0	42.7
IEEB024	IEEB024H	M24	50.0	90.0	50.0	80.0	20.0	36.0	12.5	82.3
IEEB030	IEEB030H	M30	65.0	108.0	60.0	110.0	24.0	45.0	25.0	152.7
IEEB036	IEEB036H	M36	75.0	125.0	70.0	130.0	28.0	55.0	37.0	246.1
IEEB042	IEEB042H	M42	85.0	145.0	80.0	150.0	32.0	65.0	50.0	366.9
IEEB048	IEEB048H	M48	100.0	165.0	90.0	170.0	38.0	70.0	60.0	581.8
IEEB056	IEEB056H	M56	110.0	185.0	100.0	190.0	42.0	80.0	85.0	799.8
IEEB064	IEEB064H	M64	120.0	210.0	110.0	210.0	48.0	90.0	125.0	1,137.5

Dual Thread Screw

Size Range

- M8-M10

Material

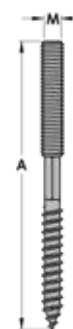
- Carbon Steel

Service

- Enables to connect metric thread attachments to wooden structures. Follow Eurocode 5 for safe connections.

Finish

- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 - EN ISO 2081/EN ISO 4042



Code	M	A	Quantity / Pack	Weight
		mm		kg/Box
ICTA08080	M8	80	250	7.5
ICTA08100	M8	100	250	8.8
ICTA08120	M8	120	250	10.1
ICTA10100	M10	100	250	10.3
ICTA10120	M10	120	250	12.3

FIXING & CONNECTION ACCESSORIES



Hex Bolt



Material

- Carbon Steel and Alloy Steel
- Stainless Steel

Manufacturing Specification

- ASME B18.2.1
- ISO 4017
- DIN 933

Mechanical Properties

- Bolts, screws and studs with specified property classes – Coarse thread and fine pitch thread (ISO 898-1:2009)
- Mechanical properties of corrosion-resistant stainless steel fasteners – Part 1: Bolts, screws and studs (ISO 3506-1:2009) (Stainless Steel)

Property Class

- 6.8, 8.8 (Carbon Steel)
- A2-70, A4-80 (Stainless Steel)

Dimensional Specification

- DIN 933, ISO 4017 for full threaded
- DIN 931 for full semi-threaded

Finish

- Electro galvanisation in accordance with ASTM B633/ ASTM F 1941, EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

AA BBB CC DDD E F

Special Item		Property Class		Size (M)	Length	Finish		Special Item	
Yes	99	6.8	ZCD	Between M6-M36	Between 10 - 300 mm	Electro-galvanized/ Stainless Steel	-	Yes	P
No	-	8.8	ZCC			HCR	H/G	No	-
		A2-70	ZCP						
		A4-80	ZCCP						

Code	M	Lenght	Qty. / Box	Weight	Code	M	Lenght	Qty. / Box	Weight
		mm		kg/Box			mm		kg/Box
ZCD0615	M6	15.0	100	0.5	ZCD1030	M10	30.0	100	2.6
ZCD0620	M6	20.0	100	0.6	ZCD1035	M10	35.0	100	2.9
ZCD0625	M6	25.0	100	0.7	ZCD1040	M10	40.0	100	3.2
ZCD0630	M6	30.0	100	0.7	ZCD1045	M10	45.0	100	3.5
ZCD0640	M6	40.0	100	0.9	ZCD1050	M10	50.0	100	3.7
ZCD0650	M6	50.0	100	1.1	ZCD1055	M10	55.0	100	3.8
ZCD0660	M6	60.0	100	1.2	ZCD1060	M10	60.0	100	4.4
ZCD0670	M6	70.0	100	1.5	ZCD1070	M10	70.0	100	5.0
ZCD0815	M8	15.0	100	1.0	ZCD10100	M10	100.0	100	6.6
ZCD0820	M8	20.0	100	1.2	ZCD1220	M12	20.0	100	3.1
ZCD0825	M8	25.0	100	1.3	ZCD1225	M12	25.0	100	3.6
ZCD0830	M8	30.0	100	1.5	ZCD1230	M12	30.0	100	3.9
ZCD0835	M8	35.0	100	1.6	ZCD1235	M12	35.0	100	4.4
ZCD0840	M8	40.0	100	1.8	ZCD1240	M12	40.0	100	4.7
ZCD0845	M8	45.0	100	2.0	ZCD1245	M12	45.0	100	5.0
ZCD0850	M8	50.0	100	2.1	ZCD1250	M12	50.0	100	5.2
ZCD0855	M8	55.0	100	2.2	ZCD1260	M12	60.0	100	6.1
ZCD0860	M8	60.0	100	2.4	ZCD1270	M12	70.0	100	7.3
ZCD0870	M8	70.0	100	2.7	ZCD1670	M16	70.0	50	6.8
ZCD0890	M8	90.0	100	3.7	ZCD1680	M16	80.0	50	7.5
ZCD08100	M8	100.0	100	4.0	ZCD1690	M16	90.0	50	8.2
ZCD1015	M10	15.0	100	1.9	ZCD16100	M16	100.0	50	9.7
ZCD1020	M10	20.0	100	2.2	ZCD16120	M16	120.0	50	10.5
ZCD1025	M10	25.0	100	2.4					

Hex Nut


Material

- Carbon Steel and Alloy Steel
- Stainless Steel

Manufacturing Specification

- ASME B18.2.1
- ISO 4032
- DIN 934

Mechanical Properties

- Nuts with specified property classes – Coarse thread and fine pitch thread (ISO 898-2:2012)
- Mechanical properties of corrosion-resistant stainless steel fasteners-Part 2: Nuts (ISO 3506-2:2009) (Stainless Steel)

Property Class

- Grade 6, Grade 8 (Carbon Steel)
- A2, A4 (Stainless Steel)

Dimensional Specification

- DIN 934 Hexagon nuts
- ISO 4032 Hexagon nuts
- ISO 4035 Hexagon thin nuts

Finish

- Electro galvanisation in accordance with ASTM B633/ ASTM F 1941, EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

AA		BBB		CCC		B		D		E	
Special Item		Property Class		Size (M)		Finish		Packaged			
Yes	99	6	ZSS	Between M6-M36		Electro-galvanized (6)	1	Yes	P		
No	-	8	ZSS...2			Electro-galvanized (8)	-	No	-		
		A2-70	ZSSP			Stainless Steel	-				
		A4-80	ZSSP2			HCR	H/G				

Code	M	Thickness	Qty. / Box	Weight
		mm		kg/Box
ZSS0006	M6	5	1,000	2.19
ZSS0008	M8	6.5	1,000	4.56
ZSS0010	M10	8	500	5.13
ZSS0012	M12	10	500	7.48
ZSS0016	M16	13	300	8.69
ZSS0020	M20	16	100	5.62

Plain Washer


Material

- Carbon Steel and Alloy Steel
- Stainless Steel

Manufacturing Specification

- ASME B18.22M
- DIN 125 (ISO 7089)

Mechanical Properties

- Plain washers – Normal series, Product grade A (ISO 7089:2000)
- DIN 125 Product grade A washers

Property Class

- Grade A (Carbon Steel)
- A2, A4 (Stainless Steel)

Dimensional Specification

- DIN 125 (ISO 7089:2000)

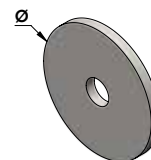
Finish

- Electro galvanisation in accordance with ASTM B633/ ASTM F 1941, EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

AA		BBB		CCC		D		E	
Special Item		Property Class		Size (M)		Finish		Packaged	
Yes	99	Grade A	ZPS	Between M6-M36		Electro-galvanized	1	Yes	P
No	-	A2-70	ZPSP			Stainless Steel	-	No	-
		A4-80	ZPSP2			HCR	H/G		

Code	M	Ø	Thickness	Qty. / Box	Weight
			mm		kg/Box
ZPS0006	M6	12.0	1.6	2,000	1.7
ZPS0008	M8	16.0	1.6	5,000	8.2
ZPS0010	M10	20.0	2.0	1,000	3.5
ZPS0012	M12	24.0	2.5	200	1.6
ZPS0016	M16	30.0	3.0	500	5.5
ZPS0020	M20	37.0	3.0	100	1.9

Special Washer



Material

- Carbon Steel and Alloy Steel
- Stainless Steel

Finish

- Electro galvanisation in accordance with ASTM B633/ ASTM F 1941, EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

Property Class

- Grade A (Carbon Steel)
- A2, A4 (Stainless Steel)

AA BBBB CC D E

Special Item		Thickness		Size (M)	Finish		Packaged	
Yes	99	2 mm	ZPXN3	Between M6-M36	Electro-galvanized	-	Yes	P
No	-	3 mm	ZPXN2		HCR	H/G	No	-

Examples	AA	BBBB	CC	D	E	Code	OD	Description	Qty./Box	Weight
										kg/Box
		ZPXN2	08		P	ZPXN208P	40	M8 Special Washer (3 mm)	1,000	27100
		ZPXN2	12	H	P	ZPXN212HP	40	M12 Special Washer (3 mm) - HCR	1,000	26.00
		ZPXN3	10		P	ZPXN310P	20	M10 Special Washer (2 mm)	1,000	8.25

Spring Lock Washer



Material

- Carbon Steel and Alloy Steel
- Stainless Steel

Property Class

- Grade A (Carbon Steel)
- A2, A4 (Stainless Steel)

Property Class

- ASME B18.21.1
- DIN 127

Dimensional Specification

- DIN 127

Mechanical Properties

- DIN 127 Product grade A washers

Finish

- Electro galvanization in accordance with ASTM B633/ ASTM F 1941, EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

AA BBB CCC D E

Special Item		Property Class		Size (M)	Finish		Packaged	
Yes	99	Grade A	ZPSYR	Between M6-M36	Electro-galvanized	-	Yes	P
No	-	A2-70	ZPSYRP		Stainless Steel	-	No	-
		A4-80	ZPSYRP2		HCR	H		

Examples	AA	BBB	CCC	D	E	Code	Description	Qty./Box	Weight
									kg/Box
		ZPSYR	008		P	ZPSYR008P	M8 Spring Lock Washer	1,000	1.88
		ZPSYR	012	H	P	ZPSYR012HP	M12 Spring Lock Washer - HCR	1,000	4.35
		ZPSYRP	016		P	ZPSYRP016P	M16 A2 Stainless Steel Spring Lock Washer	1,000	9.90
		ZPSYRP2	010		P	ZPSYRP2010P	M10 A4 Stainless Steel Spring Lock Washer	1,000	2.90

EPDM Rubber

Technical Specifications

- For the reduction of noise & vibration and preventing abrasion caused by metal to metal friction in pipe lines and air duct systems, some kind of isolator is needed, and EPDM is the ideal product.
- Noise reduction in accordance with EN 1366
- Prevents friction noises caused by thermal expansion
- Vibration reduction ability and partial compensation of thermal expansion
- The EPDM lining is held in position by side lips

Fully Resistant Against

- Water, diluted acids, caustic solutions, water based solutions and ozone

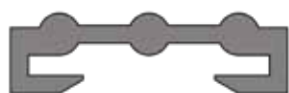
Limited Resistant Against

- Grease, mineral oils, animal and vegetables oils, and acetone

Not Resistant Against

- Hot oil and grease, fuel oil, aliphatic and aromatic carbohydrates.

UNIT		
Property		EPDM, Color Black
Hardness	Shore A	45-50
Service temperature	°C	-40 / +120
Elongation at rupture	%	> 400
Tensile Strength	N/mm ²	> 6
Resilience	%	> 40



Code	Nominal Size	Box	Weight
	mm × mm	m/Roll	kg/Roll
ZLIK20	1,5×20	20	2



Code	Nominal Size	Box	Weight
	mm × mm	m/Roll	kg/Roll
ZLF025	3×25	20	2.3



Code	Nominal Size	Box	Weight
	mm × mm	m/Roll	kg/Roll
ZLI030	3×30	20	3



Code	Nominal Size	Box	Weight
	mm × mm	m/Roll	kg/Roll
ZLI040	4×40	20	3.5



Code	Nominal Size	Box	Weight
	mm × mm	m/Roll	kg/Roll
ZLI050	5×50	20	4

Silicone Rubber

Technical Specifications

- Silicone rubber is an ideal product for preventing wear caused by metal-to-metal friction in pipelines at high temperatures and also for reducing noise and vibration.

- Flame retardant.
- Service temperature up to 250°C.
- Perfect sound insulation material.
- Prevents friction noises caused by thermal expansion.
- Vibration reduction ability and partial compensation of thermal expansion
- The silicone rubber lining is held in position by side lips

Total Resistant Against

- Heat, steam, water, dilute acids, weather, UV radiation, dilute bases, mold, glycerin, oxygen and ozone.

Limited Resistant Against

- Dilute organic acids, dilute alkalis, shor-chain alcohols, hydraulic fluids, diesel oil, vegetable oils, and ammonia.

Not Resistant Against

- Strong acids and bases, solvents, fuels and oils.

UNIT		
Property		Silicone Color
Hardness	Shore A	55
Service temperature	°C	-50 / +250
Elongation at rupture	%	455
Tensile Strenght	N/mm ²	6.5
Resilience	%	50



Code	Nominal Size	Box	Weight
	mm × mm	m/Roll	kg/Roll
ZLIKS020	1,5 × 20	20	2



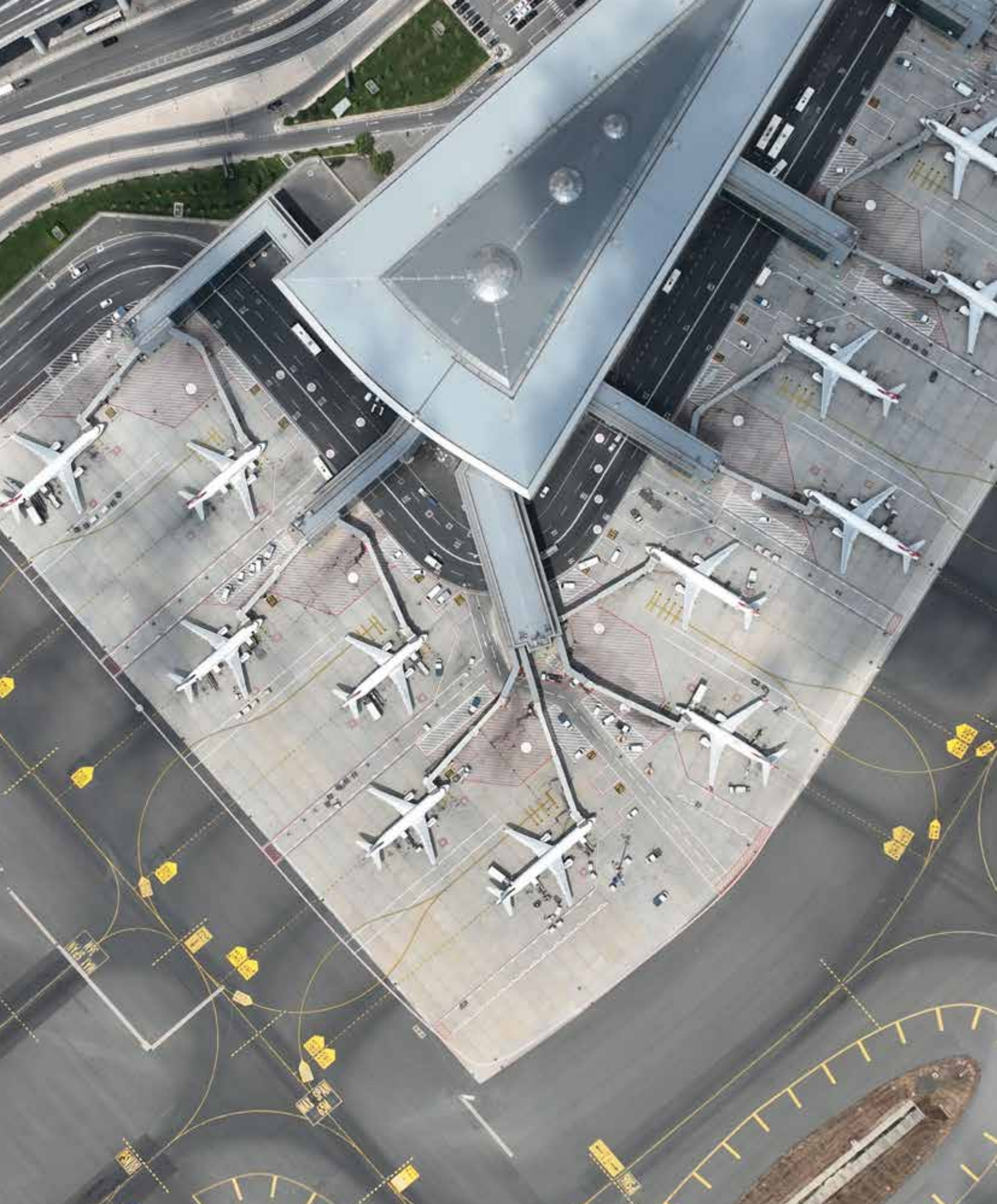
Code	Nominal Size	Box	Weight
	mm × mm	m/Roll	kg/Roll
ZLES0325	3 × 25	20	2.3



Code	Nominal Size	Box	Weight
	mm × mm	m/Roll	kg/Roll
ZLES0330	3 × 30	20	3



Code	Nominal Size	Box	Weight
	mm × mm	m/Roll	kg/Roll
ZLES0550	5 × 50	20	4

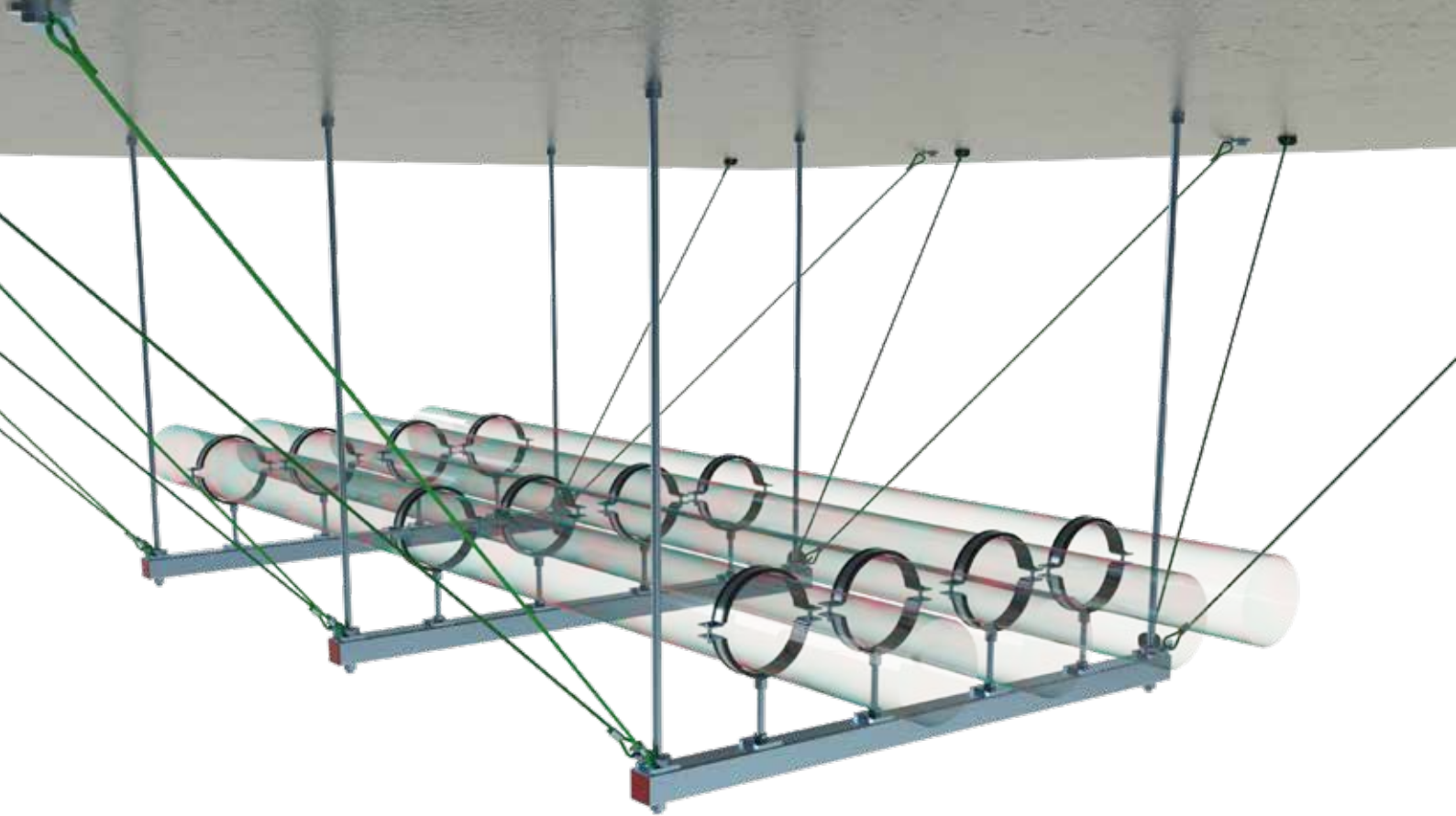


**MODULAR SUPPORT
SYSTEMS**



SEISMIC SYSTEMS

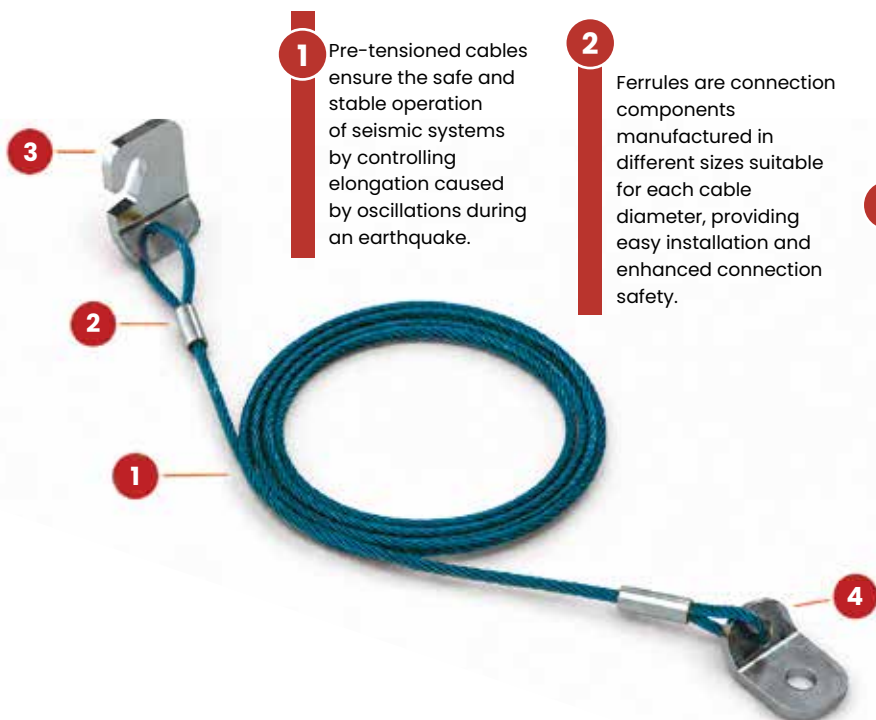




Seismic Cable Bracing Systems

Components

INKA Seismic Cable Bracing Systems are an integrated safety solution consisting of three main components. The system is composed of pre-tensioned, steel-core seismic cables designed to accommodate different load capacities, connection brackets that ensure secure load transfer between the cable and the structure or mechanical systems, and high strength aluminium ferrules that firmly connect these two elements. Through the combined operation of these three components, dynamic seismic loads are effectively controlled, system integrity is maintained, and long-term safe operation is ensured.



1 Pre-tensioned cables ensure the safe and stable operation of seismic systems by controlling elongation caused by oscillations during an earthquake.

2 Ferrules are connection components manufactured in different sizes suitable for each cable diameter, providing easy installation and enhanced connection safety.

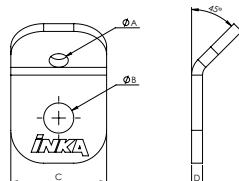
3 Retrofit brackets are connection elements that can be integrated into previously installed building systems, reducing installation time and improving application efficiency.

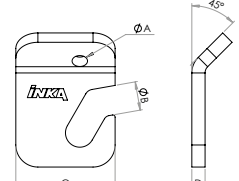
4 Standard brackets are connection components that connect the cable to the structure and can be attached to M10, M12, and M16 threaded rods.

Seismic Cable Bracing Systems

ETA Approved Seismic Anchors

- The anchors to be used in INKA Cable Seismic Systems are listed below. The anchor selection should be made according to the bracket type and the project calculations.

STANDARD BRACKET			
			
B	A	C	D
M10	7	35	4
M12	7	35	4
M16	7	40	4

RETROFIT BRACKET			
			
B	A	C	D
M10	7	40	6
M12	7	45	6
M16	7	50	6

Standard Bracket	Retrofit Bracket	Anchor Code	ETA Approval
M10		IDKLAPX10090	C1 & C2
		IDKLAPX10115	C1 & C2
M12		IDKLAPX12110	C1 & C2
		IDKLAPX12130	C1 & C2
M16		IDKLAPX16145	C1 & C2

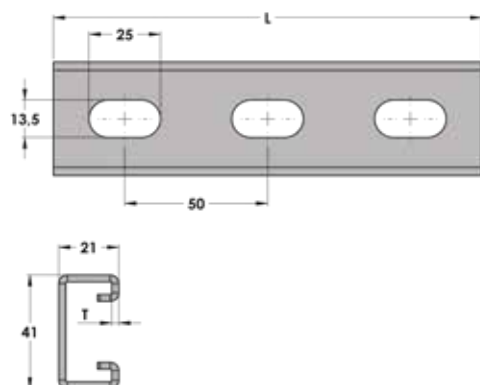
Code	Diameter	Rope Production	Safety Factor	Max. Allowable Design Load	Length	Seismic Bracket Size	Seismic Bracket Set	Color
	mm			kgf	m			
ISH25	2,5	Pre-Stretching	1,5	232	2	M10	Standart / Standart	Blue
ISHR25	2,5	Pre-Stretching	1,5	242	2	M10	Standart / Retrofit	Blue
ISH35	3,5	Pre-Stretching	1,5	533	2	M12	Standart / Standart	Orange
ISHR35	3,5	Pre-Stretching	1,5	535	2	M12	Standart / Retrofit	Orange
ISH50	5	Pre-Stretching	1,5	1050	2	M16	Standart / Standart	Green
ISHR50	5	Pre-Stretching	1,5	949	2	M16	Standart / Retrofit	Green

G PROFILES, BRACKETS & ACCESSORIES



G Profile

IPG4121 – G Profile



Pre-Galvanized

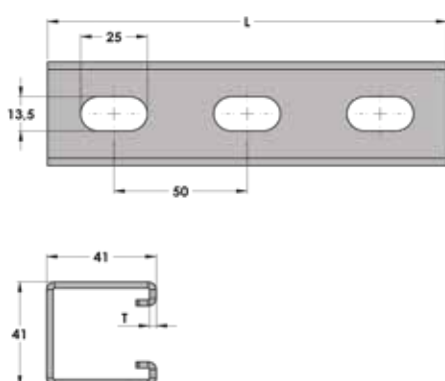
- Material: S250GD (1.0242) Pre-galvanized in accordance with DIN EN 10346
- Finish designation: Z275

HCR

- Material: S235JR (1.0038) Carbon steel in accordance with DIN EN 10025
- Finish: High Corrosion Resistant (HCR) details can be found on page 256

Ordering

- Available Thickness (T): 1.5mm & 2 mm & 2.5 mm
- Available Length (L): 2m, 3m & 6m



IPG4141 – G Profile

Pre-Galvanized

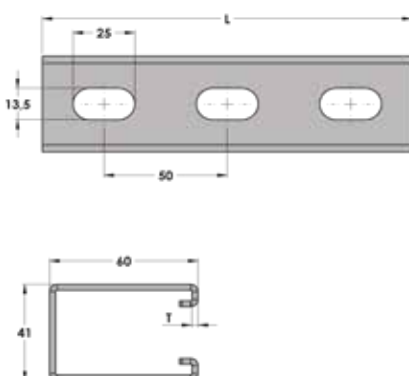
- Material: S250GD (1.0242) Pre-galvanized in accordance with DIN EN 10346
- Finish designation: Z275

HCR

- Material: S235JR (1.0038) Carbon steel in accordance with DIN EN 10025
- Finish: High Corrosion Resistant (HCR) details can be found on page 256

Ordering

- Available Thickness (T): 1.5mm & 2 mm & 2.5 mm
- Available Length (L): 2m, 3m & 6m



IPG4160 – G Profile

Pre-Galvanized

- Material: S250GD (1.0242) Pre-galvanized in accordance with DIN EN 10346
- Finish designation: Z275

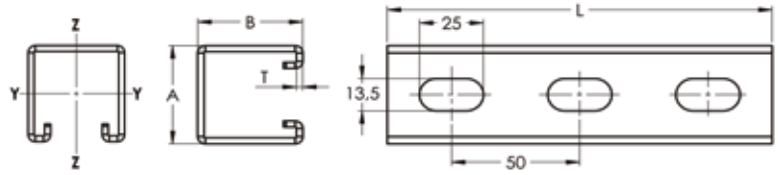
HCR

- Material: S235JR (1.0038) Carbon steel in accordance with DIN EN 10025
- Finish: High Corrosion Resistant (HCR) details can be found on page 256

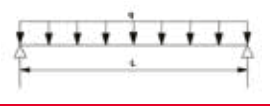
Ordering

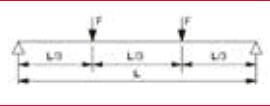
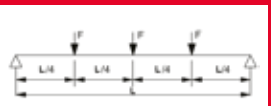
- Available Thickness (T): 2.5 mm & 3 mm
- Available Length (L): 2m, 3m & 6m

Technical Data for G Profiles



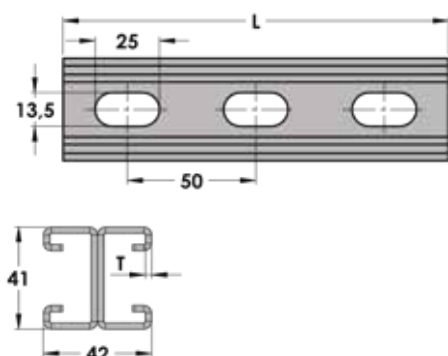
Code	Yield Strength	Size	A	B	T	L	Area Moment of Inertia		Section Modulus		Profile Cross Section	Weight
	N/mm ²	mm × mm × mm	mm	mm	mm	mm	I _y [mm ⁴]	I _z [mm ⁴]	W _y [mm ³]	W _z [mm ³]	[cm ²]	[kg/m]
IPG4121152000	250	41×21×1.5	41	21	1.5	2,000	7,850	36,300	720	1,770	1.55	1.13
IPG4121202000	250	41×21×2	41	21	2.0	2,000	9,610	46,350	880	2,260	1.93	1.47
IPG4121252000	250	41×21×2.5	41	21	2.5	2,000	11,394	56,100	1,041	2,736	2.33	1.77
IPG4141152000	250	41×41×1.5	41	41	1.5	2,000	43,300	60,800	2,110	2,960	2.15	1.58
IPG4141202000	250	41×41×2	41	41	2.0	2,000	53,200	76,800	2,565	3,745	2.73	2.05
IPG4141252000	250	41×41×2.5	41	41	2.5	2,000	63,660	93,530	3,104	4,560	3.33	2.49
IPG4160252000	250	41×60×2.5	41	60	2.5	2,000	166,855	126,735	5,496	6,185	4.30	3.26
IPG4160302000	250	41×60×3	41	60	3.0	2,000	194,245	147,530	6,377	7,197	5.09	3.86

F (N)											
		Maximum Recom. Load - F=qxL (N) L (mm)					Maximum Recom. Load (N) L (mm)				
Code	Size mm × mm × mm	500	1,000	1,500	2,000	3,000	500	1,000	1,500	2,000	3,000
IPG412115...	41×21×1.5	1,600	800	375	160	30	825	350	175	90	25
IPG412120...	41×21×2	2,175	948	406	175	48	1,090	474	202	104	28
IPG412125...	41×21×2.5	2,585	1,124	480	206	55	1,295	562	239	123	33
IPG414115...	41×41×1.5	4,750	2,400	1,755	1,080	420	2,400	1,200	775	560	230
IPG414120...	41×41×2	6,750	3,400	2,500	1,129	450	3,400	1,700	1,121	679	276
IPG414125...	41×41×2.5	7,700	3,850	2,834	1,278	507	3,880	1,930	1,273	770	311
IPG416025...	41×60×2.5	13,675	6,850	5,117	3,448	1,434	6,878	3,405	2,273	1,686	874
IPG416030...	41×60×3	15,800	7,920	5,935	4,012	1,670	7,978	3,975	2,636	1,956	1,017

F (N)											
		Maximum Recom. Load (N) L (mm)					Maximum Recom. Load (N) L (mm)				
Code	Size mm × mm × mm	500	1,000	1,500	2,000	3,000	500	1,000	1,500	2,000	3,000
IPG412115...	41×21×1.5	600	260	110	50	15	400	170	70	35	11
IPG412120...	41×21×2	823	318	134	60	17	545	198	85	43	12
IPG412125...	41×21×2.5	974	377	158	71	19	647	234	100	51	14
IPG414115...	41×41×1.5	1,800	900	590	325	135	1,200	600	380	230	95
IPG414120...	41×41×2	2,560	1,276	827	392	161	1,700	849	518	286	115
IPG414125...	41×41×2.5	2,911	1,450	939	443	181	1,940	965	588	324	130
IPG416025...	41×60×2.5	5,157	2,570	1,705	1,195	512	3,438	1,714	1,135	846	367
IPG416030...	41×60×3	5,984	2,965	1,979	1,391	596	3,989	1,988	1,317	982	427

Double G Profile

IPGD4121 – Double G Profile



Material: S235JR (1.0038) Carbon steel in accordance with DIN EN 10025

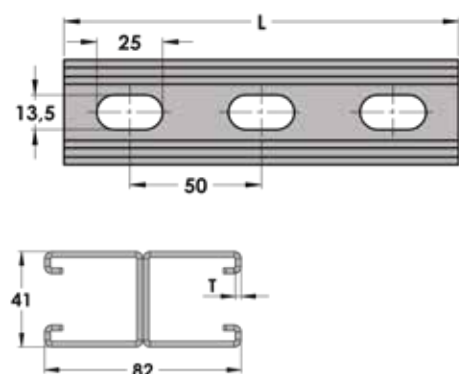
Finish:

- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 – EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

Ordering

- Available Thickness (T): 1.5mm & 2 mm & 2.5 mm
- Available Length (L): 2m, 3m & 6m

IPGD4141 – Double G Profile



Material: S235JR (1.0038) Carbon steel in accordance with DIN EN 10025

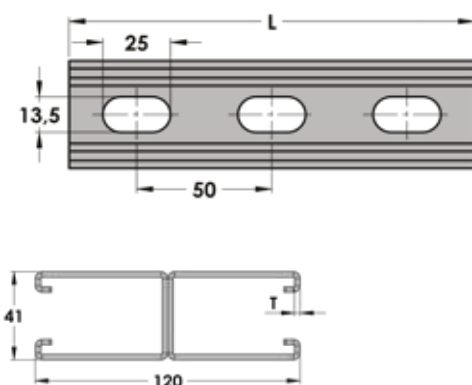
Finish:

- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 – EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

Ordering

- Available Thickness (T): 2 mm & 2.5 mm
- Available Length (L): 2m, 3m & 6m

IPGD4160 – Double G Profile



Material: S235JR (1.0038) Carbon steel in accordance with DIN EN 10025

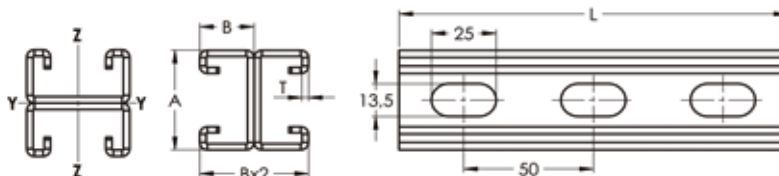
Finish:

- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 – EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

Ordering

- Available Thickness (T): 2.5 mm & 3 mm
- Available Length (L): 2m, 3m & 6m

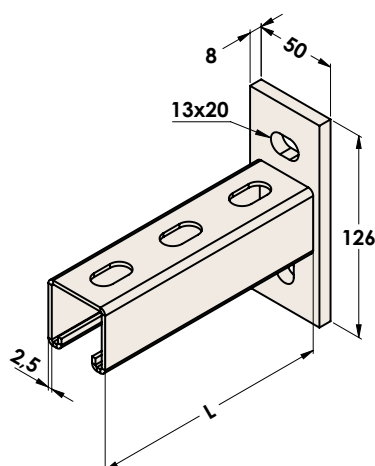
Technical Data for Double G Profiles



Code	Fy	Size	A	B	T	L	Moment of Inertia		Section Modulus		Profile Cross Section	Profile Weight
	N/mm²	mm × mm × mm	mm	mm	mm	mm	I _y [mm⁴]	I _z [mm⁴]	W _y [mm³]	W _z [mm³]	[cm²]	[kg/m]
IPGD4121152000	250	41×21×1.5	41	21	1.5	2000	7,850	36,300	720	1,770	3.10	2.26
IPGD4121202000	250	41×21×2	41	21	2.0	2000	54,784	93,276	2,609	4,550	3.86	2.94
IPGD4121252000	250	41×21×2.5	41	21	2.5	2000	65,099	111,917	3,100	5,459	4.66	3.53
IPGD4141152000	250	41×41×1.5	41	41	1.5	2000	287,305	122,460	7,028	5,991	4.30	3.16
IPGD4141202000	250	41×41×2	41	41	2.0	2000	315,308	154,170	7,690	7,520	5.46	4.10
IPGD4141252000	250	41×41×2.5	41	41	2.5	2000	381,008	186,133	9,293	9,080	6.66	4.98
IPGD4160252000	250	41×60×2.5	41	60	2.5	2000	1,045,102	254,651	17,418	12,422	8.60	6.52
IPGD4160302000	250	41×60×3	41	60	3.0	2000	1,220,960	295,781	20,349	14,428	10.18	7.72

F (N)											
		Maximum Recom. Load - F=q×L (N) L (mm)					Maximum Recom. Load (N) L (mm)				
Code	Size mm × mm × mm	500	1,000	1,500	2,000	3,000	500	1,000	1,500	2,000	3,000
IPGD412120...	41×21×2	7,685	3,850	2,869	1,315	488	3,880	1,928	1,272	917	302
IPGD412125...	41×21×2.5	9,295	4,650	3,466	1,587	587	4,680	2,328	1,536	1,105	363
IPGD414120...	41×21×2	21,770	10,820	8,130	5,386	3,141	10,915	5,448	3,603	2,690	1,760
IPGD414125...	41×21×2.5	26,550	13,230	9,945	6,587	3,840	13,368	6,660	4,411	3,290	2,151
IPGD416025...	41×60×2.5	49,190	24,550	18,300	12,240	8,033	24,723	12,345	8,197	6,119	4,030
IPGD416030...	41×60×3	55,050	27,500	20,550	13,700	8,987	27,675	13,822	9,181	6,856	4,510

F (N)											
		Maximum Recom. Load (N) L (mm)					Maximum Recom. Load (N) L (mm)				
Code	Size mm × mm × mm	500	1,000	1,500	2,000	3,000	500	1,000	1,500	2,000	3,000
IPGD412120...	41×21×2	2,910	1,445	950	444	175	1,938	963	635	320	127
IPGD412125...	41×21×2.5	3,510	1,745	1,146	537	210	2,342	1,163	767	385	153
IPGD414120...	41×21×2	8,186	4,085	2,709	2,013	1,100	5,463	2,721	1,800	1,343	805
IPGD414125...	41×21×2.5	10,025	4,995	3,318	2,462	1,344	6,682	3,330	2,205	1,644	985
IPGD416025...	41×60×2.5	18,547	9,260	6,157	4,584	3,006	12,370	6,174	4,095	3,060	2,009
IPGD416030...	41×60×3	20,765	10,369	6,887	5,130	3,366	13,855	6,912	4,590	3,425	2,248



Brackets

IWKG Single Profile Bracket 41x41 Strut

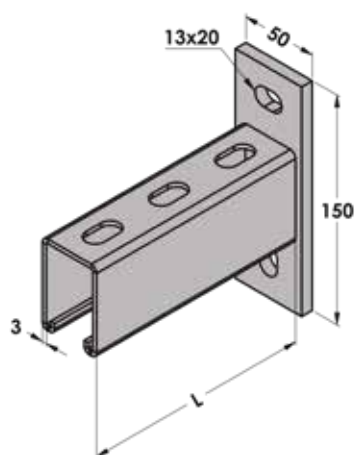
Material & Finish

Material: S235JR (1.0038)
Carbon steel in accordance with DIN EN 10025

Finish: Electro-Galvanized in accordance with
ASTM B 633/ASTM F 1941 - EN ISO 2081/EN ISO 4042

High Corrosion Resistant (HCR) details can be found on page 256

Code	HCR Code	L						Weight
		mm	F=q×L (N)	F (N)	F (N)	F (N)	F (N)	kg/100 Pcs.
IWKG150	IWKG150H	150.0	6,457.0	6,472.0	3,236.0	3,236.0	2,152.0	70.0
IWKG250	IWKG250H	250.0	3,870.0	3,880.0	1,940.0	1,940.0	1,290.0	100.0
IWKG300	IWKG300H	300.0	3,222.0	3,231.0	1,615.0	1,615.0	1,074.0	120.0
IWKG400	IWKG400H	400.0	2,410.0	2,420.0	1,210.0	1,210.0	803.0	140.0
IWKG500	IWKG500H	500.0	1,928.0	1,932.0	966.0	966.0	642.0	160.0
IWKG600	IWKG600H	600.0	1,595.0	1,606.0	732.0	802.0	531.0	190.0
IWKG750	IWKG750H	750.0	1,250.0	1,278.0	465.0	636.0	426.0	230.0



IWKG60 Single Profile Bracket 41x60 Strut

Material & Finish

Material: S235JR (1.0038)
Carbon steel in accordance with DIN EN 10025

Finish: Electro-Galvanized in accordance with
ASTM B 633/ASTM F 1941 - EN ISO 2081/EN ISO 4042

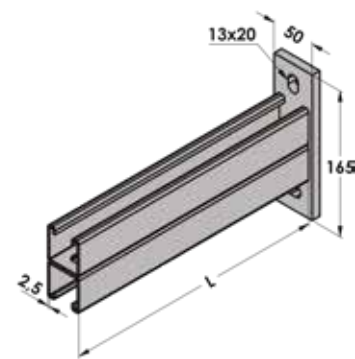
High Corrosion Resistant (HCR) details can be found on page 256

Code	HCR Code	L						Weight
		mm	F=q×L (N)	F (N)	F (N)	F (N)	F (N)	kg/100 Pcs.
IWKG60150	IWKG60150H	150	13,270	13,250	6,625	6,625	4,423	100
IWKG60250	IWKG60250H	250	7,959	7,950	3,975	3,975	2,653	140
IWKG60300	IWKG60300H	300	6,631	6,625	3,312	3,312	2,210	160
IWKG60350	IWKG60350H	350	5,681	5,680	2,840	2,840	1,893	180
IWKG60400	IWKG60400H	400	4,969	4,960	2,480	2,480	1,656	200
IWKG60450	IWKG60450H	450	4,410	4,421	2,210	2,210	1,470	220
IWKG60600	IWKG60600H	600	3,305	3,306	1,653	1,653	1,101	280

Brackets

IWKDG

Double Profile Bracket



Material & Finish

Material: S235JR (1.0038)
Carbon steel in accordance with DIN EN 10025

Finish: Electro-Galvanized in accordance with
ASTM B 633/ASTM F 1941 - EN ISO 2081/EN ISO 4042

High Corrosion Resistant (HCR) details can be found on page 256

Code	HCR Code	L						Weight
		mm	$F=q \times L$ (N)	F (N)	F (N)	F (N)	F (N)	kg/100 Pcs.
IWKDG300	IWKDG300H	300	11,130	11,130	5,565	5,565	3,710	220
IWKDG450	IWKDG450H	450	7,405	7,400	3,700	3,700	2,468	300
IWKDG600	IWKDG600H	600	5,538	5,540	2,770	2,770	1,846	370
IWKDG750	IWKDG750H	750	4,414	4,420	2,210	2,210	1,471	450
IWKDG900	IWKDG900H	900	3,663	3,664	1,832	1,832	1,221	520

IWKGU U Profile Bracket

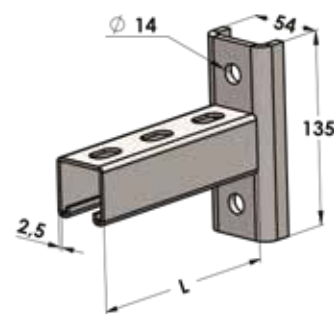
41x41 Strut

Material & Finish

Material: S235JR (1.0038)
Carbon steel in accordance with DIN EN 10025

Finish: Electro-Galvanized in accordance with
ASTM B 633/ASTM F 1941 - EN ISO 2081/EN ISO 4042

High Corrosion Resistant (HCR) details can be found on page 256



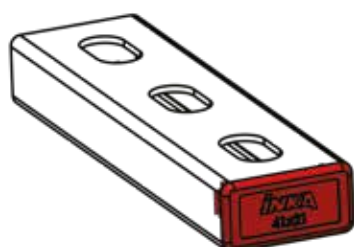
Note: A minimum order may apply on the Product.

Code	HCR Code	L	Weight
		mm	kg/100 Pcs.
IWKGU150	IWKGU150H	150	90
IWKGU300	IWKGU300H	300	130
IWKGU450	IWKGU450H	450	160
IWKGU600	IWKGU600H	600	200

End Cap & G Profile Rubber

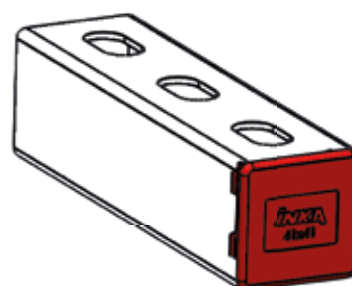
IPGT2141 41x21 End Cap

Weight: 0,4 kg/100pcs.



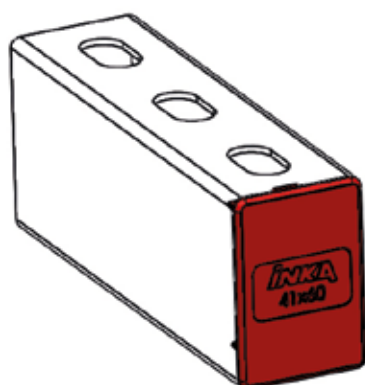
IPGT4141 41x41 End Cap

Weight: 0,7 kg/100pcs.

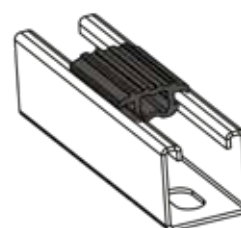


IPGT4160 41x60 End Cap

Weight: 1,1 kg/100pcs.



ZLIG01 G Profile Rubber



Rubber Quality		EPDM. Color black Etilen-Propilen- Dien-Caoutchouc
Hardness	Shore A	45 - 50
Temperature resistance	°C	-40 / +120
Elongation at rupture	%	> 400
Tensile strength	N/mm²	> 6
Resilience	%	> 40

Fittings Design Data

Dimensions

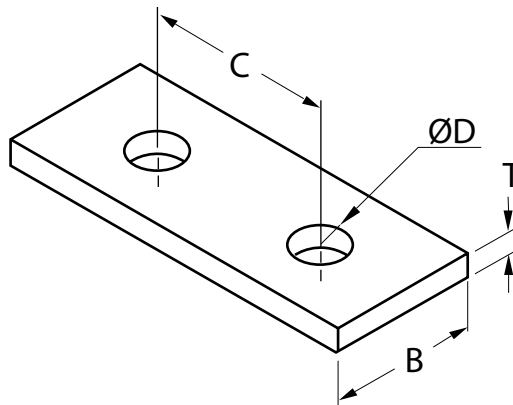
The following dimensions apply to all fittings except as noted:

Material & Finish

Material: S235JR (1.0038)
Carbon steel in accordance with DIN EN 10025

Finish: Electro-Galvanized in accordance with
ASTM B 633/ASTM F 1941 - EN ISO 2081/EN ISO 4042
High Corrosion Resistant (HCR) details can be found on page 256

Hardware: Nuts and bolts are not included in the fittings and must be ordered separately, unless noted.



FITTINGS GENERAL TABLE			
B	C	ØD	T
mm	mm	mm	mm
40	50	14	6

Recommended Bolt Torque

Bolt Size	M8	M10	M12
N·m	15	26	68

Design Load Data

90° Fittings						
Profile Thickness	kN	kN	kN	kN	kN	kN
2.5 mm	6.6	4.40	8.85	6.60	6.60	4.40
2.0 mm	4.4	2.85	6.65	5.10	4.40	2.85

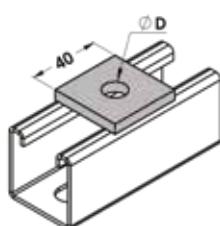
90° Fittings					Angle Fittings	
Profile Thickness	kN	kN	kN	kN	kN	kN
2.5 mm	11.10	8.85	13.30	11.10	4.40	4.40
2.0 mm	8.85	7.30	8.85	7.30	3.55	3.55

- The load data published includes a safety factor of 2.5. (Safety factor = Ratio of ultimate load to design load)
- The above load values are calculated with using M12 G Profile Nut. (Code: ISGC12, Catalogue page no: 171)
- Both ends of profiles supported.

Flat Plate Fittings

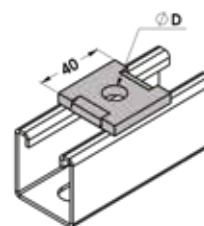
IFBLFD1 Square Washer

Note: A minimum order may apply on the Product.



Code No	ØD	Weight
	mm	kg/100 Pcs.
IFBLFD109	9	7
IFBLFD111	11	7
IFBLFD113	13	7

IFBLFGD1 Square Washer with Profile Guide

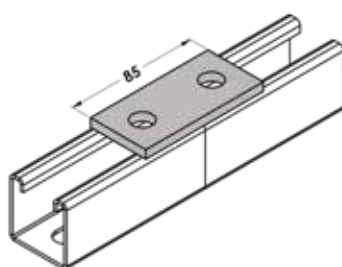


Code No	ØD	Weight
	mm	kg/100 Pcs.
IFBLFGD109	9	7
IFBLFGD111	11	7
IFBLFGD113	13	7

IFBLFD285 2 Holes Splice Plate

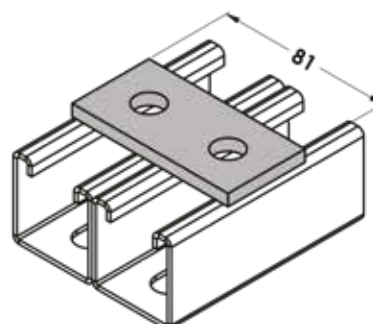
Weight: 15 kg/100 pcs.

Note: A minimum order may apply on the Product.



IFBLFD281 2 Holes Splice Plate

Weight: 14 kg/100 pcs.

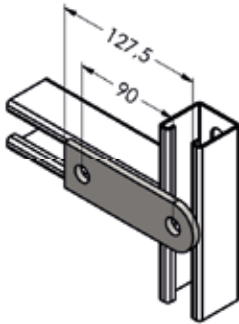


Flat Plate Fittings

IFBLFD21275 2 Holes Swivel Plate

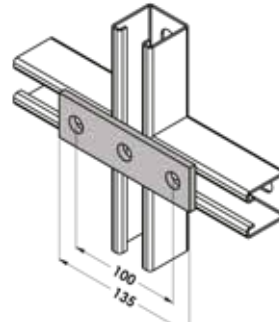
Weight: 22 kg/100 pcs.

Note: A minimum order may apply on the Product.



IFBLFD3135 3 Holes Splice Plate

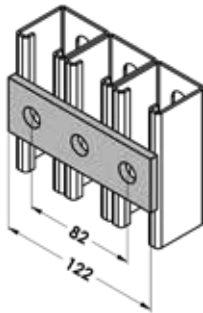
Weight: 23 kg/100 pcs.



IFBLFD3122 3 Holes Splice Plate

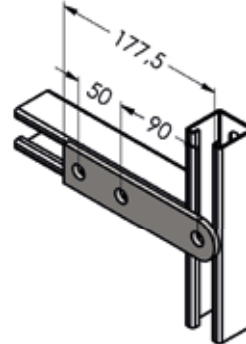
Weight: 21 kg/100 pcs.

Note: A minimum order may apply on the Product.



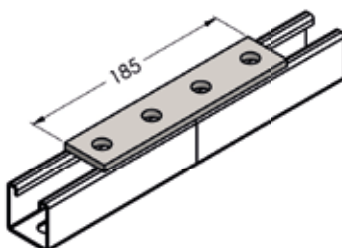
IFBLFD31775 3 Holes Swivel Plate

Weight: 30 kg/100 pcs.



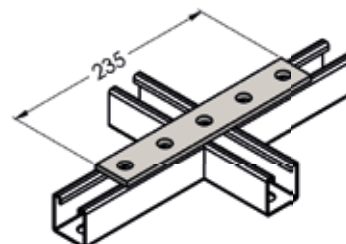
IFBLFD4185 4 Holes Splice Plate

Weight: 32 kg/100 pcs.



IFBLFD5235 5 Holes Splice Plate

Weight: 40 kg/100 pcs.

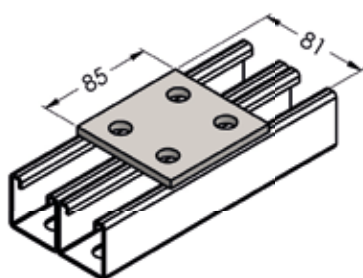


Flat Plate Fittings

IFBLFD48581 **4 Holes Splice Plate**

Weight: 29 kg/100 pcs.

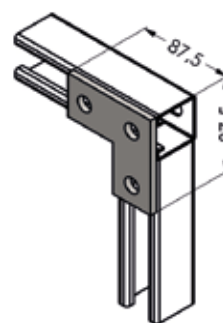
Note: A minimum order may apply on the Product.



IFBLFD3L875 **3 Holes corner Plate**

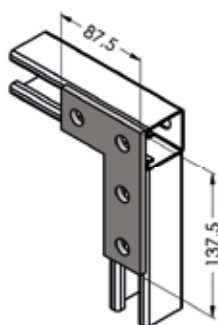
Weight: 23 kg/100 pcs.

Note: A minimum order may apply on the Product.



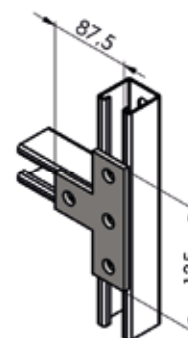
IFBLFD4L875 **4 Holes Corner Plate**

Weight: 32 kg/100 pcs.



IFBLFD4T875 **4 Holes Tee Plate**

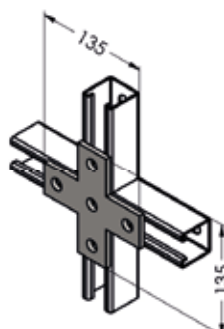
Weight: 31 kg/100 pcs.



IFBLFD5X135 **5 Holes Cross Plate**

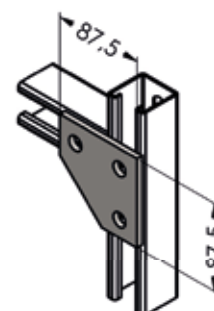
Weight: 39 kg/100 pcs.

Note: A minimum order may apply on the Product.



IFBLFD3V875 **3 Holes Corner Connection Plate**

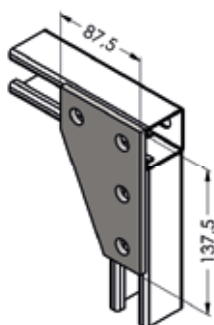
Weight: 28 kg/100 pcs.



Flat Plate Fittings

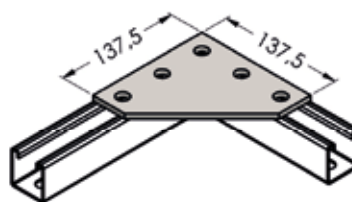
IFBLFD4V875 **4 Holes Corner Connector Plate**

Weight: 43 kg/100 pcs.
Note: A minimum order may apply on the Product.



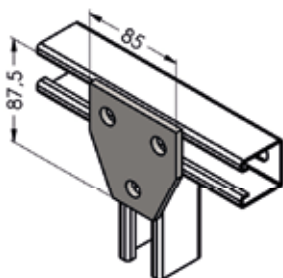
IFBLFD5V1375 **5 Holes Corner Connector Plate**

Weight: 63 kg/100 pcs.
Note: A minimum order may apply on the Product.



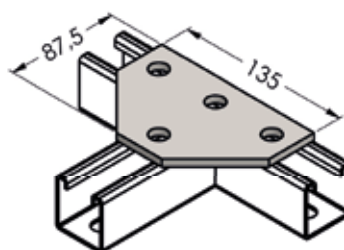
IFBLFD3A85 **3 Holes Tee Gusset Plate**

Weight: 28 kg/100 pcs.
Note: A minimum order may apply on the Product.



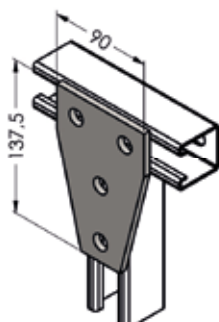
IFBLFD4A135 **4 Holes Tee Gusset Plate**

Weight: 42 kg/100 pcs.
Note: A minimum order may apply on the Product.



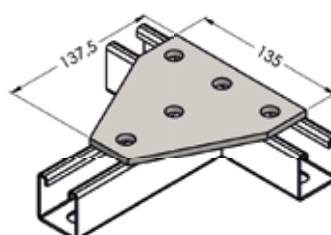
IFBLFD4A90 **4 Holes Tee Gusset Plate**

Weight: 44 kg/100 pcs.
Note: A minimum order may apply on the Product.



IFBLFD5A135 **5 Holes Tee Gusset Plate**

Weight: 62 kg/100 pcs.
Note: A minimum order may apply on the Product.

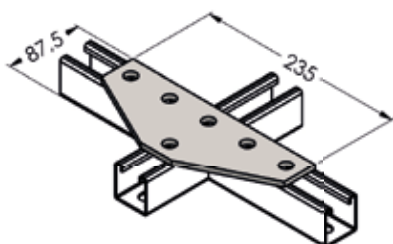


Flat Plate Fittings

IFBLFD6A235 **6 Holes Tee Gusset Plate**

Weight: 70 kg/100 pcs.

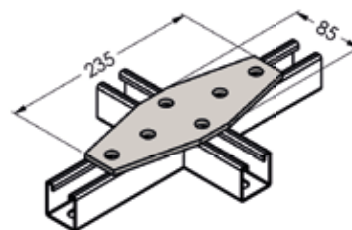
Note: A minimum order may apply on the Product.



IFBLFD6I85 **6 Holes Cross Gusset Plate**

Weight: 69 kg/100 pcs.

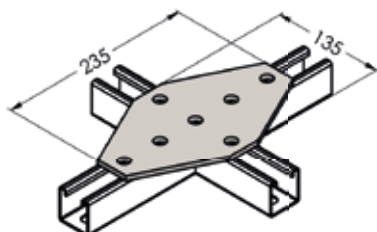
Note: A minimum order may apply on the Product.



IFBLFD7I135 **7 Holes Cross Gusset Plate**

Weight: 100 kg/100 pcs.

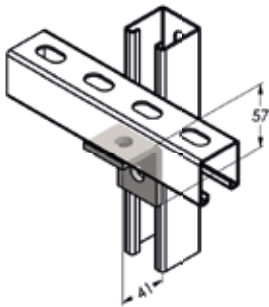
Note: A minimum order may apply on the Product.



90° Angle Fittings

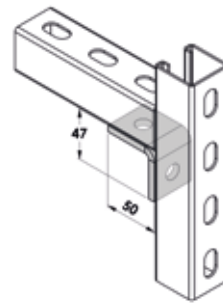
IFBL90D24157 2 Holes Corner Angle

Weight: 15 kg/100 pcs.
Note: A minimum order may apply on the Product.



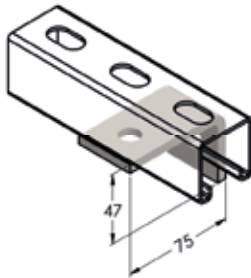
IFBL90D24750 2 Holes Corner Angle

Weight: 15 kg/100 pcs.



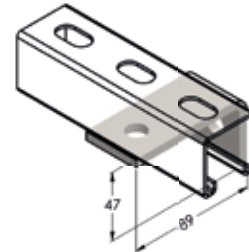
IFBL90D24775 2 Holes Corner Angle

Weight: 20 kg/100 pcs.
Note: A minimum order may apply on the Product.



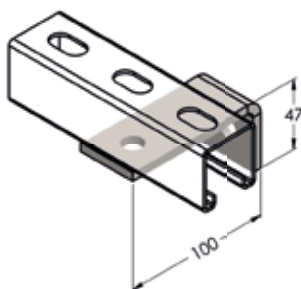
IFBL90D24789 2 Holes Corner Angle

Weight: 22 kg/100 pcs.



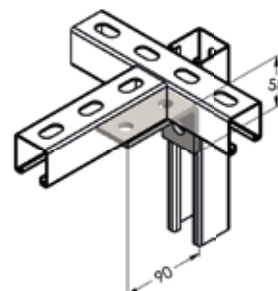
IFBL90D247100 2 Holes Corner Angle

Weight: 24 kg/100 pcs.
Note: A minimum order may apply on the Product.



IFBL90D35590 3 Holes Corner Angle

Weight: 23 kg/100 pcs.
Note: A minimum order may apply on the Product.

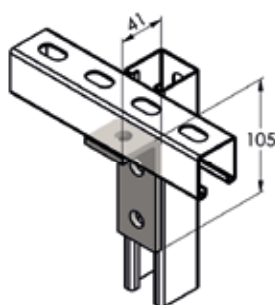


90° Angle Fittings

IFBL90D341105 3 Holes Corner Angle

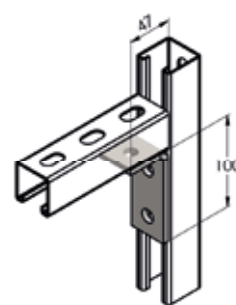
Weight: 23 kg/100 pcs.

Note: A minimum order may apply on the Product.



IFBL90D347100 3 Holes Corner Angle

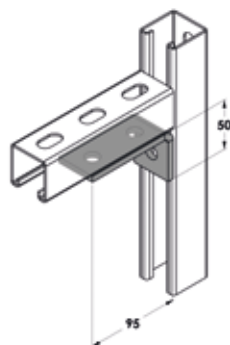
Weight: 24 kg/100 pcs.



IFBL90D35095 3 Holes Corner Angle

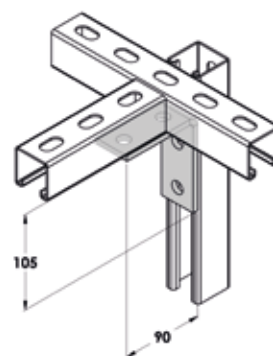
Weight: 23 kg/100 pcs.

Note: A minimum order may apply on the Product.



IFBL90D490105 4 Holes Corner Angle

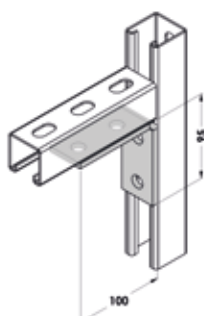
Weight: 32 kg/100 pcs.



IFBL90D495100 4 Holes Corner Angle

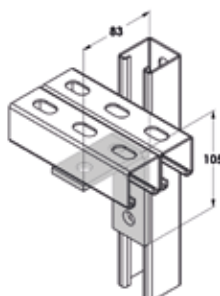
Weight: 32 kg/100 pcs.

Note: A minimum order may apply on the Product.



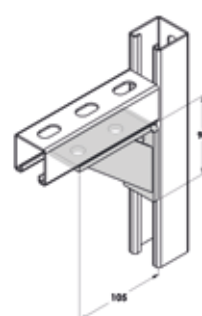
IFBL90D483105 4 Holes Corner Angle

Weight: 31 kg/100 pcs.



IFBL90DH490105 4 Holes Corner Angle (Heavy)

Weight: 41,5 kg/100 pcs.



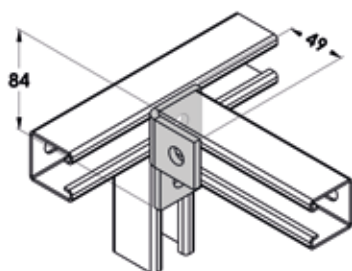
90° Angle Fittings

IFBL90D3R4984

3 Holes Offset Bent Angle (Right)

Weight: 23 kg/100 pcs.

Note: A minimum order may apply on the Product.

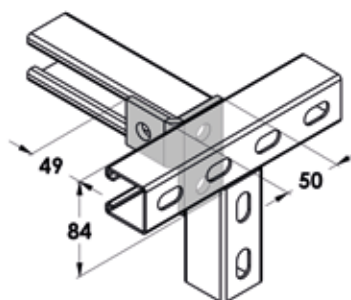


IFBL90D3L4984

3 Holes Offset Bent Angle (Left)

Weight: 23 kg/100 pcs.

Note: A minimum order may apply on the Product.

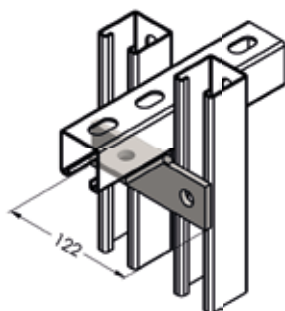


IFBL90D3T122

3 Holes Offset Bent Tee

Weight: 30 kg/100 pcs.

Note: A minimum order may apply on the Product.

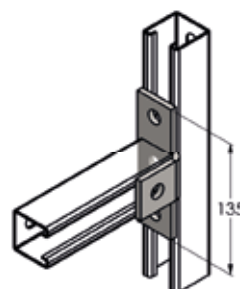


IFBL90D4T135

4 Holes Offset Bent Tee

Weight: 32 kg/100 pcs.

Note: A minimum order may apply on the Product.

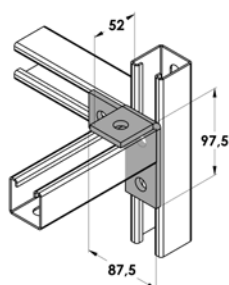


IFBL90D4TR52

4 Holes Offset Bent Angle (Right)

Weight: 32 kg/100 pcs.

Note: A minimum order may apply on the Product.

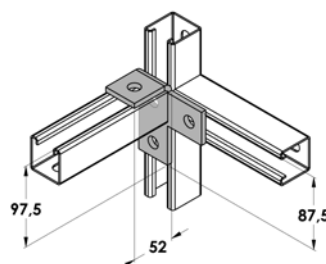


IFBL90D4TL52

4 Holes Offset Bent Angle (Left)

Weight: 32 kg/100 pcs.

Note: A minimum order may apply on the Product.

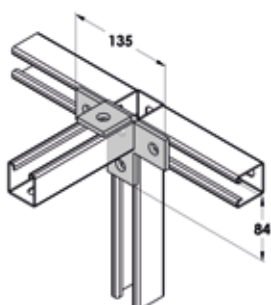


90° Angle Fittings

IFBL90D5X135 **5 Holes Offset Bent Tee**

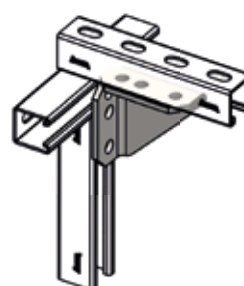
Weight: 40 kg/100 pcs.

Note: A minimum order may apply on the Product.



IFBL90D6W103 **Universal Shelf Bracket**

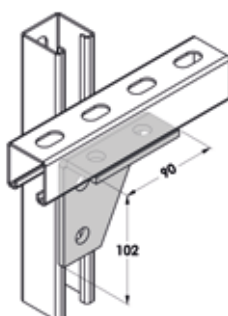
Weight: 60 kg/100 pcs.



IFBL90D4VR41 **4 Holes Corner Gusset (Right)**

Weight: 42 kg/100 pcs.

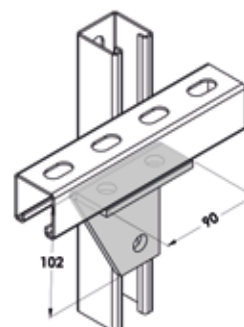
Note: A minimum order may apply on the Product.



IFBL90D4VL41 **4 Holes Corner Gusset (Left)**

Weight: 42 kg/100 pcs.

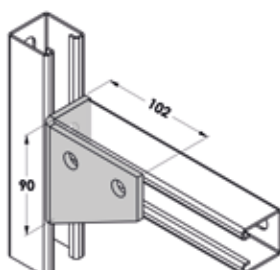
Note: A minimum order may apply on the Product.



IFBL90D4VR47 **4 Holes Corner Gusset (Right)**

Weight: 44 kg/100 pcs.

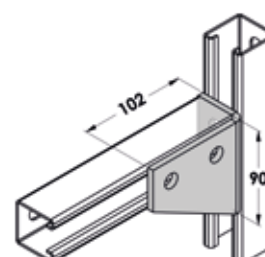
Note: A minimum order may apply on the Product.



IFBL90D4VL47 **4 Holes Corner Gusset (Left)**

Weight: 44 kg/100 pcs.

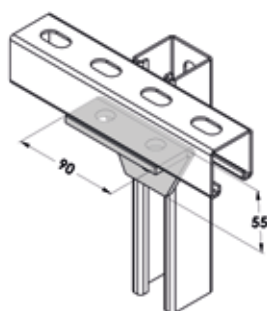
Note: A minimum order may apply on the Product.



90° Angle Fittings

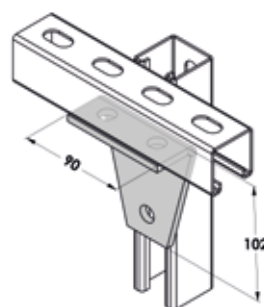
IFBL90D3A90 **3 Holes Gusseted Shelf Angle**

Weight: 29 kg/100 pcs.
Note: A minimum order may apply on the Product.



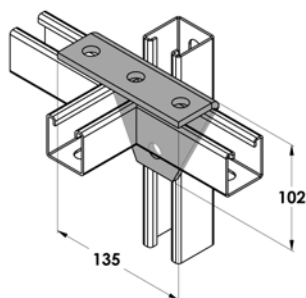
IFBL90D4A90 **4 Holes Gusseted Shelf Angle**

Weight: 42 kg/100 pcs.
Note: A minimum order may apply on the Product.



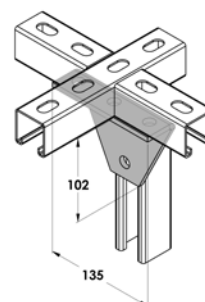
IFBL90D5A47 **5 Holes Gusseted Shelf Angle**

Weight: 63 kg/100 pcs.
Note: A minimum order may apply on the Product.



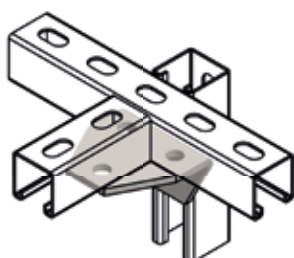
IFBL90D5A41 **5 Holes Gusseted Shelf Angle**

Weight: 60 kg/100 pcs.
Note: A minimum order may apply on the Product.



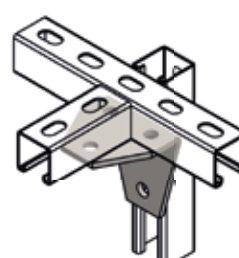
IFBL90D4I55 **4 Holes Joint Corner Connector**

Weight: 42 kg/100 pcs.
Note: A minimum order may apply on the Product.



IFBL90D5I102 **5 Holes Joint Corner Connector**

Weight: 56 kg/100 pcs.
Note: A minimum order may apply on the Product.

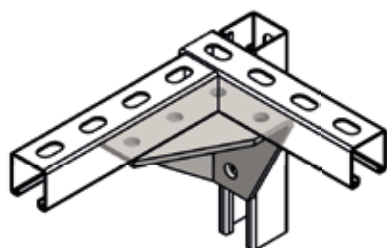


90° Angle Fittings

IFBL90D6CR106 6 Holes Gusseted Corner Connector (Right)

Weight: 102 kg/100 pcs.

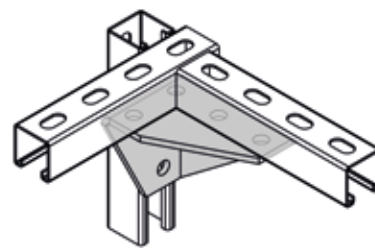
Note: A minimum order may apply on the Product.



IFBL90D6CL106 6 Holes Gusseted Corner Connector (Right)

Weight: 102 kg/100 pcs.

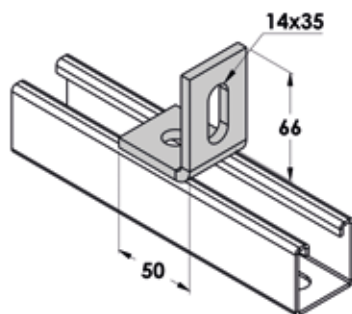
Note: A minimum order may apply on the Product.



IFBL90DIS50 1 Hole Adjustable Corner Angle

Weight: 17 kg/100 pcs.

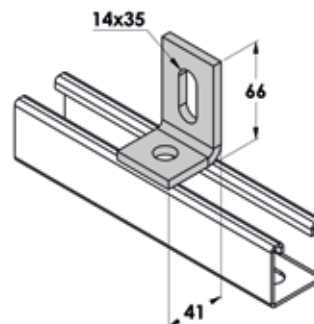
Note: A minimum order may apply on the Product.



IFBL90DIS41 1 Hole Adjustable Corner Angle

Weight: 16 kg/100 pcs.

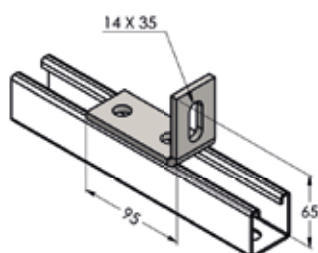
Note: A minimum order may apply on the Product.



IFBL90D2S65 2 Holes Adjustable Corner Angle

Weight: 25 kg/100 pcs.

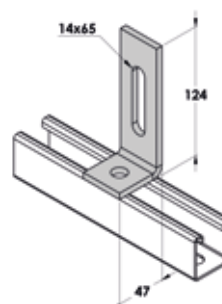
Note: A minimum order may apply on the Product.



IFBL90D1S124 1 Hole Adjustable Corner Angle

Weight: 26 kg/100 pcs.

Note: A minimum order may apply on the Product.



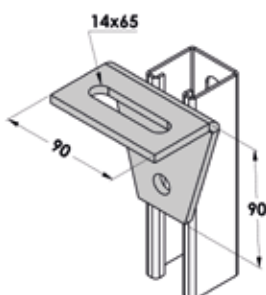
90° Angle Fittings

IFBL90D1AS90

1 Holes Adjustable Corner Angle

Weight: 43 kg/100 pcs.

Note: A minimum order may apply on the Product.

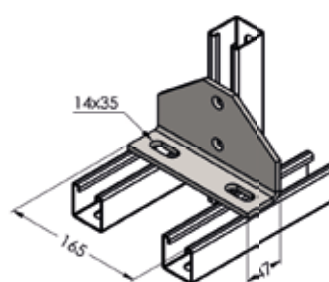


IFBL90D2AS165

2 Holes Adjustable Corner Angle

Weight: 83 kg/100 pcs.

Note: A minimum order may apply on the Product.

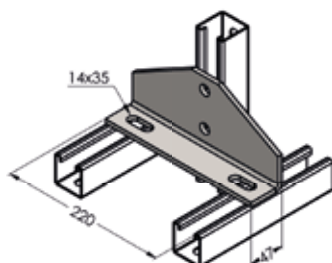


IFBL90D2AS220

2 Holes Adjustable Corner Angle

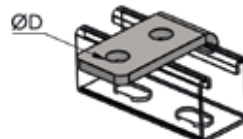
Weight: 111 kg/100 pcs.

Note: A minimum order may apply on the Product.



IFBL90D2M

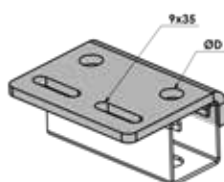
2 Holes Connector Hanger



Code	D	Weight
	mm	kg/100 Pcs.
IFBL90D2M08	9	16
IFBL90D2M10	11	16
IFBL90D2M12	14	16
IFBL90D2M16	17	16
IFBL90D2M20	21	18

IFBL90D2MAS

2 Holes Connector Hanger



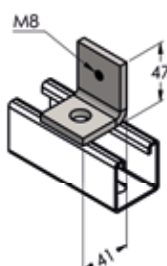
Code	D	Weight
	mm	kg/100 Pcs.
IFBL90D2MAS	14	40.7

IFBL90D1M8

1 Hole M8 Corner Angle

Weight: 14 kg/100 pcs.

Note: A minimum order may apply on the Product.

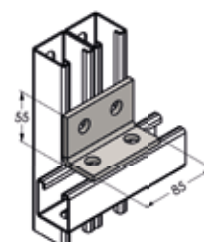


IFBL90D4D5585

4 Holes Corner Angle

Weight: 31 kg/100 pcs.

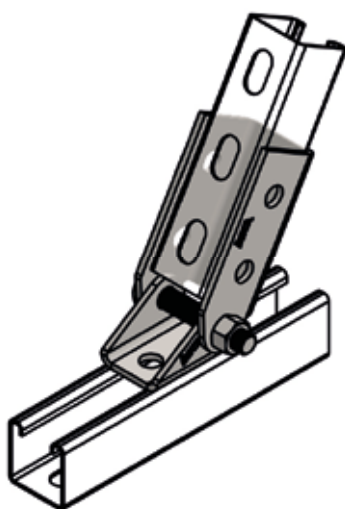
Note: A minimum order may apply on the Product.



Angle Fittings

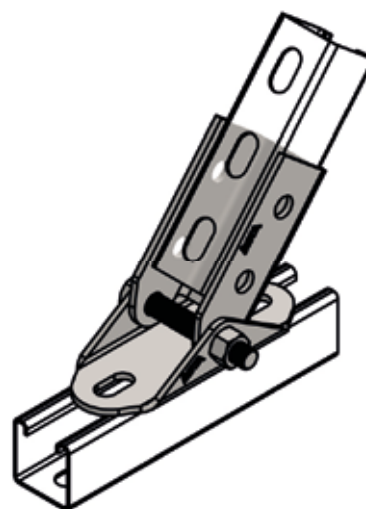
IBSMF1 **1 Hole Hinged Joint**

Weight: 61 kg/100 pcs.



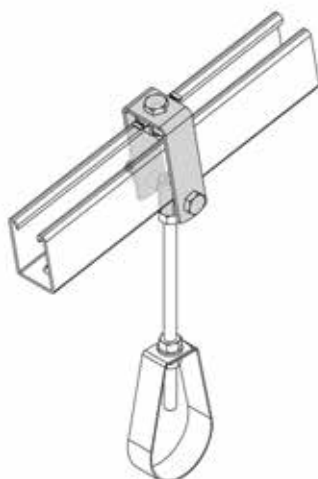
IBSMF2 **2 Holes Hinged Joint**

Weight: 78 kg/100 pcs.



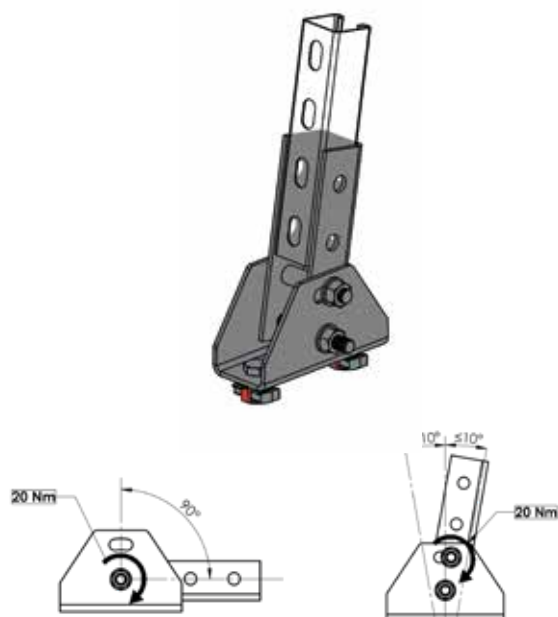
IBSMF3M10 **2 Holes Joint**

Weight: 28 kg/100 pcs.



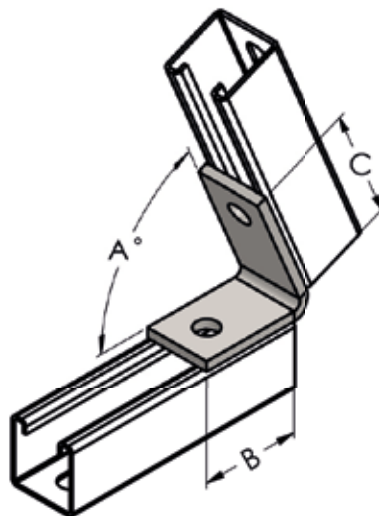
IBSMF3H **2 Holes Joint**

Weight: 166 kg/100 pcs.



Angle Fittings

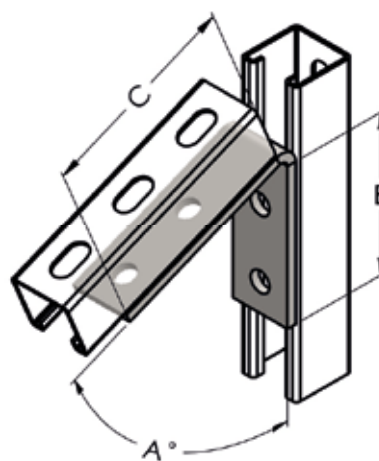
IFBLACD2 2 Holes Closed Angle Connector



Code	A	B	C	Weight
	(°)	mm	mm	kg/100 Pcs.
IFBLACD237	37.5	65	80	25
IFBLACD245	45.0	65	90	27
IFBLACD252	52.5	65	80	26
IFBLACD260	60.0	65	80	26
IFBLACD267	67.5	65	80	26
IFBLACD275	75.0	65	80	26
IFBLACD282	82.5	65	80	26

IFBLACD4 4 Holes Closed Angle Connector

Note: A minimum order may apply on the Product.

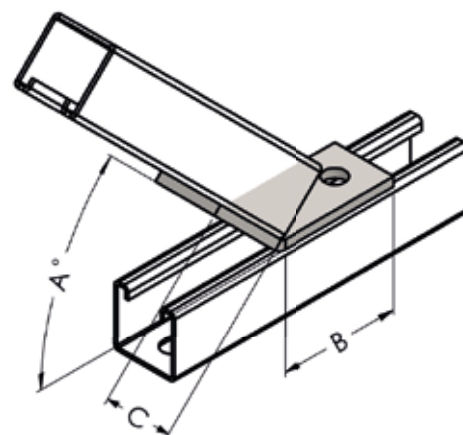


Code	A	B	C	Weight
	(°)	mm	mm	kg/100 Pcs.
IFBLACD437	37.5	110	125	40
IFBLACD445	45.0	110	125	41
IFBLACD452	52.5	110	125	41
IFBLACD460	60.0	110	125	41
IFBLACD467	67.5	110	125	41
IFBLACD475	75.0	110	125	41
IFBLACD482	82.5	110	125	42

Angle Fittings

IFBLAOD2 2 Holes Open Angle Connector

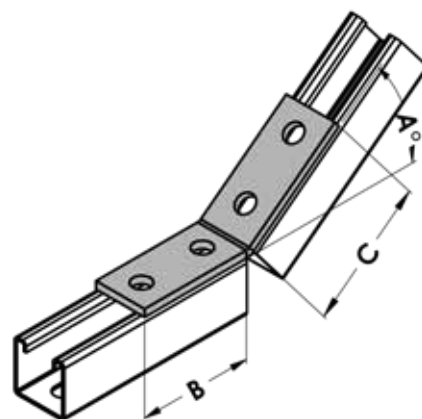
Code	A	B	C	Weight
	(°)	mm	mm	kg/100 Pcs.
IFBLAOD207	7.5	52	83	24
IFBLAOD215	15.0	52	83	24
IFBLAOD222	22.5	52	83	24
IFBLAOD230	30.0	52	83	24
IFBLAOD237	37.5	83	60	26
IFBLAOD245	45.0	76	60	24
IFBLAOD252	52.5	83	60	26
IFBLAOD260	60.0	83	60	26
IFBLAOD267	67.5	83	60	26
IFBLAOD275	75.0	83	60	26
IFBLAOD282	82.5	83	60	26



IFBLAOD4 4 Holes Closed Angle Connector

Note: A minimum order may apply on the Product.

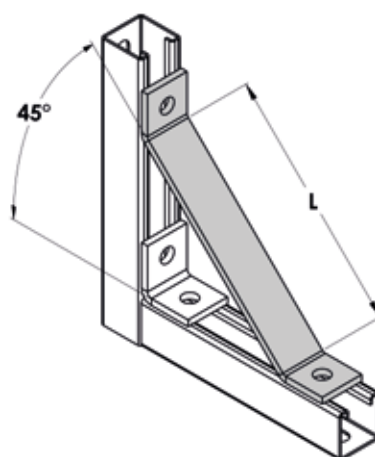
Code	A	B	C	Weight
	(°)	mm	mm	kg/100 Pcs.
IFBLAOD407	7.5	90	95	32
IFBLAOD415	15.0	85	90	30
IFBLAOD422	22.5	85	90	30
IFBLAOD430	30.0	85	90	30
IFBLAOD437	37.5	85	90	30
IFBLAOD445	45.0	85	90	30
IFBLAOD452	52.5	85	90	30
IFBLAOD460	60.0	85	90	30
IFBLAOD467	67.5	85	90	30
IFBLAOD475	75.0	85	90	30
IFBLAOD482	82.5	85	90	30



Braces

IFBLB45 2 Holes 45° Knee Brace

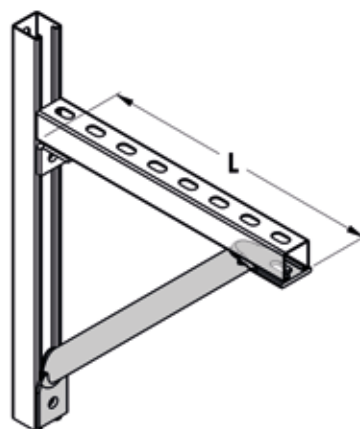
Note: A minimum order may apply on the Product.



Code	L	Weight
	mm	kg/100 Pcs.
IFBLB45200	200	50
IFBLB45300	300	69
IFBLB45400	400	88
IFBLB45500	500	106
IFBLB45600	600	125
IFBLB45900	900	181

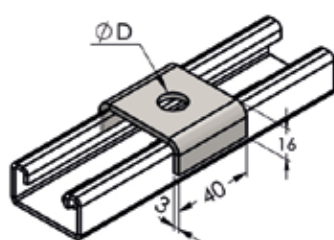
IFBLB 2 Holes 45° Knee Brace

Code	L	Weight
	mm	kg/100 Pcs.
IFBLB400	400	137
IFBLB500	500	169
IFBLB600	600	201
IFBLB700	700	233
IFBLB800	800	264
IFBLB900	900	296
IFBLB1000	1,000	328
IFBLB1150	1,150	376
IFBLB1350	1,350	440
IFBLB1550	1,550	504
IFBLB1800	1,800	583



Clevis Fittings

IFBLCD1 1 Hole U Washer

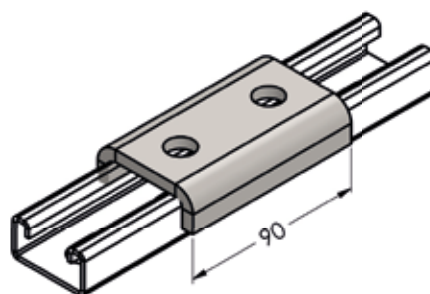


Code	L	Weight
	mm	kg/100 Pcs.
IFBLCD108	9	6
IFBLCD110	11	6
IFBLCD112	13	6

IFBLCD290 2 Holes Splice Clevis For IPG4121

Weight: 31 kg/100 pcs.

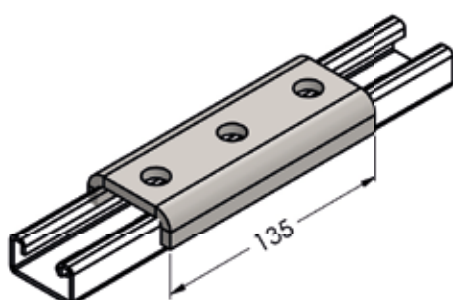
Note: A minimum order may apply on the Product.



IFBLCD3135 3 Holes Splice Clevis For IPG4121

Weight: 26 kg/100 pcs.

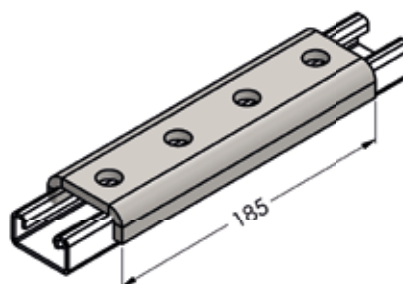
Note: A minimum order may apply on the Product.



IFBLCD4185 4 Holes Splice Clevis For IPG4121

Weight: 63 kg/100 pcs.

Note: A minimum order may apply on the Product.

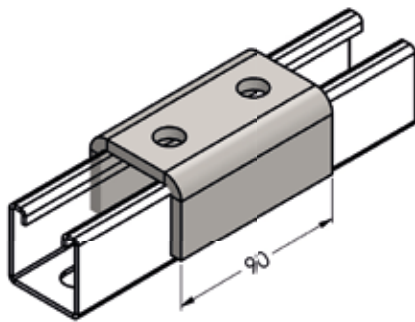


Clevis Fittings

IFBLCD2D90 **2 Holes Splice Clevis**

Weight: 48 kg/100 pcs.

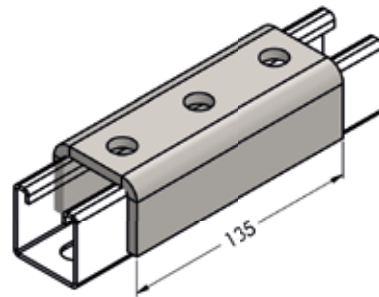
Note: A minimum order may apply on the Product.



IFBLCD3D135 **3 Holes Splice Clevis**

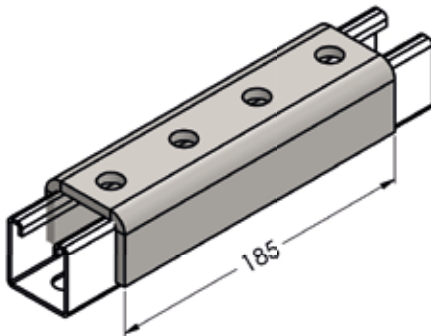
Weight: 72 kg/100 pcs.

Note: A minimum order may apply on the Product.



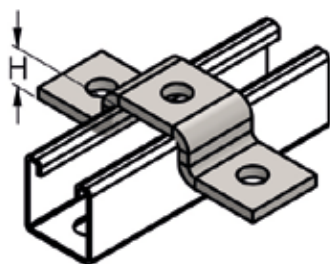
IFBLCD4D185 **4 Holes Splice Clevis**

Weight: 99 kg/100 pcs.



U&Z Shape Fittings

IFBLU 3 Holes U Support

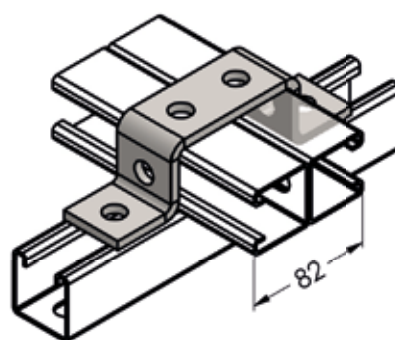


Code	H	Weight
	mm	kg/100 Pcs.
IFBLU21	21	29
IFBLU41	41	36
IFBLU60	60	43
IFBLU82	82	52
IFBLU120	120	66

IFBLUD682 6 Holes U Support

Weight: 42 kg/100 pcs.

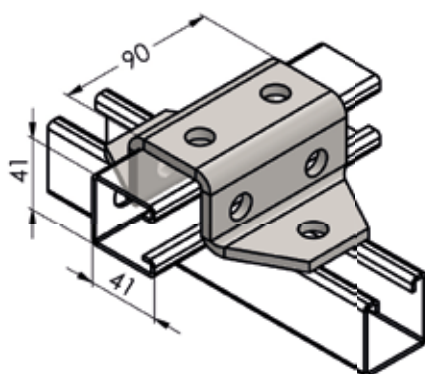
Note: A minimum order may apply on the Product.



IFBLUD841 8 Holes U Support

Weight: 70 kg/100 pcs.

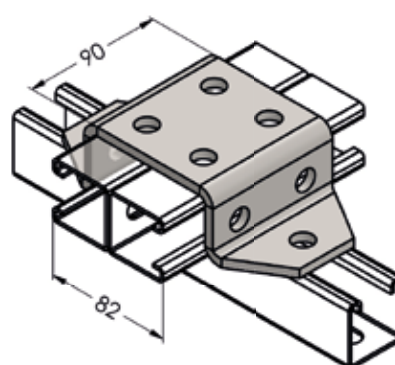
Note: A minimum order may apply on the Product.



IFBLUD1082 10 Holes U Support

Weight: 87 kg/100 pcs.

Note: A minimum order may apply on the Product.

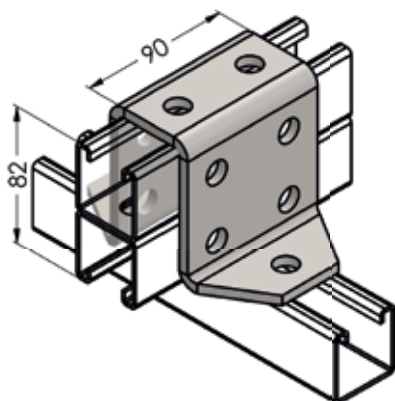


U&Z Shape Fittings

IFBLUD1282 12 Holes U Support

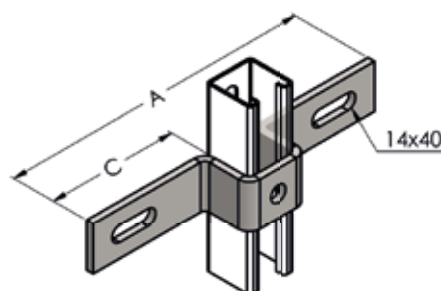
Weight: 103 kg/100 pcs.

Note: A minimum order may apply on the Product.



IFBLUD1S 1 Hole U Support

Note: A minimum order may apply on the Product.

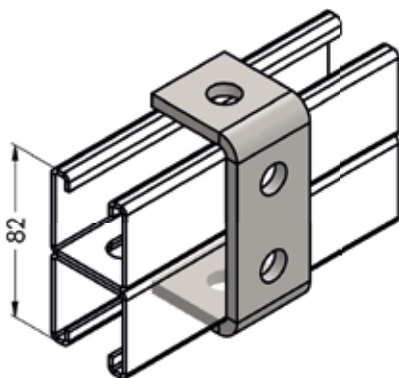


Code	A	C	Weight
	mm	mm	kg/100 Pcs
IFBLUD1S185	185	72.0	42
IFBLUD1S210	210	84.5	47
IFBLUD1S260	260	109.0	56

IFBLUD482 4 Holes U Support

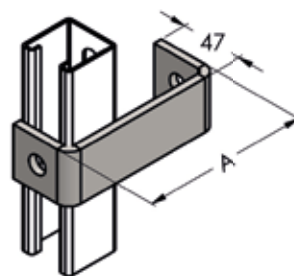
Weight: 29 kg/100 pcs.

Note: A minimum order may apply on the Product.



IFBLUD2 2 Holes Clevis

Note: A minimum order may apply on the Product.



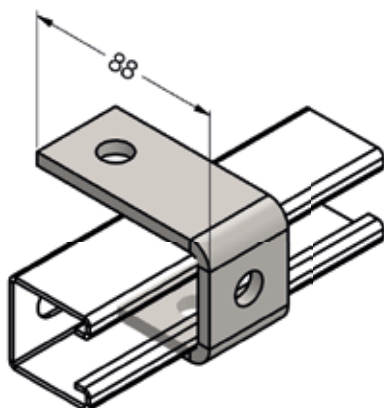
Code	A	Weight
	mm	kg/100 Pcs
IFBLUD2100	100	32
IFBLUD2125	125	36
IFBLUD2150	150	41
IFBLUD2170	175	46
IFBLUD2200	200	50

U&Z Shape Fittings

IFBLUD341 3 Holes Suspension Clevis

Weight: 30 kg/100 pcs.

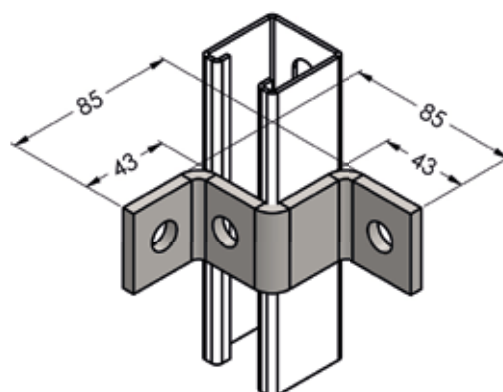
Note: A minimum order may apply on the Product.



IFBLZD341 3 Holes Sheat Corner Connection

Weight: 27 kg/100 pcs.

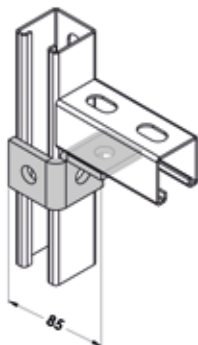
Note: A minimum order may apply on the Product.



Wing Fittings

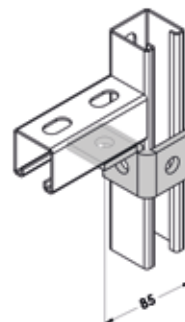
IFBLWD3R41 **3 Holes Corner Connector**

Weight: 22 kg/100 pcs.



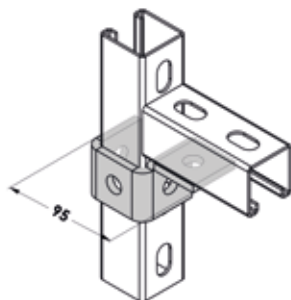
IFBLWD3L41 **3 Holes Corner Connector**

Weight: 22 kg/100 pcs.



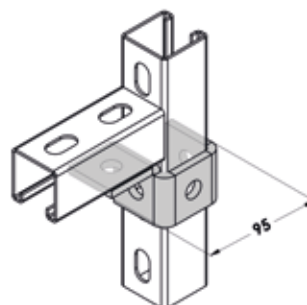
IFBLWD4R41 **4 Holes Corner Connector**

Weight: 30 kg/100 pcs.



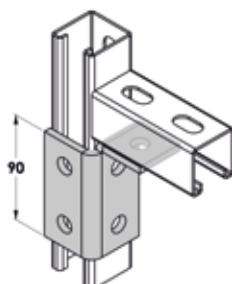
IFBLWD4L41 **4 Holes Corner Connector**

Weight: 30 kg/100 pcs.



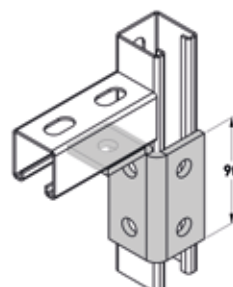
IFBLWD5R41 **5 Holes Corner Connector**

Weight: 41 kg/100 pcs.
Note: A minimum order may apply on the Product.



IFBLWD5L41 **5 Holes Corner Connector**

Weight: 41 kg/100 pcs.
Note: A minimum order may apply on the Product.

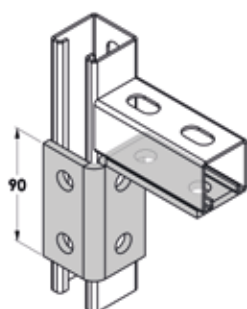


Wing Fittings

IFBLWD6R41 **6 Holes Corner Connector**

Weight: 49 kg/100 pcs.

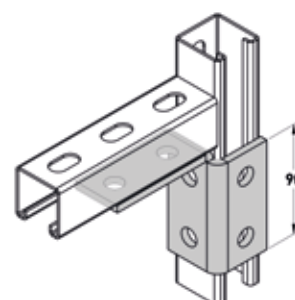
Note: A minimum order may apply on the Product.



IFBLWD6L41 **6 Holes Corner Connector**

Weight: 49 kg/100 pcs.

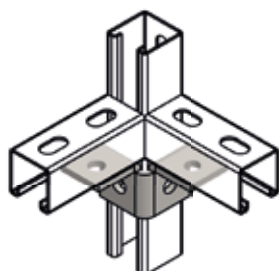
Note: A minimum order may apply on the Product.



IFBLWD4RL41 **4 Holes Double Corner Connector**

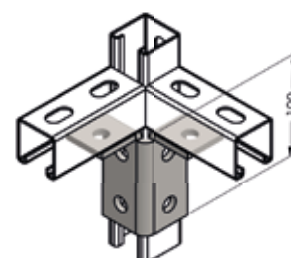
Weight: 31 kg/100 pcs.

Note: A minimum order may apply on the Product.



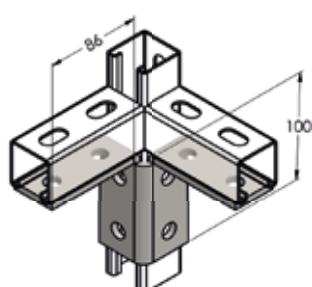
IFBLWD6RL41 **6 Holes Double Corner Connector**

Weight: 50 kg/100 pcs.



IFBLWD8RL41 **8 Holes Double Corner Connector**

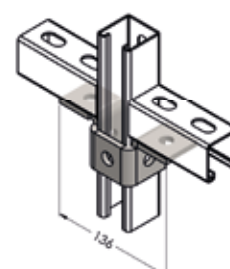
Weight: 66 kg/100 pcs.



IFBLWD5H41 **5 Holes Double Wing Connector**

Weight: 38 kg/100 pcs.

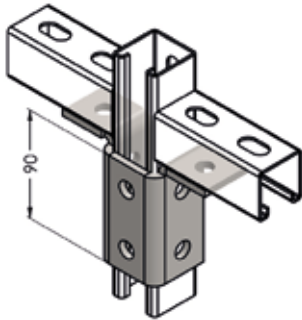
Note: A minimum order may apply on the Product.



Wing Fittings

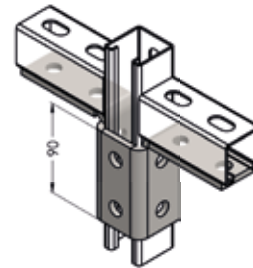
IFBLWD8H41 **8 Holes Double Wing Connector**

Weight: 67 kg/100 pcs.



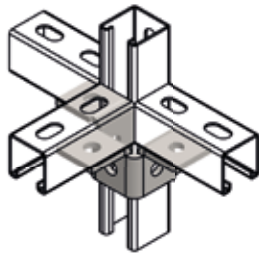
IFBLWD10H41 **10 Holes Double Wing Connector**

Weight: 83 kg/100 pcs.



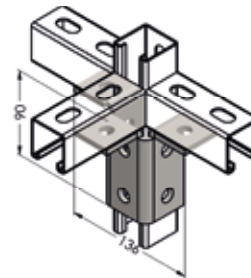
IFBLWD6HV41 **6 Holes Triple Wing Connector**

Weight: 46 kg/100 pcs.



IFBLWD9HV41 **9 Holes Triple Wing Connector**

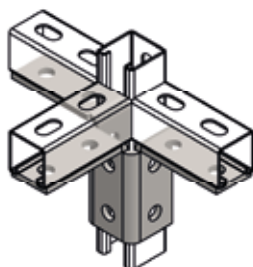
Weight: 75 kg/100 pcs.



IFBLWD12HV41 **12 Holes Triple Wing Connector**

Weight: 101 kg/100 pcs.

Note: A minimum order may apply on the Product.



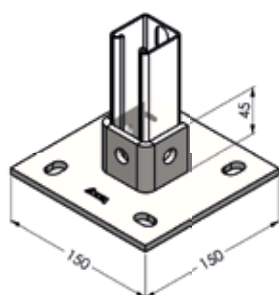
Post Bases

IFBLPD43

4x3 Holes Post Base 41x41 Strut

Weight: 1,3 kg/100pcs.

Note: A minimum order may apply on the Product.

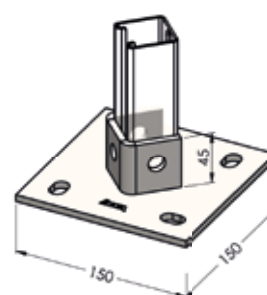


IFBLPD4345

4x3 Holes Post Base 41x41 Strut

Weight: 1,3 kg/100pcs.

Note: A minimum order may apply on the Product.

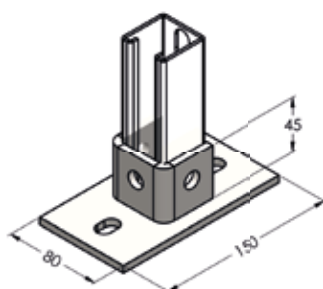


IFBLPOD23

2x3 Holes Post Base 41x41 Strut

Weight: 0,8 kg/100pcs.

Note: A minimum order may apply on the Product.

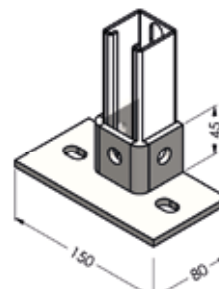


IFBLPKD23

2x3 Holes Post Base 41x41 Strut

Weight: 0,8 kg/100pcs.

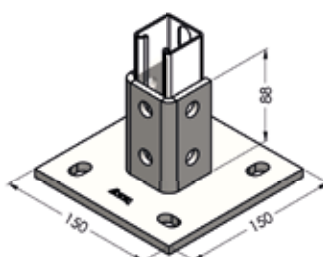
Note: A minimum order may apply on the Product.



IFBLPD46

4x6 Holes Post Base 41x41 Strut

Weight: 1,9 kg/100pcs.

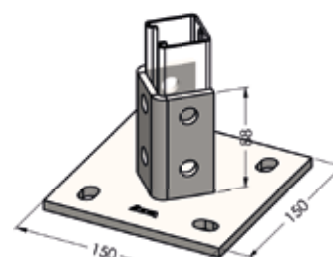


IFBLPD4645

4x6 Holes Post Base 41x41 Strut

Weight: 1,9 kg/100pcs.

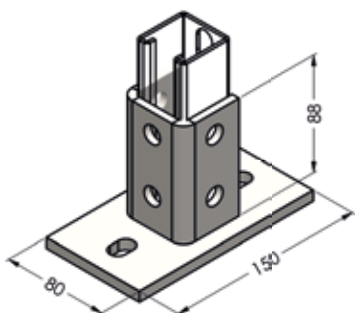
Note: A minimum order may apply on the Product.



Post Bases

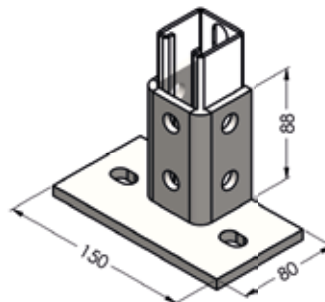
IFBLPOD26 **2x6 Holes Post Base 41x41 Strut**

Weight: 1,2 kg/100pcs.



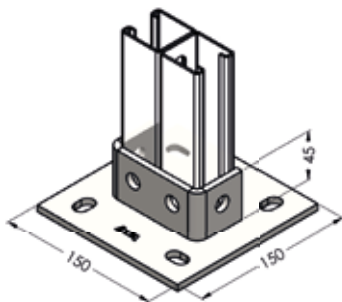
IFBLPKD26 **2x6 Holes Post Base 41x41 Strut**

Weight: 1,2 kg/100pcs.



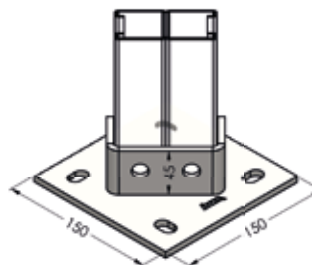
IFBLPDD44 **4x4 Holes Post Base 41x41 Strut**

Weight: 1,4 kg/100pcs.
Note: A minimum order may apply on the Product.



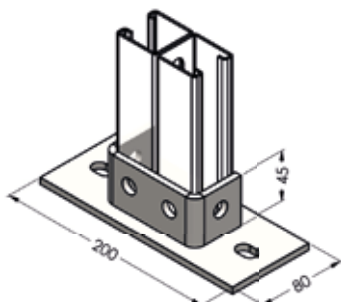
IFBLPDD4445 **4x4 Holes Post Base 41x41 Strut**

Weight: 1,4 kg/100pcs.
Note: A minimum order may apply on the Product.



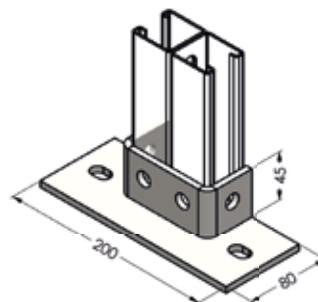
IFBLPODD24 **2x4 Holes Post Base 41x41 Strut**

Weight: 1,1 kg/100pcs.
Note: A minimum order may apply on the Product.



IFBLPKDD24 **2x4 Holes Post Base 41x41 Strut**

Weight: 1,1 kg/100pcs.
Note: A minimum order may apply on the Product.

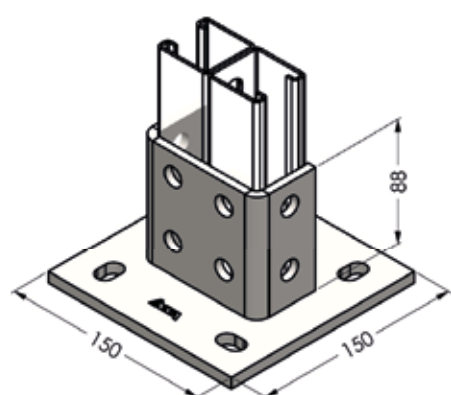


Post Bases

IFBLPDD48

4x8 Holes Post Base 41x41D Strut

Weight: 2 kg/100pcs.

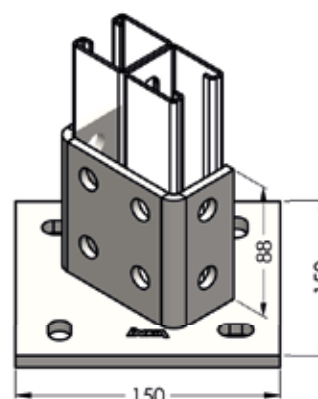


IFBLPDD4845

4x8 Holes Post Base 41x41D Strut

Weight: 2 kg/100pcs.

Note: A minimum order may apply on the Product.

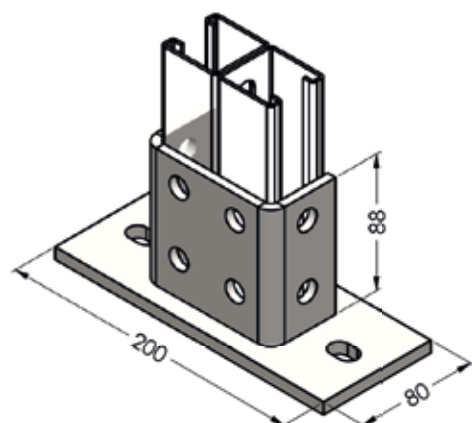


IFBLPODD28

2x8 Holes Post Base 41x41D Strut

Weight: 1,6 kg/100pcs.

Note: A minimum order may apply on the Product.

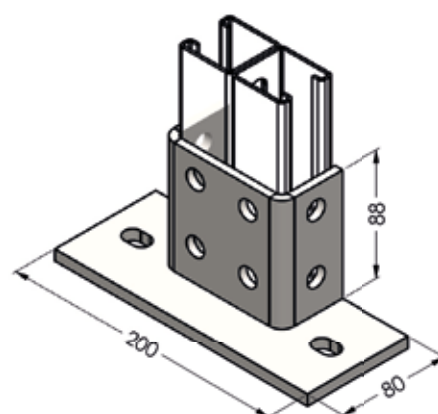


IFBLPKDD28

2x8 Holes Post Base 41x41D Strut

Weight: 1,6 kg/100pcs.

Note: A minimum order may apply on the Product.

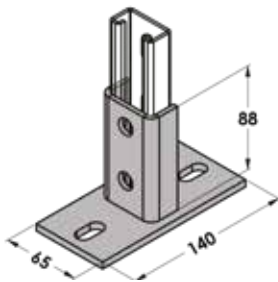


Post Bases

IFBLPD22

2x2 Holes Post Base 41x21 Strut

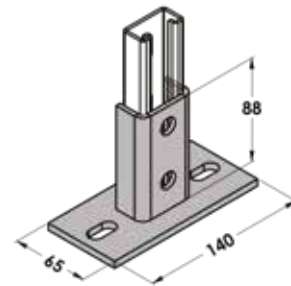
Weight: 63,7 kg/100pcs.



IFBLPY22

2x2 Holes Post Base 41x21 Strut

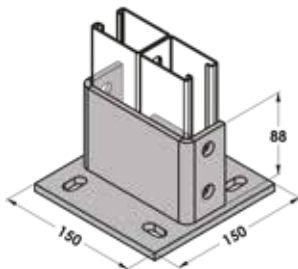
Weight: 63,7 kg/100pcs.



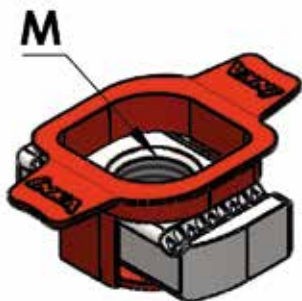
IFBLPD4D4

4x4 Holes Post Base 41x60D Strut

Weight: 218,5 kg/100pcs.

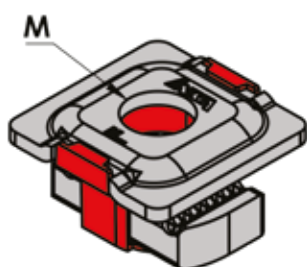


G Profile Nut ISGC



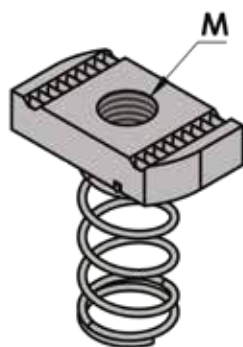
Code	D	Weight
		kg/100 Pcs
ISGC08	M8	4.1
ISGC10	M10	3.9
ISGC12	M12	3.8

G Profile Nut with Washer ISGPI



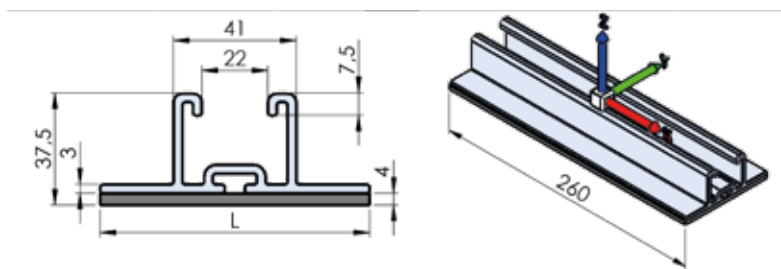
Code	D	M	Weight
			kg/100 Pcs
ISGPI08	8.5	M8	7.4
ISGPI10	10.5	M10	7.1
ISGPI12	13.5	M12	6.8

Spring Nut ISOY



Code	D	Weight
		kg/100 Pcs
ISOY08	M8	4.0
ISOY10	M10	3.9
ISOY12	M12	3.8

Roof Supports BigFoot



Application areas

- Chillers
- Ventilation
- Cable channels
- Air ducts
- Pipelines
- Transitional bridges
- Air conditioners
- Support frame
- Heavy Equipment Supports

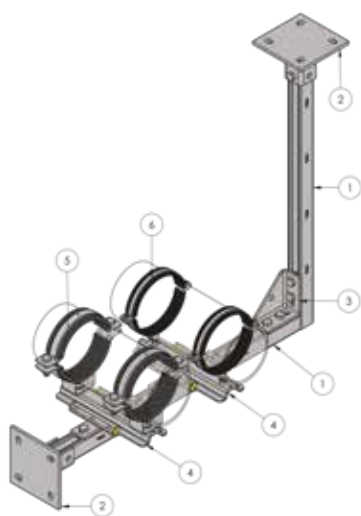
Advantages

- Simple and quick installation
- INKA engineering support
- Design and calculations
- Corrosion protection
- Hot-dip galvanized elements do not require additional priming, painting or processing

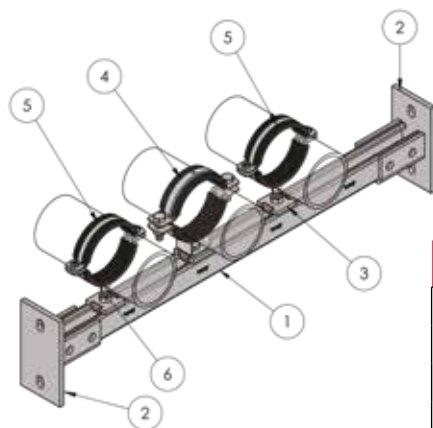
Code	Model	L	Fz	Weight
		mm	kN	kg/100 Pcs.
IFBLABF260090	BIGFOOT-90	90	6	48
IFBLABF260187	BIGFOOT-187	187	10	112
IFBLABF260374	BIGFOOT-374	374	10	183

Application Cases for G Profiles

Type 1



Item No.	Description	Code
1	4lx4lx2 G Profile	IPG414120...
2	4x6 - Hole Post Bases 4lx4l Strut	IFBLPD46
3	Universal Shelf Bracket	IFBL90D6W103
4	Heavy Duty Slider Joined By M12 Bolts To Double Clamps	IWKML509024512
5	Heavy Duty Pipe Clamp With Rubber Profile	IKAK...
6	Std. Pipe Clamp With Rubber Profile & Combi Nut	IKKS...



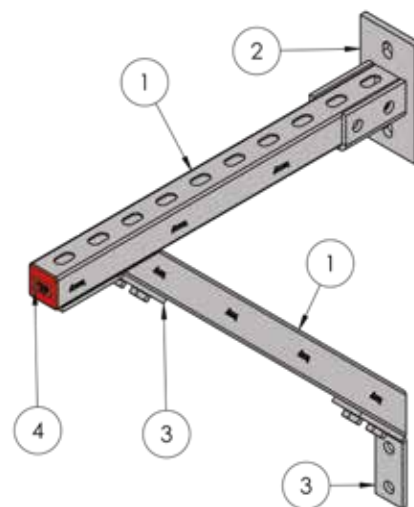
Type 2

Item No.	Description	Code
1	4lx4lx2 G Profile	IPG414120...
2	2x6 - Hole Post Bases 4lx4l Strut	IFBLPOD26
3	Square Washer With Profile Guide	IFBLFGD1...
4	Heavy Duty Pipe Clamp With Rubber Profile	IKAK...
5	Std. Pipe Clamp With Rubber Profile & Combi Nut	IKKS..
6	Threaded Rod	IRRT...

Application Cases for G Profiles

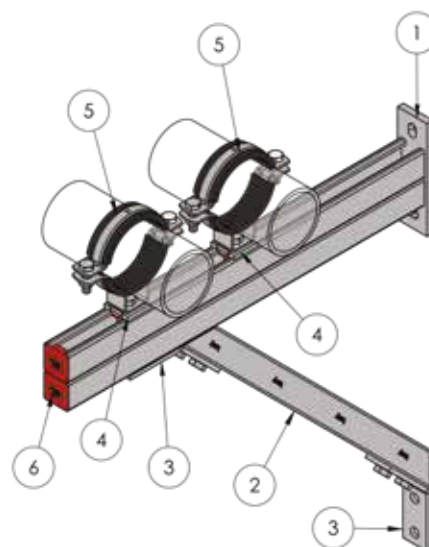
Type 3

Item No.	Description	Code
1	41x41x2 G Profile	IPG414120...
2	2x6 - Hole Post Bases 41x41 Strut	IFBLPOD26
3	2 - Hole Open Angle Connector	IFBLAOD445
4	41x41 Cover	IPGT4141



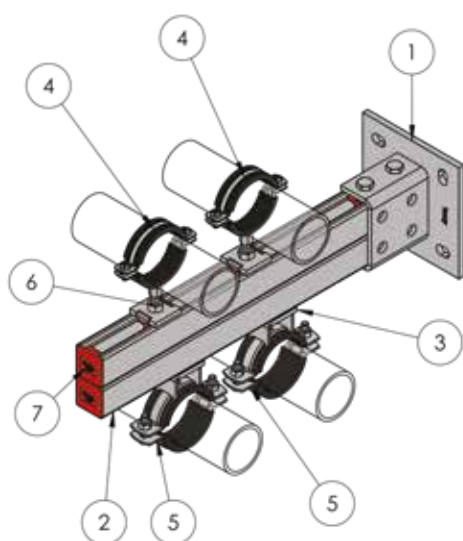
Type 4

Item No.	Description	Code
1	Double Profile Bracket	IWKDG600
2	41x41x2.5 G Profile	IPG414125...
3	2- Hole Open Angle Connector	IFBLAOD445
4	Square Washer With Profile Guide	IFBLFGD1...
5	Heavy Duty Pipe Clamp With Rubber Profile	IKAK...
6	41x41 Cover	IPGT4141

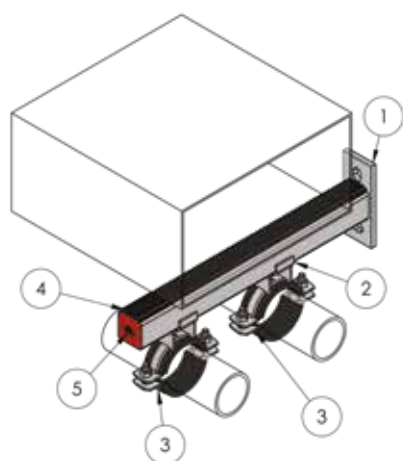


Application Cases for G Profiles

Type 5



Item No.	Description	Code
1	4x8 - Hole Post Bases 4x41D Strut	IFBLPDD48
2	4x4x2 G Double Profile	IPGD414120...
3	Square Washer With Profile Guide	IFBLFGD1...
4	Std. Pipe Clamp With Rubber Profile & Combi Nut	IKKS...
5	Heavy Duty Pipe Clamp With Rubber Profile	IKAK..
6	Threaded Rod	IRRT10...
7	4x41 Cover	IPGT4141



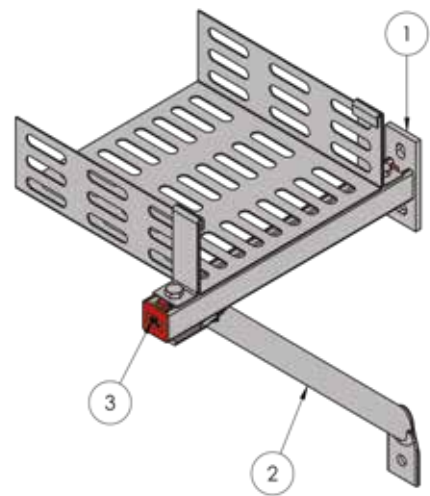
Type 6

Item No.	Description	Code
1	Single Profile Bracket 4x41 Strut	IWKG400
2	1- Hole U Washer	IFBLCD110
3	Heavy Duty Pipe Clamp With Rubber Profile	IKAK..
4	G Profile Rubber	ZLIG
5	4x41 Cover	IPGT4141

Application Cases for G Profiles

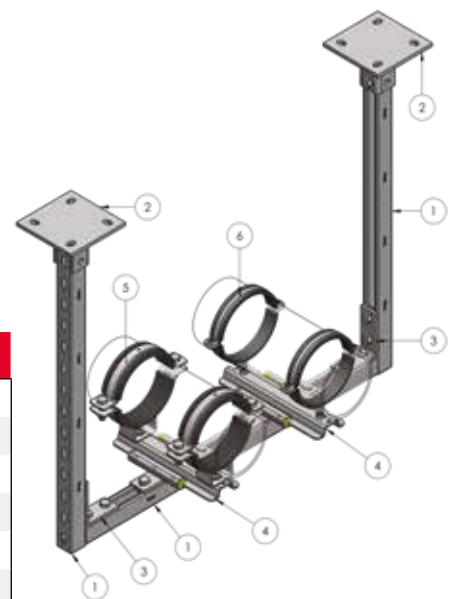
Type 7

Item No.	Description	Code
1	Single Profile Bracket 41x41 Strut	IWKG400
2	2- Hole 45° Pipe Knee Brace	IFBLB400
3	41x41 Cover	IPGT4141

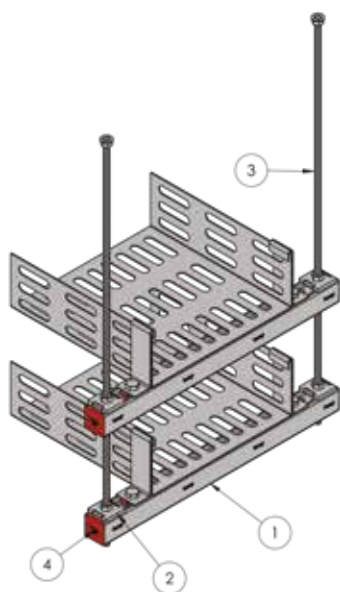


Type 8

Item No.	Description	Code
1	41x41x2 G Profile	IPG414120...
2	4x6 - Hole Post Bases 41x41 Strut	IFBLPD46
3	4- Hole Corner Angle	IFBL90D490105
4	Heavy Duty Slider Joined By M12 Bolts To Double Clamps	IWKML509024512
5	Heavy Duty Pipe Clamp With Rubber Profile	IKAK...
6	Std. Pipe Clamp With Rubber Profile & Combi Nut	IKKS...
7	41x41 Cover	IPGT4141

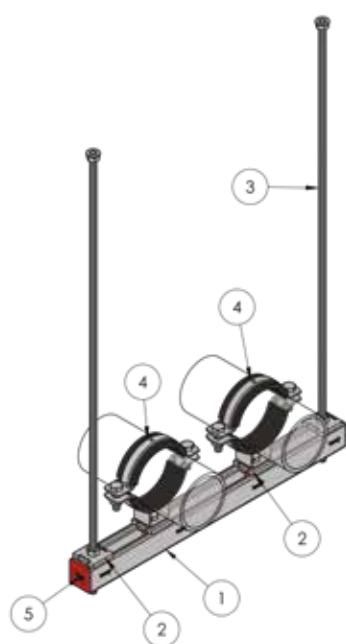


Application Cases for G Profiles



Type 9

Item No.	Description	Code
1	4x4x2 G Profile	IPG414120...
2	Square Washer With Profile Guide	IFBLFGD1...
3	Threaded Rod	IRRT10...
4	4x41 Cover	IPGT4141



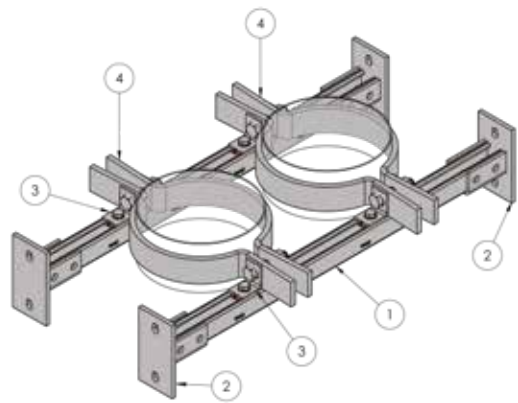
Type 10

Item No.	Description	Code
1	4x4x2.5 G Profile	IPG414125...
2	Square Washer With Profile Guide	IFBLFGD1...
3	Threaded Rod	IRRT08...
4	Heavy Duty Pipe Clamp With Rubber Profile	IKAK...
5	4x41 Cover	IPGT4141

Application Cases for G Profiles

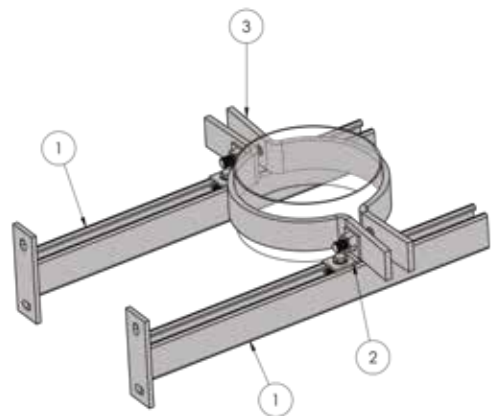
Type 11

Item No.	Description	Code
1	41x41x2.5 G Profile	IPG414125...
2	2x6 - Hole Post Bases 41x41 Strut	IFBLPOD26
3	90° Connecting Plate	IFBLF90...
4	Riser Clamp	IEKRC...

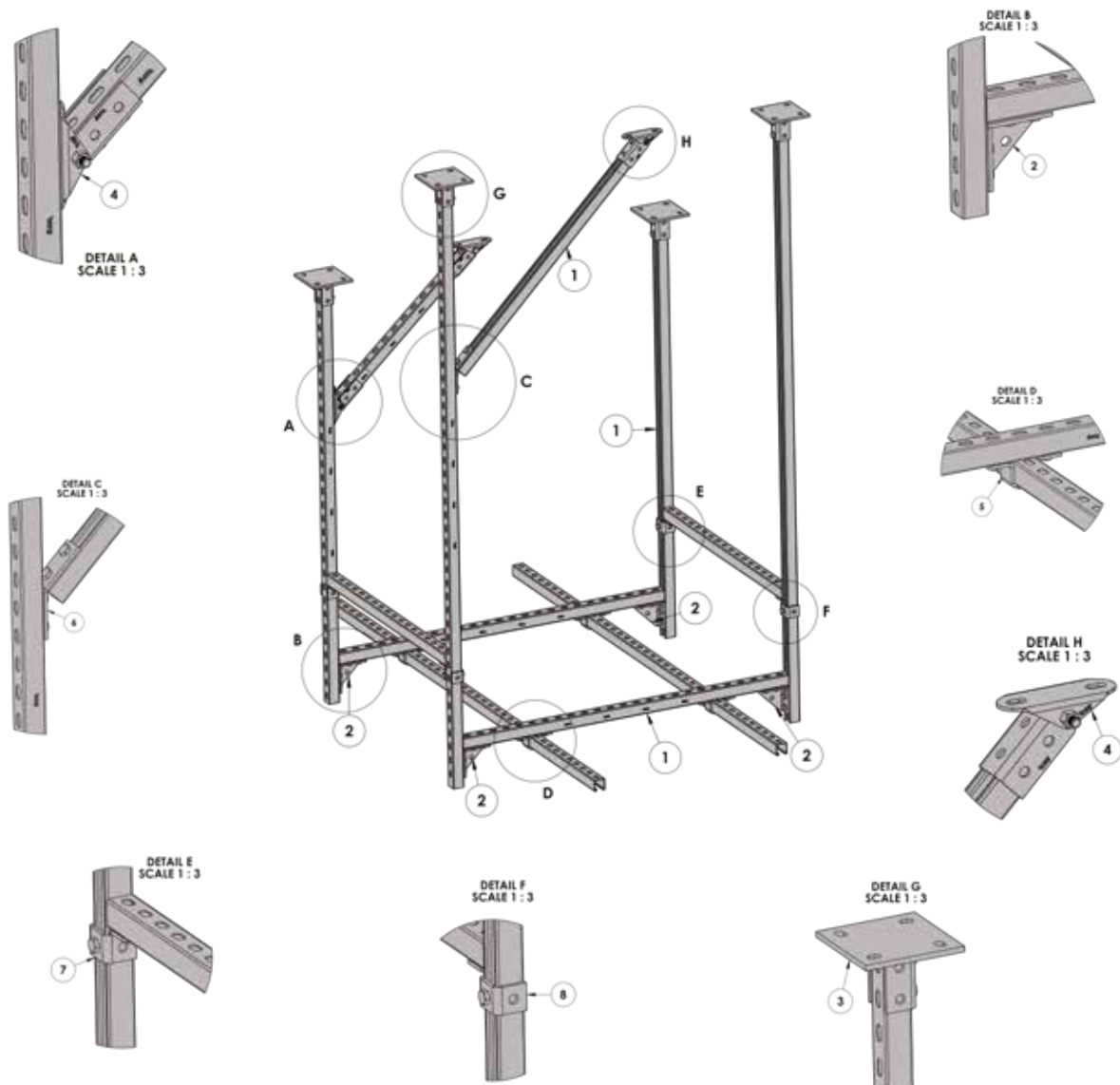


Type 12

Item No.	Description	Code
1	Single Profile Bracket 41x60 Strut	IWKG60600
2	90° Connecting Plate	IFBLF90...
3	Riser Clamp	IEKRC...



Application Cases for G Profiles

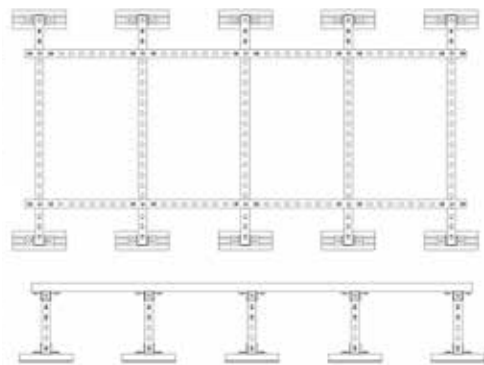
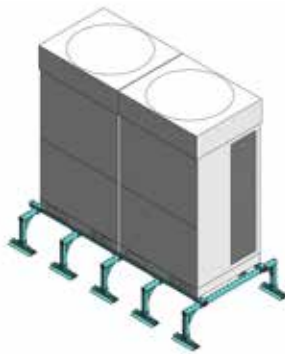


Item No.	Description	Code
1	41x41x2.5 G Profile	IPG414125...
2	Universal Shelf Bracket	IFBL90D6W103
3	4x6-Hole Post Bases 41x41 Strut	IFBLPD46
4	2- Hole Hinged Joint	IBSMF2
5	3- Hole U Support	IFBLU41
6	2- Hole Open Angle Connector	IFBLAOD445
7	3- Hole Corner Connector	IFBLWD3L41
8	3- Hole Corner Connector	IFBLWD3R41

Application Cases for BigFoot

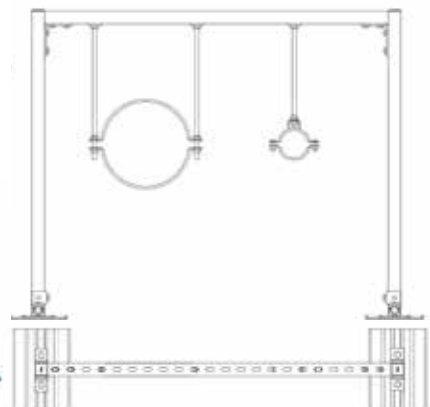
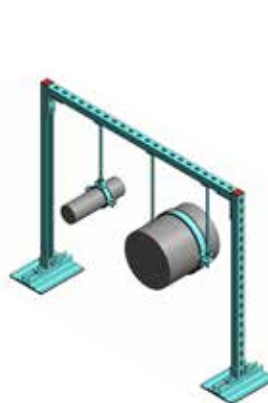
Supports for Chillers

Code	Description
IFBL90DH490105	4-Hole Corner Angle (Heavy)
IFBLABF260090	Light Duty Big Foot L:90
IFBLU41	3-Hole U support (H:41)
IFBLWD5H41	5- Hole Double Wing Connector
IPG414120...	41x41/2.0mm INKA G Profile
ISGC12	M12 INKA G Profile Nut
ZCC1225P	M12*25 Hex Bolt 8.8 DIN933



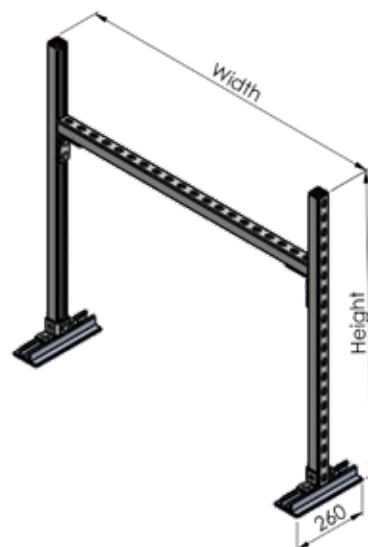
Supports for Pipelines

Code	Description
IFBL90D490105	4-Hole Corner Angle
IFBLABF260187	Medium Duty Big Foot L:187
IFBLF6D113	Square Washer with Profile Guide (M12)
IFBLWD5H41	5- Hole Double Wing Connector
IKAI2050	2" INKA M12 Heavy Duty Pipe Clamp w/ Nut
IKAK072	80-87 INKA Heavy Duty Pipe Clamp (Bracket Type)
IPG414120...	41x41/2.0mm INKA G Profile
IPGT4141	41x41 INKA G Profile End Cup
IRRT12	M12 Threaded Rod
ISGC12	M12 INKA G Profile Nut
ZCC1225P	M12*25 Hex Bolt 8.8 DIN933
ZPS00121P	M12 Plain Washer DIN125
ZSS00121P	M12 Hex Nut DIN934

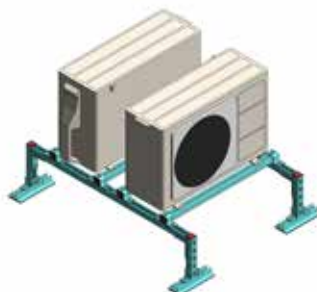
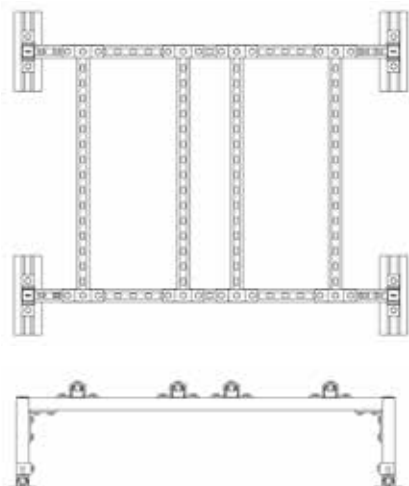


Support Systems

Model	Height	Width	Number of Basis	Weight	Uniform Load
	mm	mm		kg/100 Pcs.	kN
TYPE 1	600	450	4	775	8.5
TYPE 2		600		813	6.5
TYPE 3		900		890	4.5
TYPE 4		1,200		967	3.5
TYPE 5	750	450		852	8.5
TYPE 6		600		890	6.5
TYPE 7		900		967	4.5
TYPE 8		1,200		1,044	3.5
TYPE 9	1,050	450		1,006	8.5
TYPE 10		600		1,044	6.5
TYPE 11		900		1,121	4.5
TYPE 12		1,200		1,198	3.5
TYPE 13	1,350	450		1,160	8.5
TYPE 14		600		1,198	6.5
TYPE 15		900		1,275	4.5
TYPE 16		1,200		1,352	3.5

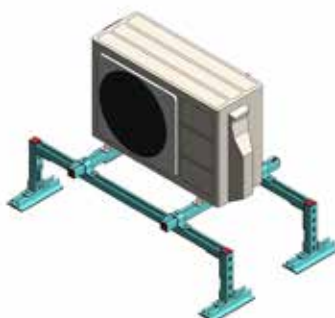
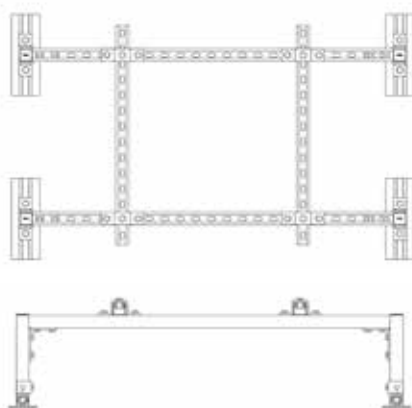


Application Cases for BigFoot Support Frames



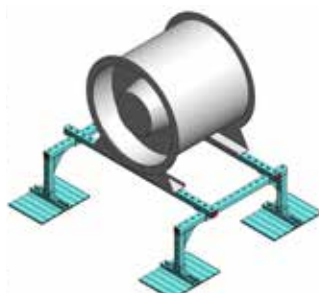
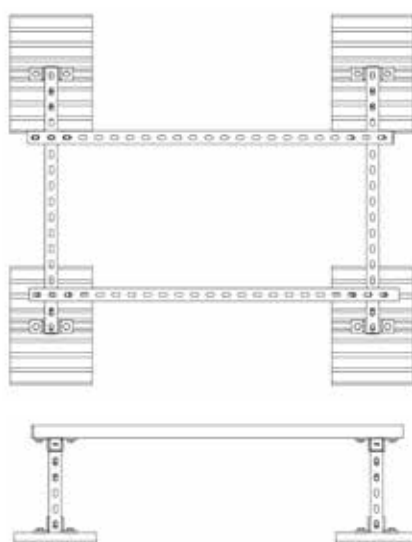
Code	Description
IFBL90D490105	4-Hole Corner Angle
IFBLABF260090	Light Duty Big Foot L:90
IFBLU41	3-Hole U support (H:41)
IFBLWD5H41	5- Hole Double Wing Connector
IPG414120...	41x41/2.0mm INKA G Profile
ISC12	M12 INKA C Profile Nut
ISGC12	M12 INKA G Profile Nut
ZCC1225P	M12*25 Hex Bolt 8.8 DIN933

Supports for Air Conditioners



Code	Description
IFBL90D490105	4-Hole Corner Angle
IFBLABF260090	Light Duty Big Foot L:90
IFBLU41	3-Hole U support (H:41)
IFBLWD5H41	5- Hole Double Wing Connector
IPG414120...	41x41/2.0mm INKA G Profile
IPGT4141	41x41 INKA G Profile End Cup
ISC12	M12 INKA C Profile Nut
ISGC12	M12 INKA G Profile Nut
ZCC1225P	M12*25 Hex Bolt 8.8 DIN933

Supports for Fans

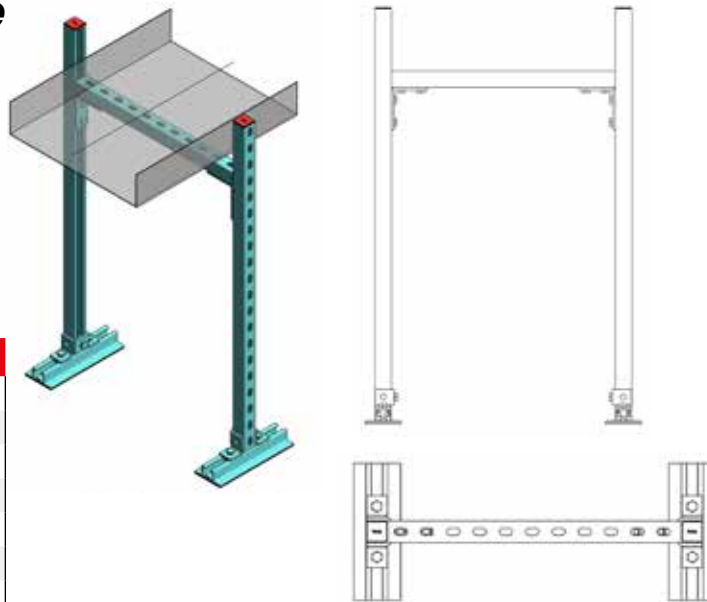


Code	Description
IFBL90DH490105	4-Hole Corner Angle (Heavy)
IFBLABF260374	Heavy Duty Big Foot L:360
IFBLU41	3-Hole U support (H:41)
IFBLWD5H41	5- Hole Double Wing Connector
IPG414120...	41x41/2.0mm INKA G Profile
IPGT4141	41x41 INKA G Profile End Cup
ISGC12	M12 INKA G Profile Nut
ZCC1225P	M12*25 Hex Bolt 8.8 DIN933

Application Cases for BigFoot

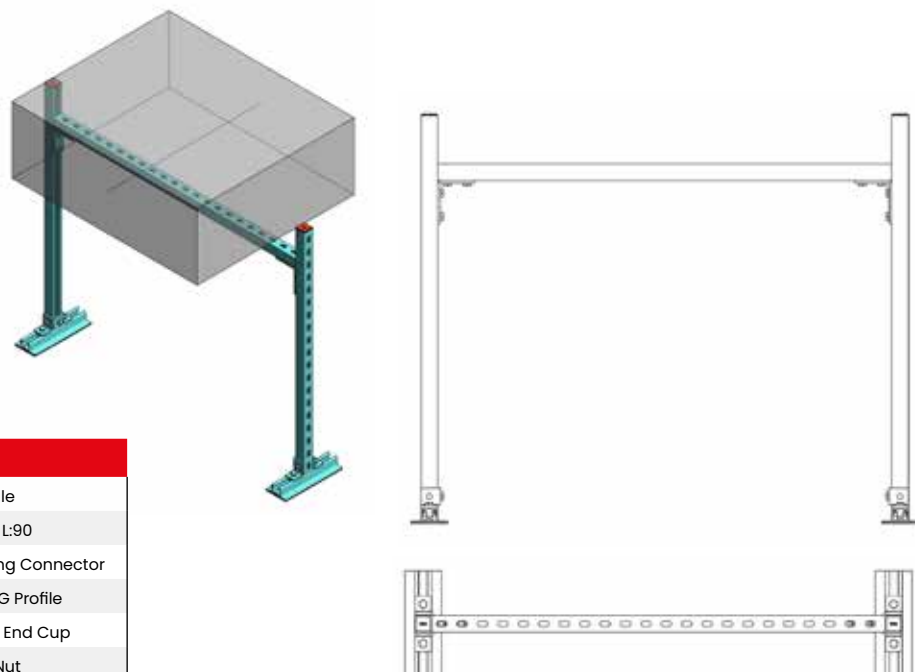
Supports for Cable Ducts

Code	Description
IFBL90D490105	4-Hole Corner Angle
IFBLABF260090	Light Duty Big Foot L:90
IFBLWD5H41	5- Hole Double Wing Connector
IPG414120...	41x41/2.0mm INKA G Profile
IPGT4141	41x41 INKA G Profile End Cup
ISGC12	M12 INKA G Profile Nut
ZCC1225P	M12*25 Hex Bolt 8.8 DIN933



Supports for Air Ducts

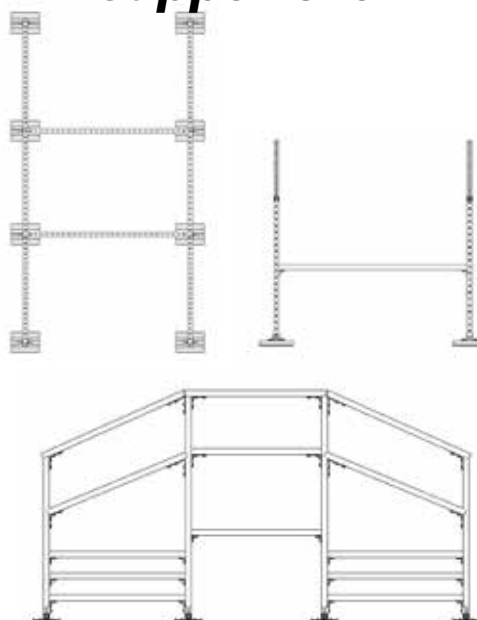
Code	Description
IFBL90D490105	4-Hole Corner Angle
IFBLABF260090	Light Duty Big Foot L:90
IFBLWD5H41	5- Hole Double Wing Connector
IPG414120...	41x41/2.0mm INKA G Profile
IPGT4141	41x41 INKA G Profile End Cup
ISGC12	M12 INKA G Profile Nut
ZCC1225P	M12*25 Hex Bolt 8.8 DIN933



Application Cases for BigFoot Supports for Bridges



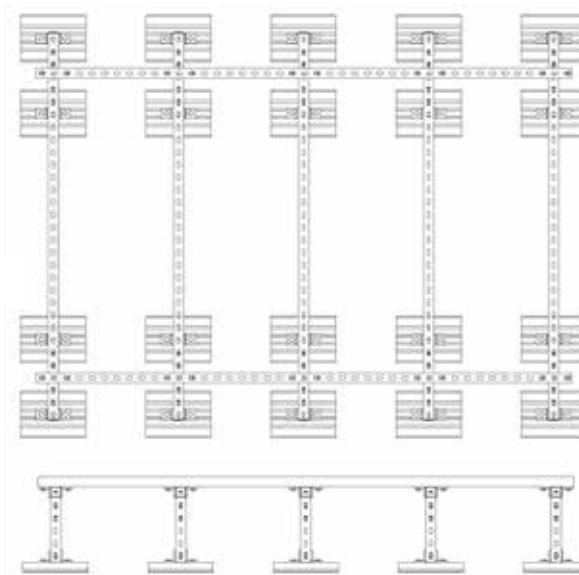
Code	Description
IFBL90D24750	2-Hole Corner Angle
IFBL90D490105	4-Hole Corner Angle
IFBLABF260187	Medium Duty Big Foot L:187
IFBLACD467	4- Hole Closed Angle Connector 67.5°
IFBLAOD467	4- Hole Open Angle Connector
IFBLWD4RL41	4-Hole Double Corner Connector
IFBLWD5H41	5- Hole Double Wing Connector
IPG4141202000	41x41/2mm INKA G Profile (2000mm)
ISC12	M12 INKA C Profile Nut
ISGC12	M12 INKA G Profile Nut
ZCC1225P	M12*25 Hex Bolt 8.8 DIN933



Supports for Heavy Equipment



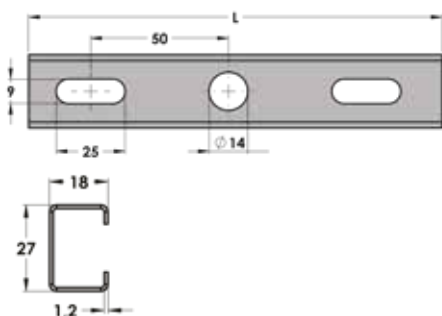
Code	Description
IFBL90DH490105	4-Hole Corner Angle (Heavy)
IFBLABF260187	Medium Duty Big Foot L:187
IFBLU41	3-Hole U support (H:41)
IFBLWD5H41	5- Hole Double Wing Connector
IPG414120...	41x41/2.0mm INKA G Profile
IPGT4141	41x41 INKA G Profile End Cup
ISGC12	M12 INKA G Profile Nut
ZCC1225P	M12*25 Hex Bolt 8.8 DIN933



C PROFILE SYSTEMS



IPC2718 – C Profile



Pre-Galvanized

- Material: S250GD (1.0242)
- Finish: Pre-galvanized in accordance with DIN EN 10346 designation Z275

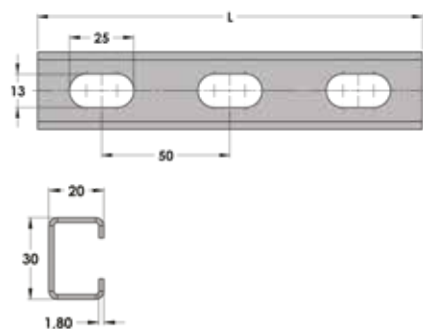
HCR

- Material: DC01 Carbon steel in accordance with DIN EN 10130
- Finish: High Corrosion Resistant (HCR) details can be found on page 256

Ordering

- Available Thickness (T): 1.2mm
- Available Length (L): 2m, 3m & 6m

IPC3020 – C Profile



Pre-Galvanized

- Material: S250GD (1.0242)
- Finish: Pre-galvanized in accordance with DIN EN 10346 designation Z275

HCR

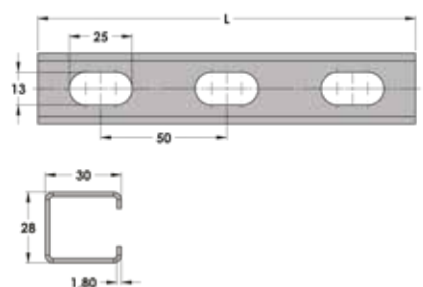
- Material: S235 Carbon steel in accordance with DIN EN 10025-2
- Finish: High Corrosion Resistant (HCR) details can be found on page 256

Ordering

- Available Thickness (T): 1.8 mm
- Available Length (L): 2m, 3m & 6m

Note: A minimum order may apply on the Product

IPC2830 – C Profile



Pre-Galvanized

- Material: S250GD (1.0242)
- Finish: Pre-galvanized in accordance with DIN EN 10346 designation Z275

HCR

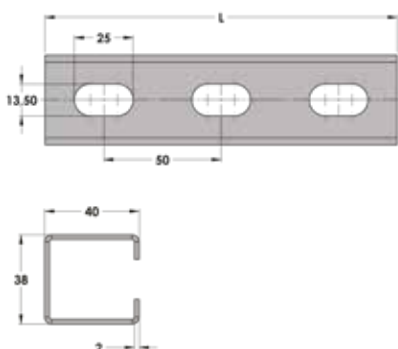
- Material: S235 Carbon steel in accordance with DIN EN 10025-2
- Finish: High Corrosion Resistant (HCR) details can be found on page 256

Ordering

- Available Thickness (T): 1.8 mm
- Available Length (L): 2m, 3m & 6m

Note: A minimum order may apply on the Product

IPC3840 – C Profile



Pre-Galvanized

- Material: S250GD (1.0242)
- Finish: Pre-galvanized in accordance with DIN EN 10346 designation Z275

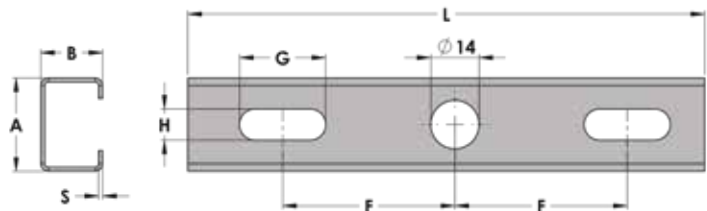
HCR

- Material: S235 Carbon steel in accordance with DIN EN 10025-2
- Finish: High Corrosion Resistant (HCR) details can be found on page 256

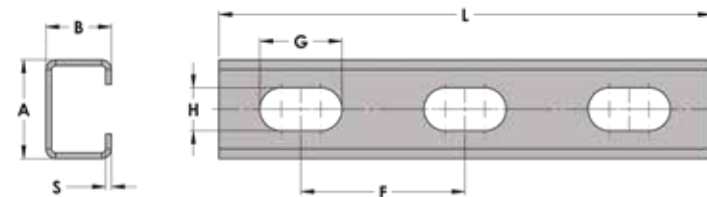
Ordering

- Available Thickness (T): 2 mm
- Available Length (L): 2m, 3m & 6m

Technical Data for C Profiles

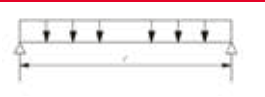
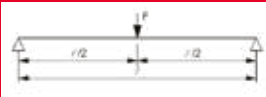


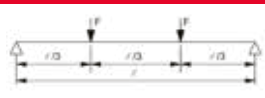
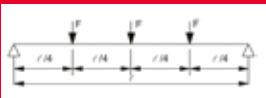
(For 27x18 C Profile)



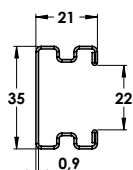
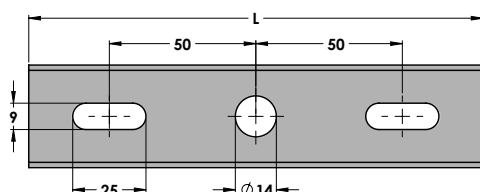
(For 30x20, 28x30 and 38x40 C Profiles)

Code	Size	A	B	s	M	G	H	F	L	Weight
	mm × mm × mm	mm	mm	mm	mm	mm	mm	mm	mm	kg/m
IPC2718122000	27 × 18 × 1.2	27	18	1.2	15	25	9.0	50	2,000	0.60
IPC3020182000	30 × 20 × 1.8	30	20	1.8	15	25	13.5	50	2,000	0.97
IPC2830182000	28 × 30 × 1.8	28	30	1.8	15	25	13.5	50	2,000	1.19
IPC3840202000	38 × 40 × 2	38	40	2.0	17	25	13.5	50	2,000	1.90

F (N)											
		N					Maximum Recom. Load (N)				
		L (mm)					L (mm)				
Code	Size	500	1,000	1,500	2,000	3,000	500	1,000	1,500	2,000	3,000
	mm × mm × mm										
IPC271812...	27 × 18 × 1.2	793	311	132	55	12	398	154	65	32	7
IPC302018...	30 × 20 × 1.8	1,437	589	254	108	28	722	292	125	63	16
IPC283018...	28 × 30 × 1.8	2,472	1,232	670	301	106	1,238	616	330	177	63
IPC384020...	38 × 40 × 2	5,735	2,865	2,108	934	380	2,870	1,432	944	572	230

F (N)											
		N					Maximum Recom. Load (N)				
		L (mm)					L (mm)				
Code	Size	500	1,000	1,500	2,000	3,000	500	1,000	1,500	2,000	3,000
	mm × mm × mm										
IPC271812...	27 × 18 × 1.2	298	104	44	19	4	198	64	26	13	3
IPC302018...	30 × 20 × 1.8	540	197	85	37	9	360	122	51	25	6
IPC283018...	28 × 30 × 1.8	927	462	224	103	37	618	307	139	73	26
IPC384020...	38 × 40 × 2	2,150	1,075	703	336	135	1,435	716	437	240	96

IPCPWR3521 Power C Profile



Pre-Galvanized

- Material: S250GD (1.0242)
- Finish: Pre-galvanized in accordance with DIN EN 10346 designation Z275

HCR

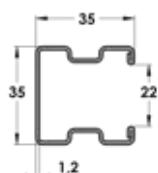
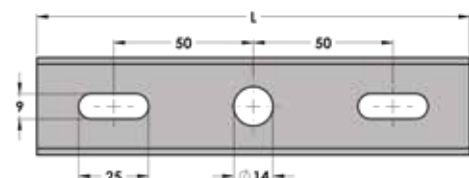
- Material: S235JR (1.0038) Carbon steel in accordance with DIN EN 10025
- Finish: High Corrosion Resistant (HCR) details can be found on page 256

Ordering

- Available Thickness (T): 0.9 mm
- Available Length (L): 2mt

Note: A minimum order may apply on the Product

IPCPWR3535 Power C Profile



Pre-Galvanized

- Material: S250GD (1.0242)
- Finish: Pre-galvanized in accordance with DIN EN 10346 designation Z275

HCR

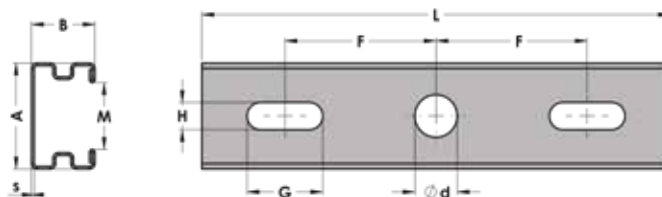
- Material: S235JR (1.0038) Carbon steel in accordance with DIN EN 10025
- Finish: High Corrosion Resistant (HCR) details can be found on page 256

Ordering

- Available Thickness (T): 1.2 mm
- Available Length (L): 2m

Note: A minimum order may apply on the Product

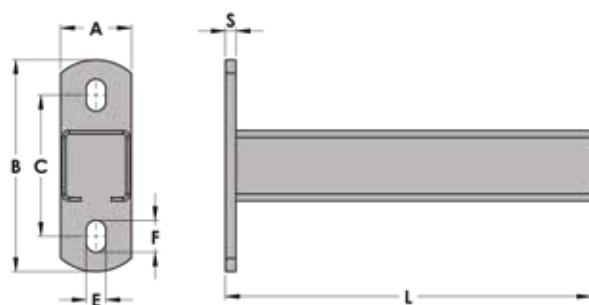
Technical Data for Power C Profiles



Code	Size	A	B	S	M	G × H	Ød	F	L
	mm × mm × mm	mm	mm	mm	mm	mm × mm	mm	mm	mm
IPCPWR3521092000	35 × 21 × 0.9	35	21	0.9	22	9 × 25	14	50	2,000
IPCPWR3535122000	35 × 35 × 1.2	35	35	1.2	22	9 × 25	14	50	2,000

F (N)											
		N					Maximum Recom. Load (N)				
		L (mm)					L (mm)				
Code	Size mm × mm × mm	500	1,000	1,500	2,000	3,000	500	1,000	1,500	2,000	3,000
IPCPWR352109...	35 × 21 × 0.9	1,130	479	207	89	24	566	237	101	52	14
IPCPWR353512...	35 × 35 × 1.2	3,040	1,518	946	431	161	1,524	758	466	254	98

F (N)											
		N					Maximum Recom. Load (N)				
		L (mm)					L (mm)				
Code	Size mm × mm × mm	500	1,000	1,500	2,000	3,000	500	1,000	1,500	2,000	3,000
IPCPWR352109...	35 × 21 × 0.9	425	160	69	30	8	283	99	42	22	6
IPCPWR353512...	35 × 35 × 1.2	1,140	569	315	148	57	761	378	195	105	40



C Profile Console

Material

- Carbon Steel

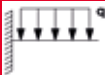
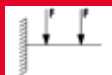
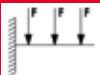
Service

- Multi purpose hanging and fixing element. Provides fast, easy and safe supporting of ducts and pipes. It is economical and strong. Provides easy and safe assembly.
- M8, M10 and M12 bolts, threaded rods and hammer head bolts can be used as fasteners.

Finish

- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 - EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

Code	HCR Code	Channel Size	Channel Length	Channel Slot Size	Distance Between Two Channel Slots	Fixing Plate Size (S x A x B)	Distance Between Fixing Plates Holes (C)	Fixing Plate Slot Size (E x F)
		mm x mm x mm	mm	mm x mm	mm	mm x mm x mm	mm	mm x mm
IWKC203840200	IWKC203840200H	38 x 40 x 2	206	13.5 x 25	50	6 x 40 x 120	80	11 x 18
IWKC203840300	IWKC203840300H	38 x 40 x 2	306	13.5 x 25	50	6 x 40 x 120	80	11 x 18
IWKC203840400	IWKC203840400H	38 x 40 x 2	406	13.5 x 25	50	6 x 40 x 120	80	11 x 18
IWKC203840500	IWKC203840500H	38 x 40 x 2	506	13.5 x 25	50	6 x 40 x 120	80	11 x 18

Code	HCR Code	L					
		mm	$F=q \times L$	N	N	N	N
IWKC203840200	IWKC203840200H	200	3,597	3,596	1,798	1,800	1,199
IWKC203840300	IWKC203840300H	300	2,395	2,395	1,196	1,198	798
IWKC203840400	IWKC203840400H	400	1,795	1,793	896	897	593
IWKC203840500	IWKC203840500H	500	1,432	1,431	715	716	477

Corner Bracket

Material

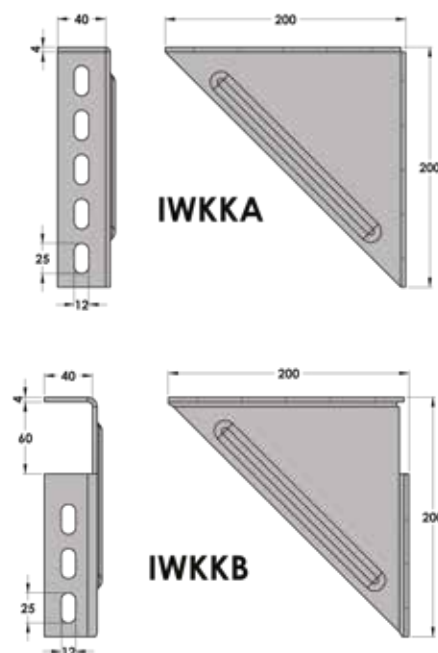
- Carbon Steel

Service

- Multi purpose hanging and fixing element. There are different assembly possibilities, either can be used as single or double and with U, C, and L channels. Provides fast and easy assembly. Can easily be used on ceiling, walls and channels.

Finish

- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 - EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256



Code	HCR Code	Profile Size	Type	Quantity / Box	Weight
		mm × mm × mm			Kg/Box
IWKKA40200200	IWKKA40200200H	200 × 200 × 4	IWKKA	15	15.3
IWKKB40200200	IWKKB40200200H	200 × 200 × 4	IWKKB	15	13.8

U Bracket Console

Material

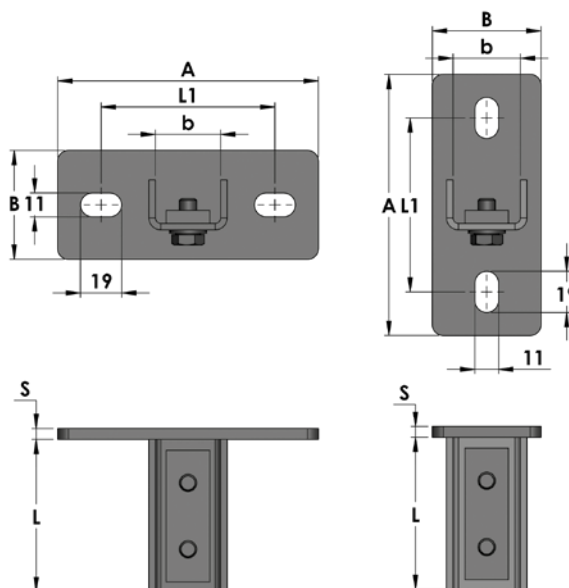
- Carbon Steel

Service

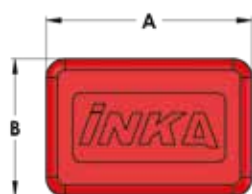
- The ideal assembly element for narrow places like profiles. Position adjustment is possible with slot holes of the fixing plate. Welded construction enables high load carrying capacity.

Finish

- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 - EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256



Code	HCR Code	Suitable Profile	A	B	b	S	L	L1	Qty./Box	Weight
		mm/mm								Kg/Box
IWKD1827	IWKD1827H	27/18	120	50	30	5	70	80	10	3.2
IWKD3028	IWKD3028H	28/30			31	5	70	80	10	3.3
IWKD2030	IWKD2030H	30/20			34	5	90	95	10	4.9
IWKD4038	IWKD4038H	38/40	135	70	42	5	90	95	10	5.1
IWKY1827	IWKY1827H	27/18	120	50	30	5	70	80	10	3.2
IWKY3028	IWKY3028H	28/30			31	5	70	80	10	3.3
IWKY2030	IWKY2030H	30/20			34	5	90	95	10	4.9
IWKY4038	IWKY4038H	38/40	135	70	42	5	90	95	10	5.1



C Channel End Cap

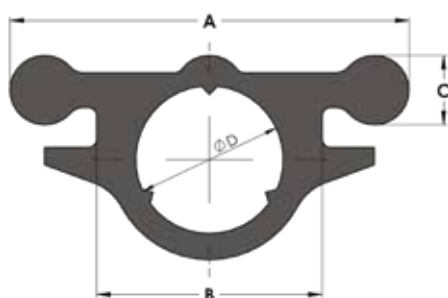
Material

• PP



Code	Size	A	B	C	Qty./Box	Weight
	mm × mm × mm	mm	mm			Kg/Box
IPCT1827	27 × 18 × 1.2	27	18	10	1,000	2
IPCT3020	30 × 20 × 1.8	30	20	10	1,000	4
IPCT2830	28 × 30 × 1.8	28	30	10	1,000	4
IPCT3840	38 × 40 × 2	38	40	10	1,000	5

C Channel Rubber



Material

• EPDM

Rubber Quality		EPDM. Color black Etilen-Propilen-Di- en-Caoutchouc
Hardness	Shore A	45 / +5; -0
Temperature resistance	°C	-40 / +120
Elongation at rupture	%	> 400
Tensile strength	N / mm ²	> 6
Resilience	%	> 40

Code	Suitable Profile	A	B	C	ØD	Box	Weight
	mm / mm	mm / mm	mm	mm		m/Roll	kg/Roll
ZLIC01	27 / 18	23 / 27	13	4	8.5	20	2.5
ZLIC02	38 / 40	28 / 36	16	5	10.5	20	3.0
ZLIC03	22 / 38 - 35 / 38	33	21	5	10.5	20	4.1

Assembly Bracket

Material

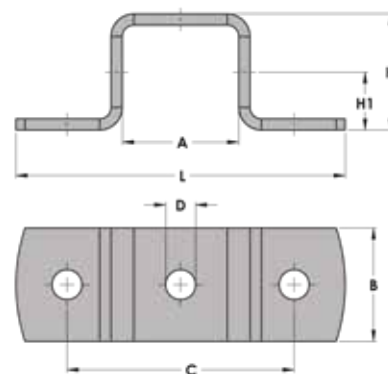
- Carbon Steel

Service

- The ideal assembly element for narrow places like profiles. Position adjustment is possible with slot holes of the fixing plate. Welded construction enables high load carrying capacity.

Finish

- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 - EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256



Code	HCR Code	Size	A	H	B	C	D	L	H1	Qty./Box	Weight
		mm / mm	mm	mm	mm	mm	mm	mm	mm		kg/Box
IFKK182730	IFKK182730H	18 / 27	30	31	25	80	ø 9.0	100	15	25	1.9
IFKK203032	IFKK203032H	20 / 30	32	21	25	70	ø 9.0	100	-	25	1.7
IFKK302830	IFKK302830H	30 / 28	30	32	40	70	ø 10.5	100	15	25	4.1
IFKK384041	IFKK384041H	38 / 40	41	41	40	88	ø 10.5	116	18	25	5.2

90° Connecting Plate

Material

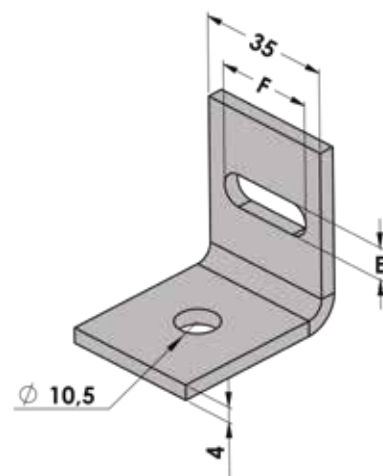
- Carbon Steel

Service

- Designed for supporting vertical connection of clamps. Shell be use with console.

Finish

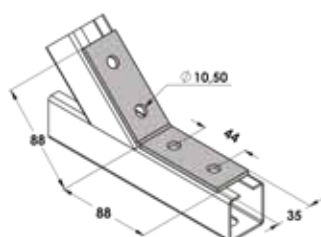
- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 - EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256



Code	HCR Code	Suitable for male	E	F	Qty./Box	Weight
			mm	mm		kg/Box
IFBL9008	IFBL9008H	M8	8.5	25.5	100	8
IFBL9010	IFBL9010H	M10	10.5	23.5	100	8
IFBL9012	IFBL9012H	M12	12.5	21.5	100	8
IFBL9016	IFBL9016H	M16	16.5	19.5	100	8

Profile Assembly Accessories

135° Connector

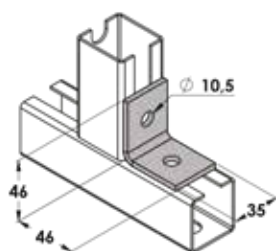


Finish

- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 - EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

Code	HCR Code	Quantity/Box	Weight
			kg/Box
IFBL135	IFBL135H	100	18

90° 2 Holes Connector

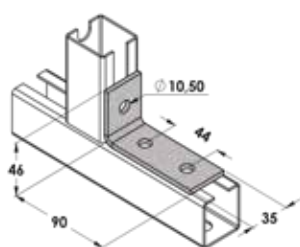


Finish

- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 - EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

Code	HCR Code	Quantity/Box	Weight
			kg/Box
IFBL90D2	IFBL90D2H	100	8

90° 3 Holes Connector

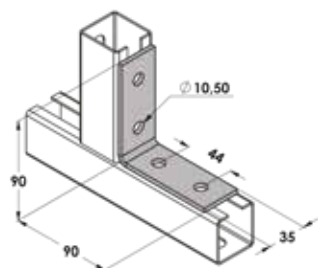


Finish

- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 - EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

Code	HCR Code	Quantity/Box	Weight
			kg/Box
IFBL90D3	IFBL90D3H	100	13.4

90° 4 Holes Connector



Finish

- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 - EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

Code	HCR Code	Quantity/Box	Weight
			kg/Box
IFBL90D4	IFBL90D4H	100	18

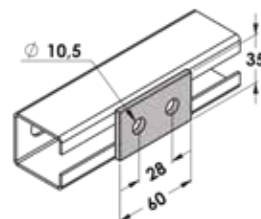
Profile Assembly Accessories

2 Holes Flat Connector

Finish

- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 – EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

Code	HCR Code	Qty./Box	Weight
			kg/Box
IFBLD2	IFBLD2H	100	6

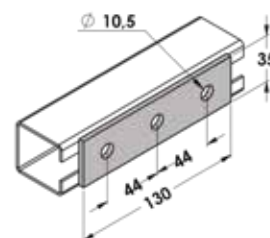


3 Holes Flat Connector

Finish

- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 – EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

Code	HCR Code	Qty./Box	Weight
			kg/Box
IFBLD3	IFBLD3H	100	13.4

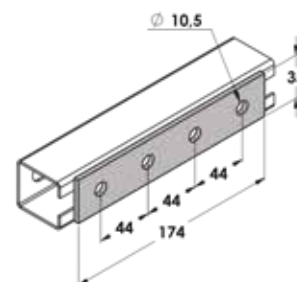


4 Holes Flat Connector

Finish

- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 – EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

Code	HCR Code	Qty./Box	Weight
			kg/Box
IFBLD4	IFBLD4H	100	18

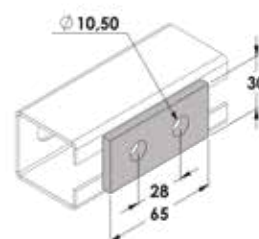


Threaded 2 Holes Flat Connector

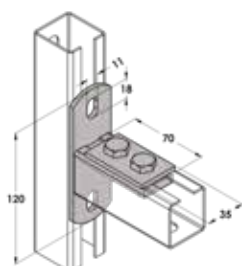
Finish

- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 – EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

Code	HCR Code	Qty./Box	Weight
			kg/Box
IFBLDD	IFBLDDH	100	7



Profile Assembly Accessories

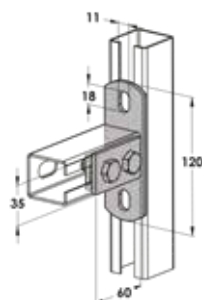


T Connector Type A

Finish

- Electro-Galvanized in accordance with
ASTM B 633/ASTM F 1941 – EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

Code	HCR Code	Qty./Box	Weight
			kg/Box
IFBLC	IFBLCH	50	17.9

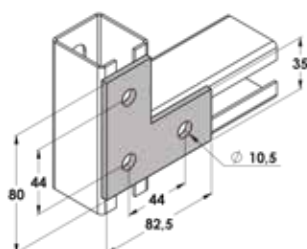


T Connector Type B

Finish

- Electro-Galvanized in accordance with
ASTM B 633/ASTM F 1941 – EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

Code	HCR Code	Qty./Box	Weight
			kg/Box
IFBLT	IFBLTH	50	14

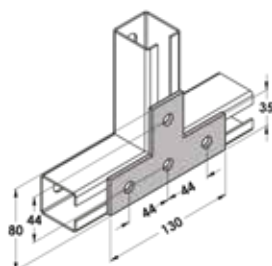


Flat "L" Connector

Finish

- Electro-Galvanized in accordance with
ASTM B 633/ASTM F 1941 – EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

Code	HCR Code	Qty./Box	Weight
			kg/Box
IFBLDL	IFBLDLH	100	13



Flat "T" Connector

Finish

- Electro-Galvanized in accordance with
ASTM B 633/ASTM F 1941 – EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

Code	HCR Code	Qty./Box	Weight
			kg/Box
IFBLDT	IFBLDTH	100	18.1

Hammerhead Bolt

Material

- Carbon Steel

Service

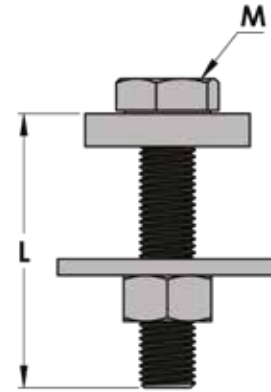
- It is used for direct fastening of pipe clamps to C channel profiles. It is suitable for C channel 27/18, 30/28, 36/38, 40/38 and 60/40s.

Ordering

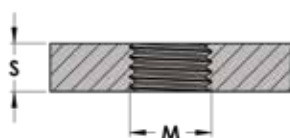
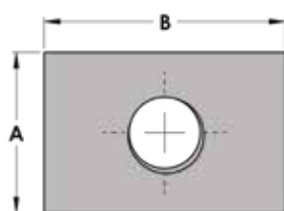
- Specify code or name, nominal size and finish.

Finish

- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 – EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256



Code	HCR Code	Size	Size	Length - L	Qty. / Box	Weight
		mm / mm	mm	mm	mm	kg/Box
ICH06020	ICH06020H	18 / 27	M6	20	100	6.9
ICH08030	ICH08030H	18 / 27 - 38 / 40	M8	30	100	7.4
ICH08040	ICH08040H	18 / 27 - 38 / 40	M8	40	100	7.9
ICH08050	ICH08050H	18 / 27 - 38 / 40	M8	50	100	8.0
ICH10030	ICH10030H	18 / 27 - 38 / 40	M10	30	100	8.5
ICH10035	ICH10035H	18 / 27 - 38 / 40	M10	35	100	8.8
ICH10040	ICH10040H	18 / 27 - 38 / 40	M10	40	100	9.1
ICH10050	ICH10050H	18 / 27 - 38 / 40	M10	50	100	9.6



C Profile Nut

Material

- Carbon Steel

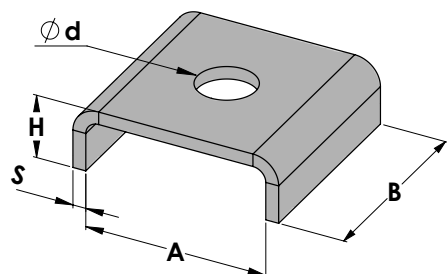
Service

- Used with bolts, threaded rods, washers and nuts to fasten various elements on C Channels

Finish

- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 - EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

Code	HCR Code	M	Hole Size	A	B	S	Qty./Box	Weight
			mm	mm	mm	mm		kg/Box
ISC08	ISC08H	M8	6.8	20.0	30.0	6.0	250	6.1
ISC10	ISC10H	M10	8.5	20.0	30.0	6.0	250	5.9
ISC12	ISC12H	M12	10.2	20.0	30.0	6.0	250	5.8



Profile Washer

Material

- Carbon Steel

Service

- Suitable for assembly to C Channels

Finish

- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 - EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

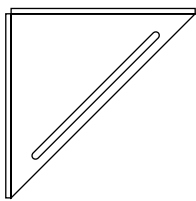
Code	HCR Code	Suitable Profile	A	H	B	S	Ø d	Qty./Box	Weight
		mm / mm	mm	mm	mm	mm	mm		kg/Box
IVPP082718	IVPP082718H	27 / 18	28	10	30	2	9	500	10
IVPP102718	IVPP102718H	27 / 18	28	10	30	2	11	500	10
IVPP122718	IVPP122718H	27 / 18	28	10	30	2	13	500	10
IVPP083020	IVPP083020H	30 / 20	31	10	30	2	9	400	8
IVPP103020	IVPP103020H	30 / 20	31	10	30	2	11	400	8
IVPP123020	IVPP123020H	30 / 20	31	10	30	2	13	400	8
IVPP082830	IVPP082830H	28 / 30	29	12	30	3	9	400	13
IVPP102830	IVPP102830H	28 / 30	29	12	30	3	11	400	13
IVPP122830	IVPP122830H	28 / 30	29	12	30	3	13	400	13
IVPP083840	IVPP083840H	38 / 40	39	12	30	3	9	400	16
IVPP103840	IVPP103840H	38 / 40	39	12	30	3	11	400	16
IVPP123840	IVPP123840H	38 / 40	39	12	30	3	13	400	16

Corner Bracket Technical Data

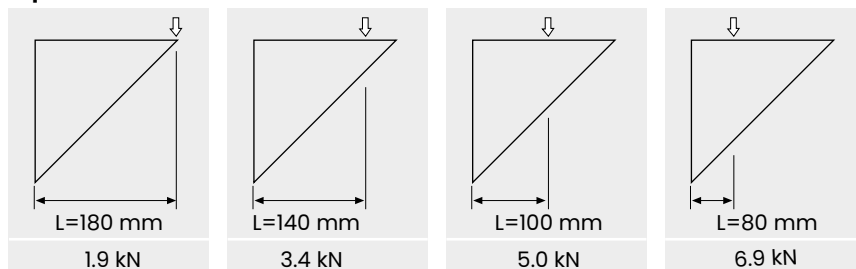


Safe working loads for corner bracket

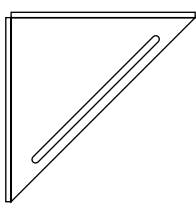
Equal sided corner bracket



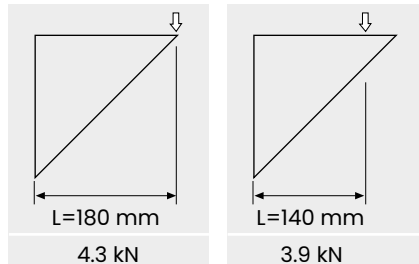
4 mm



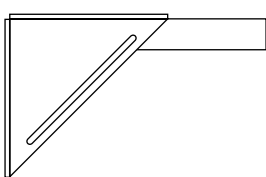
Equal sided corner bracket mounted in pairs



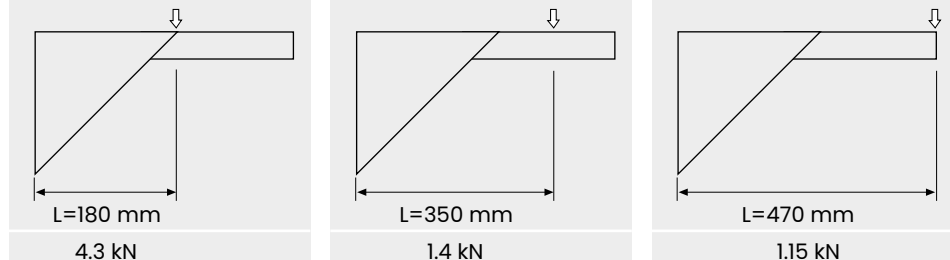
4 mm



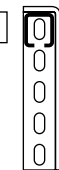
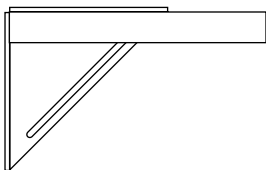
Equal sided corner bracket in pairs supported by channel profile 38 / 40



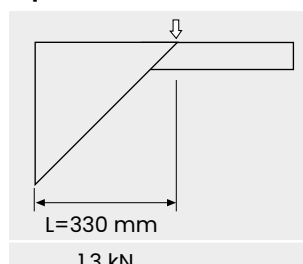
4 mm



Equal sided corner bracket supported by channel profile 38 / 40



4 mm

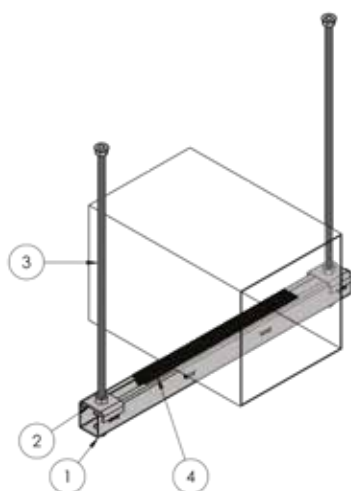


The values given above are calculated for allowable stress on the steel $\sigma_{\text{dem}} = 100 \text{ N/mm}^2$ and the maximum deflection $L/150$

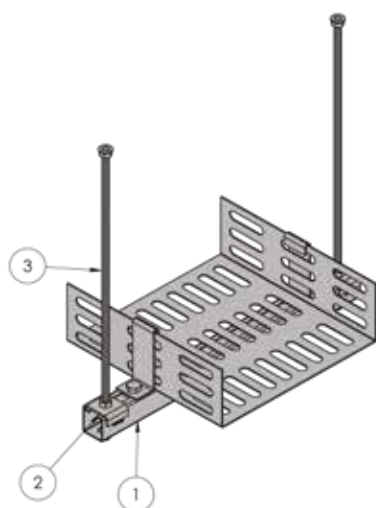
Application Cases for C Profiles



No	Description	Code
1	38x40x2 C Profile	IPC384020..
2	Profile Washer	IVPP...
3	Threaded Rod	IRRT...
4	Std. Pipe Clamp With Rubber Profile&Combi Nut	IKKS...
5	Heavy Duty Pipe Clamp With Rubber Profile	IKAK...
6	C Profile Nut	ISC...



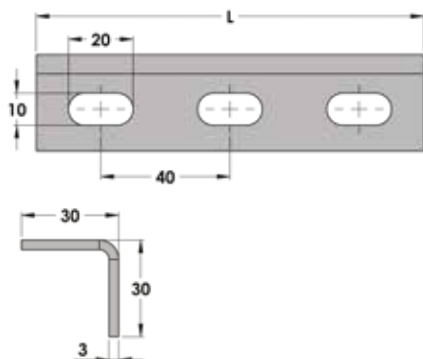
No	Description	Code
1	38x40x2 C Profile	IPC384020..
2	Profile Washer	IVPP...
3	Threaded Rod	IRRT...
4	C Profile Rubber	ZLIC..



No	Description	Code
1	38x40x2 C Profile	IPC384020..
2	Profile Washer	IVPP...
3	Threaded Rod	IRRT...

L PROFILE SYSTEMS





IPL3030 – L Profile

Pre-Galvanized

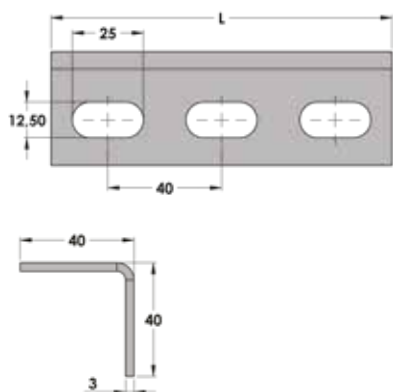
- Material: S250GD (1.0242)
- Finish: Pre-galvanized in accordance with DIN EN 10346 designation Z100

HCR

- Material: S235JR (1.0038) Carbon steel in accordance with DIN EN 10025
- Finish: High Corrosion Resistant (HCR) details can be found on page 256

Ordering

- Available Thickness (T): 3 mm
- Available Length (L): 2 m & 3 m



IPL3040 – L Profile

Pre-Galvanized

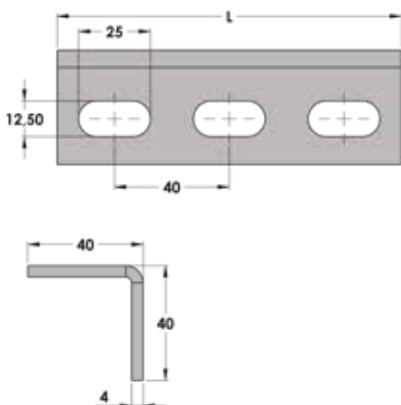
- Material: S250GD (1.0242)
- Finish: Pre-galvanized in accordance with DIN EN 10346 designation Z100

HCR

- Material: S235JR (1.0038) Carbon steel in accordance with DIN EN 10025
- Finish: High Corrosion Resistant (HCR) details can be found on page 256

Ordering

- Available Thickness (T): 3 mm
- Available Length (L): 2 m & 3 m



IPL4040 – L Profile

Pre-Galvanized

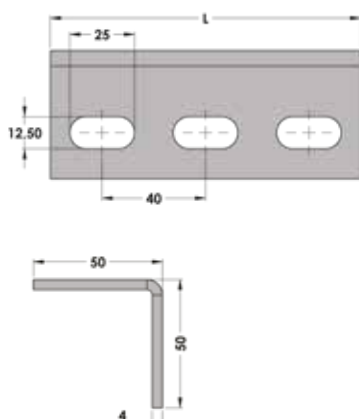
- Material: S250GD (1.0242)
- Finish: Pre-galvanized in accordance with DIN EN 10346 designation Z100

HCR

- Material: S235JR (1.0038) Carbon steel in accordance with DIN EN 10025
- Finish: High Corrosion Resistant (HCR) details can be found on page 256

Ordering

- Available Thickness (T): 4 mm
- Available Length (L): 2 m & 3 m



IPL4050 – L Profile

Pre-Galvanized

- Material: S250GD (1.0242)
- Finish: Pre-galvanized in accordance with DIN EN 10346 designation Z100

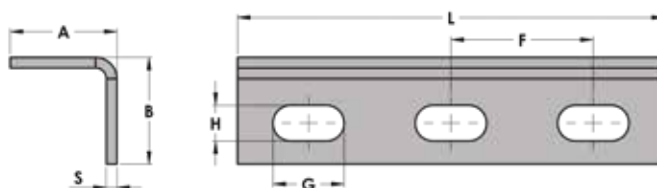
HCR

- Material: S235JR (1.0038) Carbon steel in accordance with DIN EN 10025
- Finish: High Corrosion Resistant (HCR) details can be found on page 256

Ordering

- Available Thickness (T): 4 mm
- Available Length (L): 2 m & 3 m

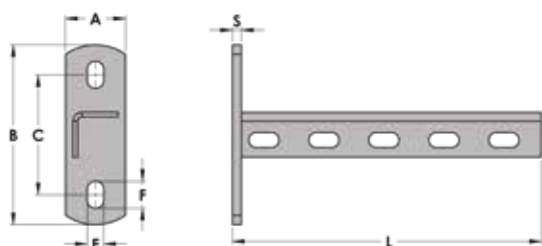
Technical Data for L Profile



Code	Size	A	B	S	G	H	F	L	Radius	Weight
	mm × mm × mm	mm	mm	mm	mm	mm	mm	mm		kg/m
IPL3030302000	30 × 30 × 3	30	30	3	20	10.0	40	2,000	6	1.10
IPL3040402000	40 × 40 × 3	40	40	3	25	12.5	40	2,000	6	1.56
IPL4040402000	40 × 40 × 4	40	40	4	25	12.5	40	2,000	6	2.06
IPL4050502000	50 × 50 × 4	50	50	4	25	12.5	40	2,000	6	2.69

F (N)											
		Maximum Recom. Load (N)					N				
		L (mm)					L (mm)				
Code	Size mm × mm × mm	500	1,000	1,500	2,000	3,000	500	1,000	1,500	2,000	3,000
IPL303030...	30 × 30 × 3	1,055	480	270	120	30	531	242	103	53	15
IPL304040...	40 × 40 × 3	1,865	860	570	280	90	936	429	254	135	45
IPL404040...	40 × 40 × 4	2,340	1,090	750	340	120	1,175	545	313	166	54
IPL405050...	50 × 50 × 4	3,910	1,830	1,260	740	300	1,960	918	572	345	120

F (N)											
		Maximum Recom. Load (N)					N				
		L (mm)					L (mm)				
Code	Size mm × mm × mm	500	1,000	1,500	2,000	3,000	500	1,000	1,500	2,000	3,000
IPL303030...	30 × 30 × 3	393	164	70	32	8	262	102	43	22	5
IPL304040...	40 × 40 × 3	693	315	172	82	28	461	209	107	56	19
IPL404040...	40 × 40 × 4	872	403	212	100	33	581	268	131	69	23
IPL405050...	50 × 50 × 4	1,463	677	422	210	78	975	450	268	144	53



L Profile Console

Material

- Carbon Steel

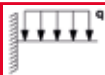
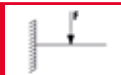
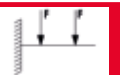
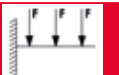
Service

- Multi purpose hanging and fixing element. Provides fast and easy assemble of air ducts, heating and piping systems. It is economical and strong. Provides easy and safe assembly. M8, M10 and M12 bolts, threaded rods and hammer head rods can be used as fasteners. It is preferred for lighter loads compared to C and U profiles.

Finish

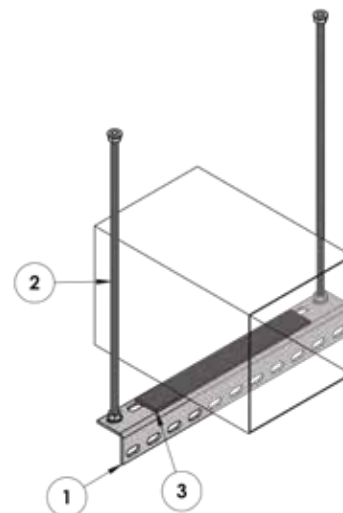
- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 – EN ISO 2081/EN ISO 4042
- High Corrosion Resistant (HCR) details can be found on page 256

Code	HCR Code	Profile Size	Profile Length	Profile Slot Size	Distance Between Two Profile Slots	Fixing Plate Size (S x A x B)	Distance Between Fixing Plates Holes (C)	Fixing Plate Slot Size (E x F)
		mm x mm x mm x mm	mm	mm x mm	mm	mm x mm x mm	mm	mm
IWKL303030200	IWKL303030200H	30 x 30 x 30 x 3	206	10 x 20	40	6 x 40 x 120	80	11 x 18
IWKL303030300	IWKL303030300H	30 x 30 x 30 x 3	306	10 x 20	40	6 x 40 x 120	80	11 x 18
IWKL303030400	IWKL303030400H	30 x 30 x 30 x 3	406	10 x 20	40	6 x 40 x 120	80	11 x 18
IWKL303030500	IWKL303030500H	30 x 30 x 30 x 3	506	10 x 20	40	6 x 40 x 120	80	11 x 18

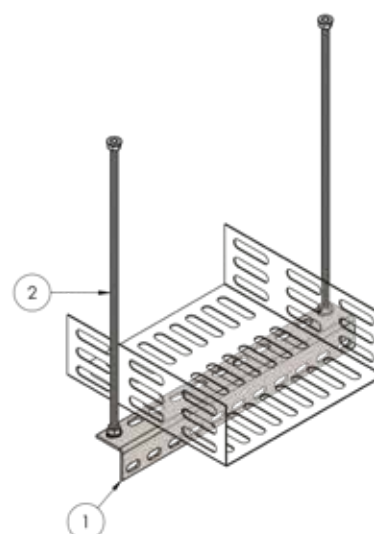
Code	HCR Code	L					
		mm	N	N	N	N	N
IWKL303030200	IWKL303030200H	200	682	682	341	341	277
IWKL303030300	IWKL303030300H	300	454	454	227	229	151
IWKL303030400	IWKL303030400H	400	339	339	169	169	113
IWKL303030500	IWKL303030500H	500	270	270	120	134	88

Application Cases for L Profiles

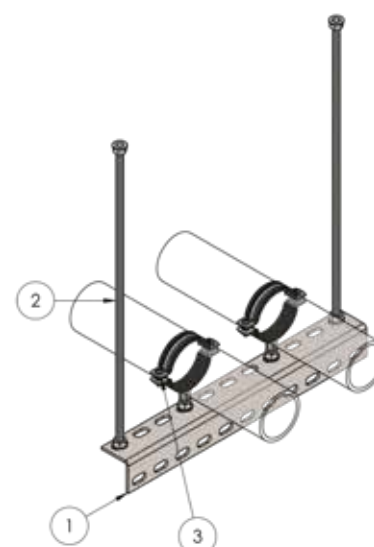
No	Description	Code
1	50x50x4 L Profile	IPL505040...
2	Threaded Rod	IRRT...
3	Neoprene Seal	ZLIP...



No	Description	Code
1	50x50x4 L Profile	IPL505040...
2	Threaded Rod M10	IRRT102000



No	Description	Code
1	50x50x4 L Profile	IPL505040...
2	Threaded Rod	IRRT102000
3	Std. Pipe Clamp With Rubber Profile & Combi Nut	IKKS...



U PROFILE SYSTEMS



IPU303030 – U Profile

Pre-Galvanized

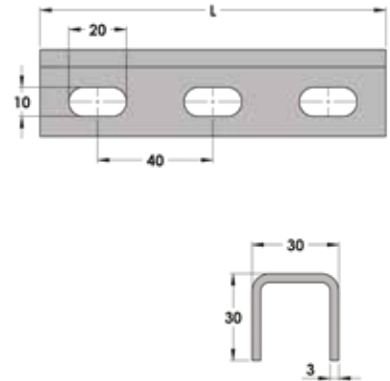
- Material: S250GD (1.0242)
- Finish: Pre-galvanized in accordance with DIN EN 10346 designation Z100

HCR

- Material: S235JR (1.0038) Carbon steel in accordance with DIN EN 10025
- Finish: High Corrosion Resistant (HCR) details can be found on page 256

Ordering

- Available Length (L): 2 m. 3 m
- Available Thickness (T): 3 mm



IPU304040 – U Profile

Pre-Galvanized

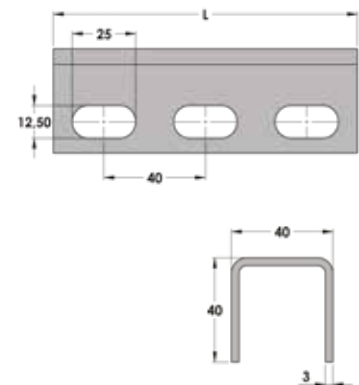
- Material: S250GD (1.0242)
- Finish: Pre-galvanized in accordance with DIN EN 10346 designation Z100

HCR

- Material: S235JR (1.0038) Carbon steel in accordance with DIN EN 10025
- Finish: High Corrosion Resistant (HCR) details can be found on page 256

Ordering

- Available Length (L): 2 m. 3 m
- Available Thickness (T): 3 mm



IPU404040 – U Profile

Pre-Galvanized

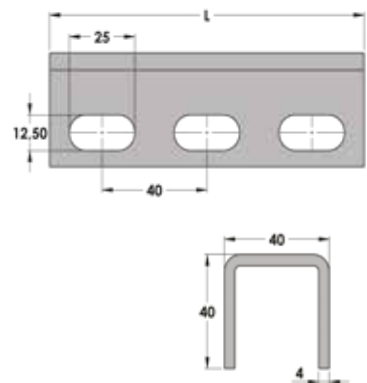
- Material: S250GD (1.0242)
- Finish: Pre-galvanized in accordance with DIN EN 10346 designation Z100

HCR

- Material: S235JR (1.0038) Carbon steel in accordance with DIN EN 10025
- Finish: High Corrosion Resistant (HCR) details can be found on page 256

Ordering

- Available Length (L): 2 m. 3 m
- Available Thickness (T): 4 mm



IPU405050 – U Profile

Pre-Galvanized

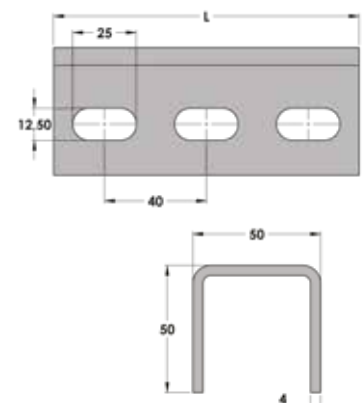
- Material: S250GD (1.0242)
- Finish: Pre-galvanized in accordance with DIN EN 10346 designation Z100

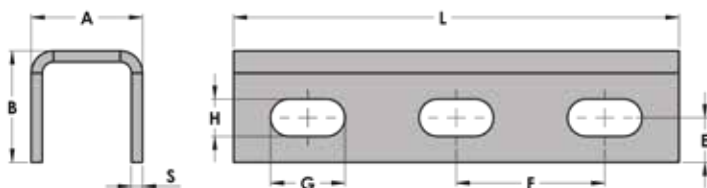
HCR

- Material: S235JR (1.0038) Carbon steel in accordance with DIN EN 10025
- Finish: High Corrosion Resistant (HCR) details can be found on page 256

Ordering

- Available Length (L): 2 m. 3 m
- Available Thickness (T): 4 mm

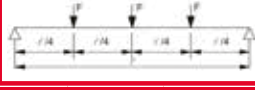




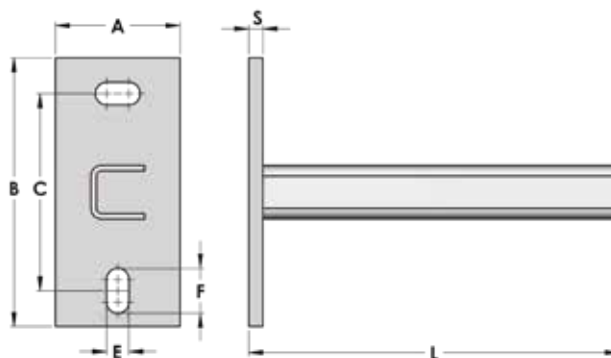
Technical Data for U Profile

Code	Size	A	B	s	E	G	H	F	L	Radius	Weight
	mm × mm × mm	mm	mm	mm	mm	mm	mm	mm	mm		kg/m
IPU3030302000	30 × 30 × 3	30	30	3	12	20	10	40	2,000	6	1.68
IPU3040402000	40 × 40 × 3	40	40	3	17	25	12.5	40	2,000	6	2.27
IPU4040402000	40 × 40 × 4	40	40	4	15	25	12.5	40	2,000	6	2.92
IPU4050502000	50 × 50 × 4	50	50	4	20	25	12.5	40	2,000	7	3.86

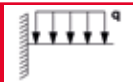
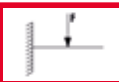
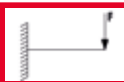
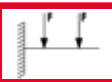
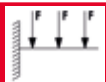
F (N)											
		Maximum Recom. Load (N)					N/mm				
		L (mm)					L (mm)				
Code	Size mm × mm × mm	500	1,000	1,500	2,000	3,000	500	1,000	1,500	2,000	3,000
IPU303030...	30 × 30 × 3	3,900	1,950	1,067	499	215	1,952	779	338	183	67
IPU304040...	40 × 40 × 3	7,840	3,930	2,858	1,337	577	3,932	1,965	920	507	206
IPU404040...	40 × 40 × 4	9,800	4,870	3,574	1,671	722	4,912	2,455	1,150	633	254
IPU405050...	50 × 50 × 4	17,745	8,910	6,660	3,785	1,635	8,910	4,456	2,616	1,456	608

F (N)											
		Maximum Recom. Load (N)					N/mm				
		L (mm)					L (mm)				
Code	Size mm × mm × mm	500	1,000	1,500	2,000	3,000	500	1,000	1,500	2,000	3,000
IPU303030...	30 × 30 × 3	1,450	525	230	107	39	976	327	143	77	28
IPU304040...	40 × 40 × 3	2,917	1,405	624	297	120	1,962	877	388	214	86
IPU404040...	40 × 40 × 4	3,650	1,758	780	372	149	2,454	1,097	485	267	107
IPU405050...	50 × 50 × 4	6,621	3,338	1,767	855	357	4,446	2,226	1,102	613	257

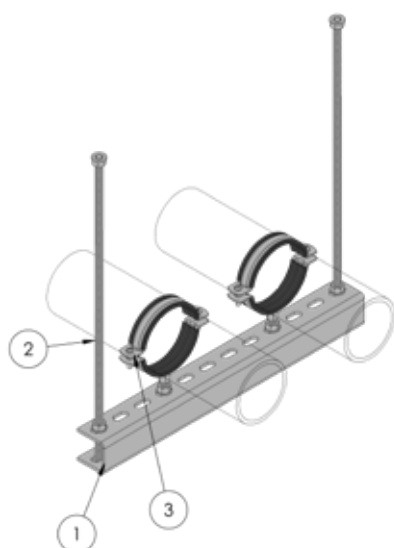
U Profile Console



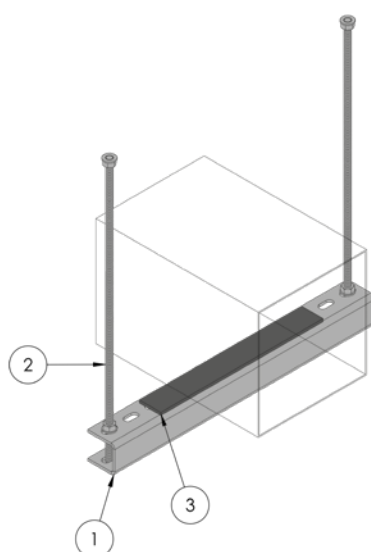
Code	Profile Size	Profile Length	Profile Slot Size	Fixing Plate Size (S x A x B)	Distance Between Fixing Plates Holes (C)	Fixing Plate Slot Size (E x F)
	mm x mm x mm x mm	mm	mm x mm	mm x mm x mm	mm	mm x mm
IWKU303030200	30 x 30 x 30 x 3	208	10 x 20	8 x 70 x 150	110	12.5 x 25
IWKU303030300	30 x 30 x 30 x 3	308	10 x 20	8 x 70 x 150	110	12.5 x 25
IWKU303030400	30 x 30 x 30 x 3	408	10 x 20	8 x 70 x 150	110	12.5 x 25
IWKU303030500	30 x 30 x 30 x 3	508	10 x 20	8 x 70 x 150	110	12.5 x 25

Code	L (mm)					
		N	N	N	N	N
IWKU303030200	200	2,452	2,453	1,226	1,266	817
IWKU303030300	300	1,633	1,633	816	816	544
IWKU303030400	400	1,222	1,222	611	611	407
IWKU303030500	500	976	976	391	487	325

Application Cases for U Profiles



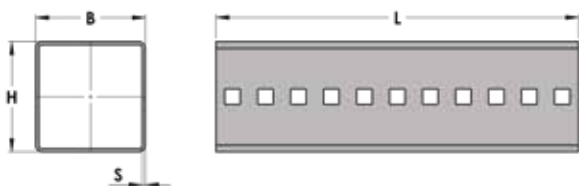
NO	DESCRIPTION	CODE
1	50 × 50 × 4 U Profile	IPU505040...
2	Threaded Rod	IRRT...
3	Std. Pipe Clamp With Rubber Profile&Combi Nut	IKKS...



NO	DESCRIPTION	CODE
1	50 × 50 × 4 U Profile	IPU505040...
2	Threaded Rod	IRRT...
3	Neoprene Seal	ZLIP...

HEAVY DUTY PROFILE SYSTEMS (SQUARE PROFILE SYSTEMS)





Square Profile (Vertical)

Material

- S235JR (1.0038)
- Carbon Steel in accordance with EN 10025-2

Finish

- High Corrosion Resistant (HCR) details can be found on page 256

Service

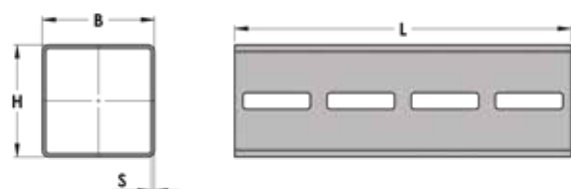
- Square Profile allows 15 mm steps connections in the vertical direction for wall or ceiling heavy duty pipe support systems.

Ordering

- Available Thickness (T): 2 mm & 3 mm & 4 mm
- Available Length (L): 6 m

Code	H×B×S	L	Weight
	mm × mm × mm		kg/m
IPKD080080206000H	80 × 80 × 2	6,000.0	4.4
IPKD080080306000H	80 × 80 × 3		6.4
IPKD100100306000H	100 × 100 × 3		8.3
IPKD100100406000H	100 × 100 × 4		11.0
IPKD100120306000H	100 × 120 × 3		9.2
IPKD100120406000H	100 × 120 × 4		12.0

*A minimum order may apply on the Product



Square Profile (Horizontal)

Material

- S235JR (1.0038)
- Carbon Steel in accordance with EN 10025-2

Finish

- High Corrosion Resistant (HCR) details can be found on page 256

Service

- Square Profile allows endless connections in the horizontal direction for wall or ceiling heavy duty pipe support systems.

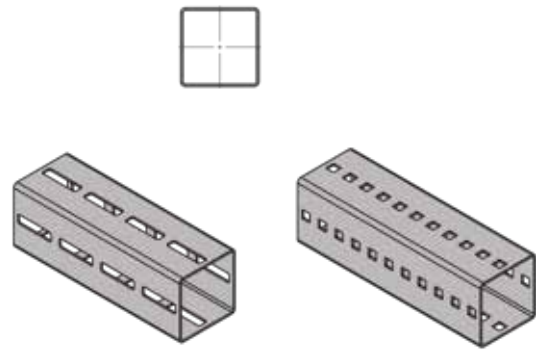
Ordering

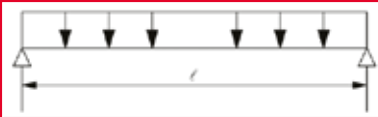
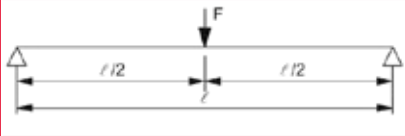
- Available Thickness (T): 2 mm & 3 mm & 4mm
- Available Length (L): 6 m

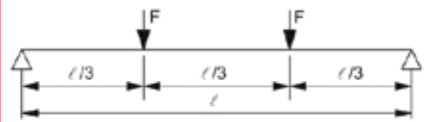
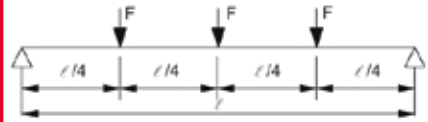
Code	H×B×S	L	Weight
	mm × mm × mm		kg/m
IPK080080206000H	80 × 80 × 2	6,000.0	4.0
IPK080080306000H	80 × 80 × 3		6.0
IPK100100306000H	100 × 100 × 3		7.9
IPK100100406000H	100 × 100 × 4		10.4
IPK100120306000H	100 × 120 × 3		8.8
IPK100120406000H	100 × 120 × 4		11.6

Note: The unit weight per meter for square profiles without holes is considered %12-15 higher than the above weights.

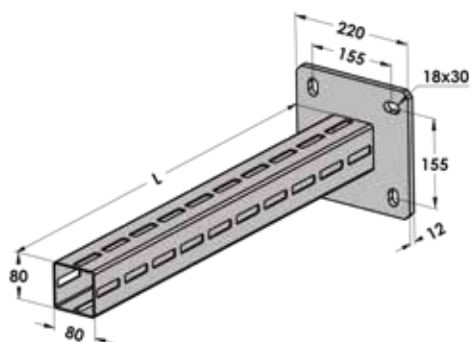
Technical Data For Square Profiles



F [N]									
		F (N)				F (N)			
Code	Size mm × mm × mm	L=1,000	L=2,000	L=3,000	L=6,000	L=1,000	L=2,000	L=3,000	L=6,000
IPK08008020...	80 × 80 × 2	15,730	7,860	5,240	1,180	7,860	3,930	2,620	650
IPK08008030...	80 × 80 × 3	22,530	11,260	7,510	1,690	11,260	5,630	3,750	940
IPK10010030...	100 × 100 × 3	31,600	12,600	6,900	1,980	16,800	6,600	3,700	1,100
IPK10010040...	100 × 100 × 4	43,600	18,000	10,200	3,000	22,900	9,300	5,400	1,800
IPK10012030...	100 × 120 × 3	39,300	15,800	9,000	2,700	20,700	8,300	4,700	1,500
IPK10012040...	100 × 120 × 4	53,500	22,400	12,900	4,200	28,000	11,200	6,800	2,300

F [N]									
		F (N)				F (N)			
Code	Size mm × mm × mm	L=1,000	L=2,000	L=3,000	L=6,000	L=1,000	L=2,000	L=3,000	L=6,000
IPK08008020...	80 × 80 × 2	5,900	2,950	1,970	440	3,930	1,970	1,310	290
IPK08008030...	80 × 80 × 3	8,450	4,220	2,820	630	5,630	2,820	1,880	420
IPK10010030...	100 × 100 × 3	11,500	4,700	2,600	700	7,700	3,100	1,700	500
IPK10010040...	100 × 100 × 4	15,900	6,700	3,900	1,200	10,600	4,500	2,600	800
IPK10012030...	100 × 120 × 3	14,300	5,900	3,300	1,000	9,500	3,900	2,200	600
IPK10012040...	100 × 120 × 4	19,600	8,400	4,900	1,600	13,000	5,600	3,200	1,000

Square Profile Console



Material

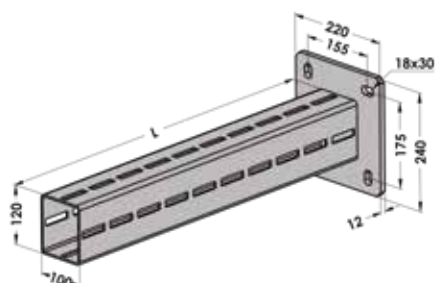
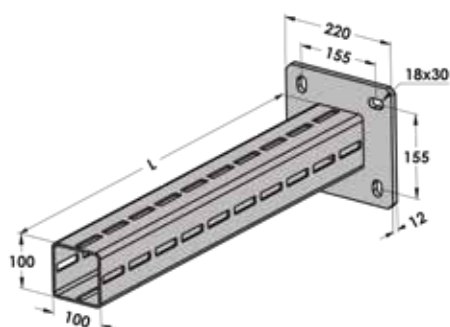
- S235JR (1.0038)
- Carbon Steel in accordance with EN 100025-2

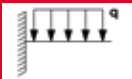
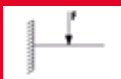
Finish

- High Corrosion Resistant (HCR) details can be found on page 256

Welding

- Welding in accordance with EN 3834-2 / ASME Section IX. AWS D1.1



Code	L				Weight
	mm	kN	kN	kN	kg/100 Pcs.
IWPK080080750H	750	8.0	6.0	3.0	810
IWPK100100750H	750	20.5	15.3	7.6	1,190
IWPK100100975H	975	12.0	11.7	5.8	1,420
IWPK1001001425H	1425	5.6	8.0	4.0	1,870
IWPK100120750H	750	26.5	20.0	9.9	1,330
IWPK100120975H	975	15.0	15.2	7.5	1,590
IWPK1001201425H	1,425	7.3	10.3	5.2	2,100

Horizontal Profile Connection Plate

Material & Finish

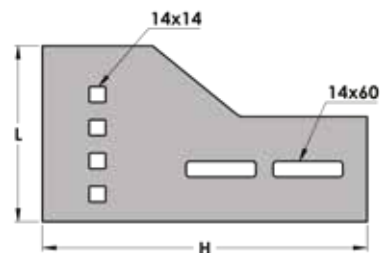
- S235JR

Finish

- High Corrosion Resistant (HCR) details can be found on page 256

Service

- Square Profile allows 15mm steps connections in the vertical direction for wall or ceiling heavy duty pipe support systems.



Code	L × H × S	Weight
	mm × mm × mm	kg/100 Pcs.
IFPKDA080H	133 × 235 × 6	100
IFPKDA100120H	159 × 280 × 6	150

Horizontal Profile Connection Plate (Heavy)

Material & Finish

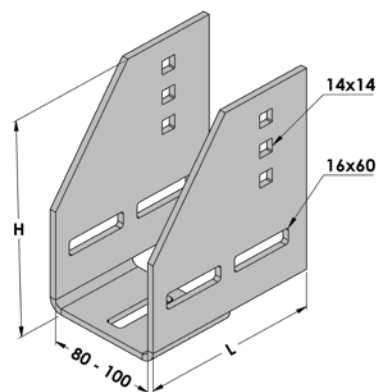
- S235JR

Finish

- High Corrosion Resistant (HCR) details can be found on page 256

Service

- Square Profile allows 15 mm steps connections in the vertical direction for wall or ceiling heavy duty pipe support systems.



Code	L × H × S	Weight
	mm × mm × mm	kg/100 Pcs.
IFPKDAH080H	160 × 204 × 6	250
IFPKDAH100H	170 × 225 × 6	310
IFPKDAH120H	170 × 246 × 6	340

Corner Connecting Plate

Material & Finish

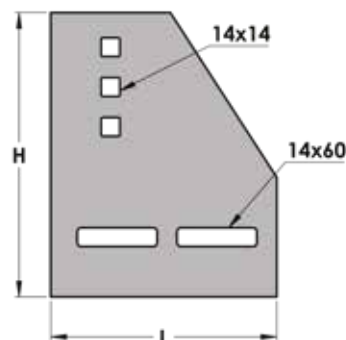
- S235JR

Finish

- High Corrosion Resistant (HCR) details can be found on page 256

Service

- Corner connection plate, designed for realize the horizontal and vertical connections of square profile. Corner connection plate allows adjusting for both directions.



Code	L × H × S	Weight
	mm × mm × mm	kg/100 Pcs.
IFPKDK080H	160 × 193 × 6	100
IFPKDK100H	160 × 214 × 6	140
IFPKDK120H	170 × 235 × 6	150

Corner Connector

Material & Finish

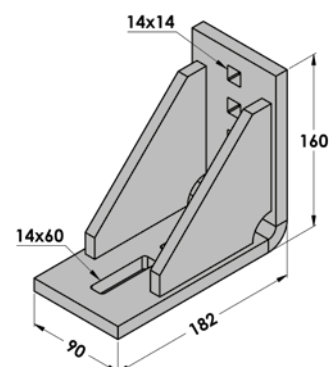
- S235JR

Finish

- High Corrosion Resistant (HCR) details can be found on page 256

Service

- Corner connector designed for realize the horizontal and vertical connections of square profile. Corner connection plate allows adjusting for both directions.



Code	L × H × S	Weight
	mm × mm × mm	kg/100 Pcs.
IFPKDH080H	160 × 182 × 75	313
IFPKDH100H	160 × 182 × 90	392

Corner Connecting Plate (Heavy)

Material & Finish

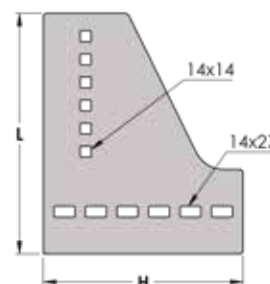
- S235JR

Finish

- High Corrosion Resistant (HCR) details can be found on page 256

Service

- Corner connection plate, designed for realize the horizontal and vertical connections of square profile. Corner connection plate allows adjusting for both directions.



Code	L × H × S	Weight
	mm × mm × mm	kg/100 Pcs.
IFPKDKH080H	255.5 × 219 × 6	160
IFPKDKH100H	295 × 260 × 6	230
IFPKDKH120H	313 × 260 × 8	360

Middle Connecting Plate

Material & Finish

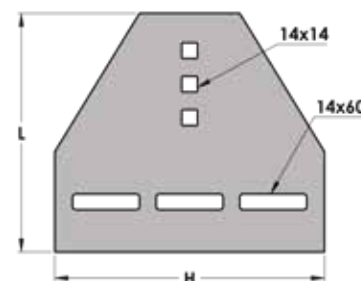
- S235JR

Finish

- High Corrosion Resistant (HCR) details can be found on page 256

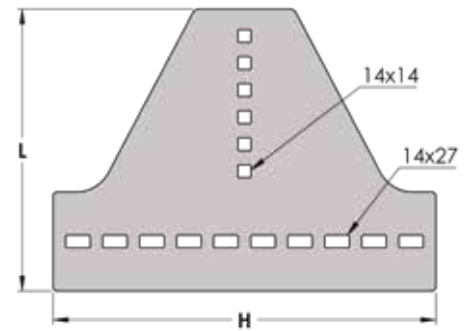
Service

- Middle connection plate allows horizontal and vertical connections for square profile with adjusting both direction.



Code	L × H × S	Weight
	mm × mm × mm	kg/100 Pcs.
IFPKDO080H	184 × 242 × 6	150
IFPKDO100H	214 × 242 × 6	180
IFPKDO120H	236 × 242 × 6	210

Middle Connecting Plate (Heavy)


Material & Finish

- S235JR

Finish

- High Corrosion Resistant (HCR) details can be found on page 256

Service

- Middle connection plate allows horizontal and vertical connections for square profile with adjusting both direction.

Code	L × H × S	Weight
	mm × mm × mm	kg/100 Pcs.
IFPKDOH080H	255.5 × 342 × 6	216
IFPKDOH100H	295 × 424 × 6	342
IFPKDOH120H	313 × 424 × 7	469

Holder

Material

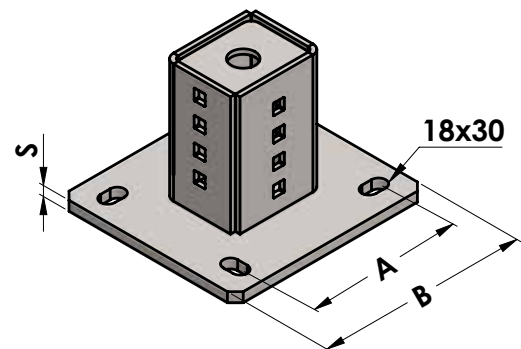
- S235JR

Finish

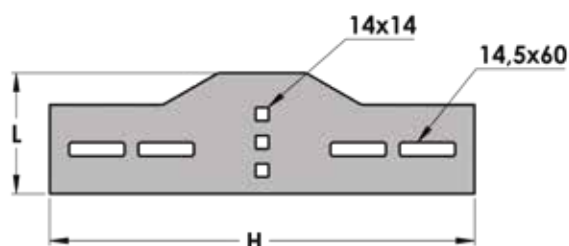
- High Corrosion Resistant (HCR) details can be found on page 256

Service

- Profile Holder allows vertical connections of square profile for ground or ceiling connections heavy duty pipe support systems.



Code	Size	A × B	S	Weight
	mm × mm	mm × mm	mm	kg/100 Pcs.
IFPKDTB080H	80 × 80	125 × 190	10	378
IFPKDTB100H	100 × 100	155 × 220	12	633
IFPKDTB120H	100 × 120	175 × 240	12	736



T Connecting Plate

Material & Finish

- S235JR

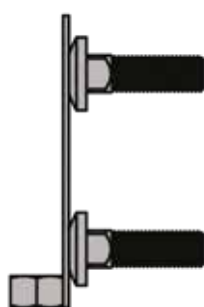
Finish

- High Corrosion Resistant (HCR) details can be found on page 256

Service

- T connection plate allows horizontal and vertical connections for square profile with adjusting both direction.

Code	L × H × S	Weight
	mm × mm × mm	kg/100 Pcs.
IFPKDT100080H	105,5 × 440 × 6	160
IFPKDT100120H	129 × 460 × 6	210



Double Bolt Holder with Nut

Material

- S235JR

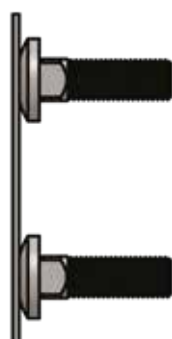
Finish

- High Corrosion Resistant (HCR) details can be found on page 256

Service

- Double bolt holder allows easy fastening for connection parts.
- Designed for long inner profile fastening distances.

Code	Weight
	kg/100 Pcs.
IFPKDCTS100120H	17



Double Bolt Holder without Nut

Material

- S235JR

Finish

- High Corrosion Resistant (HCR) details can be found on page 256

Service

- Double bolt holder allows easy fastening for connection parts.
- Designed for multi bolt connection. Easy to fasten nuts in one operation.

Code	Weight
	kg/100 Pcs.
IFPKDCT100120H	16

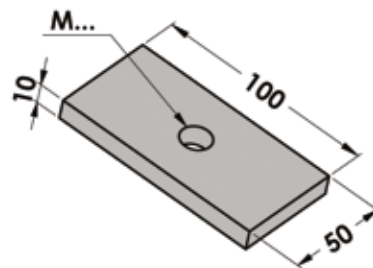
Rectangle Washer

Material

• S235JR

Finish

• High Corrosion Resistant (HCR) details can be found on page 256



Code	M	Weight
		kg/100 Pcs.
IFPKZPK1050100M08H	8	38
IFPKZPK1050100M10H	10	38
IFPKZPK1050100M12H	12	38
IFPKZPK1050100M16H	16	38
IFPKZPK1050100M20H	20	38

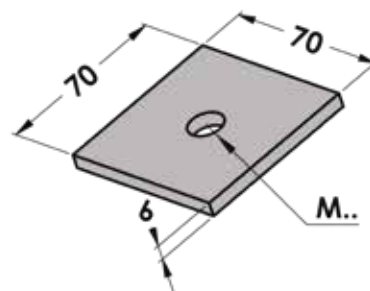
Square Washer

Material

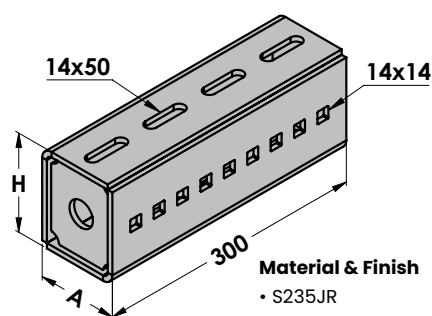
• S235JR

Finish

• High Corrosion Resistant (HCR) details can be found on page 256



Code	M	Weight
		kg/100 Pcs.
IFPKZPK067070M08H	8	22
IFPKZPK067070M10H	10	22
IFPKZPK067070M12H	12	22
IFPKZPK067070M16H	16	22
IFPKZPK067070M20H	20	22


Material & Finish

- S235JR

Finish

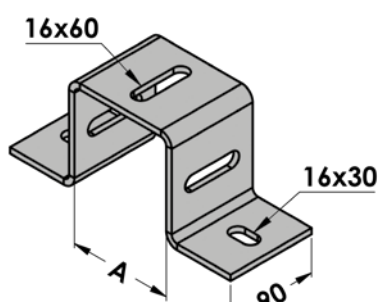
- High Corrosion Resistant (HCR) details can be found on page 256

Connector

Service

- Corner connector designed for realize the horizontal and vertical connections of square profile. Corner connection plate allows adjusting for both directions.

Code	A × H	Weight
	mm × mm	kg/100 Pcs.
IPKEB080H	70 × 70	230
IPKEB100H	90 × 90	400
IPKEB120H	90 × 110	520


Service

- Corner connector designed for realize the horizontal and vertical connections of square profile. Corner connection plate allows adjusting for both directions.

Finish

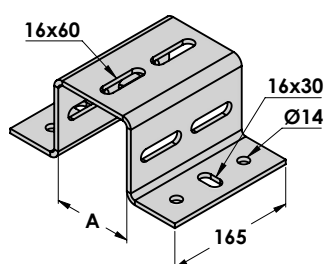
- High Corrosion Resistant (HCR) details can be found on page 256

Material & Finish

- S235JR

Beam Section Holder Medium

Code	A	Weight
	mm	kg/100 Pcs.
IFPKBHM080H	82	150
IFPKBHM100H	102	165


Material & Finish

- S235JR

Finish

- High Corrosion Resistant (HCR) details can be found on page 256

Service

- Corner connector designed for realize the horizontal and vertical connections of square profile. Corner connection plate allows adjusting for both directions.

Beam Section Holder

Code	A	Weight
	mm	kg/100 Pcs.
IFPKBH080H	82	250
IFPKBH100H	102	300

Square Neck Bolt


Material

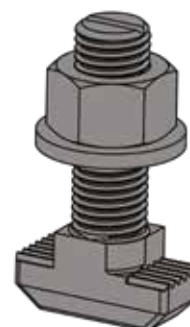
- Carbon Steel - Grade 8.8 in accordance with EN 898-1

Finish

- High Corrosion Resistant (HCR) details can be found on page 256

Code	Bolt	Weight
		kg/100 Pcs.
ZCKBP1240GP	M12 × 40	6
ZCKBP12100GP	M12 × 100	11
ZCKBP12120GP	M12 × 120	13
ZCKBP12140GP	M12 × 140	15

T Bolt


Material

- Carbon Steel - Grade 8.8 in accordance with EN 898-1

Finish

- High Corrosion Resistant (HCR) details can be found on page 256

Service

- T head bolts allows easy fastening for horizontal connection parts of pipe supports systems. Possible to see bolt direction with mark on it.

Code	Bolt	Weight
		kg/100 Pcs.
ICTK1240GP	M12 × 40	11

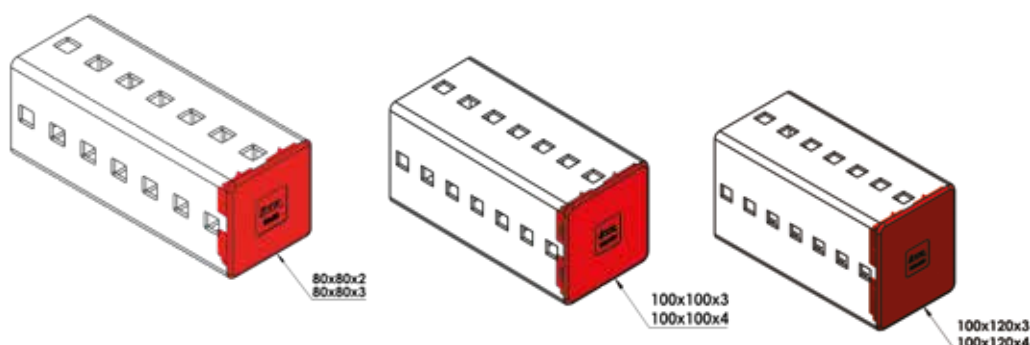
Cover

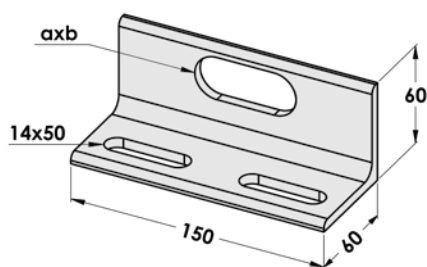
Material

- PP

Code

- IPKT08008030
- IPKT10010030
- IPKT10012030




Material & Finish

- S235JR

Finish

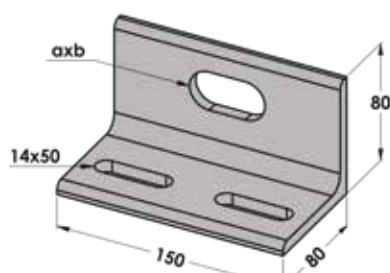
- High Corrosion Resistant (HCR) details can be found on page 256

Servis

- Corner connector designed for realize the horizontal and vertical connections of square profile. Corner connection plate allows adjusting for both directions.

Angle 60

Code	a × b	Weight
		kg/100 Pcs.
IFPKK6060M10H	12 × 60	71
IFPKK6060M12H	14 × 60	71
IFPKK6060M16H	18 × 60	70
IFPKK6060M20H	22 × 60	69
IFPKK6060M24H	26 × 60	68


Material

- S235JR

Finish

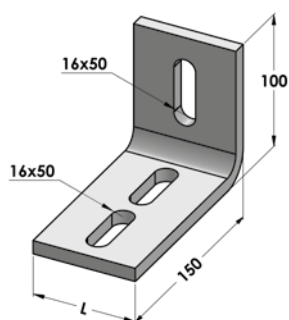
- High Corrosion Resistant (HCR) details can be found on page 256

Service

- Corner connector designed for realize the horizontal and vertical connections of square profile. Corner connection plate allows adjusting for both directions.

Angle 80

Code	a × b	Weight
		kg/100 Pcs.
IFPKK8080M10H	12 × 60	132
IFPKK8080M12H	14 × 60	132
IFPKK8080M16H	18 × 60	130
IFPKK8080M20H	22 × 60	130
IFPKK8080M24H	26 × 60	128


Material & Finish

- S235JR

Finish

- High Corrosion Resistant (HCR) details can be found on page 256

Servis

- Corner connector designed for realize the horizontal and vertical connections of square profile. Corner connection plate allows adjusting for both directions.

Angle 100x150

Code	L	Weight
	mm	kg/100 Pcs.
IFPKK10015075H	75	119
IFPKK10015090H	90	146

Pressure Plate (Square Profile)

Material

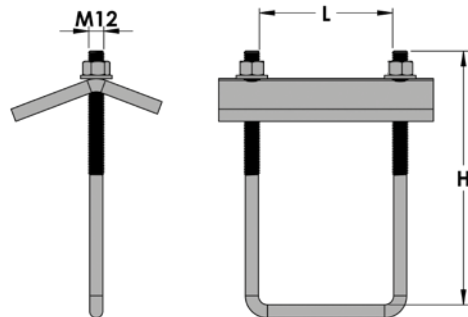
• S235JR

Service

- It is used for fixing square profiles to structural steels.
No drilling and welding necessary. It is very easy to adjust the position of the profile. Supplied as preassembled.

Finish

- High Corrosion Resistant (HCR) details can be found on page 256



Code	Size	Square Profile	Weight
	mm (L) × mm (H)	mm × mm	kg/100 Pcs.
IFPKC080H	82 × 175	80 × 80	167
IFPKC100H	102 × 195	100 × 100 / 100 × 120	341

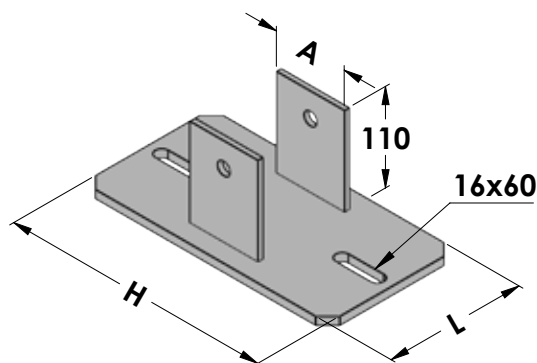
Vertical Hinge

Material

• S235JR

Finish

- High Corrosion Resistant (HCR) details can be found on page 256



Code	L × H × A	Weight
	mm × mm × mm	kg/100 Pcs.
IFPKDM080H	140 × 285 × 70	364
IFPKDM100H	160 × 305 × 85	450

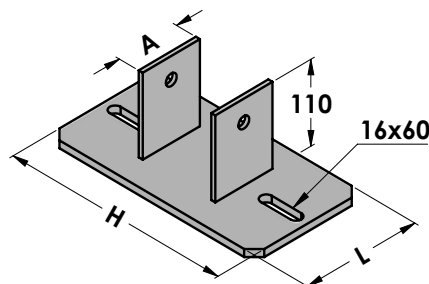
Horizontal Hinge

Material

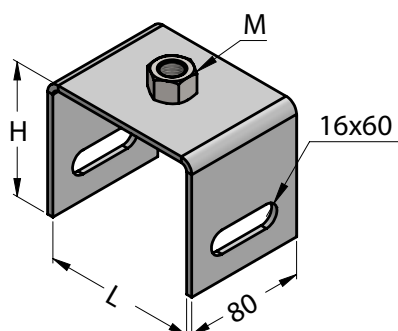
• S235JR

Finish

- High Corrosion Resistant (HCR) details can be found on page 256



Code	L × H × A	Weight
	mm × mm × mm	kg/100 Pcs.
IFPKYM080H	140 × 285 × 70	364
IFPKYM100H	160 × 305 × 85	450



Rod Connection Bracket

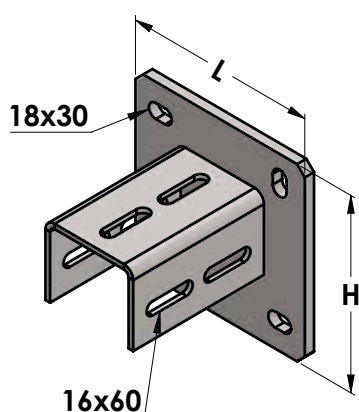
Material

• S235JR

Finish

• High Corrosion Resistant (HCR) details can be found on page 256

Code	H × L	M	Weight
	mm × mm		kg/100 Pcs.
IFPKRB080M10H	82 × 69	M10	50.2
IFPKRB080M12H		M12	50.8
IFPKRB080M16H		M16	53,0
IFPKRB080M20H		M20	56.5
IFPKRB080M24H		M24	61.9
IFPKRB100M10H	102 × 79	M10	60,0
IFPKRB100M12H		M12	60.6
IFPKRB100M16H		M16	62.9
IFPKRB100M20H		M20	66,0
IFPKRB100M24H		M24	71.9
IFPKRB120M10H	102 × 89	M10	65,0
IFPKRB120M12H		M12	65.6
IFPKRB120M16H		M16	67.9
IFPKRB120M20H		M20	70,0
IFPKRB120M24H		M24	75.4



Wall Connection Plate

Material

• S235JR

Finish

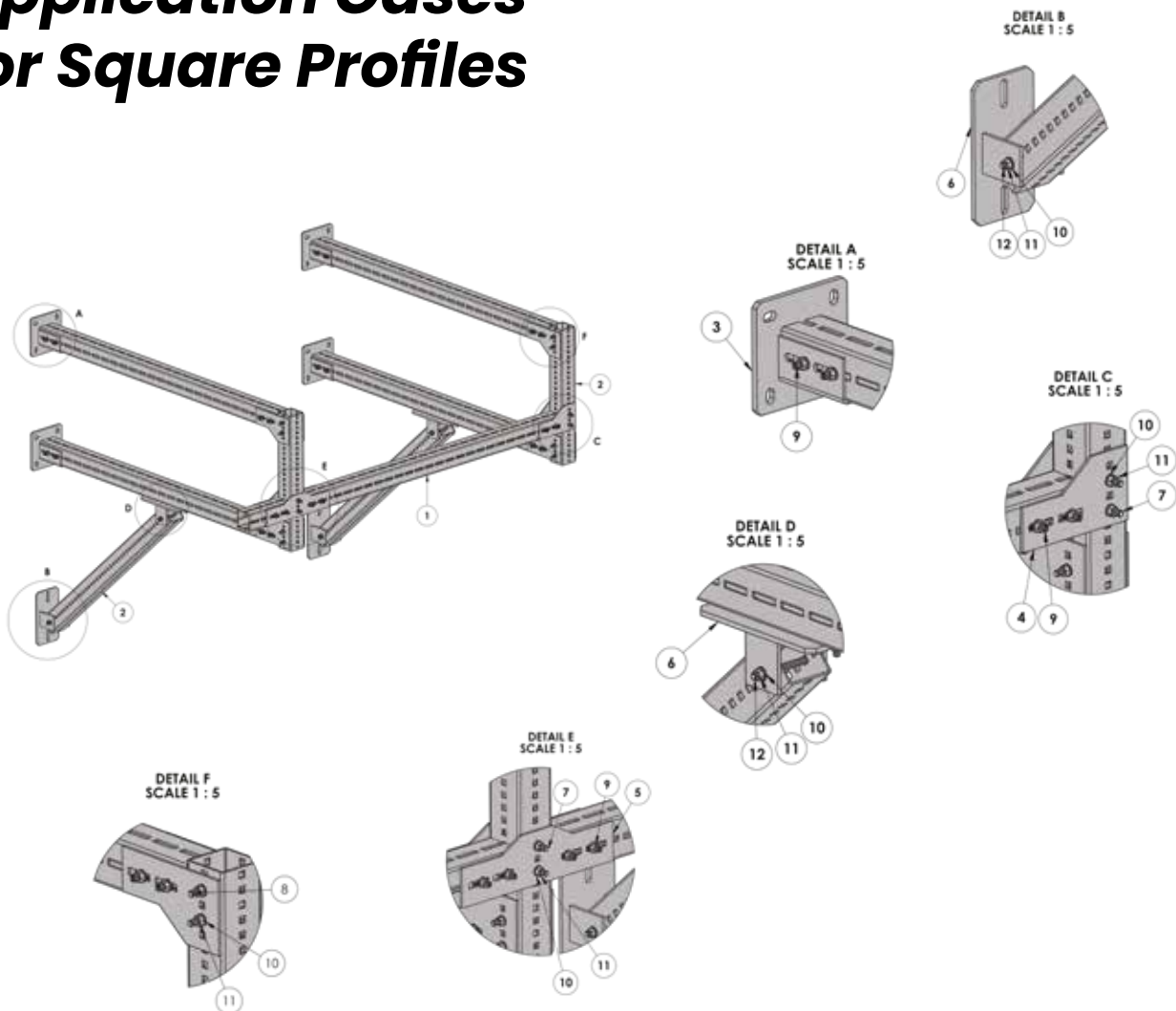
• High Corrosion Resistant (HCR) details can be found on page 256

Service

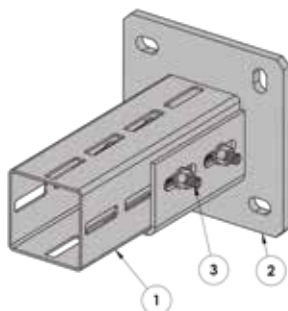
• Profile Holder allows horizontal connections of square profile for wall connections heavy duty pipe support systems.

Code	L × H	Size	Weight
	mm × mm	mm × mm	kg/100 Pcs.
IFPKTB080080H	200 × 200	80 × 80	442
IFPKTB100100H	220 × 220	100 × 100	628
IFPKTB120100H	220 × 240	100 × 120	693

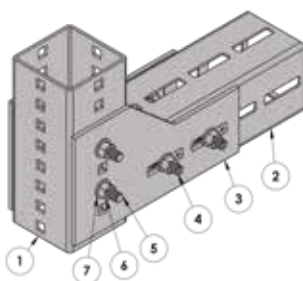
Application Cases for Square Profiles



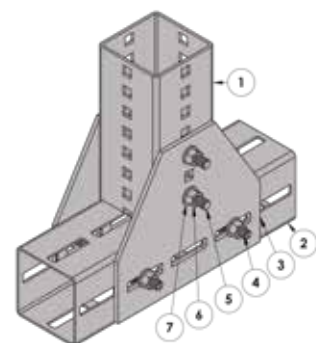
Item No.	Description	Code	Qty.
1	100 × 100 Square Profile (Horizontal)	IPK100100406000	5
2	100 × 100 Square Profile (Vertical)	IPKD100100406000	2
3	100 × 100 Wall Connection Plate	IFPKTB100100	4
4	Horizontal Profile Connection Plate	IFPKDA100120	10
5	T Connection Plate	IFPKDT100120	2
6	Horizontal Hinge	IFPKYM100H	4
7	Double Bolt Holder With Nut	IFPKDCTS100120	4
8	DIN 603 (8.8) Square Neck Bolt	ZCKBP1240GP	16
9	T Bolt	ICTK1240GP	48
10	Plain Washer M12	ZPS0012	32
11	Hex Nut M12	ZSS0012	32
12	Threaded Rod M12	IRRT12...	4



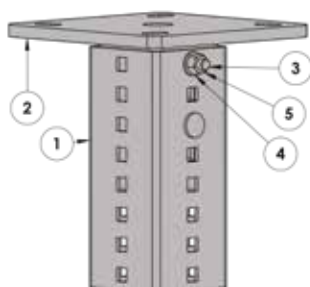
Item No.	Description	Code	Qty.
1	100 × 100 × 3 Square Profile (Horizontal)	IPK100100306000	1
2	100 × 100 Wall Connection Plate	IFPKTB100100	1
3	Profile T Lock	ICTK1240GP	4



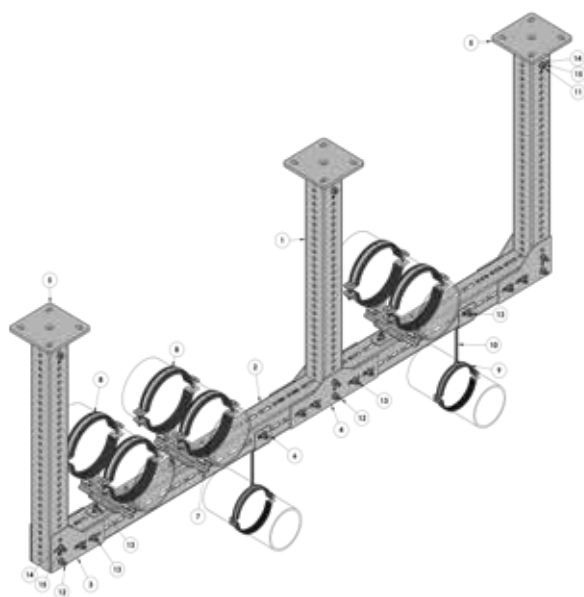
Item No.	Description	Code	Qty.
1	100 × 100 Square Profile (Vertical)	IPKD100100406000	1
2	100 × 100 Square Profile (Horizontal)	IPK100100306000	1
3	Corners Plate 5 Connection	IFPKDA100120	2
4	Profile T Lock	ICTK1240GP	4
5	Din 603 (8.8) Square Neck Bolt	ZCKBP1240GP	4
6	Hex Nut M12	ZSS0012	4
7	Plain Washer M12	ZPS0012	4



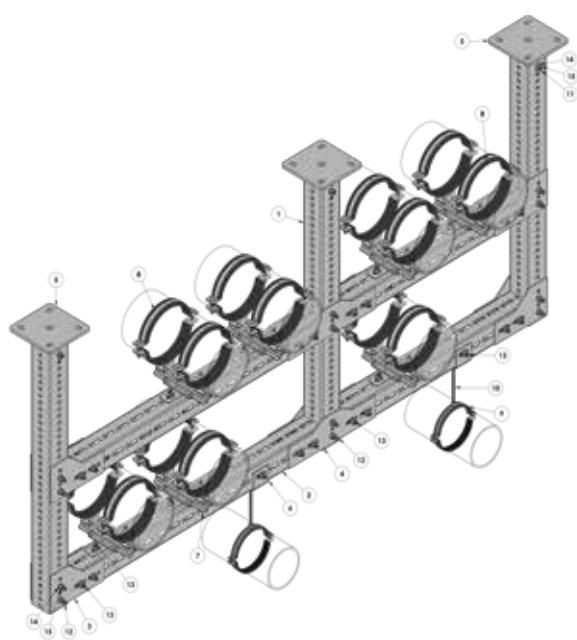
Item No.	Description	Code	Qty.
1	100 × 100 Square Profile (Vertical)	IPKD100100406000	1
2	100 × 100 Square Profile (Horizontal)	IPK100100306000	1
3	Cross Fixing Plate	IFPKDO100	2
4	Profile T Lock	ICTK1240GP	4
5	Din 603 (8.8) Square Neck Bolt	ZCKBP1240GP	4
6	Hex Nut M12	ZSS0012	4
7	Plain Washer M12	ZPS0012	4



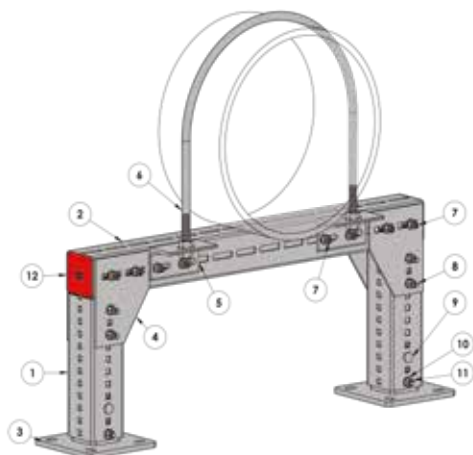
Item No.	Description	Code	Qty.
1	100 × 100 Square Profile (Vertical)	IPKD100100406000	1
2	100 × 100 Ceiling Connection Plate	IFPKDTB100	1
3	Din 603 (8.8) Square Neck Bolt	ZCKBP12120GP	2
4	Plain Washer M12	ZPS0012	2
5	Hex Nut M12	ZSS0012	2



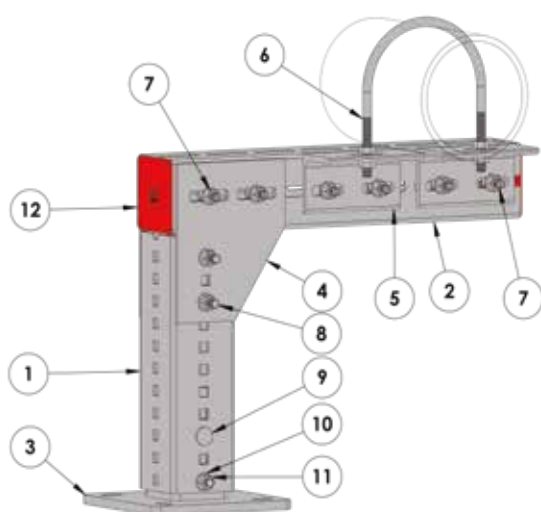
Item No.	Description	Code	Qty.
1	100 × 100 Square Profile (Vertical)	IPKD100100306000	3
2	100 × 100 Square Profile (Horizontal)	IPK100100306000	1
3	Corners Plate 5 Connection	IFPKDA100120	4
4	T Connection Plate	IFPKDT100120	2
5	100 × 100 Ceiling Connection Plate	IFPKDTB100	3
6	100 × 100 Rod Connection Bracket	IFPKRB100M10	2
7	Heavy Duty Slider (Mount on Square Profile)	IWKMLK5090245...	3
8	Heavy Duty Pipe Clamp With Rubber Profile	IKAK200	6
9	Std. Pipe Clamp With Rubber Profile & Combi Nut	IKKS150	2
10	Threaded Rod M10	IRRT102000	2
11	Din 603 (8.8) Square Neck Bolt	ZCKBP12120GP	6
12	Din 603 (8.8) Square Neck Bolt	ZCKBP1240GP	12
13	Profile T Lock	ICTK1240GP	26
14	Plain Washer M12	ZPS0012	24
15	Hex Nut M12	ZSS0012	24
16	Hex Bolt M12	ZCC1230	6
17	100 × 100 × 3 Square Profile (Horizontal)	IPK100100306000	1



Item No.	Description	Code	Qty.
1	100 × 100 Square Profile (Vertical)	IPKD100100306000	3
2	100 × 100 Square Profile (Horizontal)	IPK100100306000	2
3	Corners Plate 5 Connection	IFPKDA100120	8
4	T Connection Plate	IFPKDT100120	4
5	100 × 100 Ceiling Connection Plate	IFPKDTB100	3
6	100 × 100 Rod Connection Bracket	IFPKRB100M10	2
7	Heavy Duty Slider (Mount on Square Profile)	IWKMLK5090245...	7
8	Heavy Duty Pipe Clamp With Rubber Profile	IKAK200	14
9	Std. Pipe Clamp With Rubber Profile & Combi Nut	IKKS150	2
10	Threaded Rod M10	IRRT102000	2
11	Din 603 (8.8) Square Neck Bolt	ZCKBP12120GP	6
12	Din 603 (8.8) Square Neck Bolt	ZCKBP1240GP	24
13	Profile T Lock	ICTK1240GP	50
14	Plain Washer M12	ZPS0012	40
15	Hex Nut M12	ZSS0012	40
16	Hex Bolt M12	ZCC1230	10
17	100 × 100 × 3 Square Profile (Horizontal)	IPK100100306000	2



Item No.	Description	Code	Qty.
1	100 × 100 Square Profile (Vertical)	IPKD100100406000	0.69m
2	100 × 100 Square Profile (Horizontal)	IPK100100406000	1.05m
3	100 × 100 Ceiling Connection Plate	IFKDTB100	2
4	Corner Connecting Plate	IFPKDK100	4
5	80x80 Angle	IFPKK8080M20	2
6	U-Bolt	IRUB20510A	1
7	Profile T Lock	ICTK1240GP	12
8	Din 603 (8.8) Square Neck Bolt	ZCKBP1240GP	8
9	Din 603 (8.8) Square Neck Bolt	ZCKBP12120GP	4
10	Plain Washer M12	ZPS0012	12
11	Hex Nut M12	ZSS0012	12
12	100 × 100 Cover	IPKT10010030	2

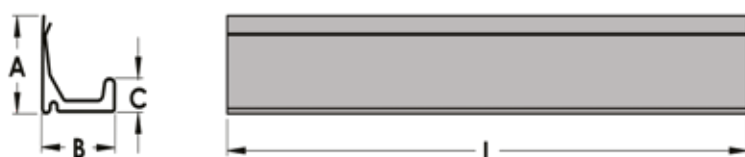


Item No.	Description	Code	Qty.
1	100 × 100 Square Profile (Vertical)	IPKD100100406000	1
2	100 × 100 Square Profile (Horizontal)	IPK100100406000	1
3	100 × 100 Ceiling Connection Plate	IFKDTB100	1
4	Corner Connecting Plate	IFPKDK100	2
5	80x80 Angle	IFPKK8080M20	2
6	U-Bolt	IRUB12168A	1
7	Profile T Lock	ICTK1240GP	8
8	Din 603 (8.8) Square Neck Bolt	ZCKBP1240GP	4
9	Din 603 (8.8) Square Neck Bolt	ZCKBP12120GP	2
10	Plain Washer M12	ZPS0012	6
11	Hex Nut M12	ZSS0012	6
12	100 × 100 Cover	IPKT10010030	2

VENTILATION SYSTEMS



Duct Flange Profile



Nominal Size Range

- 20 mm & 30 mm

Material & Finish

- Pre-galvanized
- **Material:** DX51D
- **Finish designation:** Z200

Service

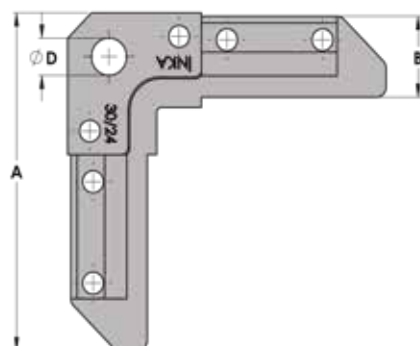
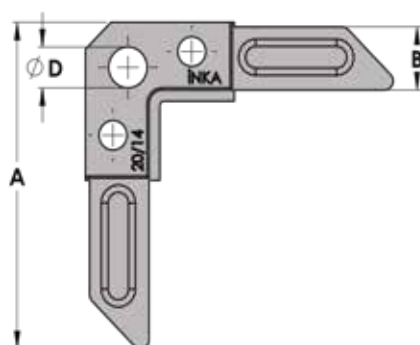
- Flange profiles cut in to desired lengths and assembled as frame use for air ventilation system assembly.
- Flange is used produced in our facility by rollforming method
- Galvanized sheet is used as raw materials.

Ordering

- **Available Length (L):** 4 m

Code	Nominal Size	A	B	C	L
	mm / mm	mm	mm	mm	mm
IFFLO20	20/14	27	20	10	4,000
IFFLO30	30/14	27	30	10	4,000

Ventilation Duct Angle Piece



Material

- S235JR

Service

- Angle piece that is mounted to the flanges of rectangular air ducts, to enable their assembly to each other from the corners.
- The fixing bolt must be the same dimension with the ventilation clamp bolts, to accomplish the loading values in the catalogue.

Finish

- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 - EN ISO 2081/EN ISO 4042

Code	A	B	Ø D	Qty. / Box	Weight
	mm	mm	mm		Kg/Box
IFFLC2014	71	18	9	500	13
IFFLC3024	105	27	11	200	15

Ventilation Pipe Clamp with Rubber Profile

Nominal Size Range

- 71 to 1,400 mm

Material

- Carbon Steel
- EPDM Rubber Lining provides noise reduction in accordance with EN 14366, vibration reduction and partial compensation of thermal expansion

Ordering

- Specify code or name, nominal size and finish.

Service

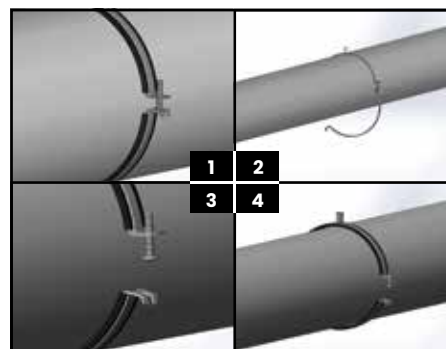
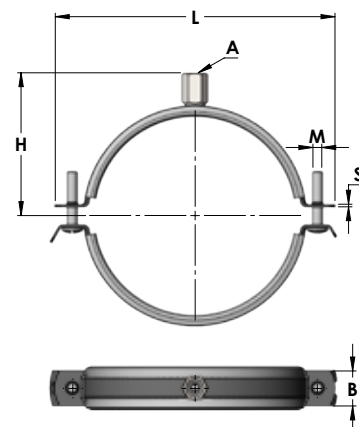
- Used for mounting of circular ducts to the walls (vertical/horizontal), ceilings and floors.
- Connection type is M8 / M10 combi nut.

Installation

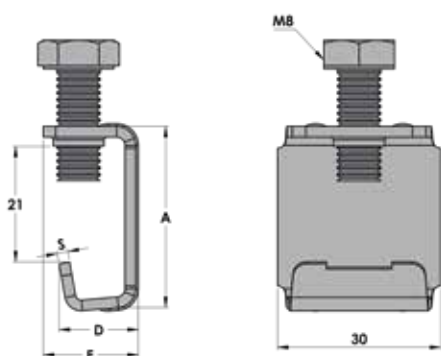
- Easy and safe assembly through Philips combi side screws.
Side screws are protected against loss during assembly with the help of plastic washers.

Finish

- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 – EN ISO 2081/EN ISO 4042



Code	Nominal Size	Clamping Range	L	H	M	S × B	A	Qty./Box	Weight
	mm	mm	mm	mm		mm × mm			kg/Box
IKHV0071	71	73	116	55	M6	1,5 x 20	M8 / M10	50	6,25
IKHV0080	80	82	124,5	59,5	M6	1,5x 20	M8 / M10	50	6,6
IKHV0090	90	92	135,5	64,5	M6	1,5x 20	M8 / M10	50	7,8
IKHV0100	100	103	146,5	70	M6	1,5x 20	M8 / M10	50	8
IKHV0112	112	115	158,5	76	M6	1,5 x 20	M8 / M10	25	4,5
IKHV0125	125	128	172	82,5	M6	1,5 x 20	M8 / M10	25	5
IKHV0140	140	143	187	89,5	M6	1,5 x 20	M8 / M10	25	5,2
IKHV0150	150	153	197	95	M6	1,5 x 20	M8 / M10	25	5,6
IKHV0160	160	163	209,5	101	M6	1,5 x 20	M8 / M10	25	5,7
IKHV0180	180	183	232,5	111	M6	1,5 x 20	M8 / M10	25	6,4
IKHV0200	200	203	250	120	M6	1,5 x 20	M8 / M10	25	6,8
IKHV0224	224	227	275,5	145,5	M6	2 x 25	M8 / M10	25	11,25
IKHV0250	250	253	315	158	M6	2 x 25	M8 / M10	20	10,8
IKHV0280	280	283	333,5	172,5	M6	2 x 25	M8 / M10	15	9
IKHV0300	300	304	360	184	M6	2 x 25	M8 / M10	15	9,75
IKHV0315	315	319	383	191,5	M6	2 x 25	M8 / M10	25	17,5
IKHV0355	355	359	415,5	211,5	M6	2 x 25	M8 / M10	25	18,75
IKHV0400	400	404	464	234	M6	2 x 25	M8 / M10	15	13,2
IKHV0450	450	454	547	259	M6	2 x 25	M8 / M10	15	14,55
IKHV0500	500	504	579	284	M6	2 x 25	M8 / M10	20	21
IKHV0560	560	564,8	625	300,5	M10	2,5 x 25	M8 / M10	20	25
IKHV0600	600	604,8	664	320,5	M10	2,5 x 25	M8 / M10	20	26,3
IKHV0630	630	636	696,3	336	M10	2,5 x 25	M8 / M10	20	27,5
IKHV0710	710	716	776,5	363	-	2,5 x 25	M8 / M10	10	15,6
IKHV0800	800	806	866,5	408	-	2,5 x 25	M8 / M10	10	17,4
IKHV0900	900	906	966,5	458	-	2,5 x 25	M8 / M10	10	19,2
IKHV1000	1000	1007,2	1068,5	508,5	-	2,5 x 25	M8 / M10	10	21,2
IKHV1120	1120	1127,2	1188	568,5	-	2,5 x 25	M8 / M10	10	22,4
IKHV1250	1250	1257,2	1318	633,5	-	2,5 x 25	M8 / M10	10	29
IKHV1400	1400	1400	1468	708,5	-	2,5 x 25	M8 / M10	10	30



Ventilation Clamp

Material

- Carbon Steel

Service

- The most ideal and economic element for assembling air ducts to each other from the flange. Easy clamping of profiles with the help of bolt screws. It has a right construction for high load carrying capacity.
- The clamp bolt must be the same dimensions with the flange bolts, to accomplish the loading values in the catalogue.

Finish

- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 – EN ISO 2081/EN ISO 4042

Code	S	A	C°	D	E	Qty. / Box	Weight
	mm	mm		mm	mm		kg/Box
IFHM02	2	33	95	14.5	17.5	150	5.4

VR Hanging Part

Material

- Carbon Steel

Service

- Fixing elements for easy and simple assembly of circular air ducts. Height adjustment is possible with INKA threaded rod. Can be mounted to the ceiling directly. Fixed with rivets to circular air ducts EPDM protection nozzle to prevent friction between rods and mounted objects. Vibration reduction Noise reduction level up to 18 dB.

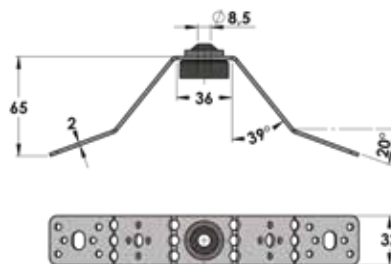
Ordering

- Threaded rods, anchors and nuts should be ordered separately.

Finish

- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 - EN ISO 2081/EN ISO 4042

Code	Recom. Load (kN)	Qty./Box	Weight
			kg/Box
IFMAVR	230	75	9.4



VT Hanging Part

Material

- Carbon Steel

Service

- Fixing elements for easy and simple assembly of circular air ducts. Height adjustment is possible with INKA threaded rod. Can be mounted to the ceiling directly. Fixed with rivets to circular air ducts. EPDM protection nozzle to prevent friction between rods and mounted objects. Vibration reduction. Noise reduction level up to 18 dB.

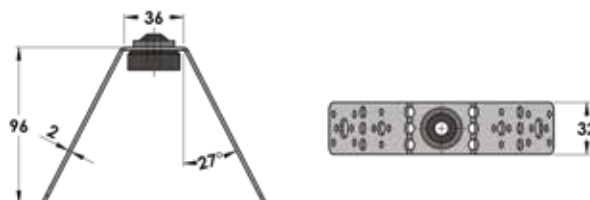
Ordering

- Threaded rods, anchors and nuts should be ordered separately.

Finish

- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 - EN ISO 2081/EN ISO 4042

Code	Recom. Load	Qty./Box	Weight
	kN		kg/Box
IFMAVT	75	9.35	230



L Hanging Part

Material

- Carbon Steel

Service

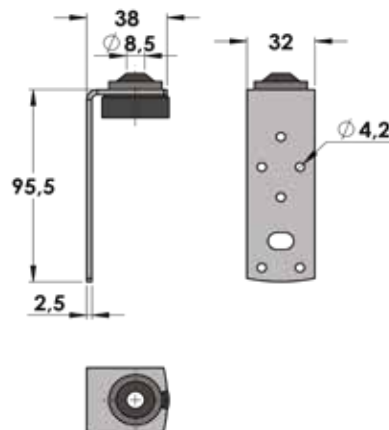
- Fixing elements for easy and simple assembly of air ducts. Allow height adjustment with inka rods. Can be mounted to the ceiling directly. Must be fixed with rivets to air ducts. EPDM protection nozzle to prevent friction between rods and mounted objects. Vibration reduction. Noise reduction level up to 18 dB.

Ordering

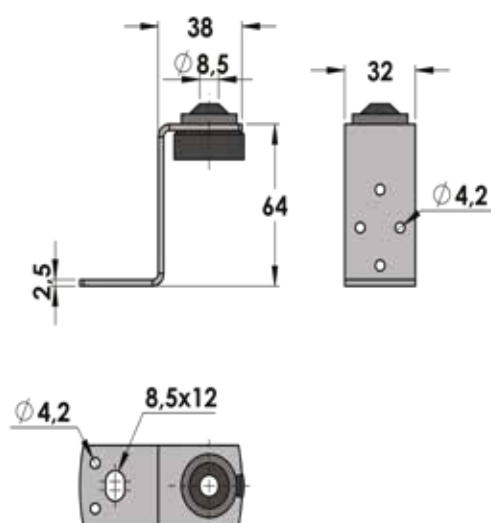
- Rods, anchors and nuts should be ordered separately.

Finish

- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 - EN ISO 2081/EN ISO 4042



Code	Recom. Load	Qty./Box	Weight
	kN		kg/Box
IFMAL	230	100	9.5



Z Hanging Part

Material

- Carbon Steel

Service

- Fixing elements for easy and simple assembly of air ducts. Allow height adjustment with inka rods. Can be mounted to the ceiling directly. Must be fixed with rivets to air ducts. EPDM protection nozzle to prevent friction between rods and mounted objects. Vibration reduction. Noise reduction level up to 18 dB.

Ordering

- Rods, anchors and nuts should be ordered separately.

Finish

- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 - EN ISO 2081/EN ISO 4042

Code	Recom. Load	Qty./Box	Weight
	kN		kg/Box
IFMAZ	230	100	9.5



Neoprene Seal

Material

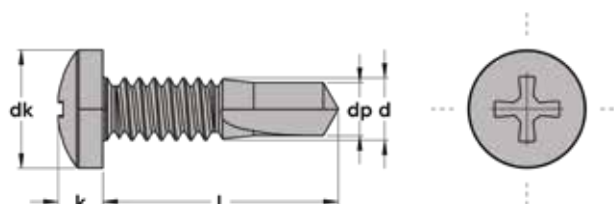
- Eva Foam

Service

- Used in the connection places of the air canals in order to provide impermeability. Temperature resistance -20°C to +100°C Density: 70 kg/m³ (± 10 kg/m³)

Code	Size	Material	Thickness	Width	Length
	mm × mm		mm	mm	m/Roll
ZLIP515	5 × 15	EPDM	5	15	10
ZLIP520	5 × 20	EPDM	5	20	10
ZLIP525	5 × 25	EPDM	5	25	10
ZLIP530	5 × 30	EPDM	5	30	10

Easy Screw



Size d	ST2.9	ST3.5	ST3.9	ST4.2	ST4.8
P (pitch)	1.1	1.3	1.3	1.4	1.6
dk	5.6	6.9	7.5	8.2	9.5
k	2.2	2.6	2.8	3.0	3.5
dp	4.5	5.0	6.0	7.0	8.0
h	1.0	2.0	2.0	2.0	2.0
Code	Diameter	Size	Drill Capacity	Vertical Force in Drilling	Drilling Speed
		mm			rpm
9KV3913	3.9	ST3.9 × 13 mm	2.8	150 (~15)	1,800-2,500
9KV3916		ST3.9 × 16 mm			
9KV3919		ST3.9 × 19 mm			
9KV3922		ST3.9 × 22 mm			
9KV3925		ST3.9 × 25 mm			
9KV3932		ST3.9 × 32 mm			
9KV4219	4.2	ST4.2 × 19 mm	2.8	250 (~25.5)	1,800-2,500
9KV4222		ST4.2 × 22 mm			
9KV4225		ST4.2 × 25 mm			
9KV4232		ST4.2 × 32 mm			
9KV4238		ST4.2 × 38 mm			
9KV4245		ST4.2 × 45 mm			
9KV4255		ST4.2 × 55 mm			
9KV4816	4.8	ST4.8 × 16 mm	3.6	250 (~25.5)	1,800-2,500
9KV4819		ST4.8 × 19 mm			
9KV4832		ST4.8 × 32 mm			
9KV4838		ST4.8 × 38 mm			
9KV4850		ST4.8 × 50 mm			
9KV6350	6.3	ST6.3 × 50 mm	5.3	350 (~35.5)	1,000-1,800

ANCHOR & FIXING SYSTEMS



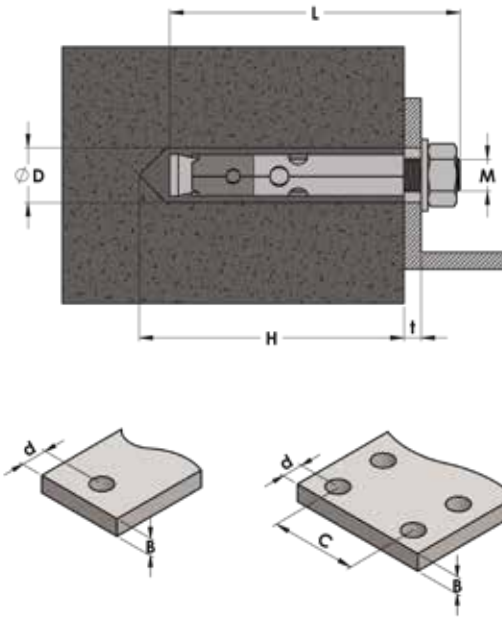
Sleeve Anchor

Service

- Economic and fast means of anchoring for medium load and low quality concrete. The sleeve which easily expands even in short holes and light loads insures safe anchoring and fastening properties. Suitable for fastening of vibrating elements.

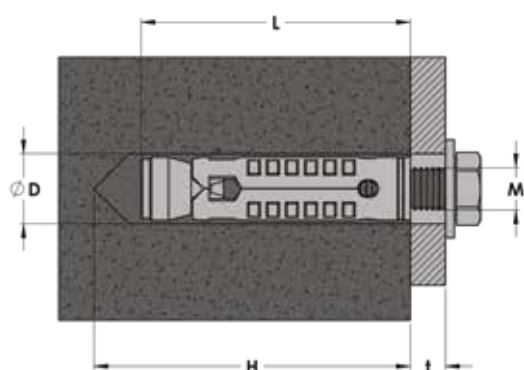
Finish

- Electro-Galvanized in accordance with
ASTM B 633/ASTM F 1941 - EN ISO 2081/EN ISO 4042

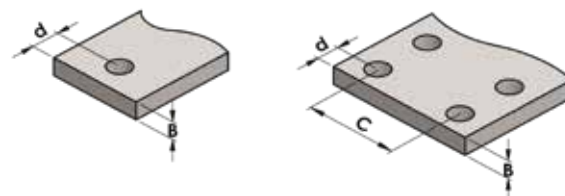


Size	M6	M8	M10	M12
Max. Permissible load for single anchor (kN)	1.5	2.0	3.0	5.0
Permissible bending moment at proper edge and axial spacing (Nm)	3.2	5.2	12.9	25.7

Code	M	L	Ø D	H	t (Max.)	Distance Between Anchor	Distance from Edge	Fastenable Thickness	Qty./Box	Weight
		mm	mm	mm	mm	c mm	d mm	e mm		kg/Box
IDGM06050	M6	46	8	55	8	130	90	100	800	12.6
IDGM06065	M6	65	8	75	30	130	90	100	600	12.6
IDGM08055	M8	55	10	65	10	160	100	120	400	12.4
IDGM08075	M8	75	10	80	35	160	100	120	300	12.7
IDGM08100	M8	100	10	110	40	160	100	120	200	13.4
IDGM10070	M10	70	12	80	15	200	125	140	200	12.2
IDGM10085	M10	85	12	95	40	200	125	140	200	14.6
IDGM10110	M10	110	12	120	60	200	125	140	100	9.2
IDGM12075	M12	75	16	85	15	220	140	160	150	15.3
IDGM12090	M12	90	16	100	50	220	140	160	100	12.0
IDGM12110	M12	110	16	120	70	220	140	160	100	14.1



Draw-in Anchor



Service

- Can be used with standart hex bolt or stud
- The extending tongues prevent co-rotation during installation.

Ordering

- Bolt length, $l = L + t$
- Stud length, $l = L + t + \text{thickness of washer \& nut}$

Finish

- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 - EN ISO 2081/EN ISO 4042

Nominal Size	M6	M8	M10	M12	M16
Max. permissible load for singe anchor (kN) bolt material 5.6	0.8	3.5	5.0	7.4	8.4
Permissible bending moment at proper edge and axial spacing (Nm) bolt material 5.6	5.1	12.5	24.9	43.7	85.0

Code	M	L	Ø D	H	t (Max.)	Distance Between Anchor	Distance from Edge	Fastenable Thickness	Qty./Box	Weight
		mm	mm	mm	mm	c mm	d mm	e mm		kg/Box
IDCES06	M6	45	10	50	7.0	260	130	160	1,800	11.2
IDCES08	M8 (S)	57	12	60	9.0	300	150	200	1,200	8.1
IDCES10	M10 (S)	63	15	70	11.0	360	180	200	600	7.8
IDCES12	M12 (S)	75	18	85	13.5	460	250	240	300	10.7
IDCE16	M16	90	24	110	17.5	520	250	320	100	10.0

Drop-in Anchor

Service

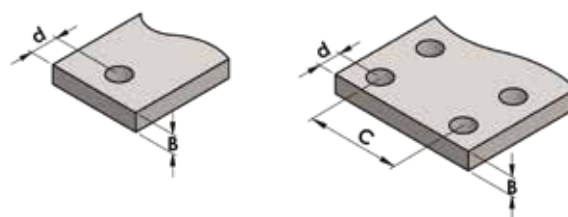
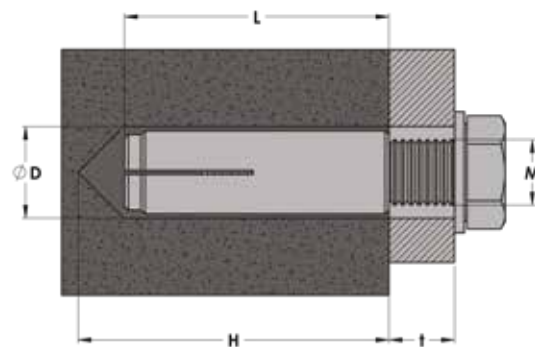
- An economical steel anchor that fastens safely and quickly and requires short hole in the concrete substrate. Conical plug provides uniform expansion and safe holding.

Ordering

- Bolt length should be chosen according to the table.

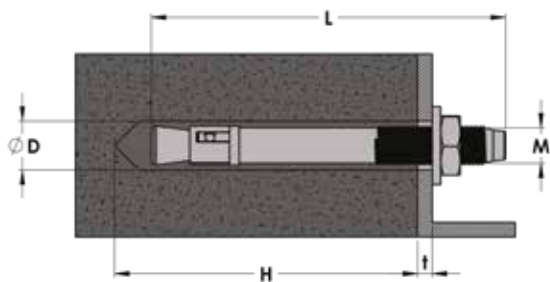
Finish

- Electro-Galvanized in accordance with
ASTM B 633/ASTM F 1941 – EN ISO 2081/EN ISO 4042



Nominal Size	M6	M8	M10	M12	M16	M20
Max. permissible load for single anchor (kN) bolt material 5.6	1	1.8	3.6	5.7	7.4	11.3
Permissible bending moment at proper edge and axial spacing (Nm) bolt material 5.6	2.5	6.2	12.5	21.8	55.8	108.2
Threading length (min.) V mm	6	8	10	12	16	20
Threading length (max.) V mm	10	12	15	18	20	30
Length of the bolt to be used cb mm	V+t	V+t	V+t	V+t	V+t	V+t

Code	M	L	Ø D	H	t (Max.)	Distance Between Anchor	Distance from Edge	Fastenable Thickness	Qty./Box	Weight
		mm	mm	mm	mm	c mm	d mm	e mm		kg/Box
IDCA06	M6	25	8	25	11	200	100	160	2,400	16.0
IDCA08	M8	30	10	30	13	240	120	160	1,200	14.4
IDCA10	M10	40	12	40	17	320	160	200	800	17.9
IDCA12	M12	50	15	50	18	400	200	200	400	18.8
IDCA16	M16	65	20	65	21	520	260	240	200	22.0
IDCA20	M20	80	25	80	30	640	320	320	100	19.0



Monoclip Anchor

Service

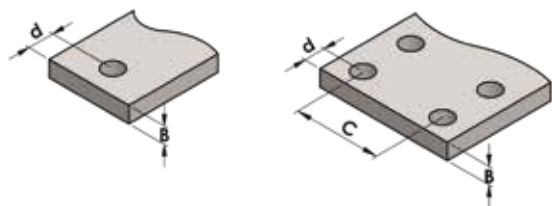
- Provides fast and easy setting
- Drill hole diameter=bolt diameter
- Suitable for anchoring at ceilings
- Suitable for fixing metal profiles, consoles and etc.

Ordering

- Upon request can be manufactured stainless steel material (A2 & A4)

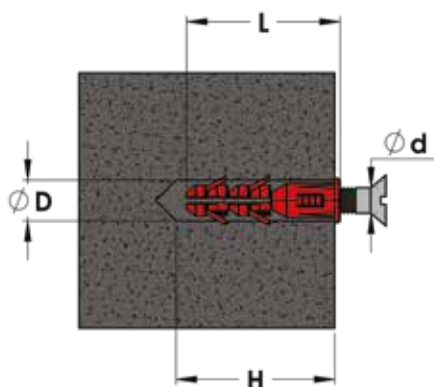
Finish

- Electro-Galvanized in accordance with
ASTM B 633/ASTM F 1941 - EN ISO 2081/EN ISO 4042



Nominal Size	M8	M10	M12	M16
Max. permissible load for single anchor (kN)	1.4	2.3	3.2	5.8
Permissible bending moment at proper edge and axial spacing (Nm)	11.7	23.4	34.9	88.8

Code	M	L	Ø D	H	h _v	t (Max)	Distance Between Anchor	Distance from Edge	Fastenable Thickness	Qty./Box	Weight
		mm	mm	mm	mm	mm	c mm	d mm	e mm		kg/Box
IDKL08075	M8	75	8	60	45	9	260	130	100	400	12.6
IDKL08120	M8	120	8	105	65	9	260	130	100	150	6.5
IDKL10090	M10	90	10	80	55	12	300	150	120	200	11.6
IDKL10120	M10	120	10	110	55	12	300	150	120	150	11.6
IDKL12110	M12	110	12	100	65	14	360	180	140	120	13.1
IDKL16145	M16	145	16	130	85	18	460	230	160	50	12.3



Plastic Anchor

Service

- It is plastic anchor that can withstand high pullout loads because of its special profile and provides safe and easy fastening. Because of the high plastic quality; no breaking, bending and cracking during setting.

Ordering

- The screw sizes should be suitable to the plastic anchor size.
- For a safe application, correct drill size should be chosen.

Code	Nominal Size	Color	L	Ø D	H	Ø d	Qty./Box	Weight
			mm	mm	mm	mm		kg/Box
IDPL06	M6	GREY	30	6	40	3.5 - 5.0	1,000	0.6
IDPL07	M7	GREEN	35	7	45	4.0 - 5.5	1,000	0.8
IDPL08	M8	BLUE	40	8	50	4.5 - 6.0	1,000	1.2
IDPL10	M10	RED	45	10	55	6.0 - 8.0	1,000	1.7
IDPL12	M12	GREY	55	12	65	8.0 - 10.0	500	1.5



Through Bolt Anchor

The male anchors are an effective professional solution for installing elements with high performance guarantees in cracked and non-cracked concrete.

They are available in a wide range that includes, among others, anchors with European ETA 21/0620 approval for use in cracked and non-cracked concrete, C1&C2 seismic approval for fire resistance, and European ETA 21/0543 approval for use in non-cracked concrete. They are suitable for installation in both indoor and outdoor applications thanks to the coating options. (ATLANTIS C3-L and zinc-plated).

DESIGN AND GEOMETRY



Shaft retracts as thread protection during anchor installation.



Nut. The internal threading makes it possible to fit the screw, facilitating the securing and connection of detachable elements. It is supplied pre-assembled.



Washer. It ensures optimal precision of the element being installed. It is supplied with a pre-assembled DIN 125 washer. Optionally, it can be supplied with DIN 9021 (wide series) or DIN 440 (for wood) washers.



The lettering on the shaft indicates its length, letting you know the length of the anchor once installed. It is important to check the thickness to be fastened in order to properly choose the necessary anchor length.



Marked with the installation depth. The line pointed on the shaft marks the depth recommended by the approval to insert the anchor into the drill.



Shaft edge. It allows the clip to be held in position during installation.



Expansion clip and cone. The cone retracts, expanding the clip and exerting pressure on the base material to enable fastening.



Identification. Model and measurement indicated on the clip.

APPLICATIONS



- Structural applications
- Structural beams and columns
- Stadium seats
- Wood-to-concrete structures
- Railings and fencing
- Shelving and racks
- Structural beams and columns
- Fastening of non-structural elements like signs, machines, boilers, posters, billboards, etc.
- Other installations

QUALITIES AND ADVANTAGES



MAXIMUM VERSATILITY. VARIABLE ANCHOR DEPTH. It can be installed with up to two different screwing depths in M8, M10, M12 and M16*

* In the IDKLAH zinc-plated version

MAXIMUM GUARANTEES. PRODUCTS APPROVED ACCORDING TO THE HIGHEST QUALITY STANDARDS.

Approval ETA 21/0620 option 1 for installation in cracked and non-cracked concrete (C20/25-C50/60).

- Approval ETA 21/0543 option 7 for installation in non-cracked concrete (C20/25-C50/60).
- Seismic approval C1&C2.
- Approved for fire resistance R30-R120 in concrete.
- Confirmed suitability for the installation of sprinkler systems in accordance with the VdS CEA 4001 guidelines.



THE PERFECT COATING ACCORDING TO THE EXPECTED LEVELS OF CORROSION

Atlantis C3-L coating: Valid for dry indoor conditions (50 years) or in C3-type outdoor environments according to ISO 9223, for a period of 25 years.

Zinc coating: Suitable for use in dry indoor conditions (category C1 according to ISO 9223), for a period of 50 years.

RANGE



Product	Axis	Clip	ETA	ETA	Seismic	Fire	VdS
IDKLAP	A2	A	✓		✓	✓	✓
IDKLAH	Zn	Zn		✓		✓	

IDKLAP



IDKLAPX Through Bolt Anchor

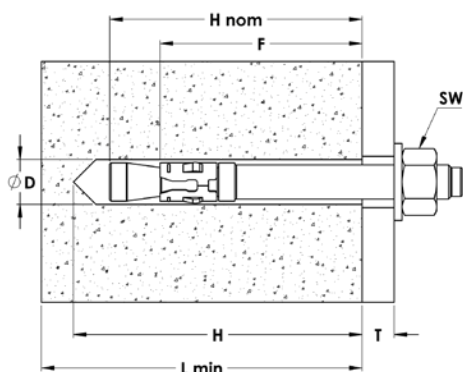
Through bolt anchor for heavy loads in cracked & uncracked concrete

IDKLAPX

Opt.1 ETA Assessed. Zinc-plated shaft. ATLANTIS C3-L clip



Code	Seismic Assessment	Size	DRILL Ø	Thickness Max. Fixture	Axis Letter (Length)		
			mm	mm			
IDKLAPX08075	C1	M8 × 75 Ø8	8	9	C	100	600
IDKLAPX10090	C1&C2	M10 × 90 Ø10	10	10	E	100	400
IDKLAPX10115	C1&C2	M10 × 115 Ø10	10	35	G	50	200
IDKLAPX12110	C1&C2	M12 × 110 Ø12	12	14	F	50	200
IDKLAPX12130	C1&C2	M12 × 130 Ø12	12	34	H	50	200
IDKLAPX16145	C1&C2	M16 × 145 Ø16	16	28	I	25	100
IDKLAPX16175	C1	M16 × 175 Ø16	16	58	K	25	50
IDKLAPX20170	C1&C2	M20 × 170 Ø20	20	32	K	20	40



IDKLAPX

Opt.1 ETA Assessed. Zinc-plated shaft. ATLANTIS C3-L clip

Code	Size	Max. Fixture Thickness	Drill Ø	Hole Depth Min.	Min. Anchor Depth	Installation Key	Torque	Axis Letter	Ø Element to Fix	Min. Substrate Thickness	Min Distance to Edge	Min. Distance from Axis	Tension Load Non-Cracked Concrete	Shear Load Non-Cracked Concrete	Tension Load Cracked Concrete	Shear Load Cracked Concrete
		(T) mm	(ØD) mm	(H) mm	(H nom.) mm	SW	Nm		mm	(L min.) mm	mm	mm	kg	kg	kg	kg
IDKLAPX08075	M8 x 75	9	8	60	55	13	15	C	9	100	72	144	364	641	243	556
IDKLAPX10090	M10 x 90	10	10	75	68	17	40	E	12	120	90	180	777	1,014	437	1,014
IDKLAPX10115	M10 x 115	35	10	75	68	7	40	G	12	120	90	180	777	1,014	437	1,014
IDKLAPX12110	M12 x 110	14	12	85	80	19	60	F	14	140	105	210	1,214	1,474	777	1,474
IDKLAPX12130	M12 x 130	34	12	85	80	19	60	H	14	140	105	210	1,214	1,474	777	1,474
IDKLAPX16145	M16 x 145	28	16	105	97	24	100	I	18	170	128	255	1,699	2,744	1,214	2,620
IDKLAPX16175	M16 x 175	58	16	105	97	24	100	K	18	170	128	255	1,699	2,744	1,214	2,620
IDKLAPX20170	M20 x 170	32	20	125	114	30	200	K	22	200	150	300	2,388	4,258	1,456	3,343

IDKLAH

Through bolt anchor for heavy loads in uncracked concrete



IDKLAH

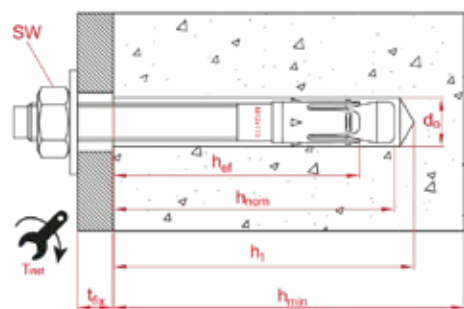
Opt.7 ETA Assessed. Zinc-plated shaft. Zinc-plated clip



Code	Size	Thickness Max. Fixture	Axis Letter (Length)		
		mm			
IDKLAH08075	M8 x 75 Ø8	5.0	C	100	600
IDKLAH08120	M8 x 120 Ø8	50.0	G	100	400
IDKLAH10090	M10 x 90 Ø10	10.0	E	100	400
IDKLAH10120	M10 x 120 Ø10	40.0	G	50	300
IDKLAH12110	M12 x 110 Ø12	18.0	F	50	200
IDKLAH16145	M16 x 145 Ø16	23.0	I	25	100

IDKLAH

Opt.7 ETA Assessed. Zinc-plated shaft. Zinc-plated clip



Code	Size	Max. Fixture Thickness	Drill Ø	Hole Depth Min.	Min. Anchor Depth	Installation Key	Torque	Axis Letter	Ø Element to Fix	Min. Substrate Thickness	Min. Distance To Edge	Min. Distance From Axis	Tension Load Noncracked Concrete	Shear Load Noncracked Concrete
		(T) mm	(ØD) mm	(H) mm	(H nom.) mm	SW	Nm		(ØDf) mm	(L min.) mm	mm	mm	kg	kg
IDKLAH08075	M8 x 75	5	8	65	60	13	20	C	9	100	72	144	676	542
IDKLAH08120	M8 x 120	50	8	65	60	13	20	G	9	100	72	144	676	542
IDKLAH10090	M10 x 90	10	10	75	67	17	35	E	12	110	83	165	922	856
IDKLAH10120	M10 x 120	40	10	75	67	17	35	G	12	110	83	165	922	856
IDKLAH12110	M12 x 110	18	12	85	77	19	60	F	14	130	98	195	1,251	1,200
IDKLAH16145	M16 x 145	23	16	110	104	24	120	I	18	168	126	252	1,887	2,337



Drop-in Expansion Anchor

The range of drop-in expansion anchors with internal thread are designed for installing pipework, cable trays, ventilation ducts or fire sprinkler systems.

They have European technical approval for structural applications in non-cracked concrete (in accordance with ETA 21/0541) and for the installation of redundant nonstructural systems in cracked concrete, including under conditions of fire exposure (in accordance with ETA 21/0542). Available with ATLANTIS C3-L or zinc-plated coating for use in both indoor and outdoor applications.

DESIGN AND GEOMETRY



Inner thread. The first part of the anchor has an inner thread where the metric bolt and/or threaded bar is installed (bolts and bars not supplied with the product). The metric inner thread guarantees maximum versatility for use in multiple installations.



Internal cone. The lower part of the anchor contains a cone that causes the fins to expand during installation.



Fins. The expansion of the cone causes the fins to expand, producing friction against the walls of the base material to enable fastening.



Protection. The plastic inside the anchor prevents the cone from falling during installation or transportation of the box.



Version with HE-CL collar. The version with collar prevents the anchor from being introduced too far into the base material in cases where the bore hole has been made deeper than required by the documentation.



Identification. The size of the anchor is punched onto the body to allow easy identification and to always know the required bore size and expansion tool.



Short version HE-HC. The HE-HC version enables installation in areas where there are believed to be a lot of reinforcement trusses, such as the lower part of slabs. Given its short length (25 mm) it is not expected to interfere with the trusses.

APPLICATIONS



- Structural applications
- Structural beams and columns
- Stadium seats
- Wood-to-concrete structures
- Railings and fencing
- Shelving and racks
- Structural beams and columns
- Fastening of non-structural elements like signs, machines, boilers, posters, billboards, etc.
- Other installations



QUALITIES AND ADVANTAGES



REMOVABLE AND REUSABLE ANCHOR.

The bolt or bar used can be removed, leaving a clear surface (the casing and cone remain inside the bore hole). The installed anchor can be reused.

MAXIMUM GUARANTEES. PRODUCTS APPROVED ACCORDING TO THE HIGHEST QUALITY STANDARDS.

- Approved (ETA 21/0542) for redundant non-structural systems in cracked and non-cracked concrete (C12/15 to C50/60), including under conditions of fire exposure.
- Approved (ETA 21/0541) for structural applications in non-cracked concrete (C20/25 to C50/60).
- Confirmed suitability for the installation of sprinkler systems in accordance with the Vds CEA 4001 guidelines.

EASY INSTALLATION.

The EXP tool with rubber protector enables safe, controlled and ergonomic expansion of the anchor.

How do I know if the anchor has been installed correctly?

Once the sleeve has been inserted into the hole, hit with the expander until the upper edge of the sleeve is marked with some notches.

RANGE



Product	Coating/Material	ETA	ETA	Fire	VDS
IDCAHEHO	Zn	✓	✓	✓	✓
IDCAHECL	Zn	✓	✓	✓	✓
IDCAHEHC	Zn	✓	✓	✓	✓

THE PERFECT COATING ACCORDING TO THE EXPECTED LEVELS OF CORROSION



Atlantis C3-L coating:

Valid for dry indoor conditions (50 years) or in C3-type outdoor environments according to ISO 9223, for a period of 25 years.



Zinc coating:

Suitable for use in dry indoor conditions (category C1 according to ISO 923), for a period of 50 years.

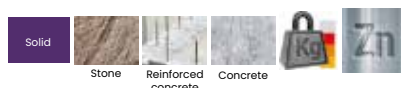
IDCAHE

Drop-in anchor with internal thread for heavy loads



IDCAHEHO

Zinc-plated. Opt.7 ETA Assessed & for non-structural applications



Code	Size	Length		
IDCAHEHOM20	M20 × 80 Ø25	80	25	100

IDCAHECL

With collar. Zinc-plated. Opt.7 ETA Assessed & for non-structural applications



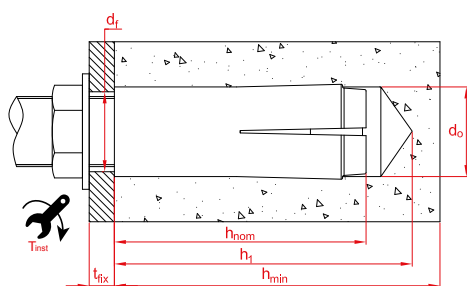
Code	Size	Length		
IDCAHECLM08	M8 × 30 Ø10	30	100	1,600
IDCAHECLM10	M10 × 40 Ø12	40	50	800
IDCAHECLM12	M12 × 50 Ø15	50	50	400
IDCAHECLM16	M16 × 65 Ø20	65	25	200

IDCAHEHC

Short. Zinc-plated. ETA Assessed for non-structural applications



Code	Size	Length		
IDCAHEHCM08	M8 × 25	25	100	1,600
IDCAHEHCM10	M10 × 25	25	50	800
IDCAHEHCM12	M12 × 25	25	50	800



IDCAHE

IDCAHEHO

Opt.7 ETA Assessed. Zinc-plated shaft.
Zinc-plated clip

Code	MXL	DRILL Ø	HOLE DEPTH MIN.	MIN. ANCHOR DEPTH	TORQUE	Ø ELEMENT TO FIX	MIN. SUBSTRATE THICKNESS	MIN. DISTANCE TO EDGE "A"	MIN. DISTANCE FROM AXIS "B"	TENSION LOAD NON-CRACKED CONCRETE	SHEAR LOAD NON-CRACKED CONCRETE
		mm	mm	mm	NM	mm	mm	mm	mm	kg	kg
IDCAHEHOM20	M20	25	86	80	100	22	160	280	160	1,220	2,767

IDCAHECL

With collar. Zinc-plated. Opt.7 ETA Assessed & for non-structural applications

Code	MXL	DRILL Ø (mm)	HOLE DEPTH MIN.	MIN. ANCHOR DEPTH	TORQUE	Ø ELEMENT TO FIX	MIN. SUBSTRATE THICKNESS	MIN. DISTANCE TO EDGE "A"	MIN. DISTANCE FROM AXIS "B"	TENSION LOAD NON-CRACKED CONCRETE	SHEAR LOAD NON-CRACKED CONCRETE
		mm	mm	mm	NM	mm	mm	mm	mm	kg	kg
IDCAHECLOM08	M8	10	33	30	11	9	100	105	90	327	392
IDCAHECLOM10	M10	12	43	40	17	12	100	140	80	354	530
IDCAHECLOM12	M12	15	54	50	38	14	100	175	100	494	844
IDCAHECLOM16	M16	20	70	65	60	18	130	230	130	733	1,893

IDCAHEHC

With collar. Zinc-plated. Opt.7 ETA Assessed & for non-structural applications

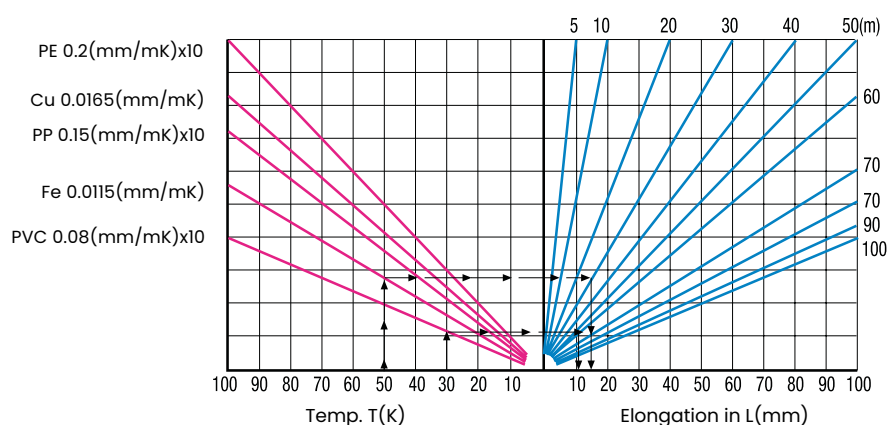
Code	M × L	DRILL Ø	HOLE DEPTH MIN.	MIN. ANCHOR DEPTH	TORQUE	Ø ELEMENT TO FIX	MIN. SUBSTRATE THICKNESS	MIN. DISTANCE TO EDGE "A"	MIN. DISTANCE FROM AXIS "B"	TENSION LOAD NON-CRACKED CONCRETE	SHEAR LOAD NON-CRACKED CONCRETE
		mm	mm	mm	NM	mm	mm	mm	mm	kg	kg
IDCAHEHCM08	M8 × 25	10	28	25	11	9	80	60	75	101	101
IDCAHEHCM10	M10 × 25	12	28	25	17	12	80	60	75	162	162
IDCAHEHCM12	M12 × 25	15	29	25	38	14	80	60	75	162	162

TECHNICAL DATA



Expansion Diagrams for Various Types of Pipes

Expansion diagrams for various type of pipes. With increase in temperature, all metal and plastic pipes expand. To eliminate high tension forces to build up, the value of elongation should be known and the necessary precautions should be taken. For this purpose, please refer following diagram.



$$\Delta L = \alpha \Delta T L$$

L: Length of pipe (mm)
 ΔL : Elongation (mm)
 ΔT : Difference in temp. (K)
 α : Thermal expansion coefficient (mm/mK)

ATTENTION: For plastic pipes (PE, PP, PVC) the elongation value from the diagram, should be multiplied by ten.

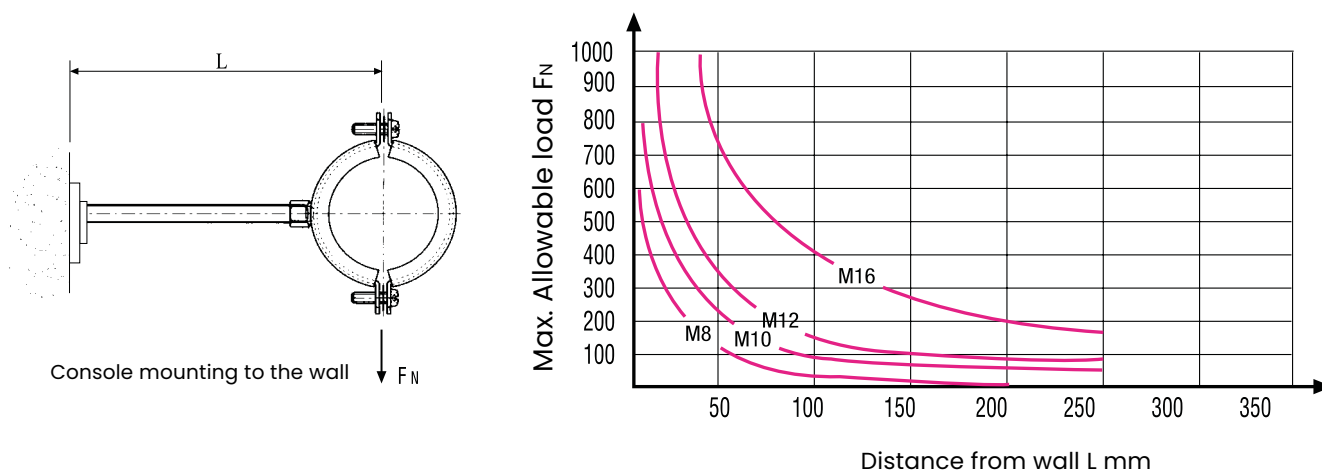
Example 1:

Steel pipe (FE) L = 30 m
 Temp Difference $\Delta T = 50^\circ\text{C}$
 Elongation in $\Delta L = 16 \text{ mm}$

Example 2:

Plastic pipe L = 40 m
 Temp. Difference $\Delta T = 30^\circ\text{C}$
 Elongation in $\Delta L = 9 \times 10 = 90 \text{ mm}$

Allowable loads for wall mounted threaded rods in relation to thread size and distance from wall



Size	L					
	mm					
	50	100	150	200	250	300
M8	80	40	18			
M10	160	85	60	35	20	10
M12	300	150	90	50	35	25
M16	700	380	250	175	120	90

Pipe Dimensions, Weight and Clamping Ranges

Threaded Tube DIN EN 10255 [as a replacement for DIN 2440]						
Nominal Diameter	Nominal Diameter	Outside Diameter	Wall Thickness	Pipe Weight	Water filled Pipe Weight	Maximum Span
DN	inch	mm	mm	kg/m	kg/m	m
8	1/4"	13.5	2.35	0.65	0.71	1.50
10	3/8"	17.2	2.35	0.86	0.98	2.25
15	1/2"	21.3	2.65	1.22	1.42	2.75
20	3/4"	26.9	2.65	1.58	1.95	3.00
25	1"	33.7	3.25	2.44	3.02	3.50
32	1 1/4"	42.4	3.25	3.14	4.15	3.75
40	1 1/2"	48.3	3.25	3.61	4.98	4.25
50	2"	60.3	3.65	5.10	7.31	4.75
65	2 1/2"	76.1	3.65	6.52	10.24	5.50
80	3"	88.9	4.05	8.47	13.60	6.00
100	4"	114.3	4.50	12.19	20.89	6.00
125	5"	139.7	4.85	16.13	29.4	6.00
150	6"	165.1	4.85	19.17	38.13	6.00

Steel Pipes DIN EN 10220, seamless (as a replacement for DIN 2448)						
Nominal Diameter	Nominal Diameter	Outside Diameter	Wall Thickness	Pipe Weight	Water filled Pipe Weight	Maximum Span
DN	inch	mm	mm	kg/m	kg/m	m
15	1/2"	20.0	1.8	0.8	1.0	2.25
15	1/2"	21.3	2.0	1.0	1.2	2.75
15	1/2"	22.0	2.0	1.0	1.2	2.75
20	3/4"	25.0	2.0	1.1	1.5	3.00
20	3/4"	25.4	2.0	1.2	1.5	3.00
20	3/4"	26.9	2.3	1.4	1.8	3.00
25	1"	30.0	2.3	1.6	2.1	3.00
25	1"	31.8	2.6	1.9	2.4	3.25
25	1"	32.0	2.6	1.9	2.4	4.25
32	1 1/4"	33.7	2.6	2.0	2.6	3.50
32	1 1/4"	35.0	2.3	1.9	2.6	3.50
32	1 1/4"	38.0	2.6	2.3	3.1	3.65
32	1 1/4"	40.0	2.6	2.4	3.3	3.65
32	1 1/4"	42.4	2.6	2.6	3.6	3.70
40	1 1/2"	44.5	2.6	2.7	3.9	3.75
40	1 1/2"	48.3	2.6	2.9	4.4	4.25
50	2"	51.0	2.6	3.1	4.8	4.40
50	2"	54.0	2.6	3.3	5.2	4.40
50	2"	57.0	2.9	3.9	5.9	4.60
50	2"	60.3	2.9	4.1	6.4	4.75
65	2 1/2"	63.5	2.9	4.3	6.9	4.75
65	2 1/2"	70.0	2.9	4.8	8.0	5.00
65	2 1/2"	73.0	2.9	5.0	8.6	5.00
65	2 1/2"	76.1	2.9	5.2	9.1	5.50
80	3"	82.5	3.2	6.3	10.8	5.75
80	3"	88.9	3.2	6.8	12.1	6.00
80	3"	101.6	3.6	8.7	15.7	6.00
100	4"	108.0	3.6	9.3	17.2	6.00
100	4"	114.3	3.6	9.8	18.8	6.00
100	4"	127.0	4.0	12.1	23.3	6.00
125	5"	133.0	4.0	12.7	25.0	6.00
125	5"	139.7	4.0	13.4	27.0	6.00
125	5"	141.3	4.0	13.5	27.5	6.00
125	5"	152.4	4.5	16.4	32.6	6.00
150	6"	159.0	4.5	17.1	34.8	6.00
150	6"	168.3	4.5	18.2	38.1	6.00
150	6"	177.8	5.0	21.3	43.4	6.00
200	8"	193.7	5.4	25.1	51.3	6.00
200	8"	219.1	6.3	33.1	66.6	6.00
200	8"	244.5	6.3	37.0	79.2	6.00
250	10"	273.0	6.3	41.4	94.7	6.00
300	12"	323.9	7.1	55.5	130.8	6.00
350	14"	355.6	8.0	68.6	159.2	6.00
400	16"	406.4	8.8	86.3	205.0	6.00
400	16"	457.0	10.0	110.2	260.2	6.00
500	20"	508.0	11.0	134.8	320.3	6.00
500	20"	559.0	12.5	168.5	392.4	6.00
600	24"	610.0	12.5	184.2	453.0	6.00

Pipe Dimensions, Weight and Clamping Ranges

Steel Pipes DIN EN 10220, welded [as a replacement for DIN 2458]						
Nominal Diameter	Nominal Diameter	Outside Diameter	Wall Thickness	Pipe Weight	Water filled Pipe Weight	Maximum Span
DN	inch	mm	mm	kg/m	kg/m	m
15	1/2"	20.0	1.8	0.8	1.0	2.25
15	1/2"	21.3	2.0	1.0	1.2	2.75
15	1/2"	22.0	2.0	1.0	1.2	2.75
20	3/4"	25.0	2.0	1.1	1.5	3.00
20	3/4"	25.4	2.0	1.2	1.5	3.00
20	3/4"	26.9	2.3	1.4	1.8	3.00
25	1"	30.0	2.3	1.6	2.1	3.00
25	1"	31.8	2.6	1.9	2.4	3.25
25	1"	32.0	2.6	1.9	2.4	4.25
32	1 1/4"	33.7	2.6	2.0	2.6	3.50
32	1 1/4"	35.0	2.3	1.9	2.6	3.50
32	1 1/4"	38.0	2.6	2.3	3.1	3.65
32	1 1/4"	40.0	2.6	2.4	3.3	3.65
32	1 1/4"	42.4	2.6	2.6	3.6	3.70
40	1 1/2"	44.5	2.6	2.7	3.9	3.75
40	1 1/2"	48.3	2.6	2.9	4.4	4.25
50	2"	51.0	2.6	3.1	4.8	4.40
50	2"	54.0	2.6	3.3	5.2	4.40
50	2"	57.0	2.9	3.9	5.9	4.60
50	2"	60.3	2.9	4.1	6.4	4.75
65	2 1/2"	63.5	2.9	4.3	6.9	4.75
65	2 1/2"	70.0	2.9	4.8	8.0	5.00
65	2 1/2"	73.0	2.9	5.0	8.6	5.00
65	2 1/2"	76.1	2.9	5.2	9.1	5.50
80	3"	82.5	3.2	6.3	10.8	5.75
80	3"	88.9	3.2	6.8	12.1	6.00
80	3"	101.6	3.6	8.7	15.7	6.00
100	4"	108.0	3.6	9.3	17.2	6.00
100	4"	114.3	3.6	9.8	18.8	6.00
100	4"	127.0	4.0	12.1	23.3	6.00
125	5"	133.0	4.0	12.7	25.0	6.00
125	5"	139.7	4.0	13.4	27.0	6.00
125	5"	141.3	4.0	13.5	27.5	6.00
125	5"	152.4	4.5	16.4	32.6	6.00
150	6"	159.0	4.5	17.1	34.8	6.00
150	6"	168.3	4.5	18.2	38.1	6.00
150	6"	177.8	5.0	21.3	43.4	6.00
200	8"	193.7	5.4	25.1	51.3	6.00
200	8"	219.1	6.3	33.1	66.6	6.00
200	8"	244.5	6.3	37.0	79.2	6.00
250	10"	273.0	6.3	41.4	94.7	6.00
300	12"	323.9	7.1	55.5	130.8	6.00
350	14"	355.6	8.0	68.6	159.2	6.00
400	16"	406.4	8.8	86.3	205.0	6.00
400	16"	457.0	10.0	110.2	260.2	6.00
500	20"	508.0	11.0	134.8	320.3	6.00
500	20"	559.0	12.5	168.5	392.4	6.00
600	24"	610.0	12.5	184.2	453.0	6.00

Copper Pipes DIN EN 1057 [as a replacement for DIN 1786]						
Nominal Diameter	Nominal Diameter	Outside Diameter	Wall Thickness	Pipe Weight	Water filled Pipe Weight	Maximum Span
DN	inch	mm	mm	kg/m	kg/m	m
8	1/4"	10	1.0	0.25	0.30	1.00
10	3/8"	12	1.0	0.31	0.39	1.25
12	3/8"	15	1.0	0.39	0.53	1.25
15	1/2"	18	1.0	0.48	0.68	1.50
20	3/4"	22	1.0	0.59	0.91	2.00
25	1"	28	2.0	1.12	1.61	2.25
32	1 1/4"	35	2.0	1.41	2.22	2.75
40	1 1/2"	42	2.0	1.71	2.90	3.00
50	2"	54	2.0	2.93	4.89	3.50
60		64	2.0	3.49	6.32	4.00
65	2 1/2"	76	2.0	4.17	8.25	4.25
80	3"	89	2.0	4.89	10.55	4.75
100	4"	108	3.0	7.42	15.76	5.00
125	5"	133	3.0	10.98	23.65	5.00
150	6"	159	3.0	13.17	31.56	5.00
200	8"	219	3.0	18.24	53.87	5.00
250	10"	267	3.0	22.29	75.80	5.00

Pipe Dimensions, Weight and Clamping Ranges

Drain Pipes SML DIN 19522						
Nominal Diameter	Nominal Diameter	Outside Diameter	Wall Thickness	Pipe Weight	Water filled Pipe Weight	Maximum Span
DN	inch	mm	mm	kg/m	kg/m	m
40	40	48	3.0	3.07	4.46	1.5
50	50	58	3.5	4.34	6.39	1.5
70	70	78	3.5	5.94	9.90	1.5
80	80	83	3.5	6.34	10.87	1.5
100	100	110	3.5	8.49	16.82	1.5
125	125	135	4.0	11.93	24.60	1.5
150	150	160	4.0	14.21	32.36	1.5
200	200	210	5.0	23.35	54.76	1.5
250	250	274	5.5	33.64	87.96	1.5
300	300	326	6.0	43.73	121.17	1.5
400	400	429	8.1	77.65	211.49	1.5
500	500	532	9.0	107.21	314.71	1.5
600	600	635	9.9	140.95	438.20	1.5

Pressure Pipes PN16 PVC hard DIN 8062. series 5						
Nominal Diameter	Nominal Diameter	Outside Diameter	Wall Thickness	Pipe Weight	Water filled Pipe Weight	Maximum Span
DN	inch	mm	mm	kg/m	kg/m	m
DN6	1/4"	14	1.2	0.11	0.17	1.07
DN10	3/8"	17	1.5	0.14	0.26	1.22
DN15	1/2"	21	1.9	0.20	0.40	1.37
DN20	3/4"	27	2.4	0.30	0.60	1.37
DN25	1"	33	3.0	0.40	0.90	1.52
DN32	1 1/4"	42	3.7	0.60	1.50	1.68
DN40	1 1/2"	48	4.7	0.70	2.00	1.68
DN50	2"	60	5.6	0.90	3.00	1.68
DN65	2 1/2"	73	6.7	1.50	4.51	1.98
DN80	3"	89	8.2	2.00	6.70	2.13
DN90	3 1/2"	102	10.4	2.40	8.70	2.13
DN100	4"	114	11.9	2.80	11.00	2.13
DN125	5"	141	13.4	4.10	17.00	2.29
DN150	6"	168	14.9	4.90	23.00	2.44
DN200	8"	219	16.7	7.80	39.90	2.59
DN250	10"	273	18.6	11.10	61.80	2.74
DN300	12"	324	20.8	14.90	87.00	3.20

Drain Pipes PVC hard DIN 8062. series 3						
Nominal Diameter	Nominal Diameter	Outside Diameter	Wall Thickness	Pipe Weight	Water filled Pipe Weight	Maximum Span
DN	inch	mm	mm	kg/m	kg/m	m
DN40	1 1/2"	50.0	1.8	0.40	2.09	0.5
DN50	2"	63.0	1.9	0.53	3.29	0.6
DN70	2 1/2"	75.0	2.2	0.73	4.65	0.8
DN80	3"	90.0	2.7	1.08	6.70	0.9
DN100	4"	110.0	3.2	1.57	10.00	1.2
DN125	5"	125.0	3.7	2.06	12.92	1.3
DN150	6"	160.0	4.7	3.35	21.16	1.8
Ø180	-	180.0	5.3	4.25	26.78	2.0
Ø200	-	200.0	5.9	5.25	33.07	2.2
Ø225	-	225.0	6.6	6.61	41.84	2.3
Ø250	-	250.0	7.3	8.13	51.65	2.4
Ø280	-	280.0	8.2	10.22	64.80	2.5
Ø315	-	315.0	9.2	12.90	82.00	2.6

Which Clamp to Which Pipe

Nominal Size		Water Pipe Cast Iron (SML)		Water Pipe Hard PVC (DIN 1953)		PE Plastic Pipe (DIN 19535)	
Size	Clamping Range	Nominal Diameter	Diameter	Nominal Diameter	Diameter	Size	Clamping Range
inch	mm/mm		inch		inch	inch	mm
1/4"	12.0/15.0	-	-	-	-	-	-
3/8"	16.0/20.0	-	-	-	-	-	-
1/2"	20.0/24.0	-	-	-	-	-	-
3/4"	25.0/30.0	-	-	-	-	-	-
1"	32.0/38.0	-	-	-	-	30	32.0
1 1/4"	39.0/46.0	-	-	-	-	-	40.0
1 1/2"	48.0/53.0	40	48	40	50	40	50.0
-	-	-	-	-	-	-	-
-	54.0/58.0	50	58	-	-	50	56.0
2"	59.0/66.0	-	-	50	63	-	63.0
-	-	-	-	-	-	-	-
-	67.0/73.0	-	-	-	-	-	-
2 1/2"	74.0/80.0	70	78	70	75	70	75.0
-	80.0/87.0	80	83	-	-	-	-
3"	87.0/94.0	-	-	80	90	80	90.0
-	95.0	-	-	-	-	-	-
-	99.0/108.0	100	110	100	110	100	110.0
4"	108.0/116.0	-	-	-	-	-	-
-	120.0/129.0	-	-	125	125	125	125.0
-	129.0/135.0	125	135	-	-	-	-
5"	135.0/143.0	-	-	-	140	-	-
-	149.0/161.0	-	-	-	-	-	-
6"	162.0/170.0	150	160	150	160	150	160.0
-	-	200	210	200	210	-	-
-	-	-	-	-	-	200	200.0
8"	216.0/222.0	-	-	250	250	250	250.0
-	-	-	-	-	-	-	-
10"	267.0/273.0	250	274	280	280	-	-
-	297.0/303.0	-	-	-	-	-	-
-	-	300	326	300	315	300	315.0
12"	320.0/330.0	-	-	-	-	-	-
14"	354.0/362.0	-	-	-	-	-	-
-	366.0/374.0	-	-	-	-	-	-
16"	404.0/412.0	-	-	400	400	-	-
-	415.0/422.0	-	-	-	-	-	-
-	-	400	429	-	-	-	-
20"	506.0/512.0	-	-	-	-	-	-
-	519.0/525.0	-	-	-	-	-	-
-	608.0/614.0	-	-	-	-	-	-
-	658.0/665.0	-	-	-	-	-	-
-	-	500	532	-	-	-	-
-	-	600	635	-	-	-	-

Which Clamp to Which Pipe

Nominal Size		Steel Pipe (DIN 2440)			Steel Pipe (DIN 2448)		Copper Pipe (DIN1786)		Stainless Steel DIN 17440	
Size	Clamping Range	Nominal Diameter	Diameter	Diameter	Nominal Diameter	Diameter	Nominal Diameter	Diameter	Nominal Diameter	Diameter
inch	mm		inch	inch		inch		inch		inch
-	-	-	-	-	-	10.2	-	10.0	-	-
-	-	-	-	-	-	13.5	-	-	-	-
1/4"	12.0/15.0	8	1/4"	13.5	-	16.0	12 / 15	12.0 / 15.0	-	15.0
3/8"	16.0/20.0	10	3/8"	17.2	10	17.2	18	18.0	-	-
-	-	-	-	-	-	20.0	-	-	-	-
1/2"	20.0/24.0	15	1/2"	21.3	15	21.3	22	22.0	15	18.0/21.3
-	-	-	-	-	-	25.0	-	-	-	-
3/4"	25.0/30.0	20	3/4"	26.9	20	26.9	28	28.0	20	22.0/26.9/28.0
-	-	-	-	-	-	30.0	-	-	-	-
-	-	-	-	-	-	31.8	-	-	-	-
1"	32.0/38.0	25	1"	33.7	25	33.7	35	35.0	25	33.7/35.0
1 1/4"	39.0/46.0	32	1 1/4"	42.4	32	42.4	42	42.0	32	42.4
-	-	-	-	-	-	44.5	-	-	-	-
-	-	40	1 1/2"	48.3	40	48.3	-	-	40	48.3
-	-	-	-	-	46	51.0	54	54.0	-	54.0
-	54.0/58.0	-	-	-	50	57.0	-	-	-	-
-	-	50	2"	60.3	50	60.3	-	-	-	-
-	-	-	-	-	57	63.5	64	64.0	-	-
-	67.0/73.0	-	-	-	-	70.0	-	-	-	-
2 1/2"	74.0/80.0	65	2 1/2"	76.1	65	76.1	76.1	76.1	65	76.1
-	80.0/87.0	-	-	-	76	82.5	-	-	-	-
3"	87.0/94.0	80	3"	88.9	80	88.9	88.9	88.9	80	88.9
-	-	-	-	-	94	101.6	-	-	-	-
-	99.0/108.0	-	-	-	100	108.0	108	108.0	-	108
4"	-	100	4"	114.3	100	114.3	-	-	-	114.3
-	-	-	-	-	-	127.0	-	-	-	-
-	129.0/135.0	-	-	-	125	133.0	133	133.0	-	133.0
5"	135.0/143.0	125	5"	139.7	125	139.7	-	-	125	139.7
-	-	-	-	-	-	152.4	-	-	-	-
-	149.0/161.0	-	-	-	150	159.0	159	159.0	-	159.0
-	-	150	6"	165.1	-	-	160	160.0	-	168.3
-	-	-	-	-	-	168.3	-	-	-	-
-	-	-	-	-	-	177.8	-	-	-	-
-	-	-	-	-	-	193.7	-	-	-	-
-	-	-	-	-	200	219.0	219	219.0	-	-
8"	-	-	-	-	-	244.5	-	-	-	219.1
-	-	-	-	-	-	-	267	267.0	-	-
10"	-	-	-	-	-	-	-	-	-	273
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
12"	320.0/330.0	-	-	-	300	323.9	-	-	-	323.9
14"	354.0/362.0	-	-	-	350	355.6	-	-	-	355.6
-	-	-	-	-	-	-	-	-	-	-
16"	404.0/412.0	-	-	-	400	406.4	-	-	-	406.4
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	450	457.0	-	-	-	-
20"	506.0/512.0	-	-	-	500	508.0	-	-	-	508.0
-	-	-	-	-	-	559.0	-	-	-	-
-	608.0/614.0	-	-	-	600	610.0	-	-	-	609.6

HANGER AND SUPPORT SYSTEMS TECHNICAL SPECIFICATION

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Annex-1 Pipe Hanger Spacings

1 – GENERAL SPECIFICATIONS

- 1.1. SUMMARY: This section includes hangers and supports for plumbing systems.

2 – GENERAL SPECIFICATIONS, STANDARDS AND REGULATIONS

2.1. DESIGN

- ASME B31.1 : High Pressure Piping Design Principles
- ASME B31.3 : Process Piping Installation Design Principle
- ASME B31.9 : Building Services Piping Installation Design Principles
- NFPA 13 : Standard for the Installation of Sprinkler Systems
- SMACNA : Sheet Metal and Air Conditioning Contractors' National Association Standards
- DIN EN 13480-1/BS EN 13480-1 : Metallic industrial piping – Part 1: General
- DIN EN 13480-2/BS EN 13480-2 : Metallic industrial piping – Part 2: Materials
- DIN EN 13480-3/BS EN 13480-3 : Metallic industrial piping – Part 3: Design and calculation
- DIN EN 13480-4/BS EN 13480-4 : Metallic industrial piping – Part 4: Fabrication and installation
- DIN EN 13480-5/BS EN 13480-5 : Metallic industrial piping – Part 5: Inspection and testing
- FM : (Factory Mutual) Pipe Hanger Components for Automatic Sprinkler Systems (FM Approval Standard)
- UL : (Underwriters Laboratories) Fire Fighting (UL Approval Standard)

2.2. QUALITY ASSURANCE

- ISO 9001:2015 : Quality Management Systems – Requirements
- IATF 16949:2016 : Quality Management Systems – Requirements for Automotive Production and Relevant Services Parts Organizations
- ISO 14001:2015 : Environmental Management Systems – Requirements with guidance for use
- ISO 45001 / OHSAS 18001: Occupational Health and Safety Management Systems – Requirements
- EN ISO 3834-2 : Quality requirements for fusion welding of metallic materials – Part 2: Comprehensive quality requirements

2.3. MATERIAL

- EN 10025-2 : Hot rolled structural steel products – Part 1: General technical delivery conditions
- EN 10130 : Cold rolled low carbon flat products for cold forming – Technical delivery conditions
- EN 10111 : Continuously hot-rolled low carbon steel sheet and strip for cold forming – Technical delivery conditions
- EN 10088-2 : Stainless steels – Part 2: Technical delivery conditions for sheet/plate and strip of corrosion resisting steels for general purposes
- EN 10346 : Continuously hot-dip coated steel flat products – Technical delivery conditions
- ISO 4017/DIN 933 : Hexagon Head Cap Screws – Product Grades A and B
- ISO 4032/DIN 934 : Hexagon nuts, Style 1- Product Grades A and B
- MSS SP 58 : TABLE A2M / A2: Materials and Allowable Stresses

2.4. WELDING

- EN ISO 3834-2 : Quality requirements for fusion welding of metallic materials – Part 2: Comprehensive quality requirements
- EN ISO 9606-1 : Qualification testing of welders – Fusion welding – Part 1: Steels
- EN ISO 14732 : Welding personnel – Qualification testing of welding operators and weld setters for mechanized and automatic welding of metallic materials
- EN ISO 14731 : Welding coordination – Tasks and responsibilities
- EN ISO 15609-1 : Specification and qualification of welding procedures for metallic materials – Welding procedure specification – Part 1: Arc welding
- EN ISO 15614-1 : Specification and qualification of welding procedures for metallic materials – Welding procedure test – Part 1: Arc and gas welding of steels and arc welding of nickel and nickel alloys
- EN ISO 9712 : Non-destructive testing – Qualification and certification of NDT personnel – General principles
- EN ISO 17637 : Non-destructive testing of welds – Visual testing of fusion-welded joints
- EN ISO 5817 : Welding. Fusion-welded joints in steel, nickel, titanium and their alloys (beam welding excluded).Quality levels for imperfections
- EN ISO 3452-1 : Non-destructive testing – Penetrant testing – Part 1: General principles (ISO 3452-1:2013)
- EN ISO 23277 : Non-destructive testing of welds – Penetrant testing of welds – Acceptance levels
- ASME SECTION IX: Welding, Brazing and Fusing Qualifications
- AWS D1.1 : Structural Source Code / Steel

2.5. COATING

- ISO 1461 : Hot dip galvanized coatings on fabricated iron and steel articles – specification and test methods
- ASTM A153/A153M : Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware
- ASTM A123/A123M : Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products
- ASTM B633 : Standard Specification for Electrodeposited Coatings of Zinc on Iron and Steel
- ISO 2081 : Metallic and other inorganic coatings – Electroplated coatings of zinc with supplementary treatments on iron or steel
- DIN 50961 : Electroplated coatings – Zinc coatings on iron or steel – Terms, testing and corrosion resistance
- ISO 4042 : Fasteners – Electroplated coatings
- EN 10684 : Fasteners – Hot dip galvanized coatings

• 2.6 HCR (High Corrosion Resistant)

To ensure long service life and high performance in our products, we offer High Corrosion Resistance (HCR) solutions. In this context, we apply suitable coating technologies based on product functions and areas of use.

For our products, Hot-Dip Galvanizing (HDG) is applied in full compliance with ASTM A153/A153M, ASTM A123/A123M, EN ISO 1461, and EN 10684 standards. Thanks to its high zinc thickness, HDG coating provides superior corrosion resistance, offering long-term protection even under harsh environmental conditions.

However, in certain special cases—particularly for threaded fasteners (such as bolts, nuts, parts with internal threads, or welded nuts)—HDG may affect product functionality due to the high coating thickness and build-ups caused by the process. For such parts, zinc flake coatings applied in accordance with EN 10683 are preferred. These coatings provide high corrosion resistance while preserving thread geometry and assembly compatibility.

Aligned with product design and functionality, we determine and apply the most suitable coating type for each item under the HCR concept. In doing so, we ensure both maximum corrosion protection and functional integrity.

2.7. FABRICATION

- MSS SP 58 : Pipe Hangers and Supports – Materials, Design, Manufacture, Selection, Application, and Installation
- MSS SP 69 : Pipe Hangers and Supports – Selection and Application
- MSS SP 89 : Pipe Hangers and Supports – Fabrication and Installation Practices
- BS 3974 Part 1 : Pipe Hangers, Sliding and Roller Type Supports
- BS 3974 Part 2 : Pipe Clamps, Cages, Cantilevers and Attachments to Beams
- ISO 2768-1 : General Tolerances – Part 1: Tolerances for Linear and Angular Dimensions Without Individual Tolerance Indications
- DIN 6930-2 : Stamped Steel Parts – Part 2: General Tolerances
- ISO 3302-1 : Rubber – Tolerances for Products – Part 1: Dimensional Tolerances
- EN 877: Cast Iron Pipes and Fittings, Their Joints and Accessories for the Evacuation of Water from Buildings – Requirements, Test Methods and Quality Assurance
- EN ISO 9227 : Corrosion Tests in Artificial Atmospheres – Salt Spray Tests

- EN 898-1 : Mechanical Properties of Fasteners Made of Carbon Steel and Alloy Steel:
– Part 1: Bolts, Screws and Studs with Specified Property Classes – Coarse Thread and Fine Pitch Thread
- EN 898-2 : Mechanical properties of fasteners made of carbon steel and alloy steel
– Part 2: Nuts with specified property classes – Coarse thread and fine pitch thread

3 – PERFORMANCE CRITERIA

- 3.1. Supported systems must be designed in line with system requirements and applicable standards.
 - 3.1.1. Description of Supported Systems: These are systems such as all kinds of pipes, ventilation ducts, cable trays, equipment and fittings that will be fixed to the structural elements of the building within the scope of electrical and mechanical systems of the building.
- 3.2. Hangers and supports must be made of materials that will not cause galvanic corrosion.
- 3.3. Hangers and supports must be coated in accordance with EN ISO 12944 and ISO 9223 standards, in accordance with environmental and weather conditions.
- 3.4. Engineering Responsibility: Shop-drawings for pipe hangers and supports, their design and calculations must be done by a qualified professional engineer.
 - 3.4.1. Description of Professional Engineer: The engineer in question must have experience in material selection, design and project design within the scope of hanger and support systems applications.

4 – SPECIAL DESIGN CRITERIA

- 4.1. Hanger and Support Systems requiring special design: Special design must be made for the pipe systems stated below.
 - 4.1.1. Pipes with a minimum temperature difference of 10oC between operating and installation temperatures.
 - 4.1.2. Pipes containing dangerous (corrosive or flammable) liquids according to ASME B31.1 or EN 13480 standards.
 - 4.1.3. Pipes with a pressure fluid higher than 2 bars.
- 4.2. Piping systems must be evaluated and analyzed according to thermal expansion and/or contraction, operating pressure and temperature, hydropneumatic tests and load conditions in the project site conditions.
- 4.3. Pipe stress analysis should be done with approved/certified pipe stress analysis software (e.g. CAESARII, Bentley AUTO PIPE, CAEPIPE, Rohr2, Start-Prof) and approved by a pipe stress analysis engineer with more than 5 years of experience in pipe design or analysis.
- 4.4. Hanger and support systems that require special design must be designed after the pipe stress analysis has been carried out.
 - 4.4.1. Design loads to be used for the design of hanger and support systems must be taken from the pipe stress analysis.
 - 4.4.2. Hanger and support systems design must be done with simulation software that applies 2D Beam Structure or 3D finite element analysis.
 - 4.4.3. The design and analysis of hanger and support systems must comply with AISC, MSS SP-58, MSS SP-69, Eurocode 3 or similar international standards.

4.4.4. Documents to be submitted for the hangers and supports designed:

- 4.4.4.1. Inputs and references used in calculations
- 4.4.4.2. Load tables (Pipe stress analysis project outputs or spreadsheets)
- 4.4.4.3. Structural steel analysis report
- 4.4.4.4. Finite element analysis report
- 4.4.4.5. Fitting / bolt calculation report
- 4.4.4.6. Detailed technical drawings

5 – QUALITY ASSURANCE

5.1. Raw Material Certificates

Relevant test reports and certificates showing the mechanical properties of the materials to be used in the manufacture of hanger and support systems to be used in the projects must be obtained from suppliers and presented to the customer on the request of the customer.

The manufacturer must provide the raw material analysis certificates according to EN 10204 of the steel raw materials for all the products to be used in the project, when the customer requests. 2.2 or 3.1 certificates according to EN 10204 must be provided on the request of the customer.

5.2. Material Testing Process

The manufacturer must verify the performance of all hangers and supports to be used in the project with factory tests .

If requested, reports of these tests must be submitted to the customer.

If requested by the customer, third party audit must be available for the products.

5.3. Welding

Processes, devices (welding robots etc.) and operators shall be specified according to ASME Boiler and Pressure Vessel

Standard Part IX and/or EN 3834-2 standard.

Welders and welding operators shall be certified according to EN 9606-1 or EN 14732.

Welding procedures shall be specified according to EN ISO 15614-1.

Welding specifications shall be prepared according to EN ISO 15609-1 and production shall be made according to these specifications.

5.4. Material Test Reports and Certification

Certifications related to the products must be presented to the customer. TSE, TSEK documents or other certification documents must be available upon request.

FM and UL documents must be presented to the customer in products related to Fire Systems.

6 – DOCUMENTS TO BE SUBMITTED FOR APPROVAL

6.1. Product Information

6.1.1. Hangers and Supports

6.1.1.1. Pipe Clamps

6.1.1.2. Sliding Supports, Roller Pipe Supports, Cover Plates

6.1.1.3. Insulation Mounts

- 6.1.1.4. Steel Clamps
- 6.1.1.5. Rods and other fittings
- 6.1.2. Modular Support Systems
 - 6.1.2.1. Perforated Profile Systems and fittings
 - 6.1.2.2. Square Profile Systems and fittings
- 6.2. Shop-drawings: Stamped and signed, containing strength calculations, showing fabrication and installation details, prepared by the professional engineer of the manufacturer:
- 6.3. Product Certificates
- 6.4. Welding Certificates
- 6.5. Calculation reports

7 – SUBMITTALS

- 7.1. Product Specifications: Product specifications for all types of hangers and support materials must be submitted for approval.
- 7.2. Product Information
 - 7.2.1. Hanger And Supports
 - 7.2.2. Hanger And Supports
 - 7.1.2. Full details of hangers and supports intended to be used must be provided. A special support system can be used, provided that it is approved in advance. Where two or more pipes are to be sustained with a single support, the spacing between the supports must be adjusted according to the pipe with a short hanger spacing.
 - 7.1.3. Pipe Hanger Spacings: see Annex-I
- 7.3. Pipe Clamps
 - All sheets used as raw materials in the production of pipe clamps must be material certified, their chemical composition and physical properties must be guaranteed by the manufacturer and these certificates must be delivered to the customer when requested.
 - The production of pipe clamps must be traceable and the manufacturer must be able to examine all production steps and materials used retrospectively if necessary.
 - The brand logo and, if any, the product certificates must be clearly readable on the body of the pipe clamps.
 - Measurement and/or clamping range information must be clearly readable on the body of the pipe clamps (The clamping range information must be specified in the pipe clamps to show the use with and without rubber).
 - Sheet thickness and other dimensional values used for pipe clamps must be included in the Manufacturers catalog.
 - The strength values for pipe clamps specified in the Manufacturers catalog must be tested with minimum 3-fold loads, and this must be clearly stated in the product catalog.
 - The test values for pipe clamps specified in the Manufacturers catalog must be approved by an independent laboratory or organization and these reports must be delivered to the customer when requested.
 - Pipe clamps to be used in fire fighting installations must be produced in accordance with the details given in the latest version of NFPA 13 standard and in accordance with MSS (Manufacturers Standardization Society) standard.
 - Pipe clamps to be used in fire fighting installation must have FM and UL certificates.

- Nuts welded to the pipe clamps must be centered using the projection welding method (Middle Frequency Direct Current System).
- The EPDM rubber used in pipe clamps must not deteriorate at 100 °C for 24 hours and must have 100% ozone resistance according to DIN 53517 standard. It must also provide noise reduction in accordance with EN 14366.
- Pipe clamps must have a polyethylene washer on the side connecting bolts to ensure that the bolts do not fall off during installation (This applies to pipe clamps that do not contain nuts on the side connection).
- Electrogalvanized coating for pipe clamps: This must comply with ISO 2081 or ASTM B 633 standard and with Cr+3 free eco-friendly method.
- Hot dip coating for pipe clamps: This must comply with ISO 1461 or ASTM A153 standard.

7.4. Sliding Supports

- Sliding supports for horizontal pipelines should be designed primarily for pipes mounted on the floor or overhead.
The sliding supports must transmit their frictional force in the direction of the pipe axis. Therefore, the need for lateral support should be taken into account at each support position during installation. The fittings between guide ways and the pipe clamp must be designed to meet the bending moments.
- Under operating conditions, the slide plate will rotate around the middle position. The direction and distance of the sliding movement must be taken into account during installation.
- The guideway supports must be aligned with the pipe axis and/or direction of movement.
- All sheets used as raw materials in the manufacture of sliding supports must be material certified, their chemical composition and physical properties must be guaranteed by the manufacturer and these certificates must be delivered to the customer when requested.
- The production of sliding supports must be traceable and the manufacturer must be able to examine all production stages and materials used retrospectively if necessary.
- All the measurements required for the mounting of sliding supports and the recommended payloads according to the installation method must be included in the Manufacturers catalog.
- In order to reduce the friction coefficient in sliding supports, cushioning materials with low friction coefficient must be used to provide the necessary strength and prevent contact with the metal.
- Sliding supports must be produced in different models in accordance with the type of construction elements
(reinforced concrete, steel construction, etc.) and the type of installation
(mounted on the floor or overhead).

7.5. Insulation Mounts

- In general, qualified insulation mounts shall be used to prevent the formation of a thermal bridge between the clamp and the pipe in heating cooling lines and insulated domestic water lines.
- Polyurethane isolation mounts shall be made of closed cell polyurethane rigid foam, with 80 kg/m³ minimum specific gravity, 0.030 W/Mk heat transmission coefficient, thermal resistance range from 150°C to + 130°C and minimum 75 N/cm² compressive strength according to ASTM D 1621 standard.

- Polyurethane insulation mounts shall have excellent physical properties and shall be in B1 non-flammability class according to DIN4102 Standard.
- Self-vapor barrier insulation mounts shall be used in order to prevent sweating in cold lines.
- In cases where the polyurethane compressive strength is not sufficient, cover plate shall be used to prevent damage to the insulation mounts. The thickness of the cover plate shall be determined according to MSS SP-58. There is no need to use cover plate in polyurethane insulation mounts for diameters between DN15 (1/2") - DN32 (1 1/4"). The sizing of the cover plate in diameters of DN40 (1 1/2") and above shall be determined in accordance with the resistance calculations to be made by the authorized engineer of the manufacturer according to the insulation thickness to be used.
- The isolation mount length shall be 50 mm longer than the cover plate as per the MSS SP-58 Standard in order to prevent vapor diffusion in cold lines.
- The density of polyurethane insulation mount shall be at least 80 kg/m³ for diameters of DN200 and below, and at least 120 kg/m³ for DN250 and above.

7.6 Rods and Other Fittings

7.6.1. Rods

- If the threaded rods to be produced according to EN 898-1 standards will be used inside the building, they shall be coated against corrosion with Cr+3 free eco-friendly method with a minimum of 5 µm in the same production facility with Electro-Galvanized method in accordance with ISO 2081 or ASTM B 633 standard.
- If the products are used in outdoor spaces outside the building, they must be coated by high corrosion resistant method (HCR) according to DIN EN ISO 10684 or ASTM A153 standard.
- Threaded rods shall be produced in the quality range of 4.6 to 8.8.
- Geomet coating option shall be available if requested.

7.6.2. Nuts and Bolts

7.6.2.1. Standard Nuts Bolts

- Nuts produced according to ISO 4032-DIN 934 standard shall have the mechanical properties specified in EN 898-2 standard.
- If they will be used inside the building, they shall be coated against corrosion with Cr+ free eco-friendly method with a minimum of 8 µm in the same production facility with Electro-Galvanized method in accordance with ISO 4042 or ASTM B 633 standard.
- If the products are used in outdoor spaces outside the building, they must be coated by high corrosion resistant method (HCR) according to DIN EN ISO 10684 or ASTM A153 standard.
- Bolts produced according to ISO 4017-DIN 933 standard shall have the mechanical properties specified in EN 898-1 standard.
- If they will be used inside the building, they shall be coated with Cr+3 free eco-friendly method with a minimum of 5 µm in the same production facility with Electro-Galvanized method in accordance with ISO 4042 or ASTM B 633 standard.
- In addition, if the products are used in outdoor spaces outside the building, they must be coated by high corrosion resistant method (HCR) according to DIN EN ISO 10684 or ASTM A153 standard.

7.6.2.2. Special Fasteners

7.6.2.2.1. T-Head Bolts

- T-head bolts are used for the connection of clamps, sliding supports, corner pieces and fittings to the square profiles. T-head bolts provide easy and safe mounting of clamps and articulation components to square profiles with slots.
- T-head bolts must be specially manufactured to work in harmony with the slots in the profiles and allow easy installation.
- Unless otherwise stated, (8.8) grade bolts shall be used. The threaded pieces must be covered with geomet, and the washers to be used for application must be coated by high corrosion resistant method (HCR) to comply with DIN EN ISO 10684 or ASTM A153 standard.

7.6.2.3. Square Neck Bolts

- Square neck bolts are used to mount fittings on vertical (square perforated) square profiles. They provide a shape connection between the fittings and the vertical square profiles, allowing larger loads to be carried vertically.
- Unless otherwise stated, (8.8) quality bolts in accordance with DIN 603 norm shall be used.
- The threaded pieces must be covered with geomet, and the washers to be used for application must be coated by high corrosion resistant method (HCR) to comply with DIN EN ISO 10684 or ASTM A153 standard.

7.7. Perforated Profile Systems and Fittings

7.7.1. Perforated Profiles

- Perforated profiles to be used in the hangers and consoles to be manufactured to carry the pipes and ventilation ducts and equipment of these materials shall be produced by cold forming method in pre-galvanized sheet material in accordance with the EN 10346 standard.
- The manufacturer must be able to produce in U, L, C and G profile forms.
- The supplier shall be able to also offer coating with hot-dip galvanizing method in accordance with ISO 1461 or ASTM A153 standards, if needed.
- The perforations on the profile shall provide easy mounting, be compatible with other products and fittings of the manufacturer and shall be burr-free.
- The strength values of the profiles, safe bearing capacities recommended in different sizes and loading conditions shall be specified in the catalog.
- The calculation report, which shows that the consoles designed with perforated profiles, can safely carry the loads calculated for the system to be carried, which has 3-dimensional calculation capability and stress and deflection controls, selected channel types and sizes, shall be prepared and submitted for approval by the manufacturer.

7.7.2. Profile Fittings

- The profile fittings to be used for mounting perforated profiles to each other, to the reinforced concrete structure and/or to a fixed point must be made of sheet metal material in accordance with EN 10111 and 10130 standards by cold forming method and/or welded manufacturing.

- They shall be coated with 8–10 µm thick Electro-Galvanized method in accordance with ISO 2081 or ASTM B 633 standards against corrosion. The supplier shall be able to also offer coating with hot-dip galvanizing method in accordance with ISO 1461 or ASTM A153 standards, if needed.
- The perforations on the profile fittings shall provide easy mounting, be compatible with other products and fittings of the manufacturer and shall be burr-free.
- The safe bearing capacities of the fittings according to mounting types and profile wall thicknesses shall be specified in the catalog.

7.8. Square Profile Systems and Fittings

7.8.1. Square Profile Systems

- Square Profiles must be made of sheet metal in accordance with EN 10025-2 standard by cold forming method.
- Hot dip galvanized coating in accordance with TS EN ISO 1461 shall be applied against corrosion.
- The perforations on the profile fittings shall provide easy mounting, be compatible with other products and fittings of the manufacturer and shall be burr-free.
- The strength values of the profiles, safe bearing capacities recommended in different sizes and loading conditions shall be specified in the catalog.
- The calculation report, which shows that the consoles designed with square profiles can safely carry the loads calculated for the system to be carried, which has 3-dimensional calculation capability and stress and deflection controls, selected channel types and sizes, shall be prepared and submitted for approval by the manufacturer.

7.8.2. Square Profile Fittings

- The profile fittings to be used for mounting square profiles to each other, to the reinforced concrete structure and/or to a fixed point must be made of sheet metal material in accordance with EN 10111 and 10130 standards by cold forming method and/or welded manufacturing.
- The supplier shall apply coating with hot-dip galvanizing method in accordance with ISO 1461 or ASTM A153 standards against corrosion.
- The perforations on the profile fittings shall provide easy mounting, be compatible with other products and fittings of the manufacturer and shall be burr-free.

Heating-Cooling Installation Pipe Hanger Spacings						Domestic Water Installation Pipe Hanger Spacings					Extinguishing Installation Pipe Hanger Spacings				
Pipe Nominal Dia.	Ma Pipe Outer Dia.	Pipe Type	Pipe Water- Filled Weight	Hanger Spacing (DIN 1998)	Min. Rod Dia	Pipe Nominal Dia.	Pipe Type*	Pipe Water- Filled Weight	Hanger Spacing*	Min. Rod Dia.	Pipe Nominal Dia.	Pipe Type*		Hanger Spacing*	Min. Rod Dia.
	mm		kg/m	L [m]				kg/m	L/m					L/m	NFPA
DN 15	21.3	Black Steel Pipe DIN 2440	1.47	2.0	M8	Ø20	PPRC	0.307	0.6	M8	DN 25	Black Steel Pipe ASME/ ANSI B36.10M (Sch40)	3.0	3.66	M10
DN 20	26.9	Black Steel Pipe DIN 2440	2.02	2.3	M8	Ø25	PPRC	0.482	0.8	M8	DN 32	Black Steel Pipe ASME/ ANSI B36.10M (Sch40)	4.3	3.66	M10
DN 25	33.7	Black Steel Pipe DIN 2440	3.13	2.6	M8	Ø32	PPRC	0.781	0.9	M8	DN 40	Black Steel Pipe ASME/ ANSI B36.10M (Sch40)	5.3	4.57	M10
DN 32	44.5	Black Steel Pipe DIN 2440	4.30	2.6	M8	Ø40	PPRC	1.215	1.0	M8	DN 50	Black Steel Pipe ASME/ ANSI B36.10M (Sch40)	7.5	4.57	M10
DN 40	48.3	Black Steel Pipe DIN 2440	5.15	2.6	M8	Ø50	PPRC	1.891	1.2	M8	DN 65	Black Steel Pipe ASME/ ANSI B36.10M (Sch40)	11.7	4.57	M10
DN 50	51.0	Black Steel Pipe DIN 2440	6.93	2.6	M8	Ø63	PPRC	3.005	1.4	M8	DN 80	Black Steel Pipe ASME/ ANSI B36.10M (Sch40)	15.9	4.57	M10
	57.0		7.33	2.9		Ø75	PPRC	4.253	1.5		DN 100		24.2		
DN 65	60.3	Black Steel Pipe DIN 2440	10.52	2.9	M8	Ø90	PPRC	6.117	1.6	M8	DN 125	Black Steel Pipe ASME/ ANSI B36.10M (Sch40)	34.6	4.57	M10
	63.5					Ø110	PPRC	9.131	1.8		DN 150		46.8		
	76.1										DN 200		74.6		
DN 80	82.5	Black Steel Pipe DIN 2440	13.98	3.2	M10										
	88.9														
DN 100	101.6	Black Steel Pipe DIN 2440	21.30	3.6	M10										
	108.0														
	114.3														
DN 125	127.0	Black Steel Pipe DIN 2440	30.17	4.0	M10										
	133.0														
	139.7														
DN 150	152.4	Black Steel Pipe DIN 2440	39.06	4.5	M10										
	159.0														
	168.3														
DN 200	177.8	Black Steel Pipe DIN 2440	64.73	5.0	M12										
	193.7			5.6											
	219.1			6.3											

Technical Data

PART I – GENERAL

1.1 – SUMMARY

A. Contractor shall provide all Labour, Materials, Contractor's Equipment and Plant to fully execute the requirements to furnish, deliver, and install the works as described in the Drawings and Specification, or implied therefrom, and in accordance with the Contract. It is the intent of this Specification that the work performed pursuant hereto be complete and acceptable in every respect for its intended purpose. Nothing in this specification section shall limit the scope of work as required by the Contract.

1.2 – REFERENCES

DESIGN SPECIFICATIONS :

- A- ASME B31.1 : Power Piping Design
- B- ASME B31.3 : Process Piping Design
- C- ASME B31.9 : Building Services Piping
- D- NFPA 13 : Standard for the Installation of Sprinkler Systems.
- E- DIN EN 13480-1/BS EN 13480-1 : Process Piping Design Part 1: Materials
- F- DIN EN 13480-2/BS EN 13480-2 : Part 2: Materials
- G- DIN EN 13480-3/BS EN 13480-3 : Part 3: Design and Calculation
- H- DIN EN 13480-4/BS EN 13480-4 : Part 4: Fabrication and installation
- I- DIN EN 13480-5/BS EN 13480-5 : Part 5: Inspection and testing
- J- DIN EN 13480-6/BS EN 13480-6 : Part 6: Additional requirements for buried piping
- K- DIN EN 13480-7/BS EN 13480-7 : Part 7: Guidance on the use of conformity assessment procedures
- L- DIN EN 13480-8/BS EN 13480-8 : Additional requirements for aluminium and aluminium alloy piping
- M- Factory Mutual FM Approval Standard for Pipe Hanger Components for Automatic Sprinkler System
- N- UL : Pipe Hanger Equipment for Protection Service

MANUFACTURING SPECIFICATIONS :

- A- MSS SP 58 : Pipe Hangers and Supports, Materials, Design, Manufacture, Selection, Application, Installation
- B- MSS SP 69 : Pipe Hangers and Supports – Selection and Application
- C- MSS SP 89 : Pipe Hangers and Supports – Fabrication and Installation Practices
- D- BS 3974 Part 1 : Pipe Hangers, slider and roller type supports
- E- BS 3974 Part 2 : Pipe Clamps, cages, cantilevers and attachments to beams

MATERIAL SPECIFICATIONS :

A- MSS SP 58 : TABLE A2M/A2 : Materials and Allowable Stresses

WELDING SPECIFICATIONS :

A- ASME SECTION IV : ASME BOILER AND PRESSURE VESSEL CODE Qualification
Standard for welding and brazing procedures, welders, brazers and welding and brazing operators

B- AWS D1.1 : Structural Welding Code/Steel

COATING SPECIFICATIONS:

A- Electro-Galvanized in accordance with ASTM B 633/ASTM F 1941 - EN ISO 2081/EN ISO 4042

B- High Corrosion Resistant (HCR) in accordance with ASTM A153/153M - ASTM A123/123M - EN ISO 1461/EN ISO 10684

1.3 - QUALITY ASSURANCE

A- Welding: Qualify processes and operators according to ASME Boiler and Pressure Vessel Code: Section IX, "Welding and Brazing Qualifications."

B- NFPA Compliance: Comply with NFPA 13 for hangers and supports used as components of fire protection system. Include listing and labeling by UL Listed or FM Approval.

C- Engineering Responsibility: Design and preparation of Shop Drawings and calculations for each multiple pipe support, trapeze, and seismic restraint by a qualified professional engineer.

1. Professional Engineer Qualifications: A professional engineer who is legally registered and qualified to practice in jurisdiction where Project is located and who is experienced in providing engineering services of the kind indicated. Engineering services are defined as those performed for installations of hangers, supports, and seismic restraints that are similar to those indicated for the Project in material, design, and extent.

D- MSS (Manufacturers Standardization Society) Compliance: Comply with the latest revision of MSS Standards specified herein.

E- Manufacturer that employ a Quality Management System complying with the program described in ISO 9001-2015, ISO 14001-2015, OHSAS 18001-2007 and ISO 16949:2009.

F- Steel pipe hangers and supports shall have the Manufacturers name and applicable size stamped in the part itself for identification.

1.4 - SUBMITTALS

A. Product Data: For each type of Horizontal Piping Hangers and Supports, Vertical Pipe Supports, Hanger-Rod Attachments, Building Attachments, Saddles and Shields and Thermal Hanger Shield Inserts indicated.

PART 2 - PRODUCTS

2.1 MANUFACTURER

A. Subject to compliance with requirements, provide products by INKA, Istanbul-Turkey.

2.2 HORIZONTAL PIPING HANGERS AND SUPPORTS

A. Select size of hangers and supports to exactly fit pipe size for bare piping, and around piping insulation with saddle or shield for insulated piping. Unless otherwise indicated, install the following types:

- 1) INKA Clevis Hanger (MSS Type 1): For suspension of non-insulated or insulated stationary pipes, DN15 to DN750.
- 2) INKA Double Bolt Pipe Clamp (MSS Type 3): For suspension of pipes, DN20 to DN600, requiring damp flexibility and up to 4 pipes, DN20 to DN600, requiring damp flexibility and up to 4 inches (100 mm) of insulation.
- 3) INKA Steel Pipe Clamps (MSS Type 4): For suspension of cold and hot pipes, DN15 to DN600, if little or no insulation is required.
- 4) INKA J-Hanger (MSS Type 5): For suspension of pipes DN 15 to DN 100, to allow off-center closure for hanger installation before pipe erection.
- 5) INKA Adjustable Steel Band Hanger (Sprinkler Installation Clamp) (MSS Type 7): For suspension of non-insulated stationary pipes and sprinkler systems, DN15 to DN250.
- 6) INKA Adjustable Swivel-Ring Band Hangers (MSS Type 10): For suspension of non-insulated stationary pipes, DN15 to DN250.
- 7) INKA U-Bolt (MSS Type 24): For support of heavy pipes, DN15 to DN750.
- 8) INKA Pipe Strap (MSS Type 26): For support of pipes not subject to expansion or contraction.
- 9) INKA Pipe Slide & Slide Plate (MSS Type-35): Designed to support insulated, or non-insulated stationery pipes allowing horizontal movements.
- 10) INKA Pipe Saddle Support (MSS Type-36): For support of pipes DN 100 to DN 900, with steel-pipe base stanchion support and cast-iron floor flange or carbon-steel plate.
- 11) INKA Pipe Stanchion Saddle (MSS Type-37): For support of pipes DN 100 to DN 900, with steel-pipe base stanchion support and cast-iron floor flange or carbon-steel plate, and with U-bolt to retain pipe.
- 12) INKA Adjustable Pipe Saddle Support (MSS Type-38): For stanchion-type support for pipes DN 65 to DN 900 if vertical adjustment is required, with steel-pipe base stanchion support and cast-iron floor flange.
- 13) INKA Single Pipe Rolls (MSS Type 41): For suspension of pipes, DN25 to DN750, from 2 rods if longitudinal movement caused by expansion and contraction might occur.
- 14) INKA Adjustable Roller Hangers (MSS Type 43): For suspension of pipes, DN65 to DN500, from single rod if horizontal movement caused by expansion and contraction might occur.
- 15) INKA Pipe Roll Complete (MSS Type 44): For support of pipes, DN50 to DN1050, if longitudinal movement caused by expansion and contraction might occur but vertical adjustment is not necessary.
- 16) INKA Pipe Roll and Plate (MSS Type 45): For support of pipes, DN50 to DN600, if small horizontal movement caused by expansion and contraction might occur and vertical adjustment is not necessary.
- 17) INKA Adjustable Pipe Roll and Base Units (MSS Type 46): For support of pipes, DN50 to DN750, if vertical and lateral adjustment during installation might be required in addition to expansion and contraction.

2.3 - VERTICAL PIPE SUPPORTS

A. Select size of vertical piping clamps to exactly fit pipe size of bare pipe. Unless otherwise indicated, install one of the following.

- 1) INKA Riser Clamp (MSS Type 8): For support of pipe risers, DN20 to DN500.

- 2) INKA Heavy Duty Riser Clamp (MSS Type 42): For support of pipe risers, DN20 to DN500, if longer ends are required for riser.

2.4 – HANGER-ROD ATTACHMENTS

- A. Unless otherwise indicated and except as specified in piping system Sections, install the following types:
- 1) INKA Steel Turnbuckle (MSS Type 13): For adjustment up to 150 mm for heavy loads.
 - 2) INKA Swivel Turnbuckle (MSS Type 15): For use with MSS Type 11, split pipe rings.
 - 3) INKA Malleable Iron Socket (MSS Type 16): For attaching hanger rods to various types of building attachments.
 - 4) INKA Steel Weldless Eyebolt (MSS Type 17): For 120 to 450 deg F (49 to 232 deg C) piping installations.

2.5 – BUILDING ATTACHMENTS

- A. INKA Top Beam C-Clamp (MSS Type 19): For use under roof installations with bar-joint construction, to attach to top flange of structural shape.
- B. INKA Center-Beam Clamps (MSS Type 21): For attaching to center of bottom flange of beams.
- C. INKA Welded Beam Attachment (MSS Type 22): For attaching to bottom of beams if loads are considerable and rod sizes are large.
- D. INKA Top Beam Clamp (MSS Type 25): For top of beams if hanger rod is required tangent to flange edge
- E. INKA Side Beam Clamps (MSS Type 27): For bottom of steel I-beams.
- F. Welded-Steel Brackets: For support of pipes from below, or for suspending from above by using clip and rod.

Use one of the following for indicated loads:

- 1) INKA Light Welded Steel Bracket (MSS Type 31): 750 lb (340 kg).
 - 2) INKA Medium Welded Steel Bracket (MSS Type 32): 1500 lb (680 kg).
 - 3) INKA Heavy Welded Steel Bracket (MSS Type 33): 3000 lb (1360 kg).
- G. INKA Plate Lugs (MSS Type 57): For attaching to steel beams if flexibility at beam is required.

2.6 – SADDLES AND SHIELDS

- A. INKA Pipe-Covering Protection Saddles (MSS Type 39): To fill interior voids with insulation that matches adjoining insulation.
- B. INKA Protection Shield (MSS Type 40): To prevent crushing insulation.

2.7 – THERMAL HANGER SHIELD INSERTS

- A. Insulation Insert material for cold piping;
- 1) INKA Calcium Silicate: Water-repellent treated, ASTM C 533, Type I calcium silicate with 690 kPa min. compressive strength.
 - 2) INKA Polyisocyanurate Insulation Block: ASTM C591, Type VI, Grade 1 Polyisocyanurate (PIR) with 862-kPa (125-psig) minimum compressive strength.

- B. Insulation Insert material for hot piping;
 - 1) INKA Calcium Silicate: Water-repellent treated, ASTM C 533, Type I calcium silicate with 690 kPa min. compressive strength.
 - 2) INKA Polyisocyanurate Insulation Block: ASTM C591, Type VI, Grade 1 Polyisocyanurate (PIR) with 862-kPa (125-psig) minimum compressive strength. For applications up to 100 °C.
- C. For Trapeze or Clamped System: Insert and shield cover entire circumference of pipe.
- D. For Clevis or Band Hanger: Insert and shield cover lower 180 degrees of pipe.

PART 3 – HANGER AND SUPPORT INSTALLATION

- A. Steel Pipe Hanger Installation: Comply with MSS SP-69 and MSS SP-89. Install hangers, supports, clamps, and attachments as required to properly support piping from building structure.
- B. Trapeze Pipe Hanger Installation: Comply with MSS SP-69 and MSS SP-89. Arrange for grouping of parallel runs of horizontal piping and support together on field-fabricated trapeze pipe hangers.
 - 1) Pipes of Various Sizes: Support together and space trapezes for smallest pipe size or install intermediate supports for smaller diameter pipes as specified above for individual pipe hangers.
 - 2) Field fabricate from ASTM A 36/A 36M, steel shapes selected for loads being supported. Weld steel according to AWS D1.1
- C. Metal Framing System Installation: Arrange for grouping of parallel runs of piping and support together on field-assembled metal framing systems.
- D. Thermal-Hanger Shield Installation: Install in pipe hanger or shield for insulated piping.
- E. Fastener System Installation:
 - 1) Install powder-actuated fasteners for use in lightweight concrete or concrete slabs less than 100 mm thick in concrete after concrete is placed and completely cured. Use operators that are licensed by powder-actuated tool manufacturer. Install fasteners according to powder-actuated tool Manufacturers operating manual.
 - 2) Install INKA anchors in concrete after concrete is placed and completely cured.
- F. Pipe Stand Installation: Assemble components and mount on smooth surface. Do not penetrate membrane.
- G. Install hangers and supports complete with necessary inserts, bolts, rods, nuts, washers, and other accessories.
- H. Install hangers and supports to allow controlled thermal and seismic movement of piping systems, to permit freedom of movement between pipe anchors, and to facilitate action of expansion joints, expansion loops, expansion bends and similar units.
- I. Install lateral bracing with pipe hangers and supports to prevent swaying.
- J. Install building attachments within concrete slabs or attach to structural steel. Install additional attachments at concentrated loads, including valves, flanges, and strainers, DN65 and larger and at changes in direction of piping. Install concrete inserts before concrete is placed; fasten inserts to forms and install reinforcing bars through openings at top of inserts.

- K. Load Distribution: Install hangers and supports so piping live and dead loads and stresses from movement will not be transmitted to connected equipment.
- L. Pipe Slopes: Install hangers and supports to provide indicated pipe slopes and so maximum pipe deflections allowed by ASME B31.9 (for building services piping) are not exceeded.
- M. Insulated Piping: Comply with the following;
 - 1) Attach clamps and spacers to piping.
 - a) Piping Operating above Ambient Air Temperature: Clamp may project through insulation.
 - b) Piping Operating below Ambient Air Temperature: Use thermal-hanger shield insert with Nominal Sized to match OD of insert.
 - c) Do not exceed pipe stress limits according to ASME B31.1 for power piping and ASME B31.9 for building services piping.
 - 2) Install MSS SP-58, Type 39, protection saddles if insulation without vapour barrier is indicated. Fill interior voids with insulation that matches adjoining insulation.
 - 3) Install MSS SP-58 & SP-69 Type 40, protective shields on storm water, domestic cold and hot water piping with vapour barrier. Shields shall span an arc of 180 degrees.
 - 4) Shield Dimensions for Pipe: Not less than the following
 - a) DN 8 to DN 90: 305 mm long and 1.22 mm thick.
 - b) DN 100: 305 mm long and 1.52 mm thick.
 - c) DN 125 and DN 150: 457 mm long and 1.52 mm thick.
 - d) DN 200 to DN 350: 610 mm long and 1.91 mm thick.
 - e) DN 400 to DN 600: 610 mm long and 2.67 mm thick.
 - 5) Insert Material: Length at least as long as protective shield.
 - 6) Thermal-Hanger Shields: Install with insulation same thickness as piping insulation.

PART 4 – METAL FABRICATIONS

- A. Cut, drill, and fit miscellaneous metal fabrications for trapeze pipe hangers and equipment supports.
- B. Fit exposed connections together to form hairline joints. Field weld connections that cannot be shop welded because of shipping size limitations.
- C. Field Welding: Comply with AWS D1.1 procedures for shielded metal arc welding, appearance and quality of welds, and methods used in correcting welding work, and with the following:
 - 1) Use materials and methods that minimize distortion and develop strength and corrosion resistance of base metals.
 - 2) Obtain fusion without undercut or overlap.
 - 3) Remove welding flux immediately.
 - 4) Finish welds at exposed connections so no roughness shows after finishing and contours of welded surfaces match adjacent contours.

PART 5 – SCHEDULE

Maximum Horizontal Pipe Hanger and Support Spacing													
Nominal Pipe or Tube Size										In accordance with NFPA 13			
		Steel Pipe				Copper Pipe				Steel Pipe		Copper Tube	
		Water Service		Vapor Service		Water Service		Vapor Service					
NPS	DN	ft	m	ft	m	ft	m	ft	m	ft	m	ft	m
1/4"	8					5	1.5	5	1.5				
3/8"	10	7	2.1	8	2.4	5	1.5	6	1.8				
1/2"	15	7	2.1	8	2.4	5	1.5	6	1.8				
3/4"	20	7	2.1	9	2.7	5	1.5	7	2.1			8	2.44
1"	25	7	2.1	9	2.7	6	1.8	8	2.4	12	3.66	8	2.44
1 1/4"	32	7	2.1	9	2.7	7	2.1	9	2.7	12	3.66	10	3.05
1 1/2"	40	9	2.7	12	3.7	8	2.4	10	3.0	15	4.57	10	3.05
2	50	10	3.0	13	4.0	8	2.4	11	3.4	15	4.57	12	3.66
2 1/2"	65	11	3.4	14	4.3	9	2.7	13	4.0	15	4.57	12	3.66
3	80	12	3.7	15	4.6	10	3.0	14	4.3	15	4.57	12	3.66
3 1/2"	90	13	4.0	16	4.9	11	3.4	15	4.6	15	4.57	15	4.57
4"	100	14	4.3	17	5.2	12	3.7	16	4.9	15	4.57	15	4.57
5"	125	16	4.9	19	5.8	13	4.0	18	5.5	15	4.57	15	4.57
6"	150	17	5.2	21	6.4	14	4.3	20	6.1	15	4.57	15	4.57
8"	200	19	5.8	24	7.3	16	4.9	23	7.0	15	4.57	15	4.57
10"	250	22	6.7	26	7.9	18	5.5	25	7.6				
12"	300	23	7.0	30	9.1	19	5.8	28	8.5				
14"	350	35	7.6	32	9.8								
16"	16"	27	8.2	35	10.7								
18"	450	28	8.5	37	11.3								
20"	500	30	9.1	39	11.9								
24"	600	32	9.8	42	12.8								
30"	750	33	10.1	44	13.4								

REFERENCES



REFERENCES FROM TURKEY



PROJECT NAME	PROJECT TYPE	CITY	COUNTRY
10 TEMMUZ PROJECT	RESIDENTIAL	ZONGULDAK	TÜRKİYE
1915 CANAKKALE BRIDGE AND ROAD	INFRASTRUCTURE	ÇANAKKALE	TÜRKİYE
212 SHOPPING MALLS	SHOPPING MALLS	İSTANBUL	TÜRKİYE
3. BRIDGE CAMLIK AND RIVA TUNNEL	INFRASTRUCTURE	İSTANBUL	TÜRKİYE
3. HAVA JET NAVAL BASE HANGAR	AVIATION	KONYA	TÜRKİYE
3M FACTORY	INDUSTRIAL	TEKİRDAĞ	TÜRKİYE
7. MAIN JET NAVAL BASE	AVIATION	MALATYA	TÜRKİYE
ABC DETARJAN FACTORY ADDITIONAL BUILDING	INDUSTRIAL	OSMANİYE	TÜRKİYE
ACIBADEM HOSPITAL	HEALTH	İZMİR	TÜRKİYE
ACIBADEM MEDIPOL HOSPITAL	HEALTH	İSTANBUL	TÜRKİYE
ADA ADAPAZARI SHOPPING MALLS	SHOPPING MALLS	ADAPAZARI	TÜRKİYE
ADANA RAMADA	HOSPITALITY	ADANA	TÜRKİYE
ADANA SHERATON	HOSPITALITY	ADANA	TÜRKİYE
ADAPAZARI OTOKAR SERVICE BUILDING	INDUSTRIAL	SAKARYA	TÜRKİYE
ADDITIONAL BIM FACTORY	INDUSTRIAL	ANKARA	TÜRKİYE
ADNAN MENDERES AIRPORT	AVIATION	İZMİR	TÜRKİYE
AFS GENERAL DIRECTORATE AND LOGISTICS CENTER	INDUSTRIAL	İSTANBUL	TÜRKİYE
AFYON PROVATE HEALTHCARE	HEALTH	AFYON	TÜRKİYE
AGORA IZMIR	SHOPPING MALLS	İZMİR	TÜRKİYE
AGORA SHOPPING MALL	SHOPPING MALLS	ANTALYA	TÜRKİYE
AHLAT DEPARTMENT OF CORRECTIONS	PUBLIC BUILDINGS	BİTLİS	TÜRKİYE
AIR FORCE ACADEMY	PUBLIC BUILDINGS	İSTANBUL	TÜRKİYE
AKASYA ACIBADEM	SHOPPING MALLS	İSTANBUL	TÜRKİYE
AKASYA PARK RESIDENCE & OFFICE	RESIDENTIAL	İSTANBUL	TÜRKİYE
AKBATI SHOPPING MALLS	SHOPPING MALLS	İSTANBUL	TÜRKİYE
AKDERE LOGISTICS	INDUSTRIAL	İSTANBUL	TÜRKİYE
AKHISAR GONENLİ MİLK FACTORY	INDUSTRIAL	MANİSA	TÜRKİYE
AKKUYU – NUCLEAR POWER PLANT	INFRASTRUCTURE	MERSİN	TÜRKİYE
AKP CONGRESS CENTER	PUBLIC BUILDINGS	ANKARA	TÜRKİYE
AKTUL PAPER PRODUCTION FACILITY	INDUSTRIAL	ADAPAZARI	TÜRKİYE
AKVARYUM HOTEL	HOSPITALITY	İSTANBUL	TÜRKİYE
AKYURT ENGINEERING BUILDING	OFFICE BUILDINGS	ANKARA	TÜRKİYE
ALBASLAR	RESIDENTIAL	İSTANBUL	TÜRKİYE
ALIAGA – OPET – FUSCHA	INDUSTRIAL	İZMİR	TÜRKİYE
ALIAGA ANATOLIA CERAMIC OFFICE BUILDINGS	OFFICE BUILDINGS	İZMİR	TÜRKİYE
ALIAGA RAVAGO ALOSBI PRODUCTION AND FACTORY	INDUSTRIAL	İZMİR	TÜRKİYE
ALTOWER GOZTEPE RESIDENCE	OFFICE BUILDINGS	İSTANBUL	TÜRKİYE
ALTUNIZADE – CAPITOL SHOPPING MALL	SHOPPING MALLS	İSTANBUL	TÜRKİYE
ALTUNIZADE DUNYA EYE HOSPITAL	HEALTH	İSTANBUL	TÜRKİYE
AMERIKAN HOSPITAL	HEALTH	İZMİR	TÜRKİYE
ANADOLU SHIPYARD	INDUSTRIAL	İSTANBUL	TÜRKİYE
ANATOLIUM	SHOPPING MALLS	BURSA	TÜRKİYE
AND OFFICE	OFFICE BUILDINGS	İSTANBUL	TÜRKİYE
AND PASTEL	RESIDENTIAL	İSTANBUL	TÜRKİYE
AND PLAZA	OFFICE BUILDINGS	İSTANBUL	TÜRKİYE
ANKARA MAHAL	RESIDENTIAL	ANKARA	TÜRKİYE

PROJECT NAME	PROJECT TYPE	CITY	COUNTRY
ANKARA STADIUM	SPORT FACILITIES	ANKARA	TÜRKİYE
ANTAKYA 9.SECTION 1.STAGE 1065 RESIDENCE - 37 STORES	RESIDENTIAL	HATAY	TÜRKİYE
ANTALYA AIRPORT INCREASING THE CAPACITY	AVIATION	ANTALYA	TÜRKİYE
ANTALYA BERING NAVAL SHIPYARD	INDUSTRIAL	ANTALYA	TÜRKİYE
ANTALYA CITY HOSPITAL	HEALTH	ANTALYA	TÜRKİYE
ANTALYA LIMAK HOTEL	HOSPITALITY	ANTALYA	TÜRKİYE
ANTALYA ONCOLOGY HOSPITAL	HEALTH	ANTALYA	TÜRKİYE
ANTALYA RAIL SYSTEMS	INFRASTRUCTURE	ANTALYA	TÜRKİYE
ANTASYA	RESIDENTIAL	İSTANBUL	TÜRKİYE
ARCELIK DISH WASHER FACTORY - EXPANSION	INDUSTRIAL	MANİSA	TÜRKİYE
ARCELIK FACTORY	INDUSTRIAL	ANKARA	TÜRKİYE
ARCELIK FACTORY FIRE SYSTEMS	INDUSTRIAL	BOLU	TÜRKİYE
ARCELIK SMALL HOME APPLIANCES	INDUSTRIAL	BOLU	TÜRKİYE
AREL OTEL	HOSPITALITY	İSTANBUL	TÜRKİYE
ARMA TOWER	OFFICE BUILDINGS	ANKARA	TÜRKİYE
ARMY AVIATION SCHOOL	PUBLIC BUILDINGS	ISPARTA	TÜRKİYE
ARTAS AVRUPA HOUSING CAMLIVADI	RESIDENTIAL	İSTANBUL	TÜRKİYE
ARTVIN DAM	POWER & ENERGY	ARTVİN	TÜRKİYE
ASAS ALUMINYUM FACTORY ADDITIONAL PRODUCTION FACILITIES	INDUSTRIAL	SAKARYA	TÜRKİYE
ASELSAN PREFABRICATED PRODUCTION FACILITIES	INDUSTRIAL	ANKARA	TÜRKİYE
ASELSAN SHOOTING RANGE	PUBLIC BUILDINGS	ANKARA	TÜRKİYE
ASPILSAN BATTERYPRODUCTION FACILITIES	INDUSTRIAL	KAYSERİ	TÜRKİYE
ASSAN FOODS FACTORY	INDUSTRIAL	BALIKESİR	TÜRKİYE
ASSAN HANIL	INDUSTRIAL	KOCAELİ	TÜRKİYE
ATAKOY / İKITELLİ SUBWAY 12 STATION	INFRASTRUCTURE	İSTANBUL	TÜRKİYE
ATAKOY KUZU GRUP SEA PEARL	RESIDENTIAL	İSTANBUL	TÜRKİYE
ATAKOY NEF 22	RESIDENTIAL	İSTANBUL	TÜRKİYE
ATAKOY SEA PEARL JUMEIRAH OTEL	HOSPITALITY	İSTANBUL	TÜRKİYE
ATAKOY TOWERS	RESIDENTIAL	İSTANBUL	TÜRKİYE
ATASEHIR - MY NEW WORK	RESIDENTIAL	İSTANBUL	TÜRKİYE
ATASEHIR ACIBADEM HOSPITAL	HEALTH	İSTANBUL	TÜRKİYE
ATASEHIR MODERN	RESIDENTIAL	İSTANBUL	TÜRKİYE
ATASEHIR MYC OFFICE	OFFICE BUILDINGS	İSTANBUL	TÜRKİYE
ATASEHIR NIDA TOWER	OFFICE BUILDINGS	İSTANBUL	TÜRKİYE
ATATOWER	SHOPPING MALLS	ANKARA	TÜRKİYE
ATATURK AIRPORT	AVIATION	İSTANBUL	TÜRKİYE
ATATURK AIRPORT - HANGAR	AVIATION	İSTANBUL	TÜRKİYE
ATILIM UNIVERSITY	PUBLIC BUILDINGS	ANKARA	TÜRKİYE
AVCILAR - ISPARTATOWER 6. STAGE	RESIDENTIAL	İSTANBUL	TÜRKİYE
AVRASYA TUNNEL	INFRASTRUCTURE	İSTANBUL	TÜRKİYE
AVRUPA HOUSING BASAKSEHIR - KAYASEHIR	PUBLIC BUILDINGS	İSTANBUL	TÜRKİYE
AVRUPA HOUSING SAKLI VADI	RESIDENTIAL	İSTANBUL	TÜRKİYE
AVRUPA HOUSING YAMANEVLER	RESIDENTIAL	İSTANBUL	TÜRKİYE
AVRUPA HOUSING YAMANEVLER 2.STAGE	RESIDENTIAL	İSTANBUL	TÜRKİYE
AXIS ISTANBUL BAYRAMPASA	RESIDENTIAL	İSTANBUL	TÜRKİYE

PROJECT NAME	PROJECT TYPE	CITY	COUNTRY
AYAZMA EMLAK HOUSING	RESIDENTIAL	İSTANBUL	TÜRKİYE
AYDIN CITY HOSPITAL	HEALTH	AYDIN	TÜRKİYE
AYDIN UNIVERSITY	PUBLIC BUILDINGS	İSTANBUL	TÜRKİYE
AYDINLI SELIMPASA FACTORY	INDUSTRIAL	İSTANBUL	TÜRKİYE
B420 TAI COMPOSITE PRODUCTION FACILITY	INDUSTRIAL	ANKARA	TÜRKİYE
BAFRA BIM FACTORY	INDUSTRIAL	SAMSUN	TÜRKİYE
BAGCILAR - MEDIPOL HOSPITAL	HEALTH	İSTANBUL	TÜRKİYE
BAGCILAR EAE ELECTRICITY OFFICE BUILDING	OFFICE BUILDINGS	İSTANBUL	TÜRKİYE
BAGCILAR TRI G RESIDENCE	RESIDENTIAL	İSTANBUL	TÜRKİYE
BAHCELIEVLER CARREFOURSA SHOPPING MALL	SHOPPING MALLS	İSTANBUL	TÜRKİYE
BAHCELIEVLER MEDIPOLITAN NISA HOSPITAL	AVIATION	İSTANBUL	TÜRKİYE
BAHCESEHIR - TEMA BAHCE ISTANBUL 2.STAGE	RESIDENTIAL	İSTANBUL	TÜRKİYE
BAHCETEPE	RESIDENTIAL	İSTANBUL	TÜRKİYE
BAKIRKOY BAHCELIEVLER KIRAZLI SUBWAY	INFRASTRUCTURE	İSTANBUL	TÜRKİYE
BALGAT TRADE CENTER	OFFICE BUILDINGS	ANKARA	TÜRKİYE
BALIN FACTORY CERKEZKOY	INDUSTRIAL	TEKİRDAĞ	TÜRKİYE
BANDIRMA ADIENT FACTORY	INDUSTRIAL	BALIKESİR	TÜRKİYE
BANDIRMA ETI MADEN TURBO GENERATOR BUILDING	INDUSTRIAL	BALIKESİR	TÜRKİYE
BASAKSEHIR LUXERA PROJECT	RESIDENTIAL	İSTANBUL	TÜRKİYE
BASAKSEHIR OYAK SILUET	RESIDENTIAL	İSTANBUL	TÜRKİYE
BASISKELE HILTON HOTEL AND BUREAU RESIDENCE	HOSPITALITY	KOCAELİ	TÜRKİYE
BASKENT EMLAK HOUSING	RESIDENTIAL	ANKARA	TÜRKİYE
BATISEHIR PROJECT	RESIDENTIAL	İSTANBUL	TÜRKİYE
BAUHAUS ISTANBUL	SHOPPING MALLS	İSTANBUL	TÜRKİYE
BAYRAKLI INTEGRATED HEALTHCARE CAMPUS	HEALTH	İZMİR	TÜRKİYE
BAYRAKLI TOWER	OFFICE BUILDINGS	İZMİR	TÜRKİYE
BAYRAMPASA - KIPTAS URBAN TRANSFORMATION	RESIDENTIAL	İSTANBUL	TÜRKİYE
BAYRAMPASA AXIS ISTANBUL KARMA	RESIDENTIAL	İSTANBUL	TÜRKİYE
BAYRAMPASA KARMA YASAM	RESIDENTIAL	İSTANBUL	TÜRKİYE
BAYRAMPASA KIDAN OTEL	HOSPITALITY	İSTANBUL	TÜRKİYE
BEKSA	INDUSTRIAL	KOCAELİ	TÜRKİYE
BEMAS METAL FACTORY	INDUSTRIAL	İSTANBUL	TÜRKİYE
BEMSE REFECTORY	INDUSTRIAL	ANKARA	TÜRKİYE
BENESTA ACIBADEM	RESIDENTIAL	İSTANBUL	TÜRKİYE
BENESTA ACIBADEM PARKING LOT	RESIDENTIAL	İSTANBUL	TÜRKİYE
BENESTA PODIO BAHCELIEVLER	RESIDENTIAL	İSTANBUL	TÜRKİYE
BEST TRAFO 2. STAGE	INDUSTRIAL	BALIKESİR	TÜRKİYE
BETA ZIRAAT AND TICARET A.S	INDUSTRIAL	KONYA	TÜRKİYE
BEYKOZ ACAR KENT HOUSES	RESIDENTIAL	İSTANBUL	TÜRKİYE
BEZMIALEM UNIVERSITY	PUBLIC BUILDINGS	İSTANBUL	TÜRKİYE
BEZMIALEM VAKIF UNI. HEALTHCARE CAMPUS	PUBLIC BUILDINGS	İSTANBUL	TÜRKİYE
BIGA - CENAL ENERJİ SANTRALİ	POWER & ENERGY	ÇANAKKALE	TÜRKİYE
BIKUR PLAZA	OFFICE BUILDINGS	İSTANBUL	TÜRKİYE
BILIM PHARMACEUTICAL PLANT	INDUSTRIAL	İSTANBUL	TÜRKİYE
BILKENT HEATING CENTER	INFRASTRUCTURE	ANKARA	TÜRKİYE

PROJECT NAME	PROJECT TYPE	CITY	COUNTRY
BILKENT INTEGRATED HEALTHCARE CAMPUS	HEALTH	ANKARA	TÜRKİYE
BILKENT UNIVERSITY BUPS BUILDING	PUBLIC BUILDINGS	ANKARA	TÜRKİYE
BILKENT UNIVERSITY HOSTEL	RESIDENTIAL	ANKARA	TÜRKİYE
BIM FACTORY	INDUSTRIAL	ANKARA	TÜRKİYE
BIM FACTORY	INDUSTRIAL	DIYARBAKIR	TÜRKİYE
BIR BAHCE	RESIDENTIAL	İSTANBUL	TÜRKİYE
BLUE LAKE	RESIDENTIAL	İSTANBUL	TÜRKİYE
BMW BORUSAN PRODUCTION FACILITIES	INDUSTRIAL	İSTANBUL	TÜRKİYE
BODRUM - IL RICCIO HOTEL	HOSPITALITY	MUĞLA	TÜRKİYE
BODRUM BVLGARI HOTEL	HOSPITALITY	MUĞLA	TÜRKİYE
BODRUM CARESSE	HOSPITALITY	MUĞLA	TÜRKİYE
BODRUM PUBLIC HOSPITAL	HEALTH	MUĞLA	TÜRKİYE
BOGAZICI KARAYOLU SUB-SEA TUNNEL	INFRASTRUCTURE	İSTANBUL	TÜRKİYE
BOLU BURDA 14 SHOPPING MALL	SHOPPING MALLS	BOLU	TÜRKİYE
BOLU GOYNUK THERMAL POWER PLANT	POWER & ENERGY	BOLU	TÜRKİYE
BOMONTI BABYLON	SHOPPING MALLS	İSTANBUL	TÜRKİYE
BOMONTI HILTON	HOSPITALITY	İSTANBUL	TÜRKİYE
BOMONTI NOVOTEL	HOSPITALITY	İSTANBUL	TÜRKİYE
BOMONTI THE HOUSE RESIDENCE	RESIDENTIAL	İSTANBUL	TÜRKİYE
BORSA ISTANBUL	OFFICE BUILDINGS	İSTANBUL	TÜRKİYE
BOULEVARD ISTANBUL	RESIDENTIAL	İSTANBUL	TÜRKİYE
BOZUYUK PUBLIC HOSPITAL	HEALTH	BİLECİK	TÜRKİYE
BRISA BRIDGESTONE TIRE PRODUCTION FACILITIES	INDUSTRIAL	AKSARAY	TÜRKİYE
BRISSA FACTORY	INDUSTRIAL	KOCAELİ	TÜRKİYE
BSH CERKEZKOY FACTORY	INDUSTRIAL	TEKİRDAĞ	TÜRKİYE
BUCA OYAK HOUSING	RESIDENTIAL	İZMİR	TÜRKİYE
BURDA 01 SHOPPING MALLS	SHOPPING MALLS	ADANA	TÜRKİYE
BURDUR MILITARY BRIGAGE BARRACKS	PUBLIC BUILDINGS	BURDUR	TÜRKİYE
BURSA HILTON	HOSPITALITY	BURSA	TÜRKİYE
BUYAKA SHOPPING MALLS	SHOPPING MALLS	İSTANBUL	TÜRKİYE
BUYUKYALI KAZLICESME	RESIDENTIAL	İSTANBUL	TÜRKİYE
CAGRI HIPER MARKET	INDUSTRIAL	İSTANBUL	TÜRKİYE
CAMEL CIGARETTE PRODUCTION FACILITY	INDUSTRIAL	İZMİR	TÜRKİYE
CAMLICA MESA	RESIDENTIAL	İSTANBUL	TÜRKİYE
CAMSAN FACTORY	INDUSTRIAL	KOCAELİ	TÜRKİYE
CAN THERMAL POWER PLANT	POWER & ENERGY	ÇANAKKALE	TÜRKİYE
CANAKKALE BURDA SHOPPING MALL	SHOPPING MALLS	ÇANAKKALE	TÜRKİYE
CANDY FACTORY	INDUSTRIAL	ESKİŞEHİR	TÜRKİYE
CANPARK SHOPPING MALLS	SHOPPING MALLS	İSTANBUL	TÜRKİYE
CARREFOUR STORE	SHOPPING MALLS	BURSA	TÜRKİYE
CASSABA MODERN YASAM CENTER	RESIDENTIAL	ESKİŞEHİR	TÜRKİYE
CATALCA MENDERLER FACTORY	INDUSTRIAL	İSTANBUL	TÜRKİYE
CAYIROVA - AKBANK LIFE CENTER	OFFICE BUILDINGS	KOCAELİ	TÜRKİYE
CEKMEKOY MEDISTATE HOSPITAL	HEALTH	İSTANBUL	TÜRKİYE
CEKMEKOY SANCAKTEPE SULTANBEYLİ SUBWAY	INFRASTRUCTURE	İSTANBUL	TÜRKİYE

PROJECT NAME	PROJECT TYPE	CITY	COUNTRY
CEKMEKOY-USKUDAR 7 PCS. SUBWAY STATION	INFRASTRUCTURE	İSTANBUL	TÜRKİYE
CENGELKOY NIDA PARK	RESIDENTIAL	İSTANBUL	TÜRKİYE
CENTRAL BANK	PUBLIC BUILDINGS	ANKARA	TÜRKİYE
CENTRAL PUBLIC HOSPITAL	HEALTH	MANİSA	TÜRKİYE
CENTRUM PHARMACEUTICAL PLANT	INDUSTRIAL	ANKARA	TÜRKİYE
CEPA HOUSING	RESIDENTIAL	ANKARA	TÜRKİYE
CEPA OFFICE	OFFICE BUILDINGS	ANKARA	TÜRKİYE
CERKEZKOY – ARCELİK FACTORY	INDUSTRIAL	TEKİRDAĞ	TÜRKİYE
CERKEZKOY – BSH FACTORY ADDITIONAL BUILDING	INDUSTRIAL	TEKİRDAĞ	TÜRKİYE
CERKEZKOY – ELK ELECTRIC FACTORY BUILDING	INDUSTRIAL	TEKİRDAĞ	TÜRKİYE
CERKEZKOY INAN MACHINERY	INDUSTRIAL	TEKİRDAĞ	TÜRKİYE
CERKEZKOY KALE KILIT FACTORY	INDUSTRIAL	TEKİRDAĞ	TÜRKİYE
CERKEZKOY PELSAN TEXTILE FACTORY	INDUSTRIAL	TEKİRDAĞ	TÜRKİYE
CERKEZKOY SARAY FOLYO FACTORY	INDUSTRIAL	TEKİRDAĞ	TÜRKİYE
CERKEZKOY TURKCELL DATA CENTER EK BİNA	OFFICE BUILDINGS	TEKİRDAĞ	TÜRKİYE
CERKEZKOY VEM PHARMACEUTICAL PLANT	INDUSTRIAL	TEKİRDAĞ	TÜRKİYE
CESME SWISS HOTEL	HOSPITALITY	İZMİR	TÜRKİYE
CEVİZLİ IKEA	OFFICE BUILDINGS	İSTANBUL	TÜRKİYE
CİFTAY OKSUT MINE SIDE FIRE SYSTEM	INDUSTRIAL	KAYSERİ	TÜRKİYE
CİFTÇİLER TOWER	RESIDENTIAL	İSTANBUL	TÜRKİYE
CİRAGAN KEMPINSKI HOTEL	HOSPITALITY	İSTANBUL	TÜRKİYE
CITY HOSPITAL	HEALTH	BURSA	TÜRKİYE
CITY HOSPITAL	HEALTH	İSPARTA	TÜRKİYE
CITY HOSPITAL	HEALTH	SAKARYA	TÜRKİYE
CITY INSTITUTIONS ATASEHIR	OFFICE BUILDINGS	İSTANBUL	TÜRKİYE
CLUP ALİBEY HOTEL	HOSPITALITY	ANTALYA	TÜRKİYE
COCA-COLA ALTUNIZADE ADMINISTRATION BUILDING	OFFICE BUILDINGS	İSTANBUL	TÜRKİYE
CONRAD HOTEL	HOSPITALITY	İSTANBUL	TÜRKİYE
CORLU – DSI CORLU WASTE WATER PURIFICATION PLANT	INFRASTRUCTURE	TEKİRDAĞ	TÜRKİYE
CORLU BİM FACTORY	INDUSTRIAL	TEKİRDAĞ	TÜRKİYE
CORLU HILTON	HOSPITALITY	ÇORLU	TÜRKİYE
CORLU KIZILELMA HANGAR BUILDING	INDUSTRIAL	TEKİRDAĞ	TÜRKİYE
CORLU MODERN PACKAGING FACTORY	INDUSTRIAL	TEKİRDAĞ	TÜRKİYE
CORLU RESIDENCE	RESIDENTIAL	TEKİRDAĞ	TÜRKİYE
CORLU-TURKCELL DATA CENTER	OFFICE BUILDINGS	TEKİRDAĞ	TÜRKİYE
CORUM SPECIAL ADMINISTRATION EDUCATION AND RESEARCH HOSPITAL	HEALTH	ÇORUM	TÜRKİYE
CROWN PLAZA UMRANIYE	HOSPITALITY	İSTANBUL	TÜRKİYE
CUBES HOUSING	RESIDENTIAL	ANKARA	TÜRKİYE
CUKUROVA AIRPORT SUPERSTRUCTURE WORKS	AVIATION	MERSİN	TÜRKİYE
DALAMAN AIRPORT	AVIATION	MUĞLA	TÜRKİYE
DATA CENTER KALE WORKSITE	PUBLIC BUILDINGS	ANKARA	TÜRKİYE
DEDEMAN OTEL	HOSPITALITY	ZONGULDAK	TÜRKİYE
DEFACTO FACTORY	INDUSTRIAL	İSTANBUL	TÜRKİYE
DEFACTO FACTORY	INDUSTRIAL	SİVAS	TÜRKİYE
DEMİREL PLASTİK	INDUSTRIAL	İSTANBUL	TÜRKİYE

PROJECT NAME	PROJECT TYPE	CITY	COUNTRY
DHL ESENYURT	INDUSTRIAL	İSTANBUL	TÜRKİYE
DILOVASI HALK GYO	INDUSTRIAL	KOCAELİ	TÜRKİYE
DILOVASI – FUPA ASANSOR	INDUSTRIAL	KOCAELİ	TÜRKİYE
DILOVASI ASSAN ALUMINIUM COLD ROLLING BUILDING	INDUSTRIAL	KOCAELİ	TÜRKİYE
DILOVASI BYCHEM PETROCHEMICAL	INDUSTRIAL	KOCAELİ	TÜRKİYE
DILOVASI HITACHI TRANSFORMER	INDUSTRIAL	KOCAELİ	TÜRKİYE
DILOVASI YC INOX FACTORY	INDUSTRIAL	KOCAELİ	TÜRKİYE
DIVAN ASYA	HOSPITALITY	İSTANBUL	TÜRKİYE
DIVAN TASDELEN PRODUCTION FACILITIES	INDUSTRIAL	İSTANBUL	TÜRKİYE
DIYARBAKIR NOV HOSPITAL	HOSPITALITY	DIYARBAKIR	TÜRKİYE
DKY ON KAGITHANE	RESIDENTIAL	İSTANBUL	TÜRKİYE
DOGUS HOLDING BUSINESS HOTEL	HOSPITALITY	KOCAELİ	TÜRKİYE
DOGUS OTO KARTAL	OFFICE BUILDINGS	İSTANBUL	TÜRKİYE
DOGUS OTO SCANIA BUILDING	INDUSTRIAL	KOCAELİ	TÜRKİYE
DOGUSOTO GENERAL DIRECTORATE	OFFICE BUILDINGS	KOCAELİ	TÜRKİYE
DOLLVET PHARMACEUTICAL PLANT ADDITIONAL PRODUCTION BUILDING	INDUSTRIAL	ŞANLIURFA	TÜRKİYE
DOLPHIN SHOPPING MALL	SHOPPING MALLS	ANKARA	TÜRKİYE
DOLUNAY ANKARA	SHOPPING MALLS	ANKARA	TÜRKİYE
DORTYOL EMERGENCY HOSPITAL	HEALTH	HATAY	TÜRKİYE
DSI WORKSITE	RESIDENTIAL	ANKARA	TÜRKİYE
DUBAİPORT	INDUSTRIAL	KOCAELİ	TÜRKİYE
DUDULLU BİLNE PRINTING HOUSEFACTORY	INDUSTRIAL	İSTANBUL	TÜRKİYE
DUDULLU OMEGA MOTOR	INDUSTRIAL	İSTANBUL	TÜRKİYE
DUDULLU OSB ATATURK EDUCATIONAL CAMPUS	PUBLIC BUILDINGS	İSTANBUL	TÜRKİYE
DUMANKAYA MIKS	RESIDENTIAL	İSTANBUL	TÜRKİYE
DUMANKAYA RITİM	RESIDENTIAL	İSTANBUL	TÜRKİYE
DUSE	INDUSTRIAL	KOCAELİ	TÜRKİYE
DVK HEADQUARTER BUILDING	PUBLIC BUILDINGS	ANKARA	TÜRKİYE
EAG MALTEPE OFFICES PARK	OFFICE BUILDINGS	İSTANBUL	TÜRKİYE
EBRAR APARTMENTS	RESIDENTIAL	MARAŞ	TÜRKİYE
ECZACIBASI PHARMACEUTICAL PLANT	INDUSTRIAL	KIRKLARELİ	TÜRKİYE
EFESAN PORT	INDUSTRIAL	KOCAELİ	TÜRKİYE
EGE PERLA	SHOPPING MALLS	İZMİR	TÜRKİYE
EGEBOYU İSTANBUL	RESIDENTIAL	İSTANBUL	TÜRKİYE
EKATERRA (LIPTON) TEA PACKAGING FACTORY	INDUSTRIAL	SAKARYA	TÜRKİYE
EKOL LOGISTICS	INDUSTRIAL	İSTANBUL	TÜRKİYE
EKOMAS BES	POWER & ENERGY	KIRKLARELİ	TÜRKİYE
ELIF PLASTICS & PRINTING FACTORY	INDUSTRIAL	İSTANBUL	TÜRKİYE
EMAAR OTEL	HOSPITALITY	İSTANBUL	TÜRKİYE
EMAAR SQUARE	SHOPPING MALLS	İSTANBUL	TÜRKİYE
EMBA HUNUTLU THERMAL POWER PLANT	INDUSTRIAL	ADANA	TÜRKİYE
EMET SULFURIC ACID ADMINISTRATIVE BUILDING	OFFICE BUILDINGS	KÜTAHYA	TÜRKİYE
EMİNEVİM KURTKOY RAMADA HOTEL	HOSPITALITY	İSTANBUL	TÜRKİYE
EMLAK CİNARKOY RESIDENCE / MESA	RESIDENTIAL	İSTANBUL	TÜRKİYE
EMLAK İSPARTATOWER	RESIDENTIAL	İSTANBUL	TÜRKİYE

PROJECT NAME	PROJECT TYPE	CITY	COUNTRY
EMLAK RESIDENCES ESENLER	RESIDENTIAL	İSTANBUL	TÜRKİYE
ENDULUS SHOPPING MALL AND HIGH-RISE PARKING LOT	SHOPPING MALLS	BURSA	TÜRKİYE
ENKA AND RBENA NATURAL GAS CONVERSION PLANT	POWER & ENERGY	KIRKLARELİ	TÜRKİYE
ENKA TUZLA DATA CENTER	OFFICE BUILDINGS	İSTANBUL	TÜRKİYE
ENTEGRE HOSPITAL CAMPUS	HEALTH	ADANA	TÜRKİYE
ENTEGRE HOSPITAL CAMPUS	HEALTH	BURSA	TÜRKİYE
EQUINIX DATA CENTER	INDUSTRIAL	İSTANBUL	TÜRKİYE
EQUINIX IL2 DATA CENTER	OFFICE BUILDINGS	İSTANBUL	TÜRKİYE
ERASTA SHOPPING MALL	SHOPPING MALLS	EDİRNE	TÜRKİYE
EREGLİ - ÖZDEMİR SHOPPING MALL	SHOPPING MALLS	ZONGULDAK	TÜRKİYE
ERIKLI WATER PRODUCTION FACILITY	INDUSTRIAL	BURSA	TÜRKİYE
ERMAN ILICAK FEN HIGH SCHOOL	PUBLIC BUILDINGS	ANKARA	TÜRKİYE
ERSA HOSPITALITY	HOSPITALITY	İSTANBUL	TÜRKİYE
ERSAN RUBBER PRODUCTION FACILITY	INDUSTRIAL	KOCAELİ	TÜRKİYE
ESENBÖĞA AIRPORT	AVIATION	ANKARA	TÜRKİYE
ESENYURT - YESİL İNŞAAT İNNOVIA - 4	RESIDENTIAL	İSTANBUL	TÜRKİYE
ESENYURT AVRUPARK HAYAT	RESIDENTIAL	İSTANBUL	TÜRKİYE
ESENYURT GARANTI KOZA PARK RESIDENCE OTEL	RESIDENTIAL	İSTANBUL	TÜRKİYE
ESKİŞEHİR CITY HOSPITAL	HEALTH	ESKİŞEHİR	TÜRKİYE
ETİ CHOCOLATE FACTORY	INDUSTRIAL	ESKİŞEHİR	TÜRKİYE
ETİ MADEN GENERAL DIRECTORATE BUILDING	OFFICE BUILDINGS	ANKARA	TÜRKİYE
ETİLER HİSARUSTU SUBWAY WORKSITE	INFRASTRUCTURE	İSTANBUL	TÜRKİYE
ETİLER MANDARIN ORIENTAL RESIDENCES	RESIDENTIAL	İSTANBUL	TÜRKİYE
ETLİK GYNÄCOLOGY HOSPITAL	HEALTH	ANKARA	TÜRKİYE
ETLİK INTEGRATED HEALTHCARE CAMPUS	HEALTH	ANKARA	TÜRKİYE
EVİMTEKS DEMİRTAS TEXTILE FACTORY	INDUSTRIAL	BURSA	TÜRKİYE
EVVEL İSTANBUL	RESIDENTIAL	İSTANBUL	TÜRKİYE
EVYAP FACTORY	INDUSTRIAL	İSTANBUL	TÜRKİYE
EYÜP BEZMİALEM UNIVERSITY EYÜP HASDAL CAMPUS	PUBLIC BUILDINGS	İSTANBUL	TÜRKİYE
EYÜP TURKUAZ MEDYA CENTER	OFFICE BUILDINGS	İSTANBUL	TÜRKİYE
EYÜP WASTE INCINERATION AND PRODUCTION FACILITIES	INDUSTRIAL	İSTANBUL	TÜRKİYE
FATİH HILTON HAMPTON OLD CITY	HOSPITALITY	İSTANBUL	TÜRKİYE
FER YAPI PREMIER CAMPUS OFFICE	OFFICE BUILDINGS	İSTANBUL	TÜRKİYE
FERBİS AGRICULTURE OYAK İNŞAAT	INDUSTRIAL	NİĞDE	TÜRKİYE
FERKO LINE KAGİTHANE	RESIDENTIAL	İSTANBUL	TÜRKİYE
FERKO SIGNATURE	OFFICE BUILDINGS	İSTANBUL	TÜRKİYE
FESTO FACTORY	INDUSTRIAL	MANİSA	TÜRKİYE
FETHİYE - ÖZDİLEK RESIDENCE	RESIDENTIAL	BURSA	TÜRKİYE
FETHİYE ERASTA SHOPPING MALLS	SHOPPING MALLS	MUĞLA	TÜRKİYE
FETHİYE SEKETUR HOTEL	HOSPITALITY	MUĞLA	TÜRKİYE
FIKİRTEPE URBAN TRANSFORMATION 3419/1	RESIDENTIAL	İSTANBUL	TÜRKİYE
FİLYOS GAS FIELD	OIL & GAS	SAKARYA	TÜRKİYE
FINANCIAL DISTRICT BDDK BUILDING	OFFICE BUILDINGS	İSTANBUL	TÜRKİYE
FINANCIAL DISTRICT CENTRAL BANK	OFFICE BUILDINGS	İSTANBUL	TÜRKİYE
FINANCIAL DISTRICT HALK GYO GENERAL DIRECTORATE	PUBLIC BUILDINGS	İSTANBUL	TÜRKİYE

PROJECT NAME	PROJECT TYPE	CITY	COUNTRY
FINANCIAL DISTRICT IS GYO	OFFICE BUILDINGS	İSTANBUL	TÜRKİYE
FINANCIAL DISTRICT PROVINCE BANK	OFFICE BUILDINGS	İSTANBUL	TÜRKİYE
FINANCIAL DISTRICT RECREATION	OFFICE BUILDINGS	İSTANBUL	TÜRKİYE
FINANCIAL DISTRICT SPK BUILDING	OFFICE BUILDINGS	İSTANBUL	TÜRKİYE
FINANCIAL DISTRICT T. VAKIFLAR BANK	OFFICE BUILDINGS	İSTANBUL	TÜRKİYE
FINANCIAL DISTRICT ZIRAAT BANK GENERAL DIRECTORATE	OFFICE BUILDINGS	İSTANBUL	TÜRKİYE
FLORYA – AYDIN UNIVERSITY HOSPITAL	HEALTH	İSTANBUL	TÜRKİYE
FNSS NUROL TANK FACTORY	INDUSTRIAL	ANKARA	TÜRKİYE
FOLKART TOWERS	RESIDENTIAL	İZMİR	TÜRKİYE
FORD OTOSAN GOLCUK FACTORY EXPANSION	INDUSTRIAL	KOCAELİ	TÜRKİYE
FORD OTOSAN YENIKOY FACILITIES	INDUSTRIAL	KOCAELİ	TÜRKİYE
FORD R&D	OFFICE BUILDINGS	İSTANBUL	TÜRKİYE
FORUM ANTEP SHOPPING MALL	SHOPPING MALLS	GAZİANTEP	TÜRKİYE
FORUM BAYRAMPASA	SHOPPING MALLS	İSTANBUL	TÜRKİYE
FORUM MERSİN SHOPPING MALLS	SHOPPING MALLS	MERSİN	TÜRKİYE
FORUM SHOPPING MALL	SHOPPING MALLS	ÇORUM	TÜRKİYE
FORUM SHOPPING MALLS TADILAT	SHOPPING MALLS	ANKARA	TÜRKİYE
FUAYE	RESIDENTIAL	İSTANBUL	TÜRKİYE
FÜLYA TEST-TUBE BABY CENTER	HEALTH	İSTANBUL	TÜRKİYE
FUZUL GYO – EMLAK HOUSING BARBAROS 48	RESIDENTIAL	İSTANBUL	TÜRKİYE
GALATAPORT – MODERN ART MUSEUM	PUBLIC BUILDINGS	İSTANBUL	TÜRKİYE
GALATAPORT PENINSULA HOTEL	HOSPITALITY	İSTANBUL	TÜRKİYE
GALATAPORT SALIPAZARI	SHOPPING MALLS	İSTANBUL	TÜRKİYE
GALATASARAY FOOTBALL CLUB STADIUM	SPORT FACILITIES	İSTANBUL	TÜRKİYE
GAMA TURKERLER INTEGRATED HOSPITAL	HEALTH	KOCAELİ	TÜRKİYE
GARANTI BANKASI TECHNOLOGY HUB	OFFICE BUILDINGS	İSTANBUL	TÜRKİYE
GARANTI KOZA	RESIDENTIAL	İSTANBUL	TÜRKİYE
GATA HOSPITAL	HEALTH	ANKARA	TÜRKİYE
GAYRETTEPE 3. AIRPORT SUBWAY	INFRASTRUCTURE	İSTANBUL	TÜRKİYE
GAZİANTEP MECHANIC BIOLOGIC WASTE PARSING FACILITY	INDUSTRIAL	GAZİANTEP	TÜRKİYE
GEBZE – ATESSAN CORRUGATED CARDBOARD FACTORY	INDUSTRIAL	KOCAELİ	TÜRKİYE
GEBZE – KASTAMONU ENTEGRE SPRINKLER SYSTEM	INDUSTRIAL	KOCAELİ	TÜRKİYE
GEBZE – ULKER FOOD FACTORY SPRINKLER SYSTEM	INDUSTRIAL	KOCAELİ	TÜRKİYE
GEBZE BİLİM PHARMACEUTICAL PLANT	INDUSTRIAL	KOCAELİ	TÜRKİYE
GEBZE DARICA INFRASTRUCTURE STATIONS	INFRASTRUCTURE	KOCAELİ	TÜRKİYE
GEBZE ERSEM	INDUSTRIAL	KOCAELİ	TÜRKİYE
GEBZE EYFEL COSMETIC PERFUME FACTORY	INDUSTRIAL	KOCAELİ	TÜRKİYE
GEBZE GENVEO FACTORY	INDUSTRIAL	KOCAELİ	TÜRKİYE
GEBZE GÜLCİCEK CHEMICAL	RESIDENTIAL	KOCAELİ	TÜRKİYE
GEBZE HAS DEMİR STEEL FACTORY	INDUSTRIAL	KOCAELİ	TÜRKİYE
GEBZE HEKTAS FACTORY FIRE SYSTEM	INDUSTRIAL	KOCAELİ	TÜRKİYE
GEBZE HENKEL ANATOLIA	INDUSTRIAL	KOCAELİ	TÜRKİYE
GEBZE HEPSİ BURADA LOGISTICS BUILDING	INDUSTRIAL	KOCAELİ	TÜRKİYE
GEBZE RAMADA HOTEL	HOSPITALITY	KOCAELİ	TÜRKİYE
GEBZE SIEMENS WORKSITE	INDUSTRIAL	KOCAELİ	TÜRKİYE

PROJECT NAME	PROJECT TYPE	CITY	COUNTRY
GEBZE STEINWEG LOGISTICS CENTER	INDUSTRIAL	KOCAELİ	TÜRKİYE
GEBZE TEKNOSIN INK FACTORY AND GENERAL DIRECTORATE BUILDING	INDUSTRIAL	KOCAELİ	TÜRKİYE
GEBZE TRENDYOL	INDUSTRIAL	KOCAELİ	TÜRKİYE
GEBZE TURKCELL DATA CENTER	OFFICE BUILDINGS	KOCAELİ	TÜRKİYE
GEBZE-BETA TRANS	INDUSTRIAL	KOCAELİ	TÜRKİYE
GOKTURK - HOUSE B RESIDENCE	RESIDENTIAL	İSTANBUL	TÜRKİYE
GOLBASI - VETAL ASI FACTORY	INDUSTRIAL	ADIYAMAN	TÜRKİYE
GOLBASI LAB BUILDING	OFFICE BUILDINGS	ANKARA	TÜRKİYE
GOLD MINING	INDUSTRIAL	ERZİNCAN	TÜRKİYE
GOODYEAR IZMIT	INDUSTRIAL	KOCAELİ	TÜRKİYE
GOODYEAR PRODUCTION FACILITY	INDUSTRIAL	ADAPAZARI	TÜRKİYE
GORELE 50 BEDS HOSPITAL ADDITIONAL BUILDING	HEALTH	GİRESUN	TÜRKİYE
GOSB - AGCO PRODUCTION FACILITIES	INDUSTRIAL	KOCAELİ	TÜRKİYE
GOZTEPE BASARI HOLDING CENTRAL BUILDING	OFFICE BUILDINGS	İSTANBUL	TÜRKİYE
GOZTEPE BAYSAS ISTANBUL	RESIDENTIAL	İSTANBUL	TÜRKİYE
GOZTEPE EDUCATION AND RESEARCH HOSPITAL	HEALTH	İSTANBUL	TÜRKİYE
GOZTEPE GURSEL AKSEL STADIUM	INFRASTRUCTURE	İZMİR	TÜRKİYE
GOZTEPE MEMORIAL HOSPITAL	HEALTH	İSTANBUL	TÜRKİYE
GUMUSOVA NAMET FOOD FACTORY	INDUSTRIAL	DÜZCE	TÜRKİYE
HABAS HOT ROLLIN FACILITIES	INDUSTRIAL	KOCAELİ	TÜRKİYE
HACETTEPE CONSERVATORY BUILDING	PUBLIC BUILDINGS	ANKARA	TÜRKİYE
HADIMKOY - BAYKAR FACTORY	INDUSTRIAL	İSTANBUL	TÜRKİYE
HADIMKOY - CAGRI STORES LOGISTICS FACTORY	INDUSTRIAL	İSTANBUL	TÜRKİYE
HADIMKOY BAYKAR TECHNOLOGY AND PRODUCTION CENTER	INDUSTRIAL	İSTANBUL	TÜRKİYE
HADIMKOY HOSDERE	RESIDENTIAL	İSTANBUL	TÜRKİYE
HADIMKOY PEOPLELESS SYSTEMS R&D CENTER	INDUSTRIAL	İSTANBUL	TÜRKİYE
HADIMKOY SELIM CONSTRUCTION LOGISTICS FACTORY	INDUSTRIAL	İSTANBUL	TÜRKİYE
HALICPORT RIXOS HOTEL	HOSPITALITY	İSTANBUL	TÜRKİYE
HALK BANK OPERATION HUB	OFFICE BUILDINGS	KOCAELİ	TÜRKİYE
HALK BANKASI GENERAL DIRECTORATE	PUBLIC BUILDINGS	ANKARA	TÜRKİYE
HALKALI 3. AIRPORT SUBWAY	INFRASTRUCTURE	İSTANBUL	TÜRKİYE
HARMONY TOWER	RESIDENTIAL	BURSA	TÜRKİYE
HASKOY NATA SHOPPING MALLS	SHOPPING MALLS	ANKARA	TÜRKİYE
HATAY EARTHQUAKE HOUSING 2,2 SECTION	RESIDENTIAL	HATAY	TÜRKİYE
HAVELSAN GENERAL DIRECTORATE	PUBLIC BUILDINGS	ANKARA	TÜRKİYE
HAYATI BEN HABIP	INDUSTRIAL	KOCAELİ	TÜRKİYE
HENDEK CAST FACTORY	INDUSTRIAL	SAKARYA	TÜRKİYE
HENKEL HASANOGLAN FACTORY	INDUSTRIAL	ANKARA	TÜRKİYE
HIGH-SPEED TRAIN TUNNEL	INFRASTRUCTURE	İSTANBUL	TÜRKİYE
HIGH-SPEED TREN	INFRASTRUCTURE	BURSA	TÜRKİYE
HILTON	HOSPITALITY	ADIYAMAN	TÜRKİYE
HILTON ISTANBUL BOSPHORUS	HOSPITALITY	İSTANBUL	TÜRKİYE
HITIT UNIVERSITY CLASSROOM RENOVATION	PUBLIC BUILDINGS	ÇORUM	TÜRKİYE
HITIT UNIVERSITY NORTH CAMPUS	PUBLIC BUILDINGS	ÇORUM	TÜRKİYE
HOROZ LOGISTICS	INDUSTRIAL	KOCAELİ	TÜRKİYE

PROJECT NAME	PROJECT TYPE	CITY	COUNTRY
HOSDERE OTOPARK	PUBLIC BUILDINGS	İSTANBUL	TÜRKİYE
HSK SYSTEMAIR	INDUSTRIAL	İSTANBUL	TÜRKİYE
IBB DUDULLU-BOSTANCI SUBWAY	INFRASTRUCTURE	İSTANBUL	TÜRKİYE
IBN-İ HALDUN UNIVERSITY BASAKSEHIR FACULTY	PUBLIC BUILDINGS	İSTANBUL	TÜRKİYE
IGA AIRPORT CITY HOTEL	HOSPITALITY	İSTANBUL	TÜRKİYE
IGA CIP LAUNGE DOMESTIC TERMINAL	AVIATION	İSTANBUL	TÜRKİYE
IHLAMURKUYU SUBWAY	INFRASTRUCTURE	İSTANBUL	TÜRKİYE
İK ACADEMY İPEK UNIVERSITY	PUBLIC BUILDINGS	ANKARA	TÜRKİYE
IKEA	SHOPPING MALLS	BURSA	TÜRKİYE
İKİTELLİ ATATÜRK OLYMPIAD STADIUM	SPORT FACILITIES	İSTANBUL	TÜRKİYE
İKİTELLİ INTEGRATED HEALTCARE CAMPUS	HEALTH	İSTANBUL	TÜRKİYE
İLBANK ATAŞEHİR	OFFICE BUILDINGS	İSTANBUL	TÜRKİYE
İNCİRLİK AIRBASE FIRE DEPARTMENT BUILDING	AVIATION	ADANA	TÜRKİYE
İNDESİT WHITE GOODS FACTORY	INDUSTRIAL	MANİSA	TÜRKİYE
İNELSAN JOGISTIC	INDUSTRIAL	ADAPAZARI	TÜRKİYE
INTEGRATED HEALTCARE CAMPUS	HEALTH	GAZİANTEP	TÜRKİYE
INTEGRATED HEALTCARE CAMPUS	HEALTH	KÜTAHYA	TÜRKİYE
INTEGRATED HEALTHCARE CAMPUS	HEALTH	ELAZIĞ	TÜRKİYE
İPEK PAPER FACTORY	INDUSTRIAL	MANİSA	TÜRKİYE
İPEK UNIVERSITY	PUBLIC BUILDINGS	ANKARA	TÜRKİYE
İPKB DR. LUTFI KIRDAR KARTAL EDUCATION AND RESEARCH HOSPITAL	HEALTH	İSTANBUL	TÜRKİYE
IRON MOUNTAIN FACTORY	INDUSTRIAL	KOCAELİ	TÜRKİYE
İS GYO	OFFICE BUILDINGS	İSTANBUL	TÜRKİYE
İS TOWERS	OFFICE BUILDINGS	İSTANBUL	TÜRKİYE
İSKENDERUN 200 BEDS HOSPITAL	HEALTH	HATAY	TÜRKİYE
İSKENDERUN HILTON SHOPPING MALL	SHOPPING MALLS	HATAY	TÜRKİYE
İSKİLİP OPEN PRISON	PUBLIC BUILDINGS	ÇORUM	TÜRKİYE
İSPARTA CENTRUM GARDEN	OFFICE BUILDINGS	İSPARTA	TÜRKİYE
İSTANBUL - ARNAVUTKOY HARİBO CANDY FACTORY	INDUSTRIAL	İSTANBUL	TÜRKİYE
İSTANBUL 3. AIRPORT 1. STAGE	AVIATION	İSTANBUL	TÜRKİYE
İSTANBUL 3. AIRPORT A ZONE DH BUILDING	AVIATION	İSTANBUL	TÜRKİYE
İSTANBUL 3. AIRPORT B ZONE GANGLION	INDUSTRIAL	İSTANBUL	TÜRKİYE
İSTANBUL 3. AIRPORT B ZONE THY CARGO TERMINAL BUILDING	PUBLIC BUILDINGS	İSTANBUL	TÜRKİYE
İSTANBUL 3. AIRPORT C ZONE GANGLION	AVIATION	İSTANBUL	TÜRKİYE
İSTANBUL 3. AIRPORT C ZONE THY SERVICE TUNNELS	AVIATION	İSTANBUL	TÜRKİYE
İSTANBUL 3. AIRPORT C ZONE VEHICLE MAINTENANCE BUILDING	AVIATION	İSTANBUL	TÜRKİYE
İSTANBUL 3. AIRPORT DHL BUILDING	INDUSTRIAL	İSTANBUL	TÜRKİYE
İSTANBUL 3. AIRPORT PLANE PAINTING HANGAR	INDUSTRIAL	İSTANBUL	TÜRKİYE
İSTANBUL CITY UNIVERSITY	PUBLIC BUILDINGS	İSTANBUL	TÜRKİYE
İSTANBUL DH BUILDING	RESIDENTIAL	İSTANBUL	TÜRKİYE
İSTANBUL DOĞUS AUTOMOTIVE LOGISTICS CENTER	OFFICE BUILDINGS	İSTANBUL	TÜRKİYE
İSTANBUL ESENLER AIRPORT DISTRICT URBAN TRANSFORMATION	AVIATION	İSTANBUL	TÜRKİYE
İSTANBUL KADIKÖY MODERN	RESIDENTIAL	İSTANBUL	TÜRKİYE
İSTANBUL SURGEON LEVENT HOSPITAL	HEALTH	İSTANBUL	TÜRKİYE
İSTANBUL TOWER LEVENT OFFICE	OFFICE BUILDINGS	İSTANBUL	TÜRKİYE

PROJECT NAME	PROJECT TYPE	CITY	COUNTRY
ISTANBUL UNIVERSITY HASDAL FACULTY 1. STAGE HOSPITAL INSAATI	HEALTH	İSTANBUL	TÜRKİYE
ISTINYE PARK SHOPPING MALL	SHOPPING MALLS	İSTANBUL	TÜRKİYE
ISTMARINA	RESIDENTIAL	İSTANBUL	TÜRKİYE
İZMİR TUNNEL	INFRASTRUCTURE	İZMİR	TÜRKİYE
İZMİR TURAN NEVA MANSION	RESIDENTIAL	İZMİR	TÜRKİYE
İZMİT TOKİ 33.000 AUDIENCE CAPACITY SPORT FACILITIES	SPORT FACILITIES	KOCAELİ	TÜRKİYE
İZMİT TUPRAS DINING ROOM	OFFICE BUILDINGS	KOCAELİ	TÜRKİYE
İZOCAM ESKİŞEHİR	INDUSTRIAL	ESKİŞEHİR	TÜRKİYE
İZOCAM PRODUCTION FACILITIES	INDUSTRIAL	KOCAELİ	TÜRKİYE
JANDARMA REKTÖRLÜK & HOSTEL	PUBLIC BUILDINGS	ANKARA	TÜRKİYE
K.MARAS SHOPPING MALLS	SHOPPING MALLS	KAHRAMANMARAŞ	TÜRKİYE
KABATAS / MAHMUTBEY METRO HATTI	INFRASTRUCTURE	İSTANBUL	TÜRKİYE
KAGITHANE NEF 03	RESIDENTIAL	İSTANBUL	TÜRKİYE
KAGITHANE SEBA OFFICE BOULEVARD	OFFICE BUILDINGS	İSTANBUL	TÜRKİYE
KALAMIS OTEL İSTANBUL	HOSPITALITY	İSTANBUL	TÜRKİYE
KALE CLAMP FACTORY	INDUSTRIAL	İSTANBUL	TÜRKİYE
KALE EUROPE RESIDENCE	RESIDENTIAL	İSTANBUL	TÜRKİYE
KALE PROJECT	PUBLIC BUILDINGS	ANKARA	TÜRKİYE
KANDILLI NEF	RESIDENTIAL	İSTANBUL	TÜRKİYE
KANSAİ ALTAN	INDUSTRIAL	İZMİR	TÜRKİYE
KANYON SHOPPING MALLS	SHOPPING MALLS	İSTANBUL	TÜRKİYE
KAPI TOWER YHT	INFRASTRUCTURE	EDİRNE	TÜRKİYE
KAPITAL MASLAK	OFFICE BUILDINGS	İSTANBUL	TÜRKİYE
KARACABEY TEKNOSAB WARMHAUS 33 FACTORY	INDUSTRIAL	BURSA	TÜRKİYE
KARAT 34	RESIDENTIAL	İSTANBUL	TÜRKİYE
KARATAY – INTEGRATED HEALTHCARE CAMPUS	HEALTH	KONYA	TÜRKİYE
KARBOSAN	INDUSTRIAL	İSTANBUL	TÜRKİYE
KARSAN PRODUCTION FACILITIES	INDUSTRIAL	KONYA	TÜRKİYE
KARSIYAKA – RONESANS HOTEL	SHOPPING MALLS	İZMİR	TÜRKİYE
KARTAL – ACIBADEM HOSPITAL	HEALTH	İSTANBUL	TÜRKİYE
KARTAL – ROYAL GARDEN	RESIDENTIAL	İSTANBUL	TÜRKİYE
KARTAL – TERAS TOWER	RESIDENTIAL	İSTANBUL	TÜRKİYE
KARTAL – TUAL MANZARA RESIDENCE AND HOUSING	RESIDENTIAL	İSTANBUL	TÜRKİYE
KARTAL ECZACIBASI GYMNASIUM	INFRASTRUCTURE	İSTANBUL	TÜRKİYE
KARTAL NATIONAL PARK OFFICES	OFFICE BUILDINGS	İSTANBUL	TÜRKİYE
KARTAL RADISSON BLUE OTEL	HOSPITALITY	İSTANBUL	TÜRKİYE
KARTAL REFERANS KARTAL TOWER	RESIDENTIAL	İSTANBUL	TÜRKİYE
KARTAL SUBWAY	INFRASTRUCTURE	İSTANBUL	TÜRKİYE
KARTAL TOWER	OFFICE BUILDINGS	İSTANBUL	TÜRKİYE
KARTAL-KARNARCA STATION 3 PCS.	INFRASTRUCTURE	İSTANBUL	TÜRKİYE
KASTAMONU ENTEGRE İSTANBUL	INDUSTRIAL	İSTANBUL	TÜRKİYE
KASTAMONU ENTEGRE PRODUCTION FACILITIES	INDUSTRIAL	KASTAMONU	TÜRKİYE
KASTAMONU SHERATON HOTEL	HOSPITALITY	KASTAMONU	TÜRKİYE
KAVACIK MEDİPOL UNIVERSITY HOSPITAL	HEALTH	İSTANBUL	TÜRKİYE
KAYABASI AKYAPI MAKRO BAHCETEPE	RESIDENTIAL	İSTANBUL	TÜRKİYE

PROJECT NAME	PROJECT TYPE	CITY	COUNTRY
KAYASEHIR – ADIM ISTANBUL	RESIDENTIAL	İSTANBUL	TÜRKİYE
KAYASEHIR – KAYAPARK NORTH SECTION	RESIDENTIAL	İSTANBUL	TÜRKİYE
KAYASEHIR NIDAPARK	RESIDENTIAL	İSTANBUL	TÜRKİYE
KAYNARCA PENDİK TUZLA SUBWAY	INFRASTRUCTURE	İSTANBUL	TÜRKİYE
KAYSERİ FORUM	SHOPPING MALLS	KAYSERİ	TÜRKİYE
KAYSERİ HEALTHCARE CAMPUS	HEALTH	KAYSERİ	TÜRKİYE
KAZLI CESME SIRKECI RAIL SYSTEM	INFRASTRUCTURE	İSTANBUL	TÜRKİYE
KELESOĞLU DENİZ ISTANBUL	RESIDENTIAL	İSTANBUL	TÜRKİYE
KEMPINSKY ISTANBUL	HOSPITALITY	İSTANBUL	TÜRKİYE
KENT CANDY FACTORY	INDUSTRIAL	KOCAELİ	TÜRKİYE
KENT HOSPITAL ADDITIONAL BUILDING	HEALTH	İZMİR	TÜRKİYE
KENT MEYDANI SHOPPING MALL	SHOPPING MALLS	BURSA	TÜRKİYE
KERVANSARAY OTEL	HOSPITALITY	İSTANBUL	TÜRKİYE
KERVANSARAY YILDIZKENT	PUBLIC BUILDINGS	ERZURUM	TÜRKİYE
KIBAR ASSAN FACTORY	INDUSTRIAL	KOCAELİ	TÜRKİYE
KIPA İZMİR	SHOPPING MALLS	İZMİR	TÜRKİYE
KIPA ANKARA	SHOPPING MALLS	ANKARA	TÜRKİYE
KIPA BOLU	SHOPPING MALLS	BOLU	TÜRKİYE
KIPAS A.S. SOKE PAPER FACTORY	INDUSTRIAL	AYDIN	TÜRKİYE
KIRIKKALE SHOPPING MALLS	SHOPPING MALLS	KIRIKKALE	TÜRKİYE
KIVANC TEXTILE PAPERFACTORY	INDUSTRIAL	ADANA	TÜRKİYE
KKC MARMARAY HAYDARPASA	INFRASTRUCTURE	İSTANBUL	TÜRKİYE
KOC MODERN ART MUSEUM	PUBLIC BUILDINGS	İSTANBUL	TÜRKİYE
KOLIN CAYYOLU SABWAY	INFRASTRUCTURE	ANKARA	TÜRKİYE
KONAK – TURKERLER MAHALL BOMONTI	RESIDENTIAL	İZMİR	TÜRKİYE
KONAK DUNYA EYE HOSPITAL	HEALTH	İZMİR	TÜRKİYE
KONURALP – DUZCE UNIVERSITY LIBRARY BUILDING	PUBLIC BUILDINGS	DÜZCE	TÜRKİYE
KONYA MEDOVA HOSPITAL	HEALTH	KONYA	TÜRKİYE
KONYA SEKER	INDUSTRIAL	KONYA	TÜRKİYE
KOORDINAT CAYYOLU HOUSING	RESIDENTIAL	ANKARA	TÜRKİYE
KORDSA	INDUSTRIAL	KOCAELİ	TÜRKİYE
KOROZO	INDUSTRIAL	İSTANBUL	TÜRKİYE
KOROZO ADDITIONAL BUILDING	INDUSTRIAL	İSTANBUL	TÜRKİYE
KOZ GRUP FACTORY	INDUSTRIAL	BURSA	TÜRKİYE
KOZYATAGI CARREFOUR SHOPPING MALL	SHOPPING MALLS	İSTANBUL	TÜRKİYE
KOZYATAGI CITY'S SHOPPING MALL PARKING LOT	SHOPPING MALLS	İSTANBUL	TÜRKİYE
KRISTAL TOWER	OFFICE BUILDINGS	İSTANBUL	TÜRKİYE
KUBRA TEXTILE	INDUSTRIAL	MALATYA	TÜRKİYE
KUCUKYALI – NIDAPARK KUCUKYALI	RESIDENTIAL	İSTANBUL	TÜRKİYE
KUCUKYALI ELIT WORLD ASIA	HOSPITALITY	İSTANBUL	TÜRKİYE
KURTKOY ASSAN BUILDING FACTORY	INDUSTRIAL	İSTANBUL	TÜRKİYE
KURUCESME – MANDARIN ORIENTAL OTEL	HOSPITALITY	İSTANBUL	TÜRKİYE
KUTAHYA CITY HOSPITAL	HEALTH	KÜTAHYA	TÜRKİYE
KUVEYTTURK BANK	OFFICE BUILDINGS	KOCAELİ	TÜRKİYE
KUYUMCU KENT 2	OFFICE BUILDINGS	İSTANBUL	TÜRKİYE

PROJECT NAME	PROJECT TYPE	CITY	COUNTRY
KUYUMCUKENT	OFFICE BUILDINGS	İSTANBUL	TÜRKİYE
KUYUMCUKENT ELMAS TOWER 2	OFFICE BUILDINGS	İSTANBUL	TÜRKİYE
KUZEY MARMARA UNDERGROUND GAS FACTORY STAGE III	OIL & GAS	İSTANBUL	TÜRKİYE
KUZULUK – KADIFETEKST TEXTILE FACTORY	INDUSTRIAL	ADAPAZARI	TÜRKİYE
LARESSA MATTRESS PRODUCTION FACILITY	INDUSTRIAL	ANKARA	TÜRKİYE
LCW FACTORY	INDUSTRIAL	YALOVA	TÜRKİYE
LCW GENERAL DIRECTORATE	OFFICE BUILDINGS	İSTANBUL	TÜRKİYE
LCW LOGISTICS FACTORY B1 BLOCK	INDUSTRIAL	AKSARAY	TÜRKİYE
LCW WAIKIKI ESENYURT FACTORY	INDUSTRIAL	İSTANBUL	TÜRKİYE
LCW WORKSHOP	INDUSTRIAL	ELAZIĞ	TÜRKİYE
LEVENT – 5 LEVENT RESIDENCE	RESIDENTIAL	İSTANBUL	TÜRKİYE
LIGNA DEKOR	INDUSTRIAL	İSTANBUL	TÜRKİYE
LIMAGRAIN TOHUM KARACABEY FACTORY	INDUSTRIAL	BURSA	TÜRKİYE
LIMRA HOSPITAL	HOSPITALITY	ANTALYA	TÜRKİYE
LUBECAPILL PHARMACEUTICAL PLANT	INDUSTRIAL	TEKİRDAĞ	TÜRKİYE
LULEBURGAZ BIM FACTORY	INDUSTRIAL	KIRKLARELİ	TÜRKİYE
LULEBURGAZ HAMİTABAT NATURAL GAS CONVERSION PLANT	POWER & ENERGY	KIRKLARELİ	TÜRKİYE
M GALLERY BY SOfitel KARAKOY	HOSPITALITY	İSTANBUL	TÜRKİYE
MACKA HOTEL	HOSPITALITY	İSTANBUL	TÜRKİYE
MAHMUTBEY AHMET SALIK OFFICE BUILDINGS	OFFICE BUILDINGS	İSTANBUL	TÜRKİYE
MAI RESIDENCE	RESIDENTIAL	İSTANBUL	TÜRKİYE
MAKRO KAYABASI	RESIDENTIAL	İSTANBUL	TÜRKİYE
MALATYA KURECİK RADAR NAVAL BASE	PUBLIC BUILDINGS	MALATYA	TÜRKİYE
MALL OF İSTANBUL	SHOPPING MALLS	İSTANBUL	TÜRKİYE
MALTEPE MARMARA UNIVERSITY 2.STAGE	PUBLIC BUILDINGS	İSTANBUL	TÜRKİYE
MALTEPE MARMARA UNIVERSITY RECEP TAYYIP ERDOĞAN CAMPUS	PUBLIC BUILDINGS	İSTANBUL	TÜRKİYE
MALTEPE PARK	SHOPPING MALLS	İSTANBUL	TÜRKİYE
MANİSA MAGNESİA SHOPPING MALLS	SHOPPING MALLS	MANİSA	TÜRKİYE
MANZARA ADALAR	RESIDENTIAL	İSTANBUL	TÜRKİYE
MARAS GOKSUN TUNNEL	INFRASTRUCTURE	KAHRAMANMARAŞ	TÜRKİYE
MARDAN PALAS HOTEL	HOSPITALITY	ANTALYA	TÜRKİYE
MARLBORO SİĞARA FACTORY	INDUSTRIAL	İZMİR	TÜRKİYE
MARMARA FORUM	SHOPPING MALLS	İSTANBUL	TÜRKİYE
MARMARA THEOLOGY MOSQUE	PUBLIC BUILDINGS	İSTANBUL	TÜRKİYE
MARMARAY STATIONS	INFRASTRUCTURE	İSTANBUL	TÜRKİYE
MARMARAY SUB-SEA TUNNEL	INFRASTRUCTURE	İSTANBUL	TÜRKİYE
MARMARIS İS BANKASI RELAXING AND EDUCATION BUILDING	HOSPITALITY	MUĞLA	TÜRKİYE
MARMARIS PRESIDENCY RESIDENCE	RESIDENTIAL	MUĞLA	TÜRKİYE
MARRIOTT HOTEL SİSLİ	HOSPITALITY	İSTANBUL	TÜRKİYE
MARRIOTT OTEL ASIA	HOSPITALITY	İSTANBUL	TÜRKİYE
MARRIOTT OTEL İKİTELLİ	HOSPITALITY	İSTANBUL	TÜRKİYE
MARRIOTT HOTEL	HOSPITALITY	İZMİR	TÜRKİYE
MASHATTAN	RESIDENTIAL	İSTANBUL	TÜRKİYE
MASLAK 1453	RESIDENTIAL	İSTANBUL	TÜRKİYE
MASLAK 42	RESIDENTIAL	İSTANBUL	TÜRKİYE

PROJECT NAME	PROJECT TYPE	CITY	COUNTRY
MASLAK HOTEL	SHOPPING MALLS	İSTANBUL	TÜRKİYE
MAVERA WORKSITE	RESIDENTIAL	İSTANBUL	TÜRKİYE
MAVI BAHCE HOTEL	SHOPPING MALLS	İZMİR	TÜRKİYE
MAVI BAHCE SHOPPING MALLS	SHOPPING MALLS	İZMİR	TÜRKİYE
MAVİSEHİR RESIDENTIAL	RESIDENTIAL	İZMİR	TÜRKİYE
MAXION JANT FACTORY	INDUSTRIAL	İZMİR	TÜRKİYE
MAYA TEXTILE	INDUSTRIAL	ADAPAZARI	TÜRKİYE
MEDICAL PARK GOZTEPE	HEALTH	İSTANBUL	TÜRKİYE
MEDICAL PARK PENDİK	HEALTH	İSTANBUL	TÜRKİYE
MEDICANA HOSPITAL	HEALTH	SAMSUN	TÜRKİYE
MEDICANA HOSPITAL	HEALTH	İZMİR	TÜRKİYE
MERAM – TEMASEHİR WORKSITE	SHOPPING MALLS	KONYA	TÜRKİYE
MERCAN LOGISTICS	INDUSTRIAL	KOCAELİ	TÜRKİYE
MERCEDES AKSARAY PRODUCTION FACILITIES	INDUSTRIAL	AKSARAY	TÜRKİYE
MERCEDES BENZ CHEMICAL PRODUCTION FACILITY	INDUSTRIAL	AKSARAY	TÜRKİYE
MERCEDES CHEMICAL FACTORY	INDUSTRIAL	AKSARAY	TÜRKİYE
MERINOS BURSA	PUBLIC BUILDINGS	BURSA	TÜRKİYE
MERKEZ BOZTEPE RADISSON BLU HOTEL	HOSPITALITY	TRABZON	TÜRKİYE
MERSİN INTEGRATED HEALTHCARE CAMPUS	HEALTH	MERSİN	TÜRKİYE
MERTER NEF 13	RESIDENTIAL	İSTANBUL	TÜRKİYE
MERTER THE İSTANBUL	RESIDENTIAL	İSTANBUL	TÜRKİYE
METALKON	INDUSTRIAL	KOCAELİ	TÜRKİYE
METEKSAN BUSINESS MANAGEMENT BUILDING	OFFICE BUILDINGS	ANKARA	TÜRKİYE
METRO GROSS MARKET KAGITHANE	SHOPPING MALLS	İSTANBUL	TÜRKİYE
METRO GROSS MARKET KAYSERİ	SHOPPING MALLS	KAYSERİ	TÜRKİYE
METROPOL İSTANBUL	SHOPPING MALLS	İSTANBUL	TÜRKİYE
METROPOLIS MINUCIPALITY BUILDING	PUBLIC BUILDINGS	TEKİRDAĞ	TÜRKİYE
METSAN NEXUS RESIDENCE OFFICE AND HOTEL	RESIDENTIAL	İSTANBUL	TÜRKİYE
MEY ALASEHİR DISTILLERY	INDUSTRIAL	MANİSA	TÜRKİYE
MEY DISTILLERY	INDUSTRIAL	BİLECİK	TÜRKİYE
MEY DISTILLERY SARKOY FACTORY	INDUSTRIAL	TEKİRDAĞ	TÜRKİYE
MEY DISTILLERY WATER EXTINGUISHER	INDUSTRIAL	KARAMAN	TÜRKİYE
MEYDAN BASAKSEHİR	RESIDENTIAL	İSTANBUL	TÜRKİYE
MILAS HOSPITAL	HEALTH	MUĞLA	TÜRKİYE
MINISTRY OF JUSTICE BUILDING	PUBLIC BUILDINGS	İZMİR	TÜRKİYE
MİRANLI TEXTILE	INDUSTRIAL	BURSA	TÜRKİYE
MITSUBISHI MANİSA FACTORY	INFRASTRUCTURE	İZMİR	TÜRKİYE
MOMENT LOFT	RESIDENTIAL	ANKARA	TÜRKİYE
MONDELEZ KENT GIDA GEBZE FACILITIES	INDUSTRIAL	KOCAELİ	TÜRKİYE
MONDI PRODUCTION FACILITIES	INDUSTRIAL	ADANA	TÜRKİYE
MONDI PRODUCTION FACILITIES	INDUSTRIAL	İZMİR	TÜRKİYE
MUNICIPALITY SERVICE BUILDING	PUBLIC BUILDINGS	KÜTAHYA	TÜRKİYE
MURATPASA DIVAN TALYA	HOSPITALITY	ANTALYA	TÜRKİYE
MUSIAD BUILDING	OFFICE BUILDINGS	İSTANBUL	TÜRKİYE
NABA OTEL KARAKOY	HOSPITALITY	İSTANBUL	TÜRKİYE

PROJECT NAME	PROJECT TYPE	CITY	COUNTRY
NATIONAL DIRECTORATE OF DIPLOMATIC ARCHIVES	PUBLIC BUILDINGS	İSTANBUL	TÜRKİYE
NAZMI AKPINAR SERVICE BUILDING	INDUSTRIAL	TEKİRDAĞ	TÜRKİYE
NEO ESKİSEHIR	SHOPPING MALLS	ESKİŞEHİR	TÜRKİYE
NEO MARIN SHOPPING MALLS	SHOPPING MALLS	İSTANBUL	TÜRKİYE
NESTLE PET FOOD FACTORY	INDUSTRIAL	BALIKESİR	TÜRKİYE
NG HOTEL & CONGRESS CENTER	HOSPITALITY	İSTANBUL	TÜRKİYE
NG PHASELIS KEMER (GOYNUK)	HOSPITALITY	ANTALYA	TÜRKİYE
NIDA TOWER ATASEHIR	RESIDENTIAL	İSTANBUL	TÜRKİYE
NIDA TOWER GOZTEPE	OFFICE BUILDINGS	İSTANBUL	TÜRKİYE
NIDA TOWER LEVENT	OFFICE BUILDINGS	İSTANBUL	TÜRKİYE
NIDAPARK BASAKSEHIR	RESIDENTIAL	İSTANBUL	TÜRKİYE
NIDAPARK İSTİNYE HOUSING	RESIDENTIAL	İSTANBUL	TÜRKİYE
NIDAPARK SEYRANTEPE	RESIDENTIAL	İSTANBUL	TÜRKİYE
NILUFER - DORUK HOSPITAL	HEALTH	BURSA	TÜRKİYE
NILUFER - KARSAN BUS FACTORY	INDUSTRIAL	BURSA	TÜRKİYE
NOBEL - PHARMACEUTICAL PLANT	INDUSTRIAL	DÜZCE	TÜRKİYE
NOV HOSPITAL GAZİANTEP	HOSPITALITY	GAZİANTEP	TÜRKİYE
NOVADA PARK	SHOPPING MALLS	ŞANLIURFA	TÜRKİYE
NOVADA SHOPPING MALLS	SHOPPING MALLS	İSTANBUL	TÜRKİYE
NOW BOMONTI	RESIDENTIAL	İSTANBUL	TÜRKİYE
NUROL LIFE	RESIDENTIAL	İSTANBUL	TÜRKİYE
NUROL PARK GÜNEŞLİ	RESIDENTIAL	İSTANBUL	TÜRKİYE
NUROL TOWER	RESIDENTIAL	İSTANBUL	TÜRKİYE
OKMEYDANI EDUCATION AND RESEARCH HOSPITAL	HEALTH	İSTANBUL	TÜRKİYE
ONE TOWER	SHOPPING MALLS	ANKARA	TÜRKİYE
OPTIMUM HOTEL	INDUSTRIAL	İZMİR	TÜRKİYE
OPTIMUM SHOPPING MALL	SHOPPING MALLS	ANKARA	TÜRKİYE
ORDU PUBLIC HOSPITAL	HEALTH	ORDU	TÜRKİYE
ORGANGAZI UNIVERSITY	PUBLIC BUILDINGS	BURSA	TÜRKİYE
ORGANIZED INDUSTRIAL ZONE	INDUSTRIAL	MANİSA	TÜRKİYE
ORHANELİ THERMAL POWER PLANT	POWER & ENERGY	BURSA	TÜRKİYE
ORHANLI - ORGACHEM CHEMICAL FACTORY	INDUSTRIAL	İSTANBUL	TÜRKİYE
ORTAKOY TURKISH DO&CO HOTEL	HOSPITALITY	İSTANBUL	TÜRKİYE
ORYAPARK	SHOPPING MALLS	İSTANBUL	TÜRKİYE
ORYATAS HOTEL AND SHOPPING MALL	HOSPITALITY	İSTANBUL	TÜRKİYE
OTTOMARE RESIDENCE	RESIDENTIAL	İSTANBUL	TÜRKİYE
OYAK DRAGOS RESIDENCE	RESIDENTIAL	İSTANBUL	TÜRKİYE
OYAK GOKSU RESIDENCES	RESIDENTIAL	ANKARA	TÜRKİYE
OZALTIN GLORYA HOTEL	HOSPITALITY	ANTALYA	TÜRKİYE
OZDİLEK FACTORY	INDUSTRIAL	BURSA	TÜRKİYE
OZDİLEK PARK	SHOPPING MALLS	İSTANBUL	TÜRKİYE
OZDİLEK SHOPPING MALL	SHOPPING MALLS	BURSA	TÜRKİYE
OZDİLEK SHOPPING MALL YALOVA	SHOPPING MALLS	YALOVA	TÜRKİYE
OZDİLEK SHOPPING MALLS	SHOPPING MALLS	ANTALYA	TÜRKİYE
OZMER PASTRY FACTORY GOSB	INDUSTRIAL	KOCAELİ	TÜRKİYE

PROJECT NAME	PROJECT TYPE	CITY	COUNTRY
OZYEĞİN UNIVERSITY	PUBLIC BUILDINGS	İSTANBUL	TÜRKİYE
PALLADIUM TOWER	OFFICE BUILDINGS	İSTANBUL	TÜRKİYE
PAMUKOVA – COPYING TISSUE PAPER FACTORY	INDUSTRIAL	ADAPAZARI	TÜRKİYE
PAMUKOVA AKGIDA FACILITIES	INDUSTRIAL	SAKARYA	TÜRKİYE
PAPER FACTORY FIRE DEPARTMENT	INDUSTRIAL	KARAMAN	TÜRKİYE
PARAGON TOWER	OFFICE BUILDINGS	ANKARA	TÜRKİYE
PARK AVENUE	RESIDENTIAL	ANKARA	TÜRKİYE
PARK INN OTEL BY RADISSON SERİFALİ	HOSPITALITY	İSTANBUL	TÜRKİYE
PARK MARINE SHOPPING MALLS	SHOPPING MALLS	İSTANBUL	TÜRKİYE
PARK MOZAIK	RESIDENTIAL	ANKARA	TÜRKİYE
PARSAN FACTORY	INDUSTRIAL	KOCAELİ	TÜRKİYE
PASABAHCE FACTORY	INDUSTRIAL	LÜLEBURGAZ	TÜRKİYE
PASABAHCE FACTORY FIRE SYSTEMS	INDUSTRIAL	ESKİŞEHİR	TÜRKİYE
PEAK SOLAR FACTORY	INDUSTRIAL	ANKARA	TÜRKİYE
PENDİK – 5YUZ60 KURTKOY RESIDENCE	RESIDENTIAL	İSTANBUL	TÜRKİYE
PENDİK – BASF SHELL&CORE TEKNOPARK INNOVATION CENTER	INDUSTRIAL	İSTANBUL	TÜRKİYE
PENDİK ROKETSAN TEKNOPARK	OFFICE BUILDINGS	İSTANBUL	TÜRKİYE
PENDORYA SHOPPING MALLS	SHOPPING MALLS	İSTANBUL	TÜRKİYE
PERFEKTUP AEROSOL FACTORY	INDUSTRIAL	KIRKLARELİ	TÜRKİYE
PHILSA TORBALI	INDUSTRIAL	İZMİR	TÜRKİYE
PILSA PILASTIK	INDUSTRIAL	ADANA	TÜRKİYE
PIRELLI KOCAELİ	INDUSTRIAL	KOCAELİ	TÜRKİYE
PIRI REIS UNIVERSITY	PUBLIC BUILDINGS	İSTANBUL	TÜRKİYE
PISA TEXTILE FACTORY	INDUSTRIAL	TEKİRDAĞ	TÜRKİYE
PIU ACRYLIC	INDUSTRIAL	MALATYA	TÜRKİYE
PIYALEPASA GAYRİMENKUL – BEYOĞLU HACİHUSREV KARMA	RESIDENTIAL	İSTANBUL	TÜRKİYE
PIYALEPASA MARRIOTT OTEL	HOSPITALITY	İSTANBUL	TÜRKİYE
PIYALEPASA PREMIUM	RESIDENTIAL	İSTANBUL	TÜRKİYE
PLASTFAY FACTORY	INDUSTRIAL	KOCAELİ	TÜRKİYE
PODIUM SHOPPING MALLS	SHOPPING MALLS	ANKARA	TÜRKİYE
POINT BORNOVA	RESIDENTIAL	İZMİR	TÜRKİYE
POLAT HOTEL KAGITHANE	HOSPITALITY	İSTANBUL	TÜRKİYE
POLAT İNŞAAT	HOSPITALITY	İSTANBUL	TÜRKİYE
POLAT OTEL BALMUMCU	HOSPITALITY	İSTANBUL	TÜRKİYE
POLATLI – TURKCELL DATA CENTER	OFFICE BUILDINGS	ANKARA	TÜRKİYE
POLATLI MACHINERY & CHEMICAL FACTORY	INDUSTRIAL	ANKARA	TÜRKİYE
POLICE SPECIAL OPERATION	PUBLIC BUILDINGS	ANKARA	TÜRKİYE
PORT RESIDENCE İZMİR	RESIDENTIAL	İZMİR	TÜRKİYE
PORTA VADI	RESIDENTIAL	İSTANBUL	TÜRKİYE
POWER HOUSE	PUBLIC BUILDINGS	İSTANBUL	TÜRKİYE
PREMIER CAMPUS	OFFICE BUILDINGS	İSTANBUL	TÜRKİYE
PRESIDENCY OF THE JUDICIAL COUNCIL SERVICE BUILDING	PUBLIC BUILDINGS	ANKARA	TÜRKİYE
PRESIDENCY SOCIAL COMPLEX EXHIBITION HALL – PARKING LOT	PUBLIC BUILDINGS	ANKARA	TÜRKİYE
PRESIDENTIAL PALACE	PUBLIC BUILDINGS	ANKARA	TÜRKİYE
PROF HALİS SİMSEK HEALTHCARE	HEALTH	ANKARA	TÜRKİYE

PROJECT NAME	PROJECT TYPE	CITY	COUNTRY
PRUVA 34 HOTEL	HOSPITALITY	İSTANBUL	TÜRKİYE
PRUVA34	RESIDENTIAL	İSTANBUL	TÜRKİYE
QNB FINANSBANK KRISTAL TOWER	OFFICE BUILDINGS	İSTANBUL	TÜRKİYE
QUASAR İSTANBUL RESIDENCE	RESIDENTIAL	İSTANBUL	TÜRKİYE
RADISSON BLU KURTKOY	HOSPITALITY	İSTANBUL	TÜRKİYE
RADISSON BLU SISLI	HOSPITALITY	İSTANBUL	TÜRKİYE
RECORDATI PHARMACEUTICAL PLANT	INDUSTRIAL	TEKİRDAĞ	TÜRKİYE
REGNUM CARYA RESORT	HOSPITALITY	ANTALYA	TÜRKİYE
REHA İNSAAT GÜNEŞLER RESIDENCE	RESIDENTIAL	MARAŞ	TÜRKİYE
RENAULT PRODUCTION FACILITY	INDUSTRIAL	BURSA	TÜRKİYE
RENESCO BIOGAS CONVERSION	INDUSTRIAL	KOCAELİ	TÜRKİYE
RİZE ARTVIN AIRPORT SUPERSTRUCTURE WORKS	AVIATION	RİZE	TÜRKİYE
ROCHE PHARMACEUTICAL PLANT	INDUSTRIAL	İSTANBUL	TÜRKİYE
ROKETSAN ITS BUILDINGS	PUBLIC BUILDINGS	ANKARA	TÜRKİYE
ROKETSAN TEKNO PARK İSTANBUL R&D BUILDING	PUBLIC BUILDINGS	İSTANBUL	TÜRKİYE
RONESANS CEVİZLİ KARMA	RESIDENTIAL	İSTANBUL	TÜRKİYE
RONESANS INTEGRATED HEALTHCARE CAMPUS	HEALTH	YOZGAT	TÜRKİYE
RONESANS KUCUKYALI SHOPPING MALL AND HOTEL	SHOPPING MALLS	İSTANBUL	TÜRKİYE
RUMELİHİSARUSTU- ASİYAN FUNICULAR	INFRASTRUCTURE	İSTANBUL	TÜRKİYE
SABANCI UNIVERSITY	PUBLIC BUILDINGS	İSTANBUL	TÜRKİYE
SABİHA GÖKÇEN AIRPORT	AVIATION	İSTANBUL	TÜRKİYE
SABİHA GÖKÇEN AIRPORT ADDITIONAL TERMINAL	AVIATION	İSTANBUL	TÜRKİYE
SAFA AGRICULTURE FACTORY	INDUSTRIAL	KONYA	TÜRKİYE
SAMAWA & DHIQAR KOMBİNE CİRCUIT POWER PLANT	POWER & ENERGY	İSTANBUL	TÜRKİYE
SAMSON VALVE FACTORY	INDUSTRIAL	İSTANBUL	TÜRKİYE
SAMSUN 900 BEDS CITY HOSPITAL	HEALTH	SAMSUN	TÜRKİYE
SAMSUN SHERATON OTEL	HOSPITALITY	SAMSUN	TÜRKİYE
SAMSUNG NATURAL GAS CONVERSION PLANT	POWER & ENERGY	KIRIKKALE	TÜRKİYE
SANCAKTEPE CITY HOSPITAL FERİHA OZ	HEALTH	İSTANBUL	TÜRKİYE
SANCAKTEPE NEONYA SHOPPING MALL	SHOPPING MALLS	İSTANBUL	TÜRKİYE
SANCAKTEPE SAHRA HOSPITAL	HEALTH	İSTANBUL	TÜRKİYE
SANDOZ PHARMACEUTICAL PLANT GEBZE	INDUSTRIAL	KOCAELİ	TÜRKİYE
SANLIURFA CITY HOSPITAL	HEALTH	ŞANLIURFA	TÜRKİYE
SANLIURFA SHOPPING MALLS	SHOPPING MALLS	ŞANLIURFA	TÜRKİYE
SANOIL FOOD - SUNSET FACTORY	INDUSTRIAL	KIRKLARELİ	TÜRKİYE
SANTA FARMA	INDUSTRIAL	KOCAELİ	TÜRKİYE
SAPANCA - DOĞAN VİLLA	RESIDENTIAL	SAKARYA	TÜRKİYE
SARITAS DUDULLU INDUSTRY	INDUSTRIAL	İSTANBUL	TÜRKİYE
SARBUYSAN GENERAL DIRECTORATE BUILDING	OFFICE BUILDINGS	İSTANBUL	TÜRKİYE
SARPHAN FINANS PARK	OFFICE BUILDINGS	İSTANBUL	TÜRKİYE
SASA FİBER FACTORY	INDUSTRIAL	ADANA	TÜRKİYE
SEA PEARL MEDICANA HOSPITAL	HEALTH	İSTANBUL	TÜRKİYE
SEBA BURLA OTEL	HOSPITALITY	İSTANBUL	TÜRKİYE
SEKER CUMRA OIL FACILITIES	INDUSTRIAL	KONYA	TÜRKİYE
SELCUK ECZA FACTORY GEBZE	INDUSTRIAL	KOCAELİ	TÜRKİYE

PROJECT NAME	PROJECT TYPE	CITY	COUNTRY
SELCUKLU UNILEVER PRODUCTION FACILITIES	INDUSTRIAL	KONYA	TÜRKİYE
SEMBOL ESENYURT	RESIDENTIAL	İSTANBUL	TÜRKİYE
SERRA FOAM RUBBER FACTORY	INDUSTRIAL	ESKİŞEHİR	TÜRKİYE
SHANGRILA HOTEL	HOSPITALITY	İSTANBUL	TÜRKİYE
SHERATON HOTEL	HOSPITALITY	ANKARA	TÜRKİYE
SHERATON HOTEL	HOSPITALITY	VAN	TÜRKİYE
SIEMENS GEBZE	INDUSTRIAL	KOCAELİ	TÜRKİYE
SILIVRI DIRECTORATE OF DIPLOMATIC ARCHIVES	PUBLIC BUILDINGS	İSTANBUL	TÜRKİYE
SILIVRI HALKBANK	SHOPPING MALLS	İSTANBUL	TÜRKİYE
SINCAN - SOLAR PANEL PRODUCTION FACILITIES	INDUSTRIAL	ANKARA	TÜRKİYE
SINPAS BOMONTI QUEEN	RESIDENTIAL	İSTANBUL	TÜRKİYE
SISECAM ESKİŞEHİR FACTORY PRODUCT WAREHOUSE	INDUSTRIAL	ESKİŞEHİR	TÜRKİYE
SKYLAND İSTANBUL	RESIDENTIAL	İSTANBUL	TÜRKİYE
SKYLAND TOWER DINING HALL	RESIDENTIAL	İSTANBUL	TÜRKİYE
SOFA D BLOCK	RESIDENTIAL	İSTANBUL	TÜRKİYE
SOKE - PLANE TEXTILE FACTORY	INDUSTRIAL	AYDIN	TÜRKİYE
SOMAL SHEET METAL FACTORY	INDUSTRIAL	KOCAELİ	TÜRKİYE
SPINE TOWER	RESIDENTIAL	İSTANBUL	TÜRKİYE
SSK HOSPITAL	HEALTH	ANTALYA	TÜRKİYE
SSK HOSPITAL	HEALTH	İSTANBUL	TÜRKİYE
SSK HOSPITAL TARSUS	HEALTH	MERSİN	TÜRKİYE
STAR OF BOSPHORUS DATA CENTER	OFFICE BUILDINGS	İSTANBUL	TÜRKİYE
STRADA BAHCESEHİR	RESIDENTIAL	İSTANBUL	TÜRKİYE
SULEYMAN SAH UNIVERSITY	PUBLIC BUILDINGS	İSTANBUL	TÜRKİYE
SULTANBEYLİ SHOPPING MALLS	SHOPPING MALLS	İSTANBUL	TÜRKİYE
SUN CHEMICAL	INDUSTRIAL	İZMİR	TÜRKİYE
SUPERMAX PRISON	PUBLIC BUILDINGS	BATMAN	TÜRKİYE
SURYAPI METROGARDEN	RESIDENTIAL	İSTANBUL	TÜRKİYE
SWISS OTEL BODRUM	HOSPITALITY	MUĞLA	TÜRKİYE
SYMBOL KAVANLAR	SHOPPING MALLS	KOCAELİ	TÜRKİYE
TAI - TUISAS MOUNTING HANGAR	INDUSTRIAL	ANKARA	TÜRKİYE
TAI 1020 - 1021 INSTALLATION LAB & LC ENERGY BUILDINGS	POWER & ENERGY	ANKARA	TÜRKİYE
TAI 1080 LAB BUILDING	INDUSTRIAL	ANKARA	TÜRKİYE
TAI 164-201-203-208 OFFICE AND FACTORY BUILDINGS	OFFICE BUILDINGS	ANKARA	TÜRKİYE
TAI 320 BUILDING	INDUSTRIAL	ANKARA	TÜRKİYE
TAI 510 - 610 FIRE DEPARTMENT BUILDING	INDUSTRIAL	ANKARA	TÜRKİYE
TAI B15-B202 PLANNING DIRECTORATE & LOGISTICS BUILDING	INDUSTRIAL	ANKARA	TÜRKİYE
TAI B42 PAINTING BUILDING	INDUSTRIAL	ANKARA	TÜRKİYE
TAI ENGINEERING BUILDING	OFFICE BUILDINGS	ANKARA	TÜRKİYE
TAI HELICOPTER PRODUCTION FACILITY	INDUSTRIAL	ANKARA	TÜRKİYE
TAI IHA CAMPUS	INDUSTRIAL	ANKARA	TÜRKİYE
TAI TUSAS TEST & LAB BUILDINGS	PUBLIC BUILDINGS	ANKARA	TÜRKİYE
TAI TUSAS WIND TUNNEL	INDUSTRIAL	ANKARA	TÜRKİYE
TAKSİM - ATATÜRK PUBLIC BUILDINGS (AKM)	PUBLIC BUILDINGS	İSTANBUL	TÜRKİYE
TAKSİM 360	RESIDENTIAL	İSTANBUL	TÜRKİYE

PROJECT NAME	PROJECT TYPE	CITY	COUNTRY
TANAP DOGALGAZ	INFRASTRUCTURE	İSTANBUL	TÜRKİYE
TARABYA HOTEL	HOSPITALITY	İSTANBUL	TÜRKİYE
TARIM KREDİ KOOP. SOGUTOZU RESIDENTIAL	RESIDENTIAL	ANKARA	TÜRKİYE
TARSUS BIM FACTORY	INDUSTRIAL	MERSİN	TÜRKİYE
TARSUS SISECAM FROSTED GLASS PRODUCTION FACILITIES	INDUSTRIAL	MERSİN	TÜRKİYE
TASIS	INDUSTRIAL	İSTANBUL	TÜRKİYE
TASYAPI ALTUNIZATE	RESIDENTIAL	İSTANBUL	TÜRKİYE
TAV AIRPORT	AVIATION	İSTANBUL	TÜRKİYE
TAVSANTEPE – SABIHA GOKCEN SUBWAY	INFRASTRUCTURE	İSTANBUL	TÜRKİYE
TBMM BUILDING	PUBLIC BUILDINGS	ANKARA	TÜRKİYE
TEKİRA SHOPPING MALL	SHOPPING MALLS	TEKİRDAĞ	TÜRKİYE
TEKİRDAG CITY HOSPITAL	HEALTH	TEKİRDAĞ	TÜRKİYE
TEKNOPARK 2. STAGE	PUBLIC BUILDINGS	İSTANBUL	TÜRKİYE
TEKNOPARK 3.STAGE	OFFICE BUILDINGS	İSTANBUL	TÜRKİYE
TEKNOPARK KURTKOY	OFFICE BUILDINGS	İSTANBUL	TÜRKİYE
TEMA 2. STAGE KUCUKCEKMECE	RESIDENTIAL	İSTANBUL	TÜRKİYE
TEPE NARCITY	RESIDENTIAL	İSTANBUL	TÜRKİYE
TEPE NARLIFE WORKSITE	RESIDENTIAL	İSTANBUL	TÜRKİYE
TEPEOREN VKV KOC SCHOOL	PUBLIC BUILDINGS	İSTANBUL	TÜRKİYE
TERSANE İSTANBUL ZONE 5	RESIDENTIAL	İSTANBUL	TÜRKİYE
THE MANDARINS ACIBADEM	RESIDENTIAL	İSTANBUL	TÜRKİYE
THERMAL POWER PLANT	POWER & ENERGY	ZONGULDAK	TÜRKİYE
THY İGA CIP – DOMESTIC FIRE SECTION	AVIATION	İSTANBUL	TÜRKİYE
TİNANIC BELEK HOTEL	HOSPITALITY	ANTALYA	TÜRKİYE
TOBB GENERAL DIRECTORATE OF FORESTRY	PUBLIC BUILDINGS	ANKARA	TÜRKİYE
TOGG FACTORY	INDUSTRIAL	BURSA	TÜRKİYE
TOPKAPI NEF – İS GYO RESIDENCE	RESIDENTIAL	İSTANBUL	TÜRKİYE
TORBALI SERRA SPONGE FACTORY	INDUSTRIAL	İZMİR	TÜRKİYE
TORLAK SHIPYARD	INDUSTRIAL	İSTANBUL	TÜRKİYE
TORUN CENTER	RESIDENTIAL	İSTANBUL	TÜRKİYE
TRABZON HILTON HOSPITAL	HOSPITALITY	TRABZON	TÜRKİYE
TRABZON TUNNEL	INFRASTRUCTURE	TRABZON	TÜRKİYE
TRADE CENTER	OFFICE BUILDINGS	BALIKESİR	TÜRKİYE
TRAKTOR PRODUCTION FACILITY	INDUSTRIAL	ADAPAZARI	TÜRKİYE
TREATMENT FACILITY	INDUSTRIAL	İSTANBUL	TÜRKİYE
TRENDYOL FACTORY	INDUSTRIAL	BURSA	TÜRKİYE
TRENDYOL İGA	INDUSTRIAL	İSTANBUL	TÜRKİYE
TRENDYOL LOGISTICS FACTORY	INDUSTRIAL	ANKARA	TÜRKİYE
TRT STUDIOS	PUBLIC BUILDINGS	ANKARA	TÜRKİYE
TRT STUDIOS	PUBLIC BUILDINGS	İSTANBUL	TÜRKİYE
TSE QUALITY CAMPUS	PUBLIC BUILDINGS	ANKARA	TÜRKİYE
TSK SECURITY SCHOOL	PUBLIC BUILDINGS	ANKARA	TÜRKİYE
TUAL BAHCEKENT	RESIDENTIAL	İSTANBUL	TÜRKİYE
TUPRAS PRODUCTION FACILITIES	OIL & GAS	KOCAELİ	TÜRKİYE
TUPRAS RAFINERY	OIL & GAS	KIRIKKALE	TÜRKİYE

PROJECT NAME	PROJECT TYPE	CITY	COUNTRY
TURK TELEKOM	OFFICE BUILDINGS	ANKARA	TÜRKİYE
TURK YTONG FACTORY	INDUSTRIAL	İSTANBUL	TÜRKİYE
TURKUAZ POLYESTER RESIN FACTORY	INDUSTRIAL	KOCAELİ	TÜRKİYE
TUSAS TEKNOKENT	OFFICE BUILDINGS	ANKARA	TÜRKİYE
TUZLA ARVATO LOGISTICS	INDUSTRIAL	İSTANBUL	TÜRKİYE
TUZLA - HELBA PHARMACEUTICAL PLANT	INDUSTRIAL	İSTANBUL	TÜRKİYE
TUZLA AMAZON	INDUSTRIAL	İSTANBUL	TÜRKİYE
TUZLA BIM	INDUSTRIAL	İSTANBUL	TÜRKİYE
TUZLA EVORA	RESIDENTIAL	İSTANBUL	TÜRKİYE
TUZLA EVYAP FACTORY	INDUSTRIAL	İSTANBUL	TÜRKİYE
TUZLA IS GYO TECHNOLOGY AND OPERATION HUB	OFFICE BUILDINGS	İSTANBUL	TÜRKİYE
TUZLA PELITLI BUILDING	OFFICE BUILDINGS	İSTANBUL	TÜRKİYE
TUZLA SISECAM FACTORY	INDUSTRIAL	İSTANBUL	TÜRKİYE
TUZLA VESEN MANSIONS	RESIDENTIAL	İSTANBUL	TÜRKİYE
TUZLA YAPIKUR LOGISTICS FACTORY	INDUSTRIAL	İSTANBUL	TÜRKİYE
UBK	RESIDENTIAL	İSTANBUL	TÜRKİYE
ULKER ONEM FOOD CATALCA	INDUSTRIAL	İSTANBUL	TÜRKİYE
ULUDAG UNIVERSITY FACULTY OF DENSISTRY	PUBLIC BUILDINGS	BURSA	TÜRKİYE
UMRANIYE - ATASEHIR - GOZTEPE SUBWAY	INFRASTRUCTURE	İSTANBUL	TÜRKİYE
UMRANIYE CANPARK SHOPPING MALL & HOTEL	SHOPPING MALLS	İSTANBUL	TÜRKİYE
UMRANIYE CEVAHIR BORSA BUILDING	OFFICE BUILDINGS	İSTANBUL	TÜRKİYE
UMRANIYE EQUINIX IL03 DATA CENTER (3.STAGE)	OFFICE BUILDINGS	İSTANBUL	TÜRKİYE
UMRANIYE HILTON	HOSPITALITY	İSTANBUL	TÜRKİYE
UPTOWN	RESIDENTIAL	ANKARA	TÜRKİYE
URBAN TRANSFORMATION 660 RESIDENCE	RESIDENTIAL	BURSA	TÜRKİYE
URFA HILTON	HOSPITALITY	ŞANLIURFA	TÜRKİYE
USKUDAR ACIBADEM ALTUNIZADE HOSPITAL	HEALTH	İSTANBUL	TÜRKİYE
USKUDAR CAMLICA MOSQUE AND ISLAMIC ART MUSEUM	PUBLIC BUILDINGS	İSTANBUL	TÜRKİYE
USKUDAR SHOPPING MALL	SHOPPING MALLS	İSTANBUL	TÜRKİYE
UZEL MACHINERY PRODUCTION FACILITIES	INDUSTRIAL	İSTANBUL	TÜRKİYE
VADI İSTANBUL	SHOPPING MALLS	İSTANBUL	TÜRKİYE
VAKIF GUREBA HOSPITAL	HEALTH	İSTANBUL	TÜRKİYE
VAN SHOPPING MALL	SHOPPING MALLS	VAN	TÜRKİYE
VIALAND ENTERTAINMENT CENTER	SHOPPING MALLS	İSTANBUL	TÜRKİYE
VIAPORT SHOPPING MALLS	SHOPPING MALLS	İSTANBUL	TÜRKİYE
VIAPORT VENEZIA	SHOPPING MALLS	İSTANBUL	TÜRKİYE
VISSMANN MANISA	INDUSTRIAL	MANİSA	TÜRKİYE
WATER GARDENS İSTANBUL	SHOPPING MALLS	İSTANBUL	TÜRKİYE
YALI ATA KOY	RESIDENTIAL	İSTANBUL	TÜRKİYE
YAMANEVLER SUBWAY	INFRASTRUCTURE	İSTANBUL	TÜRKİYE
YARIMCA OYAK PORT	INDUSTRIAL	KOCAELİ	TÜRKİYE
YASSI ADA OTEL SIVRIADA CONGRESS CENTER	PUBLIC BUILDINGS	İSTANBUL	TÜRKİYE
YDA CENTER	OFFICE BUILDINGS	ANKARA	TÜRKİYE
YEDİTEPE UNIVERSITY STEMCELL HOSPITAL	INDUSTRIAL	İSTANBUL	TÜRKİYE
YENİKAPI TAKSİM SUBWAY	INFRASTRUCTURE	İSTANBUL	TÜRKİYE

PROJECT NAME	PROJECT TYPE	CITY	COUNTRY
YENISEHIR MIGROS LOGISTICS FACTORY	INDUSTRIAL	BURSA	TÜRKİYE
YESILKOY SAHRA HOSPITAL	HEALTH	İSTANBUL	TÜRKİYE
YESILKOY THY OFFICE	OFFICE BUILDINGS	İSTANBUL	TÜRKİYE
YHT PARKING LOT	PUBLIC BUILDINGS	ANKARA	TÜRKİYE
YILDIZ ENTEGRE	INDUSTRIAL	KOCAELİ	TÜRKİYE
YOO İSTANBUL RESIDENCE	RESIDENTIAL	İSTANBUL	TÜRKİYE
YOZGAT SHOPPING MALL	SHOPPING MALLS	YOZGAT	TÜRKİYE
YTONG CATALCA FACTORY	INDUSTRIAL	İSTANBUL	TÜRKİYE
YURTBAY CERAMICS	INDUSTRIAL	ESKİŞEHİR	TÜRKİYE
ZEKERİYAKOY KOY RESIDENCE	RESIDENTIAL	İSTANBUL	TÜRKİYE
ZEYTİNBURNU ABDİ İPEKÇİ SPORT FACILITIES	PUBLIC BUILDINGS	İSTANBUL	TÜRKİYE
ZEYTİNBURNU HOTEL	HOSPITALITY	İSTANBUL	TÜRKİYE
ZEYTİNBURNU SELENIUM PARK	RESIDENTIAL	İSTANBUL	TÜRKİYE
ZF - WABCO AUTOMOBILE SUB-INDUSTRY FACTORY	INDUSTRIAL	SAKARYA	TÜRKİYE
ZORLU SHOPPING MALL	SHOPPING MALLS	İSTANBUL	TÜRKİYE

REFERENCES FROM OTHER COUNTRIES



PROJECT NAME	PROJECT TYPE	COUNTRY
1800MW COMBINED CYCLE PLANT	POWER & ENERGY	BAHRAIN
20000 HOUSING PROJECT IN WEST BENGHAZI	RESIDENTIAL	LIBYA
520 HMUS HOSPITAL	HEALTH	ALGERIA
ABU DHABI INTERNATIONAL AIRPORT EXPANSION	AVIATION	U.A.E.
ADA UNIVERSITY CAMPUS	PUBLIC BUILDINGS	AZERBAIJAN
ADAN HOSPITAL PROJECT	HEALTH	KUWAIT
AHALTEKE PROJECT	SPORT FACILITIES	TURKMENISTAN
AKARYAKIT SUPPLY ESTABLISHMENT	OIL & GAS	TURKMENISTAN
AKTAU GOLF VILLAS	RESIDENTIAL	KAZAKHISTAN
AL AHLY BANK	PUBLIC BUILDINGS	EGYPT
AL IMAN GENERAL HOSPITAL	HEALTH	SAUDI ARABIA
AL MAAIDIN WADI - UNIVERSITY OF NIZWA	PUBLIC BUILDINGS	OMAN
AL NAJAF TEACHING HOSPITAL	HEALTH	IRAQ
AL TADOMON TOWER	OFFICE BUILDINGS	LIBYA
AL TUHAMI /ABHA/HETIN SPORTS CLUBS	PUBLIC BUILDINGS	SAUDI ARABIA
AL WAAB COMMERCIAL & RESIDENTIAL DISTRICT	RESIDENTIAL	QATAR
ALAMEIN TOWERS	RESIDENTIAL	EGYPT
ALGER KBF HOTEL PROJECT	HOSPITALITY	ALGERIA
ALMATY AIRPORT PROJECT	AVIATION	KAZAKHISTAN
AMAALA - VEOLIA AMAALA STATION	INFRASTRUCTURE	SAUDI ARABIA
ASGABAT AIRPORT	AVIATION	TURKMENISTAN
ASKABAT ENDOCRINOLOGY HOSPITAL	HEALTH	TURKMENISTAN
ASKABAT HOSPITAL PROJECT	HEALTH	TURKMENISTAN
ASKABAT INTERNATIONAL AIRPORT	AVIATION	TURKMENISTAN
ASKABAT MORPHOLOGY HOSPITAL	HEALTH	TURKMENISTAN
ASKABAT ONKOLOGY HOSPITAL	HEALTH	TURKMENISTAN
ASKABAT PEDIATRICS HOSPITAL	HEALTH	TURKMENISTAN
ASKABAT REHABILITATION HOSPITAL	HEALTH	TURKMENISTAN
ASKABAT STOMATOLOGY CENTER	HEALTH	TURKMENISTAN
ASTANA REGIS HOSPITALITY	HOSPITALITY	KAZAKHISTAN
ATHLETE HOUSES	RESIDENTIAL	TURKMENISTAN
AVAZA PUBLIC BUILDINGS	PUBLIC BUILDINGS	TURKMENISTAN
AWASH WELDIA HARA GEBEYA RAILWAY	INFRASTRUCTURE	ETHIOPIA
AZERBAYCAN - CENTRAL BANK	PUBLIC BUILDINGS	AZERBAIJAN
AZURI PROJECT	RESIDENTIAL	NIGERIA
BAGDAT CCI COCA COLA FACTORY	INDUSTRIAL	IRAQ
BAGDAT COUNCIL OF MINISTERS BUILDING	PUBLIC BUILDINGS	IRAQ
BAGHDAD SHOPPING MALL	SHOPPING MALLS	IRAQ
BAHREYN INTERNATIONAL AIRPORT	AVIATION	BAHRAIN
BAKU EXPO CENTER	OFFICE BUILDINGS	AZERBAIJAN
BAKU FLAME TOWERS (2. TOWER)	HOSPITALITY	AZERBAIJAN
BANJU DAM	POWER & ENERGY	ALBANIA
BASRA PORT PROJECT	INDUSTRIAL	IRAQ
BASRA SOYBIN OIL PLANT SOYA OIL FACTORY	OIL & GAS	IRAQ
BASRA ZUBAIR OIL FIELD ELECTRIC BUILDINGS	OIL & GAS	IRAQ

PROJECT NAME	PROJECT TYPE	COUNTRY
BECHAR MILITARY HOSPITAL PROJECT	HOSPITALITY	ALGERIA
BEIT MISK	RESIDENTIAL	LEBANON
BESMAYA POWER PLANT	INFRASTRUCTURE	IRAQ
BILIDA HOTEL	HOSPITALITY	ALGERIA
BINGAZI STADIUM RENOVATION PROJECT	SPORT FACILITIES	LIBYA
BLAISE-DIAGNE (AIBD) AIRPORT	AVIATION	SENEGAL
BODU FUSHI ISLAND VILLA HOTEL	HOSPITALITY	MALDIVES
BONA DEA HOSPITAL	HEALTH	AZERBAIJAN
BONA DEA HOSPITAL BAKU	HEALTH	AZERBAIJAN
BOURDILLON 39 PROJECT	RESIDENTIAL	NIGERIA
BUKRES – ARCELIK FACTORY	INDUSTRIAL	ROMANIA
CAIRO INTERNATIONAL AIRPORT	AVIATION	KAHIRE
CAIRO METRO PROJECT	INFRASTRUCTURE	EGYPT
CAM FACTORY	INDUSTRIAL	TURKMENISTAN
CAMP NOU PROJECT	SPORT FACILITIES	SPAIN
CCI – SEMERKAND GREENFIELD	INDUSTRIAL	UZBEKISTAN
CDP – BAKU	RESIDENTIAL	AZERBAIJAN
CDP PLACE TOWER	OFFICE BUILDINGS	AZERBAIJAN
CENTRAL BANK	PUBLIC BUILDINGS	AZERBAIJAN
CENTRAL BANK BAGDAT	PUBLIC BUILDINGS	IRAQ
CHERAGA-ALGER 248 LITS COMPLEXE HOSPITALIER MERE-ENFANT	HEALTH	ALGERIA
CIDDE HAVAALANI-HANGARS TAV	AVIATION	SAUDI ARABIA
CINER GLASS LOMMEL FACTORY	INDUSTRIAL	BELGIUM
CITE FINANCIERE	OFFICE BUILDINGS	ALGERIA
COMMANDEMENT FORCE NAVAL	PUBLIC BUILDINGS	ALGERIA
COMMUNITY HEALTH CARE CENTER	HEALTH	TURKMENISTAN
CONGRESS CENTRAL	PUBLIC BUILDINGS	KONGO
CROWN PLAZA RESORT	HOSPITALITY	JORDAN
DAKAR – HOTEL-EXPO & SAR – SENEGAL ARENA	HOSPITALITY	SENEGAL
DARUSSELM MOROGORO RAILWAY	INFRASTRUCTURE	TANZANIA
DEBRECEN BMW FACTORY	INDUSTRIAL	HUNGARY
DIAMNADIO OLIMPIC STADIUM	SPORT FACILITIES	SENEGAL
EIB LUXEMBOURG INVESTMENT BANK PROJECT	PUBLIC BUILDINGS	LUXEMBURG
EL FATEH UNIVERSITY	PUBLIC BUILDINGS	LIBYA
EL-BIAR PARKING LOT	PUBLIC BUILDINGS	ALGERIA
ERBIL AIRPORT	AVIATION	IRAQ
ERCAN AIRPORT EXPANSION PROJECT	AVIATION	T.R.N.C.
EXTENSION DE L'HMUSORA BOUCHAOUI	HEALTH	ALGERIA
EYE HOSPITAL	HEALTH	LIBYA
FACTORY WORKSIDE	INDUSTRIAL	BRUNEI
FAWAZ-MATAF-BACK-OFF-HOUSE	RESIDENTIAL	AZERBAIJAN
FLEET MAINTENANCE	AVIATION	TURKMENISTAN
GARABOGAZ FERTILIZER FACTORY	INDUSTRIAL	TURKMENISTAN
GARAGUM HOTEL	HOSPITALITY	TURKMENISTAN
GETZ PHARMA	INDUSTRIAL	PAKISTAN

PROJECT NAME	PROJECT TYPE	COUNTRY
GINE MALABO CONGRESS CENTRAL	PUBLIC BUILDINGS	EQUATORIAL GUINEA
HAYAT KIMYA BUILDING	OFFICE BUILDINGS	IRAN
HIGH RISE OFFICE BUILDING	OFFICE BUILDINGS	QATAR
HILTON	HOSPITALITY	UZBEKISTAN
HILTON GARDEN INN	HOSPITALITY	AZERBAIJAN
HOIMA STADIUM ROOF TRUSS	SPORT FACILITIES	UGANDA
HTC HOTEL	HOSPITALITY	TURKMENISTAN
INDUS HOSPITAL KARACHI PROJECT	HEALTH	PAKISTAN
INDUSTRIAL FACILITY - KES PROJECT	INDUSTRIAL	MACEDONIA
INNOVATION CENTER FOR BOROUGE	PUBLIC BUILDINGS	U.A.E.
INTERNATIONAL AIRPORT NEW TERMINAL PROJECT	AVIATION	KUWAIT
IRAQ UNIVERSITY SPECIAL EQUIPPED HOSPITAL	HEALTH	IRAQ
JAMAL OMAR DEVELOPMENT PROJECT	RESIDENTIAL	SAUDI ARABIA
JEDDAH - VEOLIA WESTERN STATION	INFRASTRUCTURE	SAUDI ARABIA
JESA PROJECT	RESIDENTIAL	SOUTH AFRICA
JUMEIRAH VILLAGES	RESIDENTIAL	U.A.E.
JUSTICE PALACE NEW PROJECT	PUBLIC BUILDINGS	KUWAIT
KERBELA KORAN SCIENCE UNIVERSITY	PUBLIC BUILDINGS	IRAQ
KHABAT THERMAL POWER PLANT PROJECT	POWER & ENERGY	IRAQ
KIGALI - CONVENTION CENTER	PUBLIC BUILDINGS	RWANDA
KING ABDUL AZIZ INTERNATIONAL AIRPORT PROJECT (KAIA)	AVIATION	SAUDI ARABIA
KING ABDUL AZIZ ROAD WORKS	INFRASTRUCTURE	SAUDI ARABIA
KING ABDULLAH BIN ABDULAZIZ THIRD SAUDI EXPANSION OF HOLY HARAM	PUBLIC BUILDINGS	SAUDI ARABIA
KING FAISAL MEDICAL CITY	HEALTH	SAUDI ARABIA
KING HUSSAIN CANCER CENTER	HEALTH	JORDAN
KING SALMAN PARK	PUBLIC BUILDINGS	SAUDI ARABIA
KIRNATA HES	POWER & ENERGY	GEORGIA
KONSTANTIN HOTEL	HOSPITALITY	ALGERIA
KOTOKA INTERNATIONAL AIRPORT NEW TERMINAL	AVIATION	GHANA
KUWAIT INT. AIRPORT TERMINAL II-CARPARK	AVIATION	KUWAIT
KUWAIT- KIA KUWAIT INTERNATIONAL AIRPORT	AVIATION	KUWAIT
KVELHACHAUR HES	POWER & ENERGY	GEORGIA
LA PLAGE SOUTH - LPS4 RESIDENTIAL BUILDING	RESIDENTIAL	QATAR
LAHORE - SINDBAD DOLMEN MALL	SHOPPING MALLS	PAKISTAN
LEKHWIYA SPORTS STADIUM	SPORT FACILITIES	QATAR
LEVEL 27 RESIDENCE	RESIDENTIAL	LEBANON
LIBYA - COURT OF ACCOUNT BUILDING	PUBLIC BUILDINGS	LIBYA
LIMAK KIBRIS BABYLON HOTEL	HOSPITALITY	T.R.N.C.
LUSAIL PLAZA TOWERS	OFFICE BUILDINGS	QATAR
MADINAH - MADINAH KEC HUB	INFRASTRUCTURE	SAUDI ARABIA
MADINAH AIRPORT	AVIATION	SAUDI ARABIA
MAKKAH - FINGERS AT UTILITY TUNNEL - MAKKAH HARAM	INFRASTRUCTURE	SAUDI ARABIA
MAKKAH - HARAM BUILDING	PUBLIC BUILDINGS	SAUDI ARABIA
MAKKAH - MASAAR B TOWERS	OFFICE BUILDINGS	SAUDI ARABIA
MAKKAH - MATAF - BIN LADIN - MATAF ZONE 33	INFRASTRUCTURE	SAUDI ARABIA

PROJECT NAME	PROJECT TYPE	COUNTRY
MAKKAH – MATAF – BIN LADIN – MATAF ZONE 33	INFRASTRUCTURE	SAUDI ARABIA
MAKKAH – SEVEN ENTERTAINMENT CITY IN MAKKAH	SHOPPING MALLS	SAUDI ARABIA
MALABO CONGRESS HALL	INFRASTRUCTURE	GUINEA
MASAAR TOWERS PROJECT	RESIDENTIAL	QATAR
MEDINE AIRPORT	AVIATION	SAUDI ARABIA
MEEZA DATA CENTER PROJECT MV3	PUBLIC BUILDINGS	QATAR
MERCURY TOWER	RESIDENTIAL	MALTA
MILITARY HEADQUARTER	PUBLIC BUILDINGS	JORDAN
MOZOON TOWERS	HOSPITALITY	QATAR
NEOM COMPLEX	INFRASTRUCTURE	JORDAN
NEOM PROFESSIONAL WATER STATION	INFRASTRUCTURE	SAUDI ARABIA
NESMA- SANG HOSPITALS	HEALTH	SAUDI ARABIA
NEW CAPITAL – MINISTRIES BUILDINGS – GOVERNMENTAL DISTRICT	PUBLIC BUILDINGS	EGYPT
NEW DOHA INTERNATIONAL AIRPORT	AVIATION	QATAR
NEW NAVAL BASE BUILDINGS	INFRASTRUCTURE	QATAR
NEW RAYYAN PALACE	PUBLIC BUILDINGS	QATAR
NOBEL TINIP PROJECT	INDUSTRIAL	KAZAKHISTAN
NORT SOUTH RAILWAY PROJECT	INFRASTRUCTURE	SAUDI ARABIA
ODR/OAP RESIDENCE AND OFFICE BUILDING	RESIDENTIAL	KONGO
OLIMPIC VILLAGE	PUBLIC BUILDINGS	TURKMENISTAN
OLIVE	SHOPPING MALLS	LEBANON
ONE&ONLY PORTONOVİ RESORT	HOSPITALITY	MONTENEGRO
OURGALA MILITARY HOSPITAL	HEALTH	ALGERIA
PATIO VILLA	RESIDENTIAL	KAZAKHISTAN
PORT BAKU TOWER II (PBT II)	OFFICE BUILDINGS	AZERBAIJAN
PROSECUTION BUILDING 2. SECTION	PUBLIC BUILDINGS	TURKMENISTAN
QATAR FOUNDATION EDUCATION CITY SOUTH SITE UNILITY TUNNELS	INFRASTRUCTURE	QATAR
QATAR FOUNDATION EDUCATION CITY WEST CAR PARK	PUBLIC BUILDINGS	QATAR
QATAR FOUNDATION OFFSITE WAREHOUSE AND DISTRIBUTION CENTER	PUBLIC BUILDINGS	QATAR
QATAR FOUNDATION RESEARCH&DEVELOPMENT COMPLEX	PUBLIC BUILDINGS	QATAR
RAFHA UNIVERSITY	PUBLIC BUILDINGS	PALESTINE
RELIZANE TEXTILE INDUSTRIAL AREA	INDUSTRIAL	ALGERIA
RITZ CARLTON HOTEL	HOSPITALITY	JORDAN
RIYADH – SPECIAL FORCES MEDICAL CITY	HEALTH	SAUDI ARABIA
RIYADH AIRPORT EXTENSION PROJECT- TAV & AKFA	AVIATION	SAUDI ARABIA
RIYADH AVENUE MALL	SHOPPING MALLS	SAUDI ARABIA
RIYADH METRO PROJECT	INFRASTRUCTURE	SAUDI ARABIA
RWANDA SPORTS ARENA PROJECT	SPORT FACILITIES	RWANDA
SAMRYA BUSINESS TOWERS	OFFICE BUILDINGS	QATAR
SANG HOUSING PROJECT	RESIDENTIAL	SAUDI ARABIA
SARABSKI PLAZA	OFFICE BUILDINGS	AZERBAIJAN
SEEF LUSAIL PLOT D1 & D2 TOWERS	RESIDENTIAL	QATAR
SHOTTON MONDERN KAGIT FACTORY	INDUSTRIAL	ENGLAND
SISECAM FACTORY	INDUSTRIAL	HUNGARY
SOCAR OFFICE BUILDING TIFLIS	OFFICE BUILDINGS	GEORGIA

PROJECT NAME	PROJECT TYPE	COUNTRY
SOFYA AIRPORT	AVIATION	SOFYA
SPORT FACILITIES	SPORT FACILITIES	TURKMENISTAN
ST. PETERSBURG SOGAZ PROJECT	OIL & GAS	RUSSIA
ST.REGIS HOSPITAL VE RESIDENCE	HOSPITALITY	QATAR
TALAN TOWER	OFFICE BUILDINGS	KAZAKHISTAN
TASHKENT AGROBANK	OFFICE BUILDINGS	UZBEKISTAN
TASHKENT CENTRAL PARK	PUBLIC BUILDINGS	UZBEKISTAN
TASHKENT CITY LOT	RESIDENTIAL	UZBEKISTAN
TASHKENT HYAAT HOTEL	HOSPITALITY	UZBEKISTAN
TASHKENT MODERA TOWER	RESIDENTIAL	UZBEKISTAN
TASHKENT TRILLANT	HOSPITALITY	UZBEKISTAN
TBILISI TABORI MARRIOTT BONVOY HOTEL	HOSPITALITY	GEORGIA
TENGIZ - PETROL FIELD	INFRASTRUCTURE	KAZAKHISTAN
TIFLIS - HILTON HOTEL	HOSPITALITY	GEORGIA
TOUAT HOTEL	HOSPITALITY	ALGERIA
TRIPOLI WEST & MISURATA 650 MW ENERGY CENTRAL	POWER & ENERGY	LIBYA
TURBA WATER TREATMENT PLANT	INFRASTRUCTURE	QATAR
TURKMENBASI INTERNATIONAL PORT & HOTEL	HOSPITALITY	TURKMENISTAN
TURKMENISTAN - ASKAABAT HOSPITAL	HEALTH	TURKMENISTAN
UMM AL-HAYMAN PROJECT	INDUSTRIAL	KUWAIT
USKUP AIRPORT	AVIATION	MACEDONIA
USKUP SHOPPING MALL	SHOPPING MALLS	MACEDONIA
VEOLIA MAMASUK NEOM STATION	INFRASTRUCTURE	SAUDI ARABIA
VOLGA TURKMENISTAN PROJECT	OFFICE BUILDINGS	TURKMENISTAN
WEST QURNA NATURAL GAS CONVERSION, ELECTRIC PRODUCTION & DISTRIBUTION	POWER & ENERGY	IRAQ
WINTER BOULEVARD HOTEL (WBH)	HOSPITALITY	AZERBAIJAN

CERTIFICATES





For more details and actual certificates, please visit our website
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