



ANCHOR **PRODUCTS CATALOGUE**



THROUGH BOLT ANCHOR



Through Bolt Anchor

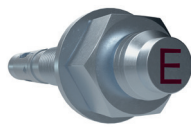
The male anchors are an effective professional solution for installing elements with high performance guarantees in cracked and non-cracked concrete.

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).

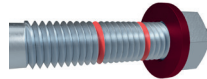
DESIGN AND GEOMETRY



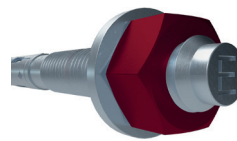
Shaft retracts as thread protection during anchor installation.



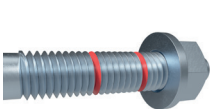
Nut. The internal threading makes it possible to fit the screw, facilitating the securing and connection of detachable elements. It is supplied pre-assembled.



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 painted 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.

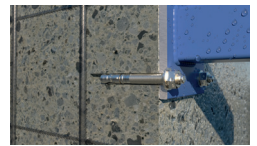


Expansion clip and cone. The cone retracts, expanding the clip and exerting pressure on the base material to enable fastening.



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.



RANGE



| Product | Axis | Clip | ETA STRUCTURAL FIXINGS IN CRACKED & UNCRACKED CONCRETE | ETA NON-STRUCTURAL FIXINGS | SEISMIC C2 & C1 | FIRE RESISTANCE | VdS CEA 4001 compliant |
|---------|-------------|------|---|----------------------------------|-----------------|-----------------|---------------------------|
| IDKLAP | A2 STEEL | A | ✓ | ✓ | ✓ | ✓ | ✓ |
| IDKLAH | Zn | Zn | ✓ | ✓ | ✓ | ✓ | ✓ |

THE PERFECT COATING ACCORDING TO THE EXPECTED LEVELS OF CORROSION

A **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.

Zn **Zinc coating:** Suitable for use in dry indoor conditions (category C1 according to ISO 923), for a period of 50 years.

IDKLAP

Through bolt anchor for heavy loads in cracked & uncracked concrete

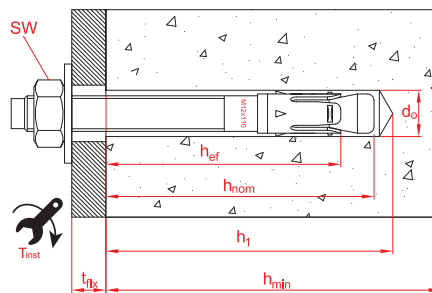


IDKLAPX

Opt.1 ETA Assessed. Zinc-plated shaft.
ATLANTIS C3-L clip



| Code No | Seismic Assessment | Size | DRILL Ø (mm) | Thickness Max. Fixture (mm) | Axis Letter (Length) | | |
|--------------|--------------------|---------------|--------------|-----------------------------|----------------------|-----|-----|
| IDKLAPX08075 | C1 | M8 x 75 Ø8 | 8 | 9 | C | 100 | 600 |
| IDKLAPX10090 | C1&C2 | M10 x 90 Ø10 | 10 | 10 | E | 100 | 400 |
| IDKLAPX10115 | C1&C2 | M10 x 115 Ø10 | 10 | 35 | G | 50 | 200 |
| IDKLAPX12110 | C1&C2 | M12 x 110 Ø12 | 12 | 14 | F | 50 | 200 |
| IDKLAPX12130 | C1&C2 | M12 x 130 Ø12 | 12 | 34 | H | 50 | 200 |
| IDKLAPX16145 | C1 | M16 x 145 Ø16 | 16 | 28 | I | 25 | 100 |
| IDKLAPX16175 | C1 | M16 x 175 Ø16 | 16 | 58 | K | 25 | 50 |
| IDKLAPX20170 | C1&C2 | M20 x 170 Ø20 | 20 | 32 | K | 20 | 40 |



IDKLAPX

Opt.1 ETA Assessed. Zinc-plated shaft.
ATLANTIS C3-L clip

| Code No | MXL | MAX. FIXTURE THICKNESS (mm) | DRILL Ø (mm) | HOLE DEPTH MIN. (mm) | MIN. ANCHOR DEPTH (mm) | INSTALLATION KEY (mm) | TORQUE (NM) | AXIS LETTER (mm) | Ø ELEMENT TO FIX (mm) | MIN. SUBSTRATE THICKNESS (mm) | MIN. DISTANCE TO EDGE "A" (mm) | MIN. DISTANCE FROM AXIS "B" (mm) | TENSION LOAD NON-CRACKED CONCRETE (kg) | SHEAR LOAD NON-CRACKED CONCRETE (kg) | TENSION LOAD CRACKED CONCRETE (kg) | SHEAR LOAD CRACKED CONCRETE (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 | 1014 | 437 | 1014 |
| IDKLAPX10115 | M10 x 115 | 35 | 10 | 75 | 68 | 7 | 40 | G | 12 | 120 | 90 | 180 | 777 | 1014 | 437 | 1014 |
| IDKLAPX12110 | M12 x 110 | 14 | 12 | 85 | 80 | 19 | 60 | F | 14 | 140 | 105 | 210 | 1214 | 1474 | 777 | 1474 |
| IDKLAPX12130 | M12 x 130 | 34 | 12 | 85 | 80 | 19 | 60 | H | 14 | 140 | 105 | 210 | 1214 | 1474 | 777 | 1474 |
| IDKLAPX16145 | M16 x 145 | 28 | 16 | 105 | 97 | 24 | 100 | I | 18 | 170 | 128 | 255 | 1699 | 2744 | 1214 | 2620 |
| IDKLAPX16175 | M16 x 175 | 58 | 16 | 105 | 97 | 24 | 100 | K | 18 | 170 | 128 | 255 | 1699 | 2744 | 1214 | 2620 |
| IDKLAPX20170 | M20 x 170 | 32 | 20 | 125 | 114 | 30 | 200 | K | 22 | 200 | 150 | 300 | 2388 | 4258 | 1456 | 3343 |

IDKLAH

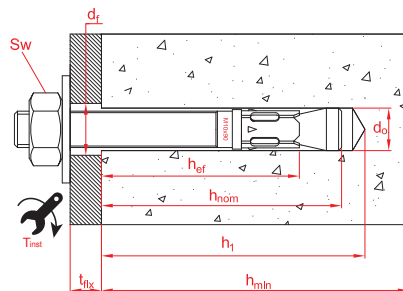
Through bolt anchor for heavy loads in uncracked concrete



IDKLAH

Opt.7 ETA Assessed. Zinc-plated shaft. Zinc-plated clip

| Code No | Size | Thickness Max. Fixture (mm) | Axis Letter (Length) | | |
|-------------|---------------|-----------------------------|----------------------|-----|-----|
| IDKLAH08075 | M8 x 75 Ø8 | 5 | C | 100 | 600 |
| IDKLAH08120 | M8 x 120 Ø8 | 50 | G | 100 | 400 |
| IDKLAH10090 | M10 x 90 Ø10 | 10 | E | 100 | 400 |
| IDKLAH10120 | M10 x 120 Ø10 | 40 | G | 50 | 300 |
| IDKLAH12110 | M12 x 110 Ø12 | 18 | F | 50 | 200 |
| IDKLAH16145 | M16 x 145 Ø16 | 23 | I | 25 | 100 |



IDKLAH

Opt.7 ETA Assessed. Zinc-plated shaft. Zinc-plated clip

| Code No | MXL | MAX. FIXTURE THICKNESS (mm) | DRILL Ø (mm) | HOLE DEPTH MIN. (mm) | MIN. ANCHOR DEPTH (mm) | INSTALLATION KEY (mm) | TORQUE (NM) | AXIS LETTER (mm) | Ø ELEMENT TO FIX (mm) | MIN. SUBSTRATE THICKNESS (mm) | MIN. DISTANCE TO EDGE "A" (mm) | MIN. DISTANCE FROM AXIS "B" (mm) | TENSION LOAD NON-CRACKED CONCRETE (kg) | SHEAR LOAD NON-CRACKED CONCRETE (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 | 1251 | 1200 |
| IDKLAH16145 | M16 x 145 | 23 | 16 | 110 | 104 | 24 | 120 | I | 18 | 168 | 126 | 252 | 1887 | 2337 |

Through Bolt Anchor

The background is a solid blue color. There are several white geometric lines scattered across the page. One line starts from the left edge, goes up and to the right, then turns horizontal to the right. Another line starts from the top edge, goes right, then turns down and to the left. A third line starts from the right edge, goes down and to the left, then turns horizontal to the left. A fourth line starts from the bottom edge, goes up and to the right, then turns horizontal to the right. These lines create a sense of movement and structure around the central text.

DROP-IN EXPANSION ANCHOR

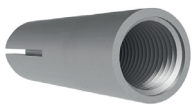


Drop-in Expansion Anchor

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.



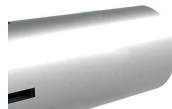
Fins. The expansion of the cone causes the fins to expand, producing friction against the walls of the base material to enable fastening.



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 STRUCTURAL FIXINGS IN CRACKED & UNCRACKED CONCRETE | ETA NON-STRUCTURAL FIXINGS | FIRE RESISTANCE | VdS CEA 4001 compliant |
|----------|------------------|---|----------------------------------|-----------------|---------------------------|
| 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

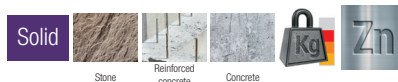
Zinc-plated. Opt.7 ETA Assessed & for non-structural applications



| Code No | Size | Length | | |
|-------------|--------------|--------|----|-----|
| IDCAHEHOM20 | M20 x 80 Ø25 | 80 | 25 | 100 |

IDCAHECL

With collar. Zinc-plated. Opt.7 ETA Assessed & for non-structural applications



| Code No | Size | Length | | |
|--------------|--------------|--------|-----|-------|
| IDCAHECLOM08 | M8 x 30 Ø10 | 30 | 100 | 1.600 |
| IDCAHECLOM10 | M10 x 40 Ø12 | 40 | 50 | 800 |
| IDCAHECLOM12 | M12 x 50 Ø15 | 50 | 50 | 400 |
| IDCAHECLOM16 | M16 x 65 Ø20 | 65 | 25 | 200 |

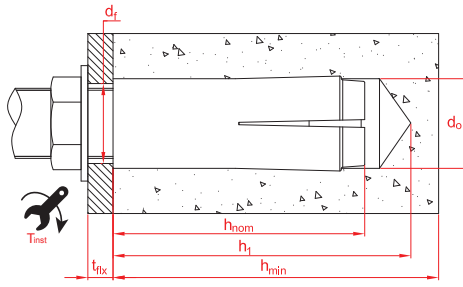
IDCAHEHC

Short. Zinc-plated. ETA Assessed for non-structural applications



| Code No | Size | Length | | |
|-------------|----------|--------|-----|-------|
| IDCAHEHCM08 | M8 x 25 | 25 | 100 | 1.600 |
| IDCAHEHCM10 | M10 x 25 | 25 | 50 | 800 |
| IDCAHEHCM12 | M12 x 25 | 25 | 50 | 800 |

IDCAHE



IDCAHEHO

Opt.7 ETA Assessed. Zinc-plated shaft.
Zinc-plated clip

| Code No | MXL | DRILL Ø (mm) | HOLE DEPTH MIN. (mm) | MIN. ANCHOR DEPTH (mm) | TORQUE (NM) | Ø ELEMENT TO FIX (mm) | MIN. SUBSTRATE THICKNESS (mm) | MIN. DISTANCE TO EDGE "A" (mm) | MIN. DISTANCE FROM AXIS "B" (mm) | TENSION LOAD NON-CRACKED CONCRETE (kg) | SHEAR LOAD NON-CRACKED CONCRETE (kg) |
|-------------|-----|--------------|----------------------|------------------------|-------------|-----------------------|-------------------------------|--------------------------------|----------------------------------|--|--------------------------------------|
| IDCAHEHOM20 | M20 | 25 | 86 | 80 | 100 | 22 | 160 | 280 | 160 | 1220 | 2767 |

IDCAHECL

With collar. Zinc-plated. Opt.7 ETA Assessed & for non-structural applications

| Code No | MXL | DRILL Ø (mm) | HOLE DEPTH MIN. (mm) | MIN. ANCHOR DEPTH (mm) | TORQUE (NM) | Ø ELEMENT TO FIX (mm) | MIN. SUBSTRATE THICKNESS (mm) | MIN. DISTANCE TO EDGE "A" (mm) | MIN. DISTANCE FROM AXIS "B" (mm) | TENSION LOAD NON-CRACKED CONCRETE (kg) | SHEAR LOAD NON-CRACKED CONCRETE (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 | 1893 |

IDCAHEHC

With collar. Zinc-plated. Opt.7 ETA Assessed & for non-structural applications

| Code No | MXL | DRILL Ø (mm) | HOLE DEPTH MIN. (mm) | MIN. ANCHOR DEPTH (mm) | TORQUE (NM) | Ø ELEMENT TO FIX (mm) | MIN. SUBSTRATE THICKNESS (mm) | MIN. DISTANCE TO EDGE "A" (mm) | MIN. DISTANCE FROM AXIS "B" (mm) | TENSION LOAD NON-CRACKED CONCRETE (kg) | SHEAR LOAD NON-CRACKED CONCRETE (kg) |
|-------------|----------|--------------|----------------------|------------------------|-------------|-----------------------|-------------------------------|--------------------------------|----------------------------------|--|--------------------------------------|
| IDCAHEHCM08 | M8 x 25 | 10 | 28 | 25 | 11 | 9 | 80 | 60 | 75 | 101 | 101 |
| IDCAHEHCM10 | M10 x 25 | 12 | 28 | 25 | 17 | 12 | 80 | 60 | 75 | 162 | 162 |
| IDCAHEHCM12 | M12 x 25 | 15 | 29 | 25 | 38 | 14 | 80 | 60 | 75 | 162 | 162 |

Drop-in Expansion Anchor

TRUE SOLUTION | **INKA**[®]
FIXING SYSTEMS

