



Through Bolt

DESCRIPTION

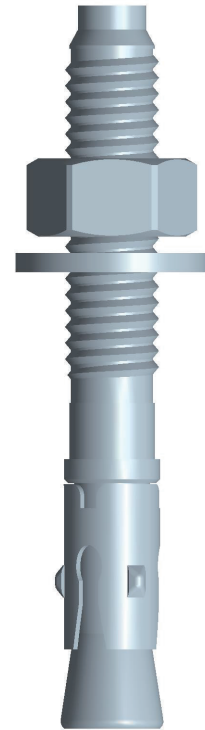
The Through Bolts is made of carbon steel or stainless steel. This anchor is assembled with a three-segment expansion clip and endowed with long threaded rod, allows fastening on stiff material (concrete, natural stone). The pre-assembled nut and the washer DIN 125 allows a fast installation and the shape of expansion clip avoid the rotation of the anchor while tightening the nut.

TYPICAL APPLICATION

- ✓ Steel structures
- ✓ Column base plates
- ✓ Seatings
- ✓ Barriers
- ✓ Cable racks
- ✓ Handrails
- ✓ Ladders
- ✓ Façade systems

FEATURES

- Made from cold-formed carbon steel, zinc-plated to 5µm
- Two embedment depths for a wide range of fastening thicknesses
- Raised impact section prevents thread damage during installation
- Pre-assembled to save time
- Drill bit size is same as anchor size for easy installation



MATERIAL SPECIFICATION

Component	Standard	Mechanical Properties
Anchor Body	EN 10263	Carbon steel
Expansion Clip	EN 10263-4	Carbon steel
Corrosion protection	EN ISO 4042	Zinc plating, Min.5 µm

ANCHOR SELECTION

Part No	Size	Diameter (mm)	Length (mm)	Drill Dia (mm)	Box (pcs)
601508075	M8 × 75	8	75	8	100
601508090	M8 × 90	8	90	8	100
601510090	M10 × 90	10	90	10	100
601510100	M10 × 100	10	100	10	50
601512100	M12 × 100	12	110	12	50
601512100	M12 × 110	12	110	12	50
601512120	M12 × 120	12	120	12	50
601516120	M16 × 120	16	120	16	25
601516140	M16 × 140	16	140	16	25

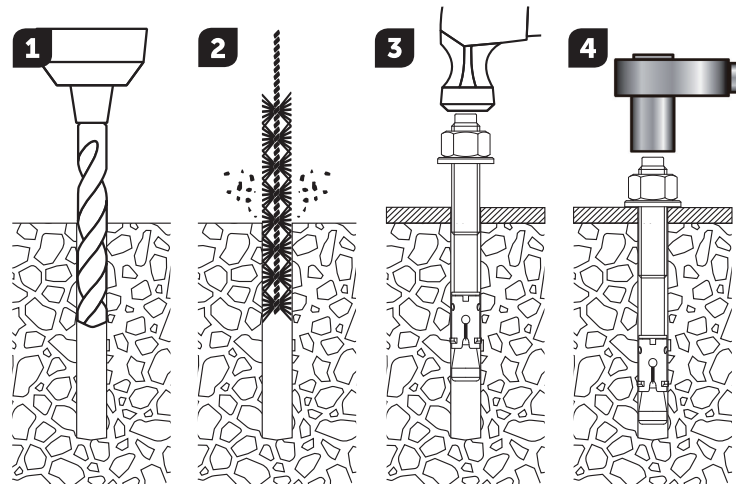
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INSTALLATION

Size	d (mm)	L (mm)	d _o (mm)	h ₁ (mm)	t _{fix} (mm)	h _{ef} (mm)
M8 × 75	8	75	M8	65	5	48
M8 × 90	8	90	M8	70	20	48
M10 × 90	10	90	M10	70	10	55
M10 × 100	10	100	M10	85	25	55
M12 × 100	12	100	M12	85	10	65
M12 × 110	12	110	M12	85	18	65
M12 × 120	12	120	M12	100	20	65
M16 × 120	16	120	M16	100	5	84
M16 × 140	16	140	M16	110	23	84

* d = Anchor diameter, L= Total length, d_o= Drill hole diameter, h₁= Min. Drill hole depth, t_{fix}= Fixture thickness, h_{ef}=Effective anchorage depth.



PERFORMANCE DATA

Characteristic resistance

Anchor size	M8		M10		M12		M16	
h _{ef} (Effective anchorage depth) ≥	30	40	40	50	50	65	65	80
Tensile (KN)	8.3	12.0	12.0	14.0	14.5	20.0	26.5	36.1
Shear(KN)	8.3	8.5	12.8	14.4	17.0	22.6	42.4	42.4