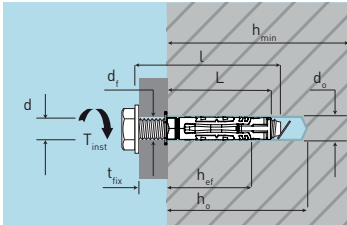




Universal mechanical anchor, with double complementary expansion, for non-structural anchoring in non-cracked concrete, solid or hollow masonry.



APPLICATION

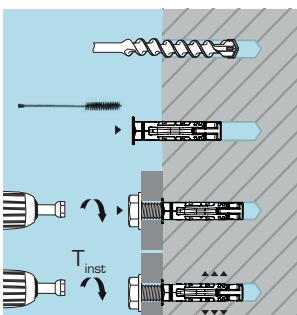
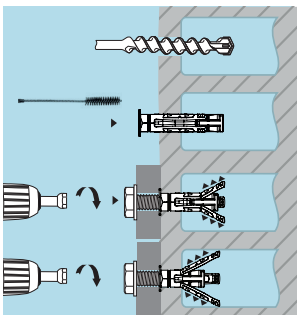
FIXING OF:

- Brackets for ducting, clamps, steel tracks, switchboards in electrical installations
- Support rails, clamps, hangers in HVAC
- Metal joinery
- Fencing, gates, handrails
- Industrial doors
- Facade frameworks
- Plumbing appliances
- Signs
- Antennas

MATERIAL

- Expansion sleeve: cold stamping, 5 µm blue-chromate zinc plated steel
- Plastic sleeve: high strength modified copolymer
- Cone: 5 µm blue-chromate zinc plated steel
- Washer: 7 µm blue-chromate zinc plated steel
- Screw: high strength cl. 8.8 steel, 5 µm zinc plated
- Protection: cellulose with adhesive

INSTALLATION



Technical Data

Anchor size	Anchorage depth	Fixture max. thickness	Screw size (ø x length)	Drilling depth	Drilling diameter	Min. concrete thickness	Clearance diameter	Sleeve length	Tightening torque*	CODE
	mm	mm	mm	mm	mm	mm	mm	mm	Nm* (C20/25)	



TRIDER 5	M5/8	40	-	M5 x > tfix + 49	60	8	110	6	49	8	569550
TRIDER 6	M6/10	43	-	M6x > tfix + 55	65	10	110	7	55	10	569551
TRIDER 8	M8/12	46	-	M8x > tfix + 58	70	12	110	9	58	25	569552
TRIDER 10	M10/15	57	-	M10x > tfix + 73	85	15	120	11	73	40	569553

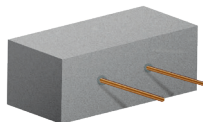


TRIDER/B 5	M5x 60/10	40	10	M5x60	60	8	110	6	49	8	569555
TRIDER/B 6	M6x65/10	43	10	M6x65	65	10	110	7	55	10	569556
TRIDER/B 8	M8x70/10	46	10	M8x70	70	12	110	9	58	25	569557
TRIDER/B 10	M10x90/15	57	15	M10x90	85	15	120	11	73	40	569558

Mechanical Characteristics

TRIDER/B		M5	M6	M8	M10	
Galvanized steel, with 8.8 screw						
f_{uk}	N/mm ²	Tensile strength	800	800	800	800
f_{yk}	N/mm ²	Yield strength	640	640	640	640
A_s	mm ²	Cross section	14,2	20,1	36,6	58,0
$M_{Rk,s}^0$	Nm	Characteristic bending moment	6,0	12,2	30,0	59,8
M	Nm	Recommended bending moment	2,5	5,0	12,4	24,8

* Tightening torque for installation on concrete \geq C20/25


Loads in non-cracked concrete, C20/25 for anchors without edge or spacing influence

CHARACTERISTIC LOAD, in kN
1 kN ≈ 100 kg

TENSILE						SHEAR					
Size		M5	M6	M8	M10	Size		M5	M6	M8	M10
h_{ef}	mm	40	43	46	57	h_{ef}	mm	40	43	46	57
N_{Rk}	kN	3,5	5,4	6,8	13,5	V_{Rk}	kN	4,7	6,4	13,2	19,3

DESIGN LOAD

TENSILE						SHEAR					
Size		M5	M6	M8	M10	Size		M5	M6	M8	M10
h_{ef}	mm	40	43	46	57	h_{ef}	mm	40	43	46	57
N_{Rd}	kN	1,7	2,6	3,2	6,4	V_{Rd}	kN	2,2	3,0	6,3	9,2
$\gamma_{Mc} = 2,1$						$\gamma_{Mc} = 2,1$					

ADMISSIBLE LOAD

TENSILE						SHEAR					
Size		M5	M6	M8	M10	Size		M5	M6	M8	M10
h_{ef}	mm	40	43	46	57	h_{ef}	mm	40	43	46	57
N_{adm}	kN	1,2	1,8	2,3	4,6	V_{adm}	kN	1,6	2,2	4,5	6,6
$\gamma_F = 1,4; \gamma_{Mc} = 2,1$						$\gamma_F = 1,4; \gamma_{Mc} = 2,1$					

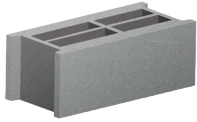
INSTALLATION DISTANCE

DISTANCE						
Size		M5	M6	M8	M10	
h_{ef}	mm	40	43	46	57	
Critical distance between two anchors ($S_{cr,N}$) - tensile load		mm	120	130	140	170
Critical edge distance ($C_{cr,N/V}$) - tensile/shear load		mm	60	65	70	85



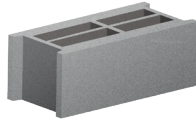
Loads in masonry, for anchors without edge or spacing influence

HOLLOW CONCRETE BLOCK (lightweight, non-plastered)



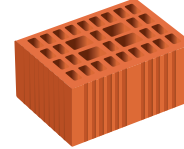
Type	B40 - 200x400x200 EN 771-3
Specific weight	kg/dm ³ ≥ 1,0
Compressive strength	N/mm ² ≥ 4,0

HOLLOW CONCRETE BLOCK (heavy, non-plastered)



Type	BC - 200X250X500 EN 771-3
Specific weight	kg/dm ³ ≥ 1,6
Compressive strength	N/mm ² ≥ 6,0

HOLLOW CLAY BRICK (non-plastered)



Type	D. UNI
Specific weight	kg/dm ³ ≥ 1,2
Compressive strength	N/mm ² ≥ 18,0

CHARACTERISTIC LOAD, in kN

1 kN ≈ 100 kg

Size		M5	M6	M8	M10
N _{Rk}	kN	1,0	1,3	1,4	1,8

Size		M5	M6	M8	M10
N _{Rk}	kN	1,9	2,6	2,9	3,8

Size		M5	M6	M8	M10
N _{Rk}	kN	1,6	1,7	2,0	2,5

DESIGN LOAD

Size		M5	M6	M8	M10
N _{Rd}	kN	0,4	0,5	0,6	0,7
γMm = 2,5					

Size		M5	M6	M8	M10
N _{Rd}	kN	0,8	1,0	1,2	1,5
γMm = 2,5					

Size		M5	M6	M8	M10
N _{Rd}	kN	0,6	0,7	0,8	1,0
γMm = 2,5					

ADMISSIBLE LOAD

Size		M5	M6	M8	M10
N _{amm}	kN	0,3	0,4	0,4	0,5
γF = 1,4; γMm = 2,5					

Size		M5	M6	M8	M10
N _{amm}	kN	0,6	0,7	0,8	1,1
γF = 1,4; γMm = 2,5					

Size		M5	M6	M8	M10
N _{amm}	kN	0,5	0,5	0,6	0,7
γF = 1,4; γMm = 2,5					