R-RLK-P Rawlok - Bolt Projecting

All purpose expansion anchor for use in medium weight applications







Product information

Features and benefits

- Medium weight applications anchor
- Anchor designed for optimum performance in most base materials
- Integral collapse feature to ensure maximum clamping force is applied to the fixture
- Bolt and drill size marked on sleeve for accurate installation

Applications

- Radiators
- Signs
- Stadium seating
- Satelite dishes
- Wall plates
- Shutter
- Garage doors

Base materials

Approved for use in:

- Non-cracked concrete C20/25-C50/60
- Solid Brick
- Reinforced concrete

Also suitable for use in:

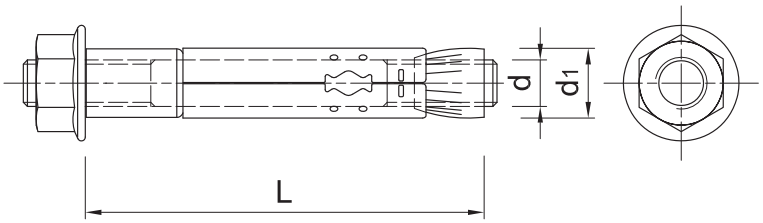
- Natural Stone (after site testing)

Installation guide



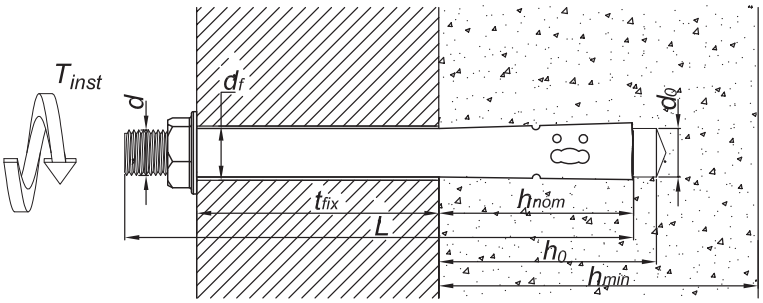
1. Drill a hole of required diameter and depth. Note: When fixing into brickwork, mortar joints should be avoided
2. Remove debris and thoroughly clean hole with brush and pum
3. Insert Rawlock through the fixture into the hole
4. Tighten to the recommended torque

Product information



Size	Product Code	Anchor		Fixture	
		Diameter	Length	Max. thickness	Hole diameter
		d	L	t_{fix}	d_f
		[mm]	[mm]	[mm]	[mm]
M6	R-RLK-P-06040	6	40	10	10
	R-RLK-P-06065	6	65	35	10
M8	R-RLK-P-08075	8	75	36	12
	R-RLK-P-08095	8	95	55	12
M10	R-RLK-P-10100	10	100	50	14
	R-RLK-P-10130	10	130	80	14

Installation data



Size			M6	M8	M10
Thread diameter	d	[mm]	6	8	10
Hole diameter in substrate	d_0	[mm]	8	10	12
Installation torque (Concrete)	T_{inst}	[Nm]	6	11	22
Installation torque (Blockwork 14.0MPa)	T_{inst}	[Nm]	3	6	11
Installation torque (Blockwork 7.0MPa)	T_{inst}	[Nm]	2	4	8
Min. hole depth in substrate	h_0	[mm]	35	45	55
Min. installation depth	h_{nom}	[mm]	35	45	55
Min. substrate thickness	h_{min}	[mm]	55	65	85
Min. spacing	s_{min}	[mm]	50	60	70
Min. edge distance	c_{min}	[mm]	50	60	70

Basic performance data

Performance data for single anchor without influence of edge distance and spacing - ETAG 001

Size		M6	M8	M10
NON-CRACKED CONCRETE				
Effective embedment depth h_{ef}	[mm]	26.00	36.00	43.00
BLOCKWORK 7.0MPA				
Effective embedment depth h_{ef}	[mm]	26.00	36.00	43.00

Basic performance data

Size		M6	M8	M10
CHARACTERISTIC LOAD				
TENSION LOAD N_{Rk}				
NON-CRACKED CONCRETE	[kN]	6.90	9.30	11.40
BLOCKWORK 7.0MPA	[kN]	2.40	3.50	4.50
SHEAR LOAD V_{Rk}				
NON-CRACKED CONCRETE	[kN]	5.40	9.00	12.60
BLOCKWORK 7.0MPA	[kN]	2.50	2.70	3.10
DESIGN LOAD				
TENSION LOAD N_{Rd}				
NON-CRACKED CONCRETE	[kN]	3.19	4.31	5.28
BLOCKWORK 7.0MPA	[kN]	1.11	1.62	2.08
SHEAR LOAD V_{Rd}				
NON-CRACKED CONCRETE	[kN]	3.00	5.00	7.00
BLOCKWORK 7.0MPA	[kN]	1.39	1.50	1.72
RECOMMENDED LOAD				
TENSION LOAD N_{rec}				
NON-CRACKED CONCRETE	[kN]	2.28	3.08	3.77
BLOCKWORK 7.0MPA	[kN]	0.79	1.16	1.49
SHEAR LOAD V_{rec}				
NON-CRACKED CONCRETE	[kN]	2.14	3.57	5.00
BLOCKWORK 7.0MPA	[kN]	0.99	1.07	1.23

Design performance data

Size			M6	M8	M10
Effective embedment depth	h_{ef}	[mm]	26.00	36.00	43.00
TENSION LOAD					
PULL-OUT FAILURE; NON-CRACKED CONCRETE C20/25					
Characteristic resistance	$N_{Rk,p}$	[kN]	6.90	9.30	11.40
Design resistance γ_M*= 2.16	$N_{Rd,p}$	[kN]	3.19	4.31	5.28
PULL-OUT FAILURE; BLOCKWORK 7.0MPA					
Characteristic resistance	$N_{Rk,p}$	[kN]	2.40	3.50	4.50
Design resistance γ_M*= 2.16	$N_{Rd,p}$	[kN]	1.11	1.62	2.08
PULL-OUT FAILURE; BLOCKWORK 14.0MPA					
Characteristic resistance	$N_{Rk,p}$	[kN]	3.20	4.50	5.60
Design resistance γ_M*= 2.16	$N_{Rd,p}$	[kN]	1.48	2.08	2.59
PULL-OUT FAILURE; BLOCKWORK 20.5MPA					
Characteristic resistance	$N_{Rk,p}$	[kN]	3.70	5.00	6.00
Design resistance γ_M*= 2.16	$N_{Rd,p}$	[kN]	1.71	2.31	2.78
SHEAR LOAD					
NON-CRACKED CONCRETE C20/25					
Characteristic resistance	V_{Rk}	[kN]	5.40	9.00	12.60
Design resistance γ_{Mc}= 1.8	V_{Rd}	[kN]	3.00	5.00	7.00
BLOCKWORK 7.0MPA					
Characteristic resistance	V_{Rk}	[kN]	2.50	2.70	3.10
Design resistance γ_{Mc}= 1.8	V_{Rd}	[kN]	1.39	1.50	1.72
BLOCKWORK 14.0MPA					
Characteristic resistance	V_{Rk}	[kN]	5.20	8.60	10.30
Design resistance γ_{Mc}= 1.8	V_{Rd}	[kN]	2.89	4.78	5.72
BLOCKWORK 20.5MPA					
Characteristic resistance	V_{Rk}	[kN]	5.20	8.60	10.30
Design resistance γ_{Mc}= 1.8	V_{Rd}	[kN]	2.89	4.78	5.72

Product commercial data

Size	Product Code	Anchor		Quantity [pcs]			Weight [kg]			Bar Codes
		Diameter [mm]	Length [mm]	Box	Outer	Pallet	Box	Outer	Pallet	
M6	R-RLK-P-06040	6	40	100	100	18000	1.80	1.80	354.0	5010445695087
	R-RLK-P-06065	6	65	50	50	9000	1.30	1.30	264.0	5010445695100
M8	R-RLK-P-08075	8	75	50	50	15000	2.4	2.4	750.0	5010445695162
	R-RLK-P-08095	8	95	25	25	7500	1.53	1.53	487.5	5010445695186
M10	R-RLK-P-10100	10	100	10	10	3000	0.90	0.90	298.8	5010445695247
	R-RLK-P-10130	10	130	10	10	3000	1.14	1.14	372.0	5010445695254