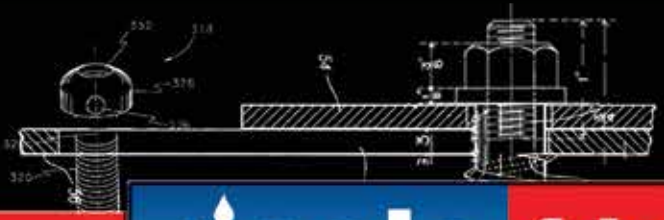
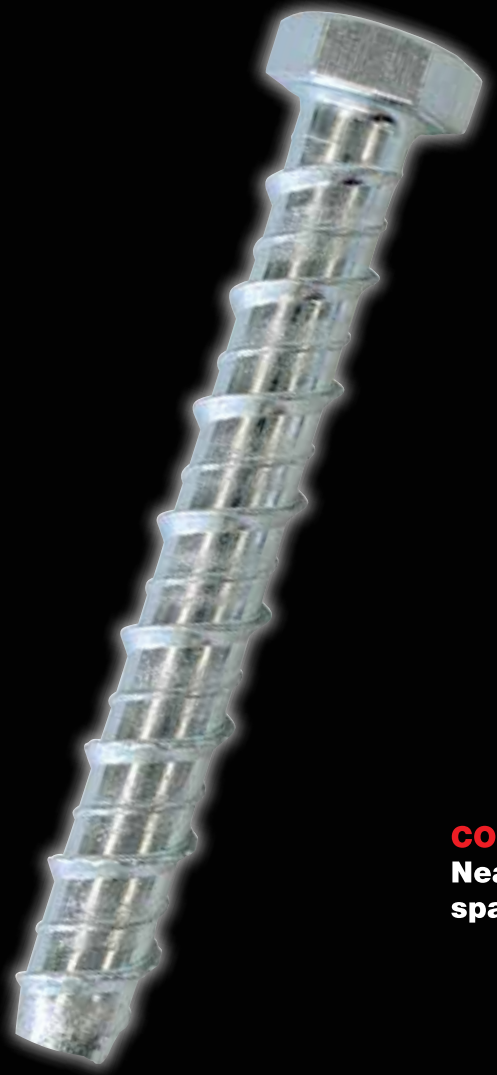


ripple friulsider

FM-CLK

Hex Head Screw for Structural Fixings

The Structural Anchor for Concrete



DIRECT INSTALLATION
No plug required

Thread HILO

HIGH LOADING CAPACITY
In relation to diameter

CORRECT FUNCTIONING
Near edges and with reduced spacing distances

ALSO AVAILABLE IN: NAUTILUS 1000 h

"Special anti-corrosion coating - 1000hours in salt spray test"

friulsider

since 1966

CERTIFICATION OF QUALITY MANAGEMENT SYSTEM
ISO 9001 Cert. n° 1085

CERTIFICATION OF ENVIRONMENTAL MANAGEMENT SYSTEM
ISO 14001 Cert. n° 0050A

FM-CLK

Hex Head screw for Structural Fixings

Versions Available

- White Zinc Plated Hex head screw
- Nautilus Hex Head screw

FEATURES

- High Shear Loads
- No Plug required
- Diameter Vs Loads
- Edge Distance
- Spacing Distance
- Re-usable
- Drill Diameter

ADVANTAGES

- Safe Anchoring in Concrete
- Direct Installation
- High Loading Capacity
- Low due to Keying Principle
- Correct funtioning with reduced spacing
- Can remove and reuse
- 2mm less than Anchor diameter

BASE MATERIALS:

- ● Concrete
- ● Solid Brick
- ◓ Honeycomb Brick
- ◓ Solid Stone

● suitable applications ◓ partially suitable applications

FM-CLK

White Zinc Plated Hex head screw

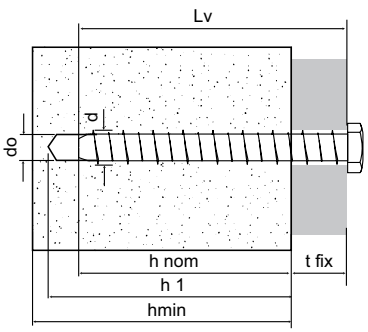
WZP

ALSO AVAILABLE IN:

NAUTILUS 1000 h

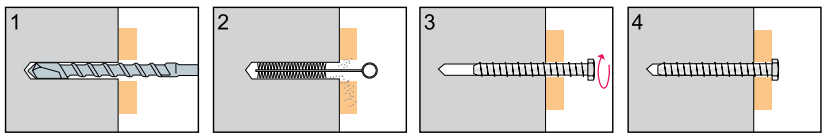
Special anti-corrosion coating with glossy finish - 1000 hours in salt spray test

Code	do mm	d x Lv mm	tfix mm	sw	Pkg.	Outer box
72000b10060	8	10x60	20	15	100	600
72000b10075	8	10x75	35	15	100	500
72000b10100	8	10x100	60	15	100	500
72000b10130	8	10x130	90	15	50	300
72000b10150	8	10x150	110	15	50	300
72000b12060	10	12x60	10	17	50	300
72000b12075	10	12x75	25	17	50	300
72000b12100	10	12x100	50	17	50	300
72000b12130	10	12x130	80	17	25	150
72000b12150	10	12x150	100	17	25	150
72000b14075	12	14x75	15	19	50	300
72000b14100	12	14x100	40	19	50	250
72000b14130	12	14x130	70	19	25	150
72000b14150	12	14x150	90	19	20	120



d	=	screw diameter	Lv	=	screw length
do	=	hole diameter	sw	=	wrench
h1	=	minimum hole depth	tfix	=	fixture thickness
hmin	=	minimum support thickness	Tmax	=	maximum torque
hnom	=	nominal embedment depth			

Installation Procedure



DESIGN AND RECOMMENDED(1) LOADS

Single anchor with large anchor spacing and edge distances in non-cracked concrete C20/25

Anchor			Ø10	Ø12	Ø14
Minimum support thickness	h_{min}	mm	100	100	120
Depth of hole	h_1	mm	50	60	70
Nominal embedment depth	h_{nom}	mm	40	50	60
Hole diameter	d_0	mm	8	10	12
Spacing	$S_{cr.N}$	mm	120	150	180
Edge distance	$C_{cr.N}$	mm	60	75	90
Tensile non-cracked concrete	N_{rd}	kN	3.5	4.2	5.6
	N	kN	2.5	3.0	4.0
Shear C >= 10xhef	V_{rd}	kN	9.8	14.0	21.0
	V	kN	7.0	10.0	15.0
Minimum spacing	S_{min}	mm	50	60	70
Minimum edge distance	C_{min}	mm	50	60	70
Shear C = C_{min}	$V_{rd.cmin}$	kN	2.1	3.2	4.2
	V_{cmin}	kN	1.5	2.3	3.0
Torque max	T_{max}	Nm	40	80	100

1kN = 100 kgf

(1) The recommended loads N and V derive from the mean ultimate loads and are inclusive of the total safety factors γ=4 (shear=3).

In the absence of CE markings. the recommended loads derive from tests carried out in the Friulsider laboratory in accordance with the appropriate standards.
The load values are only valid if the installation has been carried out correctly. The design engineer is responsible for the designing and calculation of the fixing.

Ripple Construction Products Pvt Ltd

ripple friulsider

Corp Off: 303 & 403, Royal Arcadia, Above SBI Bank, Balkampet,
S.R. Nagar, Hyderabad - 500 038, INDIA
Tel: +91 40 4004 0707 Fax: +91 40 4004 0686
E-mail: marketing@rippleindia.in | Website:www.rippleindia.in