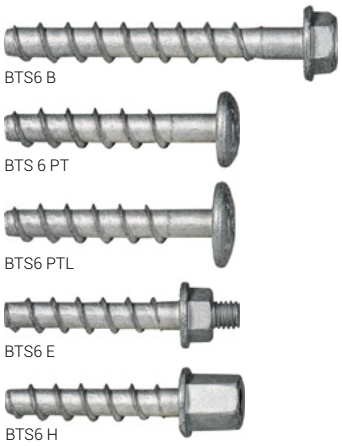
TECHNICAL DATA SHEET: BTS-6



APPROVALS

For multiple use for non-structural applications in cracked concrete

Fire resistance class **F 120**

M8, M10

BENEFITS

- ETA approved (ETA 16-0848).
- Approved for cracked and non cracked concrete for redundant non-structural systems.
- Multi-application.
- You can install M6-M8 clamps, fix supports or channels, install threaded bars, ...
- Two embedment depths (35/50 mm).
- No expansion.
- Low edge distance and spacing between anchors.
- One piece anchor.
- Low install torque using nut setter that allow the installation of three references, screw, rod and nut.
- Removable.
- High resistance to vibrations.
- Immediate load. No need to wait.
- Allows the installation with drilling machine using the drill, the adapter and nut setter.
- Fire resistance homologated.
- Material: manufactured in hardened steel
- Coating: organic coating Zn-Al flakes > 240H in SST.

BASE MATERIALS

- Concrete
- Solid brick
- Prefabricated hollow concrete slabs

MAIN DIMENSIONS (mm)

Reference	Recess	Ø Head	Nut length
BTS6 B	SW10	14	-
BTS6 PT	TX30	14,5	-
BTS6 PTL	TX30	19	-
BTS6 E M6	SW10	14	5
BTS6 E M8	SW10	14	15
BTS6 H M6	SW10	14	10
BTS6 H M6	SW10	14	15
BTS6 H M10	SW13	17	15

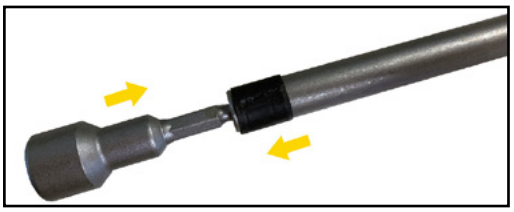
INSTALLATION TOOLS

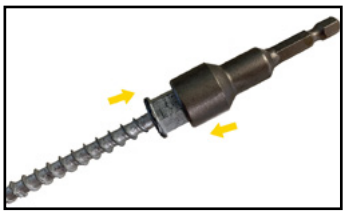
With set adaptor

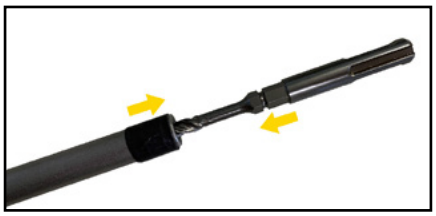
SDS Drill ø6 mm
Ref.: 6115SDSBTS6

Nut setter
Ref.: 910LLTRBCA

Adapter
Ref.: 9ATRBCA







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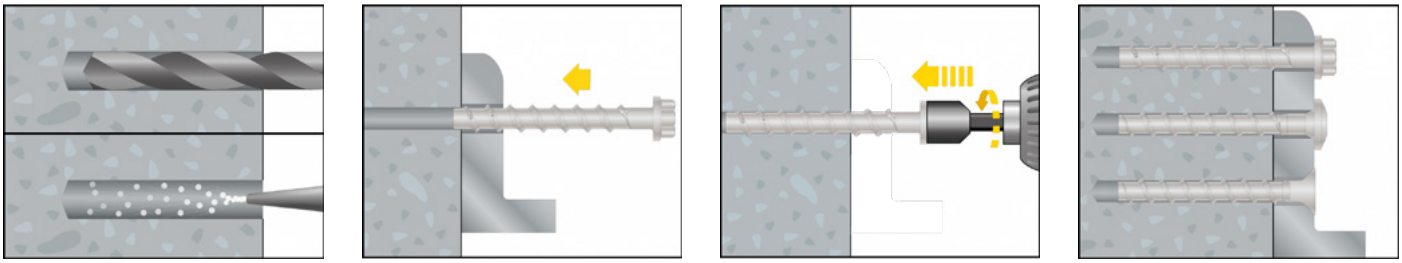
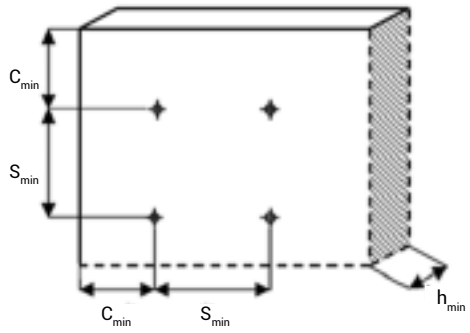
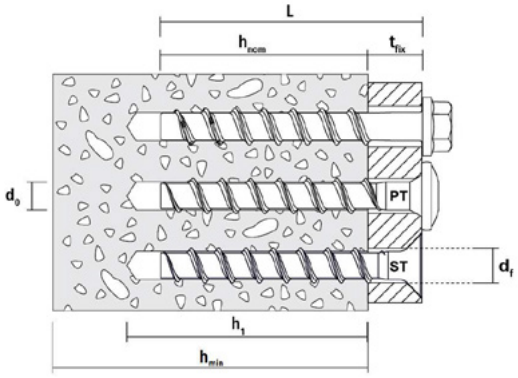
INSTALLATION PROCEDURE



Fast anchor in concrete, only three steps: drill, clean and thread.
If you use a drilling machine, you need to use adaptor to thread the anchor.

INSTALLATION PARAMETERS





Parameters	35 mm	50 mm
Hole diameter d_0	6	6
Embedment depth h_{nom}	35	50
Effective depth h_{eff}	26	39
Characteristhic spacing between anchor S_{cr} (mm)	160	160
Characteristic edge distance C_{cr} (mm)	80	80
Minimum spacing between anchor S_{min} (mm)	40	40
Minimum edge distance C_{min} (mm)	40	40
Minimum concrete thickness h_{min} (mm)	100	100
Max. installation torque T_{imp} impact wrench (Nm)	150	150

PERMISSIBLE LOADS

Permissible loads [kN] [1] [2]	35 mm	50 mm
Load in any direction C20/25	0.85	1,90
Load in any direction C5/60	1,23	2,38

(1) Allowable loads without influence of edge spacing and distance.
(2) The load figures include the partial safety factors of the resistors as per approval and a partial safety factor in action of YF = 1.4.
If the characteristic distances (C_{cr} or S_{cr}) are not met, the loads must be reduced. The minimum distances (S_{min}, C_{min}) must always be observed.

Small Things Matter

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LOADS, SPACING AND EDGE DISTANCE IN PREFABRICATED HOLLOW CONCRETE ≥ C45/55

	Allowable load in any direction [1] [2] h_{nom} = 35 mm F_{per} [kN]	Bending moment permitted M_{per} [Nm]²	Distance between anchors		Distance to edges	
			S_{cr} [mm]	S_{min} [mm]	C_{cr} [mm]	C_{min} [mm]
BTS 6	1,02	5,7	200	200	150	150

(1) Allowable loads without influence of edge spacing and distance.
(2) The load figures include the partial safety factors of the resistors as per approval and a partial safety factor in action of YF = 1.4.
If the characteristic distances (C_{cr} or S_{cr}) are not met, the loads must be reduced. The minimum distances (S_{min}, C_{min}) must always be observed.
Loads, spacing and edge distance for non-structural applications in precast concrete hollow core slabs: w / e ≤ 4.2 // Concrete ≥ C45 / 55 //
Lower edge thickness ≥ 35 mm.

FIRE RESISTANCES ACCORDING TO ETA APPROVAL/CE HOMOLOGATION

BTS6	Fire resistance class			H_{nom} ≥ 50 mm
Characteristic resistance	R30	FRk, fi	[kN]	0,2
	R60	FRk, fi	[kN]	0,2
	R90	FRk, fi	[kN]	0,1
	R120	FRk, fi	[kN]	0,1

Distances under fire exposure			
Spacing distance R30-R120	S_{cr}, fi	[mm]	160
Edge distance R30-R120	Ccr, fi	[mm]	80

The edge distance shall be ≥ 300mm, in case of fire attack from more than one side

APPLICATIONS

Fixing of rods, clamps, supports, profiles, ...




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