CELO

Made in Germany

For multiple use for non-structural applications in cracked concrete

Fire resistance class R 120

M8, M10

Concrete screw *BTS6*

Wide range of installations - fast and direct

CELO

Product advantages — BTS6

- **Concrete screw BTS6 with ETA approval for multiple use for non-structural applications in cracked and non-cracked concrete**
  The BTS6 is suitable for a wide variety of fixing applications due to the approval in cracked and non-cracked concrete.
- Also approved for fixing in **precast concrete hollow core slabs.**
- **Fire resistance class R 120**
  For even more safety in case of fire.
- **Wide range of installations**
  Thanks to different head designs and therefore a large number of connection options
- **Low setting depth; variable**
  Reduces installation effort. Higher loads with greater setting depth possible.
- **Fast assembly**
  Drill, screw in - finished.
- **Simple system with special accessories**
  Drilling and fixing with the same power tool without changing tools.
- **Removable**
  Also very suitable for temporary fixings.
- **Redundant fastening**
  i.e. if one anchor group is fastened, the load is transferred to the other fixing points if one anchor fails.

Redundant fastening

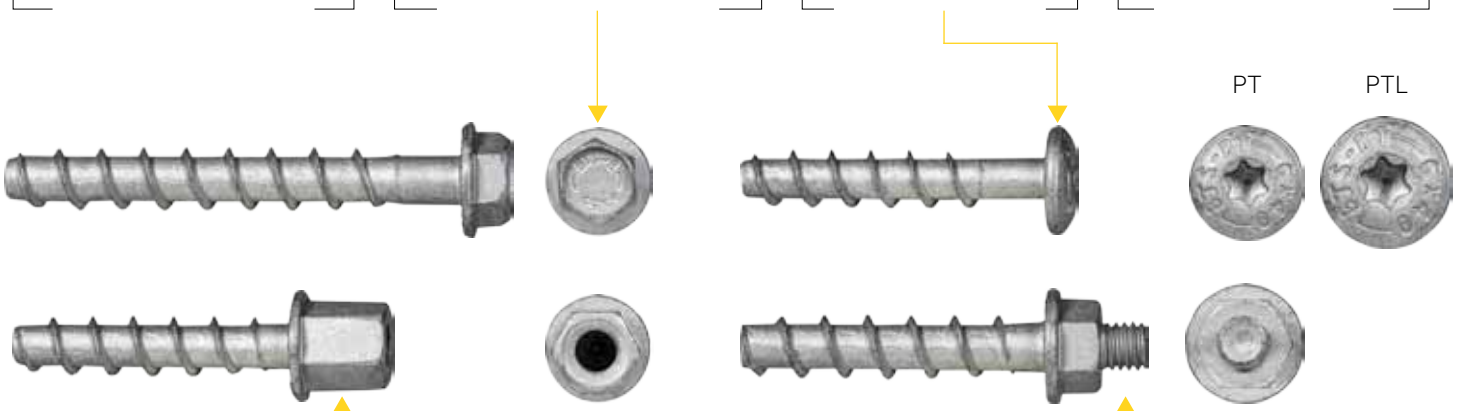
Number of fixing points	Number of fixings per fixing points	Load per fixing point [KN]
≥ 4	≥ 1	≤ 3
≥ 3	≥ 1	≤ 2

Zinc flake coating
for improved corrosion resistance and higher application security.

Hex-head with integral washer
No additional washer is required (time and cost saving).

Pan head
for an attractive and flat head.

The **special geometry and hardness of the thread**
ensure reliable and secure screwing in into the concrete.



Expansion-free anchoring
allows low edge distances and spacing.

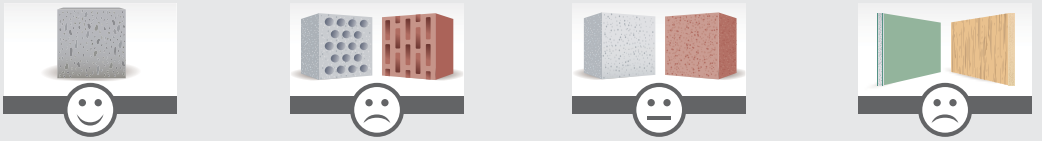
Various head designs
for flexible application areas.

Internal thread and connecting thread
No additional fixture is required, e.g. a clamp can be fixed directly to the concrete screw.

Concrete screw *BTS6*

Profile — BTS6

Suitable building materials



Category

Concrete screw for multiple use for non-structural applications in cracked and non-cracked concrete

Assortment

BTS6 B:
with hex-head and integral washer

BTS6 PT / PTL:
with Pan head

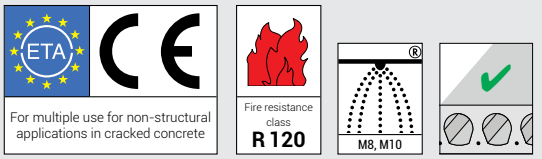
BTS6 E:
with connecting thread

BTS6 H:
with internal thread

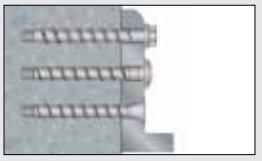
Sizes

Ø6, zinc flake coating

Approvals and certificates



Typical applications

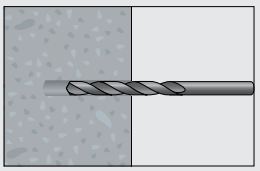


BTS6 in concrete
(Metal construction)

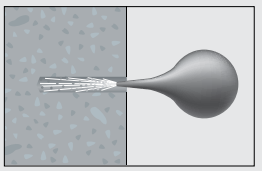
Suitable for through-mounting fixings such as:

- Sanitary installations
- Electrical installations
- Railings
- Mounting tracks
- Profiles
- Shelves
- Ventilation systems
- Clamps
- Hollow chamber ceilings

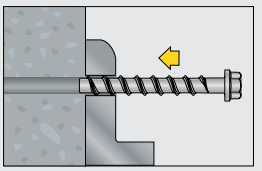
Mounting



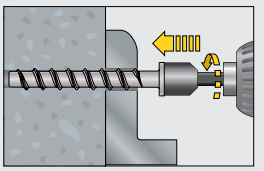
1. Drill hole



2. Clean hole



3. Push BTS6 through the fixture into the hole



4. Apply required setting torque

BTS6 B

BTS6 PT

BTS6 PT

Assortment – BTS6

BTS6 B with hex-head and integral washer, washer Ø: 14,0 mm, zinc flake coating

Type d_0 - L	Art-No	d_S x L [mm]	$h_1 \geq$ [mm]	$h_{nom} \geq$ [mm]	$t_{fix} \leq$ [mm]	Drive	Packing [pcs]	Packing [pcs]
6-40/5	9ZG640BTSB	7,5 x 40	40	35	5	SW10	150	750
6-55/5	9ZG655BTSB	7,5 x 55	40 / 55	35 / 50	20 / 5	SW10	100	500

BTS6 PT with Pan head (TX 30), head Ø: 14,5 mm, zinc flake coating

Type d_0 - L	Art-No	d_S x L [mm]	$h_1 \geq$ [mm]	$h_{nom} \geq$ [mm]	$t_{fix} \leq$ [mm]	Recess	Packing [pcs]	Packing [pcs]
6-40/5	9ZG640BTSPT	7,5 x 40	40	35	5	TX30	150	750
6-55/5	9ZG655BTSPT	7,5 x 55	40 / 55	35 / 50	20 / 5	TX30	100	500

BTS6 PTL with Pan head large (TX 30), head Ø: 19 mm, zinc flake coating

Type d_0 - L	Art-No	d_S x L [mm]	$h_1 \geq$ [mm]	$h_{nom} \geq$ [mm]	$t_{fix} \leq$ [mm]	Recess	Packing [pcs]	Packing [pcs]
6-40/5	9ZG640BTSPTL	7,5 x 40	40	35	5	TX30	150	750
6-55/5	9ZG655BTSPTL	7,5 x 55	40 / 55	35 / 50	20 / 5	TX30	100	500

BTS6 E with connecting thread, washer Ø: 14,0 mm, zinc flake coating

Type d_0 - L	Art-No	d_S x L [mm]	$h_1 \geq$ [mm]	$h_{nom} \geq$ [mm]	Connecting thread	Drive	Packing [pcs]	Packing [pcs]
6-35	9ZG635M6BTSE	7,5 x 35	40	35	M6 (L = 5 mm)	SW10	150	750
6-35	9ZG635M8BTSE	7,5 x 35	40	35	M8 (L = 15 mm)	SW10	100	500

BTS6 H with internal thread, washer Ø: M6 and M8: Ø 14 mm; M10: Ø 17 mm, zinc flake coating

Type d_0 - L	Art-No	d_S x L [mm]	$h_1 \geq$ [mm]	$h_{nom} \geq$ [mm]	Internal thread	Drive	Packing [pcs]	Packing [pcs]
6-35	9ZG635M6BTSH	7,5 x 35	40	35	M6 (L = 10 mm)	SW10	150	750
6-35	9ZG635M8BTSH	7,5 x 35	40	35	M8 (L = 15 mm)	SW10	100	500
6-50	9ZG650M8BTSH	7,5 x 50	55	50	M8 (L = 15 mm)	SW10	100	500
6-35	9ZG635M10BTSH	7,5 x 35	40	35	M10 (L = 15 mm)	SW13	100	500

BTS6 H

BTS6 H

BTS6 E

Accessories — BTS6

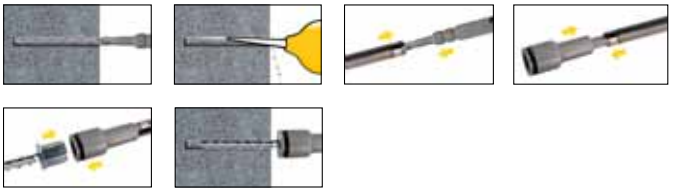
SDS special drill bit Ø6 mm
Usable drill length 105 mm

Special adapter
Put over the drill bit and the socket wrench

Socket wrench
Suitable for all sizes BTS6

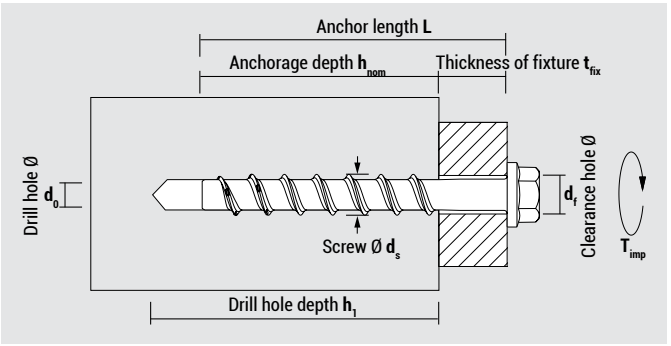
▶ Quick installation without changing tools.

Mounting



Accessories for concrete screw BTS6					**Packing**
Type	Art-No	d_0 [mm]	L [mm]	Recess	[pc]
Special drill bit SDS 6 mm	6115SDSTRBCA	6	175	SDS plus	1
Special adapter	9ATRBCA	13	145	2x hex-head	1
Socket wrench 10 (SW10)	910LLTRBCA	18	65	hexagon	1
Socket wrench 13 (SW13)	913M8LLTRB	20	65	hexagon	1

Loads and installation parameters — BTS 6



Loads, spacing and edge distance for multiple use for non-structural applications in **precast concrete hollow core slabs** C45/55

Type	Permissible load in any direction [1),2)] h_{nom} 35 mm	Permissible bending moment [2)]	Spacing		Edge distance	
	F_{per} [kN]	M_{per} [Nm]	S_{cr} [mm]	S_{min} [mm]	C_{cr} [mm]	C_{min} [mm]
BTS 6	1,02	5,7	200	200	150	150

[1)] Permissible loads without influence of spacing and edge distance
[2)] Load figures include the resistances´ partial safety factors as per approval and a partial safety factor on the action of $\gamma_F = 1.4$
If underrun the char. space or edge distance (C_{cr} or S_{cr}) the loads must be reduced. h_{min}, S_{min} and C_{min} must be observed.

Loads, spacing and edge distance for non-structural applications in precast concrete hollow core slabs: w/e ≤ 4,2 / concrete ≥ C45/5T / thickness of bottom flange ≥ 35 mm

Loads, spacing and edge distance for multiple use for non-structural applications in cracked **concrete** C20/25-C50/60

Type	Permissible load in any direction [1),2)]		Permissible bending moment [2)]	Spacing		Edge distance		Min. thickness of structural part	Max. torque of the impact wrench	Max. torque
	h_{nom} 35 mm	h_{nom} 50 mm								
	F_{per} [kN]	F_{per} [kN]	M_{per} [Nm]	S_{cr} [mm]	S_{min} [mm]	C_{cr} [mm]	C_{min} [mm]	h_{min} [mm]	$T_{imp} \leq$ [Nm]	$T_{inst,max}$ [Nm]
BTS 6-35	0,85	–	5,7	160	40	80	40	100	150	15
BTS 6-40	0,85	–	5,7	160	40	80	40	100	150	15
BTS 6-50	0,85	1,90	5,7	160	40	80	40	100	150	15
BTS 6-55	0,85	1,90	5,7	160	40	80	40	100	150	15

[1)] Permissible loads without influence of spacing and edge distance
[2)] Load figures include the resistances´ partial safety factors as per approval and a partial safety factor on the action of $\gamma_F = 1.4$
If underrun the char. space or edge distance (C_{cr} or S_{cr}) the loads must be reduced. h_{min}, S_{min} and C_{min} must be observed.

Made in Germany

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