

# Advantages

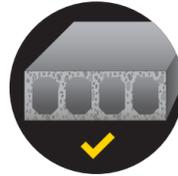
## Concrete screw BTS6



**ETA-approval** for multiple use for non-structural applications in concrete



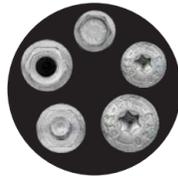
Approved for cracked and non-cracked concrete **suitable for a wide variety of fixing applications**



Also approved for fixing in **precast concrete hollow core slabs**



Fire resistance report R120 **fulfills fire protection requirements for more safety in case of fire**



Different head designs **large number of connection and installations options**



Low setting depth reduces installation effort **and ensures less risk of hitting rebars**



**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



**Long concrete screw BTS6 E** bridges insulated concrete



**Two setting depths** for a higher application flexibility (for BTS6 longer than 55 mm)



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



**Expansion-free anchoring** allows low edge distances and spacing



**Internal thread [BTS6 H] & connection thread [BTS6 E]** clamps or threaded rods can be attached directly to the concrete screw



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



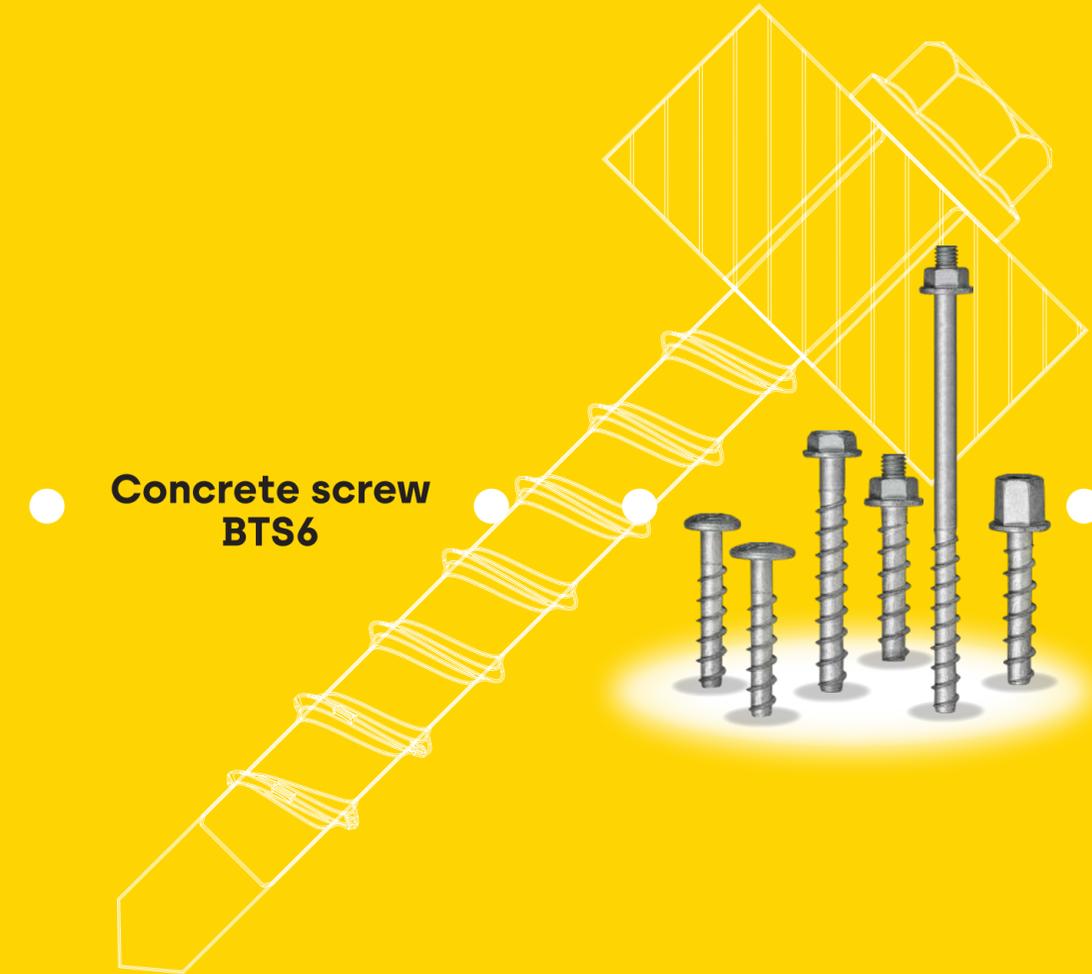
**Hex-head with integral washer** No additional washer is required (time and cost saving)

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## Small Things Matter

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Concrete screw BTS6

Presented by:

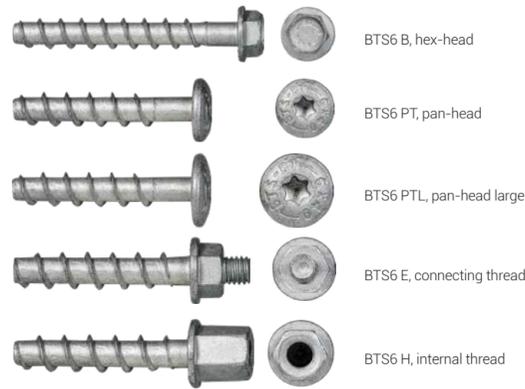
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## Concrete screw BTS6 Quick mounting to concrete



### Suitable building materials

#### Very suitable



- Concrete
- Precast pre-stressed hollow core slabs

#### Suitable to a limited extent

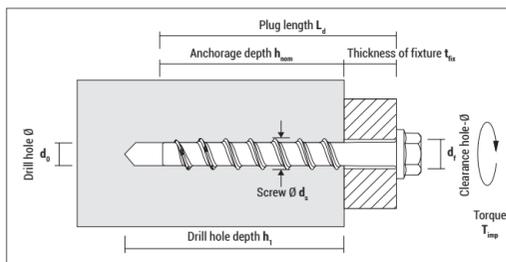
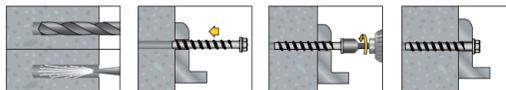


- Dense natural stone

### Approvals and certificates



### Mounting



## Assortment Concrete screw BTS6



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

Type d <sub>0</sub> - L <sub>d</sub>	Art-No	d <sub>s</sub> x L <sub>d</sub> [mm]	h <sub>1</sub> ≥ [mm]	h <sub>nom</sub> ≥ [mm]	t <sub>fix</sub> ≤ [mm]	Recess	ETA	[pcs]	[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, zinc flake coating** with pan-head (TX 30), head-Ø: 14,5 mm

Type d <sub>0</sub> - L <sub>d</sub>	Art-No	d <sub>s</sub> x L <sub>d</sub> [mm]	h <sub>1</sub> ≥ [mm]	h <sub>nom</sub> ≥ [mm]	t <sub>fix</sub> ≤ [mm]	Drive	ETA	[pcs]	[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, zinc flake coating** with pan-head large (TX 30), head-Ø: 19 mm

Type d <sub>0</sub> - L <sub>d</sub>	Art-No	d <sub>s</sub> x L <sub>d</sub> [mm]	h <sub>1</sub> ≥ [mm]	h <sub>nom</sub> ≥ [mm]	t <sub>fix</sub> ≤ [mm]	Drive	ETA	[pcs]	[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, zinc flake coating** with connecting thread, washer-Ø: 14,0 mm

Type d <sub>0</sub> - L <sub>d</sub>	Art-No	d <sub>s</sub> x L <sub>d</sub> [mm]	h <sub>1</sub> ≥ [mm]	h <sub>nom</sub> ≥ [mm]	t <sub>fix</sub> ≤ [mm]	Connecting thread	Recess	ETA	[pcs]	[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 E, zinc flake coating** with connecting thread, washer-Ø: 14,0 mm

Type d <sub>0</sub> - L <sub>d</sub>	Art-No	d <sub>s</sub> x L <sub>d</sub> [mm]	h <sub>1</sub> ≥ [mm]	h <sub>nom</sub> ≥ [mm]	t <sub>fix</sub> ≤ [mm]	Connecting thread	Recess	ETA	[pcs]	[pcs]
6-135	9ZG6135M6BTSE	7,5 x 135	40 / 55	35 / 50	85 / 100	M6 (L = 5 mm)	SW10	●	50	250
6-155	9ZG6155M6BTSE	7,5 x 155	40 / 55	35 / 50	105 / 120	M6 (L = 5 mm)	SW10	●	50	250
6-175	9ZG6175M6BTSE	7,5 x 175	40 / 55	35 / 50	125 / 140	M6 (L = 5 mm)	SW10	●	50	250
6-195	9ZG6195M6BTSE	7,5 x 195	40 / 55	35 / 50	145 / 160	M6 (L = 5 mm)	SW10	●	50	200



**BTS6 H, zinc flake coating** with internal thread, washer-Ø: M6 and M8: 14,0 mm; M10: 17,0 mm

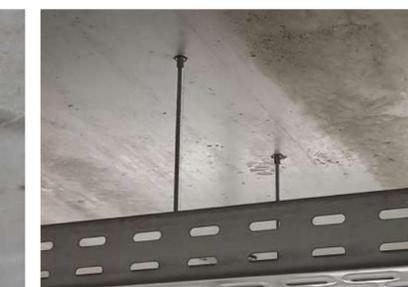
Type d <sub>0</sub> - L <sub>d</sub>	Art-No	d <sub>s</sub> x L <sub>d</sub> [mm]	h <sub>1</sub> ≥ [mm]	h <sub>nom</sub> ≥ [mm]	Internal thread	Recess	ETA	[pcs]	[pcs]
6-35	9ZG635M6BTSH	7,5 x 35	40	35	M6 (L = 10 mm)	SW10	●	150	750
6-35	9ZG635M8BTSH	7,5 x 35	40	35	M8 (L = 15 mm)	SW10	●	100	500
6-50	9ZG650M8BTSH	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 PT



BTS6 H



BTS6 H



BTS6 H



BTS6 E long



BTS6 B

## Accessories Concrete screw 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  
for quick mounting of  
all BTS6 with hex-head

### Accessories for concrete screw BTS6

Type	Art-No	d <sub>0</sub> [mm]	L [mm]	Recess	[pc]	[pcs]
Special drill bit SDS 6 mm	6115SDSBTS6	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, spacing and edge distance for multiple use for non-structural applications in cracked concrete C20/25-C50/60

Type	Permissible load in any direction <sup>1),2)</sup>		Permissible bending moment <sup>2)</sup> M <sub>per</sub> [Nm]	Spacing		Edge distance		Min. thickness of structural part h <sub>min</sub> [mm]	Max. torque of the impact wrench T <sub>imp</sub> [Nm]
	F <sub>per</sub> [kN]	F <sub>per</sub> [kN]		S <sub>cr</sub> [mm]	S <sub>min</sub> [mm]	C <sub>cr</sub> [mm]	C <sub>min</sub> [mm]		
BTS 6-35	0,85	-	5,7	160	40	80	40	100	150
BTS 6-40	0,85	-	5,7	160	40	80	40	100	150
BTS 6-50	0,85	1,90	5,7	160	40	80	40	100	150
BTS 6-55	0,85	1,90	5,7	160	40	80	40	100	150

<sup>1)</sup> Permissible loads without influence of spacing and edge distance.

<sup>2)</sup> Load figures include the resistances' partial safety factors as per ETA assessment and a partial safety factor on the action of v<sub>r</sub> = 1,4. If under the char. spacing or edge distance (C<sub>cr</sub> or S<sub>d</sub>) the loads must be reduced. h<sub>min</sub>, S<sub>min</sub> and C<sub>min</sub> must be observed.

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

Type	Permissible load in any direction <sup>1),2)</sup>		Permissible bending moment <sup>2)</sup> M <sub>per</sub> [Nm]	Spacing		Edge distance	
	F <sub>per</sub> [kN]	F <sub>per</sub> [kN]		S <sub>cr</sub> [mm]	S <sub>min</sub> [mm]	C <sub>cr</sub> [mm]	C <sub>min</sub> [mm]
BTS 6	1,02	-	5,7	200	200	150	150

<sup>1)</sup> Permissible loads without influence of spacing and edge distance.

<sup>2)</sup> Load figures include the resistances' partial safety factors as per ETA assessment and a partial safety factor on the action of v<sub>r</sub> = 1,4. If under the char. spacing or edge distance (C<sub>cr</sub> or S<sub>d</sub>) the loads must be reduced. h<sub>min</sub>, S<sub>min</sub> and C<sub>min</sub> must be observed.

Loads, spacing and edge distance for multiple use for non-structural applications in **precast pre-stressed hollow core slabs**: w/s ≤ 4,2 / Concrete ≥ C45/55 / thickness of bottom flange ≥ 35 mm