## Advantages Concrete screw BTS6

## CELO



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



Approved for cracked and noncracked 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



Simple system with special accessories: Drilling and fixing with the same power tool without changing tools



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Different head designs large number of connection and installations options



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





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



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



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]



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Removable

Also very suitable for

temporary fixings

Expansion-free anchoring allows low edge distances and spacing

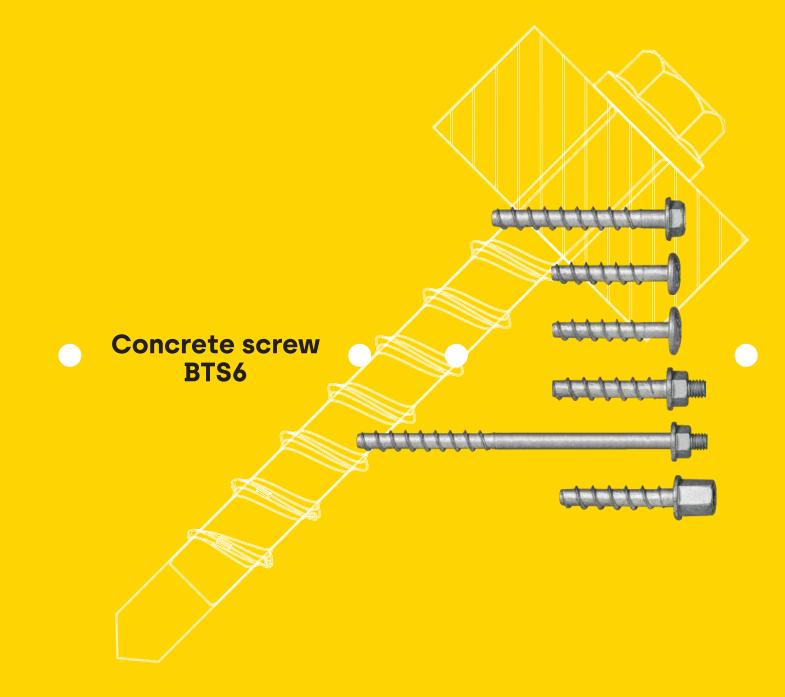




Internal thread (BTS6 H) & connection thread (BTS6 E) clamps or threaded rots can be attached directly to the concrete screw

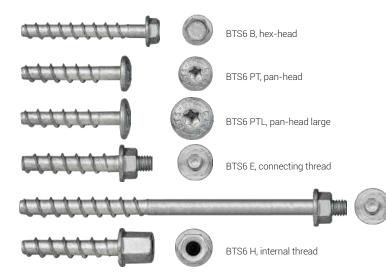








**Concrete screw BTS6** Quick mounting to concrete



ETA



#### Suitable building materials

Very suitable



- Concrete
- (TA) Precast pre-stressed hollow core slabs

#### Suitable to a limited extent

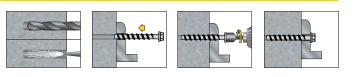


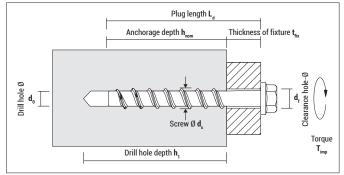
• Dense natural stone

## Approvals and certificates



### Mounting





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

Type d <sub>o</sub> - L <sub>d</sub>	Art-No	d <sub>s x</sub> L <sub>d</sub> [mm]	h <sub>1</sub> ≥ [mm]	h <sub>nom</sub> ≥ [mm]	t <sub>fix</sub> ≤ [mm]	Recess		[pcs]	[pcs]
6-40/5	9ZG640BTSB	7,5 x 40	40	35	5	SW10	٠	150	750
6-55/5	9ZG655BTSB	7,5 x 55	40/55	35/50	20/5	SW10	•	100	500

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

Type d <sub>o</sub> - L <sub>d</sub>	Art-No	d <sub>s x</sub> L <sub>d</sub> [mm]	h₁≥ [mm]	h <sub>nom</sub> ≥ [mm]	t <sub>fix</sub> ≤ [mm]	Drive		/ [pcs]	(pcs)
6-40/5	9ZG640BTSPT	7,5 x 40	40	35	5	TX30	٠	150	750
6-55/5	9ZG655BTSPT	7,5 x 55	40 / 55	35/50	20/5	TX30	٠	100	500

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PTS4 PTL sinc flake

BTS6 PTL	BTS6 PTL, zinc flake coating with pan-head large (TX 30), head-Ø: 19 mm												
Type d <sub>o</sub> - L <sub>d</sub>	Art-No	d <sub>s x</sub> L <sub>d</sub> [mm]	h <sub>i</sub> ≥ [mm]	h <sub>nom</sub> ≥ [mm]	t <sub>fix</sub> ≤ [mm]	Drive		[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	٠	100	500				

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

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Туре	Type Art-No	d <sub>s x</sub> L <sub>d</sub>	$h_1 \ge$	h <sub>nom</sub> ≥	$t_{fix} \leq$	Connecting	Recess	ETA)	B	Ø
d <sub>o</sub> - L <sub>d</sub>		[mm]	[mm]	[mm]	[mm]	thread		· • • • •	[pcs]	[pcs]
6-35	9ZG635M6BTSE	7,5 x 35	40	35	_	M6 (L = 5 mm)	SW10		150	750
0-33	92000010D13L	1,0 × 00	40	55		MO(L - 3 MM)	30010	•	100	100
6-35	9ZG635M8BTSE	7,5 x 35	40	35	-	M8 (L = 15 mm)	SW10	٠	100	500



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

Type d <sub>o</sub> - L <sub>d</sub>	Art-No	d <sub>s x</sub> L <sub>d</sub> [mm]	h₁≥ [mm]	h <sub>nom</sub> ≥ [mm]	t <sub>fix</sub> ≤ [mm]	Connecting thread	Recess		[pcs]	[pcs]
6-135 M6	9ZG6135M6BTSE	7,5 x 135	40 / 55	35/50	85/100	M6 (L = 6 mm)	SW10	٠	50	250
6-155 M6	9ZG6155M6BTSE	7,5 x 155	40/55	35/50	105/120	M6 (L = 6 mm)	SW10	٠	50	250
6-175 M6	9ZG6175M6BTSE	7,5 x 175	40/55	35/50	125/140	M6 (L = 6 mm)	SW10	•	50	250
6-195 M6	9ZG6195M6BTSE	7,5 x 195	40 / 55	35/50	145/160	M6 (L = 6 mm)	SW10	٠	50	200
6-85 M8	9ZG685M8BTSE	7,5 x 85	40 / 55	35/50	35 / 50	M8 (L = 16 mm)	SW10	•	50	250
6-135 M8	9ZG6135M8BTSE	7,5 x 135	40/55	35/50	85 / 100	M8 (L = 16 mm)	SW10	٠	50	250
6-155 M8	9ZG6155M8BTSE	7,5 x 155	40/55	35/50	105 / 120	M8 (L = 16 mm)	SW10	٠	50	250
6-175 M8	9ZG6175M8BTSE	7,5 x 175	40/55	35/50	125 / 140	M8 (L = 16 mm)	SW10	٠	50	200
6-195 M8	9ZG6195M8BTSE	7,5 x 195	40/55	35/50	145 / 160	M8 (L = 16 mm)	SW10	٠	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>o</sub> - L <sub>d</sub>	Art-No	d <sub>s x</sub> L <sub>d</sub> [mm]	h <sub>1</sub> ≥ [mm]	h <sub>nom</sub> ≥ [mm]	- Internal thread -	Recess		[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	٠	100	500







BTS6 H



# 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

**Accessories for concrete screw BTS6** 

Туре	Art-No	d₀ [mm]	L [mm]	Recess	<i>[</i> ] [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 concreteC20/25-C50/60

Туре	direct	load in any ion <sup>1],2]</sup> h <sub>nom</sub> 50 mm	Permissible bending mo- ment <sup>2)</sup>	no- Spacing		Edge d	istance	Min. thickness of structural part	Max. torque of the impact wrench
	F <sub>per</sub> [kN]	F <sub>per</sub> [kN]	M <sub>per</sub> [Nm]	S <sub>cr</sub> [mm]	S <sub>min</sub> [mm]	C <sub>cr</sub> [mm]	C <sub>min</sub> [mm]	h <sub>min</sub> [mm]	T <sub>imp ≤</sub> [Nm]
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  $\gamma_e$  = 1,4

If underrun the char. spacing or edge distance (C<sub>er</sub> or S<sub>er</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

Туре	Permissible load in any direction <sup>1],2]</sup> h <sub>nom</sub> 35 mm	Permissible bending moment <sup>2)</sup>	Spa	cing	Edge dis	stance
	F <sub>per</sub> [kN]	M <sub>per</sub> [Nm]	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  $\gamma_r$  = 1,4 If underrun the char. spacing or edge distance (C<sub>cr</sub> or S<sub>cr</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/e  $\leq$  4,2 / Concrete  $\geq$  C45/55 / thickness of bottom flange  $\geq$  35 mm

Socket wrench for quick mounting of all BTS6 with hex-head



BTS6 E long

