## **Advantages**

## Concrete screw BTS6



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



Different head designs large number of connection and



installations options



Removable Also very suitable for temporary fixings



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



Approved for cracked and noncracked concrete suitable for a wide variety of fixing applications

and ensures less risk of

hitting rebars

bridges insulated

concrete



precast concrete hollow core slabs



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



Fast assembly Drill, screw in - finished



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



Long concrete screw BTS6 E



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



Internal thread (BTS6 H) & connection thread (BTS6 E) clamps or threaded rots 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)

## CELO

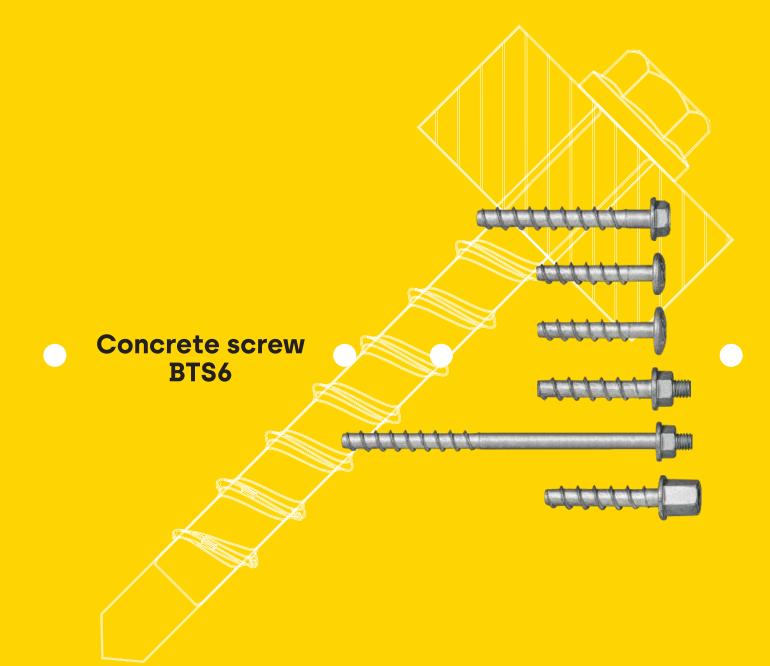
## **Small Things Matter**

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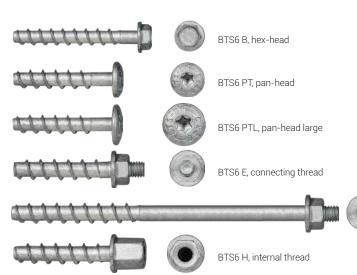




# CELO

## **Concrete screw BTS6**

Quick mounting to concrete





#### Suitable building materials

#### Very suitable



- Precast pre-stressed hollow core slabs

#### Suitable to a limited extent

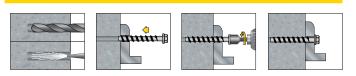


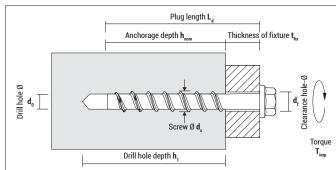
Dense natural stone

#### 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	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	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>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]	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 x</sub> 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 x</sub> 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	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]	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	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	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













## Accessories

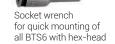
## Concrete screw BTS6







Special adapter
Put over the drill bit and the socket wrench





SDS special drill bit Ø6 mm Usable drill length 105 mm

Туре	Art-No	d <sub>o</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

	Permissible load in any direction 1],2]		Permissible bending mo-	Spo	cing	Edge o	distance	Min. thickness of	Max. torque of the
Туре	h <sub>nom</sub> 35 mm	h <sub>nom</sub> 50 mm	ment 2]	Spa	g	Lago distano		structural part	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]	$T_{imp \leq}[Nm]$
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.

#### 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>11,2)</sup> Permissible Permissible bending moment <sup>2)</sup>		Spo	acing	Edge distance		
	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>&</sup>lt;sup>2)</sup> Load figures include the resistances' partial safety factors as per ETA assessment and a partial safety factor on the action of  $y_e = 1.4$ 

If underrun the char. spacing or edge distance  $(C_{rr} \text{ or } S_{cr})$  the loads must be reduced.  $h_{min}$ ,  $S_{min}$  and  $C_{min}$  must be observed.

<sup>&</sup>lt;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 ( $C_{cr}$  or  $S_{cr}$ ) the loads must be reduced.  $h_{min}$ ,  $S_{min}$  and  $C_{min}$  must be observed.

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