

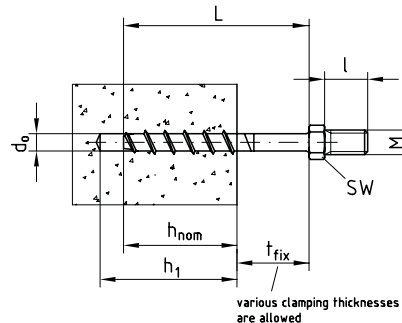
### Screws for concrete long type TSM, galvanised

#### Field of application

- For anchorages free of expansion pressure in cracked and non-cracked concrete
- For direct attachment of support channels, wall hanger brackets and other assembly parts
- Long shank design for attachments, e.g. through insulating materials

#### Advantages

- More than 25 % reduction of assembly time per attachment point
- Versatile use in concrete and other solid building materials
- High security, no splaying effect – thus can be placed close to the edge and to other screws
- High load capacity due to form lock
- Easy to withdraw, facilitates corrections during installation
- No additional mounting or setting tools required
- European Technical Assessment for cracked and uncracked concrete
- Fire protection in concrete
- Suitable for the installation of gas mains according to the TRGI (Technical Rules for Gas Installations)
- Two effective anchorage depths for greater flexibility







Screw for concrete long  
with stud

Type	Thread-Ø [mm]	Length L [mm]	Connecting thread M	Thread length l [mm]	Part no.	Sales unit	Pack unit
With stud	6	135	M8	16	176131	100	pieces
		155			176132		
		175			176133		
		195			176134		



### Screws for concrete long type TSM, galvanised


#### Standard anchorage depth:

Features								   	
Design	Thread-Ø [mm]	Length L [mm]	Spanner width [SW]	Clamping thickness t <sub>fix</sub> [mm]	Drilled hole-Ø d <sub>0</sub> [mm]	Drilling depth h <sub>1</sub> [mm]	Setting depth h <sub>nom</sub> [mm]	Admissible loads [kN] acc. to ETA assessment <sup>1)</sup>	
								cracked concrete	uncracked concrete
With stud	6	135	10	80	6	60	55	1,9	4,3
		155		100					
		175		120					
		195		140					

#### Reduced anchorage depth:

Features									
Design	Thread-Ø [mm]	Length L [mm]	Spanner width [SW]	Clamping thickness t <sub>fix</sub> [mm]	Drilled hole-Ø d <sub>0</sub> [mm]	Drilling depth h <sub>1</sub> [mm]	Setting depth h <sub>nom</sub> [mm]	Admissible loads [kN] acc. to ETA assessment <sup>1)</sup>	
								cracked concrete	uncracked concrete
With stud	6	135	10	95	6	45	40	1,0	1,9
		155		115					
		175		135					
		195		155					

<sup>1)</sup> Admissible loads acc. to EN 1992-4 without influence of axial spacing and edge spacing. The total safety coefficient ( $\gamma_M$  and  $\gamma_F$ ) was taken into account. The European Technical Assessment ETA-15/0514 shall be observed for dimensioning.

-  Please refer to chapter „Technical information“ for further installation parameters and loads for use in areas with requirements for fire resistance duration.  
For fitting tools please refer to chapter „Tools“.

