PRODUCT DATA SHEET - WS-6,3





## Section 1. PRODUCT DESCRIPTION

#### SELF-DRILLING SCREW FOR FIXING STEEL SHEETS IN STEEL CONSTRUCTION - WS-6.3

Self-drilling screw WS-6,3 is made of heat-treated carbon steel in galvanized zinc coating 12  $\mu$ m (WS) or SQ Ceramic coating (WS-D). Screw has SW hex head, pin threaded for use in steel and self-drilling tip.

#### Use:

- fixing steel sheets in steel constructions
- · for mounting profiled sheets to steel structures
- for mounting wall cassettes to steel structures







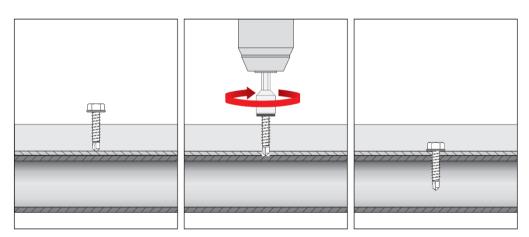




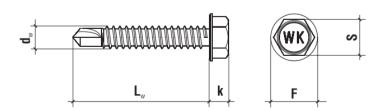
Self-drilling screws hold European Technical Assessment: ETA-16/0443

## Section 2. METHOD OF INSTALLATION

- 1. Original self-drilling screws delivered by the manufacturer can be used only
- 2. Before installation identify the substrate, its thickness and environmental conditions (expressed as corrosivity categories), and then select screws which meet the above criteria
- 3. Correctly select screw type, its length, drilling capacity depending on sum of thickness values of members being fixed
- 4. Drilling capacity for each screw is given in corresponding Product Data Sheet and European Technical Assessment and stands for the sum of thickness values of members being fixed
- 5. Make sure to set optimum rotary speed when screwing (max. 1800 rpm), as too high rotary speed may cause burning of drilling bits and make it impossible to fasten the screw
- 6. At all times screws should be installed perpendicularly to the substrate surface



# Section 3. TECHNICAL DATA



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## **PRODUCT DATA SHEET - WS-6,3**

TECHNICAL PARAMETERS					
Parameter	Unit	Value			
Screw diameter	d <sub>w</sub> [mm]	6,3			
Drilling capacity	Σt <sub>i</sub> [mm]	≤7			
Wrench size	S [mm]	SW-10			
Head height	k [mm]	5,4			
Head diameter	F [mm]	12,5			
Tip length	[mm]	11,0			
Screw material	-	carbon steel			
Corrosion protection	WS	galvanized zinc coating 12 μm			
	WS-D	SQ Ceramic coating			
EPDM washer	D [mm]	-			
Coating to RAL palette	-	-			
Substrate material	-	steel ≥ S280GD			
European Technical Assessment	-	ETA-16/0443			

INSTALLATION PARAMETERS					
Parameter	Unit	Value			
Screw diameter	d <sub>w</sub> [mm]	6,3			
Diameter of hole in the substrate	d₀ [mm]	-			
Min. depth of hole in the substrate	h₀ [mm]	-			
Anchorage depth	h <sub>eff</sub> [mm]	push-through			
Min. substrate thickness	h <sub>min</sub> [mm]	3,0			
Min. spacing	s <sub>min</sub> [mm]	50			
Min. distance from edge	c <sub>min</sub> [mm]	25			

RESISTANCE						
Characteristic pull-out / shear strength [kN]						
Substrate thickness [mm]	Steel sheet thickness [mm]					
	0,50	0,63	0,75	0,88	1,00	1,25 ÷ 2,00
3,0 ÷ 5,0	0,63/1,75	0,89/2,48	1,01/3,04	1,07/3,59	1,16/3,62	1,16/4,57

<sup>\*</sup>Partial safety factor of 1.33 recommended

SELECTION TABLE						
WS	WS-D*	Screw dimensions	Max. usable length	Number of pieces in a box		
(galvanized zinc coating ZN)	(SQ Ceramic coating)	d <sub>w</sub> x L <sub>w</sub> [mm]	t <sub>fix</sub> [mm]	[pcs]		
WS-63019	WS-D-63019	6,3 x 19	4	250		
WS-63025	WS-D-63025	6,3 x 25	10	250		
WS-63032	WS-D-63032	6,3 x 32	17	250		
WS-63038	WS-D-63038	6,3 x 38	23	200		
WS-63100	WS-D-63100	6,3 x 100	85	100		

<sup>\*</sup>Screw on request and to order

# Section 4. REMARKS

- 1. All previous versions of this Product Data Sheet shall cease to be valid
- 2. Data given in this Product Data Sheet is in accordance with current knowledge and published in good faith. KLIMAS Sp. z o.o. is not responsible for correctness and quality of the fixing if recommendations regarding method of use and installation are not followed.