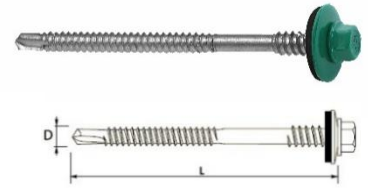


## GTX 6 SP S19

**BIMETALLIC SELF-DRILLING STAINLESS STEEL SCREWS WITH WASHER FOR FIXING OF SANDWICH PANELS**

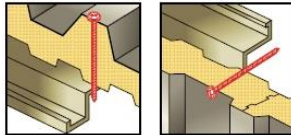


### PRODUCT DESCRIPTION


Self-drilling, self-tapping screws (double thread) made of austenitic stainless steel (bimetallic), with drilling point #3, fine working thread and a hex head, with an integrated stainless steel washer with vulcanized EPDM layer. Additional corrosion protection: gRey.coat coating.

### APPLICATION

Designed for mounting sandwich panels to cold rolled steel structures in aggressive environments. Possibility of use in environments with corrosivity category C1, C2, C3, C4, C5 according to PN-EN ISO 12944-2:2018.



### LENGTH OF SCREWS

Fastener type		Dimensions D x L [mm]	Maximum thickness of fixed elements [mm]		
			Maximum drill capacity [mm]	MTmin	MTmax
GTX 6 SP	S19	5,5/6,3 x 85	6,00	35	65
GTX 6 SP	S19	5,5/6,3 x 110	6,00	60	85
GTX 6 SP	S19	5,5/6,3 x 130	6,00	80	105
GTX 6 SP	S19	5,5/6,3 x 150	6,00	100	125
GTX 6 SP	S19	5,5/6,3 x 170	6,00	120	145
GTX 6 SP	S19	5,5/6,3 x 195	6,00	145	170
GTX 6 SP	S19	5,5/6,3 x 225	6,00	175	200
GTX 6 SP	S19	5,5/6,3 x 240	6,00	190	215
GTX 6 SP	S19	5,5/6,3 x 265	6,00	215	240

*The working length of the fastener is calculated from the maximum thickness of the DC substrate.*

## EUROPEAN TECHNICAL APPROVAL ETA-13/0199

### CHARACTERISTIC CAPACITIES OF SHEAR ATTACHMENTS AND PULL-OUT FROM STEEL SUBSTRATE, DISPLACEMENT OF THE SCREW HEAD DUE TO HEAT EXPANSION

Element II: $t_{II} w$ [mm]		1,00	1,50	2,00	2,50	3,00	4,00	≥ 5,00	
Element I: $t_{n,1} lub t_{n,2w}$ [mm]	SHEAR $V_{R,k} w$ [kN]	0,50	1,40	1,40	1,40	1,40	1,40	1,40	1,40
		0,55	1,40	1,40	1,40	1,40	1,40	1,40	1,40
		0,63	1,60	1,60	1,60	1,60	1,60	1,60	1,60
		0,75	2,10	2,10	2,10	2,10	2,10	2,10	2,10
		0,88	2,10	2,10	2,10	2,10	2,10	2,10	2,10
		1,00	2,10	2,10	2,10	2,10	2,10	2,10	2,10
	PULL-OUT $N_{R,k} w$ [kN]	0,50	1,04	1,92	2,56	2,56	2,56	3,06	3,06
		0,55	1,04	1,92	2,56	2,56	2,56	3,06	3,06
		0,63	1,04	1,92	2,56	2,56	2,56	3,86	3,86
		0,75	1,04	1,92	2,56	2,56	2,56	5,39	5,39
		0,88	1,04	1,92	2,56	2,56	2,56	5,39	5,39
		1,00	1,04	1,92	2,56	2,56	2,56	5,39	5,39
Max. head displacement $u^*$ depending on the sandwich panel thickness in [mm]	30	12	12	12	12	1,5	1,5	1,5	
	40	12	12	12	12	1,5	1,5	1,5	
	50	12	12	12	12	1,5	1,5	1,5	
	60	18	18	18	18	4	4	4	
	70	18	18	18	18	4	4	4	
	80	18	18	18	18	4	4	4	
	90	23	23	23	23	10	10	10	
	100	23	23	23	23	10	10	10	
	120	23	23	23	23	10	10	10	
	≥140	23	23	23	23	10	10	10	

Element I - sheet steel of S280GD grade; S320GD; S350GD according to EN 10346.

Element II - steel sheet steel of grade S235 according to EN 10025-1 or S280GD; S320GD; S350GD according to EN 10346.

In order to determine the design load, the characteristic load factor must be divided by the safety factor  $\gamma_m = 1.33$ .

## NATIONAL TECHNICAL ASSESSMENT ITB-KOT-2017/0022

### CHARACTERISTIC CAPACITIES OF SHEAR ATTACHMENTS AND PULL-OUT FROM STEEL SUBSTRATE, DISPLACEMENT OF THE SCREW HEAD DUE TO HEAT EXPANSION

Element II: $t_{II}$ [mm]		1,00	1,50	2,00	2,50	3,00	4,00	≥ 5,00	
Element I: $t_{n,1}$ lub $t_{n,2w}$ [mm]	SHEAR $V_{R,k,w}$ [kN]	0,50	1,40	1,40	1,40	1,40	1,40	1,40	1,40
		0,55	1,40	1,40	1,40	1,40	1,40	1,40	1,40
		0,63	1,60	1,60	1,60	1,60	1,60	1,60	1,60
		0,75	2,10	2,10	2,10	2,10	2,10	2,10	2,10
		0,88	2,10	2,10	2,10	2,10	2,10	2,10	2,10
		1,00	2,10	2,10	2,10	2,10	2,10	2,10	2,10
	PULL-OUT $N_{R,k,w}$ [kN]	0,50	1,04	1,92	3,65	3,65	3,65	3,65	3,65
		0,55	1,04	1,92	3,65	3,65	3,65	3,65	3,65
		0,63	1,04	1,92	3,71	3,71	3,71	3,71	3,71
		0,75	1,04	1,92	3,71	3,71	3,71	3,71	3,71
		0,88	1,04	1,92	3,71	3,71	3,71	3,71	3,71
		1,00	1,04	1,92	3,71	3,71	3,71	3,71	3,71
Max. head displacement $u^*$ depending on the sandwich panel thickness in [mm]	30	1,5	12	12	12	12	1,5	1,5	
	40	1,5	12	12	12	12	1,5	1,5	
	50	1,5	12	12	12	12	1,5	1,5	
	60	4	18	18	18	18	4	4	
	70	4	18	18	18	18	4	4	
	80	4	18	18	18	18	4	4	
	90	6	23	23	23	23	10	10	
	100	6	23	23	23	23	10	10	
	≥140	6	23	23	23	23	10	10	

Element I – steel plate s280gd; s320gd; s350gd according to: en 10346.

Element II – steel plate s235 according to: en 10025-1 or steel plate s280gd; s320gd; s350gd according to: en 10346.

To define a design load should divide the value of the characteristic load by a safety factor  $\gamma_m = 1,33$ .

## OTHER FEATURES

BASE MATERIAL:	COLD-ROLLED STEEL PROFILE
SIZE OF HEX HEAD:	8 mm
MINIMUM THICKNESS OF STEEL BASE:	1,0 mm
MAXIMUM DRILLING CAPACITY:	6,0 mm
HEAD AND SHAFT MADE OF:	STAINLESS STEEL CLASS A2
DRILLING POINT MADE OF:	HARDENED STEEL
ADDITIONAL CORROSION PROTECTION:	gRey.coat
CORROSIVITY CATEGORY:	C5
TECHNICAL OPINION ON CORROSION PROTECTION:	02248/16/Z00NZM
PAINTING POSSIBILITY:	YES
THICKNESS OF POLYESTER PAINT:	50 µm
TIGHTENING TORQUE:	5 Nm
RECOMMENDED SPEED OF THE TOOL WITHOUT LOAD:	1200 rpm
WASHER DIAMETER (STAINLESS S19):	19 mm

