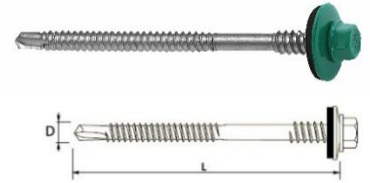


GTX 6 SP S29

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

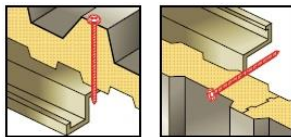


PRODUCT DESCRIPTION


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 drill capacity [mm]	Maximum thickness of fixed elements [mm]	
			DC	MTmin	MTmax
GTX 6 SP	S29	5,5/6,3 x 85	6,00	35	65
GTX 6 SP	S29	5,5/6,3 x 110	6,00	60	85
GTX 6 SP	S29	5,5/6,3 x 130	6,00	80	105
GTX 6 SP	S29	5,5/6,3 x 150	6,00	100	125
GTX 6 SP	S29	5,5/6,3 x 170	6,00	120	145
GTX 6 SP	S29	5,5/6,3 x 195	6,00	145	170
GTX 6 SP	S29	5,5/6,3 x 225	6,00	175	200
GTX 6 SP	S29	5,5/6,3 x 240	6,00	190	215
GTX 6 SP	S29	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	4,23	4,23
		0,55	1,04	1,92	2,56	2,56	2,56	4,23	4,23
		0,63	1,04	1,92	2,56	2,56	2,56	5,82	5,82
		0,75	1,04	1,92	2,56	2,56	2,56	6,35	6,35
		0,88	1,04	1,92	2,56	2,56	2,56	6,35	6,35
		1,00	1,04	1,92	2,56	2,56	2,56	6,35	6,35
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} 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	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:	<i>COLD-ROLLED STEEL PROFILE</i>
SIZE OF HEX HEAD:	<i>8 mm</i>
MINIMUM THICKNESS OF STEEL BASE:	<i>2,0 mm</i>
MAXIMUM DRILLING CAPACITY:	<i>6,0 mm</i>
HEAD AND SHAFT MADE OF:	<i>STAINLESS STEEL CLASS A2</i>
DRILLING POINT MADE OF:	<i>HARDENED STEEL</i>
ADDITIONAL CORROSION PROTECTION:	<i>gRey.coat</i>
CORROSIVITY CATEGORY:	<i>C5</i>
TECHNICAL OPINION ON CORROSION PROTECTION:	<i>02248/16/Z00NZM</i>
PAINTING POSSIBILITY:	<i>YES</i>
THICKNESS OF POLYESTER PAINT:	<i>50 µm</i>
TIGHTENING TORQUE:	<i>5 Nm</i>
RECOMMENDED SPEED OF THE TOOL WITHOUT LOAD:	<i>1200 rpm</i>
WASHER DIAMETER (STAINLESS S29):	<i>29 mm</i>

