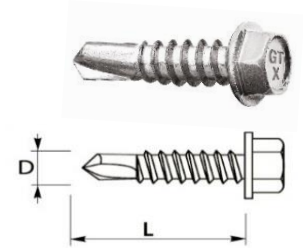


GTX 3 AL

**BIMETALLIC STAINLESS STEEL
SCREWS FOR ALUMINUM
CONSTRUCTION**

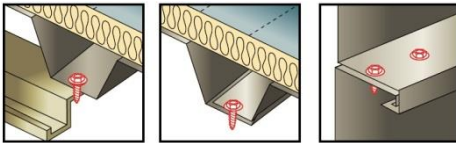


PRODUCT DESCRIPTION


Self-drilling, self-tapping screws made of austenitic stainless steel (bimetallic), with drilling point #2, fine thread and a hex head, without a washer.

APPLICATION

Designed for fixing elements of aluminum structures also for aggressive environments. Possibility of use in environments with corrosivity category C1, C2, C3, C4, C5-I/M according to PN-EN ISO 12944-2: 2001



LENGTH OF SCREWS

Fastener type		Dimensions D x L [mm]	Maximum drilling capacity [mm]	Maximum thickness of fixture element [mm]
			DC	MTmax
GTX 3 AL	NA	5,5 x 25	3,00	11
GTX 3 AL	NA	5,5 x 38	3,00	24

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

NATIONAL TECHNICAL ASSESSMENT ITB-KOT-2018/0680

CHARACTERISTIC BEARING CAPACITY OF SHEAR AND PULL-OUT FIXINGS FROM STEEL SUBSTRATE

Thickness of substrate ¹⁾ [mm]		0,75	1,00	1,25	1,50	2,00	2,50	Wood class \geq C24	
$M_{t,nom}$		6 Nm							
Thickness of steel substrate ²⁾ [mm]	Characteristic capacity For shear [kN] For shear [kN]	0,50	—	1,08	1,08	1,08	1,08	—	
		0,55	—	1,08	1,08	1,08	1,08	—	
		0,63	—	1,38	1,38	1,38	1,38	—	
		0,75	0,95	2,11	2,11	2,11	2,11	—	
		0,88	0,95	2,29	2,29	2,29	2,29	—	
		1,00	0,95	2,59	2,59	2,59	2,59	—	
		1,13	0,95	2,59	2,59	2,59	—	—	
		1,25	0,95	2,59	2,74	2,74	—	—	
		1,50	0,95	2,59	2,74	3,41	—	—	
		1,75	0,95	2,59	2,74	—	—	—	
	2,00	0,95	2,59	—	—	—	—		
	For pull-out [kN]	0,50	—	0,61	0,61	0,61	0,61	—	
		0,55	—	0,61	0,61	0,61	0,61	—	
		0,63	—	0,90	0,90	0,90	0,90	—	
		0,75	0,86	0,96	0,99	0,99	0,99	—	
		0,88	0,86	0,96	1,13	1,13	1,13	—	
		1,00	0,86	0,96	1,13	1,13	1,13	—	
		1,13	0,86	0,96	1,13	1,13	—	—	
		1,25	0,86	0,96	1,13	1,13	—	—	
		1,50	0,86	0,96	1,13	1,13	—	—	
1,75		0,86	0,96	1,13	—	—	—		
2,00	0,86	0,96	—	—	—	—			

¹⁾ steel grade S280GD, S320GD or S350GD according to PN-EN 10346:2015

²⁾ steel grade S280GD, S320GD or S350GD according to PN-EN 10346:2015

If both elements I and II are made of steel grade S320GD, values $V_{R,k}$ can be increased by 8,3%
If both elements I and II are made of steel grade S350GD, values $V_{R,k}$ can be increased by 16,6%

CHARACTERISTIC BEARING CAPACITY OF SHEAR AND PULL-OUT FIXINGS FROM ALUMINIUM SUBSTRATE

Thickness of substrate ¹⁾ [mm]		0,75	1,00	1,25	1,50	2,00	2,50	Wood class ≥ C24	
M_{t,nom}		6 Nm							
Thickness of steel substrate ²⁾ [mm]	Characteristic capacity For shear [kN] For shear [kN]	0,50	—	—	—	—	—	/	
		0,55	—	—	—	—	—		
		0,63	—	—	—	—	—		
		0,75	—	—	—	—	—		
		0,88	—	—	—	—	—		
		1,00	—	—	—	—	—		
		1,13	—	—	—	—	—		
		1,25	—	—	—	—	—		
		1,50	—	—	0,76	0,76	—		—
		1,75	—	—	0,76	2,21	—		—
	2,00	—	—	0,76	2,21	—	—		
	For pull-out [kN]	0,50	—	—	—	—	—		—
		0,55	—	—	—	—	—		—
		0,63	—	—	—	—	—		—
		0,75	—	—	—	—	—		—
		0,88	—	—	—	—	—		—
		1,00	—	—	—	—	—		—
		1,13	—	—	—	—	—		—
		1,25	—	—	—	—	—		—
		1,50	—	—	0,76	0,76	—		—
1,75		—	—	0,76	2,21	—	—		
2,00	—	—	0,76	2,21	—	—			

¹⁾ Aluminum 1050A acc. PN-EN 573-3:2010, H42 acc. PN-EN 485-2:2016

²⁾ Aluminum 1050A acc. PN-EN 573-3:2010, H42 acc. PN-EN 485-2:2016

EUROPEAN TECHNICAL APPROVAL ETA-12/0580

CHARACTERISTIC LOAD BEARING CAPACITY OF SHEAR RESISTANCE

tN,II* [mm]	1,00	1,25	1,50	2,00	
VR,k [kN] for tN,I* [mm]	0,50	1,08	1,08	1,08	1,08
	0,55	1,08	1,08	1,08	1,08
	0,63	1,38	1,38	1,38	1,38
	0,75	2,11	2,11	2,11	2,11
	0,88	2,29	2,29	2,29	2,29
	1,00	2,59	2,59	2,59	2,59
	1,13	2,59	2,59	2,59	-
	1,25	2,59	2,74	2,74	-
	1,50	2,59	2,74	3,41	-
	1,75	2,59	2,74	-	-
	2,00	2,59	-	-	-

Element I - sheet steel class S280GD; S320GD; Standard S350GD according to EN 10346.

Element II - sheet steel class S280GD; S320GD; Standard S350GD according to EN 10346.

To determine the structural carrying capacity of the characteristic safety factor $\gamma_m = 1.33$.

CHARACTERISTIC LOAD BEARING CAPACITY OF PULL-OUT RESISTANCE IN A STEEL BASE

tN,II* [mm]	1,00	1,25	1,50	2,00	
NR,k [kN] for tN,I* [mm]	0,50	0,61	0,61	0,61	0,61
	0,55	0,61	0,61	0,61	0,61
	0,63	0,90	0,90	0,90	0,90
	0,75	0,96	0,99	0,99	0,99
	0,88	0,96	0,99	0,99	0,99
	1,00	0,96	1,13	1,13	1,13
	1,13	0,96	1,13	1,13	-
	1,25	0,96	1,13	1,13	-
	1,50	0,96	1,13	1,13	-
	1,75	0,96	1,13	-	-
	2,00	0,96	-	-	-

Element I - sheet steel class S280GD; S320GD; Standard S350GD according to EN 10346.

Element II - sheet steel class S280GD; S320GD; Standard S350GD according to EN 10346.

To determine the structural carrying capacity of the characteristic safety factor $\gamma_m = 1.33$.

OTHER FEATURES

SUBSTRATE MATERIAL:	<i>COLD-ROLLED STEEL PROFILE, PROFILED METAL SHEET, ALUMINUM PROFILE</i>
THE SIZE OF HEXAGONAL HEAD:	<i>8 mm</i>
MINIMUM THICKNESS OF CONNECTED STEEL SHEETS:	<i>2 x 0,75 mm</i>
MAXIMUM DRILLING CAPACITY:	<i>3,00 mm</i>
HEAD AND SHAFT MADE OF:	<i>STAINLESS STEEL CLASS A2</i>
DRILLING POINT MADE OF:	<i>HARDENED STEEL</i>
CORROSIVITY CATEGORY:	<i>C5 I/M</i>
TECHNICAL OPINION ON CORROSION PROTECTION:	<i>02248/16/Z00NZM</i>
PAINTING POSSIBILITY:	<i>YES</i>
MINIMUM THICKNESS OF POWDER PAINTING:	<i>50 µm</i>
TIGHTENING TORQUE:	<i>3 Nm</i>
RECOMMENDED SPEED OF THE TOOL WITHOUT LOAD:	<i>1200 obr/min</i>



PZH



ETA



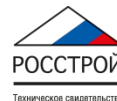
DWU/DoP



KDWU



ZKP



TC



POCC



SZU