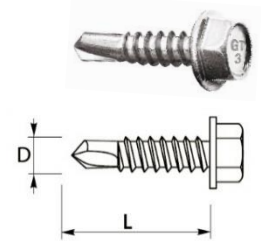


GTR 3

SELF-DRILLING SCREWS WITHOUT WASHER FOR FIXING STEEL SHEETS



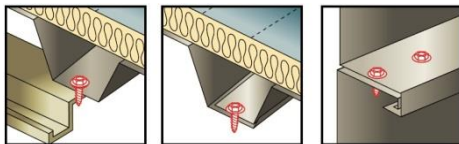
PRODUCT DESCRIPTION

Self-drilling, self-tapping screws made of surface-hardened carbon steel, with drilling point #2, fine thread and a hex head, without a washer. Additional corrosion protection: gRey.coat coating.

APPLICATION



Designed for fixing profiled steel structural steel sheets to thin-walled steel structures and for connecting steel structural sheets to the plant.

Designed for use in environments with corrosivity category C1, C2, C3 and C4 according to PN-EN ISO 12944-



2:2001

LENGTH OF SCREWS

Fastener type		Dimensions D x L [mm]	Maximum drill capacity [mm]	Maximum thickness of fixed elements [mm]	
			DC	MTmax	
GTR 3	NA	4,8 x 16	3,00	3	
GTR 3	NA	4,8 x 19	3,00	6	
GTR 3	NA	4,8 x 25	3,00	12	

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]		1,00	1,25	1,50	2,00	2,50	3,00	Wood class \geq C24	
$M_{t, nom}$		3 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	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	—	—	—	—	—		
	For pull-out [kN]	0,50	0,51	0,51	0,51	0,51	—	—	
		0,55	0,51	0,51	0,51	0,51	—	—	
		0,63	0,76	0,76	0,76	0,76	—	—	
		0,75	0,84	0,84	0,84	0,84	—	—	
		0,88	0,78	0,78	0,78	0,78	—	—	
		1,00	0,94	0,94	0,94	0,94	—	—	
		1,13	0,94	0,94	0,94	—	—	—	
		1,25	0,94	0,94	0,94	—	—	—	
		1,50	0,94	0,94	0,94	—	—	—	
1,75		0,94	0,94	—	—	—	—		
2,00	0,94	—	—	—	—	—			

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%

EUROPEAN TECHNICAL APPROVAL ETA-12/0580

CHARACTERISTIC LOAD BEARING CAPACITY OF SHEAR RESISTANCE

tN,II* [mm]	1,00	1,25	1,50	2,00
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	-	-	-

Component I: S280GD, S320GD or S350GD – EN 10346

Component II: S280GD, S320GD or S350GD – EN 10346

To define a design load should divide the value of the characteristic load by a 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
0,50	0,51	0,51	0,51	0,51
0,55	0,51	0,51	0,51	0,51
0,63	0,76	0,76	0,76	0,76
0,75	0,84	0,84	0,84	0,84
0,88	0,78	0,78	0,78	0,78
1,00	0,94	0,94	0,94	0,94
1,13	0,94	0,94	0,94	-
1,25	0,94	0,94	0,94	-
1,50	0,94	0,94	0,94	-
1,75	0,94	0,94	-	-
2,00	0,94	-	-	-

Component I: S280GD, S320GD or S350GD – EN 10346

Component II: S280GD, S320GD or S350GD – 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, METAL SHEET
SIZE OF HEX HEAD:	8 mm
MINIMUM THICKNESS OF STEEL BASE (OVERLAP):	0,75 mm
MAXIMUM DRILLING CAPACITY:	3,00 mm
ADDITIONAL CORROSION PROTECTION:	gRey.coat
CORROSIVITY CATEGORY:	C4
TECHNICAL OPINION ON CORROSION PROTECTION:	02248/16/Z00NZM
PAINTING POSSIBILITY:	YES
THICKNESS OF POLYESTER PAINT:	50 μm
TIGHTENING TORQUE:	3 Nm
RECOMMENDED SPEED OF THE TOOL WITHOUT LOAD:	1800 rpm

