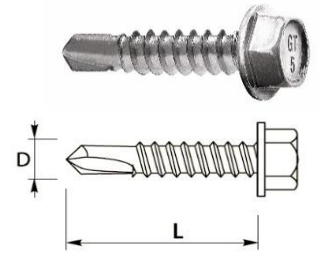


GTR 5

SELF-DRILLING SCREWS WITHOUT WASHER FOR FIXING STEEL SHEETS



PRODUCT DESCRIPTION

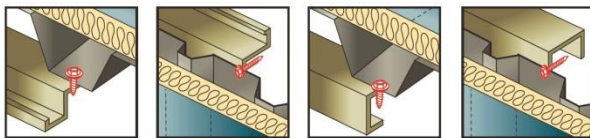
Self-drilling, self-tapping screws made of surface-hardened carbon steel, with drilling point #3, fine thread and a hex head, without a washer.

Additional corrosion protection: gRey.coat coating.


APPLICATION

Designed for fixing construction corrugated steel sheets to thin-walled steel structures.

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 5	NA	5,5 x 25	5,00	9
GTR 5	NA	5,5 x 32	5,00	16

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]		1,50	2,00	3,00	4,00	5,00	6,00	Wood class ≥ C24	
$M_{t,nom}$		6 Nm							
Thickness of steel substrate ²⁾ [mm]	Characteristic capacity For shear [kN]	0,50	1,25	1,25	1,25	1,25	—	—	/
		0,55	1,25	1,25	1,25	1,25	—	—	
		0,63	1,18	1,18	1,18	1,18	—	—	
		0,75	1,70	1,70	1,70	1,70	—	—	
		0,88	2,07	2,07	2,07	2,07	—	—	
		1,00	2,32	2,32	2,32	2,32	—	—	
		1,13	2,32	2,32	2,32	—	—	—	
		1,25	3,41	3,41	3,41	—	—	—	
		1,50	3,41	3,41	3,41	—	—	—	
		1,75	3,41	3,41	3,41	—	—	—	
	2,00	3,41	3,41	3,41	—	—	—		
	Characteristic capacity 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	0,99	0,99	0,99	0,99	—	—	
		0,88	0,99	0,99	0,99	0,99	—	—	
		1,00	1,13	1,13	1,13	1,13	—	—	
		1,13	1,13	1,13	1,13	—	—	—	
		1,25	1,13	1,13	1,13	—	—	—	
		1,50	1,13	1,13	1,13	—	—	—	
1,75		1,13	1,13	1,13	—	—	—		
2,00	1,13	1,13	1,13	—	—	—			

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]	1,50	2,00	3,00	4,00	
VR,k [kN] for tN,I* [mm]	0,50	1,25	1,25	1,25	1,25
	0,55	1,25	1,25	1,25	1,25
	0,63	1,18	1,18	1,18	1,18
	0,75	1,70	1,70	1,70	1,70
	0,88	2,07	2,07	2,07	2,07
	1,00	2,32	2,32	2,32	2,32
	1,13	2,32	2,32	2,32	-
	1,25	3,41	3,41	3,41	-
	1,50	3,41	3,41	3,41	-
	1,75	3,41	3,41	3,41	-
	2,00	3,41	3,41	3,41	-

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]	1,50	2,00	3,00	4,00	
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	0,9	0,9	0,9	0,9
	0,75	0,99	0,99	0,99	0,99
	0,88	0,99	0,99	0,99	0,99
	1,00	1,13	1,13	1,13	1,13
	1,13	1,13	1,13	1,13	-
	1,25	1,13	1,13	1,13	-
	1,50	1,13	1,13	1,13	-
	1,75	1,13	1,13	1,13	-
	2,00	1,13	1,13	1,13	-

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
SIZE OF HEX HEAD:	8 mm
MINIMUM THICKNESS OF STEEL BASE:	1,50 mm
MAXIMUM DRILLING CAPACITY:	5,00 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:	5 Nm
RECOMMENDED SPEED OF THE TOOL WITHOUT LOAD:	1500 rpm

