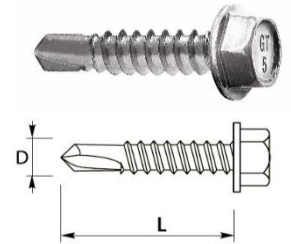


GT 5

SELF-DRILLING SCREWS WITHOUT WASHER FOR FIXING STEEL SHEETS



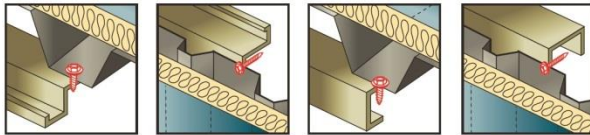
PRODUCT DESCRIPTION

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


APPLICATION

Designed for fixing construction corrugated steel sheets to thin-walled steel structures. Protected with paint coating - polyester thickness of not less than 50 µm, intended for use in environments with corrosivity class C1, C2 and C3 according to PN-EN ISO 12944-2: 2001 standard.

Galvanized without paint coating intended for use in environments with corrosivity class C1, C2.



LENGTH OF SCREWS

Fastener type		Dimensions D x L [mm]	Maximum drill capacity [mm]	Maximum thickness of fixed elements [mm]
			DC	MTmax
GT 5	NA	5,5 x 19	5,00	3
GT 5	NA	5,5 x 25	5,00	9
GT 5	NA	5,5 x 32	5,00	16
GT 5	NA	5,5 x 38	5,00	22
GT 5	NA	5,5 x 50	5,00	34
GT 5	NA	5,5 x 60	5,00	44
GT 5	NA	5,5 x 70	5,00	54

The working length of the connector 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 \geq 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	—	—	—	
	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	-

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

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

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

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	0,90	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	-

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

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

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

OTHER FEATURES

BASE MATERIAL:	<i>COLD STEEL PROFILE</i>
SIZE OF HEX HEAD:	<i>8 mm</i>
MINIMUM THICKNESS OF STEEL BASE:	<i>1,50 mm</i>
MAXIMUM CAPACITY OF DRILLING:	<i>5,00 mm</i>
THICKNESS OF ZINC COATING:	<i>12 μm</i>
CORROSIVE ENVIRONMENT:	<i>PAINTED - C3 UNPAINTED - C2</i>
OPINION ON ANTI-CORROSIVE PROTECTION:	<i>02248/16/Z00NZM</i>
POSSIBILITY OF PAINTING:	<i>YES</i>
PAINT COATING THICKNESS:	<i>50 μm</i>
TIGHTENING TORQUE:	<i>5 Nm</i>
RECOMMENDED ROTARY SPEED (IDLE):	<i>1500 rpm</i>

