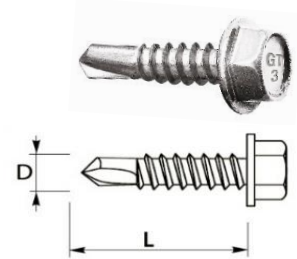


GT 3

SELF-DRILLING SCREWS WITHOUT WASHER FOR FIXING STEEL SHEETS



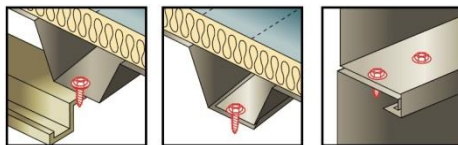
PRODUCT DESCRIPTION

Self-drilling, self-tapping screws made of surface-hardened carbon steel, electroplated, with a reduced drilling point #2, fine thread and a hex head, without a washer.



APPLICATION

Designed for fastening corrugated construction steel sheets to thin-walled steel structures and for overlap joints fastening of construction steel sheets to each other. 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 3	NA	4,8 x 16	3,00	3	
GT 3	NA	4,8 x 19	3,00	6	
GT 3	NA	4,8 x 22	3,00	9	
GT 3	NA	4,8 x 25	3,00	12	
GT 3	NA	4,8 x 32	3,00	19	
GT 3	NA	4,8 x 35	3,00	22	
GT 3	NA	4,8 x 45	3,00	32	
GT 3	NA	4,8 x 55	3,00	42	

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]		1,00	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]	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	—	—	—	—	—	
	Characteristic capacity 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	
VR,k [kN] dla 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	-	-	-

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	
NR,k [kN] dla tN,I* [mm]	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:	<i>COLD-ROLLED STEEL PROFILE, TRAPEZOIDAL METAL SHEET</i>
SIZE OF HEX HEAD:	<i>8 mm</i>
MINIMUM THICKNESS OF STEEL BASE (OVERLAP JOINTS):	<i>0,75 mm</i>
MAXIMUM CAPACITY OF DRILLING:	<i>3,00 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>3 Nm</i>
RECOMMENDED ROTARY SPEED (IDLE):	<i>1800 rpm</i>

