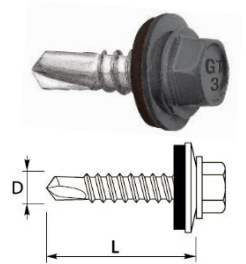


GTR 3 A14

SELF-DRILLING SCREWS WITH WASHER FOR FIXING STEEL SHEETS



PRODUCT DESCRIPTION

Self-drilling, self-tapping screws made of surface-hardened carbon steel, with a drilling point #2, fine thread and a hex head, with an integrated washer with vulcanized EPDM. Additional corrosion protection: gRey.coat coating.



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.

Designed for use in environments with corrosivity class C1, C2, C3, C4 according to PN-EN ISO 12944-2: 2001 standards.



LENGTH OF SCREWS

Fastener type		Dimensions D x L [mm]	Maximum drill capacity [mm]	Maximum thickness of fixed elements [mm]
			DC	MTmax 
GTR 3	A14	4,8 x 16	3,00	1
GTR 3	A14	4,8 x 19	3,00	3
GTR 3	A14	4,8 x 25	3,00	9

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]		0,75	1,00	1,25	1,50	2,00	2,50	Wood class \geq C24
$M_{t,nom}$		3 Nm						
Thickness of steel substrate ²⁾ [mm]	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	2,11	—
		0,88	2,11	2,29	2,29	2,29	2,29	—
		1,00	2,11	2,59	2,59	2,59	2,59	—
		1,13	2,11	2,59	2,59	2,59	—	—
		1,25	2,11	2,59	2,74	2,74	—	—
		1,50	2,11	2,59	2,74	3,41	—	—
		1,75	2,11	2,59	2,74	—	—	—
	2,00	2,11	2,59	—	—	—	—	
	For pull-out [kN]	0,50	—	0,97	1,43	1,69	2,19	—
		0,55	—	0,97	1,43	1,69	2,19	—
		0,63	—	0,97	1,43	1,69	2,76	—
		0,75	0,75	0,97	1,43	1,69	2,76	—
		0,88	0,75	0,97	1,43	1,69	2,76	—
		1,00	0,75	0,97	1,43	1,69	2,76	—
		1,13	0,75	0,97	1,43	1,69	—	—
		1,25	0,75	0,97	1,43	1,69	—	—
		1,50	0,75	0,97	1,43	1,69	—	—
1,75		0,75	0,97	1,43	—	—	—	
2,00	0,75	0,97	—	—	—	—		

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 VR,k can be increased by 8,3%

If both elements I and II are made of steel grade S350GD, values VR,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] 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	0,97	1,43	1,69	2,19
	0,55	0,97	1,43	1,69	2,19
	0,63	0,97	1,43	1,69	2,76
	0,75	0,97	1,43	1,69	2,76
	0,88	0,97	1,43	1,69	2,76
	1,00	0,97	1,43	1,69	2,76
	1,13	0,97	1,43	1,69	-
	1,25	0,97	1,43	1,69	-
	1,50	0,97	1,43	1,69	-
	1,75	0,97	1,43	-	-
	2,00	0,97	-	-	-

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

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>
ADDITIONAL CORROSION PROTECTION:	<i>gRey.coat</i>
CORROSIVITY CATEGORY:	<i>C4</i>
TECHNICAL OPINION ON CORROSION PROTECTION:	<i>02248/16/Z00NZM</i>
PAINTING POSSIBILITY:	<i>YES</i>
THICKNESS OF POLYESTER PAINT:	<i>50 µm</i>
TIGHTENING TORQUE:	<i>3 Nm</i>
RECOMMENDED ROTARY SPEED (IDLE):	<i>1800 rpm</i>
DIAMETER OF ALUMINUM WASHER A14:	<i>14 mm</i>

