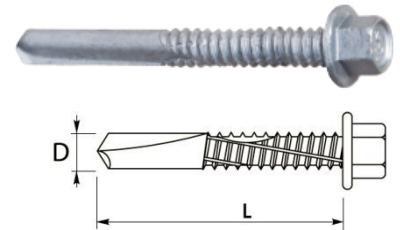


GTR 25

SELF-DRILLING SCREWS WITHOUT WASHER FOR FIXING STEEL SHEETS



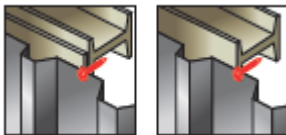
PRODUCT DESCRIPTION

Self-drilling, self-tapping screws made of surface-hardened carbon steel, with drilling point #8, fine thread and a hex head, without a washer. Additional corrosion protection: gRey.coat coating.



APPLICATION

Designed for fixing construction corrugated steel sheets to hot-rolled steel structures in of very high thickness. Designed for use in environments with corrosivity class C1, C2, C3, C4 according to PN-EN ISO 12944-2: 2001 standards.

Due to the high thickness of the substrate and the diversity of materials on the construction site, it is recommended to perform drilling tests each time. Maximum drilling thickness is given for the horizontal position of the screw only.



LENGTH OF SCREWS

Fastener type		Dimensions D x L [mm]	Maximum drill capacity [mm]	Maximum thickness of fixed elements [mm]	
			DC	MTmax	
GTR 25	NA	6,3 x 57	25,00	3	

The working length of the connector is calculated from the maximum thickness of the DC substrate

NATIONAL TECHNICAL ASSESSMENT ITB-KOT-2018/0680

CHARACTERISTIC LOAD BEARING CAPACITY FOR SHEAR AND PULL-OUT RESISTANCE IN A STEEL BASE

Substrate thickness ¹⁾ [mm]		5,00	6,00	8,00	10,00	12,00	14,00	Wood class \geq C24
$M_{t,nom}$		6 Nm						
Attachment thickness ²⁾ [mm]	SHEAR [kN]	0,50	1,42	1,42	1,42	1,42	1,42	—
		0,55	1,42	1,42	1,42	1,42	1,42	—
		0,63	1,54	1,54	1,54	1,54	1,54	—
		0,75	2,10	2,10	2,10	2,10	2,10	—
		0,88	2,49	2,49	2,49	2,49	2,49	—
		1,00	3,00	3,00	3,00	3,00	3,00	—
		1,13	3,00	3,00	3,00	3,00	3,00	—
		1,25	3,00	3,00	3,00	3,00	3,00	—
		1,50	3,00	3,00	3,00	3,00	3,00	—
		1,75	3,00	3,00	3,00	3,00	3,00	—
	2,00	3,00	3,00	3,00	3,00	3,00	—	
	FOR PULL OUT [kN]	0,50	0,70	0,70	0,70	0,70	0,70	—
		0,55	0,70	0,70	0,70	0,70	0,70	—
		0,63	0,88	0,88	0,88	0,88	0,88	—
		0,75	1,21	1,21	1,21	1,21	1,21	—
		0,88	1,32	1,32	1,32	1,32	1,32	—
		1,00	1,60	1,60	1,60	1,60	1,60	—
		1,13	1,60	1,60	1,60	1,60	1,60	—
		1,25	1,60	1,60	1,60	1,60	1,60	—
		1,50	1,60	1,60	1,60	1,60	1,60	—
1,75		1,60	1,60	1,60	1,60	1,60	—	
2,00	1,60	1,60	1,60	1,60	1,60	—		

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 ASSESSMENT ETA-12/0580

CHARACTERISTIC LOAD BEARING CAPACITY OF SHEAR RESISTANCE

tN,II* [mm]	5,00	6,00	8,00	10,00	12,00	14,00
VR,k [kN] for tN,I* [mm]	0,50	1,42	1,42	1,42	1,42	1,42
	0,55	1,42	1,42	1,42	1,42	1,42
	0,63	1,54	1,54	1,54	1,54	1,54
	0,75	2,10	2,10	2,10	2,10	2,10
	0,88	2,49	2,49	2,49	2,49	2,49
	1,00	3,00	3,00	3,00	3,00	3,00
	1,13	3,00	3,00	3,00	3,00	3,00
	1,25	3,00	3,00	3,00	3,00	3,00
	1,50	3,00	3,00	3,00	3,00	3,00
	1,75	3,00	3,00	3,00	3,00	3,00
	2,00	3,00	3,00	3,00	3,00	3,00

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]	5,00	6,00	8,00	10,00	12,00	14,00
VR,k [kN] for tN,I* [mm]	0,50	0,70	0,70	0,70	0,70	0,70
	0,55	0,70	0,70	0,70	0,70	0,70
	0,63	0,88	0,88	0,88	0,88	0,88
	0,75	1,21	1,21	1,21	1,21	1,21
	0,88	1,32	1,32	1,32	1,32	1,32
	1,00	1,60	1,60	1,60	1,60	1,60
	1,13	1,60	1,60	1,60	1,60	1,60
	1,25	1,60	1,60	1,60	1,60	1,60
	1,50	1,60	1,60	1,60	1,60	1,60
	1,75	1,60	1,60	1,60	1,60	1,60
	2,00	1,60	1,60	1,60	1,60	1,60

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:	STEEL PROFILE
SIZE OF HEX HEAD:	8 mm
MINIMUM THICKNESS OF STEEL BASE:	5,00 mm
MAXIMUM DRILLING CAPACITY:	25,00 mm
ADDITIONAL CORROSION PROTECTION:	gRey.coat
CORROSIVITY CATEGORY:	C4
TECHNICAL OPINION ON CORROSION PROTECTION:	02248/16/ZOONZM
PAINTING POSSIBILITY:	YES
THICKNESS OF POLYESTER PAINT:	50 μ m
TIGHTENING TORQUE:	7 Nm
RECOMMENDED ROTARY SPEED (IDLE):	1300 rpm

