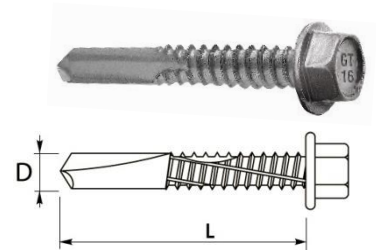


## GTR 16

SELF-DRILLING SCREWS WITHOUT WASHER FOR FIXING STEEL SHEETS

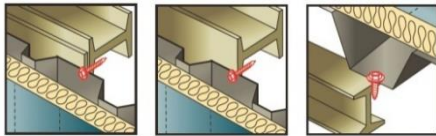


### PRODUCT DESCRIPTION



Self-drilling, self-tapping screws made of surface-hardened carbon steel, with drilling point #6, 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.



### LENGTH OF SCREWS

Fastener type		Dimensions D x L [mm]	Maximum drill capacity [mm]	Maximum thickness of fixed elements [mm]	
			DC	MTmax	
<b>GTR 16</b>	NA	6,3 x 40	16,00	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 <sup>1)</sup> [mm]		5,00	6,00	8,00	10,00	12,00	14,00	Wood class $\geq$ C24	
$M_{t,nom}$		6 Nm							
Attachment thickness <sup>2)</sup> [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	—			

<sup>1)</sup> steel grade S280GD, S320GD or S350GD according to PN-EN 10346:2015

<sup>2)</sup> 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]	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
NR,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:	16,00 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:	7 Nm
RECOMMENDED ROTARY SPEED (IDLE):	1300 rpm

