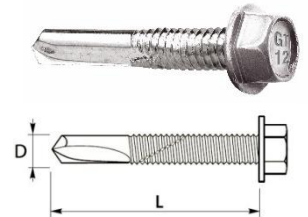


## GT 12

SELF-DRILLING SCREWS WITHOUT WASHER FOR FIXING STEEL SHEETS



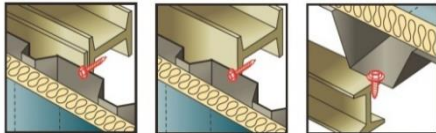
### PRODUCT DESCRIPTION

Self-drilling, self-tapping screws made of surface-hardened carbon steel, electroplated, with a reduced drilling point #5, fine thread and a hex head, without a washer.


### APPLICATION

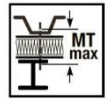
Designed for fixing construction profiled steel sheets to hot-rolled steel structures. Protected with paint coating - polyester thickness of not less than 50 µm, intended for use in environments with corrosivity class C1, C2 and C3 according to PN-EN ISO 12944-2: 2001 standard.

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 12	NA	5,5 x 35	12,00	4



*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]		4,00	5,00	6,00	8,00	10,00	12,00	Wood class ≥ C24	
M <sub>t,nom</sub>		6 Nm							
Attachment thickness <sup>2)</sup> [mm]	SHEAR [kN]	0,50	1,34	1,34	1,34	1,34	1,34	—	/
		0,55	1,34	1,34	1,34	1,34	1,34	—	
		0,63	1,46	1,46	1,46	1,46	1,46	—	
		0,75	1,93	1,93	1,93	1,93	1,93	—	
		0,88	2,35	2,35	2,35	2,35	2,35	—	
		1,00	2,82	2,82	2,82	2,82	2,82	—	
		1,13	2,82	2,82	2,82	2,82	2,82	—	
		1,25	2,82	2,82	2,82	2,82	2,82	—	
		1,50	2,82	2,82	2,82	2,82	2,82	—	
		1,75	2,82	2,82	2,82	2,82	2,82	—	
	2,00	2,82	2,82	2,82	2,82	2,82	—		
	FOR PULL OUT [kN]	0,50	0,61	0,61	0,61	0,61	0,61	—	
		0,55	0,61	0,61	0,61	0,61	0,61	—	
		0,63	0,90	0,90	0,90	0,90	0,90	—	
		0,75	0,99	0,99	0,99	0,99	0,99	—	
		0,88	0,99	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	1,13	1,13	1,13	—	
		1,25	1,13	1,13	1,13	1,13	1,13	—	
		1,50	1,13	1,13	1,13	1,13	1,13	—	
1,75		1,13	1,13	1,13	1,13	1,13	—		
2,00	1,13	1,13	1,13	1,13	1,13	—			

<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]	4,00	5,00	6,00	8,00	10,00
VR,k [kN] for tN,I* [mm]	0,50	1,34	1,34	1,34	1,34
	0,55	1,34	1,34	1,34	1,34
	0,63	1,46	1,46	1,46	1,46
	0,75	1,93	1,93	1,93	1,93
	0,88	2,35	2,35	2,35	2,35
	1,00	2,82	2,82	2,82	2,82
	1,13	2,82	2,82	2,82	2,82
	1,25	2,82	2,82	2,82	2,82
	1,50	2,82	2,82	2,82	2,82
	1,75	2,82	2,82	2,82	2,82
	2,00	2,82	2,82	2,82	2,82

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]	4,00	5,00	6,00	8,00	10,00
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	1,13
	1,25	1,13	1,13	1,13	1,13
	1,50	1,13	1,13	1,13	1,13
	1,75	1,13	1,13	1,13	1,13
	2,00	1,13	1,13	1,13	1,13

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 (OVERLAP JOINTS):	4,00 mm
MAXIMUM CAPACITY OF DRILLING:	12,00 mm
THICKNESS OF ZINC COATING:	12 µm
CORROSIVE ENVIRONMENT:	PAINTED - C3 UNPAINTED - C2
OPINION ON ANTI-CORROSIVE PROTECTION:	02248/16/Z00NZM
POSSIBILITY OF PAINTING:	YES
PAINT COATING THICKNESS:	50 µm
TIGHTENING TORQUE:	5 Nm
RECOMMENDED ROTARY SPEED (IDLE):	1500 rpm

