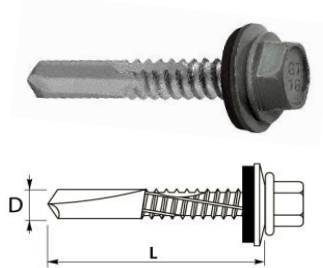


GTR 16 A16

SELF-DRILLING SCREWS WITH WASHER
FOR FIXING STEEL SHEETS

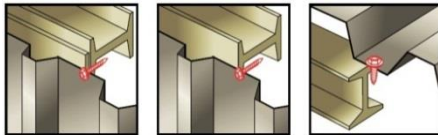


PRODUCT DESCRIPTION


Self-drilling, self-tapping screws made of surface-hardened carbon steel, drilling point #6, with fine thread and hex head, with integrated aluminum washer with vulcanized EPDM. Additional corrosion protection: gRey.coat coating.

APPLICATION

Designed for fixing construction corrugated steel sheets to hot-rolled steel structures 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
GTR 16	A16	6,3 x 40	16,00	1

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 ≥ 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	2,53	2,53	3,16	3,16	3,16	—	
		0,55	2,53	2,53	3,16	3,16	3,16	—	
		0,63	2,53	2,53	3,74	3,74	3,74	—	
		0,75	2,53	2,53	4,85	4,85	4,85	—	
		0,88	2,53	2,53	5,50	5,50	5,50	—	
		1,00	2,53	2,53	6,37	6,37	6,37	—	
		1,13	2,53	2,53	6,37	6,37	6,37	—	
		1,25	2,53	2,53	6,37	6,37	6,37	—	
		1,50	2,53	2,53	6,37	6,37	6,37	—	
1,75		2,53	2,53	6,37	6,37	6,37	—		
2,00	2,53	2,53	6,37	6,37	6,37	—			

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]	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	2,53	2,53	3,31	3,31	3,31
	0,55	2,53	2,53	3,31	3,31	3,31
	0,63	2,53	2,53	3,74	3,74	3,74
	0,75	2,53	2,53	4,85	4,85	4,85
	0,88	2,53	2,53	5,50	5,50	5,50
	1,00	2,53	2,53	6,37	6,37	6,37
	1,13	2,53	2,53	6,37	6,37	6,37
	1,25	2,53	2,53	6,37	6,37	6,37
	1,50	2,53	2,53	6,37	6,37	6,37
	1,75	2,53	2,53	6,37	6,37	6,37
	2,00	2,53	2,53	6,37	6,37	6,37

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
DIAMETER OF ALUMINUM WASHER A16:	16 mm

