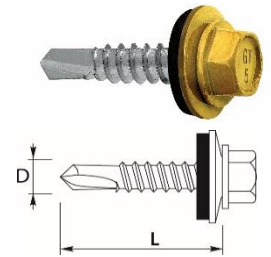


GT 5 Z16

SELF-DRILLING SCREWS WITH WASHER FOR FIXING STEEL SHEETS



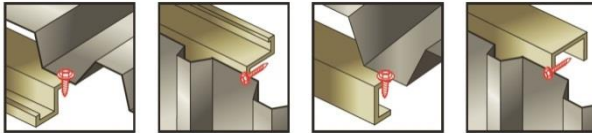
PRODUCT DESCRIPTION

Self-drilling, self-tapping screws made of surface-hardened carbon steel, electro-galvanized, drilling point #3, with fine thread and hex washer head, with integrated steel washer with vulcanized EPDM layer.



APPLICATION

Designed for fixing construction corrugated steel sheets to thin-walled 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 5	Z16	5,5 x 19	5,00	0	
GT 5	Z16	5,5 x 25	5,00	5	
GT 5	Z16	5,5 x 32	5,00	12	
GT 5	Z16	5,5 x 38	5,00	18	
GT 5	Z16	5,5 x 50	5,00	30	
GT 5	Z16	5,5 x 60	5,00	40	
GT 5	Z16	5,5 x 70	5,00	50	

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]		1,50	2,00	3,00	4,00	5,00	6,00	Wood class \geq C24	
$M_{t,nom}$		6 Nm							
Thickness of steel substrate ²⁾ [mm]	Characteristic capacity For shear [Kn]	0,50	1,25	1,25	1,25	1,25	—	—	
		0,55	1,25	1,25	1,25	1,25	—	—	
		0,63	1,18	1,18	1,18	1,18	—	—	
		0,75	1,70	1,70	1,70	1,70	—	—	
		0,88	2,07	2,07	2,07	2,07	—	—	
		1,00	2,32	2,32	2,32	2,32	—	—	
		1,13	2,32	2,32	2,32	—	—	—	
		1,25	3,41	3,41	3,41	—	—	—	
		1,50	3,41	3,41	3,41	—	—	—	
		1,75	3,41	3,41	3,41	—	—	—	
		2,00	3,41	3,41	3,41	—	—	—	
	For pull-out [kN]	0,50	1,78	2,55	3,16	3,16	—	—	
		0,55	1,78	2,55	3,16	3,16	—	—	
		0,63	1,78	2,55	3,63	3,63	—	—	
		0,75	1,78	2,55	4,17	4,17	—	—	
		0,88	1,78	2,55	4,18	4,18	—	—	
		1,00	1,78	2,55	4,75	4,75	—	—	
		1,13	1,78	2,55	4,75	—	—	—	
		1,25	1,78	2,55	4,75	—	—	—	
		1,50	1,78	2,55	4,75	—	—	—	
		1,75	1,78	2,55	4,75	—	—	—	
		2,00	1,78	2,55	4,75	—	—	—	

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]	1,50	2,00	3,00	4,00
0,50	1,25	1,25	1,25	1,25
0,55	1,25	1,25	1,25	1,25
0,63	1,18	1,18	1,18	1,18
0,75	1,70	1,70	1,70	1,70
0,88	2,07	2,07	2,07	2,07
1,00	2,32	2,32	2,32	2,32
1,13	2,32	2,32	2,32	-
1,25	3,41	3,41	3,41	-
1,50	3,41	3,41	3,41	-
1,75	3,41	3,41	3,41	-
2,00	3,41	3,41	3,41	-

Element I - sheet steel of S280GD grade; S320GD; S350GD according to EN 10346.

Element II - sheet steel of S280GD grade; S320GD; S350GD according to EN 10346.

In order to determine the design load, the characteristic load factor must be divided by the safety factor $\gamma_m = 1.33$.

CHARACTERISTIC LOAD BEARING CAPACITY OF PULL-OUT RESISTANCE IN A STEEL BASE

tN,II* [mm]	1,50	2,00	3,00	4,00
0,50	1,78	2,55	3,16	3,16
0,55	1,78	2,55	3,16	3,16
0,63	1,78	2,55	4,17	4,17
0,75	1,78	2,55	4,18	4,18
0,88	1,78	2,55	4,75	4,75
1,00	1,78	2,55	4,75	-
1,13	1,78	2,55	4,75	-
1,25	1,78	2,55	4,75	-
1,50	1,78	2,55	4,75	-
1,75	1,78	2,55	4,75	-
2,00	1,78	2,55	4,75	-

Element I - sheet steel of S280GD grade; S320GD; S350GD according to EN 10346.

Element II - sheet steel of S280GD grade; S320GD; S350GD according to EN 10346.

In order to determine the design load, the characteristic load factor must be divided by the safety factor $\gamma_m = 1.33$.

OTHER FEATURES

BASE MATERIAL:	COLD-ROLLED STEEL PROFILE
SIZE OF HEX HEAD:	8 mm
MINIMUM THICKNESS OF STEEL BASE:	1,50 mm
MAXIMUM CAPACITY OF DRILLING:	5,00 mm
THICKNESS OF ZINC COATING:	12 μ m
CORROSIVE ENVIRONMENT:	PAINTED - C3 UNPAINTED - C2
OPINION ON ANTI-CORROSIVE PROTECTION:	02248/16/Z00NZM
POSSIBILITY OF PAINTING:	YES
PAINT COATING THICKNESS:	50 μ m
TIGHTENING TORQUE:	5 Nm
RECOMMENDED ROTARY SPEED (IDLE):	1500 rpm
DIAMETER OF STEEL WASHER Z16:	16 mm

