

## GT 02 Z14

FASTENERS WITH WASHER  
FOR OVERLAP JOINTS (STAPLE)



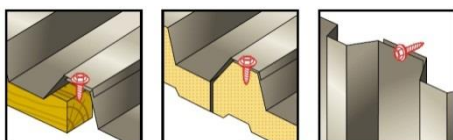
### PRODUCT DESCRIPTION

Self-drilling, self-tapping screws made of surface-hardened carbon steel, electroplated, with a reduced drilling point, fine thread and a hex head, with integrated steel washer with vulcanized EPDM layer.


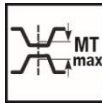
### APPLICATION

Designed for fastening corrugated construction steel sheets to each other and for overlap joints fastening of sandwich panels (roof tiles). Protected with paint coating - polyester with a thickness of not less than 50 µm, designed for use in environments with corrosivity categories C1, C2 and C3 according to PN-EN ISO 12944-2: 2001.

Zinc coated fasteners without paint coating are designed for use in environments with corrosivity categories 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 02	Z14	4,8 x 20	2 x 1,00	7,00

*The working length of the fastener 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]		0,50	0,55	0,63	0,75	0,88	1,00	Wood class $\geq$ C24	
$M_{t,nom}$		3Nm							
Attachment thickness <sup>2)</sup> [mm]	SHEAR [kN]	0,50	1,05	1,05	1,05	1,05	1,05	1,05	/
		0,55	1,05	1,05	1,05	1,05	1,05	1,05	
		0,63	1,05	1,05	1,42	1,42	1,42	1,42	
		0,75	1,05	1,05	1,42	2,02	2,02	2,02	
		0,88	1,05	1,05	1,42	2,02	2,21	2,21	
		1,00	1,05	1,05	1,42	2,02	2,21	2,53	
	FOR PULL OUT [kN]	0,50	0,55	0,55	0,73	0,86	1,04	1,59	
		0,55	0,55	0,55	0,73	0,86	1,04	1,59	
		0,63	0,55	0,55	0,73	0,86	1,04	1,59	
		0,75	0,55	0,55	0,73	0,86	1,04	1,59	
		0,88	0,55	0,55	0,73	0,86	1,04	1,59	
		1,00	0,55	0,55	0,73	0,86	1,04	1,59	

<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 PULL-OUT RESISTANCE IN A STEEL BASE

tN,II* [mm]		0,50	0,55	0,63	0,75	0,88	1,00
VR,k [kN] for tN,I* [mm]	0,50	1,05	1,05	1,05	1,05	1,00	1,00
	0,55	1,05	1,05	1,05	1,05	1,05	1,05
	0,63	1,05	1,05	1,42	1,42	1,42	1,42
	0,75	1,05	1,05	1,42	2,02	2,02	2,02
	0,88	1,05	1,05	1,42	2,02	2,21	2,21
	1,00	1,05	1,05	1,42	2,02	2,21	2,53

Component I: S280GD, S320GD or S350GD – EN 10326

Component II: S280GD, S320GD or S350GD – EN 10326.

To define a design load should divide the value of the characteristic load by a safety factor  $\gamma_m = 1,33$ .

### CHARACTERISTIC LOAD BEARING CAPACITY OF SHEAR RESISTANCE

tN,II* [mm]		0,50	0,55	0,63	0,75	0,88	1,00
NR,k [kN] for tN,I* [mm]	0,50	0,55	0,55	0,73	0,86	1,04	1,59
	0,55	0,55	0,55	0,73	0,86	1,04	1,59
	0,63	0,55	0,55	0,73	0,86	1,04	1,59
	0,75	0,55	0,55	0,73	0,86	1,04	1,59
	0,88	0,55	0,55	0,73	0,86	1,04	1,59
	1,00	0,55	0,55	0,73	0,86	1,04	1,59

Component I: S280GD, S320GD or S350GD – EN 10326

Component II: S280GD, S320GD or S350GD – EN 10326.

To define a design load should divide the value of the characteristic load by a safety factor  $\gamma_m = 1,33$ .

## OTHER FEATURES

SUBSTRATE MATERIAL:	<i>PROFILED METAL SHEET</i>
THE SIZE OF HEXAGONAL HEAD:	<i>8 mm</i>
MINIMUM THICKNESS OF CONNECTED STEEL SHEETS:	<i>2 x 0,50 mm</i>
MAXIMUM DRILLING CAPACITY:	<i>2 x 1,00 mm</i>
THICKNESS OF THE ZINC COATING:	<i>12 µm</i>
CORROSIVITY CATEGORY:	<i>PAINTED - C3 NOT PAINTED - C2</i>
TECHNICAL OPINION:	<i>02248/16/Z00NZM</i>
PAINTING POSSIBILITY:	<i>YES</i>
MINIMUM THICKNESS OF POWDER PAINTING:	<i>50 µm</i>
TIGHTENING TORQUE:	<i>3 Nm</i>
RECOMMENDED SPEED OF THE TOOL WITHOUT LOAD:	<i>1800 rpm</i>
WASHER DIAMETER (STEEL Z14):	<i>14 mm</i>

