

GTF O2 P

FARMER SCREWS WITH ALUMINUM WASHER (STAPLE)



PRODUCT DESCRIPTION

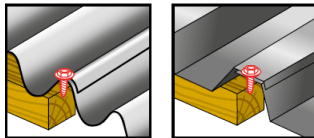
Self-drilling and tapping carbon steel screws, surface-hardened, electro-galvanized, with reduced drilling point and oval head with TX-20 cut. With integrated aluminum washer with vulcanized EPDM layer.

APPLICATION



Designed for fastening metal flat and corrugated steel sheets with overlap joints between each other.

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
GTF O2 P	A14	4,8 x 20	2 x 1,00	7

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 ¹⁾ [mm]		0,50	0,55	0,63	0,75	0,88	1,00	Wood class \geq C24
$M_{t,nom}$		3Nm						
Attachment thickness ²⁾ [mm]	SHEAR [kN]	0,50	1,11	1,11	1,11	1,11	1,11	1,11
		0,55	1,11	1,11	1,11	1,11	1,11	1,11
		0,63	1,11	1,11	1,45	1,45	1,45	1,45
		0,75	1,11	1,11	1,45	1,49	1,49	1,49
		0,88	1,11	1,11	1,45	1,49	1,49	1,49
		1,00	1,11	1,11	1,45	1,49	1,49	1,49
	FOR PULL OUT [kN]	0,50	0,48	0,48	0,48	0,48	0,48	0,48
		0,55	0,48	0,48	0,48	0,48	0,48	0,48
		0,63	0,48	0,48	0,78	0,78	0,78	0,78
		0,75	0,48	0,48	0,78	0,91	0,91	0,91
		0,88	0,48	0,48	0,78	0,91	1,30	1,30
		1,00	0,48	0,48	0,78	0,91	1,30	1,61

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]	0,50	0,55	0,63	0,75	0,88	1,00
VR,k [kN] for tN,I* [mm]	0,50	1,11	1,11	1,11	1,11	1,11
	0,55	1,11	1,11	1,11	1,11	1,11
	0,63	1,11	1,11	1,45	1,45	1,45
	0,75	1,11	1,11	1,45	1,49	1,49
	0,88	1,11	1,11	1,45	1,49	1,49
	1,00	1,11	1,11	1,45	1,49	1,49

Component I: S280GD, S320GD or S350GD – EN 10346

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 PULL-OUT RESISTANCE IN STEEL BASE

tN,II* [mm]	0,50	0,55	0,63	0,75	0,88	1,00
NR,k [kN] for tN,I* [mm]	0,50	0,48	0,48	0,48	0,48	0,48
	0,55	0,48	0,48	0,48	0,48	0,48
	0,63	0,48	0,48	0,78	0,78	0,78
	0,75	0,48	0,48	0,78	0,91	0,91
	0,88	0,48	0,48	0,78	0,91	1,30
	1,00	0,48	0,48	0,78	0,91	1,30

Component I: S280GD, S320GD or S350GD – EN 10346

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

BASE MATERIAL:	<i>PROFILED METAL SHEET</i>
SIZE OF HEX HEAD:	<i>8 mm</i>
MINIMUM DRILLING CAPACITY:	<i>2 x 0,50 mm</i>
MAXIMUM DRILLING CAPACITY:	<i>2 x 1,00 mm</i>
THICKNESS OF THE ZINC COATING:	<i>20 µm</i>
CORROSIVITY CATEGORY:	<i>PAINTED - C3 NOT PAINTED - C2</i>
TECHNICAL OPINION ON CORROSION PROTECTION:	<i>02248/16/Z00NZM</i>
PAINTING POSSIBILITY:	<i>YES</i>
THICKNESS OF POLYESTER PAINT:	<i>50 µm</i>
TIGHTENING TORQUE:	<i>3 Nm</i>
RECOMMENDED SPEED OF THE TOOL WITHOUT LOAD:	<i>1800 rpm</i>
MINIMUM EMBEDMENT DEPTH (l _{ef}):	<i>20 mm</i>
WASHER DIAMETER (ALUMINUM A14):	<i>14 mm</i>



ETA



DWU/DoP



AT



KDZ