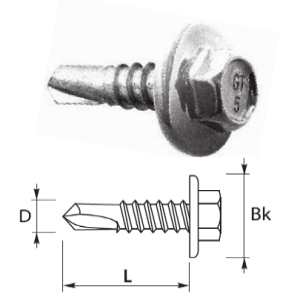


## GT 5 FH

FASTENERS WITH FLANGE HEAD FOR FIXING OF STEEL SHEETS

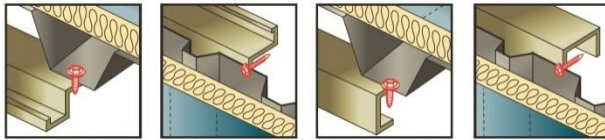


### PRODUCT DESCRIPTION

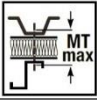
Self-drilling, self-tapping screws made of surface-hardened carbon steel, with drilling point #3, fine thread and a hex head, with integrated flange head.

### APPLICATION

Designed for fixing construction profiled steel sheets to thin-walled steel structures in crucial application types. 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	Diameter of flange Bk [Mm]	Dimensions D x L [mm]	Maximum drill capacity [mm]	Maximum thickness of fixed elements [mm]	
			DC	MTmax	
GT 5 FH	15	5,5 x 19	5,00	3	
GT 5 FH	15	5,5 x 25	5,00	9	

*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 <sup>1)</sup> [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 <sup>2)</sup> [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	2,76	2,76	—	—	
		0,55	1,78	2,55	2,76	2,76	—	—	
		0,63	1,78	2,55	3,77	3,77	—	—	
		0,75	1,78	2,55	4,34	4,34	—	—	
		0,88	1,78	2,55	4,35	4,35	—	—	
		1,00	1,78	2,55	4,94	4,94	—	—	
		1,13	1,78	2,55	4,94	—	—	—	
		1,25	1,78	2,55	4,94	—	—	—	
		1,50	1,78	2,55	4,94	—	—	—	
		1,75	1,78	2,55	4,94	—	—	—	
		2,00	1,78	2,55	4,94	—	—	—	

<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]	1,50	2,00	3,00	4,00	
VR,k [kN] for tN,I* [mm]	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	
NR,k [kN] for tN,I* [mm]	0,50	1,78	2,55	2,76	2,76
	0,55	1,78	2,55	2,76	2,76
	0,63	1,78	2,55	3,77	3,77
	0,75	1,78	2,55	4,34	4,34
	0,88	1,78	2,55	4,35	4,35
	1,00	1,78	2,55	4,94	4,94
	1,13	1,78	2,55	4,94	-
	1,25	1,78	2,55	4,94	-
	1,50	1,78	2,55	4,94	-
	1,75	1,78	2,55	4,94	-
	2,00	1,78	2,55	4,94	-

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 $\mu$ m
CORROSIVE ENVIRONMENT:	PAINTED - C3 UNPAINTED - C2
OPINION ON ANTI-CORROSIVE PROTECTION:	02248/16/Z00NZM
POSSIBILITY OF PAINTING:	YES
PAINT COATING THICKNESS:	50 $\mu$ m
TIGHTENING TORQUE:	5 Nm
RECOMMENDED ROTARY SPEED (IDLE):	1500 rpm

