

SELF DRILLING SCREW

SELF DRILLING SCREW FOR FASTENING TO STEEL



- #4 drill point for one step installation with no need for predrilling
- Large flange under the head for better load distribution
- Tall head for easy and stable mounting
- Surface treated with ZYTEC™ M for good corrosion resistance
- Available in more than 500 colours (QUALICOAT certified powder)



Hex head



Corrosion category C3



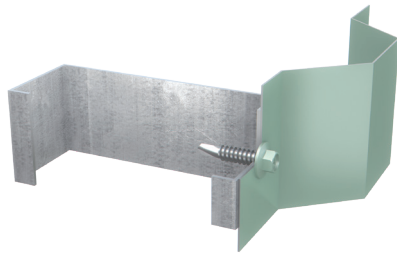
Hardened steel

PRODUCT RANGE

MG/PG	Item no.	Item name	Thread [mm]	Length L [mm]	Effective length L _{ef} [mm]	Drill capacity [mm]	Head [mm]	Unit [pcs]
06 7970	13047	HFH 6.3 X 21 #4 "A" HX8	Ø6.3	21	6.0	3.5 - 8.0	Ø14.0 HEX 8.0	250
	13048	HFH 6.3 X 38 #4 "A" HX8		38	23.0			

TYPICAL APPLICATION

- Fastening of cladding to steel

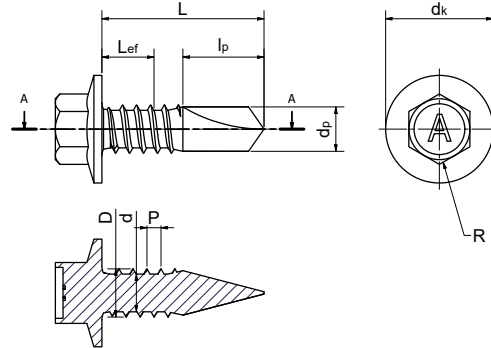


INSTALLATION INSTRUCTIONS

For optimal drill performance, it is recommended that the rotational speed is 1000 - 1600 RPM.

TECHNICAL DATA

Outer diameter, D	[mm]	Ø6.3
Inner diameter, d	[mm]	Ø4.7
Head diameter, d_k	[mm]	Ø14.0
Washer diameter, d_w	[mm]	-
Drill point diameter, d_p	[mm]	Ø5.7
Drill point length, l_p	[mm]	10.5
Pitch, P	[mm]	1.8
Drive type, R	[-]	HEX 8.0



DESIGN RESISTANCE

The design resistance of the screw is determined in accordance with EN 1993-1-3:2006 + AC:2009, Eurocode 3 for steel structures.

The resistance when loaded in tension, N_{Rd} appears from the table on the right and is the minimum value of the pull-out resistance of the supporting object, the pull-through resistance of the fixed object, and the tension resistance of the screw.

The resistance when loaded in shear, V_{Rd} appears from the table on the right and is the minimum value of the bearing resistance of the supporting object and the fixed object, and the shear resistance of the screw.

The theoretical values must be considered indicative since the conditions at the construction site may vary. Practical tests of the specific application are recommended for verification of the listed values.

Assumptions:

Fixed object: Steel S280GD - EN 10346

Supporting object: Steel S280GD - EN 10346

t_f = Thickness of the fixed object [mm]

t_{II} = Thickness of the supporting object [mm]

All resistances are stated in kN (1 kN \approx 100 kg)

Safety factor: $\gamma_M = 1.35$

MG/PG: 06 7970 HFH 6.3 X L #4 "A" HX8

Design resistance when loaded in tension, N_{Rd} [kN]							
t_f / t_{II}	3.50	4.00	4.50	5.00	5.50	6.00	8.00
0.50	0.93	0.93	0.93	0.93	0.93	0.93	0.93
0.55	1.03	1.03	1.03	1.03	1.03	1.03	1.03
0.63	1.18	1.18	1.18	1.18	1.18	1.18	1.18
0.75	1.40	1.40	1.40	1.40	1.40	1.40	1.40
0.88	1.64	1.64	1.64	1.64	1.64	1.64	1.64
1.00	1.87	1.87	1.87	1.87	1.87	1.87	1.87
1.25	2.33	2.33	2.33	2.33	2.33	2.33	2.33
1.50	2.80	2.80	2.80	2.80	2.80	2.80	2.80

Design resistance when loaded in shear, V_{Rd} [kN]							
t_f / t_{II}	3.50	4.00	4.50	5.00	5.50	6.00	8.00
0.50	0.75	0.75	0.75	0.75	0.75	0.75	0.75
0.55	0.86	0.86	0.86	0.86	0.86	0.86	0.86
0.63	1.06	1.06	1.06	1.06	1.06	1.06	1.06
0.75	1.38	1.38	1.38	1.38	1.38	1.38	1.38
0.88	1.75	1.75	1.75	1.75	1.75	1.75	1.75
1.00	3.46	3.46	3.46	3.46	3.46	3.46	3.46
1.25	4.32	4.32	4.32	4.32	4.32	4.32	4.32
1.50	5.04	5.19	5.19	5.19	5.19	5.19	5.19