

Manufacturer: ETANCO (FRANCE)

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Product name

FASTOVIS-COLORVIS 4 PI TH8/ ZN or 2C Ø 5,5 x L

Application:

Fastening sheets to metal purlins

Description:

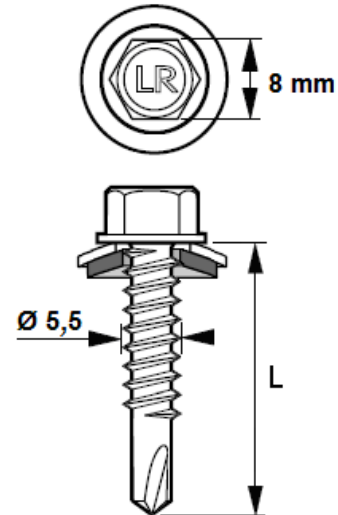
Self-drilling screw Ø 5,5 mm
Hexagonal head , 6 sections of 8 mm collar
Natural finish or EPOXY powder painted, stove hardened
Pitch 1.81 mm. Drill point
Can be fitted with Vulca Galva washer Ø14 mm
the pilot advanced IP allows drilling all plate carrier before thread engagement

Drilling capacity (CP):

1.5 to 4 mm into steel

Material:

Screw body:
Cemented steel 20MB5 - SAE 1020 - JIS SWRCH22A.
Surface hardness HV0.5 _ 550 < HV < 750
Washer: Aluminium or stainless steel A2 + vulcanized
EPDM 2 mm thickness Shore 70 A



Material, coating and anti-corrosion level tests

- **ZN:** Carbon steel (3 to 5 µm of zinc)

Anti-corrosion level determined by Kesternich test (sulfur dioxide corrosion with general dampness condensation) According to NF EN 3231 (2 l)
Resisted to 1 cycle

Salt spray test according to NF ISO 9227 (March 2007):
No trace of red rust after 48 hours.

Resistance to corrosion: No warranty
We recommend not using powder painted steel screws in outside environments other than the following:
non-polluted rural, normal urban and industrial, marine 10 to 20 km from the coast.

- **2C:** SUPRACOAT 2C treated cemented steel (12 to 20 µm)

Corrosion resistance level determined by Kesternich test (sulfur dioxide corrosion with general dampness condensation) according to NF EN 3231 (2 l)
Resisted to 15 cycles before the appearance of red rust

Salt spray test according to NF ISO 9227 (March 2007):
No trace of red rust after 500 hours.

Painting of heads and washers:

Powder painted without TGIC – without Gloss polyester Epoxy

The following tests were carried out on 1 mm zinc plated steel test panels and a nominal coating thickness of 60 µm.

Test	ISO / ASTM Specification
Cross hatch adhesion	ISO 2409 - class 0
Impact resistance	ASTM D 2794 - pass 20 inch/lbs
Flexibility	ISO 1519 - pass 4 mm
Cupping test	ISO 1520 - pass 6 mm
Scratch resistance	N / A
Hot salt spray resistance	ISO 9227 - pass 1,000 hours
Humidity resistance	ISO 6270 - pass 1,000 hours
Kesternich resistance	ISO 3231 - pass 25 cycles
Chemical resistance	Resistance to most acids, alkalis and oils at normal temperatures. May be affected by chlorinated solvents.

Drilling Performance:

Conditions: a) Test material: Structural steel S355 JR

b) Test screwdriver: Drilling test with SCS Fein 6.3-19X power 400 W mini with torque limiter (depth control)

Drilling test	Unit	Ø 4.8	Ø 5.5	Ø 6.3 & 6.5
Drilling time	s/mm	< 2	< 2	< 2
Speed rotate	rpm	2000 *	2000 *	2000 *
Axial load	daN	16	20	27

* Under load: 1800 rotations/min

Drilling performance, diameter, length in mm and packaging

Drilling capacity	Ø x Length	CS Build up min	CS Build up max	Hexagonal head TH	Packaging
1.5 to 4	5,5 x 25	-	11	8	100
1.5 to 4	5,5 x 25 + VG 14	-	9	8	100
1.5 to 4	5,5 x 32	-	16	8	100
1.5 to 4	5,5 x 32 + VG 14	-	14	8	100
1.5 to 4	5,5 x 38	-	20	8	100
1.5 to 4	5,5 x 38 + VG 14	-	18	8	100
1.5 to 4	5,5 x 48	10	19	8	100
1.5 to 4	5,5 x 48 + VG 14	8	17	8	100

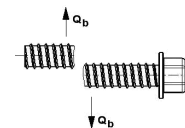
Characteristic tensile test:

$\bar{x} = 855 \text{ daN}$



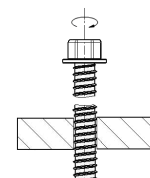
Characteristic shearing test value – 0.6 x Rm:

$\bar{x} = 513 \text{ daN}$



Characteristic torsion strength:

$\bar{x} = 7 \text{ Nm}$



Tensile strength test value (Pk in daN) of top sheet - According to NF P 30-314.

Thickness of sheet steel (mm)					
Superior steel sheet S320	Steel sheet support S320			Steel sheet support S235	
0.75 mm	1.5 mm	2 mm	2.5 mm	3 mm	4 mm
		213	324	463*	495*

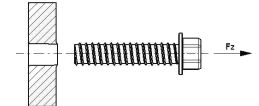
These values do not include safety coefficients

* **Buckling**

Tensile strength test value (Pk in daN) – According to NF P 30-310

Thickness of Steel sheet support S320			Thickness of Steel sheet support S235	
1.5 mm	2 mm	2.5 mm	3 mm	4 mm
194	258	525	592	1245

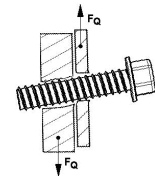
These values do not include safety coefficients



Shearing test value (Pk in daN) – According to NF P 30-316.

Thickness of sheet steel (mm)		
Superior steel sheet S320	Steel sheet support S320	daN
0.75	1.5	-
0.75	2	-
0.75	2.5	-
Superior steel sheet S320	Steel sheet support S235	
0.75	3	-
0.75	4	-

These values do not include safety coefficients



Accordance:

Professional regulations related to cladding

Recommended setting tools:

Screwdriver FEIN SCS 6.3 -19X power 400 W mini with torque limiter (depth control)
Screw bit: 8 mm hexagonal head

Marking - Labelling:

FASTOVIS 4 PI TH8 / Zn – Ø 5,5 x L + Code
FASTOVIS 4 PI TH8 / 2C – Ø 5,5 x L + Code
FASTOVIS 4 PI TH8 / Zn – Ø 5,5 x L + VG 14 + Code
COLORVIS 4 PI TH8 / Zn – Ø 5,5 x L + VG 14 + Code

Quality control:

ISO 9001: 2008