

Manufacturer: LR ETANCO (FRANCE)

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Product name:

FASTOVIS– COLORVIS 12 TH8/ ZN Ø 5,5 x L

Application:

Steel sheet on steel beam.

Description:

Self-drilling screw Ø 5,5 mm.

Hexagonal head of 8 mm with collar.

Natural finish or EPOXY powder painted, stove hardened.

Pitch = 1 mm. Drill point.

Can be assembled with VULCA Galva washer Ø14 mm or 16 mm.

Drilling capacity (CP):

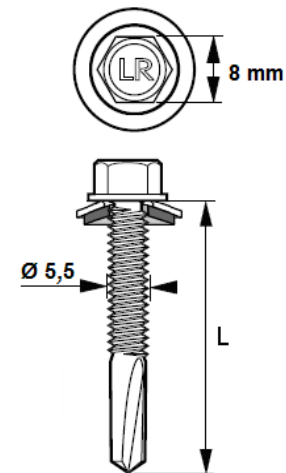
4 to 12 mm into steel sheet.

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



Not contractual position marking

Material, coating and anti-corrosion level tests:

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

Corrosion resistance level determined by Kesternich test (sulphur dioxide corrosion with general dampness condensation) according to NF EN 3231 (2 l):

Resisted to 1 cycle before the appearance of red rust.

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.

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	Hex head TH	Packaging
4 to 12	5,5 x 32	-	13	8	100
4 to 12	5,5 x 32 + VG 14	-	11	8	100
4 to 12	5,5 x 40	-	21	8	100
4 to 12	5,5 x 40 + VG 14	-	19	8	100
4 to 12	5,5 x 51	7	32	8	100
4 to 12	5,5x 51 + VG 16	5	30	8	100
4 to 12	5,5 x 67	20	48	8	100
4 to 12	5,5x 67 + VG 16	18	46	8	100
4 to 12	5,5 x 76	16	57	8	100
4 to 12	5,5 x 76 + VG 16	14	55	8	100
4 to 12	5,5 x 100	35	81	8	100
4 to 12	5,5 x 100 + VG 16	33	79	8	100

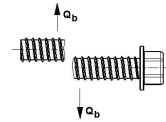
Tensile test value in daN:

$\bar{x} = 1355 \text{ daN}$



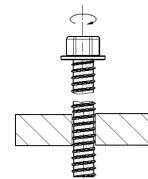
Shear test value – 0.6 x Rm (value in daN):

$\bar{x} = 813 \text{ daN}$



Breaking torque value (in Nm):

$\bar{x} = 10 \text{ Nm}$

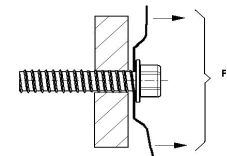


Pull out test values (Pk in daN) of top sheet - According to NF P 30-314

Sheet thickness (mm)					
Top sheet (Steel S320)	Steel sheet (Steel S235)				
0.75 mm	4 mm	6 mm	8 mm	10 mm	12 mm
	502*	502*	502*	502*	502*

the values do not include safety coefficients

* **Buckling**

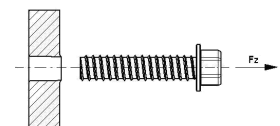


Pull out test values (Pk in daN) – According to NF P 30-310

Sheet thickness (mm)				
4 mm	6 mm	8 mm	10 mm	12 mm
1166	1634**	1634**	1634**	1634**

the values do not include safety coefficients

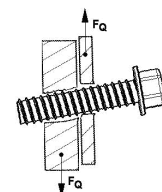
** **Breaking point**



Shear load test values (Pk in daN) – According to NF P 30-316

Sheet thickness (mm)		
Top sheet (Steel S320)	Steel sheet (Steel S253)	daN
0.75	4	-
0.75	6	-
0.75	8	-
0.75	10	-
0.75	12	-

the values do not include safety coefficients



Conformity:

French 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 12 TH8 / Zn- Ø 5,5 x L + CODE

FASTOVIS 12 TH8 / Zn - Ø 5,5 x L + VG 14 + CODE

COLORVIS 12 TH8 / Zn - Ø 5,5 x L + VG 14 + CODE

Quality control:

ISO 9001 : 2015