

Manufacturer : LR ETANCO (FRANCE)

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Product name:

DRILLNOX 3T TH8 A4 (316L) Ø 6.3 x 25

Application:

Sewing of metallic sheeting

Description:

Self-drilling bi-metal screw Ø 6.3 mm

Hexagonal head of 8 mm. Natural finish or EPOXY powder painted stove hardened.

Pitch = 1.81 mm.

Can be fitted with VULCA stainless steel washer Ø 16 or 19 mm.

Drilling capacity (CP):

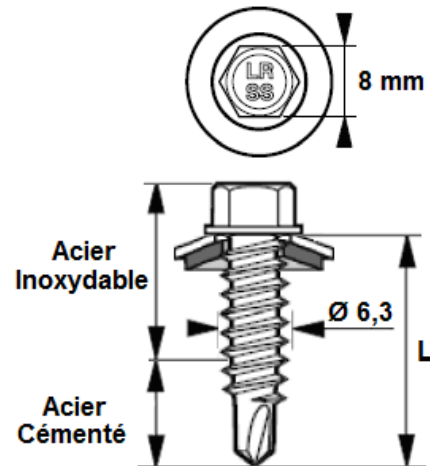
2 to 3 x 0.75 mm into steel sheet

Material:

Screw body: Austenitic stainless steel A4 AISI 316L - 1.4404 - X2CrNiMo17-12-2

Drill point and first threads: Cemented steel

Washer: Stainless steel A2 + vulcanized EPDM, 2 mm thickness, 70 Shore A



Not contractual position marking

Material, coating and test of corrosion resistance:

- A4: Austenitic stainless steel A4 AISI 316 L

Corrosion resistance level determined by Kesternich test (sulphur dioxide corrosion with general dampness condensation) in compliance with NF EN 3231 (2 1)

Resisted to more than 30 cycles before the appearance of red rust

Salt spray test in compliance with NF ISO 9227 (March 2007):

No trace of red rust after 1000 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 Requirement
Cross 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. Can be affected by chlorinated solvents.

Drilling time Performance:

- Conditions: a) Test material : Structural steel S355 JR
 b) Tools used : Drilling test with SCS Fein 6.3-19X power 400 W mini with torque limiter and 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 Capacity, diameter, length (in mm) and packaging:

Drilling capacity	Ø x Length	CS Capacity of mini tightening	Assembly capacity CA maxi	Hex head TH	Packaging
2 to 3 x 0.75	6.3 x 25	-	6	8	100 units
2 to 3 x 0.75	6.3 x 25 + VI 16	-	4	8	100 units
2 to 3 x 0.75	6.3 x 25 + VI 19	-	3	8	100 units

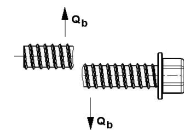
Tensile test (value in daN):

$\bar{x} = 1076 \text{ daN}$



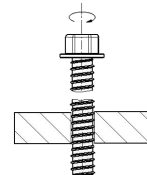
Shear test value – 0.6 x Rm (value in daN):

$\bar{x} = 645 \text{ daN}$



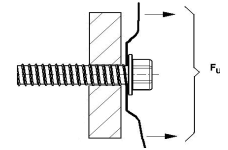
Breaking torque (in Nm):

$\bar{x} = 14 \text{ Nm}$



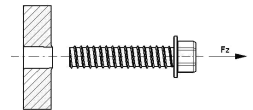
Pull out test values (Pk in daN) of top sheet - In compliance with NF P 30-314.

Thickness of sheet steel (mm)	
Superior steel sheet (S320)	Steel sheet support (S320)
0.75 mm	2 x 0.75mm
	190
the values do not include safety coefficients	



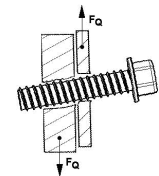
Pull out test values (Pk in daN) – In compliance with NF P 30-310

Thickness of Steel sheet support (S320)	
2 x 0.75 mm	3 x 0.75 mm
233 daN	421 daN
the values do not include safety coefficients	



Shear load test values (Pk in daN) – In compliance with NF P 30-316.

Thickness of sheet steel (mm)		
Superior steel sheet (S320)	Steel sheet support (S320)	daN
0.75	0.75	-
0.75	2 x 0.75	464
0.75	3 x 0.75	-
the values do not include safety coefficients		



Compliance:

DTU 40.35
DTU 40.36
French professional regulations related to cladding

Recommended setting tools:

Screwing toll FEIN SCS 6.3 -19X power 400 W mini with torque limiter and depth control
Screw Tip : socket with 8 mm imprint hex head hollow

Marking - Labelling:

DRILLNOX 3T TH8 / A4 - Ø 6,3 x 25 + article number
DRILLNOX 3T TH8 / A4 - Ø 6,3 x 25 + VI 16 + article number
DRILLNOX 3T TH8 / A4 - Ø 6,3 x 25 + VI 19 + article number

Quality control:

ISO 9001 : 2015