



TECHNICAL SHEET

For detailed use of the data on the technical sheet consult the FIXING TECHNOLOGY

**FOR ANY SPECIFIC APPLICATION PROBLEMS CONTACT
THE *Friulsider TECHNICAL DEPARTMENT***

E-mail: marketing@friulsider.com

The technical sheets can be downloaded from the download area of the
Friulsider internet site www.friulsider.com

Friulsider S.p.A.

33048 - S. Giovanni al Natisone
Via Trieste, 1 - (Udine) - ITALY

Tel. ++39-0432-747911

www.friulsider.com

e-mail: marketing@friulsider.com

All rights reserved. Friulsider S.p.A. reserves the copyright of all photographs, designs, texts and illustrations. The reproduction of such is prohibited without Friulsider S.p.A. authorization. Colour images are purely indicative and may not correspond to the true chromaticity of the product. Designs are purely indicative and show how the products are used. Friulsider S.p.A. is constantly involved in the development of its products, therefore reserving the right to modify technical specifications and other data without prior notice.



- **UNIQUE:** similar load and safety values to heavy duty metal fixings.
- **VERSATILE:** through fixing suitable for most base materials used in building.
- **ECONOMIC:** with regards to high performance.
- **CONTROLLED EXPANSION:** during application the screw remains in the correct position due to the locating groove inside the plug.
- **EFFECTIVE ANTI-ROTATION:** ensured by ribs and multiple wings for a stronger grip on hollow and compact base materials.
- **WIDE EXPANSION:** with optimum distribution of the load.
- **LARGE FIXTURE THICKNESS:** due to the range available with lengths up to 240 mm.
- **SPECIAL SCREW:** with large built-in washered head to distribute the load on the face of the profile being fixed. Made from steel grade 4.8, yellow passivated min thickness 5 microns.

size do x L	t fix max	h1	hnom	dr	hmin	d	Lv	Wrench	Code
Ø16X140	45	110	95	34	140	12	150	19	64001b16140
Ø16X160	65	110	95	34	140	12	170	19	64001b16160
Ø16X200	105	110	95	34	140	12	210	19	64001b16200
Ø16X240	145	110	95	34	140	12	250	19	64001b16240

APPLICATIONS

TUPP is a heavy duty nylon through fixing suitable for fixing:- wood structures (even of great thickness), light metal box profiles, hollow metal tubes and metal structures.

PRODUCT FEATURES

Steel screw grade 4.8, nylon plug.

RECOMMENDED LOADS

(Important: for detailed anchor selection using this table consult the chapter "Fixing Technology")

Base material type	Plug Ø16
Concrete C20/25	Tensile load Nrec kN (3) 1.80
	Shear load Vrec kN 2.50
Solid brick	Tensile load Nrec kN 1.70
	Shear load Vrec kN 2.00
Double brick UNI (1)	Tensile load Nrec kN 0.40
	Shear load Vrec kN 1.50
Critical distance from edge Ccr (2)	mm 140
Critical distance between anchors Scr (2)	mm 140
Bending moment Mrec	Nm 10.3

(1) Base materials with plaster thickness around 5-10 mm.

(2) In case of broken bricks, double the indicated data.

(1) kN=100 Kgf.

- concrete
- hollow core concrete
- solid brick
- honeycomb brick
- cell like clay brick
- perforated brick
- light weight honeycomb brick
- dense aggregate block
- light aggregate block
- hollow dense aggregate block
- hollow light aggregate block
- aerated concrete
- plasterboard
- panels & sheets
- solid stone
- wood

- do = hole diameter (mm)
- h1 = min. hole depth (mm)
- hnom = nominal embedment depth (mm)
- hmin = min. support thickness (mm)
- Lv = screw length (mm)
- t fix = fixture thickness (mm)
- dr = washer diameter (mm)
- d = screw diameter (mm)
- L = anchor length (mm)

