

HYDRAULIC BOLT TENSIONING

Rubber Filled Nuts

This is a mechanically operated, shim type nut. It is activated by tightening socket head cap screws located in the top of the nut. The nut has a flanged piston. A shim gap is created between the body and the piston when the nut is operated. The size of the shim gap is a combination of the compression of the bolted joint and gasket, if fitted, plus the elongation of the bolt.

In use the socket head cap screws are tightened until the shim gap is large enough to accept the pre-machined shims. The socket head cap screws are then removed and the pre-load is transferred onto the shims. A high percentage of the load is retained in the bolt. The mechanical



Nominal Size	Nut Height inch (mm)	Nut OD inch (mm)	Max Shim inch (mm)	Max Load tonf (kN)
1 (M24)	1-13/16" (46.04)	2-1/2" (63.5)	0.036 (0.914)	20.6 (205)
1-1/4" (M30)	1-13/16" (46.04)	2-1/2" (63.5)	0.036 (0.914)	20.6 (205)
1-3/8" (M36)	1-13/16" (46.04)	2-5/8" (66.6)	0.026 (0.660)	22.0 (219)
1-1/2" (M36)	1-13/16" (46.04)	2-3/4" (69.85)	0.023 (0.584)	23.5 (234)
1-5/8" (M39)	1-13/16" (46.04)	2-7/8" (73.02)	0.020 (0.508)	25.0 (249)
1-3/4" (M42)	2-7/32" (56.36)	3-3/8" (85.73)	0.031 (0.787)	35.8 (357)
2" (M48)	2-7/32" (56.36)	3-5/8" (92.07)	0.026 (0.660)	39.5 (394)
2-1/4" (M56)	2-5/8" (66.67)	4-1/8" (104.78)	0.034 (0.864)	53 (528)
2-1/2" (M64)	3-5/32" (80.17)	4-11/16" (119.06)	0.042 (1.067)	69.5 (693)
2-3/4" (M68)	3-7/16" (87.31)	5-1/4" (133.35)	0.037 (0.94)	88.3 (880)
3" (M72)	3-7/16" (87.31)	5-1/2" (139.7)	0.046 (1.168)	94.2 (938)
3-1/4" (M80)	4-1/4" (107.9)	6-3/8" (161.92)	0.068 (1.727)	132.5 (1318)
3-1/2" (M90)	4-1/4" (107.9)	6-5/8" (168.27)	0.062 (1.575)	139.9 (1394)
3-3/4" (M95)	4-1/4" (107.9)	6-7/8" (174.62)	0.057 (1.448)	147.2 (1467)
4" (M100)	5-1/16" (128.6)	7-3/4" (196.85)	0.080 (2.032)	129.6 (1300)
4-1/2" (M110)	5-1/16" (128.6)	8-1/4" (209.55)	0.068 (1.727)	141.3 (1439)
5" (M125)	5-7/8" (149.22)	9-3/8" (238.1)	0.084 (2.134)	185.5 (1850)
5-1/2" (M140)	6-11/16" (169.9)	10-1/2" (266.7)	0.102 (2.591)	235.6 (2342)
6" (M150)	6-11/16" (169.9)	11" (279.4)	0.090 (2.286)	251.1 (2500)

Notes

- Maximum load is generated using a hexagon allen key
- No hydraulic hoses, fittings or pumps required
- Above 6 inch use hydraulic nut
- Nuts are made to order and can easily be designed to suit the application
- Any thread form can be machined-specify when ordering
- Nuts can be designed to match and develop the same load as the customers existing nuts
- Service temperature -20°C to +80°C
- Due to continuous product development dimensions may change without notice

Options available

- Plain bore
- Extra socket head cap screws for increase stroke not load
- Additional shims
- 3 mm shim gap and shims at zero load, to avoid need for paper thin shims

Advantages

- No hydraulic hoses or pumps required
- Simple and easy to use



BOLTIGHT®
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