# bervina

## **TAPER LOCKING BUSHES**

**BS & BT Series** 

Fix gears & pulleys to motors or shafts without expensive machining or damage.

For shaft sizes 4mm to 25mm

Low diameter boring

High gripping torque

Minimal machining required

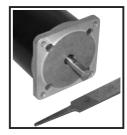




No drilling and tapping for setscrews. No loosening of setscrews due to vibration.



No time consuming and expensive machining of keyways. No backlash caused by keyway tolerance.



No filing flats on motor shafts, weakening and damaging shaft.



Infinite radial and axial position adjustment for synchronisation.



Can be used on very small pulleys, improving the reduction ratio.



Easily removed and re-used.



No locking agents required.



Easily fitted to existing shafts. No need to dismantle for machining.



Small size allows use of narrow pulleys, saving space.

The BERVINA taper bushes are an ideal solution for fixing pulleys and gears to shafts without extensive machining or damage to the shaft. They consist of an inner tapered collet, outer sleeve and a locking nut. By tightening the nut, the assembly expands and a very high clamping force is produced.

Two ranges are available. The BS range is constructed from stainless steel and will fit into small diameter bores. The BT series are constructed from carbon steel and have higher gripping torque but require larger bore sizes. As a result, they are not suitable for very small pulleys.

### **INSTALLATION**

- 1 If shaft has a key in it, remove the key.
- 2 Ensure the shaft is smooth and clean.
- 3 Remove any burrs on the shaft.
- 4 Bore the pulley to the required diameter "D" and depth "I" as specified in this brochure. This must be accurate.
- 5 Assemble the taper bush. Ensure the nut is loose and the taper has not been expanded.
- 6 Insert assembled taper bush into the pulley bore.
- 7 Fit pulley onto shaft, adjust position and tighten nut.
- 8 When dissassembling taper bush, loosen nut approx half a turn and tap with soft hammer to loosen taper.



### BS Series (stainless steel) **MODEL** STYLE d D Η THREAD TORQUE WEIGHT to fit shaft dia. bore dia. total length sleeve length nut AF WORKING approx. (mm) (mm) (mm) (mm) (Nm) (mm) metric kg BS-6.35 6.35 (0.25") 10 15 12.5 10 M8 x 0.5 7 0.005 MPERIAI 14 BS-9.52 9.52 (0.375") 22 19 16 M12 x 1 14 0.015 23 26 BS-15.88 28 23 M20 x 1 26 0.052 15.88 (0.675") 8 BS-4.00 4.00 8 15 12.5 M6 x 0.5 3 0.004 BS-5.00 10 15 12.5 10 M8 x 0.5 5.00 4 0.006 BS-6.00 10 M8 x 0.5 7 6.00 10 15 12.5 0.005 BS-7.00 7.00 12 15 12 12 M10 x 0.75 8 0.009 BS-8.00 8.00 14 22 19 16 M12 x 1 14 0.019 BS-9.00 9.00 14 22 19 16 M12 x 1 14 0.017 METRIC BS-10.00 17 22 18.5 18 M15 x 1 18 0.027 10.00 11.00 17 22 18.5 18 18 0.024 BS-11.00 M15 x 1 12.00 18.5 BS-12.00 17 22 18 M15 x 1 18 0.020 BS-14.00 14.00 20 28 23 20 24 M17 x 1 0.036

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M17 x 1

M20 x 1

M20 x 1

M22 x 1

M25 x 1

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26

26 29

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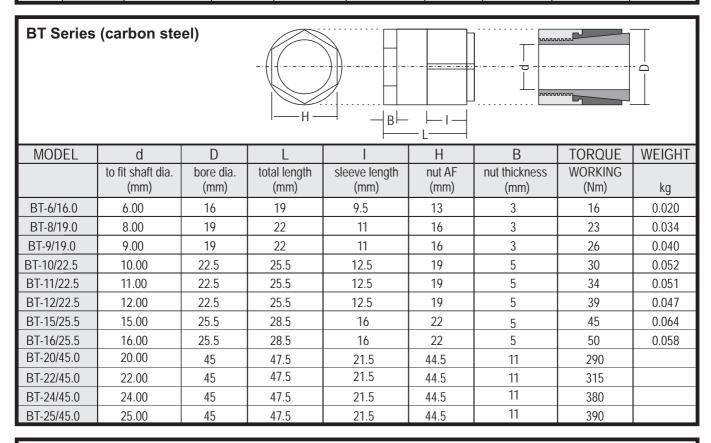
0.032

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0.069



## AUTOMATED MOTION SYSTEMS PTY.LTD.

MAILING ADDRESS: P.O.BOX 1240 WANGARA DC W.A. 6947

BS-15.00

BS-16.00

BS-17.00

BS-19.00

BS-20.00

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20.00

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PHONE: (08) 9309 1896 FAX: (08) 9309 5671 EMAIL: sales@automotsys.com.au INTERNET: http://www.automotsys.com.au OFFICE ADDRESS: UNIT 2, 7 BARETTA RD. WANGARA, PERTH WESTERN AUSTRALIA