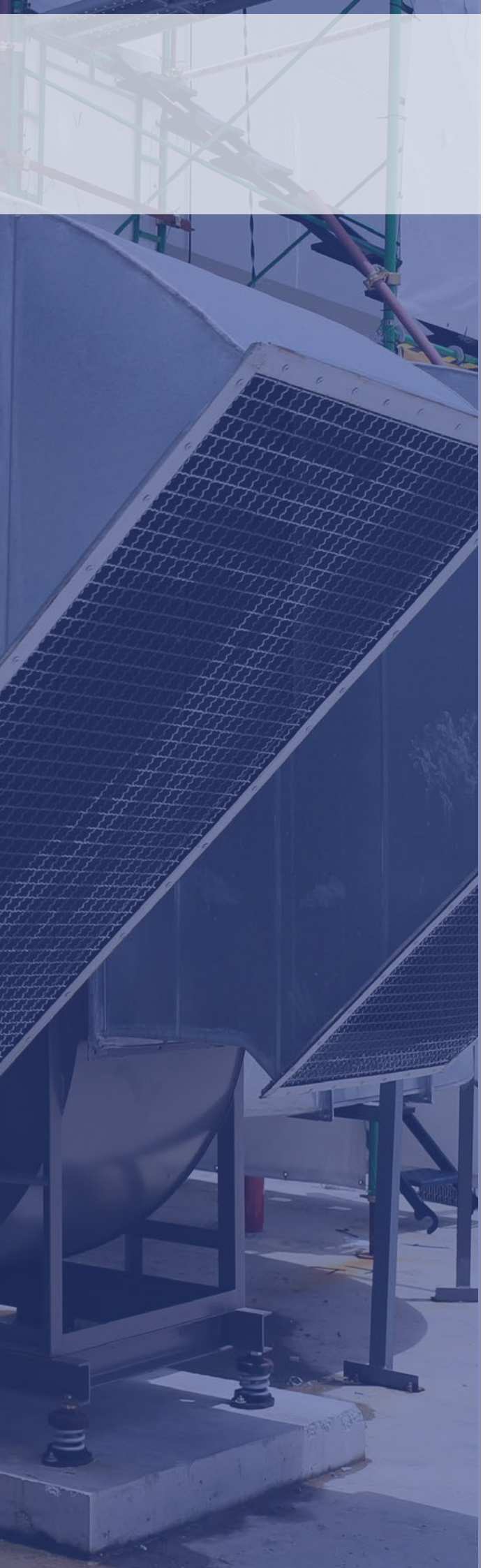
Bearing Supplies
Norwich
tel: 01603891800
email: sales@bearing-supplies.co.uk
web: www.bearing-supplies.co.uk

POWERDRIVE TAPER LOCK BUSHES

POWER DRIVE

REV-01



TAPER LOCK BUSHES

INTRODUCTION

THE TAPER LOCK BUSH, ALSO REFERRED TO AS A TAPER BUSH OR TAPER FIT BUSH, IS A LOCKING MECHANISM COMMONLY USED IN POWER TRANSMISSION DRIVES FOR LOCATING PULLEYS, SPROCKETS, AND COUPLINGS TO SHAFTS.

The outside of the bush is tapered to match the component bore that is to be located on the shaft. POWERDRIVE Taperlock bushes are produced from high grade cast iron.

FEATURES

- Manufactured from high grade cast iron.
- Slow cooling process increases resistance to cracking and breaking.
- Available in Metric & Imperial Bores.
- Splined Taperlock bushes also available.
- All bushes surface ground to ensure tolerance.
- Fixed key in relation to grub screw.
- Series range from 1008 – 5050.

POWER DRIVE

IMPERIAL BORES

Bore Dia.	Keyway		Product Code														
	Width	Depth	TL1008	TL1108	TL1210	T1215	T1610	T1615	TL2012	TL2517	TL3020	TL3525	TL3535	TL4040	TL4535	TL4545	TL5050
3/8	0.125	0.06															
1/2																	
5/8	0.187	0.09															
11/16																	
3/4	0.25	0.12															
7/8																	
15/16																	
1																	
1 1/8	0.312	0.11															
1 1/4																	
1 3/8	0.375	0.11															
1 1/2																	
1 5/8	0.437	0.13															
1 3/4																	
1 7/8	0.500	0.13															
2																	
2 1/8	0.625	0.18															
2 1/4																	
2 3/8																	
2 1/2																	
2 5/8	0.75	0.21															
2 3/4																	
2 7/8																	
3																	
3 1/8	0.875	0.26															
3 1/4																	
3 3/8																	
3 1/2																	
3 3/4	1.000	0.32															
4																	
D			35.0	38.0	47.5	47.5	57	57	70	85.5	108	127	127	146	162	162	177.5
F	(inches)		7/8"	7/8"	1"	1 1/2"	1"	1 1/2"	1 1/4"	1 3/4"	2"	2 1/2"	3 1/2"	4"	3 1/2"	4 1/2"	5"

METRIC BORES

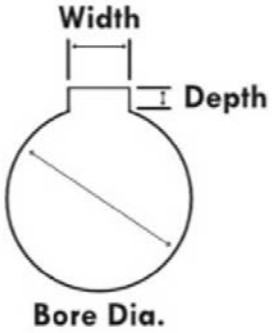
Bore Dia.	Keyway		Product Code																
	Width	Depth	TL1008	TL1108	TL1210	T1215	T1610	T1615	TL2012	TL2517	TL3020	TL3030	TL3525	TL3535	TL4030	TL4040	TL4535	TL4545	TL5040	TL5050
10	3	1.4																		
11	4	1.8																		
12																				
14	5	2.3																		
15																				
16																				
17																				
18	6	2.8																		
19																				
20																				
22																				
24	8	3.3																		
25																				
26																				
28																				
30																				
32	10	3.3																		
35																				
36																				
38																				
40	12	3.3																		
42																				
45	14	3.8																		
48																				
50																				
55	16	4.3																		
60	18	4.4																		
62																				
65																				
70	20	4.9																		
75																				
80	22	5.4																		
85																				
90	25	5.4																		
95																				
100	28	6.4																		
110																				
115	32	7.4																		
120																				
125																				
D			35.0	38.0	47.5	47.5	57	57	70	85.5	108	108	127	127	146	146	162	162	177.5	177.5
F	(mm)		22.2	22.2	25.4	38.1	25.4	38.1	31.75	44.45	50.8	76.2	63.5	88.9	76.2	101.6	88.9	114.3	101.6	127

TAPER LOCK BUSH INSTALLATION

INSTRUCTIONS

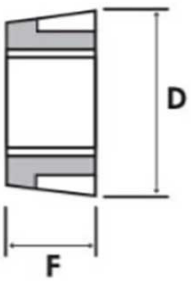
TO ASSEMBLE

- Clean and de-grease the bore and taper surfaces of the bush and the tapered bore of the pulley insert the bush in the pulley hub and line up the holes (half thread holes must line up with half straight holes).
- Lightly oil the grub screws (bush size 1008 to 3030) or the cap screws (bush size 3535 to 5050) and screw them in, do not tighten yet.
- Clean and de-grease the shaft it pulley with taper bush on shaft and locate in desired position.
- When using the key it should be a top clearance between the key and the keyway in the bore.
- Using a hexagon socket wrench (DIN911) gradually tighten the grub/cap screws in accordance with the torques as listed in the schedule of screw tightening torque.
- When the drive has been operating under load for a short period (half to one hour) check and ensure that the screws remain at the appropriate tightening torque.
- In order to eliminate the ingress of dirt ill all empty holes with grease.



TO REMOVE

- Slacken all screws. Depending on the size of the bush remove one or two. After oiling point and thread of grub screws or under head and thread of cap screws insert them into the jacking off hole(s) in bush.
- Tighten screw(s) uniformly and alternately until the bush is loose in the hub and pulley is free on the shaft.
- Remove the pulley bush assembly from shaft.



TORQUE SETTINGS

Bush	Screw tightening Torques (Nm)	SCREW	
		Quantity	Size
1008	5.6	2	1/4" BSW
1108			
1310	20	2	3/8" BSW
1315			
1210	20	2	3/8" BSW
1215			
1610	20	2	3/8" BSW
1615			
2012	31	2	7/16" BSW
2517	48	2	1/2" BSW
3020	90	2	5/8" BSW
3030			
3535	90	3	1/2" BSW
4040	170	3	5/8" BSW
4545	192	3	3/4" BSW
5050	271	3	7/8" BSW

POWER DRIVE