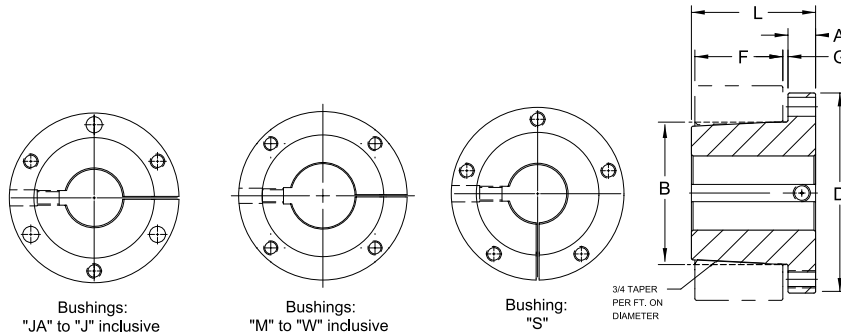


# All Steel QD Bushings

★F = Length of Mating Bore

★★G = Gap Between QD Bushing and Mating Hub



Bushing	Dimensions (Inches)								Screws Required	Stock Bore Range			Average Weight (Approx.)
	A	B	D	E	★F	★★G	L	Cap Bolt Circle		Min.	Maximum		
											Standard Keyway	Shallow Keyway	
SF-STL	9/16	3.125	4-5/8	1-1/2	1-1/4	1/8	2-1/16	3-7/8	3-3/8 × 2	1/2	2-5/16	2-13/16	3.0
E-STL	3/4	3.834	6	1-7/8	1-5/8	1/8	2-5/8	5	3-1/2 × 2-3/4	7/8	2-7/8	3-1/2	10.0
F-STL	13/16	4.437	6-5/8	2-13/16	2-1/2	3/16	3-5/8	5-5/8	3-9/16 × 3-5/8	1	35/16	4	11.5
J-STL	1	5.148	7-1/4	3-1/2	3-3/16	3/16	4-1/2	6-1/4	3-5/8 × 4-1/2	17/16	3-3/4	4-1/2	18.0
M-STL	1-1/4	6.500	9	5-1/2	5-3/16	3/16	6-3/4	7-7/8	4-3/4 × 6-3/4	2	4-3/4	5-1/2	37.0
N-STL	1-1/2	7.000	10	6-5/8	6-1/4	7/18	8-1/8	8-1/2	4-7/8 × 8-1/2	2 1/2	5-1/8	5-7/8	57.0

Bushing	Bores	Keyway
SF-STL	2-3/8 – 2-9/16	5/8 × 3/16
	2-5/8 – 2-3/4	5/8 × 1/16
	2-13/16 – 2-7/8	3/4 × 1/16
	2-15/16	3/4 × 1/32
	7/8 – 2-7/8	STD.
E-STL	2-15/16 – 3-1/4	3/4 × 1/8
	3-5/16 – 3-1/2	7/8 × 1/16
F-STL	1 – 3-5/16	STD.
	3-3/8 – 3-3/4	7/8 × 3/16
	3-7/8 – 3-15/16	1 × 1/8
	4	NONE
J-STL	3-7/16 – 3-3/4	STD.
	3-13/16 – 4-1/2	1 × 1/8
	2 – 4-3/4	STD.
M-STL	4-13/16 – 5-1/2	1 1/4 × 1/4
	2-1/2 – 5-1/8	STD.
N-STL	5-3/16 – 5-1/2	1 1/4 × 1/4
	5-9/16 – 5-7/8	1 1/2 × 1/4

Shallow Key Dimension — Standard			
Keyset	Key	Keyset	Key
1/4 × 1/32	1/4 × 5/32	3/4 × 1/8	3/4 × 1/2
1/4 × 1/16	1/4 × 3/16	7/8 × 1/16	7/8 × 1/2
3/8 × 1/32	3/8 × 7/32	7/8 × 3/16	7/8 × 5/8
3/8 × 1/16	3/8 × 1/4	1 × 1/8	1 × 5/8
3/8 × 1/8	3/8 × 5/16	1-1/4 × 1/4	1-1/4 × 7/8
1/2 × 1/32	1/2 × 9/32	1-1/2 × 1/8	1-1/2 × 7/8
1/2 × 1/16	1/2 × 5/16	1-1/2 × 1/4	1-1/2 × 1
1/2 × 1/8	1/2 × 3/8	1-3/4 × 1/8	1-3/4 × 3/4
5/8 × 1/16	5/8 × 3/8	1-3/4 × 1/4	1-3/4 × 7/8
3/4 × 1/16	3/4 × 7/16	2 × 1/4	2 × 1

Shallow Key Dimension — Steel			
Keyset	Key	Keyset	Key
1/4 × 1/32	1/4 × 5/32	3/4 × 1/16	3/4 × 7/16
1/4 × 1/16	1/4 × 3/16	3/4 × 1/8	3/4 × 1/2
3/8 × 1/32	3/8 × 7/32	7/8 × 1/16	7/8 × 1/2
3/8 × 1/16	3/8 × 1/4	7/8 × 3/16	7/8 × 5/8
3/8 × 1/8	3/8 × 5/16	1 × 1/8	1 × 5/8
1/2 × 1/32	1/2 × 3/32	1-1/4 × 1/4	1-1/4 × 7/8
1/2 × 1/16	1/2 × 5/16	1-1/2 × 1/4	1-1/2 × 1
1/2 × 1/8	1/2 × 3/8	1-3/4 × 1/8	1-3/4 × 3/4
5/8 × 1/16	5/8 × 3/8	1-3/4 × 3/8	1-3/4 × 1
5/8 × 3/16	5/8 × 1/2	2 × 1/4	2 × 1

Shallow Key Dimension — Standard		
Bores	Keyset	Key
7/8	3/16 × 3/32	3/16 × 3/16
15/16 – 1-1/4	1/4 × 1/8	1/4 × 1/4
1-5/16 – 1-3/8	5/16 × 5/32	5/16 × 5/16
1-7/16 – 1-3/4	3/8 × 3/16	3/8 × 3/8
1-13/16 – 2-1/4	1/2 × 1/4	1/2 × 1/2
2-5/16 – 2-3/4	5/8 × 5/16	5/8 × 5/8
2-13/16 – 3-1/4	3/4 × 3/8	3/4 × 3/4
3-5/16 – 3-3/4	7/8 × 7/16	7/8 × 7/8
3-13/16 – 4-1/2	1 × 1/2	1 × 1
4-9/16 – 5-1/2	1-1/4 × 5/8	1-1/4 × 1-1/4
5-9/16 – 6-1/2	1-1/2 × 3/4	1-1/2 × 1-1/2
6-9/16 – 7-1/2	1-3/4 × 3/4	1-3/4 × 1-1/2
7-9/16 – 9	2 × 3/4	2-1/2 × 1-1/2
9-1/16 – 11	2-1/2 × 7/8	—
1-11/16 – 13	3 × 1	—

Bushing	Plain Bores Not Split
SH-STL	1/2
SD-STL	1/2
SK-STL	1/2
SF-STL	1-15/16
E-STL	7/8 – 1-15/16
F-STL	1 – 2-7/16 – 2-15/16
J-STL	17/16 – 2-15/16
M-STL	2 – 2-15/16
N-STL	2-7/16 – 4-15/16

Reborable QD bushings made of Stainless Steel are available in many sizes. Non stock sizes are available on MTO basis.

Interchangeable Bushings | QD

# Standard QD Bushings

Bushing	Dimensions (Inches)								Cap Screws Required	Stock Bore Range			Set Screw Size	Average Weight (lbs) (Approx.)
	A	B	D	E	F	G	L	Bolt Circle		Minimum	Maximum			
											Standard Keyway	Shallow Keyway		
JA	0.375	1.375	2.000	0.688	0.563	0.125	1.000	1.665	3 - 10 x 1	0.375	1.000	1.250	10 - 24	0.90
SH	0.438	1.871	2.688	0.875	0.813	0.125	1.250	2.250	3 - 1/4 x 1-3/8	0.500	1.375	1.688	1/4 - 20	1.00
SDS	0.500	2.187	3.188	0.875	0.750	0.125	1.375	2.688	3 - 1/4 x 1-3/8	0.500	1.688	2.000	1/4 - 20	1.00
SD	0.500	2.187	3.188	0.938	1.250	0.125	1.813	2.688	3 - 1/4 x 1-7/8	0.500	1.688	1.938	1/4 - 20	1.50
SK	0.563	2.812	3.875	1.375	1.250	0.125	1.125	3.313	3 - 5/16 x 2	0.500	2.125	2.500	5/16 - 18	2.00
SF	0.563	3.125	4.625	1.500	1.250	0.125	2.000	3.875	3 - 3/8 x 2	0.500	2.313	2.316	5/16 - 18	3.00
E	0.750	3.834	6.000	1.875	1.625	0.125	2.625	5.000	3 - 1/2 x 2-3/4	0.875	2.875	3.500	3/8 - 16	10.00
F	0.813	4.437	6.250	2.813	2.500	0.188	3.625	5.625	3 - 9/16 x 3-5/8	1.000	3.313	3.938	1/2 - 13	11.50
J	1.000	5.148	7.625	3.500	3.188	0.188	4.500	6.250	3 - 5/8 x 4-1/2	1.438	3.750	4.500	5/8 - 11	18.00
M	1.250	6.500	9.000	5.500	5.188	0.188	6.750	7.875	4 - 3/4 x 6-3/4	1.938	4.750	5.500	3/4 - 10	37.00
N	1.500	7.000	10.250	6.625	6.250	0.250	8.125	8.500	4 - 7/8 x 8-1/2	2.438	5.125	6.000	3/4 - 10	57.00
P	1.750	8.250	11.750	7.625	7.250	0.250	9.375	10.000	4 - 1 x 9-1/2	2.938	5.938	7.000	7/8 - 9	120.00
W	2.000	10.437	15.000	9.375	9.000	0.250	11.375	12.750	4 - 1-1/8 x 1-11/2	4.000	7.500	8.500	1 - 8	250.00
S	3.250	12.125	17.750	12.500	-	0.375	15.750	15.000	5 - 1-1/4 x 15-1/2	6.000	8.250	10.000	1-1/4 - 7	400.00

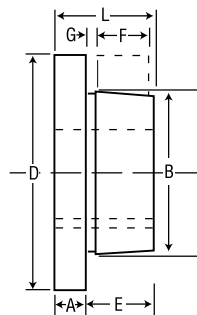
## Inch Bore

Bushing	Bores	Keyway
JA	3/8 - 7/16	NO K.W.
	1/2 - 1	STD.
	1-1/18 - 1-1/8	1/4 - 1/16
	13/16	1/4 - 1/16
SH	1-1/4	NO K.W.
	1/2 - 1-3/8	STD.
	1-7/16 - 1-1/2	3/8 x 1/16
	1-9/16 - 1-5/8	3/8 - 1/16
SDS	1-11/16	NO K.W.
	1/2 - 1-11/16	STD.
	1-3/4	3/8 x 1/8
	1-13/16	1/2 x 1/8
SD	1-7/8 - 1-15/16	1/2 x 1/16
	2	NO K.W.
	1/2 - 1-11/16	STD.
	1-3/4	3/8 x 1/8
SD	1-13/16	1/2 x 1/8
	1-7/8	1/2 x 1/16
	1-15/16	1/2 x 1/16
	2	NO K.W.
SK	1/2 - 2-1/8	STD.
	2-3/16 - 2-1/4	1/2 x 1/8
	2-5/16 - 2-1/2	5/8 x 1/16
	2-9/16 - 2-5/8	NO K.W.
SF	1/2 - 2-1/4	STD.
	2-5/16 - 2-1/2	5/8 x 3/16
	2-9/16 - 2-3/4	5/8 x 1/16
	2-13/16 - 2-7/8	3/4 x 1/16
E	2-15/16	3/4 x 1/32
	7/8 - 2-7/8	STD.
	2-15/16 - 3-1/4	3/4 x 1/8
	3-3/8 - 3-1/2	7/8 x 1/16
F	3-5/16	7/8 x 1/8
	1 - 3-5/16	STD.
	3-3/8 - 3-3/4	7/8 x 3/16
	37/8 - 315/16	1 x 1/8
J	4	NONE
	1-1/4 - 3-3/4	STD.
	3-13/16 - 4-1/2	1 x 1/8
	2 - 4-3/4	STD.
M	4-13/16 - 5-1/2	1-1/4 x 1/4
	2-7/16 - 5	STD.
	5-1/8 - 5-1/2	1-1/4 x 1/4
	5-9/16 - 6	1-1/2 x 1/4
N	2-15/16 - 5-15/16	STD.
	6 - 6-1/2	1-1/2 x 1/4
	6-9/16 - 7	1-3/4 x 1/8
	4 - 7-1/2	STD.
W	7-9/16 - 8-1/2	2 x 1/4

Keystock provided for nonstandard keyways.

## Millimeter Bore

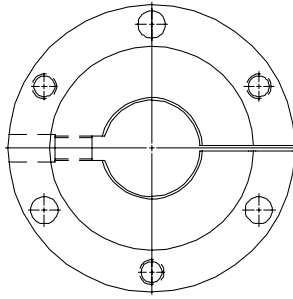
Bushing	Bores MM	Key Stock Size ★ w x t	
SH	24, 25	8 x 7	
	28, 30		
	32, 35		
SDS	24, 25	8 x 7	
	28, 30		
	32, 35		
	38		
SD	40, 42	12 x 8	
	24, 25		8 x 7
	28, 30		
	32, 35		
SK	38	10 x 8	
	40, 42		
	48, 50		
	55		
SF	12 x 8	10 x 8	
	14 x 9		
	16 x 10		
	18 x 11		
E	28, 30	8 x 7	
	32, 35		
	38		
	40, 42		
	48, 50		
	55		
F	10 x 8	12 x 8	
	12 x 8		
	14 x 9		
	16 x 10		
	18 x 11		
	20 x 12		
J	48, 50	14 x 9	
	55		
	60, 65		
	70, 75		
	80, 85		
	90		
J	14 x 9	16 x 10	
	16 x 10		
	18 x 11		
	20 x 12		
	22 x 14		
	25 x 14		
J	50	14 x 9	
	55		
	60, 65		
	70, 75		
	80, 85		
	90, 95		
J	100	28 x 16	



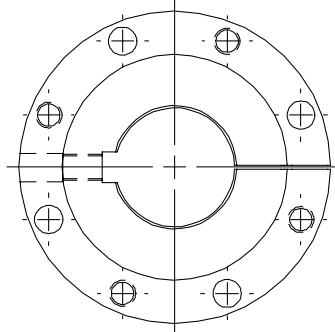
★ Important — The metric system does not refer to keyseat or keyway dimensions as does the English system; instead, dimensions are given for the key itself which is rectangular in shape, not square as in the English system.

NOTE: .03937" = 1mm  
 Ex—24 mm = 0.94488"  
 TO ORDER: SH 24 mm

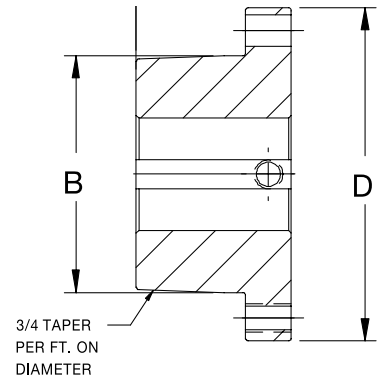
# QD Short Bushings



Bushings:  
JS



Bushings:  
MS to WS inclusive



## Inch Bore

Bushing	Bores	Keyway	Weight lbs (approx)
JS	2-7/16	5/8 × 5/16	19
	2-15/16	3/4 × 3/8	17
	3-7/16	7/8 × 7/16	15
	3-1/2		15
	3-15/16	1 × 1/8	13
4-7/16	10		
MS	3-7/16	7/8 × 7/16	38
	3-1/2		37
	3-15/16	1 × 1/2	34
	4-7/16		30
	4-15/16	1-1/4 × 1/4	26
	5-7/16		21
5-1/2	20		
NS	3-15/16	1 × 1/2	54
	4-7/16		49
	4-15/16	1-1/4 × 5/8	43
	5-7/16	1-1/4 × 1/4	38
	5-1/2		37
5-15/16	1-1/2 × 1/4	31	
6		30	
PS	4-15/16	1-1/4 × 5/8	76
	5-7/16		70
	5-15/16	1-1/2 × 3/4	62
	6	1-1/2 × 1/4	62
	6-7/16		55
	6-1/2		54
6-15/16	1-3/4 × 1/8	47	
7		45	
WS	5-7/16	1-1/4 × 5/8	154
	5-15/16	1-1/2 × 3/4	145
	6		144
	6-7/16		136
	6-1/2		135
	6-15/16	1-3/4 × 3/4	126
	7		125
	7-1/2		114
	7-15/16	2 × 1/4	106
8	105		
8-7/16	94		
8-1/2	93		

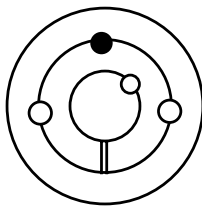


*Martin* QD Short Bushings are suitable for use in belt conveyor applications wherever the short hubs of a conveyor pulley require the QD Short Bushing style.

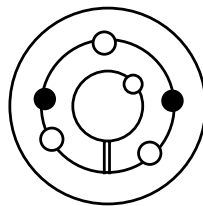
## Millimeter Bore

Bushing	Dimensions (Inches)						Cap Screws Required	Set Screw Size
	A	B	D	E	L	Bolt Circle		
JS	1.00	5.1484	7.25	2.38	3.38	6.25	5/8 × 2-1/2 (3)	5/8
MS	1.19	6.5000	9.00	3.62	4.81	7.88	3/4 × 3 (4)	3/4
NS	1.50	7.0000	10.00	4.50	6.00	8.50	7/8 × 3-1/2 (4)	3/4
PS	1.50	8.2500	11.75	5.00	6.50	10.00	1 × 4 (4)	7/8
WS	1.75	10.4370	15.00	5.50	7.25	12.75	1-1/8 × 5 (4)	1

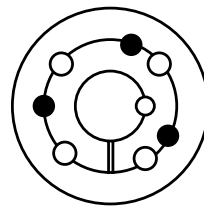
**IMPORTANT NOTE:** Please follow the instructions on this sheet in order for the Martin bushing to perform satisfactorily.



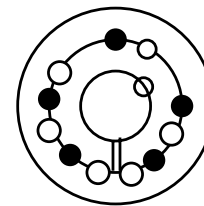
**1008 to 3030**



**3535 to 6050**



**7060 to 10085**



**102100**

### INSTALLATION

1. Clean all oil, dirt, and paint from shaft, bushing bore, outside of bushing and component (sprocket, sheave...etc.) bore.
2. Insert bushing into component. Match the hole pattern, not the threaded holes (each hole will be threaded on one side only.)
3. Thread set or cap screws into those half threaded holes indicated by ○ on above diagram. Mount assembly on shaft.
4. Alternately torque set or cap screws\* to recommended torque setting in chart below.
5. On 3535 and larger bushings use a block, sleeve or drift and hammer large end of bushing (do not hammer bushing directly).
6. Repeat steps 4 and 5 until torque wrench reading, after hammering, is the same as before hammering.
7. Fill all unoccupied holes with grease.

### REMOVAL

1. Remove all set or cap screws.
2. Insert set or cap screws in holes indicated by ● on drawing. Loosen bushing by alternately tightening set or cap screws.
3. To reinstall, complete all seven (7) installation instructions.

### RECOMMENDED TORQUE TABLE

Bushing No.	Set or Cap Screw	Wrench Torque in. / lbs.
1008, 1108	1/4 - 20 Socket Set Screw	55
1210, 1215, 1310	3/8 - 16 Socket Set Screw	175
1610, 1615	3/8 - 16 Socket Set Screw	175
2012	7/16 - 14 Socket Set Screw	280
2517, 2525	1/2 - 13 Socket Set Screw	430
3020, 3030	5/8 - 11 Socket Set Screw	800
3535	1/2 - 13 Socket Head Cap Screw	1,000
4040	5/8 - 11 Socket Head Cap Screw	1,700
4545	3/4 - 10 Socket Head Cap Screw	2,450
5050	7/8 - 9 Socket Head Cap Screw	3,100
6050, 7060, 8065	1-1/4 - 7 Socket Head Cap Screw	7,820
10085, 120100	1 - 1/2 - 6 Socket Head Cap Screw	13,700

\* If two bushings are used on same component and shaft, fully tighten one bushing before working on the other.

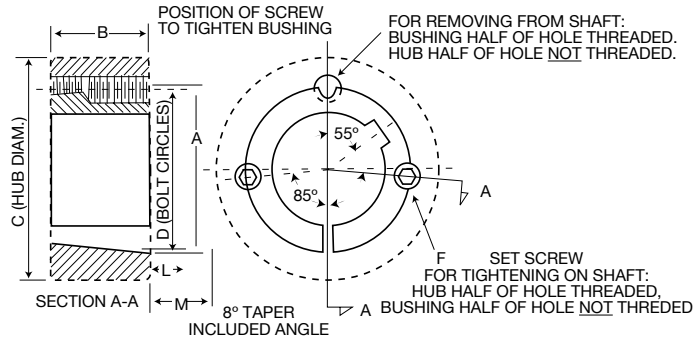
### CAUTION

**WARNING: USE OF ANTI-SEIZE LUBRICANT ON TAPERED CONE SURFACES OR ON BOLT THREADS WHEN MOUNTING MAY RESULT IN DAMAGE TO SHEAVES AND SPROCKETS. THIS VOIDS ALL MANUFACTURER'S WARRANTIES.**

**WARNING:** Because of the possible danger to person(s) or property from accidents which may result from the improper use of products, it is important that correct procedures be followed: Products must be used in accordance with the engineering information specified in the catalog. Proper installation, maintenance and operation procedures must be observed. The instructions given above must be followed. Inspections should be made as necessary to assure safe operation under prevailing conditions. All rotating power transmission products when used in a drive are potentially dangerous and must be guarded by the user as required by applicable laws, regulations, standards, and good safety practice. (Refer to ANSI Standard B15.1.)

## No. 1008 to 3030 Taper Bushings

Bushing Number	Bore	Wt. lbs (appr)	Bushing Keyseat	Shaft Keyseat
1008	1/2 to 9/16	.27	1/8 x 1/16	1/8 x 1/16
	5/8 to 7/8	.21	3/16 x 3/32	3/16 x 3/32
	15/16 to 1	.16	1/4 x 1/16 ▼	1/4 x 1/8
1108	1/2 to 9/16	.33	1/8 x 1/16	1/8 x 1/16
	5/8 to 7/8	.27	3/16 x 3/32	3/16 x 3/32
	15/16 to 1	.22	1/4 x 1/8	1/4 x 1/8
	1-1/16 to 1-1/8	.17	1/4 x 1/16 ▼	1/4 x 1/8
1210	1/2 to 9/16	.61	1/8 x 1/16	1/8 x 1/16
	5/8 to 7/8	.55	3/16 x 3/32	3/16 x 3/32
	15/16 to 1-1/4	.49	1/4 x 1/8	1/4 x 1/8
1215	1/2 to 9/16	.8	1/8 x 1/16	1/8 x 1/16
	5/8 to 7/8	.7	3/16 x 3/32	3/16 x 3/32
	15/16 to 1-1/4	.6	1/4 x 1/8	1/4 x 1/8
1310	1/2 to 9/16	.7	1/8 x 1/16	1/8 x 1/16
	5/8 to 7/8	.7	3/16 x 3/32	3/16 x 3/32
	15/16 to 1-1/4	.6	1/4 x 1/8	1/4 x 1/8
	1-5/16 to 1-3/8	.6	5/16 x 5/32	5/16 x 5/32
1610	1/2 to 9/16	.9	1/8 x 1/16	1/8 x 1/16
	5/8 to 7/8	.8	3/16 x 3/32	3/16 x 3/32
	15/16 to 1-1/4	.7	1/4 x 1/8	1/4 x 1/8
	1-5/16 to 1-3/8	.7	5/16 x 5/32	5/16 x 5/32
	1-7/16 to 1-1/2	.6	3/8 x 3/16	3/8 x 3/16
1615	1-9/16 to 1-5/8	.5	3/8 x 1/8 ▼	3/8 x 3/16
	1/2 to 9/16	1.2	1/8 x 1/16	1/8 x 1/16
	5/8 to 7/8	1.1	3/16 x 3/32	3/16 x 3/32
	15/16 to 1-1/4	1.0	1/4 x 1/8	1/4 x 1/8
	1-5/16 to 1-3/8	.8	5/16 x 5/32	5/16 x 5/32
2012	1-7/16 to 1-1/2	.7	3/8 x 3/16	3/8 x 3/16
	1-9/16 to 1-5/8	.6	3/8 x 1/8 ▼	3/8 x 3/16
	1/2 to 9/16	1.7	1/8 x 1/16	1/8 x 1/16
	5/8 to 7/8	1.6	3/16 x 3/32	3/16 x 3/32
	15/16 to 1-1/4	1.5	1/4 x 1/8 ▼	1/4 x 1/8
	1-5/16 to 1-3/8	1.4	5/16 x 5/32	5/16 x 5/32
	1-7/16 to 1-3/4	1.2	3/8 x 3/16	3/8 x 3/16
2517	1-13/16 to 1-7/8	1.0	1/2 x 1/4	1/2 x 1/4
	1-15/16 to 2	1.0	1/2 x 3/16 ▼	1/2 x 1/4
	1/2 to 9/16	3.5	1/8 x 1/16	1/8 x 1/16
	5/8 to 7/8	3.4	3/16 x 3/32	3/16 x 3/32
	15/16 to 1-1/4	3.3	1/4 x 1/8	1/4 x 1/8
	1-5/16 to 1-3/8	3.2	5/16 x 5/32	5/16 x 5/32
2525	1-7/16 to 1-3/4	3.0	3/8 x 3/16	3/8 x 3/16
	1-13/16 to 2-1/4	2.4	1/2 x 1/4	1/2 x 1/4
	2-5/16 to 2-1/2	1.9	5/8 x 3/16 ▼	5/8 x 5/16
	3/4 to 7/8	4.9	3/16 x 3/32	3/16 x 3/32
	15/16 to 1-1/4	4.7	1/4 x 1/8	1/4 x 1/8
	15-1/16 to 1-3/8	4.5	5/16 x 5/32	5/16 x 5/32
3020	1-7/16 to 1-3/4	4.2	3/8 x 3/16	3/8 x 3/16
	1-13/16 to 2-1/4	3.3	1/2 x 1/4	1/2 x 1/4
	2-5/16 to 2-1/2	2.5	5/8 x 3/16 ▼	5/8 x 5/16
	15/16 to 1-1/4	6.5	1/4 x 1/8	1/4 x 1/8
	1-5/16 to 1-3/8	6.3	5/16 x 5/32	5/16 x 5/32
3030	1-7/16 to 1-3/4	6.0	3/8 x 3/16	3/8 x 3/16
	1-13/16 to 2-1/4	5.3	1/2 x 1/4	1/2 x 1/4
	2-5/16 to 2-3/4	4.5	5/8 x 5/16	5/8 x 5/16
	2-13/16 to 3	3.9	3/4 x 1/4 ▼	3/4 x 3/8
	15/16 to 1-1/4	9.2	1/4 x 1/8	1/4 x 1/8
3030	1-5/16 to 1-3/8	8.9	5/16 x 5/32	5/16 x 5/32
	1-7/16 to 1-3/4	8.6	3/8 x 3/16	3/8 x 3/16
	1-13/16 to 2-1/4	7.6	1/2 x 1/4	1/2 x 1/4
	2-5/16 to 2-3/4	6.2	5/8 x 5/16	5/8 x 5/16
	2-13/16 to 3	5.0	3/4 x 1/4 ▼	3/4 x 3/8



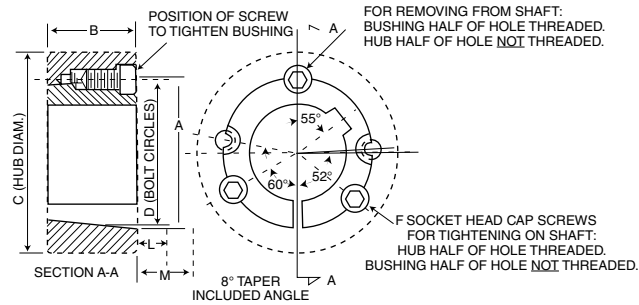
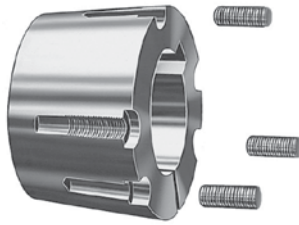
## Dimensions

Bushing Number	A	B	C Ø			D	F †	L ★		M ★★	
			Class 20 Gray Iron	Class 30 Gray Iron	Steel			Standard Hex. Key	Short Key ‡	Standard Hex. Key	Short Key ‡
1008	1.386	7/8	2-3/8	2-3/16	1-15/16	1-21/64	1/4 x 1/2	1-1/8	5/8	1-1/4	3/4
1108	1.511	7/8	2-1/2	2-5/16	2-1/16	1-29/64	1/4 x 1/2	1-1/8	5/8	1-1/4	3/4
1210	1-7/8	1	3-5/8	3-1/4	2-7/8	1-3/4	3/8 x 5/8	1-3/8	13/16	1-5/8	1-1/16
1215	1-7/8	1-1/2	3-1/8	2-7/8	2-5/8	1-3/4	3/8 x 5/8	1-3/8	13/16	1-5/8	1-1/16
1310	2	1	3-3/4	3-3/8	3	1-7/8	3/8 x 5/8	1-3/8	13/16	1-5/8	1-1/16
1610	2-1/4	1	4	3-5/8	3-1/4	2-1/8	3/8 x 5/8	1-3/8	13/16	1-5/8	1-1/16
1615	2-1/4	1-1/2	3-1/2	3-1/4	3	2-1/8	3/8 x 5/8	1-3/8	13/16	1-5/8	1-1/16
2012	2-3/4	1-1/4	4-3/4	4-3/8	3-7/8	2-5/8	7/16 x 7/8	1-9/16	15/16	2	1-3/8
2517	3-3/8	1-3/4	5-1/2	4-7/8	4-3/8	3-1/4	1/2 x 1	1-5/8	1	2-1/4	1-5/8
2525	3-3/8	2-1/2	4-3/4	4-1/2	4-1/4	3-1/4	1/2 x 1	1-5/8	1	2-1/4	1-5/8
3020	4-1/4	2	7	6-1/4	5-5/8	4	5/8 x 1-1/4	1-13/16	1-3/16	2-11/16	2-1/16
3030	4-1/4	3	6-1/4	5-3/4	5-3/8	4	5/8 x 1-1/4	1-13/16	1-3/16	2-11/16	2-1/16

Bushings cannot be bored larger than largest bore listed.

For detail dimensions required for machining hubs, consult factory.

- ▼ Key furnished for these sizes only.
- Ø For general reference. Severe conditions may require larger hub. Heavy well-located web may permit smaller hub. Hub diameter required depends on the particular application. Consult *Martin* giving full information on the proposed design. Hub diameters shown are based on 20,000, 30,000, and 50,000 P.S.I. minimum ultimate tensile strength respectively for Class 20 gray iron, Class 30 gray iron, and steel hubs.
- † 2 screws required. Use in positions shown for tightening bushing on shaft. In removing bushing from shaft, remove screws and use one of them in the other hole. Bushing price includes screws.
- ★ Space required to tighten bushing. Also space required to loosen screws to permit removal of hub by puller.
- ★★ Space required to loosen bushing using one screw as jackscrew — no puller required.
- ‡ Standard hex key cut to minimum usable length.



## No. 3535 to 5050 Bushings

Bushing Number	Bore	Weight	Bushing Keyseat	Shaft Keyseat	A	B	C Ø			D	F †	G	R
							Class 20 Gray Iron	Class 30 Gray Iron	Steel				
3535	1-3/16 to 1-1/4	14	1/4 × 1/8	1/4 × 1/8	5	3-1/2	7-3/4	7	6-1/2	4.83	1/2 × 1-1/2	39°	▲
	1-5/16 to 1-3/8	14	5/16 × 5/32	5/16 × 5/32									
	1-7/16 to 1-3/4	13	3/8 × 3/16	3/8 × 3/16									
	1-13/16 to 2-1/4	12	1/2 × 1/4	1/2 × 1/4									
	2-5/16 to 2-3/4	11	5/8 × 5/16	5/8 × 5/16									
	2-13/16 to 3-1/4	9	3/4 × 3/8	3/4 × 3/8									
4040	3-5/16 to 3-1/2	8	▼ 7/8 × 1/4	7/8 × 7/16	5-3/4	4	9-1/2	8-1/2	7-3/4	5.54	5/8 × 1-3/4	40°	▲
	1-7/16 to 1-3/4	22	3/8 × 3/16	3/8 × 3/16									
	1-13/16 to 2-1/4	21	1/2 × 1/4	1/2 × 1/4									
	2-5/16 to 2-3/4	19	5/8 × 5/16	5/8 × 5/16									
	2-13/16 to 3-1/4	17	3/4 × 3/8	3/4 × 3/8									
	3-5/16 to 3-5/8	15	7/8 × 7/16	7/8 × 7/16									
4545	3-11/16 to 3-3/4	14	▼ 1 × 1/4	7/8 × 7/16	6-3/8	4-1/2	10-1/2	9-1/2	8-3/4	6.13	3/4 × 2	40°	▲
	3-13/16 to 4	13	▼ 1 × 1/4	1 × 1/2									
	1-15/16 to 2-1/4	30	1/2 × 1/4	1/2 × 1/4									
	2-5/16 to 2-3/4	28	5/8 × 5/16	5/8 × 5/16									
	2-13/16 to 3-1/4	26	3/4 × 3/8	3/4 × 3/8									
	3-5/16 to 3-3/4	23	7/8 × 7/16	7/8 × 7/16									
5050	3-13/16 to 4-1/4	20	1 × 1/2	1 × 1/2	7	5	11-1/2	10-1/2	9-1/2	6.72	7/8 × 2-1/4	37°	▲
	4-5/16 to 4-1/2	18	▼ 1 × 1/4	1 × 1/2									
	2-5/16 to 2-3/4	38	5/8 × 5/16	5/8 × 5/16									
	2-13/16 to 3-1/4	35	3/4 × 3/8	3/4 × 3/8									
	3-5/16 to 3-3/4	32	7/8 × 7/16	7/8 × 7/16									
	3-13/16 to 4-1/2	27	1 × 1/2	1 × 1/2									
4-9/16 to 5	24	▼ 1-1/4 × 7/16	1-1/4 × 5/8										

## No. 4030 to 5040 Short Taper Bushings

Bushing Number	Bore	Weight	Bushing Keyseat	Shaft Keyseat	A	B	C Ø			D	F †	G	R
							Class 20 Gray Iron	Class 30 Gray Iron	Steel				
4030	1-7/16 to 1-3/4	24	3/8 × 3/16	3/8 × 3/16	5-3/4	3	9-1/2	8-1/2	7-3/4	5.54	5/8 × 1-3/4	39°	▲
	1-13/16 to 2-1/4	21	1/2 × 1/4	1/2 × 1/4									
	2-5/16 to 2-3/4	20	5/8 × 5/16	5/8 × 5/16									
	2-13/16 to 3-1/4	18	3/4 × 3/8	3/4 × 3/8									
	3-5/16 to 3-11/16	15	7/8 × 7/16	7/8 × 7/16									
	3-3/4	13	▼ 7/8 × 3/16	7/8 × 7/16									
	3-13/16	13	1 × 1/2	1 × 1/2									
	3-7/8 to 4-7/16	13	1 × 1/4	1 × 1/2									
4535	1-15/16 to 2-1/4	31	1/2 × 1/4	1/2 × 1/4	6-3/8	3-1/2	10-1/2	9-1/2	8-3/4	6.13	3/4 × 2	40°	▲
	2-5/16 to 2-3/4	29	5/8 × 5/16	5/8 × 5/16									
	2-13/16 to 3-1/4	25	3/4 × 3/8	3/4 × 3/8									
	3-5/16 to 3-11/16	23	7/8 × 7/16	7/8 × 7/16									
	3-13/16 to 4-1/4	20	1 × 1/2	1 × 1/2									
	4-3/8 to 4-1/2	17	▼ 1 × 1/4	1 × 1/2									
5040	4-3/4 to 4-15/16	15	▼ 1-1/4 × 1/4	1-1/4 × 5/8	7	4	11-1/2	10-1/2	9-1/2	6.72	7/8 × 2-1/4	37°	▲
	2-7/16 to 2-3/4	40	5/8 × 5/16	5/8 × 5/16									
	2-13/16 to 3-1/4	37	3/4 × 3/8	3/4 × 3/8									
	3-5/16 to 3-3/4	33	7/8 × 7/16	7/8 × 7/16									
	3-13/16 to 4-1/2	29	1 × 1/2	1 × 1/2									
4-3/4 to 5	23	▼ 1-1/4 × 1/4	1-1/4 × 5/8										

Bushings cannot be bored larger than largest bore listed.

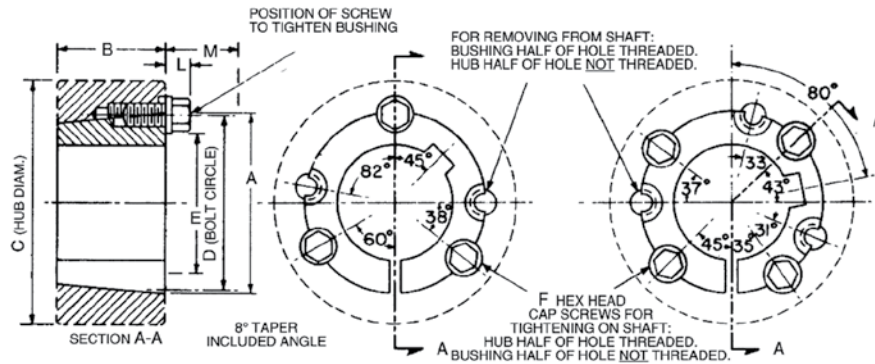
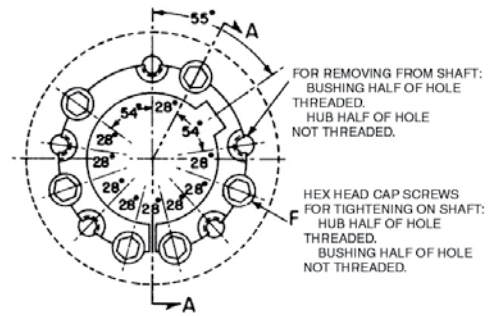
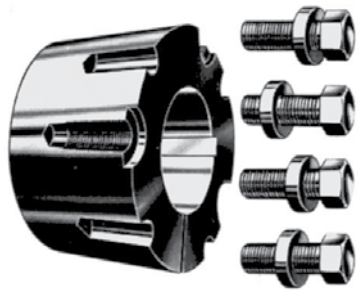
For detail dimensions required for machining hubs, consult factory.

▼ Key furnished for these sizes only.

○ For general reference. Severe conditions may require larger hub. Heavy well located web may permit smaller hub. Hub diameter required depends on the particular application. Consult factory giving full information on the proposed design. Hub diameters shown are based on 20,000, 30,000, and 50,000 P.S.I. minimum ultimate tensile strength respectively for Class 20 gray iron, Class 30 gray iron, and steel hubs.

† 3 screws required. Use in positions shown for tightening bushing on shaft. In removing bushing from shaft, remove screws and use two of them in the other two holes. Bushing price includes screws. See following footnote.

▲ Provide sufficient space to tighten and loosen bushing. Width across flats of screw head is same as screw diameter which is shown in column F.



## No 6050 to 120100 Taper Bushings

Bushing Number	Bore	Weight	Bushing Keyseat	Shaft Keyseat	A	B	C Ø			D	E	F †	L ★	M ★★
							Class 20 Gray Iron	Class 30 Gray Iron	Steel					
6050	3-13/16 to 4-1/2	60	1 × 1/2	1 × 1/2	9-1/4	5	17	15-1/2	13-1/2	9	6-3/4	1-1/4 × 3-1/2	1-5/8	4-3/8
	49/16 to 5-1/2	55	1-1/4 × 5/8	1-1/4 × 5/8										
	5-9/16 to 6	50	1-1/2 × 3/4	1-1/2 × 3/4										
7060	4-9/16 to 5-1/2	85	1-1/4 × 5/8	1-1/4 × 5/8	10-1/4	6	18-1/2	17	14-3/4	10	7-3/4	1-1/4 × 3-1/2	1-5/8	4-3/8
	5-9/16 to 6-1/2	75	1-1/2 × 3/4	1-1/2 × 3/4										
	6-9/16 to 7	65	1-3/4 × 3/4	1-3/4 × 3/4										
Φ 8065	5-1/16 to 5-1/2	120	1-1/4 × 5/8	1-1/4 × 5/8	11-1/4	6-1/2	19	17-1/2	15-1/2	11	8-3/4	1-1/4 × 3-1/2	1-5/8	4-3/8
	5-9/16 to 6-1/2	105	1-1/2 × 3/4	1-1/2 × 3/4										
	6-9/16 to 7-1/2	90	1-3/4 × 3/4	1-3/4 × 3/4										
Φ 10085	7-9/16 to 8	75	2 × 3/4	2 × 3/4	14-3/4	8-1/2	23-1/2	22	19-1/2	14-1/2	11-3/4	1-1/2 × 4-1/4	2	5-3/8
	6-9/16 to 7-1/2	260	1-3/4 × 3/4	1-3/4 × 3/4										
	7-9/16 to 9	230	2 × 3/4	2 × 3/4										
Φ 120100	9-1/16 to 10	190	2-1/2 × 7/8	2-1/2 × 7/8	17-1/4	10	28	26	23	17	14-1/4	1-1/2 × 4-1/4	2	5-3/8
	7-9/16 to 9	410	2 × 3/4	2 × 3/4										
	11-1/16 to 12	290	3 × 1	3 × 1										

Bushings cannot be bored larger than largest bore listed.

For detail dimensions required for machining hubs, consult *Martin*.

Ø For general reference. Severe conditions may require larger hub. Heavy well located web may permit smaller hub. Hub diameter required depends on the particular application. Consult *Martin* giving full information on the proposed design. Hub diameters shown are based on 20,000, 30,000, and 50,000 P.S.I. minimum ultimate tensile strength respectively for Class 20 gray iron, Class 30 gray iron, and steel hubs.

† 3 screws for 6050; four for 7060 to 10085; six for 120100. Use in positions shown for tightening bushing on shaft. In loosening bushing, remove screws and use all except one in the other holes. Bushing price includes screws.

- ★ Space required to tighten bushing. Also space required to loosen screws to permit removal of hub by puller.
- ★★ Space required to loosen bushing using screws as jackscrews—no puller required.
- Φ Not currently stocked — Available on order.

## Stock Taper Bushings With Metric Bores and Keyways

★ Metric Bores	★ Metric Keyway	Taper Bushing Number			
		1008	1108	1210	
14, 16	5 × 2.3	1008 1215	1108 1610	1210 1615	
18, 19 20, 22	6 × 2.8	1008 1610	1108 1615	1210 2012	1215 2517
24	8 × 3.3	1108 1610	1210 1615	1215 2012	2517
25	8 × 3.3	1210 1615	1215 2012	1610 2517	
28, 30	8 × 3.3	1210 1615	1215 2012	1610 2517	3020
32	10 × 3.3	1610 2012	1615 2517	3020	
35	10 × 3.3	1610 2012	1615 2517	3020	
38	10 × 3.3	1610 2012	1615 2517	3020	
40, 42	12 × 3.3	2012 2517	3020		
45, 48	14 × 3.8	2012 2517	3020		
50 55	14 × 3.8 16 × 4.3	2517 2517	3020 3020		

★ Millimeter Bores and Keyways from ISO Std. R773. 1" = 25.4 millimeters

NOTE: For other metric bore sizes consult factory.

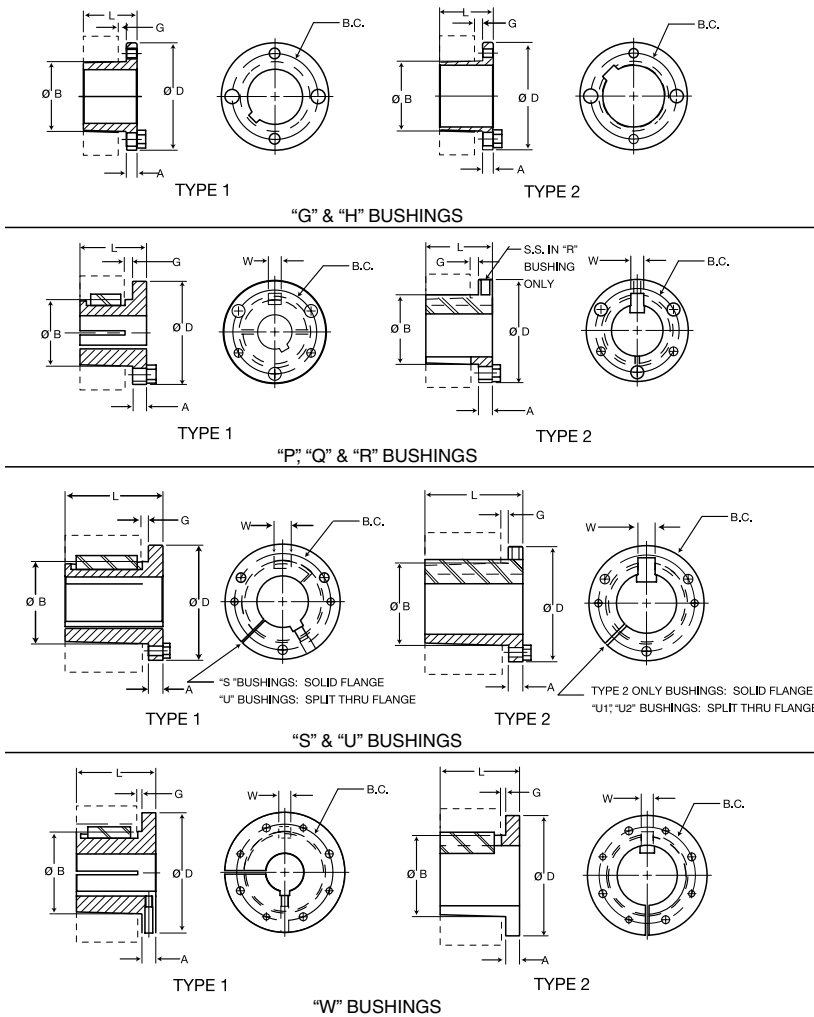
## Stock Reborable Taper Bushings With No Keyways

Sintered Steel		Gray Iron		Steel		Stainless Steel	
1008	9/16			1008	1/2	1008	1/2
1108	1/2			1108	1/2	1108	
1210	9/16			1210	1/2	1210	1/2
1215	1/2			1215	1/2	1215	
1310	1/2			1310		1310	
1610	1/2 1-5/16			1610	1/2	1610	1/2
1615	1/2 1-5/16			1615	1/2	1615	
2012	1/2			2012	1/2	2012	1/2
2517	1/2 1-9/16			2517	1/2	2517	1/2
		2525	2-1/8	2525		2525	
3020	15/16 1-11/16	3020	15/16 1-7/16 2-15/16	3020	15/16	3020	15/16
		3030	15/16 2-7/16 2-15/16	3030		3030	
		3535	1-3/16 2-7/16 2-15/16	3535		3535	
		4040	1-7/16 3-7/16 3-15/16	4040		4040	
		4545	3-15/16 4-7/16	4545		4545	
		5050	2-7/16 3-15/16				
		6050	3-7/16 5-7/16				
		7060	3-15/16				
		8065	4-7/16				
		10085	7				
		H120100	8				

★ Not currently stocked. Consult factory for availability and pricing.

Every effort is made to keep all catalog dimensions and styles current in the catalog. However, from time to time it is necessary because of manufacturing changes to alter stock products dimensionally. If any stock product dimension or style in this catalog section is critical to your application please contact *Martin* for certification.





## Bushing Specifications

Part Number	Dimensions							Stock Bore Range		Cap Screws		Av. Wt. Lbs.	Wrench Torque in./lbs.
	D	L	A	B Large End	G	B.C.	W	Type 1	Type 2	No.	Size		
G	2.00	1.00	0.25	1.1720	0.19	1.56	—	3/8 – 15/16	1	2	1/4 x 5/8	0.5	95
H	2.50	1.25	0.25	1.6250	0.19	2.00	—	3/8 – 1-3/8	1-7/16 – 1-1/2	2	1/4 x 3/4	0.8	95
P1	3.00	1.94	0.41	1.9375	0.22	2.44	0.375	1/2 – 1-7/16	1-1/2 – 1-3/4	3	5/16 x 1	1.3	192
P2	3.00	2.94	0.41	1.9375	0.22	2.44	0.375	3/4 – 1-7/16	1-1/2 – 1-3/4	3	5/16 x 1	1.5	192
P3	3.00	4.44	0.41	1.9375	0.22	2.44	0.375	1-1/8 – 1-3/8	1-5/8	3	5/16 x 1	2.0	192
Q1	4.12	2.50	0.53	2.8750	0.22	3.38	0.500	3/4 – 2-1/16	2-1/8 – 2-11/16	3	3/8 x 1-1/4	3.5	348
Q2	4.12	3.50	0.53	2.8750	0.22	3.38	0.500	1 – 2-1/16	2-1/8 – 2-5/8	3	3/8 x 1-1/4	4.5	348
Q3	4.12	5.00	0.53	2.8750	0.22	3.38	0.500	1-3/8 – 2-1/16	2-1/8 – 2-1/2	3	3/8 x 1-1/4	5.5	348
R1	5.38	2.88	0.62	4.0000	0.25	4.62	0.750	1-1/8 – 2-13/16	2-7/8 – 3-3/4	3	3/8 x 1-3/4	7.5	348
R2	5.38	4.88	0.62	4.0000	0.25	4.62	0.750	1-3/8 – 2-13/16	2-7/8 – 3-5/8	3	3/8 x 1-3/4	11.0	348
S1	6.38	4.38	0.75	4.6250	0.31	5.38	0.750	1-11/16 – 3-3/16	3-1/4 – 4-1/4	3	1/2 x 2-1/4	13.5	840
S2	6.38	6.75	0.75	4.6250	0.31	5.38	0.750	1-7/8 – 3-3/16	3-1/4 – 4-3/16	3	1/2 x 2-1/4	19.0	840
UO	8.38	5.25	1.06	6.0000	0.44	7.00	1.250	2-3/8 – 3-1/16	—	3	5/8 x 2-3/4	30.0	1680
UO	8.38	4.94	0.75	6.0000	0.44	7.00	1.250	3-1/4 – 4-1/4	4-3/8 – 5-1/2	3	5/8 x 2-3/4	27.0	1680
U1	8.38	7.12	1.06	6.0000	0.44	7.00	1.250	2-3/8 – 4-1/4	4-3/8 – 5-1/2	3	5/8 x 2-3/4	40.0	1680
U2	8.38	10.12	1.06	6.0000	0.44	7.00	1.250	2-7/16 – 4-1/4	4-3/8 – 5	3	5/8 x 2-3/4	50.0	1680
W1	12.50	8.25	1.44	8.5000	0.44	10.00	1.250	3-3/8 – 6-3/16	6-1/4 – 7-7/16	4	3/4 x 3	104.0	3000
W2	12.50	11.25	1.44	8.5000	0.44	10.00	1.250	3-3/8 – 6-3/16	6-1/4 – 7-7/16	4	3/4 x 3	133.0	3000

All tapers are 3/4" per 12" on Diameter.

All dimensions are in inches except, as noted.

All bushings are cast iron, ductile iron, sintered steel, or steel. Consult manufacturer for clarification.

Metric bushings also available.