

BUSHINGS

- Convenience and design flexibility
- Precision machined quality steel
- Many different QD bushing types
- 3/8" to 7 7/16" bore range



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QD BUSHINGS

- L ("H" reference)
- JA to J inclusive
- M to W inclusive
- S



QD BUSHINGS

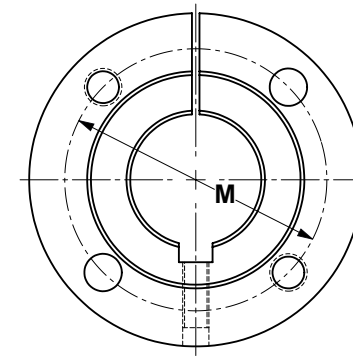
QD BUSHINGS

| Bushing | Dimensions (in) | | | | | | | | |
|----------|-----------------|---------|---------|---------|--------|-------|------|---------|---------|
| | A | B | D | E | F | G | H | L | M |
| L | 11/32 | 15/8 | 2 1/2 | 1 | 29/32 | 3/16 | 3/32 | 1 11/32 | 2 |
| JA | 5/16 | 13/8 | 2 | 11/16 | 5/8 | 13/64 | 9/64 | 1 | 1 21/32 |
| SH | 3/8 | 17/8 | 2 11/16 | 7/8 | 3/4 | 1/4 | 1/8 | 1 1/4 | 2 1/4 |
| SDS | 7/16 | 2 3/16 | 3 3/16 | 7/8 | 3/4 | 1/4 | 1/8 | 1 5/16 | 2 11/16 |
| SD | 7/16 | 2 3/16 | 3 3/16 | 13/8 | 1 1/4 | 1/4 | 1/8 | 1 13/16 | 2 11/16 |
| SK | 1/2 | 2 3/16 | 3 7/8 | 13/8 | 1 1/4 | 5/16 | 3/16 | 1 7/8 | 3 5/16 |
| SF | 1/2 | 3 1/8 | 4 5/8 | 1 1/2 | 1 1/4 | 5/16 | 1/16 | 2 | 3 7/8 |
| E | 3/4 | 3 27/32 | 6 | 1 7/8 | 1 5/8 | 5/16 | 1/16 | 2 5/8 | 5 |
| F | 13/16 | 4 7/16 | 6 5/8 | 2 13/16 | 2 1/2 | 13/32 | 3/32 | 3 5/8 | 5 5/8 |
| J | 1 | 5 5/32 | 7 1/4 | 3 1/2 | 3 3/16 | 13/32 | 3/32 | 4 1/2 | 6 1/4 |
| M | 1 1/4 | 6 1/2 | 9 1/8 | 5 1/2 | 5 3/16 | 13/32 | 3/32 | 6 3/4 | 7 7/8 |
| N | 1 1/2 | 7 | 10 | 6 5/8 | 6 1/4 | 9/16 | 3/16 | 8 1/8 | 8 1/2 |
| P | 1 3/4 | 8 1/4 | 11 3/4 | 7 5/8 | 7 1/4 | 5/8 | 1/4 | 9 3/8 | 10 |
| W | 2 | 10 7/16 | 15 | 9 3/8 | 9 | 5/8 | 1/4 | 11 3/8 | 12 3/4 |
| S | 3 1/4 | 12 1/8 | 17 3/4 | 12 1/2 | 12 | 13/16 | 5/16 | 15 3/4 | 15 |
| SX5* | 3 1/4 | 12 1/2 | 17 3/4 | 12 1/2 | 12 | 13/16 | 5/16 | 15 3/4 | 15 |
| SX7-1/2* | 3 1/4 | 12 1/8 | 17 3/4 | 12 1/2 | 12 | 13/16 | 5/16 | 15 3/4 | 15 |
| Z | 2 5/8 | 16 | 22 | 9 3/8 | 9 | 3/4 | 3/8 | 12 | 19 |

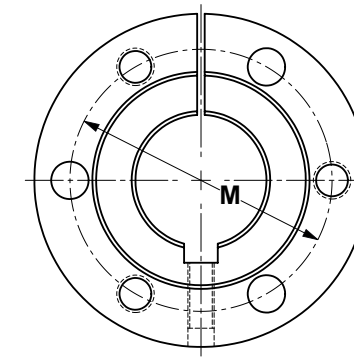
* RB = Rough bore



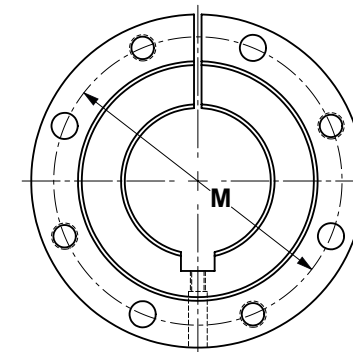
| NC grade 5 cap screws | Set screw dimensions | Bore range (in) | |
|-----------------------|----------------------|-----------------|---------|
| | | Min. | Max. |
| 2= 1/4 x 7/8 | 10-24 UNC x 1/4 | 3/8 | 1 1/2 |
| 3= 10-24 x 1 | 10-24 UNC x 1/4 | 1/2 | 1 1/4 |
| 3= 1/4 x -3/8 | 1/4-20 UNC x 1/4 | 1/2 | 1 11/16 |
| 3= 1/4 x -3/8 | 1/4-20 UNC x 1/4 | 1/2 | 2 |
| 3= 1/4 x -3/8 | 1/4-20 UNC x 1/4 | 1/2 | 2 |
| 3= 5/16 x 2 | 1/4-20 UNC x 1/4 | 1/2 | 2 5/8 |
| 3= 3/8 x 2 | 5/16-18 UNC x 3/8 | 1/2 | 2 15/16 |
| 3= 1/2 x 2-3/4 | 3/8-16 UNC x 3/8 | 7/8 | 3 1/2 |
| 3= 9-16 x 3-5/8 | 3/8-16 UNC x 3/8 | 1 | 4 |
| 3= 5/8 x 4-1/2 | 3/8-16 UNC x 3/8 | 1 7/16 | 4 1/2 |
| 4= 3/4 x 7 | 3/8-16 UNC x 1/2 | 2 | 5 1/2 |
| 4= 7/8 x 8 | 1/2-13 UNC x 5/8 | 2 3/4 | 6 |
| 4= 1 x 9-1/2 | 5/8-11 UNC x 1 1/4 | 2 15/16 | 7 |
| 4= 1-1/8 x 11-1/2 | 1-8 UNC x 1 1/2 | 4 1/4 | 8 1/2 |
| 5= 1-1/4 x 15-1/2 | 1-1/4-7 UNC x 2 | 5 1/2 | 10 |
| 5= 1-1/4 x 15-1/2 | 1-1/4-7 UNC x 2 | - | - |
| 5= 1-1/4 x 15-1/2 | 1-1/4-7 UNC x 2 | - | - |
| 5= 1-1/4 x 12 | 1-8 UNC x 1/2 | 7 | 12 |



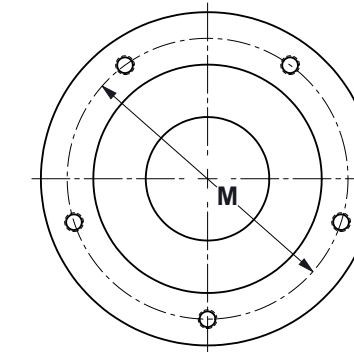
Bushing L
("H" - Crossing Reference)



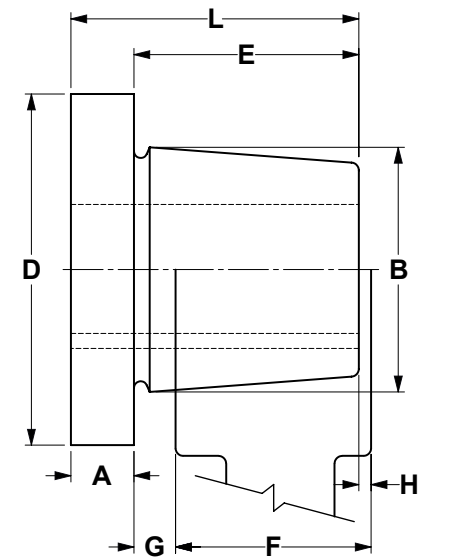
Bushing
JA to J Inclusive



Bushing
M to W
Inclusive



Bushing S



Taper 3/4" per FT on Diameter - B -

QD BUSHINGS

TECHNICAL INFORMATION

Proper wrench torque

| Bushing size | Screw size | Wrench torque | Open end or socket wrench | | Torque capacity |
|--------------|------------|---------------|---------------------------|------|-----------------|
| | | | Length | Pull | |
| | | | in | lb | |
| | in | lb/ft | in | lb | lb-in |
| L | 1/4 | 6 | 4 | 18 | 1200 |
| JA | #10 | 5 | 4 | 15 | 1000 |
| SH | 1/4 | 9 | 4 | 27 | 3500 |
| SDS - SD | 1/4 | 9 | 4 | 27 | 5000 |
| SK | 5/16 | 15 | 6 | 30 | 7000 |
| SF | 3/8 | 30 | 6 | 60 | 11000 |
| E | 1/2 | 60 | 12 | 60 | 20000 |
| F | 9/16 | 75 | 12 | 75 | 30000 |
| J | 5/8 | 135 | 15 | 108 | 45000 |
| M | 3/4 | 225 | 15 | 180 | 85000 |
| N | 7/8 | 300 | 15 | 240 | 150000 |
| P | 1 | 450 | 18 | 300 | 250000 |
| W | 1 1/8 | 600 | 24 | 300 | 375000 |
| S | 1 1/4 | 750 | 30 | 300 | 625000 |
| Z | 1 1/4 | 750 | 30 | 300 | On request |

QD BUSHINGS

STANDARD STOCK BORE (INCHES)

| Stock bore | Keyseat | L | JA | SH | SDS | SD | SK | SF | E | F | J | M | N | P |
|------------|-------------|---|----|----|-----|----|----|----|---|---|---|---|---|---|
| in | in | | | | | | | | | | | | | |
| 3/8 | NO K.S. | X | - | - | - | - | - | - | - | - | - | - | - | - |
| 7/16 | NO K.S. | X | - | - | - | - | - | - | - | - | - | - | - | - |
| 1/2* | NO K.S. | X | X | X | X | X | X | X | - | - | - | - | - | - |
| 1/2KW | 1/8 x 1/16 | X | X | X | - | - | - | - | - | - | - | - | - | - |
| 9/16 | 1/8 x 1/16 | X | X | X | X | X | X | X | - | - | - | - | - | - |
| 5/8 | 3/16 x 3/32 | X | X | X | X | X | X | X | - | - | - | - | - | - |
| 11/16 | 3/16 x 3/32 | X | X | X | X | X | X | X | - | - | - | - | - | - |
| 3/4 | 3/16 x 3/32 | X | X | X | X | X | X | X | - | - | - | - | - | - |
| 13/16 | 3/16 x 3/32 | X | X | X | X | X | X | X | - | - | - | - | - | - |
| 7/8 | 3/16 x 3/32 | X | X | X | X | X | X | X | X | - | - | - | - | - |
| 15/16 | 1/4 x 1/8 | X | X | X | X | X | X | X | X | - | - | - | - | - |
| 1 | 1/4 x 1/8 | X | X | X | X | X | X | X | X | X | - | - | - | - |
| 1 1/16 | 1/4 x 1/8 | X | S | X | X | X | X | X | X | X | - | - | - | - |
| 1 1/8 | 1/4 x 1/8 | X | S | X | X | X | X | X | X | X | - | - | - | - |
| 1 3/16 | 1/4 x 1/8 | X | S | X | X | X | X | X | X | X | - | - | - | - |
| 1 1/4 | 1/4 x 1/8 | X | S | X | X | X | X | X | X | X | - | - | - | - |
| 1 5/16 | 5/16 x 5/32 | S | - | X | X | X | X | X | X | X | - | - | - | - |
| 1 3/8 | 5/16 x 5/32 | S | - | X | X | X | X | X | X | X | - | - | - | - |
| 1 7/16 | 3/8 x 3/16 | S | - | S | X | X | X | X | X | X | X | - | - | - |
| 1 1/2 | 3/8 x 3/16 | S | - | S | X | X | X | X | X | X | X | - | - | - |
| 1 9/16 | 3/8 x 3/16 | - | - | S | X | X | X | X | X | X | X | - | - | - |
| 1 5/8 | 3/8 x 3/16 | - | - | S | X | X | X | X | X | X | X | - | - | - |
| 1 11/16 | 3/8 x 3/16 | - | - | N | S | S | X | X | X | X | X | - | - | - |
| 1 3/4 | 3/8 x 3/16 | - | - | - | S | S | X | X | X | X | X | - | - | - |
| 1 13/16 | 1/2 x 1/4 | - | - | - | S | S | X | X | X | X | X | - | - | - |
| 1 7/8 | 1/2 x 1/4 | - | - | - | S | S | X | X | X | X | X | - | - | - |
| 1 15/16 | 1/2 x 1/4 | - | - | - | S | S | X | X | X | X | X | - | - | - |
| 2 | 1/2 x 1/4 | - | - | - | N | N | X | X | X | X | X | X | - | - |
| 2 1/16 | 1/2 x 1/4 | - | - | - | - | - | X | X | X | X | X | - | - | - |
| 2 1/8 | 1/2 x 1/4 | - | - | - | - | - | X | X | X | X | X | X | - | - |
| 2 3/16 | 1/2 x 1/4 | - | - | - | - | - | S | X | X | X | X | X | - | - |
| 2 1/4 | 1/2 x 1/4 | - | - | - | - | - | S | X | X | X | X | X | - | - |
| 2 1/4KW5/8 | 5/8 x 5/16 | - | - | - | - | - | S | X | X | X | - | - | - | - |
| 2 5/16 | 5/8 x 5/16 | - | - | - | - | - | S | S | X | X | X | - | - | - |
| 2 3/8 | 5/8 x 5/16 | - | - | - | - | - | S | S | X | X | X | X | - | - |
| 2 7/16 | 5/8 x 5/16 | - | - | - | - | - | S | S | X | X | X | X | - | - |
| 2 1/2 | 5/8 x 5/16 | - | - | - | - | - | S | S | X | X | X | X | - | - |
| 2 9/16 | 5/8 x 5/16 | - | - | - | - | - | N | S | X | X | X | X | - | - |
| 2 5/8 | 5/8 x 5/16 | - | - | - | - | - | N | S | X | X | X | X | X | - |
| 2 11/16 | 5/8 x 5/16 | - | - | - | - | - | - | S | X | X | X | X | - | - |
| 2 3/4 | 5/8 x 5/16 | - | - | - | - | - | - | S | X | X | X | X | X | - |
| 2 13/16 | 3/4 x 3/8 | - | - | - | - | - | - | S | X | X | X | X | - | - |
| 2 7/8 | 3/4 x 3/8 | - | - | - | - | - | - | S | X | X | X | X | - | - |
| 2 15/16 | 3/4 x 3/8 | - | - | - | - | - | - | S | S | X | X | X | X | X |
| 3 | 3/4 x 3/8 | - | - | - | - | - | - | - | S | X | X | X | X | - |
| 3 1/16 | 3/4 x 3/8 | - | - | - | - | - | - | - | S | X | X | - | - | - |
| 3 1/8 | 3/4 x 3/8 | - | - | - | - | - | - | - | S | X | X | X | - | - |
| 3 3/16 | 3/4 x 3/8 | - | - | - | - | - | - | - | S | X | X | X | - | X |
| 3 1/4 | 3/4 x 3/8 | - | - | - | - | - | - | - | S | X | X | X | X | X |

X = Stock bore, standard keyway

S = Stock bore, shallow keyway

N = Stock bore, no keyway

QD BUSHINGS

STANDARD STOCK BORE (INCHES)

| Stock bore | Keyseat | E | F | J | M | N | P | W | S | Z |
|------------|------------|---|---|---|---|---|---|---|---|---|
| in | in | | | | | | | | | |
| 3 5/16 | 7/8 x 7/16 | S | S | X | X | X | X | - | - | - |
| 3 3/8 | 7/8 x 7/16 | S | S | X | X | X | X | - | - | - |
| 3 7/16 | 7/8 x 7/16 | S | S | X | X | X | X | - | - | - |
| 3 1/2 | 7/8 x 7/16 | S | S | X | X | X | X | - | - | - |
| 3 9/16 | 7/8 x 7/16 | - | S | X | - | - | - | - | - | - |
| 3 5/8 | 7/8 x 7/16 | - | S | X | X | X | X | - | - | - |
| 3 11/16 | 7/8 x 7/16 | - | S | X | X | X | - | - | - | - |
| 3 3/4 | 7/8 x 7/16 | - | S | X | X | X | X | - | - | - |
| 3 13/16 | 1 x 1/2 | - | S | X | X | - | - | - | - | - |
| 3 7/8 | 1 x 1/2 | - | S | S | X | X | X | - | - | - |
| 3 15/16 | 1 x 1/2 | - | S | S | X | X | X | - | - | - |
| 4 | 1 x 1/2 | - | N | S | X | X | X | - | - | - |
| 4 1/16 | 1 x 1/2 | - | - | S | - | - | - | - | - | - |
| 4 1/8 | 1 x 1/2 | - | - | S | X | X | - | - | - | - |
| 4 3/16 | 1 x 1/2 | - | - | S | X | X | X | - | - | - |
| 4 1/4 | 1 x 1/2 | - | - | S | X | X | X | X | - | - |
| 4 5/16 | 1 x 1/2 | - | - | S | X | X | X | - | - | - |
| 4 3/8 | 1 x 1/2 | - | - | S | X | X | X | - | - | - |
| 4 7/16 | 1 x 1/2 | - | - | S | X | X | X | X | - | - |
| 4 1/2 | 1 x 1/2 | - | - | S | X | X | X | - | - | - |
| 4 9/16 | 1/4 x 5/8 | - | - | - | X | X | - | - | - | - |
| 4 5/8 | 1/4 x 5/8 | - | - | - | X | X | X | X | - | - |
| 4 11/16 | 1/4 x 5/8 | - | - | - | X | X | X | X | - | - |
| 4 3/4 | 1/4 x 5/8 | - | - | - | X | X | X | X | - | - |
| 4 13/16 | 1/4 x 5/8 | - | - | - | X | X | - | - | - | - |
| 4 7/8 | 1/4 x 5/8 | - | - | - | S | X | X | X | - | - |
| 4 15/16 | 1/4 x 5/8 | - | - | - | S | X | X | X | - | - |
| 5 | 1/4 x 5/8 | - | - | - | S | X | X | X | - | - |
| 5 1/8 | 1/4 x 5/8 | - | - | - | S | S | X | - | - | - |
| 5 3/16 | 1/4 x 5/8 | - | - | - | S | S | - | - | - | - |
| 5 1/4 | 1/4 x 5/8 | - | - | - | S | S | X | X | - | - |
| 5 5/16 | 1/4 x 5/8 | - | - | - | S | S | X | - | - | - |
| 5 3/8 | 1/4 x 5/8 | - | - | - | S | S | X | - | - | - |
| 5 7/16 | 1/4 x 5/8 | - | - | - | S | S | X | X | - | - |
| 5 1/2 | 1/4 x 5/8 | - | - | - | S | S | X | X | X | - |
| 5 11/16 | 1/4 x 5/8 | - | - | - | - | S | - | X | - | - |
| 5 3/4 | 11/2 x 3/4 | - | - | - | - | S | S | X | X | - |
| 5 7/8 | 11/2 x 3/4 | - | - | - | - | S | S | X | X | - |
| 5 15/16 | 11/2 x 3/4 | - | - | - | - | S | S | X | X | - |
| 6 | 11/2 x 3/4 | - | - | - | - | S | S | X | X | - |
| 6 1/16 | 11/2 x 3/4 | - | - | - | - | - | S | - | - | - |
| 6 1/4 | 11/2 x 3/4 | - | - | - | - | - | S | X | X | - |
| 6 7/16 | 11/2 x 3/4 | - | - | - | - | - | S | X | X | - |
| 6 1/2 | 11/2 x 3/4 | - | - | - | - | - | S | X | X | - |
| 6 3/4 | 13/4 x 3/4 | - | - | - | - | - | S | X | X | - |
| 6 7/8 | 13/4 x 3/4 | - | - | - | - | - | S | X | - | - |
| 6 15/16 | 13/4 x 3/4 | - | - | - | - | - | S | X | X | - |
| 7 | 13/4 x 3/4 | - | - | - | - | - | S | X | X | - |
| 7 1/8 | 13/4 x 3/4 | - | - | - | - | - | - | X | - | - |
| 7 1/4 | 13/4 x 3/4 | - | - | - | - | - | - | X | X | - |
| 7 3/8 | 13/4 x 3/4 | - | - | - | - | - | - | X | - | - |
| 7 7/16 | 13/4 x 3/4 | - | - | - | - | - | - | X | - | - |

X = Stock bore, standard keyway

S = Stock bore, shallow keyway

N = Stock bore, no keyway

QD BUSHINGS

STANDARD STOCK BORE (INCHES)

| Stock bore | Keyseat | L | JA | SH |
|----------------|-------------|---|----|----|
| in | in | | | |
| 7 1/2 | 1 3/4 x 3/4 | X | X | - |
| 7 3/4 | 2 x 3/4 | S | X | - |
| 7 7/8 | 2 x 3/4 | - | X | - |
| 8 | 2 x 3/4 | S | X | - |
| 8 1/4 | 2 x 3/4 | S | X | - |
| 8 1/2 | 2 x 3/4 | S | X | - |
| 8 1/2KW2 X 3/8 | 2 x 3/8 | S | - | - |
| 8 1/2KW2 X 1 | 2 x 1 | - | X | - |
| 8 1/2KW2 X 3/4 | 2 x 3/4 | - | X | - |
| 8 3/4 | 2 x 3/4 | - | X | - |
| 8 7/8 | 2 x 3/4 | - | X | - |
| 9 | 2 x 3/4 | - | X | - |
| 9 1/4 | 2 1/2 x 1/2 | - | S | - |
| 9 3/8 | 2 1/2 x 1/2 | - | S | - |
| 9 1/2 | 2 1/2 x 1/2 | - | S | - |
| 9 3/4 | 2 1/2 x 3/8 | - | S | - |
| 9 3/4KW2 X 1/4 | 2 x 1/4 | - | X | - |
| 9 7/8 | 2 1/2 x 3/8 | - | S | - |
| 10 | 2 1/2 x 1/4 | - | S | - |
| 10 1/4 | 2 1/2 x 7/8 | - | - | X |
| 10 3/4 | 3 x .819 | - | - | X |

X = Stock bore, standard keyway

S = Stock bore, shallow keyway

N = Stock bore, no keyway



QD BUSHINGS

STANDARD STOCK BORE (MILLIMETERS)

| Stock bore | Keyseat | L | JA | SH | SDS | SD | SK | SF | E | F | J | M | N | P | W |
|------------|--------------------------|---|----|----|-----|----|----|----|---|---|---|---|---|---|---|
| mm | mm | | | | | | | | | | | | | | |
| 14MM | 5 x 2.3 | X | X | X | X | X | X | - | - | - | - | - | - | - | - |
| 15MM | 5 x 2.3 | X | X | X | X | X | X | - | - | - | - | - | - | - | - |
| 16MM | 5 x 2.3 (6 x 2.8 for JA) | X | X | X | X | X | X | - | - | - | - | - | - | - | - |
| 18MM | 6 x 2.8 | X | X | X | X | X | X | - | - | - | - | - | - | - | - |
| 19MM | 6 x 2.8 | X | X | X | X | X | X | - | - | - | - | - | - | - | - |
| 20MM | 6 x 2.8 | X | X | X | X | X | X | X | - | - | - | - | - | - | - |
| 22MM | 6 x 2.8 | X | X | X | X | X | X | - | - | - | - | - | - | - | - |
| 24MM | 8 x 3.3 | X | S | X | X | X | X | X | - | - | - | - | - | - | - |
| 25MM | 8 x 3.3 | X | S | X | X | X | X | X | - | - | - | - | - | - | - |
| 28MM | 8 x 3.3 | X | S | X | X | X | X | X | - | - | - | - | - | - | - |
| 30MM | 8 x 3.3 | X | - | X | X | X | X | X | - | - | - | - | - | - | - |
| 32MM | 10 x 3.3 | S | - | X | X | X | X | X | - | - | - | - | - | - | - |
| 35MM | 10 x 3.3 | S | - | X | X | X | X | X | X | - | - | - | - | - | - |
| 38MM | 10 x 3.3 | - | - | S | X | X | X | X | X | - | - | - | - | - | - |
| 40MM | 12 x 3.3 | - | - | N | X | X | X | X | X | - | - | - | - | - | - |
| 42MM | 12 x 3.3 | - | - | - | X | X | X | X | X | - | - | - | - | - | - |
| 45MM | 14 x 3.8 | - | - | - | - | - | X | X | X | X | - | - | - | - | - |
| 48MM | 14 x 3.8 | - | - | - | - | - | X | X | X | X | - | - | - | - | - |
| 50MM | 14 x 3.8 | - | - | - | - | - | X | X | X | X | X | - | - | - | - |
| 55MM | 16 x 4.3 | - | - | - | - | - | X | X | X | X | X | - | - | - | - |
| 60MM | 18 x 4.4 | - | - | - | - | - | S | X | X | X | X | - | - | - | - |
| 65MM | 18 x 4.4 | - | - | - | - | - | - | X | X | X | X | - | - | - | - |
| 70MM | 20 x 4.9 | - | - | - | - | - | - | X | X | X | X | X | - | - | - |
| 75MM | 20 x 4.9 | - | - | - | - | - | - | - | X | X | X | X | - | - | - |
| 80MM | 22 x 5.4 | - | - | - | - | - | - | - | X | X | X | X | X | - | - |
| 85MM | 22 x 5.4 | - | - | - | - | - | - | - | X | X | X | X | - | - | - |
| 90MM | 25 x 5.4 | - | - | - | - | - | - | - | - | X | X | X | X | - | - |
| 95MM | 25 x 5.4 | - | - | - | - | - | - | - | - | X | X | X | X | - | - |
| 100MM | 28 x 6.4 | - | - | - | - | - | - | - | - | N | X | X | X | X | - |
| 110MM | 28 x 6.4 | - | - | - | - | - | - | - | - | - | S | X | X | X | - |
| 115MM | 32 x 7.4 | - | - | - | - | - | - | - | - | - | S | X | X | - | - |
| 120MM | 32 x 7.4 | - | - | - | - | - | - | - | - | - | - | X | X | X | X |
| 125MM | 32 x 7.4 | - | - | - | - | - | - | - | - | - | - | X | X | - | - |
| 130MM | 32 x 7.4 | - | - | - | - | - | - | - | - | - | - | X | X | X | - |
| 135MM | 36 x 4.4 | - | - | - | - | - | - | - | - | - | - | - | S | - | - |
| 140MM | 36 x 8.4 | - | - | - | - | - | - | - | - | - | - | - | S | X | - |
| 145MM | 36 x 8.4 | - | - | - | - | - | - | - | - | - | - | - | - | X | - |
| 150MM | 36 x 8.4 | - | - | - | - | - | - | - | - | - | - | - | S | X | - |
| 160MM | 40 x 9.4 | - | - | - | - | - | - | - | - | - | - | - | - | X | - |
| 170MM | 40 x 4.4 | - | - | - | - | - | - | - | - | - | - | - | - | S | - |

Note: All bushings up to sizes M are manufactured in ductile iron. Key not supplied for all bore sizes.

X = Stock bore, standard keyway

S = Stock bore, shallow keyway

N = Stock bore, no keyway



SPLIT TAPER BUSHINGS

- Will hold even if fasteners become loose
- Interchangeable between manufacturers.
- Bore range for type 1 from 3/8" - 15/16" to 3 3/8" - 6 3/16"
- Bore range for type 2 from 1" to 6 1/4"- 7 7/16"



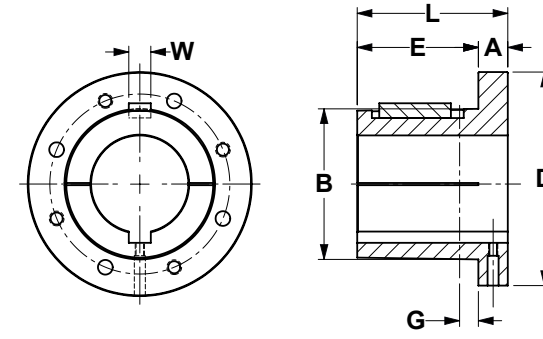
SPLIT TAPER BUSHINGS

SPLIT TAPER BUSHINGS

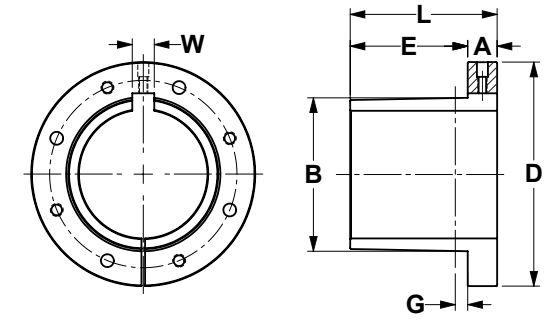
| Part no. | Dimensions (in) | | | | | | |
|----------|-----------------|---------|-----------|-----------|---------|-------|------|
| | L | E | B | | D | W | G |
| | | | Large end | Small end | | | |
| G | 1 | 3/4 | 1.172 | 1.133 | 2 | --- | 3/16 |
| H | 1 11/32 | 1 | 1.625 | 1.570 | 2 1/2 | --- | 3/16 |
| P1 | 1 15/16 | 1 17/32 | 1.9375 | 1.8555 | 3 | 3/8 | 7/32 |
| P2 | 2 15/16 | 2 17/32 | 1.9375 | 1.7930 | 3 | 3/8 | 7/32 |
| B | 1 15/16 | 1 7/16 | 2.625 | 2.5567 | 3 11/16 | 1/2 | 7/32 |
| Q1 | 2 1/2 | 1 31/32 | 2.875 | 2.7657 | 4 1/8 | 1/2 | 7/32 |
| Q2 | 3 1/2 | 2 31/32 | 2.875 | 2.7032 | 4 1/8 | 1/2 | 7/32 |
| R1 | 2 7/8 | 2 1/4 | 4.000 | 3.8750 | 5 3/8 | 3/4 | 1/4 |
| R2 | 4 7/8 | 4 1/4 | 4.000 | 3.7500 | 5 3/8 | 3/4 | 1/4 |
| S1 | 4 3/8 | 3 5/8 | 4.625 | 4.4180 | 6 3/8 | 3/4 | 5/16 |
| S2 | 6 3/4 | 6 | 4.625 | 4.2696 | 6 3/8 | 3/4 | 5/16 |
| U0* | 5 1/4 | 4 3/16 | 6.000 | 5.7656 | 8 3/8 | 1 1/4 | 7/16 |
| U0* | 4 15/16 | 4 3/16 | 6.000 | 5.7656 | 8 3/8 | 1 1/4 | 7/16 |
| U1* | 7 1/8 | 6 1/16 | 6.000 | 5.6485 | 8 3/8 | 1 1/4 | 7/16 |
| W1* | 8 1/4 | 6 13/16 | 8.500 | 8.1016 | 12 1/2 | 1 1/4 | 7/16 |

*Contact us for availability

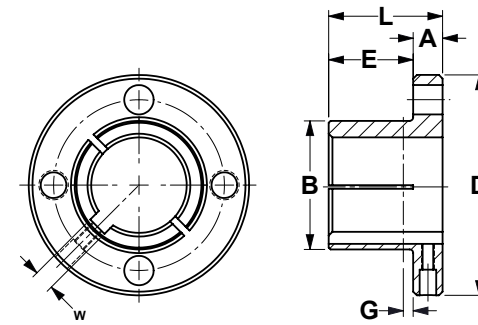
| Bore range (in) | | Cap screws | | Avg. weight | Wrench torque |
|------------------|-----------------|------------|---------------------|-------------|---------------|
| Type 1 | Type 2 | No. | Size | lb | lb-in |
| 3/8 - 15/16 | 1 | 2 | 1/4-20 UNC x 5/8 | 0.5 | 95 |
| 3/8 - 13/8 | 1 7/16 - 1 1/2 | 2 | 1/4-20 UNC x 7/8 | 0.8 | 95 |
| 1/2 - 1 7/16 | 1 1/2 - 1 3/4 | 3 | 5/16-18 UNC x 1 | 1.3 | 192 |
| 3/4 - 1 7/16 | 1 1/2 - 1 3/4 | 3 | 5/16-18 UNC x 1 | 1.5 | 192 |
| 1/2 - 1 15/16 | 2 - 2 7/16 | 3 | 5/16-18 UNC x 1-1/4 | 1.8 | 192 |
| 5/8 - 2 1/16 | 2 1/8 - 2 11/16 | 3 | 3/8-16 UNC x 1-1/4 | 3.5 | 348 |
| 1 - 2 1/16 | 2 1/8 - 2 5/8 | 3 | 3/8-16 UNC x 1-1/4 | 4.5 | 348 |
| 1 1/8 - 2 13/16 | 2 7/8 - 3 3/4 | 3 | 3/8-16 UNC x 1-3/4 | 7.5 | 348 |
| 1 3/8 - 2 13/16 | 2 7/8 - 3 5/8 | 3 | 3/8-16 UNC x 1-3/4 | 11 | 348 |
| 1 11/16 - 3 3/16 | 3 1/4 - 4 1/4 | 3 | 1/2-13 UNC 2-1/4 | 13.5 | 840 |
| 1 7/8 - 3 3/16 | 3 1/4 - 4 3/16 | 3 | 1/2-13 UNC 2-1/4 | 19 | 840 |
| 2 3/8 - 3 3/16 | ----- | 3 | 5/8-11 UNC x 2-3/4 | 30 | 1680 |
| 3 1/4 - 4 1/4 | 4 3/8 - 5 1/2 | 3 | 5/8-11 UNC x 2-3/4 | 27 | 1680 |
| 2 3/8 - 4 1/4 | 4 3/8 - 5 1/2 | 3 | 5/8-11 UNC x 2-3/4 | 40 | 1680 |
| 3 3/8 - 6 3/16 | 6 1/4 - 7 7/16 | 4 | 3/4-10 UNC x 3 | 104 | 3000 |



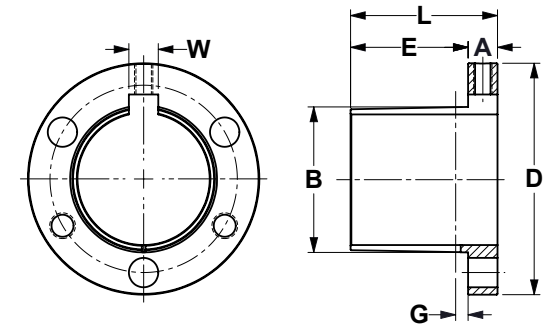
W TYPE 1



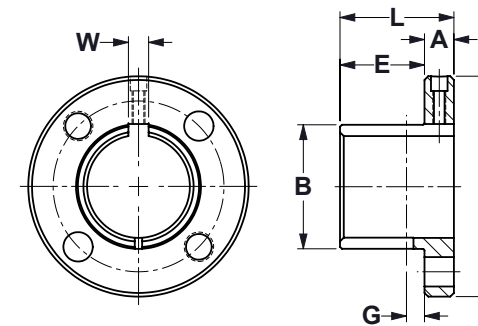
W TYPE 2



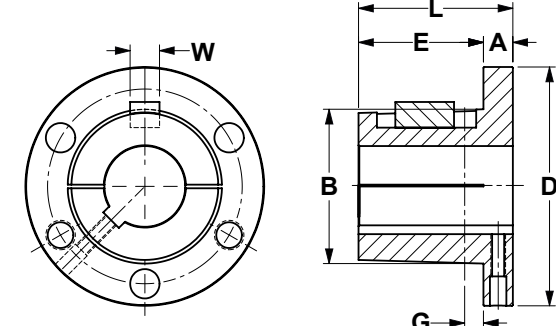
G TYPE 1



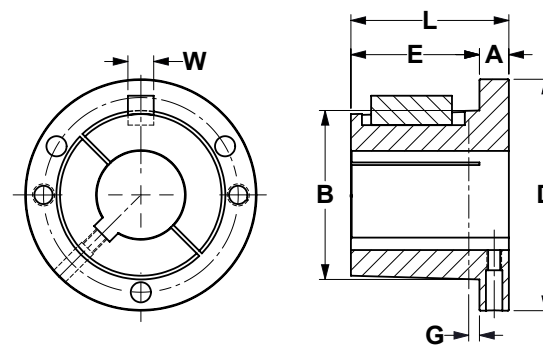
P, B, Q & R TYPE 2



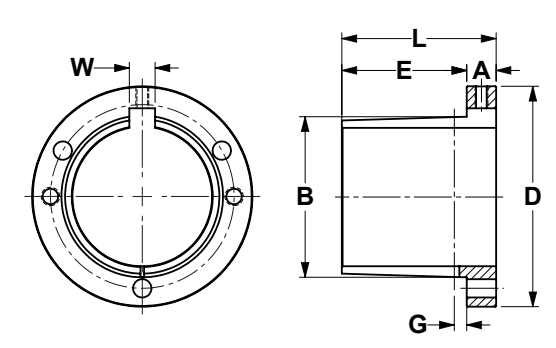
G TYPE 2



P, B, Q & R TYPE 1



S & U TYPE 1



S & U TYPE 2

SPLIT TAPER BUSHINGS

STANDARD STOCK BORE (INCHES)

| Stock bore | Keyseat | G | H | P1 | P2 | B | Q1 | Q2 | R1 | R2 | S1 | S2 | U0* | U1* |
|------------|-------------|---|---|----|----|---|----|----|----|----|----|----|-----|-----|
| in | in | | | | | | | | | | | | | |
| 3/8 | NO K.S. | X | X | - | - | - | - | - | - | - | - | - | - | - |
| 7/16 | NO K.S. | X | X | - | - | - | - | - | - | - | - | - | - | - |
| 1/2 | 1/8 X 7/16 | X | - | - | - | X | - | - | - | - | - | - | - | - |
| 9/16 | 1/8 X 7/16 | X | - | - | - | X | - | - | - | - | - | - | - | - |
| 1/2 | 1/8 X 1/16 | - | X | X | - | - | - | - | - | - | - | - | - | - |
| 9/16 | 1/8 X 1/16 | - | X | X | - | - | - | - | - | - | - | - | - | - |
| 5/8 | 3/16 X 3/32 | X | X | X | - | X | X | - | - | - | - | - | - | - |
| 21/32 | 3/16 X 3/32 | - | - | X | - | - | - | - | - | - | - | - | - | - |
| 11/16 | 3/16 X 3/32 | X | X | X | - | X | - | - | - | - | - | - | - | - |
| 3/4 | 3/16 X 3/32 | X | X | X | X | X | X | - | - | - | - | - | - | - |
| 25/32 | 3/16 X 3/32 | - | - | X | - | - | - | - | - | - | - | - | - | - |
| 13/16 | 3/16 X 3/32 | X | X | X | X | X | X | - | - | - | - | - | - | - |
| 7/8 | 3/16 X 3/32 | X | X | X | X | X | X | - | - | - | - | - | - | - |
| 15/16 | 1/4 X 1/8 | X | X | X | X | X | X | - | - | - | - | - | - | - |
| 31/32 | 1/4 X 1/8 | - | - | X | - | - | - | - | - | - | - | - | - | - |
| 1 | 1/4 X 1/8 | X | X | X | X | X | X | X | - | - | - | - | - | - |
| 11/16 | 1/4 X 1/8 | - | X | X | X | X | X | X | - | - | - | - | - | - |
| 11/8 | 1/4 X 1/8 | - | X | X | X | X | X | X | X | - | - | - | - | - |
| 13/16 | 1/4 X 1/8 | - | X | X | X | X | X | X | X | - | - | - | - | - |
| 11/4 | 1/4 X 1/8 | - | X | X | X | X | X | X | X | - | - | - | - | - |
| 15/16 | 5/16 X 1/16 | - | S | - | - | - | - | - | - | - | - | - | - | - |
| 13/8 | 5/16 X 1/16 | - | S | - | - | - | - | - | - | - | - | - | - | - |
| 15/16 | 5/16 X 5/32 | - | - | X | X | X | X | X | X | - | - | - | - | - |
| 13/8 | 5/16 X 5/32 | - | - | X | X | X | X | X | X | X | - | - | - | - |
| 13/8 | 3/8 X 3/16 | - | - | - | X | X | X | X | X | X | - | - | - | - |
| 1 3/8KW3/8 | 3/8 X 3/16 | - | - | X | X | X | X | X | X | - | - | - | - | - |
| 17/16 | 3/8 X 3/16 | - | S | X | X | X | X | X | X | X | - | - | - | - |
| 11/2 | 3/8 X 3/16 | - | S | X | X | X | X | X | X | X | - | - | - | - |
| 19/16 | 3/8 X 3/16 | - | - | X | X | X | X | X | X | X | - | - | - | - |
| 15/8 | 3/8 X 3/16 | - | - | X | X | X | X | X | X | X | - | - | - | - |
| 111/16 | 3/8 X 3/16 | - | - | X | X | X | X | X | X | X | X | - | - | - |
| 13/4 | 3/8 X 3/16 | - | - | X | X | X | X | X | X | X | X | - | - | - |
| 113/16 | 1/2 X 1/4 | - | - | - | - | X | X | X | X | X | - | - | - | - |
| 17/8 | 1/2 X 1/4 | - | - | - | - | X | X | X | X | X | X | - | - | - |
| 115/16 | 1/2 X 1/4 | - | - | - | - | X | X | X | X | X | X | - | - | - |
| 2 | 1/2 X 1/4 | - | - | - | - | X | X | X | X | X | X | - | - | - |
| 2 1/16 | 1/2 X 1/4 | - | - | - | - | X | X | X | X | X | - | - | - | - |
| 2 1/8 | 1/2 X 1/4 | - | - | - | - | X | X | X | X | X | X | - | - | - |
| 2 3/16 | 1/2 X 1/4 | - | - | - | - | X | X | X | X | X | X | - | - | - |
| 2 1/4 | 1/2 X 1/4 | - | - | - | - | X | X | X | X | X | X | - | - | - |
| 2 5/16 | 5/8 X 5/16 | - | - | - | - | X | X | X | X | X | X | - | - | - |
| 2 3/8 | 5/8 X 5/16 | - | - | - | - | X | X | X | X | X | X | X | X | X |
| 2 7/16 | 5/8 X 5/16 | - | - | - | - | X | X | X | X | X | X | X | X | X |
| 2 1/2 | 5/8 X 5/16 | - | - | - | - | - | X | X | X | X | X | X | X | X |
| 2 9/16 | 5/8 X 5/16 | - | - | - | - | - | X | X | X | X | X | X | X | X |
| 2 5/8 | 5/8 X 5/16 | - | - | - | - | - | X | X | X | X | X | X | X | X |
| 2 11/16 | 5/8 X 5/16 | - | - | - | - | - | X | - | X | X | X | X | X | X |
| 2 3/4 | 5/8 X 5/16 | - | - | - | - | - | - | - | X | X | X | X | X | X |

X = Stock bore, standard keyway

S = Stock bore, shallow keyway

| Stock bore | Keyseat | R1 | R2 | S1 | S2 | U0* | U1* |
|------------|-------------|----|----|----|----|-----|-----|
| in | in | | | | | | |
| 2 13/16 | 3/4 X 3/8 | X | X | - | - | - | - |
| 2 7/8 | 3/4 X 3/8 | X | X | X | X | X | X |
| 2 15/16 | 3/4 X 3/8 | X | X | X | X | X | X |
| 3 | 3/4 X 3/8 | X | X | X | X | X | X |
| 3 1/16 | 3/4 X 3/8 | X | - | - | - | - | - |
| 3 1/8 | 3/4 X 3/8 | X | X | X | X | X | X |
| 3 3/16 | 3/4 X 3/8 | X | X | X | X | X | X |
| 3 1/4 | 3/4 X 3/8 | X | X | X | X | X | X |
| 3 3/8 | 7/8 X 7/16 | X | X | X | X | X | X |
| 3 7/16 | 7/8 X 7/16 | X | X | X | X | X | X |
| 3 1/2 | 7/8 X 7/16 | X | X | X | X | X | X |
| 3 5/8 | 7/8 X 7/16 | X | X | X | X | X | X |
| 3 11/16 | 7/8 X 7/16 | X | - | X | X | X | X |
| 3 3/4 | 7/8 X 7/16 | X | - | X | X | X | X |
| 3 7/8 | 1 X 1/2 | - | - | X | X | X | X |
| 3 15/16 | 1 X 1/2 | - | - | X | X | X | X |
| 4 | 1 X 1/2 | - | - | X | X | X | X |
| 4 1/8 | 1 X 1/2 | - | - | X | X | X | X |
| 4 3/16 | 1 X 1/2 | - | - | X | X | X | X |
| 4 1/4 | 1 X 1/2 | - | - | X | - | X | X |
| 4 3/8 | 1 X 1/2 | - | - | - | - | X | X |
| 4 7/16 | 1 X 1/2 | - | - | - | - | X | X |
| 4 1/2 | 1 X 1/2 | - | - | - | - | X | X |
| 4 5/8 | 1 1/4 X 5/8 | - | - | - | - | X | X |
| 4 11/16 | 1 1/4 X 5/8 | - | - | - | - | X | X |
| 4 3/4 | 1 1/4 X 5/8 | - | - | - | - | X | X |
| 4 7/8 | 1 1/4 X 5/8 | - | - | - | - | X | X |
| 4 15/16 | 1 1/4 X 5/8 | - | - | - | - | X | X |
| 5 | 1 1/4 X 5/8 | - | - | - | - | X | X |
| 5 1/8 | 1 1/4 X 5/8 | - | - | - | - | X | X |
| 5 3/16 | 1 1/4 X 5/8 | - | - | - | - | X | X |
| 5 1/4 | 1 1/4 X 5/8 | - | - | - | - | X | X |
| 5 3/8 | 1 1/4 X 5/8 | - | - | - | - | X | X |
| 5 7/16 | 1 1/4 X 5/8 | - | - | - | - | X | X |
| 5 1/2 | 1 1/4 X 5/8 | - | - | - | - | X | X |

X = Stock bore, standard keyway

S = Stock bore, shallow keyway



| Stock bore | Keyseat | W1* |
|------------|-------------|-----|
| in | in | |
| 3 3/8 | 1 1/4 X 5/8 | X |
| 3 7/16 | 1 1/4 X 5/8 | X |
| 3 1/2 | 1 1/4 X 5/8 | X |
| 3 5/8 | 1 1/4 X 5/8 | X |
| 3 11/16 | 1 1/4 X 5/8 | X |
| 3 3/4 | 1 1/4 X 5/8 | X |
| 3 7/8 | 1 X 1/2 | X |
| 3 15/16 | 1 X 1/2 | X |
| 4 | 1 X 1/2 | X |
| 4 1/8 | 1 X 1/2 | X |
| 4 3/16 | 1 X 1/2 | X |
| 4 1/4 | 1 X 1/2 | X |
| 4 3/8 | 1 X 1/2 | X |
| 4 7/16 | 1 X 1/2 | X |
| 4 1/2 | 1 X 1/2 | X |
| 4 5/8 | 1 1/4 X 5/8 | X |
| 4 3/4 | 1 1/4 X 5/8 | X |
| 4 7/8 | 1 1/4 X 5/8 | X |
| 4 15/16 | 1 1/4 X 5/8 | X |
| 5 | 1 1/4 X 5/8 | X |
| 5 1/8 | 1 1/4 X 5/8 | X |
| 5 3/16 | 1 1/4 X 5/8 | X |
| 5 1/4 | 1 1/4 X 5/8 | X |
| 5 3/8 | 1 1/4 X 5/8 | X |
| 5 7/16 | 1 1/4 X 5/8 | X |
| 5 1/2 | 1 1/4 X 5/8 | X |
| 5 5/8 | 1 1/2 X 3/4 | X |
| 5 3/4 | 1 1/2 X 3/4 | X |
| 5 7/8 | 1 1/2 X 3/4 | X |
| 5 15/16 | 1 1/2 X 3/4 | X |
| 6 | 1 1/2 X 3/4 | X |
| 6 1/8 | 1 1/2 X 3/4 | X |
| 6 3/16 | 1 1/2 X 3/4 | X |
| 6 1/4 | 1 1/2 X 3/4 | X |
| 6 3/8 | 1 1/2 X 3/4 | X |
| 6 7/16 | 1 1/2 X 3/4 | X |
| 6 1/2 | 1 1/2 X 3/4 | X |
| 6 5/8 | 1 3/4 X 3/4 | X |
| 6 3/4 | 1 3/4 X 3/4 | X |
| 6 7/8 | 1 3/4 X 3/4 | X |
| 6 15/16 | 1 3/4 X 3/4 | X |
| 7 | 1 3/4 X 3/4 | X |
| 7 1/8 | 1 3/4 X 3/4 | X |
| 7 3/16 | 1 3/4 X 3/4 | X |
| 7 1/4 | 1 3/4 X 3/4 | X |
| 7 3/8 | 1 3/4 X 3/4 | X |
| 7 7/16 | 1 3/4 X 3/4 | X |

BUSHINGS

TAPER LOCK BUSHINGS

- Torque capacity of up to 126,000 lb-in
- Hub diameter from 2 3/16" to 10 1/2"
- Bushing type of up to 5050
- Bore range from 1/2" - 1/2" kw - 9/16" to 4 7/8" - 4 15/16" - 5"



TAPER LOCK BUSHINGS

TAPER LOCK BUSHINGS

| Bushing | Torque capacity lb-in | Hub diameter ref. (in) | | | | Installation screw | | G | Approx. weight lb |
|---------|--------------------------|------------------------|-------|--------|---------|--------------------|-------------|----|----------------------|
| | | A | B | C | D | Qty | Size | | |
| 1008 | 1200 | 1 3/8 | 7/8 | 2 3/16 | 1 21/64 | 2 | 1/4 x 1/2 | -- | 0.2 |
| 1108 | 1300 | 1 1/2 | 7/8 | 2 5/16 | 1 29/64 | 2 | 1/4 x 1/2 | -- | 0.2 |
| 1210 | 3600 | 1 7/8 | 1 | 3 1/4 | 1 3/4 | 2 | 3/8 x 5/8 | -- | 0.5 |
| 1215 | 3550 | 1 7/8 | 1 1/2 | 2 7/8 | 1 3/4 | 2 | 3/8 x 5/8 | -- | 0.3 |
| 1310 | 3850 | 2 | 1 | 3 3/8 | 1 7/8 | 2 | 3/8 x 5/8 | -- | 0.6 |
| 1610 | 4300 | 2 1/4 | 1 | 3 5/8 | 2 1/8 | 2 | 3/8 x 5/8 | -- | 0.7 |
| 1615 | 4300 | 2 1/4 | 1 1/2 | 3 1/4 | 2 1/8 | 2 | 3/8 x 5/8 | -- | 1.0 |
| 2012 | 7150 | 2 3/4 | 1 1/4 | 4 3/8 | 2 5/8 | 2 | 7/16 x 7/8 | -- | 1.4 |
| 2517 | 11600 | 3 3/8 | 1 3/4 | 4 7/8 | 3 1/4 | 2 | 1/2 x 1 | -- | 3.1 |
| 2525 | 11300 | 3 3/8 | 2 1/2 | 4 1/2 | 3 1/4 | 2 | 1/2 x 1 | -- | 3.5 |
| 3020 | 24000 | 4 1/4 | 2 | 6 1/4 | 4 | 2 | 5/8 x 1 1/4 | -- | 5.0 |
| 3030 | 24000 | 4 1/4 | 3 | 5 3/4 | 4 | 2 | 5/8 x 1 1/4 | -- | 7.4 |
| 3535 | 44800 | 5 | 3 1/2 | 7 | 4 27/32 | 3 | 1/2 x 1 1/2 | 39 | 9.8 |
| 4040 | 77300 | 5 3/4 | 4 | 8 1/2 | 5 35/64 | 3 | 5/8 x 1 3/4 | 40 | 15.4 |
| 4545 | 110000 | 6 3/8 | 4 1/2 | 9 1/2 | 6 1/8 | 3 | 3/4 x 2 | 40 | 21.0 |
| 5050 | 126000 | 7 | 5 | 10 1/2 | 6 23/32 | 3 | 7/8 x 2 1/4 | 37 | 29.0 |

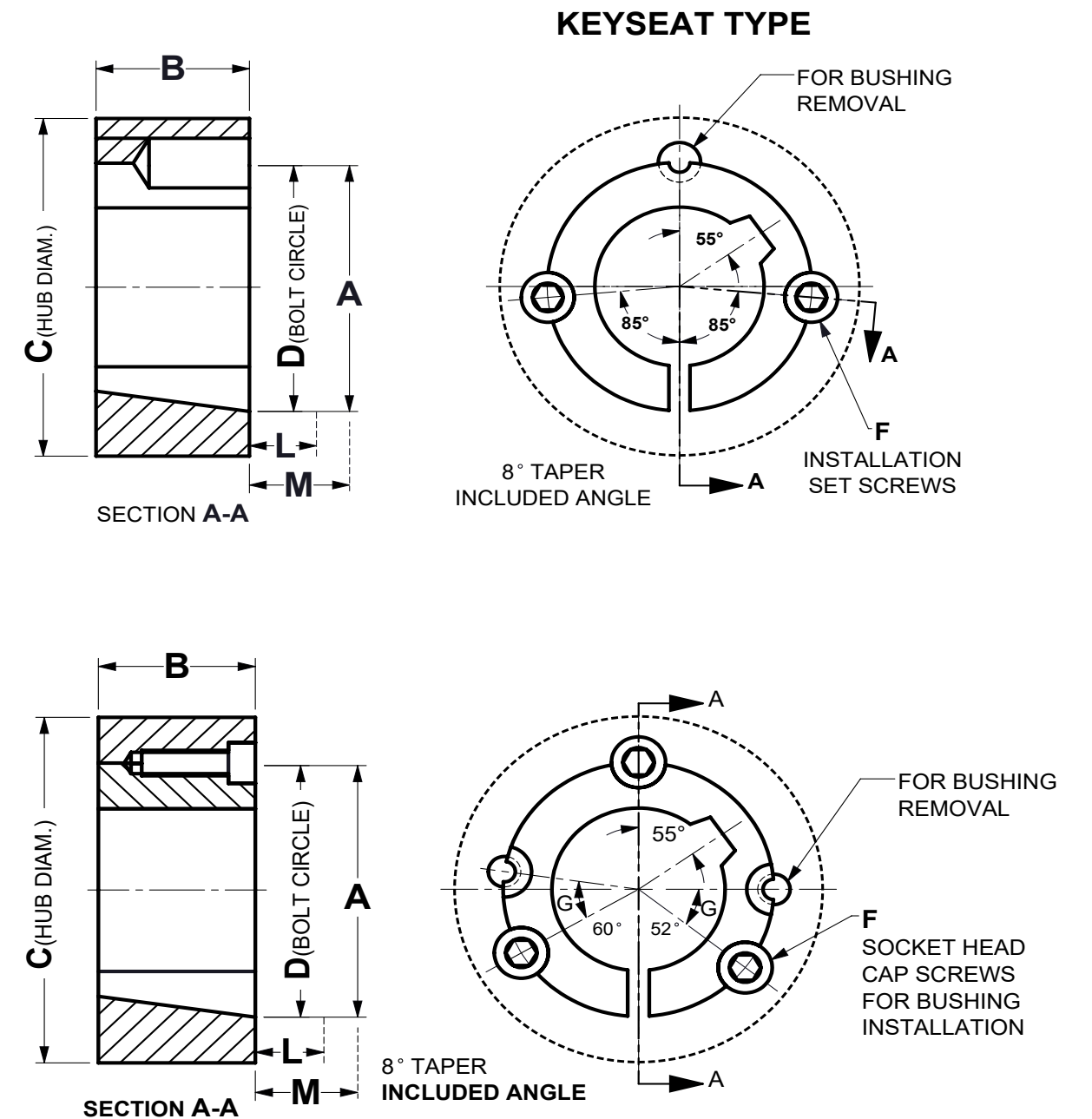
Peak torque loads must not exceed torque capacity rating shown above. Capacity values shown are for light starting and steady running conditions. For more severe duty, divide torque capacity by service factor suggested in table below.



TAPER LOCK BUSHINGS

SERVICE FACTOR

| Service factor | Type of loading |
|----------------|---|
| 1.0 | Light start and steady running |
| 1.5 | Light start and uneven running |
| 2.0 | Fairly heavy start and steady or uneven running |
| 2.5 | Light or heavy start and moderate shock running |
| 3.0 | Light or heavy start and severe shock running, or reversing loads |



BUSHINGS

BUSHINGS

TAPER LOCK BUSHINGS

STANDARD STOCK BORE (INCHES)

| Bushing | Stock bore | Keyseat | Bushing | Stock bore | Keyseat |
|---------|--------------------------|-------------|---------|-----------------------------|-------------|
| | in | in | | in | in |
| 1008 | 1/2 · 1/2KW · 9/16 | 1/8 x 1/16 | 2012 | 1-5/8 · 1 11/16 · 1 3/4 | 3/8 x 3/16 |
| | 5/8 · 11/16 · 3/4 | 3/16 x 3/32 | | 1 13/16 · 1 7/8 | 1/2 x 1/4 |
| | 13/16 · 7/8 | 3/16 x 3/32 | | 1 15/16 · 2 | 1/2 x 3/16 |
| | 15/16 · 1 | 1/4 x 1/16 | | 2 1/8 | 1/2 x 1/8 |
| 1108 | 1/2 · 1/2KW · 9/16 | 1/8 x 1/16 | 2517 | 1/2 · 1/2KW · 9/16 | 1/8 x 1/16 |
| | 5/8 · 11/16 · 3/4 | 3/16 x 3/32 | | 5/8 · 11/16 · 3/4 | 3/16 x 3/32 |
| | 13/16 · 7/8 | 3/16 x 3/32 | | 13/16 · 7/8 | 3/16 x 3/32 |
| | 15/16 · 1 | 1/4 x 1/8 | | 15/16 · 1 · 11/16 | 1/4 x 1/8 |
| 1210 | 1/2 · 1/2KW · 9/16 | 1/8 x 1/16 | 2525 | 1 1/8 · 1 3/16 · 1 1/4 | 1/4 x 1/8 |
| | 5/8 · 11/16 · 3/4 | 3/16 · 3/32 | | 1 5/16 · 1 3/8 | 5/16 x 5/32 |
| | 13/16 · 7/8 | 3/16 · 3/32 | | 1 7/16 · 1 1/2 · 1 9/16 | 3/8 x 3/16 |
| | 15/16 · 1 · 11/16 | 1/4 x 1/8 | | 1 5/8 · 1 11/16 · 1 3/4 | 3/8 x 3/16 |
| 1215 | 1 13/16 · 1 1/4 | 1/4 x 1/8 | 3020 | 1 13/16 x 1 7/8 | 1/2 x 1/4 |
| | 1/2 · 1/2KW · 9/16 | 1/8 x 1/16 | | 1 15/16 · 2 · 2 1/16 | 1/2 x 1/4 |
| | 5/8 · 11/16 · 3/4 | 3/16 x 3/32 | | 2 1/8 · 2 3/16 · 2 1/4 | 1/2 x 1/4 |
| | 13/16 · 7/8 | 3/16 x 3/32 | | 2 5/16 · 2 3/8 · 2 7/16 | 5/8 x 3/16 |
| 1310 | 15/16 · 1 · 11/16 | 1/4 x 1/8 | 3030 | 2 1/2 · 2 5/8 · 2 11/16 | 5/8 x 3/16 |
| | 11/8 · 1 3/16 · 1 1/4 | 1/4 x 1/8 | | 3/4 · 7/8 | 3/16 x 3/32 |
| | 1/2 · 9/16 | 1/8 x 1/16 | | 1 · 1 1/8 · 1 3/16 | 1/4 x 1/8 |
| | 5/8 · 11/16 · 3/4 | 3/16 x 3/32 | | 1 1/4 | 1/4 x 1/8 |
| 1610 | 13/16 · 7/8 | 3/16 x 3/32 | 3050 | 1 3/8 | 5/16 x 5/32 |
| | 15/16 · 1 · 11/16 | 1/4 x 1/8 | | 1 7/16 · 1 1/2 · 1 5/8 | 3/8 x 3/16 |
| | 11/8 · 1 3/16 · 1 1/4 | 1/4 x 1/8 | | 1 11/16 · 1 3/4 | 3/8 x 3/16 |
| | 1 5/16 · 1 3/8 | 5/16 x 5/32 | | 1 7/8 · 1 15/16 · 2 | 1/2 x 1/4 |
| 1615 | 17/16 | 3/8 x 1/8 | 3535 | 2 1/8 · 2 3/16 · 2 1/4 | 1/2 x 1/4 |
| | 1/2 · 1/2KW · 9/16 | 1/8 x 1/16 | | 2 3/8 · 2 7/16 · 2 1/2 | 5/8 x 5/16 |
| | 5/8 · 11/16 · 3/4 | 3/16 x 3/32 | | 2 5/8 · 2 11/16 · 2 3/4 | 5/8 x 5/16 |
| | 13/16 · 7/8 | 3/16 x 3/32 | | 2 7/8 · 2 15/16 · 3 | 3/4 x 3/8 |
| 2012 | 15/16 · 1 · 11/16 | 1/4 x 1/8 | 4040 | 3 1/8 · 3 3/16 · 3 1/4 | 3/4 x 3/8 |
| | 11/8 · 1 3/16 · 1 1/4 | 1/4 x 1/8 | | 3 5/16 · 3 3/8 · 3 7/16 | 7/8 x 1/4 |
| | 1 5/16 · 1 3/8 | 5/16 x 5/32 | | 3 1/2 · 3 5/8 · 3 11/16 | 7/8 x 1/4 |
| | 1 7/16 · 1 1/2 | 3/8 x 3/16 | | 3 3/4 | 7/8 x 1/4 |
| 3030 | 1 3 3/8 · 3 7/16 · 3 1/2 | 7/8 x 7/16 | 4040 | 3 7/8 · 3 15/16 | 1 x 1/4 |
| | 1 5/16 · 1 3/8 | 5/16 x 5/32 | | 1 7/16 · 1 1/2 · 1 5/8 | 3/8 x 3/16 |
| | 1 7/16 · 1 1/2 | 3/8 x 3/16 | | 1 11/16 · 1 3/4 | 3/8 x 3/16 |
| | 1 9/16 · 1 5/8 · 1 11/16 | 3/8 x 1/8 | | 1 7/8 · 1 15/16 · 2 | 1/2 x 1/4 |
| 3050 | 4 1/8 · 4 3/16 · 4 1/4 | 1 x 1/4 | 4455 | 2 1/8 · 2 3/16 · 2 1/4 | 1/2 x 1/4 |
| | 4 3/8 · 4 7/16 | 1 x 1/4 | | 2 3/8 · 2 7/16 · 2 1/2 | 5/8 x 5/16 |
| | 1 15/16 · 2 · 2 3/16 | 1/2 x 1/4 | | 2 5/8 · 2 11/16 · 2 3/4 | 5/8 x 5/16 |
| | 2 3/8 · 2 7/16 · 2 5/8 | 5/8 x 5/16 | | 2 7/8 · 2 15/16 · 3 · 3 1/8 | 3/4 x 3/8 |
| 3535 | 3 3/8 · 3 7/16 · 3 1/2 | 7/8 x 7/16 | 4545 | 3 3/16 · 3 1/4 | 3/4 x 3/8 |
| | 3 5/8 | 7/8 x 7/16 | | 3 3/8 · 3 7/16 · 3 1/2 | 7/8 x 7/16 |
| | 3 11/16 · 3 3/4 | 7/8 x 1/4 | | 2 3/4 | 5/8 x 5/16 |
| | 3 7/8 · 3 15/16 · 4 | 1 x 1/4 | | 2 7/8 · 2 15/16 · 3 | 3/4 x 3/8 |
| 4040 | 4 1/8 · 4 3/16 · 4 1/4 | 1 x 1/4 | 5050 | 3 1/8 · 3 3/16 · 3 1/4 | 3/4 x 3/8 |
| | 4 3/8 · 4 7/16 | 1 x 1/4 | | 3 5/16 · 3 3/8 · 3 7/16 | 7/8 x 1/4 |
| | 1 15/16 · 2 · 2 3/16 | 1/2 x 1/4 | | 3 1/2 · 3 5/8 · 3 11/16 | 7/8 x 1/4 |
| | 2 3/8 · 2 7/16 · 2 5/8 | 5/8 x 5/16 | | 13/16 · 1 1/4 | 1/4 x 1/8 |
| 4455 | 2 7/8 · 2 15/16 · 3 | 3/4 x 3/8 | 5050 | 1 3/8 | 5/16 x 5/32 |
| | 3 1/8 · 3 3/16 · 3 1/4 | 3/4 x 3/8 | | 1 7/16 · 1 1/2 · 1 5/8 | 3/8 x 3/16 |
| | 3 3/8 · 3 7/16 · 3 1/2 | 7/8 x 7/16 | | 1 11/16 · 1 3/4 | 3/8 x 3/16 |
| | 3 5/8 · 3 3/4 | 7/8 x 7/16 | | 1 7/8 · 1 15/16 · 2 | 1/2 x 1/4 |
| 5050 | 3 7/8 · 3 15/16 · 4 | 1 x 1/2 | 5050 | 2 1/8 · 2 3/16 · 2 1/4 | 1/2 x 1/4 |
| | 4 1/8 · 4 3/16 · 4 1/4 | 1 x 1/2 | | 2 3/8 · 2 7/16 · 2 1/2 | 5/8 x 5/16 |
| | 4 3/8 · 4 7/16 · 4 1/2 | 1 x 1/4 | | 2 5/8 · 2 11/16 · 2 3/4 | 5/8 x 5/16 |
| | 4 3/4 · 4 7/8 · 4 15/16 | 1 1/4 x 1/4 | | 2 7/8 · 2 15/16 · 3 | 3/4 x 3/8 |

TAPER LOCK BUSHINGS

STANDARD STOCK BORE (MILLIMETERS)

| Bushing | Stock bore | Keyseat | Bushing | Stock bore | Keyseat |
|---------|---------------------|---------|---------|-------------------|---------|
| | mm | mm | | mm | mm |
| 1008 | 12 · 14 · 15 · 16 | 5 x 5 | 2525 | 45 · 48 · 50 | 14 x 9 |
| | 18 · 19 · 20 · 22 | 6 x 6 | | 55 | 16 x 10 |
| | (24) | 8 x 7 | | 60 | 18 x 11 |
| 1108 | (12) | 4 x 4 | 3020 | 24 · 25 · 28 · 30 | 8 x 7 |
| | 14 · (15) · 16 | 5 x 5 | | 32 · 35 · 38 | 10 x 8 |
| | 18 · 19 · 20 · 22 | 6 x 6 | | 40 · 42 | 12 x 8 |
| | 24 · 25 | 8 x 7 | | 45 · 48 · 50 | 14 x 9 |
| 1210 | 12 · 14 · (15) · 16 | 5 x 5 | 3030 | 55 | 16 x 10 |
| | 18 · 19 · 20 · 22 | 6 x 6 | | 60 · 65 | 18 x 11 |
| | 24 · 25 · 28 · 30 | 8 x 7 | | 70 · 75 | 20 x 12 |
| | (32) | 10 x 8 | | 22 | 6 x 6 |
| 1215 | 16 | 5 x 5 | 3535 | 24 · 25 · 28 · 30 | 8 x 7 |
| | 19 · 20 · 22 | 6 x 6 | | 32 · 35 · 36 · 38 | 10 x 8 |
| | 24 · 25 · 28 · 30 | 8 x 7 | | 39 · 40 · 42 | 12 x 8 |
| | 32 | 10 x 8 | | 45 · 48 · 50 | 14 x 9 |
| 1310 | 14 · 16 | 5 x 5 | 4040* | 55 | 16 x 10 |
| | 18 · 19 · 20 · 22 | 6 x 6 | | 60 · 65 | 18 x 11 |
| | 24 · 25 · 28 · 30 | 8 x 7 | | 70 · 75 | 20 x 12 |
| | 32 · 35 | 10 x 8 | | 35 · 38 | 10 x 8 |
| 1610 | 14 · 16 | 5 x 5 | 4545* | 40 · 42 | 12 x 8 |
| | 18 · 19 · 20 · 22 | 6 x 6 | | 45 · 48 · 50 | 14 x 9 |
| | 24 · 25 · 28 · 30 | 8 x 7 | | 55 | 16 x 10 |
| | 32 · 35 · 38 | 10 x 8 | | 60 · 65 | 18 x 11 |
| | 40 | 12 x 8 | | 70 · 75 | 20 x 12 |
| 1615 | 12 | 4 x 4 | 5050* | 80 · 85 | 22 x 14 |
| | 14 · 15 · 16 | 5 x 5 | | 90 | 25 x 14 |
| | 18 · 19 · 20 · 22 | 6 x 6 | | 48 | 14 x 9 |
| | 24 · 25 · 28 · 30 | 8 x 7 | | 55 | 16 x 10 |
| | 32 · 35 · 36 · 38 | 10 x 8 | | 60 · 65 | 18 x 11 |
| | 39 · 40 | 12 x 8 | | 70 · 75 | 20 x 12 |
| 2012 | 42 | 12 x 7 | 5050* | 80 · 85 | 22 x 14 |
| | 14 · 16 | 5 x 5 | | 90 · 95 | 25 x 14 |
| | 18 · 19 · 20 · 22 | 6 x 6 | | 100 · 110 | 28 x 16 |
| | 24 · 25 · 28 · 30 | 8 x 7 | | 55 | 16 x 10 |
| | 32 · 35 · 38 | 10 x 8 | | 60 · 65 | 18 x 11 |
| | 40 · 42 | 12 x 8 | | 70 · 75 | 20 x 12 |
| 2517 | 45 · 48 | 14 x 9 | 5050* | 80 · 85 | 22 x 14 |
| | 14 · 16 | 5 x 5 | | 90 · 95 | 25 x 14 |
| | 18 · 19 · 20 · 22 | 6 x 6 | | 100 · 105 · 110 | 28 x 16 |
| | 24 · 25 · 28 · 30 | 8 x 7 | | 115 · 120 | 32 x 18 |
| | 32 · 35 · 38 | 10 x 8 | | 55 | 16 x 10 |
| | 40 · 42 | 12 x 8 | | 60 · 65 | 18 x 11 |
| 2525 | 45 · 48 · 50 | 14 x 9 | 5050* | 70 · 75 | 20 x 12 |
| | 55 | 16 x 10 | | 80 · 85 | 22 x 14 |
| | 60 · 65 | 18 x 11 | | 90 · 95 | 25 x 14 |
| | 19 · 20 · 22 | 6 x 6 | | 100 · 110 | 28 x 16 |
| 2525 | 24 · 25 · 28 · 30 | 8 x 7 | 5050* | 115 · 120 · 125 | 32 x 18 |
| | 32 · 35 · 36 · 38 | 10 x 8 | | | |
| | 39 · 40 · 42 | 12 x 8 | | | |

*Contact us for availability

TAPER LOCK BUSHINGS

TECHNICAL INFORMATION

QD bushings – Set screws (tightening torques and axial loads)

| Set screw size | Socket/ allen key size (across flat) | Recommended tightening torque | | Set screw axial load (± 30%) | | | |
|----------------|--------------------------------------|-------------------------------|-----|------------------------------|------|---------------|------|
| | | | | Cup point | | Knurled point | |
| | | in | Nm | lb-in | N | lb | N |
| #10-24 | 3/32 | 3.62 | 32 | 1500 | 340 | 2225 | 500 |
| 1/4-20 | 1/8 | 6.8 | 60 | 2500 | 560 | 3650 | 820 |
| 5/16-18 | 5/32 | 12.4 | 110 | 3500 | 785 | 5110 | 1150 |
| 3/8-16 | 3/16 | 22.6 | 200 | 4500 | 1010 | 6580 | 1480 |
| 1/2-13 | 1/4 | 45.2 | 400 | 9000 | 2025 | 13230 | 2975 |
| 5/8-11 | 5/16 | 97.2 | 860 | 12000 | 2720 | 17800 | 4000 |



TAPER LOCK BUSHINGS

TECHNICAL INFORMATION

Proper wrench torque

| Bushing | Set screws | Wrench torque | |
|---------|------------|---------------|-------|
| | | in | lb-in |
| 1008 | 1/4 | | 55 |
| 1108 | 1/4 | | 55 |
| 1210 | 3/8 | | 175 |
| 1215 | 3/8 | | 175 |
| 1310 | 3/8 | | 175 |
| 1610 | 3/8 | | 175 |
| 1615 | 3/8 | | 175 |
| 2012 | 7/16 | | 280 |
| 2517 | 1/2 | | 430 |
| 2525 | 1/2 | | 430 |
| 3020 | 5/8 | | 800 |
| 3030 | 5/8 | | 800 |
| 3535 | 1/2 | | 1000 |
| 4040 | 5/8 | | 1700 |
| 4545 | 3/4 | | 2450 |
| 5050 | 7/8 | | 3100 |



CONTRIBUTING TO PEOPLE'S QUALITY OF LIFE, EVERY DAY.

