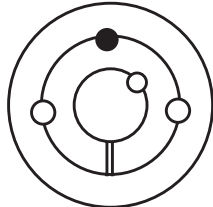
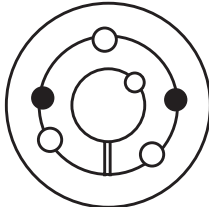


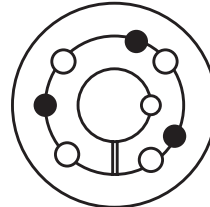
IMPORTANT NOTE: Please follow the instructions on this sheet in order for the Martin bushing to perform satisfactorily.



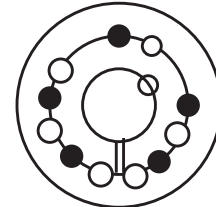
1008 to 3030



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 | | |
|--|----------------------------|---------------------|
| Bushing No. | Set Screw | Wrench Torque in/lb |
| 1008, 1108 1210, 1215, 1310 1610, 1615 | 1/4 – 20 Socket Set Screw | 55 |
| | 5/16 – 18 Socket Set Screw | 165 |
| | 3/8 – 16 Socket Set Screw | 175 |
| | 3/8 – 16 Socket Set Screw | 175 |
| 2012 2317, 2525 3020, 3030 | 7/16 – 14 Socket Set Screw | 280 |
| | 1/2 – 13 Socket Set Screw | 430 |
| | 5/8 – 11 Socket Set Screw | 800 |
| 3535 4040 4545 | 1/2 – 13 Socket Set Screw | 1000 |
| | 5/8 – 11 Socket Set Screw | 1700 |
| | 3/4 – 10 Socket Set Screw | 2450 |
| 5050 6050, 7060, 8065 10085, 120100 | 7/8 – 9 Socket Set Screw | 3100 |
| | 1-1/4 – 7 Socket Set Screw | 7820 |
| | 1-1/2 – 6 Socket Set Screw | 13700 |

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 SURFACE OR ON BOLT THREADS WHEN MOUNTING MAY RESULT IN DAMAGE TO SHEAVE AND SPROCKETS. THIS VOIDS ALL MANUFACTURER'S WARRANTIES

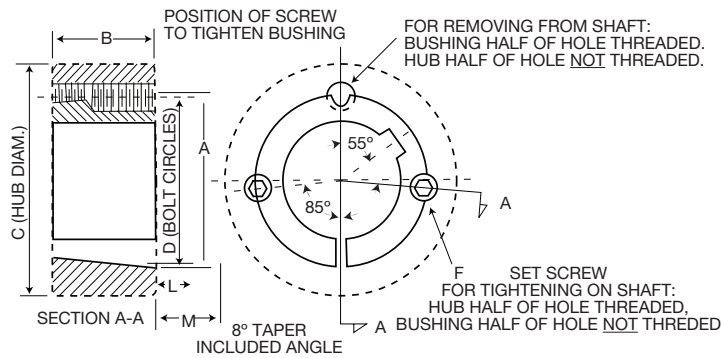
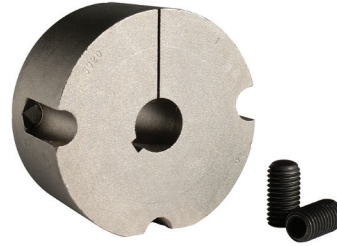
WARNING: Because of the possible danger to person(s) or property from accidents which may result from the improper use of products, it is important that correct procedures be followed: Products must be used in accordance with the engineering information specified in the catalog. Proper installation, 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.)

Taper Bushings Dimensions



No. 1008 to 3030 Taper Bushings

| Bush. No. | Bore | Wt. (lb) | Bushing Keyseat | Shaft Keyseat |
|-----------|---------------|----------|-----------------|---------------|
| 1008 | 0.500 - 0.563 | 0.27 | 1/8 x 1/16 | 1/8 x 1/16 |
| | 0.625 - 0.875 | 0.21 | 3/16 x 3/32 | 3/16 x 3/32 |
| | 0.938 - 1.000 | 0.16 | 1/4 x 1/16 ▼ | 1/4 x 1/8 |
| 1108 | 0.500 - 0.563 | 0.33 | 1/8 x 1/16 | 1/8 x 1/16 |
| | 0.625 - 0.875 | 0.27 | 3/16 x 3/32 | 3/16 x 3/32 |
| | 0.938 - 1.000 | 0.22 | 1/4 x 1/8 | 1/4 x 1/8 |
| | 1.063 - 1.125 | 0.17 | 1/4 x 1/16 ▼ | 1/4 x 1/8 |
| 1210 | 0.500 - 0.563 | 0.61 | 1/8 x 1/16 | 1/8 x 1/16 |
| | 0.625 - 0.875 | 0.55 | 3/16 x 3/32 | 3/16 x 3/32 |
| | 0.938 - 1.250 | 0.49 | 1/4 x 1/8 | 1/4 x 1/8 |
| 1215 | 0.500 - 0.563 | 0.8 | 1/8 x 1/16 | 1/8 x 1/16 |
| | 0.625 - 0.875 | 0.7 | 3/16 x 3/32 | 3/16 x 3/32 |
| | 0.938 - 1.250 | 0.6 | 1/4 x 1/8 | 1/4 x 1/8 |
| 1310 | 0.500 - 0.563 | 0.7 | 1/8 x 1/16 | 1/8 x 1/16 |
| | 0.625 - 0.875 | 0.7 | 3/16 x 3/32 | 3/16 x 3/32 |
| | 0.938 - 1.250 | 0.6 | 1/4 x 1/8 | 1/4 x 1/8 |
| | 1.313 - 1.375 | 0.6 | 5/16 x 5/32 | 5/16 x 5/32 |
| 1610 | 0.500 - 0.563 | 0.9 | 1/8 x 1/16 | 1/8 x 1/16 |
| | 0.625 - 0.875 | 0.8 | 3/16 x 3/32 | 3/16 x 3/32 |
| | 0.938 - 1.250 | 0.7 | 1/4 x 1/8 | 1/4 x 1/8 |
| | 1.313 - 1.375 | 0.7 | 5/16 x 5/32 | 5/16 x 5/32 |
| | 1.438 - 1.500 | 0.6 | 3/8 x 3/16 | 3/8 x 3/16 |
| 1615 | 0.500 - 0.563 | 1.2 | 1/8 x 1/16 | 1/8 x 1/16 |
| | 0.625 - 0.875 | 1.1 | 3/16 x 3/32 | 3/16 x 3/32 |
| | 0.938 - 1.250 | 1.0 | 1/4 x 1/8 | 1/4 x 1/8 |
| | 1.313 - 1.375 | 0.8 | 5/16 x 5/32 | 5/16 x 5/32 |
| | 1.438 - 1.500 | 0.7 | 3/8 x 3/16 | 3/8 x 3/16 |
| 2012 | 1.563 - 1.625 | 0.6 | 3/8 x 1/8 ▼ | 3/8 x 3/16 |
| | 0.500 - 0.563 | 1.7 | 1/8 x 1/16 | 1/8 x 1/16 |
| | 0.625 - 0.875 | 1.6 | 3/16 x 3/32 | 3/16 x 3/32 |
| | 0.938 - 1.250 | 1.5 | 1/4 x 1/8 | 1/4 x 1/8 |
| | 1.313 - 1.375 | 1.4 | 5/16 x 5/32 | 5/16 x 5/32 |
| | 1.438 - 1.750 | 1.2 | 3/8 x 3/16 | 3/8 x 3/16 |
| 2517 | 1.813 - 1.875 | 1.0 | 1/2 x 1/4 | 1/2 x 1/4 |
| | 1.938 - 2.000 | 1.0 | 1/2 x 3/16 ▼ | 1/2 x 1/4 |
| | 0.500 - 0.563 | 3.5 | 1/8 x 1/16 | 1/8 x 1/16 |
| | 0.625 - 0.875 | 3.4 | 3/16 x 3/32 | 3/16 x 3/32 |
| | 0.938 - 1.250 | 3.3 | 1/4 x 1/8 | 1/4 x 1/8 |
| | 1.313 - 1.375 | 3.2 | 5/16 x 5/32 | 5/16 x 5/32 |
| | 1.438 - 1.750 | 3.0 | 3/8 x 3/16 | 3/8 x 3/16 |
| 2525 | 1.813 - 2.250 | 2.4 | 1/2 x 1/4 | 1/2 x 1/4 |
| | 2.313 - 2.500 | 1.9 | 5/8 x 3/16 ▼ | 5/8 x 5/16 |
| | 0.750 - 0.875 | 4.9 | 3/16 x 3/32 | 3/16 x 3/32 |
| | 0.938 - 1.250 | 4.7 | 1/4 x 1/8 | 1/4 x 1/8 |
| | 0.938 - 1.375 | 4.5 | 5/16 x 5/32 | 5/16 x 5/32 |
| | 1.438 - 1.750 | 4.2 | 3/8 x 3/16 | 3/8 x 3/16 |
| 3020 | 1.813 - 2.250 | 3.3 | 1/2 x 1/4 | 1/2 x 1/4 |
| | 2.313 - 2.750 | 4.5 | 5/8 x 5/16 | 5/8 x 5/16 |
| | 2.813 - 3.000 | 3.9 | 3/4 x 1/4 ▼ | 3/4 x 3/8 |
| | 0.938 - 1.250 | 9.2 | 1/4 x 1/8 | 1/4 x 1/8 |
| | 1.313 - 1.375 | 8.9 | 5/16 x 5/32 | 5/16 x 5/32 |
| | 1.438 - 1.750 | 8.6 | 3/8 x 3/16 | 3/8 x 3/16 |
| 3030 | 1.813 - 2.250 | 7.6 | 1/2 x 1/4 | 1/2 x 1/4 |
| | 2.313 - 2.750 | 6.2 | 5/8 x 5/16 | 5/8 x 5/16 |
| | 2.813 - 3.000 | 5.0 | 3/4 x 1/4 ▼ | 3/4 x 3/8 |



Dimensions

| Bush. No. | Bush. Torque Capacity (in-lb) | A | B | C Ø | | | D | F † | L ★ | | M ★★ | |
|-----------|-------------------------------|-------|-------|--------------------|--------------------|-------|-------|-------------|---------------|-------------|---------------|-------------|
| | | | | Class 20 Gray Iron | Class 30 Gray Iron | Steel | | | Std. Hex. Key | Short Key ‡ | Std. Hex. Key | Short Key ‡ |
| 1008 | 1,200 | 1.386 | 0.875 | 2.375 | 2.188 | 1.938 | 1.328 | 1/4 x 1/2 | 1 1/8 | 5/8 | 1 1/4 | 3/4 |
| 1108 | 1,300 | 1.511 | 0.875 | 2.500 | 2.313 | 2.063 | 1.453 | 1/4 x 1/2 | 1 1/8 | 5/8 | 1 1/4 | 3/4 |
| 1210 | 3,600 | 1.875 | 1.000 | 3.625 | 3.250 | 2.875 | 1.750 | 3/8 x 5/8 | 1 3/8 | 13/16 | 1 5/8 | 1 1/16 |
| 1215 | 3,550 | 1.875 | 1.500 | 3.125 | 2.875 | 2.625 | 1.750 | 3/8 x 5/8 | 1 3/8 | 13/16 | 1 5/8 | 1 1/16 |
| 1310 | 3,850 | 2.000 | 1.000 | 3.750 | 3.375 | 3.000 | 1.875 | 3/8 x 5/8 | 1 3/8 | 13/16 | 1 5/8 | 1 1/16 |
| 1610 | 4,300 | 2.250 | 1.000 | 4.000 | 3.625 | 3.250 | 2.125 | 3/8 x 5/8 | 1 3/8 | 13/16 | 1 5/8 | 1 1/16 |
| 1615 | 4,300 | 2.250 | 1.500 | 3.500 | 3.250 | 3.000 | 2.125 | 3/8 x 5/8 | 1 3/8 | 13/16 | 1 5/8 | 1 1/16 |
| 2012 | 7,150 | 2.750 | 1.250 | 4.750 | 4.375 | 3.875 | 2.625 | 7/16 x 7/8 | 1 9/16 | 15/16 | 2 | 1 3/8 |
| 2517 | 11,600 | 3.375 | 1.750 | 5.500 | 4.875 | 4.375 | 3.250 | 1/2 x 1 | 1 5/8 | 1 | 2 1/4 | 1 5/8 |
| 2525 | 11,300 | 3.375 | 2.500 | 4.750 | 4.500 | 4.250 | 3.250 | 1/2 x 1 | 1 5/8 | 1 | 2 1/4 | 1 5/8 |
| 3020 | 24,000 | 4.250 | 2.000 | 7.000 | 6.250 | 5.625 | 4.000 | 5/8 x 1 1/4 | 1 13/16 | 1 3/16 | 2 11/16 | 2 1/16 |
| 3030 | 24,000 | 4.250 | 3.000 | 6.250 | 5.750 | 5.375 | 4.000 | 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.



Taper Bushings Dimensions

No. 3535 to 5050 Bushings

| Bushing Number | Bush. Torque Capacity (in-lb) | Bore | Wt. | Bushing Keyseat | Shaft Keyseat | A | B | C Ø | | | D | F † | G | R |
|----------------|-------------------------------|---------------|------------|-----------------|---------------|------|------|--------------------|--------------------|-------|------|-----------------|-----|---|
| | | | | | | | | Class 20 Gray Iron | Class 30 Gray Iron | Steel | | | | |
| 3535 | 44,800 | 1.188 - 1.250 | 14 | 1/4 x 1/8 | 1/4 x 1/8 | 5.00 | 3.50 | 7.75 | 7.00 | 6.50 | 4.83 | 3 - 1/2 x 1 1/2 | 39° | ▲ |
| | | 1.313 - 1.375 | 14 | 5/16 x 5/32 | 5/16 x 5/32 | | | | | | | | | |
| | | 1.438 - 1.750 | 13 | 3/8 x 3/16 | 3/8 x 3/16 | | | | | | | | | |
| | | 1.813 - 2.250 | 12 | 1/2 x 1/4 | 1/2 x 1/4 | | | | | | | | | |
| | | 2.313 - 2.750 | 11 | 5/8 x 5/16 | 5/8 x 5/16 | | | | | | | | | |
| | | 2.813 - 3.250 | 9 | 3/4 x 3/8 | 3/4 x 3/8 | | | | | | | | | |
| 3.313 - 3.500 | 8 | 7/8 x 1/4 ▼ | 7/8 x 7/16 | | | | | | | | | | | |
| 4040 | 77,300 | 1.438 - 1.750 | 22 | 3/8 x 3/16 | 3/8 x 3/16 | 5.75 | 4.00 | 9.50 | 8.50 | 7.75 | 5.54 | 3 - 5/8 x 1 3/4 | 40° | ▲ |
| | | 1.813 - 2.250 | 21 | 1/2 x 1/4 | 1/2 x 1/4 | | | | | | | | | |
| | | 2.313 - 2.750 | 19 | 5/8 x 5/16 | 5/8 x 5/16 | | | | | | | | | |
| | | 2.813 - 3.250 | 17 | 3/4 x 3/8 | 3/4 x 3/8 | | | | | | | | | |
| | | 3.313 - 3.625 | 15 | 7/8 x 7/16 | 7/8 x 7/16 | | | | | | | | | |
| | | 3.688 - 3.750 | 14 | 7/8 x 1/4 ▼ | 7/8 x 7/16 | | | | | | | | | |
| 3.813 - 4.000 | 13 | 1 x 1/4 ▼ | 1 x 1/2 | | | | | | | | | | | |
| 4545 | 110,000 | 1.938 - 2.250 | 30 | 1/2 x 1/4 | 1/2 x 1/4 | 6.38 | 4.50 | 10.50 | 9.50 | 8.75 | 6.13 | 3 - 3/4 x 2 | 40° | ▲ |
| | | 2.313 - 2.750 | 28 | 5/8 x 5/16 | 5/8 x 5/16 | | | | | | | | | |
| | | 2.813 - 3.250 | 26 | 3/4 x 3/8 | 3/4 x 3/8 | | | | | | | | | |
| | | 3.313 - 3.750 | 23 | 7/8 x 7/16 | 7/8 x 7/16 | | | | | | | | | |
| | | 3.813 - 4.250 | 20 | 1 x 1/2 | 1 x 1/2 | | | | | | | | | |
| | | 4.313 - 4.500 | 18 | 1 x 1/4 ▼ | 1 x 1/2 | | | | | | | | | |
| 5050 | 126,000 | 2.313 - 2.750 | 38 | 5/8 x 5/16 | 5/8 x 5/16 | 7.00 | 5.00 | 11.50 | 10.50 | 9.50 | 6.72 | 3 - 7/8 x 2 1/4 | 37° | ▲ |
| | | 2.813 - 3.250 | 35 | 3/4 x 3/8 | 3/4 x 3/8 | | | | | | | | | |
| | | 3.313 - 3.750 | 32 | 7/8 x 7/16 | 7/8 x 7/16 | | | | | | | | | |
| | | 3.813 - 4.500 | 27 | 1 x 1/2 | 1 x 1/2 | | | | | | | | | |
| | | 4.563 - 5.000 | 24 | 1 1/4 x 7/16 ▼ | 1 1/4 x 5/8 | | | | | | | | | |

No. 4030 to 5040 Short Taper Bushings

| Bushing Number | Bush. Torque Capacity (in-lb) | Bore | Wt. | Bushing Keyseat | Shaft Keyseat | A | B | C Ø | | | D | F † | G | R |
|----------------|-------------------------------|---------------|-------------|-----------------|---------------|------|------|--------------------|--------------------|-------|------|-----------------|-----|---|
| | | | | | | | | Class 20 Gray Iron | Class 30 Gray Iron | Steel | | | | |
| 3525 | 44,800 | 1.188 - 1.250 | 14 | 1/4 x 1/8 | 1/4 x 1/8 | 5.00 | 3.50 | 7.75 | 7.00 | 6.50 | 4.83 | 3 - 1/2 x 1 1/2 | 39° | ▲ |
| | | 1.313 - 1.375 | 14 | 5/16 x 5/32 | 5/16 x 5/32 | | | | | | | | | |
| | | 1.438 - 1.750 | 13 | 3/8 x 3/16 | 3/8 x 3/16 | | | | | | | | | |
| | | 1.813 - 2.250 | 13 | 1/2 x 1/4 | 1/2 x 1/4 | | | | | | | | | |
| | | 2.313 - 2.750 | 12 | 5/8 x 5/16 | 5/8 x 5/16 | | | | | | | | | |
| | | 2.813 - 3.250 | 10 | 3/4 x 3/8 | 3/4 x 3/8 | | | | | | | | | |
| | | 3.313 | 9 | 7/8 x 1/8 ▼ | 7/8 x 7/16 | | | | | | | | | |
| | | 3.375 - 3.750 | 8 | 7/8 x 3/16 ▼ | 7/8 x 7/16 | | | | | | | | | |
| 3.813 - 3.938 | 8 | 1 x 1/4 ▼ | 1 x 1/2 | | | | | | | | | | | |
| 4030 | 77,300 | 1.438 - 1.750 | 24 | 3/8 x 3/16 | 3/8 x 3/16 | 5.75 | 3.00 | 9.50 | 8.50 | 7.75 | 5.54 | 3 - 5/8 x 1 3/4 | 39° | ▲ |
| | | 1.813 - 2.250 | 21 | 1/2 x 1/4 | 1/2 x 1/4 | | | | | | | | | |
| | | 2.313 - 2.750 | 20 | 5/8 x 5/16 | 5/8 x 5/16 | | | | | | | | | |
| | | 2.813 - 3.250 | 18 | 3/4 x 3/8 | 3/4 x 3/8 | | | | | | | | | |
| | | 3.313 - 3.688 | 15 | 7/8 x 7/16 | 7/8 x 1/4 | | | | | | | | | |
| | | 3.750 | 13 | 7/8 x 1/4 ▼ | 7/8 x 7/16 | | | | | | | | | |
| | | 3.813 | 13 | 1 x 1/2 | 1 x 1/2 | | | | | | | | | |
| 3.875 - 4.438 | 13 | 1 x 1/4 ▼ | 1 x 1/2 | | | | | | | | | | | |
| 4535 | 110,000 | 1.938 - 2.250 | 31 | 1/2 x 1/4 | 1/2 x 1/4 | 6.38 | 3.50 | 10.50 | 9.50 | 8.75 | 6.13 | 3 - 5/8 x 1 3/4 | 40° | ▲ |
| | | 2.313 - 2.750 | 29 | 5/8 x 5/16 | 5/8 x 5/16 | | | | | | | | | |
| | | 2.813 - 3.250 | 25 | 3/4 x 3/8 | 3/4 x 3/8 | | | | | | | | | |
| | | 3.313 - 3.688 | 23 | 7/8 x 7/16 | 7/8 x 7/16 | | | | | | | | | |
| | | 3.813 - 4.250 | 20 | 1 x 1/2 | 1 x 1/2 | | | | | | | | | |
| | | 4.375 - 4.500 | 17 | 1 x 1/4 ▼ | 1 x 1/2 | | | | | | | | | |
| 4.750 - 4.938 | 15 | 1 1/4 x 1/4 ▼ | 1 1/4 x 5/8 | | | | | | | | | | | |
| 5040 | 126,000 | 2.438 - 2.750 | 40 | 5/8 x 5/16 | 5/8 x 5/16 | 7.00 | 4.00 | 11.50 | 10.50 | 9.50 | 6.72 | 3 - 7/8 x 2 1/4 | 37° | ▲ |
| | | 2.813 - 3.250 | 37 | 3/4 x 3/8 | 3/4 x 3/8 | | | | | | | | | |
| | | 3.313 - 3.750 | 33 | 7/8 x 7/16 | 7/8 x 7/16 | | | | | | | | | |
| | | 3.813 - 4.500 | 29 | 1 x 1/2 | 1 x 1/2 | | | | | | | | | |
| | | 4.750 - 5.000 | 23 | 1 1/4 x 1/4 ▼ | 1 1/4 x 5/8 | | | | | | | | | |

Bushings cannot be bored larger than largest bore listed.

For detail dimensions required for machining hubs, consult factory.

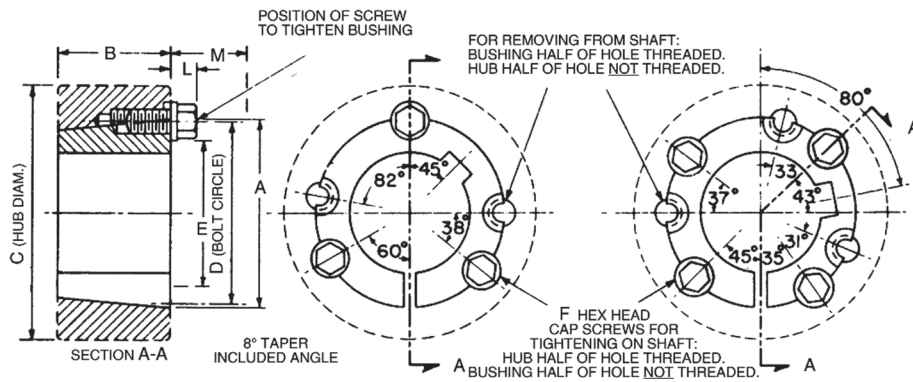
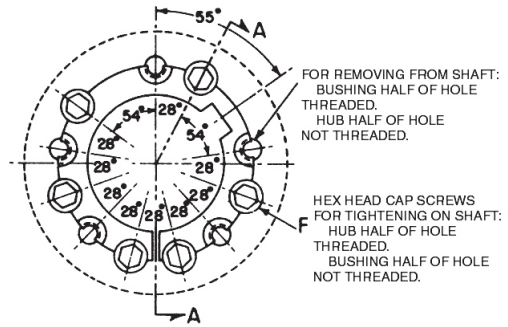
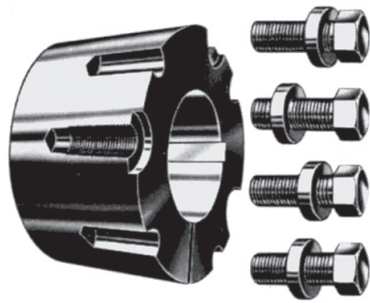
Ø For general reference. Severe conditions may require larger hub. Heavy well located web may permit smaller hub. Hub diameter required depends on the particular application. Consult factory giving full information on the proposed design. Hub diameters shown are based on 20,000, 30,000, and 50,000 P.S.I.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

▼ Key furnished for these sizes only.

† 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.

Taper Bushings Dimensions



No 6050 to 120100 Taper Bushings

| Bushing Number | Bushing Torque Capacity (in-lb) | 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 | 282,000 | 3.813 - 4.500 | 60 | 1 x 1/2 | 1 x 1/2 | 9.25 | 5.00 | 17.00 | 15.50 | 13.50 | 9.00 | 6.75 | 3 - 1 1/4 x 3 1/2 | 1.625 | 4.375 |
| | | 4.563 - 5.500 | 55 | 1 1/4 x 5/8 | 1 1/4 x 5/8 | | | | | | | | | | |
| | | 5.563 - 6.000 | 50 | 1 1/2 x 3/4 | 1 1/2 x 3/4 | | | | | | | | | | |
| 7060 | 416,000 | 4.563 - 5.500 | 85 | 1 1/4 x 5/8 | 1 1/4 x 5/8 | 10.25 | 6.00 | 18.50 | 17.00 | 14.75 | 10.00 | 7.75 | 4 - 1 1/4 x 3 1/2 | 1.625 | 4.375 |
| | | 5.563 - 6.500 | 75 | 1 1/2 x 3/4 | 1 1/2 x 3/4 | | | | | | | | | | |
| | | 6.563 - 7.000 | 65 | 1 3/4 x 3/4 | 1 3/4 x 3/4 | | | | | | | | | | |
| ◊ 8065 | 456,000 | 5.063 - 5.500 | 120 | 1 1/4 x 5/8 | 1 1/4 x 5/8 | 11.25 | 6.50 | 19.00 | 17.50 | 15.50 | 11.00 | 8.75 | 4 - 1 1/4 x 3 1/2 | 1.625 | 4.375 |
| | | 5.563 - 6.500 | 105 | 1 1/2 x 3/4 | 1 1/2 x 3/4 | | | | | | | | | | |
| | | 6.563 - 7.500 | 90 | 1 3/4 x 3/4 | 1 3/4 x 3/4 | | | | | | | | | | |
| | | 7.563 - 8.000 | 75 | 2 x 3/4 | 2 x 3/4 | | | | | | | | | | |
| ◊ 10085 | 869,000 | 6.563 - 7.500 | 260 | 1 3/4 x 3/4 | 1 3/4 x 3/4 | 14.75 | 8.50 | 23.50 | 22.00 | 19.50 | 14.50 | 11.75 | 4 - 1 1/2 x 4 1/4 | 2 | 5.375 |
| | | 7.563 - 9.000 | 230 | 2 x 3/4 | 2 x 3/4 | | | | | | | | | | |
| | | 9.063 - 10.000 | 190 | 2 1/2 x 7/8 | 2 1/2 x 7/8 | | | | | | | | | | |
| ◊ 120100 | 1,520,000 | 7.563 - 9.000 | 410 | 2 x 3/4 | 2 x 3/4 | 17.25 | 10.00 | 28.00 | 26.00 | 23.00 | 17.00 | 14.25 | 6 - 1 1/2 x 4 1/4 | 2 | 5.375 |
| | | 9.063 - 11.000 | 360 | 2 1/2 x 7/8 | 2 1/2 x 7/8 | | | | | | | | | | |
| | | 11.063 - 12.000 | 290 | 3 x 1 | 3 x 1 | | | | | | | | | | |

Bushings cannot be bored larger than largest bore listed.

For detail dimensions required for machining hubs, consult Martin.

◊ 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.

◊ Not currently stocked — Available on order.

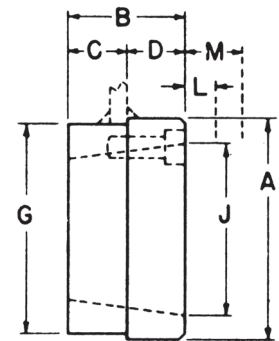
Type S

Martin taper bushed type S weld-on hubs are suitable for use in many applications such as for welding to plate steel sprockets. The outside diameters of these hubs have been reduced to a minimum. This is permissible because of the reinforcing strength of the items to which they are to be welded. Cases where the attached item is of small dimensions should be referred to Martin.

Type S weld-on hubs are made of steel, drilled, tapped, and taper bored for tapered bushings. Their small size and the convenience and advantages of taper bushed construction make them of great value on many devices for use on shafts.



| Bushing Number | For Use with Bushing Number | Max. Bore of Bushing | Weight | A | B \diamond | C $\star\star$ | D ∇ | G | J |
|----------------|-----------------------------|----------------------|--------|-------|--------------|----------------|------------|-------------------|-------|
| S16-4 | 1610 | 1.625 | .9 | 3.000 | 1.000 | 0.275 | 0.725 | 2.875 † | 2.250 |
| S16-6 | 1610 | 1.625 | .9 | 3.000 | 1.000 | 0.450 | 0.550 | 2.875 † | 2.250 |
| S20-6 | 2012 | 2.000 | 1.8 | 3.563 | 1.250 | 0.450 | 0.800 | 3.438 † | 2.750 |
| S20-8 | 2012 | 2.000 | 1.4 | 3.563 | 1.250 | 0.570 | 0.680 | 3.438 † | 2.750 |
| S25-6 | 2517 | 2.500 | 2.6 | 4.250 | 1.750 | 0.450 | 1.300 | 4.125 † | 3.375 |
| S25-8 | 2517 | 2.500 | 2.6 | 4.250 | 1.750 | 0.565 | 1.185 | 4.125 † | 3.375 |
| S25-10 | 2517 | 2.500 | 2.5 | 4.250 | 1.750 | 0.685 | 1.065 | 4.125 † | 3.375 |
| S25-16 | 2517 | 2.500 | 2.4 | 4.250 | 1.750 | 1.090 | 0.660 | 4.125 † | 3.375 |
| S30-10 | 3020 | 3.000 | 4.3 | 5.250 | 2.000 | 0.675 | 1.325 | 5.125 † | 4.250 |
| S30-16 | 3020 | 3.000 | 4.2 | 5.250 | 2.000 | 1.090 | 0.910 | 5.125 † | 4.250 |
| S35 | 3535 | 3.500 | 12.8 | 6.625 | 3.500 | 1.160 | 2.340 | 6.375 \emptyset | 5.000 |

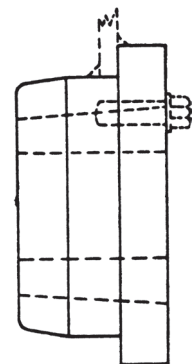


See dimension tables on preceding page for bushing data and wrench space required.

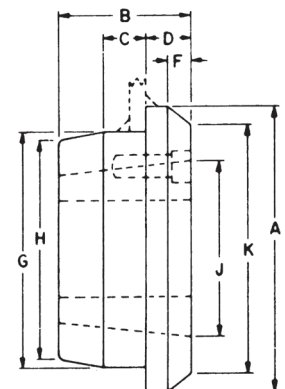
- † + .000 - .002
- \diamond + .005 - .010
- \emptyset + .001 - .003
- ∇ + .000 - .005
- $\star\star$ + .010 - .010

Type WA

Type WA weld-on hubs are made of steel, drilled, tapped, and taper bored to receive tapered bushings. They are very useful for welding into fan rotors, pulleys, plate sprockets, impellers, agitators, and many other devices which must be firmly fastened to the shaft.



| Bushing Number | For Use with Bushing Number | Max. Bore of Bushing | Weight | A | B | C | D | F | G | H | J | K |
|----------------|-----------------------------|----------------------|--------|--------|-------|-------|-------|-------|-----------------|--------|--------|-------|
| WA12 | 1215 | 1.250 | 1 | 2.875 | 1.500 | 0.375 | 0.625 | 0.375 | 2.500 † | 2.375 | 1.875 | 2.625 |
| WA16 | 1615 | 1.625 | 2 | 3.250 | 1.500 | 0.375 | 0.625 | 0.375 | 2.875 † | 2.750 | 2.25 | 3.000 |
| WA25 | 2517 | 2.500 | 4 | 4.875 | 1.750 | 0.500 | 0.750 | 0.375 | 4.375 † | 4.250 | 3.375 | 4.625 |
| WA30 | 3030 | 3.000 | 9 | 5.500 | 3.000 | 0.750 | 0.750 | 0.250 | 5.125 † | 4.813 | 4.125 | 5.000 |
| WA35 | 3535 | 3.500 | 15 | 6.750 | 3.500 | 1.250 | 1.000 | 0.375 | 6.250 † | 5.938 | 5.000 | 6.000 |
| WA40 | 4040 | 4.000 | 29 | 7.750 | 4.000 | 1.500 | 1.000 | 0.375 | 7.250 † | 6.875 | 5.750 | 7.000 |
| WA45 | 4545 | 4.500 | 42 | 8.750 | 4.500 | 1.750 | 1.000 | 0.375 | 8.000 † | 7.625 | 6.375 | 8.000 |
| WA50 | 5050 | 5.000 | 57 | 9.500 | 5.000 | 1.750 | 1.000 | 0.375 | 8.750 \bullet | 8.375 | 7.000 | 8.750 |
| WA60 | 6050 | 6.000 | 115 | 13.250 | 5.000 | 1.750 | 1.250 | — | 12.250 \star | 11.875 | 9.250 | — |
| WA70 | 7060 | 7.000 | 155 | 14.500 | 6.000 | 2.250 | 1.250 | — | 13.500 \star | 13.250 | 10.250 | — |
| WA80 | 8065 | 8.000 | 180 | 15.250 | 6.500 | 2.250 | 1.250 | — | 14.250 \star | 14.000 | 11.250 | — |
| WA100 | 10085 | 10.000 | 340 | 19.750 | 8.500 | 3.500 | 1.500 | — | 18.750 \star | 18.250 | 14.750 | — |



See dimension tables on preceding page for bushing data and wrench space required.

- † + .000 - .002
- \bullet + .000 - .003
- \star + .000 - .004

Taper Bushings Metric and Reborable



Stock Taper Bushings With Metric Bores and Keyways

| ★ Metric Bores | ★ Metric Keyway | Taper Bushing Number | | | |
|------------------|-----------------|----------------------|------|------|------|
| | | | | | |
| 14, 16 | 5 × 2.3 | 1008 | 1108 | 1210 | |
| | | 1215 | 1610 | 1615 | |
| 18, 19 20, 22 | 6 × 2.8 | 1008 | 1108 | 1210 | 1215 |
| | | 1610 | 1615 | 2012 | 2517 |
| 24 | 8 × 3.3 | 1108 | 1210 | 1215 | |
| | | 1610 | 1615 | 2012 | 2517 |
| 25 | 8 × 3.3 | 1210 | 1215 | 1610 | |
| | | 1615 | 2012 | 2517 | |
| 28, 30 | 8 × 3.3 | 1210 | 1215 | 1610 | |
| | | 1615 | 2012 | 2517 | 3020 |
| 32 | 10 × 3.3 | 1610 | 1615 | | |
| | | 2012 | 2517 | 3020 | |
| 35 | 10 × 3.3 | 1610 | 1615 | | |
| | | 2012 | 2517 | 3020 | |
| 38 | 10 × 3.3 | 1610 | 1615 | | |
| | | 2012 | 2517 | 3020 | |
| 40, 42 | 12 × 3.3 | 2012 | | | |
| | | 2517 | 3020 | | |
| 45, 48 | 14 × 3.8 | 2012 | | | |
| | | 2517 | 3020 | | |
| 50 | 14 × 3.8 | 2517 | 3020 | | |
| | | 16 × 4.3 | 2517 | 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 | .563 | | | 1008 | .5 | 1008 | .5 |
| 1108 | .5 | | | 1108 | .5 | 1108 | |
| 1210 | .563 | | | 1210 | .5 | 1210 | .5 |
| 1215 | .5 | | | 1215 | .5 | 1215 | |
| 1310 | .5 | | | 1310 | | 1310 | |
| 1610 | .5 1.313 | | | 1610 | .5 | 1610 | .5 |
| 1615 | .5 1.313 | | | 1615 | .5 | 1615 | |
| 2012 | .5 | | | 2012 | .5 | 2012 | .5 |
| 2517 | .5 1.563 | | | 2517 | .5 | 2517 | .5 |
| | | 2525 | 2.125 | 2525 | | 2525 | |
| 3020 | .938 1.688 | 3020 | .938 1.438 2.938 | 3020 | .938 | 3020 | .938 |
| | | 3030 | .938 2.438 2.938 | 3030 | | 3030 | |
| | | 3535 | 1.188 2.438 2.938 | 3535 | | 3535 | |
| | | 4040 | 1.438 3.438 3.938 | 4040 | | 4040 | |
| | | 4545 | 3.938 4.438 | 4545 | | 4545 | |
| | | 5050 | 2.438 3.938 | | | | |
| | | 6050 | 3.438 5.438 | | | | |
| | | 7060 | 3.938 | | | | |
| | | 8065 | 4.438 | | | | |
| | | 10085 | 7 | | | | |
| | | H120100 | 8 | | | | |

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