

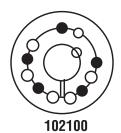
Taper Bushing Installation

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









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 O 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
	1/4 – 20 Socket Set Screw	55
1008, 1108	5/16 – 18 Socket Set Screw	165
1210, 1215, 1310 1610, 1615	3/8 - 16 Socket Set Screw	175
	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 Set Screw	1000
4040	5/8 - 11 Socket Set Screw	1700
4545	3/4 - 10 Socket Set Screw	2450
5050	7/8 – 9 Socket Set Screw	3100
6050, 7060, 8065	1-1/4 – 7 Socket Set Screw	7820
10085, 120100	1-1/2 – 6 Socket Set Screw	13700

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

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

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.)

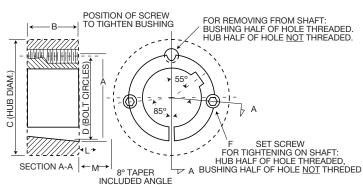
Taper Bushings Dimensions



No. 1008 to 3030 Taper Bushings

			C Tapor I	
Bush. No.	Bore	Wt. (lb)	Bushing Keyseat	Shaft Keyseat
	0.500 - 0.563	0.27	1/8 × 1/16	1/8 × 1/16
1008	0.625 - 0.875	0.21	3/16 × 3/32	3/16 × 3/32
	0.938 - 1.000	0.16	1/4 × 1/16 ▼	1/4 × 1/8
	0.500 - 0.563	0.33	1/8 × 1/16	1/8 × 1/16
1100	0.625 - 0.875	0.27	3/16 × 3/32	3/16 × 3/32
1108	0.938 - 1.000	0.22	1/4 × 1/8	1/4 × 1/8
	1.063 - 1.125	0.17	1/4 × 1/16 ▼	1/4 × 1/8
	0.500 - 0.563	0.61	1/8 × 1/16	1/8 × 1/16
1210	0.625 - 0.875	0.55	3/16 × 3/32	3/16 × 3/32
1210	0.938 - 1.250	0.49	1/4 × 1/8	1/4 × 1/8
	0.500 - 0.563	0.8	1/8 × 1/16	1/8 × 1/16
1215	0.625 - 0.875	0.7	3/16 × 3/32	3/16 × 3/32
	0.938 - 1.250	0.6	1/4 × 1/8	1/4 × 1/8
	0.500 - 0.563	0.7	1/8 × 1/16	1/8 × 1/16
1310	0.625 - 0.875	0.7	3/16 × 3/32	3/16 × 3/32
	0.938 - 1.250 1.313 - 1.375	0.6	1/4 × 1/8 5/16 × 5/32	1/4 × 1/8 5/16 × 5/32
	0.500 - 0.563	0.0		1/8 × 1/16
	0.625 - 0.875	0.8	1/8 × 1/16 3/16 × 3/32	$3/16 \times 3/32$
	0.938 - 1.250	0.7	1/4 × 1/8	1/4 × 1/8
1610	1.313 - 1.375	0.7	5/16 × 5/32	5/16 × 5/32
	1.438 - 1.500	0.6	3/8 × 3/16	$3/8 \times 3/16$
	1.563 - 1.625	0.5	3/8 × 1/8 ▼	3/8 × 3/16
	0.500 - 0.563	1.2	1/8 × 1/16	1/8 × 1/16
	0.625 - 0.875	1.1	3/16 × 3/32	3/16 × 3/32
1015	0.938 - 1.250	1.0	1/4 × 1/8	1/4 × 1/8
1615	1.313 - 1.375	0.8	5/16 × 5/32	5/16 × 5/32
	1.438 - 1.500	0.7	3/8 × 3/16	3/8 × 3/16
	1.563 - 1.625	0.6	3/8 × 1/8 ▼	3/8 × 3/16
	0.500 - 0.563	1.7	1/8 × 1/16	1/8 × 1/16
	0.625 - 0.875	1.6	3/16 × 3/32	3/16 × 3/32
	0.938 - 1.250	1.5	1/4 × 1/8 ▼	1/4 × 1/8
2012	1.313 - 1.375	1.4	5/16 × 5/32	5/16 × 5/32
	1.438 - 1.750	1.2	3/8 × 3/16	3/8 × 3/16
	1.813 - 1.875	1.0	1/2 × 1/4	1/2 × 1/4
	1.938 - 2.000	1.0	1/2 × 3/16 ▼	1/2 × 1/4
	0.500 - 0.563 0.625 - 0.875	3.5	1/8 × 1/16 3/16 × 3/32	1/8 × 1/16 3/16 × 3/32
	0.938 - 1.250	3.3	3/16 × 3/32 1/4 × 1/8	1/4 × 1/8
2517	1.313 - 1.375	3.2	5/16 × 5/32	$5/16 \times 5/32$
2317	1.438 - 1.750	3.0	3/8 × 3/16	$3/8 \times 3/16$
	1.813 - 2.250	2.4	1/2 × 1/4	1/2 × 1/4
	2.313 - 2.500	1.9	5/8 × 3/16 ▼	5/8 × 5/16
	0.750 - 0.875	4.9	3/16 × 3/32	3/16 × 3/32
	0.938 - 1.250	4.7	1/4 × 1/8	1/4 × 1/8
2525	0.938 - 1.375	4.5	5/16 × 5/32	5/16 × 5/32
2020	1.438 - 1.750	4.2	3/8 × 3/16	3/8 × 3/16
	1.813 - 2.250	3.3	1/2 × 1/4	1/2 × 1/4
	2.313 - 2.500	2.5	5/8 × 3/16 ▼	5/8 × 5/16
	0.938 - 1.250	6.5	1/4 × 1/8	1/4 × 1/8
	1.313 - 1.375	6.3	5/16 × 5/32	5/16 × 5/32
3020	1.438 - 1.750	6.0	3/8 × 3/16	3/8 × 3/16
0020	1.813 - 2.250	5.3	1/2 × 1/4	1/2 × 1/4
	2.313 - 2.750	4.5	5/8 × 5/16	5/8 × 5/16
	2.813 - 3.000	3.9	3/4 × 1/4 ▼	3/4 × 3/8
	0.938 - 1.250	9.2	1/4 × 1/8	1/4 × 1/8
	1.313 - 1.375	8.9	5/16 × 5/32	5/16 × 5/32
3030	1.438 - 1.750 1.813 - 2.250	8.6	3/8 × 3/16	3/8 × 3/16
	2.313 - 2.750	7.6 6.2	1/2 × 1/4 5/8 × 5/16	1/2 × 1/4 5/8 × 5/16
	2.813 - 2.730	5.0	$3/4 \times 1/4 t$	$3/6 \times 3/16$ $3/4 \times 3/8$
	2.010 0.000	0.0	U/T ^ /T	J/T ^ J/U





Dimensions

		Bush.				СØ				L	*	M	* *
	Bush. No.	Torque Capacity (in-lb)	A	В	Class 20 Gray Iron	Class 30 Gray Iron	Steel	D	F†	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 × 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 × 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	$3/8 \times 5/8$	1 3/8	13/16	1 5/8	1 1/16
Н	1215	3,550	1.875	1.500	3.125	2.875	2.625	1.750	$3/8 \times 5/8$	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	$3/8 \times 5/8$	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	$3/8 \times 5/8$	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	$3/8 \times 5/8$	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 × 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 × 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 × 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 ×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 ×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.
- 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

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

No. 4030 to 5040 Short Taper Bushings

Duching	Bush. Torque			D him m	01-4				CØ					
Bushing Number	Capacity (in-lb)	Bore	Wt.	Bushing Keyseat	Shaft Keyseat	A	В	Class 20 Gray Iron	Class 30 Gray Iron	Steel	D	F†	G	R
		1.188 - 1.250	14	1/4 x 1/8	1/4 x 1/8									
		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			7.75						
3525	44,800	2.313 - 2.750	12	5/8 x 5/16	5/8 x 5/16	5.00	3.50		7.00	6.50	4.83	3 – 1/2 × 1 1/2	39°	
		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									
		1.438 - 1.750	24	3/8 x 3/16	3/8 x 3/16									
		1.813 - 2.250	21	1/2 x 1/4	1/2 x 1/4	5.75								
		2.313 - 2.750	20	5/8 x 5/16	5/8 x 5/16									
	77,300	2.813 - 3.250	18	3/4 x 3/8	3/4 x 3/8		3.00	9.50	8.50	7.75	5.54	$3 - 5/8 \times 13/4$	39°	
4030	77,300	3.313 - 3.688	15	7/8 x 7/16	7/8 x 1/4		0.00	0.00	0.00	7.70	0.01	0 0/0 × 1 0/1	00	_
		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									
		1.938 - 2.250	31	1/2 x 1/4	1/2 x 1/4									
		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									
4535	110,000	3.313 - 3.688	23	7/8 x 7/16	7/8 x 7/16	6.38	3.50	10.50	9.50	8.75	6.13	$3 - 5/8 \times 13/4$	40°	
4000		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									
		2.438 - 2.750	40	5/8 x 5/16	5/8 x 5/16									
		2.813 - 3.250	37	3/4 x 3/8	3/4 x 3/8									
5040	126,000	3.313 - 3.750	33	7/8 x 7/16	7/8 x 7/16	7.00	4.00	11.50	10.50	9.50	6.72	$3 - 7/8 \times 21/4$	37°	
3040		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.

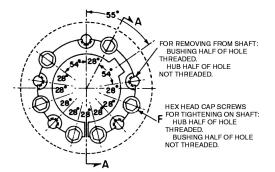
For detail dimensions required for machining hubs, consult factory.

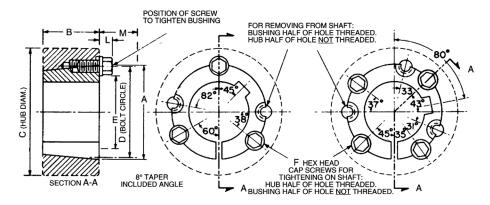
- For general reference. Severe conditions may require larger hub. Heavy well located web may permit smaller hub. Hub diameter required depends on the particular application. Consult factory giving full information on the proposed design. Hub diameters shown are based on 20,000, 30,000, and 50,000 P.S.I. 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								CØ						
Bushing Number	Torque Capacity (in-lb)	Bore	Weight	Bushing Keyseat	Shaft Keyseat	A	В	Class 20 Gray Iron	Class 30 Gray Iron	Steel	D	E	F†	L ★	M ★★
		3.813 - 4.500	60	1 × 1/2	1 × 1/2										
6050	282,000	4.563 - 5.500	55	1 1/4 × 5/8	1 1/4 × 5/8	9.25	5.00	17.00	17.00 15.50	13.50	9.00	6.75	3 - 1 1/4 × 3 1/2	1.625	4.375
		5.563 - 6.000	50	1 1/2 × 3/4	1 1/2 × 3/4										
		4.563 - 5.500	85	1 1/4 × 5/8	1 1/4 × 5/8										
7060	416,000	5.563 - 6.500	75	1 1/2 × 3/4	1 1/2 × 3/4	10.25	6.00	18.50	17.00	14.75	10.00	7.75	3 – 1 1/4 × 3 1/2	1.625	4.375
		6.563 - 7.000	65	1 3/4 × 3/4	1 3/4 × 3/4										
		5.063 - 5.500	120	1 1/4 × 5/8	1 1/4 × 5/8	11.25	6.50				11.00	8.75	3 – 1 1/4 × 3 1/2	1.625	1 275
◊ 8065	456,000	5.563 - 6.500	105	1 1/2 × 3/4	1 1/2 × 3/4			19.00	00 17.50	15.50					
V 6000	430,000	6.563 - 7.500	90	1 3/4 × 3/4	1 3/4 × 3/4										4.373
		7.563 - 8.000	75	2 × 3/4	2 × 3/4										
		6.563 - 7.500	260	1 3/4 × 3/4	1 3/4 × 3/4										
◊ 10085	869,000	7.563 - 9.000	230	2 × 3/4	2 × 3/4	14.75	8.50	23.50	22.00	19.50	14.50	11.75	3 – 1 1/2 × 4 1/4	2	5.375
		9.063 - 10.000	190	2 1/2 × 7/8	2 1/2 × 7/8										
		7.563 - 9.000	410	2 × 3/4	2 × 3/4										
◊ 120100	1,520,000	9.063 - 11.000	360	2 1/2 × 7/8	2 1/2 × 7/8	17.25	10.00	28.00	26.00	23.00	17.00	14.25	6 - 1 1/2 × 4 1/4	2	5.375
V 120100 1,5		11.063 - 12.000	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.
- Not currently stocked Available on order.



Taper Bushed Type S-Type W **Weld-On Hubs Dimensions**

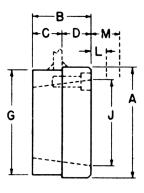
Type S

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 ◊	C **	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 Ø	5.000





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

.000 - .002

.005 - .010

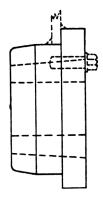
.001 - .003 Ø

.000 - .005 .010 - .010

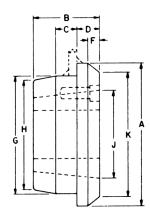
Type WA

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	В	С	D	F	G	Н	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 •	8.375	7.000	8.750
WA60	6050	6.000	115	13.250	5.000	1.750	1.250	_	12.250 ★	11.875	9.250	-
WA70	7060	7.000	155	14.500	6.000	2.250	1.250	-	13.500 ★	13.250	10.250	-
WA80	8065	8.000	180	15.250	6.500	2.250	1.250	_	14.250 ★	14.000	11.250	_
WA100	10085	10.000	340	19.750	8.500	3.500	1.500	-	18.750 ★	18.250	14.750	-



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

- .000 .002
- .000 .003
- .000 .004

Taper Bushings Metric and Reborable



Stock Taper Bushings With Metric Bores and Keyways

★ Metric Bores	★ Metric Keyway		Taper Bus	hing Number	
14.16	5 × 2.3	1008	1108	1210	
14, 16	3 × 2.3	1215	1610	1615	
18, 19	6 × 2.8	1008	1108	1210	1215
20, 22	0 × 2.0	1610	1615	2012	2517
24	8 × 3.3	1108	1210	1215	
24	0 × 3.3	1610	1615	2012	2517
25	8 × 3.3	1210	1215	1610	
20	0 × 3.3	1615	2012	2517	
28, 30	8 × 3.3	1210	1215	1610	
20, 30	0 × 3.3	1615	2012	2517	3020
32	10 × 3.3	1610	1615		
32	10 × 3.3	2012	2517	3020	
35	10 × 3.3	1610	1615		
33	10 × 3.3	2012	2517	3020	
38	10 × 3.3	1610	1615		
30	10 × 3.3	2012	2517	3020	
40.40	12 × 3.3	2012			
40, 42	12 × 3.3	2517	3020		
45, 48	14 × 3.8	2012			
40, 48	14 × 3.8	2517	3020		
50	14 × 3.8	2517	3020		
55	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

Sinter	red Steel		Gray Iron	Ste	el	Stainles	s 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				

 $[\]bigstar$ Not currently stocked. Consult factory for availability and pricing.