QTL Taper bushing

JA - S

QTL Taper bushing are made of GGG40 ductile iron and surface is phosphated. They are fixed with UNC bolt (12.9 grade), and packed in individual box.

QTL Taper bushing and JA-E with inner bore and keyway in inch can be sold off-the-shelf , immediate delivery.
F - S are produced against orders, and prompt delivery.

QTL Taper bushing in metric dimensions can be produced.

QTL Taper bushing QTL

The QTL bushing is used throughout the in-dustry offering convenience and design flexibility. They are made of quality gray or ductile iron and are installed by tightening several cap screws.

This draws the bushing into the taper bore of the product which compresses the bore of the bush-ing-gripping the shaft so that no external keys or dowels are required.QTL bushings are easily re-moved by using the cap screws as jack-screws.

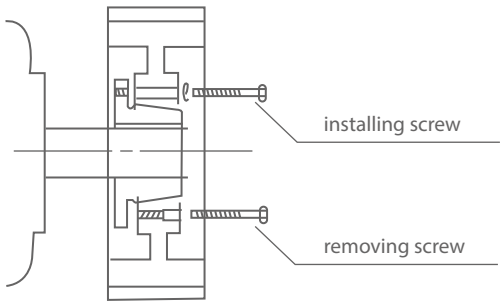
Double-drilled holes are furnished in QTL bush-ings permitting mounting of product in the conven-tional or reverse positions,This allows cap screws to be installed through product hub or bushing flange whichever is most convenient. No matter which way the product is installed,cap screws are always inserted from the outside where they are easily assembled.

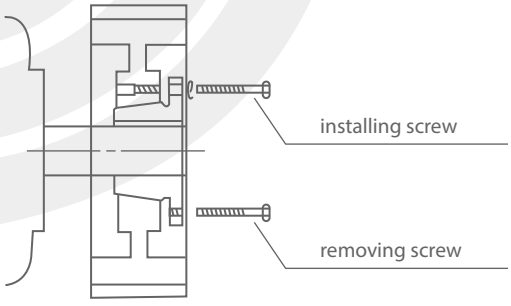
QTL bushings are available from stock with all popular bores within the range of each size bushing.

Some of the power transmission products which use QTL bushings are pulleys,sprockets, sheaves and couplings,Used in unlimited-fans, inpellers,or any product which needs to be shaft mounted.

TYPICAL INSTALLATION OF A PRODUCT ON A MOTOR SHAFT

Reverse Mounting:
Small end of bushing taper toward motor as shown in drawing at left Easy On-Place cap screw through drilled holes in bush-ing flange and install (finger tight) into threaded holes in prod-uct hub. Slip loosely assembled unit (small end of taper first) into desired position of shaft .Tighten each cap screws alter-nately and evenly.
Easy Off-Remove cap screws and place them in threaded holes in bushing flange. As they are drawn up they will act as jack screws against the face of the product hub to release grip be-tween bushing and hub.





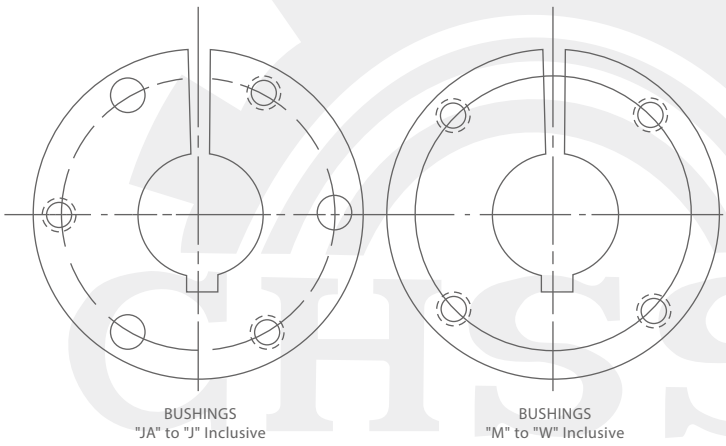
Conventional Mounting:
Bushing flange is toward the motor as shown in drawing at right. Easy On-Place QTL bushing in the product hub and insert cap screws through drilled holes in product hub. Tighten cap screws (finger tight) into threaded holes in bushing flange. Slip loosely assembled unit (flange end first) into desired position on shaft. Tighten each cap screw alternately and evenly to specified wrench torque.
Easy Off-Remove cap screws and place them in holes threaded in product hub. As they are drawn up they will act as jack screws against the flange of the bushing to release grip between bush-ing and hub.

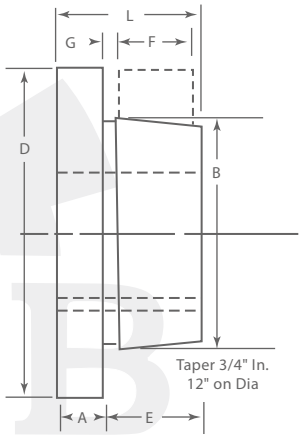
QTL Taper bushing

The"QTL" Bushing easily fits over the ta-pered hub and a tight press can be produced on the shaft by tightening capscrews.The bushing is easily removed from the hub by using the pull-up bolts as jack bushing in the holes tapped in the rim of bushing .All hubs"JA" through "J" are drilled for REVERSE MOUNTING.

* F =Length of Mating Bore

** G =Gap Between " QTL " Bushing and Mating Hub





STOCK QTL BUSHINGS DIMENSIONS

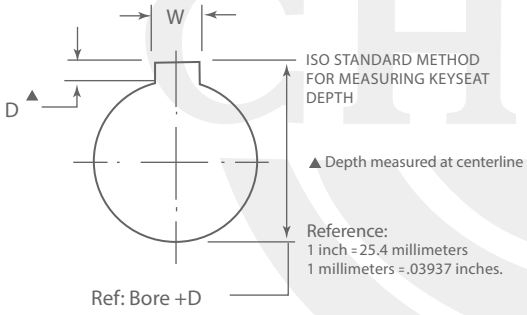
Bushing	DIMENSIONS(Inches) A	B	D	E	* F	** G	L	Bolt Circle	Cap Screws Required	STOCK BORE RANGE Minimum	MAXIMUM Standard Keyway	MAXIMUM Shallow Keyway	Average Weight (Approw.)
JA	5/16	1.375	2	11/16	9/16	0.20	1	1.656	3-10x1	3/8	1	13/16	.9
SH	7/16	1.871	211/16	7/8	13/16	0.23	15/16	21/4	3 1/4x1 3/8	1/2	13/8	15/8	1
SDS	7/16	2.187	31/8	7/8	3/4	0.23	15/16	211/16	3 1/4x1 3/8	1/2	15/8	115/16	1
SD	7/16	2.187	31/8	13/8	11/4	0.23	113/16	211/16	3 1/4x1 3/8	1/2	15/8	115/16	1.5
SK	9/16	2.812	37/8	13/8	11/4	0.23	115/16	35/16	3 5/16x2	1/2	21/8	21/2	2
SF	5/8	3.125	45/8	17/16	11/4	0.23	21/16	37/8	3 3/8x2	1/2	21/4	27/8	4
E	7/8	3.834	6	17/8	15/8	9/32	23/4	5	3 1/2x23/4	7/8	27/8	31/2	10.5
F	1	4.437	65/8	23/4	21/2	11/32	33/4	55/8	3 9/16x35/8	1	31/4	315/16	15
J	11/8	5.148	71/4	31/2	33/16	5/16	45/8	61/4	3 5/8x41/2	11/2	313/16	41/2	23
M	11/4	6.494	9	51/2	53/16	11/32	63/4	77/8	4 3/4x63/4	2	411/16	51/2	55
N	11/2	6.992	10	65/8	61/4	9/16	81/8	81/2	4 7/8x8	27/16	51/16	57/8	73
P+	13/4	8.242	113/4	75/8	71/4	5/8	93/8	10	4 1x91/2	215/16	513/16	7	120
W+	2	10.437	15	93/8	9	11/16	113/8	123/4	4-11/8x111/2	4	71/2	81/2	250
S+	31/4	12.125	173/4	121/2	12	3/4	153/4	15	5-11/4x151/2	6	81/4	10	400

+Consult Factory

QTL Taper bushing

QTL BUSHING DIMENSIONS AND RANGES FOR INNER BORES AND KEYWAYS

Bushing	Bores Key Seat	Bushing	Bores	Key Seat	Bushing	Bores	Key Seat	
JA	3/8-7/16	None	SF	1/2-2 1/4	Std.	M	2-4 11/16	Std.
	1/2-1	Std.		2 5/16-2 1/2	5/8x3/16		4 3/4-5 1/2	1 1/4x1/4
	1 1/16-1 3/16	1/4x1/16		2 9/16-2 3/4	5/8x1/16	N	2 7/16-5 1/16	Std.
	1 1/4	None		2 13/16-2 7/8	3/4x1/16		5 1/8-5 1/2	1 1/4x1/4
SH	1/2-1 3/8	Std.		2 15/16	None		5 9/16-5 7/8	1 1/2x1/4
	1 7/16-1 5/8	3/8x1/16	E	7/8-2 7/8	Std.	P	2 15/16-5 13/16	Std.
	1 11/16	None		2 15/16-3 1/4	3/4x1/8		5 7/8-6 1/2	1 1/2x1/4
SDS SD	1/2-1 5/8	Std.		3 5/16-3 1/2	7/8x1/16		6 9/16-7	1 3/4x1/8
	1 11/16-1 3/4	3/8x1/8	F	1-3 1/4	Std.	W	4-7 1/2	Std.
	1 13/16	1/2x1/8		3 5/16-3 3/4	7/8x3/16		7 9/16-8 1/2	2x1/4
	1 7/8-1 15/16	1/2x1/16		3 13/16-3 15/16	1x1/8			
	2	None		4	None			
SK	1/2-2 1/8	Std.	J	1 1/2-3 13/16	Std.			
	2 3/16-2 1/4	1/2x1/8		3 7/8-4 1/2	1x1/8			
	2 5/16-2 1/2	5/8x1/16						
	2 9/16-2 5/8	None						



STANDARD KEYWAY & KEY DIMEMSION

Bores	Key Seat	Key
1/2-9/16	1/8x1/16	1/8x1/8
5/8-7/8	3/16x3/32	3/16x3/16
15/16-1 1/4	1/4x1/8	1/4x1/4
1 5/16-1 3/8	5/16x5/32	5/16x5/16
1 7/16-1 3/4	3/8x3/16	3/8x3/8
1 13/16-2 1/4	1/2x1/4	1/2x1/2
2 5/16-2 3/4	5/8x5/16	5/8x5/8
2 13/16-3 1/4	3/4x3/8	3/4x3/4
3 5/16-3 3/4	7/8x7/16	7/8x7/8
3 13/16-4 1/2	1x1/2	1x1
4 9/16-5 1/2	1 1/4x5/8	1 1/4x1 1/4
5 9/16-6 1/2	1 1/2x3/4	1 1/2x1 1/2
6 9/16-7 1/2	1 3/4x7/8	1 3/4x1 3/4

Dimensions:inch

BORE RANGE FOR QTL BUSHING

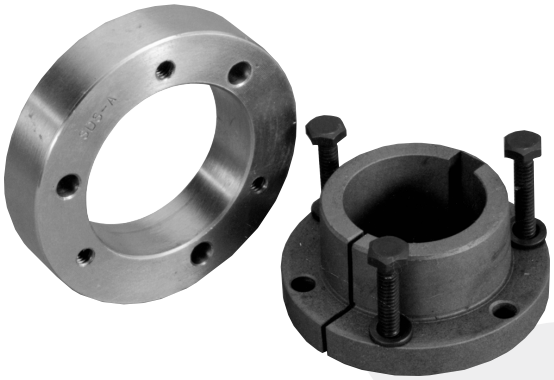
Bush.	Min. Bore	Max.Bore with:		
		Full Keyway	Shallow Keyway	No Keyway
JA	3/8	1	1 3/16	1 1/4
SH	1/2	1 3/8	1 5/8	1 11/16
SDS	1/2	1 5/8	1 15/16	2
SD	1/2	1 5/8	1 15/16	2
SK	1/2	2 1/8	2 1/2	2 5/8、2 9/16
SF	1/2	2 1/4	2 7/8	2 15/16
E	7/8	2 7/8	3 1/2	——
F	1	3 1/4	3 15/16	4
J	1 1/2	3 13/16	4 1/2	——
M	2	4 11/16	5 1/2	——
N	2 7/16	5 1/16	5 7/8	——
P	2 15/16	5 13/16	7	——
W	4	7 1/2	8 1/2	——
S	6	8 1/4	10	——

SHALLOW KEY DIMENSION

Key Seat	Key	Key Seat	Key
3/8x1/16	3/8x1/4	7/8x3/16	7/8x5/8
3/8x1/8	3/8x5/16	1x1/16	1x9/16
1/2x1/32	1/2x9/32	1x1/8	1x5/8
1/2x1/16	1/2x5/16	1 1/4x1/4	1 1/4x3/4
1/2x1/8	1/2x3/8	1 1/4x1/4	1 1/4x7/8
5/8x1/16	5/8x3/8	1 1/2x1/8	1 1/2x1
5/8x3/16	5/8x1/2	1 3/4x3/8	1 3/4x3/4
3/4x1/8	3/4x1/2	1 3/4x3/8	1 3/4x1
7/8x1/16	7/8x1/2	2x5/16	2x1

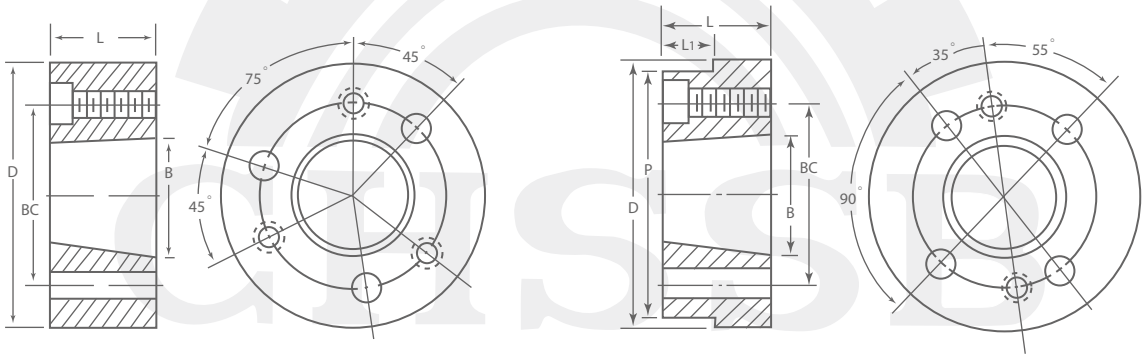
Dimensions:inch

Taper Bore Bolt-hubs QTL



QTL WELD-ON HUBS

QTL weld-on hubs are suitable in many applications, such as welding to steel plate wheels. Weld-on hubs are made of steel. Drilled, taped and taper bored to receive QTL bushing



QTL TYPE 1 AND TYPE 2 WELD- ON HUBS

Catalog Number	Dimensions-Inches						Type Drilling	Torque Transmitted Bolt Stress in Pounds Per Sq.In			Weight Pounds
	D*	L	B	P+	L1	BC	BC	6.000	9.000	12.000	
SH-A	3.000	13/16	1.871	—	—	2 1/4	1	950	1,425	1,900	1
SDS-A	3.500	3/4	2.188	—	—	2 11/16	1	1,130	1,695	2,260	1.30
SK-A	4.375	1 1/4	2.813	—	—	3 5/16	1	2,400	3,600	4,800	3
SF-A	5.000	1 1/4	3.125	—	—	3 7/8	1	4,060	6,090	8,120	4
E-A	6.250	1 5/8	3.832	—	—	5	1	9,240	13,860	18,480	9
F-A	7.000	2 1/2	4.437	—	—	5 5/8	1	13,960	20,940	27,920	16
J-A	7.750	3 3/16	5.140	—	—	6 1/4	1	19,550	29,325	39,100	25
M-A	9.500	5 3/16	6.494	9.250	3 9/16	7 7/8	2	49,000	73,500	98,000	50
N-A	10.500	6 1/4	6.990	10.250	4 1/2	8 1/2	2	73,200	109,800	146,400	75

*Tolerance of "D" - "SH" thru "J" =(+.000 -.002)
+Tolerance of "P"- "M" and "N" =(+.000-.003