



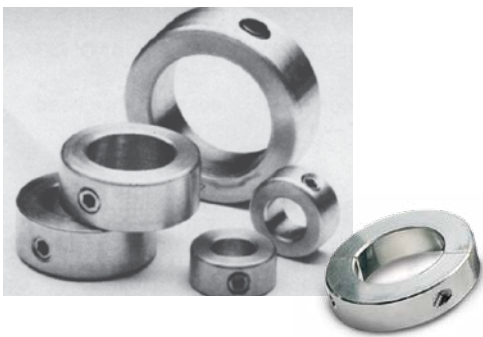
## SSFC Series - Insert (3 Jaw) Type Coupling

- 316 stainless steel with passivated finish
- Precision machined bore or solid hubs
- Three types of inserts for different service requirements
- No lubrication needed
- Stocked bores complete with keyway and stainless setscrew
- Custom bore sizes available on request



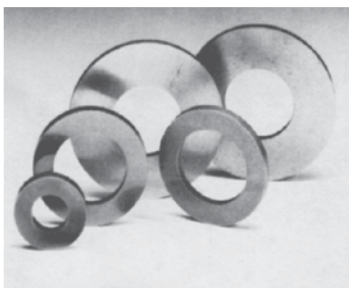
## JS Series - Pin and Block Type Universal Joints

- Connect shafts at angles up to 30 degrees and speeds up to 2,000 RPM
- Precision machined bore or solid hubs
- Self-locking assembly rings (hubs 7/8" and larger)
- Riveted bearing pin (hubs 3/4" and smaller)
- Joint covers keep dirt/moisture out and lubricant in



## SSC/CSSC/2SSC Series - Collars

- Setscrew, 1-piece clamp & 2-piece clamp styles for locking
- Setscrew type suitable for temps up to 800° F, ideal for autoclaved hygienic equipment
- Clamp type conform to OSHA with recessed screw heads, provide convenient adjusting and removal

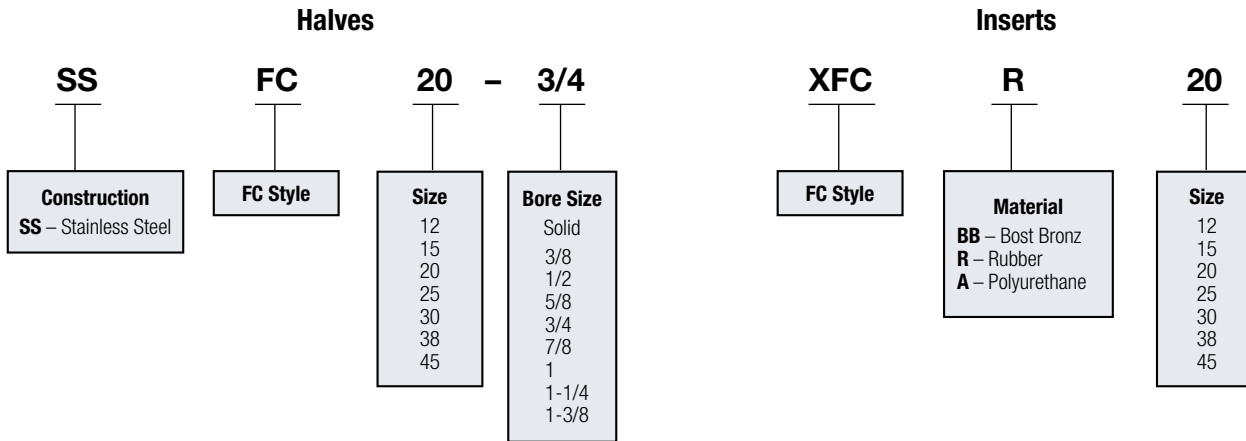


## SAO Series - Thrust Washers & Thrust Ball Bearings

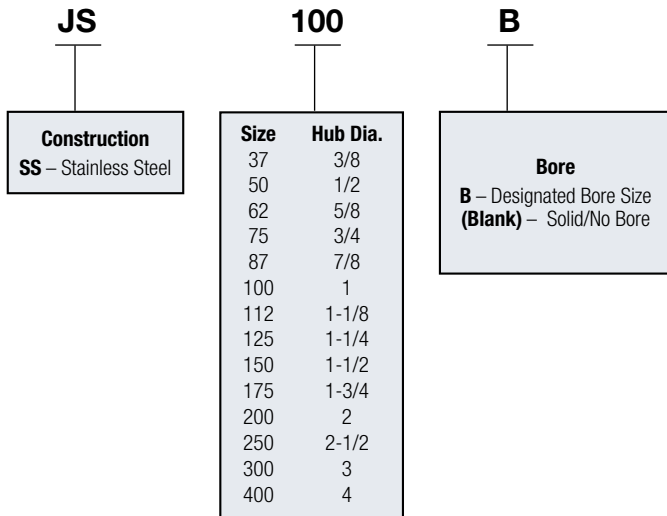
- Hardened and ground surface
- Ideal as a radial bearing surface
- Negligible friction when used as a set with thrust bearing sandwiched between 2 thrust washers

## Ordering Information

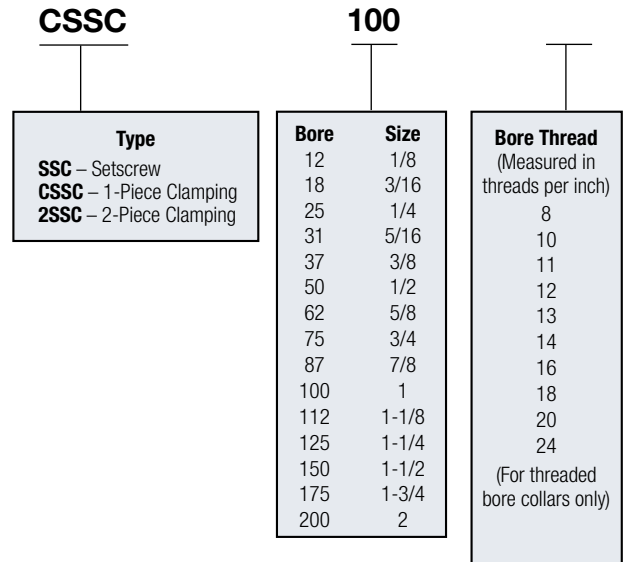
### Couplings



### Universal Joints



### Collars



### Thrust Washers

#### SAO 8 Washer

1	3/16 Bore
5	1/4 Bore
8	5/16 Bore
10	3/8 Bore
16	1/2 Bore

### Thrust Ball Bearings

#### SAO 8 CN

1	3/16 Bore
5	1/4 Bore
8	5/16 Bore
10	3/8 Bore
16	1/2 Bore

- Oil-Impregnated Bost-Bronz – recommended for high torque loads, particularly at slower speeds.
- Oil-Resistant Synthetic Rubber – recommended when quietness is desired, particularly at motor speeds.
- Polyurethane – recommended where moderate to heavy shock loads are encountered.

**Load Rating Table**

Coupling Size	Maximum Horsepower Rating at RPM*								Misalignment Tolerances		Max Torque (lb-in)
	50	100	300	690	870	1150	1750	3450	Lateral/Parallel	Angular	
XFCBB BOST-BRONZ INSERTS											
SSFC12	0.16	0.32	0.95	2.2	2.8	3.6	5.6	—	.001	.011	200
SSFC15	0.40	0.79	2.4	5.5	6.9	9.1	13.9	—		.013	500
SSFC20	0.79	1.6	4.8	10.9	13.8	18.2	—	—		.018	1000
SSFC25	1.4	2.9	8.6	19.7	24.8	—	—	—		.022	1800
SSFC30	2.5	5.1	15.2	35.0	—	—	—	—		.026	3200
SSFC38	5.6	11.1	33.3	—	—	—	—	—		.032	7000
SSFC45	8.7	17.5	—	—	—	—	—	—		.039	11000
XFCR RUBBER INSERTS											
SSFC12	—	0.10	0.31	0.71	0.90	1.2	1.8	3.6	.002	.033	65
SSFC15	—	0.20	0.60	1.4	1.7	2.3	3.5	56.8		.039	125
SSFC20	—	0.40	1.2	2.7	3.5	4.6	6.9	13.7		.053	250
SSFC25	—	0.71	2.1	4.9	6.2	8.2	12.5	24.6		.066	450
SSFC30	—	1.3	3.8	8.8	11.0	14.6	22.2	43.8		.078	800
SSFC38	—	2.5	7.6	17.5	22.1	29.2	44.4	—		.097	1600
SSFC45	—	4.4	13.3	30.7	38.7	51.1	77.7	—		.117	2800
XFCA POLYURETHANE INSERTS											
SSFC12	0.09	0.19	0.56	1.2	1.6	2.0	3.0	5.7	.002	.022	125
SSFC15	0.18	0.37	1.1	2.5	3.1	4.0	6.0	11.3		.026	250
SSFC20	0.35	0.70	2.1	4.6	5.7	7.5	11.1	20.7		.035	470
SSFC25	0.62	1.2	3.7	8.1	10.1	13.1	19.3	35.8		.044	845
SSFC30	1.1	2.2	6.5	14.4	17.9	23.3	34.3	63.6		.052	1500
SSFC38	2.2	4.3	12.9	28.4	35.3	45.8	67.3	—		.065	3000
SSFC45	3.7	7.5	22.4	49.2	61.0	79.0	115.9	—		.078	5250

\*For uniform load.

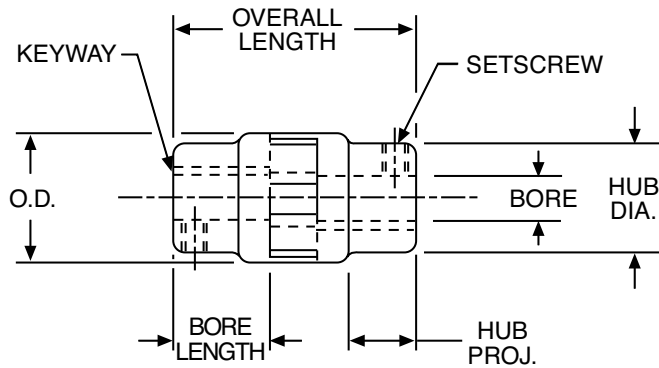
### Selection Procedure

1. From Table select Service Factor.
2. Determine Design Load  
 $\text{Design HP} = \text{Application HP} \times \text{S.F.}$   
 or  
 $\text{Design Torque} = \text{Application Torque} \times \text{S.F.}$
3. Select coupling size from Load Rating Table which has a rating equal to or greater than the design load

### COUPLING SERVICE FACTOR

Load Classification	Service Factor
Uniform	1
Moderate Shock	1.75
Heavy Shock	2.5

## Dimensions



**All Dimensions in Inches**  
**Order By Catalog Number or Item Code**  
 To order complete coupling order two coupling halves and one coupling insert

Coupling Size	Bore	Max. Bore	Bore Length *	OD	Overall Length **	Hub		Assy. Clearance	Standard Keyway Size	Standard Setscrew Size	Coupling Halves		Insert					
						Dia.	Proj.				Catalog Number	Item Code	Bost-Bronz		Rubber		Polyurethane	
													Catalog Number	Item Code	Catalog Number	Item Code	Catalog Number	Item Code
SSFC12	SOLID	5/8	N/A	1-1/4	2-5/16	1	5/8	3-3/16	N/A	N/A	SSFC12 SOLID	G89785	XFCBB12	08064	XFCR12	08078	XFCA12	08050
	3/8		3/32 x 3/64						10-32	SSFC12-3/8	G89783							
	1/2		1/8 x 1/16						1/4-20	SSFC12-1/2	G89784							
SSFC15	SOLID	7/8	N/A	1-1/2	2-3/4	1-1/4	3/4	3-3/4	N/A	N/A	SSFC15 SOLID	G89789	XFCBB15	08066	XFCR15	08080	XFCA15	08052
	1/2		1/8 x 1/16						1/4-20	SSFC15-1/2	G89786							
	5/8		3/16 x 3/32						5/16-18	SSFC15-5/8	G89787							
	3/4		3/16 x 3/32						5/16-18	SSFC15-3/4	G89788							
SSFC20	SOLID	1-1/8	N/A	2	3-11/16	1-3/4	1-1/8	4-13/16	N/A	N/A	SSFC20 SOLID	G89794	XFCBB20	08068	XFCR20	08082	XFCA20	08054
	5/8		3/16 x 3/32						5/16-18	SSFC20-5/8	G89790							
	3/4		3/16 x 3/32						5/16-18	SSFC20-3/4	G89791							
	7/8		3/16 x 3/32						5/16-18	SSFC20-7/8	G89792							
	1		1/4 x 1/8						3/8-16	SSFC20-1	G89793							
SSFC25	SOLID	1-3/8	N/A	2-1/2	4-1/8	2-1/4	1-1/4	5-3/8	N/A	N/A	SSFC25 SOLID	G89798	XFCBB25	08070	XFCR25	08084	XFCA25	08056
	3/4		3/16 x 3/32						5/16-18	SSFC25-3/4	G89795							
	1		1/4 x 1/8						3/8-16	SSFC25-1	G89796							
	1-1/4		1/4 x 1/8						3/8-16	SSFC25-1-1/4	G89797							
SSFC30	SOLID	1-5/8	N/A	3	5-15/32	2-3/4	1-11/16	7	N/A	N/A	SSFC30 SOLID	G89802	XFCBB30	08072	XFCR30	08086	XFCA30	08058
	1		1/4 x 1/8						3/8-16	SSFC30-1	G89799							
	1-1/4		1/4 x 1/8						3/8-16	SSFC30-1-1/4	G89800							
	1-3/8		5/16 x 5/32						7/16-14	SSFC30-1-3/8	G89801							
SSFC38	SOLID	1-7/8	N/A	3-3/4	6-5/16	3-1/2	1-7/8	8-3/16	N/A	N/A	SSFC38 SOLID	G89809	XFCBB38	08074	XFCR38	08088	XFCA38	08060
SSFC45	SOLID	2-1/8	N/A	4-1/2	7-3/16	4	2-1/8	9-5/16	N/A	N/A	SSFC45 SOLID	G89810	XFCBB45	08076	XFCR45	08090	XFCA45	08062

\*Length of hole in each half. \*\*Total length of assembled coupling with jaws engaged to full depth.

Notes: Bore tolerance: +.001"/-.000".  
 Recommended shaft tolerance: Nominal +.000"/-.001".

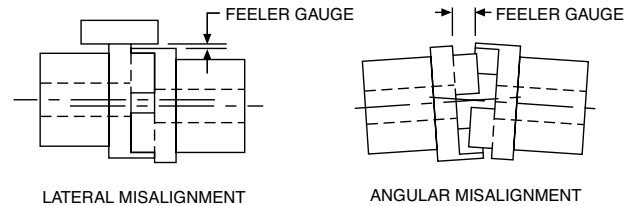


Contact the factory for bore sizes not listed above.  
 Inch and metric options available.

### Alignment

Alignment of Boston couplings should be performed by the following steps to meet lateral and angular misalignment specifications below.

1. Align shafts and supports to give minimum lateral and angular misalignment.
2. Assemble coupling halves to shaft.
3. Slide couplings together and check lateral misalignment using straight edge and feeler gauge over coupling outside diameter. This should be within specifications below.
4. Lock couplings on shaft and check distance using feeler gauges between drive lug on one half and space between on other coupling half. Rotate coupling and check gap at a minimum of 3 other coupling positions. The difference between any two readings should be within specifications below.



### Misalignment Tolerances

Coupling Series	Lateral	Angular
FC - Bronze Insert	.001	See Chart Below
FC - Urethane Insert	.002	
FC - Rubber Insert	.002	

#### FC Series ANGULAR MISALIGNMENT

Chart reflects maximum angular misalignment of 1-1/2° for rubber, 1° for urethane and 1/2° for bronze.

### Maximum Reading Differential

Size	Rubber	Insert Urethane	Bronze
FC12	.033	.022	.011
FC15	.039	.026	.013
FC20	.053	.035	.018
FC25	.066	.044	.022
FC30	.078	.052	.026
FC38	.097	.065	.032
FC45	.117	.078	.039

## Performance & Selection

Boston Gear precision machined JS Series Universal Joints are designed for connecting shafts at angles up to 30 degrees and speeds up to 2000 RPM. All sizes are stocked with both solid and bored hubs.



### Selection

Torque ratings may be calculated from data in tables. The tables indicate the Rated Static Torque (Lb. Ins.) and Speed-Angle factors suggested for various operating conditions.

The approximate service torque rating of a particular joint is obtained by dividing the Rated Static Torque by the appropriate Speed-Angle factor.

Selecting a universal to satisfy a specified torque requirement is also made convenient with the data provided.

The designated torque load should be multiplied by the appropriate Speed-Angle factor to obtain an equivalent static torque load.

A universal with a rated static torque equal to or greater than the calculated torque load would then be selected.

### Example:

A pair of universal joints are desired to transmit 1/2 HP from one shaft running at 500 RPM to another located at an angle of 10 degrees (from a straight line).

The joints will be connected by an intermediate shaft and arranged to operate at equal angles of 5 degrees.

A Speed-Angle factor of 9 is indicated in the table for an operating angle of 5 degrees and a speed of 500 RPM.

$$\text{Torque Load} = \frac{63025 \times \text{HP}}{\text{RPM}} = \frac{63025 \times 1/2}{500} = 63 \text{ Lb. Ins.}$$

JS175 size stainless steel universals would be suggested for this application.

### Speed-Angle Factors

Speed in RPM	Operating Angle - Degrees (Deviation From Straight Line)														
	0	1/2	1	2	3	4	5	6	8	10	12	15	20	25	30
2000	21	22	23.2	25.2	27.4	29.4	31.6	-	-	-	-	-	-	-	-
1800	19	20	21.0	22.8	24.8	26.6	28.6	30.4	-	-	-	-	-	-	-
1600	17	17.8	18.8	20.4	22.2	23.8	25.6	27.2	-	-	-	-	-	-	-
1400	15	15.8	16.6	18.0	19.6	21.0	22.6	24.0	27	-	-	-	-	-	-
1200	13	13.6	14.4	15.6	17.0	18.2	19.6	20.8	23.4	-	-	-	-	-	-
1000	11	11.6	12.2	13.2	14.4	15.4	16.6	17.6	19.8	22	-	-	-	-	-
900	10	10.6	11.0	12.0	13.0	14.0	15.0	16.0	18.0	20	22	-	-	-	-
800	9.0	9.4	10.0	10.8	11.8	12.6	13.6	14.4	16.2	18	19.8	-	-	-	-
700	8.0	8.4	8.8	9.6	10.4	11.2	12.0	12.8	14.4	16	17.6	20	-	-	-
600	7.0	7.4	7.8	8.4	9.2	9.8	10.6	11.2	12.6	14	15.4	17.6	-	-	-
500	6.0	6.4	6.6	7.2	7.8	8.4	9.0	9.6	10.8	12	13.2	15.0	18	-	-
400	5.0	5.2	5.6	6.0	6.6	7.0	7.6	8.0	9.0	10	11.0	12.6	15	17.6	-
300	4.0	4.2	4.4	4.8	5.2	5.6	6.0	6.4	7.2	8.0	8.8	10.0	12	14.0	16
200	3.0	3.2	3.4	3.6	4.0	4.2	4.6	4.8	5.4	6.0	6.6	7.6	9.0	10.6	12
100	2.0	2.2	2.2	2.4	2.6	2.8	3.0	3.2	3.6	4.0	4.4	5.0	6.0	7.0	8.0
50	1.5	1.6	1.7	1.8	2.0	2.2	2.2	2.4	2.8	3.0	3.4	3.8	4.6	5.2	6.0
25	1.3	1.3	1.4	1.5	1.6	1.8	1.9	2.0	2.2	2.6	2.8	3.2	3.8	4.4	5.0
10	1.1	1.2	1.2	1.3	1.4	1.5	1.7	1.8	2.0	2.2	2.4	2.8	3.4	3.8	4.4
0	1.0	1.1	1.1	1.2	1.3	1.4	1.5	1.6	1.8	2.0	2.2	2.6	3.0	3.6	4.0

### Rated Static Torque (Lb. Ins.)

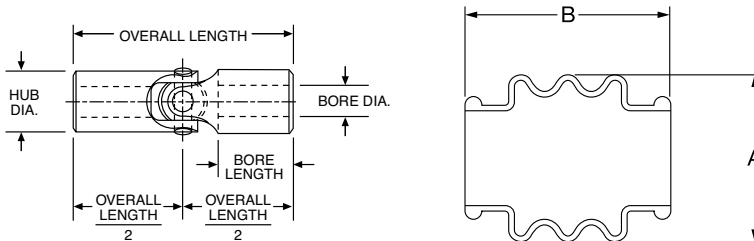
### Stainless Steel Universal Joints

Catalog Number	JS37	JS50	JS62	JS75	JS87	JS100	JS112	JS125	JS150	JS175	JS200	JS250	JS300	JS400
Torque - Lb. Ins.	6	24	50	96	110	180	200	310	500	750	1320	1900	3100	7360

### Pin and Block Type; Stainless Steel

#### Standard Tolerances

Dimensions		Tolerance
Bore	All	±.001
Hub Dia.	All	±.020
Bore Length	All	±1/64
Overall Length	1-3/4 - 4-1/4	±1/64
	5 - 10-5/8	±1/32



**All Dimensions in Inches**  
**Order By Catalog Number or Item Code**

Stainless Steel		Universal Joints					Boot Kits† ††			
Catalog Number	Item Code	Bore**	Bore Length*	Hub Dia.	Overall Length	Approx. Weight Lbs.	A	B	Catalog Number	Item Code
JS37B	08472	3/16	11/16	3/8	1-3/4	.04	0.72	0.88	UB37	47602
JS37	08452	-	-	3/8	1-3/4	.05				
JS50B	08474	1/4	3/4	1/2	2	.08	0.95	0.88	UB50	47603
JS50	08454	-	-	1/2	2	.10				
JS62B	08476	5/16	13/16	5/8	2-1/4	.14	1.13	1.03	UB62	47604
JS62	08456	-	-	5/8	2-1/4	.18				
JS75B	08478	3/8	31/32	3/4	2-11/16	.24	1.38	1.25	UB75	47605
JS75	08458	-	-	3/4	2-11/16	.30				
JS87B	08480	7/16	1-1/32	7/8	3	.31	1.50	1.38	UB87	47606
JS87	08460	-	-	7/8	3	.45				
JS100B	08482	1/2	1-3/16	1	3-3/8	.50	1.50	1.50	UB100	47607
JS100	08462	-	-	1	3-3/8	.66				
JS112B	72483	9/16	1-7/32	1-1/8	3-1/2	.69	1.75	1.63	UB112	72491
JS112	72484	-	-	1-1/8	3-1/2	.88				
JS125B	08484	5/8	1-1/4	1-1/4	3-3/4	.88	1.88	2.09	UB125	47608
JS125	08464	-	-	1-1/4	3-3/4	1.15				
JS150B	08486	3/4	1-11/32	1-1/2	4-1/4	1.44	2.25	2.06	UB150	47609
JS150	08466	-	-	1-1/2	4-1/4	1.81				
JS175B	08488	7/8	1-9/16	1-3/4	5	2.31	2.69	2.63	UB175	47610
JS175	08468	-	-	1-3/4	5	2.86				
JS200B	08490	1	1-5/8	2	5-7/16	3.31	2.69	3.00	UB200	47611
JS200	08470	-	-	2	5-7/16	4.06				
JS250B	72485	1-1/4	2-3/32	2-1/2	7	6.81	3.50	4.00	UB250	47612
JS250	72486	-	-	2-1/2	7	8.25				
JS300B	72487	1-1/2	2-27/32	3	9	12.5	4.25	4.63	UB300	47613
JS300	72488	-	-	3	9	15.25				
JS400B	72489	2	3-1/8	4	10-5/8	25.8	6.00	5.50	UB400	47614
JS400	72490	-	-	4	10-5/8	31.3				

\*Approximate Hub Projection

†Each Kit contains (2) Boots and (4) Ties together with complete instructions for installation and lubrication.

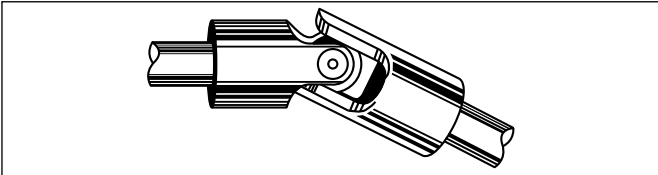
\*\*Style B includes bore only. Units without a B letter have a solid bore.

†† Assemble the boot to be positioned central to the joint.  
 The shape of the boot may vary from the image shown above.

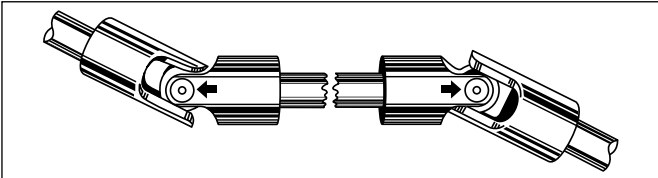
## Installation & Maintenance

### Mounting

A single universal joint (rotating at uniform speed) operating at an angle will introduce periodic variations of angular velocity to the driven shaft. These cyclic speed fluctuations (two per revolution) cause vibration, higher shaft stresses and bearing loads which will be more severe with larger angles of operation.



The detrimental effects of these rotational deviations can be reduced, and uniform speed restored by using two joints (and an intermediate shaft) to connect shafts at an angle or misaligned in a parallel direction.



For connecting shafts in the same plane the joints should be arranged to operate at equal angles and with the bearing pins of the yokes on the intermediate shaft in line with each other.

### Lubrication

#### PIN and BLOCK TYPE

**These universal joints are not lubricated when shipped.**

Many applications are considered severe when in harsh environments and when a combination of speed, dirt contamination and inaccessible locations make it impractical to maintain proper lubrication.

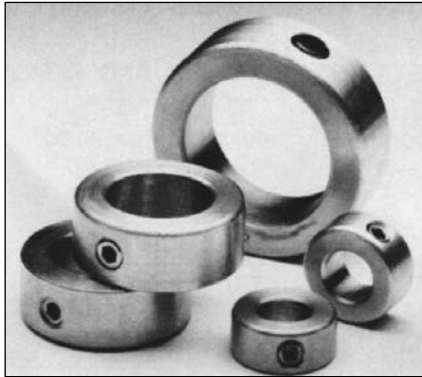
It is in these instances when the Boot Kits become a desirable alternative. For satisfactory performance, all booted joints should be used with a LITH-EP-000 grease for an ambient temperature range of 40° to 225°F.

### Volume of Lubrication for Booted Joints

Size	Volume (Ozs.)	Size	Volume (Ozs.)	Size	Volume (Ozs.)
37	.4	100	2.0	250	25.0
50	.5	125	3.5	300	30.0
62	.75	150	4.5	400	50.1
75	1.0	175	7.0		
87	1.5	200	15.0		

NOTE: Joints should be initially lubricated with a 90 weight oil before being packed with grease.





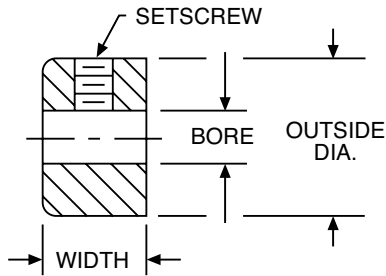
## Stainless Steel Bore Sizes from 1/8" to 2"

**Stainless Steel Collars are Corrosion-Resistant and Non-Magnetic** suitable for temperatures up to 800°F. Ideal for applications requiring hygienic cleanliness.

**All Collars Complete with Standard Hollow Point Setscrews.**

### All Dimensions in Inches Order By Catalog Number or Item Code

Bore	Outside Diameter	Width	Stainless Steel	
			Catalog Number	Item Code
1/8	3/8	1/4	SSC12	67740
3/16	7/16	1/4	SSC18	67741
1/4	1/2	5/16	SSC25	67742
5/16	5/8	11/32	SSC31	67743
3/8	3/4	3/8	SSC37	67744
1/2	1	7/16	SSC50	67745
5/8	1-1/8	1/2	SSC62	67746
3/4	1-1/4	9/16	SSC75	67747
7/8	1-1/2	9/16	SSC87	67748
1	1-1/2	5/8	SSC100	67749
1-1/8	1-3/4	5/8	SSC112	67784
1-1/4	2	11/16	SSC125	67785
1-1/2	2-1/4	3/4	SSC150	67788
1-3/4	2-5/8	7/8	SSC175	67789
2	3	7/8	SSC200	67790



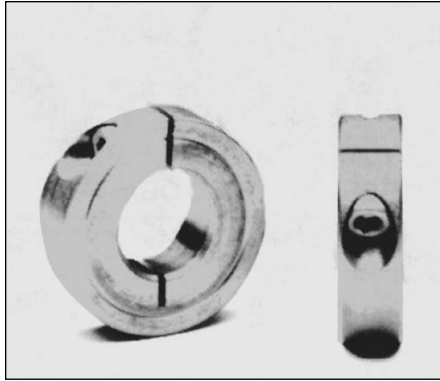
## Standard Tolerances

Dimensions	Tolerance
Bore 1/8-1	-.001/ + .003
Bore 1-1/8-2	-.001/ + .004

## Materials

Stainless Steel—Type 303 Austenitic.

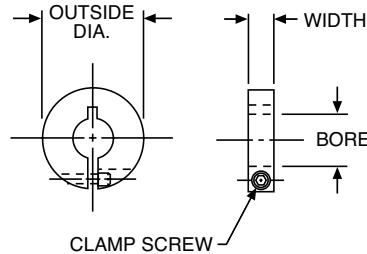
## Smooth Bore



**Design Provides Convenient Setting, Adjusting and Removal** prevents shaft damage.

**OSHA Conformance** collars have completely recessed screw head.

**Bore From 1/8" to 2"**



All Dimensions in Inches

Order By Catalog Number or Item Code

Bore	O.D.	Width	Clamp Screws	Stainless Steel	
				Catalog Number	Item Code
1/8	13/16	1/4	4-40	CSSC12	49094
3/16				CSSC18	49095
1/4				CSSC25	49096
5/16				CSSC31	49097
3/8	1-1/16	5/16	6-32	CSSC37	49098
7/16				CSSC43	49099
1/2	1-1/4	3/8	8-32	CSSC50	49100
9/16				CSSC56	49101
5/8	1-1/2	13/32	10-32	CSSC62	49102
3/4	1-3/4			CSSC75	49104
7/8	1-7/8			CSSC87	49106
15/16		CSSC93	49107		
1	2			CSSC100	49108
1-1/16		CSSC106	49109		
1-1/8	2-1/8	1/2	1/4-28	CSSC112	49110
1-3/16				CSSC118	49111
1-5/16	2-3/8			CSSC143	49115
1-1/2	2-1/2			CSSC150	49116
1-15/16	3-1/4	5/8	5/16-24	CSSC193	49123
2				CSSC200	49124

Dimension in Inches

Bore	Axial Load Capacity (Lbs.)	Screw Size	Recommended Screw Torque (Lb. Ins.)	
			Steel	Stainless Steel
1/8-5/16	400	4-40	20	16
3/8-7/16	600	6-32	30	24
1/2-9/16	1400	8-32	55	35
5/8	1800	10-32	90	72
3/4-1-1/2	4000	1/4-28	220	170
1-15/16-2	6500	5/16-24	435	340

## Materials

Stainless—Type 303 Austenitic

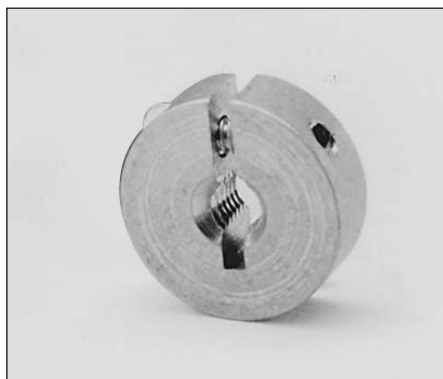
## Load Data

Capacity is based on a standard steel, one-piece collar mounted with recommended screw torque on a lightly oiled shaft. Capacity is load to move collar .010". Data shown is for guidance only. In applications involving control of axial loads, capacity should be determined experimentally on actual parts involved.

## Standard Tolerances

Dimensions		Tolerance
Bore	All	-.000 / +.003

## Threaded Bore



Order By Catalog Number or Item Code

Bore	O.D.	Width	Clamp Screws	Stainless Steel	
				Catalog Number	Item Code
1/4-20	13/16	1/4	4-40	CSSC25-20	49265
3/8-16	1-1/16	5/16	6-32	CSSC37-16	49269
3/8-24				CSSC37-24	49270
1/2-13	1-1/4	3/8	8-32	CSSC50-13	49271
1/2-20				CSSC50-20	49272
5/8-11	1-1/2	13/32	10-32	CSSC62-11	49273
5/8-18				CSSC62-18	49274
3/4-10	1-3/4	1/2	1/4-28	CSSC75-10	49275
3/4-16				CSSC75-16	49276
1-8	2	1/2	1/4-28	CSSC100-8	49279
1-14				CSSC100-14	49280
1-1/4-12	2-1/4	1/2	1/4-28	CSSC125-12	49284

## Materials

Stainless—Type 303 Austenitic

## Bore Threads From 1/4-20UNC To 1-1/4 - 12UNC

# 2SSC Series Stainless Steel Clamping Collars (2-Piece)

E

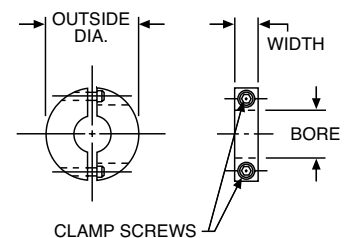
**Design Provides Convenient Setting, Adjusting And Removal**  
prevents shaft damage.

**OSHA Conformance** collars have completely recessed screw head.

**Bores From 1/4" To 2"**

**All Dimensions in Inches**  
**Order By Catalog Number or Item Code**

Bore	O.D.	Width	Clamp Screws	Stainless Steel	
				Catalog Number	Item Code
1/4	13/16	1/4	4-40	2SSC25	49190
5/16				2SSC31	49191
3/8	1-1/16	5/16	6-32	2SSC37	49192
7/16				2SSC43	49193
1/2	1-1/4	3/8	8-32	2SSC50	49194
9/16				2SSC56	49195
5/8	1-1/2	13/32	10-32	2SSC62	49196
11/16				2SSC68	49197
3/4	1-3/4	1/2	1/4-28	2SSC75	49198
7/8	1-7/8			2SSC87	49200
1	2			2SSC100	49202
1-1/16				2SSC106	49203
1-1/8	2-1/8			2SSC112	49204
1-3/16				2SSC118	49205
1-1/4	2-1/4			2SSC125	49206
1-5/16				2SSC131	49207
1-7/16	2-3/8			2SSC143	49209
1-1/2	2-1/2			2SSC150	49210
1-7/8	3-1/4	5/8	5/16-24	2SSC187	49216
1-15/16				2SSC193	49217
2				2SSC200	49218



## Standard Tolerances

Dimensions		Tolerance
Bore	All	-.000 / +.003

## Materials

Stainless—Type 303 Austenitic

## Load Data

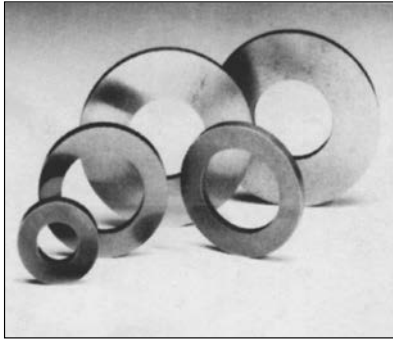
Capacity is based on a standard, one-piece collar mounted with recommended screw torque on a lightly oiled shaft. Capacity is load to move collar .010".

Data shown is for guidance only. In applications involving control of axial loads, capacity should be determined experimentally on actual parts involved.

## Dimension in Inches

Bore	Axial Load Capacity (Lbs.)	Screw Size	Recommended Screw Torque (Lb. Ins.)
			Stainless Steel
1/4-5/16	400	4-40	16
3/8-7/16	600	6-32	24
1/2-9/16	1400	8-32	35
5/8-11/16	1800	10-32	72
3/4-1-1/2	4000	1/4-28	170
1-7/8-2	6500	5/16-24	340

## Thrust Washer Only



### Hardened and Ground Stainless Steel Bore Sizes From 3/16" to 1/2"

All Dimensions in Inches  
Order By Catalog Number or Item Code

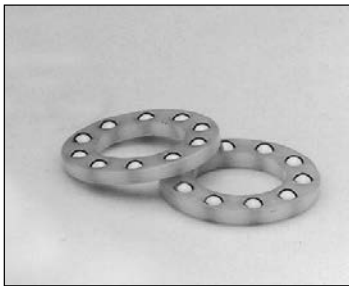
Bore	O.D.	Thickness	Catalog Number
Stainless Steel†			
3/16	7/16	1/16	06760
1/4	9/16	1/16	06762
5/16	5/8	5/64	06764
3/8	11/16	3/32	06766
1/2	7/8	1/8	06770

†These washers also listed with SAO Bearings.

## Standard Tolerances

Dimensions	Tolerance
Bore	+ .0015 + .0070
O.D.	+ .000 - .005
Thickness	+ .000 - .005

## Thrust Washers & Thrust Ball Bearing



### Hardened Stainless Steel — SAO Series For Light Loads

**High Quality Hardened Steel Balls**, retained in a nylon cage.

**Hardened Thrust Washers**, are ground both sides to provide smooth, flat, parallel ball raceway surfaces.

**Quality and Number Of Balls** assure high load carrying capacity.

**Nylon Retainer** assures minimum frictional losses.

## Standard Tolerances

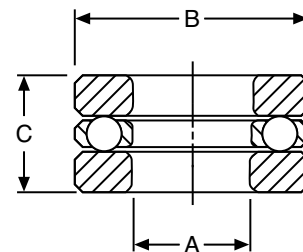
Dimensions	Tolerance
A*	All +.002 + .007
B	All +.000 - .005
C	All +.000 - .010

\*SAO 16 +.002 to +.010

## Load Data

The indicated load ratings are based on 2500 hours average life ( $L_{50}$ ). To determine the load ratings at 3500 and 5000 hours, 90 percent and 80 percent respectively, of the above ratings should be used.

Basic Bearing Number	Thrust Capacity (lbs.)			
	Revolutions Per Minute			
	50	100	500	1000
SAO1	30	25	14	11
SAO5	64	56	31	25
SAO8	68	60	34	27
SAO10	85	72	42	32
SAO16	250	125	70	58



### All Dimensions in inches Order by Item Code (2 Washers and 1 Nylon Cage)

A	B	C	Balls		Basic Bearing Number	SAO Series Stainless Steel	
			Number	Diameter		Washer	Nylon Cage
3/16	7/16	3/16	9	1/16	SAO1	06760	56813
1/4	9/16	7/32	10	3/32	SAO5	06762	56814
5/16	5/8	1/4	10	3/32	SAO8	06764	56815
3/8	11/16	9/32	12	3/32	SAO10	06766	56816
1/2	7/8	3/8	10	1/8	SAO16	06770	56818