

#### 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



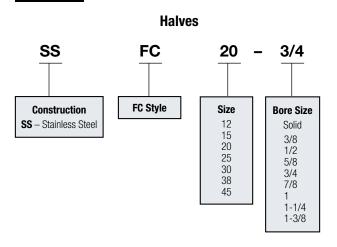
### **SAO Series - Thrust Washers & Thrust Ball Bearings**

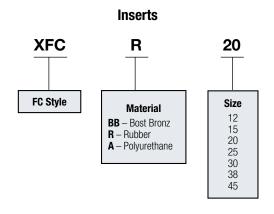
- Hardened and ground surface
- · Ideal as a radial bearing surface
- Negligible friction when used as a set with thrust bearing sandwiched between 2 thrust washers

## **Stainless Steel Couplings, Universal Joints & Shaft Accessories**

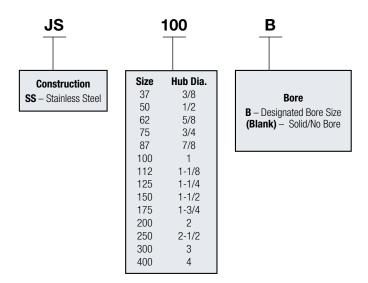
## **Ordering Information**

### Couplings

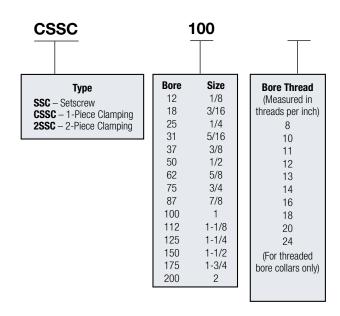




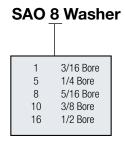
### **Universal Joints**



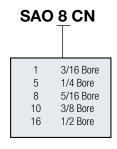
### **Collars**



#### **Thrust Washers**



#### **Thrust Ball Bearings**



**Performance** 

- 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			Maximu	m Horsep	oower Rat	ing at RPM	*		Misalignment 1	olerances	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	_		.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	_	_	_	.001	.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 RUBI	BER INSER	TS				
SSFC12		0.10	0.31	0.71	0.90	1.2	1.8	3.6		.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	.002	.066	450	
SSFC30	_	1.3	3.8	8.8	11.0	14.6	22.2	43.8		.078	800	
SSFC38 SSFC45		2.5	7.6 13.3	17.5 30.7	22.1 38.7	29.2 51.1	44.4 77.7	_		.097	1600	
55FC45	_	4.4	13.3	30.7		A POLYURI		SERTS		.117	2800	
SSFC12	0.09	0.19	0.56	1.2	1.6	2.0	3.0	5.7		.022	125	
SSFC15	0.09	0.19	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	.002	.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	

<sup>\*</sup>For uniform load.

#### **Selection Procedure**

- 1. From Table select Service Factor.
- Determine Design Load
   Design HP = Application HP x S.F.
   or

Design Torque = Application Torque  $\times$  S.F.

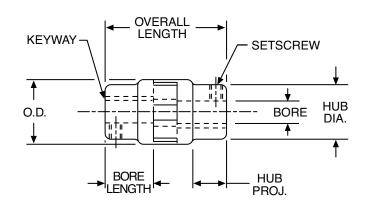
Select coupling size from Load Rating
 Table which has a rating equal to or greater than the design load

### **COUPLING SERVICE FACTOR**

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

## **SSFC Series Stainless Steel Couplings**

## **Dimensions**





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

To order complete coupling order two coupling halves and one coupling insert

	Dimensions (in)							Coupling H	alves			Inse	rt					
Coupling	Ma	Max.	Bore		Overall	Н	ub	Assy.	Standard	Standard	Catalog	Item	Bost-Bronz		Rub	ber	Polyure	thane
Size	Bore	Bore	Length *	OD	Length **	Dia.	Proj.	Clearance	Keyway Size	Setscrew Size	Number	Code	Catalog Number	Item Code	Catalog Number	Item Code	Catalog Number	Item Code
	SOLID		N/A						N/A	N/A	SSFC12 SOLID	G89785						
SSFC12	3/8	5/8	-	1-1/4	2-5/16	1	5/8	3-3/16	3/32 × 3/64	10-32	SSFC12-3/8	G89783	XFCBB12	08064	XFCR12	08078	XFCA12	08050
	1/2		27/32						1/8 × 1/16	1/4-20	SSFC12-1/2	G89784						
	SOLID		N/A						N/A	N/A	SSFC15 SOLID	G89789						
005045	1/2	7/8		1	0.0/4		0/4	0.0/4	1/8 × 1/16	1/4-20	SSFC15-1/2	G89786	VEODDAE	00000	VEOD45	00000	XFCA15	00050
SSFC15	5/8	//8	1-1/32	1-1/2	2-3/4	1-1/4	3/4	3-3/4	3/16 × 3/32	5/16-18	SSFC15-5/8	G89787	XFCBB15	08066	XFCR15	00000		08052
	3/4								3/16 × 3/32	5/16-18	SSFC15-3/4	G89788						
	SOLID		N/A						N/A	N/A	SSFC20 SOLID	G89794				08082	XFCA20	08054
	5/8								3/16 × 3/32	5/16-18	SSFC20-5/8	G89790		08068	58 XFCR20			
SSFC20	3/4	1-1/8	1-7/16	2	3-11/16	1-3/4	1-1/8	4-13/16	3/16 × 3/32	5/16-18	SSFC20-3/4	G89791	XFCBB20					
	7/8		1-7/10						3/16 × 3/32	5/16-18	SSFC20-7/8	G89792						
	1								1/4 × 1/8	3/8-16	SSFC20-1	G89793						
	SOLID		N/A						N/A	N/A	SSFC25 SOLID	G89798						
SSFC25	3/4	1-3/8		2-1/2	4-1/8	2-1/4	1-1/4	5-3/8	3/16 × 3/32	5/16-18	SSFC25-3/4	G89795	XFCBB25	08070	YECR25	08084	XFCA25	08056
001 020	1	1-5/0	1-19/32	2-1/2	4-1/0	2-1/4	1-1/4	3-3/0	1/4 × 1/8	3/8-16	SSFC25-1	G89796	IN ODDZO	00070	XI 01120	00004	AI OAZO	00000
	1-1/4								1/4 × 1/8	3/8-16	SSFC25-1-1/4	G89797						
	SOLID		N/A						N/A	N/A	SSFC30 SOLID	G89802	1					
SSFC30	1	1-5/8		3	5-15/32	2-3/4	1-11/16	7	1/4 × 1/8	3/8-16	SSFC30-1	G89799	XFCBB30	08072	XFCR30	08086	XFCA30	08058
	1-1/4		2-5/32					·	1/4 × 1/8	3/8-16	SSFC30-1-1/4	G89800						
005055	1-3/8	4 7 /0	11/4	0.0/:	0.5/45	0.4/5	1 7/6	0.0445	5/16 × 5/32	7/16-14	SSFC30-1-3/8	G89801	VEODD	0007:	VEODES	00005	VE0.4.6.5	22225
SSFC38	SOLID	1-7/8		_	6-5/16	-	1-7/8	8-3/16	N/A	N/A	SSFC38 SOLID	G89809	XFCBB38				XFCA38	
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".



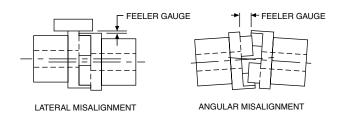
Contact the factory for bore sizes not listed above. Inch and metric options available.

### **Installation & Maintenance**

### **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 FC - Urethane Insert FC - Rubber Insert	.001 .002 .002	See Chart Below

#### 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

## **JS Series Stainless Steel Universal Joints**

### **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.

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

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

#### **Speed-Angle Factors**

Speed in					Operatir	ng Angle	- Degree	es (Devia	tion Fror	n Straigh	nt Line)				
RPM	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

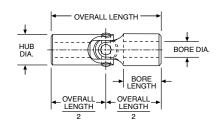
<b>Catalog Number</b>	JS37	JS50	JS62	JS75	JS87	JS100	JS112	JS125	JS150	JS175	JS200	JS250	JS300	JS400
Torque – Lb. Ins.	6	24	50	96	110	180	200	310	500	750	1320	1900	3100	7360

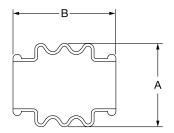
## **Dimensions**

## Pin and Block Type; Stainless Steel

### **Standard Tolerances**

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





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

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

<sup>\*</sup>Approximate Hub Projection

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

<sup>\*\*</sup>Style B includes bore only. Units without a B letter have a solid bore.

<sup>††</sup> Assemble the boot to be positioned central to the joint.

The shape of the boot may vary from the image shown above.

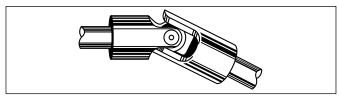


## **JS Series Stainless Steel Universal Joints**

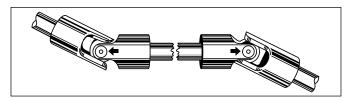
### **Installation & Maintenance**

#### 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.

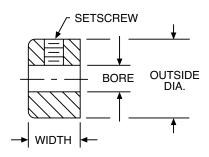
It is in these instances when the Boot Kits become a desirable alternative. For satisfactory performance, all booted joints should be used with a LITH-EP-000 grease for an ambient temperature range of 40° to 225°F.

#### **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.





#### **Standard Tolerances**

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

#### **Materials**

Stainless Steel-Type 303 Austenitic.

#### 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.

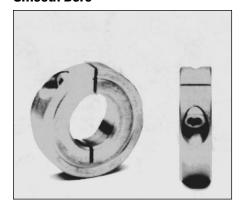
All Collars Complete with Standard Hollow Point Setscrews.

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

			Stainle	ss Steel
Bore	Outside Diameter	Width	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

## **CSSC Series Stainless Steel Clamping Collars (1-Piece)**

#### **Smooth Bore**



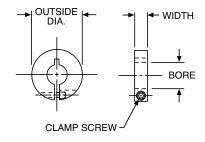
### All Dimensions in Inches Order By Catalog Number or Item Code

				Stainless	Steel
Bore	0.D.	Width	Clamp Screws	Catalog Number	Item Code
1/8				CSSC12	49094
3/16	13/16	1/4	4-40	CSSC18	49095
1/4	13/10	1/4	4-40	CSSC25	49096
5/16				CSSC31	49097
3/8	4 4/40	E/40	0.00	CSSC37	49098
7/16	1-1/16	5/16	6-32	CSSC43	49099
1/2	1 1/4	0./0	8-32	CSSC50	49100
9/16	1-1/4	3/8	0-32	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	1-7/8			CSSC93	49107
1	2			CSSC100	49108
1-1/16	2			CSSC106	49109
1-1/8	2-1/8	1/2	1/4-28	CSSC112	49110
1-3/16	2-1/8	1/2	1/4-28	CSSC118	49111
1-5/16	2-3/8			CSSC143	49115
1-1/2	2-1/2			CSSC150	49116
1-15/16	2 1/4	5/8	E/16 04	CSSC193	49123
2	3-1/4	5/8	5/16-24	CSSC200	49124

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

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

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



#### **Dimension in Inches**

(Lbs.)         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	Bore	Axial Load Capacity	oad Screw		Recommended Screw Torque (Lb. Ins.)		
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				Steel			
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	1/8-5/16	400	4-40	20	16		
5/8         1800         10-32         90         72           3/4-1-1/2         4000         1/4-28         220         170	3/8-7/16	600	6-32	30	24		
3/4-1-1/2 4000 1/4-28 220 170	1/2-9/16	1400	8-32	55	35		
0.1.02	5/8	1800	10-32	90	72		
1 15/16 0 6500 5/16 04 405 040	3/4-1-1/2	4000	1/4-28	220	170		
1-13/10-2   0300   3/10-24   433   340	1-15/16-2	6500	5/16-24	435	340		

#### **Standard Tolerances**

Dimer	nsions	Tolerance
Bore	All	000 / +.003

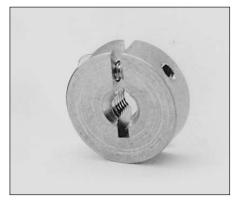
#### **Materials**

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.

### **Threaded Bore**



### **Order By Catalog Number or Item Code**

				Stainless Steel											
Bore	0.D.	Width	Clamp Screws	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	1-1/10	3/10	0-32	CSSC37-24	49270										
1/2-13	1-1/4	3/8 8-	2/0	2/0	1 1/4 2/9	8-32	CSSC50-13	49271							
1/2-20	1-1/4		0-32	CSSC50-20	49272										
5/8-11	1-1/2	13/32	10-32	CSSC62-11	49273										
5/8-18	1-1/2	13/32	10-32	CSSC62-18	49274										
3/4-10	1-3/4	1/2	1/4-28	CSSC75-10	49275										
3/4-16	1-3/4	1/2	1/2	1/4-20	CSSC75-16	49276									
1-8	2 1/2	1/2	1/4-28	CSSC100-8	49279										
1-14		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2 1/4	1/4-20	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

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

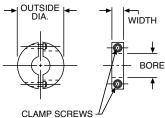
**OSHA Conformance** collars have completely recessed screw head.

Bores From 1/4" To 2"

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

			01	Stainless Steel						
Bore	0.D.	Width	Clamp Screws	Catalog Number	Item Code					
1/4	13/16	1/4	4-40	2SSC25	49190					
5/16	13/10	1/4	4-40	2SSC31	49191					
3/8	1-1/16	5/16	6-32	2SSC37	49192					
7/16	1-1/10	5/16	0-32	2SSC43	49193					
1/2	1-1/4	3/8	8-32	2SSC50	49194					
9/16	1-1/4	3/6	0-32	2SSC56	49195					
5/8	1-1/2	13/32	1.1/0 10/00 10.00	2SSC62	49196					
11/16	1-1/2		13/32 10-32	2SSC68	49197					
3/4	1-3/4			2SSC75	49198					
7/8	1-7/8			2SSC87	49200					
1	2			2SSC100	49202					
1-1/16	2			2SSC106	49203					
1-1/8	2-1/8	1 /0	1/0	1/0	1/2	1/2 1/4-28	2SSC112	49204		
1-3/16	2-1/0	1/2	1/4-20	2SSC118	49205					
1-1/4	2-1/4			2SSC125	49206					
1-5/16	2-1/4			2SSC131	49207					
1-7/16	2-3/8			2SSC143	49209					
1-1/2	2-1/2			2SSC150	49210					
1-7/8				2SSC187	49216					
1-15/16	3-1/4	5/8	5/8	5/8	5/8	5/8	5/8	5/8 5/16-24	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, onepiece 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
1/4-5/16	400	4-40	Steel 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

## **SAO Stainless Steel Thrust Washers & Thrust Ball Bearings**

#### **Thrust Washer Only**



#### **Standard Tolerances**

Dimensions	Tolerance
Bore	+.0015 + .0070
O.D.	+.000005
Thickness	+.000005

# 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	0.D.	Thickness	Catalog Number
	Stainles	s 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.

#### **Thrust Washers & Thrust Ball Bearing**



#### **Standard Tolerances**

Dimensions		Tolerance
A*	All	+.002 + .007
В	All	+.000005
С	All	+.000010

\*SAO 16 +.002 to +.010

#### **Load Data**

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

Basic	Thrust Capacity (lbs.)						
Bearing	Revolutions Per Minute						
Number	50	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			

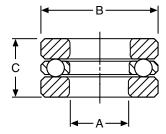
# Hardened Stainless Steel — SAO Series For Light Loads

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.



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

A	В	C	Ва	lls Basic Bearing			Series ss Steel
			Number	Diameter Number	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

## BOSTON GEAR AND BAUER GEAR MOTOR PROVIDE POWER TRANSMISSION SOLUTIONS FOR THE FOOD AND BEVERAGE INDUSTRY

Tightened federal regulations regarding food safety and hygiene in food processing and beverage industries has led producers to continue to adapt their equipment to meet those changing requirements.

The areas in production facilities where drive systems are located are often the areas that have the most stringent requirements for hygiene and sanitation, due to their proximity to the food product. The key to food safety is prevention of microbial contamination and bacteria growth. Equipment in these areas needs to be resistant to alkali or acid based cleaning agents and disinfectants.



For installations where the drive system is located at or above the food product, there is a higher risk of product contamination due to rigorous cleaning standards. For these installations special attention must be given to drive design & materials, so that bacterial growth on surfaces will be avoided. Drive systems with the most extreme protection are often utilized in these applications. Stainless steel exterior materials, rounded edges, domed crowns, and enhanced sealing are critical design features that will ensure long equipment life, the sustainability of your process and the safety of your product.

Some producers use highly caustic wash down solutions; others use high-pressure hot water. Equipment can also be exposed to process by-products such as sugar, seasonings, brines, or animal blood. Whatever challenges the integrity of your drive system, Regal Rexnord has a solution for you. The family of gearing & motor products manufactured by Boston Gear and Bauer Gear Motor provide the level of protection needed for the harsh elements increasingly used in the prevention of microbial contamination and bacterial growth in hygiene sensitive environments.

#### www.BostonGear.com



Scan to visit the Food and Beverage Website



Scan to visit Boston Gear's Stainless Steel Website



Scan to visit Bauer Gear Motor's HiflexDRIVE Product Page

#### **Boston Gear Facilities**

#### **North America**

IISΔ

701 Carrier Drive Charlotte, NC 28216 - USA 704-588-5610 Enclosed and Open Gearing, Electrical and Mechanical P.T. Components

**Customer Service** 1-888-999-9860

**Application Support** 1-800-816-5608



Scan to see all the brands of Regal Rexnord

Neither the accuracy nor completeness of the information contained in this publication is guaranteed by the company and may be subject to change in its sole discretion. The operating and performance characteristics of these products may vary depending on the application, installation, operating conditions and environmental factors. The company's terms and conditions of sale can be viewed at https://www.bostongear.com/resources/terms-and-conditions. These terms and conditions apply to any person who may buy, acquire or use a product referred to herein, including any person who buys from a licensed distributor of these branded products.

©2023 by Boston Gear LLC. All rights reserved. All trademarks in this publication are the sole and exclusive property of Boston Gear LLC or one of its affiliated companies.

