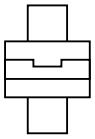
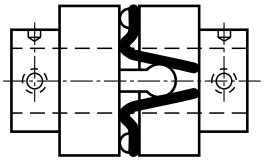
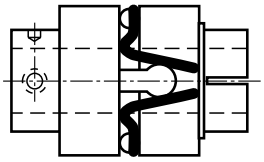


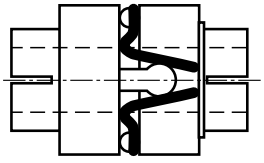
ENGINEERING DATA

A newly developed zero backlash coupling providing many features has been introduced by SECS engineering department. This unique coupling was patented by SECS and is now available on an immediate delivery basis. The coupling will operate under a misalignment condition of approximately 5° without adversely affecting shafts and bearings. It has been designed for use under constant as well as variable velocity without being damaged by the force imposed from the driving shaft. Another object of our design is to provide a zero backlash coupling which is reliable and has a predictable performance under widely varying conditions. Dependably transmitting torque under circumstances where the shaft has either angular misalignment or combined parallel misalignment, axial shaft motion, torsional or other vibrations, the coupling will act to dampen these conditions.

The coupling requires no lubrication and is adaptable to high speeds. It is not adversly affected by high or low temperatures and has equal performance characteristics when driving in either direction.

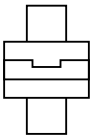


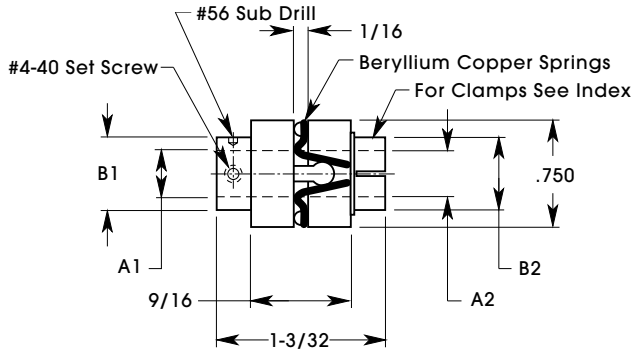




PRECISION ANTI-BACKLASH COUPLING

Combination Type
Shaft .1200 thru 1/4
303 Stainless Steel–Clear Passivated

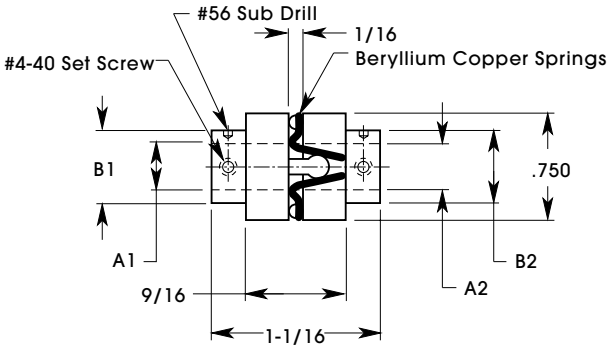




U.S. Patent No. 3,286,489

A1	B1	A2 +.0005	B2	CATALOG NUMBER
.1200		.1200		CCA1
.1248		.1248		CCA2
.1873		.1873		CCA3
.2498		.2498		CCA4
.1200		.1248		CCA5
.1200		.1873		CCA6
.1200		.2498		CCA7
.1248		.1873		CCA8
.1248		.2498		CCA9
.1873		.2498		CCA10
.1248		.1200		CCA11
.1873		.1200		CCA12
.2498		.1200		CCA13
.1873		.1248		CCA14
.2498		.1248		CCA15
.2498		.1873		CCA16

Pin Type
Shaft .1200 thru 1/4
303 Stainless Steel–Clear Passivated

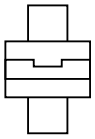


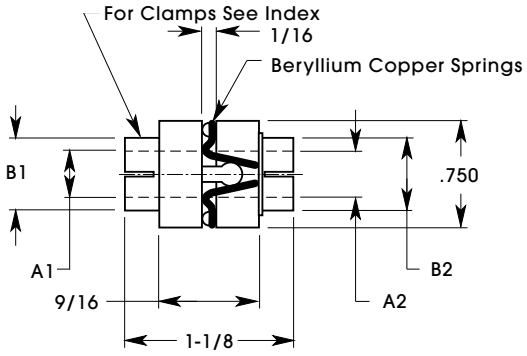
U.S. Patent No. 3,286,489

A1	B1	A2 +.0005	B2	CATALOG NUMBER
.1200	5/16	.1200	5/16	PCA1
.1248	5/16	.1248	5/16	PCA2
.1873	7/16	.1873	7/16	PCA3
.2498	7/16	.2498	7/16	PCA4
.1200	5/16	.1248	5/16	PCA5
.1200	5/16	.1873	7/16	PCA6
.1200	5/16	.2498	7/16	PCA7
.1248	5/16	.1873	7/16	PCA8
.1248	5/16	.2498	7/16	PCA9
.1873	7/16	.2498	7/16	PCA10

PRECISION ANTI-BACKLASH COUPLING

Clamp Type
Shaft .1200 thru 1/4
303 Stainless Steel–Clear Passivate



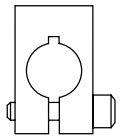


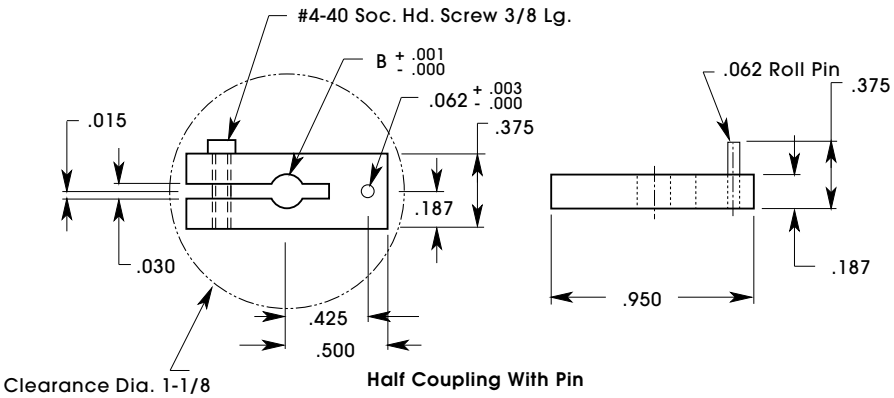
U.S. Patent No. 3,286,489

A1	B1	A2 +.0005	B2	CATALOG NUMBER
.1200	.188	.1200	.188	CAC1
.1248	.188	.1248	.188	CAC2
.1873	.250	.1873	.250	CAC3
.2498	.313	.2498	.313	CAC4
.1200	.188	.1248	.188	CAC5
.1200	.188	.1873	.250	CAC6
.1200	.188	.2498	.313	CAC7
.1248	.188	.1873	.250	CAC8
.1248	.188	.2498	.313	CAC9
.1873	.250	.2498	.313	CAC10

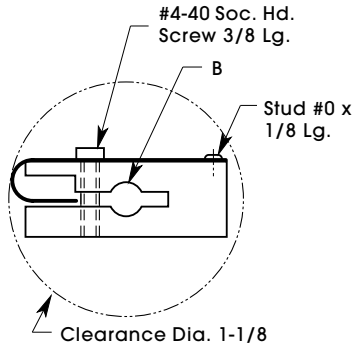
COUPLING COMBINATION ASSEMBLY

Combination Type
Shaft .093 thru 1/4
Aluminum 2024T–Chromic Acid Anodize





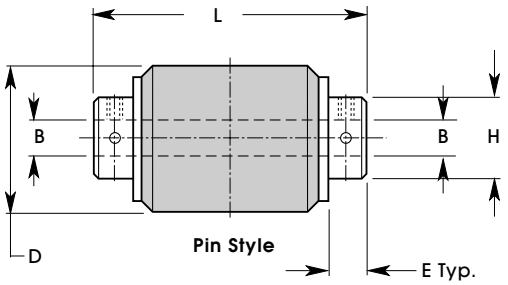
Half Coupling With Pin



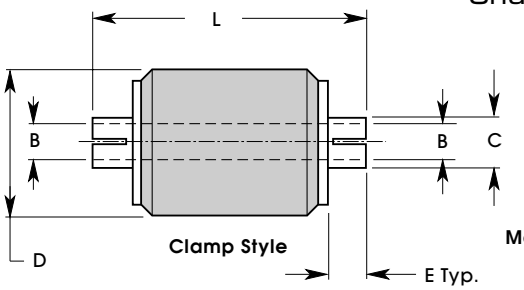
Half Coupling With Spring

B	CATALOG NUMBER
.125	SCH30
.187	SCH31
.250	SCH32
.313	SCH33

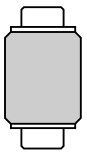
B	CATALOG NUMBER
.093	SCH34
.120	SCH35
.125	SCH36
.156	SCH37
.187	SCH38
.241	SCH39
.250	SCH40



Pin Style

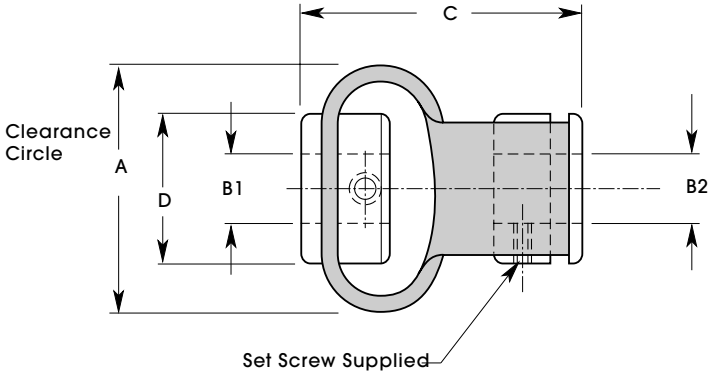


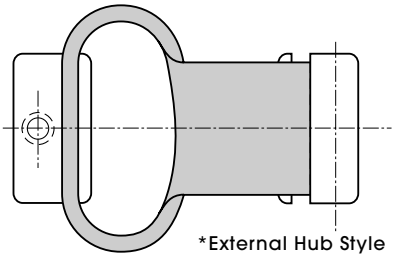
Clamp Style

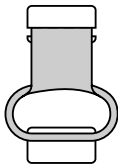


Material:
Hubs – Stainless Steel
Flexible Material –Neoprene

B	H	C +.000 -.003	D	E	L	MAX WORKING TORQUE (IN OZ)	MAX MISALIGNMENT		CATALOG NUMBER/STYLE	
							PARALLEL	ANGULAR	PIN	CLAMP
.1200 .2498	.31 .50	.187 .312	.81	.25	1.25	150	.005	1°	SE41OC-9	SE51OC-9
.1248 .1248	.31 .31	.187 .187							SE41OC-1	SE51OC-1
.1248 .1873	.31 .38	.187 .250							SE41OC-4	SE51OC-4
.1248 .2498	.31 .50	.187 .312							SE41OC-2	SE51OC-2
.1873 .2498	.38 .50	.250 .312							SE41OC-6	SE51OC-6
.2498 .2498	.50 .50	.312 .312							SE41OC-3	SE51OC-3
.3123 .3123	.50 .50	.375 .375							SE41OC-11	SE51OC-11
.3748 .3748	.63 .63	.437 .437							SE41OC-12	SE51OC-12







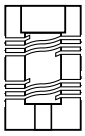
Material:
Hubs – Stainless Steel
Flexible Material –Neoprene

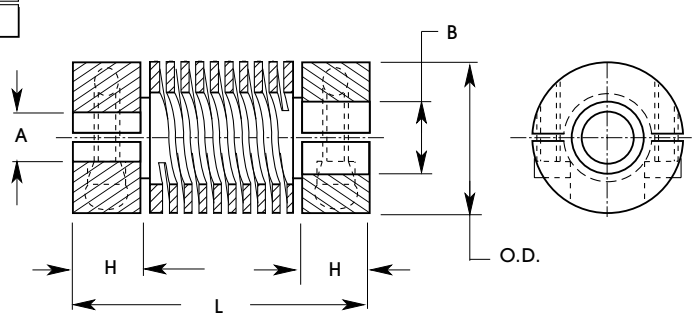
B1	B2 +.002 -.000	A	C	D	MAX WORKING TORQUE (IN OZ)	MAX MISALIGNMENT		CATALOG NUMBER
						PARALLEL	ANGULAR	
.187 .250 .312 .375	.187 .250 .312 .375	1.12	1.12	.69	48	.094	10°	SE3CC-10* SE3CC-11* SE3CC-12* SE3CC-13*
.250 .312 .375 .500	.250 .312 .375 .500	1.88	1.75	1.00	192	.125	15°	SE3CC-1 SE3CC-2 SE3CC-3 SE3CC-5
.375 .500 .562 .625	.375 .500 .562 .625	2.12	2.12	1.25	448	.187	15°	SE3CC-4 SE3CC-6 SE3CC-16 SE3CC-8
.500 .625	.500 .625	2.12	2.38	1.25	640	.125	15°	SE3CC-7 SE3CC-9

COUPLINGS *BEAMED*

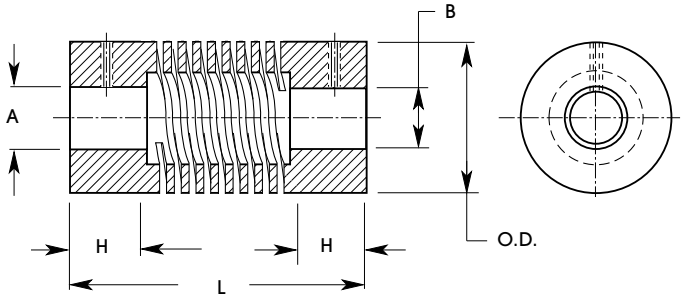
2024 Aluminum • 303 Stainless Steel
Shafts 3/32" thru 5/8"

Set Screw Style • Integral Clamp Style





Integral Clamp Style



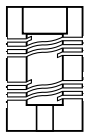
Set Screw Style

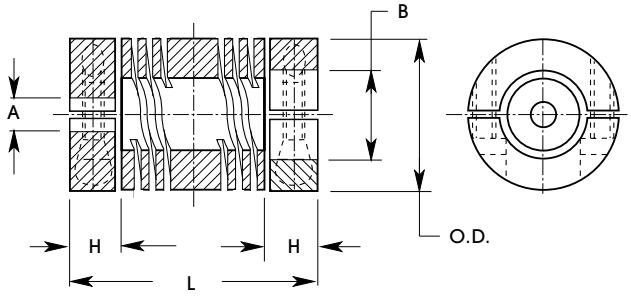
A = 2024 Aluminum
S = 303 Stainless Steel

A	B +.002 -.000	O.D.	L MAX	H	MAX WORKING TORQUE (IN LBS)		MAX MISALIGNMENT		CATALOG NUMBER/STYLE	
					STEEL	ALUMINUM	PARALLEL	ANGULAR	SET SCREW	CLAMP
.094	.094	.38	.56	.11	4	3.5	.004		SE17OC*-1	———
.094	.094	.50	.75	.21	9	8	.005		SE37OC*-1	SE27OC*-1
.094	.125								SE37OC*-2	SE27OC*-2
.125	.125								SE37OC*-3	SE27OC*-3
.125	.125	.63	.80	.24	16	13	.005		SE57OC*-1	SE47OC*-1
.125	.157								SE57OC*-2	SE47OC*-2
.125	.188								SE57OC*-3	SE47OC*-3
.157	.157								SE57OC*-4	SE47OC*-4
.157	.188								SE57OC*-5	SE47OC*-5
.188	.188								SE57OC*-6	SE47OC*-6
.125	.125	.75	.90	.28	24	22	.005		SE77OC*-1	SE67OC*-1
.125	.157								SE77OC*-2	SE67OC*-2
.125	.188								SE77OC*-3	SE67OC*-3
.125	.250								SE77OC*-4	SE67OC*-4
.157	.157								SE77OC*-5	SE67OC*-5
.157	.188								SE77OC*-6	SE67OC*-6
.157	.250								SE77OC*-7	SE67OC*-7
.188	.188								SE77OC*-8	SE67OC*-8
.188	.250								SE77OC*-9	SE67OC*-9
.250	.250								SE77OC*-10	SE67OC*-10
.250	.250	1.00	1.25	.33	54	36	.005		SE97OC*-1	SE87OC*-1
.250	.313								SE97OC*-2	SE87OC*-2
.250	.375								SE97OC*-3	SE87OC*-3
.313	.313								SE97OC*-4	SE87OC*-3
.313	.375								SE97OC*-5	SE87OC*-5
.375	.375								SE97OC*-6	SE87OC*-6
.250	.250	1.25	1.75	.44	93	62	.005		SE18OC*-1	SE08OC*-1
.250	.375								SE18OC*-2	SE08OC*-2
.250	.500								SE18OC*-3	SE08OC*-3
.250	.625								SE18OC*-4	SE08OC*-4
.375	.375								SE18OC*-5	SE08OC*-5
.375	.500								SE18OC*-6	SE08OC*-6
.375	.625								SE18OC*-7	SE08OC*-7
.500	.500								SE18OC*-8	SE08OC*-8
.500	.625								SE18OC*-9	SE08OC*-9
.625	.625								SE18OC*-10	SE08OC*-10

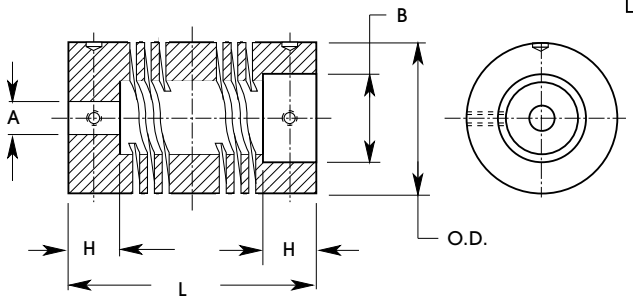
5°

* Add an "A" or "S" to Basic Part Number for Material





Integral Clamp Style



Set Screw Style

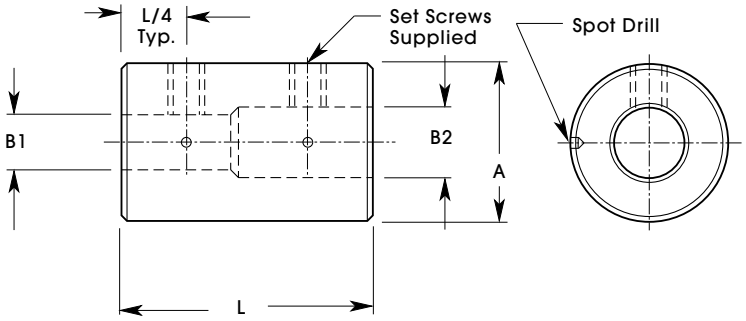
A = 2024 Aluminum
S = 303 Stainless Steel
D = Delrin

	A +.0005 -.0000	B +.0005 -.0000	O.D.	L			H			MAX WORKING TORQUE			MAX MISALIGNMENT		CATALOG NUMBER/STYLE	
				S	A	D	S	A	D	STEEL (IN LBS)	ALUMINUM (IN LBS)	DELRIN (IN OZ)	PARALLEL	ANGULAR	SET SCREW	CLAMP
A,S	.1200 .1248 .1248 .1873	.1248 .1248 .1873 .1873	.375	.770	.770	—	.23	.23	—	7	4	—	.005	5°	SE63OC*-1 SE63OC*-2 SE63OC*-3 SE63OC*-4	SE73OC*-1 SE73OC*-2 SE73OC*-3 SE73OC*-4
A,S,D	.1200 .1248 .1873 .2498	.1248 .1248 .1873 .2498	.500	1.000	.900	.900	.27	.27	.27	13	9	35	.007		SE83OC*-1 SE83OC*-2 SE83OC*-3 SE83OC*-4	SE93OC*-1 SE93OC*-2 SE93OC*-3 SE93OC*-4
	.1873 .2498 .2498 3748	.2498 .2498 .3748 .3748	.750	1.100	1.025	1.025	.25	.25	.25	35	23	91	.010	7°	SE04OC*-1 SE04OC*-2 SE04OC*-3 SE04OC*-4	SE14OC*-1 SE14OC*-2 SE14OC*-3 SE14OC*-4
	.2498 .3123 .3748 4998	.2498 .3123 .3748 4998	1.000	1.500	1.500	1.500	.40	.46	.46	71	44	195	.015		SE24OC*-1 SE24OC*-2 SE24OC*-3 SE24OC*-4	SE34OC*-1 SE34OC*-2 SE34OC*-3 SE34OC*-4
	.2498 .3748 .4998 .6248	.3748 .3748 4998 .6248	1.250	2.250	2.250	2.250	.62	.62	.62	111	66	283	.020		SE44OC*-1 SE44OC*-2 SE44OC*-3 SE44OC*-4	SE54OC*-1 SE54OC*-2 SE54OC*-3 SE54OC*-4
	.4998 .6248 .7498	.4998 .6248 .7498	1.500	2.625	2.625	2.625	.71	.71	.71	159	97	424	.020		SE05OC*-1 SE05OC*-2 SE05OC*-3	SE15OC*-1 SE15OC*-2 SE15OC*-3
	.4998 .6248 .7498	.4998 .6248 .7498	1.750	3.000	3.000	3.000	.79	.79	.79	212	133	636	.031		SE25OC*-1 SE25OC*-2 SE25OC*-3	SE35OC*-1 SE35OC*-2 SE35OC*-3
	.7498 .8748 1.0000	.7498 .8748 1.0000	2.250	5.125	5.125	5.125	1.26	1.26	1.26	451	239	1275	.038		SE45OC*-1 SE45OC*-2 SE45OC*-3	SE55OC*-1 SE55OC*-2 SE55OC*-3

* Add an "A" or "S" or "D" to Basic Part Number for Material

COUPLINGS *SLEEVE*

303 Stainless Steel
Shafts 5/64" thru 1"

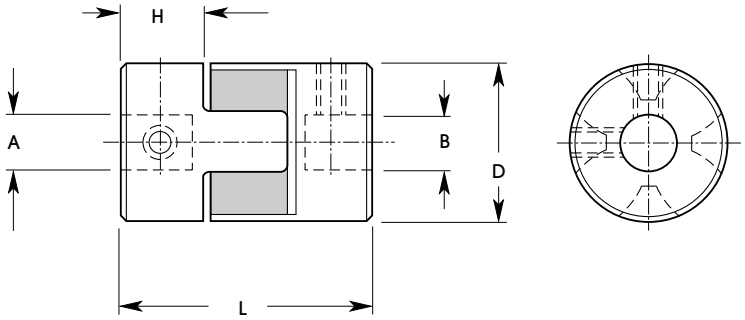


SHAFT SIZE	B1 +.0005 -.0000	B2 +.0005 -.0000	L	A	CATALOG NUMBER
5/64 TO 5/64	.0779	.0779	3/8	7/32	SH-40
3/32 TO 3/32	.0935	.0935	3/8	1/4	SH-41
1/8 TO .120	.1248	.1200	7/16	1/4	SH-24
1/8 TO 1/8	.1248	.1248	7/16	5/16	SH-21
1/8 TO 5/32	.1248	.1562	7/16	1/4	SH-25
1/8 TO 3/16	.1248	.1873	1/2	3/8	SH-26
1/8 TO 1/4	.1248	.2498	9/16	1/2	SH-27
3/16 TO 3/16	.1873	.1873	1/2	3/8	SH-22
3/16 TO .2405	.1873	.2405	1/2	3/8	SH-28
3/16 TO 1/4	.1873	.2498	9/16	1/2	SH-29
1/4 TO 1/4	.2498	.2498	9/16	1/2	SH-23
1/4 TO 5/16	.2498	.3123	9/16	9/16	SH-42

SHAFT SIZE	B1 +.0005 -.0000	B2 +.0005 -.0000	L	A	CATALOG NUMBER
1/4 TO 3/8	.2498	.3748	3/4	3/4	SH-43
5/16 TO 5/16	.3123	.3123	9/16	1/2	SH-44
5/16 TO 3/8	.3123	.3748	3/4	3/4	SH-45
3/8 TO 3/8	.3748	.3748	3/4	3/4	SH-46
3/8 TO 3/8	.3748	.3748	1	3/4	SH-47
3/8 TO 1/2	.3748	.4998	1	1	SH-48
1/2 TO 1/2	.4998	.4998	1	1	SH-49
1/2 TO 1/2	.4998	.4998	1-1/2	1	SH-50
5/8 TO 5/8	.6248	.6248	2	1-1/4	SH-51
3/4 TO 3/4	.7498	.7498	2	1-1/2	SH-52
1 TO 1	.9998	.9998	3	2	SH-53

COUPLINGS *SPIDER*

Hub – Aluminum • *Fexible Material* – Polyurethane
Shafts 1/8" thru 1/2"

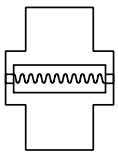


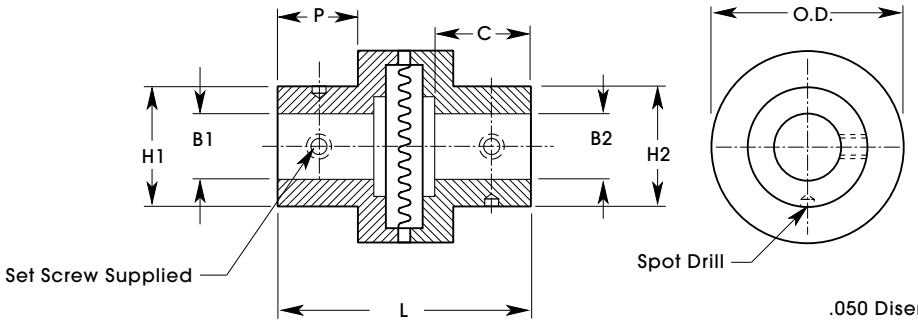
A	B +.002	D	H	L	MAX WORKING TORQUE (I LBS)		MAX MISALIGNMENT		CATALOG NUMBER	
					80 DURO	98 DURO	PARALLEL	ANGULAR	SOFT 80 DURO SPIDER	RIGID 98 DURO SPIDER
.125 .187	.025 .187	.394	.20	.59	2.6	8.6	.031	1°	SE64OC-180	SE64OC-198
.125 .187 .250	.125 .187 .250	.551	.28	.87	12	34	.047		SE74OC-180 SE74OC-280 SE74OC-380	SE74OC-198 SE74OC-298 SE74OC-398
.250 .312 .375	.250 .312 .375	.787	.39	1.18	32	86	.063		SE84OC-180 SE84OC-280 SE84OC-380	SE84OC-198 SE84OC-298 SE84OC-398
.312 .375 .500	.312 .375 .500	1.187	.43	1.36	70	220	.078		SE94OC-180 SE94OC-280 SE94OC-380	SE94OC-198 SE94OC-298 SE94OC-398

PRECISION JAWED **COUPLINGS**

303 Stainless Steel
Shafts 1/8" thru 1/2"

Light Duty





.050 Disengagement
& Assembly Clearance

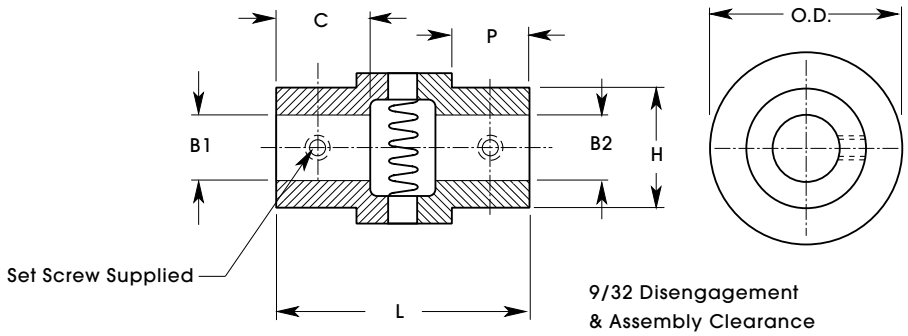
B1	B2 +.0005 -.0000	H1	H2	L	C	P	O.D.	NUMBER OF TEETH	MAX. TORQUE	CATALOG NUMBER
.1200	.1200	.31	.31	.79	.21	.22	17/32	32	.300 OZ IN	SE3MC-4
.1200	.1248	.31	.31							SE3MC-5
.1248	.1248	.31	.31							SE3MC-1
.1248	.1873	.31	.37							SE3MC-6
.1248	.2498	.37	.50							SE3MC-7
.1873	.1873	.37	.37							SE3MC-2
.1873	.2498	.50	.50							SE3MC-8
.2498	.2498	.50	.50							SE3MC-3
.1200	.1248	.31	.31	.87	.21	.25	3/4	48	.500 OZ IN	SE1MC-15
.1248	.1248	.31	.31							SE1MC-2
.1248	.1873	.31	.37							SE1MC-16
.1248	.2498	.31	.50							SE1MC-17
.1873	.1873	.37	.37							SE1MC-3
.1873	.2498	.37	.50							SE1MC-18
.2498	.2498	.50	.50							SE1MC-4
.3123	.3148	.50	.50							SE1MC-5
.3748	.3748	.68	.68	1.50	.43	.31				SE1MC-6
.4998	.4998	.93	.93	1.50	.56	.43	1	64	.900 OZ IN	SE1MC-8

Other Bore Combinations Available on Request

COMMERCIAL JAWED **COUPLINGS**

Cold Rolled Steel
Shafts 3/16" thru 1/2"

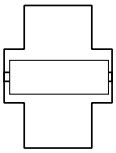
Heavy Duty

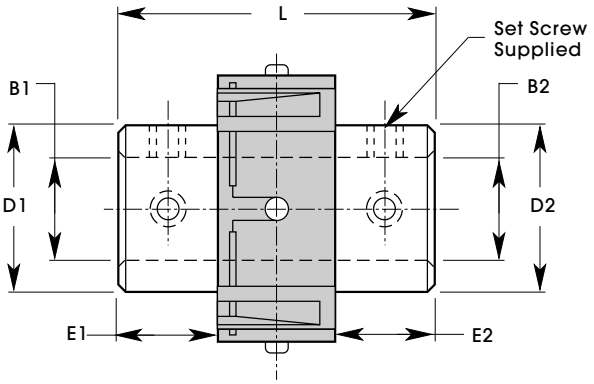


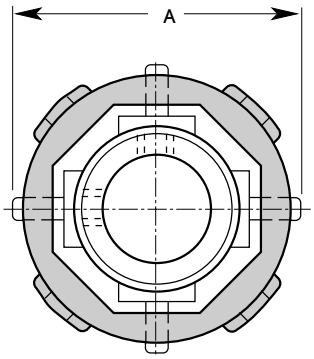
9/32 Disengagement
& Assembly Clearance

	B2 +.002 -.000	O.D.	L	C	H	P	NUMBER OF TEETH	MAX. TORQUE OZ IN	CATALOG NUMBER
3/16	1/4	1/2	1-1/8	1/2	.43	7/16	10	400	SE2MC-3
1/4	5/16	1/2	1-1/8	1/2	.43	7/16	10	400	SE2MC-4
5/16	3/8	3/4	1-1/2	5/8	.68	33/64	10	650	SE2MC-5
3/8	1/2	3/4	1-1/2	5/8	.68	33/64	10	650	SE2MC-6
1/2	3/16	1	2	7/8	.93	3/4	12	1100	SE2MC-8

Pin Hub Style
Shafts 1/8" thru 5/8"







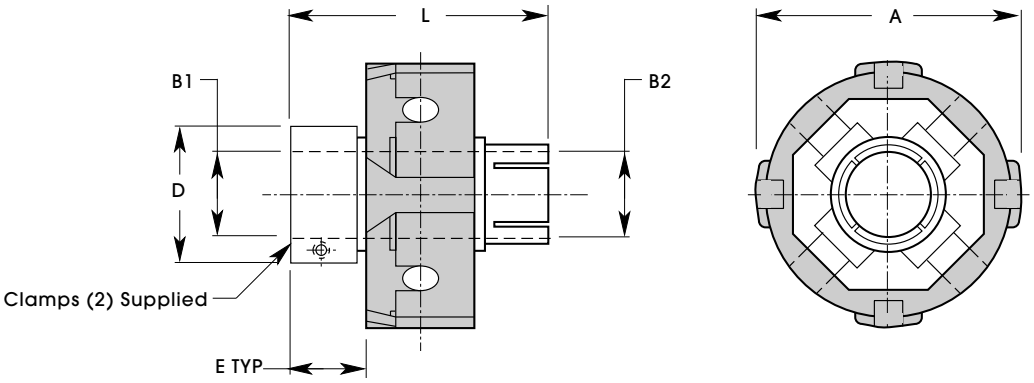
Material:

Outer Ring – Delrin

Hubs – SE32OC & SE62OC Series – Brass
SE52OC &SEX52 – Aluminum

B1	B2 +.002 -.000	D1	D2	E1	E2	L	A	MAX WORKING TORQUE (IN OZ)	MAX MISALIGNMENT		CATALOG NUMBER	
									PARALLEL	ANGULAR		
.120	.125	.35	.35	.16	.16	.56	.72	38	.050	10°	SE62OC-1	STEEL HUB
.125	.125	.35	.35	.16	.16	.56					SE62OC-2	
.125	.157	.35	.35	.16	.16	.56					SE62OC-3	
.125	.187	.35	.35	.16	.16	.56					SE62OC-4	
.125	.250	.35	.44	.16	.26	.66					SE62OC-7	
.157	.157	.35	.35	.16	.16	.56					SE62OC-5	
.157	.250	.35	.44	.16	.26	.66					SE62OC-8	
.187	187	.35	.35	.16	.16	.56					SE62OC-6	
.187	.250	.35	.44	.16	.26	.66					SE62OC-9	
.250	.250	.44	.44	.26	.26	.75					SE62OC-10	
.125	.125	.50	.50	.19	.19	.75	1.06	222**			SE32OC-1	
.125	.187	.50	.50	.19	.19	.75					SE32OC-2	
.125	.250	.50	.50	.19	.19	.75					SE32OC-3	
.157	.157	.50	.50	.19	.19	.75					SE32OC-8	
.187	.187	.50	.50	.19	.19	.75					SE32OC-4	
.187	.250	.50	.50	.19	.19	.75					SE32OC-5	
.187	.375	.50	.59	.19	.31	.88					SE32OC-10	
.250	.250	50	.50	.19	.19	.75					SE32OC-6	
.250	.312	.50	.50	.19	.19	.75					SE32OC-9	
.250	.375	.50	.59	.19	.31	.88					SE32OC-11	
.312	.312	.50	.50	.19	.19	.75					SE32OC-7	
.312	.375	.50	.59	.19	.31	.88					SE32OC-12	
.375	.375	.59	.59	.31	.31	1.00					SE32OC-13	
.250	.250	.69	.69	.30	.30	.99	1.33	444			SEX52OC-1	ALUMINUM HUB
.250	.375	.69	.69	.30	.30	.99					SEX52OC-2	
.375	.375	.69	.69	.30	.30	.99					SEX52OC-3	
.375	.500	.69	.79	.30	.40	1.10					SEX52OC-4	
.500	.500	.79	.79	.40	.40	1.21					SEX52OC-5	
.250	.250	.87	.87	.30	.30	1.12	1.63	607			SE52OC-1	
.250	.312	.87	.87	.30	.30	1.12					SE52OC-2	
.250	.375	.87	.87	.30	.30	1.12					SE52OC-3	
.250	.500	.87	.87	.30	.30	1.12					SE52OC-8	
.312	.312	.87	.87	.30	.30	1.12					SE52OC-4	
.312	.500	.87	.87	.30	.30	1.12					SE52OC-9	
.375	.375	.87	.87	.30	.30	1.12					SE52OC-5	
.375	.500	.87	.87	.30	.30	1.12					SE52OC-6	
.500	.500	.87	.87	.30	.30	1.12					SE52OC-7	
.625	.625	.95	.95	.49	.49	1.50					SE52OC-10	

** Torque Rating is 122 in-oz for SE32OC -10,-11,-12, & -13 Coupling



Material:

Outer Ring – Delrin

Hubs – SE72OC & SE82OC Series – Brass
SE92OC – Aluminum

Clamps – Aluminum

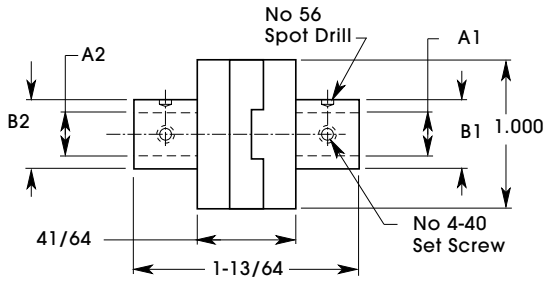
B1	B2 +.002 -.000	D	E	L	A	MAX WORKING TORQUE (IN OZ)	MAX MISALIGNMENT		CATALOG NUMBER	
							PARALLEL	ANGULAR		
.120	.125	.75	.26	.75	.75	38	.050	5°	SE72OC-1	BRASS HUB
.125	.125								SE72OC-2	
.125	.250								SE72OC-3	
.157	.157								SE72OC-4	
.187	.187								SE72OC-5	
.250	.250								SE72OC-6	
.157	.157	1.00	.31	1.00	1.06	222**			SE82OC-1	
.187	.187								SE82OC-2	
.250	.250								SE82OC-3	
.250	.375								SE82OC-4	
.312	.312								SE82OC-5	
.375	.375								SE82OC-6	
.250	.250	.79	.40	1.21	1.33	444			SEX92OC-1	ALUMINUM HUB
.250	.375								SEX92OC-2	
.375	.375								SEX92OC-3	
.250	.250	.95	.49	1.50	1.63	607			SE92OC-1	
.250	.500								SE92OC-2	
.312	.312								SE92OC-3	
.312	.500								SE92OC-4	
.375	.375								SE92OC-5	
.375	.500								SE92OC-6	
.500	.500								SE92OC-7	

** Torque Rating is 122 in-oz for SE82OC-4 &SE82OC-6 Coupling

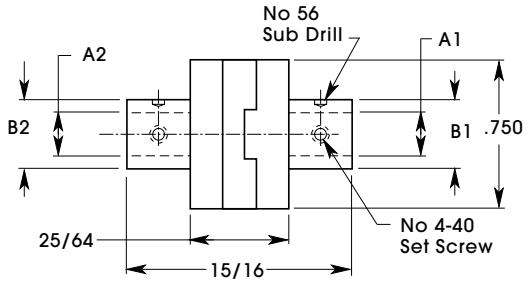
Pin Hub Style — Standard • Miniature
Shafts 1/8" thru 3/8"

303 Stainless Steel – Clear Passivated

Maximum Backlash 5 Minutes of Arc



Standard



Miniature

A1 DIA	B1 DIA	A2 DIA +.0005 -.0000	B2 DIA	CATALOG NUMBER
.1248	5/16	.1248	5/16	OC1
.1873	7/16	.1873	7/16	OC2
.2498	7/16	.2498	7/16	OC3
.3123	7/16	.3123	7/16	OC4
.3748	9/16	.3748	9/16	OC5

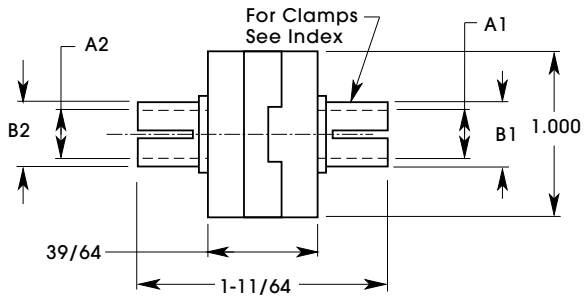
Special Bores and Lengths on Request

A1 DIA	B1 DIA	A2 DIA +.0005 -.0000	B2 DIA	CATALOG NUMBER
.1200	5/16	.1200	5/16	OC6
.1248	5/16	.1248	5/16	OC7
.1873	7/16	.1873	7/16	OC8
.2498	7/16	.2498	7/16	OC9
1200	5/16	.1248	5/16	OC10
.1200	5/16	.1873	7/16	OC11
.1200	5/16	.2498	7/16	OC12
.1248	5/16	.1873	7/16	OC13
.1248	5/16	.2498	7/16	OC14
.1873	7/16	.2498	7/16	OC15

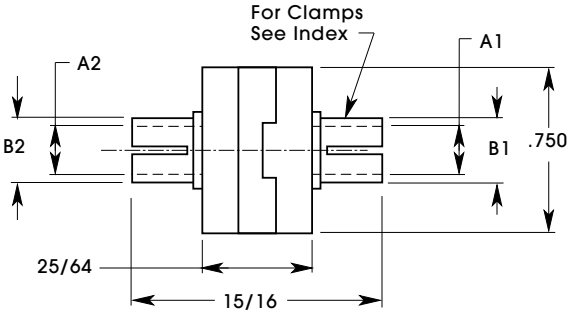
Clamp Hub Style — Standard • Miniature
Shafts 1/8" thru 3/8"

303 Stainless Steel – Clear Passivated

Maximum Backlash 5 Minutes of Arc



Standard



Miniature

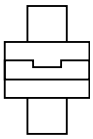
A1 DIA	B1 DIA +.000 -.003	A2 DIA +.0005 -.0000	B2 DIA +.000 -.003	CATALOG NUMBER
.1248	.188	.1248	.188	OC16
.1873	.250	.1873	.250	OC17
.2498	.313	.2498	.313	OC18
.3123	.375	.3123	.375	OC19
.3748	.438	.3748	.438	OC20

Special Bores and Lengths on Request

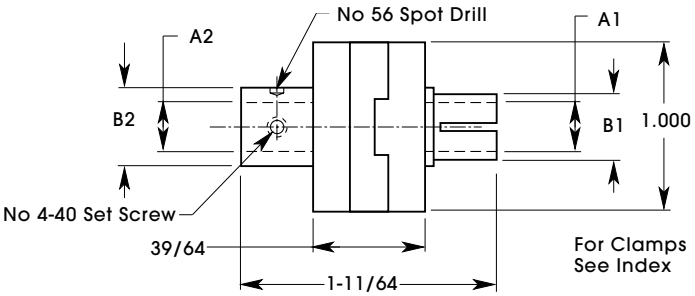
A1 DIA	B1 DIA +.000 -.003	A2 DIA +.0005 -.0000	B2 DIA +.000 -.003	CATALOG NUMBER
.1200	.188	.1200	.188	OC21
.1248	.188	.1248	.188	OC22
.1873	.250	.1873	.250	OC23
.2498	.313	.2498	.313	OC24
.1200	.188	.1248	.188	OC25
.1200	.188	.1873	.250	OC26
.1200	.188	.2498	.313	OC27
.1248	.188	.1873	.250	OC28
.1248	.188	.2498	.313	OC29
.1873	.250	.2498	.313	OC30

Combination Hub Style
Shafts 1/8" thru 3/8"

303 Stainless Steel – Clear Passivate



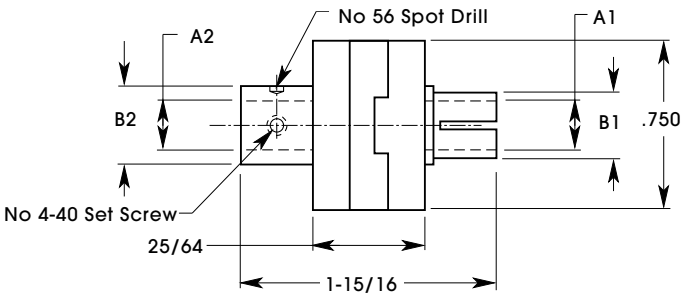
Maximum Backlash 5 Minutes of Arc



Standard

A1 DIA	B1 DIA	A2 DIA +.0005 -.0000	B2 DIA	CATALOG NUMBER
.1248	.187	.1248	5/16	OC31
.1873	.250	.1873	7/16	OC32
.2498	.312	.2498	7/16	OC33
.3123	.375	.3123	9/16	OC34
.3748	.437	.3748	9/16	OC35

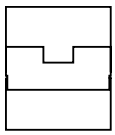
Special Bores and Lengths on Request

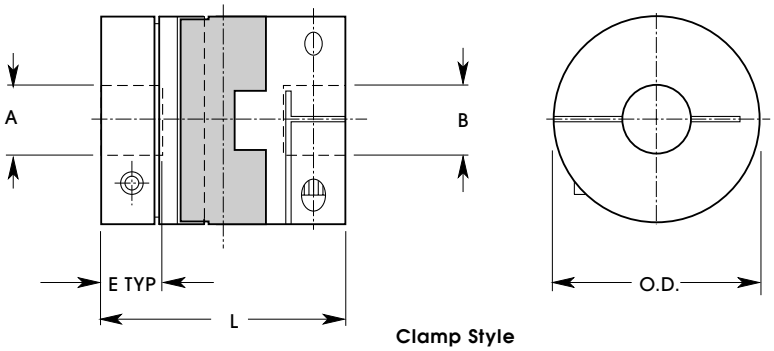


Miniature

A1 DIA	B1 DIA	A2 DIA +.0005 -.0000	B2 DIA	CATALOG NUMBER
.1200	.185	.1200	5/16	OC36
.1248	.185	.1248	5/16	OC37
.1873	.248	.1873	7/16	OC38
.2498	.311	.2498	7/16	OC39
1200	.185	.1248	5/16	OC40
.1200	.185	.1873	7/16	OC41
.1200	.185	.2498	7/16	OC42
.1248	.185	.1873	7/16	OC43
.1248	.185	.2498	7/16	OC44
.1873	.248	.2498	7/16	OC45
.1248	.185	.1200	5916	OC46
.1873	.248	.1200	5/16	OC47
.2498	.311	.1200	5/16	OC48
.1873	.248	.1248	5/16	OC49
.2498	.311	.1248	5/16	OC50
.2498	.311	.1873	7/16	OC51

Pin Hub Style • Set Screw Style
Shafts 3/32" thru 5/8"



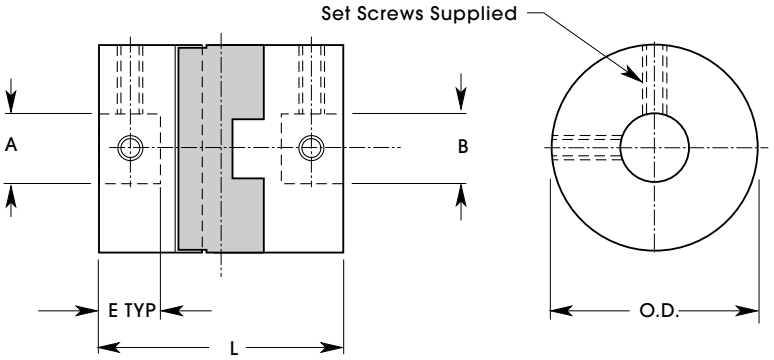


Clamp Style

Material:

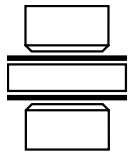
Hubs – SE03OC & SE23OC Series – Brass
SE33OC & SE04OC – Aluminum

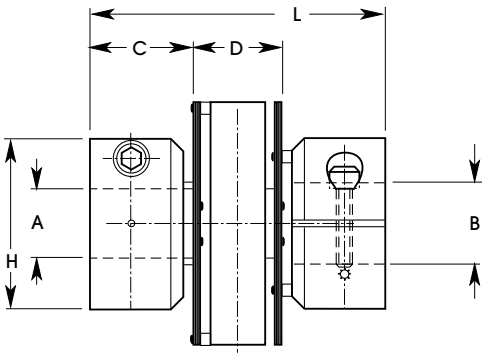
Insert – Delrin

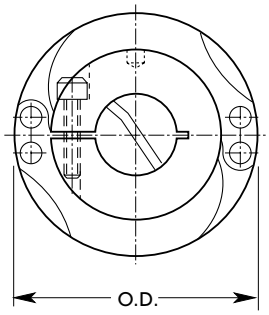


Set Screw Style

A	B +.000 -.003	E	O.D.	L	MAX WORKING TORQUE (IN OZ)	MAX MISALIGNMENT		CATALOG NUMBER/STYLE	
						PARALLEL	ANGULAR	SET SCREW	CLAMP
SOLID	SOLID	---	.25	.50	16	.03	.5°	SE03OC-B	————
.094 .120 .125	.125 .125 .125	.15						SE03OC-1 SE03OC-2 SE03OC-3	———— ———— ————
SOLID	SOLID	---	.37	.50	64	.05	.5°	SE13OC-B	————
.120 .125 .156 .187	.125 .125 .156 .187	.15						SE13OC-1 SE13OC-2 SE13OC-3 SE13OC-4	———— ———— ———— ————
SOLID	SOLID	---	.50	.62	120	.06	.75°	SE23OC-B	————
.125 .156 .187 .250	.125 .156 .187 .250	.17						SE23OC-1 SE23OC-2 SE23OC-3 SE23OC-4	———— ———— ———— ————
SOLID	SOLID	---	.75	.87	334	.09	.75°	SE33OC-B	————
.187 .250 .312	.187 .250 312	.25						SE33OC-1 SE33OC-2 SE33OC-3	SE33OC-1C SE33OC-2C ————
SOLID	SOLID	---	1.00	1.11	640	.12	1°	SE43OC-B	————
.250 .312 .375 .437	.250 .312 .375 .437	.34						SE43OC-1 SE43OC-2 SE43OC-3 SE43OC-4	SE43OC-1C SE43OC-2C SE43OC-3C ————
SOLID	SOLID	---	1.31	1.91	2200	.16	1.25°	SE06OC-B	————
.312 .375 .500	.312 .375 .500	.51						SE06OC-1 SE06OC-2 SE06OC-3	SE06OC-1C SE06OC-2C SE06OC-3C
SOLID	SOLID	---	1.62	2.00	3200	.20	1.25°	SE53OC-B	————
.375 .437 .500 .625	.375 .437 .500 625	.66						SE53OC-1 SE53OC-2 SE53OC-3 SE53OC-4	SE53OC-1C SE53OC-2C SE53OC-3C SE53OC-4C

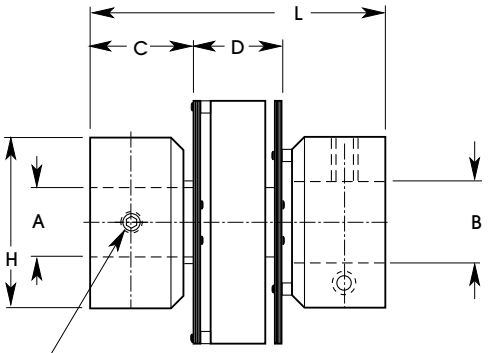


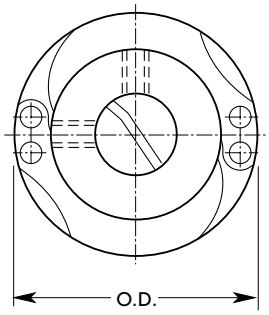




Clamp Type

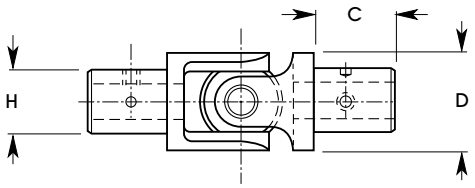
Material:
Hubs & Center Block – Aluminum
Leaves – Beryllium Copper





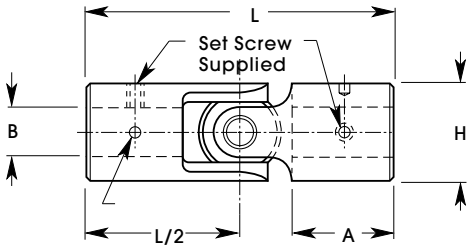
Pin Type

A +.0010 -.0000	B +.0010 -.0000	L	H	C	D	O.D.	MAX WORKING TORQUE (IN OZ)	MAX MISALIGNMENT		CATALOG NUMBER/STYLE	
								PARALLEL	ANGULAR	CLAMP HUB	PIN HUB
.1200	.1250	.88	.56	.30	.28	.75	165	.018	8°	SE02OC-1	SE02OC-1P
.1200	.1562									SE02OC-2	SE02OC-2P
.1200	.1875									SE02OC-3	SE02OC-3P
.1200	.2500									SE02OC-4	SE02OC-4P
.1250	.1250									SE02OC-5	SE02OC-5P
.1250	.1562									SE02OC-6	SE02OC-6P
.1250	.1875									SE02OC-7	SE02OC-7P
.1250	.2500									SE02OC-8	SE02OC-8P
.1562	.1562									SE02OC-9	SE02OC-9P
.1562	.1875									SE02OC-10	SE02OC-10P
.1562	.2500									SE02OC-11	SE02OC-11P
.1875	.1875									SE02OC-12	SE02OC-12P
.1875	.2500									SE02OC-13	SE02OC-13P
.2500	.2500									SE02OC-14	SE02OC-14P
.1875	.1875	1.25	.75	.44	.38	1.00	225	.020		SE02OC-22	SE02OC-22P
.1875	.2500									SE02OC-23	SE02OC-23P
.2500	.2500									SE02OC-24	SE02OC-24P
.2500	.3125									SE02OC-25	SE02OC-25P
.3125	.3125									SE02OC-26	SE02OC-26P
.2500	.3125	1.81	1.00	.66	.50	1.50	440	.030		SE02OC-15	SE02OC-15P
.2500	.3750									SE02OC-16	SE02OC-16P
.3125	.3125									SE02OC-17	SE02OC-17P
.3125	.3750									SE02OC-18	SE02OC-18P
.3750	.3750									SE02OC-19	SE02OC-19P
.3750	.5000									SE02OC-20	SE02OC-20P
.5000	.5000									SE02OC-21	SE02OC-21P



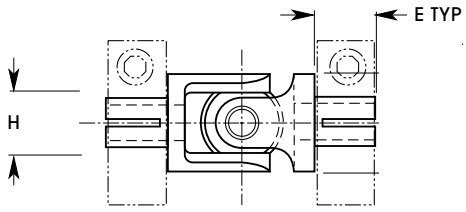
Pin Style

B +.0005 -.0000	H	L	A BORE LENGTH	D	C	MAX WORKING TORQUE (IN OZ)	MAX MISALIGNMENT		CATALOG NUMBER
							PARALLEL	ANGULAR	
.1248 .1873	.31 .38	1.50	.44	.50	.31	480	0	30° @ 500 RPM 10° @ 1000 RPM	SEJU-1 SEJU-2



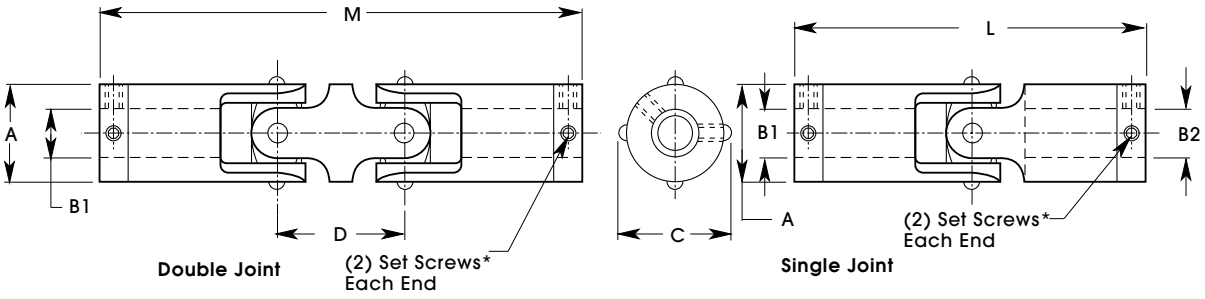
Pin Style

B +.0005 -.0000	H	L	A BORE LENGTH	D	C	MAX WORKING TORQUE (IN OZ)	MAX MISALIGNMENT		CATALOG NUMBER
							PARALLEL	ANGULAR	
.2498	.50	1.50	.44	---	---	480	0	30° @ 500 RPM 10° @ 1000 RPM	SEJU-3
.3123 .3748	.50 .75	1.50 2.63	.44 .92			1280			SEJU-4 SEJU-5



B +.0005 -.0000	H	L	A BORE LENGTH	E	MAX WORKING TORQUE (IN OZ)	MAX MISALIGNMENT		CATALOG NUMBER
						PARALLEL	ANGULAR	
.1248 .1873 .2498	.19 .25 .31	1.38	.37	.25	480	0	30° @ 500 RPM 10° @ 1000 RPM	SEJU-10 SEJU-11 SEJU-12

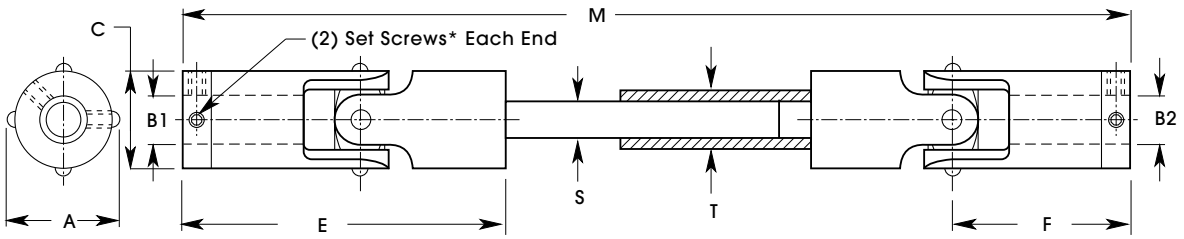
Material:
Hubs & Spiders – Brass
Body – Delrin®



B1 +.001 -.000	B2 +.001 -.000	L	A	C	D	M	MAX WORKING TORQUE (I LBS)		MAX PARALLEL MISALIGNMENT		MAX ANGULAR MISALIGNMENT		CATALOG NUMBER	
							SINGLE JOINT	DOUBLE JOINT	SINGLE JOINT	DOUBLE JOINT	SINGLE JOINT	DOUBLE JOINT	SINGLE JOINT	DOUBLE JOINT
.125*	.125*	1.06	.25	.28	.31	1.39	16	11	0	.22	45°	90°	SESJU-9	SEDJU-9
.125*	.125*	1.48	.38	.44	.52	2.00	55	23		.36			SESJU-1	SEDJU-1
.125*	.187												SESJU-2	SEDJU-2
.187	.187												SESJU-3	SEDJU-3
.187	.187	1.81	.50	.56	.63	2.44	151	55		.43			SESJU-4	SEDJU-4
.187	.250												SESJU-5	SEDJU-5
.250	.250												SESJU-6	SEDJU-6
.250	.250	2.66	.63	.69	.88	3.53	239	183		.61			SESJU-10	SEDJU-10
.250	.312												SESJU-11	SEDJU-11
.250	.375												SESJU-12	SEDJU-12
.312	.312												SESJU-13	SEDJU-13
.312	.375												SESJU-14	SEDJU-14
.375	.375												SESJU-15	SEDJU-15

* 1/8" Bore Coupling Ends are Supplied with (1) Set Screw Each End

Material:
Hubs, Spiders & Telescope – Brass
Body – Delrin®



Telescopic

B1 +.002 -.000	B2 +.002 -.000	A	C	L		E	F	S SQ.	T SQ	MAX WORKING TORQUE (IN OZ)	MAX MISALIGNMENT		CATALOG NUMBER
				MAX	MIN						PARALLEL	ANGULAR	
.125*	.125*	.38	.44	5.3	4.1	1.30	.73	.12	.18	55	1.92	90°	SETJU-1*
.125*	.187												SETJU-2*
.187	.187												SETJU-3
.187	.187	.50	.56	7.3	5.4	1.61	.91	.18	.25	151	2.74		SETJU-4
.187	.250												SETJU-5
.250	.250												SETJU-6
.250	.250	.63	.69	10.2	7.7	2.38	1.33	.25	.31	239	3.77		SETJU-10
.250	.312												SETJU-11
.250	.375												SETJU-12
.312	.312												SETJU-13
.312	.375												SETJU-14
.375	.375												SETJU-15

* 1/8" Bore Coupling Ends are Supplied with (1) Set Screw Each End

DESIGN CONSIDERATIONS: Bellows coupling characteristics are approximate. Slight bends or misalignments will cause a coupling to vary as much as 25% in "buckling torque" and side thrust. Therefore, conservative ratings should be used. The term "buckling torque" describes the sudden reversible deformation occurring in the bellows when certain torque, say 150% of maximum rating , is reached. At or near this value the twist suddenly increases to 2° or more. Bellow maximum rated torque the twist is 0.3° or less.

Twist angle is about the same for all sizes of couplings at rated maximum torque 0.15° to 0.3°-a remarkable circumstance.

COUPLING CHARACTERISTICS vary according to the following relationships:

A = angle of twist of the coupling.
T = max. rated torque of the coupling.
: = proportionality sign.
t = wall thickness of the bellows.
L = length of the bellows convolutions.
D = outside diameter of the bellows.
P = side thrust force produced by shaft displacement.
X = displacement between shaft center lines at midpoint of coupling.

$$T : Dr^2/L^{0.8}$$

$$A = 0.3°T/T_{max}$$

$$P : XD^2t^2/L^3$$

BELLOWS O.D.	BELLOWS LENGTH L	BELLOWS WALL M	TORQUE T	TWIST A	OFF SET X	SIDE THRUST P	MAX ANGLE Y	CATALOG NUMBER	
								PIN TYPE	CLAMP TYPE
.125	.240	.0010	1.5	.3°	.032	.50	60	BCP15	----
.125	.120	.0007	.85	.3°	.005	.75	40	BCP16	----
.250	.740	.0015	2.2	.3°	.075	1.3	44	BCP17	----
.250	.370	.0015	5	.3°	.018	2.7	21	BCP18	----
.250	.245	.0015	7.5	.3°	.007	3.5	13	BCP19	BCC1
.250	.185	.0015	10	.3°	.004	4.8	9	BCP20	BCC2
.375	.750	.0018	7.5	.3°	.065	13.	37	BCP21	BCC3
.375	.550	.0018	10.5	.3°	.036	18	28	BCP22	BCC4
.375	.370	.0018	12.5	.3°	.017	23	20	BCP23	BCC5
.375	.305	.0018	15	.3°	.010	28	14	BCP24	BCC6
.500	.740	.0025	27	.25°	.048	29	27	BCP25	BCC7
.500	.490	.0025	35	.25°	.021	36	17	BCP26	BCC8
.500	.370	.0025	40	.25°	.011	52	12	BCP27	BCC9
.750	.980	.0030	47	.25°	.043	58	19	BCP28	BCC10
.750	.730	.0030	60	.25°	.042	75	14	BCP29	BCC11
.750	.540	.0030	72	.25°	.012	90	7	BCP30	BCC12
1.000	1.250	.0035	90	.25°	.055	85	20	BCP31	BCC13
1.000	.730	.0035	130	.25°	.016	115	10	BCP32	BCC14

M Bellows wall thickness, inches.

T Maximum rated torque, instantaneous, inch ounces.

R Elastic twist permitted at maximum torque, degrees.

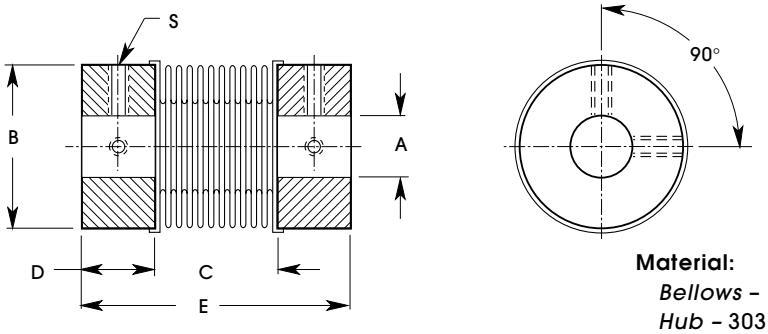
X Displacement between shaft center line at midpoint of coupling, inches, maximum recommended.

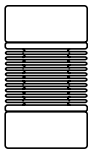
P Side thrust of the coupling against shaft bearings for shaft displacement shown, ounces. This zero for aligned shafts, and proportional to displacement between shaft center lines, at the rate shown.

Maximum angle shafts may deviate from parallel when axes intersect at the bellows midpoint, in degrees.

Torques:	0.1 inch ounce to 250 inch ounces
Side thrust:	from 1 gram
Shaft sizes:	0.020" to 0.375".
Bellows sizes:	0.100" OD to 1.00" OD, walls from .0007" up.
Materials:	Bellows are hard nickel, hubs, stainless steel.

Pin Type
Shafts .0404" thru 5/16"

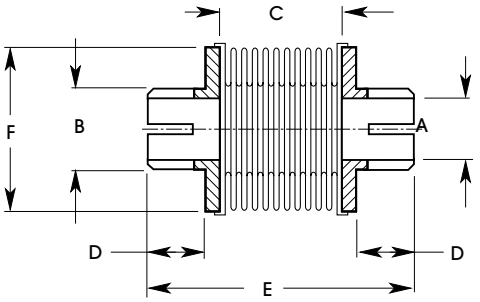


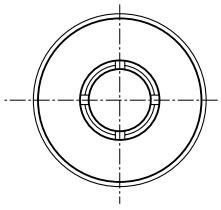


Material:
Bellows – Nickel, Spring Temper
Hub – 303 Stainless Steel

A +.0005 -.0000	B	C	D	E	S SCREW	CATALOG NUMBER
.0404	.125	.240	.087	.41	00-96	BCP15
.0404	.125	.120	.087	.29	00-96	BCP16
.0903	.250	.740	.141	1.02	2-56	BCP17
.0903	.250	.370	.141	.65	2-56	BCP18
.1200	.250	.245	.141	.53	2-56	BCP19
.1200	.250	.185	.141	.47	2-56	BCP20
.1875	.375	.740	.141	1.02	2-56	BCP21
.1875	.375	550	.141	.83	2-56	BCP22
.1875	.375	370	.141	.65	2-56	BCP23
.1875	.375	.305	.141	.59	2-56	BCP24
.2500	.500	.740	.167	1.07	4-40	BCP25
.2500	.500	.490	.167	.82	4-40	BCP26
.2500	.500	.370	.167	.70	4-40	BCP27
.2500	.500	.980	.167	1.31	4-40	BCP28
.2500	.500	.730	.167	1.06	4-40	BCP29
.2500	.500	.540	.167	.87	4-40	BCP30
.3125	.625	1.230	.195	1.62	6-32	BCP31
.3125	.625	.730	.195	1.12	6-32	BCP32

Clamp Type
Shafts .1200" thru 5/16"

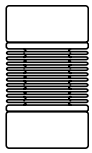




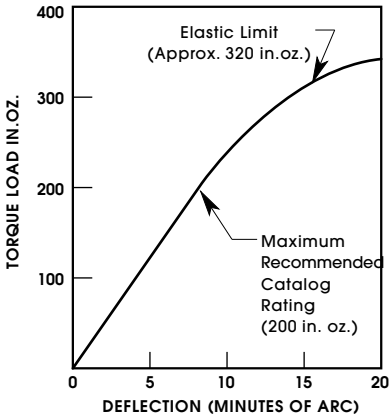
Material:
Bellows – Nickel, Spring Temper
Hub – 303 Stainless Steel

A	B	C	D	E	F	CATALOG NUMBER
.1200	.187	.245	7/32	3/4	.250	BCC1
.1200	.187	.185	7/32	11/16	.250	BCC2
.1875	.250	.740	8/32	1-3/8	.375	BCC3
.1875	.250	.550	9/32	1-3/16	.375	BCC4
.1875	.250	.370	9/32	1	.375	BCC5
.1875	.250	.305	9/32	15/16	.375	BCC6
.2500	.312	.740	9/32	1-3/8	.500	BCC7
.2500	.312	.490	9/32	1-1/8	.500	BCC8
.2500	.312	.370	9/32	1	.500	BCC9
.2500	.312	980	9/32	1-5/8	.750	BCC10
.2500	.312	.730	9/32	1-3/8	.750	BCC11
.2500	.312	.540	9/32	1-3/16	.750	BCC12
.3125	.375	1.230	9/32	1-55/64	1.000	BCC13
.3125	.375	.730	9/32	1-3/8	1.000	BCC14

Engineering Information
Pin Style • Clamp Style • Combination Style



SECS, Inc. offers on the following pages one of the largest stock lines of miniature precision couplings in the servo development field. It is our intention to give the engineer all the necessary design information that is needed. In the event your specifications are not satisfied from the stock lines, SECS can custom design a coupling to meet your requirements.



Typical Deflection vs. Loading Characteristics

FEATURES:

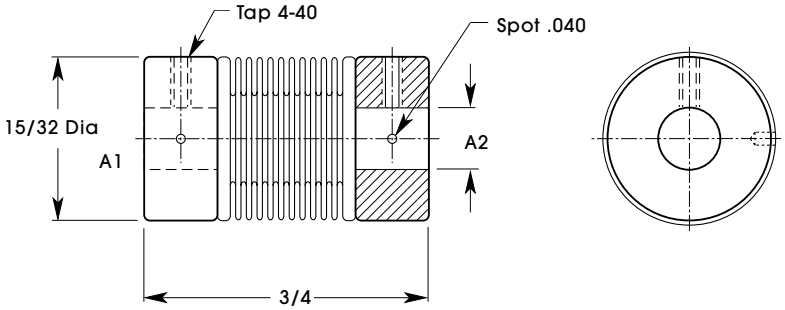
ZERO BACKLASH
ELIMINATES RADIAL ANGULAR AND AXIAL MISALIGNMENT
CONSTANT VELOCITY
HIGH TORQUE CAPABILITY
COMPLETELY REVERSIBLE
LIGHT WEIGHT
LOW INERTIA
HIGH SPEED EFFICIENCY
NO LUBRICATION PROBLEMS
NONMAGNETIC
FULL RANGE OF STANDARD BORES WITH SPLIT AND SOLID HUBS
SPECIAL BORES AND CUSTOM HUB DESIGNS AT MINIMUM COST

SPECIFICATIONS:

MAXIMUM TORQUE TRANSMISSION	200 OZ-IN
MAXIMUM RECOMMENDED SPEED	5000 RPM
MAXIMUM ANGULAR MISALIGNMENT	5°
MAXIMUM AXIAL MISALIGNMENT	1/32
MAXIMUM TEMPERATURE RANGE	300°F
WEIGHT	32 oz.

MATERIAL: Phosphor Bronze throughout
CONSTRUCTION: Induction soldered
FINISH: Nickel plate QQ-N-290 (Bores unplatted)

Pin Type
Shafts .090" thru 1/4"
Phosphor Bronze throughout — Induction Soldered — Nickel Plate (QQ-N-290) Bores Unplated

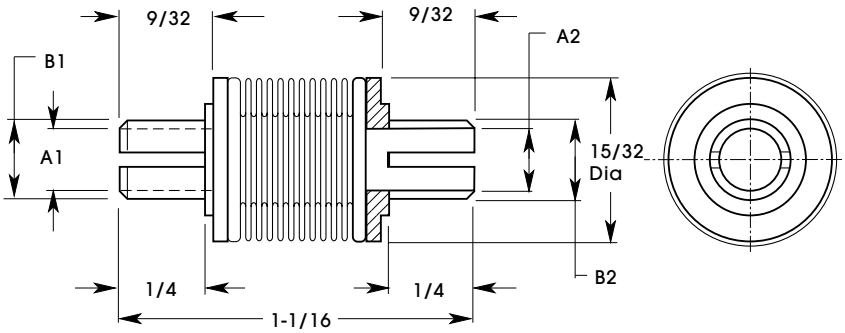


SHAFT DIAMETER	A1	A2	CATALOG NUMBER
1/8 x 1/8	.1252 .1255	.1252 .1255	BCP55
3/16 x 3/16	.1877 .1880	.1877 .1880	BCP56
1/4 x 1/4	.2502 .2505	.2502 .2505	BCP57
1/8 x 3/16	.1252 .1255	.1877 .1880	BCP58
1/8 x 1/4	.1252 .1255	.2502 .2505	BCP59
3/16 x 1/4	.1877 .1880	.2502 .2505	BCP60
.090 x .090	.0902 .0905	.0902 .0905	BCP61
3/32 x 3/32	.0939 .0942	.0939 .0942	BCP62
.120 x .120	.1202 .1205	.1202 .1205	BCP63
.090 x 3/32	.0902 .0905	.0939 .0942	BCP64
.090 x .120	.0902 .0905	.1202 .1205	BCP65

SHAFT DIAMETER	A1	A2	CATALOG NUMBER
.090 x 1/8	.0902 .0605	.1252 .1266	BCP66
.090 x 3/16	.0902 .0905	.1877 .1880	BCP67
.090 x 1/4	.0902 .0905	.2502 .2505	BCP68
3/32 x .120	.0939 .0942	.1202 .1205	BCP69
3/32 x 1/8	.0939 .0942	.1252 .1255	BCP70
3/32 x 3/16	.0939 .0942	.1877 .1880	BCP71
3/32 x 1/4	.0932 .0942	.2502 .2505	BCP72
.120 x 1/8	.1202 .1205	.1252 .1255	BCP73
.120 x 3/16	.1202 .1205	.1877 .1880	BCP74
.120 x 1/4	.1202 .1205	.2502 .2505	BCP75

Clamp Type
Shafts .090" thru 1/4"

Phosphor Bronze throughout — Induction Soldered — Nickel Plate (QQ-N-290) Bores Unplated

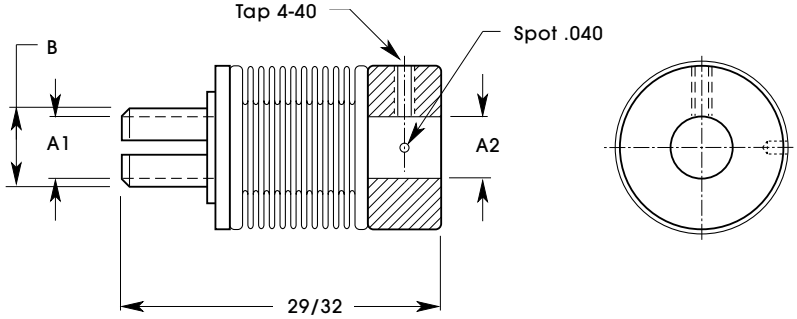


SHAFT DIAMETER	A1	A2	B1	B2	CATALOG NUMBER
1/8 x 1/8	.1252 .1255	.1252 .1255	.187 .188	.187 .188	BCC33
3/16 x 3/16	.1877 .1880	.1877 .1880	.250 .251	.250 .251	BCC34
1/4 x 1/4	.2502 .2505	.2502 .2505	.312 .313	.312 .313	BCC35
1/8 x 3/16	.1252 .1255	.1877 .1880	.187 .188	.250 .251	BCC36
1/8 x 1/4	.1252 .1255	.2502 .2505	.187 .188	.312 .313	BCC37
3/16 x 1/4	.1877 .1880	.2502 .2505	.250 .251	.312 .313	BCC38
.090 x .090	.0902 .0905	.0902 .0905	.187 .188	.187 .188	BCC39
3/32 x 3/32	.0939 .0942	.0939 .0942	.187 .188	.187 .188	BCC40
.120 x .120	.1202 .1205	.1202 .1205	.187 .188	.187 .188	BCC41
.090 x 3/32	.0902 .0905	.0939 .0942	.187 .188	.187 .188	BCC42
.090 x .120	.0902 .0905	.1202 .1205	.187 .188	.187 .188	BCC43

SHAFT DIAMETER	A1	A2	B1	B2	CATALOG NUMBER
.090 x 1/8	.0902 .0605	.1252 .1266	.87 .188	.187 188	BCC44
.090 x 3/16	.0902 .0905	.1877 .1880	.187 .188	.250 .251	BCC45
.090 x 1/4	.0902 .0905	.2502 .2505	.187 .188	.312 .313	BCC46
3/32 x .120	.0939 .0942	.1202 .1205	.155 .187	.187 .188	BCC47
3/32 x 1/8	.0939 .0942	.1252 .1255	.187 .188	.187 .188	BCC48
3/32 x 3/16	.0939 .0942	.1877 .1880	.187 .188	.250 .251	BCC49
3/32 x 1/4	.0932 .0942	.2502 .2505	.187 .188	.312 .313	BCC50
.120 x 1/8	.1202 .1205	.1252 .1255	.187 .188	.187 .188	BCC51
.120 x 3/16	.1202 .1205	.1877 .1880	.187 .188	.250 .251	BCC52
.120 x 1/4	.1202 .1205	.2502 .2505	.187 .188	.312 .313	BCC53

Combination Type
Shafts .090" thru 1/4"

Phosphor Bronze throughout — Induction Soldered — Nickel Plate (QQ-N-290) Bores Unplated

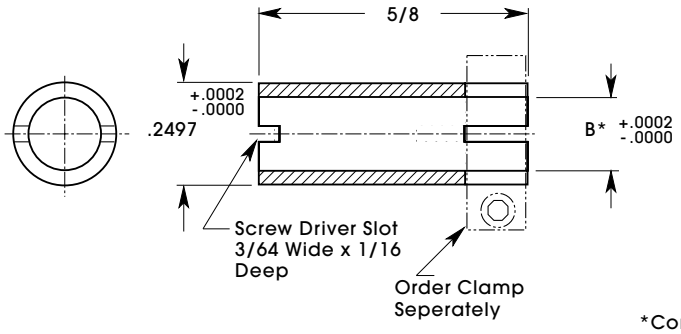


SHAFT DIAMETER	A1	B	A2	CATALOG NUMBER
1/8 x 1/8	.1252 .1255	.187 .188	.1252 .1255	CBC76
3/16 x 3/16	.1877 .1880	.250 .251	.1877 .1880	CBC77
1/4 x 1/4	.2502 .2505	.312 .313	.2502 .2505	CBC78
1/8 x 3/16	.1252 .1255	.187 .188	.1877 .1880	CBC79
1/8 x 1/4	.1252 .1255	.187 .188	.2502 .2505	CBC80
3/16 x 1/4	.1877 .1880	.250 .251	.2502 .2505	CBC81
3/16 x 1/8	.1877 .1880	.250 .251	.1252 .1255	CBC82
1/4 x 1/8	.2502 .2505	.312 .313	.1252 .1255	CBC83
1/4 x 3/16	.2502 .2505	.312 .313	.1877 .1880	CBC84
.090 x .090	.0902 .0905	.187 .188	.0902 .0905	CBC85
3/32 x 3/32	.0939 .0942	.187 .188	.0939 .0942	CBC86

SHAFT DIAMETER	A1	B	A2	CATALOG NUMBER
.120 x .120	.1202 .1205	.187 .188	.1202 .1205	CBC87
.090 x 3/32	.0902 .0905	.187 .188	.0939 .0942	CBC88
.090 x 1/8	.0902 .0605	.87 .188	.1252 .1266	CBC89
.090 x 3/16	.0902 .0905	.187 .188	.1877 .1880	CBC90
.090 x 1/4	.0902 .0905	.187 .188	.2502 .2505	CBC91
3/32 x 1/8	.0939 .0942	.187 .188	.1252 .1255	CBC92
3/32 x 3/16	.0939 .0942	.187 .188	.1877 .1880	CBC93
3/32 x 1/4	.0932 .0942	.187 .188	.2502 .2505	CBC94
.120 x 3/16	.1202 .1205	.187 .188	.1877 .1880	CBC95
.120 x 1/4	.1202 .1205	.187 .188	.2502 .2505	CBC9 6

SHAFT ADAPTER

303 Stainless Steel
Shafts .1200" thru 3/16"

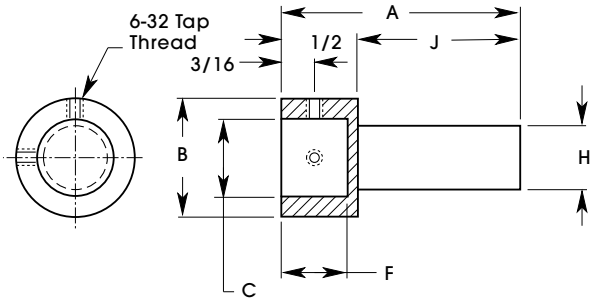


B BORE SIZE	SHAFT DIAMETER	CATALOG NUMBER
.1200	.1200	SEAS-3
.1248	1/8	SEAS-4
.1560	5/32	SEAS-1
.1772	.1772	SEAS-5
.1873	3/16	SEAS-2

*Concentric Within .0003

SHAFT EXTENDER AND REDUCER

303 Stainless Steel
Shafts 1/4" thru 3/8"

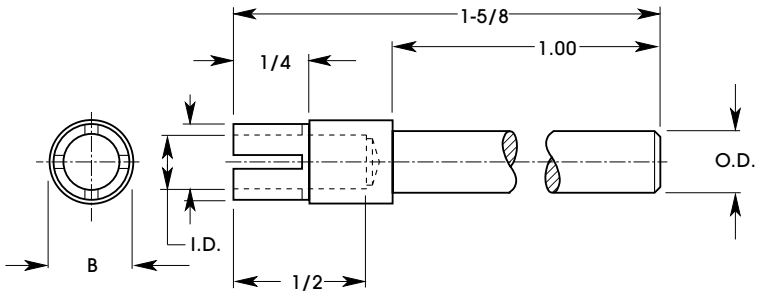


A	B	C	F	H	J	CATALOG NUMBER
1-1/8	7/16	1/4	3/8	1/4	5/8	EH21-2
1-1/8	7/16	1/4	7/16	1/4	5/8	EH21-3
1-1/8	7/16	1/4	7/16	3/8	5/8	EH21-4
1-1/8	7/16	1/4	3/8	3/8	5/8	EH21-5
1-3/4	7/16	1/4	7/16	1/4	1-1/4	EH21-6
1-3/4	7/16	1/4	3/8	1/4	1-1/4	EH21-7
1-1/8	1/2	1/4	7/16	1/4	5/8	EH21-8
1-1/8	1/2	1/4	3/8	1/4	5/8	EH21-9
1-3/4	1/2	1/4	7/16	1/4	1-1/4	EH21-10
1-3/4	1/2	1/4	3/8	1/4	1-1/4	EH21-11
1-1/8	1/2	1/4	7/16	3/8	5/8	EH21-12
1-1/8	1/2	1/4	3/8	3/8	5/8	EH21-13
1-3/4	1/2	1/4	7/16	3/8	1-1/4	EH21-14
1-3/4	1/2	1/4	3/8	3/8	1-1/4	EH21-15
1-1/8	9/16	3/8	7/16	12/4	5/8	EH21-16
1-1/8	9/16	3/8	3/8	1/4	5/8	EH21-17
1-3/4	9/16	3/8	7/16	1/4	1-1/4	EH21-18
1-3/4	9/16	3/8	3/8	1/4	1-1/4	EH21-19

Supplied with Two Set Screws @ 90°

SHAFT EXTENDER *PRECISION*

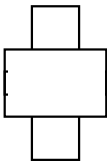
303 Stainless Steel
Shafts 1/8" thru 3/16"

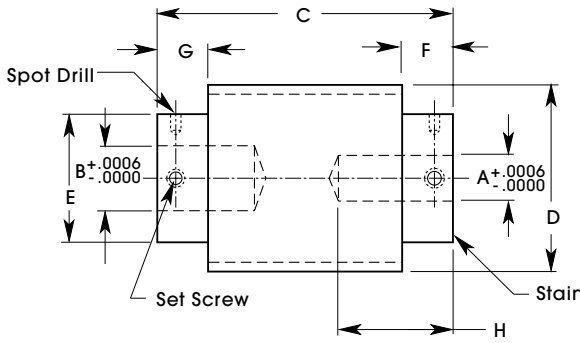


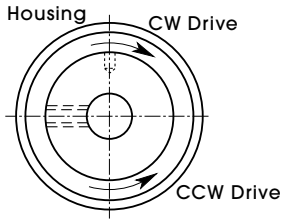
SHAFT SIZE MALE FEMALE	I.D. +.0005 -.0000	O.D. +.0000 -.0003	A	B	CATALOG NUMBER
1/8 x 1/8	.1248	.1248	.188	.250	EH4-1
3/16 x 3/16	.1873	.1873	.250	.312	EH4-2
1/4 x 1/4	.2498	.2498	.312	.375	EH4-3
1/8 x 3/16	.1873	.1248	.250	.312	EH4-4
1/8 x 1/4	.2498	.1248	.312	.375	EH4-5
3/16 x 1/8	.2498	1873	.312	.375	EH4-6
3/16 x 1/8	.1248	.1873	.188	.250	EH4-7
1/4 x 1/8	.1248	.2498	.188	.250	EH4-8
1/4 x 3/16	.1973	.2498	.250	.312	EH4-9
1/8 x .1200	.1200	.1248	.188	.250	EH4-10

OVERRUNNING COUPLING

Shafts 1/8" thru 1/2"







ClockWise Series:
R.H. Hub Locked While
L.H. Drives Clockwise

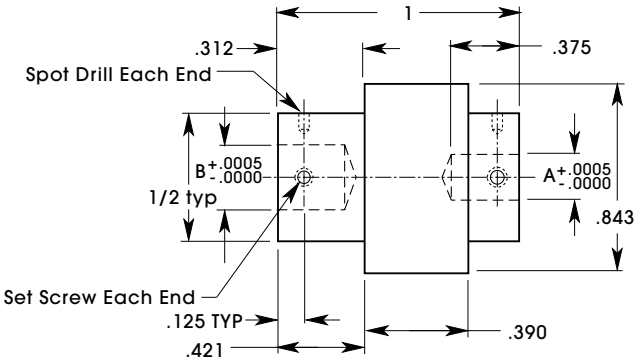
Counter-ClockWise Series:
R.H. Hub Locked While
L.H. Drives Counter-Clockwise

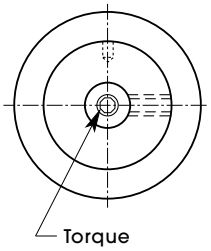
Material:
Hub – 416 Stainless Steel RC 26-32
Center – Delrin®

BORES		MAX DRIVE TORQUE	MAX DRAG TORQUE	C	D	E	F	G	H	SET SCREW	CATALOG NUMBER/DIRECTION	
A	B										CLOCKWISE	COUNTER CLOCKWISE
.1248	.1248	10.0 IN LBS	.10 IN LBS	1.00	.75	.56	.21	.11	.47	#4-40	SERBJ-4	SELBJ-4
.1248	.1873										SERBJ-5	SELBJ-5
.1248	.2498										SERBJ-6	SELBJ-6
.1873	.1873										SERBJ-17	SELBJ-17
.1873	.2498										SERBJ-8	SELBJ-8
.2498	.2498										SERBJ-9	SELBJ-9
.3123	.3123	80.0 IN LBS	.25 IN LBS	1.48	1.38	1.00	.33	.20	.73	#10-32	SERBJ-10	SELBJ-10
.3123	.3748										SERBJ-11	SELBJ-11
.3123	.4998										SERBJ-12	SELBJ-12
.3748	.3748										SERBJ-13	SELBJ-13
.3748	.4998										SERBJ-14	SELBJ-14
.4998	.4998										SERBJ-15	SELBJ-15

ADJUSTABLE SLIP COUPLING

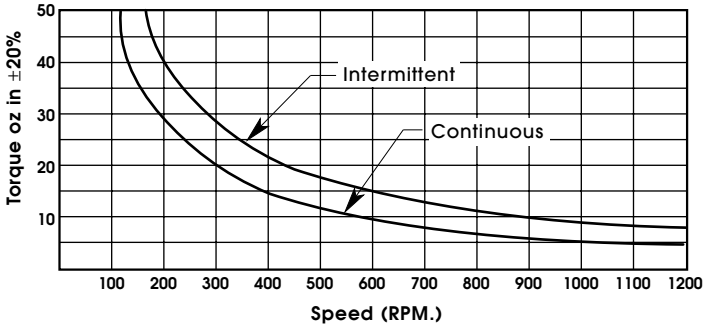
Shafts 1/8" thru 1/4"
Stainless Steel





A BORE SIZE	B BORE SIZE	TORQUE RANGE	CATALOG NUMBER
.1250	.1250	0 TO 50 OZ/IN	SEKJ-1
.1250	.1875		SEKJ-2
.1250	.2500		SEKJ-3
.1875	.1875		SEKJ-4
.1875	.2500		SEKJ-5
.2500	.2500		SEKJ-7

Capacity Chart, When Coupling is Opperated at an Ambient Temperature of 21°C



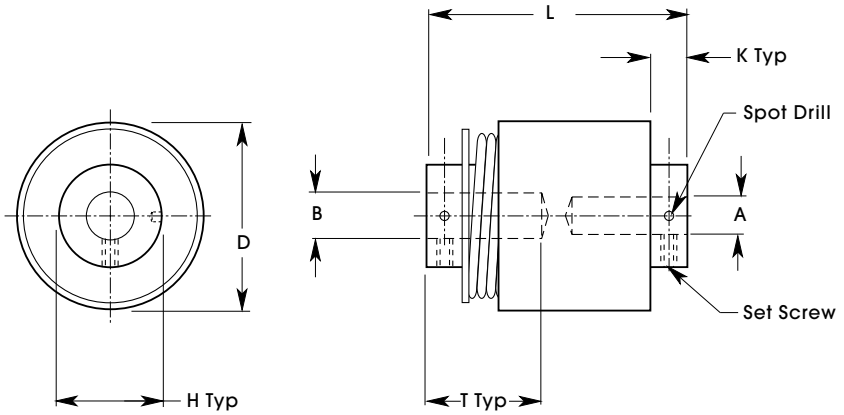
Notes:

To Determine Clutch Capacity it is Neccessary to Use the Chart.

The Intermittent Curve Represents the Capacity of the Coupling When it is Slipping for a Total of 10 Minutes or Less and the Cooling Time is 10 Minutes or More.

SLIP COUPLING

Stainless Steel
Shafts 1/8" thru 3/8"

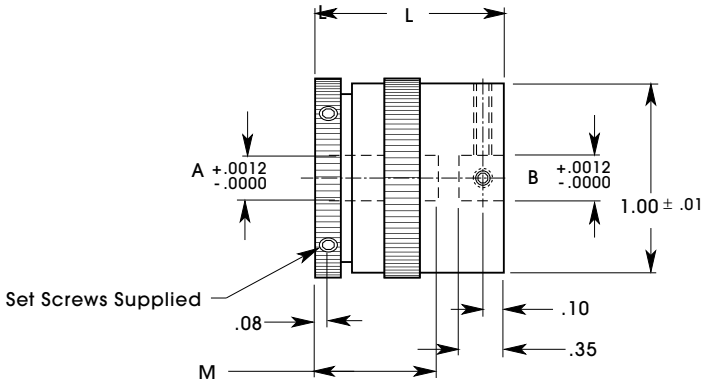


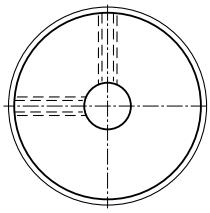
Misalignment: Shaft to Shaft .010 Max.
Angular 3° Max.

BORES		L ±.02	D ±.02	H ±.02	K ±.02	T	TORQUE BI DIRECTION	CATALOG NUMBER
A	B							
.1250 .1250 .1875	.1250 .1875 .1875	.89	.50	.37	.17	.43	5 ± .7	SEJJ-1 SEJJ-2 SEJJ-3
.1875 .1875 .2500	.1875 .2500 .2500	1.11	.75	.50	.19	.50	12 ± 1.2	SEJJ-4 SEJJ-5 SEJJ-6
.1875 .1875 .2500	.1875 .2500 .2500	1.26	1.00	.50	.19	.55	20 ± 2	SEJJ-7 SEJJ-8 SEJJ-9
.2500 .2500 .3750	.2500 .3750 .3750	1.43	1.25	.62	.25	.62	48 ± 5	SEJJ-10 SEJJ-11 SEJJ-12
.3125 .3750	.3125 .3750	1.59	1.50	.75	.25	.73	88 ± 9	SEJJ-13 SEJJ-14
.3750 .3750 .5000	.3750 .5000 .5000	1.84	1.87	.87	.28	.85	120 ± 12	SEJJ-15 SEJJ-16 SEJJ-17
.3750 .3750 .5000 .5000 .6250 .6250 .7500	.3750 .5000 .5000 .6250 .6250 .7500 .7500	2.25	2.25	1.25	.38	1.00	240 ± 24	SEJJ-18 SEJJ-19 SEJJ-20 SEJJ-21 SEJJ-22 SEJJ-23 SEJJ-24

Last Catalog Number Group is Available with 320 oz in ±32
(add 320 to Catalog Number)

Adjustable Torque 3.5 oz in – 187.5 oz in
Shafts 1/4" thru 5/16"

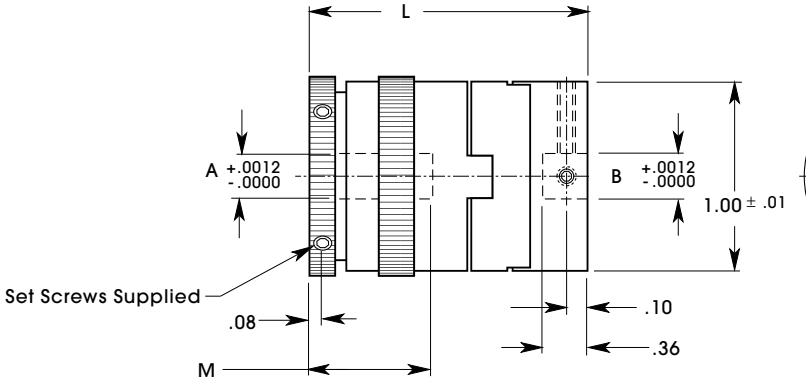


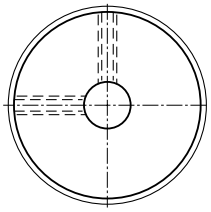


- Bi-Directional
- Maximum Operating temp. 175°
- Maximum Backlash 2°

BORES		L	M	ADJUSTABLE TORQUE RANGE		WEIGHT	CATALOG NUMBER
A	B			MIN	MAX		
.2500 .3125	.2500 .3125	1.42	.98	3.4 in oz	76.0 in oz	50g	SEJJ-25 SEJJ-26
.2500 .3125	.2500 .3125	1.65	1.22	11.0 in oz	187.4 in oz	61g	SEJJ-27 SEJJ-28

Adjustable Torque 3.5 oz in – 187.5 oz in
Shafts 1/4" thru 5/16"
Oldham Style



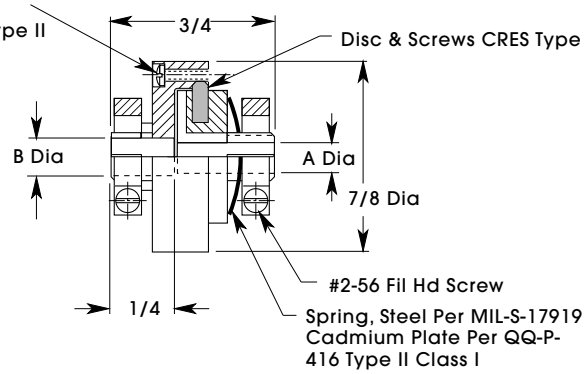


- Bi-Directional
- Maximum Operating temp. 175°
- Maximum Backlash 2°

BORES		L	M	ADJUSTABLE TORQUE RANGE		WEIGHT	CATALOG NUMBER
A	B			MIN	MAX		
.2500 .3125	.2500 .3125	1.83	.98	3.4 in oz	76.0 in oz	57g	SEJJ-29 SEJJ-30
.2500 .3125	.2500 .3125	2.07	1.22	11.0 in oz	187.4 in oz	68g	SEJJ-31 SEJJ-32

Adjustable Torque 0 oz in – 50 oz in
Shafts 1/8" thru 1/4"

Clamps Hub & Housing
Alum 2024-T4 Per QQ-A-268
Anodized Per MIL-A-8625 Type II



I.D. +.0002 -.0000	O.D. +.0002 -.0000	CATALOG NUMBER
.1248	.1248	CSA-1
.1248	.1873	CSA-2
.1248	.2498	CSA-3
.1873	.1248	CSA-4
.1873	.1873	CSA-5
.1873	.2498	CSA-6

SLIP CLUTCH *PRECISION*

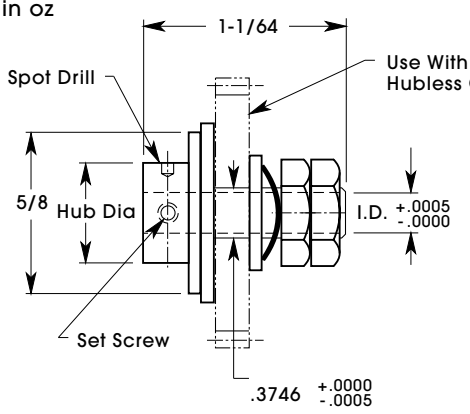
Shafts .1200" thru 1/4"

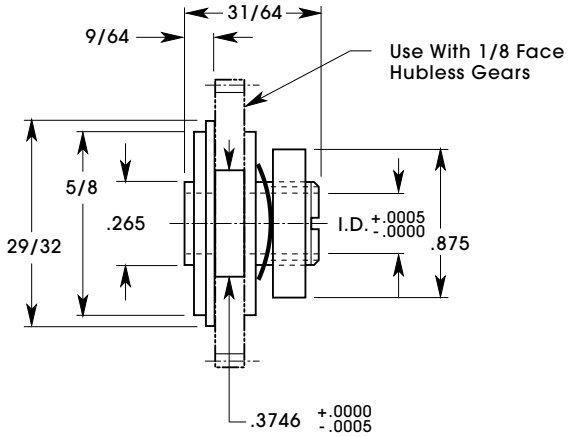
Material:

303 Stainless Steel–Clear Passivate

Brake – Oil-Less Bronze

Torque – 50 in oz





I.D.	HUB DIA	SET SCREW	SUB DRILL	CATALOG NUMBER
.1200	.312	#2-56	.029	CS5
.1248	.312	#2-56	.029	CS6
.1873	.375	#4-40	.040	CS7
.2498	.500	#6-32	.070	CS8

I.D.	CATALOG NUMBER
.1200	CS1
.1248	CS2
.1873	CS3
.2498	CS4

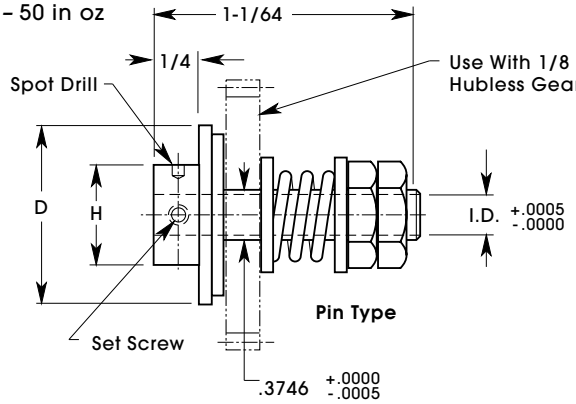
SLIP CLUTCH *STANDARD*

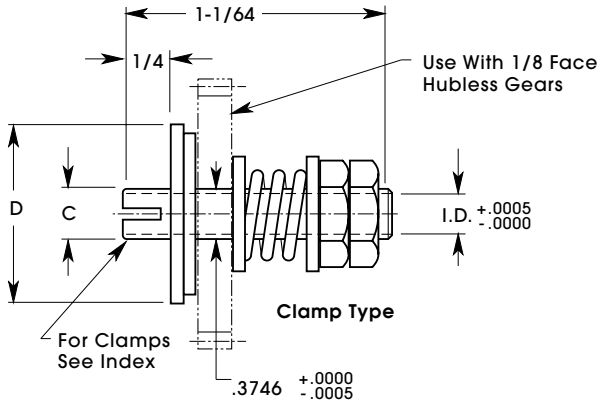
Material:

303 Stainless Steel–Clear Passivate

Brake – Cork

Torque – 50 in oz

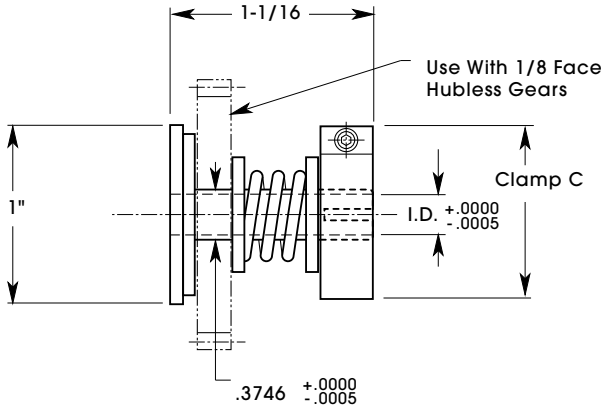




I.D.	H (PIN)	C (CLAMP)	D	FRICTION FACE	ADJUSTABLE SLIP TORQUE OZ IN	CATALOG NUMBER/HUB	
						PIN	CLAMP
.1248 .1873 .2498	5/16 3/8 1/2	——— ——— ———	5/8	FRICTION RING	0 TO 10	CS-101 CS-102 CS-103	——— ——— ———
.1248 .1873 .2498	5/16 3/8 1/2	——— ——— ———	5/8	FRICTION RING	10 TO 50	CS-18 CS-19 CS-20	——— ——— ———
.1248 .1873 .2498	5/16 3/8 1/2	3/16 1/4 5/16	1	FRICTION RING	10 TO 50	CS-12 CS-13 CS-14	CS-9 CS-10 CS-11
.1248 .1873 .2498	5/16 3/8 1/2	3/16 1/4 5/16	1	FRICTION PAD	0 TO 10	CS-104 CS-105 CS-106	CS-116 CS-117 CS-118
.1248 .1873 .2498	5/16 3/8 1/2	3/16 1/4 5/16	1	FRICTION PAD	10 TO 50	CS-107 CS-108 CS-109	CS-119 CS-120 CS-121

STANDARD SLIP CLUTCH

Shafts 1/8" thru 1/4"



Material:

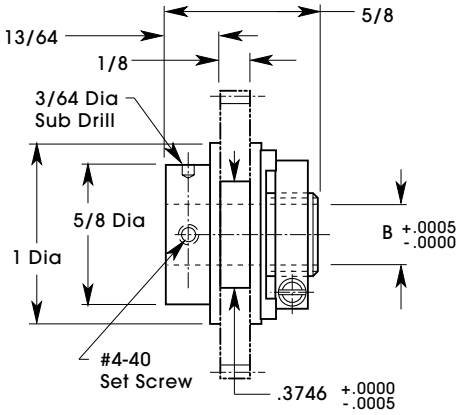
303 Stainless Steel–Clear Passivate

Brake – Cork

Torque – 50 in oz

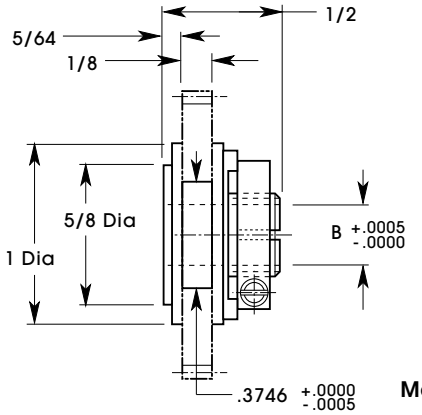
I.D.	CLAMP C	CATALOG NUMBER
.1248	7/8	CS-15
.1873	1-1/32	CS-16
.2498	1-1/8	CS-17

MINIATURE PRECISION SLIP CLUTCH



Torque – 0 to 50 in oz

B	CATALOG NUMBER
.1200	CS33
.1248	CS34
.1873	CS35
.2498	CS36



Torque – 0 to 60 in oz

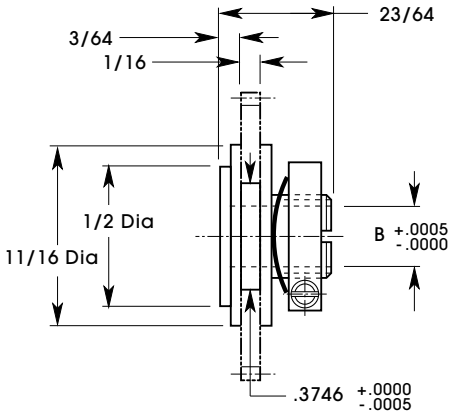
B	CATALOG NUMBER
.1200	CS29
.1248	CS30
.1873	CS31
.2498	CS32

Material:

Hub & Clamp –
303 Stainless Steel Clear Passivate

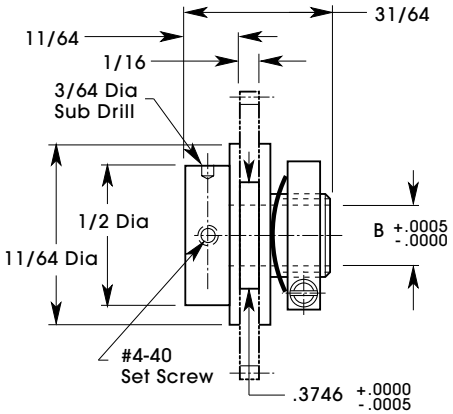
Brake Washers (2) –
Oil Impregnated Bronze

Spring Washer –
Spring Steel Cadmium Plated



Torque – 0 to 50 in oz

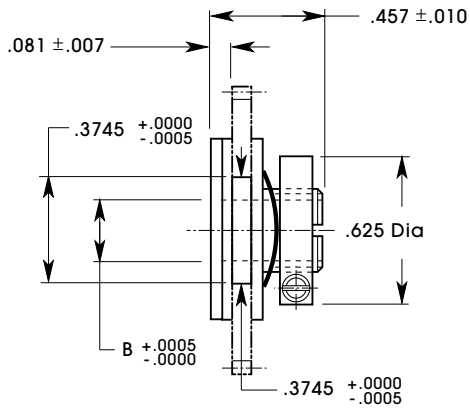
B	CATALOG NUMBER
.1200	CS21
.1248	CS22
.1873	CS23
.2498	CS24



Torque – 0 to 50 in oz

B	CATALOG NUMBER
.1200	CS25
.1248	CS26
.1873	CS27
.2498	CS28

Use With Hubless Gears



Torque – 0 to 50 in oz

B	CATALOG NUMBER
.1248	CS220
.1873	CS230
.2498	CS240

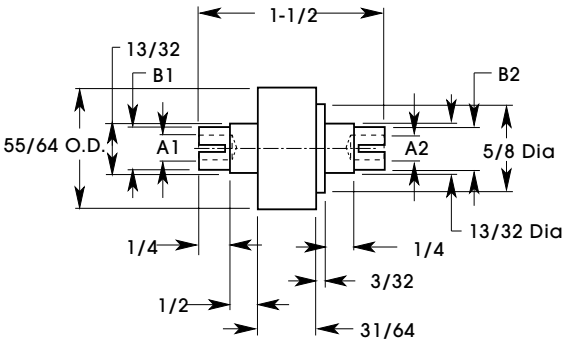
SLIP CLUTCH *DELRIN® IN-LINE*

Pin Style • Clamp Style • Combination Style
Shafts 1/8" thru 1/4"

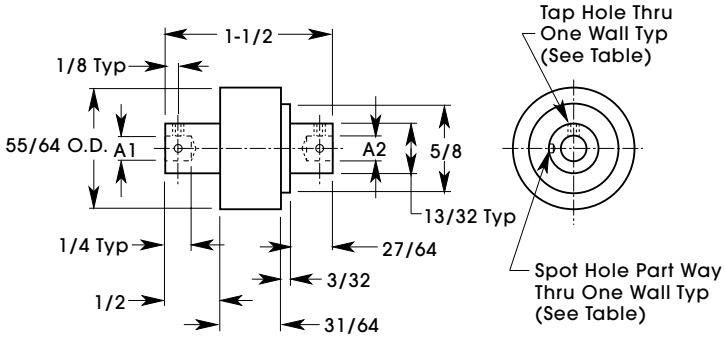
Material:

Housing – Anodized Aluminum
Hubs – Stainless Steel
Friction Faces – DuPont Delrin® 500

Torque – 0 to 50 in oz



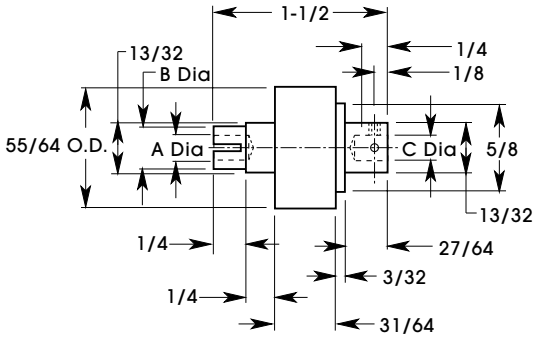
Clamp Type



Pin Type

SHAFT DIA	TAP HOLE	SPOT HOLE
1/8	#2-56	#69
3/16	#4-40	#60
1/4	#6-32	#50

A1 DIA .0005 .0000	B1 DIA .001 .000	A2 DIA .0005 .0000	B2 DIA .001 .000	REF.	CATALOG NUMBER/HUB	
					PIN	CLAMP
.1250	.187	.1250	.187	1/8 x 1/8	CS-43	CS-37
.1875	.250	.1875	.250	3/16 x 3/16	CS-44	CS-38
.2500	.312	.2500	.312	1/4 x 1/4	CS-45	CS-39
1250	.187	.1875	.250	1/8 x 3/16	CS-46	CS-40
.1250	.187	.2500	.312	1/8 x 1/4	CS-47	CS-41
.1875	.250	.2500	.312	3/16 x 1/4	CS-48	CS-42



Combination Type

SHAFT DIA	TAP HOLE	SPOT HOLE
1/8	#2-56	#69
3/16	#4-40	#60
1/4	#6-32	#50

A DIA .0005 .0000	B DIA .001 .000	C DIA .0005 .0000	REF.	CATALOG NUMBER
.1250	.187	.1250	1/8 x 1/8	CS-49
.1875	.250	.1875	3/16 x 3/16	CS-50
.2500	.312	.2500	1/4 x 1/4	CS-51
1250	.187	.1875	1/8 x 3/16	CS-52
.1250	.187	.2500	1/8 x 1/4	CS-53
.1875	.250	.2500	3/16 x 1/4	CS-54

DELRIN® ADJUSTABLE SLIP CLUTCH

Shafts 1/8" thru 3/16"

Material:

Hub & Clamp –
Aluminum Per QQ-A-268, Alloy 2024 T4

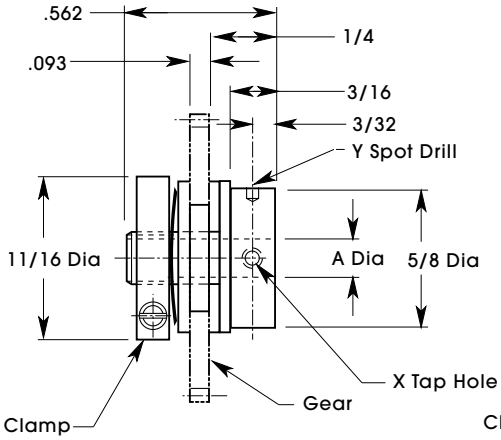
Bearings –
Delrin® 150 NC-10

Pressure Spring –
Spring Steel Per Mil-S-17919

Finish:

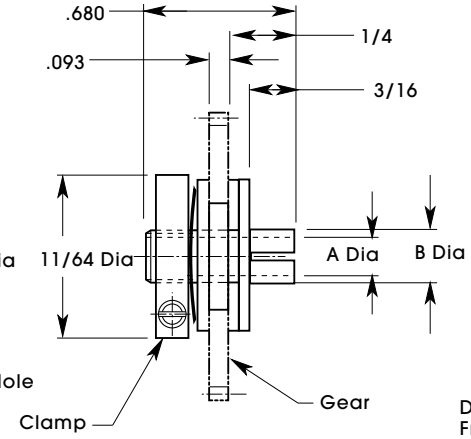
Aluminum –
Anodized Per Mil-A-8625 Type II

Spring Steel –
Cadmium Plate Per QQ-P-416 Type II Class I



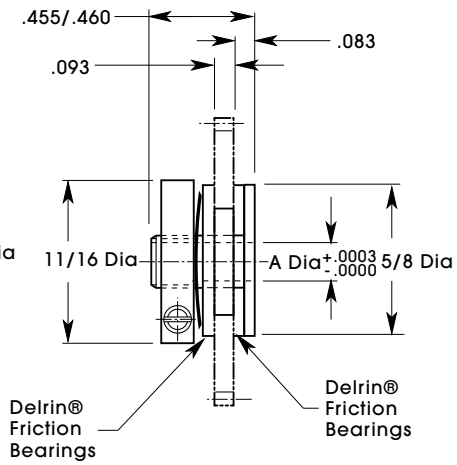
Pin Type

A +.0003 -.0000	X TAP HOLE	Y SPOT HOLE	CATALOG NUMBER
.1250	#2-56	#69	SC-59
.1875	#4-40	#60	SC-60



Clamp Type

A DIA +.0003 -.0000	B DIA +.001 -.000	CATALOG NUMBER
.1250	.187	SC-61
.1875	.250	SC-62

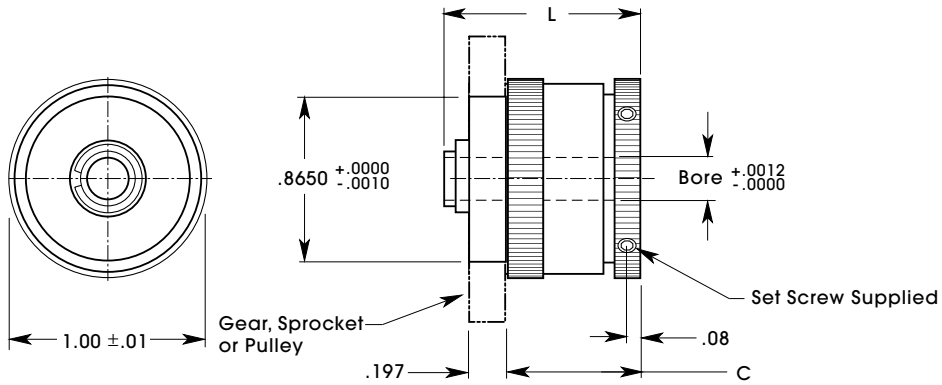


A DIA	T WIDTH	CATALOG NUMBER
.1248	.062	SC-55
.1873	.062	SC-56
.1248	.093	SC-57
.1873	.093	SC-58

KNURLED SLIP CLUTCH

Shafts 1/8" thru 5/16"

Operating Temperature 80° Maximum
2° Maximum Backlash
Two Directions

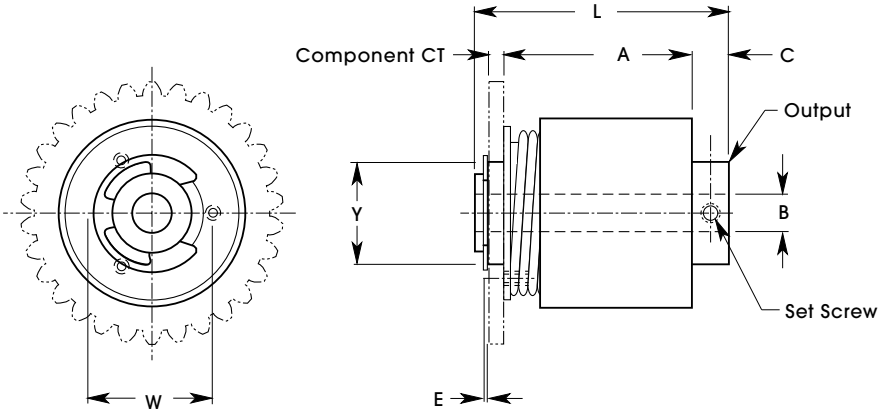


BORE	L	C	TORQUE RANGE		CATALOG NUMBER
			MIN	MAX	
.2500 .3125	1.04	.79	3.4 IN OZ	76.0 IN OZ	SEHJ-11 SEHJ-12
.2500 .3125	1.28	1.03	11.0 IN OZ	187.4 IN OZ	SEHJ-13 SEHJ-14

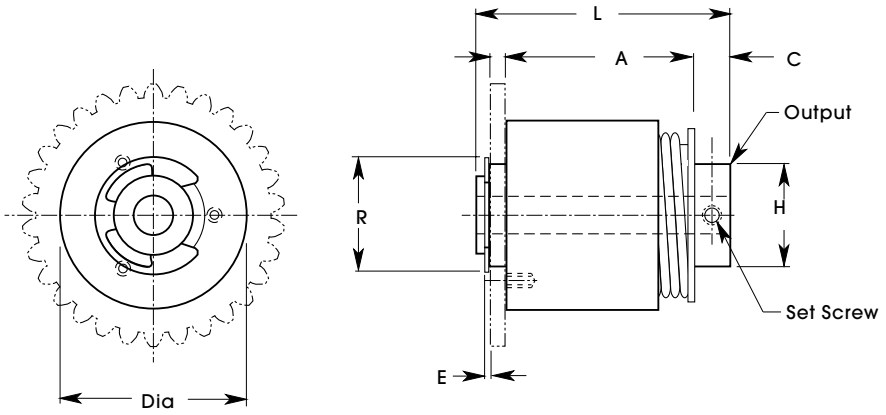
BRONZE BEARING CLUTCH

Stainless Steel — Bronze Bearings
Shafts 1/8" thru 1/2"

Continuous Slip Operating



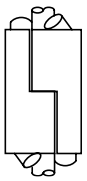
Style 1

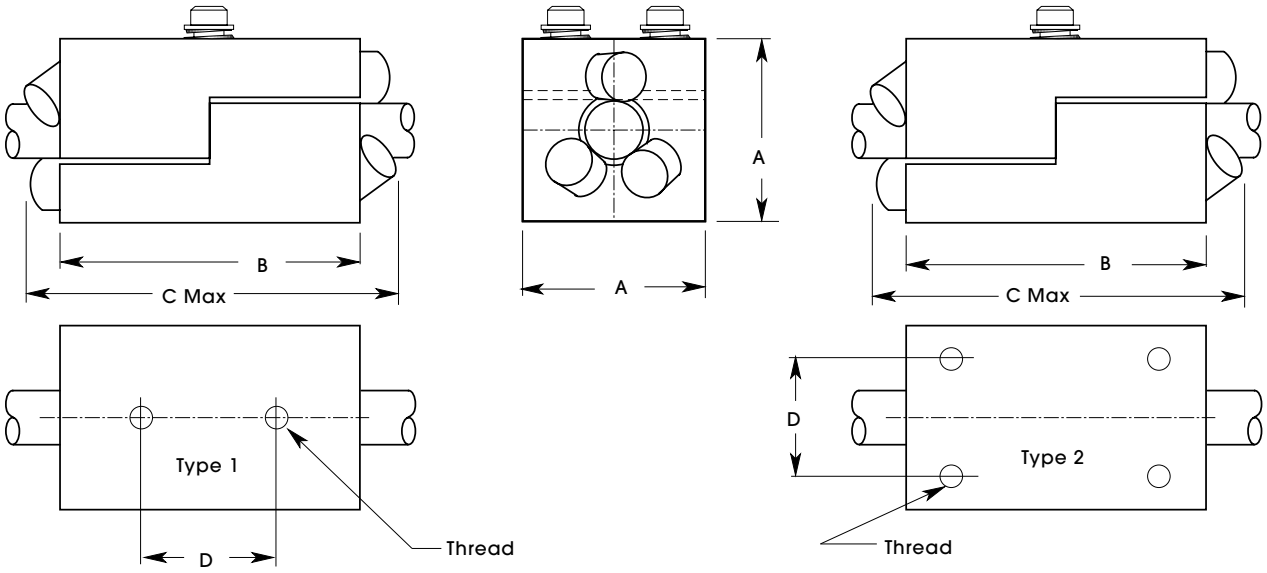


Style 2

B BORE +.0007 -.0000	TORQUE BIDIRECTIONAL	Y DIA +.0000 -.0008	L	A	C	DIA	THREAD DEPTH	W	CT	R MAX	E	H	TYPE	CATALOG NUMBER
.1248 .1873	9 oz in ±1	.3740	1.05	.72	.18	.63	#0-80 x .08	.500	.080	.45 .33	.03	.38	1	SEHJ-1 SEHJ-1A
.1873	20 oz in ±2	.4990	1.24	.85	.21	1.00	#1-72 x .10	.650	.095	.68	.04	.50	1	SEHJ-2
.2498 .3123							#1-72 x .11							SEHJ-3 SEHJ-3A
.2498 .3123	48 oz in ±5		1.39	.94	.23	1.25	#2-56 x .11	.925	.130				2	SEHJ-4 SEHJ-4A
.2498 .3123	80 oz in ±8					1.50						.63	1	SEHJ-5 SEHJ-5A
.2498 .3123	120 oz in ±12		1.67	1.20	.25	1.87	#4-40 x .15	.780					1	SEHJ-6 SEHJ-6A
.2498 .3123 .3748 .4998	240 oz in ±24	.7490	1.88	1.34	.29	2.25	#4-40 x .17	1.170	.130	.74	.04	1.00	2	SEHJ-7 SEHJ-8 SEHJ-9 SEHJ-10

Style SEHJ-7 to SEHJ-10 Available in 320 oz in ±32





Features: •Adjustable Tension to Prevent Overload
•Permanent Lubrication
•Use With Standard Shafts 3/8 • 1/2 • 5/8 • 3/4 • 1 inch (non-threaded)

Material: Aluminum Housing
Steel Bearings and Screws

SHAFT DIAMETER	LATERAL TRAVEL PER ROTATION	THRUST RATING	A	B	C	D	THREAD	TYPE	CATALOG NUMBER
3/8	.032 .100	5 LBS	1-1/8	1-5/8	2-1/4	3/4	6-32NC 2B	1	SEACL-1 SEACL-2
1/2	.100 .200 .500 .100 .200 .500 1.000	30 LBS	1-1/2	2	2-13/16	1	10-32NF-2B	1	SEACL-3 SEACL-4 SEACL-5 SEACL-6 SEACL-7 SEACL-8 SEACL-9
1/2	.200 .500 1.000	60 LBS	2	2-1/2	3-3/8	1-1/4	1/4-20NC-2B	1	SEACL-10 SEACL-11 SEACL-12
5/8	.100 .500								SEACL-13 SEACL-14
3/4	.100 .750 1.000								SEACL-15 SEACL-16 SEACL-17
1	.200 .500 1.000 2.000	100 LBS	3	2-1/2	3-1/2	2-1/2	1/4-20NC-2B	2	SEACL-18 SEACL-19 SEACL-20 SEACL-30