

# OTS COUPLINGS

Off-The-Shelf  
Couplings



# FLEXIBLE SHAFT COUPLINGS

Senior Aerospace Metal Bellows designs, engineers, and assembles a broad line of flexible shaft couplings that deliver precise positioning and control of machine components. Featuring all welded stainless steel construction, SAMB couplings are highly resistant to corrosion, withstand high and low temperature extremes, and are available in a wide variety of configurations and sizes as standard items.

## FEATURES

These durable features enable these couplings to thrive in demanding mechanical environments that require:

- Reliable axial and angular characteristics, with low windup (rotational deflection)
- Low backlash
- Medium torque capacity
- Constant rotational velocity
- Low inertia

## PRIMARY APPLICATIONS

Senior Aerospace Metal Bellows couplings are available in basic bore sizes to meet a broad range of precision applications including:

- Precision shaft encoders
- Semiconductor wire bonders
- Military tracking and positioning devices
- Automated equipment
- Numerically controlled machine tools
- Servo systems

All couplings featured in this catalog are also offered with split hub on one end and a set screw hub on the other end.

# SIMUL-TORQUE COUPLINGS

## SPECIFICATIONS

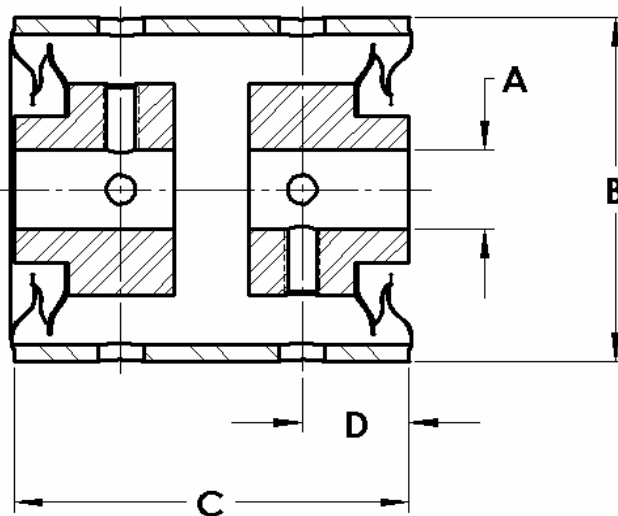
MAXIMUM TORQUE	MAXIMUM ANGULAR MISALIGNMENT	MAXIMUM PARALLEL MISALIGNMENT	MAXIMUM END PLAY	MAXIMUM WINDUP
3500* IN. OZ.	6°*	.05*	±.04*	.3 ARC SEC IN. OZ.

\* These are maximum values and are not additive.

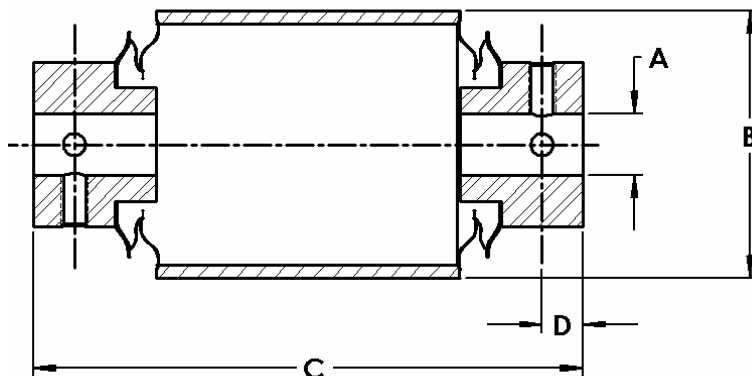
### Notes:

1. Bellows size 1.60" O.D. .68" I.D.
2. For hub clamps see last page
3. Set screws #8-32

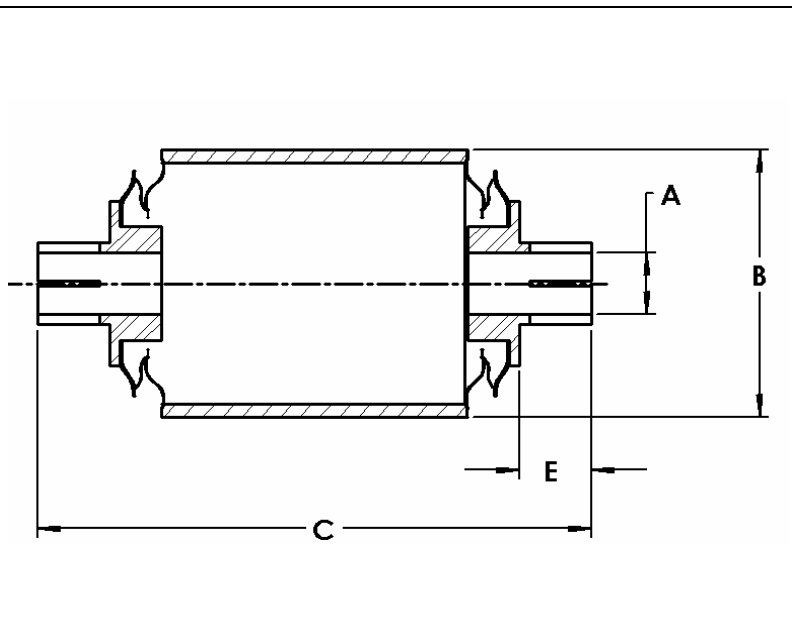
MODEL STA-XX						
Model No.	Part No.	Dimensions (in.)				Weight (oz.)
		A +.001 -.000	B	C	D	
STA-11	25854	.250	1 5/8	1 5/8	31/64	4.8
STA-12	25857	.50 .375	1 5/8	1 5/8	31/64	4.8
STA-13	25858	.250 .500	1 5/8	1 5/8	31/64	4.8
STA-14	37783	.250 .625	1 5/8	1 5/8	31/64	4.8
STA-22	25855	.375	1 5/8	1 5/8	31/64	4.6
STA-23	25859	.375 .500	1 5/8	1 5/8	31/64	4.6
STA-24	37784	.375 .625	1 5/8	1 5/8	31/64	4.6
STA-33	25856	.500	1 5/8	1 5/8	31/64	4.4
STA-34	37785	.500 .625	1 5/8	1 5/8	31/64	4.4
STA-44	37786	.625	1 5/8	1 5/8	31/64	4.4



MODEL STB-XX						
Model No.	Part No.	Dimensions (in.)				Weight (oz.)
		A +.001 -.000	B	C	D	
STB-11	25837	.250	1 5/8	3	3/16	4.8
STB-12	25846	.250 .375	1 5/8	3	3/16	4.8
STB-13	25847	.250 .500	1 5/8	3	3/16	4.8
STB-14	37787	.250 .625	1 5/8	3	3/16	4.8
STB-22	25841	.375	1 5/8	3	3/16	4.6
STB-23	25848	.375 .500	1 5/8	3	3/16	4.6
STB-24	37788	.375 .625	1 5/8	3	3/16	4.6
STB-33	25845	.500	1 5/8	3	3/16	4.4
STB-34	37789	.500 .625	1 5/8	3	3/16	4.4
STB-44	37790	.625	1 5/8	3	3/16	4.4



MODEL STS-XX						
Model No.	Part No.	Dimensions (in.)				Weight (oz.)
		A +.001 -.000	B	C	D	
STS-11	25812	.250	1 5/8	3	7/16	4.8
STS-12	25823	.250 .375	1 5/8	3	7/16	4.8
STS-13	25829	.250 .500	1 5/8	3	7/16	4.8
STS-14	37791	.250 .625	1 5/8	3	7/16	4.8
STS-22	25816	.375	1 5/8	3	7/16	4.6
STS-23	25830	.375 .500	1 5/8	3	7/16	4.6
STS-24	37792	.375 .625	1 5/8	3	7/16	4.6
STS-33	25822	.500	1 5/8	3	7/16	4.4
STS-34	37793	.500 .625	1 5/8	3	7/16	4.4
STS-44	37794	.625	1 5/8	3	7/16	4.4



# POW-R-FLEX COUPLINGS

## SPECIFICATIONS

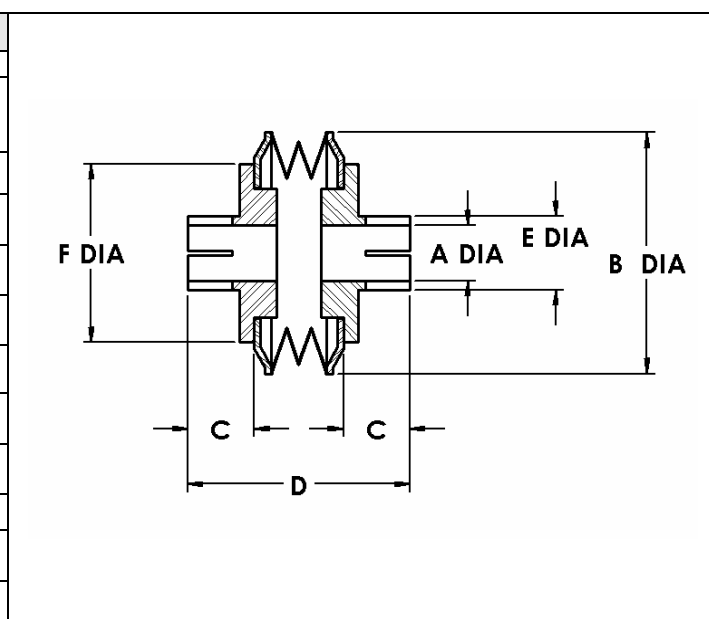
MAXIMUM TORQUE	MAXIMUM ANGULAR MISALIGNMENT	MAXIMUM PARALLEL MISALIGNMENT	MAXIMUM END PLAY	MAXIMUM WINDUP
5000* IN. OZ.	2°*	.004*	±.035*	.3 ARC SEC IN. OZ.

\* These are maximum values and are not additive.

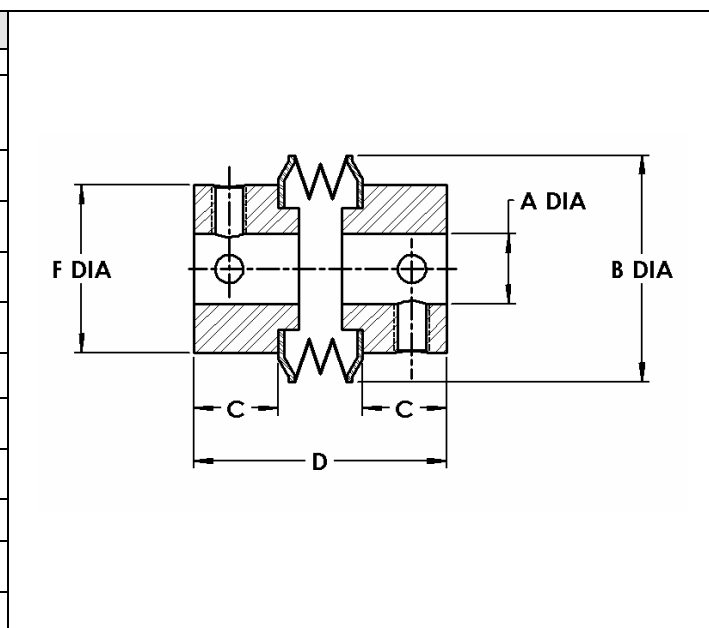
### Notes:

1. Bellows size 1.43" O.D. .94" I.D.
2. For hub clamps see last page
3. Set screws #8-32

MODEL PFC-XX							
Model No.	Part No.	Dimensions (in.)					
		A +.001 -.000	B	C	D	E	F
PFC-11	25941	.250	1.43	.462	1.34	.312	7/8
PFC -12	25942	.250 .375	1.43	.462	1.34	.312 .437	7/8
PFC -13	25943	.250 .500	1.43	.462	1.34	.312 .562	7/8
PFC -14	37801	.250 .625	1.43	.462	1.34	.312 .687	7/8
PFC -22	25944	.375	1.43	.462	1.34	.437	7/8
PFC -23	25945	.375 .500	1.43	.462	1.34	.437 .562	7/8
PFC -24	37802	.375 .625	1.43	.462	1.34	.437 .687	7/8
PFC -33	25946	.500	1.43	.462	1.34	.562	7/8
PFC -34	37803	.500 .625	1.43	.462	1.34	.562 .687	7/8
PFC -44	37804	.625	1.43	.462	1.34	.687	7/8



MODEL PFS-XX						
Model No.	Part No.	Dimensions (in.)				
		A +.001 -.000	B	C	D	F
PFS-11	25928	.250	1.43	.462	1.34	7/8
PFS -12	25929	.250 .375	1.43	.462	1.34	7/8
PFS -13	25930	.250 .500	1.43	.462	1.34	7/8
PFS -14	37797	.250 .625	1.43	.462	1.34	7/8
PFS -22	25931	.375	1.43	.462	1.34	7/8
PFS -23	25932	.375 .500	1.43	.462	1.34	7/8
PFS -24	37798	.375 .625	1.43	.462	1.34	7/8
PFS -33	25933	.500	1.43	.462	1.34	7/8
PFS -34	37799	.500 .625	1.43	.462	1.34	7/8
PFS -44	37800	.625	1.43	.462	1.34	7/8



# MINIATURE SIMUL-TORQUE COUPLINGS

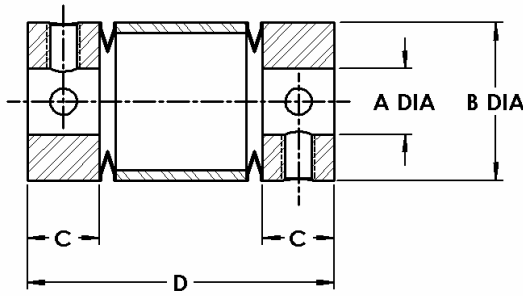
MAXIMUM TORQUE	MAXIMUM ANGULAR MISALIGNMENT	MAXIMUM PARALLEL MISALIGNMENT	MAXIMUM END PLAY	MAXIMUM WINDUP
750* IN. OZ.	3°*	.015*	±.020*	2 <u>ARC SEC</u> IN. OZ.

\* These are maximum values and are not additive.

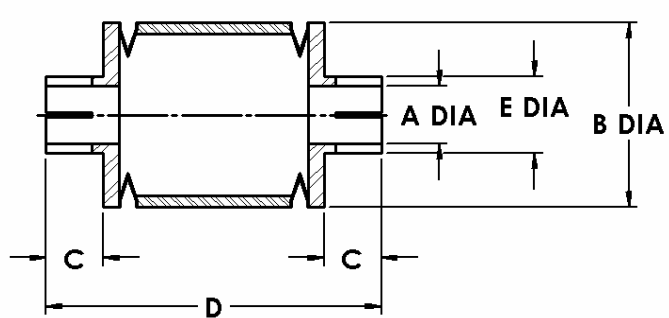
Notes:

1. Bellows size .75" O.D. 3.5" I.D.
2. For hub clamps see last page of the section

MODEL M-AXX						
Model No.	Part No.	DIMENSIONS (IN.)				SET SCREWS
		A +.001 -.000	B	C	D	
M-A1	25996	.250	3/4	9/32	1 3/8	#8-32
M-A2	25997	.375	3/4	9/32	1 3/8	#8-32
M-A12	25998	.250 .375	3/4	9/32	1 3/8	#8-32



MODEL M-BXX						
Model No.	Part No.	DIMENSIONS (IN.)				SET SCREWS
		A +.001 -.000	B	C	D	
M-B1	26003	.250	3/4	1/4	1 7/16	.312
M-B2	26004	.375	3/4	1/4	1 7/16	.437
M-B12	26005	.250 .375	3/4	1/4	1 7/16	.312 .437



# ECONALIGN COUPLINGS

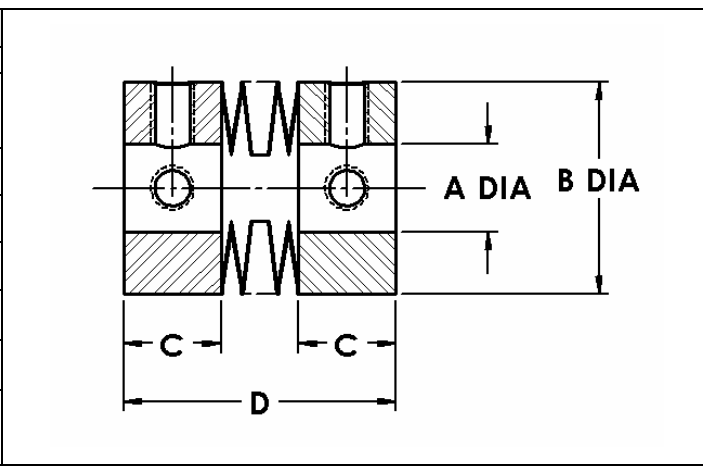
SIZE	MAXIMUM TORQUE	MAXIMUM ANGULAR MISALIGNMENT	MAXIMUM PARALLEL MISALIGNMENT	MAXIMUM END PLAY	MAXIMUM WINDUP
¼ O.D.	25* IN. OZ.	2°*	.004*	±.015*	200 ARC SEC IN. OZ.
½ O.D.	300* IN. OZ.	4°*	.008*	±.040*	30 ARC SEC IN. OZ.
¾ O.D.	700* IN. OZ.	6°*	.012*	±.050*	7 ARC SEC IN. OZ.

\* These are maximum values and are not additive.

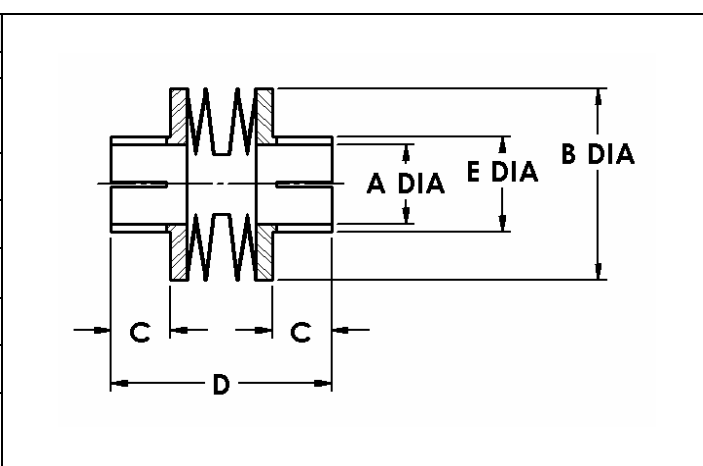
Notes:

1. Bellows size    1/4" .250" O.D. .090" I.D.    2. For hub clamps see last page of this section.  
                           1/2" .50" O.D. .20" I.D.  
                           3/4" .75" O.D. .35" I.D.

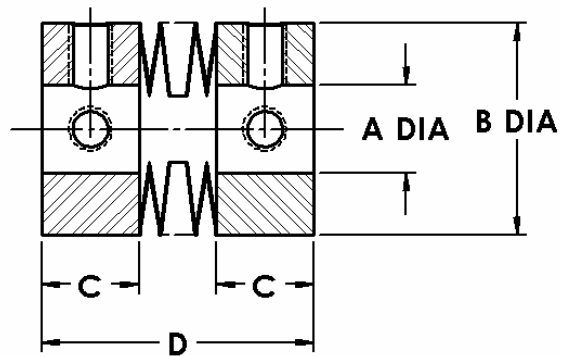
MODEL W1-SXX						
Model No.	Part No.	DIMENSIONS (IN.)				SET SCREWS
		A +.001 -.000	B	C	D	
W1-S1	26007	.090	1/4	5/32	7/16	#1-72
W1-S2	26008	.120	1/4	5/32	7/16	#1-72
W1-S3	26009	.125	1/4	5/32	7/16	#1-72
W1-S12	26010	.090 .120	1/4	5/32	7/16	#1-72
W1-S13	26012	.090 .125	1/4	5/32	7/16	#1-72
W1-S23	26013	.120 .125	1/4	5/32	7/16	#1-72



MODEL W2-CXX & W3-CXX						
Model No.	Part No.	DIMENSIONS (IN.)				
		A +.001 -.000	B	C	D	E
W2-C4	26032	.187	1/2	1/4	7/8	.250
W2-C5	26033	.250	1/2	1/4	7/8	.312
W2-C45	26034	.187 .250	1/2	1/4	7/8	.250 .312
W3-C5	26035	.250	3/4	1/4	1	.312
W3-C6	26036	.375	3/4	1/4	1	.437
W3-C56	26037	.250 .375	3/4	1/4	1	.312 .437



MODEL W2-SXX & W3-SXX						
Model No.	Part No.	DIMENSIONS (IN.)				SET SCREWS
		A +.001 -.000	B	C	D	
W2-S3	26014	.125	1/2	9/32	13/16	#4-40
W2-S4	26015	.187	1/2	9/32	13/16	#6-32
W2-S5	26016	.250	1/2	9/32	13/16	#6-32
W2-S34	26017	.125 .187	1/2	9/32	13/16	#4-40 #6-32
W2-S35	26018	.125 .250	1/2	9/32	13/16	#4-40 #6-32
W2-S45	26019	.187 .250	1/2	9/32	13/16	#6-32
W3-S5	26020	.250	3/4	9/32	7/8	#8-32
WS-S6	26021	.375	3/4	9/32	7/8	#8-32
W3-S56	26022	.250 .375	3/4	9/32	7/8	#8-32





# MINIATURE ECONSTAIN COUPLINGS

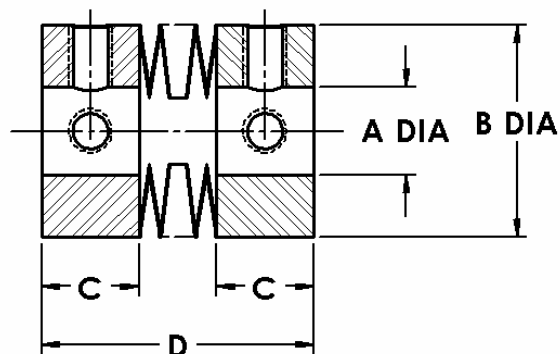
SIZE	MAXIMUM TORQUE	MAXIMUM ANGULAR MISALIGNMENT	MAXIMUM PARALLEL MISALIGNMENT	MAXIMUM END PLAY	MAXIMUM WINDUP
1/2 O.D.	350* IN. OZ.	2°*	.004*	±.015*	18 <u>ARC SEC</u> IN. OZ.
3/4 O.D.	750* IN. OZ.	3°*	.006*	±.020*	3 <u>ARC SEC</u> IN. OZ.

\* These are maximum values and are not additive.

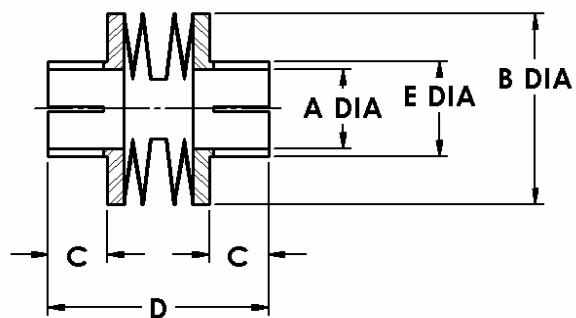
### Notes:

2. Bellows size 1/2" .50" O.D. .20" I.D. 2. For hub clamps see last page of this section.  
3/4" .75" O.D. .35" I.D.

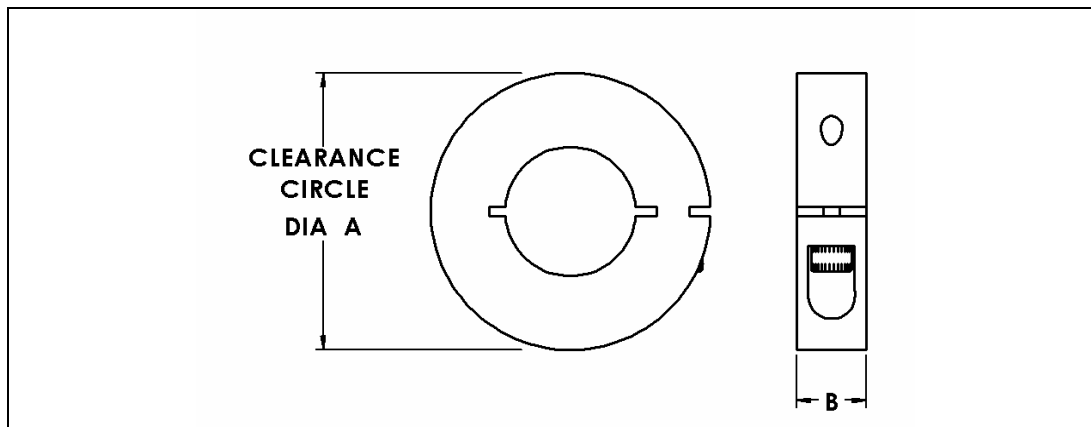
MODEL R2-SX						
Model No.	Part No.	DIMENSIONS (IN.)				
		A +.001 -.000	B	C	D	E
R2-S3	26038	.125	1/2	9/32	11/16	#4-40
R2-S4	26039	.187	1/2	9/32	11/16	#6-32
R2-S5	26040	.250	1/2	9/32	11/16	#6-32
R2-S34	26041	.125 .187	1/2	9/32	11/16	#4-40 #6-32
R2-S35	26042	.125 .250	1/2	9/32	11/16	#4-40 #6-32
R2-S45	26043	.187 .250	1/2	9/32	11/16	#6-32
R3-S5	26044	.250	3/4	9/32	23/32	#8-32
R3-S6	26045	.375	3/4	9/32	23/32	#8-32
R3-S56	26046	.250 .375	3/4	9/32	23/32	#8-32



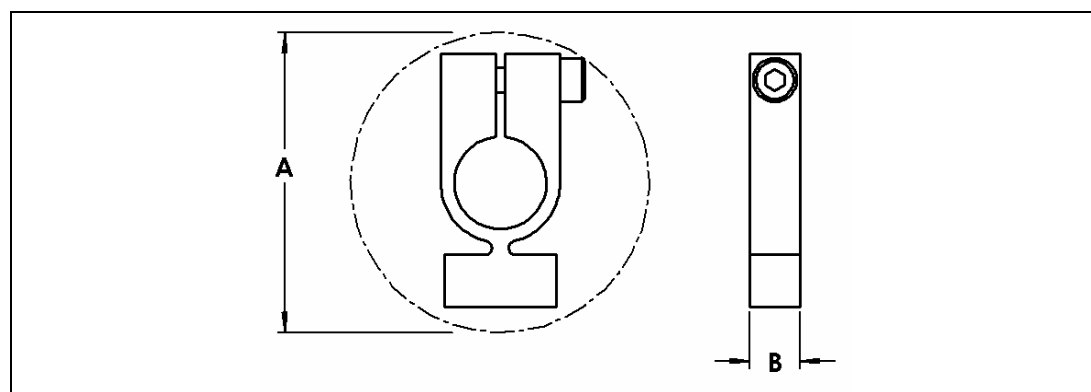
MODEL R2-CX						
Model No.	Part No.	DIMENSIONS (IN.)				
		A +.001 -.000	B	C	D	E
R2-C4	26056	.187	1/2	1/4	3/4	.250
R2-C5	26057	.250	1/2	1/4	3/4	.312
R2-C45	26058	.187 .250	1/2	1/4	3/4	.250 .312
R3-C5	26059	.250	3/4	1/4	27/32	.312
R3-C6	26060	.375	3/4	1/4	27/32	.437
R3-C56	26061	.250 .375	3/4	1/4	27/32	.312 .437



# CLAMPS



CLAMP FOR SIMUL-TORQUE AND POW-R-FLEX	Model	Part No.	Coupling Bore Size	A	B
	1329-1	25947	1/4	11/16	9/32
	1329-2	25948	3/8	15/16	11/32
	1329-3	25949	1/2	1 1/4	7/16
	1329-4	35214	5/8	1 3/8	7/16



CLAMP FOR MINIATURE SIMUL-TORQUE ECONALIGN MINIATURE ECONALIGN	Model	Part No.	Coupling Bore Size	A	B
	GC-15-3	26062	3/16	1	1/4
	GC-15-5	26063	1/4	1 1/32	1/4
	GC-15-9	26064	3/8	1 11/32	1/4

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