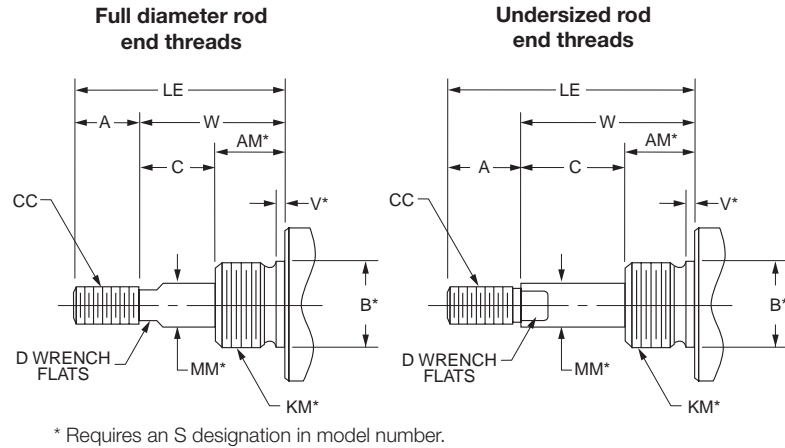


Non-Standard Rods

For non-standard rod dimensions, or undersized rod end threads, put a “3” in model number and describe the rod using the letters shown in the drawing. Specify CC, LE and A dimensions.



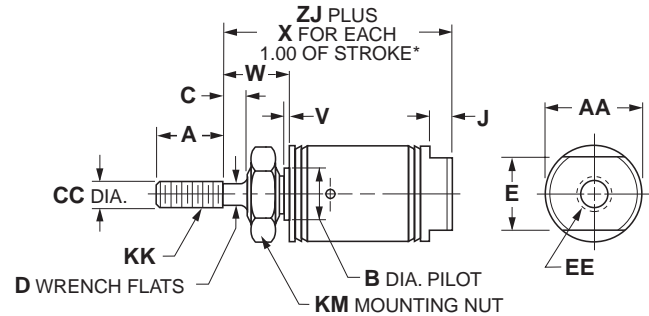
B

Round Body Cylinders
Actuator Products

Mounting Style N

Nose Mount, Spring Return

Bore size	SR	SRM	Std. strokes (in)	Max.. stroke (in)	SS rod std
5/16"	•		1/2, 1, 1-1/2, 2, 2-1/2, 3, 4	4	✓
7/16"	•		1/2, 1, 1-1/2, 2, 2-1/2, 3, 4	6	✓
9/16"	•	•	1/2, 1, 1-1/2, 2, 3, 4	6	✓
3/4"	•	•	1/2, 1, 1-1/2, 2, 3, 4	6	✓
7/8"	•		1/2, 1, 1-1/2, 2, 3, 4	6	✓
1-1/16"	•	•	1/2, 1, 1-1/2, 2, 3, 4	6	✓
1-1/4"	•	•	1/2, 1, 2, 3, 4	6	✓
1-1/2"	•	•	1/2, 1, 2, 3, 4	6	✓
1-3/4"	•	•	1/2, 1, 1-1/2, 2, 2-1/2, 3, 4	6	
2"	•	•	–	4	



Bore size	ZJ															
	A	AA	B	C	CC	D	E	EE	J	KK	KM	V	W	X	SR	SRM
5/16"	0.38	0.36	–	–	0.125	–	0.36	#10-32	–	#5-40 UNC	1/4-28	0	0.25	0.75**	1.12	–
7/16"	0.50	0.50	0.374	–	0.188	–	0.38	#10-32	0.19	#10-32 UNF	3/8-24	0.05	0.31	0.94**	1.31	–
9/16"	0.50	0.62	0.437	–	0.188	–	0.50	#10-32	0.19	#10-32 UNF	7/16-20	0.06	0.38	1.62	1.53	1.76
3/4"	0.50	0.81	0.499	–	0.250	–	0.62	1/8 NPTF	0.19	1/4-28 UNF	1/2-20	0.09	0.44	1.69	1.50	1.75
7/8"	0.50	0.93	0.624	–	0.250	–	0.62	1/8 NPTF	0.19	1/4-28 UNF	5/8-18	0.09	0.50	1.56	1.84	–
1-1/16"	0.50	1.12	0.624	0.12	0.312	0.25	0.88	1/8 NPTF	0.19	5/16-24 UNF	5/8-18	0.09	0.62	1.56	2.06	2.31
1-1/4"	0.75	1.34	0.749	0.25	0.437	0.38	0.88	1/8 NPTF	0.25	7/16-20 UNF	3/4-16	0.09	0.88	1.81	2.66	2.78
1-1/2"	0.75	1.56	0.749	0.25	0.437	0.38	0.88	1/8 NPTF	0.25	7/16-20 UNF	3/4-16	0.09	0.88	1.69	2.44	2.69
1-3/4"	0.88	1.84	1.031	0.38	0.500	7/16	1.25	1/4 NPTF	0.25	1/2-20 UNF	1-14	0.09	0.75	2.0	2.97	3.09
2"	0.88	2.08	1.374	0.38	0.625	0.50	1.25	1/4 NPTF	0.31	1/2-20 UNF	1-1/4-120.12	1.19	–	▲	▲	

▲ 5.66" for 1" stroke; 7.66" for 2" stroke; 8.91" for 3" stroke; 11.84" for 4" stroke.

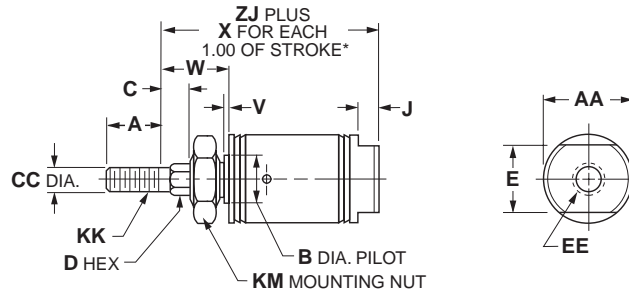
* To determine lengths for half inch stroke increments, determine length for next highest whole number stroke and subtract a half inch.

** For each 0.50" of stroke



Mounting Style NR

Nose Mount, Spring Return, Hex Rod



Bore size	SR	SRM	Std. stroke (in)	Max.. stroke (in)	SS rod std
7/16"	•		1/2, 1, 1-1/2, 2, 3, 4	6	✓
9/16"	•	•	1/2, 1, 1-1/2, 2, 3, 4	6	✓
3/4"	•	•	1/2, 1, 1-1/2, 2, 3, 4	6	✓
7/8"	•		1/2, 1, 1-1/2, 2, 3, 4	6	✓
1-1/16"	•	•	1/2, 1, 1-1/2, 2, 3, 4	6	✓
1-1/4"	•	•	1, 2, 3, 4	6	✓
1-1/2"	•	•	1/2, 1, 2, 3, 4	6	✓
1-3/4"	•	•	1/2, 1, 1-1/2, 2, 2-1/2, 3, 4	6	

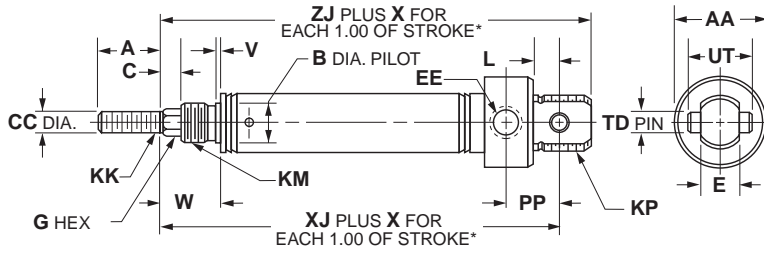
Bore size	A	AA	B	C	CC	D	E	EE	J	KK	KM	V	W	X	ZJ	
															SR	SRM
7/16"	0.50	–	0.374	0.25	0.188	3/16	–	#10-32	0.19	#10-32 UNF	3/8-24	0.05	0.56	0.94	1.56	–
9/16"	0.50	–	0.437	0.25	0.188	3/16	–	#10-32	0.19	#10-32 UNF	7/16-20	0.06	0.62	1.62	1.78	2.03
3/4"	0.50	–	0.499	0.25	0.250	1/4	–	1/8 NPTF	0.19	1/4-28 UNF	1/2-20	0.09	0.69	1.69	1.75	2.00
7/8"	0.50	–	0.624	0.25	0.250	1/4	–	1/8 NPTF	0.19	1/4-28 UNF	5/8-18	0.09	0.75	1.56	2.09	–
1-1/16"	0.50	1.12	0.624	0.25	0.312	3/8	0.88	1/8 NPTF	0.19	5/16-24 UNF	5/8-18	0.09	0.75	1.56	2.19	2.44
1-1/4"	0.88	1.34	0.749	0.25	0.437	7/16	0.88	1/8 NPTF	0.25	7/16-20 UNF	3/4-16	0.09	0.88	1.81	2.66	2.78
1-1/2"	0.88	1.56	0.749	0.38	0.437	7/16	0.88	1/8 NPTF	0.25	7/16-20 UNF	3/4-16	0.09	1.00	1.69	2.56	2.81
1-3/4"	0.88	1.84	1.031	0.38	0.500	1/2	1.25	1/4 NPTF	0.25	1/2-20 UNF	1-14	0.09	1.12	2.0	3.03	3.15

* To determine lengths for half inch stroke increments, determine length for next highest whole number stroke and subtract one half inch.

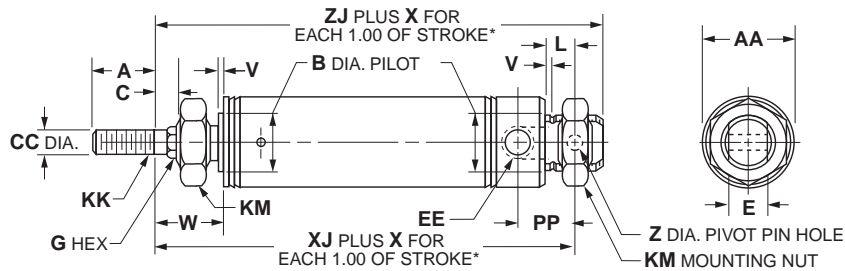
B
 Round Body Cylinders
 Actuator Products

Mounting Style NRP

Pivot & Nose Mount, Spring Return, Hex Rod



Bore sizes
7/16" *
3/4"
* No mounting nuts



Bore sizes
9/16" *
7/8" *
1-1/16" *
1-1/4"
1-1/2" *
1-3/4"
* No mounting nuts

B

Round Body Cylinders
 Actuator Products

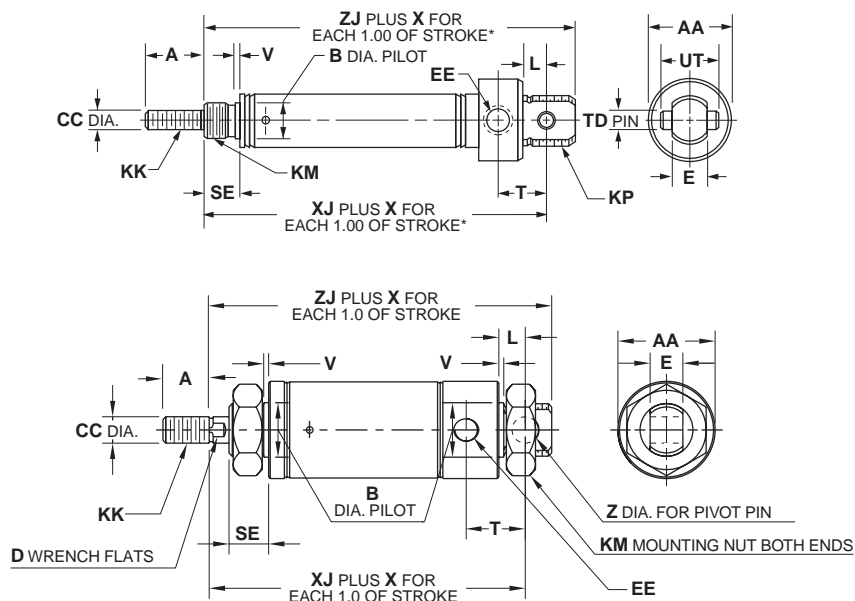
Bore size	SR	SRM	Std. stroke (in)	Max. stroke (in)	SS rod std	A	AA	B	C	CC	E	EE
7/16"	•		1/2, 1, 1-1/2, 2, 3, 4	6	✓	0.50	0.74	0.374	0.25	0.188	0.31	#10-32
9/16"	•	•	1/2, 1, 1-1/2, 2, 3, 4	6	✓	0.50	0.62	0.437	0.25	0.188	0.31	#10-32
3/4"	•	•	1, 2, 3, 4	6	✓	0.50	0.86	0.499	0.25	0.250	0.38	1/8 NPTF
7/8"	•		1, 2, 3, 4	6	✓	0.50	0.93	0.624	0.25	0.250	0.38	1/8 NPTF
1-1/16"	•	•	1, 2, 3, 4	6	✓	0.50	1.12	0.624	0.25	0.312	0.38	1/8 NPTF
1-1/4"	•	•	1, 2, 3, 4	6	✓	0.88	1.34	0.749	0.25	0.437	0.50	1/8 NPTF
1-1/2"	•	•	1, 2, 3, 4	6	✓	0.88	1.56	0.749	0.38	0.437	0.62	1/8 NPTF
1-3/4"	•	•	1/2, 1, 1-1/2, 2, 2-1/2, 3, 4	6		0.88	1.84	1.031	0.38	0.500	0.62	1/4 NPTF

Bore size	G HEX	KK	KM	KP	L	PP	TD	UT	V	W	X	XJ			ZJ	
												SR	SRM	Z	SR	SRM
7/16"	3/16	#10-32 UNF	3/8-24	7/16-20 UNF	0.25	0.44	0.156	0.50	0.05	0.56	0.94	2.00	-	-	2.25	-
9/16"	3/16	#10-32 UNF	7/16-20	7/16-20 UNF	0.25	0.38	-	-	0.06	0.62	1.62	2.06	2.31	0.157	2.25	2.50
3/4"	1/4	1/4-28 UNF	1/2-20	5/8-18 UNF	0.34	0.62	0.250	0.75	0.09	0.69	1.69	2.53	2.78	-	2.81	3.06
7/8"	1/4	1/4-28 UNF	5/8-18	5/8-18 UNF	0.34	0.62	0.250	0.75	0.09	0.75	1.56	2.72	-	-	3.00	-
1-1/16"	3/8	5/16-24 UNF	5/8-18	5/8-18 UNF	0.34	0.62	0.250	0.75	0.09	0.75	1.56	2.78	3.03	-	3.06	3.31
1-1/4"	7/16	7/16-20 UNF	3/4-16	-	0.41	0.78	0.251	-	0.09	0.88	1.81	3.38	3.50	0.251	3.78	3.91
1-1/2"	7/16	7/16-20 UNF	3/4-16	-	0.50	0.81	0.375	1.00	0.09	1.00	1.69	3.25	3.50	-	3.62	3.87
1-3/4"	1/2	1/2-20 UNF	1-14	-	0.50	1.12	0.376	0.62	0.09	1.12	2.0	4.09	4.21	0.376	4.59	4.71

* To determine lengths for half inch stroke increments, determine length for next highest whole number stroke and subtract one half inch.

Mounting Style P

Pivot Mount, Spring Return



Bore sizes

5/16" *
7/16"
3/4"

* No mounting nuts

Bore sizes

9/16" *
7/8" *
1-1/16" *
1-1/4"
1-1/2" *
1-3/4"
2" *

* No mounting nuts

Bore size	SR	SRM	Std. stroke (in)	Max. stroke (in)	SS rod std	A	AA	B	CC	D	E	EE
5/16"	•		1/2, 1, 1-1/2, 2, 3, 4	4	✓	0.38	0.39	–	0.125	–	0.25	#10-32
7/16"	•		1/2, 1, 1-1/2, 2, 3, 4	6	✓	0.50	0.74	0.374	0.188	–	0.31	#10-32
9/16"	•	•	1/2, 1, 1-1/2, 2, 3, 4	6	✓	0.50	0.62	0.437	0.188	–	0.31	#10-32
3/4"	•	•	1/2, 1, 1-1/2, 2, 3, 4	6	✓	0.50	0.86	0.499	0.250	–	0.38	1/8 NPTF
7/8"	•		1/2, 1, 1-1/2, 2, 3, 4	6	✓	0.50	0.93	0.624	0.250	–	0.38	1/8 NPTF
1-1/16"	•	•	1/2, 1, 1-1/2, 2, 3, 4	6	✓	0.50	1.12	0.624	0.312	0.25	0.38	1/8 NPTF
1-1/4"	•	•	1, 2, 3, 4	6	✓	0.75	1.34	0.749	0.437	0.38	0.50	1/8 NPTF
1-1/2"	•	•	1, 2, 3, 4	6	✓	0.75	1.56	0.749	0.437	0.38	0.62	1/8 NPTF
1-3/4"	•	•	1/2, 1, 1-1/2, 2, 2-1/2, 3, 4	6		0.88	1.84	1.031	0.500	7/16	0.62	1/4 NPTF
2"	•	•	–	4		0.88	2.08	1.374	0.625	0.50	0.75	1/4 NPTF

Bore size											XJ		ZJ		
	KK	KM	KP	L	SE	T	TD	UT	V	X	SR	SRM	Z	SR	SRM
5/16"	#5-40 UNC	3/8-24	–	0.34	0.25	0.34	–	–	–	0.75	1.52	–	0.125	1.68	–
7/16"	#10-32 UNF	3/8-24	7/16-20 UNF	0.25	0.31	0.44	0.156	0.50	0.05	0.94	1.75	–	–	2.00	–
9/16"	#10-32 UNF	7/16-20	7/16-20 UNF	0.25	0.38	0.38	–	–	0.06	1.62	1.81	2.06	0.157	2.00	2.25
3/4"	1/4-28 UNF	1/2-20	5/8-18 UNF	0.34	0.44	0.62	0.250	0.75	0.09	1.69	2.28	2.53	–	2.56	2.81
7/8"	1/4-28 UNF	5/8-18	5/8-18 UNF	0.34	0.50	0.62	0.250	0.75	0.09	1.56	2.47	–	–	2.75	–
1-1/16"	5/16-24 UNF	5/8-18	5/8-18 UNF	0.34	0.50	0.62	0.250	0.75	0.09	1.56	2.66	2.91	–	2.94	3.19
1-1/4"	7/16-20 UNF	3/4-16	–	0.41	0.63	0.78	–	–	0.09	1.81	3.38	3.91	0.251	3.78	3.50
1-1/2"	7/16-20 UNF	3/4-16	–	0.50	0.63	0.81	0.375	1.00	0.09	1.81	3.12	3.37	–	3.50	3.75
1-3/4"	1/2-20 UNF	1-14	–	0.50	0.75	1.12	–	–	0.09	2.0	4.03	4.15	0.376	4.53	4.65
2"	1/2-20 UNF	1-1/4-12	–	0.56	0.81	1.03	–	–	0.12	–	■	*	–	▲	◆

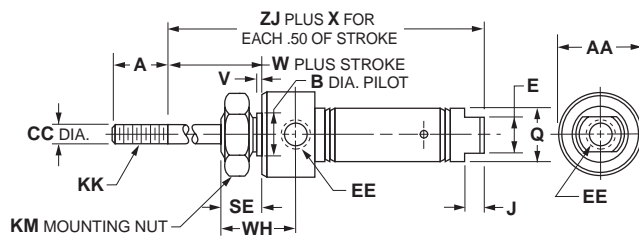
■ 6.34" for 1" stroke, 8.34" for 2" stroke, 9.59" for 3" stroke, 12.53" for 4" stroke*

▲ 6.78" for 1" stroke, 8.78" for 2" stroke, 10.03" for 3" stroke, 12.97" for 4" stroke*

* To determine lengths for half inch stroke increments, determine length for next highest whole number stroke and subtract a half inch.

Mounting Style R

Nose Mount, Spring Extended



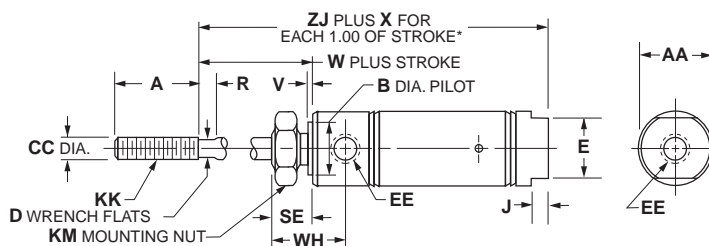
Bore sizes

5/16
 7/16"
 3/4"

Bore sizes

9/16"
 7/8"
 1-1/16"
 1-1/4"
 1-1/2"
 1-3/4"
 2" *

* No mounting nuts



B

Round Body Cylinders
 Actuator Products

Bore size	SR	SRM	Std. stroke (in)	Max. stroke (in)	SS rod std	A	AA	B	CC	D	E
5/16"	•		1/2, 1, 1-1/2, 2, 2-1/2, 3	4	✓	0.38	0.50 SQ.	–	0.125	–	–
7/16"	•		1/2, 1, 1-1/2, 2, 3	6	✓	0.50	0.74	0.437	0.188	–	0.38
9/16"	•	•	1/2, 1, 1-1/2, 2, 3	6	✓	0.50	0.62	0.437	0.188	–	0.50
3/4"	•	•	1/2, 1, 2, 3, 4	6	✓	0.50	0.86	0.624	0.250	–	–
7/8"	•		1/2, 1, 2, 3, 4	6	✓	0.50	0.93	0.624	0.250	–	–
1-1/16"	•	•	1/2, 1, 1-1/2, 2, 3, 4	6	✓	0.50	1.12	0.624	0.312	0.25	–
1-1/4"	•	•	1, 2, 3, 4	6	✓	0.75	1.34	0.749	0.437	0.38	–
1-1/2"	•	•	1, 2, 3, 4	6	✓	1.25	1.56	0.749	0.437	0.38	0.88
1-3/4"	•	•	1/2, 1, 1-1/2, 2, 2-1/2, 3, 4	6		0.88	1.84	1.031	0.500	7/16	–
2"	•	•	–	4		0.88	2.08	1.374	0.625	0.50	–

Bore size												ZJ	
	EE	J	KK	KM	Q	R	SE	V	W	WH	X	SR	SM
5/16"	#10-32	–	#5-40 UNC	3/8-24	0.36	–	0.31	–	0.31	0.47	1.25	1.49	–
7/16"	#10-32	0.19	#10-32 UNF	7/16-20	0.50	–	0.38	0.05	0.38	0.72	1.44	1.94	–
9/16"	#10-32	0.19	#10-32 UNF	7/16-20	0.62	–	0.38	0.05	0.38	0.78	2.62	2.00	2.25
3/4"	1/8 NPTF	–	1/4-28 UNF	5/8-18	0.81	–	0.50	0.09	0.50	0.97	2.69**	2.31	2.56
7/8"	1/8 NPTF	–	1/4-28 UNF	5/8-18	–	–	0.50	0.09	0.50	0.97	2.56	2.31	–
1-1/16"	1/8 NPTF	–	5/16-24 UNF	5/8-18	–	0.12	0.50	0.09	0.62	1.06	2.81	2.62	2.87
1-1/4"	1/8 NPTF	–	7/16-20 UNF	3/4-16	–	0.25	0.62	0.09	0.88	1.38	2.81	3.47	3.60
1-1/2"	1/8 NPTF	0.25	7/16-20 UNF	3/4-16	–	0.25	0.62	0.09	0.88	1.25	3.00	3.19	3.44
1-3/4"	1/4 NPTF	–	1/2-20 UNF	1-14	–	–	0.75	0.09	1.06	1.63	3.0	4.03	4.15
2"	1/4 NPTF	–	1/2-20 UNF	1-1/4-12	–	0.38	0.81	0.12	1.19	1.47	–	▲	◆

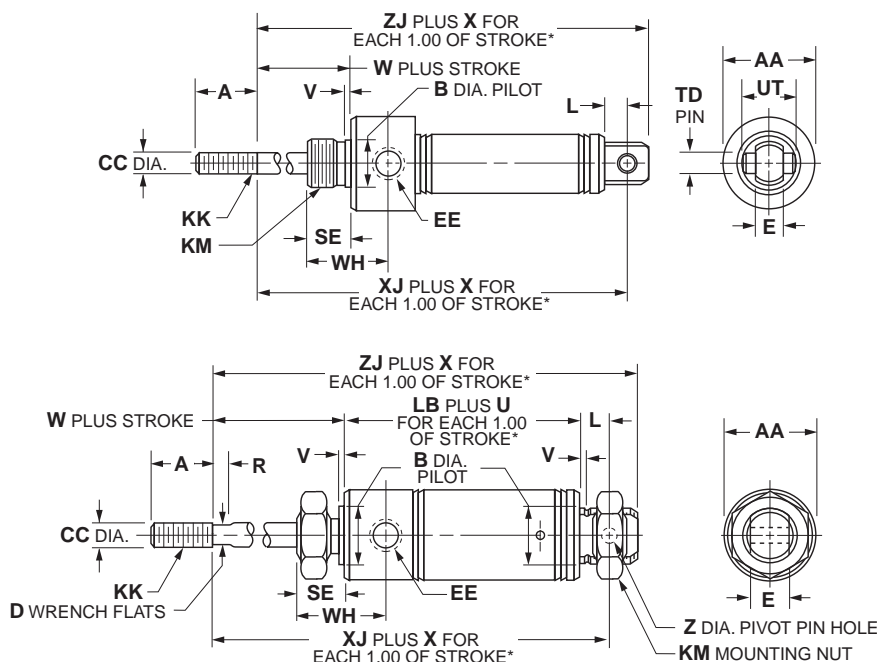
▲ 7.11" for 1" stroke, 10.11" for 2" stroke, 12.34" for 3" stroke, 16.34" for 4" stroke.*

* To determine lengths for half inch stroke increments, determine length for next highest whole number stroke and subtract one half inch.

** For each 1.00" of stroke.

Mounting Style RP

Pivot and Nose Mount, Spring Extended



Bore sizes
5/16" *
7/16"
3/4"

* No mounting nuts

Bore sizes
9/16" *
7/8" *
1-1/16" *
1-1/4"
1-1/2" *
1-3/4"
2" *

* No mounting nuts

Bore size	SR	SRM	Std. stroke (in)	Max. stroke (in)	SS rod std	A	AA	B	CC	D	E	EE	KK
5/16"	•		1/2, 1, 1-1/2, 2, 2-1/2, 3	4	✓	0.38	0.50 SQ.	–	0.125	–	0.25	#10-32	#5-40 UNC
7/16"	•		1/2, 1, 1-1/2, 2, 3	6	✓	0.50	0.74	0.437	0.188	–	0.31	#10-32	#10-32 UNF
9/16"	•	•	1/2, 1, 1-1/2, 2, 3	6	✓	0.50	0.62	0.437	0.188	–	0.31	#10-32	#10-32 UNF
3/4"	•	•	1/2, 1, 2, 3, 4	6	✓	0.50	0.86	0.624	0.250	–	0.38	1/8 NPTF	1/4-28 UNF
7/8"	•		1/2, 1, 2, 3, 4	6	✓	0.50	0.93	0.624	0.250	–	0.38	1/8 NPTF	1/4-28 UNF
1-1/16"	•	•	1/2, 1, 1-1/2, 2, 3, 4	6	✓	0.50	1.12	0.624	0.312	0.25	0.38	1/8 NPTF	5/16-24 UNF
1-1/4"	•	•	1, 2, 3, 4	6	✓	0.75	1.34	0.749	0.437	0.38	0.50	1/8 NPTF	7/16-20 UNF
1-1/2"	•	•	1, 2, 3, 4	6	✓	1.25	1.56	0.749	0.437	0.38	0.62	1/8 NPTF	7/16-20 UNF
2"	•	•	–	4		.88	2.08	1.374	0.625	0.50	0.75	1/4 NPTF	1/2-20 UNF

Bore size	KM	L	LB	R	SE	TD	U	UT	V	W	WH	X	XJ			ZJ	
													SR	SRM	Z	SR	SRM
5/16"	3/8-24	0.19	–	–	0.31	–	–	–	–	0.31	0.47	1.25	1.88	–	–	2.04	–
7/16"	7/16-20	0.25	–	–	0.38	0.156	–	0.50	0.05	0.38	0.72	1.44	2.38	–	–	2.62	–
9/16"	7/16-20	0.25	–	–	0.38	–	–	–	0.06	0.38	0.78	2.62	2.28	2.53	0.157	2.47	2.72
3/4"	5/8-18	0.34	–	–	0.50	0.250	–	0.75	0.09	0.50	0.97	2.69	2.44	2.69	–	2.72	2.97
7/8"	5/8-18	0.34	–	–	0.50	0.250	–	0.75	0.09	0.50	0.97	2.56	2.63	–	–	2.91	–
1-1/16"	5/8-18	0.34	–	0.12	0.50	0.250	–	0.75	0.09	0.62	1.06	2.81	2.78	3.03	–	3.06	3.31
1-1/4"	3/4-16	0.41	2.47	0.25	0.62	–	1.81	–	0.09	0.88	1.38	2.81	3.78	3.91	0.251	4.16	4.28
1-1/2"	3/4-16	0.50	–	0.25	0.62	0.375	–	1.00	0.09	0.88	1.25	3.00	3.88	4.13	–	4.25	4.50
2"	1-1/4 -12	0.56	–	0.38	0.81	–	–	–	0.12	1.19	1.47	–	■	★	0.376	▲	◆

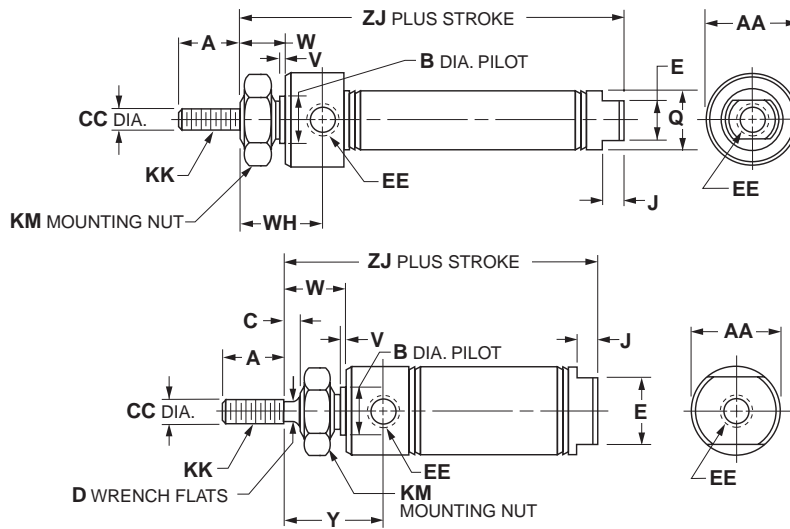
■ 8.05" for 1" stroke, 11.05" for 2" stroke, 13.28" for 3" stroke, 17.28" for 4" stroke*

▲ 8.50" for 1" stroke, 11.50" for 2" stroke, 13.72" for 3" stroke, 17.72" for 4" stroke*

* To determine lengths for half inch stroke increments, determine length for next highest whole number stroke and subtract one half inch.

Mounting Style D

Nose Mount, Double Acting



Bore sizes
5/16"
7/16"
3/4"

Bore sizes
9/16"
7/8"
1-1/16"
1-1/4"
1-1/2"
1-3/4"
2" *
2-1/2" *
3" *

* No mounting nuts

B
 Round Body Cylinders
 Actuator Products

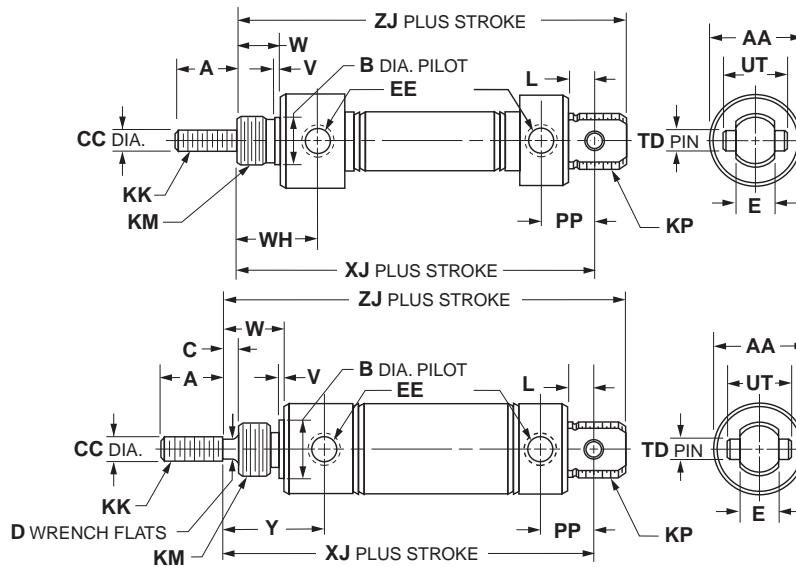
Bore size	SR	SRM	SRD SRDM	Std. stroke (in)	Max. stroke (in)	SS rod std	A	AA	B	C	CC
5/16"	•			1/2, 1, 1-1/2, 2, 2-1/2, 3, 4	4	✓	0.38	0.50 SQ.	–	–	0.125
7/16"	•			1/2, 1, 1-1/2, 2, 3, 4	12	✓	0.50	0.74	0.437	–	0.188
9/16"	•	•	•	1/2, 1, 1-1/2, 2, 3, 4	12	✓	0.50	0.62	0.437	–	0.188
3/4"	•	•	•	1/2, 1, 2, 2-1/2, 3, 4, 5, 6, 8, 10	12	✓	0.50	0.86	0.624	–	0.250
7/8"	•			1/2, 1, 2, 3, 4, 5, 6	12	✓	0.50	0.93	0.624	–	0.250
1-1/16"	•	•	•	1/2, 1, 1-1/2, 2, 2-1/2, 3, 4, 5, 6, 8, 10, 12	12	✓	0.50	1.12	0.624	0.12	0.312
1-1/4"	•	•		1, 2, 3, 4, 5, 6	12	✓	0.75	1.34	0.749	0.25	0.437
1-1/2"	•	•	•	1/2, 1, 2, 3, 4, 5, 6, 8, 10, 12	12	✓	0.75	1.56	0.749	0.25	0.437
1-3/4"	•	•		1/2, 1, 1-1/2, 2, 2-1/2, 3, 4, 5, 6	12		0.88	1.84	1.031	0.31	0.500
2"	•	•	•	–	12		0.88	2.08	1.374	0.38	0.625
2-1/2"	•	•		–	12		0.88	2.62	1.500	0.38	0.625
3"	•			–	12		1.25	3.16	1.630	0.38	0.750

Bore size	D	E	EE	J	KK	KM	Q	V	W	WH	Y	ZJ	
												SR	SRM
5/16"	–	–	#10-32	–	#5-40 UNC	3/8-24	0.36	–	0.31	0.47	–	1.64	–
7/16"	–	0.38	#10-32	0.19	#10-32 UNF	7/16-20	0.50	0.05	0.38	0.72	–	2.12	–
9/16"	–	0.50	#10-32	0.19	#10-32 UNF	7/16-20	–	0.06	0.38	0.78	–	2.28	2.53
3/4"	–	0.62	1/8 NPTF	0.19	1/4-28 UNF	5/8-18	0.81	0.09	0.50	0.97	–	2.97	2.97
7/8"	–	0.62	1/8 NPTF	0.19	1/4-28 UNF	5/8-18	–	0.09	0.50	0.97	–	2.94	–
1-1/16"	0.25	0.88	1/8 NPTF	0.19	5/16-24 UNF	5/8-18	–	0.09	0.62	–	1.19	3.25	3.41
1-1/4"	0.38	0.88	1/8 NPTF	0.25	7/16-20 UNF	3/4-16	–	0.09	0.88	–	1.62	4.00	4.03
1-1/2"	0.38	0.88	1/8 NPTF	0.25	7/16-20 UNF	3/4-16	–	0.09	0.88	–	1.50	3.69	3.94
1-3/4"	7/16	1.25	1/4 NPTF	0.25	1/2-20 UNF	1-14	–	0.09	1.06	1.63	–	4.69	4.69
2"	0.50	1.25	1/4 NPTF	0.31	1/2-20 UNF	1-1/4-12	–	0.12	1.19	–	1.84	4.69	4.97
2-1/2"	1/2	1.75	1/4 NPTF	0.31	1/2-20 UNF	1-3/8-12	–	0.13	1.19	–	1.84	4.69	4.69
3"	5/8	2.00	3/8 NPTF	0.31	5/8-18 UNF	1-1/2-12	–	0.19	1.38	–	2.09	5.25	–



Mounting Style DP

Pivot and Nose Mount, Double Acting, Pivot Pin



Bore sizes
5/16"
7/16"
3/4"

Bore sizes
1-1/16"
1-1/2"

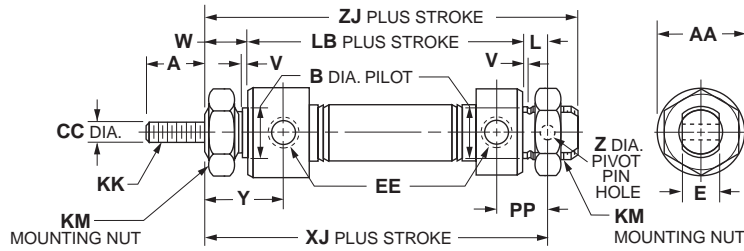
B
 Round Body Cylinders
 Actuator Products

Bore size	SR	SRM	Std. stroke (in)	Max. stroke (in)	SS rod	A	AA	B	CC	D	E
7/16"	•		1/2, 1, 1-1/2, 2, 3, 4	12	✓	0.50	0.74	0.437	0.188	-	0.31
3/4"	•	•	1/2, 1, 2, 2-1/2, 3, 4, 5, 6, 8, 10	12	✓	0.50	0.86	0.624	0.250	-	0.38
1-1/16"	•	•	1/2, 1, 1-1/2, 2, 2-1/2, 3, 4, 5, 6, 8, 10, 12	12	✓	0.50	1.12	0.624	0.312	0.25	0.38
1-1/2"	•	•	1, 2, 3, 4, 5, 6, 8, 10, 12	12	✓	0.75	1.56	0.749	0.437	0.38	0.62

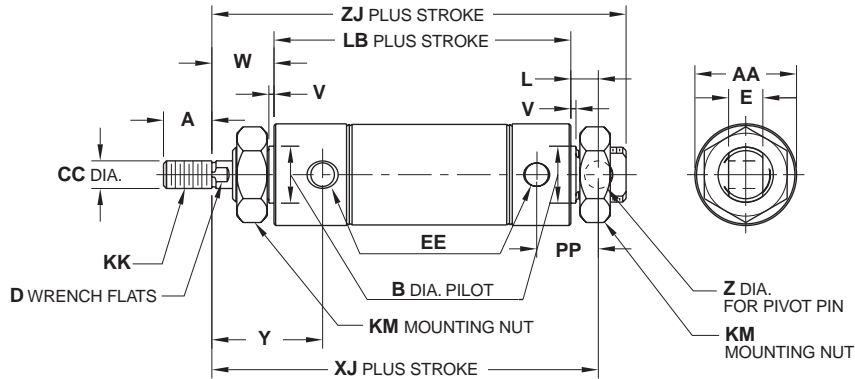
Bore size	EE	KK	KM	KP	L	PP	TD	UT	V	W	WH	XJ		ZJ		
												SR	SRM	Y	SR	SRM
7/16"	#10-32	#10-32 UNF	7/16-20	7/16-20 UNF	0.25	0.44	0.156	0.50	0.05	0.38	0.72	2.56	-	-	2.81	-
3/4"	1/8 NPTF	1/4-28 UNF	5/8-18	5/8-18 UNF	0.34	0.62	0.250	0.75	0.09	0.50	0.97	3.75	3.75	-	4.03	4.03
1-1/16"	1/8 NPTF	5/16-24 UNF	5/8-18	5/8-18 UNF	0.34	0.62	0.250	0.75	0.09	0.62	-	3.84	4.00	1.19	4.12	4.28
1-1/2"	1/8 NPTF	7/16-20 UNF	3/4-16	-	0.50	0.81	0.375	1.00	0.09	0.87	-	4.38	4.63	1.50	4.75	5.00

Mounting Style DXP

Pivot & Nose Mount, Double Acting, No Pivot Pin



Bore sizes
5/16"
7/16"
3/4"



Bore sizes
9/16" *
7/8"
1-1/16"
1-1/4"
1-1/2"
1-3/4"
2" *
2-1/2" *
3" *

* No mounting nuts

B

Round Body Cylinders
 Actuator Products

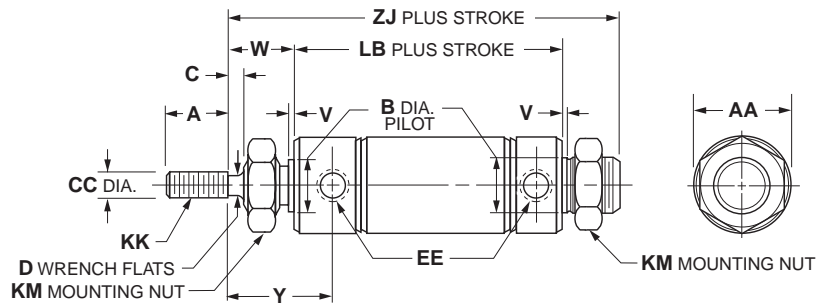
Bore size	SR	SRM	SRD	SRDM	Std. stroke (in)	Max. stroke (in)	SS rod std	A	AA	B	CC	D	E
5/16"	•				1/2, 1, 1-1/2, 2, 2-1/2, 3, 4	4	✓	0.38	0.50 SQ.	–	0.125	–	0.25
7/16"	•				1/2, 1, 1-1/2, 2, 3, 4	12	✓	0.50	0.74	0.437	0.188	–	0.31
9/16"	•	•	•		1/2, 1, 1-1/2, 2, 3, 4	12	✓	0.50	0.62	0.437	0.188	–	0.31
3/4"	•	•	•		1, 2, 3, 4, 5, 6, 8, 10	32	✓	0.50	0.86	0.624	0.250	–	0.38
7/8"	•				1, 2, 3, 4, 5, 6, 8, 10	32	✓	0.50	0.93	0.624	0.250	–	0.38
1-1/16"	•	•	•		1/2, 1, 1-1/2, 2, 2-1/2, 3, 4, 5, 6, 8, 10, 12	32	✓	0.50	1.12	0.624	0.312	0.25	0.38
1-1/4"	•	•			1, 2, 3, 4, 5, 6, 7, 8, 10, 12	32	✓	0.75	1.34	0.749	0.437	0.38	0.50
1-1/2"	•	•	•		–	32	✓	0.75	1.56	0.749	0.437	0.38	0.62
1-3/4"	•	•			1, 2, 3, 4, 5, 6, 8, 10, 12	32		0.88	1.84	1.031	0.500	7/16	0.62
2"	•	•	•		–	32		0.88	2.08	1.374	0.625	0.50	0.75
2-1/2"	•	•			–	32		0.88	2.62	1.500	0.625	1/2	0.75
3"	•				–	32		1.25	3.16	1.630	0.750	5/8	0.88

Bore size									XJ			ZJ		
	EE	KK	KM	L	LB	PP	V	W	SR	SRM	Y	Z	SR	SRM
5/16"	#10-32	#5-40 UNC	3/8-24	0.19	–	0.34	–	0.31	2.03	–	–	0.125	2.19	–
7/16"	#10-32	#10-32 UNF	7/16-20	0.25	1.94	0.44	0.05	0.38	2.56	–	0.72	0.157	2.81	–
9/16"	#10-32	#10-32 UNF	7/16-20	0.25	–	0.38	0.06	0.38	2.56	2.81	0.78	0.157	2.75	3.00
3/4"	1/8 NPTF	1/4-28 UNF	5/8-18	0.34	2.91	0.62	0.09	0.50	3.75	3.75	0.97	0.251	4.03	4.03
7/8"	1/8 NPTF	1/4-28 UNF	5/8-18	0.34	–	0.62	0.09	0.50	3.56	–	0.97	0.251	3.84	–
1-1/16"	1/8 NPTF	5/16-24 UNF	5/8-18	0.34	–	0.62	0.09	0.62	3.84	–	1.19	0.251	4.12	4.28
1-1/4"	1/8 NPTF	7/16-20 UNF	3/4-16	0.41	–	0.78	0.09	0.88	4.72	4.75	1.62	0.251	5.12	5.16
1-1/2"	1/8 NPTF	7/16-20 UNF	3/4-16	0.50	–	0.81	0.09	0.88	4.38	4.63	1.50	0.376	4.75	5.00
1-3/4"	1/4 NPTF	1/2-20 UNF	1-14	0.50	4.19	1.12	0.09	1.06	5.75	5.75	1.94	0.376	6.25	6.25
2"	1/4 NPTF	1/2-20 UNF	1-1/4-12	0.56	–	1.03	0.12	1.19	5.62	5.91	–	0.376	6.06	6.34
2-1/2"	1/4 NPTF	1/2-20 UNF	1-3/8-12	0.56	–	1.03	0.13	1.19	5.62	5.62	1.84	0.376	6.06	6.06
3"	3/8 NPTF	5/8-18 UNF	1-1/2-12	0.81	–	1.34	0.19	1.38	6.50	–	2.09	0.500	7.12	–



Mounting Style DX

Threaded Both Ends, Double Acting



Bore size	SR	SRM	Std. stroke (in)	Max. stroke (in)	SS rod std
7/16" *	•		1/2, 1, 1-1/2, 2, 3, 4	12	✓
9/16" *	•	•	1/2, 1, 1-1/2, 2, 3, 4	12	✓
3/4" *	•	•	1, 2, 3, 4, 5, 6, 8, 10	32	✓
7/8" *	•	•	1, 2, 3, 4, 5, 6, 8, 10	32	✓
1-1/16" *	•	•	1/2, 1, 1-1/2, 2, 2-1/2, 3, 4, 5, 6, 8, 10, 12	32	✓
1-1/4" *	•	•	1, 2, 3, 4, 5, 6, 7, 8, 10, 12	32	✓
1-1/2"	•	•	1, 2, 3, 4, 5, 6, 8, 10, 12	32	✓
2" *	•	•	–	32	

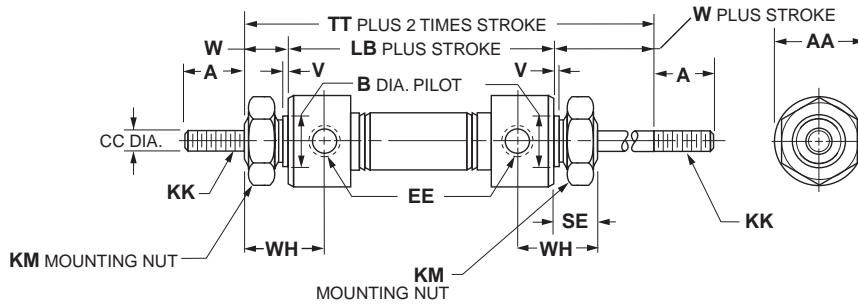
Bore size	A	AA	B	C	CC	D	EE	KK	KM	LB			ZJ		
										SR	SRM	V	W	Y	SR
7/16" *	0.50	0.74	0.437	–	0.188	–	#10-32	#10-32 UNF	7/16-20	1.94		0.05	0.38	0.72	2.81
9/16" *	0.50	0.62	0.437	–	0.188	–	#10-32	#10-32 UNF	7/16-20	–		0.06	0.38	0.78	2.75
3/4" *	0.50	0.86	0.624	–	0.250	–	1/8 NPTF	1/4-28 UNF	5/8-18	2.91		0.09	0.50	0.97	4.03
7/8" *	0.50	0.93	0.624	–	0.250	–	1/8 NPTF	1/4-28 UNF	5/8-18	–		0.09	0.50	0.97	3.84
1-1/16" *	0.50	1.12	0.624	0.12	0.312	0.25	1/8 NPTF	5/16-24 UNF	5/8-18	–		0.09	0.62	1.19	4.12
1-1/4" *	0.75	0.34	0.749	0.25	0.437	0.38	1/8 NPTF	7/16-20 UNF	3/4-16	–		0.09	0.88	1.62	5.12
1-1/2"	0.75	1.56	0.749	0.25	0.437	0.38	1/8 NPTF	7/16-20 UNF	3/4-16	3.00		0.09	0.88	1.50	4.50
2" *	0.88	2.08	1.374	0.38	0.625	0.50	1/4 NPTF	1/2-20 UNF	1-1/4-12	–		0.12	1.19	–	6.06

* Available upon request. Please consult factory.

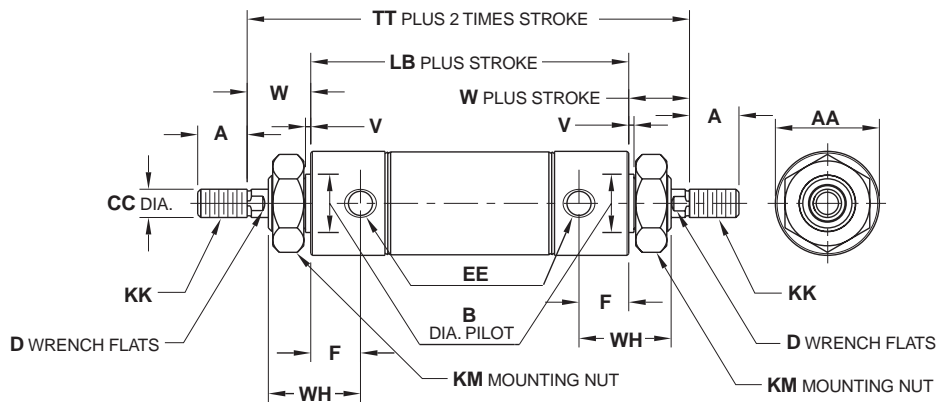
B
 Round Body Cylinders
 Actuator Products

Mounting Style KDX

Threaded Both Ends, Double Acting, Double Rod



Bore sizes
7/16"
3/4"



Bore sizes
9/16" *
7/8"
1-1/16"
1-1/4"
1-1/2"
1-3/4"
2" *
2-1/2" *
3" *

* No mounting nuts

B

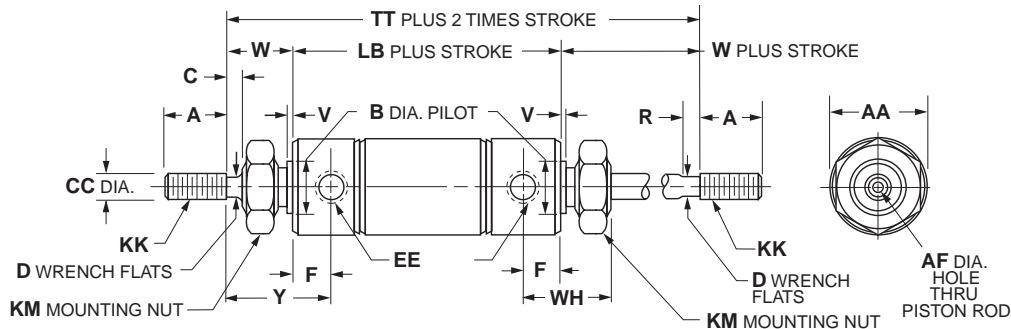
Round Body Cylinders
 Actuator Products

Bore size	SR	SRM	SRD SRDM	Std. stroke (in)	Max. stroke (in)	SS rod	A	AA	B	CC
7/16"	•			1/2, 1, 1-1/2, 2, 3, 4	6	✓	0.50	0.74	0.437	0.188
9/16"	•	•	•	1/2, 1, 1-1/2, 2, 3, 4	6	✓	0.50	0.62	0.437	0.188
3/4"	•	•	•	1, 2, 3, 4, 5, 6	12	✓	0.50	0.86	0.624	0.250
7/8"	•			1, 2, 3, 4, 6	12	✓	0.50	0.93	0.624	0.250
1-1/16"	•	•	•	1, 2, 3, 4, 5, 6	12	✓	0.50	1.12	0.624	0.312
1-1/4"	•	•	•	1, 2, 3, 4, 5, 6	12	✓	0.75	1.34	0.749	0.437
1-1/2"	•	•	•	1, 2, 3, 4, 5, 6	12	✓	0.75	1.56	0.749	0.437
1-3/4"	•	•	•	1, 2, 3, 4, 5, 6	12	✓	0.88	1.84	1.031	0.500
2"	•	•	•	–	12	✓	0.88	2.08	1.374	0.625
2-1/2"	•	•	•	–	18	✓	0.88	2.62	1.500	0.625
3"	•	•	•	–	12	✓	1.25	3.16	1.630	0.750

Bore size	D	EE	F	KK	KM	LB			TT			V	W	WH
						SR	SRM	SE	SR	SRM	SE			
7/16"	–	#10-32	0.34	#10-32 UNF	7/16-20	2.06	–	0.38	2.81	–	0.05	0.38	0.72	
9/16"	–	#10-32	0.40	#10-32 UNF	7/16-20	2.19	2.44	0.38	2.94	3.19	0.06	0.38	0.78	
3/4"	–	1/8 NPTF	0.47	1/4-28 UNF	5/8-18	3.00	3.00	0.50	4.00	4.00	0.09	0.50	0.97	
7/8"	–	1/8 NPTF	0.47	1/4-28 UNF	5/8-18	2.91	–	0.50	3.91	–	0.09	0.50	0.97	
1-1/16"	0.25	1/8 NPTF	0.56	5/16-24 UNF	5/8-18	2.75	3.28	0.50	4.00	4.53	0.09	0.62	1.19	
1-1/4"	0.38	1/8 NPTF	0.75	7/16-20 UNF	3/4-16	3.81	3.84	0.63	5.56	5.59	0.09	0.88	1.62	
1-1/2"	0.38	1/8 NPTF	0.62	7/16-20 UNF	3/4-16	3.38	3.63	0.63	5.12	5.38	0.09	0.88	1.50	
1-3/4"	7/16	1/4 NPTF	0.88	1/2-20 UNF	1-14	4.44	4.44	0.75	6.56	6.56	0.09	1.06	1.63	
2"	0.50	1/4 NPTF	0.65	1/2-20 UNF	1-1/4-12	4.19	4.47	–	6.56	6.84	0.12	1.19	1.84	
2-1/2"	1/2	1/4 NPTF	0.65	1/2-20 UNF	1-3/8-12	4.19	4.19	–	6.56	6.56	0.13	1.19	1.84	
3"	5/8	3/8 NPTF	0.71	5/8-18 UNF	1-1/2-12	4.56	–	–	7.31	–	0.19	1.38	1.72	

Mounting Style KDXH

Threaded Both Ends, Double Rod, Hollow Rod

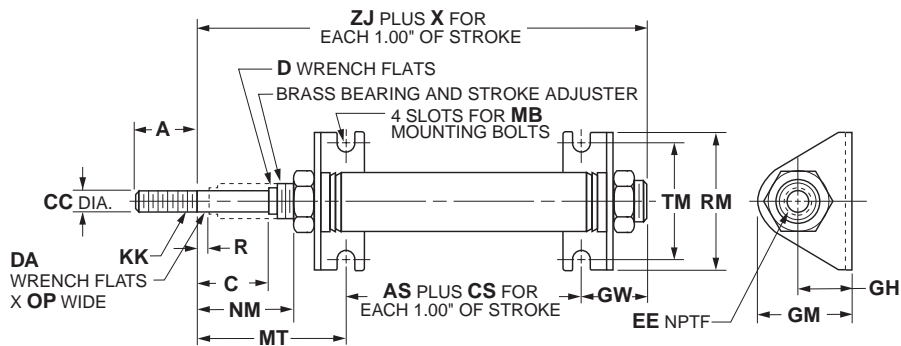


Bore size	SR	SRM	Std. stroke (in)	Max. stroke (in)	SS rod	A	AA	AF	B	C	CC
1-1/16"	•	•	1, 2, 3, 4, 5, 6	12	N/A	0.50	1.12	0.187	0.624	0.12	0.312
1-1/4"	•	•	1, 2, 3, 4, 5, 6	12	N/A	0.75	1.34	0.250	0.749	0.25	0.437
1-1/2"	•	•	1, 2, 3, 4, 5, 6	12	N/A	0.75	1.56	0.250	0.749	0.25	0.437
1-3/4"	•	•	1, 2, 3, 4, 5, 6	12	N/A	0.88	1.84	0.328	1.031	0.38	0.500

Bore size	D	EE	F	KK	KM	LB		R	TT		V	W	WH	Y
						SR	SRM		SR	SRM				
1-1/16"	0.25	1/8 NPTF	0.56	5/16-24 UNF	5/8-18	2.75	3.28	0.12	4.00	4.53	0.09	0.62	1.06	1.19
1-1/4"	0.38	1/8 NPTF	0.75	7/16-20 UNF	3/4-16	3.81	3.84	0.25	5.56	5.59	0.09	0.88	1.38	1.62
1-1/2"	0.38	1/8 NPTF	0.62	7/16-20 UNF	3/4-16	3.38	3.63	0.25	5.12	5.38	0.09	0.88	1.25	1.50
1-3/4"	7/16	1/4 NPTF	0.88	1/2-20 UNF	1-14	4.44	4.44	–	6.56	6.56	0.09	1.06	1.63	1.63

Mounting Style A

Nose Mount, Spring Return, Head Adjustable Stroke



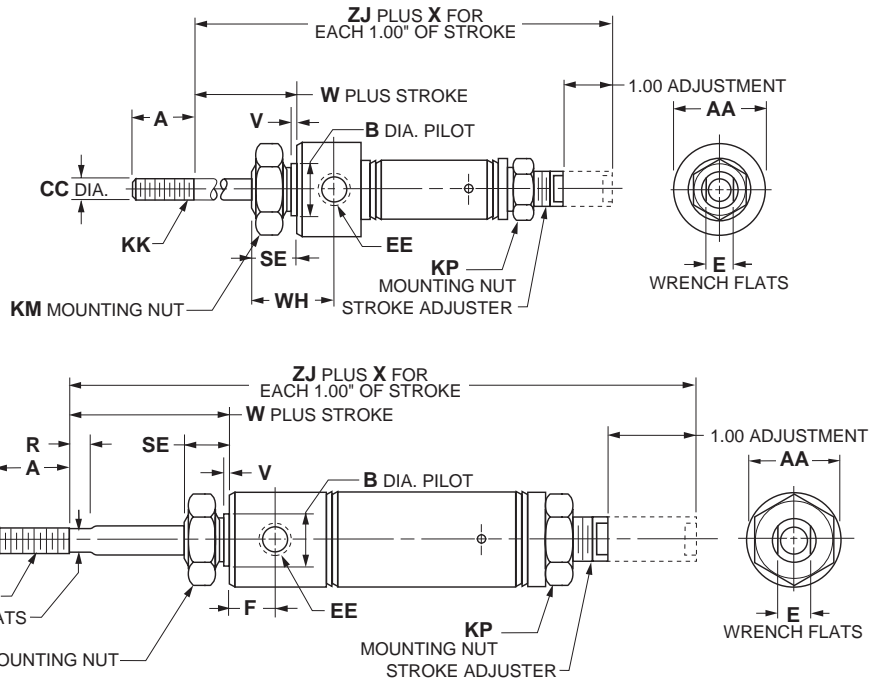
Bore size	SR	SRM	Std. stroke	Max. stroke (in)	SS rod std	A	AS	C	CC	CS	D
3/4"	•		Stroke adjustment in 1" increments to 3": 1" stroke adjusts 0-1" 2" stroke adjusts 1-2" 3" stroke adjusts 2-3"	6	✓	0.50	–	1.19	0.250	1.69	–
1-1/16"	•			6	✓	0.50	0.32	1.25	0.312	1.56	0.25
1-1/2"	•			6	✓	0.75	0.19	1.25	0.437	2.00	0.62

Bore size	EE	GH	GM	GW	KK	MB	MT	NM	OP	R	RM	TM	X	ZJ
3/4"	1/8 NPTF	0.81	1.38	0.88	1/4-28 UNF	0.250	2.38	1.44	–	0.19	1.88	1.50	1.69	3.12
1-1/16"	1/8 NPTF	0.81	1.38	0.93	5/16-24 UNF	0.250	2.38	1.44	0.12	0.25	1.88	1.50	1.56	3.63
1-1/2"	1/8 NPTF	1.00	1.78	1.25	7/16-20 UNF	0.250	2.56	1.50	–	0.25	2.50	1.88	2.00	4.00



Mounting Style RA

Nose Mount, Spring Return, Cap Adjustable Stroke



Bore sizes
 3/4"

Bore sizes
 1-1/16"
 1-1/2"

B

Round Body Cylinders
 Actuator Products

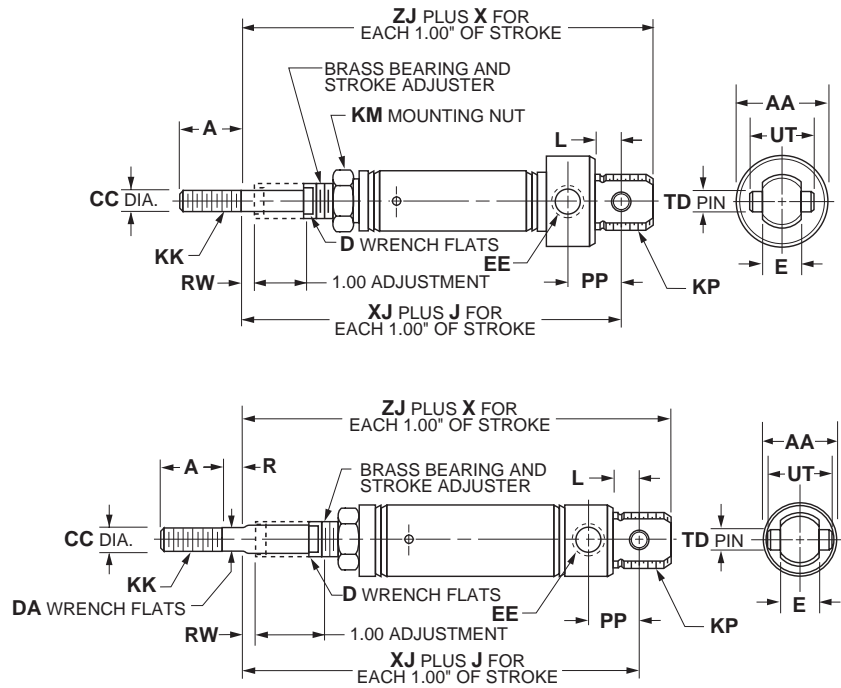
Bore size	SR	SRM	Std. stroke	Max. stroke (in)	SS rod std
3/4"	•		Stroke adjustment in 1" increments to 3":	6	✓
1-1/16"	•		1" stroke adjusts 0-1"	6	✓
1-1/2"	•		2" stroke adjusts 1-2"	6	✓
			3" stroke adjusts 2-3"	6	✓

Bore size	A	AS	AA	B	CC	D	E	EE	F
3/4"	0.50	1.69	0.86	0.624	0.250	–	0.34	1/8 NPTF	–
1-1/16"	0.50	0.32	1.12	0.624	0.312	0.25	0.50	1/8 NPTF	0.56
1-1/2"	1.25	0.19	1.56	0.749	0.437	0.38	0.62	1/8 NPTF	0.62

3/4"	KK	KM	SE	R	V	W	WH	X	ZJ
1-1/16"	1/4-28 UNF	5/8-18	0.50	–	0.09	0.53	0.97	2.69	3.78
1-1/2"	5/16-24 UNF	5/8-18	0.50	0.12	0.09	0.50	–	2.56	4.03
1-1/2"	7/16-20 UNF	3/4-16	0.62	0.25	0.09	0.88	–	2.00	5.81

Mounting Style AP

Pivot Mount, Spring Return, Head Adjustable Stroke



Bore sizes
 3/4"

Bore sizes
 1-1/16"
 1-1/2"

Bore size	SR	SRM	Std. stroke	Max. stroke (in)	SS rod std
3/4"	•		Stroke adjustment in 1" increments to 3"	6	✓
1-1/16"	•		1" stroke adjusts 0-1" 2" stroke adjusts 1-2"	6	✓
1-1/2"	•		3" stroke adjusts 2-3"	6	✓

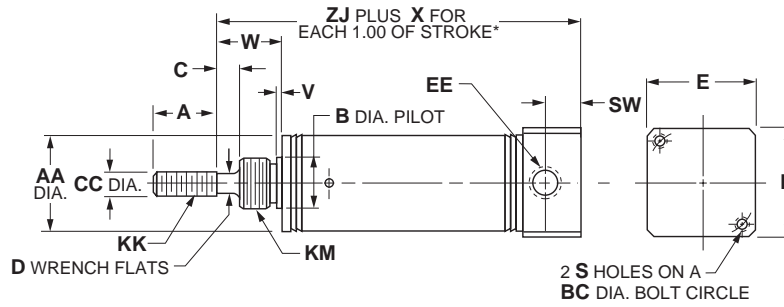
Bore size	A	AA	CC	D	DA	E	EE	J	KK
3/4"	0.50	0.86	0.250	0.34	–	0.38	1/8 NPTF	1.69	1/4-28 UNF
1-1/16"	0.50	1.12	0.312	0.50	0.25	0.38	1/8 NPTF	1.56	5/16-24 UNF
1-1/2"	0.75	1.56	0.437	0.62	0.38	0.62	1/8 NPTF	2.00	7/16-20 UNF

Bore size	KM	KP	L	OP	PP	R	RW	TD	UT	X	XJ	ZJ
3/4"	7/16-20	5/8-18 UNF	0.34	–	0.62	0.19	0.19	0.250	0.75	1.69	3.65	3.93
1-1/16"	–	5/8-18 UNF	0.34	0.25	0.62	0.12	0.25	0.250	0.75	1.56	3.97	4.25
1-1/2"	3/4-16	–	0.50	–	0.81	0.25	0.25	0.375	1.00	2.00	4.31	4.69

B
 Round Body Cylinders
 Actuator Products

Mounting Style BRN

Rear Block Mount, Single Acting, Spring Return



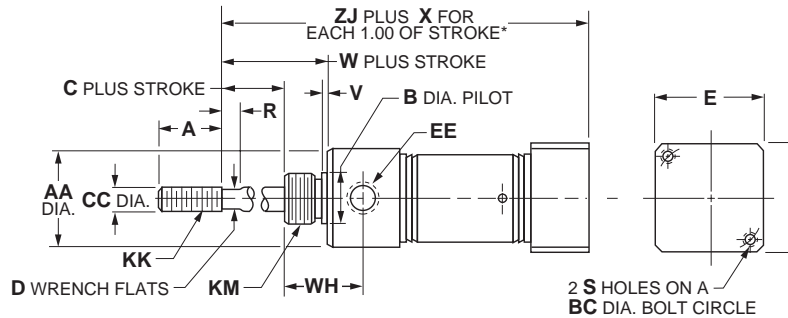
Bore size	SR	SRM	Std. stroke (in)	Max. stroke (in)	SS rod std	A	AA	B	C	CC	D
7/16"	•		1/2, 1, 2, 3, 4	6	✓	0.50	0.5	0.374	–	0.188	–
3/4"	•	•	1, 2, 3, 4	6	✓	0.75	0.81	0.499	0.25	0.250	0.22
1-1/16"	•	•	1, 2, 3, 4	6	✓	0.75	1.12	0.624	0.38	0.312	0.25
1-1/2"	•	•	1, 2, 3, 4	6	✓	1.25	1.56	0.749	0.25	0.437	0.38

Bore size	E	EE	KK	KM	SW	V	W	X	ZJ	SR	SRM
7/16"	0.75	#10-32	#10-32 UNF	3/8-24	0.38	0.05	0.31	0.94	1.62	–	–
3/4"	1.00	1/8 NPTF	1/4-28 UNF	1/2-20	0.44	0.09	0.62	1.69	2.31	2.56	–
1-1/16"	1.25	1/8 NPTF	5/16-24 UNF	5/8-18	0.44	0.09	0.88	1.81	2.81	3.06	–
1-1/2"	1.75	1/4 NPTF	7/16-20 UNF	3/4-16	0.62	0.09	0.88	2.00	3.06	3.31	–

* To determine lengths for half inch stroke increments, determine length for next highest whole number stroke and subtract one half inch.

Mounting Style BRR

Rear Block Mount, Single Acting, Spring Extend



Bore size	SR	SRM	Std. stroke (in)	Max. stroke (in)	SS rod std	A	AA	B	BC	C	CC	D
3/4"	•	•	1, 2, 3, 4	6	✓	0.75	0.86	0.624	1.00	0.25	0.250	0.22
1-1/16"	•	•	1, 2, 3, 4	6	✓	0.75	1.12	0.624	1.25	0.38	0.312	0.25
1-1/2"	•	•	1, 2, 3, 4	6	✓	1.25	1.56	0.749	1.75	0.25	0.437	0.38

Bore size	E	EE	KK	KM	R	S	V	W	WH	X	ZJ	SR	SRM
3/4"	1.00	1/8 NPTF	1/4-28 UNF	5/8-18	0.25	#10-32 UNF	0.09	0.75	0.97	2.69	3.22	3.47	–
1-1/16"	1.25	1/8 NPTF	5/16-24 UNF	5/8-18	0.25	#10-32 UNF	0.09	0.88	1.06	2.81	3.53	3.78	–
1-1/2"	1.75	1/4 NPTF	7/16-20 UNF	3/4-16	0.25	1/4-20 UNC	0.09	0.88	1.25	3.00	3.88	4.13	–

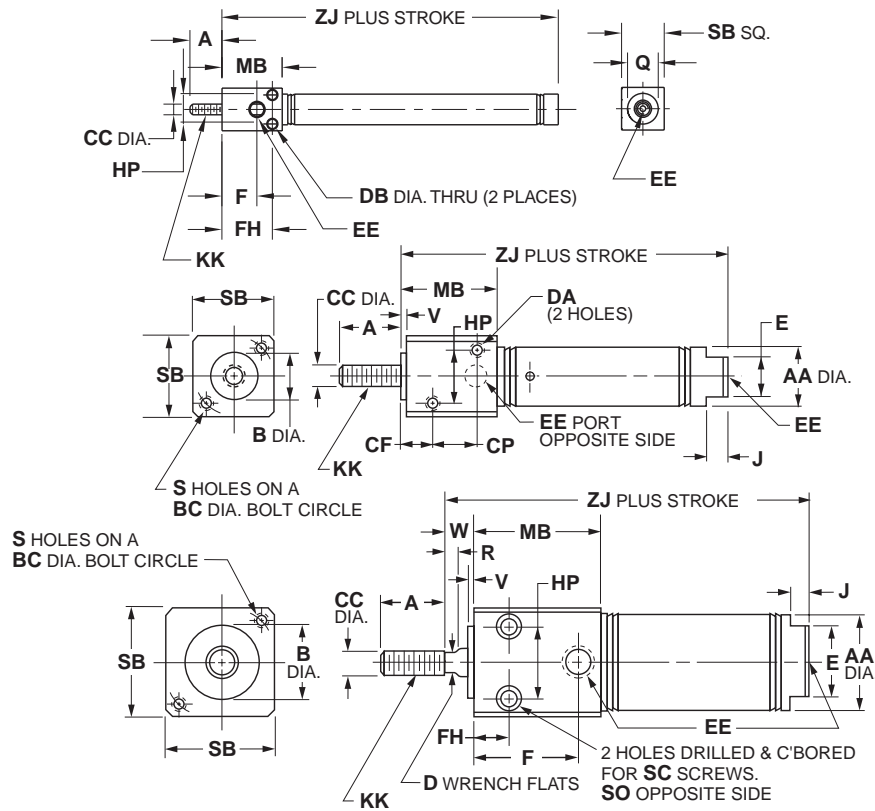
* To determine lengths for half inch stroke increments, determine length for next highest whole number stroke and subtract one half inch.

B
 Round Body Cylinders
 Actuator Products



Mounting Style BFD

Front Block Mount, Double Acting



Bore sizes
5/16"

Bore sizes
7/16"

Bore sizes
3/4"
1-1/16"
1-1/2"

B
 Round Body Cylinders
 Actuator Products

Bore size	SR	SRM	Std. stroke (in)	Max. stroke (in)	SS rod std	A	AA	B	BC	CC
5/16"	•		1/2, 1, 1-1/2, 2, 2-1/2, 3, 4	4	✓	0.38	–	–	–	0.125
7/16"	•		1/2, 1, 1-1/2, 2, 3, 4	12	✓	0.50	0.50	0.437	0.75	0.188
3/4"	•	•	1/2, 1, 2, 3, 4, 5, 6	12	✓	0.75	0.81	0.624	1.00	0.250
1-1/16"	•	•	1, 2, 3, 4, 5, 6	12	✓	0.75	1.12	0.750	1.25	0.312
1-1/2"	•	•	1, 2, 3, 4, 5, 6	12	✓	1.25	1.56	1.00	1.75	0.437

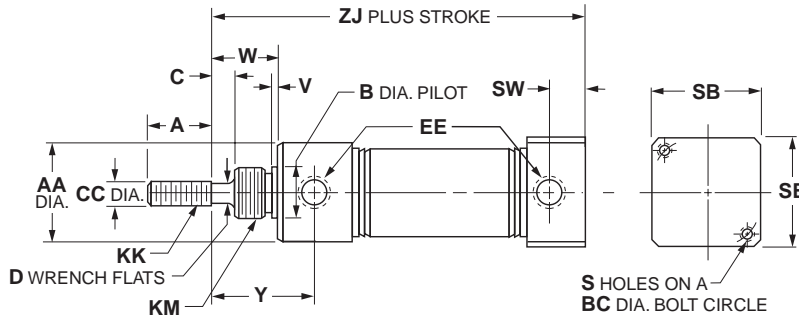
Bore size	CF	CP	D	DA	DB	E	EE	F	FH	HP	J
5/16"	–	–	–	–	0.11	–	#10-32	0.41	0.59	0.34	–
7/16"	0.31	0.44	–	#8-32	–	0.38	#10-32	–	0.31	0.44	0.19
3/4"	–	–	0.22	–	–	0.62	1/8 NPTF	0.88	0.38	0.62	0.19
1-1/16"	–	–	0.25	–	–	0.88	1/8 NPTF	1.16	0.62	0.81	0.19
1-1/2"	–	–	0.38	–	–	0.88	1/4 NPTF	1.53	0.88	1.12	0.25

Bore size	KK	MB	Q	R	S	SB	SC	SO	V	W	ZJ	SR	SRM
5/16"	#5-40 UNC	0.71	0.36	–	–	0.50 SQ	–	–	–	–	1.72	–	–
7/16"	#10-32 UNF	0.88	–	–	#8-32 UNC	0.75	–	–	0.062	–	2.12	–	–
3/4"	1/4-28 UNF	1.12	–	–	#10-32 UNF	1.00	#10-32	1/4-20 UNC	0.093	0.34	3.22	3.22	–
1-1/16"	5/16-24 UNF	1.41	–	0.25	#10-32 UNF	1.25	#10-32	1/4-20 UNC	0.093	0.47	3.75	3.91	–
1-1/2"	7/16-20 UNF	1.88	–	–	1/4-20 UNC	1.75	1/4-20	5/16-18 UNC	0.125	0.38	4.19	4.44	–



Mounting Style BRD

Rear Block Mount, Double Acting



B

Round Body Cylinders
 Actuator Products

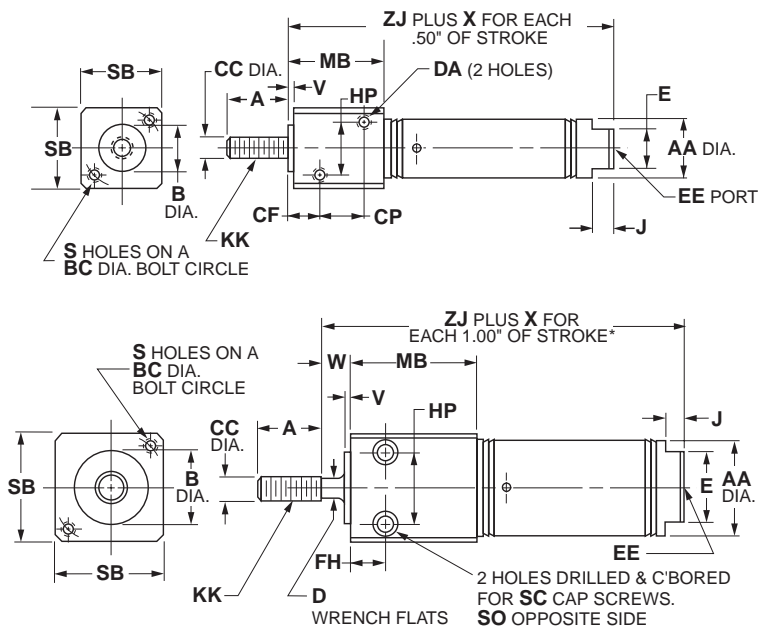
Bore size	SR	SRM	Std. stroke (in)	Max. stroke (in)	SS rod std
7/16"	•		1/2, 1, 2, 3, 4	12	✓
3/4"	•	•	1, 2, 3, 4, 5, 6	12	✓
1-1/16"	•	•	1, 2, 3, 4	12	✓
1-1/2"	•	•	1, 2, 3, 4, 5, 6	12	✓

Bore size	A	AA	B	BC	C	CC	D	EE	KK
7/16"	0.50	0.74	0.437	0.75	–	0.188	–	#10-32	#10-32 UNF
3/4"	0.75	0.86	0.624	1.00	0.25	0.250	0.22	1/8 NPTF	1/4-28 UNF
1-1/16"	0.75	1.12	0.624	1.25	0.38	0.312	0.25	1/8 NPTF	5/16-24 UNF
1-1/2"	1.25	1.56	0.749	1.75	0.25	0.437	0.38	1/4 NPTF	7/16-20 UNF

Bore size	KM	S	SB	SW	V	W	Y	ZJ	
								SR	SRM
7/16"	7/16-20 UNF	#8-32 UNC	0.75	0.38	0.05	0.43	0.72	2.44	–
3/4"	5/8-18 UNF	#10-32 UNF	1.00	0.44	0.09	0.75	1.22	3.78	3.78
1-1/16"	5/8-18 UNF	#10-32 UNF	1.25	0.44	0.09	0.88	1.44	4.00	4.16
1-1/2"	3/4-16 UNF	1/4-20 UNC	1.75	0.62	0.09	0.88	1.47	4.38	4.63

Mounting Style BFN

Front Block Mount, Single Acting, Spring Return



Bore sizes
7/16"

Bore sizes
3/4"
1-1/16"
1-1/2"

B
 Round Body Cylinders
 Actuator Products

Bore size	SR	SRM	Std. stroke (in)	Max stroke (in)	SS rod std
7/16"	•		1/2, 1, 1-1/2, 2, 3	6	✓
3/4"	•	•	1/2, 1, 2, 3, 4	6	✓
1-1/16"	•	•	1, 2, 3, 4	6	✓
1-1/2"	•	•	1, 2, 3, 4	6	✓

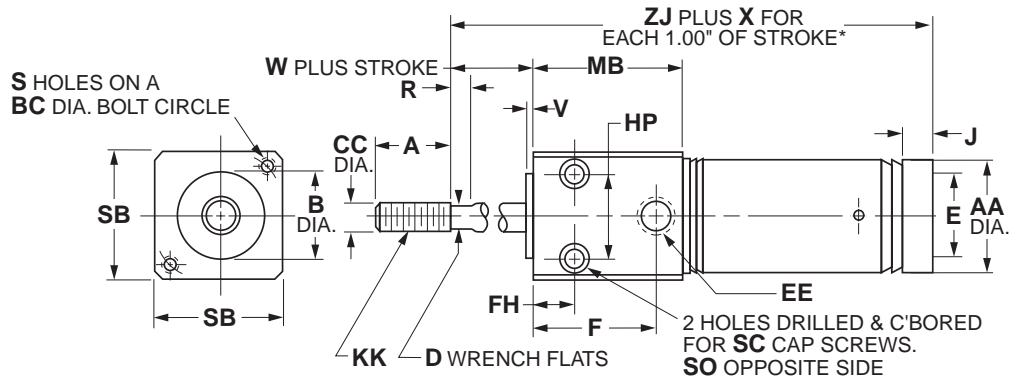
Bore size	A	AA	B	BC	CC	CF	CP	D	DA	E	EE	FH
7/16"	0.50	0.50	0.437	0.75	0.188	0.31	0.44	–	#8-32 UNC	0.38	#10-32	0.31
3/4"	0.75	0.81	0.624	1.00	0.250	–	–	0.22	–	0.62	1/8 NPTF	0.38
1-1/16"	0.75	1.12	0.750	1.25	0.312	–	–	0.25	–	0.88	1/8 NPTF	0.62
1-1/2"	1.25	1.56	1.00	1.75	0.437	–	–	0.38	–	0.88	1/4 NPTF	0.88

Bore size	HP	J	KK	MB	S	SB	SC	SO	V	W	X	ZJ	
												SR	SRM
7/16"	0.44	0.19	#10-32 UNF	0.88	#8-32 UNC	0.75	–	–	0.062	–	0.94	1.94	–
3/4"	0.62	0.19	1/4-28 UNF	1.12	#10-32 UNF	1.00	#10-32	1/4-20 UNC	0.093	0.34	1.69	2.66	2.91
1-1/16"	0.81	0.19	5/16-24 UNF	1.41	#10-32 UNF	1.25	#10-32	1/4-20 UNC	0.093	0.47	1.81	3.38	3.63
1-1/2"	1.12	0.25	7/16-20 UNF	1.88	1/4 UNC	1.75	1/4-20	5/16-18 UNC	0.125	0.38	2.00	3.69	3.94

* To determine lengths for half inch stroke increments, determine length for next highest whole number stroke and subtract one half inch.

Mounting Style BFR

Front Block Mount, Single Acting, Spring Extend



B

Round Body Cylinders
 Actuator Products

Bore size	SR	SRM	Std. stroke (in)	Max stroke (in)	SS rod std
3/4"	•	•	1, 2, 3, 4	6	✓
1-1/16"	•	•	1, 2, 3, 4	6	✓
1-1/2"	•	•	1, 2, 3, 4	6	✓

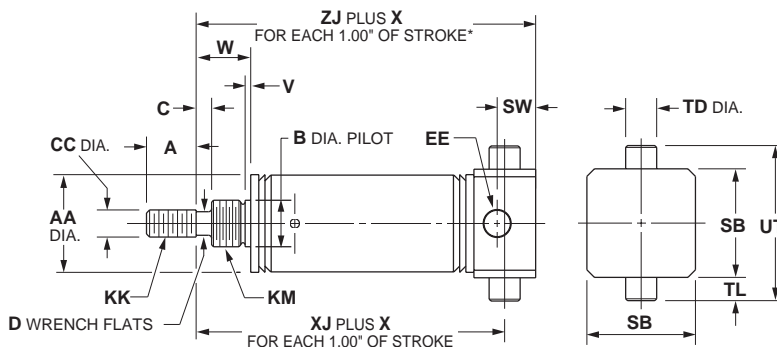
Bore size	A	AA	B	BC	CC	D	E	EE	F	FH	HP	J
3/4"	0.75	0.81	0.624	1.00	0.250	0.22	–	1/8 NPTF	0.88	0.38	0.62	0.19
1-1/16"	0.75	1.12	0.750	1.25	0.312	0.25	–	1/8 NPTF	1.16	0.62	0.81	–
1-1/2"	1.25	1.56	1.00	1.75	0.437	0.38	0.88	1/4 NPTF	1.53	0.88	1.12	0.25

Bore size	KK	MB	R	S	SB	SC	SO	V	W	X	ZJ	
											SR	SRM
3/4"	1/4-28 UNF	1.12	0.25	#10-32 UNF	1.00	#10-32	1/4-20 UNC	0.093	0.34	2.69	2.56	2.81
1-1/16"	5/16-24 UNF	1.41	0.25	#10-32 UNF	1.25	#10-32	1/4-20 UNC	0.093	0.47	2.81	3.12	3.37
1-1/2"	7/16-20 UNF	1.88	0.25	1/4-20 UNC	1.75	1/4-20	5/16-18 UNC	0.125	0.38	3.00	3.69	3.94

* To determine lengths for half inch stroke increments, determine length for next highest whole number stroke and subtract one half inch.

Mounting Style TRN

Rear Trunnion Mount, Single Acting, Spring Return



Bore size	SR	SRM	Std. stroke (in)	Max. stroke (in)	SS rod std	A	AA	B	C	CC	D	EE
7/16"	•		1/2, 1, 2, 3, 4	6	✓	0.50	0.50	0.374	–	0.188	–	#10-32
3/4"	•	•	1, 2, 3, 4	6	✓	0.75	0.81	0.499	0.25	0.250	0.22	1/8 NPTF
1-1/16"	•	•	1, 2, 3, 4	6	✓	0.75	1.12	0.624	0.38	0.312	0.25	1/8 NPTF
1-1/2"	•	•	1, 2, 3, 4	6	✓	1.25	1.56	0.749	0.25	0.437	0.38	1/4 NPTF

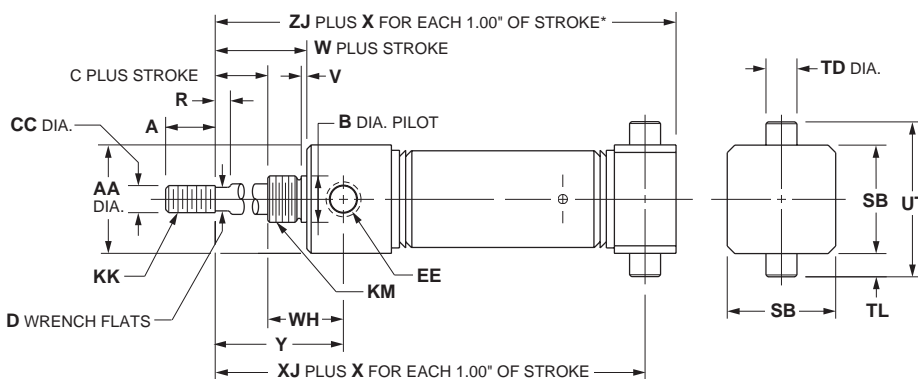
Bore size	KK	KM	SB	SW	TD	TL	UT	V	W	X	XJ		ZJ	
											SR	SRM	SR	SRM
7/16"	#10-32 UNF	3/8-24 UNF	0.75	0.38	0.374	0.50	1.25	0.05	0.32	0.94**	1.38	–	1.62	–
3/4"	1/4-28 UNF	1/2-20 UNF	1.00	0.44	0.500	0.38	1.75	0.09	0.62	1.69	1.94	2.19	2.31	2.56
1-1/16"	5/16-24 UNF	5/8-18 UNF	1.25	0.44	0.500	0.38	2.00	0.09	0.88	1.81	2.44	2.69	2.81	3.06
1-1/2"	7/16-20 UNF	3/4-16 UNF	1.75	0.62	0.500	0.38	2.50	0.09	0.88	2.00	2.56	2.81	3.06	3.31

* To determine lengths for half inch stroke increments, determine length for next highest whole number stroke and subtract one half inch.

** For each 0.50" of stroke.

Mounting Style TRR

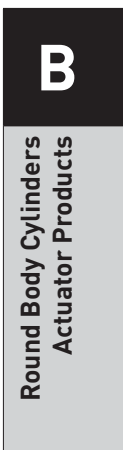
Rear Trunnion Mount, Single Acting, Spring Extend



Bore size	SR	SRM	Std. stroke (in)	Max. stroke (in)	SS rod std	A	AA	B	C	CC	D	EE
3/4"	I	I	1, 2, 3, 4	6	3	0.75	0.86	0.624	0.25	0.250	0.22	1/8 NPTF
1-1/16"	I	I	1, 2, 3, 4	6	3	0.75	1.12	0.624	0.38	0.312	0.25	1/8 NPTF
1-1/2"	I	I	1, 2, 3, 4	6	3	1.25	1.56	0.749	0.25	0.437	0.38	1/4 NPTF

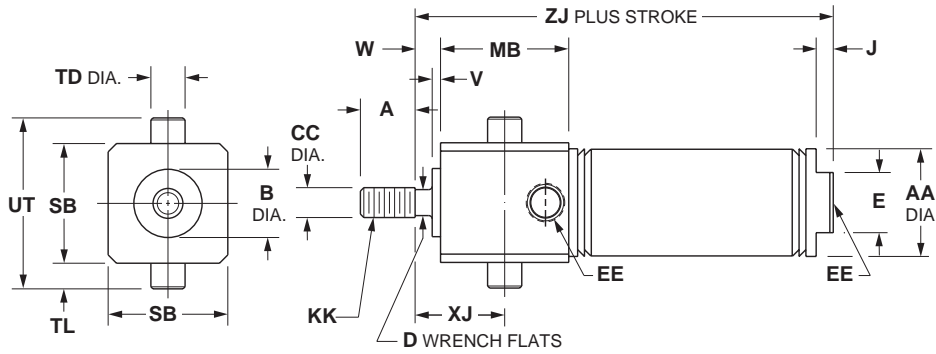
Bore size	KK	KM	R	SB	TD	TL	UT	V	W	WH	X	XJ		ZJ	
												SR	SRM	SR	SRM
3/4"	1/4-28 UNF	1/2-20 UNF	0.25	1.00	0.500	0.38	1.75	0.09	0.75	0.72	2.69	2.85	3.10	3.22	3.47
1-1/16"	5/16-24 UNF	5/8-18 UNF	0.25	1.25	0.500	0.38	2.00	0.09	0.88	0.68	2.81	3.15	3.40	3.53	3.78
1-1/2"	7/16-20 UNF	3/4-16 UNF	0.25	1.75	0.500	0.38	2.50	0.09	0.88	1.25	3.00	3.38	3.63	3.88	4.13

* To determine lengths for half inch stroke increments, determine length for next highest whole number stroke and subtract one half inch.



Mounting Style TFD

Front Trunnion Mount, Double Acting

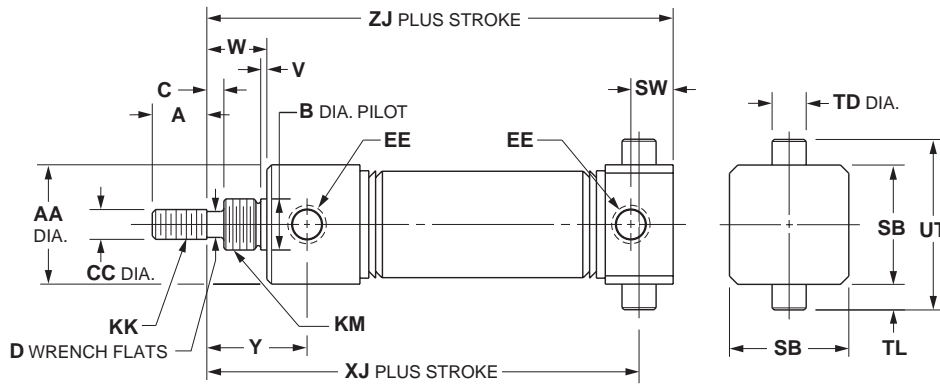


Bore size	SR	SRM	Std. stroke (in)	Max. stroke (in)	SS rod std	A	AA	B	CC	D	E	EE
7/16"	•		1/2, 1, 1-1/2, 2, 3, 4	12	✓	0.50	0.50	0.437	0.188	–	0.38	#10-32
3/4"	•	•	1, 2, 3, 4, 5, 6	12	✓	0.75	0.81	0.624	0.250	0.22	0.62	1/8 NPTF
1-1/16"	•	•	1, 2, 3, 4, 5, 6	12	✓	0.75	1.12	0.750	0.312	0.25	0.88	1/8 NPTF
1-1/2"	•	•	1, 2, 3, 4, 5, 6	12	✓	1.25	1.56	1.000	0.437	0.38	0.88	1/4 NPTF

Bore size	J		KK		MB	SB	TD	TL	UT	V	W	XJ	ZJ	
	0.19	#10-32 UNF	MB	SB									SR	SRM
7/16"	0.19	1/4-28 UNF	0.88	0.75	0.374	0.250	1.25	0.062	–	0.31	2.12	–		
3/4"	0.19	5/16-24 UNF	1.12	1.00	0.500	0.38	1.75	0.093	0.34	0.69	3.22	3.22		
1-1/16"	0.25	7/16-20 UNF	1.41	1.25	0.500	0.38	2.00	0.093	0.47	1.09	3.75	3.91		
1-1/2"			1.88	1.75	0.500	0.38	2.50	0.125	0.38	1.31	4.19	4.44		

Mounting Style TRD

Rear Trunnion Mount, Double Acting



Bore size	SR	SRM	Std. stroke (in)	Max. stroke (in)	SS rod std	A	AA	B	C	CC	D	EE
7/16"	•		1/2, 1, 1-1/2, 2, 3, 4	12	✓	0.50	0.74	0.437	–	0.188	–	#10-32
3/4"	•	•	1, 2, 3, 4, 5, 6	12	✓	0.75	0.86	0.624	0.25	0.250	0.22	1/8 NPTF
1-1/16"	•	•	1, 2, 3, 4	12	✓	0.75	1.12	0.624	0.38	0.312	0.25	1/8 NPTF
1-1/2"	•	•	1, 2, 3, 4, 5, 6	12	✓	1.25	1.56	0.749	0.25	0.437	0.38	1/4 NPTF

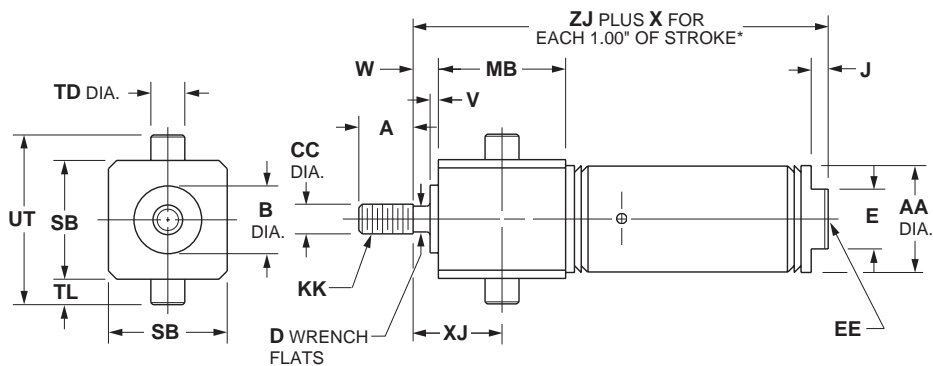
Bore size	KK		KM		SB	SW	TD	TL	UT	V	W	XJ		ZJ	
	#10-32 UNF	7/16-20 UNF	SB	SW								SR	SRM	Y	SR
7/16"	1/4-28 UNF	5/8-18 UNF	0.75	0.38	0.374	0.25	1.25	0.05	0.38	2.19	–	0.72	2.44	–	
3/4"	5/16-24 UNF	5/8-18 UNF	1.00	0.44	0.500	0.38	1.75	0.09	0.75	3.41	3.41	1.22	3.78	3.78	
1-1/16"	7/16-20 UNF	3/4-16 UNF	1.25	0.44	0.500	0.38	2.00	0.09	0.88	3.62	3.62	1.44	4.00	4.16	
1-1/2"			1.75	0.62	0.500	0.38	2.50	0.09	0.88	3.88	4.13	1.47	4.38	4.63	

B

Round Body Cylinders
 Actuator Products

Mounting Style TFN

Front Trunnion Mount, Single Acting, Spring Return



Bore size	SR	SRM	Std. stroke (in)	Max. stroke (in)	SS rod std	A	AA	B	CC	D	E	EE
7/16"	•		1/2, 1, 1-1/2, 2, 3	6	✓	0.50	0.50	0.437	0.188	–	0.38	#10-32
3/4"	•	•	1/2, 1, 2, 3, 4	6	✓	0.75	0.81	0.624	0.250	0.22	0.62	1/8 NPTF
1-1/16"	•	•	1, 2, 3, 4	6	✓	0.75	1.12	0.750	0.312	0.25	0.88	1/8 NPTF
1-1/2"	•	•	1, 2, 3, 4	6	✓	1.25	1.56	1.000	0.437	0.38	0.88	1/4 NPTF

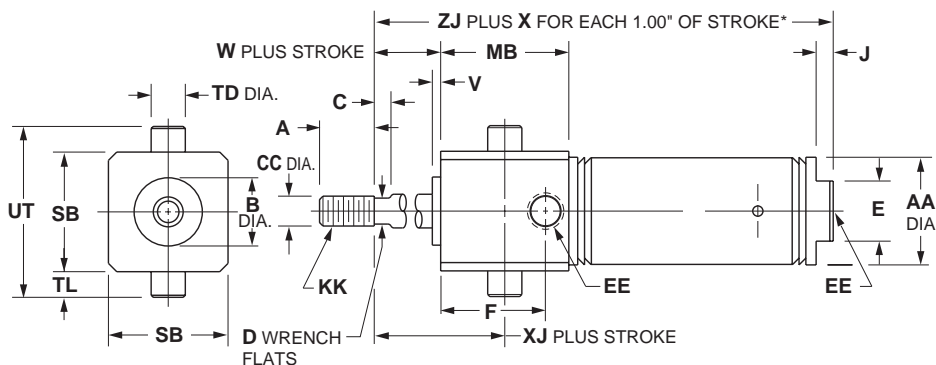
Bore size	J	KK	MB	SB	TD	TL	UT	V	W	X	XJ	ZJ SR	ZJ SRM
7/16"	0.19	#10-32 UNF	0.88	0.75	0.374	0.25	1.25	0.062	0	0.94**	0.31	1.94	–
3/4"	0.19	5/16-24 UNF	1.12	1.00	0.500	0.38	1.75	0.093	0.34	1.69	0.69	2.66	2.91
1-1/16"	0.25	7/16-20 UNF	1.41	1.25	0.500	0.38	2.00	0.093	0.47	1.81	1.09	3.38	3.63
1-1/2"			1.88	1.75	0.500	0.38	2.50	0.125	0.38	2.00	1.31	3.69	3.94

* To determine lengths for half inch stroke increments, determine length for next highest whole number stroke and subtract one half inch.

** For each 0.50" of stroke

Mounting Style TFR

Front Trunnion Mount, Single Acting, Spring Extend



Bore size	SR	SRM	Std. stroke (in)	Max. stroke (in)	SS rod std	A	AA	B	C	CC	D	E
3/4"	•	•	1, 2, 3, 4	6	✓	0.75	0.81	0.624	0.25	0.250	0.22	0
1-1/16"	•	•	1, 2, 3, 4	6	✓	0.75	1.12	0.750	0.25	0.312	0.25	0
1-1/2"	•	•	1, 2, 3, 4	6	✓	1.25	1.56	1.000	0.25	0.437	0.38	0.88

Bore size	F	EE	J	KK	MB	SB	TD	TL	UT	V	W	X	XJ	ZJ SR	ZJ SRM
3/4"	0.88	1/8 NPTF	–	1/4-28 UNF	1.12	1.00	0.500	0.38	1.75	0.093	0.34	2.69	0.69	2.56	2.81
1-1/16"	1.16	1/8 NPTF	–	5/16-24 UNF	1.41	1.25	0.500	0.38	2.00	0.093	0.47	2.81	1.09	3.12	3.37
1-1/2"	–	1/4 NPTF	0.25	7/16-20 UNF	1.88	1.75	0.500	0.38	2.50	0.125	0.38	3.00	1.31	3.69	3.94

* To determine lengths for half inch stroke increments, determine length for next highest whole number stroke and subtract one half inch.

