Title: Stainless Steel Cylinders Single Acting

ISO Date: April 10, 2006

Don't Take Chances
Compressed air is an extremely powerful medium. Always take maximum precautions when handling any component of a compressed air system. **Never** attempt to construct, replace, operate or service any component of a compressed air system unless you have been specifically and properly trained to do so. **Always** disconnect the supply air, and exhaust the air system before attempting to remove or service a component of that system. Failure to heed these warnings could result in SERIOUS, EVEN FATAL, PERSONAL INJURY.

Design And Specifications
The design and specifications and other product information contained in this catalog is for general reference purposes based upon customary and usual manufacturing standards and product applications. However, it is difficult to predict or to anticipate the functioning or suitability of the product for any particular application or use. Therefore, nothing herein shall be deemed a representation or warranty of the product design or specifications and Buyer shall have the responsibility for investigating and testing the product in any particular application or use and all risks attendant in such use.

Humphrey Products Company
1-800-477-8707
Kalamazoo, MI 49003
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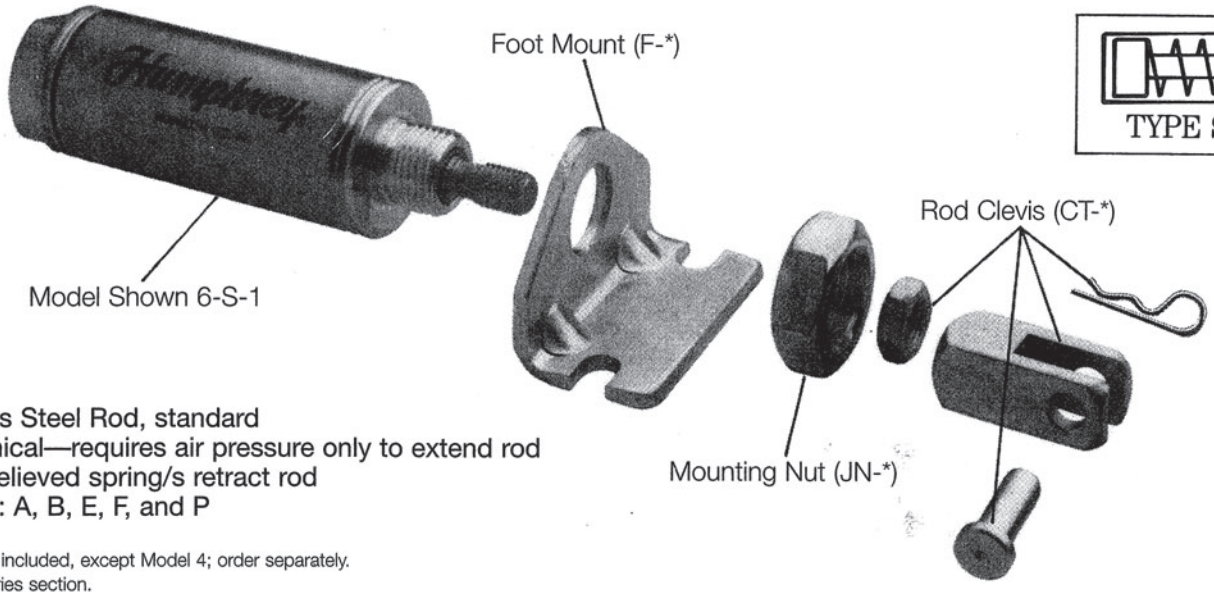
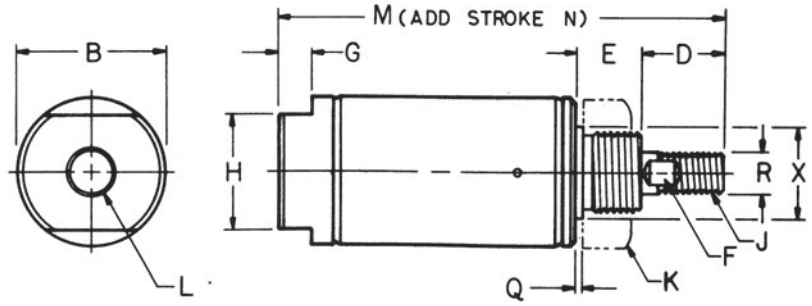
HUMPHREY AIR CYLINDERS



TYPE **S**

- Stainless Steel Rod, standard
- Economical—requires air pressure only to extend rod
- Stress relieved spring/s retract rod
- Options: A, B, E, F, and P

Mounting nut included, except Model 4; order separately.
*See Accessories section.



• No rod bushing, Model 8... front head is hard anodized.

Medium.....: Compressed Air
Pressure range .....0–200 PSIG
Temperature range .....–40°F to 160°F Ambient*
w/Fluoroelastomer.....–20°F to 400°F Ambient*
Recommended maximum stroke .....6″

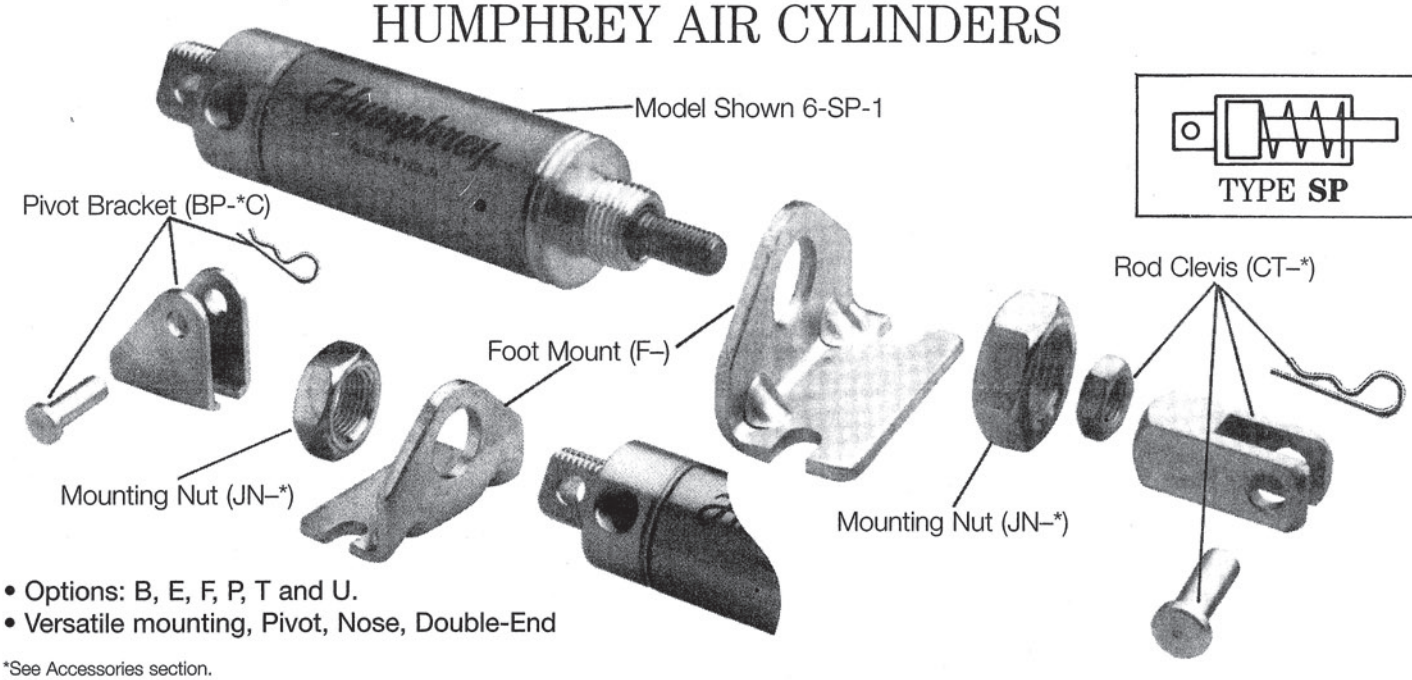
*Additional heat may be generated by seal friction (high speed cycling)

BASIC MODEL NO.	Piston Area SQ. IN.† / Volume CU. IN. (per inch of stroke)	Spring Tension Pounds Free	Comp.
8	.20	1	2
7	.44	1.5	5
6	.89	4	8
25	1.23	7	14
5	1.77	6	12
75	2.41	12	24
4	3.14	15	30

†Area x PSIG = Approximate Force

MODEL & TYPE (Stroke)	BORE	B Dia.	D Rod Exten.	E Nose Length	F Wrench Flat	G Flat	H Flat	J Rod Thread x Length	K Nose Thread	L Port (NPSF)	M Length	N For each stoke increment of:	N Add to M	N For remaining stroke increment, Add to M, plus remaining stroke	Q Pilot	R Rod Dia.	X Pilot Dia. −.001 −.006
8-S-☐	½	.56	.50	.31	None	.12	.37	10-32 x .50	⅜-24	10-32 UNF	1.81	½″	.94	.44	.04	.187	.375
7-S-☐	¾	.81	.50	.44	None	.16	.62	¼-28 x .50	½-20	⅛	2.00	1″	1.69	.69	.07	.250	.500
6-S-☐	1 1/16	1.12	.62	.50	.25	.25	.87	5/16-24 x .50	⅝-18	⅛	2.56	1″	1.56	.56	.07	.312	.625
25-S-☐	1¼	1.31	1.00	.62	.38	.18	.87	7/16-20 x .75	¾-16	⅛	3.41	1″	1.81	.81	.07	.437	.750
5-S-☐	1½	1.55	1.00	.62	.38	.25	.87	7/16-20 x .75	¾-16	⅛	3.19	1″	1.69	.69	.07	.437	.750
75-S-☐	1¾	1.81	1.19	.75	.44	.25	1.25	½-20 x .88	1-14	¼	3.85	1″	2.00	1.00	.09	.500	1.030
4-S-☐	2	2.07	1.25	.81	.50	.31	1.25	½-20 x .88	1¼-12	¼	4.17	1″	2.00	1.00	.12	.625	1.375

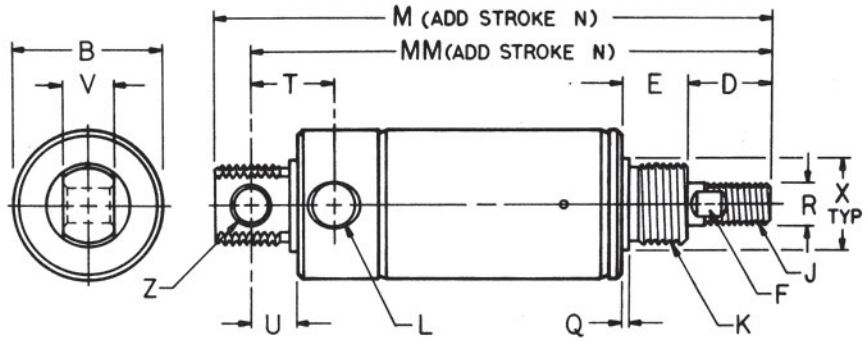
HUMPHREY AIR CYLINDERS



TYPE **SP**

- Options: B, E, F, P, T and U.
- Versatile mounting, Pivot, Nose, Double-End

*See Accessories section.



• No rod bushing, Model 8 . . . front head is hard anodized. Model 4 has rear pivot bushing.

Medium . . . . . Compressed Air
Pressure range . . . . . 0–200 PSIG
Temperature range . . . . . –40°F to 160°F Ambient*
w/Fluoroelastomer . . . . . –20°F to 400°F Ambient*
Recommended maximum stroke . . . . . .6"

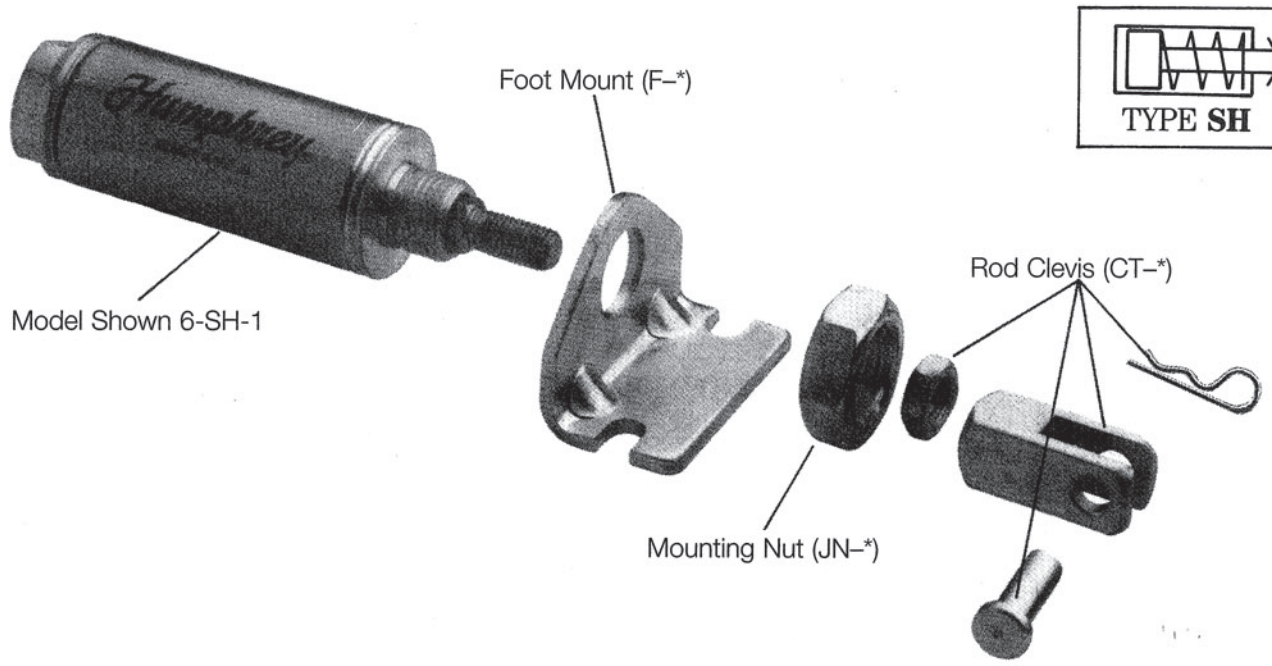
*Additional heat may be generated by seal friction (high speed cycling)

BASIC MODEL NO.	Piston Area SQ. IN.† Volume CU. IN. (per inch of stroke)	Spring Tension Pounds Free	Comp
8	.20	1	2
7	.44	1.5	5
6	.89	4	8
25	1.23	7	14
5	1.77	6	12
75	2.41	12	24
4	3.14	15	30

†Area x PSIG = Approximate Force

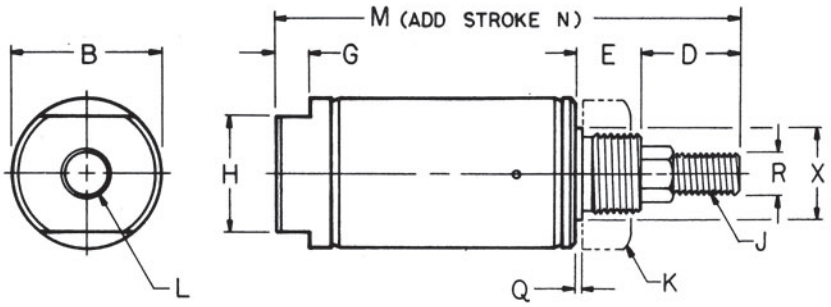
MODEL & TYPE (Stroke)	BORE	B Dia.	D Rod Exten.	E Nose Length	F Wrench Flat	J Rod Thread x Length	K Nose Thread (Pivot Thread)	L Port (NPSF)	M Length	MM Length	N For each stoke increment of:	N Add to M & MM	N For remaining stroke increment, Add to M, plus remaining stroke	Q Pilot	R Rod Dia.	T	U	V	X Pil. Dia. –.001 –.006 Front (Rear)	Z Pivot Hole Dia.
8-SP-□	1/2	.62	.50	.31	None	10-32 x .50	3/8-24 (7/16-20)	10-32 UNF	2.50	2.25	1/2"	.94	.44	.04	.187	.42	.25	.31	.375 (.437)	.16
7-SP-□	3/4	.81	.50	.44	None	1/4-28 x .50	1/2-20 (5/8-18)	1/8	3.06	2.77	1"	1.69	.69	.07	.250	.66	.34	.38	.500 (.625)	.25
6-SP-□	1 1/16	1.12	.62	.50	.25	5/16-24 x .50	5/8-18 TYP.	1/8	3.44	3.16	1"	1.56	.56	.07	.312	.62	.34	.38	.625	.25
25-SP-□	1 1/4	1.31	1.00	.62	.38	7/16-20 x .75	3/4-16 TYP.	1/8	4.50	4.14	1"	1.81	.81	.07	.437	.91	.41	.50	.750	.25
5-SP-□	1 1/2	1.55	1.00	.62	.38	7/16-20 x .75	3/4-16 TYP.	1/8	4.25	3.88	1"	1.69	.69	.07	.437	.81	.50	.62	.750	.38
75-SP-□	1 3/4	1.81	1.19	.75	.44	1/2-20 x .88	1-14 TYP.	1/4	5.41	4.91	1"	2.00	1.00	.09	.500	.98	.50	.62	1.030	.38
4-SP-□	2	2.07	1.25	.81	.50	1/2-20 x .88	1 1/4-12 TYP.	1/4	5.54	5.11	1"	2.00	1.00	.12	.625	1.0	.57	.75	1.375	.38†

HUMPHREY AIR CYLINDERS



- Stainless Steel Rod, standard
- Non-rotating hex rod — no special guides required
- Requires air pressure only to extend rod
- Stress relieved spring/s retract rod
- Options: A, B, E, F and P

*See Accessories section.



• No rod bushing, Type SH . . . front head hard anodized

Medium . . . . . Compressed Air
Pressure range . . . . . 0–200 PSIG
Temperature range . . . . . –40°F to 160°F Ambient*
w/Fluoroelastomer . . . . . –20°F to 400°F Ambient*
Recommended maximum stroke . . . . . 6″

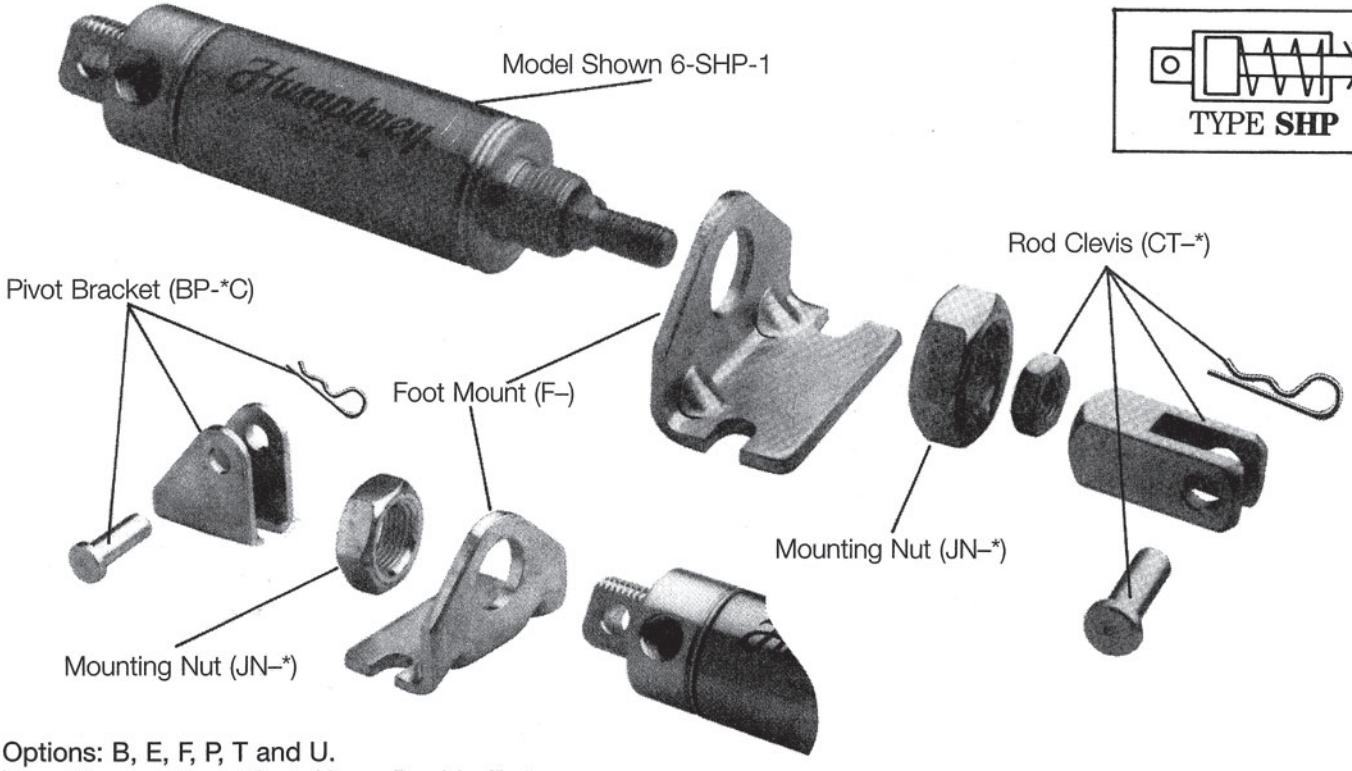
*Additional heat may be generated by seal friction (high speed cycling)

BASIC MODEL NO.	Piston Area SQ. IN.† / Volume CU. IN. (per inch of stroke)	Spring Tension Pounds Free	Comp.
8	.20	1	2
7	.44	1.5	5
6	.89	4	8
5	1.77	6	12

†Area x PSIG = Approximate Force

MODEL & TYPE (Stroke)	BORE	B Dia.	D Rod Exten.	E Nose Flat	G Flat	H Flat	J Rod Thread x Length	K Nose Thread	L Port (NPSF)	M Length	N For each stoke increment of:	N Add to M	N For remaining stroke increment, Add to M, plus remaining stroke	Q Pilot	R Rod Dia.	X Pilot Dia. –.001 –.006
8-SH-□	½	.56	.75	.31	.12	.37	10-32 x .50	⅜-24	10-32 UNF	2.06	½″	.94	.44	.04	.187	.375
7-SH-□	¾	.81	.75	.44	.16	.62	¼-28 x .50	½-20	⅛	2.25	1″	1.69	.69	.07	.250	.500
6-SH-□	1 1/16	1.12	.75	.50	.25	.87	5/16-24 x .50	⅝-18	⅛	2.68	1″	1.56	.56	.07	.375	.625
5-SH-□	1½	1.55	1.25	.62	.25	.87	7/16-20 x 1.0	¾-16	⅛	3.44	1″	1.69	.69	.07	.437	.750

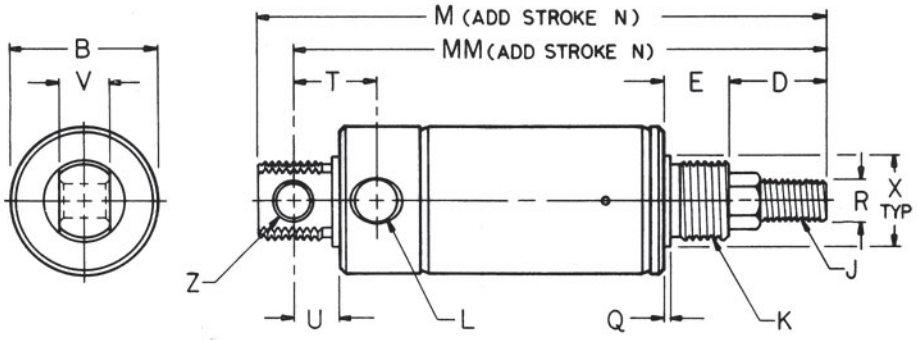
HUMPHREY AIR CYLINDERS



TYPE **SHP**

- Options: B, E, F, P, T and U.
- Versatile mounting, Pivot, Nose, Double-End

*See Accessories section.



• No rod bushing, Type SHP...front hard anodized

Medium ..... Compressed Air
Pressure range ..... 0–200 PSIG
Temperature range ..... –40°F to 160°F Ambient*
w/Fluoroelastomer ..... –20°F to 400°F Ambient*
Recommended maximum stroke ..... 6"

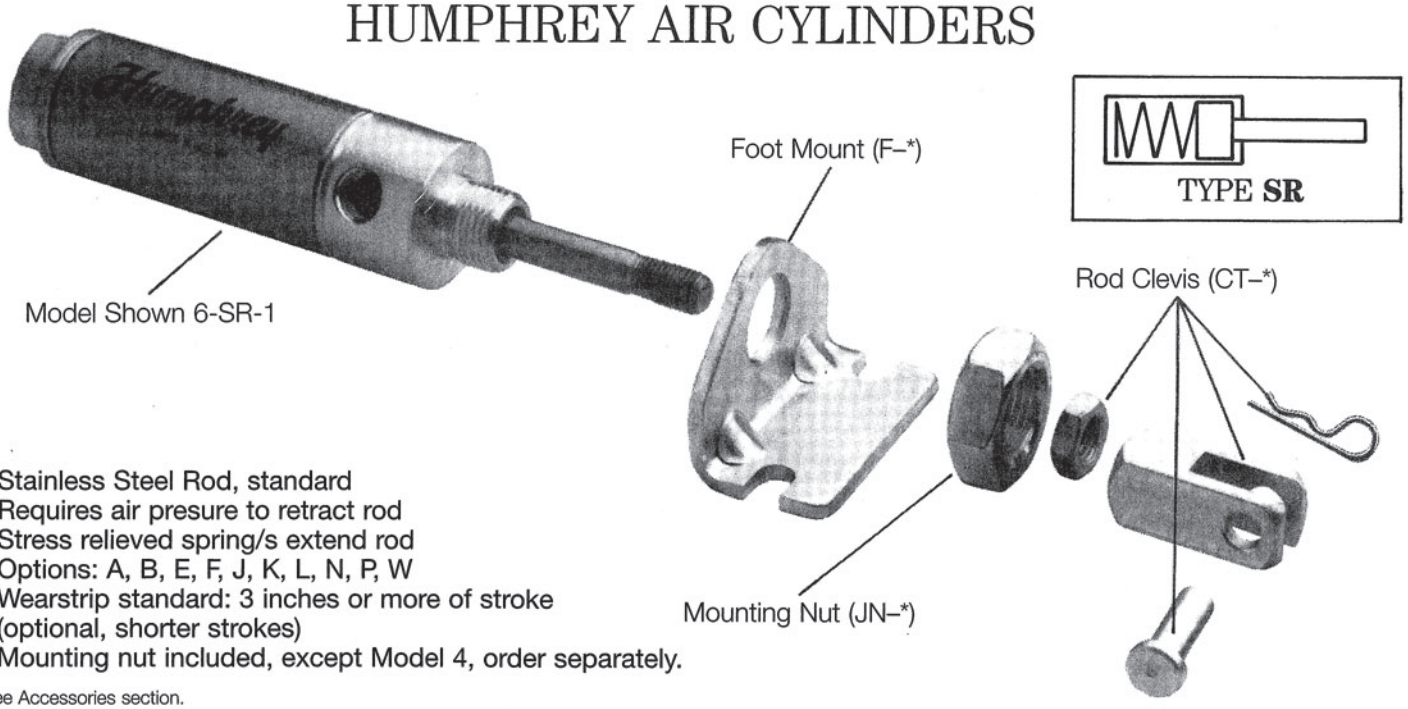
*Additional heat may be generated by seal friction (high speed cycling)

BASIC MODEL NO.	Piston Area SQ. IN.† / Volume CU. IN. (per inch of stroke)	Spring Tension Pounds Free	Comp.
8	.20	1	2
7	.44	1.5	5
6	.89	4	8
5	1.77	6	12

†Area x PSIG = Approximate Force

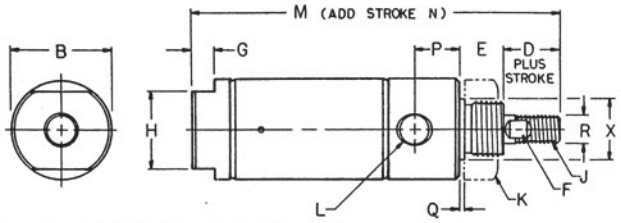
MODEL & TYPE (Stroke)	BORE	B Dia.	D Rod Exten.	E Nose Flat	J Rod Thread x Length	K Nose Thread (Pivot Thread)	L Port (NPSF)	M Length	MM Length	N			Q Pilot	R Hex Flats	T	U	V	X Pil. Dia. –.001 –.006 Front (Rear)	Z Pivot Hole Dia.
										For each stoke increment	Add to M & MM	For remaining stroke increment, Add to M, plus remaining stroke							
8-SHP-□	1/2	.56	.75	.31	10-32 x .50	3/8-24	10-32 UNF	2.75	2.50	1/2"	.94	.44	.04	.187	.42	.25	.31	.375 (.437)	.16
7-SHP-□	3/4	.81	.75	.44	1/4-28 x .50	1/2-20 (5/8-18)	1/8	3.31	3.02	1"	1.69	.69	.07	.250	.66	.34	.38	.500 (.625)	.25
6-SHP-□	1 1/16	1.12	.75	.50	5/16-24 x .50	5/8-18	1/8	3.56	3.28	1"	1.56	.56	.07	.375	.62	.34	.38	.625	.25
5-SHP-□	1 1/2	1.55	1.25	.62	7/16-20 x 1.0	3/4-16	1/8	4.50	4.13	1"	1.69	.69	.07	.437	.81	.50	.62	.750	.38

HUMPHREY AIR CYLINDERS



- Stainless Steel Rod, standard
- Requires air presure to retract rod
- Stress relieved spring/s extend rod
- Options: A, B, E, F, J, K, L, N, P, W
- Wearstrip standard: 3 inches or more of stroke (optional, shorter strokes)
- Mounting nut included, except Model 4, order separately.

*See Accessories section.



• No rod bushing, Model 8 . . . front hard anodized

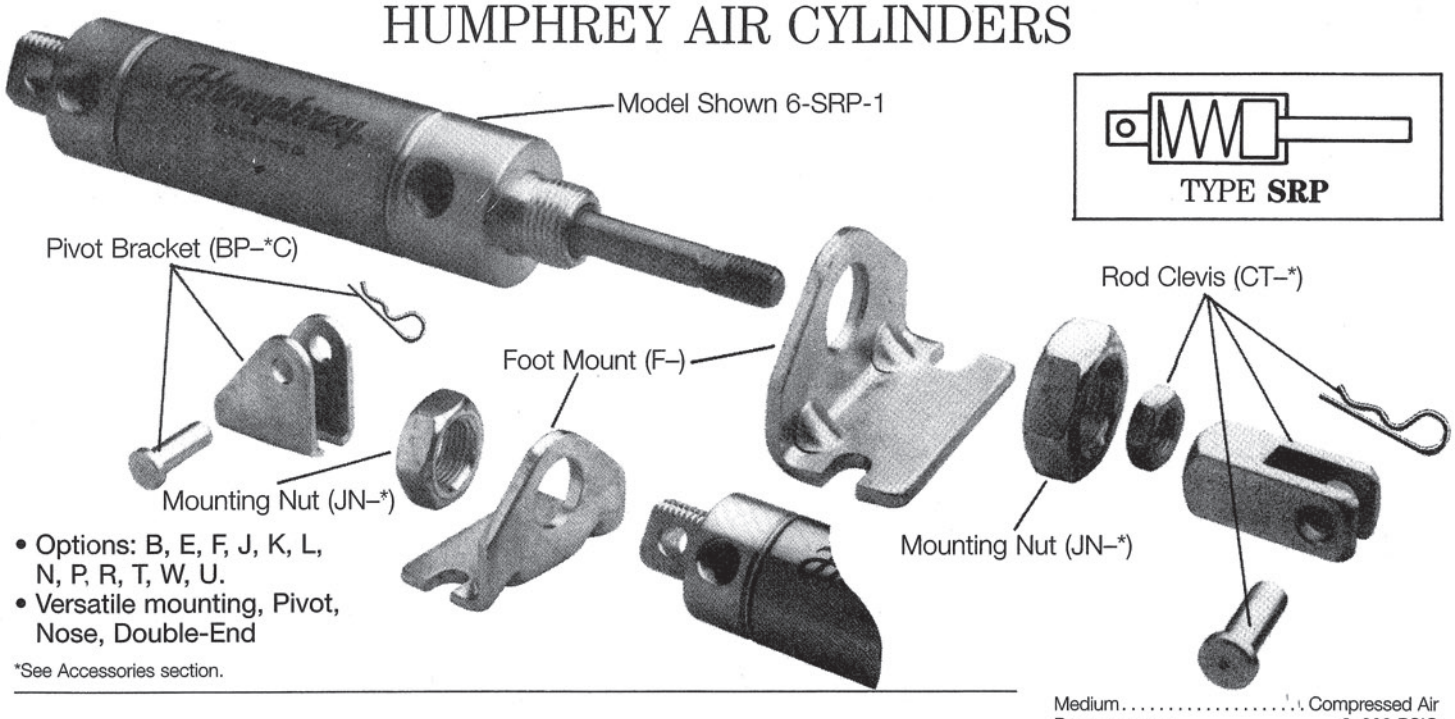
Medium . . . . . Compressed Air
Pressure range . . . . . 0–200 PSIG
Temperature range . . . . . –40°F to 160°F Ambient*
w/Fluoroelastomer . . . . . –20°F to 400°F Ambient*
Recommended maximum stroke . . . . . 4″
*Additional heat may be generated by seal friction (high speed cycling)

BASIC MODEL NO.	Piston Area SQ. IN.† Volume CU. IN. (per inch of stroke)	Spring Tension Pounds Free	Comp.
8	.17	1	4
7	.39	1.5	7.5
6	.81	4	12
25	1.08	7	21
5	1.62	6	18
75	2.21	12	36
4	2.84	15	42

†Area x PSIG = Approximate Force

MODEL & TYPE (Stroke)	BORE	B Dia.	D Rod Re-tracted	E Nose Length	F Wrench Flat	G Flat	H Flat	J Rod Thread x Length	K Nose Thread	L Port (NPSF)	M Length (w/rod extended)	N For each stoke increment of:	N Add to M	N For remaining stroke increment, Add to M, plus remaining stroke	P	Q	R Rod Dia.	X Pilot Dia. –.001 –.006
8-SR-☐	½	.62	.50	.41	None	.12	.37	10-32 x .50	7/16-20	10-32 UNF	2.42	½″	1.44	.94	.37	.04	.187	.437
7-SR-☐	¾	.88	.50	.50	None	.16	.62	¼-28 x .50	5/8-18	⅛	2.78	1″	2.69	1.69	.48	.07	.250	.625
6-SR-☐	1 1/16	1.12	.62	.50	.25	.25	.87	5/16-24 x .50	5/8-18	⅛	3.28	1″	2.56	1.56	.52	.07	.312	.625
25-SR-☐	1¼	1.31	1.00	.62	.38	.18	.87	7/16-20 x .75	¾-16	⅛	4.25	1″	2.81	1.81	.63	.07	.437	.750
5-SR-☐	1½	1.55	1.00	.62	.38	.25	.87	7/16-20 x .75	¾-16	⅛	4.00	1″	2.69	1.69	.62	.07	.437	.750
75-SR-☐	1¾	1.81	1.19	.75	.44	.25	1.25	½-20 x .88	1-14	¼	5.03	1″	3.00	2.00	.72	.09	.500	1.030
4-SR-☐	2	2.07	1.25	.81	.50	.31	1.25	½-20 x .88	1¼-12	¼	5.11	1″	3.00	2.00	.69	.12	.625	1.375

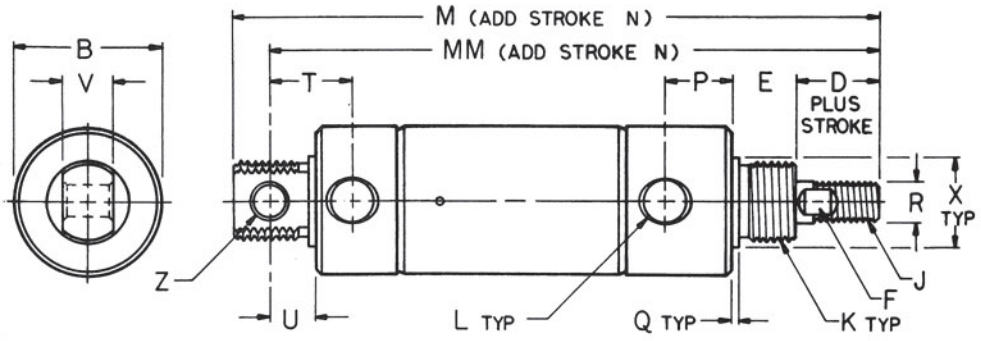
HUMPHREY AIR CYLINDERS



TYPE **SRP**

- Options: B, E, F, J, K, L, N, P, R, T, W, U.
- Versatile mounting, Pivot, Nose, Double-End

*See Accessories section.



• No rod bushing, Model 8 . . . front head is hard anodized. Model 4 has rear pivot bushing.

Medium . . . . . Compressed Air
Pressure range . . . . . 0–200 PSIG
Temperature range . . . . . –40°F to 160°F Ambient*
w/Fluoroelastomer . . . . . –20°F to 400°F Ambient*
Recommended maximum stroke . . . . . 4″

*Additional heat may be generated by seal friction (high speed cycling)

BASIC MODEL NO.	Piston Area SQ. IN.† Volume CU. IN. (per inch of stroke)	Spring Tension Pounds Free	Comp.
8	.17	1	4
7	.39	1.5	7.5
6	.81	4	12
25	1.08	7	21
5	1.62	6	18
75	2.21	12	36
4	2.84	15	42

†Area x PSIG = Approximate Force

MODEL & TYPE (Stroke)	BORE	B Dia.	D Rod Retr.	E Nose Length	F Wrench Flat	J Rod Thread x Length	K Nose & Pivot Thread	L Port (NPSF)	M Length (w/rod extended)	MM Length (w/rod extended)	N For each stroke increment of:	N Add to M & MM	N For remaining stroke increment, Add to M, plus remaining stroke	P	Q Pilot	R Rod Dia.	T	U	V	X Pil. Dia. –.001 –.005	Z Pivot Hole Dia.
8-SRP-□	½	.62	.50	.41	None	10-32 x .50	7/16-20	10-32 UNF	3.12	2.88	½″	1.44	.94	.37	.04	.187	.42	.25	.31	.437	.16
7-SRP-□	¾	.88	.50	.50	None	¼-28 x .50	⅝-18	⅛	3.84	3.55	1″	2.69	1.69	.48	.07	.250	.66	.34	.38	.625	.25
6-SRP-□	1 1/16	1.12	.62	.50	.25	5/16-24 x .50	⅝-18	⅛	4.15	3.87	1″	2.56	1.56	.52	.07	.312	.62	.34	.38	.625	.25
25-SRP-□	1¼	1.31	1.00	.62	.38	7/16-20 x .75	¾-16	⅛	5.33	4.97	1″	2.81	1.81	.63	.07	.437	.91	.41	.50	.750	.25
5-SRP-□	1½	1.55	1.00	.62	.38	7/16-20 x .75	¾-16	⅛	5.06	4.69	1″	2.69	1.69	.62	.07	.437	.81	.50	.62	.750	.38
75-SRP-□	1¾	1.81	1.19	.75	.44	½-20 x .88	1-14	¼	6.59	6.09	1″	3.00	2.00	.72	.09	.500	.98	.50	.62	1.030	.38
4-SRP-□	2	2.07	1.25	.81	.50	½-20 x .88	1¼-12	¼	6.48	6.05	1″	3.00	2.00	.69	.12	.625	1.0	.57	.75	1.375	.38