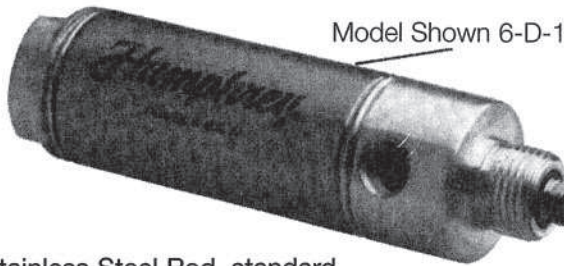
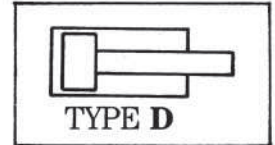


DOUBLE ACTING/NOSE MOUNT

# HUMPHREY AIR CYLINDERS



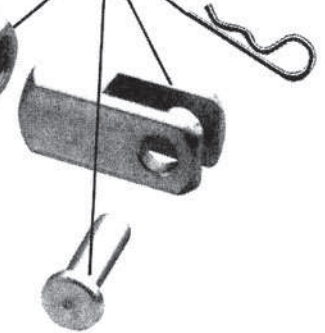
Model Shown 6-D-1



Foot Mount (F-\*)



Rod Clevis (CT-\*)

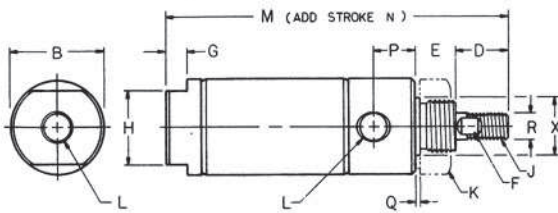


Mounting Nut (JN-\*)

- Stainless Steel Rod, standard
- Simple, reliable design
- Requires air pressure to extend *and* retract rod
- *Extend* force exceeds *retract* force (smaller effective areas on rod side of piston)
- Exclusive Humphrey Reversible Piston
- Specify Option M (Internal Magnet) to operate sensors
- Wearstrip standard: 5 inches or more of stroke (optional, shorter strokes N/A on model 8)
- Options: A, B, E, F, J, K, L, M, N, P, W

Mounting Nut included, except Model 4 & 3; order separately.

\*See Accessories section.



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 ..... 12"

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

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

Piston Area SQ. IN.†  
 Volume CU. IN.  
 (per inch of stroke)

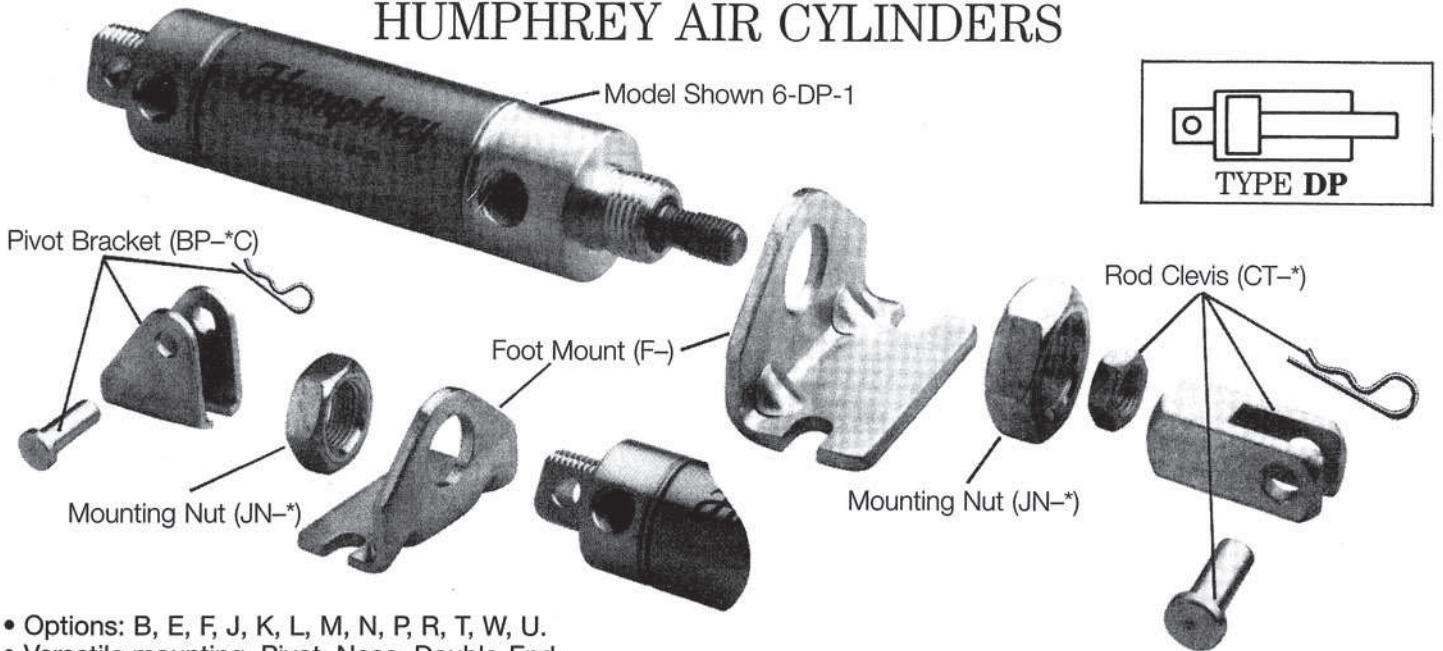
BASIC MODEL NO.	Piston Area SQ. IN.†		Rod Side
	Plain Side	Volume CU. IN. (per inch of stroke)	
8	.20	.17	
7	.44	.39	
6	.89	.81	
25	1.23	1.08	
5	1.77	1.62	
75	2.41	2.21	
4	3.14	2.84	
3	4.91	4.60	

†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		P	Q Pilot	R Rod Dia.	X Pilot Dia. -.001 -.006
												For each stroke increment of:	Add to M				
8-D-□	1/2	.62	.50	.41	None	.12	.37	10-32 x .50	7/16-20	10-32 UNF	2.62*	1/2"	.50	.37	.04	.187	.437
7-D-□	3/4	.88	.50	.50	None	.16	.62	1/4-28 x .50	5/8-18	1/8	3.47	1"	1.00	.48	.07	.250	.625
6-D-□	1 1/16	1.12	.62	.50	.25	.25	.87	5/16-24 x .50	5/8-18	1/8	3.75	1"	1.00	.52	.07	.312	.625
25-D-□	1 1/4	1.31	1.00	.62	.38	.18	.87	7/16-20 x .75	3/4-16	1/8	4.75	1"	1.00	.63	.07	.437	.750
5-D-□	1 1/2	1.55	1.00	.62	.38	.25	.87	7/16-20 x .75	3/4-16	1/8	4.44	1"	1.00	.62	.07	.437	.750
75-D-□	1 3/4	1.81	1.19	.75	.44	.25	1.25	1/2-20 x .88	1-14	1/4	5.57	1"	1.00	.72	.09	.500	1.030
4-D-□	2	2.07	1.25	.81	.50	.31	1.25	1/2-20 x .88	1 1/4-12	1/4	5.56	1"	1.00	.69	.12	.625	1.375
3-D-□	2 1/2	2.62	1.25	.81	.50	.31	1.75	1/2-20 x .88	1 3/8-12	1/4	5.56	1"	1.00	.69	.12	.625	1.500

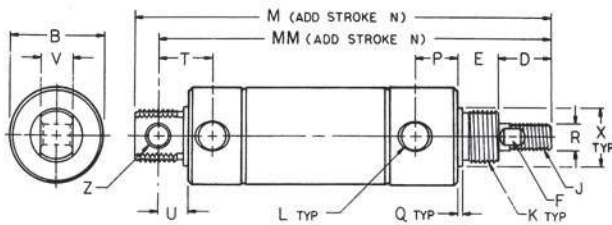
\*Add 0.399 for Option M.

# HUMPHREY AIR CYLINDERS



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

\*See Accessories section.



Medium..... Compressed Air  
 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 ..... 12"

\*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)	
	Plain Side	Rod Side
8	.20	.17
7	.44	.39
6	.89	.81
25	1.23	1.08
5	1.77	1.62
75	2.41	2.21
4	3.14	2.84
3	4.91	4.60

\* No rod bushing, Model 8... front head is hard anodized. Models 3 & 4 have rear pivot bushing.

†Area x PSIG = Approximate Force

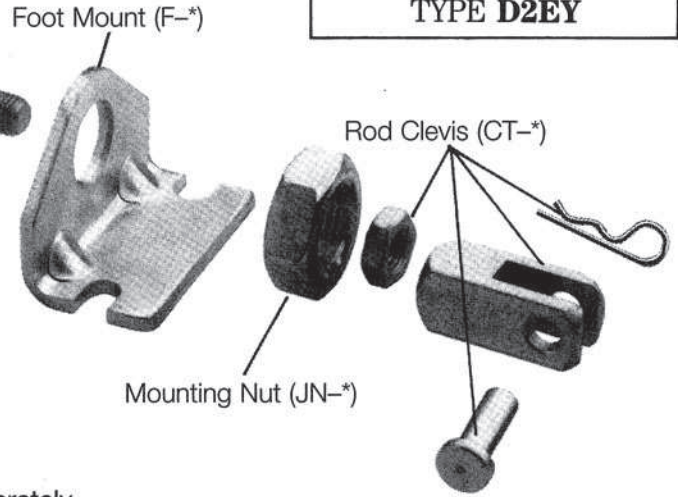
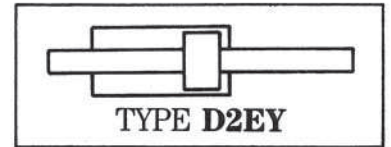
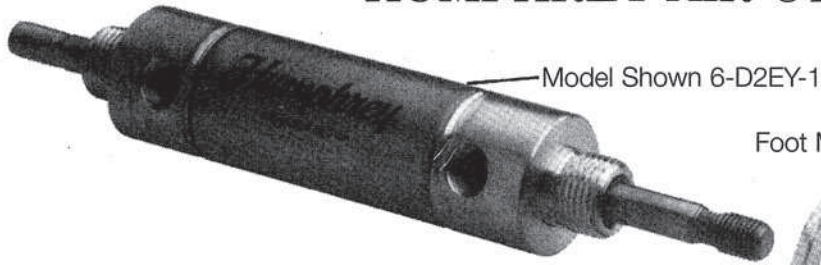
MODEL & TYPE (Stroke)	BORE	B Dia.	D Rod Exten.	E Nose Length	F Wrench Flat	J Rod Thread x Length	K Nose & Pivot Thread	L Port (NPSF)	M Length	MM Length	N		P	Q Pilot	R Rod Dia.	T	U	V	X Pilot Dia. -.001 -.006	Z Pivot Hole Dia.
											For each stroke increment of:	Add to MM								
8-DP-□	1/2	.62	.50	.41	None	10-32 x .50	7/16-20	10-32 UNF	3.31"	3.06"	1/2"	.50	.37	.04	.187	.42	.25	.31	.437	.16
7-DP-□	3/4	.88	.50	.50	None	1/4-28 x .50	5/8-18	1/8	4.54	4.25	1"	1.0	.48	.07	.250	.66	.34	.38	.625	.25
6-DP-□	1 1/16	1.12	.62	.50	.25	5/16-24 x .50	5/8-18	1/8	4.62	4.34	1"	1.0	.52	.07	.312	.62	.34	.38	.625	.25
25-DP-□	1 1/4	1.31	1.00	.62	.38	7/16-20 x .75	3/4-16	1/8	5.83	5.47	1"	1.0	.63	.07	.437	.91	.41	.50	.750	.25
5-DP-□	1 1/2	1.55	1.00	.62	.38	7/16-20 x .75	3/4-16	1/8	5.50	5.12	1"	1.0	.62	.07	.437	.81	.50	.62	.750	.38
75-DP-□	1 3/4	1.81	1.19	.75	.44	1/2-20 x .88	1-14	1/4	7.13	6.63	1"	1.0	.72	.09	.500	.98	.50	.62	1.030	.38
4-DP-□	2	2.07	1.25	.81	.50	1/2-20 x .88	1 1/4-12	1/4	6.93	6.50	1"	1.0	.69	.12	.625	1.0	.57	.75	1.375	.38
3-DP-□	2 1/2	2.62	1.25	.81	.50	1/2-20 x .88	1 3/8-12	1/4	6.93	6.50	1"	1.0	.69	.12	.625	1.0	.57	.75	1.500	.38

\*Model 8 only — add 0.399 for Option M.



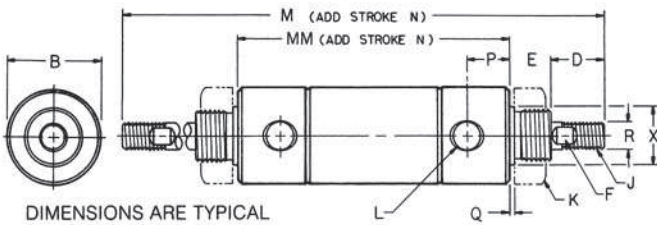
DOUBLE ACTING DOUBLE-END ROD/DOUBLE-END MOUNT

HUMPHREY AIR CYLINDERS



- Air pressure produces equal force in both directions due to equal piston area; permits "locking" in mid-stroke
- One rod can be used to perform a work function, second rod to operate limit switches, provide support or guide
- Fixed mounting of both rod ends allows movement of barrel only
- Bumpers and Stainless Steel Rod, standard
- Options: E, F, J, K, L, M, P, W
- Two mounting nuts included, except Model 3 & 4; order separately.

\*See Accessories section.



DIMENSIONS ARE TYPICAL

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

Medium ..... Compressed Air  
 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 ..... 12"

BASIC MODEL NO.	Piston Area SQ. IN.†	
	Volume CU. IN.	(per inch of stroke)
8	.17	
7	.39	
6	.81	
25	1.08	
5	1.62	
75	2.21	
4	2.84	
3	4.60	

†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	L Port (NPSF)	M Length	MM Length	N		P (Typical)	Q Pilot	R Rod Dia.	X Pilot Dia. -.001 -.006	
											For each stroke increment of:	Add to					
												M					MM
8-D2EY-□	1/2	.62	.50	.41	None	10-32 x .50	7/16-20	10-32 UNF	3.88	2.07	1/2"	1.00	.50	.37	.04	.187	.437
7-D2EY-□	3/4	.88	.50	.50	None	1/4-28 x .50	5/8-18	1/8	5.03	3.03	1"	2.00	1.00	.48	.07	.250	.625
6-D2EY-□	1 1/16	1.12	.62	.50	.25	5/16-24 x .50	5/8-18	1/8	5.32	3.07	1"	2.00	1.00	.52	.07	.312	.625
25-D2EY-□	1 1/4	1.31	1.00	.62	.38	7/16-20 x .75	3/4-16	1/8	6.83	3.58	1"	2.00	1.00	.63	.07	.437	.750
5-D2EY-□	1 1/2	1.55	1.00	.62	.38	7/16-20 x .75	3/4-16	1/8	6.63	3.39	1"	2.00	1.00	.62	.07	.437	.750
75-D2EY-□	1 3/4	1.81	1.19	.75	.44	1/2-20 x .88	1-14	1/4	8.57	4.69	1"	2.00	1.00	.72	.09	.500	1.030
4-D2EY-□	2	2.07	1.25	.81	.50	1/2-20 x .88	1 1/4-12	1/4	8.31	4.19	1"	2.00	1.00	.69	.12	.625	1.375
3-D2EY-□	2 1/2	2.62	1.25	.81	.50	1/2-20 x .88	1 3/8-12	1/4	8.31	4.19	1"	2.00	1.00	.69	.12	.625	1.500