

Shafer L-Series

Linear Valve Actuators Thrust Ratings and Dimensional Data

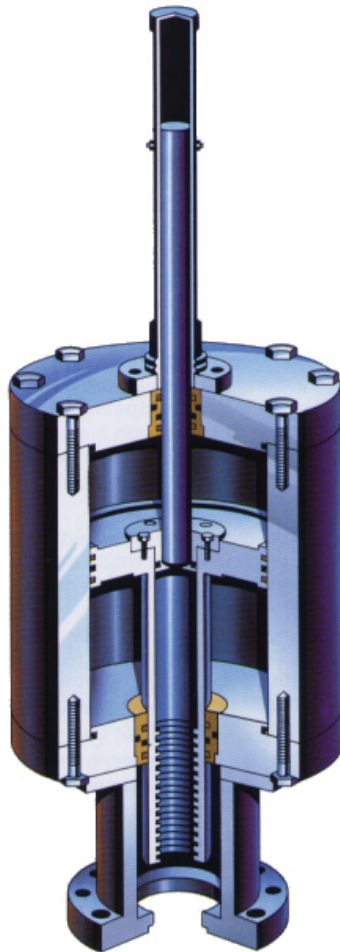


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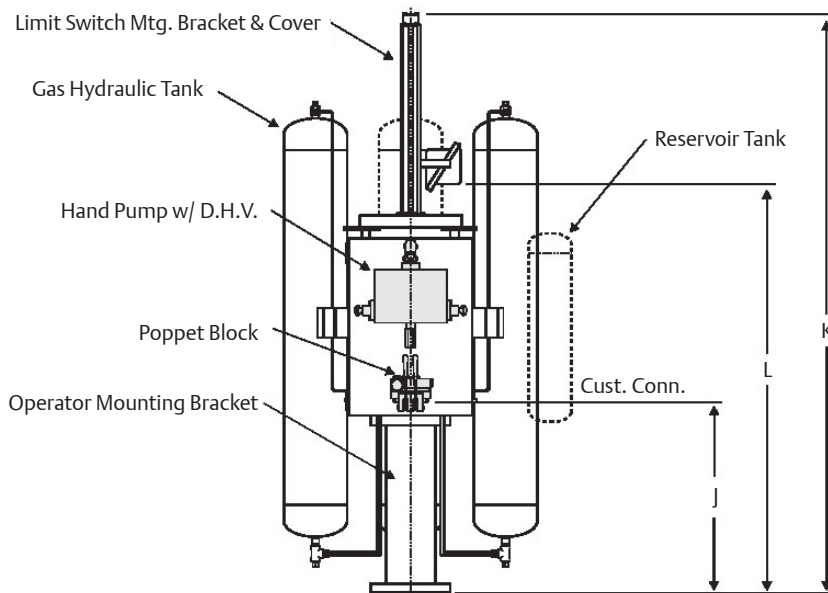
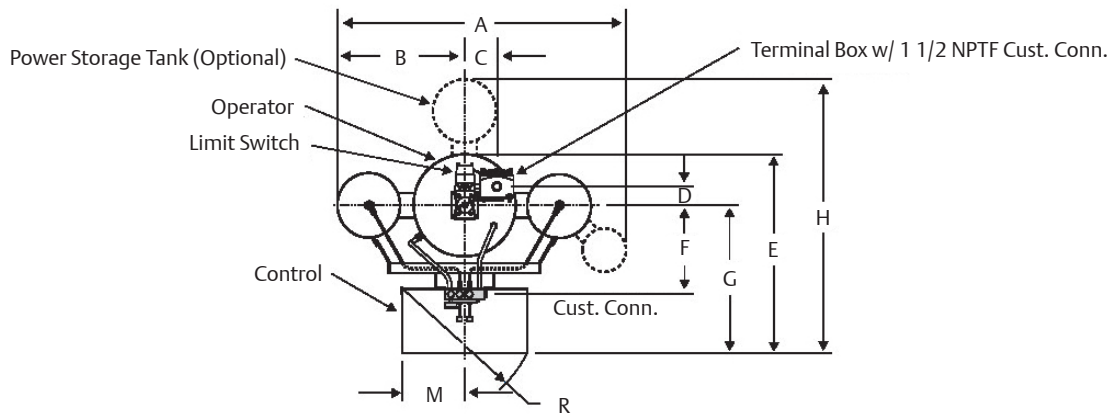
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Dimensional Data

Actuator with gas/hydraulic tanks for gas over oil applications

Valve size in inches. All other dimensions shown in centimeters.

Valve Size	6"	8"	10"	12"	14"	16"	18"	20"	22"	24"	26"	30"	36"	42"	48"
A	79.06	83.50	86.68	100.33	100.33	100.33	148.27	148.27	148.27	148.27	148.27	148.27	168.91	212.73	212.73
B	32.07	34.61	34.61	44.77	44.77	44.77	66.04	66.04	66.04	66.36	66.36	65.09	74.30	93.66	93.66
C	8.26	8.26	8.26	8.26	8.26	8.26	16.83	16.83	16.83	16.83	16.83	16.83	16.83	16.83	16.83
D	17.46	17.46	17.46	17.46	17.46	17.46	9.53	9.53	9.53	9.53	9.53	9.53	9.53	9.53	9.53
E	92.08	92.71	92.71	93.03	93.03	93.03	103.82	103.82	103.82	103.82	104.14	101.60	109.22	109.86	109.86
F	35.24	35.56	35.56	40.01	40.01	40.01	45.40	45.40	45.40	45.40	45.72	45.09	50.17	43.18	55.25
G	61.60	61.91	62.23	64.14	64.14	64.14	75.88	75.88	75.88	75.88	75.88	75.88	80.65	76.52	85.09
H	122.56	123.19	123.19	101.60	101.60	101.60	141.29	141.29	141.29	141.29	141.61	141.61	154.94	165.74	176.85
J	19.37	14.61	3.81	30.48	40.64	30.48	45.72	45.72	45.72	60.96	60.96	60.96	76.20	96.52	113.03
K	91.76	93.35	97.16	149.86	159.07	162.56	195.58	225.43	246.38	257.18	296.55	307.34	353.06	374.33	452.12
L	72.07	73.03	65.09	107.32	114.30	112.40	149.54	160.66	179.07	184.79	224.16	234.95	245.75	256.54	267.34
M	32.07	32.07	32.07	32.07	32.07	32.07	32.07	32.07	32.07	32.07	32.07	32.07	32.07	32.07	32.07
R	68.58	68.58	68.58	68.58	68.58	68.58	71.76	71.76	71.76	71.76	71.76	71.76	71.76	71.76	71.76

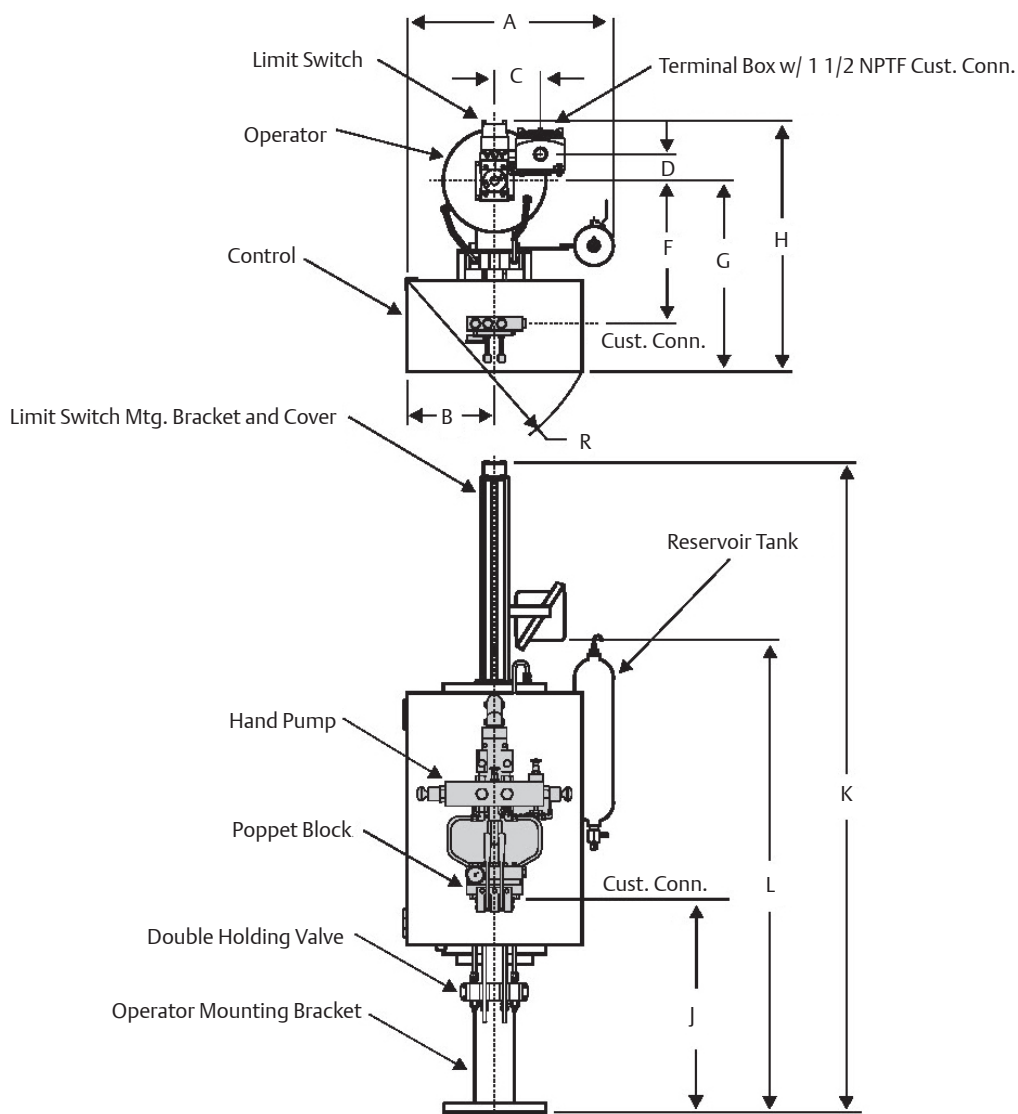


Dimensional Data

Hydraulic Actuator

Valve size in inches. All other dimensions shown in centimeters.

Valve Size	6"	8"	10"	12"	14"	16"	18"	20"	22"	24"	26"	30"	36"	42"	48"
A	68.58	68.58	68.58	68.58	68.58	68.58	68.58	68.58	68.58	71.12	71.12	71.12	71.12	71.12	76.20
B	24.45	23.81	23.81	23.81	23.81	23.81	37.78	37.78	37.78	37.78	37.78	37.78	37.78	37.78	35.88
C	8.26	8.26	8.26	8.26	8.26	8.26	16.19	16.19	16.19	16.19	16.19	16.83	16.19	16.19	16.19
D	17.46	17.46	17.46	17.46	17.46	17.46	9.53	9.53	9.53	9.53	9.53	9.53	9.53	9.53	9.53
F	45.09	46.67	48.90	48.90	53.02	53.02	55.56	55.56	55.56	49.53	53.34	58.42	78.42	79.69	83.19
G	57.15	60.96	60.96	60.96	63.18	63.18	65.72	65.72	65.72	67.31	71.12	76.20	94.93	97.47	103.51
H	92.08	92.71	92.71	92.71	95.25	95.25	97.79	97.79	97.79	93.98	99.06	102.87	126.37	131.45	142.24
J	30.48	35.56	40.64	45.72	50.80	55.88	60.96	66.04	71.12	76.20	86.36	91.44	111.76	127.00	142.24
K	88.58	103.82	121.60	136.84	152.08	167.32	182.56	197.80	213.04	224.47	239.71	254.95	317.18	357.82	398.46
L	72.07	73.03	102.55	92.39	105.41	115.25	134.62	149.86	165.10	179.07	194.31	209.55	271.15	311.79	352.43
R	60.64	60.64	60.64	60.64	60.64	60.64	85.09	85.09	85.09	85.09	85.09	85.09	85.09	85.09	85.09



Thrust Table

All thrusts shown in pounds. All diameters shown in inches.

Maximum Acceptable Valve Stem. Dia.	Piston Diameter (cm)	* Downward Closing Thrust Factor (cm ²)	* Upward Opening Thrust Factor (cm ²)	Maximum Allowable Thrust (kg)	Typical Valve Size
3.49	10.16	64.36	64.36	8,073.9	4" - 6"
5.08	10.16	64.36	54.71	11,103.9	4" - 6"
5.08	15.24	155.56	145.88	18,370.5	8" - 10"
6.99	15.24	155.56	129.69	21,708.9	8" - 10"
6.35	20.32	283.24	263.37	30,055.0	10" - 14"
8.26	20.32	283.24	243.69	35,062.7	10" - 14"
6.99	25.40	447.45	421.57	37,820.5	16" - 18"
9.53	25.40	447.45	391.89	51,110.7	16" - 18"
7.62	30.48	648.10	615.71	46,475.0	20" - 22"
10.80	30.48	648.10	574.36	69,807.8	20" - 22"
8.89	37.78	1000.45	953.22	66,451.2	24" - 26"
14.61	37.78	1000.45	858.31	114,332.4	24" - 26"
12.70	41.91	1229.56	1127.55	96,968.9	28" - 30"
14.61	41.91	1229.56	1090.84	128,584.3	28" - 30"
12.70	47.63	1591.32	1489.32	96,968.9	32" - 36"
15.88	47.63	1591.32	1425.18	141,947.1	32" - 36"
12.70	51.44	1858.05	1756.11	96,968.9	36" - 40"
15.88	51.44	1858.05	1691.97	141,947.1	36" - 40"
14.61	55.88	2195.29	2056.51	128,584.3	40" - 42"
15.88	55.88	2195.29	2029.15	141,947.1	40" - 42"

Shafer L-Series linear actuators are custom engineered to match the specific application requirements of stroke length, thrust, and power pressure. Due to the vast number of combinations offered by valve manufacturers, little standardization is allowed. Various diameter cylinders may be utilized as thrust requirements and power supply pressures vary. The Thrust Table gives only a representative sample of our total capabilities. Please contact our factory for specific actuator sizing requirements.

Normal design working pressure is 671.3 bar with a test pressure of 1,007.0 bar, however, higher pressures may be specified.

* To determine the actuator thrust output, multiply the thrust factor (cm²) times the power supply pressure (kg/cm²).

Thrust Output = Thrust Factor (cm²) x Power Pressure (kg/cm²)

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NORTH & SOUTH AMERICA

19200 Northwest Freeway
Houston TX 77065
USA
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2500 Park Avenue West
Mansfield Ohio 44906
USA
T +419 529 4311
F +419 529 3688

Av. Hollingsworth
325 Iporanga Sorocaba
SP 18087-105
Brazil
T +55 15 3238 3788
F +55 15 3228 3300

ASIA PACIFIC

No. 9 Gul Road
#01-02 Singapore 629361
T +65 6777 8211
F +65 6268 0028

No. 1 Lai Yuan Road
Wuqing Development Area
Tianjin 301700
P. R. China
T +86 22 8212 3300
F +86 22 8212 3308

For complete list of sales and manufacturing sites, please visit www.emerson.com/actuationtechnologieslocations or contact us at info.actuationtechnologies@emerson.com

MIDDLE EAST & AFRICA

P. O. Box 17033
Dubai
United Arab Emirates
T +971 4 811 8100
F +971 4 886 5465

P. O. Box 10305
Jubail 31961
Saudi Arabia
T +966 3 340 8650
F +966 3 340 8790

24 Angus Crescent
Longmeadow Business Estate East
P.O. Box 6908 Greenstone
1616 Modderfontein Extension 5
South Africa
T +27 11 451 3700
F +27 11 451 3800

EUROPE

Berenyi u. 72- 100
Videoton Industry Park
Building #230
Székesfehérvár 8000
Hungary
T +36 22 53 0950
F +36 22 54 3700

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