

Shafer L-Series

Linear Valve Actuators Thrust Ratings and Dimensional Data

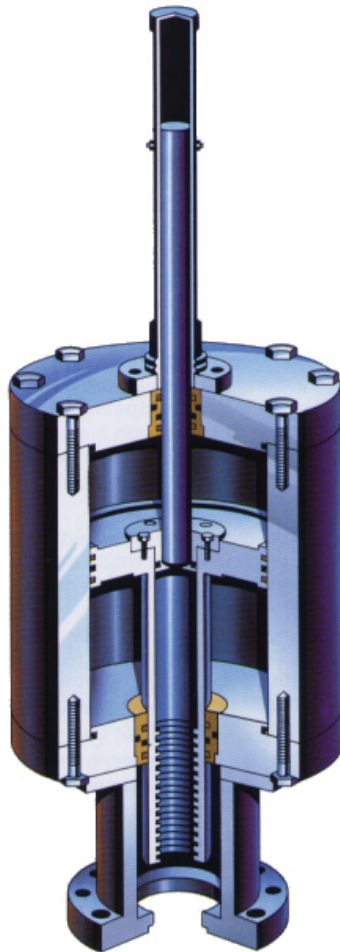


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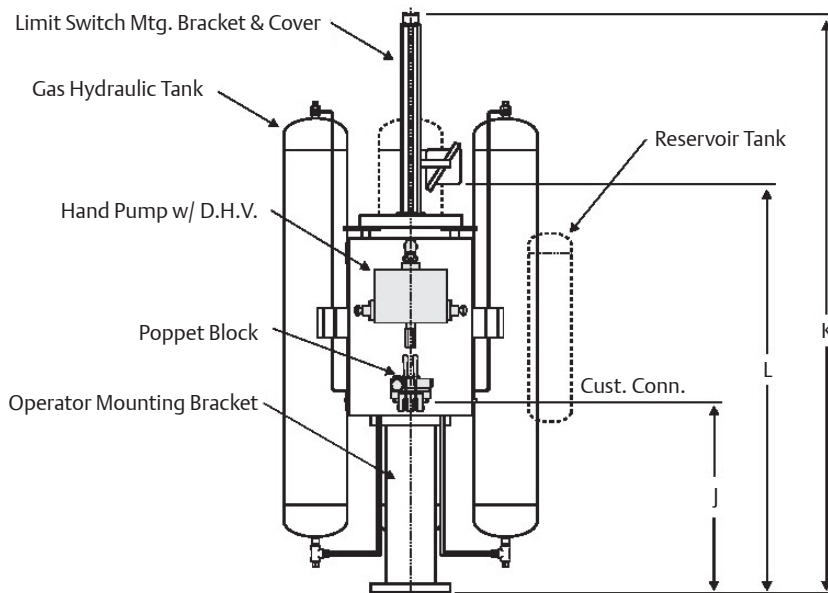
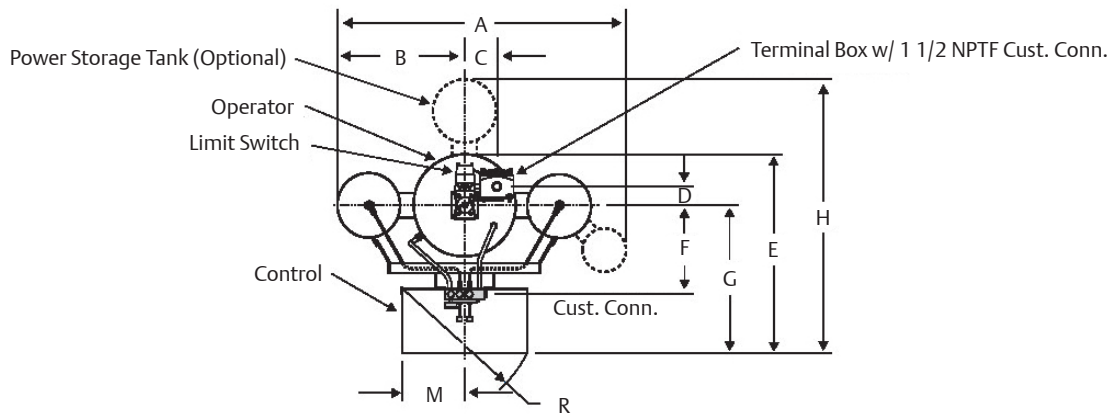
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Dimensional Data

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

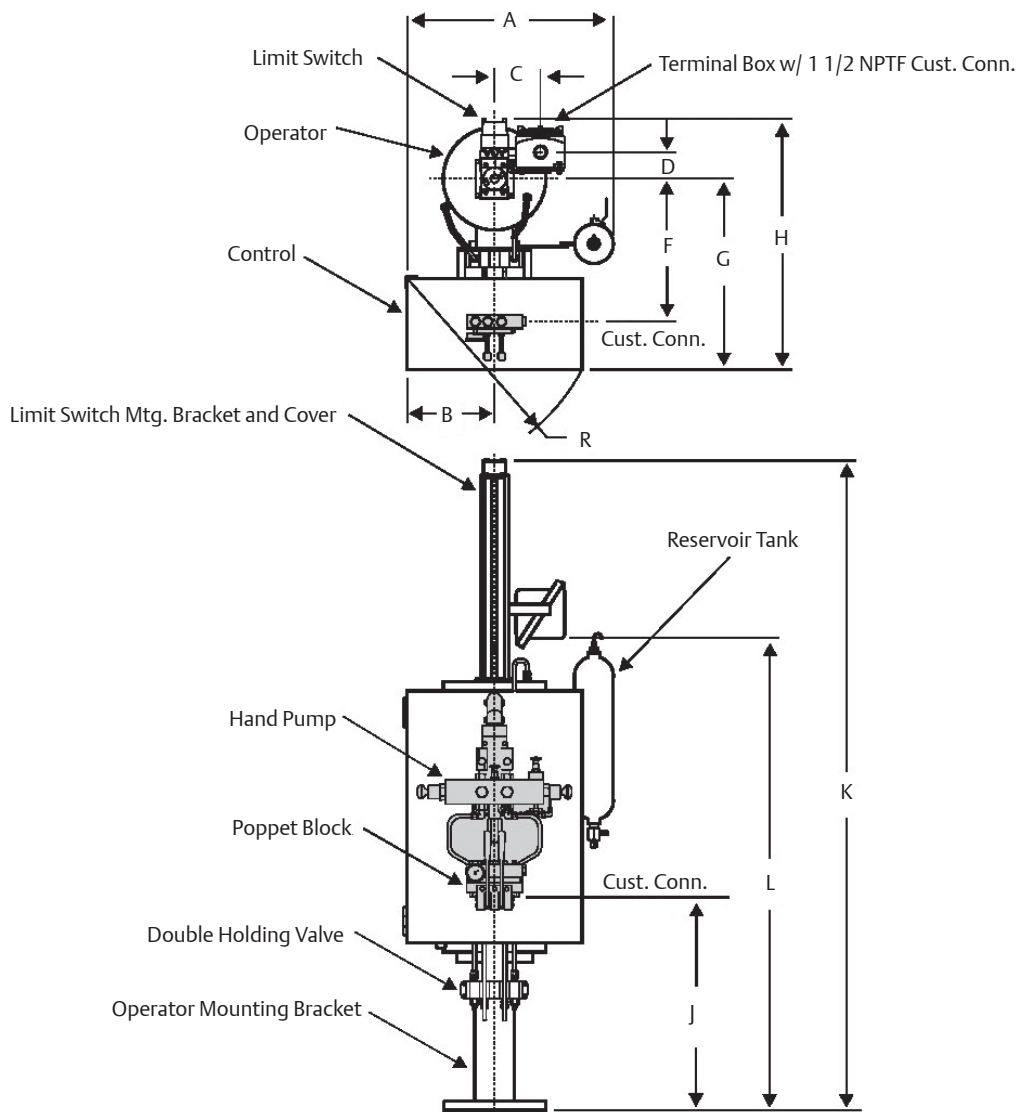


Dimensional Data

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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19200 Northwest Freeway
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#01-02 Singapore 629361
T +65 6777 8211

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

MIDDLE EAST & AFRICA

P. O. Box 17033
Jebel Ali Free Zone
Dubai
T +971 4 811 8100

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

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

EUROPE

Holland Fasor 6
Székesfehérvár 8000
Hungary
T +36 22 53 09 50

Strada Biffi 165
29017 Fiorenzuola d'Arda (PC)
Italy
T +39 0523 944 411

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

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