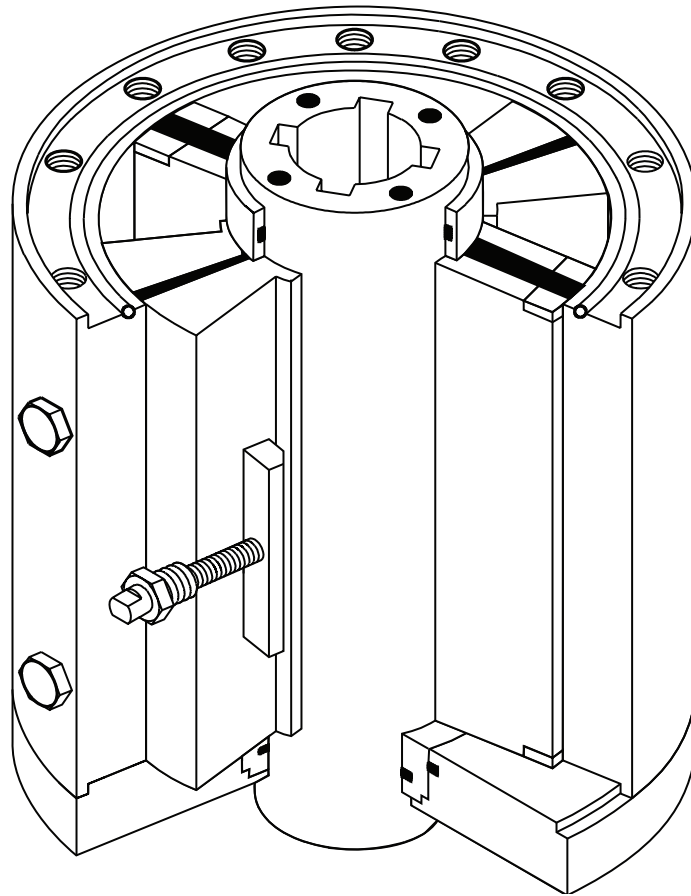


Shafer RV-Series

Rotary Vane Valve Actuators



U.S. Customary Units

Dimension:	inches (in)
Torque:	Inch Pounds (in-lbs)
Pressure:	Pounds Per Square Inch (psi)
Weight:	Pounds (lbs)
Volume:	Cubic Inches (in ³)

Table of Contents

Section 1: Actuator Specifications Sheet

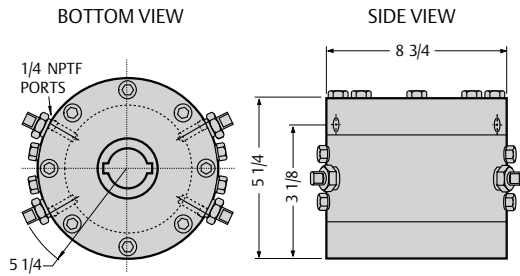
Actuator Specifications 1

Section 2: Dimensional Data Sets

Dimensional Data 8

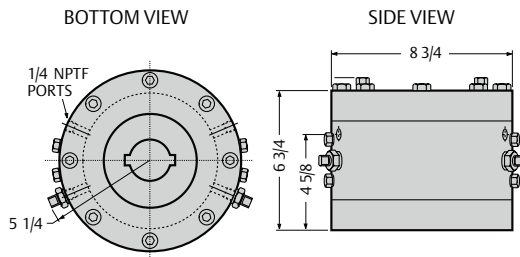
Actuator Specifications

Note: Bolt circle, rotor bore, keyway quantity and size of mounting holes for RV-Series actuators will be custom fitted to specific valve. All dimension data is subject to change. All dimensions shown in inches.



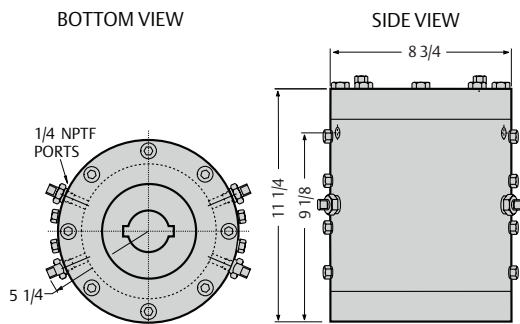
6 1/2 x 2 Rotary Vane Actuator

- Torque expression: 11.5 in. lbs./psi
- Maximum working pressure: 1440 psi
- Maximum test pressure: 3000 psi
- **Note:** Consult factory if higher pressure rating required
- Minimum working pressure: 100 psi
- Maximum acceptable valve stem: 2-5/8 in. diameter
- Maximum wrench square: 2 in. across flats
- Weight of actuator including hydraulic fluid: 39 lbs.
- Actual fluid displacement per 90° strokes equals 21 cu. in.
- On all units equipped with gas hydraulic tanks:
 - Gas consumption per 90° stroke equals 6.3 standard cu. ft. @ 1000 psi
 - Number of strokes of standard 4 cu. in. hand pump per 90° stroke equals 6



6 1/2 x 3 1/2 Rotary Vane Actuator

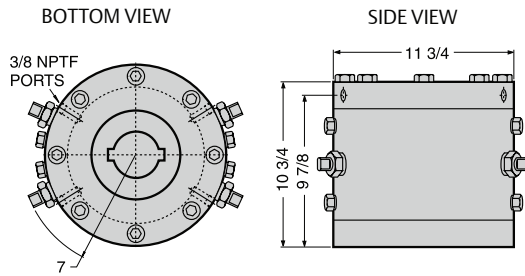
- Torque expression: 20 in. lbs./psi
- Maximum working pressure: 1440 psi
- Maximum test pressure: 3000 psi
- **Note:** Consult factory if higher pressure rating required
- Minimum working pressure: 100 psi
- Maximum acceptable valve stem: 2-5/8 in. diameter
- Maximum wrench square: 2 in. across flats
- Weight of actuator including hydraulic fluid: 94 lbs.
- Actual fluid displacement per 90° strokes equals 36 cu. in.
- On all units equipped with gas hydraulic tanks:
 - Gas consumption per 90° stroke equals 6.53 standard cu. ft. @ 1000 psi
 - Number of strokes of standard 4 cu. in. hand pump per 90° stroke equals 9



6 1/2 x 8 Rotary Vane Actuator

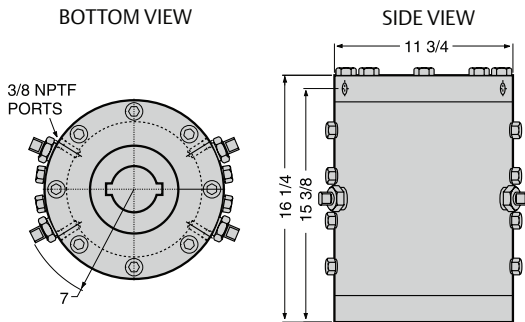
- Torque expression: 47.3 in. lbs./psi
- Maximum working pressure: 1440 psi
- Maximum test pressure: 3000 psi
- **Note:** Consult factory if higher pressure rating required
- Minimum working pressure: 100 psi
- Maximum acceptable valve stem: 2-5/8 in. diameter
- Maximum wrench square: 2 in. across flats
- Weight of actuator including hydraulic fluid: 140 lbs.
- Actual fluid displacement per 90° strokes equals 82 cu. in.
- On all units equipped with gas hydraulic tanks:
 - Gas consumption per 90° stroke equals 8.37 standard cu. ft. @ 1000 psi
 - Number of strokes of standard 4 cu. in. hand pump per 90° stroke equals 21

9 x 7 Rotary Vane Actuator



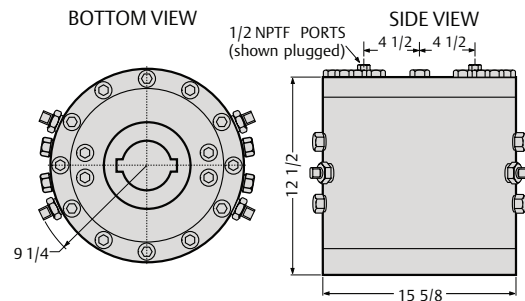
- Torque expression: 72 in. lbs./psi
- Maximum working pressure: 1440 psi
- Maximum test pressure: 3000 psi
- **Note:** Consult factory if higher pressure rating required
- Minimum working pressure: 100 psi
- Maximum acceptable valve stem: 3-3/4 in. diameter
- Maximum wrench square: 2-1/2 in. across flats
- Weight of actuator including hydraulic fluid: 230 lbs.
- Actual fluid displacement per 90° strokes equals 125 cu. in.
- On all units equipped with gas hydraulic tanks:
 - Gas consumption per 90° stroke equals 12.5 standard cu. ft. @ 1000 psi
 - Number of strokes of standard 4 cu. in. hand pump per 90° stroke equals 32

9 x 12 Rotary Vane Actuator

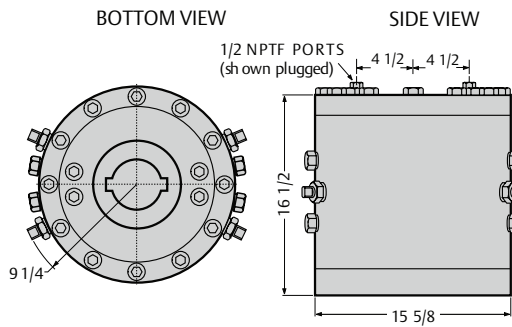


- Torque expression: 128.5 in. lbs./psi
- Maximum working pressure: 1440 psi
- Maximum test pressure: 3000 psi
- **Note:** Consult factory if higher pressure rating required
- Minimum working pressure: 100 psi
- Maximum acceptable valve stem: 3-3/4 in. diameter
- Maximum wrench square: 2-1/2 in. across flats
- Weight of actuator including hydraulic fluid: 347 lbs.
- Actual fluid displacement per 90° strokes equals 225 cu. in.
- On all units equipped with gas hydraulic tanks:
 - Gas consumption per 90° stroke equals 22.5 standard cu. ft. @ 1000 psi
 - Number of strokes of standard 4 cu. in. hand pump per 90° stroke equals 57

12 1/2 x 8 Rotary Vane Actuator

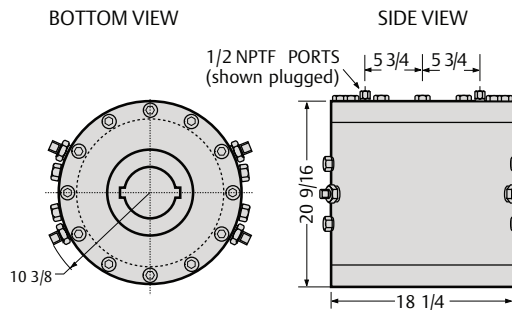


- Torque expression: 186.77 in. lbs./psi
- Maximum working pressure: 1440 psi
- Maximum test pressure: 2880 psi
- **Note:** Consult factory if higher pressure rating required
- Minimum working pressure: 100 psi
- Maximum acceptable valve stem: 4-1/2 in. diameter
- Maximum wrench square: 3-1/4 in. across flats
- Weight of actuator including hydraulic fluid: 500 lbs.
- Actual fluid displacement per 90° strokes equals 327 cu. in.
- On all units equipped with gas hydraulic tanks:
 - Gas consumption per 90° stroke equals 32.6 standard cu. ft. @ 1000 psi
 - Number of strokes of standard 4 cu. in. hand pump per 90° stroke equals 82



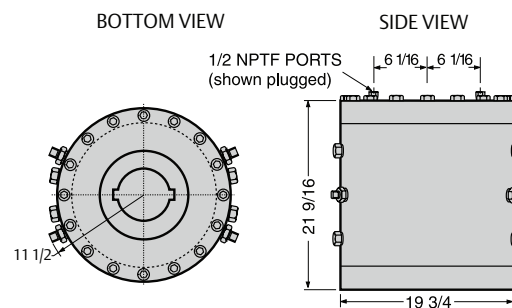
12 1/2 x 12 Rotary Vane Actuator

- Torque expression: 288 in. lbs./psi
- Maximum working pressure: 1440 psi
- Maximum test pressure: 2880 psi
- **Note:** Consult factory if higher pressure rating required
- Minimum working pressure: 100 psi
- Maximum acceptable valve stem: 4-1/2 in. diameter
- Maximum wrench square: 3-1/4 in. across flats
- Weight of actuator including hydraulic fluid: 660 lbs.
- Actual fluid displacement per 90° strokes equals 490 cu. in.
- On all units equipped with gas hydraulic tanks:
 - Gas consumption per 90° stroke equals 48.9 standard cu. ft. @ 1000 psi
 - Number of strokes of standard 4 cu. in. hand pump per 90° stroke equals 123



14 1/2 x 16 Rotary Vane Actuator

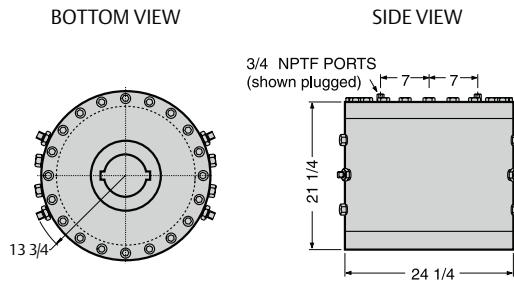
- Torque expression: 522 in. lbs./psi
- Maximum working pressure: 1440 psi
- Maximum test pressure: 2440 psi
- **Note:** Consult factory if higher pressure rating required
- Minimum working pressure: 100 psi
- Maximum acceptable valve stem: 5-1/2 in. diameter
- Weight of actuator including hydraulic fluid: 1064 lbs.
- Actual fluid displacement per 90° strokes equals 913 cu. in.
- On all units equipped with gas hydraulic tanks:
 - Gas consumption per 90° stroke equals 91.2 standard cu. ft. @ 1000 psi
 - Number of strokes of standard 12 cu. in. hand pump per 90° stroke equals 76



16 1/2 x 16 Rotary Vane Actuator

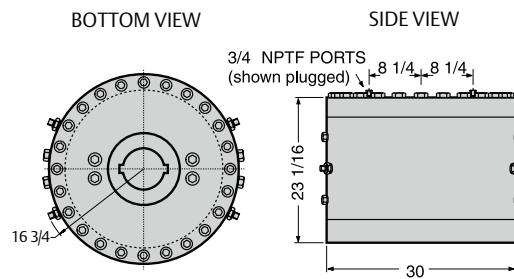
- Torque expression: 688.5 in. lbs./psi
- Maximum working pressure: 1440 psi
- Maximum test pressure: 2160 psi
- **Note:** Consult factory if higher pressure rating required
- Minimum working pressure: 100 psi
- Maximum acceptable valve stem: 6 in. diameter
- Weight of actuator including hydraulic fluid: 1325 lbs.
- Actual fluid displacement per 90° strokes equals 1280 cu. in.
- On all units equipped with gas hydraulic tanks:
 - Gas consumption per 90° stroke equals 127.8 standard cu. ft. @ 1000 psi
 - Number of strokes of standard 12 cu. in. hand pump per 90° stroke equals 107

20 x 16 Rotary Vane Actuator



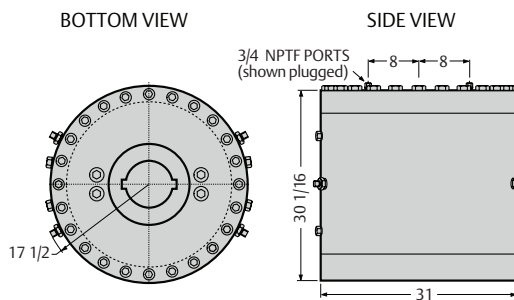
- Torque expression: 1,148.4 in. lbs./psi
- Maximum working pressure: 1440 psi
- Maximum test pressure: 2250 psi
- **Note:** Consult factory if higher pressure rating required
- Minimum working pressure: 100 psi
- Maximum acceptable valve stem: 6 in. diameter
- Weight of actuator including hydraulic fluid: 1880 lbs.
- Actual fluid displacement per 90° strokes equals 2013 cu. in.
- On all units equipped with gas hydraulic tanks:
 - Gas consumption per 90° stroke equals 201 standard cu. ft. @ 1000 psi
 - Number of strokes of standard 12 cu. in. hand pump per 90° stroke equals 168

25 x 16 Rotary Vane Actuator



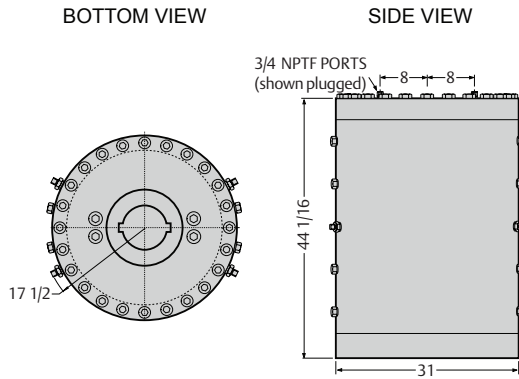
- Torque expression: 1853.1 in. lbs./psi
- Maximum working pressure: 1440 psi
- Maximum test pressure: 2160 psi
- **Note:** Consult factory if higher pressure rating required
- Minimum working pressure: 100 psi
- Maximum acceptable valve stem: 6-1/2 in. diameter
- Weight of actuator including hydraulic fluid: 2920 lbs.
- Actual fluid displacement per 90° strokes equals 3232 cu. in.
- On all units equipped with gas hydraulic tanks:
 - Gas consumption per 90° stroke equals 322.8 standard cu. ft. @ 1000 psi
 - Number of strokes of standard 12 cu. in. hand pump per 90° stroke equals 270

26 x 22 Rotary Vane Actuator



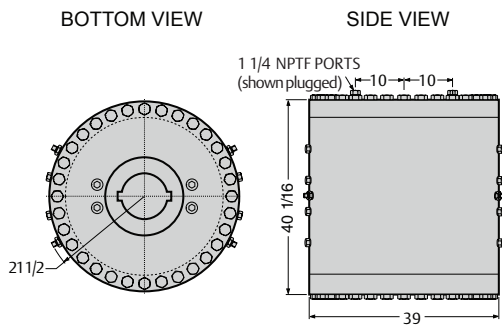
- Torque expression: 2691.5 in. lbs./psi
- Maximum working pressure: 1440 psi
- Maximum test pressure: 2160 psi
- **Note:** Consult factory if higher pressure rating required
- Minimum working pressure: 100 psi
- Maximum acceptable valve stem: 7-3/8 in. diameter
- Weight of actuator including hydraulic fluid: 4050 lbs.
- Actual fluid displacement per 90° strokes equals 4697 cu. in.
- On all units equipped with gas hydraulic tanks:
 - Gas consumption per 90° stroke equals 469.1 standard cu. ft. @ 1000 psi
 - Number of strokes of standard 12 cu. in. hand pump per 90° stroke equals 392

26 x 36 Rotary Vane Actuator



- Torque expression: 4,338 in. lbs./psi
- Maximum working pressure: 1000 psi
- Maximum test pressure: 2000 psi
- **Note:** Consult factory if higher pressure rating required
- Minimum working pressure: 100 psi
- Maximum acceptable valve stem: 7-3/8 in. diameter
- Weight of actuator including hydraulic fluid: 7687 lbs.
- Actual fluid displacement per 90° strokes equals 7686 cu. in.
- On all units equipped with gas hydraulic tanks:
Gas consumption per 90° stroke equals 767.6 standard cu. ft. @ 1000 psi
Number of strokes of standard 12 cu. in. hand pump per 90° stroke equals 641

33 x 32 Rotary Vane Actuator



- Torque expression: 5,868 in. lbs./psi
- Maximum working pressure: 1000 psi
- Maximum test pressure: 1500 psi
- **Note:** Consult factory if higher pressure rating required
- Minimum working pressure: 100 psi
- Maximum acceptable valve stem: 9-1/2 in. diameter
- Weight of actuator including hydraulic fluid: 8900 lbs.
- Actual fluid displacement per 90° strokes equals 10857 cu. in.
- On all units equipped with gas hydraulic tanks:
Gas consumption per 90° stroke equals 1084.2 standard cu. ft. @ 1000 psi
Number of strokes of standard 12 cu. in. hand pump per 90° stroke equals 905

Speed of Operation in Seconds Per 90° Rotation*

Actuator Size	Operating Pressure (psiG)													
	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400
6 1/2 x 2	8	5	4	4	3	3	3	2	2	2	2	2	1	1
6 1/2 x 3 1/2	9	6	5	5	4	3	3	3	2	2	2	2	1	1
6 1/2 x 8	10	7	6	6	5	4	4	4	3 1/2	3 1/2	3	3	2	1
9 x 7	14	11	9	8	8	7	5	5	5	5	3	3	2	2
9 x 12	15	13	11	10	9	9	8	7	6	6	5	4	4	3
12 1/2 x 8	15	14	12	11	11	10	9	9	8	8	7	6	6	6
12 1/2 x 12	20	18	18	16	15	13	10	10	10	10	9	9	9	9
14 1/2 x 16	32	25	20	18	16	14	14	12	12	12	12	11	11	11
16 1/2 x 16	40	30	28	23	20	19	17	16	15	15	15	15	15	14
20 x 16	40	35	30	25	24	22	20	20	20	19	19	19	19	18
25 x 16	76	53	43	37	33	30	25	25	24	24	24	24	22	22
26 x 22	80	60	50	40	35	30	25	25	25	25	25	25	25	25
26 x 36	90	80	70	50	45	40	38	35	35	35				
33 x 32	254	178	146	125	111	102	95	88	83	79				

* Stroking speeds above are approximate as speed may be affected by fluid viscosity or the flow capacities of the individual control components. The listed speeds are based on actuators with gas hydraulic tanks, hand pump and the standard poppet type control block in the power supply circuit.

Adjustable speed control valves may be specified so that the stroking speed may be finetuned to the field operating conditions. If faster speeds are required, please consult a factory representative.

Approximate Weights For Shafer Rotary Operators, Hydraulic Tanks And Power Storage Tanks

Size	Operator Weight (lbs)	Hydraulic Tank Weight (lbs) (per Pair)	Power Storage Tank (Standard) Weight (lbs)
6 1/2 x 2	39	35	20
6 1/2 x 3 1/2	100	35	20
6 1/2 x 8	150	75	40
9 x 7	275	111	52
9 x 12	400	170	85
12 1/2 x 8	500	265	125
12 1/2 x 12	660	406	175
14 1/2 x 16	1064	675	275
16 1/2 x 16	1325	875	450
20 x 16	1880	1275	693
25 x 16	2920	2708	1181
26 x 22	4500	3348	1450
26 x 36	7687	5362	2315
33 x 32	8900	7448	3160

Approximate Weights For Shafer Hand Pumps, 2-Way Electric Controls and Limit Switches

Pumps	Control (Two-Way Electric)	Limit Switch
4 cu. in. = 20 lbs.	1/4 in. = 60 lbs.	LARGE = 25 lbs.
12 cu. in. = 44 lbs.	1/2 in. = 75 lbs.	-----

4 cu. in. Pump, 1/4 Poppet Block = 52 lbs. + Cover 28 lbs. = Total 80 lbs.
 12 cu. in. Pump, 1/4 Poppet Block= 102 lbs. + Cover 42 lbs. = Total 144 lbs.
 Linebreak Small Plate with Lockout = 42 lbs. + Cover 22 lbs. = 64 lbs.

4 cu. in. Pump / D.H.V. = 50 lbs. 12 cu. in. Pump / D.H.V. = 110 lbs.

Limit Valve (ESD) with Plate 10 lbs.
 1-08672 Terminal Box= 10 lbs. 1-09027 Terminal Box = 12 lbs.
 1/4 Poppet Block, 4 cu. in. Pump & Linebreak with cover = 95 lbs.

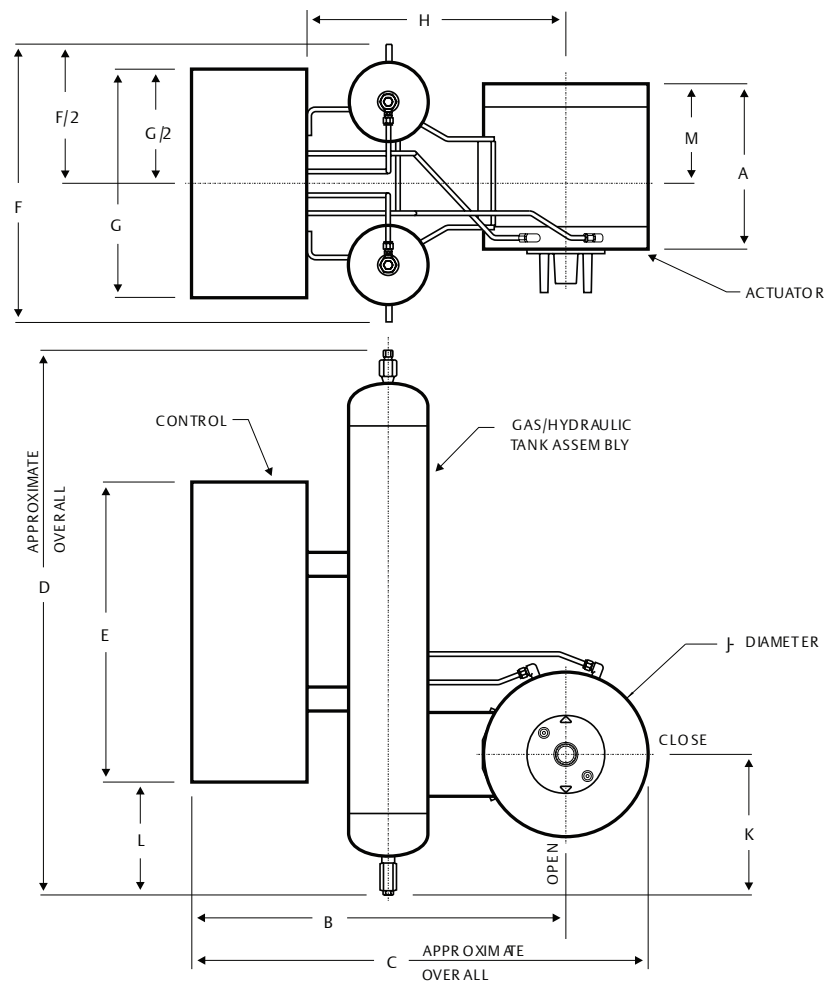
Dimensional Data

Gas / Hydraulic Rotary Vane - Horizontal Stem, Vertical Line

Note: All dimensional data is for reference only and subject to change. Depending on the application, specific actuator controls may or may not be located inside of the control box. Where specified, there may be additional pressure vessels or power storage tanks which are not shown.

Size	A	B	C	D	E	F	G	H	J	K	L	M
6 1/2 x 2	5 1/4	24 1/2	29	23 1/4	25 1/4	18 1/4	19 1/4	16 1/4	8 3/4	9 1/4	1/2	2 1/4
6 1/2 x 3 1/2	6 3/4	24 1/2	29	23 1/4	25 1/4	18 1/4	19 1/4	16 1/4	8 3/4	9 1/4	1/2	3 3/4
6 1/2 x 8	11 1/4	24 1/2	29	30	25 1/4	18 1/4	19 1/4	16 1/4	8 3/4	9 1/4	4 3/4	6 1/2
9 x 7	10 3/4	29 3/4	35 1/2	30 3/4	25 1/4	21 1/4	19 1/4	21 1/4	11 3/4	10 3/4	4 1/4	5 1/2
9 x 12	16 1/4	30 1/2	36 1/4	37 1/2	25 1/4	23 1/4	19 1/4	22	11 3/4	11 3/4	7 1/2	11
12 1/2 x 8	12 1/2	32 1/2	39 1/4	45 1/4	25 1/4	23 1/4	19 1/4	24	15 3/4	11 3/4	11 1/2	7 1/2
12 1/2 x 12	17	33 3/4	41 1/2	42	25 1/4	27 1/4	19 1/4	25 1/4	15 3/4	12 1/4	10	10 3/4
14 1/2 x 16	20 9/16	44 1/2	53 1/2	47	32 1/2	33 1/2	23	32	18 1/4	16 1/2	7	9 1/4
16 1/2 x 16	22 1/2	45 3/4	55 3/4	60 1/4	32 1/2	33 1/2	23	33 1/2	19 3/4	16 1/2	13 1/4	10 3/4
20 x 16	23 1/4	49 1/2	61 1/2	58	32 1/2	40	23	37	24 1/4	17 1/2	12 1/4	10 1/2
25 x 16	24 3/4	51 1/4	66 1/4	67 3/4	36 1/4	44	25 1/4	37 1/2	30	11 1/2	17 1/4	10 1/4
26 x 22	32 1/4	*	*	*	36 1/4	*	25 1/4	*	31	*	*	*
26 x 36	45 1/2	*	*	*	36 1/4	*	25 1/4	*	31	*	*	*
33 x 32	41 1/4	*	*	*	36 1/4	*	25 1/4	*	39	*	*	*

* Indicates this particular size of actuator has not been used in this type of application. All dimensions shown in inches.

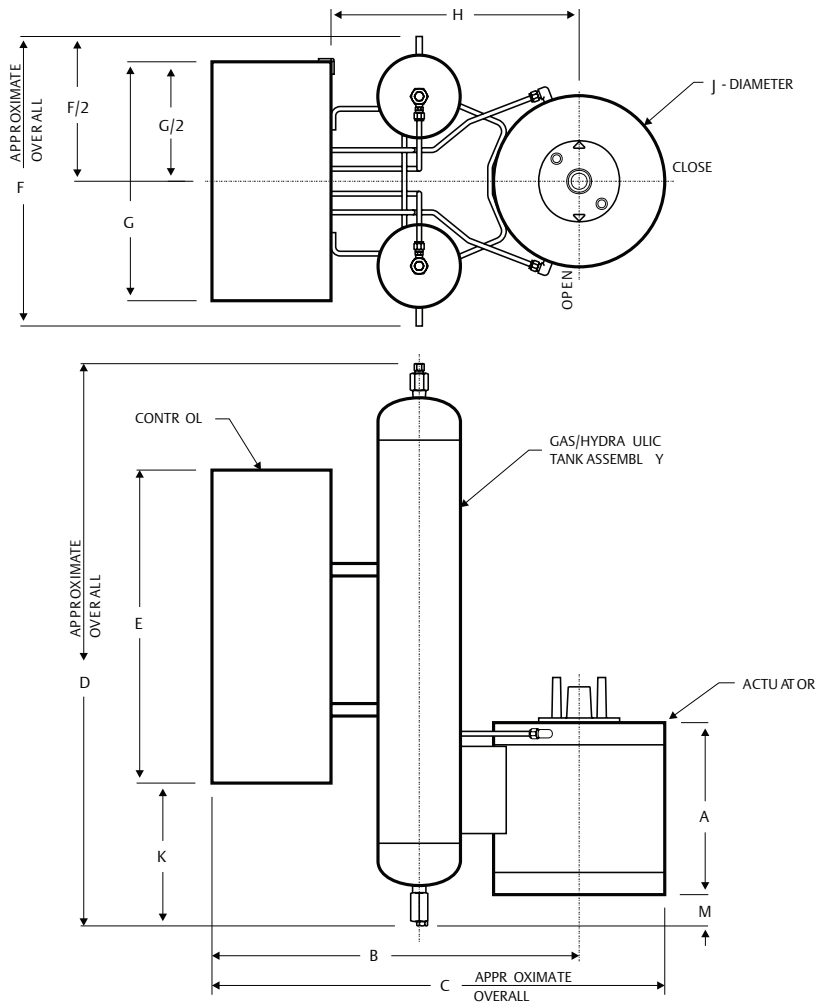


Gas / Hydraulic Rotary Vane - Vertical Stem, Horizontal Line

Note: All dimensional data is for reference only and subject to change. Depending on the application, specific actuator controls may or may not be located inside of the control box. Where specified, there may be additional pressure vessels or power storage tanks which are not shown.

Size	A	B	C	D	E	F	G	H	J	K	M
6 1/2 x 2	5 1/4	24 1/4	28 1/2	23 1/4	25 1/4	18 1/4	19 1/4	15 3/4	8 3/4	1/2	5 1/4
6 1/2 x 3 1/2	6 3/4	24 1/4	28 1/2	23 1/4	25 1/4	18 1/4	19 1/4	15 3/4	8 3/4	1/2	5
6 1/2 x 8	11 1/4	24 1/4	28 1/2	30	25 1/4	18 1/4	19 1/4	15 3/4	8 3/4	4 3/4	3 1/4
9 x 7	10 3/4	27 1/2	33 1/2	30 3/4	25 1/4	21 1/4	19 1/4	19 1/4	11 3/4	4 1/4	5
9 x 12	16 1/4	28 1/2	34 1/4	37 1/2	25 1/4	23 1/4	19 1/4	20	11 3/4	7 1/2	3 1/2
12 1/2 x 8	12 1/2	32	39 3/4	45 1/4	25 1/4	23 1/4	19 1/4	23 1/2	15 3/4	9	2 1/2
12 1/2 x 12	17	32	39 3/4	42	25 1/4	27 1/4	19 1/4	23 1/2	15 3/4	10	3/4
14 1/2 x 16	20 9/16	38 3/4	47 3/4	47	32 1/2	33 1/2	23	26 1/4	18 1/4	7	5 1/4
16 1/2 x 16	22 1/2	40	50	60 1/4	32 1/2	33 1/2	23	27 3/4	19 3/4	13 1/4	1 1/4
20 x 16	23 1/4	44 1/4	56 1/4	58	32 1/2	40	23	31 3/4	24 1/4	12 1/4	6 1/2
25 x 16	24 1/2	51	66	67 3/4	36 1/2	44	25 1/4	36 1/2	30	13 1/2	9 1/4
26 x 22	32	37	68	84 1/4	36 1/2	48	25 1/4	38	31	21 3/4	6 3/4
26 x 36	45 1/4	58	73 1/2	69 1/2	36 1/2	57	25 1/4	43 1/2	31	13 1/4	8 1/2
33 x 32	41 1/4	62 1/4	81 3/4	97 1/2	36 3/4	57	25 1/4	47 3/4	39	28 1/4	10 3/4

* Indicates this particular size of actuator has not been used in this type of application. All dimensions shown in inches.

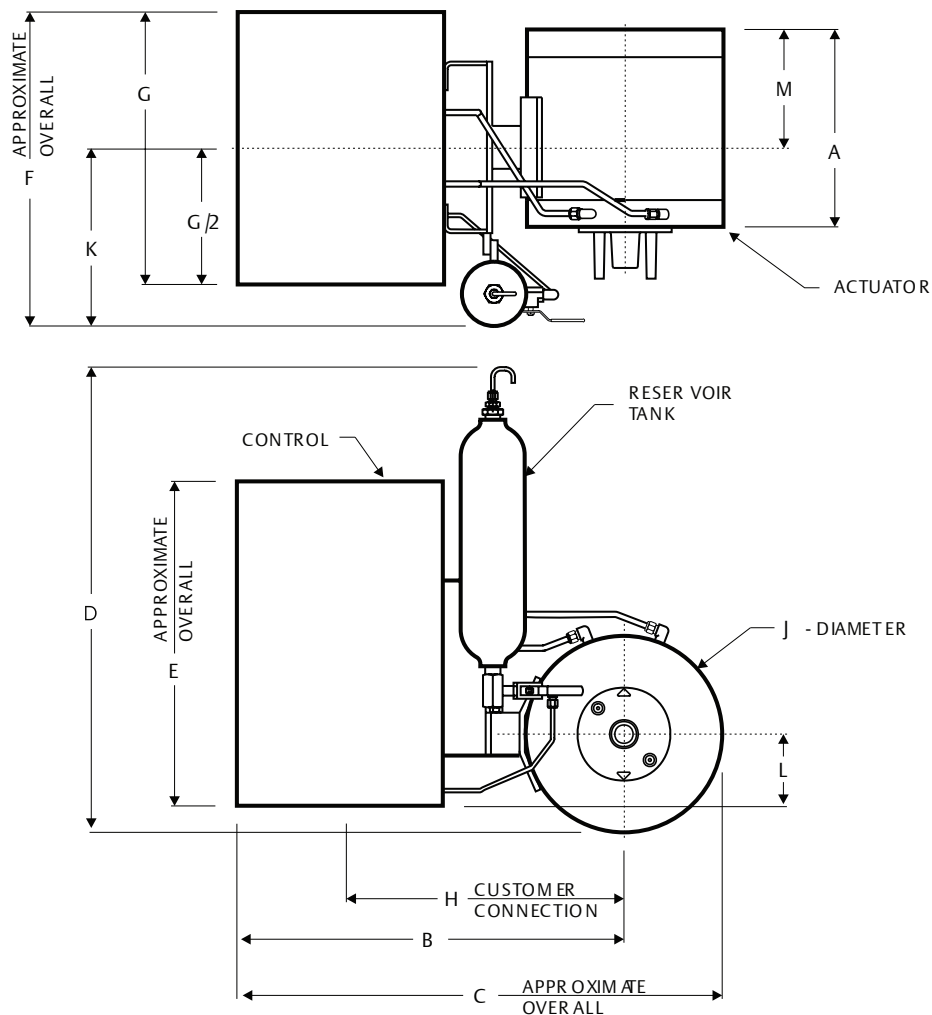


Central Hydraulic System - Horizontal Stem, Vertical Line

Note: All dimensional data is for reference only and subject to change. Depending on the application, specific actuator controls may or may not be located inside of the control box. Where specified, there may be additional pressure vessels or power storage tanks which are not shown.

Size	A	B	C	D	E	F	G	H	J	K	L	M
6 1/2 x 2	5 1/4	23 1/2	27	30 3/4	22 3/4	22	19 1/4	17	8 3/4	12 1/2	4 1/2	2 1/4
6 1/2 x 3 1/2	6 3/4	24 3/4	29	30 3/4	22 3/4	22	19 1/4	17	8 3/4	12 1/2	4 1/2	3 3/4
6 1/2 x 8	11 1/4	24 3/4	29	30 3/4	22 3/4	22	19 1/4	17	8 3/4	12 1/2	4 1/2	6 1/2
9 x 7	10 3/4	26 1/4	32	31 1/2	22 3/4	22	19 1/4	18 1/2	11 3/4	12 1/2	5	5 1/4
9 x 12	16 1/4	26 1/4	32	31 1/2	22 3/4	22 1/2	19 1/4	18 1/2	11 3/4	12 1/2	5	10 3/4
12 1/2 x 8	12 1/2	28	36	32 1/2	22 3/4	23 1/4	19 1/4	20 1/2	15 3/4	12 1/2	5	8 3/4
12 1/2 x 12	17	28	36	33 1/2	22 3/4	23 1/4	19 1/4	20 1/2	15 3/4	12 1/2	5	10 3/4
14 1/2 x 16	20 9/16	34 1/4	43 1/4	34 3/4	32 1/2	26 1/2	28 1/4	23 1/4	18 1/4	12 1/2	9	9 1/4
16 1/2 x 16	22 1/2	35	45	35 1/2	32 1/2	26 1/2	28 1/4	24	19 3/4	12 1/2	9	10 3/4
20 x 16	23 1/4	37 1/2	49 3/4	37 3/4	32 1/2	26 1/2	28 1/4	26 1/2	24 1/4	12 1/2	9	10 1/2
25 x 16	24 1/2	36 3/4	51 3/4	46	36 1/2	25	25 1/4	28 3/4	30	12 1/2	5 1/2	12 1/4
26 x 22	32	*	*	*	36 1/2	*	25 1/4	*	31	*	*	*
26 x 36	45 1/4	*	*	*	36 1/2	*	25 1/4	*	31	*	*	*
33 x 32	41 1/4	*	*	*	36 1/2	*	25 1/4	*	39	*	*	*

* Indicates this particular size of actuator has not been used in this type of application. All dimensions shown in inches.

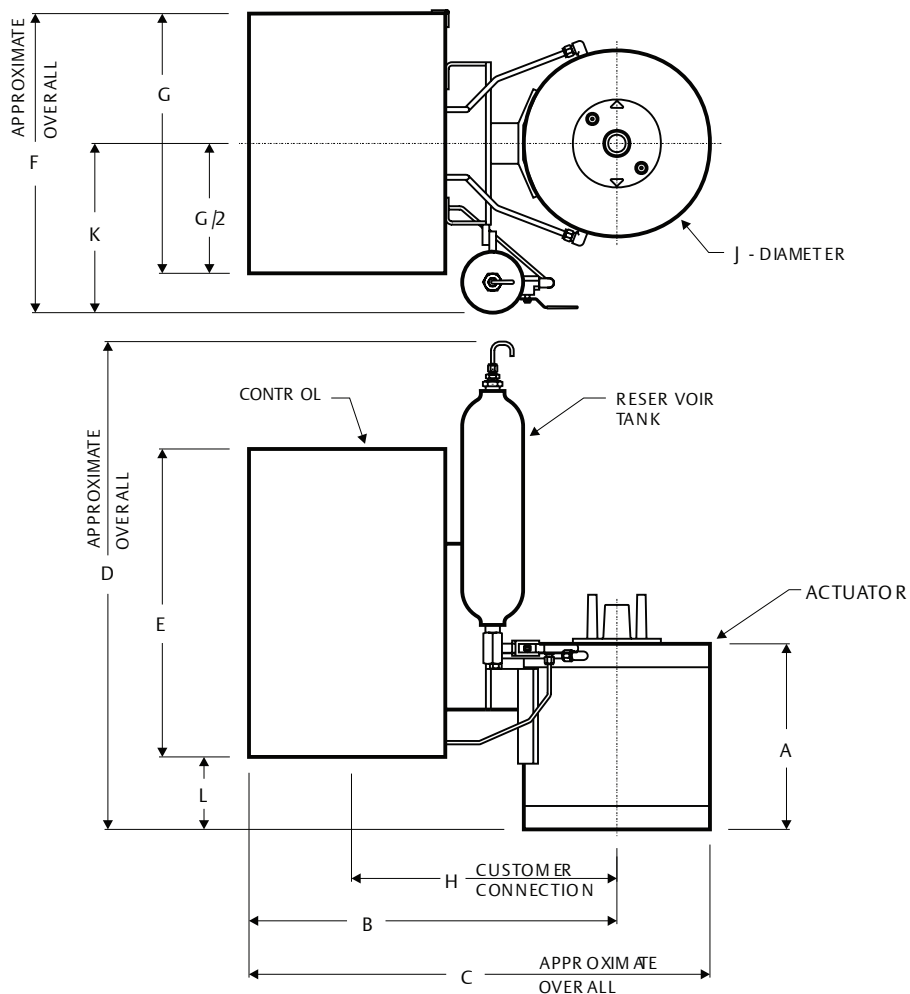


Central Hydraulic System - Vertical Stem, Horizontal Line

Note: All dimensional data is for reference only and subject to change. Depending on the application, specific actuator controls may or may not be located inside of the control box. Where specified, there may be additional pressure vessels or power storage tanks which are not shown.

Size	A	B	C	D	E	F	G	H	J	K	L
6 1/2 x 2	5 1/4	24 3/4	29	31 1/4	22 3/4	22	19 1/4	17	8 3/4	12 1/2	1/2
6 1/2 x 3 1/2	6 3/4	24 3/4	29	31 3/4	22 3/4	22	19 1/4	17	8 3/4	12 1/2	1
6 1/2 x 8	11 1/4	24 3/4	29	34 1/2	22 3/4	22	19 1/4	17	8 3/4	12 1/2	3 3/4
9 x 7	10 3/4	26	32	33	22 3/4	22	19 1/4	18 1/2	11 3/4	12 1/2	2 1/2
9 x 12	16 1/4	26	32	38 1/2	22 3/4	22	19 1/4	18 1/2	11 3/4	12 1/2	8
12 1/2 x 8	12 1/2	27 1/4	34	34 1/2	22 3/4	22	19 1/4	19 1/2	15 3/4	12 1/2	1 1/2
12 1/2 x 12	17	28 1/4	36	38 1/2	22 3/4	22	19 1/4	20 3/4	15 3/4	12 1/2	7 3/4
14 1/2 x 16	20 9/16	34 1/4	43 1/4	40 1/2	32 1/2	26 1/2	28 1/4	23 1/4	18 1/4	12 1/2	4
16 1/2 x 16	22 1/2	35	45	41	32 1/2	26 1/2	28 1/4	24	19 3/4	12 1/2	6 1/2
20 x 16	23 1/4	37 1/2	49 3/4	40 3/4	32 1/2	26 1/2	28 1/4	26 1/2	24 1/4	12 1/2	6
25 x 16	24 1/2	36 3/4	51 3/4	50 3/4	36 1/2	25	25 1/4	28 1/2	30	12 1/2	14 1/4
26 x 22	32	37 1/4	52 3/4	53 1/4	36 1/2	25	25 1/4	28 3/4	31	12 1/2	16 3/4
26 x 36	45 1/4	*	*	*	36 1/2	*	25 1/4	*	31	*	*
33 x 32	41 1/4	*	*	*	36 1/2	*	25 1/4	*	39	*	*

* Indicates this particular size of actuator has not been used in this type of application. All dimensions shown in inches.



World Area Configuration Centers (WACC) offer sales support, service, inventory and commissioning to our global customers. Choose the WACC or sales office nearest you:

NORTH & SOUTH AMERICA

19200 Northwest Freeway
Houston TX 77065
USA
T +1 281 477 4100
F +1 281 477 2809

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

www.emerson.com/shafer

©2017 Emerson. All rights reserved.

The Emerson logo is a trademark and service mark of Emerson Electric Co. Shafer™ is a mark of one of the Emerson family of companies. All other marks are property of their respective owners.

The contents of this publication are presented for information purposes only, and while every effort has been made to ensure their accuracy, they are not to be construed as warranties or guarantees, express or implied, regarding the products or services described herein or their use or applicability. All sales are governed by our terms and conditions, which are available on request. We reserve the right to modify or improve the designs or specifications of our products at any time without notice.