

Fisher™ 1068 Rotary Vane Actuator

Fisher 1068 rotary vane spring return and double acting pneumatic actuators have a large range of sizes that can be mounted to rotary shaft valves. The 1068 rotary vane actuator is one of the simplest and most reliable units for quarter-turn rotary actuation.

The 1068 design offers a wide torque range. The double acting actuator is capable of outputting the same torque at every valve rotation. The spring return actuator has torque outputs that are linear, and balanced for both air-to-open and air-to-close applications.

Features

- **Accuracy** -- The 1068 actuator vane and shaft are an integral casting, removing a means of lost motion or dead band. Clamped coupler used on size 5i through 15i spring return minimizes the possibility of lost motion between the actuator and valve shaft connection.
- **Integral Air Passage** -- The 1068 sizes 5i through 15i spring return actuator incorporates an integral air passage that eliminates the need for external tubing and fittings when paired with a Fisher FIELDVUE™ DVC2000 and DVC6200 digital valve controllers. The double acting unit will require minimal external tubing.
- **Compact Construction** -- Reduced valve/actuator envelope dimensions leads to more mounting flexibility when space is at a premium.
- **Long Life Service** -- Tested to over 1 million cycles. Rugged construction provides stability, corrosion resistance, and protection from demanding process control applications.
- **Improved Ease of Use** -- Integral mounting pad for DVC2000 and DVC6200 eliminates the traditional mounting bracket and reduces the number of parts required to mount for the size 5i through 15i spring return and double acting actuators.



X1591

1068 SPRING RETURN ACTUATOR



X1590

1068 DOUBLE ACTING ACTUATOR

Specifications

Available Configuration

Actuator Sizes:

Spring Return and Double Acting: ■ 5i (spring return), ■ 7i, ■ 8i, ■ 9i, ■ 10i, ■ 12i, ■ 14i, and ■ 15i

Spring Return and Double Acting: ■ 16, ■ 18, ■ 20, and ■ 30

Mounting Connections

Square Shaft: ISO 5211 5i through 15i
Keyed Shaft: 16 through 30

Operating Pressure

Double Acting: 20 psig (1.5 bar) to 100 psi (7 bar); 80 psig (5.5 bar), standard

Spring Return: 80 psig (5.5 bar) standard⁽¹⁾

Operation:

Fail-Safe Spring Return: Clock type spring return gives fail-safe operation with high torque output throughout spring stroke in either clockwise or counter-clockwise direction

Double Acting:

Air to close CW or CCW

Spring Return:

Spring to close CW or CCW/ Air to close CW or CCW

Pressure Connections

See table 5

Adjustable Travel Stops

Standard: 80° minimum rotation, 84° size 5i
Fixed Travel: To replace CamFlex; see table 3

Torque Output

Refer to table 6

Digital Valve Controllers

DVC6200 Series

Temperature Range

Standard: -40 to 80°C (-40 to 176°F)

Materials of Construction

See table 1

Approximate Weight

See table 4

1. The torque output of the spring return actuator is optimized for an 80 psig operating pressure. The actuators are still capable of creating usable torque at 60 or 70 psig, but the net torque output will be significantly reduced and will no longer be balanced with the spring torque. See table 5 for spring return torque valves at 60 or 70 psig.

Features (cont.)

- **Large Size Range** -- The 1068 actuator offers sizes that cover torques up to 150,000 in•lb.
- **Single Moving Part** -- The rotary vane actuator ensures a long service life with minimal maintenance.

- **Corrosion Resistant** -- Robust epoxy coated zinc/titanium alloy, or aluminum housings, epoxy enamel coated inside/out to provide substantial corrosion resistance.
- **Efficiency** -- The small internal volume minimizes the air consumption of the 1068.

Options/Available Configurations

- **Double Acting** -- Air supplied to both sides of the vane which is the only moving part. Allowing for the highest torque values and compact design.
- **Spring Return** -- Designed for long cycle life and have a balanced net and spring stroke torque.
- **Fixed Travel Spring Return** -- Designed to limit travel of V150, V200, and V300 Vee-Ball valves. See

Management of Change document (D353155X012) for more information.

Fisher 1068 size 5i through 15i spring return actuators feature an integral air passage that eliminates the need for tubing and fittings with the DVC2000 and DVC6200. The 1068 actuator with a Fisher FIELDVUE digital valve controller is a combination for precision and repeatability in the field.

Table 1. Materials

Component	Material
Yoke	Diecast Aluminum Alloy (5i through 15i)
Casing	Aluminum Alloy (8i through 30), Zinc (5i and 7i)
Vane and Output Shaft	Stainless Steel (5i), Ductile Iron Zinc Plated (7i through 15i and 16 through 30)
Seals	Molded Polyurethane
Couplers	Stainless Steel 5i through 15i
Shaft Bushings	PTFE Coated Bronze

Table 2. Shaft Size Compatibility

Spring Return Size	Square Size (mm)					
	9	11	14	19	22	27
	Shaft Size (inches)					
	0.5	0.62	0.75	1	1.25	1.5
5i	X	X				
7i	X	X	X	X		
8i	X	X	X	X	X	X
9i	X	X	X	X	X	X
10i	X	X	X	X	X	X
12i			X	X	X	X
14i			X	X	X	X
15i					X	X
16	Contact your Emerson sales office					
18						
20						
30						
Double Acting Size	Square Size (mm)					
	9	11	14	19	22	27
	Shaft Size (inches)					
	0.5	0.62	0.75	1	1.25	1.5
7i	X	X				
8i	X	X	X	X	X	
9i			X	X	X	X
10i			X	X	X	X
12i				X	X	X
14i				X	X	X
15i					X	X
16	Contact your Emerson sales office					
18						
20						
30						

Table 3. Restricted Travel

Valve Size, NPS	Actuator Size	Travel, Degrees	Approx. C _v +/- 5%
1	7i	55	8.4
1-1/2			19.8
2	8i	52	30
3			81
4	9i	51	138
6	12i	60	300
8	14i	64	510
10		56	780
12	15i	52	1050

Table 4. Approximate Shipping Weight

Size	Shaft Diameter, inch	Spring Return		Double Acting	
		lb	kg	lb	kg
5i	1/2	9	4.1	---	---
	5/8				
7i	1/2	19	8.6	10	4.5
	5/8			---	---
	3/4				
	1				
8i	1/2	22	10	12	5.4
	5/8				
	3/4				
	1			---	---
	1 1/4				
	1 1/2				
9i	1/2	29	13.1	---	---
	5/8				
	3/4				
	1			15	6.8
	1 1/4				
	1 1/2				
10i	1/2	38	17.2	---	---
	5/8				
	3/4				
	1			18	8.2
	1 1/4				
	1 1/2				
12i	3/4	72	32.6	---	---
	1				
	1 1/4			26	11.8
	1 1/2				
14i	3/4	167	75.7	---	---
	1				
	1 1/4			40	18.1
	1 1/2				
15i	1 1/4	241	109.3	59	26.8
	1 1/2				
	1 1/2				
16	1 1/2	272	123.4	88	39.9
	1 3/4				
	2				
	2 1/8				
18	2 1/2	530	240.4	170	77.1
	3				
	3 1/2				
20	2 1/2	1058	480	464	210.5
	3				
	3 1/2				
30	2 1/2	1701	771.6	635	288.0
	3				
	3 1/2				

Table 5. Pressure Connections

Actuator Size	PRESSURE CONNECTION, NPT					
	1/8	1/4	3/8	1/2	3/4	1
5i	X					
7i		X				
8i		X				
9i		X				
10i		X				
12i			X			
14i				X		
15i				X		
16				X		
18					X	
20						X
30						X

Table 6. 1068 Spring Return Torques at Various Operating Pressures

FAIL OPEN 1068 SPRING RETURN ACTUATOR ⁽¹⁾								
Actuator Size	Spring Torque (all pressures)		60 psi		70 psi		80 psi	
	Torque (in • lb)		Net Torque (in • lb)					
	0°	90°	0°	90°	0°	90°	0°	90°
5i	185	155	63	93	109	139	155	185
7i	450	375	150	225	263	338	375	450
8i	720	580	229	368	405	544	580	720
9i	925	830	356	452	593	688	830	925
10i	1450	1270	523	703	896	1076	1270	1450
12i	2110	1810	763	1063	1286	1586	1810	2110
14i	5200	4230	1748	2717	2990	3959	4230	5200
15i	8514	6992	2848	4370	4921	6442	6992	8514
16	11691	9567	4100	6224	6833	8957	9567	11691
18	26143	21390	8723	13476	15056	19809	21390	26143
20	48286	39506	16506	25286	28006	36786	39506	48286
30	72428	59260	24760	37928	42010	55178	59260	72428
FAIL CLOSED 1068 SPRING RETURN ACTUATOR ⁽¹⁾								
Actuator Size	Spring Torque (all pressures)		60 psi		70 psi		80 psi	
	Torque (in • lb)		Net Torque (in • lb)					
	0°	90°	0°	90°	0°	90°	0°	90°
5i	155	185	93	63	139	109	185	155
7i	375	450	225	150	338	263	450	375
8i	580	720	368	229	544	405	720	580
9i	830	925	452	356	688	593	925	830
10i	1270	1450	703	523	1076	896	1450	1270
12i	1810	2110	1063	763	1586	1286	2110	1810
14i	4230	5200	2717	1748	3959	2990	5200	4230
15i	6992	8514	4370	2848	6442	4921	8514	6992
16	9567	11691	6224	4100	8957	6833	11691	9567
18	21390	26143	13476	8723	19809	15056	26143	21390
20	39506	48286	25286	16506	36786	28006	48286	39506
30	59260	72428	37928	24760	55178	42010	72428	59260

1. 0° and 90° for valve rotation.

Table 7. Actuator/Valve Body Mounting Dimensions A through G (see figures 1, 2, and 3)

SPRING RETURN ACTUATOR SIZE OPTIONS														
Square Shaft (9 mm)														
Size	A		B		C		D		E		F		G	
	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch
5i	137	5.39	79.4	3.13	67	2.64	36	1.42	50	1.97	105	4.13	57	2.24
7i	178	7.01	102.6	4.04	100	3.94	36	1.42	82	3.23	105	4.13	57	2.24
8i	208	8.19	120.7	4.75	110	4.33	36	1.42	87	3.43	105	4.13	57	2.24
9i	227	8.94	132.3	5.21	126	4.96	36	1.42	92	3.62	105	4.13	57	2.24
10i	229	9.02	131	5.16	175	6.89	36	1.42	110	4.33	105	4.13	57	2.24
Square Shaft (11 mm)														
5i	137	5.39	79.4	3.13	67	2.64	36	1.42	50	1.97	105	4.13	60	2.36
7i	178	7.01	102.6	4.04	100	3.94	36	1.42	82	3.23	105	4.13	60	2.36
8i	208	8.19	120.7	4.75	110	4.33	36	1.42	87	3.43	105	4.13	60	2.36
9i	227	8.94	132.3	5.21	126	4.96	36	1.42	92	3.62	105	4.13	60	2.36
10i	229	9.02	131	5.16	175	6.89	36	1.42	110	4.33	105	4.13	60	2.36
Square Shaft (14 mm)														
7i	178	7.01	102.6	4.04	100	3.94	41	1.61	82	3.23	150	5.91	83	3.27
8i	208	8.19	120.7	4.75	110	4.33	41	1.61	87	3.43	150	5.91	83	3.27
9i	227	8.94	132.3	5.21	126	4.96	41	1.61	92	3.62	150	5.91	83	3.27
10i	229	9.02	131	5.16	175	6.89	41	1.61	110	4.33	150	5.91	83	3.27
12i	294	11.57	171	6.73	172	6.75	41	1.61	136	5.35	150	5.91	83	3.27
14i	380	14.96	224	8.82	216	8.48	41	1.61	187	7.36	150	5.91	83	3.27
Square Shaft (19 mm)														
7i	178	7.01	102.6	4.04	100	3.94	41	1.61	82	3.23	150	5.91	83	3.27
8i	208	8.19	120.7	4.75	110	4.33	41	1.61	87	3.43	150	5.91	83	3.27
9i	227	8.94	132.3	5.21	126	4.96	41	1.61	92	3.62	150	5.91	83	3.27
10i	229	9.02	131	5.16	175	6.89	41	1.61	110	4.33	150	5.91	83	3.27
12i	294	11.57	171	6.73	172	6.75	41	1.61	136	5.35	150	5.91	83	3.27
14i	380	14.96	224	8.82	216	8.48	41	1.61	187	7.36	150	5.91	83	3.27
Square Shaft (22 mm)														
8i	208	8.19	120.7	4.75	110	4.33	42	1.65	87	3.43	160	6.30	77	3.03
9i	227	8.94	132.3	5.21	126	4.96	42	1.65	92	3.62	160	6.30	77	3.03
10i	229	9.02	131	5.16	175	6.89	42	1.65	110	4.33	160	6.30	77	3.03
12i	294	11.57	171	6.73	171.5	6.75	42	1.65	136	5.35	160	6.30	77	3.03
14i	380	14.96	224	8.82	215.5	8.48	42	1.65	187	7.36	160	6.30	77	3.03
15i	433	17.05	252	9.92	260.5	10.26	42	1.65	187	7.36	160	6.30	77	3.03
Square Shaft (27 mm)														
8i	208	8.19	120.7	4.75	110	4.33	42	1.65	87	3.43	160	6.30	77	3.03
9i	227	8.94	132.3	5.21	126	4.96	42	1.65	92	3.62	160	6.30	77	3.03
10i	229	9.02	131	5.16	175	6.89	42	1.65	110	4.33	160	6.30	77	3.03
12i	294	11.57	171	6.73	171.5	6.75	42	1.65	136	5.35	160	6.30	77	3.03
14i	380	14.96	224	8.82	215.5	8.48	42	1.65	187	7.36	160	6.30	77	3.03
15i	433	17.05	252	9.92	260.5	10.26	42	1.65	187	7.36	160	6.30	77	3.03

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Table 7. Actuator/Valve Body Mounting Dimensions A through G (cont.) (see figures 1, 2, and 3)

DOUBLE ACTING ACTUATOR SIZE OPTIONS														
Square Shaft (9 mm)														
Size	A		B		C		D		E ⁽¹⁾		F		G	
	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch
7i	178	7.01	102.6	4.04	100	3.94	36	1.42	---	---	105	4.13	57	2.24
8i	208	8.19	120.7	4.75	110	4.33	36	1.42	---	---	105	4.13	57	2.24
Square Shaft (11 mm)														
7i	178	7.01	102.6	4.04	100	3.94	36	1.42	---	---	105	4.13	60	2.36
8i	208	8.19	120.7	4.75	110	4.33	---	---	---	---	105	4.13	60	2.36
Square Shaft (14 mm)														
8i	208	8.19	120.7	4.75	110	4.33	41	1.61	---	---	150	5.91	83	3.27
9i	227	8.94	132.3	5.21	126	4.96	41	1.61	---	---	150	5.91	83	3.27
10i	229	9.02	131.0	5.16	175	6.89	41	1.61	---	---	150	5.91	83	3.27
Square Shaft (19 mm)														
8i	208	8.19	120.7	4.75	110	4.33	41	1.61	---	---	150	5.91	83	3.27
9i	227	8.94	132.3	5.21	126	4.96	41	1.61	---	---	150	5.91	83	3.27
10i	229	9.02	131.0	5.16	175	6.89	41	1.61	---	---	150	5.91	83	3.27
12i	294	11.57	171	6.73	172	6.75	41	1.61	---	---	150	5.91	83	3.27
14i	380	14.96	224	8.82	216	8.48	41	1.61	---	---	150	5.91	83	3.27
Square Shaft (22 mm)														
8i	208	8.19	120.7	4.75	110	4.33	42	1.65	---	---	160	6.30	77	3.03
9i	227	8.94	132.3	5.21	126	4.96	42	1.65	---	---	160	6.30	77	3.03
10i	229	9.02	131	5.16	175	6.89	42	1.65	---	---	160	6.30	77	3.03
12i	294	11.57	171	6.73	171.5	6.75	42	1.65	---	---	160	6.30	77	3.03
14i	380	14.96	224	8.82	215.5	8.48	42	1.65	---	---	160	6.30	77	3.03
15i	433	17.05	252	9.92	260.5	10.26	42	1.65	---	---	160	6.30	77	3.03
Square Shaft (27 mm)														
8i	208	8.19	120.7	4.75	110	4.33	42	1.65	---	---	160	6.30	77	3.03
9i	227	8.94	132.3	5.21	126	4.96	42	1.65	---	---	160	6.30	77	3.03
10i	229	9.02	131	5.16	175	6.89	42	1.65	---	---	160	6.30	77	3.03
12i	294	11.57	171	6.73	171.5	6.75	42	1.65	---	---	160	6.30	77	3.03
14i	380	14.96	224	8.82	215.5	8.48	42	1.65	---	---	160	6.30	77	3.03
15i	433	17.05	252	9.92	260.5	10.26	42	1.65	---	---	160	6.30	77	3.03

1. Double Acting Actuators will not have the Spring Return Chamber (E).

Table 8. Actuator/Valve Body Mounting Dimensions H through O (see figures 1, 2, and 3)

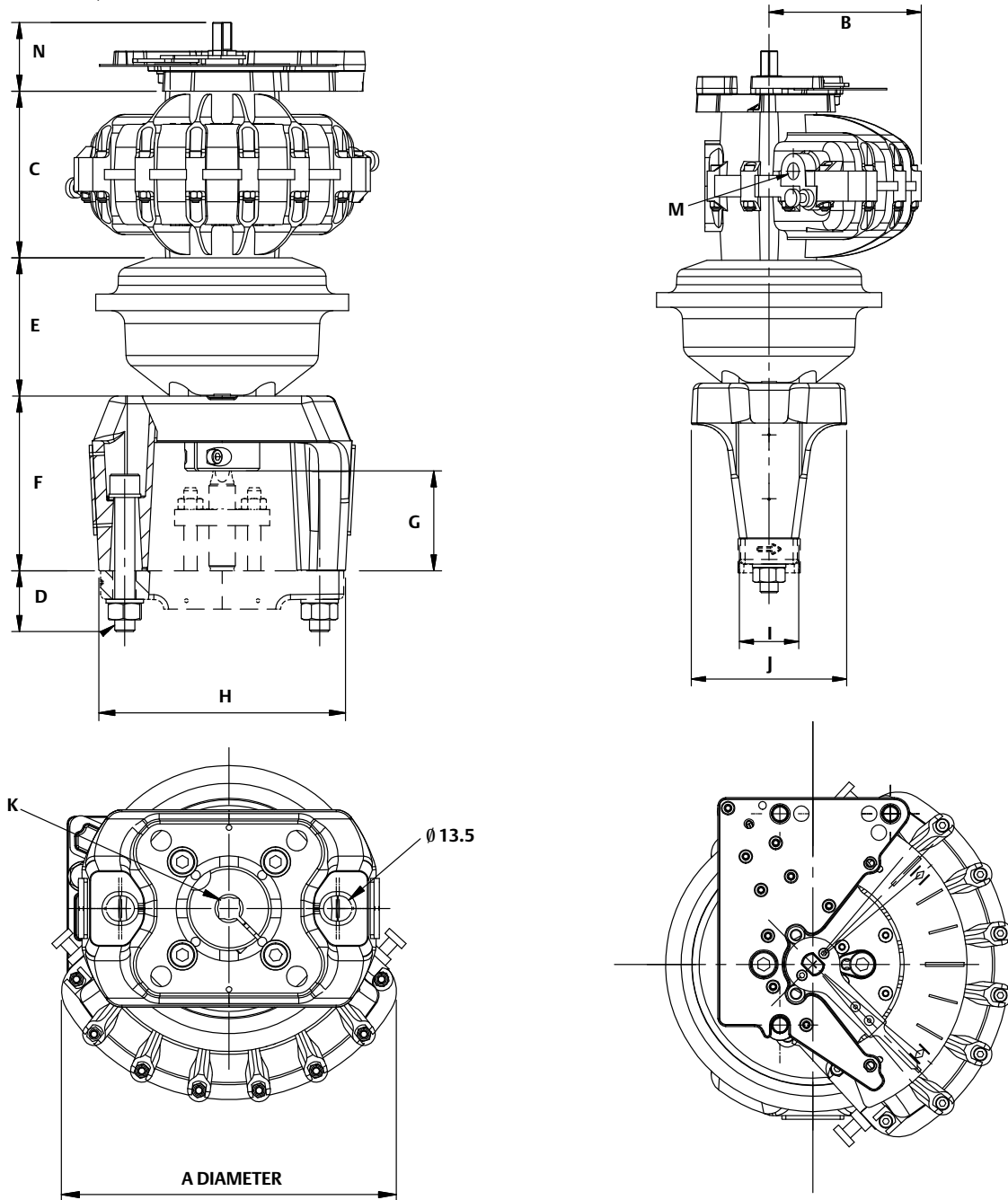
SPRING RETURN ACTUATOR SIZE OPTIONS													
Size	H		I		J		K		M (NPT)	N		O	
	mm	Inch	mm	Inch	mm	Inch	mm	Inch	Inch	mm	Inch	mm	Inch
Square Shaft (9 mm)													
5i	148	5.83	40	1.57	105	4.13	9	0.35	1/8	41.2	1.62	---	---
7i	148	5.83	40	1.57	105	4.13	9	0.35	1/4	41.2	1.62	---	---
8i	148	5.83	40	1.57	105	4.13	9	0.35	1/4	41.2	1.62	---	---
9i	148	5.83	40	1.57	105	4.13	9	0.35	1/4	41.2	1.62	---	---
10i	148	5.83	40	1.57	105	4.13	9	0.35	1/4	41.2	1.62	---	---
Square Shaft (11 mm)													
5i	148	5.83	40	1.57	105	4.13	11	0.43	1/8	41.2	1.62	---	---
7i	148	5.83	40	1.57	105	4.13	11	0.43	1/4	41.2	1.62	---	---
8i	148	5.83	40	1.57	105	4.13	11	0.43	1/4	41.2	1.62	---	---
9i	148	5.83	40	1.57	105	4.13	11	0.43	1/4	41.2	1.62	---	---
10i	148	5.83	40	1.57	105	4.13	11	0.43	1/4	41.2	1.62	---	---
Square Shaft (14 mm)													
7i	189	7.44	62	2.44	135	5.31	14	0.55	1/4	41.2	1.62	---	---
8i	189	7.44	62	2.44	135	5.31	14	0.55	1/4	41.2	1.62	---	---
9i	189	7.44	62	2.44	135	5.31	14	0.55	1/4	41.2	1.62	---	---
10i	189	7.44	62	2.44	135	5.31	14	0.55	1/4	41.2	1.62	---	---
12i	189	7.44	62	2.44	135	5.31	14	0.55	1/8	41.2	1.62	15.5	0.61
14i	189	7.44	62	2.44	135	5.31	14	0.55	1/2	41.2	1.62	15.5	0.61
Square Shaft (19 mm)													
7i	189	7.44	62	2.44	135	5.31	19	0.75	1/4	41.2	1.62	---	---
8i	189	7.44	62	2.44	135	5.31	19	0.75	1/4	41.2	1.62	---	---
9i	189	7.44	62	2.44	135	5.31	19	0.75	1/4	41.2	1.62	---	---
10i	189	7.44	62	2.44	135	5.31	19	0.75	1/4	41.2	1.62	---	---
12i	189	7.44	62	2.44	135	5.31	19	0.75	1/8	41.2	1.62	15.5	0.61
14i	189	7.44	62	2.44	135	5.31	19	0.75	1/2	41.2	1.62	15.5	0.61
Square Shaft (22 mm)													
8i	278	10.94	82	3.23	155	6.10	22	0.87	1/4	41.2	1.62	---	---
9i	278	10.94	82	3.23	155	6.10	22	0.87	1/4	41.2	1.62	---	---
10i	278	10.94	82	3.23	155	6.10	22	0.87	1/4	41.2	1.62	---	---
12i	278	10.94	82	3.23	155	6.10	22	0.87	1/8	41.2	1.62	15.5	0.61
14i	278	10.94	82	3.23	155	6.10	22	0.87	1/2	41.2	1.62	15.5	0.61
15i	278	10.94	82	3.23	155	6.10	22	0.87	1/2	41.2	1.62	15.5	0.61
Square Shaft (27 mm)													
8i	278	10.94	82	3.23	155	6.10	27	1.06	1/4	41.2	1.62	---	---
9i	278	10.94	82	3.23	155	6.10	27	1.06	1/4	41.2	1.62	---	---
10i	278	10.94	82	3.23	155	6.10	27	1.06	1/4	41.2	1.62	---	---
12i	278	10.94	82	3.23	155	6.10	27	1.06	1/8	41.2	1.62	15.5	0.61
14i	278	10.94	82	3.23	155	6.10	27	1.06	1/2	41.2	1.62	15.5	0.61
15i	278	10.94	82	3.23	155	6.10	27	1.06	1/2	41.2	1.62	15.5	0.61

-continued-

Table 8. Actuator/Valve Body Mounting Dimensions H through O (cont.) (see figures 1, 2, and 3)

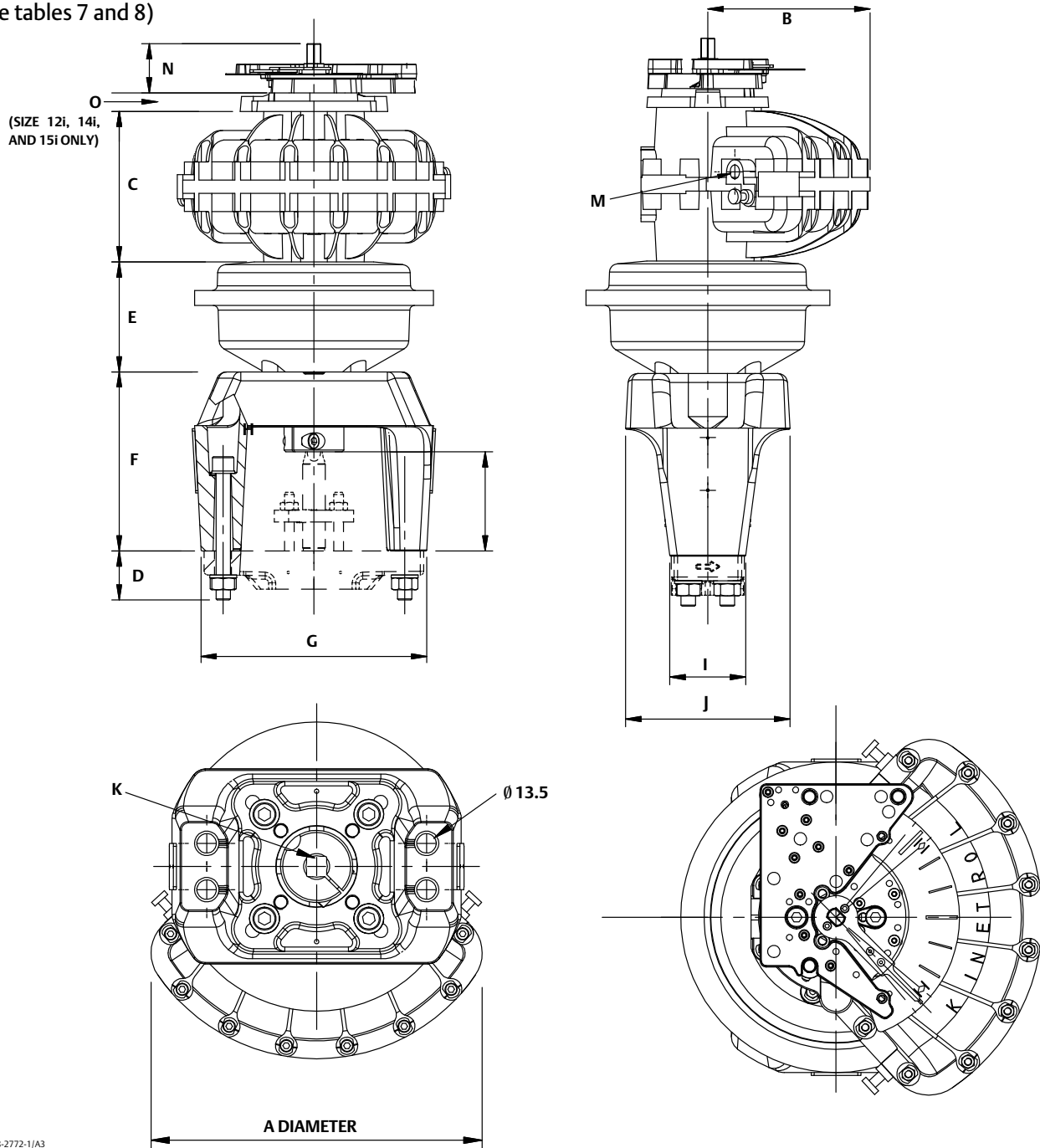
DOUBLE ACTING ACTUATOR SIZE OPTIONS													
Size	H		I		J		K		M (NPT)	N		O	
	mm	Inch	mm	Inch	mm	Inch	mm	Inch	Inch	mm	Inch	mm	Inch
Square Shaft (9 mm)													
7i	148	5.83	40	1.57	105	4.13	9	0.35	1/8	41.2	1.62	---	---
8i	148	5.83	40	1.57	105	4.13	9	0.35	1/4	41.2	1.62	---	---
Square Shaft (11 mm)													
7i	148	5.83	40	1.57	105	4.13	11	0.43	1/8	41.2	1.62	---	---
8i	148	5.83	40	1.57	105	4.13	11	0.43	1/4	41.2	1.62	---	---
Square Shaft (14 mm)													
8i	189	7.44	62	2.44	135	5.31	14	0.55	1/4	41.2	1.62	---	---
9i	189	7.44	62	2.44	135	5.31	14	0.55	1/4	41.2	1.62	---	---
10i	189	7.44	62	2.44	135	5.31	14	0.55	1/4	41.2	1.62	---	---
Square Shaft (19 mm)													
8i	189	7.44	62	2.44	135	5.31	19	0.75	1/4	41.2	1.62	15.5	0.61
9i	189	7.44	62	2.44	135	5.31	19	0.75	1/4	41.2	1.62	15.5	0.61
10i	189	7.44	62	2.44	135	5.31	19	0.75	1/4	41.2	1.62	15.5	0.61
12i	189	7.44	62	2.44	135	5.31	19	0.75	1/8	41.2	1.62	15.5	0.61
14i	189	7.44	62	2.44	135	5.31	19	0.75	1/2	41.2	1.62	15.5	0.61
Square Shaft (22 mm)													
8i	278	10.94	82	3.23	155	6.10	22	0.87	1/4	41.2	1.62	---	---
9i	278	10.94	82	3.23	155	6.10	22	0.87	1/4	41.2	1.62	---	---
10i	278	10.94	82	3.23	155	6.10	22	0.87	1/4	41.2	1.62	---	---
12i	278	10.94	82	3.23	155	6.10	22	0.87	1/8	41.2	1.62	15.5	0.61
14i	278	10.94	82	3.23	155	6.10	22	0.87	1/2	41.2	1.62	15.5	0.61
15i	278	10.94	82	3.23	155	6.10	22	0.87	1/2	41.2	1.62	15.5	0.61
Square Shaft (27 mm)													
8i	278	10.94	82	3.23	155	6.10	27	1.06	1/4	41.2	1.62	---	---
9i	278	10.94	82	3.23	155	6.10	27	1.06	1/4	41.2	1.62	---	---
10i	278	10.94	82	3.23	155	6.10	27	1.06	1/4	41.2	1.62	---	---
12i	278	10.94	82	3.23	155	6.10	27	1.06	1/8	41.2	1.62	15.5	0.61
14i	278	10.94	82	3.23	155	6.10	27	1.06	1/2	41.2	1.62	15.5	0.61
15i	278	10.94	82	3.23	155	6.10	27	1.06	1/2	41.2	1.62	15.5	0.61

Figure 1. 1068 Actuator – Spring Return and Double Acting Dimension Drawing for 9 and 11 mm Square Shaft
(see tables 7 and 8)



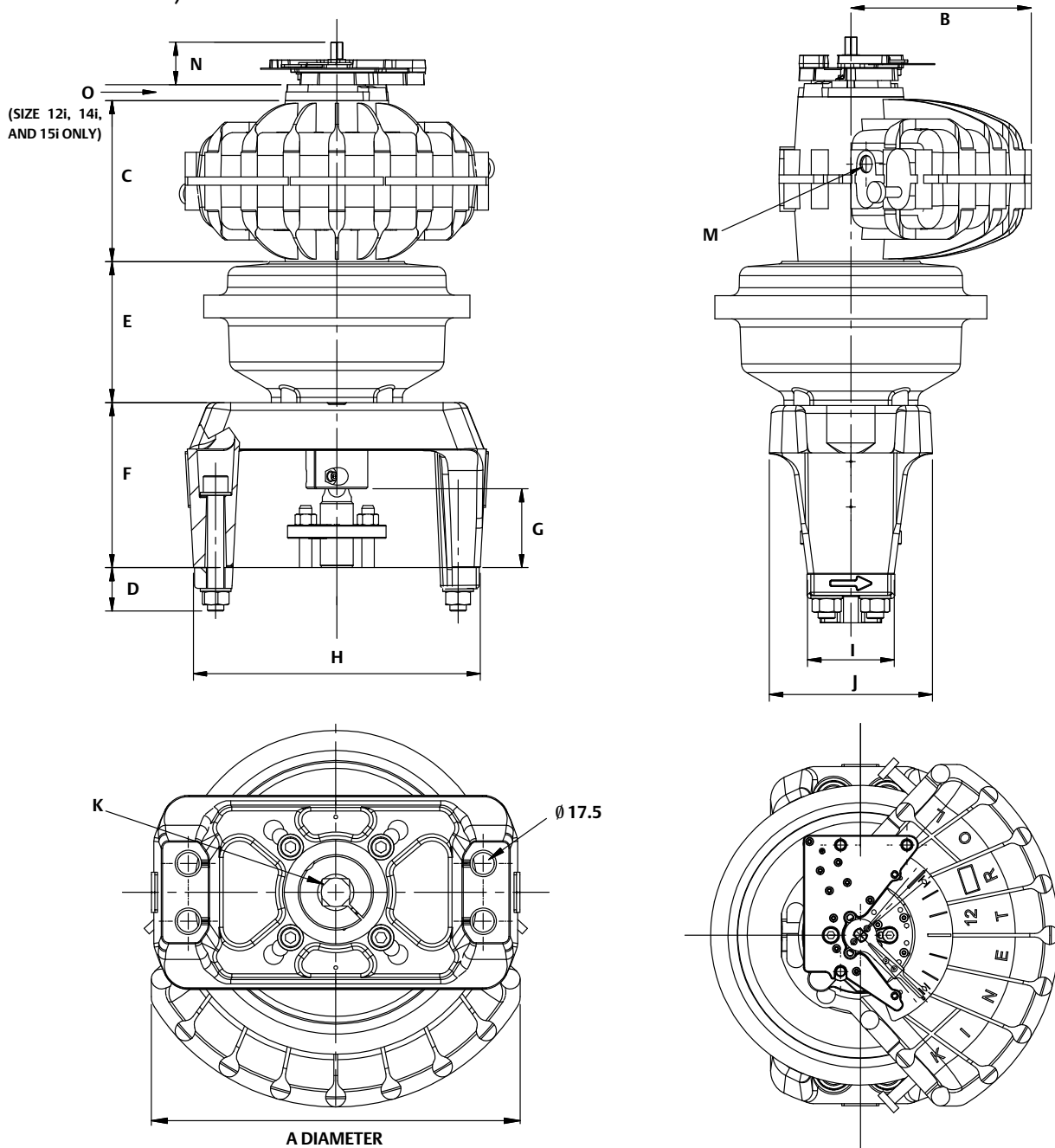
128-2771-1/A3

Figure 2. 1068 Actuator – Spring Return and Double Acting Dimension Drawing for 14 and 19 mm Square Shaft (see tables 7 and 8)



128-2772-11/A3

Figure 3. 1068 Actuator — Spring Return and Double Acting Dimension Drawing for 22 and 27 mm Square Shaft (see tables 7 and 8)



128-2773-1/A3

Table 9. Actuator/Valve Body Mounting Dimensions 16 through 30 (see figure 4)

SPRING RETURN ACTUATOR SIZE OPTIONS																						
Size	B		D		G1/G2		H ⁽¹⁾		M (NPT)	N		OU		P		PCD		R		S1/S2		T (UNC)
	mm	Inch	mm	Inch	mm	Inch	mm	Inch	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	Inch
16	530	20.87	38	1.50	40.95	1.61	212	8.35	1/8	4	0.16	524	20.63	274	10.79	152.7	6.01	302	11.89	55	2.17	7/8
18	680	26.77	50	1.97	56.95	2.24	312	12.28	1/4	4	0.16	524	20.63	360	14.17	226.3	8.91	392	15.43	78	3.07	1 1/8
20	680	26.77	50	1.97	72.95	2.87	512	20.16	1/4	8	0.31	524	20.63	620	24.41	226.3	8.91	392	15.43	100	3.94	1 1/8
30	680	26.77	50	1.97	72.95	2.87	712	28.03	1/4	8	0.31	524	20.63	880	34.65	226.3	8.91	392	15.43	100	3.94	1 1/8
DOUBLE ACTING ACTUATOR SIZE OPTIONS																						
16	530	20.87	38	1.50	40.95	1.61	---	---	1/8	4	0.16	524	20.63	274	10.79	152.7	6.01	302	11.89	55	2.17	7/8
18	680	26.77	50	1.97	56.95	2.24	---	---	1/4	4	0.16	524	20.63	360	14.17	226.3	8.91	392	15.43	78	3.07	1 1/8
20	680	26.77	50	1.97	72.95	2.87	---	---	1/4	8	0.31	524	20.63	620	24.41	226.3	8.91	392	15.43	100	3.94	1 1/8
30	680	26.77	50	1.97	72.95	2.87	---	---	1/4	8	0.31	524	20.63	880	34.65	226.3	8.91	392	15.43	100	3.94	1 1/8

1. Double Acting Actuators will not have the Spring Return Chamber (H).

Figure 4. 1068 Actuator/Valve Body Mounting for Spring Return and Double Acting 16 through 30 (see table 9)

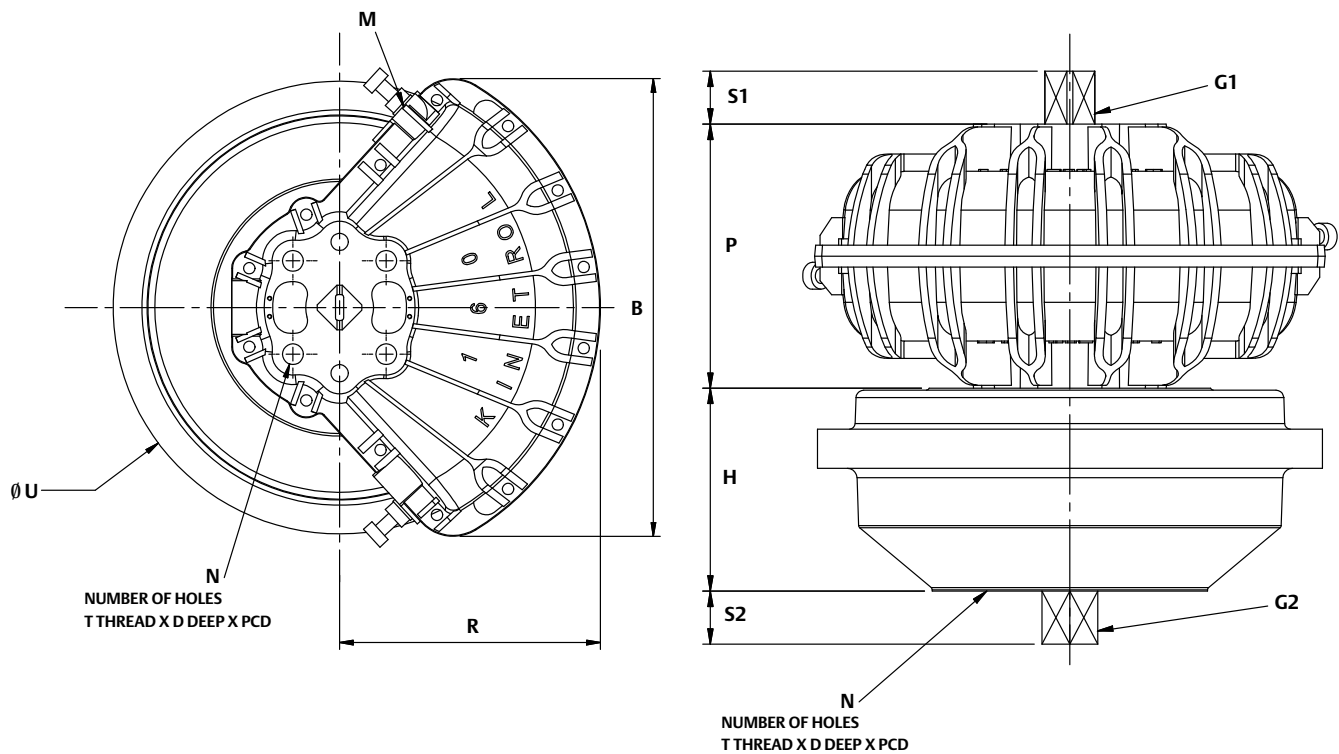
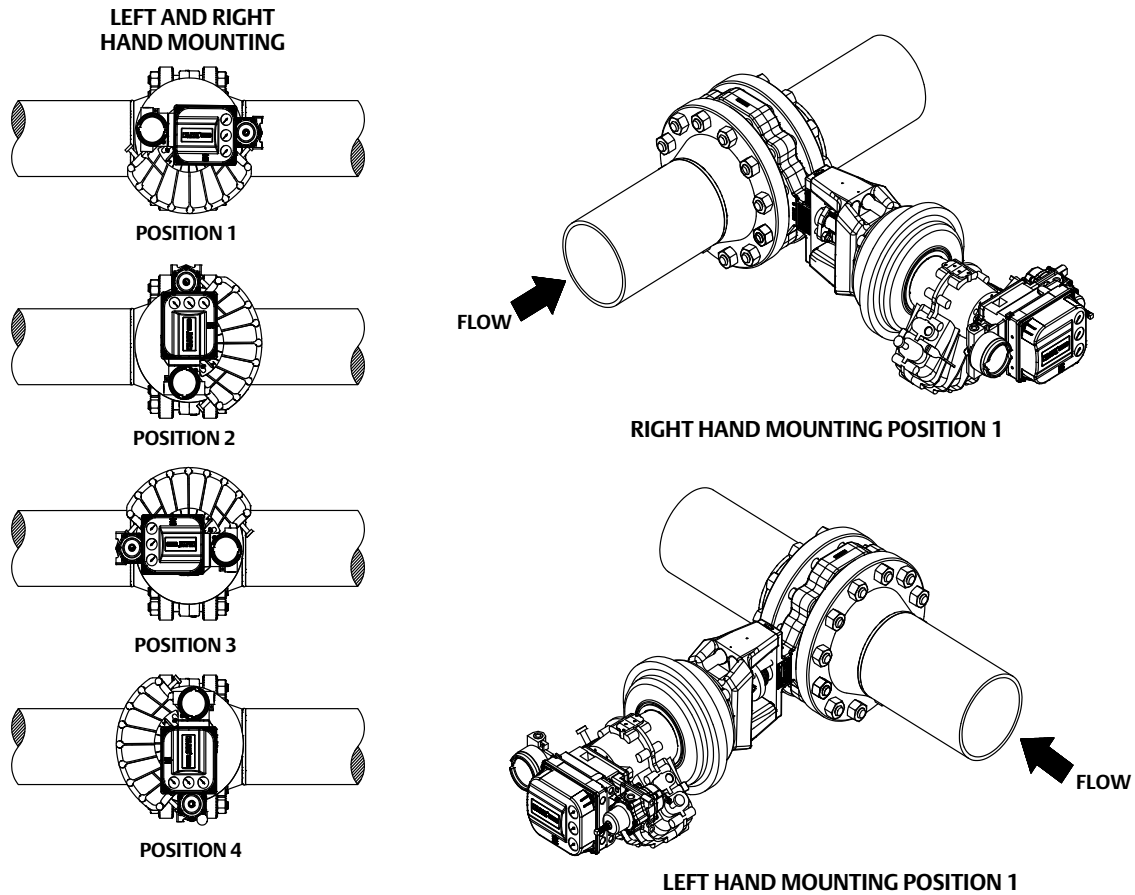


Figure 5. 1068 Actuator Mounting



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