



JOB NAME:	CONTRACTOR:
JOB LOCATION:	APPROVAL:
ENGINEER:	CONTRACTOR P.O.:
APPROVAL:	REPRESENTATIVE:

## 8P0144

**966N DIRECT MOUNT, 3-WAY STAINLESS STEEL, L-PORT, FULL PORT BALL VALVE W/ DOUBLE ACTING ACTUATOR**

**SIZES 1/4" TO 2"**

## 8P0146

**966N DIRECT MOUNT, 3-WAY STAINLESS STEEL, L-PORT, FULL PORT BALL VALVE W/ SPRING RETURN ACTUATOR**

**SIZES 1/4" TO 2"**

### SPECIFICATIONS

The 8P0144/8P0146 series features the 966N in a 3-way ASTM A351-CF8M, full port ball valve, with four seats, and an L ported configuration. The 966N valve is also an ISO 5211 direct mount style, with four seats. The four seats allow one to use any port as an entry port and offers optional diversion capabilities.

The Valbia pneumatic actuator comes with a hard-anodized aluminum body, and powder coated end caps. In addition, all Valbia pneumatic actuators are standardly furnished with elevated temperature seals to 302F. The patented side loaded limit stops never enter the piston chamber eliminating extra possible leak paths.

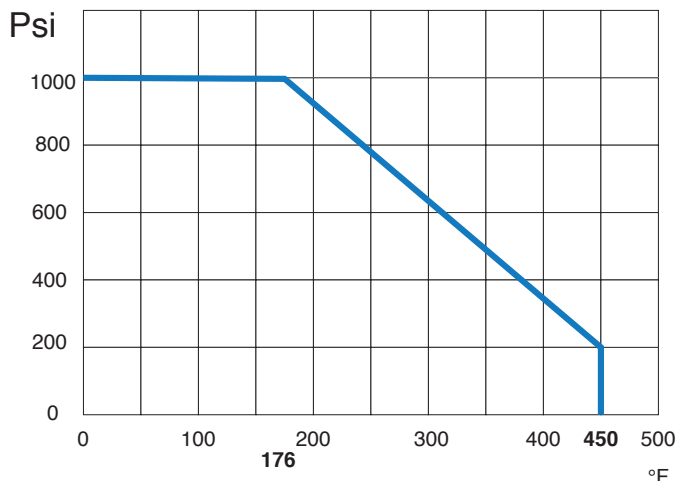
### ACTUATOR FEATURES

- Hard anodized extruded aluminum body
- Concentric spring sets
- Die cast aluminum end caps
- Solid steel barstock pinion (not casting)
- 0°-90° rotation adjustment cam
- 0°-90° rotation adjustment bolts
- POM piston guides
- Minimum air pressure rating: 80 psi
- Maximum air pressure rating: 116 psi
- Working temperature: -4°F - 302°F
- No lubrication maintenance required for the entire actuator lifetime
- 100% factory tested

### VALVE FEATURES

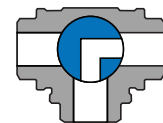
- CF8M Stainless Steel
- Full Port, Sizes 1/4" to 2"
- ISO 5211 pad and square stem
- Pressure rating to 1000psi (1/4" to 1"), 800 psi (1-1/4" to 2")
- Temperature range -4°F to 450°F
- Blow-out proof stem
- Self adjusting stem packing
- 100% electronically tested in the open and closed position@80 Psi

### PRESSURE - TEMPERATURE CHART FOR SERIES 966N

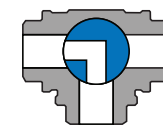


### FLOW PATH VARIATIONS

**L-PORT FLOW PATH A**



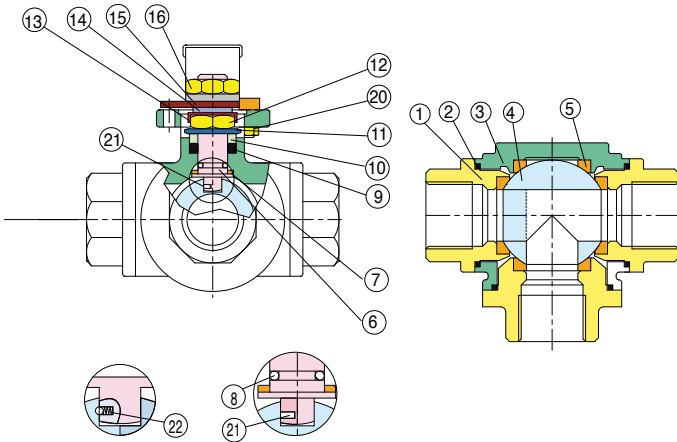
**STANDARD (CCW)**



**ACTUATED (CW)**  
Standard Fail Position

\* Flow paths above are for **actuated packages** only. For manual valves flow paths, please reference page 22 of the N. 193 Hand-operated valve catalog.

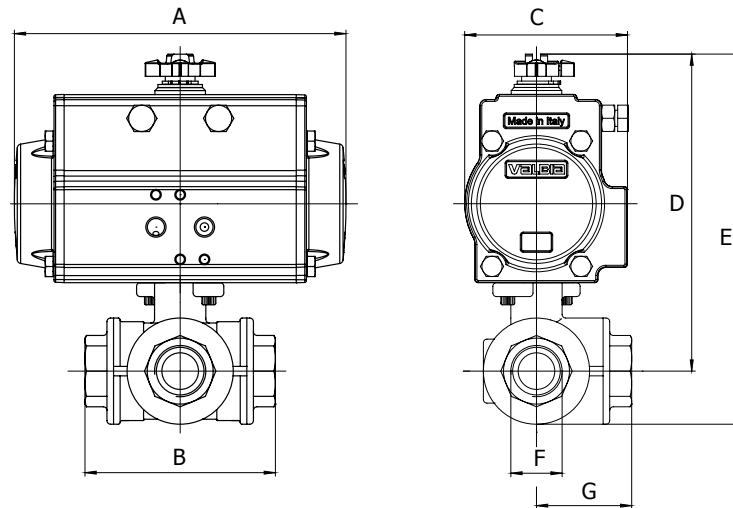
## BILL OF MATERIALS FOR 966N



N POS	PART NAME	MATERIAL	N PCS
1	END CAP	A351 CF8M	3
2	GASKET	P.T.F.E.	3
3	BODY	A351 CF8M	1
4	BALL	SS316	1
5	SEATS	R.P.T.F.E.	4
6	STEM	SS316	1
7	STEM SEAL	R.P.T.F.E.	1
8	O-RING	FKM (Viton®)	1
9	STEM PACKING	P.T.F.E.	1
10	GLAND	SS304	1
11	DISK WASHER	SS301	2

N POS	PART NAME	MATERIAL	N PCS
12	STEM NUT	SS304	1
13	NUT STOP	SS304	1
14	SPACE WASHER	SS304	1
15	PLATE STOP	SS304	1
16	HANDLE NUT	SS304	1
17	HANDLE	SS304	1
18	HANDLE SLEEVE	VINYL	1
19	STOPPER	SS304	1
20	PIN NUT	SS304	1
21	INSERT PIN	SS316	1
22	ANTISTATIC DEVICE	SS316	1

## DIMENSIONS



### 8P0144

966N W/ **DOUBLE ACTING** ACTUATOR

Size	A	B	C	D	E	F	G	ACT. DA
1/4"	5.55	2.83	2.80	5.45	6.23	0.43	1.41	52
3/8"	5.55	2.83	2.80	5.45	6.23	0.47	1.41	52
1/2"	5.55	3.26	2.80	5.65	6.56	0.59	1.63	52
3/4"	6.46	3.89	3.14	6.10	7.20	0.78	1.94	63
1"	6.46	4.40	3.17	6.63	7.96	0.98	2.20	63
1-1/4"	8.27	4.92	3.72	7.64	9.17	1.25	2.46	75
1-1/2"	9.47	5.86	4.17	8.59	10.47	1.48	2.93	85
2"	10.83	6.85	4.84	9.84	12.20	1.96	3.42	100

### 8P0146

966N W/ **SPRING RETURN** ACTUATOR

Size	A	B	C	D	E	F	G	ACT. SR
1/4"	6.46	2.83	3.17	5.90	6.66	0.43	1.41	63
3/8"	6.46	2.83	3.17	5.90	6.68	0.47	1.41	63
1/2"	6.46	3.26	3.17	6.10	7.01	0.59	1.63	63
3/4"	8.27	3.89	3.72	6.81	7.91	0.78	1.94	75
1"	8.27	4.40	3.72	7.34	8.67	0.98	2.20	75
1-1/4"	10.83	4.92	4.84	8.69	10.22	1.25	2.46	100
1-1/2"	10.83	5.86	4.84	9.09	10.97	1.49	2.93	100
2"	14.65	6.85	5.83	11.68	14.04	1.96	3.42	125