

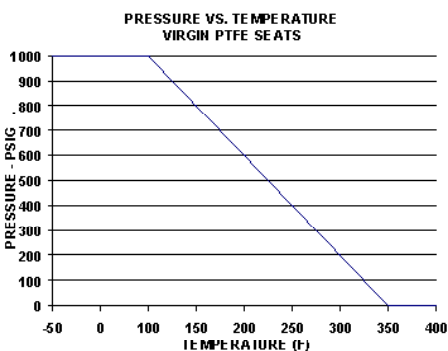
Design Features:

- 3 Piece Swing Out Style Valve
- 2 Way Ball Valves 1/2" - 2"
- Max PSI 1000 @ 70F
- Manual Override Capabilities
- NEMA 6P Actuator housing
- Ball: 316 SS
- Stem: 316 SS
- Valve Body: CF8M SS
- Seat: Virgin PTFE
- Stem Packing: PTFE & VITON

89 Series 3-Piece SS 2-Way Ball Valves					
Valve	Size	Port Type	ISO Mounting	Weight (lbs.)*	C _v
D	1/2"	FULL	FO3	5.85	30
E	3/4"	FULL	FO3	6.25	51
F	1"	FULL	FO5	7.50	68
G	1 1/4"	FULL	FO5	8.65	112
H	1 1/2"	FULL	FO5	10.10	170
i	2"	FULL	FO5	13.75	376

*Weight of Actuator Valve Assembly, for EH4, add 4.4 lbs.

C_v = GPM @ 1 psi drop water
 For GPM @ 5 PSI drop multiply C_v x 2.25
 Vacuum service to 29 inches HG

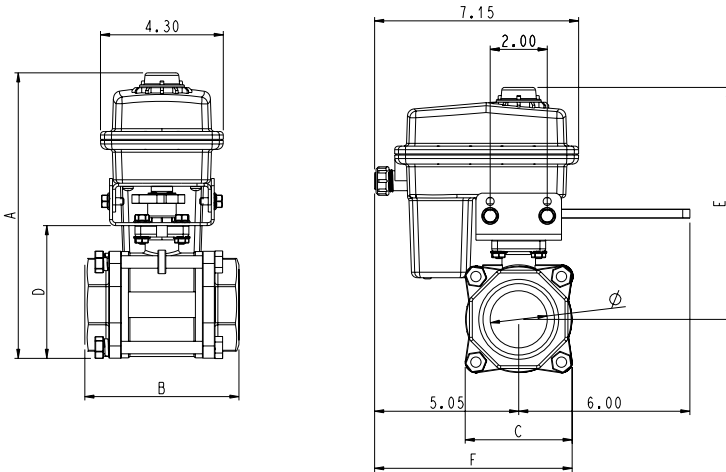


Valve & Actuator Selection Guide				
Valve Size	Size	EH2	EH4	EH3
D	1/2"			X
E	3/4"			X
F	1"	X		
G	1 1/4"	X		
H	1 1/2"	X	X	
i	2"	X	X	

HOW TO ORDER BY PART NUMBER

89i - 60A - W - 4

VALVE SERIES	VALVE SIZE	WIRING OPTION	MOTOR	OPTION
89 - 3-PIECE SS SWING-OUT STYLE 2-WAY BALL VALVES	D - 1/2" E - 3/4" F - 1" G - 1 1/4" H - 1 1/2" i - 2"	60A - 3 wire on/off (+) SPST 12 VDC 60T - 3 wire on/off (-) SPST 12VDC 63 - 4 wire 3 position 12VDC 60 - 4 wire on/off with feedback 66 - 3 wire on/off SPST 24VAC 55 - 4 wire on/off SPST 12VDC 50K - 2 wire DPDT 41 - 2 wire DPDT with 5k Pot. 62 - 4 wire regulating 12VDC 41S - DPDT with pot. for SL Control 60AE - SPST with 2 dry switches 50KE - DPDT with 2 dry switches 60F - SPST with two 12V outputs Other options available, consult factory	EH3 (1/2"-3/4") M - .8 sec N - 1.5 sec O - 12 sec P - 2.5 sec Q - 7 sec EH2 (1"-2") U - 8 sec W - 3 sec Y - 1.5 sec Z - .5 sec V* - .75 sec *24V Only All @ 13.8 VDC	- BLANK FOR NO OPTION 4 - EH4 B - BLANK LID (NO DOME) ON MOTOR CASE C - "NC" NORMALLY CLOSED H - "LESS VALVE" KIT O - "NO" NORMALLY OPEN V - 180 DEGREE OPERATION



EH2						
VALVE	SIZE	A	B	C	D	E
89F	1"	8.4	3.6	2.4	3.1	7.1
89G	1 1/4"	8.8	4.3	2.9	3.6	7.5

CYCLE TIME AND VOLTAGE

MOTOR	12 VDC	24 VDC	24 VAC
U	8 sec	4 sec	4 sec
V	n/a	.75 sec	.75 sec
W	3 sec	1.5 sec	1.5 sec
Y	1.5 sec	n/a	n/a
Z*	.5 sec	n/a	n/a

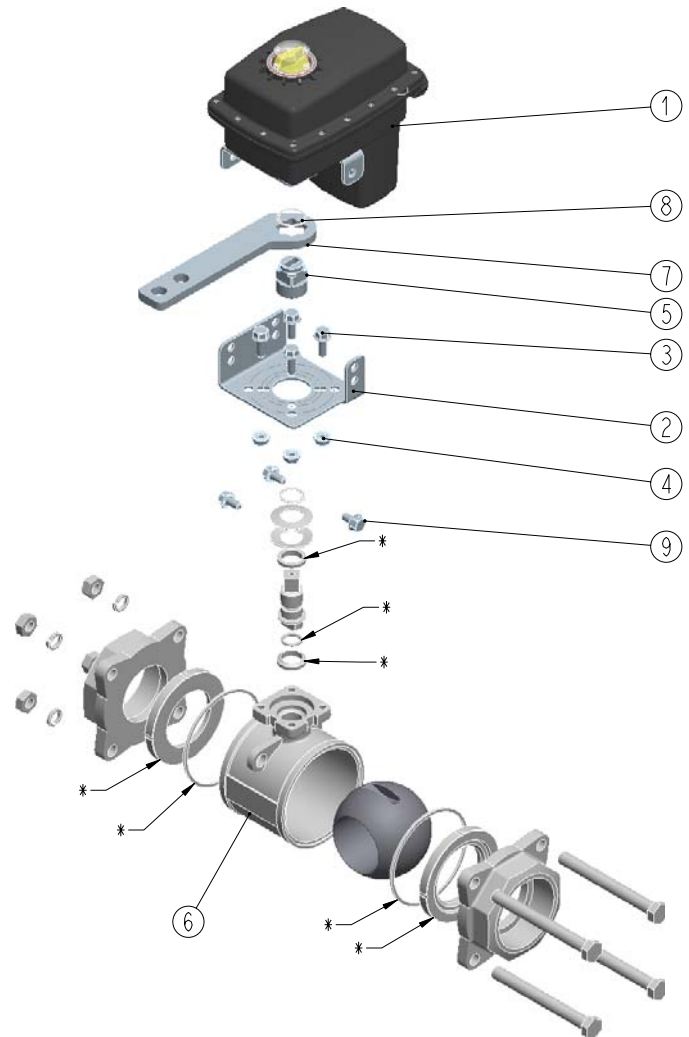
* Limited Applications, Consult Factory

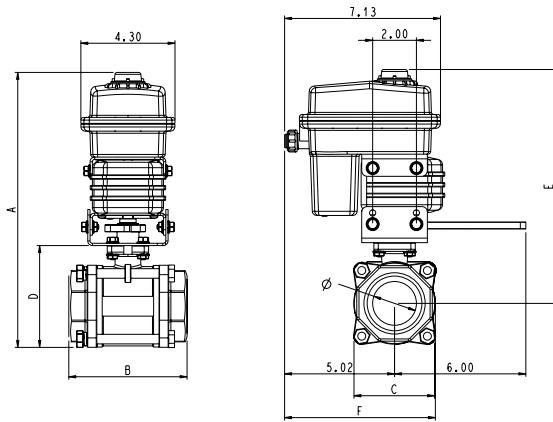
Materials List

No.	P/N	Description	Qty
1		EH2 Actuator	1
2	100042	Bracket, SS	1
3	100204	Bolt, Serrated Flange Hex, .250-20 UNC-2A x .5, SS 89F	4
	100338	.250-20 UNC-2A x .75, SS 89G, 89H & 89i	4
4	OX-222	Nut, Serrated Flange Hex, .250-20 UNC-2A, SS 89G, 89H & 89	7
		.250-20 UNC-2A, SS 89F	3
5	100197	Coupler, SS 89F & 89G	1
	100198	Coupler, SS 89H & 89i	1
6	EH-89F	Valve Assembly, 1" 2-way SS	1
	EH-89G	Valve Assembly, 1 1/4" 2-way SS	
	EH-89H	Valve Assembly, 1 1/2" 2-way SS	
	EH-89i	Valve Assembly, 2" 2-way SS	
7**	100199	Handle, FO Series, SS	1
8**	100289	Retainer Ring, SS	1
9**	100204	Bolt, Serrated Flange Hex, .250-20 UNC-2A x .5, SS	3
*	EH-126 (89F) EH-127 (89G) EH-128 (89H) EH-129 (89i)	Valve Repair Kit	1

*ORDER SEPERATELY

**FOR MANUAL OVERRIDE ONLY





EH4						
VALVE	SIZE	A	B	C	D	E
89H	1 1/2"	12.0	4.7	3.2	4.1	10.3
89i	2"	12.9	5.5	4.0	5.0	10.6

CYCLE TIME AND VOLTAGE

MOTOR	12 VDC	24 VDC	24 VAC
U	16 sec	8 sec	n/a
V	n/a	1.5 sec	1.5 sec
W	6 sec	3 sec	3 sec
Y	3 sec	n/a	n/a
Z*	n/a	n/a	n/a

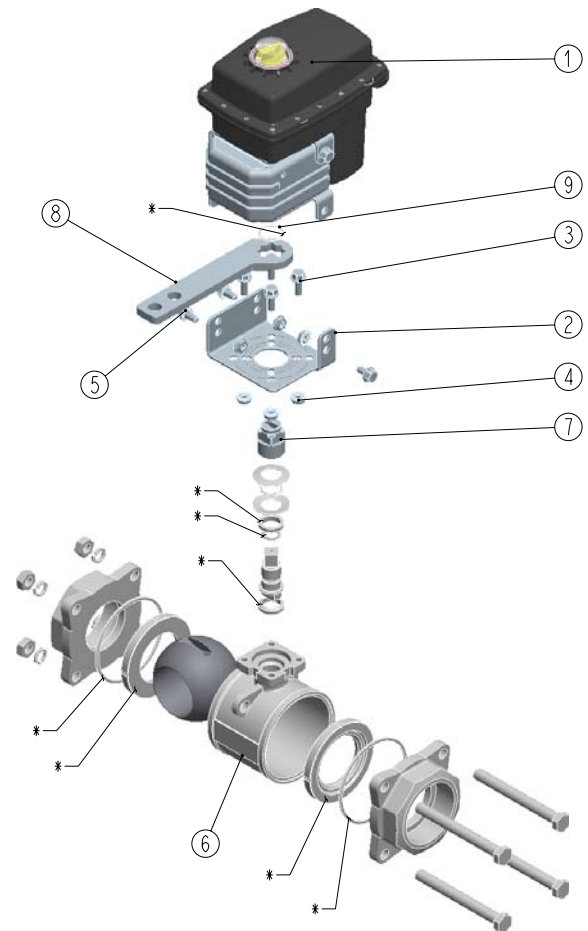
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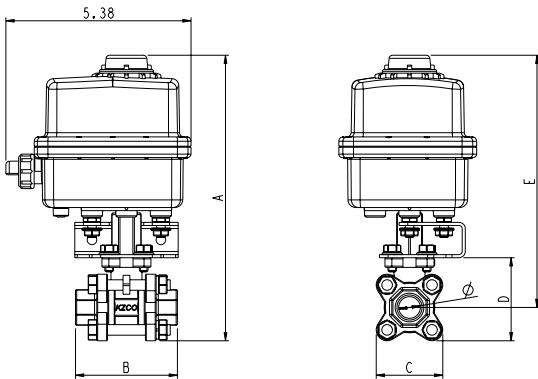
Materials List

No.	P/N	Description	Qty
1		EH4 Actuator with Gear Box	1
2	100042	Bracket, SS	1
3	100338	Bolt, Serrated Flange Hex, .250-20 UNC-2A x .75, SS 89H & 89i	4
4	QX-222	Nut, Serrated Flange Hex, .250-20 UNC-2A, SS 89H & 89i	7
5	100204	Bolt, Serrated Flange Hex, .250-20 UNC-2A x .5, SS	3
6	EH-89H EH-89i	Valve Assembly, 1 1/2" 2-way SS Valve Assembly, 2" 2-way SS	1
7	100198	Coupler, SS, 89H & 89i	1
8**	100199	Handle, FO Series, SS	1
9**	100289	Retainer Ring, SS	1
*	EH-128 (89H) EH-129 (89i)	Valve Repair Kit	1

*Order Separately

**For manual override only





EH3						
VALVE	SIZE	A	B	C	D	E
89D	1/2"	8.29	2.95	1.91	2.41	7.32
89E	3/4"	8.49	3.13	2.11	2.61	7.44

CYCLE TIME AND VOLTAGE

MOTOR	12/24 VDC & 24 VAC
M	.8 sec
N	1.5 sec
O	12 sec
P	2.5 sec
Q	7 sec

For 24V units, internal voltage is stepped down to 15V

Materials List

No.	P/N	Description	Qty
1	EH-89D EH-89E	Valve Assembly, 1/2" 2-way SS Valve Assembly, 3/4" 2-way SS	1
2	EH-109	Coupler, SS	1
3	EH3-183	Bracket, SS	1
4	100204	Bolt, Serrated Flange Hex, .250-20 UNC-2A x .5, SS	4
5		EH3 Actuator	1
*	EH-124 (89D) EH-125 (89E)	Valve Repair Kit	1

* Order Separately

