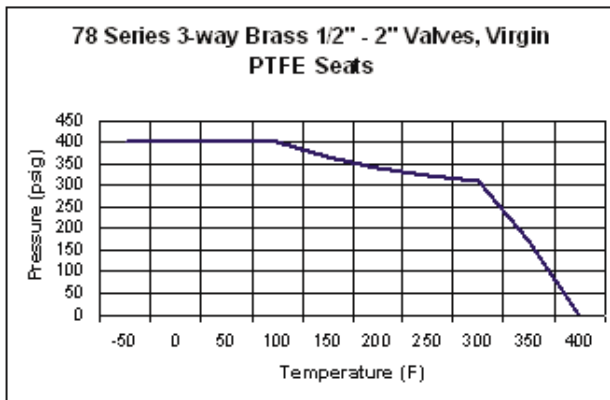




Design Features:

- 3-way Ball Valves 1/2" to 2"
- Max PSI 400 @ 70F
- Manual Override Capabilities
- NEMA 6P Actuator housing
- Ball: 316 SS
- Stem: 316 SS
- Valve Body: Bronze (C84400)
- Seat: PTFE
- Stem Packing: PTFE



78 Series 3-Way Ball Valves				
Valve	Size	Port Type	Weight (lbs.)*	C _v
D	1/2"	FULL	3.3	5.4
E	3/4"	STANDARD	4.1 (EH3), 6.1 (EH2)	12
F	1"	STANDARD	6.6	14
H	1 1/2"	STANDARD	9.92	34
i	2"	STANDARD	10.74	47

*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

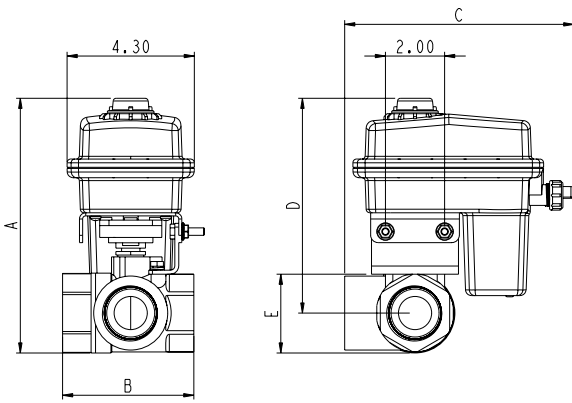
Valve & Actuator Selection Guide				
Valve Size	Size	EH2	EH4	EH3
D	1/2"			X
E	3/4"	X		X
F	1"	X		
H	1 1/2"	X	X	
i	2"	X	X	

HOW TO ORDER BY PART NUMBER

78D - 60A - W -

VALVE SERIES	VALVE SIZE	WIRING OPTION	MOTOR	OPTION
78 - BRASS VALVE BODY WITH SS BALL & STEM 3-WAY BALL VALVES	D - 1/2" E - 3/4" F - 1" H - 1 1/2" I - 2"	60A - 3 wire on/off (+) SPST 12VDC 60T - 3 wire on/off (-) SPST 12VDC 60 - 4 wire on/off with feedback, + output @ OPEN 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 - SL Series Control 60AE - 60A with 2 dry switches 50KE - 50K 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 (3/4"-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 C - "NC" NORMALLY CLOSED H - "LESS VALVE" KIT O - "NO" NORMALLY OPEN

EH2



VALVE	SIZE	A	B	C	D	E
78E	3/4"	7.1	2.04	7.75	7.3	1.9
78F	1"	7.35	2.85	7.75	7.3	2.0
78H	1 1/2"	8.6	3.34	7.75	7.3	2.7
78i	2"	9.0	3.62	7.75	7.3	2.9

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

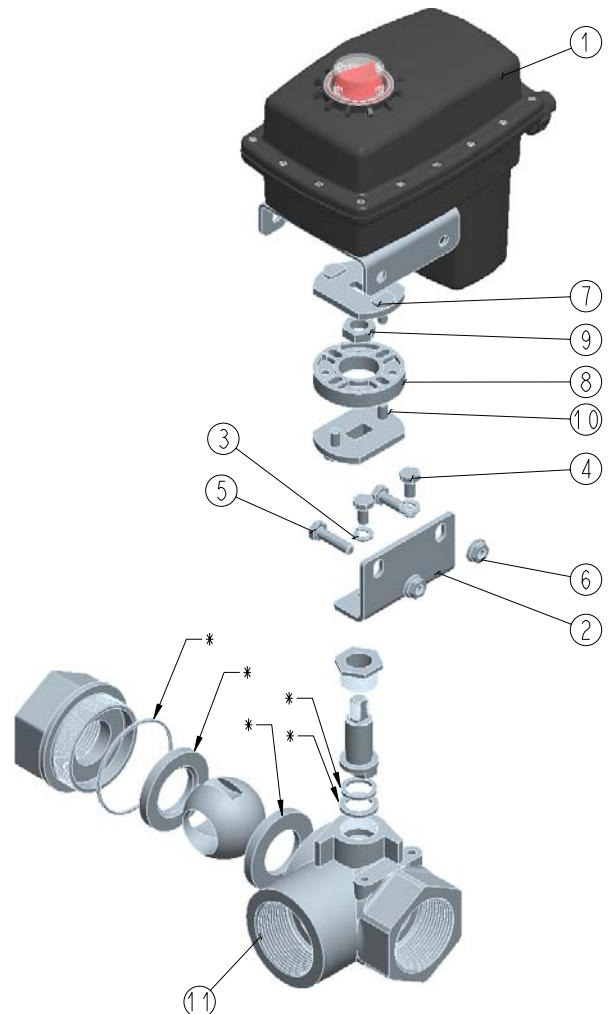
*Limited Applications, Consult Factory

Materials List

No.	P/N	Description	Qty
1		EH2 Actuator	1
2	EHPT-161-L** EHPT-161	Bracket, SS for 78E & 78F Bracket, SS for 78H & 78i	1
3	EHPT-152** EHPT-109 EHPT-150	Lockwasher, SS 78H & 78i Lockwasher, #10, SS 78E & 78F Washer, #10, SS 78E & 78F	2 2 2
4	EHPT-147** EH-158	Bolt, 1/4-20 x 1/2" 8-18, SS 78H & 78i Screw, #10-24 x 3/8", SS, 78E & 78F	2 2
5	100340	Bolt, 1/4"-20 x 1" 8-18, SS	2
6	QX-222	Nut, Serrated Flange Hex, .250-20 UNC-2A, SS	2
7	EHPT-1118	Coupler (Upper), SS	1
8	EHPT-1117	Donut, NYLON	1
9	EH2-1163	Jam Nut, SS	1
10	EHPT-1120** EHPT-1118	Coupler (Lower), SS for 78H & 78i Coupler (Lower), SS for 78E & 78F	1
11	EHPT-78E EHPT-78F EHPT-78H EHPT-78i	Valve Assembly, 3/4" Bronze 3-way Valve Assembly, 1" Bronze 3-way Valve Assembly, 1 1/2" Bronze 3-way Valve Assembly, 2" Bronze 3-way	1
*	EHPT-710 (78E) EHPT-713 (78H) EHPT-714 (78i) EHPT-715 (78F)	Valve Repair Kit	1

*Order seperately

**Shown in assembly



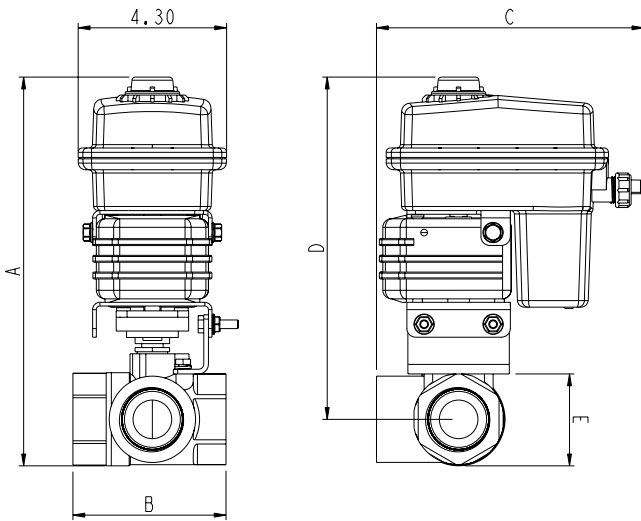
EH4

VALVE	SIZE	A	B	C	D	E
78H	1 1/2"	11.3	3.34	7.75	10.0	2.7
78i	2"	11.7	3.62	7.75	10.0	2.9

CYCLE TIME AND VOLTAGE

MOTOR	12 VDC	24 VDC	24 VAC
U	16 sec	8 sec	8 sec
V	n/a	1.5 sec	1.5 sec
W	6 sec	3 sec	3 sec
Y	3 sec	n/a	n/a
Z*	.5 sec	n/a	n/a

* Limited Applications, Consult Factory

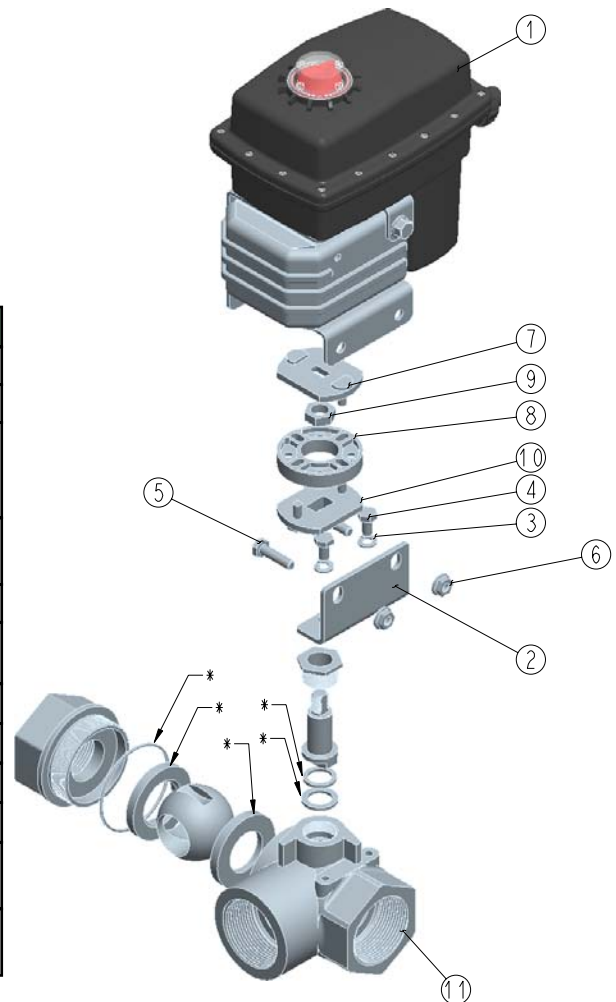


Materials List

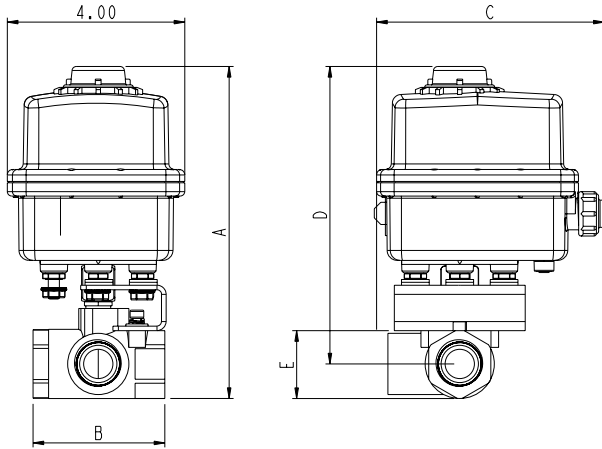
No.	P/N	Description	Qty
1		EH4 Actuator	1
2	EHPT-161-L	Bracket, SS	1
3	EHPT-152** EHPT-109 EHPT-150	Lockwasher, SS 78H & 78i Lockwasher, #10, SS 78E & 78F Washer, #10, SS 78E & 78F	2 2 2
4	EHPT-147** EH-158	Bolt, 1/4-20 x 1/2" 8-18, SS 78H & 78i Screw, #10-24 x 3/8", SS, 78E & 78F	2 2
5	100340	Bolt, 1/4"-20 x 1" 8-18, SS	2
6	QX-222	Nut, Serrated Flange Hex, .250-20 UNC-2A, SS	2
7	EHPT-1118	Coupler (Upper), SS	1
8	EHPT-1117	Donut, NYLON	1
9	EH2-1163	Jam Nut, SS	1
10	EHPT-1120	Coupler (Lower), SS	1
11	EHPT-78H EHPT-78i	Valve Assembly, 1 1/2" 3-way Bronze Valve Assembly, 2" 3-way Bronze	1
*	EHPT-713 (78H) EHPT-714 (78i)	Valve Repair Kit	1

*Order seperately

**Shown in assembly



EH3



VALVE	SIZE	A	B	C	D	E
78D	1/2"	7.0	2.25	5.1	6.2	1.5
78E	3/4"	7.5	3.0	5.1	6.7	1.5

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

	P/N	Description	Qty
1		EH3 Actuator	1
2	EH3-174	Bracket, SS	1
3	EH2-1142	Washer 18-8 1/4", SS	6
4	EHPT-150	Washer #10 18-8, SS	2
5	EHPT-109	Lockwasher #10, SS	2
6	EH-158	Bolt, 10-24 x 3/8", SS	2
7	EH3-78D	Valve Assembly, 1/2" 3-way Bronze	1
	EHPT-78E	Valve Assembly, 3/4" 3-way Bronze	
8	EH-145** EH-146	Coupler, SS 78D Coupler, SS 78E	1
*	EHPT-710 (78E)	Valve Repair Kit	1

* Order Separately

