



# Model **J3-2110E**



Doc: J3/2110E/01

Nov 2007

## Electrically operated 316SS ECON 3 pce ball valve with kit

Full bore 2 way 316 stainless steel ECON ball valve, designed for automation with integrally cast ISO5211 actuator mounting platform fitted via stainless steel mounting kit with **J3** electric actuator. Supplied assembled and dry bench function tested. Full size range from 1/4" to 4".

Type	Function
<b>J3-2113E</b>	Standard power to open - power to close - Stays put on mains failure
<b>J3-2114E</b>	Failsafe BSR - Battery Spring Return - Fails to safe position using an internal battery
<b>J3-2115E</b>	Modulating DPS - Digital Positioning System

### Applications:

Water, oil and many corrosive medias, subject to compatibility with wetted parts in contact with media. Actuators sized on a maximum differential pressure of 10 bar wet service, if the intended duty is above this differential, or dry (air or gas) call to check actuator sizing as a larger output actuator may be required.

Maximum working temperature of valve & actuator assembly is +130C. If the intended duty is at a higher temperature than this, contact us for information.

### Valve Specifications:

Body	CF8M Cast 316SS
Ball	CF8M Cast 316SS
Seats	PTFE
Pressure rating	UTI 2" 1000psi CWP
Valve temp limits	-20 to +200°C
Actuator temp limits	-20 to + 70°C

### Status light basic functions:

Constantly lit LED

If the actuator is operating correctly with no faults, the LED shows a constantly lit light.

The LED flashes with 2 blinks

If the actuator has been left in 'manual' mode, the actuator's motor runs but doesn't drive the output shaft. After a pre-set time, the actuator knows that as the torque limiter has not activated and that the motor is running, it must be in manual.

The LED flashes on/ off

When the actuator senses an impending valve jam, the electronic torque limiter is activated and on activation, repeatedly flashes the LED on and off.



### Quick guide to the **J3** electric actuator standard features :

Highly visible LED light gives continuous actuator status indication.

**J3** L - 12-24V AC/DC

**J3** H - 80-240V AC/DC

Multi-voltage capable with auto-voltage sensing:

Torque output range:  
25~95Nm Break  
20~80Nm Reset

Electronic torque limiter  
Protects against valve jams

Anti-condensation heater

Manual override

All connections via external DIN plugs ~ no need to remove cover to connect

Volt free end of travel confirmation switches

IP65 weatherproof housing

CE marked

Traceable sequential serial numbering system

Optional failsafe kit (Battery Back-up) - actuator fails to safe position on power failure

Optional modulating kit with digital positioning system, either 0-10V or 4-20mA





# Model J3-2110E

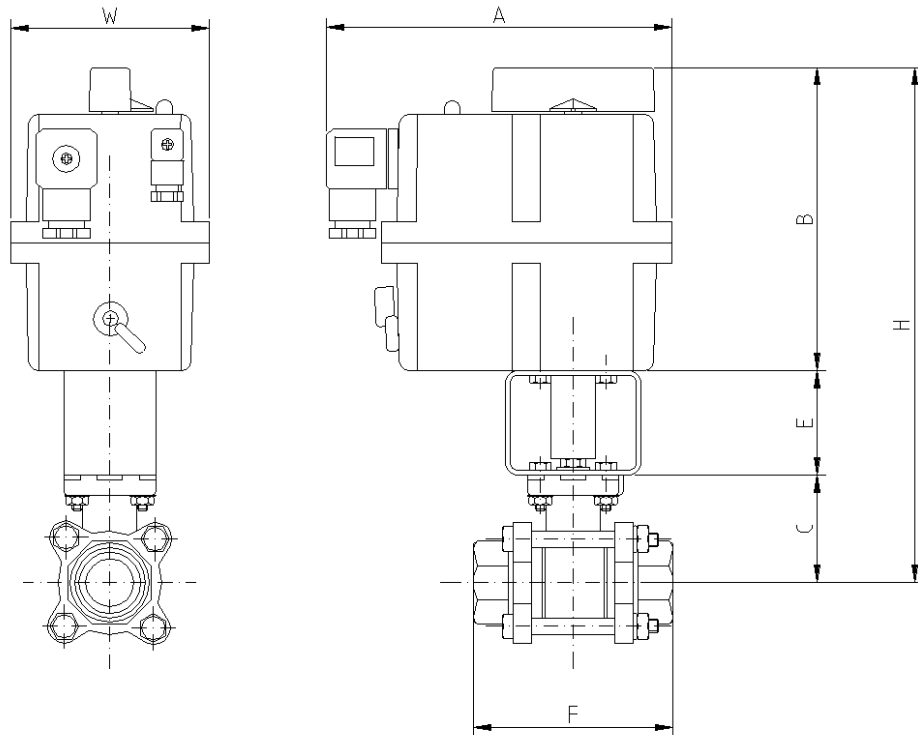
## DIMENSIONS



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Electrically operated ECON 3 pce stainless ball valve with kit- Dimensions (to nearest mm)



Dimensions remain unchanged for all versions (on-off, failsafe & modulating)

	Model	A	B	C	E	F	H	W	Kilos	Kv
1/4"	20	177	149	42	50	75	241	110	2.4	6.8
3/8"	20	177	149	42	50	75	241	110	2.4	6.8
1/2"	20	177	149	42	50	75	241	110	2.4	12.8
3/4"	20	177	149	49	50	80	248	110	2.6	29.1
1"	20	177	149	58	50	90	257	110	3.1	47.8
1 1/4"	20	177	149	63	50	110	262	110	3.8	72.6
1 1/2"	35	177	171	71	50	120	292	110	5.0	106.8
2"	35	177	196	78	50	140	324	110	6.3	213.7
2 1/2"	85	177	196	100	70	186	366	128	11.1	273.3
3"	J2-140	235	214	109	70	205	393	254	18.1	495.3
4"	J2-140	235	214	140	70	240	350	254	28.9	871.1

Kv is in m<sup>3</sup>/hr, based on water at ambient temperature with a 1 bar pressure drop across the valve

Subject to alteration without notice. Uncontrolled copy, not subject to automatic updates



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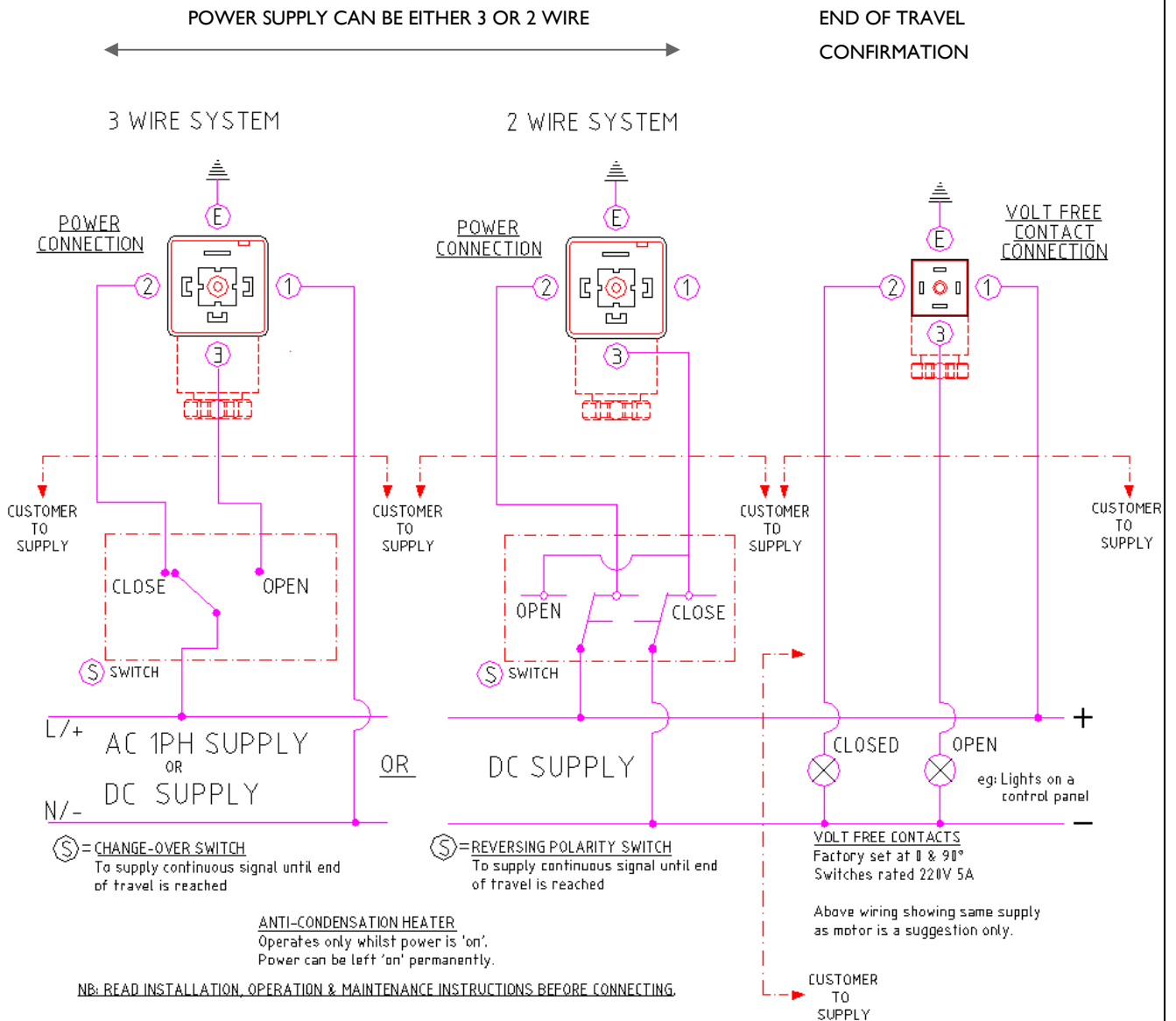
## Wiring Diagram - AC or DC



Doc: J3/STD.WD/01

Jan 2008

### AC (1ph) OR DC SUPPLY - WIRING FOR ON-OFF OR FAILSAFE ACTUATORS



#### FUNCTION: ON-OFF VERSION

Power open, power close  
Stays put on mains power failure

#### FUNCTION: FAILSAFE VERSION

Power open, power close - trickle charges battery system in either open or closed position  
Actuator sent by battery power to pre-set failsafe position on power failure  
Actuator returns to pre-failure position on power resumption.  
Failsafe can be either NC (normally closed) or NO (normally open)





# Valve Data Sheet



Doc: SBV-E7444/01

Nov 2007

## Full bore direct mount 3 piece Econ stainless steel ball valve



### Specifications:

Construction	3 Pce full bore direct mount ball valve
Size Range (Full)	1/4" to 4" BSP
Pressure Rating	1000 psi max
Valve Body Material	ASTM A351CF8M
Trim Material	ASTM A351CF8M. Cavity relief hole in ball.
Seat Material	PTFE
Seal Material (Options)	PTFE + Viton O Ring stem seal
Inspection & Test	API 598 BS6755 Pt 1
Standards	ANSI B16.34, ANSI 16.25, ANSI B1.20, API 6D ISO5211 DIN 259, DIN 2999, DIN3337.
Certification	EN 10204 3.1b on request
Temperature Range	-34 to +205C

### Approvals:

### Approved ?



PED/97/23/EC



ATEX 94/9/EC  
II 2 GD



API 607 4th Ed'n /  
BS6755 Pt 2



TA-Luft



### Dimensions

DN	d	H	H1	L	BW			SW		M	SW	N1	N2	nx		E	Weight
					L2	B3	B2	L1	B1					O1	O2		
["]	[mm]	[mm]	[mm]	[mm]	[mm]												[kg]
1/4	10.6	42	72	75	70	18	10.6	75	14.2	145	28	36	42	4x6	4x6	9	0.7
3/8	12.7	42	72	75	70	18	12.7	75	17.8	145	28	36	42	4x6	4x6	9	0.7
1/2	15	42	72	75	75	22	15.8	75	21.8	145	28	36	42	4x6	4x6	9	0.7
3/4	20	48.5	80	80	90	28	20.9	80	27.3	145	32	36	50	4x6	4x7	9	0.9
1	25	58	90	90	100	34	26.7	90	34	175	41	42	50	4x6	4x7	11	1.4
1 1/4	32	63	95	110	110	43	35.1	110	42.8	175	50	42	70	4x6	4x9	11	2.1
1 1/2	38	71	106	120	125	50	40.9	120	48.9	194	57	50	70	4x7	4x9	14	3.0
2	50	78	113	140	150	61	52.5	140	61.4	194	70	50	70	4x7	4x9	14	4.3
2 1/2	63.5	100	149	185.5	190	76	62.7	185.5	74	265	86	70	102	4x9	4x11	17	8.3
3	76	109	159	205	220	92	78	205	90	265	101	70	102	4x9	4x11	17	11.9
4	100	140	205	240	270	115	102.4	240	115.4	400	132	-	102	-	4x11	22	22.7

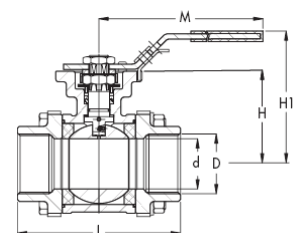
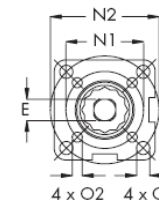


fig. 7444/7544 (BSP/NPT)