



# Model **J3-2110**



Doc: J3/2110/01

Nov 2007

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

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

Type	Function
<b>J3-2113</b>	Standard power to open - power to close - Stays put on mains failure
<b>J3-2114</b>	Failsafe BSR - Battery Spring Return - Fails to safe position using an internal battery
<b>J3-2115</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 assembly is +130C. If the intended duty is a higher temperature than this, contact us to discuss an extended mounting kit between the valve and actuator, and possible seat material change to carbon or stainless steel filled PTFE (maximum +200C).

### Valve Specifications:

Body	CF8M Cast 316SS
Ball	CF8M Cast 316SS
Seats	RTFE
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	The LED flashes with 2 blinks
If the actuator is operating correctly with no faults, the LED shows a constantly lit light.	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.



### 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 J3-2110

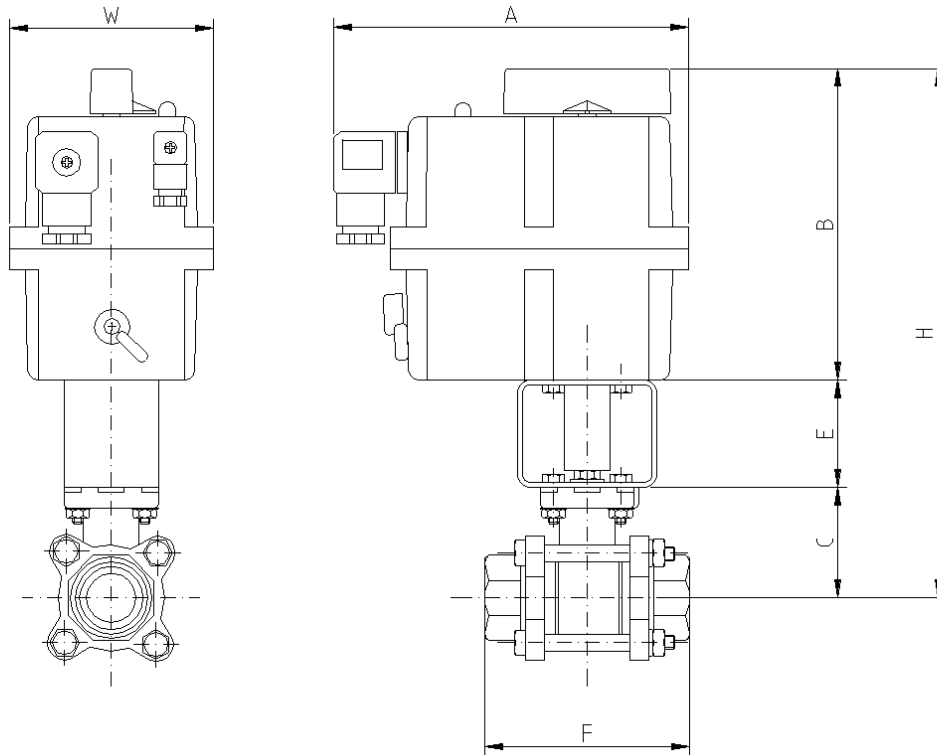
## DIMENSIONS



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Electrically operated 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	64	241	110	2.3	6.8
3/8"	20	177	149	42	50	64	241	110	2.3	6.8
1/2"	20	177	149	42	50	66	241	110	2.4	12.8
3/4"	20	177	149	48	50	76	247	110	2.5	29.1
1"	20	177	149	57	50	86	256	110	3.0	47.8
1 1/4"	20	177	149	61	50	103	260	110	3.6	72.6
1 1/2"	35	177	171	78	50	119	299	110	5.2	106.8
2"	55	177	196	85	50	131	331	110	6.8	213.7
2 1/2"	85	177	196	109	70	164	375	128	12.0	273.3
3"	85	177	196	118	70	183	384	128	15.3	495.3
4"	J2-140	235	214	133	70	236	417	254	27.7	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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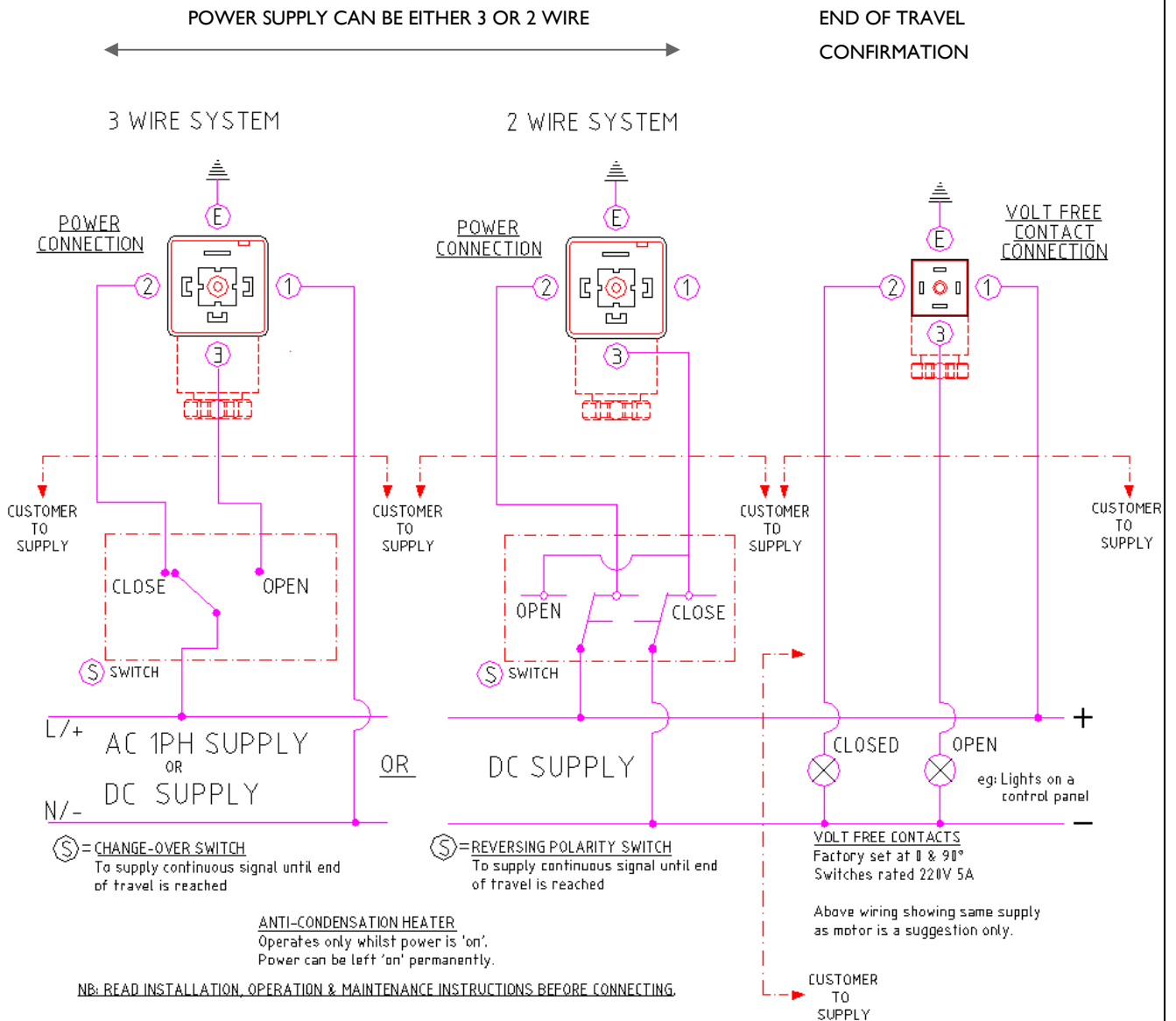
## Wiring Diagram - AC or DC



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)



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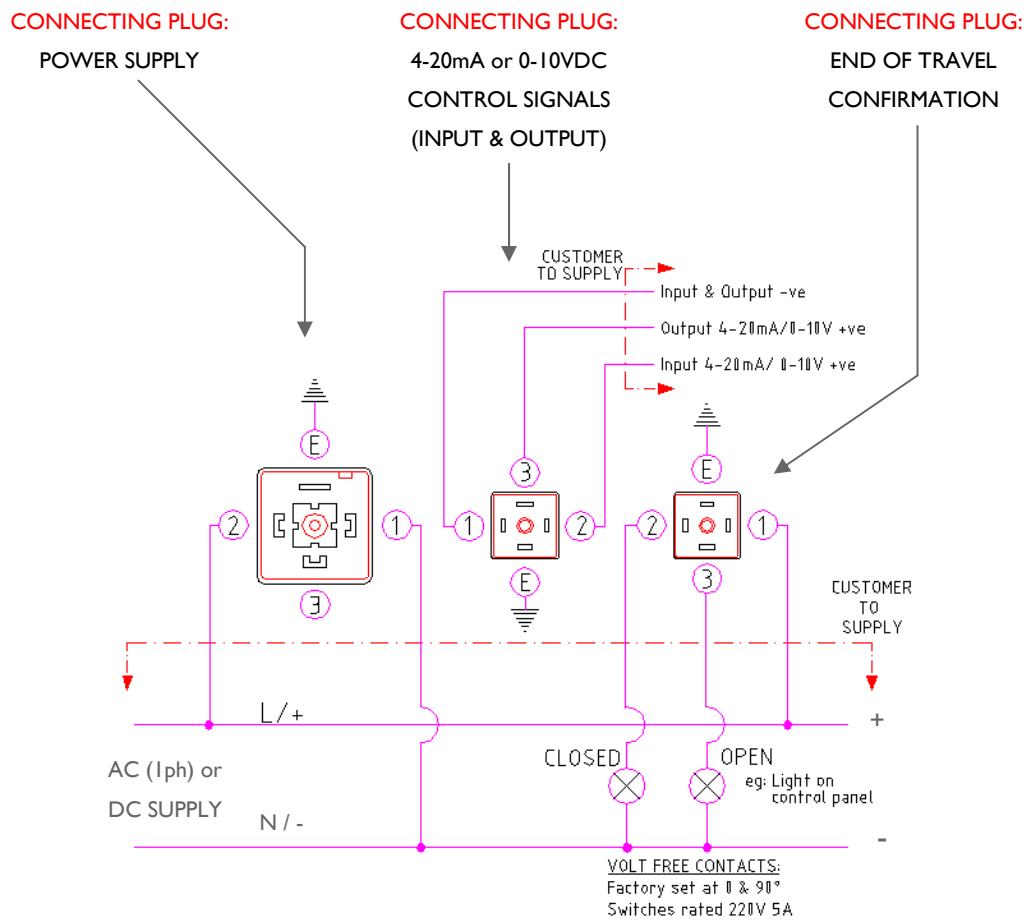
## Wiring Diagram - AC or DC



Doc: J3/STD.WD/01

Jan 2008

### AC (1ph) OR DC SUPPLY - WIRING FOR MODULATING ACTUATORS



Above wiring showing same supply as motor is only a suggestion.

NB: READ INSTALLATION, OPERATION & MAINTENANCE INSTRUCTIONS BEFORE CONNECTING.

#### FUNCTION: MODULATING VERSION

Power open, power close - actuator movement controlled by input signal (4-20mA or 0-10VDC)  
 Standard operation: 4mA or 0V = actuator closed, 20mA or 10V = actuator open (can be reversed)  
 Standard operation: Actuator closes on loss of control signal, stays put on loss of mains power  
 Output signal (in same format as supply signal) provided as standard.



# Valve Data Sheet



Doc SBV-M77/03

Nov 2007

## Full bore direct mount 3 piece 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
Seat Material	RTFE
Seal Material (Options)	PTFE
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. MSS SP25
Certification	EN 10204 3.1b on request
Temperature Range	-20 to +200C

### Approvals:

### Approved ?



PED/97/23/EC



ATEX 94/9/EC  
II 2 GD



API 607 4th Ed'n /  
BS6755 Pt 2



TA-Luft



### Dimensions:

SIZE DN	C	E	D	H	L	B4	ISO
1/2"	15	139	9	78	65.5	8.65	F03/05
3/4"	20	139	9	83	76.2	8.45	F03/05
1"	25	165	11	96	86.0	11.4	F04/05
1 1/4"	32	165	11	100	102.8	11.4	F04/05
1 1/2"	38	215	14	127	119.0	13.9	F05/07
2"	50	215	14	135	131.4	13.9	F05/07
2 1/2"	50	262	17	167	164	16.8	F07/10

