



Model **J3-2200**



Doc: J3/2200/01

Nov 2007

Electrically operated 2 way 316SS ball valve

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



| Type | Function |
|----------------|--|
| J3-2203 | Standard power to open - power to close - Stays put on mains failure |
| J3-2204 | Failsafe BSR - Battery Spring Return - Fails to safe position using an internal battery |
| J3-2205 | 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 +70C. If the intended duty is a higher temperature than this, select model **J3-2210** which has a mounting kit between the valve and actuator which uses air cooling to dissipate the heat away from the actuator (maximum +130C).

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 | The LED flashes on/ off |
| 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. | 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



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WIRING DIAGRAMS

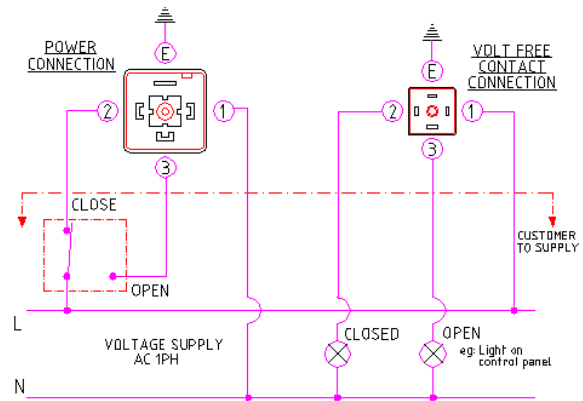


Doc: J3/2200/01

Nov 2007

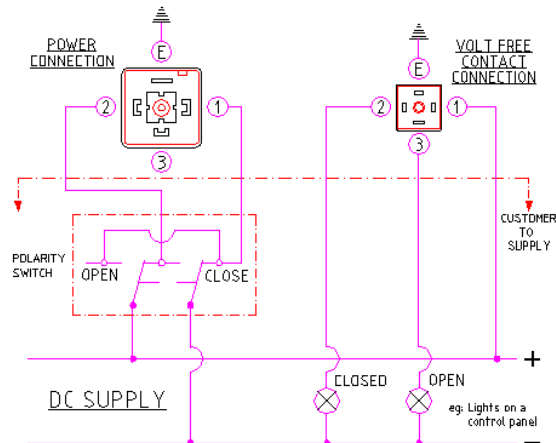
AC (1PH) WIRING FOR ON-OFF & FAILSAFE ACTUATORS

- Type **J3-xxx3** Standard on-off function.
Power open, power close.
Stays put on mains power failure.
- Type **J3-xxx4** On-off failsafe function.
Power open, power close, but fails to pre-set position on mains power failure.
- Closed = Normally closed
Open = Normally open



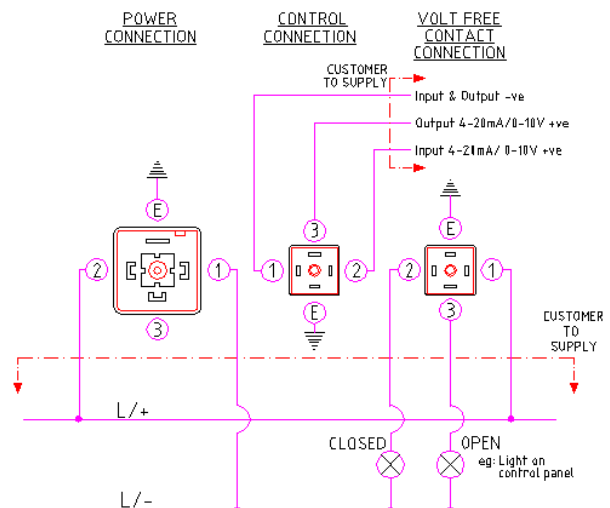
DC WIRING FOR ON-OFF & FAILSAFE ACTUATORS

- Type **J3-xxx3** Standard on-off function.
Power open, power close.
Stays put on mains power failure.
- Type **J3-xxx4** On-off failsafe function
Power open, power close, but fails to pre-set position on mains power failure.
- Closed = Normally closed
Open = Normally open



AC (1PH) OR DC WIRING FOR MODULATING ACTUATORS

- Type **J3-xxx5** Modulating function .
4-20mA or 0-10VDC control signal.
Closes on loss of control signal.
Stays put on mains power failure.
Output signal as standard.





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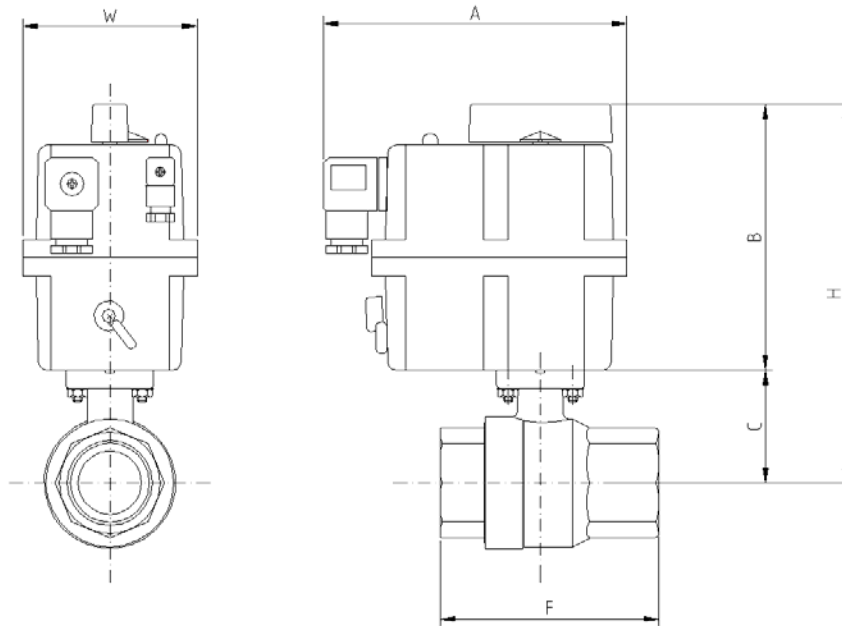
DIMENSIONS



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Electrically operated 2 pce stainless steel ball valve - Dimensions (to nearest mm)



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

| | Model | A | B | C | F | H | W | Kilos | Kv |
|--------|-------|-----|-----|-----|-----|-----|-----|-------|-------|
| 1/4" | 20 | 177 | 149 | 39 | 65 | 188 | 110 | 2.1 | 6.8 |
| 3/8" | 20 | 177 | 149 | 39 | 65 | 188 | 110 | 2.1 | 6.8 |
| 1/2" | 20 | 177 | 149 | 39 | 65 | 188 | 110 | 2.1 | 12.8 |
| 3/4" | 20 | 177 | 149 | 47 | 75 | 196 | 110 | 2.1 | 29.1 |
| 1" | 20 | 177 | 149 | 57 | 88 | 206 | 110 | 2.6 | 47.8 |
| 1 1/4" | 20 | 177 | 149 | 61 | 102 | 210 | 110 | 3.0 | 72.6 |
| 1 1/2" | 35 | 177 | 171 | 78 | 110 | 249 | 110 | 4.4 | 106.8 |
| 2" | 35 | 177 | 171 | 86 | 125 | 257 | 110 | 5.4 | 213.7 |
| 2 1/2" | 55 | 177 | 196 | 109 | 161 | 305 | 110 | 9.4 | 273.3 |
| 3" | 85 | 177 | 196 | 118 | 178 | 314 | 110 | 12.4 | 495.3 |

Kv is in m³/hr, based on water at ambient temperature with a 1 bar pressure drop across the valve

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