



# AVOL Model J3-I300 Motorised Brass Ball Valve

## Electrically operated 3 way brass ball valve

Full bore 3 way nickel plated brass 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 2". Available in both 'L' and 'T' port.

### Code

### Function

- J3-I303** Standard power to open - power to close  
- Stays put on mains failure
- J3-I304** Failsafe BSR - Battery Spring Return  
- Fails to safe position using an internal battery
- J3-I305** Modulating DPS - Digital Positioning System  
- Controlled by 4-20mA or 0-10V signal



### Applications

Water, oil and most non-corrosive media, 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. NOT recommended for use on steam.

Maximum working temperature of assembly is +70°C. If the intended duty is a higher temperature than this, select model J3-I310 which has a mounting kit between the valve and actuator which uses air cooling to dissipate the heat away from the actuator (maximum +130°C).

### Valve Specification

Body	Nickel plated brass
Ball	Chrome plated brass
Seats	PTFE
Pressure rating	UT1 3/4" 30 bar, rest 10 bar
Valve temp limits	-20 to +160°C
Actuator temp limits	-20 to +70°C

### 3 Way ball valves –flow patterns:



L Port – diverting



T Port – mixing



T Port – diverting

### J3 Actuator status light basic function:

#### 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 is 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

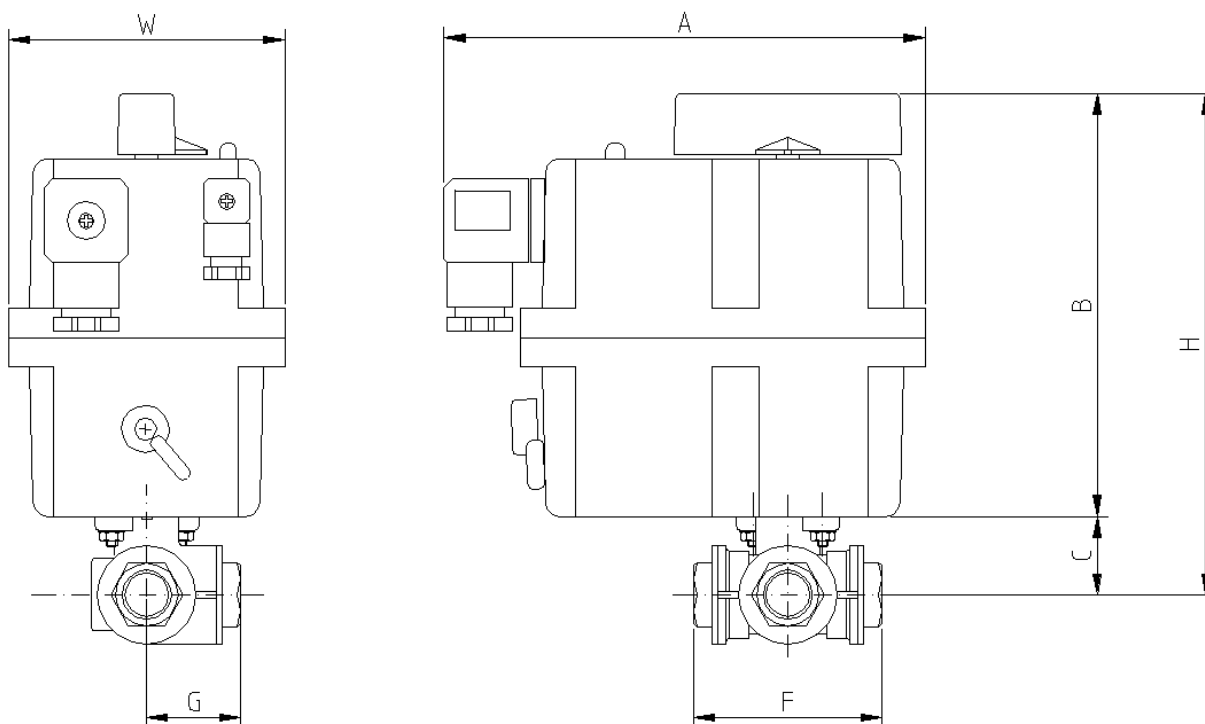
Optional modulating kit with digital positioning system, either 0-10V or 4-20mA



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## DIMENSIONS

Electrically operated 3 way brass ball valve - Dimensions (to nearest mm)



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

	Model	A	B	C	F	G	H	W	Kilos	Kv	PN
1/4"	20	177	149	31	67	34	180	110	2.1	2.8	30
3/8"	20	177	149	31	67	34	180	110	2.1	3.0	30
1/2"	20	177	149	33	77	39	182	110	3.7	3.9	30
3/4"	20	177	149	42	87	44	191	110	2.6	7.9	30
1"	20	177	149	47	105	53	196	110	3.1	13.0	16
1 1/4"	20	177	149	60	123	61	209	110	4.3	20.7	10
1 1/2"	35	177	171	74	139	69	245	110	6.6	38.7	10
2"	55	177	196	85	166	83	281	110	10.8	54.0	10

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

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