



Model **J3-I100E**



Doc: J3/I100E/01

Nov 2007

Electrically operated 2 way economy brass ball valve

Full bore 2 way economy 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. Size range from 1/4" to 3".

Type	Function
J3-I103E	Standard power to open - power to close - Stays put on mains failure
J3-I104E	Failsafe BSR - Battery Spring Return - Fails to safe position using an internal battery
J3-I105E	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 +70C. If the intended duty is a higher temperature than this, select model **J3-I110E** 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	Nickel plated brass
Ball	Nickel plated brass
Seats	PTFE
Pressure rating	UTI 1" 40 bar, 1 1/4" to 2 1/2" 30 bar, 3" 25 bar
Valve temp limits	-20 to +150°C
Actuator temp limits	-20 to + 70°C

J3 Actuator status light basic functions:

Constantly lit LED	The LED flashes with 2 blinks	The LED flashes on - off
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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 is 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



Model J3-1100E

WIRING DIAGRAMS

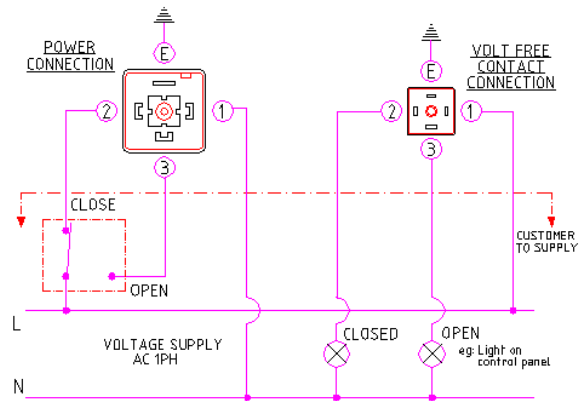


Doc: J3/1100E/01

Nov 2007

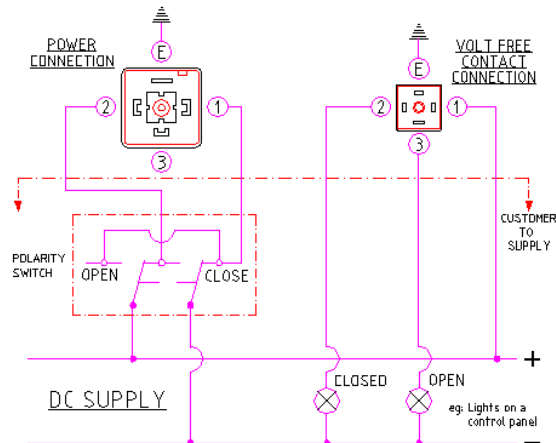
AC (1PH) WIRING FOR ON-OFF & FAILSAFE ACTUATORS

- 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



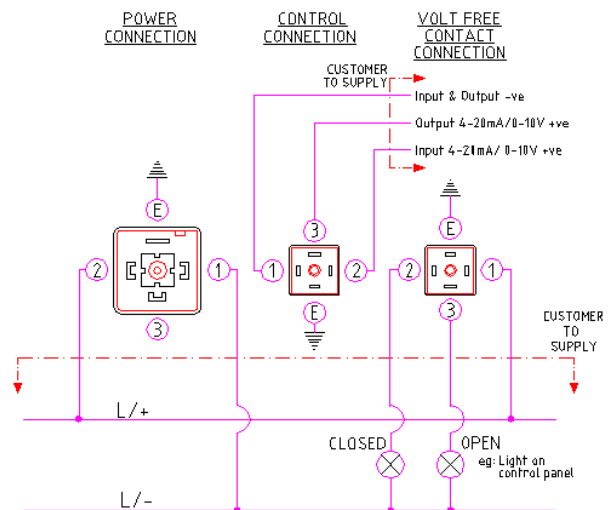
DC WIRING FOR ON-OFF & FAILSAFE ACTUATORS

- 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.





Model **J3-I 103E**

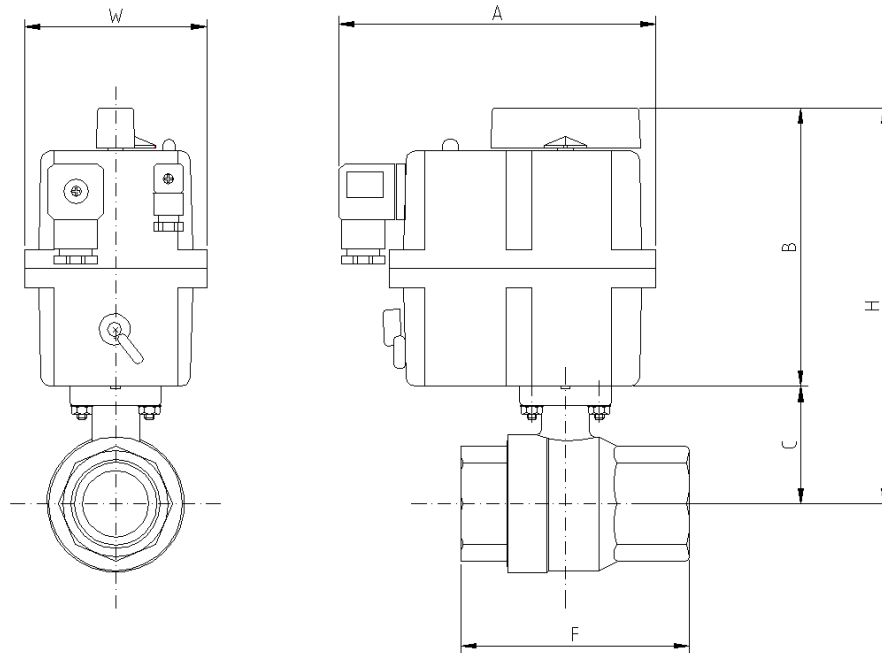
DIMENSIONS



Doc: J3/I 100E/01

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Electrically operated 2 way economy brass 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	29	65	178	110	1.9	16.3
3/8"	20	177	149	29	65	178	110	1.9	16.3
1/2"	20	177	149	29	65	178	110	1.9	16.3
3/4"	20	177	149	32	75	181	110	1.9	29.5
1"	20	177	149	36	86	185	110	2.2	43.0
1 1/4"	20	177	149	41	95	190	110	2.6	89.0
1 1/2"	20	177	149	57	101	206	110	3.2	230.0
2"	20	177	149	64	121	213	110	4.2	265.0
2 1/2"	35	177	171	90	165	220	110	5.8	540.0
3"	35	177	171	100	188	271	110	7.9	873.0

Kv is in m³/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



Valve Data Sheet



Doc: BBV160/01

Nov 2006

Economy full bore nickel plated brass direct mount ball valve



Specifications:

Construction	2 Pce Full bore direct mount ball valve
Size Range (Full)	1/4" to 3" BSP
Pressure Rating	40 Bar to 1", PN30 1 1/4" to 2 1/2", PN25 3"
Valve Body Material	OT58 Nickel plated brass
Trim Material	OT58 Chrome plated brass
Seat Material	PTFE
Seal Material (Options)	Viton
Inspection & Test	Manufacturer's own
Standards	ISO5211, DIN3337
Certification	Certificate of Conformity
Temperature Range	-20 to +120C

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	1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
d	15	15	15	20	25	32	38	47
A	38x38	38x38	38x38	38x38	50x50	50x50	50x50	50x50
B	29	29	29	32	36	41	57	64
C	65	65	65	75	86	95	101	1205
D n°4 Hole	6	6	6	6	7	7	7	7
E	17	17	17	19	21	22	22	25
F ■	F03	F03	F03	F03	F04/F05	F04/F05	F04/F05	F04/F05
h	6	6	6	7	11	10	12	11
Q	9x9	9x9	9x9	9x9	9x9	9x9	11x11	11x11
Torque (Nm)	3	3	3	4	4	7	9	12

Dimensions in mm

