



Model **J3-3740**



Doc: J3/3740/01

Jan 2008



Electrically operated PVC ball valve

Full bore PVC double union ball valve with PTFE seats and EPDM seals (Viton/ FPM option), fitted via stainless steel mounting kit with **J3** electric actuator. Supplied assembled and dry bench function tested. Ends imperial or metric solvent sockets.. UK WRAS approved for use on potable water.

Type	Function
J3-3743	Standard power to open - power to close - Stays put on mains failure
J3-3744	Failsafe BSR - Battery Spring Return - Fails to safe position using an internal battery
J3-3745	Modulating DPS - Digital Positioning System

Applications:

PVC is odourless and tasteless and is used in many applications such as potable water and many food processing. PVC has good chemical resistance and resists most solutions of acids, alkalis and salts, and solvents that can be diluted with water acids. It is not resistant to aromatic and chlorinated carbons.

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.

Valve Specifications:

Body	PVC
Ball	PVC
Seats	PTFE with EPDM seals
Pressure rating	UTI 2" 16 Bar, rest 10 Bar
Valve temp limits	0 to +60°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 Reseat

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 **J3-3740**

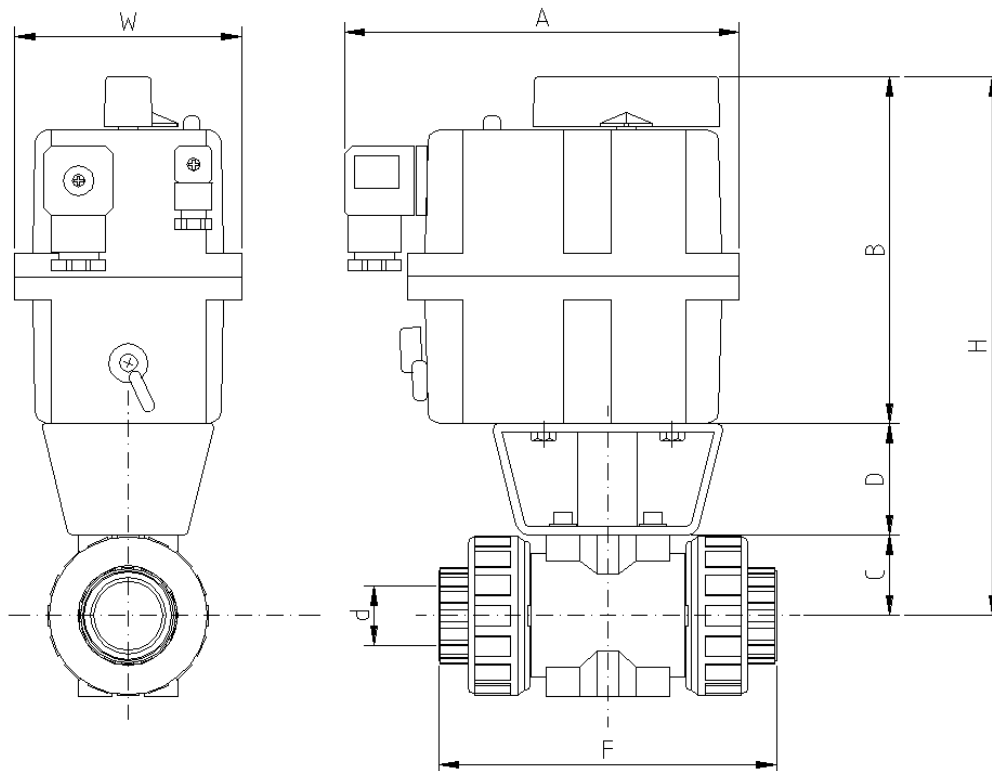
DIMENSIONS



Doc: J3/3740/01

Jan 2008

Electrically operated PVC ball valve with kit - Dimensions (to nearest mm)



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

Imperial	Model	A	B	C	D	F	H	W	Kilos	Metric pipe OD
1/2"	20	177	149	25	50	102	224	110	1.9	20 / 15
3/4"	20	177	149	30	50	120	229	110	1.9	25 / 20
1"	20	177	149	34	50	128	233	110	2.0	32 / 25
1 1/4"	20	177	149	40	50	147	239	110	2.2	40 / 32
1 1/2"	20	177	149	48	50	163	247	110	2.4	50 / 40
2"	20	177	149	58	50	197	257	110	2.9	63 / 50
2 1/2"	35	177	171	73	70	214	571	110	3.8	75 / 65
3"	55	177	196	83	70	241	349	110	5.3	90 / 80
4"	85	177	196	105	70	281	371	128	7.2	110 / 90



Model J3

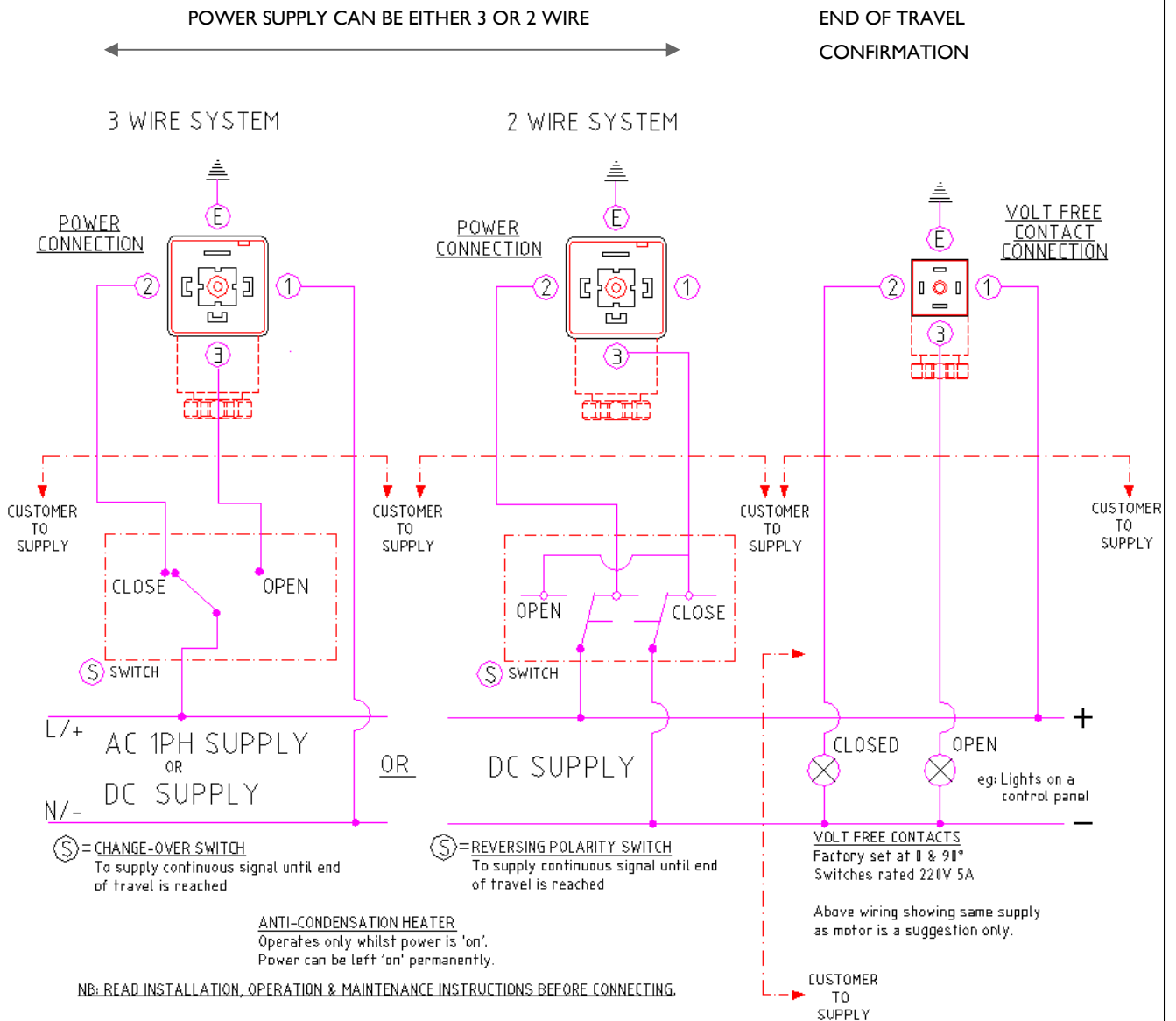
Wiring Diagram - AC or DC



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)



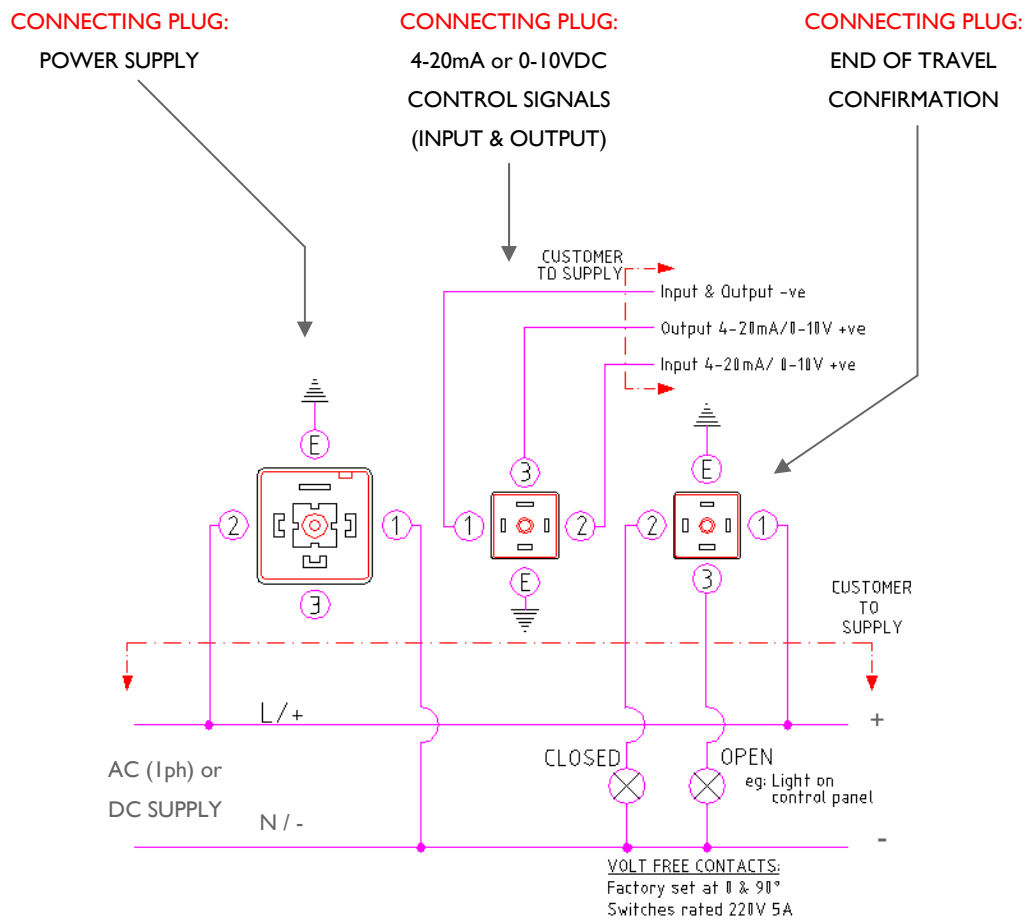
Model **J3** Wiring Diagram - AC or DC



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: BV-Comer/02

Nov 2007



Full bore ball valves suitable for actuation



PVC-U



ABS

Specifications:

GENERAL	VALVE TYPE	FULL BORE 1/4 TURN BALL VALVE	
	VALVE MODEL	BV-C66I	
	OPERATOR	HAND OPERATED WITH LEVER, OR BY ACTUATOR	
	DESIGN STANDARDS	MANUFACTURERS OWN	
	FACE TO FACE DIMS	MANUFACTURERS OWN	
	TESTING STANDARDS	MANUFACTURERS OWN	
	CERTIFICATION	CERTIFICATE OF CONFORMITY ONLY	
	ACTUATOR MOUNTING	MOUNTS WITH MOUNTING KIT	
	SIZE RANGE	3/8" UP TO 4"	
	PRESSURE RATING	PN16 UP TO 2", ABOVE 2" PN10	
TEMPERATURE LIMITS	WORKING PRESSURE BASED AT 20C		
MATERIALS	BODY	PVC	ABS
	BALL	PVC	ABS
	STEM(BLOW-OUT PROOF)	PVC	ABS
	SEATS	PTFE	PTFE
	SEALS	EPDM or VITON	EPDM OR VITON
	END CONNECTIONS	SOLVENT SOCKET or BSPP	SOLVENT SOCKET or BSPP
FEATURES	ANTI-STATIC DEVICE	NO	NO
	FIRE SAFE	NO	NO
	PRIMARY STEM SEAL	RUBBER O RING	RUBBER O RING
	SECONDARY STEM SEAL	RUBBER O RING	RUBBER O RING
	STEM SEAL ADJUSTMENT	NO	NO
	IN-LINE MAINTAINABLE	NO	NO
	OTHER	WRAS Listed for use on potable water	WRAS Listed for use on potable water



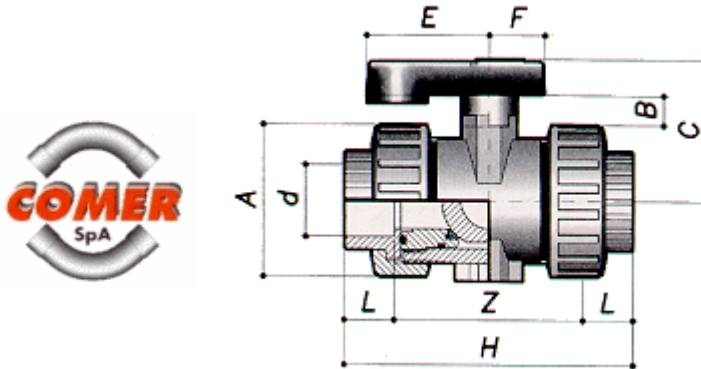
Valve Data Sheet



Doc: BV-Comer/02

Nov 2007

Dimensions:



Pipe OD (d) Metric	Pipe OD (d) Imperial	A	B	C	E	F	H	L	Z	PVC Kg	ABS Kg
20	1/2"	50	10	48	39	19	102	16	70	0.170	0.135
25	3/4"	60	11	54	47	22	120	19	82	0.265	0.212
32	1"	68	13	62	55	25	128	22	84	0.370	0.301
40	1 1/4"	80	18	75	60	30	147	26	95	0.545	0.436
50	1 1/2"	96	20	87	68	35	163	31	101	0.885	0.708
63	2"	116	20	101	80	40	197	38	121	1.440	1.152
75	2 1/2"	145	25	123	90	45	214	44	126	2.300	1.840
90	3"	166	28	138	100	50	241	51	139	3.655	2.924
110	4"	210	28	160	120	60	281	61	159	6.000	4.800

Dimensions in mm. Manufacturer reserves the right to amend without notice.



Model 3741/3742



Doc: CH-3741/01

July 2007

COMER Air operated 2 way uPVC ball valve

Full bore uPVC valve, fitted with CH-air 'A' type pneumatic actuator. Standard version has EPDM seals, but Viton (FPM) seals are available as an option. Supplied assembled and dry bench function tested. Minimum of 80 psi (5.5 bar) air supply pressure to the actuator is required.

3741 With double acting actuator

3742 With spring return actuator

Full size range from 1/2" to 4" (D20 to D110)

WRAS approved product for use on potable water.

Applications:

PVC is odourless and tasteless and is used in many applications such as potable water and many food processing. PVC has good chemical resistance and resists most solutions of acids, alkalis and salts, and solvents that can be diluted with water acids. It is not resistant to aromatic and chlorinated carbons.

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.

Valve Specifications:

Body	PVC
Ball	PVC
Seats	PTFE
Pressure rating	UTI 2" 16 bar, rest 10 bar
Valve temp limits	0 to +60°C
Actuator temp limits	-20 to + 70°C

Accessories:

Solenoid control:

This provides electrical control of the valve. The air is constantly supplied to the solenoid which in turn controls the air to and from the actuator. The solenoid direct mounts to the actuator using the actuator's Namur connection.

Position Confirmation:

Remote end of travel confirmation can be provided by adding a top mounted limit switch box. A variety of switch options and housings are available
See our LSB range for details.

Position control:

The standard on/ off function can be converted to modulating function, using either a 3-15psi or 4-20mA control signal, by adding a pneumatic or electro-pneumatic positioner.
See our YT range for details.



Quick guide to the CH-air A Type actuator standard features :

Robust rack and pinion construction

High accuracy machining of components

ATEX Ex II 2 GD approved for use in hazardous areas

CE Approved

Guaranteed for 1,000,000 cycles

Balanced air & spring strokes in spring return version

Safe to dismantle for routine maintenance

Compliant with all actuator standards

Accessories are easy to mount

Hard anodised aluminium body

*ENP coated option
(Extra cost)*

*Teflon® coated option
(Extra cost)*

*Stainless steel version
(Extra cost)*



Model 3741/3742

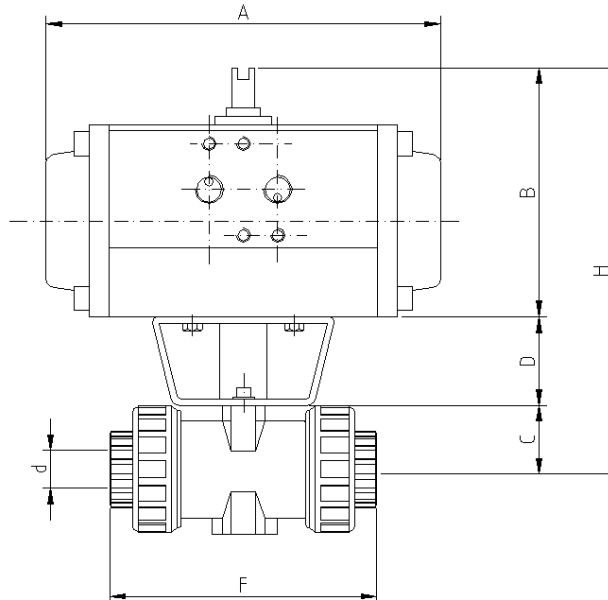


Doc: CH-3741/01

Nov 2006



Air operated PVC ball valve - Dimensions (to nearest mm)



Double Acting

Imperial	Model	A	B	C	D	F	H	Width	Kilos	Metric Pipe OD / Bore 'd'
1/2"	CH042	160	77	25	50	102	152	61	1.0	20 / 15
3/4"	CH042	160	77	30	50	120	158	61	1.1	25 / 20
1"	CH042	160	77	34	50	128	161	61	1.4	32 / 25
1 1/4"	CH042	160	77	40	50	147	167	61	1.5	40 / 32
1 1/2"	CH050	138	87	48	50	163	185	75	1.7	50 / 40
2"	CH063	156	103	58	50	197	211	86	2.5	63 / 50
2 1/2"	CH063	156	103	73	50	214	226	94	3.6	75 / 65
3"	CH075	210	120	83	50	241	253	94	6.0	90 / 80
4"	CH075	210	120	105	70	281	295	104	7.9	110 / 100

Spring Return

1/2"	CH050SR	138	87	25	50	102	162	75	1.5	20 / 15
3/4"	CH050SR	138	87	30	50	120	167	75	1.6	25 / 20
1"	CH050SR	138	87	34	50	128	171	75	1.7	32 / 25
1 1/4"	CH050SR	138	87	40	50	147	177	86	1.9	40 / 32
1 1/2"	CH063SR	156	103	48	50	163	201	86	2.8	50 / 40
2"	CH075SR	210	120	58	50	197	228	94	4.6	63 / 50
2 1/2"	CH075SR	210	120	73	50	214	243	104	5.4	75 / 65
3"	CH085SR	228	130	83	50	241	263	104	7.9	90 / 80
4"	CH100SR	281	145	105	70	281	320	134	12.9	110 / 100