

E87/E88 - Electrically Actuated 3 Way Brass Ball Valve



Valve Features:

- 3 Way Brass Ball Valve
- Screwed BSP Taper
- PTFE Seals
- T-port (E87) or L-port (E88) valve options available

Actuator features:

- IP67 Enclosure (glass-reinforced polyarylamide techno-polymer)
- 2 point or 3 point control
- 2 feedback micro-switches
- 2 cable gland electrical entries

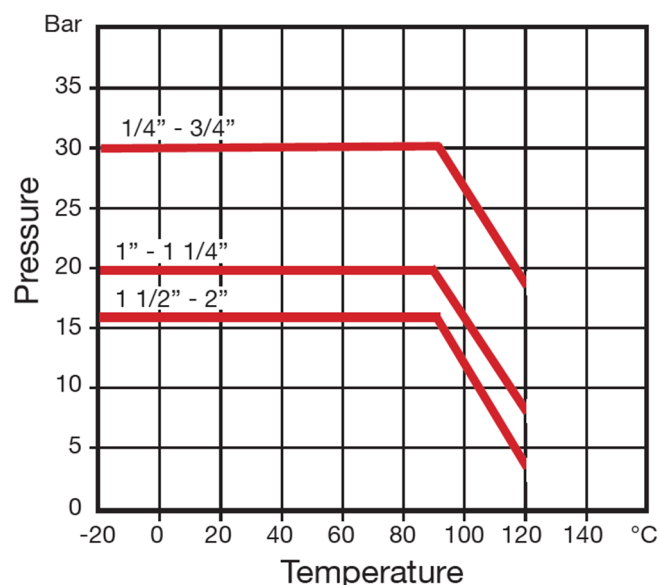
Actuator Options:

- 12vDC, 24v AC/DC, 110v AC, 230v AC
- Fast and slow operating speeds available
- SMART actuator option with WIFI configuration
- Positioning Actuator
- Fail safe super-capacitor
- Anti-condensation heater
- Manual override (AC only)

Technical Data:

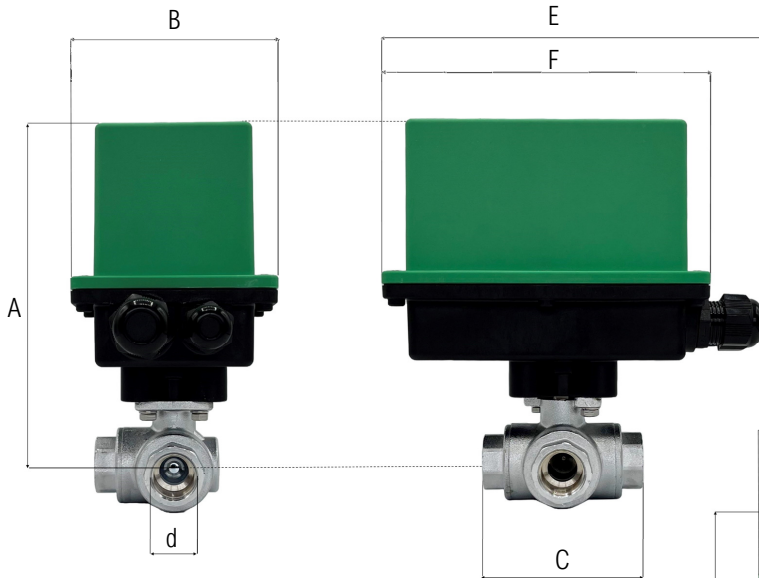
- Max pressure:
 - 1/4" - 3/4" - 30 Bar
 - 1 1/4" - 1 1/4" - 20 Bar
 - 1 1/2" - 2" - 16 Bar
- Valve Working temperature:
 - 20°C to +120°C
- Ambient temperature:
 - 10°C +50°C

Pressure / Temperature:



E87 (T-port) E88 (L-port)

Dimensions: DC Actuator



Operating Speeds:

Diamant Pro AC: 35 seconds

Diamant Pro DC: 12 seconds

Compact Pro AC : 45 seconds

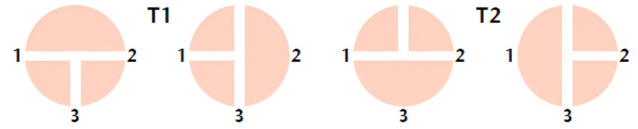
Compact Pro DC: 30 seconds

Universal Pro (AC only): 55 seconds

For faster operating speeds please contact us.

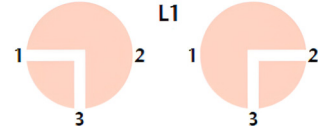
T-port or L-port?

T-port valves provide flow straight through the valve. i.e. 1 > 2 or 2 > 1.
When operated flow is diverted to either 1 > 3 / 3 > 1 or 2 > 3 / 3 > 2

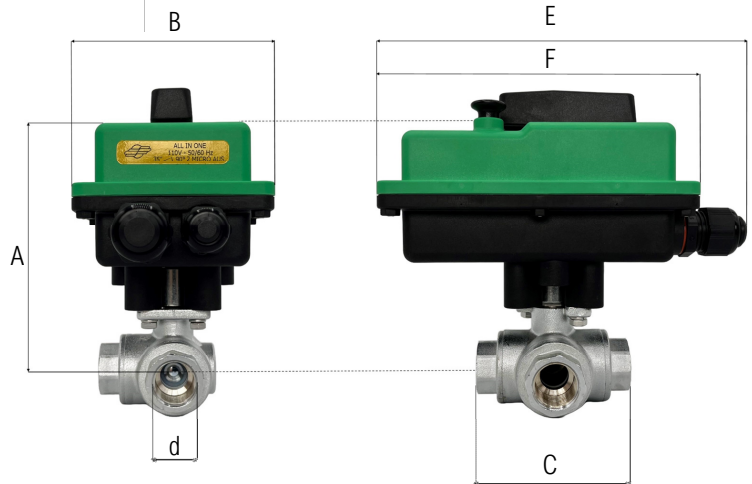


L-port valves are used for diverting or mixing applications.

i.e. 1 > 3 / 3 > 1 or 2 > 3 / 3 > 2



AC Actuator



Actuator	Diamant Pro				Compact Pro		Universal Pro		
	DN	1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
d	10	10	14	19	24	30	38	48	
A (DC)	153	153	156	165	174	179	NA	NA	
A (AC)	118	118	121	130	143	148	184	193.5	
B	95	95	95	95	95	95	139	139	
C	65	65	78	87	105	118	134	161	
E	168	168	168	168	197	197	229	229	
F	144	144	144	144	171	171	204	204	

Note: Height of optional manual-override lever = Diamant Pro 20mm, Compact Pro 27mm

Dimensions in mm

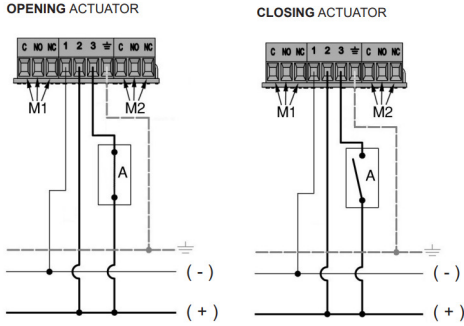
Specification is subject to change without prior notice

Actuator Wiring Information:

DC Actuator

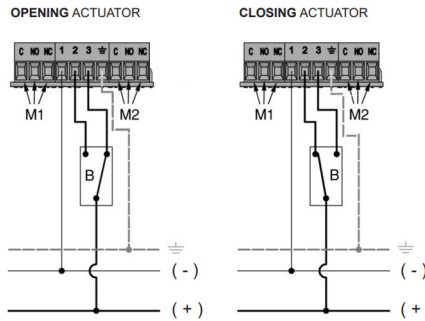
2 Point Control - On/Off (Switch)

The voltage on terminal 3 can be supplied by means of a switch.
One electric control can activate several actuators.



3 Point Control - On/Off (Changeover)

Voltage should be diverted to terminal 2 or 3.
Each actuator must be operated by a single electric control.



- 1 - Negative (-)
- 2 - Closing control (+)
- 3 - Opening control (+)
- M1 - Opening auxiliary micro
- M2 - Closing auxiliary micro

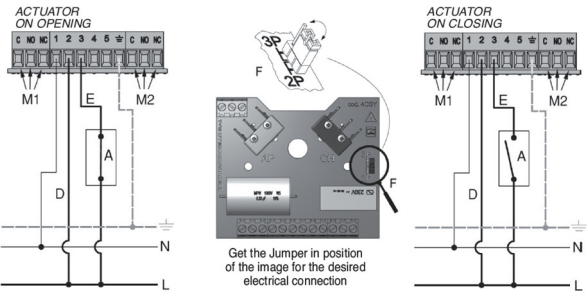
- B - Deviator-type control
- ⊕ - Earth

If powered by alternating current
(-) = Neutral
(+) = Phase

AC Actuator

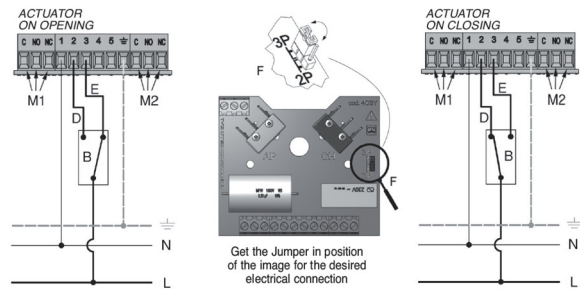
2 Point Control - On/Off (Switch)

Terminal 1: neutral;
Terminal 2: fixed closing phase
Terminal 3: opening phase
The phase to terminal 3 can be supplied by means of a switch.
One electric control can activate several actuators.



3 Point Control - On/Off (Changeover)

Terminal 1: neutral; Terminal 2: closing phase;
Terminal 3: opening phase
Phase shall be diverted to terminal 2 or terminal 3
Each actuator must be operated by a single electric control



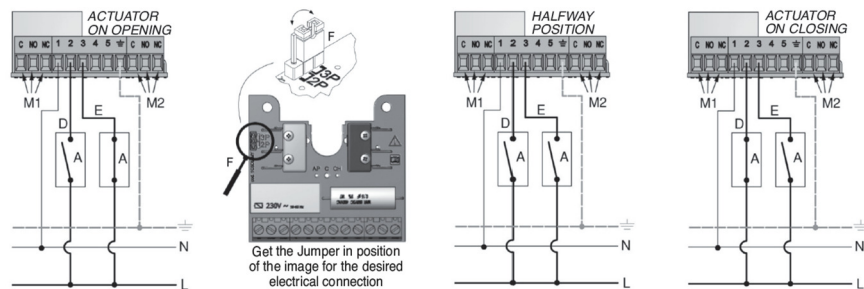
- KEY:
- 1 - Neutral
 - 2 - Closing phase
 - 3 - Opening phase
 - 4 - Outlet opening phase
 - 5 - Outlet closing phase

- B - Switch-type control
- D - Closing
- E - Opening
- F - Jumper
- ⊕ - Earth

3 Point Control - Modulating (2 Switches)

Terminal 1: neutral;
Terminal 2: fixed closing phase
Terminal 3: opening phase

The phase can be diverted to terminal 2, terminal 3 or to none of them, in order to obtain partial openings of the valve.



- KEY:
- 1 - Neutral
 - 2 - Closing phase
 - 3 - Opening phase
 - 4 - Outlet opening phase
 - 5 - Outlet closing phase

- A - Switch-type control
- D - Closing
- E - Opening
- F - Jumper
- ⊕ - Earth

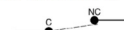
- OPTIONAL
- C - Common
 - NO - Normally open
 - NC - Normally closed
 - M1 - Opening additional microswitch
 - M2 - Closing additional microswitch

This is necessary for modulating the flow when a regulation is needed. Each actuator must be operated by a single electric control

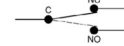
Optional Auxiliary Microswitches:

M1 • OPENING AUXILIARY MICROSWITCH

OPEN VALVE



NON-OPEN VALVE



M2 • CLOSING AUXILIARY MICROSWITCH

CLOSED VALVE



NON-CLOSED VALVE

