

# E87/E88 - Electrically Actuated 3 Way Brass Ball Valve





#### Valve Features:

- 3 Way Brass Ball Valve
- Screwed BSP Parallel
- 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

## 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

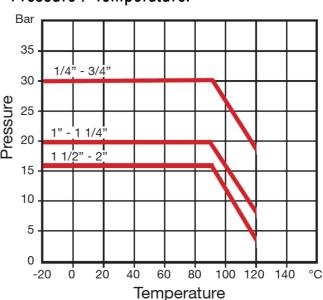
• Ambient temperature:

-10°C +50°C

## **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)

## Pressure / Temperature:





SOLUTIONS LTO

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

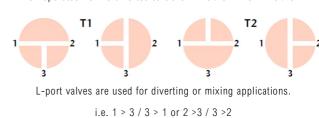
Dimensions: DC Actuator

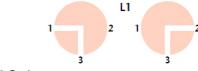
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#### T-port or L-port?

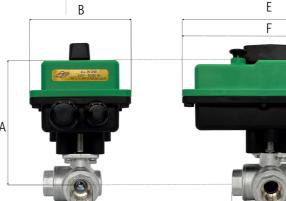
T-port valves provide flow straight through the valve. i.e. 1 > 2 or 2 > 1. When operated flow is diverted to either 1 > 3 / 3 > 1 or 2 > 3 / 3 > 2





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AC 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.

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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
В	95	95	95	95	95	95	139	139
С	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

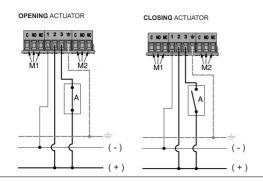
## **Actuator Wiring Information:**

#### DC Actuator

#### 2 Point Control - On/Off (Switch)

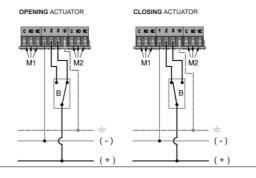
The voltage on terminal 3 can be supplied by means of a switch.

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.





- Negative ( )
- 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

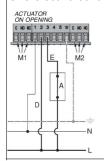
#### 2 Point Control - On/Off (Switch)

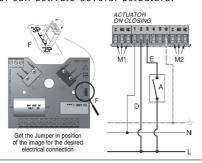
Terminal 1: neutral;

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.





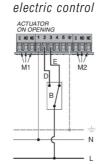
#### 3 Point Control - On/Off (Changeover)

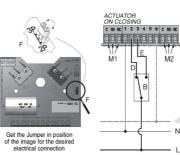
Terminal 1: neutral; Terminal 2: closing phase;

Terminal 3: opening phase

Phase shall be diverted to terminal 2 or terminal

Each actuator must be operated by a single







- Switch-type control

- Closing

Ε - Opening

Jumper

- Earth

- Common

NO - Normally open

NC - Normally closed

M1 - Opening extra microswitch

- Closing extra microswitch

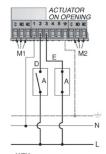
## 3 Point Control - Modulating (2 Switches)

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



- Switch-type control
- Closing
- Opening
- Jumper - Earth

OPTIONAL

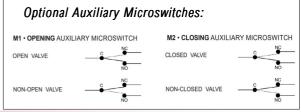
- Common

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



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