

## XII. ELECTRIC MOTOR ACTUATED BALL VALVES

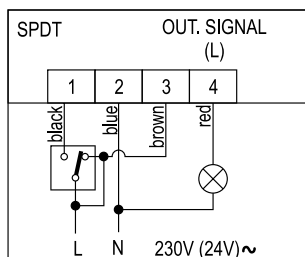
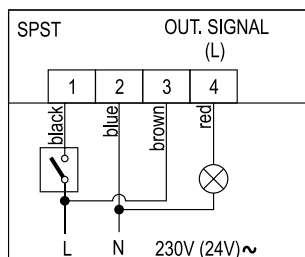
### EMV110 series 502/503

2-POINT CONTROL 1 / 0 STOPPING AT THE END POSITIONS

EMV110 series electric motor actuated ball valve is designed as closing element for heating systems (solar, remote, house-heating), for hot blast heating, cooling systems, swimming pools, petrochemical industry, alternative heating and agricultural purposes.

#### Features:

- Narrow width (53mm) enables mounting into manifold cabinets (55mm raster)
- Built-in relay module enables two wire control SPST
- Simple disassembly of the drive with clip
- Rotation angle is fixed (90°).
- Output electric signal (L) at the end position of the actuator (circulation pump control)



#### Actuator characteristics:

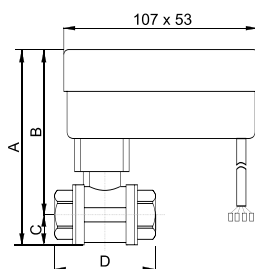
- Supply voltage: 230VAC/50Hz, \*24VAC/50Hz
- Power consumption: 7VA
- Micro switch rating: 1(1)A, 230VAC
- Protection class (in accordance with EN-60335-1): II
- Enclosure rating (in accordance with IEC60529): IP44
- In accordance with: EMC directive: 2004/108/EEC,
- LV Directive: 2006/95/EEC, PAH directive: 2005/69/EEC
- Ambient temperature: 0...55°C
- Humidity: RH 0%...80% (non condensed)
- Storage temperature: -10...+70°C
- Connection cord: 4x0.5mm2, L=0.3m

- Position indication: on actuator cover
- Possibility of manual control: no
- Direction of rotation: not defined CW/CCW
- Built in relay module: yes

#### Valve characteristics:

- Medium: water, nonaggressive fluid, air, glycol < 30%
- Medium temperature: +5°C...90°C
- Working pressure: max. 16bar
- Material:
  - Valve body: brass CuZn40Pb2 Ni
  - Ball: brass CuZn40Pb2 Cr
  - O-rings: PTFE, FPM, EPDM

### EMV 110 series 502



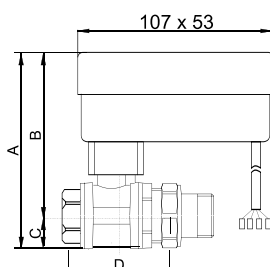
Ends: female/female

| DN        | A   | B     | C    | D  | Kvs | kg   |
|-----------|-----|-------|------|----|-----|------|
| 15 - 1/2" | 112 | 103,5 | 17,5 | 63 | 17  | 0,86 |
| 20 - 3/4" | 124 | 104,5 | 19,5 | 57 | 41  | 0,82 |
| 25 - 1"   | 129 | 105,5 | 23,5 | 68 | 68  | 0,98 |

\* Kvs=m³/h Δp=1bar

| Code   | Type               | DN        | Voltage      | Time      | MAX Torque |
|--------|--------------------|-----------|--------------|-----------|------------|
| *10502 | EMV 110 502/7930-2 | 15 - 1/2" | 230VAC, 50Hz | 30s / 90° | 8Nm        |
| *10503 | EMV 110 502/7930-3 | 20 - 3/4" | 230VAC, 50Hz | 30s / 90° | 8Nm        |
| *10504 | EMV 110 502/7930-4 | 25 - 1"   | 230VAC, 50Hz | 30s / 90° | 8Nm        |
| *10508 | EMV 110 502/7933-2 | 15 - 1/2" | 24VAC, 50Hz  | 30s / 90° | 8Nm        |
| *10509 | EMV 110 502/7933-3 | 20 - 3/4" | 24VAC, 50Hz  | 30s / 90° | 8Nm        |
| *10510 | EMV 110 502/7933-4 | 25 - 1"   | 24VAC, 50Hz  | 30s / 90° | 8Nm        |

### EMV 110 series 503



Ends: male/ female hose union

| DN        | A   | B     | C    | D    | E    | Kvs | kg   |
|-----------|-----|-------|------|------|------|-----|------|
| 15 - 1/2" | 112 | 103,5 | 17,5 | 99   | 86   | 17  | 0,89 |
| 20 - 3/4" | 124 | 104,5 | 19,5 | 90,5 | 77,5 | 41  | 0,87 |
| 25 - 1"   | 129 | 105,5 | 23,5 | 104  | 90   | 68  | 1,04 |

\* Kvs=m³/h Δp=1bar

| Code   | Type               | DN        | Voltage      | Time      | MAX Torque |
|--------|--------------------|-----------|--------------|-----------|------------|
| *10512 | EMV 110 503/7930-2 | 15 - 1/2" | 230VAC, 50Hz | 30s / 90° | 8Nm        |
| *10513 | EMV 110 503/7930-3 | 20 - 3/4" | 230VAC, 50Hz | 30s / 90° | 8Nm        |
| *10514 | EMV 110 503/7930-4 | 25 - 1"   | 230VAC, 50Hz | 30s / 90° | 8Nm        |
| *10515 | EMV 110 503/7933-2 | 15 - 1/2" | 24VAC, 50Hz  | 30s / 90° | 8Nm        |
| *10516 | EMV 110 503/7933-3 | 20 - 3/4" | 24VAC, 50Hz  | 30s / 90° | 8Nm        |
| *10517 | EMV 110 503/7933-4 | 25 - 1"   | 24VAC, 50Hz  | 30s / 90° | 8Nm        |