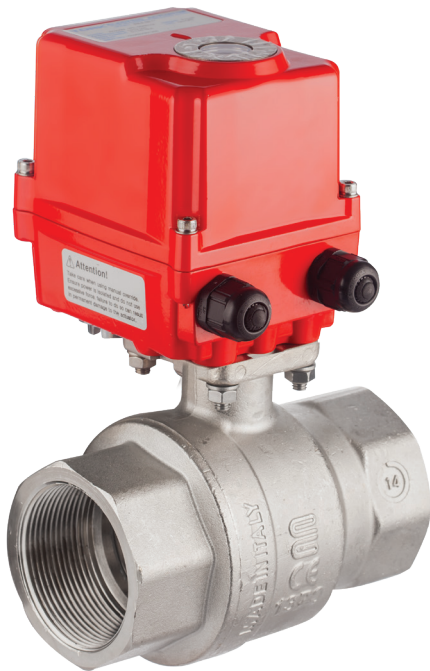
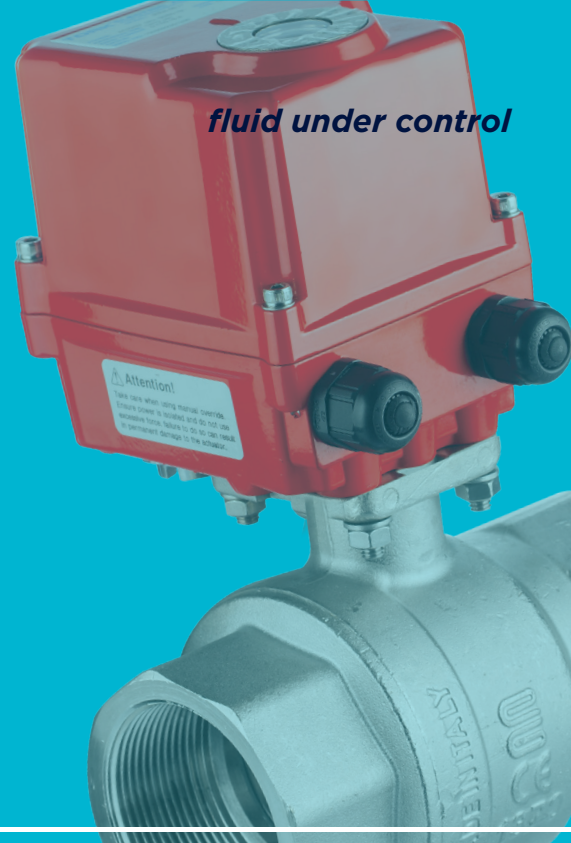


# ELECTRIC ACTUATED BRASS BALL VALVE (TORK-KV.901, EAV-901)



## Ball Valve Details

- Ball valves are brass; The actuator is designed for easy and quick installation.
- Made of durable and long-lasting material, it is resistant to abrasion. Actuator connections according to ISO 5211.

## TECHNICAL DETAILS

- Full transition
- Excellent sealing at low and high pressures
- Fast 90 degree opening operation
- No need maintenance

**THREAD:** UNI EN 10226 thread.

**WORKING PRESSURE :** Refer to the table from PN 40 (1/4 ") to PN 25 (2" 1/2 PN25).

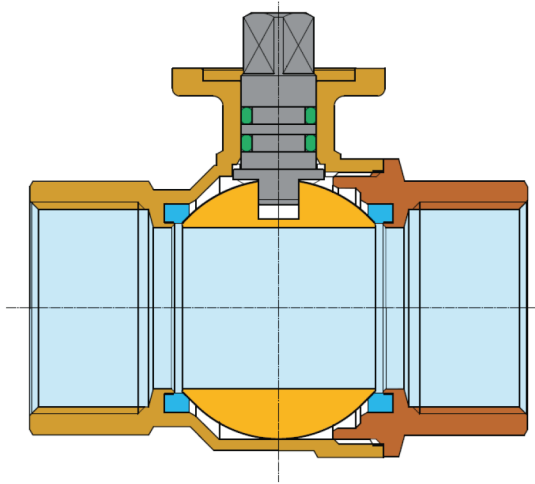
**TEMPERATURE :** -20 °C / 130 °C

**APPLICATION :** Ball valves are suitable for hot and cold water, air compressor, oil, hydrocarbon, non-corrosive fluid applications. Refer to the chemical resistance table for different specific uses.

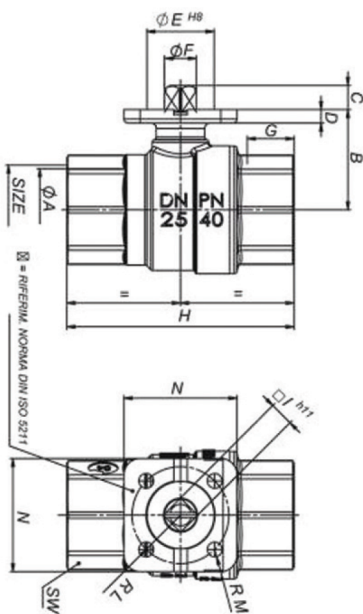
## Electric Actuator Details

|                       |   |
|-----------------------|---|
| Type                  | : On-off, on request proportional (Except TREA40)   |
| Protection Class      | : IP67, on request IP68   |
| ATEX Protection Class | : II 2G Ex db IIC T4 GB (on request )   |
| Dehumidification      | : 5 W Heater Against Humidity   |
| Working Voltage       | : 220VAC, 24VDC, 380VAC<br>(Only On-Off position and from TREA150)  |
| Working Temperature   | : -20°C...+70°C (-50°C...80°C)  |
| Torque Range          | : 40Nm...1200 Nm  |
| Body                  | : Aluminium Extrusion   |
| Valve Connection      | : Suitable for specified connection dimensions of ISO 5211  |
| Position Indicator    | : Open / Close  |
| Alternative Operation | : Manual Handle or on Pcb   |
| On Request Annexes    | : Potentiometer Annexes, Current Up to Position Output Annex (4...20 mA), Chargeable Battery Unit, LCU, Flame Proof |

## ► KV901 BALL VALVE



- BODY** 1 EN 12165
- MIDDLE PART** 2 EN 12165
- BALL** 3 EN 12165
- BALL GASKET** 4 P.T.F.E.
- SHAFT** 5 EN 12164
- STAMP** 6 P.T.F.E.
- BODY GASKET** 7 2 ELASTOMER O-RING

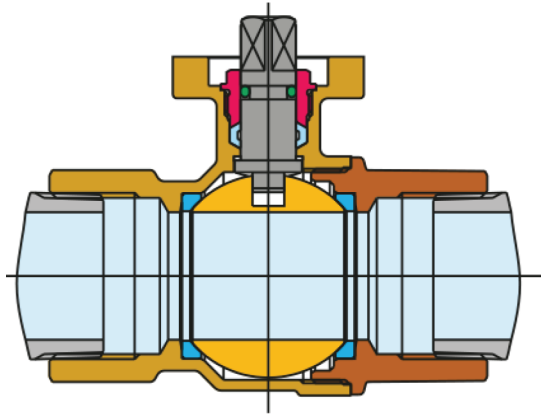


| SIZE                | 1/4"   | 3/8"   | 1/2"   | 3/4"   | 1"     | 1" 1/4 | 1" 1/2  | 2"      | 2" 1/2 | 3"    |
|---------------------|--------|--------|--------|--------|--------|--------|---------|---------|--------|-------|
| DN                  | 8      | 10     | 15     | 20     | 25     | 32     | 40      | 50      | 65     | 80    |
| <b>MAX TORK</b>     |        |        |        |        |        |        |         |         |        |       |
| PN 0 T 25 °C        | 2,7 Nm | 2,7 Nm | 2,7 Nm | 3,7 Nm | 5,6 Nm | 6,6 Nm | 8 Nm    | 9,5 Nm  | 18 Nm  | 34 Nm |
| PN 16 T 25 °C       | 3 Nm   | 3 Nm   | 3 Nm   | 4,1 Nm | 6,1 Nm | 7,5 Nm | 9,5 Nm  | 11,5 Nm | 21 Nm  | 37 Nm |
| PN 25 T 25 °C       | 3 Nm   | 3 Nm   | 3 Nm   | 4,4 Nm | 6,4 Nm | 7,8 Nm | 10,5 Nm | 13 Nm   | 33 Nm  | 40 Nm |
| PN 40 T 25 °C       | 3,2 Nm | 3,2 Nm | 3,2 Nm | 4,8 Nm | 6,8 Nm | 8,2 Nm | -       | -       | -      | -     |
| Kv H <sub>2</sub> O | 5,9    | 9,4    | 17     | 41     | 70     | 121    | 200     | 292     | 535    | 850   |

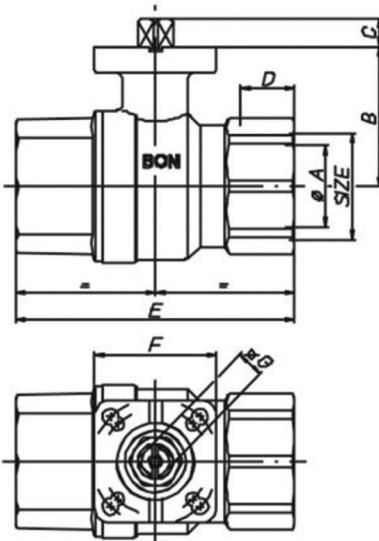
Observe the safety factor to be used with different actuators.

| SIZE            | 1/4" | 3/8" | 1/2" | 3/4" | 1"   | 1" 1/2 | 2"   | 2" 1/2 | 3"   |
|-----------------|------|------|------|------|------|--------|------|--------|------|
| ØA pass./bore   | 10   | 10   | 15   | 20   | 25   | 40     | 48   | 61     | 78   |
| B mm            | 29,4 | 29,4 | 29,4 | 33   | 37,2 | 53     | 64   | 82,75  | 94,5 |
| C mm            | 9    | 9    | 9    | 9    | 9    | 11     | 11   | 14     | 15,5 |
| D mm            | 5    | 5    | 5    | 5    | 5    | 5,5    | 6,5  | 10     | 11,5 |
| ØE mm           | 25   | 25   | 25   | 25   | 25   | 30     | 30   | 55     | 55   |
| F mm            | 10,8 | 10,8 | 10,8 | 10,8 | 10,8 | 13,9   | 13,9 | 20,9   | 26,9 |
| G mm            | 15   | 15   | 15   | 16,3 | 19,1 | 21,4   | 25,7 | 30,2   | 33,3 |
| H mm            | 61   | 61   | 61   | 69,5 | 84,5 | 110    | 130  | 161    | 183  |
| I mm            | 9    | 9    | 9    | 9    | 9    | 11     | 11   | 14     | 14   |
| L mm            | 18   | 18   | 18   | 18   | 18   | 21     | 21   | 35     | 35   |
| M mm            | 2,75 | 2,75 | 2,75 | 2,75 | 2,75 | 2,75   | 2,75 | 4,5    | 4,5  |
| N mm            | 37   | 37   | 37   | 37   | 42   | 42     | 48   | 68     | 68   |
| O mm            | F3   | F3   | F3   | F3   | F3   | F4     | F4   | F7     | F7   |
| SW mm           | 25   | 25   | 25   | 31   | 38   | 55     | 68   | 83     | 98   |
| Peac/Weight gr. | -    | -    | 217  | 315  | 538  | 1159   | 1990 | 3606   | 5920 |

► KV901-Y KÜRESEL VANA



- 1 **BODY**  
DN 617 N UNI EN 12165
- 2 **MIDDLE PART**  
DN 617 N UNI EN 12165
- 3 **BALL**  
DN 614 N UNI EN 12164
- 4 **BALL GASKET**  
P.T.F.E.
- 5 **SHAFT**  
DN 614 N UNI EN 12164
- 6 **O-RING**  
ELASTOMETRO
- 7 **SEALING**  
DN 614 N UNI EN 12164
- 8 **STAMP**  
P.T.F.E.
- 9 **SHAFT GASKET**  
P.T.F.E.

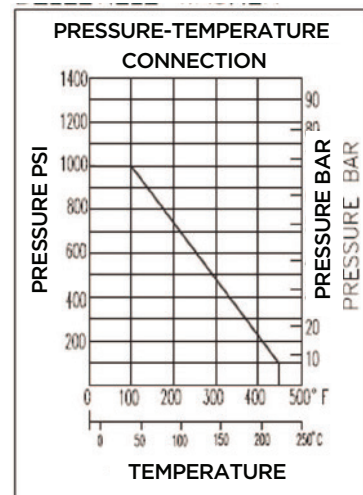
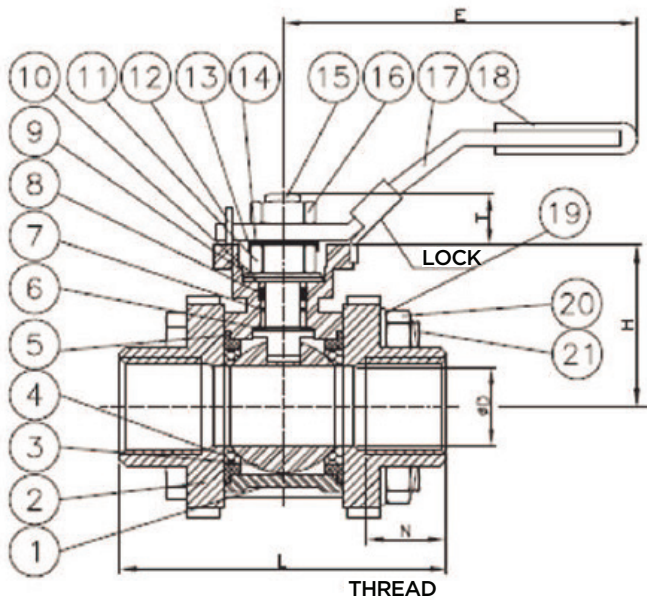


|                     |      |      |      |      |     |        |        |    |        |
|---------------------|------|------|------|------|-----|--------|--------|----|--------|
| <b>BODY</b>         | 1/4" | 3/8" | 1/2" | 3/4" | 1"  | 1" 1/4 | -      | -  | -      |
| <b>DN MAX (Bar)</b> | 40   | 40   | 40   | 40   | 40  | 40     | -      | -  | -      |
| <b>TORK (Nm)</b>    | 3,2  | 3,2  | 4,2  | 5,6  | 8,4 | 9,8    | -      | -  | -      |
| <b>BODY</b>         | 1/4" | 3/8" | 1/2" | 3/4" | 1"  | 1" 1/4 | 1" 1/2 | 2" | 2" 1/2 |
| <b>PN 25</b>        | 25   | 25   | 25   | 25   | 25  | 25     | 25     | 25 | 25     |
| <b>TORK (Nm)</b>    | 2,6  | 2,6  | 4    | 5,2  | 7,8 | 9,1    | 13     | 25 | 38     |
| <b>BODY</b>         | 1/4" | 3/8" | 1/2" | 3/4" | 1"  | 1" 1/4 | 1" 1/2 | 2" | 2" 1/2 |
| <b>PN 25</b>        | 16   | 16   | 16   | 16   | 16  | 16     | 16     | 16 | 16     |
| <b>TORK (Nm)</b>    | 2,4  | 2,4  | 3,6  | 5    | 7,2 | 8,5    | 12     | 23 | 36     |
| <b>BODY</b>         | 1/4" | 3/8" | 1/2" | 3/4" | 1"  | 1" 1/4 | 1" 1/2 | 2" | 2" 1/2 |
| <b>PN 25</b>        | 0    | 0    | 0    | 0    | 0   | 0      | 0      | 0  | 0      |
| <b>TORK (Nm)</b>    | 2    | 2    | 3    | 4    | 6   | 7      | 10     | 20 | 32     |

Observe the safety factor to be used with different actuators.

|                        |      |      |      |      |       |        |        |      |        |
|------------------------|------|------|------|------|-------|--------|--------|------|--------|
| <b>SIZE</b>            | 1/4" | 3/8" | 1/2" | 3/4" | 1"    | 1" 1/4 | 1" 1/2 | 2"   | 2" 1/2 |
| <b>ØA pass./bore</b>   | 8    | 10   | 15   | 20   | 25    | 32     | 40     | 50   | 63     |
| <b>B mm</b>            | 38   | 38   | 38   | 40,5 | 44    | 55     | 61,5   | 73   | 82,75  |
| <b>C mm</b>            | 9    | 9    | 9    | 9    | 9     | 11     | 11     | 14   | 15,5   |
| <b>D mm</b>            | 15   | 15   | 15   | 16,3 | 19,1  | 21,4   | 21,4   | 25,7 | 30,2   |
| <b>E mm</b>            | 75   | 75   | 75   | 80   | 90    | 110    | 120    | 140  | 155    |
| <b>F mm</b>            | 37   | 37   | 37   | 37   | 37    | 48     | 48     | 48   | 68     |
| <b>ØG mm</b>           | 9    | 9    | 9    | 9    | 9     | 11     | 11     | 14   | 14     |
| <b>SW mm</b>           | 26   | 26   | 26   | 32   | 41    | 50     | 55     | 70   | 83     |
| <b>ISO FLANGE</b>      | F3   | F3   | F3   | F3   | F3/F4 | F4/F5  | F4/F5  | F5   | F7     |
| <b>Peac/Weight gr.</b> | 412  | 390  | 342  | 463  | 705   | 1220   | 1650   | 2888 | 3285   |

## ▶ BALL VALVE SIZE



| SIZE |        | Ø D | L±2 | H     | E±3 | T  | S  | Ø D1  | L1±2 | ISO 5211 |      | N    | KV VALUES |
|------|--------|-----|-----|-------|-----|----|----|-------|------|----------|------|------|-----------|
| DN   | INCH   |     |     |       |     |    |    |       |      | Ø K1     | Ø K2 |      |           |
| 15   | 1/2"   | 15  | 75  | 38.0  | 140 | 9  | 9  | 21.8  | 70   | F03      | F04  | 20.0 | 9.7       |
| 20   | 3/4"   | 20  | 80  | 47.0  | 140 | 9  | 9  | 27.2  | 85   | F03      | F04  | 21.0 | 18.2      |
| 25   | 1"     | 25  | 90  | 57.2  | 154 | 11 | 11 | 34.0  | 95   | F04      | F05  | 21.0 | 30.3      |
| 32   | 1-1/4" | 32  | 110 | 62.5  | 154 | 11 | 11 | 42.7  | 110  | F04      | F05  | 27.5 | 49.3      |
| 40   | 1-1/2" | 38  | 120 | 77.5  | 184 | 14 | 14 | 48.8  | 120  | F05      | F07  | 26.5 | 69.2      |
| 50   | 2"     | 50  | 162 | 86.5  | 184 | 14 | 14 | 61.2  | 142  | F05      | F07  | 31.0 | 129.7     |
| 65   | 2-1/2" | 65  | 162 | 108.0 | 261 | 17 | 17 | 74.0  | 168  | F07      | F10  | 28.0 | 229.2     |
| 80   | 3"     | 80  | 184 | 115.0 | 261 | 17 | 17 | 90.0  | 182  | F07      | F10  | 33.5 | 358.9     |
| 100  | 4"     | 100 | 228 | 141.0 | 337 | 22 | 22 | 115.6 | 227  | F10      | F12  | 41.0 | 674.6     |

Ball Valve Code : Tork-KV.901

Electric Actuated Ball Valve Code : EAV-901