



## 2/2-way ball valve with electric rotary actuator, ball valve in plastic, DN 10...DN 50

- Suitable for aggressive media
- High flow rate value
- Actuator with adjustable limit switches
- Visual position indicator
- Safe blocked union nuts with Dual Block® technology
- Multivoltage



Product variants described in the data sheet may differ from the product presentation and description.

### Type description

The electrical ball valve Type 8804 consists of an electrical rotary actuator and a 2/2 or 3/2-way ball valve made of plastic. Different housings and materials are available for various applications. The rotary actuator is compactly built. Moreover it can be used also as single device for the operation of other control elements (see data-sheet Type 3003). Heat resistors and torque limiters are standard. The body is made of low inflammable material, classified according to UL 94 V0.

### Special features

The ball valves are equipped with the so-called Dual Block® Technology. This system allows you to lock the union nuts in the preset position and prevents them becoming loose during operation.

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## 1. General technical data

Product characteristics	
Dimensions	Further information can be found in chapter "4. Dimensions" on page 5.
Material	
Seal	PTFE/EPDM (PTFE/FKM on request)
Body	PVC-U (PP, PVDF, PVC-C on request)
Material of electrical actuator	
Cover	Nylon
Body	PA 6.6
Axis	Stainless steel
Screws	Stainless steel
Gear	Stainless steel, PC
Performance data	
Operating pressure	0...10 bar/0...16 bar See "6.1. Pressure temperature diagram" on page 8
Rotation angle	90° (± 5°)
Rotation time	Further information can be found in chapter "7. Ordering information" on page 8.
Limit switches	4 adjustable (2 for the motor and 2 additional ones for feedback) Max. 250 V AC/5 A
Electrical data	
Operating voltages	15...30 V AC, 50...60 Hz, 12...48 V DC 100...240 V AC, 50...60 Hz, 100...350 V DC
Voltage tolerance	± 10 % At 12...48 V DC, the operating voltage must not drop below 11.5 V.
Electrical connection	Cable plug according to EN 175301 - 803 (supply voltage) included in the scope of delivery Cable glands according to ISO M20
Duty cycle	According to IEC34, S4 = 50 %
Medium data	
Medium temperature	
PVC-U	0 °C...+ 60 °C
PP	+ 10 °C...+ 80 °C
PVDF	0 °C...+ 120 °C
Process/Port connection & communication	
Electrical connection	Cable plug according to EN 175301 - 803 (supply voltage) included Cable glands according to ISO M20
Port connections	
PVC-U variant	Glued socket connection
PP variant, PVDF variant	Weld socket connection
Armature-side resp. actuator-side interface	Flange according to ISO 5211
Approvals and conformities	
Degree of protection	IP66 if mounted with cable plug
Environment and installation	
Installation position	Do not install the actuator upside down, maximum installation angle: 90°
Ambient temperature	- 10 °C...+ 55 °C

## 2. Approvals and conformities

### 2.1. General notes

- The approvals and conformities listed below must be stated when making enquiries. This is the only way to ensure that the product complies with all required specifications.
- Not all available variants can be supplied with the below mentioned approvals or conformities.

## 2.2. Conformity

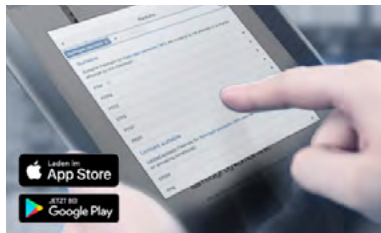
In accordance with the Declaration of Conformity, the product is compliant with the EU Directives.

## 2.3. Standards

The applied standards which are used to demonstrate compliance with the EU Directives are listed in the EU-Type Examination Certificate and/or the EU Declaration of Conformity.

# 3. Materials

## 3.1. Bürkert resistApp

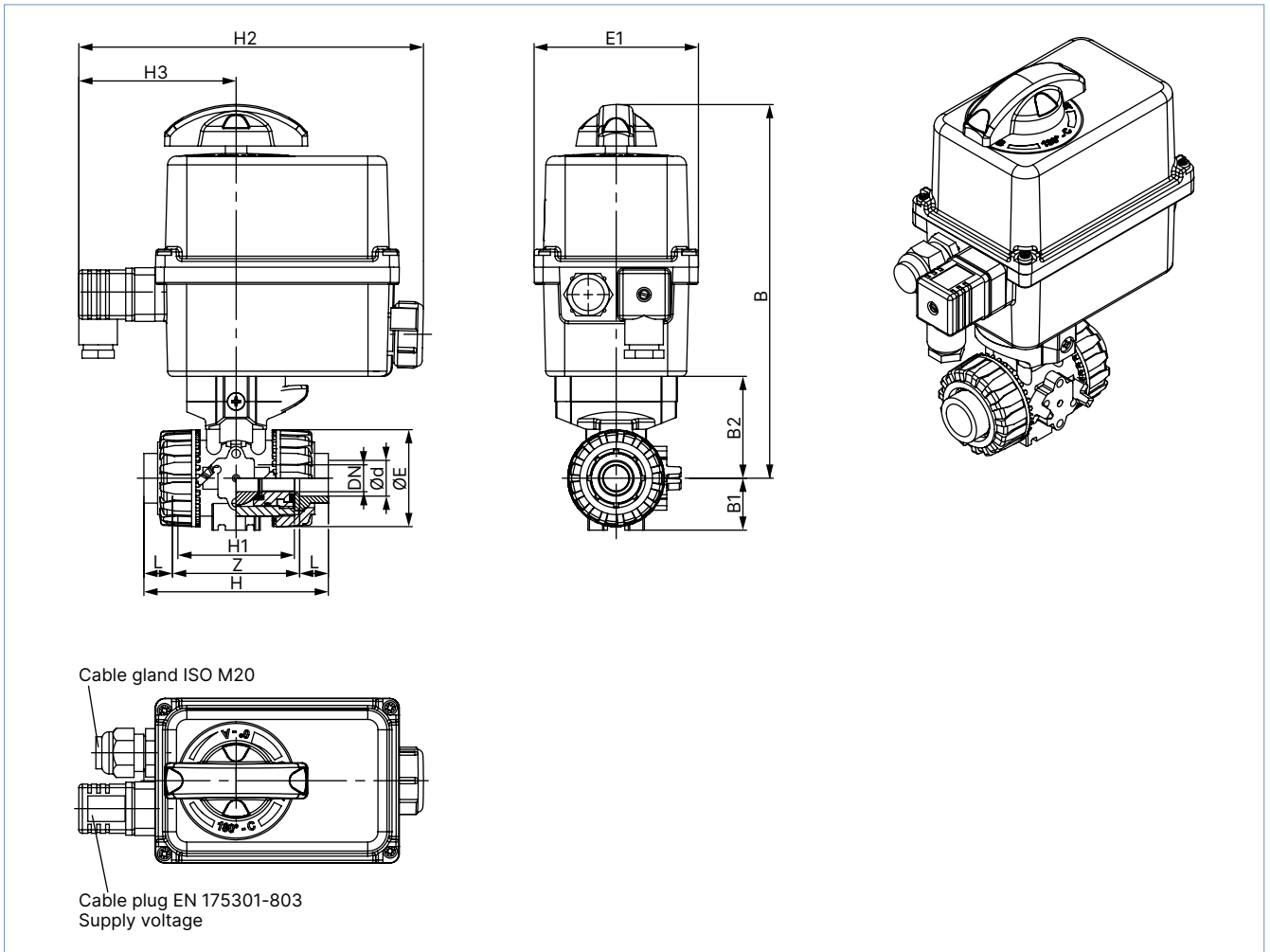


### Bürkert resistApp – Chemical resistance chart

You want to ensure the reliability and durability of the materials in your individual application case? Verify your combination of media and materials on our website or in our resistApp.

[Start chemical resistance check](#)

## 4. Dimensions

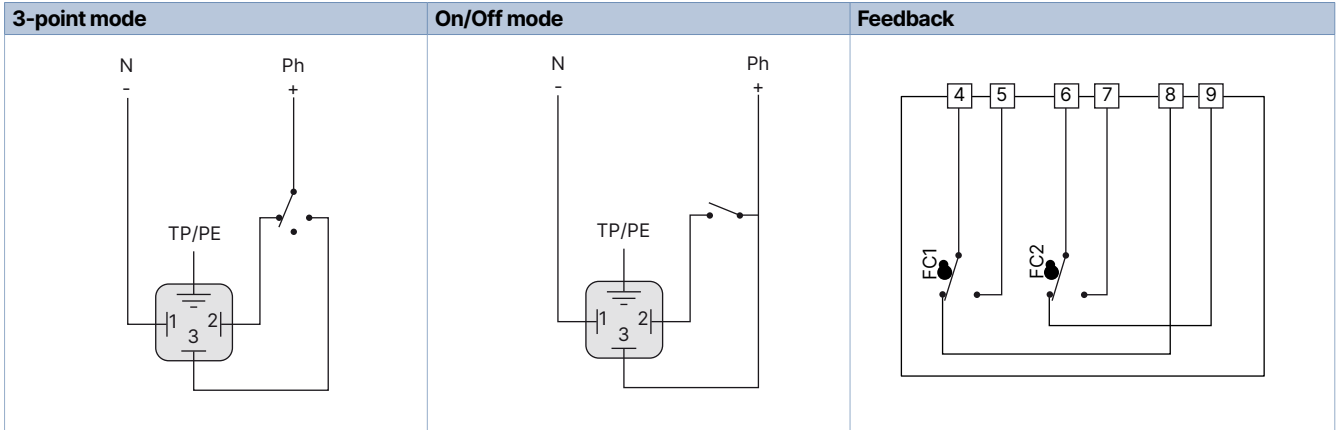


DN	Ø d [mm]	H [mm]	H1 [mm]	Z [mm]	L [mm]	Ø E [mm]	B1 [mm]	B2 [mm]	B [mm]	E1 [mm]	H2 [mm]	H3 [mm]
10	16	103	65	75	14	54	29	58	206	92	180	75
15	20	103	65	71	16	54	29	58	206	92	180	75
20	25	115	70	77	19	65	34.5	69	217	92	180	75
25	32	128	78	84	22	73	39	74	222	92	180	75
32	40	146	88	94	26	86	46	91	239	92	180	75
40	50	164	93	102	31	98	52	97	245	92	180	75
50	63	199	111	123	38	122	62	114	261	92	180	75

## 5. Device / Process connections

### 5.1. Connection details

#### On/Off variant

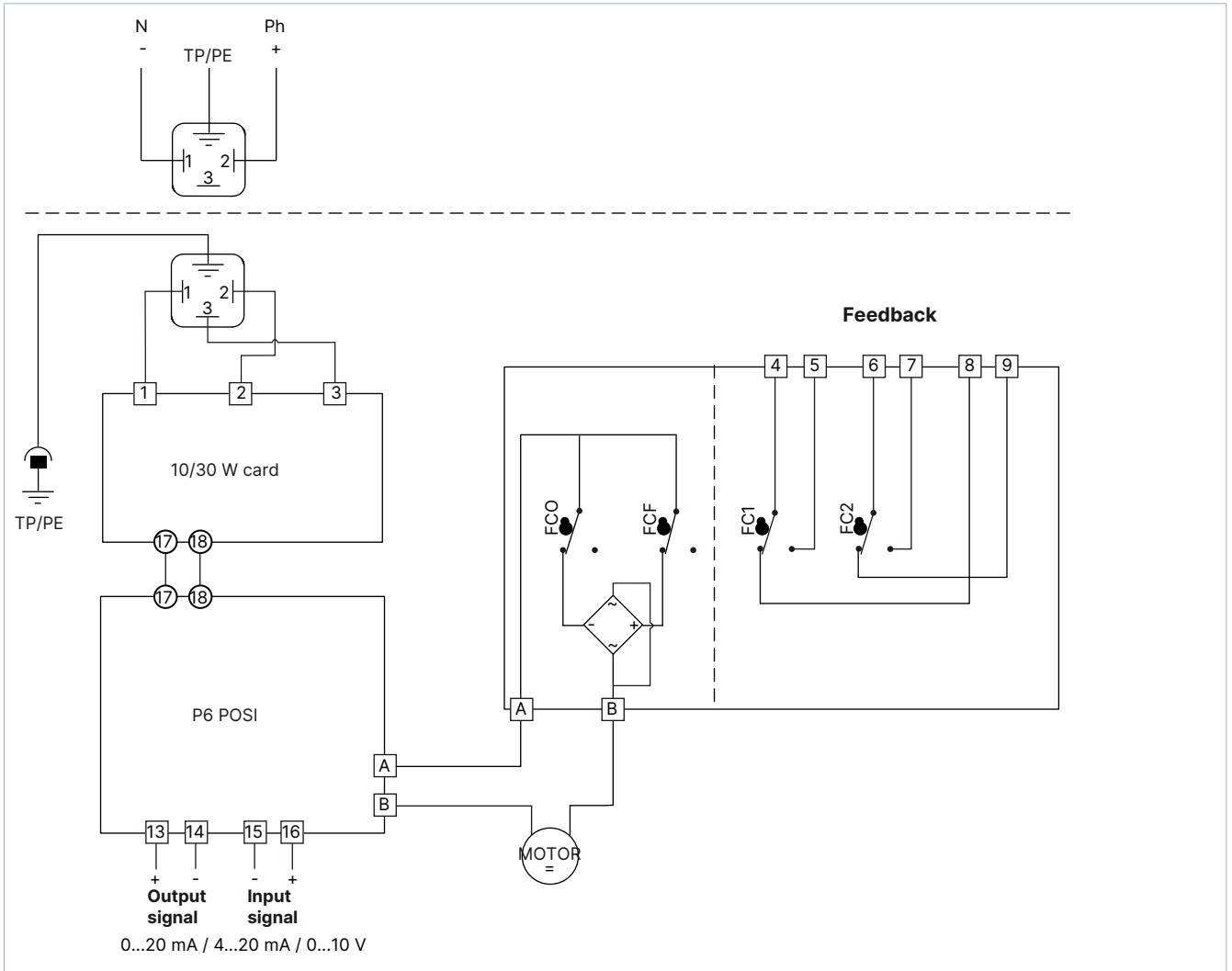


Symbol	Description
FCO	Limit switch OPEN
FCF	Limit switch CLOSED
FC1	Auxiliary limit switch 1
FC2	Auxiliary limit switch 2

**Variant with analogue signal input**

**Note:**

- The resolution of the closed-loop control mode is 1°.
- The input resistance for control 0...10 V is 10 kΩ.
- The input resistance for control 0...20 mA/4...20 mA is 100 Ω.



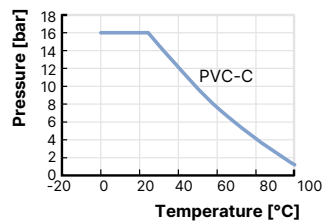
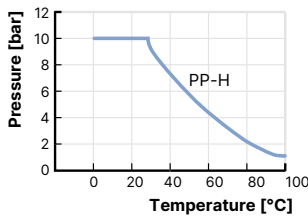
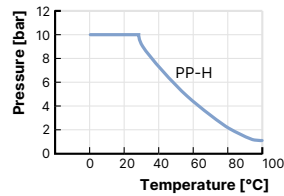
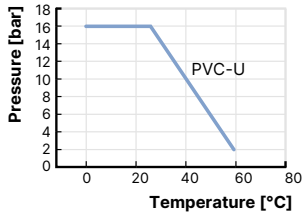
Symbol	Description
FCO	Limit switch OPEN
FCF	Limit switch CLOSED
FC1	Auxiliary limit switch 1
FC2	Auxiliary limit switch 2

## 6. Performance specifications

### 6.1. Pressure temperature diagram

**Note:**

The temperature limits of the actuators are usually lower. Therefore, the lowest temperature limit values of the included system components (ball valve and actuator) must be observed.



## 7. Ordering information

### 7.1. Bürkert eShop



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### 7.2. Bürkert product filter



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### 7.3. Ordering chart

Nominal diameter [mm]	Port connection Ø [mm]	K <sub>v</sub> value [m <sup>3</sup> /h]	Pressure range		90° rotation time [s]	Actuator [Nm]	Voltage <sup>1)</sup>	Article no. Glued socket PVC-U
			PVC-U, PVDF [bar]	PP [bar]				
Seal material PTFE/EPDM								
10	16	4.8	0...16	0...10	12	20	100...240 V AC, 50...60 Hz, 100...350 V DC	226440
15	20	12	0...16	0...10	12	20		226453
20	25	23	0...16	0...10	12	20		226454
25	32	46	0...16	0...10	12	20		226455
32	40	66	0...16	0...10	12	20		226456
40	50	105	0...16	0...10	12	20		226457
50	63	204	0...16	0...10	12	20		226178
10	16	4.8	0...16	0...10	12	20	15...30 V AC, 50...60 Hz, 12...48 V DC	226459
15	20	12	0...16	0...10	12	20		226460
20	25	23	0...16	0...10	12	20		226461
25	32	46	0...16	0...10	12	20		226462
32	40	66	0...16	0...10	12	20		226463
40	50	105	0...16	0...10	12	20		226464
50	63	204	0...16	0...10	12	20		226465

1.) At 12...48 V DC, the operating voltage must not drop below 11.5 V.

#### Further variants on request

	<p><b>Additional</b></p> <ul style="list-style-type: none"> <li>• Position controller with standard signal input 4...20 mA or 0...10 V</li> <li>• Feedback via potentiometer or 4...20 mA analogue signal</li> <li>• Slowly rotating variant</li> <li>• 3-position actuator (90° or 180°)</li> <li>• Emergency reset</li> <li>• 3/2-way variant</li> </ul>		<p><b>Material</b></p> <p>Body: PVDF, PVC-C, PP Seal material: FKM</p>
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### 7.4. Ordering chart accessories



#### Adaption flange in PP-GR

**Note:**

The adaption flange in PP-GR is used for the automation of ball valves with pneumatic or electric rotary actuators.

DN	Port connection Ø [mm]	Interface according to ISO 5211	Square	Double square	Article no.
			[mm]	[mm]	
10	16	F03/04	11	–	669974
			–	14	669980
15	20	F03/04	11	–	669974
			–	14	669980
20	25	F03/05	11	–	669975
			–	14	669981
25	32	F03/05	11	–	669976
			–	14	669982
32	40	F05/07	14	–	669977
			–	–	669978
40	50	F05/07	14	–	669978
			–	–	669979
50	63	F05/07	14	–	669979
			–	–	672134
65	75	F05/07	14	–	672134
			–	–	–
80	90				
100	110				

Distance plate kit to fix the plastic ball valves on the wall

For ball valve DN [mm]	Port connection Ø [mm]	Article no.
10...25	16...32	772678 
32...50	40...63	772679 

Description	Article no.
Key for adjusting the limit switches	665296 