



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

- Suitable for aggressive media
- High flow rate value
- Actuator with adjustable limit switches
- Visual position indicator
- Safe blocked union nuts with Dual Block® Technology<sup>1</sup>
- Multivoltage

The electric 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. It can be used also as single device for the operation of other control elements (see datasheet Type 3003).

### 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. It prevents them separating during operation.

Heat resistor and torque limiter are standard. The body is made of low inflammable material, classified acc. to UL 94 V0.

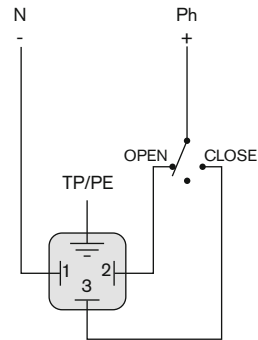
Technical data	
<b>Body material</b>	PVC-U, (PP, PVDF, PVC-C on request)
<b>Seal material</b>	PTFE/EPDM, (PTFE/FKM)
<b>Media</b>	Gaseous and liquid media, which do not attack the housing and sealing materials
<b>Media temperature</b>	(see diagram Pg. 3)
PVC-U	0 to +60°C
PP	+10 to +80°C
PVDF	0 to +120°C
<b>Ambient temperature</b>	-10 to +55°C
<b>Port connections</b>	
PVC-U (PP, PVDF on request)	True union (weld end coupling)
<b>Operating pressure</b>	0-10 bar; 0-16 bar
Connection between actuator and ball valve	Flange acc. to ISO 5211
<b>Operating voltage</b>	15-30 V AC 50/60 Hz / 12-48 V DC 100-240 V AC 50/60 Hz / 100-350 V DC
<b>Voltage tolerance</b>	+/-10%; for 12 to 48V DC the operating voltage should not go below 11.5 V
<b>Duty rating</b>	acc. to IEC34 S4 = 50%
<b>Electrical connection</b>	Cable Plug acc. to EN175301-803 (supply voltage) Cable glands ISO M20
<b>Protection class</b>	IP66 with cable plug installed
<b>Rotation angle</b>	90° (+/-5°)
<b>Rotation time</b>	see ordering chart
<b>Limit switches</b>	4 adjustable (2 for motor and 2 additional for feedback) max. 250 V AC/1.5 A max. 250 V AC/1.5 A
<b>Material (Actuator)</b>	
Cover/Body	Nylon/PA 6.6
Axis/Screws	Stainless steel
gearbox	stainless steel and PC
<b>Installation</b>	Don't mount the actuator upside down

<sup>1</sup> Dual Block® Technology is a registered trademark of FIP - Formatura Iniezione Polimeri S.p.A

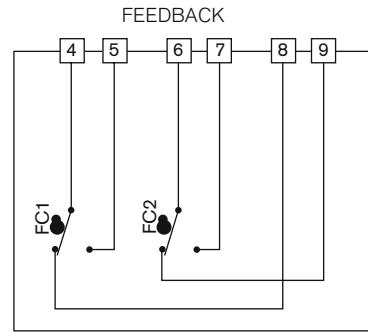
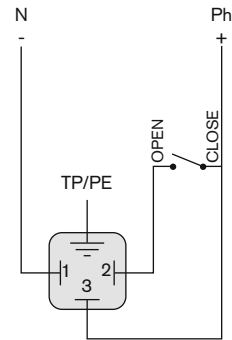
Electrical connection

On/Off Version

3 point mode

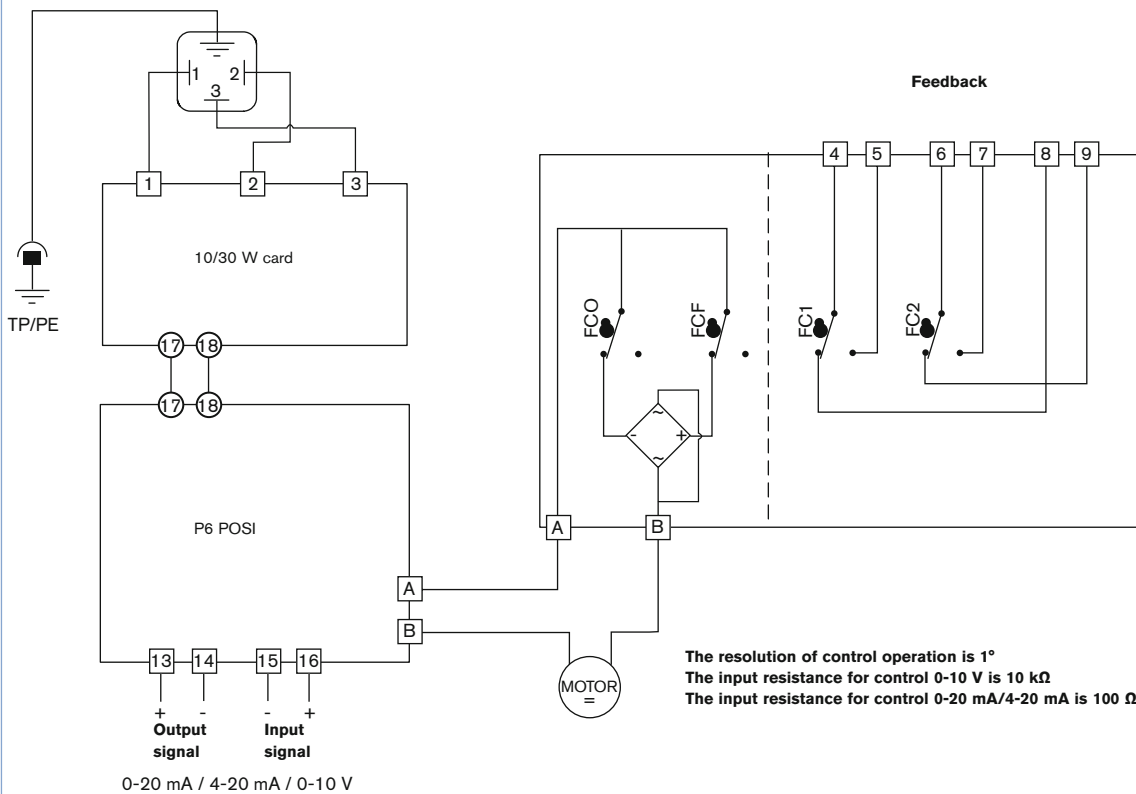
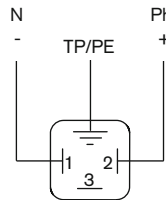


on/off mode



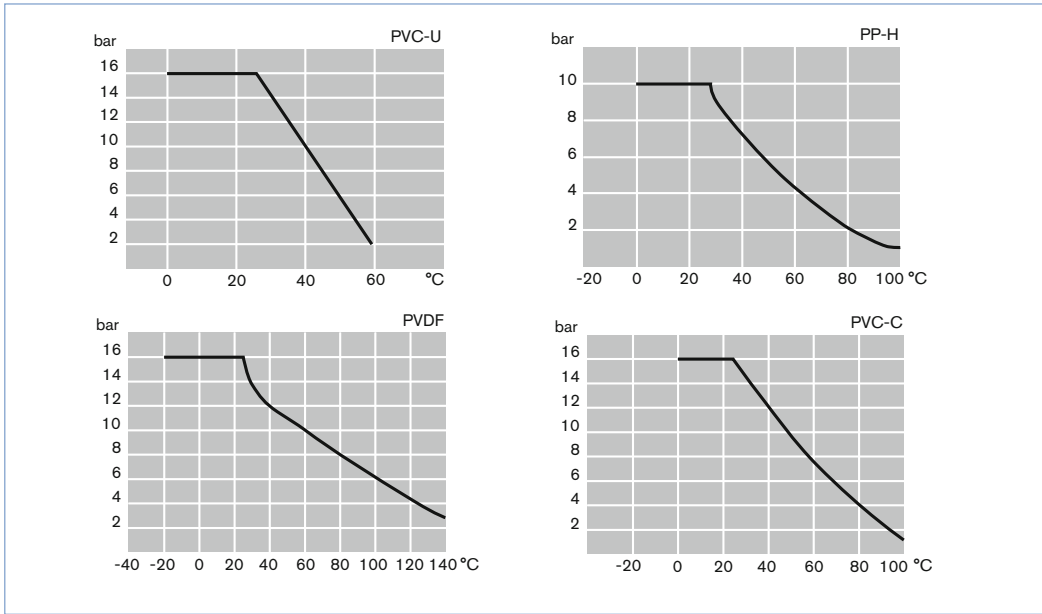
Symbol	Designation
FCO	Open limit switch
FCF	Close limit switch
FC1	Auxiliary 1 limit switch
FC2	Auxiliary 2 limit switch

Version with analog signal input

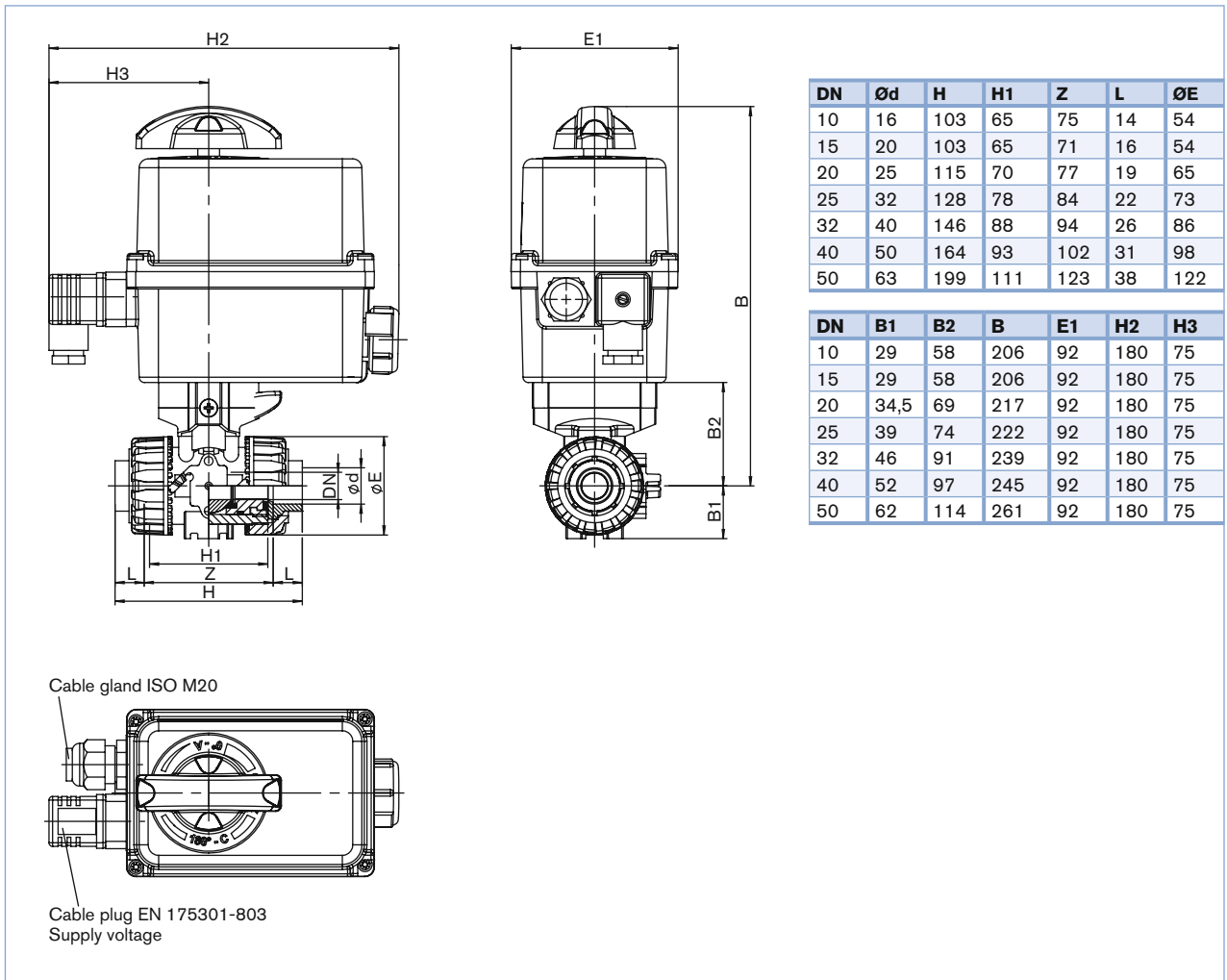


The resolution of control operation is 1°  
 The input resistance for control 0-10 V is 10 kΩ  
 The input resistance for control 0-20 mA/4-20 mA is 100 Ω

Pressure Temperature Chart



Dimensions [mm]



Ordering chart (further versions on request)

Orifice (mm)	Port connection Ø (mm)	Kv-value water (m³/h)	Pressure range PVC-U, PVDF (bar)	Pressure range PP (bar)	Rotation time for 90° (s)	Actuator (Nm)	Voltage*	Item no. True union PVC-U
<b>Seal material PTFE/EPDM</b>								
10	16	4,8	0-16	0-10	12	20	100–240 V AC 50/60 Hz 100–350 V DC	226 440
15	20	12	0-16	0-10	12	20		226 453
20	25	23	0-16	0-10	12	20		226 454
25	32	46	0-16	0-10	12	20		226 455
32	40	66	0-16	0-10	12	20		226 456
40	50	105	0-16	0-10	12	20		226 457
50	63	204	0-16	0-10	12	20		226 178
10	16	4,8	0-16	0-10	12	20	15–30 V AC 50/60 Hz 12–48 V DC	226 459
15	20	12	0-16	0-10	12	20		226 460
20	25	23	0-16	0-10	12	20		226 461
25	32	46	0-16	0-10	12	20		226 462
32	40	66	0-16	0-10	12	20		226 463
40	50	105	0-16	0-10	12	20		226 464
50	63	204	0-16	0-10	12	20		226 465

\* for 12 to 48V DC the operating voltage should not go below 11.5 V

**i Further versions on request**

**Materials**  
 Body: PVDF, PVC-C, PP  
 Seal materialFKM on request

**> Additional**  
 Positioner card with normal input signal 4-20 mA or 0-10 V  
 Feedback via Potentiometer or 4-20 mA analog signal  
 Slow rotation version  
 3-position actuator (90° or 180°)  
 Fail safe version  
 3/2-way

**Accessories**

Description	Item no.
Key for adjustment of limit switches	665 296

Spacer plate and thread insert for mounting on control panel or wall on request.

**Note**  
You can fill out the fields directly in the PDF file before printing out the form.

**Ball valve and butterfly valve - Request for quotation**

▶ Please fill out and send to your nearest Bürkert facility\* with your inquiry or order

Company	Contact person
Customer No	Department
Address	Tel./Fax
Postcode/Town	E-mail

Quantity  Required delivery date

**Operating data**

Pipeline DN  PN

Pipe material

Process medium

Type of media  Liquid  Steam  Gas

	Min	Standard	Max	Unit
Flow rate (Q, Q <sub>N</sub> , W) <sup>1)</sup>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Media temperature	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Operating pressure	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

<sup>1)</sup> Standard unit  
Liquid Q = m<sup>3</sup>/h; Steam W = Kg/h; Gas Q<sub>N</sub> = Nm<sup>3</sup>/h

**Valve features**

Type  2/2-way ball valve  3/2-way ball valve L-Boring  3/2-way ball valve T-Boring  Butterfly valve

Body material  Stainless<sup>4)</sup> steel  PVC-C  PVC-U  PP  PVDF  other

Seal material  PTFE/EPDM<sup>2)</sup>  PTFE/FKM<sup>2)</sup>  EPDM<sup>3)</sup>  FKM<sup>3)</sup>  other

Nominal pressure PN

Orifice DN

Type of connection  Flange  True union  Welded  Int. thread  Ext. thread  Clamp

Standard connection  ISO  DIN  ANSI  JIS  other

Pilot pressure  min.  max.

<sup>2)</sup> for plastic ball valve <sup>3)</sup> for butterfly valves <sup>4)</sup> Stainless steel ball valve with PTFE seal material only

**Mode of actuation**

Manual

Pneumatic

Control function A: NC by spring action

Double-acting

Electric actuator

Function  On/Off function  Control actuator with analog signal input

Power supply  230 V AC  24 V AC  24 V DC  other

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In case of special application conditions, please consult for advice.

Subject to alteration.  
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