



## Electromotive 2 way globe control valve

- High precise and fast flow control
- Several  $K_{VS}$  value per port size due to removable valve seats
- Weather, impact and vibration resistant design
- Easy cleaning by its design according hygienic demands
- Position controller and process controller available

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

### Can be combined with

	<b>Type 3320</b> Electromotive 2/2 way angle seat valve	▶
	<b>Type 3321</b> Electromotive 2/2 way globe valve	▶
	<b>Type 8098</b> FLOWave SAW flow-meter	▶
	<b>Type ME43</b> Fieldbus gateway	▶

### Type description

The innovative process controller Bürkert valve Type 3361 is the solution when it comes to demanding control tasks and operating conditions.

The electromotive actuator with ball screw positions the control cone with highest precision. A unique feature is its high positioning speed of 6 mm/s, that reacts quasi delay-free to process signals, and can be varied according to customer demands. Pressure variations or shocks in the medium aren't transferred to the valve position. Each flow optimized valve housing can be equipped with up to 5 different valve seats for a precise adaptation according to customer needs. If necessary, the safety position can be approached by an optional energy storage in case of power failure.

Actuator and valve are adapted perfectly to each other with closed design and robust surface. This ensures the hygienic requirements of a fast and residue-free cleaning.

Harsh environment are no problem for the Type 3361 because of the protection class IP65/IP67 and its high impact and vibration resistance. Unrivalled cycle life and sealing integrity is guaranteed by the proven self adjusting spindle packing with exchangeable V-seals.

The fieldbus suitable Type 3361 provides many helpful functions for process monitoring, valve diagnostics and predictive maintenance and thus offers the decisive advantage of a modern process automation.

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## 1. General Technical Data

Product properties	
Dimensions	Detailed information can be found in chapter <a href="#">“4. Dimensions” on page 8.</a>
Material	Detailed information can be found in chapter <a href="#">“3. Materials” on page 6.</a>
Design	Globe control valve
Controller versions	Position controller or process controller
Nominal diameter	DN10...50, NPS ¾...2
Flow direction	Against closing direction (below seat)
Safety setting in case of power failure	With SAFEPOS energy-pack: open, closed or freely programmable Without SAFEPOS energy-pack: blocked in last position
Weight	4 kg (only actuator, total weight depends on the port connection)
Performance data	
Operating pressure	0...25 bar(g) (see <a href="#">“5.1. Fluidic data” on page 14</a> ) Vacuum version up to -0.9 bar(g) (optional)
Nominal pressure	PN25 (DIN EN 1333), Class 150 (DIN EN 1759)
Seat leakage (DIN EN 60534 - 4)	Class III, IV and VI (see <a href="#">“5.1. Fluidic data” on page 14</a> )
K <sub>v</sub> value	0.1...37 m <sup>3</sup> /h (see <a href="#">“5.1. Fluidic data” on page 14</a> )
Flow characteristic	Linear or equal percentage (see <a href="#">“5.1. Fluidic data” on page 14</a> )
Theoretical rangeability	Up to 50:1 (see <a href="#">“5.1. Fluidic data” on page 14</a> )
Closing time	3.3...6.2 s (depending on travel speed and stroke)
Travel speed	6 mm/s (for actuator force 1300 N) 4 mm/s (for actuator force 2500 N)
Dead band of the position control	±0.1 %
Electrical data	
Operating voltage	24 V DC ±10 % (max. residual ripple 10 %)
Operating current <sup>1)</sup>	Max. 3 A (at max. load and including 1 A charging current of the optional SAFEPOS energy-pack) At minimum operating temperature additionally 2 A
Protection class (DIN EN 61140)	3
Duty cycle	100 %
Standby consumption <sup>1)</sup>	2...5 W
Communication and control	
Standard signals (analogue)	Setpoint: 0/4...20 mA, 0...5/10 V and binary input (further inputs and outputs optional, see <a href="#">“5.3. Electrical control and interfaces” on page 19</a> )
Fieldbus (digital)	Bürkert system bus (bÜS) (Standard) CANopen (optional) EtherNet/IP, PROFINET, Modbus/TCP (optional via integrated gateway)
Media data	
Medium	Steam, neutral gases, water, alcohols, oils, fuels, hydraulic fluids, salt solutions, lyes, organic solvents, oxygen (optional)
Medium temperature	-40...+230 °C (see <a href="#">“5.2. Operating limits” on page 16</a> )
Viscosity	Up to 600 mm <sup>2</sup> /s
Approvals and certificates	
Conformity	Food EGV 1935/2004 FDA (Optional)
Approvals	Explosion protection ATEX/IECEx (Optional) (siehe <a href="#">“2. Approvals” on page 5</a> ) cULus (Optional) (siehe <a href="#">“2. Approvals” on page 5</a> )
Ignition protection class	II 3G Ex ec IIC T4 Gc II 3D Ex tc IIIC T135 °C Dc

**Process/Port connection & communication****Port connection<sup>2)</sup>**

Flange connection	DIN EN 1092-1 ANSI B 16.5 JIS 10K
Threaded connection	G (EN ISO 228-1) Rc (EN ISO 228-1, ISO 7/1 /DIN EN 10226-2) NPT (ASME B 1.20.1)
Welded connection	DIN EN ISO 1127/ISO 4200/DIN11866 B DIN 11850 2/DIN 11866 A ASME BPE/DIN 11866 C SMS 3008
Clamp connection	DIN 32676 B (pipe ISO 4200) DIN 32676 A (pipe DIN 11850 2) ASME BPE

**Electrical connection**

Actuator	Terminal strip with cable gland, 3 x M20 or 2 M12 circular plugs, 5 pin and 8 pin, 1 M12 circular socket, 5 pin (only for process controller function)
Fieldbus gateway	2 M12 circular sockets, 4 pin (only for industrial ethernet)

**Environment and installation**

Ambient temperature	-25...+65 °C (only without additional modules) (Derating see <a href="#">"Operating limits for ambient and medium temperature" on page 17</a> )
Degree of protection	IP65/IP67 (DIN EN 60529), NEMA 4X








**Vibration and shock resistance**

Vibration, sinusoidal	5 g (IEC 60068-2-6 Test Fc)
Shock, mechanical	50 g (IEC 60068-2-27 Test Ea)
Installation position	Any, preferably actuator face up

1.) All values refer to a supply voltage of 24 V at 25 °C.

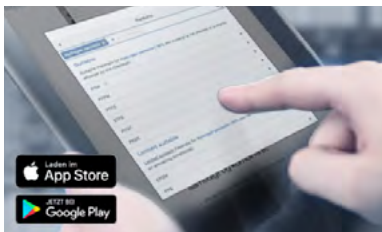
2.) Others on request

## 2. Approvals

Approval	Description
	<b>Food produce contact</b> Materials in contact with medium conform to EC regulation 1935/2004 Materials in contact with medium conform to FDA (optional)
	<b>Drinking water</b> Suitable for use with drinking water according to KTW, W270 (optional)
	<b>Oxygen</b> Suitable for use with gaseous oxygen (optional)
 	<b>Explosion proof</b> As category 3 device suitable for zone 2/22 (optional)  <b>ATEX</b> <ul style="list-style-type: none"> <li>• II 3G Ex ec IIC T4 Gc</li> <li>• II 3D Ex tc IIIC T135 °C Dc</li> </ul> <b>IECEX</b> <ul style="list-style-type: none"> <li>• Ex ec IIC T4 Gc</li> <li>• Ex tc IIIC T135 °C Dc</li> </ul>
	<b>Safety requirements</b> UL-listed cULus Cert. No. 238179 (optional)
Standards	Description
	Field device for integration into the EDIP platform via Bürkert system bus (büS)

### 3. Materials

#### 3.1. Chemical Resistance Chart – Bürkert resistApp



**Bürkert resistApp – Chemical Resistance Chart**

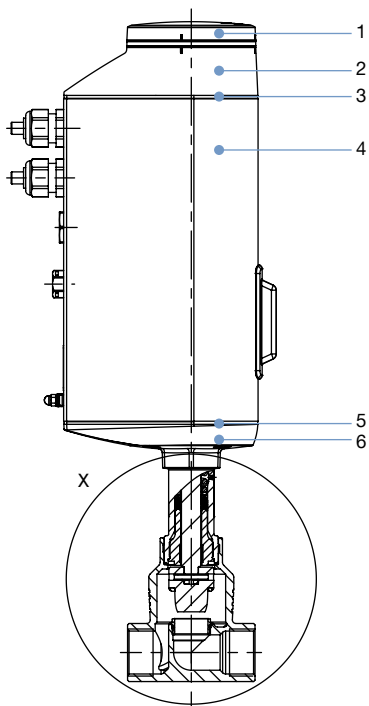
You want to ensure the reliability and durability of the materials in your individual application case? Verify your combination of media and materials on our website or in our resistApp.

[Start Chemical Resistance Check](#)

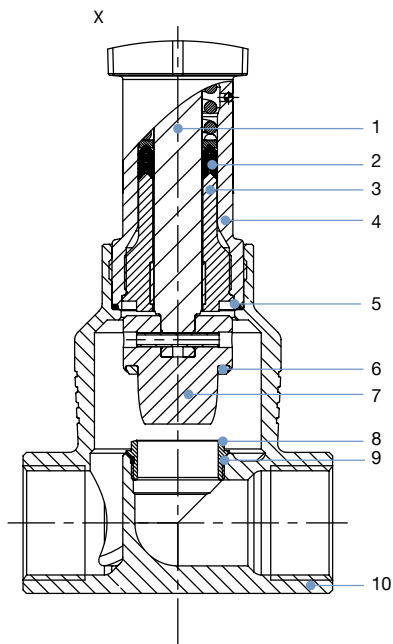
#### 3.2. Material specifications

**Note:**

The Type 3361 globe control valve is supplied with various port connections (flange, thread, weld end and clamp connections). These connections are not shown. They are the same material as the valve body.



No.	Component	Material
1	Display housing/Blind cover	PPS (Standard), Stainless steel 1.4301 (for ATEX/IECEX)
2	Actuator cover	PPS
3	Seal	EPDM
4	Actuator housing	Aluminium powder coated
5	Seal	EPDM
6	Actuator base	PPS



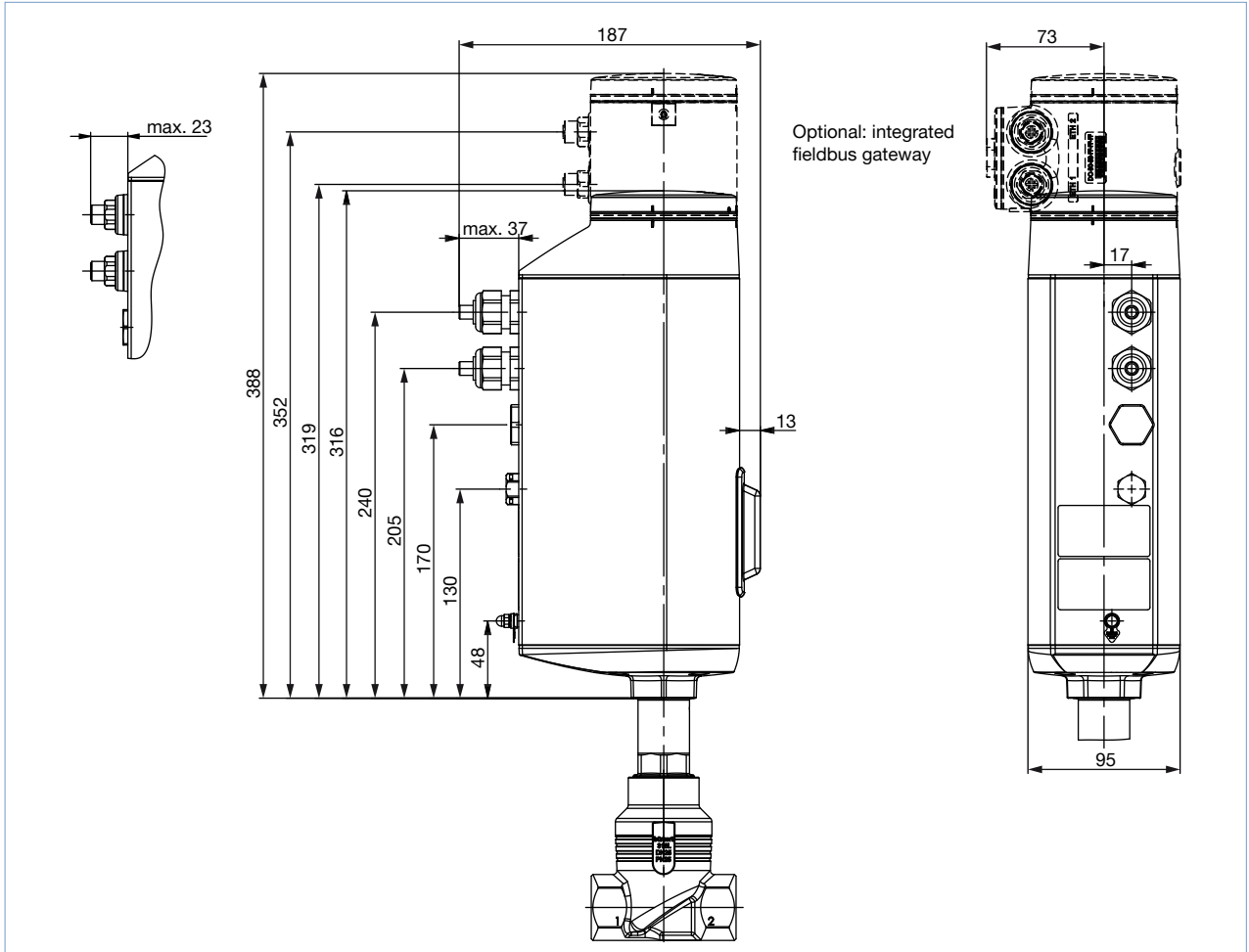
No.	Component	Material
1	Spindle	Stainless steel 1.4401 (316)/1.4404 (316L)
2	Spindle seal	PTFE V-seals (filled) with spring compensation
3	Spindle guidance	Stainless steel 1.4404 (316L)
4	Packing gland tube	Stainless steel 1.4401 (316)
5	Seal valve body	Graphite or PTFE
6	Seat seal	Stainless steel 1.4571/PTFE or PEEK seal washer
7	Control cone	Stainless steel 1.4571
8	Valve seat	Stainless steel 1.4571
9	O-Ring valve seat	EPDM
10	Valve body	Stainless steel CF3M

## 4. Dimensions

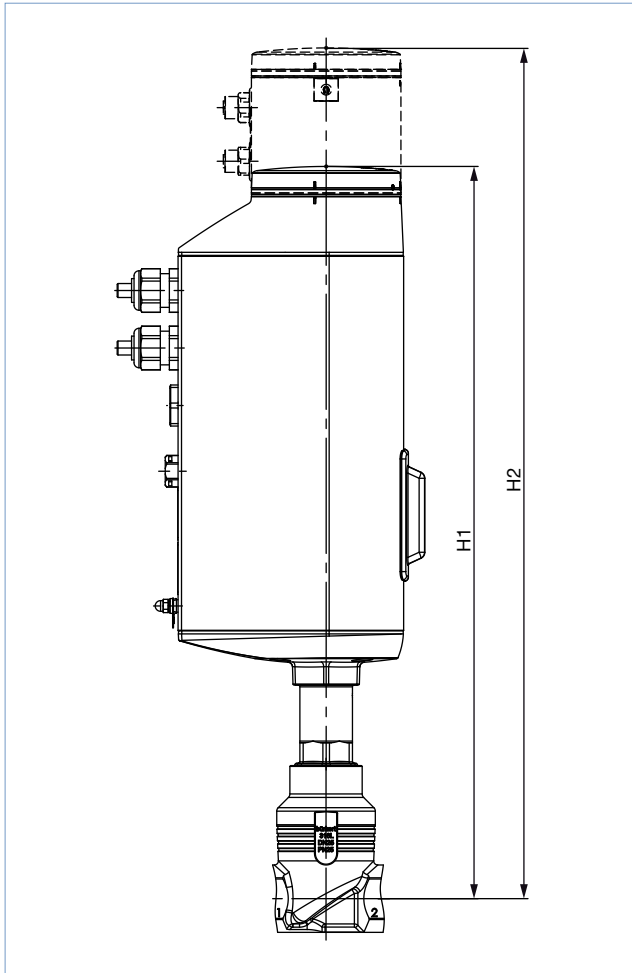
### 4.1. Complete valve Type 3361

**Note:**

Dimensions in mm, unless otherwise stated







Nominal diameter (Pipe)		Height <sup>1.)</sup>	
DN	NPS	H1	H2 <sup>2.)</sup>
10	3/8	417	489
15	1/2	417	489
20	3/4	423	495
25	1	446	518
32	1 1/4	474	546
40	1 1/2	479	551
50	2	485	557

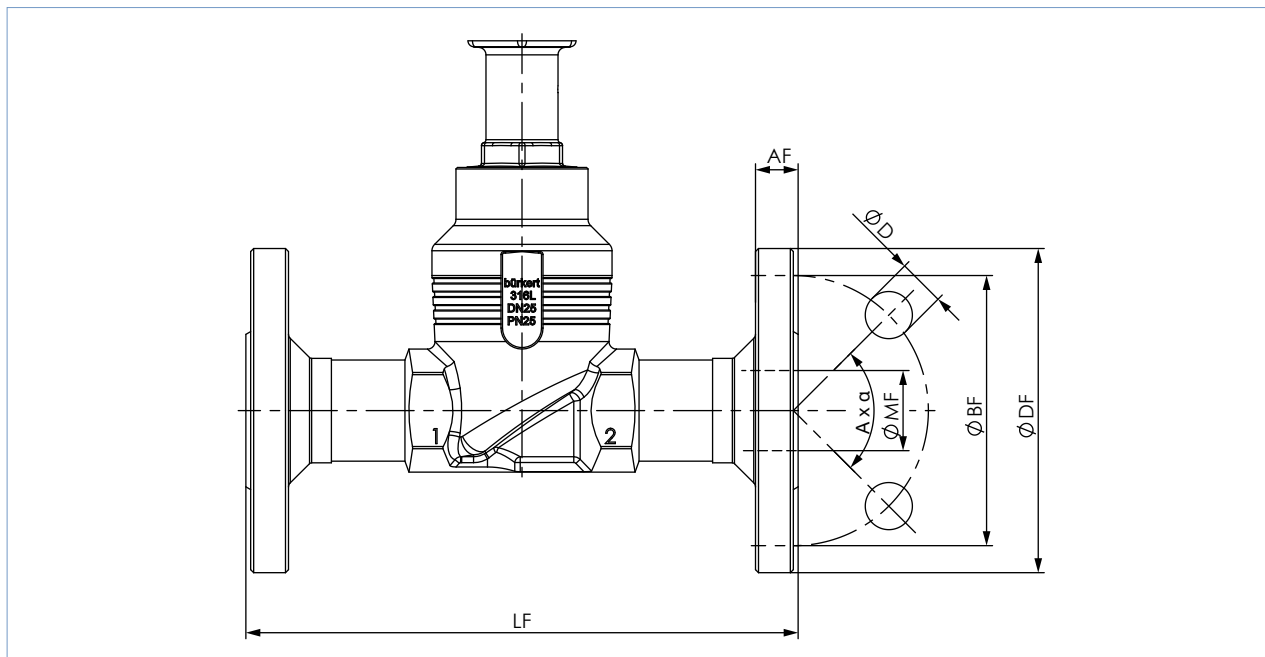
1.) Dimensions without tight-closing function: in closed position the actuator additionally lifts by approx. 2 mm

2.) Optional: integrated fieldbus gateway

## 4.2. Body with flange connection

**Note:**

Dimensions in mm, unless otherwise stated



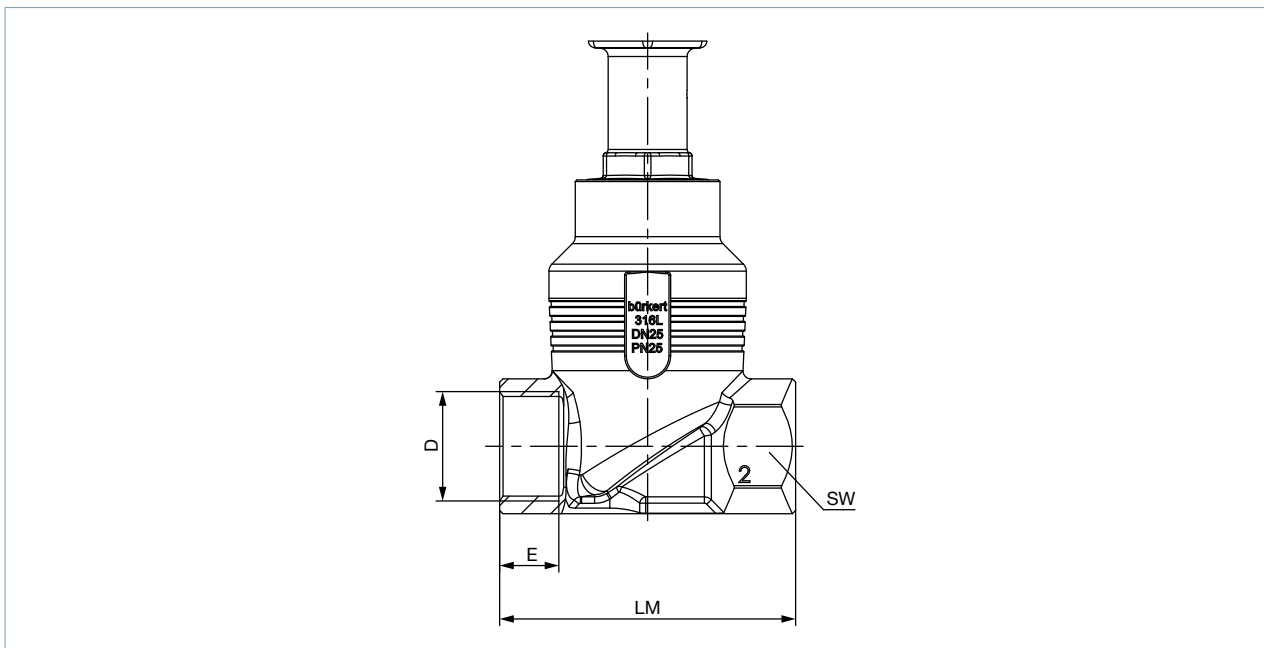
Nominal diameter (Pipe)	DIN EN 1092 PN25 FTF 1 acc. to DIN EN 558 - 1							JIS 10K FTF 10 acc. to DIN EN 558 - 2							
	DN	ØDF	LF	ØBF	AF	ØD	A x α	ØMF	ØDF	LF	ØBF	AF	ØD	A x α	ØMF
10	90	130	60	16	14	14	4 x 90°	13.6	-	-	-	-	-	-	-
15	95	130	65	16	14	14	4 x 90°	18.1	95	108	70	12	15	4 x 90°	18.1
20	105	150	75	18	14	14	4 x 90°	23.7	100	117	75	14	15	4 x 90°	23.7
25	115	160	85	18	14	14	4 x 90°	29.7	125	127	90	14	19	4 x 90°	29.7
32	140	180	100	18	18	18	4 x 90°	38.4	135	140	100	16	19	4 x 90°	38.4
40	150	200	110	18	18	18	4 x 90°	44.3	140	165	105	16	19	4 x 90°	44.3
50	165	230	125	20	18	18	4 x 90°	56.3	155	203	120	16	19	4 x 90°	56.3

Nominal diameter (Pipe)	ANSI B 16.5 Class 150 FTF 37 acc. to DIN EN 558 - 2							
	NPS	ØDF	LF	ØBF	AF	ØD	A x α	ØMF
½	89	184	60.5	11.2	15.7	15.7	4 x 90°	15.7
¾	99	184	69.9	12.7	15.7	15.7	4 x 90°	20.8
1	108	184	79.2	14.2	15.7	15.7	4 x 90°	26.7
1½	127	222	98.6	17.5	15.7	15.7	4 x 90°	40.9
2	152	254	120.7	19.1	19.1	19.1	4 x 90°	52.6

### 4.3. Body with thread connection

**Note:**

Dimensions in mm, unless otherwise stated

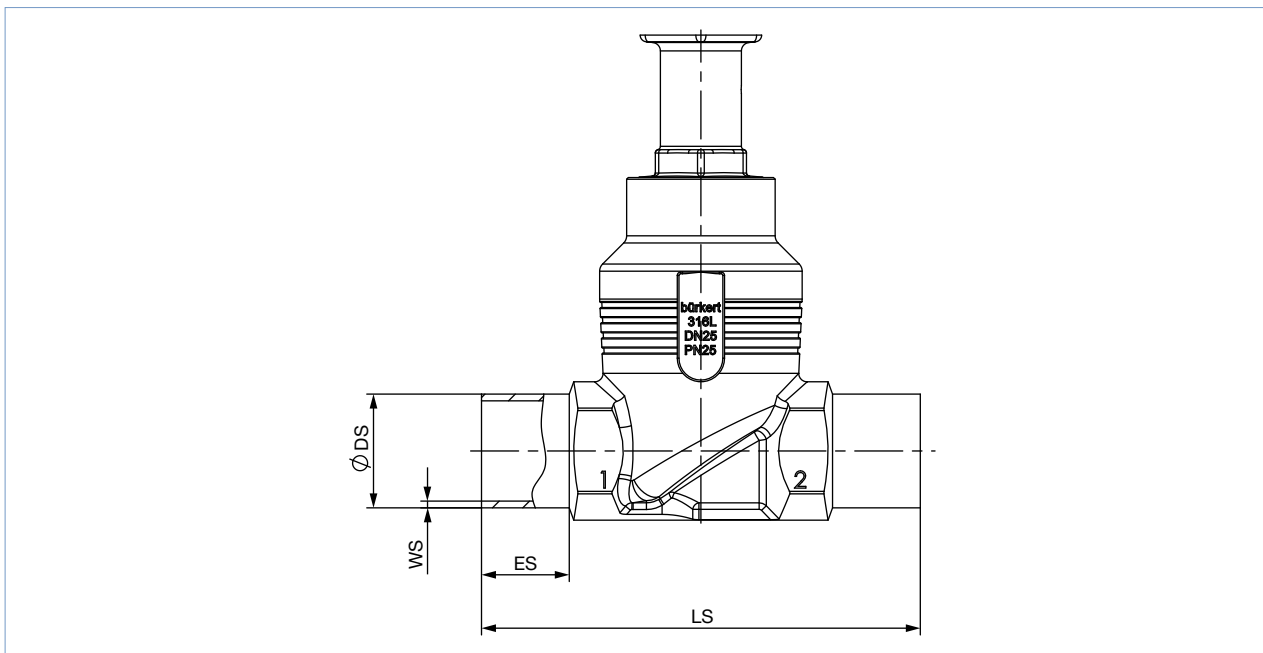


Nominal diameter (Pipe)	G, Rc, NPT (EN ISO 228-1, ISO 7/1/DIN EN 10226-2, ASME B 1.20.1)				LM	SW
	D	E	NPT	Rc		
DN	NPS	G	NPT	Rc		
10	3/8	12	10.3	10.1	65	27
15	1/2	14	13.7	13.2	65	27
20	3/4	16	14	14.5	75	34
25	1	18	16.8	16.8	90	41
32	1 1/4	20	17.3	19.1	110	50
40	1 1/2	22	17.3	19.1	120	55
50	2	24	17.6	23.4	150	70

4.4. Body with weld connection

**Note:**

Dimensions in mm, unless otherwise stated



Nominal diameter (Pipe)	ES	LS	EN ISO 1127 1/ISO 4200/DIN 11866 B		DIN 11850 2/DIN 11866 A/DIN EN 10357 A	
			ØDS	WS	ØDS	WS
10	20	90	17.2	1.6	13	1.5
15	20	90	21.3	1.6	19	1.5
20	20	100	26.9	1.6	23	1.5
25	26	130	33.7	2.0	29	1.5
32	26	140	42.4	2.0	35	1.5
40	26	150	48.3	2.0	41	1.5
50	26	175	60.3	2.0	53	1.5

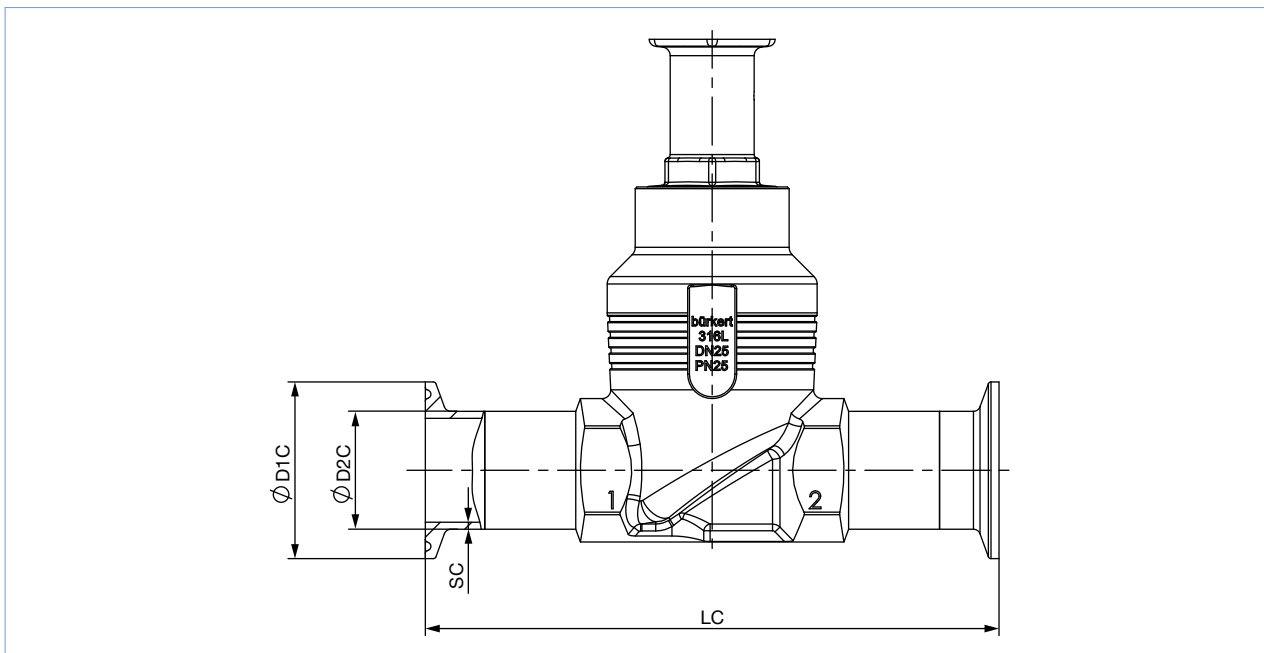
Nominal diameter (Pipe)	ES	LS	ASME BPE/DIN 11866 C	
			ØDS	WS
1/2	20	90	12.7	1.65
3/4	20	90	19.05	1.65
1	20	100	25.4	1.65
1 1/2	26	140	38.1	1.65
2	26	150	50.8	1.65

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### 4.5. Body with clamp connection

**Note:**

Dimensions in mm, unless otherwise stated



Nominal diameter (Pipe)	Clamp: DIN 32676 A				Clamp: DIN 32676 B			
	Pipe: DIN 11850 2 DIN 11866 A DIN EN 10357 A				Pipe: EN ISO 1127 1 ISO 4200 DIN 11866 B			
DN	LC	ØD2C	ØD1C	SC	LC	ØD2C	ØD1C	SC
15	126	19	34	1.5	146	21.3	50.5	1.6
20	136	23	34	1.5	136	26.9	50.5	1.6
25	173	29	50.5	1.5	164	33.7	50.5	2.0
32	179	35	50.5	1.5	-	-	-	-
40	193	41	50.5	1.5	193	48.3	64.0	2.0
50	218	53	64	1.5	218	60.3	77.5	2.0

Nominal diameter (Pipe)	LC	Clamp: ASME BPE DIN 32676 C		
		Pipe: ASME BPE DIN 11866 C		
NPS		ØD2C	ØD1C	SC
½	122	12.7	25.0	1.65
¾	126	19.05	25.0	1.65
1	126	25.4	50.5	1.65
1½	172	38.1	50.5	1.65
2	182	50.8	64.0	1.65
2½	231	63.5	77.5	1.65

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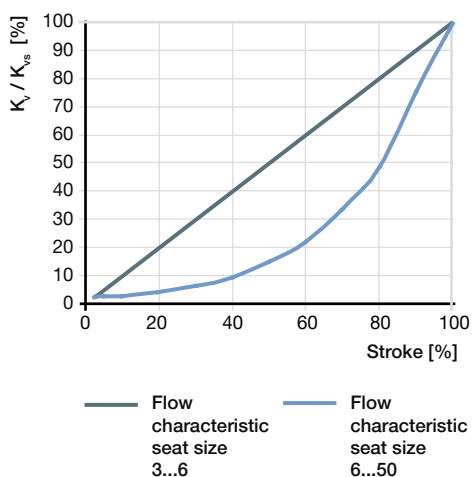
## 5. Performance specifications

### 5.1. Fluidic data

#### Flow characteristics

- Flow characteristic acc. to DIN EN 60534-2-4
- Theoretical rangeability:  $K_{VS}/K_{V0}$  (see [“Overview of flow characteristics with flow below seat” on page 15](#))
- $K_{VR}$  value<sup>1.)</sup> at 5 % of stroke for seat size > 10
- $K_{VR}$  value at 10 % of stroke for seat size ≤ 10
- The globe control valve has different flow characteristics and theoretical rangeabilities depending on the seat size (see [“Overview of flow characteristics with flow below seat” on page 15](#))
  - equal percentage or linear
  - 10:1, 25:1, 50:1

1.)  $K_{VR}$  value = smallest  $K_V$  value at which the inclination tolerance according to DIN EN 60534-2-4 can still be maintained.



## Overview of flow characteristics with flow below seat

## Note:

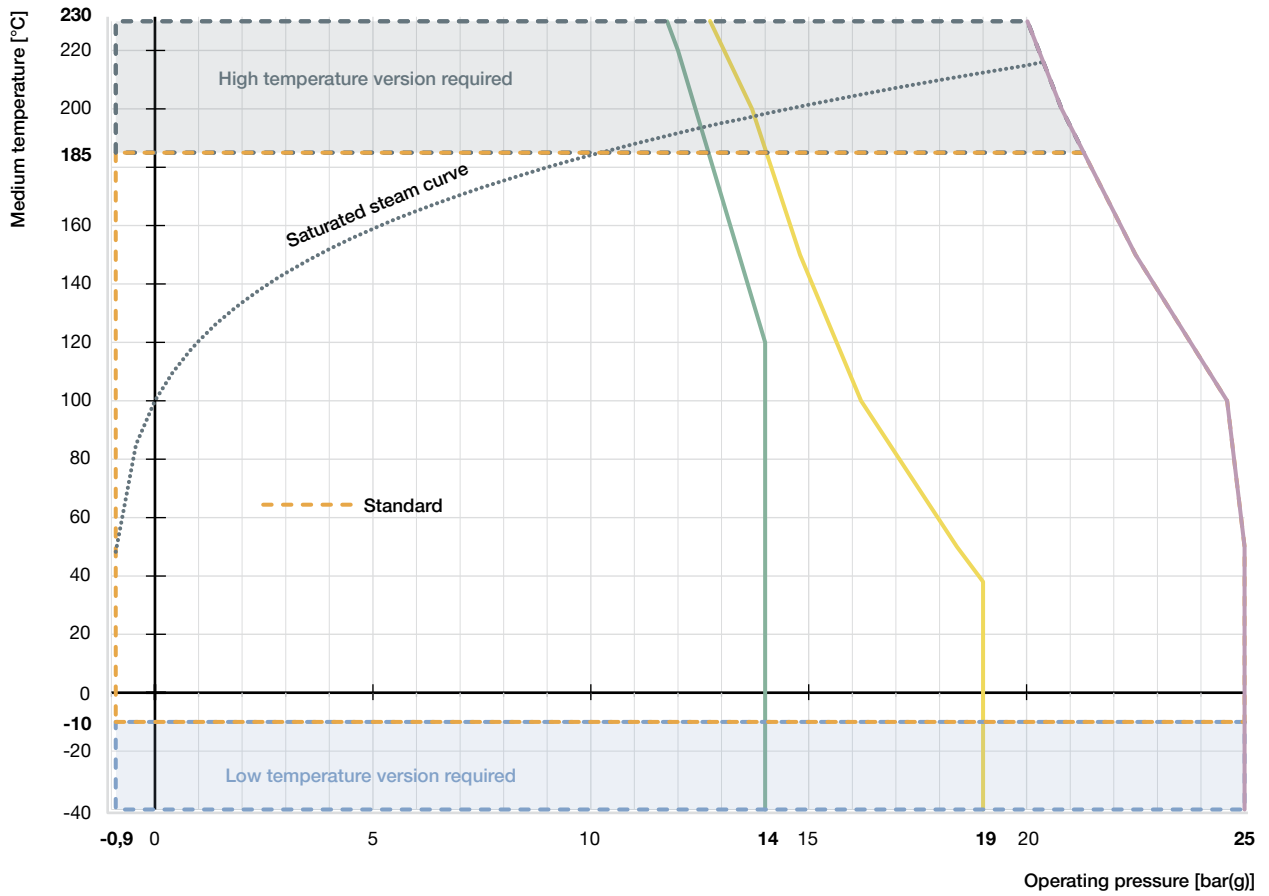
- $K_v$  value [ $m^3/h$ ]: Measured with water acc. to DIN EN 60534-2-4
- Operating limits, see "5.2. Operating limits" on page 16

Nominal diameter (Pipe)		Seat size	Actuator force	Operating pressure (Seat leakage class)			Characteristics (theoretical rangeability)	$K_v$ value at stroke						$K_{vs}$ value			
				Valve seat seal				5%	10%	30%	50%	70%	90%				
DN	NPS	[N]	Stainless steel	PTFE	PEEK	[ $m^3/h$ ]								[ $m^3/h$ ]			
10	¾	3	1300	25 (IV)	-	-	Linear (10:1)	-	0.003	0.015	0.037	0.065	0.090	0.10			
		4					Linear (25:1)	-	0.015	0.1	0.19	0.27	0.33	0.35			
		4					Linear (10:1)	-	0.050	0.16	0.27	0.36	0.44	0.50			
		6					Linear (25:1)	-	0.12	0.48	0.76	0.98	1.1	1.2			
		6					25 (VI)	Equal percentage (50:1)	-	0.007	0.045	0.16	0.41	1.1	1.25		
		8						-	0.070	0.12	0.26	0.61	1.5	2.0			
		10						-	0.11	0.19	0.48	1.0	2.3	2.7			
15	½	3	1300	25 (IV)	-	-	Linear (10:1)	-	0.003	0.015	0.037	0.065	0.09	0.10			
		4					Linear (25:1)	-	0.015	0.1	0.19	0.27	0.33	0.35			
		4					Linear (10:1)	-	0.050	0.16	0.27	0.36	0.44	0.50			
		6					Linear (25:1)	-	0.12	0.48	0.76	0.98	1.1	1.2			
		6					25 (VI)	Equal percentage (50:1)	-	0.007	0.045	0.16	0.41	1.1	1.25		
		8						-	0.080	0.13	0.27	0.63	1.6	2.1			
		10						-	0.11	0.19	0.49	1.1	2.5	3.1			
20	¾	10	1300	25 (IV)	-	25 (VI)	0.14	0.17	0.35	0.80	1.8	3.7	4.3				
		15					-	0.12	0.20	0.52	1.2	2.6	3.2				
		20					0.14	0.17	0.35	0.80	1.8	4.0	5.2				
25	1	15	1300	25 (IV)	-	25 (VI)	0.20	0.25	0.45	1.1	2.4	5.2	7.1				
		20		25 (IV)	25 (VI)	25 (VI)	0.14	0.17	0.35	0.80	1.8	4.1	5.3				
		25		25 (IV)	25 (VI)	20 (VI)	0.20	0.25	0.47	1.1	2.5	5.4	7.2				
32	1¼	20	1300	25 (IV)	25 (VI)	25 (VI)	0.35	0.38	1	2.2	5.1	9.4	12				
		25					0.22	0.25	0.50	1.1	2.5	5.8	8				
		32					0.40	0.47	1.1	2.5	5.4	10.3	13				
		32					1300	16 (IV)	16 (VI)	10 (VI)	0.48	0.60	1.3	3.1	6.8	14.0	17.8
		2500					25 (IV)	25 (VI)	20 (VI)								
40	1½	25	1300	25 (IV)	25 (VI)	20 (VI)	0.60	0.70	1.7	4.0	9.2	18.2	24				
		32					0.40	0.50	1.1	2.6	5.6	10.7	13.6				
		32					1300	16 (IV)	16 (VI)	10 (VI)	0.48	0.60	1.3	3.2	6.9	15.0	20
		2500					25 (IV)	25 (VI)	20 (VI)								
		40					1300	10 (III)	10 (VI)	6 (VI)							
50	2	32	1300	16 (IV)	16 (VI)	10 (VI)	0.60	0.70	1.7	4.0	9.2	18.9	24.5				
		40					0.48	0.60	1.3	3.2	6.9	16.0	21				
		2500					25 (IV)	25 (VI)	20 (VI)								
		40					1300	10 (III)	10 (VI)	6 (VI)							
		2500					18 (III)	18 (VI)	14 (VI)								
		50					1300	6 (III)	6 (VI)	-	0.90	1.1	2.9	6.8	15.5	29	37
	2500	10 (III)	10 (VI)	8 (VI)													

## 5.2. Operating limits

### Operating limits for medium temperature and operating pressure

The operating range of Bürkert process valves is in addition to the maximum operating pressures limited by the nominal pressure according to the relevant standard.

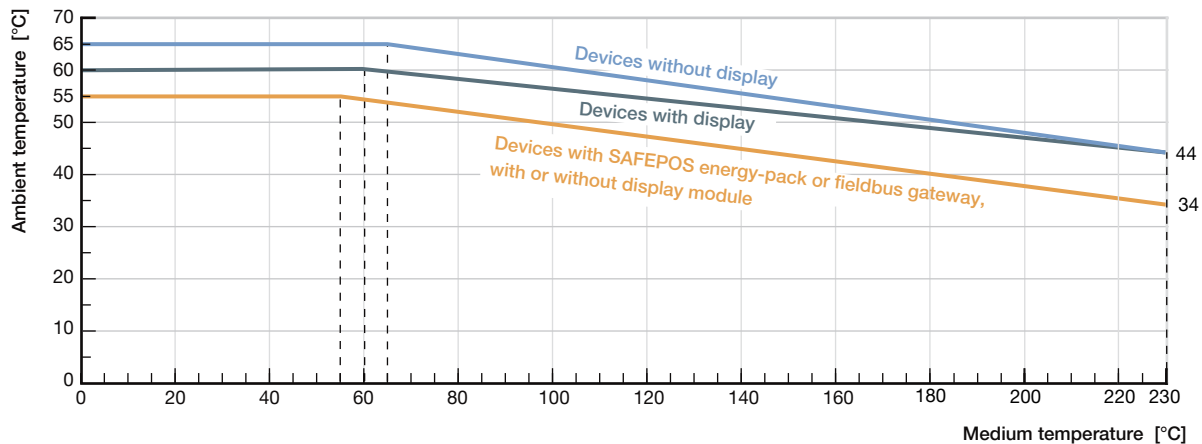


- Operating limits for PN25 acc. to DIN EN 12516-1
- Operating limits for flange 10K acc. to JIS B 2220
- Operating limits for Class 150 acc. to ASME B16.34
- ..... Saturated steam curve for water



### Operating limits for ambient and medium temperature

The maximum permissible temperature for the environment and the medium are dependent on each other. The maximum allowable temperature curves of different device variants can be seen in the temperature chart. The curves were determined for maximum operating conditions (max. operating pressure and motor power). For deviating operating conditions an individual verification can be performed. Please contact your Bürkert office for more information.



### Operating limits seat seal

Tight sealing required	Leakage class (DIN EN 60534 - 4)	Medium temperature	Seat seal
No An additional shut-off valve is recommended	III/IV (metal seals) Metal-sealed valves have larger leakages (0.1 % or 0.01 % of the nominal flow rate are permissible). Metallic seals are impervious even under demanding process conditions.	-40...230 °C	Stainless steel
Yes An additional shut-off valve is often unnecessary.	VI (soft seals) By using plastics as sealing material, the control valves can close tightly. Their use is not recommended in cases of increased erosion due to demanding process conditions.	-40...130 °C (recommended for ≤ 130 °C)	PTFE
		-10...230 °C (recommended for > 130 °C)	PEEK

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**Operating limits for optional versions**

**High temperature version**

By adapting the spindle sealing this version is suitable for applications with steam, neutral gases and other heat transfer mediums up to 230 °C.

**Drinking water version**

Materials in contact with the medium are tested for suitability with drinking water up to 85 °C.

**Vacuum version**

Without leakage bore, this design is suitable for pressures down to -0.9 bar(g).

**Low temperature version**

Suitable for minimum medium temperatures down to -40 °C

**Version for oxygen**

Non-metallic materials in contact with the medium are tested for suitability with oxygen. Suitable for operating pressures up to 20 bar(g) and medium temperatures up to 60 °C.

### 5.3. Electrical control and interfaces

#### Interface diagram

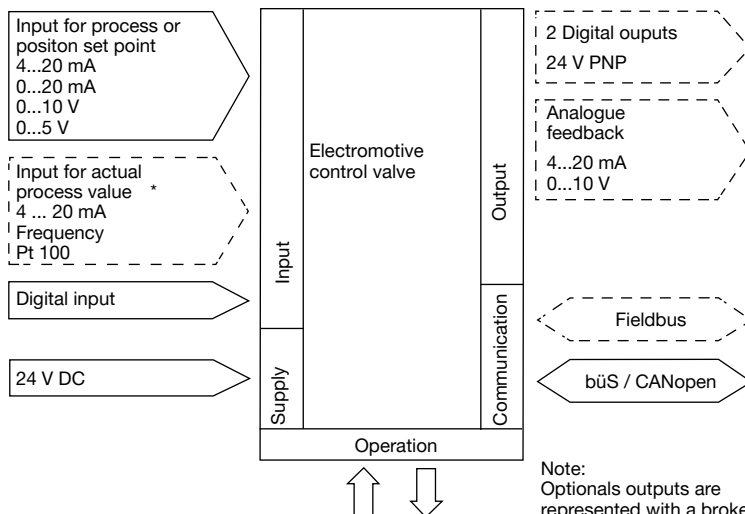
The position of the actuator is controlled according to the position setpoint. The position setpoint is given either by an external standard signal (analogue) or via a fieldbus (digital).

#### Analogue control

For the analogue control 2 variants each are available for the inputs and outputs and the connection interface.

#### Inputs and outputs:

- 1 analogue input, 1 binary input
- 1 analogue input, 1 binary input, 1 analogue output, 2 binary output (optional)
- 1 analogue input process actual value (for optional version with process controller)



#### Interface:

- Cable gland with connection terminal
- M12 circular plug-in connectors (optional)

Control data	
Analogue input (setpoint signal)	Galvanically isolated from supply voltage and analogue output 0/4...20 mA (input resistance 60 Ω) 0...5/10 V (input resistance 22 kΩ)
Digital input	0...5 V = log "0", 10...30 V = log "1" inverted input reversed accordingly
Analogue output (optional)	Max. Current 10 mA (for voltage output 0...5/10 V) Burden (load) 0...560 Ω (for current output 0/4...20 mA)
Digital output (optional)	Current limitation 100 mA
Analogue input (Actual value signal for process controller function) (optional)	
4...20 mA	Input resistance: 60 Ω Resolution: 12 bit
Frequency	Measuring range: 0.2...6500 Hz Input resistance: >30 kΩ Accuracy: 0.1 % of measured value Input signal: >300 mVpp Signal shape: sine, rectangle, triangle
Pt 100	Measuring range: -20...+220 °C Accuracy: 0.01 °C Measuring current: 1 mA
Communication	
Communication interface (büS)	Connection to PC via USB büS interface set (connection terminals, circular plug-in connector or büS service interface)
Communication software (büS)	Bürkert Communicator, see <b>Type 8920</b> ▶

## 6. Product design and assembly

### 6.1. Product features

**Note**

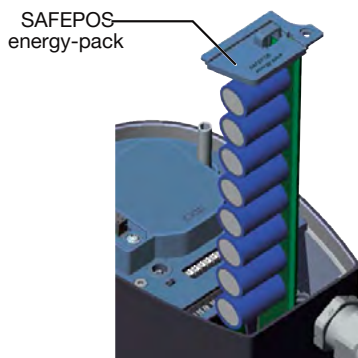
More detailed information can be found in the **operating instructions** ►.

User interface	
<p><b>Device without display module:</b> In the version without operating display, the basic functions are operated via 4 DIP switches and 2 push buttons. These are located under the blind cover, which can be removed by turning it manually. The device can also be configured in detail with the Bürkert Communicator software via the bÜS service interface</p>	<p style="text-align: right;"><b>Blind cover dismantled</b></p>
<p><b>Rugged Touch Display (optional):</b> The robust display module offers convenient operation, configuration and display of all necessary functions. Besides the start screen, various views can be freely configured. The bÜS service interface is also available here under the display module. The display cannot be retrofitted in the field..</p>	
Actuation	
<p><b>Mechanical manual control:</b> The manual override for mechanical movement of the valve is located under the blind cover or display module and ensures that the actuator can be operated even if the power supply fails.</p>	
<p><b>Electrical control via operating elements:</b> The electrical manual override for operation can be carried out directly on the touch display or, in the version without display, via two buttons under the blind cover.</p>	
Display elements	
<p><b>Display</b> 360° LED light ring: A clearly visible 360° LED ring is attached to the blind cover or display module to indicate the device status, the valve end position and the operating status. The LED light ring lights up, blinks or flashes into one or changing colours, depending on the LED mode set</p> <p><b>Mechanical position indicator:</b> The mechanical position indicator shows the current valve position even if the supply voltage fails.</p>	
Data transmission (optional)	
<p><b>SIM card (optional):</b> With the optionally available SIM card, device-specific values and user settings can be stored and quickly transferred to another device.</p>	

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**Safety position via energy storage (optional)**

The safety starting positions in case of power interruption is realized with the optional energy storage SAFEPOS energy-pack. The desired position is set via the menu. In addition to the end positions (open/closed), any desired intermediate position can be defined here. The energy storage has a lifespan of up to 10 years, depending on the operating conditions. The power of the energy storage is monitored and a warning is displayed to indicate its life is coming to an end. The storage device is designed as a plug-in module to facilitate replacement. Without energy storage, the valve remains in the last position it was in. The energy storage device is fully charged and ready for operation after a maximum of 100 seconds (depending on the operating conditions). The energy storage device cannot be retrofitted in the field.



**Fieldbus: EtherNet/IP, PROFINET, Modbus TCP (optional)**

The fieldbus gateway for EtherNet/IP, PROFINET and Modbus TCP is integrated in an additional module. It has 2 fieldbus connections with 4 pin M12 circular sockets. The interfaces for the fieldbus connection and the status LEDs are located under the gateway housing cover. If there is a need for it to be included in a network then the configuration of the Ethernet can be performed via the web server. The gateway cannot be retrofitted in the field.



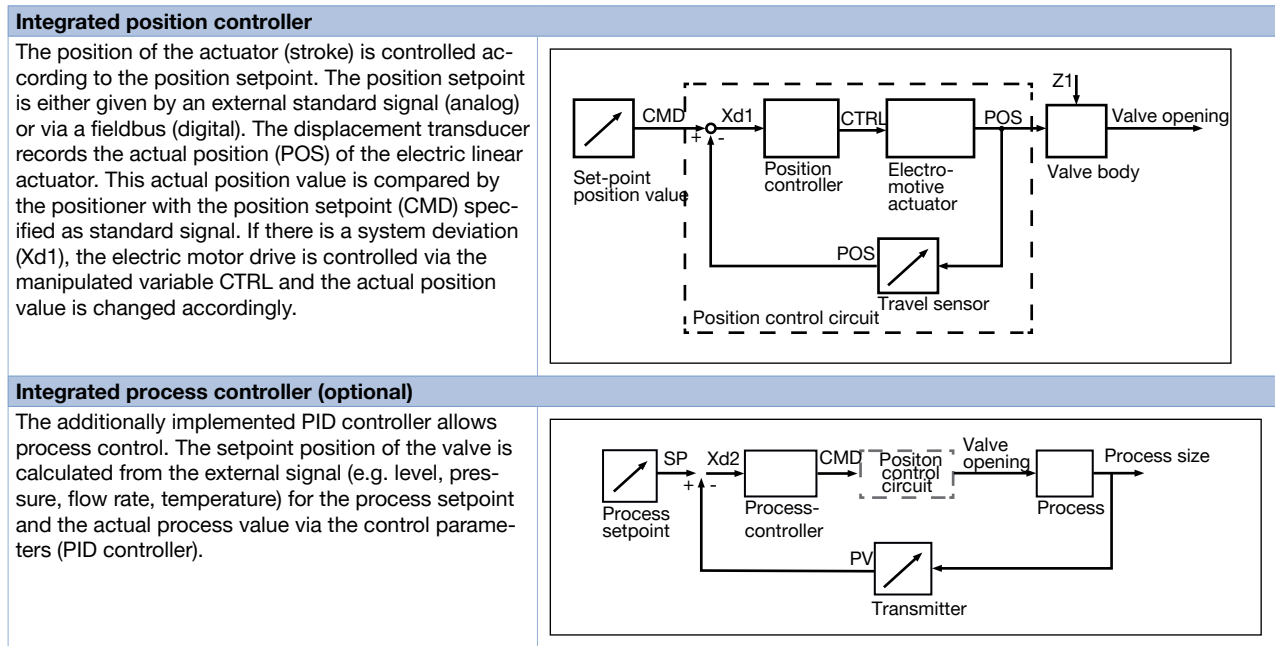
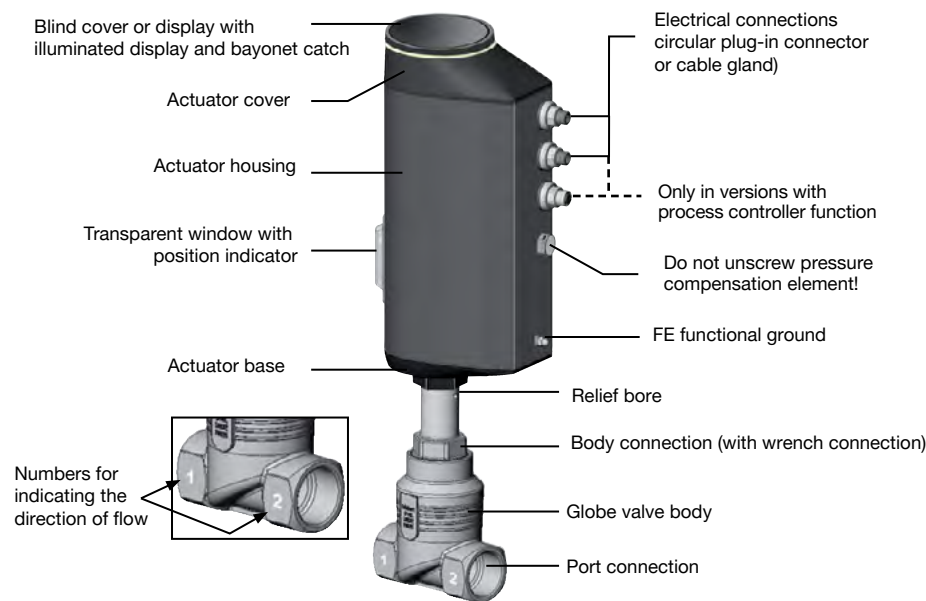
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## 6.2. Product assembly

The electromotive linear drive consists of a brushless DC motor, a gear and a spindle system that transfers the force to the control cone. The integrated control electronics are controlled either by standard signals (analog) or via a field bus (digital). A positioner and a process controller are available as controller versions. The electromotive linear actuator is designed to provide optimum efficiency. At the same time, it keeps the valve tight and in position even at the maximum specified medium pressure in a powerless standstill. An optional energy storage device (SAFEPOS energy-pack) is available for the device. If the supply voltage fails, it supplies the actuator with the energy required to move the valve into the desired position, which can be set in the menu.

The valve position can be changed manually in 2 ways. Either via the electrical manual control or via a mechanical manual control if no supply voltage is available. The device can be set and operated either via 2 capacitive keys and 4 DIP switches or optionally on a display with touch screen. In addition there is always the possibility to operate the device via the bÜS service interface and using the "Bürkert Communicator" software.

The intelligent process valve Type 3361 offers the operator options for process monitoring, valve diagnosis and preventive maintenance. Internal measurements of the operating status are evaluated and, if necessary, issued as a warning or error message. These signal, for example, impermissible ambient and process conditions, functional deviations of components or the status of the energy storage device. A special feature of the Globe Control Valve is the screwed-in valve seat, which can be replaced to reduce the seat size



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## 7. Ordering information

### 7.1. Bürkert eShop – Easy ordering and quick delivery



#### Bürkert eShop – Easy ordering and fast delivery

You want to find your desired Bürkert product or spare part quickly and order directly? Our online shop is available for you 24/7. Sign up and enjoy all the benefits.

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### 7.2. Bürkert product filter



#### Bürkert product filter – Get quickly to the right product
















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### 7.3. Ordering chart accessories

#### Note:

For connection to a bus/CANopen network see [cabling guide](#) ►.

Description	Article no.
<b>Connection cable</b>	
Connection cable with M12 socket, 4 pin, (length 5 m) for operating voltage (without communication)	918038 
Connection cable with M12 socket, 8 pin, (length 2 m) for input and output signals	919061 
Connection cable with M12 plug, 5 pin, (length 2 m) for input of process actual value signals (only for version with process controller)	559177 
<b>USB-büS interface set</b>	
büS stick set 1 (including power supply unit, büS-stick, terminating resistor, Y-distributor, 0.7 m cable with M12 connector)	772426 
büS stick set 2 (including bus-stick, terminating resistor, Y-distributor, 0.7 m cable with M12 connector)	772551 
büS adapter for büS interface set (M12 on büS service interface Micro USB)	773254 
<b>büS cable extensions from M12 plug to M12 socket</b>	
Connecting cable, length 1 m	772404 
Connecting cable, length 3 m	772405 
Connecting cable, length 5 m	772406 
Connecting cable, length 10 m	772407 
<b>Miscellaneous</b>	
Software Bürkert Communicator, Type 8920	<b>LINK</b> ►
SIM card	291773 
Holding device for port connection DN15...20	693770 
Holding device for port connection DN25...50	693771 
Blind cover made of plastic	277881 
Energy storage SAFEPOS energy-pack	285834 



# Bürkert – Close to You

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## Product Enquiry Form - Electromotive Control Valves

Thank you for your interest in our products! In order to provide you with optimum advice, please fill out the following form and send it to your **Bürkert representative** or e-mail address: [info@burkert.com](mailto:info@burkert.com). All information submitted will of course be kept strictly confidential.

Please fill in the **required fields!**  \*

\*Note: The interactive functions of this PDF may be restricted depending on the PDF reader used.

Personal Information			
Company		Contact person	
Customer no.		Department	
Street		Postcode / Town	
Telephone no.		Email	

Delivery	
Quantity	Required delivery date

Operating data			
Function <small>(Function of the control valve in the process / process description)</small>			
Pipeline	DN	PN	
Operating medium			
Type of medium	Fluid	Steam	Gas

Fluidic data	Largest flow rate 1. Operating point	Average flow rate 2. Operating point	Lowest flow rate 3. Operating point	Unit
Flow rate				
Temperature $t_1$				
Inlet pressure $p_1$ <small>absolute (a) relative (g)</small>				
Outlet pressure $p_2$ <small>absolute (a) relative (g)</small>				
Steam pressure $p_v$				
Viscosity ( $\nu / \eta$ )				
Density ( $\rho$ )				
Max. permitted sonic pressure level ( $L_p$ )				

Valve body				
Construction	Angle seat valve		Globe valve	
DN / Nominal pressure	DN		PN	
Seat size				
Flow coefficient	$K_{vs}$	$m^3/h$	$C_v$	GPM(US)
Seat seal	metallic		soft seal PTFE	
Connection	soft seal PEEK			
	Flange	DIN EN 1092-1	ANSI B16.5	JIS 10K
	Thread	G	NPT	RC
	Weld	DIN EN ISO 1127 / ISO 4200	DIN 11850 2 / DIN 11866 A	ASME BPE
	Clamp	ASME BPE	DIN 32676 A (tube ISO 4200)	DIN 32676 B (tube DIN 11850)
	Other			

Valve data	
<b>Safety position</b>	With energy storage (factory setting NO) With energy storage (factory setting NC) Without energy storage (last valve position blocked)
<b>Function</b>	Positioner                      Process controller
<b>Operation</b>	With Touch-Display              Without Touch-Display, internal button
<b>Electrical connection</b>	Cable gland                      M12 multi-pin plug connection
<b>Communication</b>	<b>Analogue:</b> 1 AI, 1 DI                      1 AI, 1 DI, 1 AO, 2 DO <b>Digital (Fieldbus):</b> EtherNet/IP                      PROFINET                      Modbus TCP CANopen
<b>SIM card</b>	With                      without

Approvals / Conformities
For use with food (conform to EG regulation no. 1935/2004)
For use with food (conform to FDA)
Explosion protection in accordance with ATEX II 2GD mech. / IECex
European Gas Appliances Directive (EU) 2016/426, DVGW DINEN 161 and DIN EN 16678
For potable water according to KTW/W270
Certificate for the fulfilment of the order EN-ISO 10204 2.1 (Article no. 440788)
Test report EN-ISO 10204 2.2 (Article no. 803722)
Conformity certification for raw material EN-ISO 10204 3.1 (included)
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Additional Requirements / Comment

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