# Type 3361





# Electromotive 2 way globe control valve

- High precise and fast flow control
- Several K<sub>vs</sub> 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



Type 3320 Electromotive 2/2 way angle seat valve



Type 3321 Electromotive 2/2 way globe valve



Type 8098 FLOWave SAW flowmeter



Type ME43
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

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Product properties	
Dimensions	Detailed information can be found in chapter "4. Dimensions" on page 8.
Material	Detailed information can be found in chapter "3. Materials" on page 6.
Design	Globe control valve
Nominal diameter	DN1050, NPS %2
Safety setting in case of power	With SAFEPOS energy-pack: open, closed or freely programmable
failure	Without SAFEPOS energy-pack: blocked in last position
Flow direction	Against closing direction (below seat)
Controller version	Position controller or process controller
Weight	4 kg (only actuator, total weight depends on the port connection)
Performance data	
Operating pressure	025 bar(g) (see "5.1. Fluidic data" on page 14) Vacuum version up to -0.9 bar(g) (optional)
Nominal pressure	PN25 (DIN EN 1333), Class 150 (DIN EN 1759)
K <sub>vs</sub> value	0.137 m³/h (see "5.1. Fluidic data" on page 14)
Flow characteristic	Linear or equal percentage (see "5.1. Fluidic data" on page 14)
Seat leakage (DIN EN 60534-4)	Class III, IV and VI (see "5.1. Fluidic data" on page 14)
Closing time	3.36.2 s (depending on travel speed and stroke)
Theoretical rangeability	Up to 50:1 (see "5.1. Fluidic data" on page 14)
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	TID LOV
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 ener-
	gy-pack) At minimum operating temperature additionally 2 A
Protection class (DIN EN 61140)	3
Duty cycle	100 %
Standby consumption <sup>1,)</sup>	25 W
Communication and control	
Standard signal (analogue)	Setpoint: 0/420 mA, 05/10 V and binary input (further inputs and outputs optional, see "5.3, Electrical control and interfaces" on page 19)
Fieldbus (digital)	Bürkert system bus (büS) (Standard)
. 60	CANopen (optional)
401 31	EtherNet/IP, PROFINET, Modbus/TCP (optional via integrated gateway)
Media data	
Process medium	Steam, neutral gases, water, alcohols, oils, fuels, hydraulic fluids, salt solutions, lyes, organic solvents, oxygen (optional)
Medium temperature	-40+230 °C (see "5.2. Operating limits" on page 16)
Viscosity	Up to 600 mm <sup>2</sup> /s
Process/Port connection & commu	unication
Port connection <sup>2.)</sup>	
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
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)
Flange connection	DIN EN 1092-1 ANSI B 16.5 JIS 10K





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 ethernets)
Approvals and certificates	
Conformity	Food EGV 1935/2004 FDA (Optional)
Approval	Explosion protection ATEX/IECEx (Optional) (see "2. Approvals" on page 5) cULus (Optional) (see "2. Approvals" on page 5)
Ignition protection class	II 3G Ex ec IIC T4 Gc II 3D Ex tc IIIC T135 °C Dc
Environment and installation	20
Ambient temperature	<ul> <li>-25+65 °C (only without additional modules)</li> <li>(Derating see "Operating limits for ambient and medium temperature" on page 17)</li> </ul>
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	h Fluitech











# 2. Approvals

Approval	Description
뀠	Food produce contact  Materials in contact with medium conform to EC regulation 1935/2004  Materials in contact with medium conform to FDA (optional)
H <sub>2</sub> O	<b>Drinking water</b> Suitable for use with drinking water according to KTW, W270 (optional)
02	Oxygen Suitable for use with gaseous oxygen (optional)
$\langle \xi_{\rm X} \rangle$	Explosion proof As category 3 device suitable for zone 2/22 (optional)  ATEX
<b>IECE</b> X	<ul> <li>II 3G Ex ec IIC T4 Gc</li> <li>II 3D Ex tc IIIC T135 °C Dc</li> </ul>
	IECEx
	Ex ec IIC T4 Gc
	Ex tc IIIC T135 °C Dc
UL	Safety requirements UL-listed cULus Cert. No. 238179 (optional)
Standards	Description
powered by	Field device for integration into the EDIP platform via Bürkert system bus (büS)
EDIP	

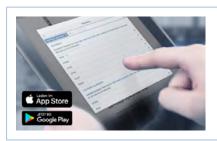


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### 3. Materials

# 3.1. Chemical Resistance Chart - Bürkert resistApp



# Bürkert resistApp - Chemical Resistance Chart

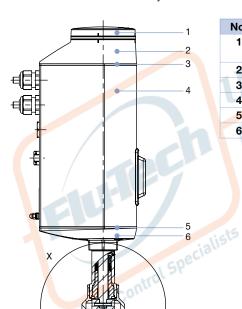
You want to ensure the reliability and durability of the materials in your individual application case? Verify your combination of media and materials on our website or in our resistApp.

**Start Chemical Resistance Check** 

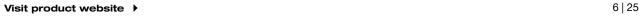
### 3.2. Material specifications

#### Note:

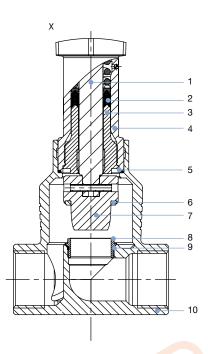
The Type 3361 globe control valve is supplied with various port connections (flange, thread, weld end and clamp connections). These connections are not shown. They are the same material as the valve body.



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



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Component	Material								
Spindle	Stainless steel 1.4401 (316)/1.4404 (316L)								
Spindle seal	PTFE V-seals (filled) with spring compensation								
Spindle guidance	Stainless steel 1.4404 (316L)								
<ul> <li>4 Packing gland tube Stainless steel 1.4401 (316)</li> <li>5 Seal valve body Graphite or PTFE</li> </ul>									
Control cone	Stainless steel 1.4571								
Valve seat	Stainless steel 1.4571								
O-Ring valve seat	EPDM								
Valve body	Stainless steel CF3M								
in wal	CO.								
	Spindle seal Spindle guidance Packing gland tube Seal valve body Seat seal Control cone Valve seat O-Ring valve seat								





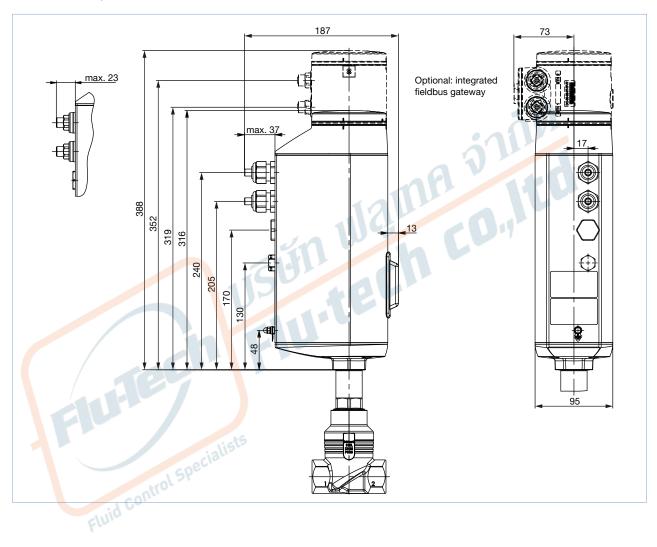


# **Dimensions**

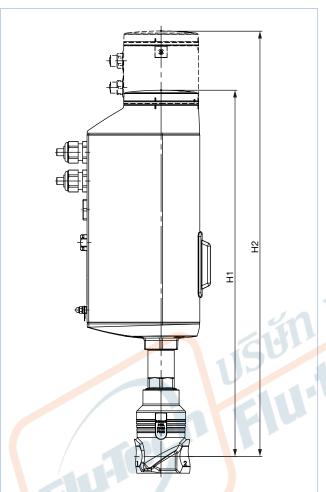
#### 4.1. **Actuator**

Note:

Dimensions in mm, unless otherwise stated









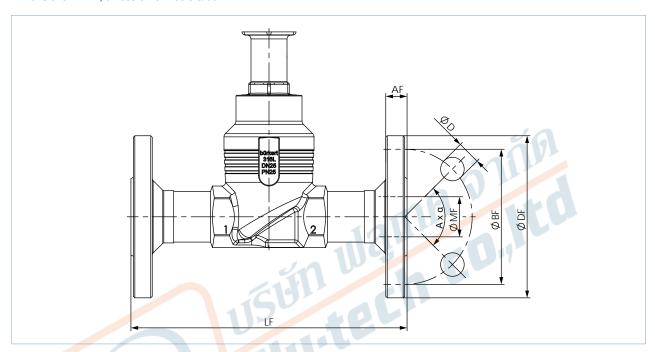
Nominal di	iameter (Pipe)	Height <sup>1.)</sup>	Height <sup>1.)</sup>		
DN	NPS	H1 class	H2 <sup>2.)</sup>		
10	3/8	417	489		
15	1/2	417	489		
20	3/4	423	495		
25	Fi	446	518		
32	11/4	474	546		
40	11/2	479	551		
50	2	485	557		

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

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# 4.2. Body with flange connection

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	Αχα	ØMF	ØDF	LF	ØBF	AF	ØD	Αχα	ØMF
10	90	130	60	16	14	4 x 90°	13.6	_	_	_	_	_	_	_
15	95	130	65	16	14	4 x 90°	18.1	95	108	70	12	15	4 x 90°	18.1
20	105	150	75	18	14	4 x 90°	23.7	100	117	75	14	15	4 x 90°	23.7
25	115	160	85	18	14	4 x 90°	29.7	125	127	90	14	19	4 x 90°	29.7
32	140	180	100	18	18	4 x 90°	38.4	135	140	100	16	19	4 x 90°	38.4
40	150	200	110	18	18	4 x 90°	44.3	140	165	105	16	19	4 x 90°	44.3
50	165	230	125	20	18	4 x 90°	56.3	155	203	120	16	19	4 x 90°	56.3

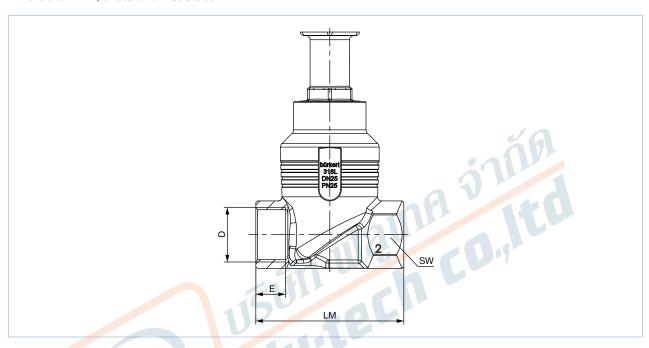
Nominal diameter (Pipe)	ANSI B 16.5 Class 150 FTF 37 acc. to DIN EN 558-2								
NPS	ØDF	LF	ØBF	AF	ØD	Αχα	ØMF		
1/2	89	184	60.5	11.2	15.7	4 x 90°	15.7		
3/4	99	184	69.9	12.7	15.7	4 x 90°	20.8		
1	108	184	79.2	14.2	15.7	4 x 90°	26.7		
1½	127	222	98.6	17.5	15.7	4 x 90°	40.9		
2	152	254	120.7	19.1	19.1	4 x 90°	52.6		



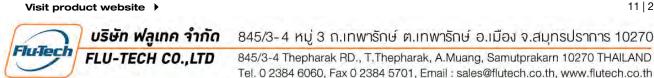


# 4.3. Body with thread connection

Dimensions in mm, unless otherwise stated



Nominal diameter	G, Rc, NPT (EN ISO 228-1, ISO 7/1/DIN EN 10226-2, ASME B 1.20.1)							
(Pipe)	D	E				SW		
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	11/4	20	17.3	19.1	110	50		
40	1½	22	17.3	19.1	120	55		
50	2 5	24	17.6	23.4	150	70		
Fluid	Control							

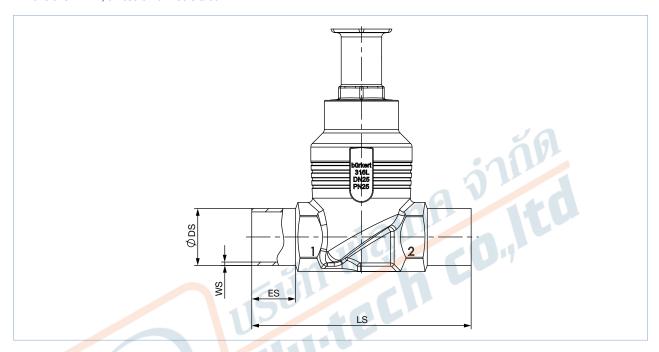




# 4.4. Body with weld connection

#### 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
DN			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

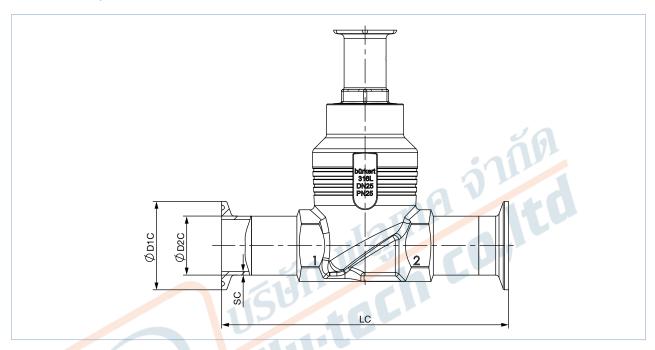
Nominal diameter (Pipe)	ES	LS	ASME BPE/DIN 11866 C		
NPS			ØDS	WS	
1/2	20	90	12.7	1.65	
3/4	20	90	19.05	1.65	
1	20	100	25.4	1.65	
1½	26	140	38.1	1.65	
2	26	150	50.8	1.65	





# 4.5. Body with clamp connection

Dimensions in mm, unless otherwise stated



Nominal diameter (Pipe)	Pipe: DIN 11850 2 DIN 11866 A	DIN 32676 A			Clamp: DIN 32676 B  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		
1/2	122	12.7	25.0	1.65		
3/4	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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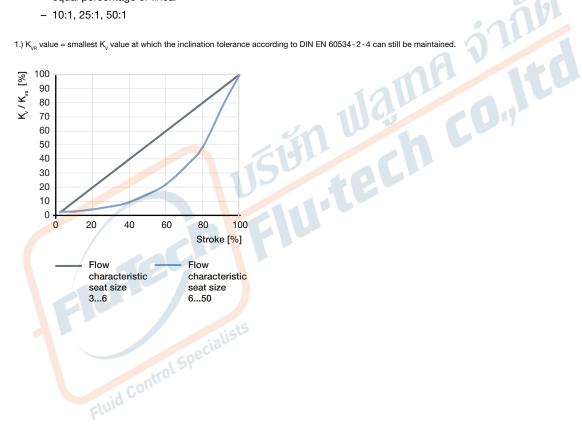


#### 5. Performance specifications

#### 5.1. Fluidic data

#### Flow characteristics

- Flow characteristic acc. to DIN EN 60534-2-4
- Theoretical rangeability: K<sub>vs</sub>/K<sub>v0</sub> (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  $\leq$  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





# Overview of flow characteristics with flow below seat

#### Note:

- $K_v$  value [m³/h]: Measured with water acc. to DIN EN 60534-2-4
- Operating limits, see "5.2. Operating limits" on page 16

Nominal Seat diameter size		Actuator force	Operating pressure (Seat leakage class) Valve seat seal		Characteris- tics (theoret- ical rangea-	K <sub>ν</sub> value at stroke					K <sub>vs</sub> value			
(Pipe)														
				Stain- less steel	PTFE	PEEK	bility)	5%	10%	30 %	50%	70%	90 %	
DN	NPS		[N]		[bar(g)]					[n	n³/h]			[m³/h]
10	3/8	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 percent-	/	0.007	0.045	0.16	0.41	1.1	1.25
		8					age (50:1)	4	0.070	0.12	0.26	0.61	1.5	2.0
		10					12	1	0.11	0.19	0.48	1.0	2.3	2.7
15	1/2	3		25 (IV)	_	_	Linear (10:1)	-	0.003	0.015	0.037	0.065	0.09	0.10
		4				2.1	Linear (25:1)	-	0.015	0.1	0.19	0.27	0.33	0.35
		4					Linear (10:1)	-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 8 10				11.	25 (VI)	Equal percent-	3	0.007	0.045	0.16	0.41	1.1	1.25	
	8				age (50:1)	-	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		
		15						0.14	0.17	0.35	0.80	1.8	3.7	4.3
20	3/4	10		25 (IV) _	- 1	25 (VI)		-	0.12	0.20	0.52	1.2	2.6	3.2
		15					0.14	0.17	0.35	0.80	1.8	4.0	5.2	
		20		25 (IV)	25 (VI)	25 (VI)		0.20	0.25	0.45	1.1	2.4	5.2	7.1
25	1 /	15		25 (IV)	-\	25 (VI)		0.14	0.17	0.35	0.80	1.8	4.1	5.3
		20		25 (IV)	25 (VI)	25 (VI)		0.20	0.25	0.47	1.1	2.5	5.4	7.2
		25				20 (VI)		0.35	0.38	1	2.2	5.1	9.4	12
32	11/4	20	1300	25 (IV)	25 (VI)	25 (VI)		0.22	0.25	0.50	1.1	2.5	5.8	8
		25		300 16 (IV) 1		20 (VI)		0.40	0.47	1.1	2.5	5.4	10.3	13
		32	1300		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	11/2	25	1300	25 (IV)	25 (VI)	20 (VI)		0.40	0.50	1.1	2.6	5.6	10.7	13.6
		32	CID.	16 (IV)	16 (VI)	10 (VI)		0.48	0.60	1.3	3.2	6.9	15.0	20
		A.c.		25 (IV)	25 (VI)	20 (VI)								
		40	1300	10 (III)	10 (VI)	6 (VI)		0.60	0.70	1.7	4.0	9.2	18.2	24
			2500	18 (IV)	18 (VI)	14 (VI)								
50	2	32	1300	16 (IV)	16 (VI)	10 (VI)		0.48	0.60	1.3	3.2	6.9	16.0	21
		2500	2500	25 (IV)	25 (VI)	20 (VI)								
		40	1300	10 (III)	10 (VI)	6 (VI)		0.60	0.70	1.7	4.0	9.2	18.9	24.5
			2500	18 (IV)	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)								

Visit product website >

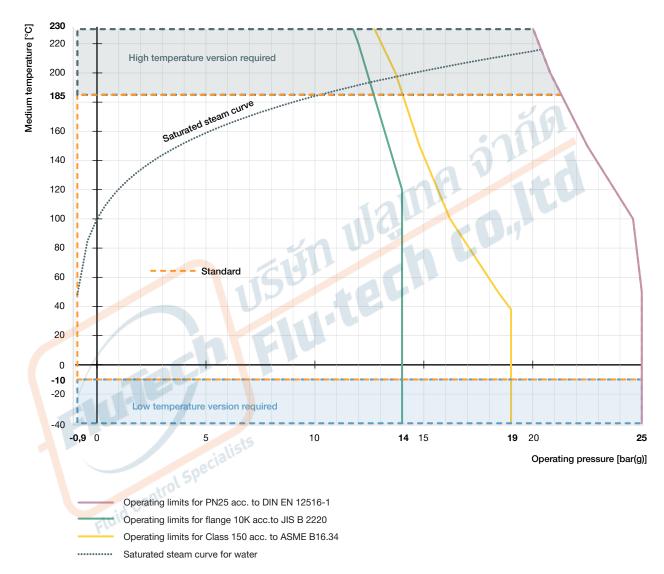
Tel. 0 2384 6060, Fax 0 2384 5701, Email: sales@flutech.co.th, www.flutech.co.th



# 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.

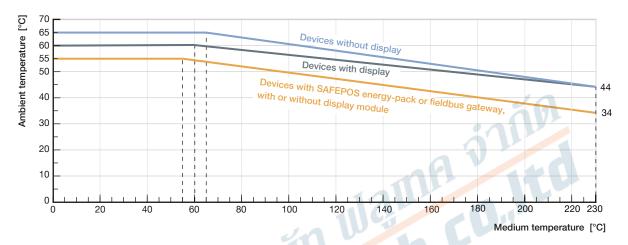


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### Operating limits for ambient and medium temperature

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 for 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.	-40230 °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.	-40130 °C (recommended for ≤130 °C)	PTFE
	Their use is not recommended in cases of increased erosion due to demanding process conditions.	-10230 °C (recommended for >130 °C)	PEEK



# 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  $^{\circ}\text{C}$ 

### 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**

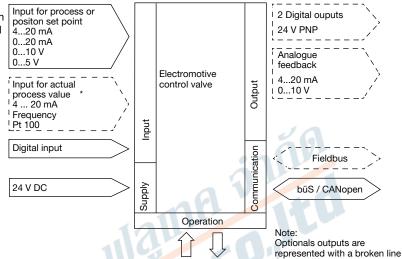
For the analogue control 2 variants each are available for the inputs and outputs and the connection interface.

### 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 setpoint input	Galvanically isolated from supply voltage and analogue output 0/420 mA (input resistance <70 Ω) 05/10 V (input resistance 22 kΩ)
Analogue output	Max. current 10 mA (for voltage output 05/10 V) Burden (load) 0800 Ω (for current output 0/420 mA)
Digital input	05 V = log "0", 1030 V = log "1" inverted input reversed accordingly
Digital output	PNP, Current limitation 100 mA
Analogue actual value signal input	(optional)
420 mA	Input resistance: $<70 \Omega$ Resolution: 12 Bit
Frequency Control St	Measuring range: up to 1000Hz Input resistance: $>30 \text{ k}\Omega$ Resolution: 0,1 % of measured value Input signal: $>300 \text{ mVss}$ Signal shape: sine, rectangle, triangle
Pt 100	Measuring range: -20 °C+220 °C Resolution: 0,01 °C Measuring current: 1 mA
Communication	
Communication interface (büS)	Connection to PC via USB büS interface set
Communication software (büS)	Bürkert Communicator, see Type 8920 ▶





# Product design and assembly

#### 6.1. **Product features**

#### Note

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

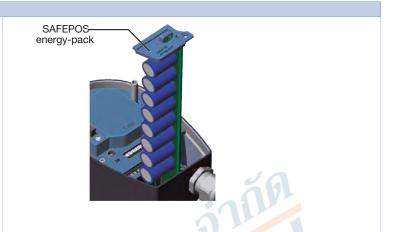
#### Device without display module: Blind cover dismantled In the version without operating display, the basic SIM card functions are operated via 4 DIP switches and 2 push buttons. These are located under the blind cover, which can be removed by turning it manually. büS Service interface DIP switch' The device can also be configured in detail with the Bürkert Communicator software via the büS service interface CLOSE button\* OPEN button 3 Mechanical manual control Rugged Touch Display (optional): Information bar The robust display module offers convenient op-Digital position indicator eration, configuration and display of all necessary functions. Besides the start screen, various views Display Sample layout: HAND /AUTO in AUTOMATIC mode can be freely configured. The büS service interface is also available here under the display module. The display cannot be retrofitted in the field.. Back button Menu button Navigation buttons Actuation Mechanical manual control: 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. Electrical control via operating elements: 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. Display elements Display LED light ring 360° LED light ring: A clearly visible 360° LED ring is attached to the blind cover or display module to indicate the device Mechanical position indicator status, the valve end position and the operating status. The LED light ring lights up, blinks or flashes Valve oper into one or changing colours, depending on the LED mode set Valve closed Mechanical position indicator: The mechanical position indicator shows the current valve position even if the supply voltage fails. Data transmission (optional) SIM card (optional): SIM card holder With the optionally available SIM card, device-specific values and user settings can be stored and quickly transferred to another device.



# burkert

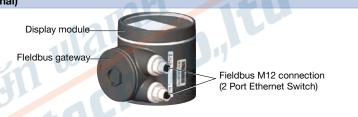
### Safety position via energy storage (optional)

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 include in a network then the configuration of the Ethernet can be performed via the web server. The gateway cannot be retrofitted in the field.







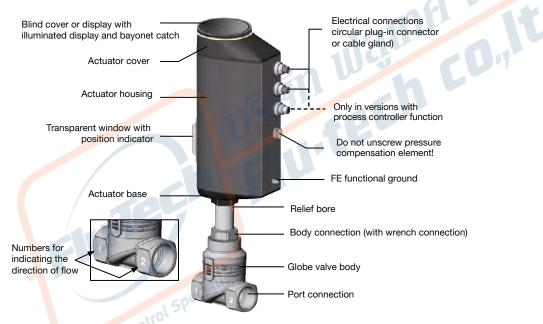


#### 6.2. Product assembly

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.

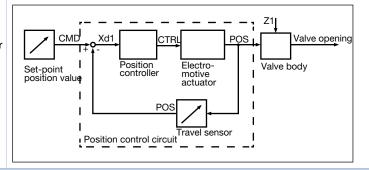
The valve position can be changed manually in 2 ways. Either via the electrical manual control or via a mechanical manual control if no supply voltage is available. The device can be set and operated either via 2 capacitive keys and 4 DIP switches or optionally on a display with touch screen. In addition 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



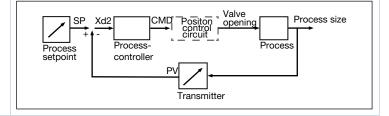
## Integrated position controller

The position of the actuator (stroke) is controlled according to the position setpoint. The position setpoint is either given by an external standard signal (analog) or via a fieldbus (digital). The displacement transducer records the actual position (POS) of the electric linear actuator. This actual position value is compared by the positioner with the position setpoint (CMD) specified as standard signal. If there is a system deviation (Xd1), the electric motor drive is controlled via the manipulated variable CTRL and the actual position value is changed accordingly.



### Integrated process controller (optional)

The additionally implemented PID controller allows process control. The setpoint position of the valve is calculated from the external signal (e.g. level, pressure, flow rate, temperature) for the process setpoint and the actual process value via the control parameters (PID controller).



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# 7. Ordering information

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



### Bürkert eShop - Easy ordering and fast delivery

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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

# Standard accessories

Description	Article no.
SIM card for data transmission between devices	291773 🖫
Holding device for port connection DN1520	693770 🖫
Holding device for port connection DN2550	693771 ∖≔
Plastic blind cover	277881 🖫
Energy storage SAFEPOS energy-pack	285834 ≒

#### Accessories cable

#### Note:

For connection to a büS/CANopen network see cabling guide .

Description	Article no.
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 🤛

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#### **Bürkert accessories**

#### Note:

- For connection to a büS/CANopen network see cabling guide >.
- Detailed accessory tables can be found in the cabling guide

Description	Article no.
Software Bürkert Communicator, Type 8920	LINK >
büS stick set 1 (including power supply unit, bus-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

### 7.4. Bürkert product enquiry form

**Bürkert product enquiry form:** Would you like to make a specific product enquiry based on your technical requirements? Please use our product enquiry form at the end of this data sheet. There you will find all the information relevant to your Bürkert contact person that will help us to process your enquiry in the best possible way.

**Bürkert specification key:** In our product enquiry form you will find a complete explanation of the composition of our specification key. You will find our product enquiry form at the end of this data sheet.

