



Electromotive 2-way tank bottom diaphragm valve (positioner)

- Safety position through energy storage
- Adjustable driving force
- Diagnostics functions and fieldbus connection
- Wetted surfaces in Ra ≤ 0.38 µm...1.6 µm (optionally electropolished)
- Available in nominal diameters DN 06...DN 100

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

Can be combined with

	Type SV02 Diaphragms	▶
	Type ME61 EDIP process display	▶
	Type ME63 Industrial Ethernet gateway, IP65/IP67/IP69k	▶
	Type ME43 Fieldbus gateway	▶
	Type 8098 FLOWave SAW flowmeter	▶

Type description

The externally controlled Type 3365 diaphragm valve consists of an electrically controlled linear actuator (positioner), a diaphragm and a tank bottom valve body. The electric actuator with ball screw ensures usage under hygienic or aggressive ambient conditions. The flow-optimised valve body with minimum dead space enables high flow rates and a wide range of possible applications. An optional energy storage device guarantees the safety position in the event of a power failure. The position is indicated by means of a 360° LED light ring. To protect the diaphragm the actuator has a drive force adjustment. A correspondingly high IP protection IP65/IP67 ensures adequate splash protection. The electromotive actuator of the tank bottom diaphragm valve with ball screw moves to the desired end position at a particularly high speed up to 4 mm/s. In addition the valve is also equipped with a mechanical position indicator and corresponding explosion protection ATEX/II 3G Ex ec IIC T4 Gc/II 3D Ex tc IIIC T135 °C Dc.

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1. General technical data

Note:

- AG2: actuator size 2 with a nominal force of 1300 or 2500 N for diaphragm size 8...40
- AG3: actuator size 3 with a nominal force of 7700 or 11500 N for diaphragm size 40...100

Product properties	
Dimensions	Further information can be found in chapter "4. Dimensions" on page 8.
Material	
Block body (VH) ¹⁾	Stainless steel block material 1.4435 according to DIN EN 10088 and 316L according to ASTM A479/A479M
Block body (VI) ¹⁾	Stainless steel block material 1.4435 according to DIN EN 10088 and 316L according to ASME BPE (Table MM- 2.1.1, Ed. 2024)
Design	Diaphragm control valve
Diaphragm	EPDM (AD) ¹⁾ , PTFE/EPDM (EA) ¹⁾ , Advanced PTFE/EPDM (EU) ¹⁾ , laminate of GYLON® and EPDM (ER) ¹⁾
Diaphragm size	8...100
Standard surface quality ²⁾	
Block body (VI etc.) ¹⁾	Internally electrically polished: Ra ≤ 0.38 µm (NO17) ¹⁾ (ASME BPE SF4/DIN HE4) (externally surface electrically polished) Internally mechanically polished: Ra ≤ 0.5 µm (NO14) ¹⁾ (ASME BPE SF1) (externally surface mechanically machined)
Safety setting in case of power failure	With energy storage SAFEPOS energy-pack: open, closed or freely programmable position Without energy storage SAFEPOS energy-pack: blocked in last position
Service life of energy storage SAFEPOS energy-pack	Up to 10 years (depending on operating conditions)
Controller variant	Positioner or process controller (option)
Performance data	
Closing time	AG2: 1.5...4.5 s AG3: 5.7...12.0 s (Depending on travel speed, stroke and operating conditions)
Travel speed	4 mm/s (for AG2 actuator force 2500 N) 3 mm/s (for AG3 actuator force 11500 N)
Dead band of the positioner	± 0.4 %
Electrical data	
Operating voltage	24 V DC ± 10 % (maximum residual ripple 10 %)
Operating current ³⁾	AG2: maximum 3 A (at maximum load and including 1 A charging current of the optional energy storage SAFEPOS energy-pack). At minimum operating temperature additionally 2 A AG3: maximum 5 A (at maximum load and including charging current of the optional energy storage SAFEPOS energy-pack). At minimum operating temperature additionally 6 A
Protection class (DIN EN 61140)	III
Duty cycle	100 %
Standby consumption ³⁾	1...5 W
Communication and control	
Standard signal (analogue)	Set-point value: 0/4...20 mA, 0...5/10 V and binary input (further inputs and outputs optional, see "6.2. Electrical control and interfaces" on page 22)
Fieldbus (digital)	Bürkert system bus (bÜS) CANopen (optional) EtherNet/IP, PROFINET, Modbus TCP, EtherCAT (optional via integrated gateway)
Medium data	
Operating medium	Neutral gases and fluids, highly purified, sterile, aggressive or abrasive mediums (see chemical resistance chart ▶)
Medium temperature	
EPDM (AD) ¹⁾	-10...+143 °C (steam sterilisation +150 °C for 60 min)
PTFE/EPDM (EA) ¹⁾	-10...+130 °C (steam sterilisation +140 °C for 60 min)
Advanced PTFE/EPDM (EU) ¹⁾	-5...+143 °C (steam sterilisation +150 °C for 60 min)
Laminate of GYLON® and EPDM (ER) ¹⁾	-5...+130 °C (steam sterilisation +140 °C for 60 min)

Product connections

Port connection ^{2.)}

Nominal diameter DN 06...DN 100 (1/8"... 4")

Stainless steel body

Welded connection ^{2.)} DIN EN ISO 1127 / ISO 4200 / DIN 11866 series B
 DIN 11850 - 2 / DIN 11866 series A / DIN EN 10357 series A
 ASME BPE / DIN 11866 series C

Clamp connection ^{2.)} DIN 32676 series A (DIN pipe)
 DIN 32676 series B (ISO pipe)
 ASME BPE

Electrical connection

Actuator Terminal strip with cable bushing (only AG2), 2 x M20 or 2 x M12 circular plugs, 5-pin and 8-pin
 Fieldbus gateway 2 x M12 circular sockets, 4-pin (only with Industrial Ethernet)
 Further information can be found in chapter **"5. Product connections" on page 14.**

Approvals and conformities

Further information can be found in chapter **"2. Approvals and conformities" on page 5.**

Detergent resistance According to Ecolab test method: F&E/P3-E No. 40 - 1

Environment and installation

Ambient temperature -10 °C...+ 65 °C ^{4.)} (without display)
 -10 °C...+ 60 °C ^{4.)} (with display)
 -10 °C...+ 55 °C ^{4.)} (with energy storage SAFEPOS energy-pack)

Degree of protection IP65/IP67 (DIN EN 60529), NEMA 4X

Installation position As required, preferably with actuator upright

1.) This information is part of the product key (see **"8.3. Bürkert Product Enquiry Form" on page 28.**)

2.) Other approvals/declarations of conformity/certificates are available on request.

3.) All values relate to a supply voltage of 24 V at +25 °C.

4.) Depends on medium temperature, see chapter **"Operating limits for ambient and medium temperature" on page 20**

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.



2.4. Explosion protection

Approval	Description
 	<p>Optional: Explosion protection (valid for the variable code PX48) As a category 3 device suitable for zone 2/22.</p> <p>ATEX: BVS 17 ATEX E 117 X II 3G Ex ec IIC T4 Gc II 3D Ex tc IIIC T135 °C Dc</p> <p>IECEX: IECEX BVS 17.0100X Ex ec IIC T4 Gc Ex tc IIIC T135 °C Dc</p>

2.5. North America (USA/Canada)


Approval	Description
	<p>Optional: Actuators UL Listed for the USA and Canada (valid for the variable code PU11) The actuators are UL Listed for the USA and Canada according to:</p> <ul style="list-style-type: none"> • UL 61010-1 (ELECTRICAL EQUIPMENT FOR MEASUREMENT, CONTROL, AND LABORATORY USE – Part 1: General Requirements) • CAN/CSA-C22.2 No. 61010-1

2.6. Foods and beverages/Hygiene

Conformity	Description
	3-A Sanitary Standards Inc. (valid for the variable code PE05) The products comply with 3-A Sanitary Standards Inc (3-A SSI) as per certificate.
FDA	FDA – Code of Federal Regulations The diaphragms made of EPDM (AD), PTFE/EPDM (EA), Advanced PTFE/EPDM (EU) and laminate of GYLON® and EPDM (ER) comply with the Code of Federal Regulations published by the FDA (Food and Drug Administration, USA).
USP	United States Pharmacopeial Convention (USP) The diaphragms made of EPDM (AD), PTFE/EPDM (EA), Advanced PTFE/EPDM (EU) and laminate of GYLON® and EPDM (ER) are tested according to USP Class VI.
	EC Regulation 1935/2004 of the European Parliament and of the Council The diaphragms made of EPDM (AD), PTFE/EPDM (EA), Advanced PTFE/EPDM (EU) and laminate of GYLON® and EPDM (ER) are suitable for use with food and beverages (according to EC Regulation 1935/2004/EC).

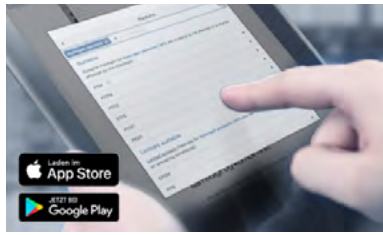
2.7. Others

Oxygen

Conformity	Description
	Optional: Suitability for oxygen (valid for the variable code NL02) The products are suitable for use with gaseous oxygen, according to the manufacturer's declaration.

3. Materials

3.1. Bürkert resistApp



Bürkert resistApp – Chemical resistance chart

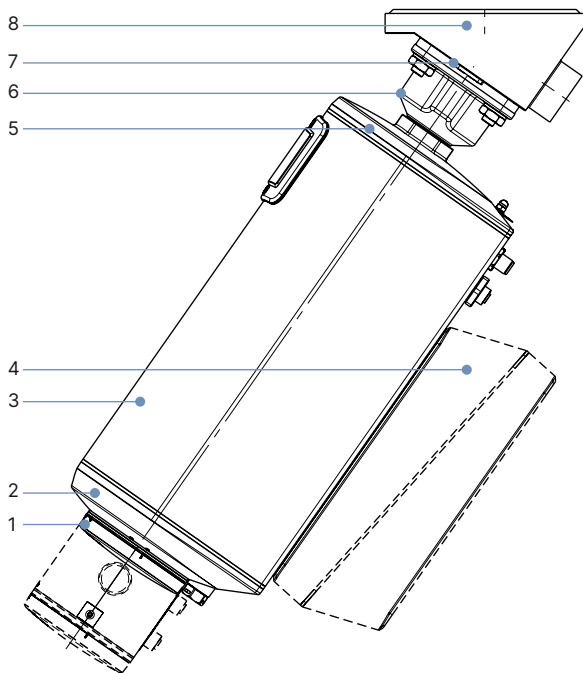
You want to ensure the reliability and durability of the materials in your individual application case? Verify your combination of media and materials on our website or in our resistApp.

[Start chemical resistance check](#)

3.2. Material specifications

Note:

The exemplary representation may differ from the actual product.



AG2

Nr.	Komponente	Material
1	Display housing/blind cover	PPS (standard), stainless steel 1.4301 (for ATEX/IECEx)
2	Actuator cover	PPS
3	Actuator body	Powder-coated aluminium
5	Actuator base	PPS
6	Interface	Stainless steel 1.4308
7	Diaphragm	EPDM (AD) PTFE/EPDM (EA) Advanced PTFE/EPDM (EU) Laminate of GYLON® and EPDM (ER)
8	Valve body	See "1. General technical data" on page 3

AG3

Nr.	Komponente	Material
1	Display housing/blind cover	PPS (standard), stainless steel 1.4301 (for ATEX/IECEx)
2	Actuator cover	PC
3	Actuator housing	Powder-coated aluminium
4	Energy storage SAFEPOS energy-pack housing	PC
5	Actuator base	Stainless steel 1.4308
6	Interface	Stainless steel 1.4470
7	Diaphragm	EPDM (AD) PTFE/EPDM (EA) Advanced PTFE/EPDM (EU) Laminate of GYLON® and EPDM (ER)
8	Valve body	See "1. General technical data" on page 3

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3.3. Example of available diaphragm materials

The diaphragms have been developed to meet the unique challenges of hygienic and sterile requirements. Bürkert offers diaphragms with precise material composition and high accuracy. Bürkert diaphragms are available in a wide range of materials which have been tested and proven in applications in the food and beverage, biotechnology, pharmaceutical and cosmetics industries. The diaphragms are tested during development and production to ensure reliability under difficult process conditions.



- EPDM (AD)
- PTFE/EPDM (EA)
- Advanced PTFE/EPDM (EU)
- Laminate of GYLON® and EPDM (ER)

For further information please refer to our flyer “Diaphragm competence for hygienic applications” on our [website](#) ▶.

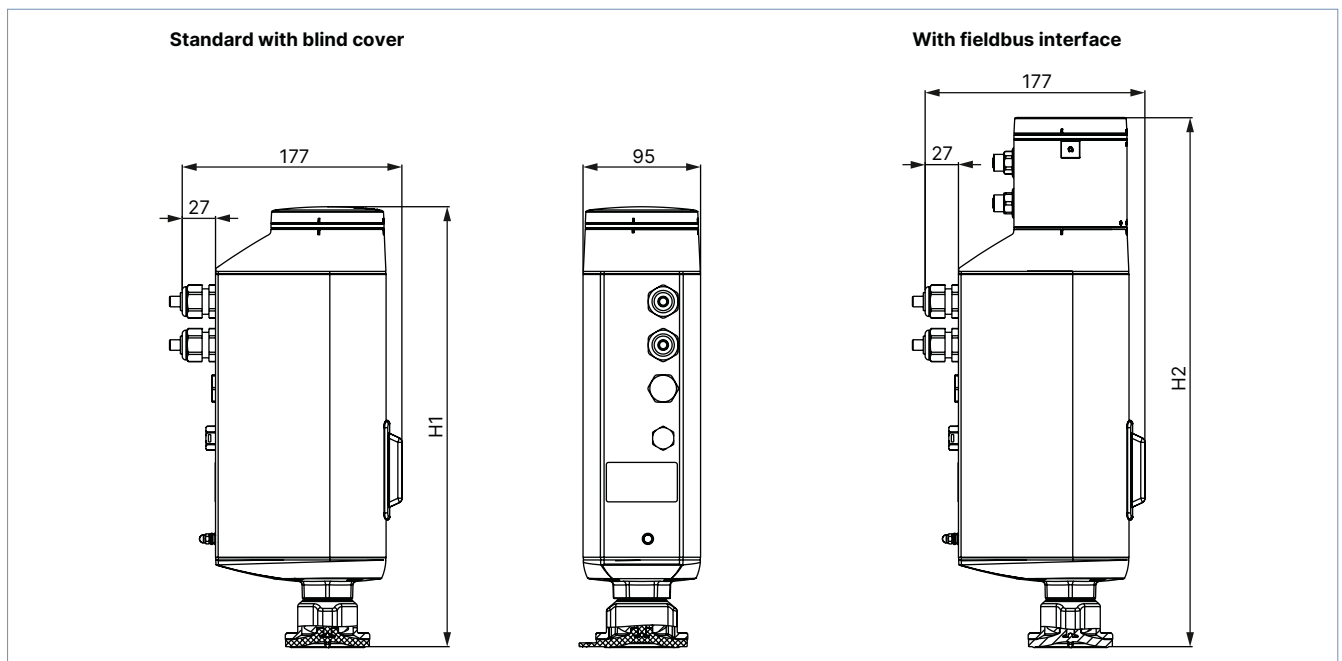
4. Dimensions

4.1. Actuator

AG2

Note:

Dimensions in mm, unless otherwise stated



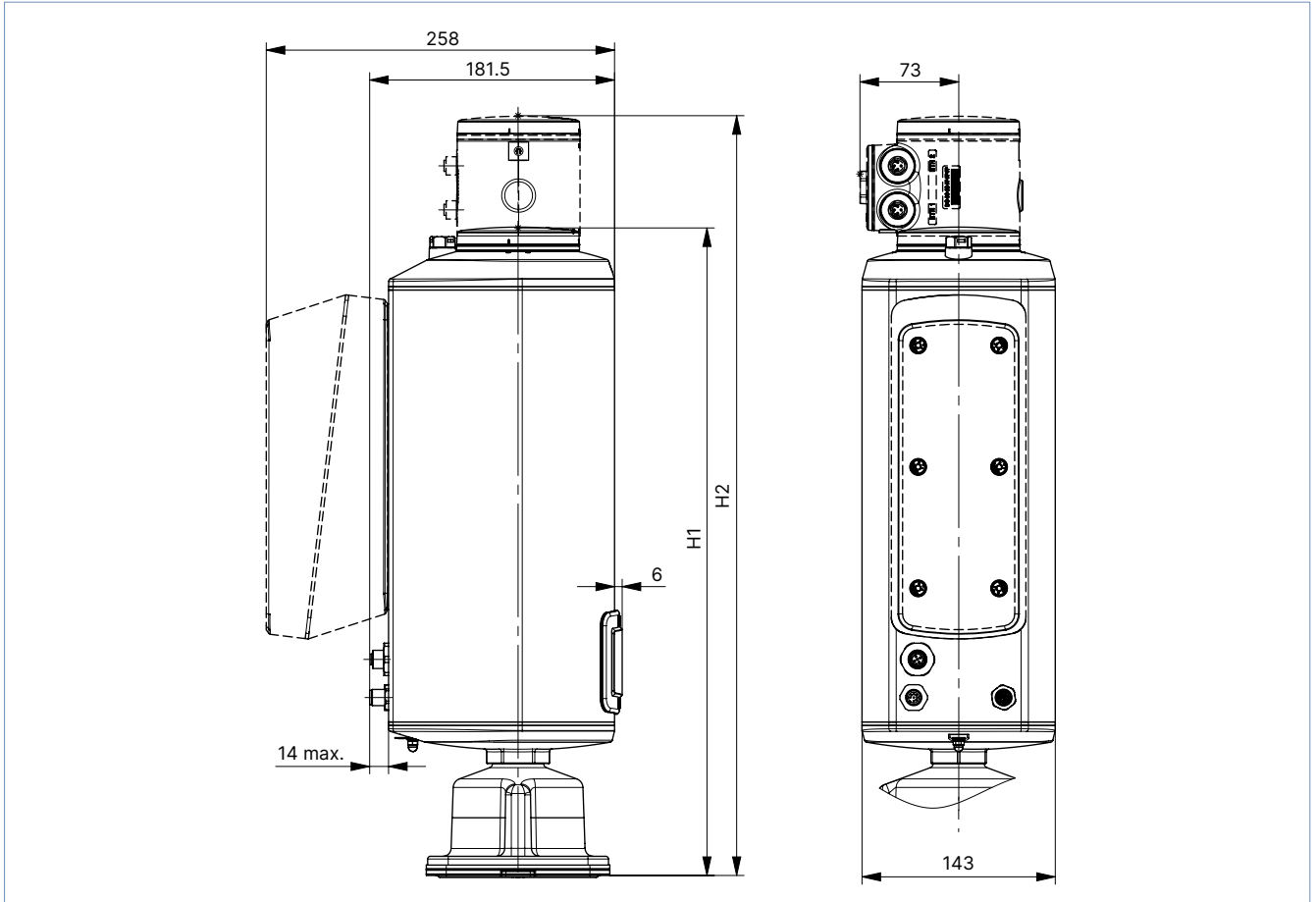
Diaphragm size	Height	
	H1 Standard variant	H2 Fieldbus variant (KOMM ≠ G, N, L)
8	342	414
15	345	418
20	350	422
25	355	426
32	365	436
40	370	442

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AG3

Note:

Dimensions in mm, unless otherwise stated



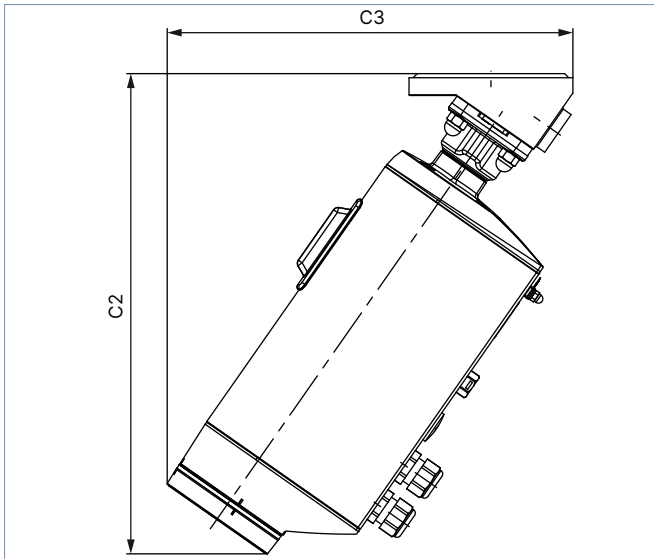
Diaphragm size	Height	
	H1 Standard variant	H2 Fieldbus variant (KOMM ≠ G, N, L)
40	452	523
50	462	533
65	477	548
80	479	550
100	482	553

4.2. Actuator with tank bottom body

AG2

Note:

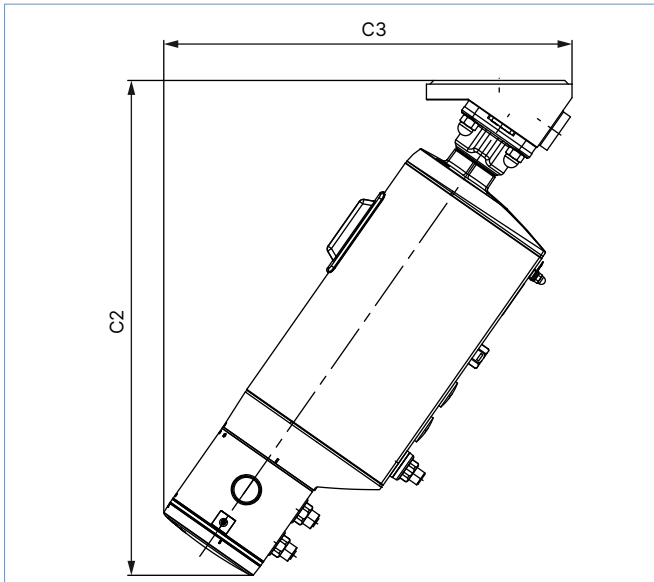
Dimensions in mm, unless otherwise stated



DN	With blind cover	
	C2	C3
8	261	325
15	273	332
20	282	338
25	297	352
32	-	-
40	332	374

Note:

Dimensions in mm, unless otherwise stated



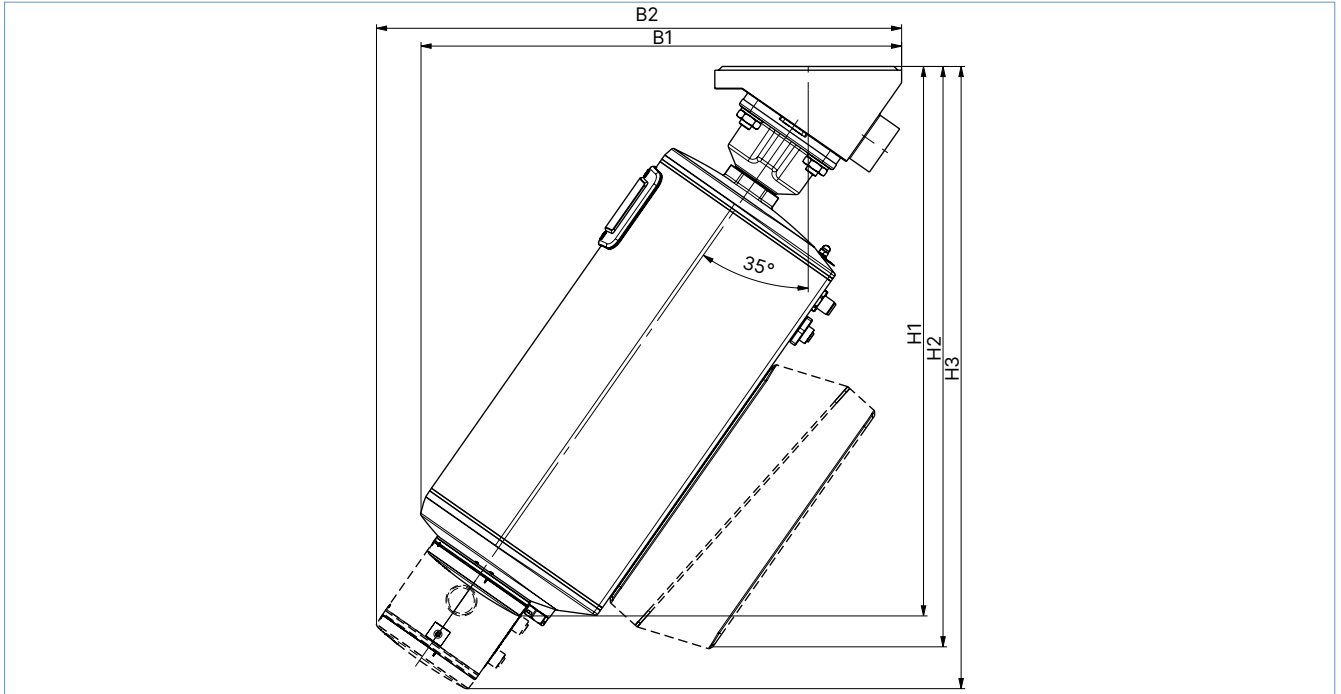
DN	With fieldbus gateway	
	C2	C3
8	302	383
15	314	391
20	324	397
25	337	408
32	-	-
40	373	433

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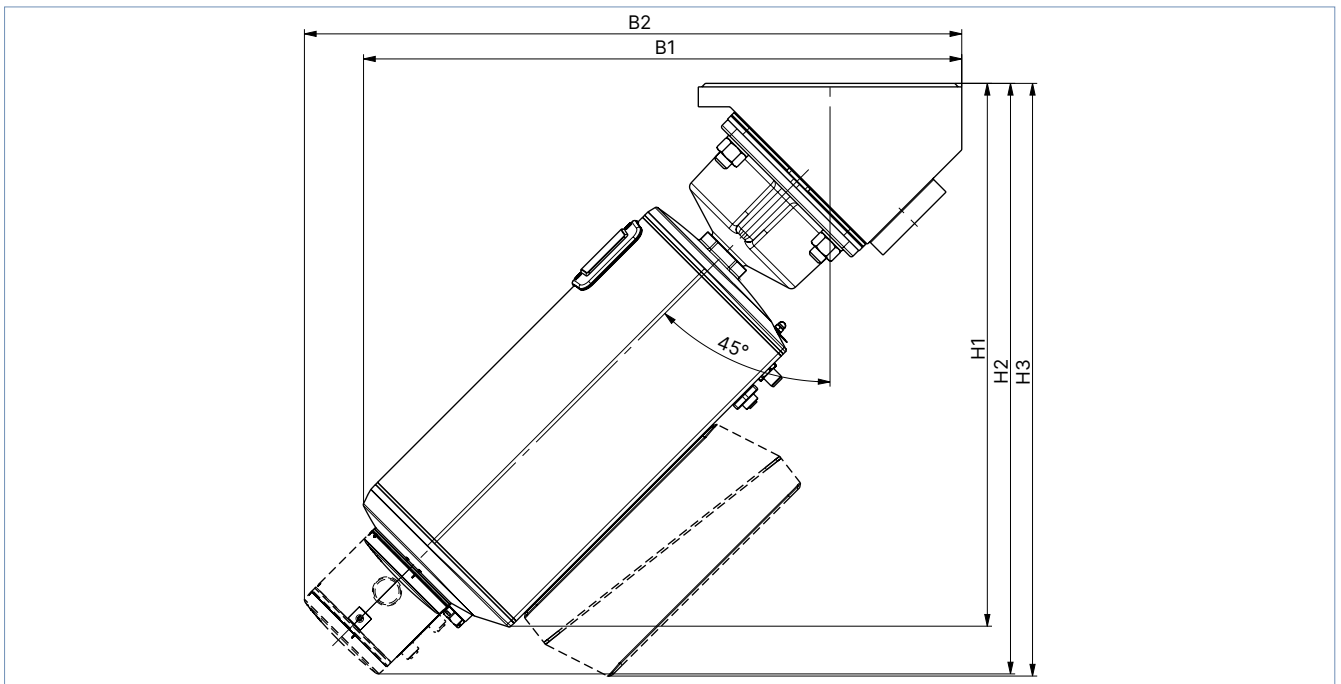
AG3

Note:

Dimensions in mm, unless otherwise stated



DN	H1	H2	H3	B1	B2
40	440.6	467.4	499.6	385.9	421.7
50	456.6	483.5	515.6	403.2	439
65	484.6	511.5	543.6	430.4	466.1
100	515	541.8	574	486.6	522.4



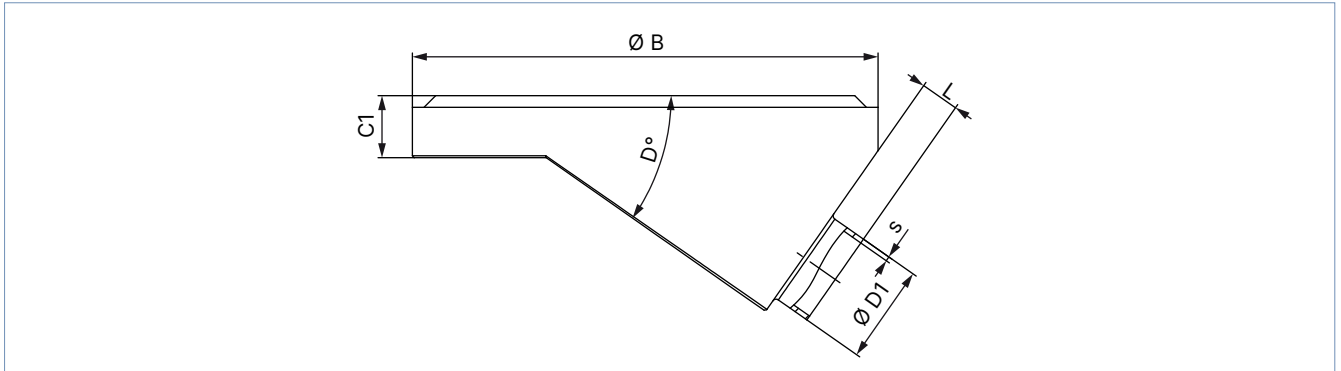
DN	H1	H2	H3	B1	B2
80	463.6	504.3	506.2	510.9	561.4

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4.3. Tank bottom body with welded connection

Note:

Dimensions in mm, unless otherwise stated



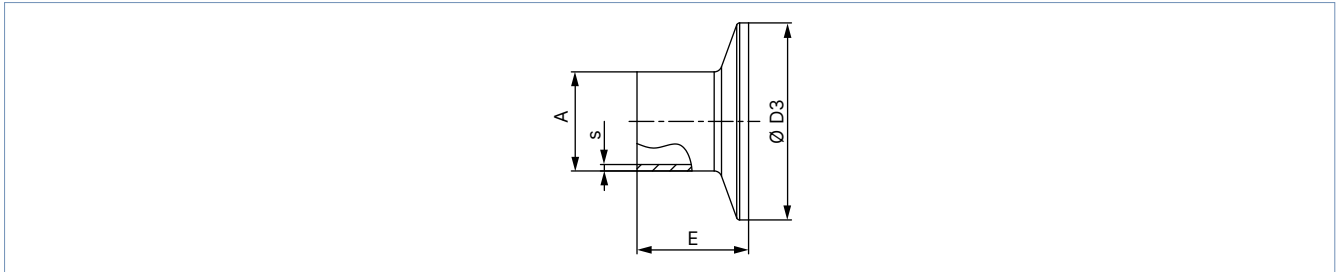
Diaphragm size	Port connection DN	Ø B	C1	D	ØD1	s	L	Product key ¹⁾
DIN EN ISO 1127 / ISO 4200 / DIN 11866 series B								
8	8	50	8	35°	13.5	1.6	5	SA40
15	15	65	12	35°	21.3	1.6	4	SA42
		85					8	SA42
20	20	85	12	35°	26.9	1.6	5.6	SA43
25	25	120	16	35°	33.7	2	8	SA44
40	32	150	18	35°	42.4 (port 32)	2	20	SA45
	40				48.3		15	SA46
50	50	180	22	35°	60.3	2	12	SA47
80	65	225	20	40°	76.1	2	16	SA48
	80				88.9	2.3	10	SA49
100	100	298	30	40°	114.3	2.3	16.5	SA39
DIN 11850 - 2 / DIN 11866 series A / DIN EN 10357 series A								
8	10	50	8	35°	13	1.5	5	SD40
15	15	85	12	35°	19	1.5	8	SD42
20	20	85	12	35°	23	1.5	7	SD43
25	25	120	16	35°	29	1.5	8	SD44
40	40	150	18	35°	41	1.5	20	SD46
50	50	180	22	35°	53	1.5	15	SD47
80	80	225	20	40°	85	2	16	SD49
100	100	298	30	40°/35°	104	2	14	SD50
ASME BPE / DIN 11866 series C								
8	¼"	50	8	35°	6.35	0.89	6	SA90
15	½"	85	12	35°	12.7	1.65	10	SA92
20	¾"	85	12	35°	19.05	1.65	8	SA93
25	1"	120	16	35°	25.4	1.65	12	SODF
40	1½"	150	18	35°	38.1	1.65	15	SODH
50	1½"	180	22	35°	38.1	1.65	25	SODH
	2"				50.8		15	SODI
	2½"				63.5		11	SODJ
80	2½"	225	20	40°	63.5	1.65	25	SODJ
	3"				76.2		16	SODK
100	4"	298	30	40°	101.6	2.11	14	SODL
SMS 3008								
25	25	120	16	35°	25	1.2	8	SA60
40	40	150	18	35°	38	1.2	20	SA62
50	50	180	22	35°	51	1.2	15	SA63

1.) This information is part of the product key (see "8.3. Bürkert Product Enquiry Form" on page 28).

4.4. Tank bottom body with clamp connection

Note:

- Dimensions in mm, unless otherwise stated
- The clamp dimensions must be added to the welded connection dimensions.



Port connection		A	s	D3	E	Product key ^{1.)}
[mm]	[inch]					
DIN 32676 series A (DIN pipe)						
10	–	13	1.5	34	18	TD41
15	–	19	1.5	34	18	TD42
20	–	23	1.5	34	18	TD43
25	–	29	1.5	50.5	21.5	TD44
32	–	35	1.5	50.5	21.5	TD45
40	–	41	1.5	50.5	21.5	TD46
50	–	53	1.5	64	21.5	TD47
65	–	70	2	91	28	TD48
80	–	85	2	106	28	TD49
100	–	104	2	119	28	TD50
DIN 32676 series B (ISO pipe)						
8	–	13.5	1.6	25	28.6	TC40
8	–	13.5	1.6	34.0 ^{2.)}	28.6	TC51 ^{2.)}
10	–	17.2	1.6	34.0 ^{2.)}	28.6	TC41 ^{2.)}
15	–	21.3	1.6	34.0 ^{2.)}	28.6	TC42 ^{2.)}
15	–	21.3	1.6	50.5	28.6	TC52
20	–	26.9	1.6	50.5	28.6	TC43
25	–	33.7	2	50.5	28.6	TC44
32	–	42.4	2	50.5 ^{2.)}	28.6	TC45 ^{2.)}
40	–	48.3	2	64	28.6	TC46
50	–	60.3	2	77.5	28.6	TC47
65	–	76.1	2	91	28.6	TC48
80	–	88.9	2.3	106	28.6	TC49
100	–	114.3	2.3	130	28.6	TC50
ASME BPE						
8	1/4"	6.35	0.89	25	28.6	TG50
10	3/8"	9.53	0.89	25	28.6	TG01
15	1/2"	12.7	1.65	25	28.6	TG02
20	3/4"	19.05	1.65	25	28.6	TG03
25	1"	25.4	1.65	50.5	28.6	TG04
40	1 1/2"	38.1	1.65	50.5	28.6	TG05
50	2"	50.8	1.65	64	28.6	TG06
65	2 1/2"	63.5	1.65	77.5	28.6	TG07
80	3"	76.2	1.65	91	28.6	TG08
100	4"	101.6	2.11	119	28.6	TG09

1.) This information is part of the product key (see "8.3. Bürkert Product Enquiry Form" on page 28).

2.) Deviating from standard because of different outside clamp diameter

5. Product connections

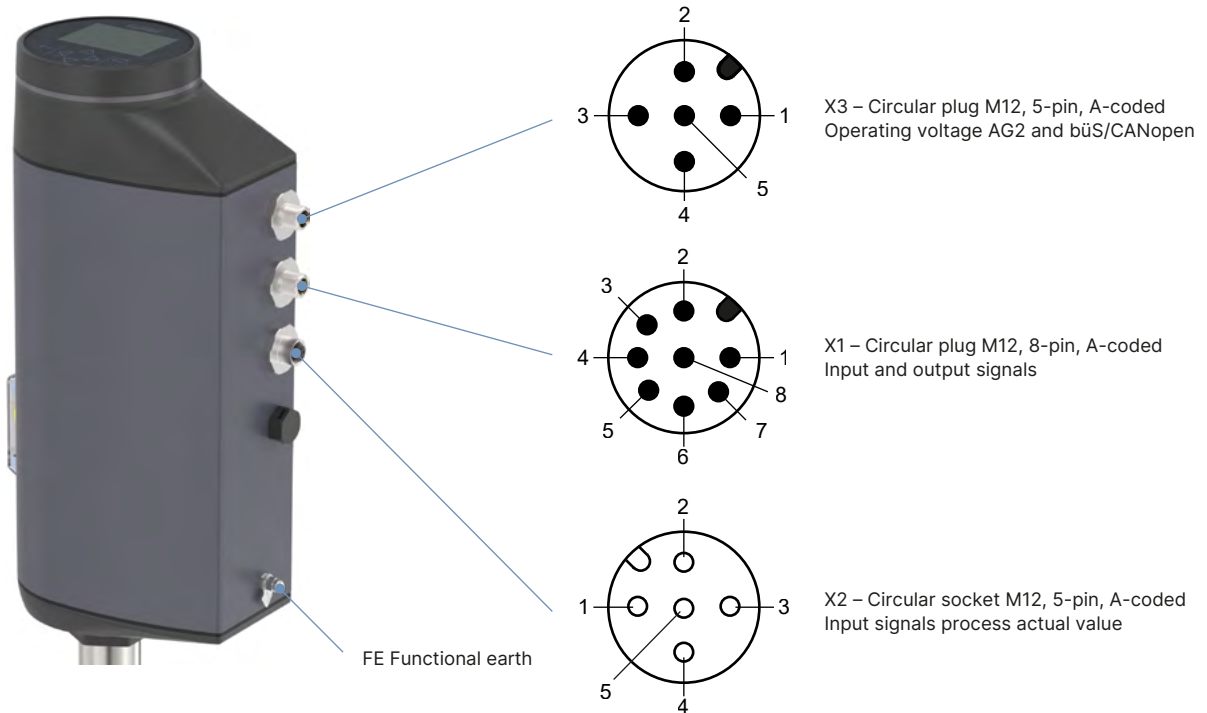
5.1. Electrical connection

Note:

For the terminal assignment of the connection variant "cable gland with connection terminals", see **operating instructions Type 3365** ▶.

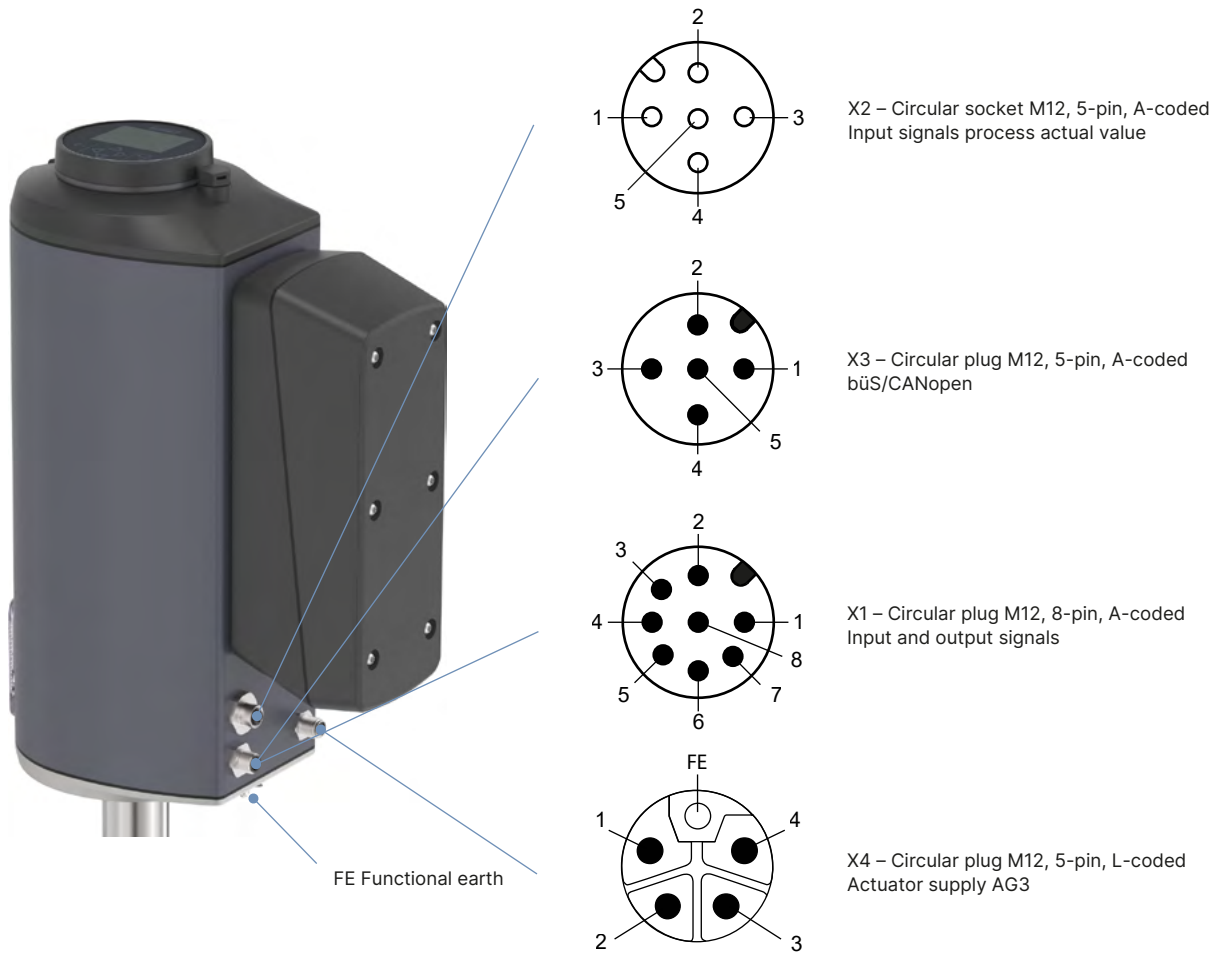
Description of circular plug-in connectors

AG2 variant

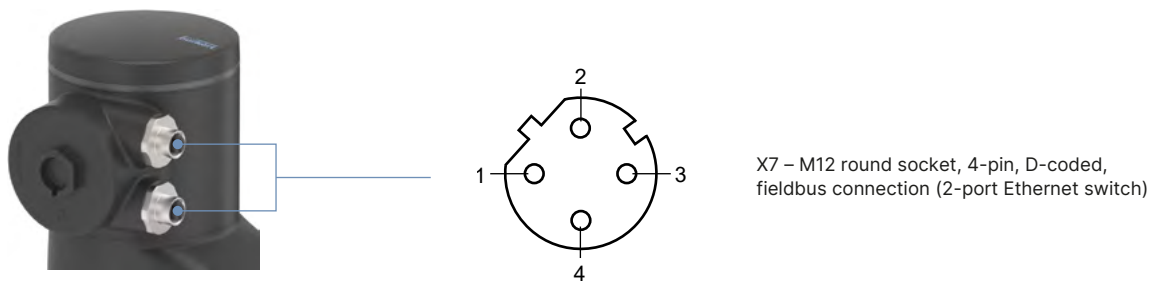


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AG3 variant



Fieldbus gateway (optional)



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The following circular plug-in connectors are used depending on the device variant:

Circular plug-in connector	AG2			AG3		
	Electrical variant			Electrical variant		
	Analogue (bùS service interface)	With fieldbus gateway	bùS/CANopen	Analogue (bùS service interface)	With fieldbus gateway	bùS/CANopen
	0...10 V 0...5 V 4...20 mA, 0...20 mA adjustable	for EtherNet/IP, PROFINET, Modbus TCP, EtherCAT protocols		0...10 V 0...5 V 4...20 mA 0...20 mA adjustable	for EtherNet/IP, PROFINET, Modbus TCP, EtherCAT protocols	
X1	X	–	–	X	–	–
X2 ¹⁾	X ¹⁾	X ¹⁾	X ¹⁾	X ¹⁾	X ¹⁾	X ¹⁾
X3	X	X	X	–	X	X
X4	–	–	–	X	X	X
X7	–	X	–	–	X	–

1.) Optional, only for devices with process controller function
X = available
– = not available

Circular plug-in connector with pin assignment

Input and output signals

X1 – Circular plug M12, 8-pin, A-coded	Pin	Assignment
	1	Digital input +
	2	GND for digital input and digital outputs
	3	Digital output 2 +
	4	Digital output 1 +
	5	Analogue output -
	6	Analogue output +
	7	Set-point value / Analogue input +
	8	Set-point value / Analogue input -

Input signal process actual value (4..20 mA, frequency, PT100) (Only for devices with process controller function)

X2 – Circular socket M12, 5-pin, A-coded	Pin	Assignment for signal type 4..20 mA, sensor supplied externally ^{1.)}
	1	Do not connect
	2	Do not connect
	3	Do not connect
	4	Process actual value / 4..20 mA
	5	Process actual value / 4..20 mA GND

1.) Further signal types (frequency, PT100) are possible. For further information see **operating instructions Type 3365** ►.

Operating voltage AG2 and büS/CANopen

X3 – Circular plug M12, 5-pin, A-coded	Pin	Assignment
	1	CAN Shield / shield
	2	Operating voltage 24 V DC ± 10 %
	3	GND / CAN_GND
	4	CAN_H
	5	CAN_L

Operating voltage AG3

X4 – Circular plug M12, 5-pin, L-coded	Pin	Assignment
	1	Operating voltage 24 V DC ± 10 %
	2	Do not connect
	3	GND
	4	Do not connect
	FE	Functional earth, connected to housing

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Fieldbus connection

X7 – Circular socket M12, 4-pin, D-coded	Pin	Assignment
	1	Transmit +
	2	Receive +
	3	Transmit -
	4	Receive -

6. Performance specifications

6.1. Operating limits

Note:

For device variants with approvals or conformities, deviating technical operating limits (temperature, pressure) may apply. Refer to the corresponding approval-related documentation.

Medium pressure

Note:

Pressure information [bar]: overpressure to ambient pressure. The valve closes dynamically against maximum operating pressure.

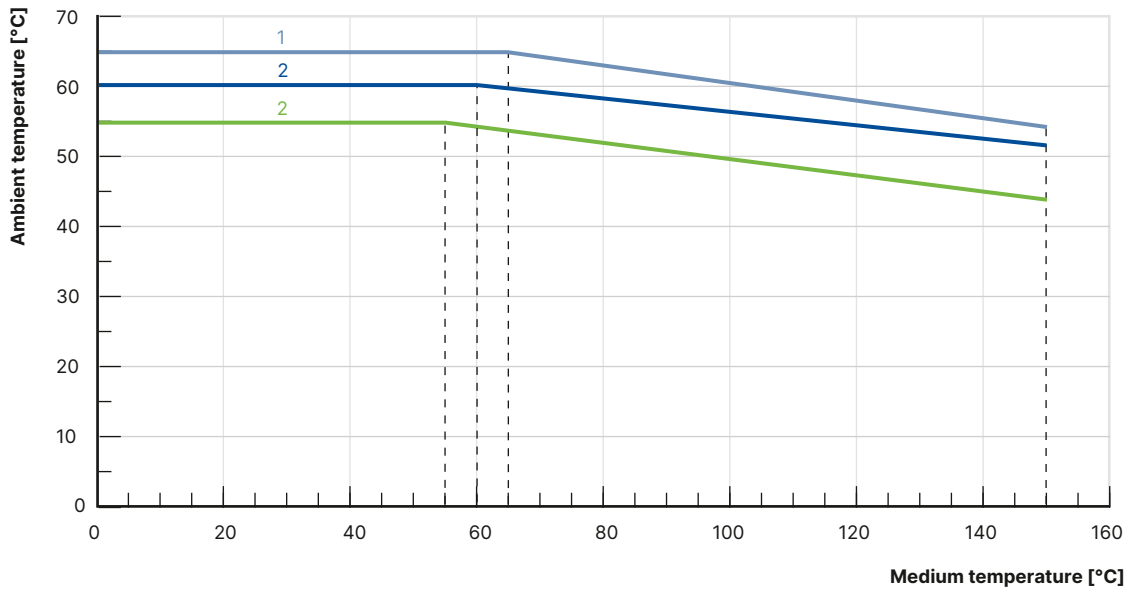
Diaphragm size	Actuator size	Max. operating pressure for seal material		
		EPDM, FKM	PTFE/EPDM, advanced PTFE/EPDM (EU)	Laminate of GYLON® and EPDM (ER)
	[N]	[bar]	[bar]	[bar]
8	N (AG2 / 2500 N)	10	10	10
15		10	10	10
20		10	10	10
25		10	10	10
32		8	5.5	5.5
40		4	2.5	2.5
40	S (AG3 / 11500 N)	10	10	10
50		10	10	10
65		10	6	6
80		6	2.5	6
100		3.5	-	-

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Operating limits for ambient and medium temperature

The maximum permissible temperature for the environment and the medium depend on each other. The maximum allowable temperature curves of different device variants are shown in the temperature chart.

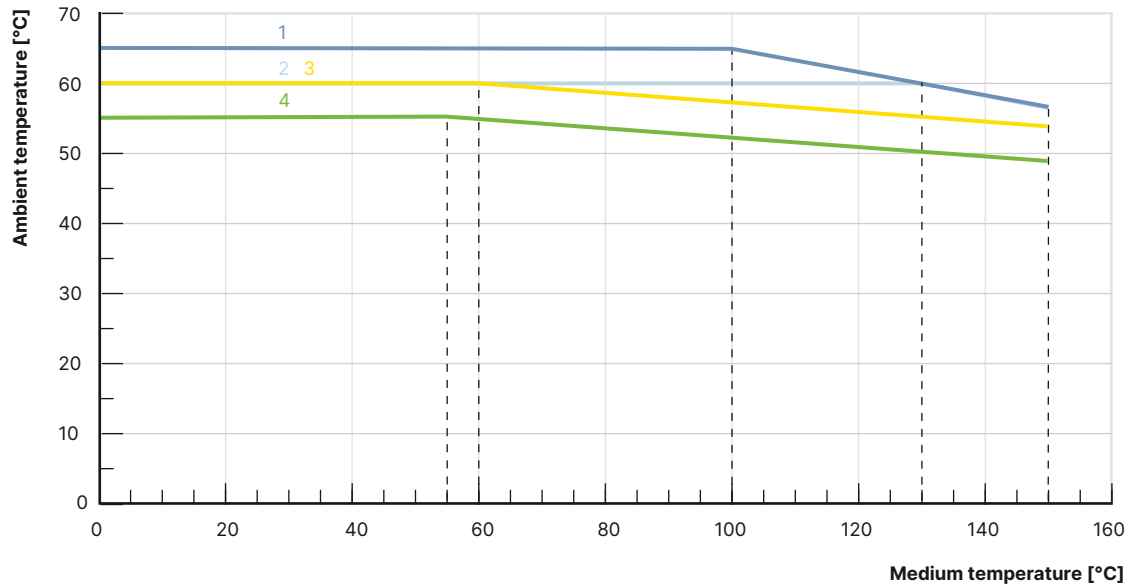
Temperature diagram AG2



No.	Description
1	Devices without module
2	Devices with display
3	Devices with energy storage SAFEPOS energy-pack or fieldbus gateway, with/without display module

1.) The service life of the energy storage SAFEPOS energy-pack depends on the medium temperature and the ambient temperature.

Temperature diagram AG3



No.	Description
1	Devices without module
2	Devices with energy storage SAFEPOS energy-pack
3	Devices with display module with/without energy storage SAFEPOS energy-pack
4	Devices with fieldbus gateway with/without display module with/without energy storage SAFEPOS energy-pack

1.) The service life of the energy storage SAFEPOS energy-pack depends on the medium temperature and the ambient temperature.

6.2. Electrical control and interfaces

Interface diagram

The position of the actuator is regulated according to the position set-point value. The position set-point value is specified either by an external standard signal or via a fieldbus (digital).

Analogue control

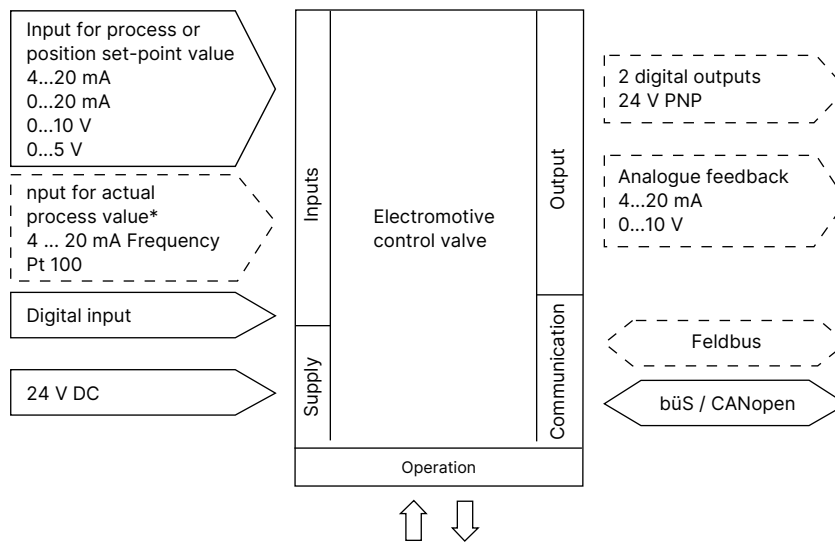
For analogue control, 2 variants are available for each the inputs and outputs and the connection interface.

Inputs and outputs:

- 1 analogue input, 1 binary input
- 1 analogue input, 1 binary input, 1 analogue output, 2 binary output (option)
- 1 input for actual process value (for process controller variant)

Interface:

- Cable gland with connection terminals (only AG2)
- M12 circular plug-in connectors (optional)



Note: Optional outputs are represented with a broken line

Control data	
Analogue input set-point value	Galvanically isolated from the supply voltage and analogue output 0/4...20 mA (input resistance 70 Ω) 0...5/10 V (input resistance 22 kΩ)
Analogue output	Maximum current 10 mA (for voltage output 0...5/10 V) Load 0...800 Ω (for current output 0/4...20 mA)
Digital input	0...5 V = log „0“, 10...30 V = log „1“, inverted input reversed accordingly
Digital output	PNP, current limitation 100 mA
Analogue input actual value (optional)	
4...20 mA	Input resistance: 80 Ω Resolution: 12 bit
Frequency	Measuring range: up to 1000 Hz Input resistance: > 30 kΩ Resolution: 0.1% of measurement value Input signal: > 300 mV _{ss} Signal form: sine, rectangle, triangle
Pt 100	Measuring range: - 20 °C...+ 220 °C Resolution: 0.01 °C Measurement current: 1 mA
Communication	
Communication interface (bÜS)	Connection to PC via USB bÜS interface set
Communication software (bÜS)	Bürkert Communicator, see Type 8920 ▶

7. Product design and assembly

7.1. Product features

Note

Further information can be found in the **operating instructions Type 3365** ▶.

User interface	
<p>Device without display module</p> <p>The basic functions are operated by 4 DIP switches and 2 push buttons. These are located under the blind cover which can be removed manually by turning.</p> <p>Through the bÜS service interface, the device can also be configured in detail with the Bürkert Communicator software.</p> <p>For this, the optional USB-bÜS interface set is required (see "8.4. Ordering chart accessories" on page 29).</p>	<p>Blind cover dismantled</p> <p>1.) Non-functional in devices with display module. The display must be used for operation.</p>
<p>Device with display module</p> <p>The robust display module is easy to use, it configures and displays all the required functions. In addition to the start screen you can also switch to the configuration view and user-specified views as needed. The functions of the device without a display module, such as bÜS service access, are also available here.</p>	
Actuation	
<p>Mechanical manual override</p> <p>The manual override for mechanical movement of the valve is located for AG2 under the blind cover or display module and for AG3 under the pressure compensation element. It ensures that the actuator can be operated even if the power supply fails.</p>	<p>Mechanical manual override AG2</p>
<p>Electrical manual override</p> <p>The electrical manual override for the procedure is carried out via two buttons under the blind cover.</p>	<p>Unlock blind cover</p> <p>Buttons for actuation of the valve</p>

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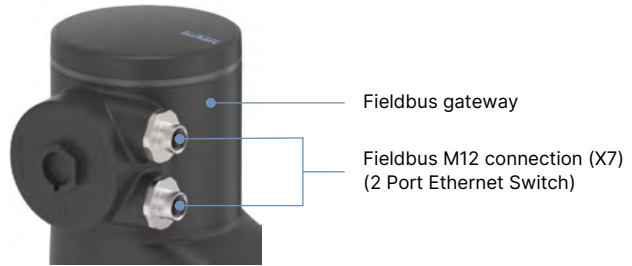
Display elements		
<p>Display 360° LED light ring A clearly visible 360° LED ring is attached to the blind cover or display module to indicate the device status, the valve end position and the operating state. The LED light ring lights up, blinks or flashes into one or changing colours, depending on the LED mode set.</p>	<p>LED light ring as status indicator</p> <p>AG2 Mechanical position indicator (yellow)</p> <p>AG3 Mechanical position indicator (yellow)</p>	
<p>Mechanical position indicator: The mechanical position indicator shows the current valve position even if the supply voltage fails.</p>		
Data transmission (optional)		
<p>SIM card (optional) With the optionally available SIM card, device-specific values and user settings can be stored and quickly transferred to another device.</p>	<p>SIM card holder</p>	
<p>büS service interface The büS service interface connects the device with the Bürkert Communicator software on a PC, laptop or smartphone. From there a configuration of the device or error diagnosis can be carried out.</p>	<p>büS service interface Connection for CAN adapter or USB-büS interface set</p>	
Safety position via energy storage (optional)	AG2	AG3
<p>The safety starting positions in case of power interruption is realised 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 service life 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.</p> <p>The energy storage device is fully charged and ready for operation after a maximum of 120 seconds (depending on the operating conditions).</p> <p>The energy storage device cannot be retrofitted in the field.</p>	<p>SAFEPOS energy-pack</p>	<p>SAFEPOS energy-pack</p>

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

The fieldbus gateway for EtherNet/IP, PROFINET, Modbus TCP and EtherCAT 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, the Ethernet configuration can be performed via the web server.

The gateway cannot be retrofitted in the field.



7.2. Product assembly

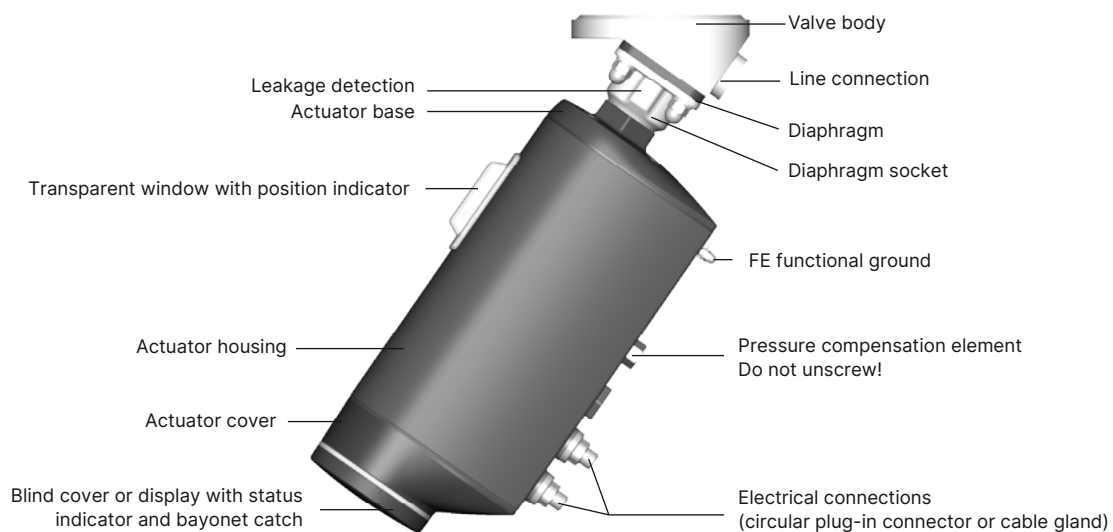
The electromotive linear drive consists of a brushless DC motor, a gear and a spindle system that transfers the force to the closing element. The integrated control electronics are controlled either by standard signals or via a fieldbus (digital). A positioner and a process controller are available as controller variants. 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. The 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. Additionally, you can always operate the device via the bÜS service interface and using the Bürkert Communicator software.

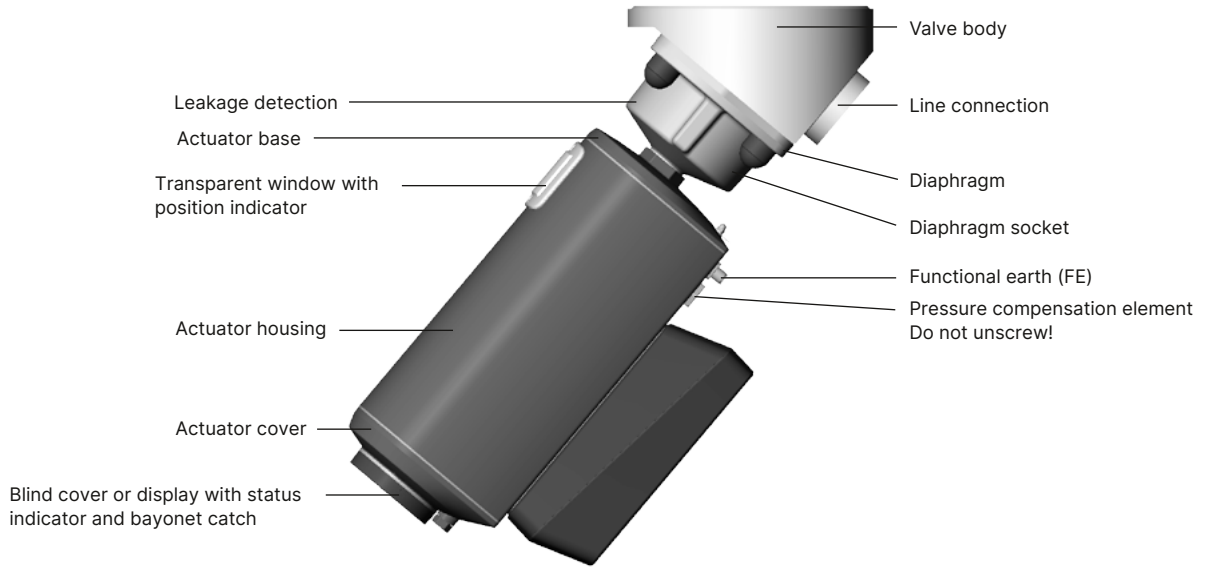
The intelligent process valve Type 3365 offers the operator options for process monitoring, valve diagnosis and preventive maintenance. Internal measurements of the operating status are evaluated and, if necessary, issued as a warning or error message. These signal, for example, impermissible ambient and process conditions, functional deviations of components or the status of the energy storage device.

To increase diaphragm service life, the drive force is adapted to the diaphragm size. It can also be adapted to the operating conditions to achieve optimum service life.

Design of electromotive diaphragm valve Type 3365 AG2

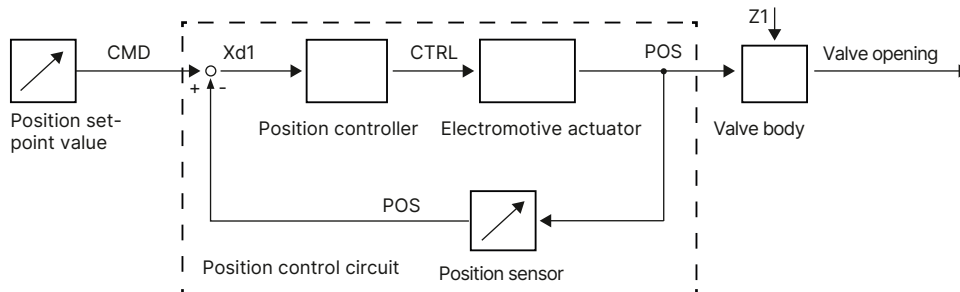


Design of electromotive diaphragm valve Type 3365 AG3



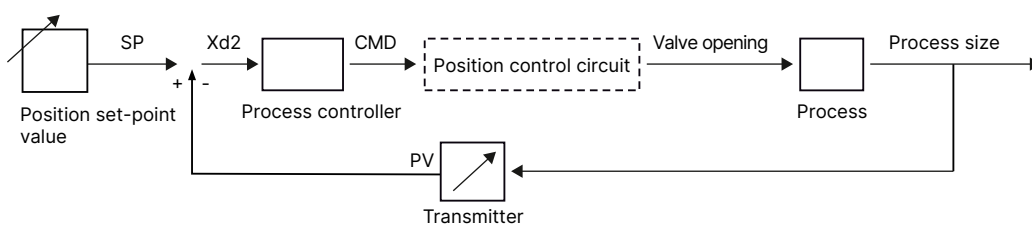
Integrated position controller

The position of the actuator (stroke) is controlled according to the position set-point value. The position set-point value is either given by an external standard signal (analogue) or via a fieldbus (digital). The displacement transducer records the actual position (POS) of the electric linear actuator. The positioner compares the actual position value with the position set-point value (CMD) specified as standard signal. If there is a system deviation (X_{d1}), the electric motor drive is controlled via the actuating variable CTRL and the actual position value is changed accordingly.



Integrated process controller (optional)

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



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8. Ordering information

8.1. Bürkert eShop



Bürkert eShop – Easy ordering and quick 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.

[Order online now](#)

8.2. Bürkert product filter

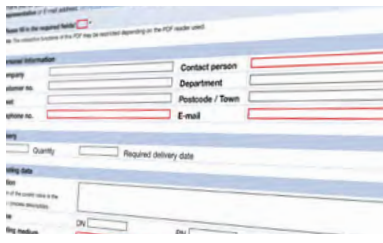


Bürkert product filter – Get quickly to the right product

You want to select products comfortably based on your technical requirements? Use the Bürkert product filter and find suitable articles for your application quickly and easily.

[Try out our product filter](#)

8.3. Bürkert Product Enquiry Form



Bürkert Product Enquiry Form – Your enquiry quickly and compactly

Would you like to make a specific product enquiry based on your technical requirements? Use our Product Enquiry Form for this purpose. There you will find all the relevant information for your Bürkert contact. This will enable us to provide you with the best possible advice.

[Fill out the form now](#)





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8.4. Ordering chart accessories

Note:

For device variants with approvals or conformities, additional accessories may be required for intended use. Please refer to the relevant approval documentation.

Standard accessories






Description	Article no.
SIM card for data transmission between units	291773 
Holding device for port connection DN 08...DN 40 ¹⁾	697473 
Blind cover made of plastic	277881 
Wearing part energy storage SAFEPOS energy-pack (AG2)	285834 

1.) For diaphragm size 08, the holding device is included in the scope of delivery.

Accessories cable

Note:



For connection to a bus/CANopen network see „Supplement | Cabling guide bus/EDIP“ on our website under „User Manuals“, **Type 3365** ▶.

Description	Article no.
M12 circular socket with cable, 4-pin, A-coded, cable length: 5 m, for X3, operating voltage AG2 (without communication)	918038 
M12 circular socket with cable, 8-pin, A-coded, cable length: 2 m, for X1, input and output signals	919061 
M12 circular plug with cable (shielded), 5-pin, A-coded, cable length: 2 m, for X2, input signals process actual value (only for variant with process controller)	559177 
M12 circular plug with cable, 4-pin, D-coded to M12 straight plug, cable length: 5 m, for X7, fieldbus connection	775043 
M12 circular plug with cable, 4-pin, D-coded to RJ45 plug, cable length: 5 m, for X7, fieldbus connection	775053 

Bürkert accessories

Note:

- For connection to a bus/CANopen network see „Supplement | Cabling guide bus/EDIP“ on our website under „User Manuals“, **Type 3365** ▶.
- For detailed accessory tables, see „Supplement | Cabling guide bus/EDIP“ on our website under „User Manuals“, **Type 3365** ▶.

Description	Article no.
Bürkert Communicator software, Type 8920	Type 8920 ▶
USB-bus interface set 1 (Type 8923)	772426 
USB-bus interface set 2 (Type 8923)	772551 
bus adapter for bus service interface (M12 on bus service interface micro USB), cable length: 0.3 mm	774931 