



Digital electropneumatic positioner SideCONTROL

- Compact and robust design
- Easy start-up using X.TUNE function
- Integrated diagnostic functions for valve monitoring
- Dynamic actuating system with no air consumption in controlled state
- IO-Link Port Class A & B, AS interface or Bürkert system bus (bUS)

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

Can be combined with

	Type 8805 Ball valve / Butterfly valve with pneumatic rotary actuator	▶
	Type 2051 Pneumatic rotary actuator	▶
	Type 8798 Remote sensor for pneumatically actuated process valves	▶
	Type 2301 Pneumatically operated 2-way Globe Control Valve	▶
	Type 2300 Pneumatically operated 2-way angle seat control valve ELEMENT	▶
	Type 2103 2/2-way diaphragm valve with pneumatic stainless steel actuator (Type ELEMENT) for decentralised automation	▶

Type description

The robust and compact positioner is designed for mounting on linear and rotary actuators with standardisation according to IEC 65034 - 6 - 1 or VDI/VDE 3845 (IEC 60534 - 6 - 2). The variant with remote position sensor can also be used to control Bürkert process control valves. The set-point value setting default for the digital electropneumatic positioner SideCONTROL occurs via standard signals 4...20 mA and/or via bus as an option. A digital input and optional analogue feedback are also available. The valve opening is qualitatively signalled via a mechanical display element and the device status, via 3 coloured LEDs. All operating elements are located inside the housing. Start-up is performed automatically and the following functions are enabled directly on the device via DIP switch: sealing threshold, inversion of set point signal direction, characteristic selection, manual/automatic operating state switchover. Additional options for configuration and parametrising, such as the linearisation of the operating characteristic with the aid of a freely programmable correction characteristic, are available using communication software. The pneumatic actuating system can be used equally for single-acting and double-acting actuators. It is characterised by a defined safety response in the event of the failure of the electrical or pneumatic auxiliary power and possesses an enormous air capacity range at pressure supplies up to 7 bar.

DTS 1000123308 EN Version: AB Status: RL (released | freigegeben | valide) printed: 18.03.2025

Table of contents

1. General technical data	4
1.1. Positioner SideCONTROL Type 8791.....	4
1.2. Without fieldbus communication	5
1.3. With fieldbus communication: AS-Interface	6
1.4. With digital communication: IO-Link	6
1.5. With digital communication: Bürkert system bus (bÜS).....	6
1.6. Linear remote position sensor (ELEMENT Type 8798).....	7
1.7. Rotative remote position sensor (NAMUR)	7
1.8. Position feedback with proximity switches (accessories for retrofitting)	8
2. Approvals and conformities	9
2.1. General notes	9
2.2. Conformity	9
2.3. Standards.....	9
2.4. Explosion protection.....	9
Positioner SideCONTROL Type 8791.....	9
2.5. North America (USA/Canada).....	9
Positioner SideCONTROL Type 8791.....	9
Linear position sensor, remote (ELEMENT Type 8798)	9
Rotative position sensor, remote (NAMUR Type 8798).....	10
2.6. Others	10
China Compulsory Certification (CCC).....	10
3. Dimensions	11
3.1. NAMUR/Remote Variant.....	11
3.2. Mounting specification of NAMUR/Remote variant.....	12
NAMUR variant.....	12
Remote variant	13
3.3. ATEX/IECEX variant.....	13
3.4. Remote position sensor variant.....	14
3.5. Mounting on control valve according to NAMUR.....	14
4. Device/Process connections	15
4.1. Electrical connections	15
Multipole connection.....	15
AS-Interface connection	16
Position feedback with proximity switches.....	17
Cable gland	17
IO-Link connection	19
Connection of digital remote position sensor Type 8798, M8 socket, 4-pin (optional)	19
Bürkert system bus (bÜS) connection	19
Connection of digital remote position sensor Type 8798, M8 socket, 4-pin (optional)	20
5. Performance specifications	21
5.1. Signal flow diagram	21
Position control loop.....	21
Additional software options of positioner SideCONTROL Type 8791 (extract)	21
5.2. Interface diagram	22
Variant without fieldbus communication	22
Variant with fieldbus communication.....	22

DTS 1000123308 EN Version: AB Status: RL (released | freigegeben | validé) printed: 18.03.2025

6. Product installation	23
6.1. Mounting options.....	23
NAMUR variant.....	23
Remote variant.....	24
Position feedback with proximity switches.....	25
6.2. Mounting options.....	26
NAMUR variant for Samson valves.....	26
6.3. Combination possibilities with pneumatic process valves.....	28
7. Ordering information	29
7.1. Bürkert eShop.....	29
7.2. Bürkert product filter.....	29
7.3. Ordering chart.....	29
Positioner SideCONTROL Type 8791 NAMUR variant.....	29
Positioner SideCONTROL Type 8791 Remote-variant.....	30
Remote position sensor for remote variant of SideCONTROL Type 8791.....	30
7.4. Ordering chart accessories.....	31
Standard accessories.....	31
Accessories SideCONTROL NAMUR.....	31
Accessories SideCONTROL Remote.....	31

DTS 1000123308 EN Version: AB Status: RL (released | freigegeben | validé) printed: 18.03.2025

1. General technical data

1.1. Positioner SideCONTROL Type 8791

Product properties	
Dimensions	Further information can be found in chapter “3. Dimensions” on page 11.
Material	
Housing	Aluminium, plastic-coated
Seal	EPDM, NBR, FKM
Operation	
Operating keys	2
DIP switch	Integrated
Service interface	Connected to PC via USB connection
Configuration tool	Bürkert Communicator PACTware (only for device variants with AS-Interface)
Commissioning	
Initialisation positioner	Automatic by X.TUNE function (automatic adjustment of positioner)
Status display	
Optical position indicator (mechanical)	Integrated (for NAMUR variant)
Communication	
Fieldbus	AS-Interface
Digital	IO-Link Port Class A or Port Class B, Bürkert system bus (büS) (based on CANopen)
Performance data	
Position sensor	
Integrated position sensor (NAMUR)	Conductive plastic rotary potentiometer
External remote position sensor	Linear or rotative
Measuring range for rotary actuator	Rotation angle 30°...180°
AS-Interface	30°...150°
Stroke range for linear actuator	3...130 mm, depending on the lever of the attachment kit
Electrical data	
Operating voltage	24 V DC ± 25 %
Residual ripple	Max. 10 %
Power consumption	≤ 3.5 W
Protection class	III according to DIN EN 61140
Electrical connection	
Multipole variant	Screw terminals: M12, 4-pin resp. 8-pin according to device variant (see connection description “4. Device/Process connections” on page 15)
Cable gland variant	2x M20 × 1.5 (cable Ø6...12 mm) on screw terminals (0.14...1.5 mm ²)
Remote variant	1x M12 × 1.5 (cable Ø 3...6.5 mm)
Pneumatic data	
Control medium	
	Neutral gases, air, quality class according to ISO 8573 - 1
Dust content	Class 7 (< 40 µm particle size)
Particle density	Class 5 (< 10 mg/m ³)
Pressure dew point	Class 3 (< - 20 °C)
Oil content	Class X (< 25 mg/m ³)
Air intake filter	
	Exchangeable
Mesh size	Approx. 0.1 mm
Supply pressure	1.4...7 bar ¹⁾²⁾
Pilot air port	Threaded port G ¼
Positioning system	
Universal air capacity	
Single and double acting	50 l _N /min (at 1.4 bar ²⁾) for aeration and ventilation 150 l _N /min (at 6 bar ²⁾) for aeration and ventilation Q _{Nn} = 100 l _N /min
Low air capacity	
Single-acting	Q _{Nn} = 7 l _N /min (Q _{Nn} according to definition at pressure drop from 7 to 6 bar absolute)

Approvals and conformities

Explosion protection

Ignition protection class	II 3D Ex tc IIIC T135 °C Dc II 3G Ex ec IIC T4 Gc
ATEX	BVS 16 ATEX E 118 X II 3G Ex ec ic IIC T4 Gc II 3D Ex tc IIIC T135 °C Dc
IECEX	IECEX BVS 16.0091 X Ex ec ic IIC T4 Gc Ex tc IIIC T135 °C Dc

Further information can be found in chapter [“2.4. Explosion protection” on page 9.](#)

North America (USA/Canada)

CSA for Canada and the USA	UL 429 (Electrically operated valves) CSA C22.2 No. 139 (Electrically operated valves) Further information can be found in chapter “2.5. North America (USA/Canada)” on page 9.
----------------------------	---

Others

China Compulsory Certification (CCC)	The products with Ex approval are suitable for import and use for hazardous applications in China. Further information can be found in chapter “2.6. Others” on page 10.
--------------------------------------	--

Further information can be found in chapter [“2. Approvals and conformities” on page 9.](#)

Environment and installation

Operating conditions

Ambient temperature

With ATEX-/IECEX approval	0...+60 °C
Without Ex approval	-10...+60 °C
Degree of protection	IP65/IP67 according to EN 60529, 4X according to NEMA 250 standard
Operating altitude	Up to 2000 m above sea level

Installation and mechanical data

Mounting variant	NAMUR according to IEC 60534 - 6 - 1 resp. VDI/VDE 3845 (IEC 60534 - 6 - 2), remote
Installation position	As required, display above or sideways
Valve actuator (type, size)	Rotary and linear actuators according to NAMUR, ELEMENT Type 2301, 2300 (actuator size Ø 70/90/130/225 mm) and CLASSIC (actuator size Ø 175/225 mm) in combination with remote variant as well as special adaptations for NAMUR and remote variants
Adapter kit	Further information can be found in chapter “7.4. Ordering chart accessories” on page 31.

- 1.) The supply pressure has to be 0.5...1 bar above the minimum required pilot pressure for the valve actuator.
- 2.) Pressure data: Overpressure to atmospheric pressure

1.2. Without fieldbus communication

Electrical data

Operating voltage	24 V DC ± 25 %
Residual ripple	Max. 10 %
Protection class	III according to DIN EN 61140

Input/Output

Digital input	1 digital input, 0...5 V = log „0“, 10...30 V = log „1“
Analogue output	1 output (optional) 0/4...20 mA

Input data setpoint

Setpoint signal

Set-point value setting default	4...20 mA (0...20 mA adjustable via configuration software)
Input resistance	0/4...20 mA: 75 Ω

1.3. With fieldbus communication: AS-Interface

Product properties

Profile	S- 7.3.4 output: 16 bit setpoint/certificate no. 87301 according to specification V3.0 S- 7.A.5 output: 16 bit setpoint; input: 16 bit setpoint/certificate no. 95401 according to specification V3.0
---------	--

Electrical data

Operating voltage	29.5...31.6 V DC
Via bus cable	According to specification
Max. current consumption	150 mA (without external power supply)
Electrical connection	M12, 4-pin stainless steel plug assembled up to 80 cm cable
Watchdog function	Integrated

1.4. With digital communication: IO-Link

Electrical data

Electrical connection	M12 × 1, 5-pin, A-coded
IO-Link Revision	1.1
SIO-Mode	No
VendorID	0×0078, 120
DeviceID	The IODD file can be downloaded from our website ►. See Software > Device Description Files.
Transmission rate	230.4 kbit/s (COM 3)
Data storage	Yes
Max. cable length	20 m

Port Class A

Operating voltage	24 V DC ± 25 % (according to specification)
Current consumption	Max. 150 mA

Port Class B

Operating voltage

System supply (Pin 1 + 3)	24 V DC ± 25 % (according to specification)
Actuator supply (Pin 2 + 5)	24 V DC ± 25 % (according to specification)

Current consumption

System supply (Pin 1 + 3)	Max. 50 mA
Actuator supply (Pin 2 + 5)	Max. 120 mA

1.5. With digital communication: Bürkert system bus (büS)

Electrical data

Operating voltage	24 V DC ± 25 % (according to specification)
Electrical connection	M12 × 1, 5-pin, A-coded
Current consumption	Max. 150 mA

1.6. Linear remote position sensor (ELEMENT Type 8798)

Note:

When the positioner is mounted remotely from the actuator, the length of the pneumatic control lines influences the dynamics and achievable accuracy of the positioner control loop. The length of the control air lines should therefore be selected as short as possible.

Product properties	
Actual position signal	Digital (RS485)
Detection range of the sensor	3...45 mm (stroke range of valve spindle)
Electrical data	
Operating voltage	24 V DC \pm 25 %, UL: NEC Class 2
Protection class	III according to DIN EN 61140
Power consumption	< 0.3 W
Electrical connection	
Cable gland (cable length)	1x M16 \times 1.5 (cable \varnothing 5...10 mm) on screw terminals (0.14...1.5 mm ²)
Connection cable	10 m
Approvals and conformities	
Protection class	IP65 and IP67 according to EN 60529, 4X according to NEMA 250 standard
Explosion protection	
Ignition protection class	II 3G Ex ec IIC T4 Gc II 3D Ex tc IIIC T135 °C Dc
North America (USA/Canada)	
UL Recognized for the USA and Canada	cULus certificate: 238179 Further information can be found in chapter "2.5. North America (USA/Canada)" on page 9.
Others	
China Compulsory Certification (CCC)	The products with Ex approval are suitable for import and use for hazardous applications in China. Further information can be found in chapter "2.6. Others" on page 10.
Further information can be found in chapter "2. Approvals and conformities" on page 9.	
Environment and installation	
Ambient temperature	- 25...+ 80 °C

1.7. Rotative remote position sensor (NAMUR)

Note:

When mounting the remote positioner away from the actuator, the length of the pneumatic control lines influences the dynamics and accuracy of the position control loop. The length of the control air lines should therefore be as short as possible.

Product properties	
Stroke range when mounted to linear actuator	3...130 mm, depending on the lever in the attachment kit
Actual position signal	Digital (RS485)
Measuring range	Rotation angle 30°...180°
Electrical data	
Operating voltage	10...30 V DC
Protection class	III according to DIN EN 61140
Power consumption	< 0.8 W
Electrical connection	2 m round cable (shielded)
Approvals and conformities	
Protection class	IP65 according to EN 60529
North America (USA/Canada)	
UL Recognized for the USA and Canada	cULus certificate: E226909 Further information can be found in chapter "2.5. North America (USA/Canada)" on page 9.
Further information can be found in chapter "2. Approvals and conformities" on page 9.	
Environment and installation	
Ambient temperature	- 25...+ 80 °C

1.8. Position feedback with proximity switches (accessories for retrofitting)

Note:

The feedback unit possesses 2 proximity switches that can be adjusted independently of each other via switch flags.

Product properties	
Output function	3-wire, normally open contact, PNP
Electrical data	
Electrical connection	M12, 4-pin
Operating voltage	10...30 V DC
Protection class	III according to DIN EN 61140
DC-rated current	≤ 100 mA
Residual ripple	≤ 10 % U _{ss}
Approvals and conformities	
Degree of protection	IP65 and IP67
Further information can be found in chapter "2. Approvals and conformities" on page 9.	

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

Positioner SideCONTROL Type 8791


Approval	Description
 	Optional: Explosion protection ATEX: BVS 16 ATEX E 118 X II 3G Ex ec ic IIC T4 Gc II 3D Ex tc IIIC T135 °C Dc IECEX: IECEX BVS 16.0091 X Ex ec ic IIC T4 Gc Ex tc IIIC T135 °C Dc

2.5. North America (USA/Canada)

Positioner SideCONTROL Type 8791

Approval	Description
 C US	Optional: CSA for Canada and the USA The products are CSA approved for Canada and the USA according to: <ul style="list-style-type: none"> • UL 429 (Electrically operated valves) • CSA C22.2 No. 139 (Electrically operated valves)

Linear position sensor, remote (ELEMENT Type 8798)

Approval	Description
	Optional: UL Listed for the USA and Canada The products are UL Listed for the USA and Canada according to: <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


Rotative position sensor, remote (NAMUR Type 8798)

Approval	Description
	<p>Optional: UL Listed for the USA and Canada The products are UL Listed for the USA and Canada according to: Certificate no: E226909</p>

2.6. Others

China Compulsory Certification (CCC)

Positioner SideCONTROL Type 8791 and linear position sensor, remote (ELEMENT Type 8798)

Conformity	Description
	<p>Optional: China Compulsory Certification (CCC) The products with Ex approval are suitable for import and use for hazardous applications in China.</p>

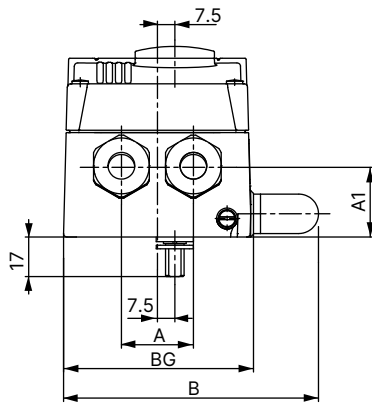
DTS 1000123308 EN Version: AB Status: RL (released | freigegeben | valide) printed: 18.03.2025

3. Dimensions

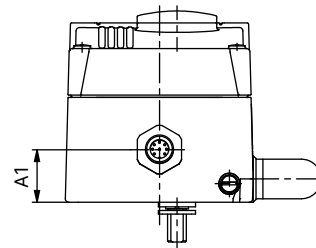
3.1. NAMUR/Remote Variant

Note:
Dimensions in mm

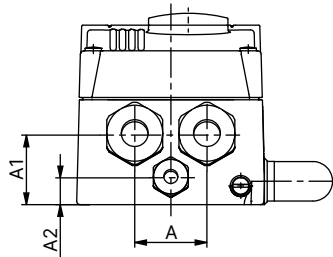
NAMUR variant Cable gland (standard)



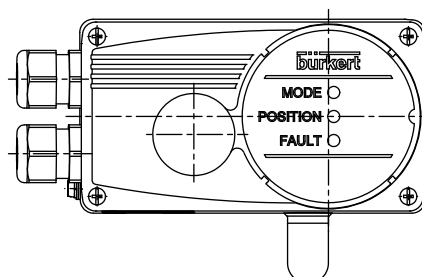
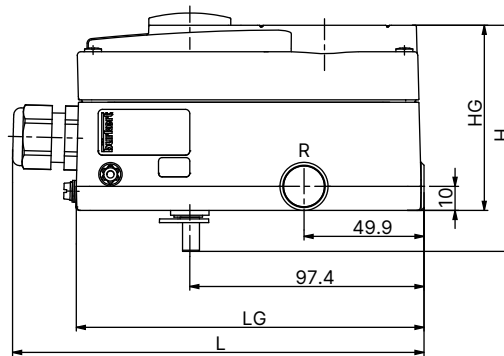
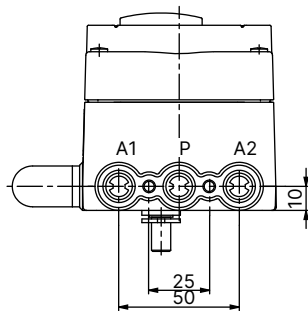
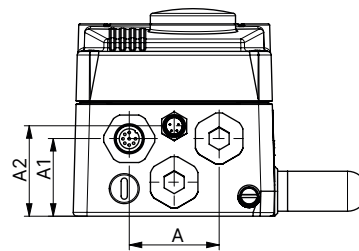
NAMUR variant Multipole



Remote variant Cable gland



Remote variant Multipole



DTS 1000123308 EN Version: AB Status: RL (released | freigegeben | valide) printed: 18.03.2025

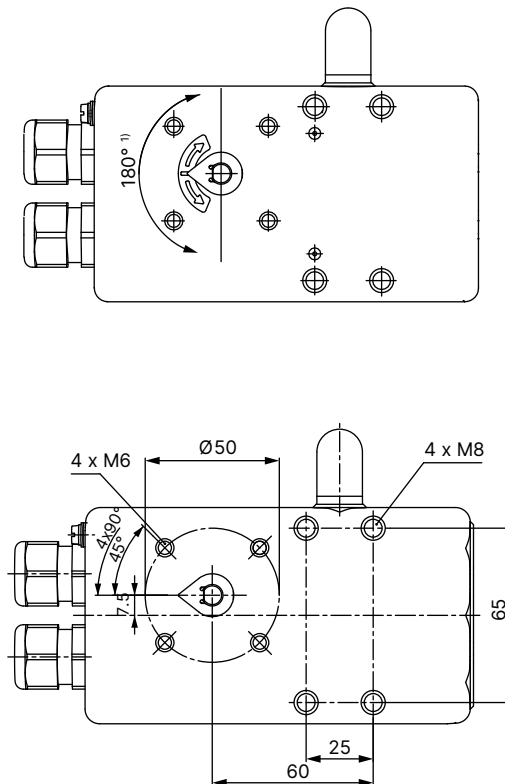
Description	LG	L	BG	B	HG	H	A	A1	A2
NAMUR cable gland	144.6	171.1	81.8	109.8	77	94.1	31	30	–
NAMUR Multipole	144.6	171.1	81.8	109.8	77	94.1	–	22.5	–
Remote cable gland	144.6	171.1	81.8	109.8	77	94.1	31	30	11.5
Remote Multipole	144.6	171.1	81.8	109.8	67	–	36	31	35.9

3.2. Mounting specification of NAMUR/Remote variant

Note:

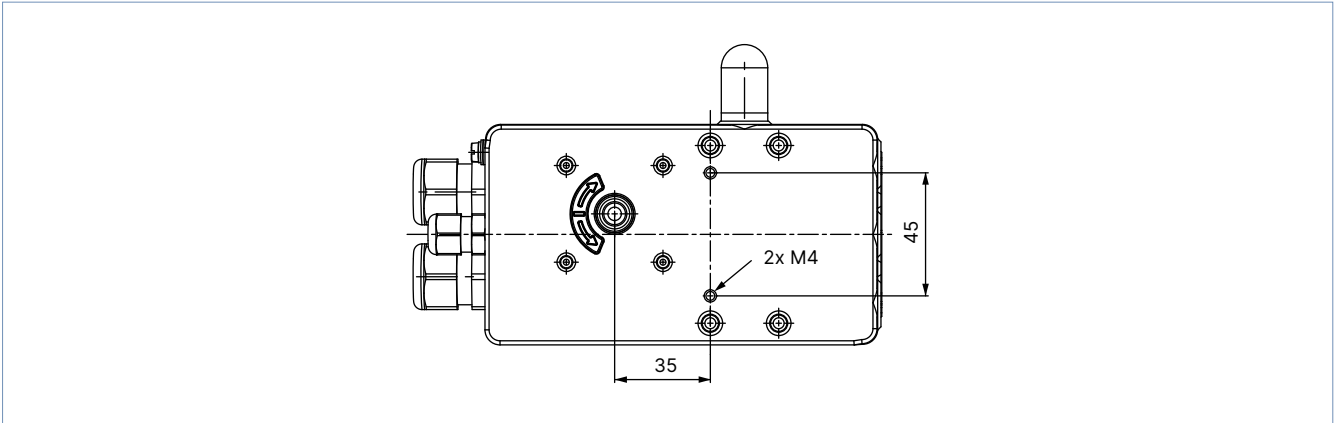
- The rotation angle of the sensor must be within a range of 180°. ¹⁾
- The sensor shaft must be in this position at approx. 50 % valve opening.
- Dimensions in mm

NAMUR variant



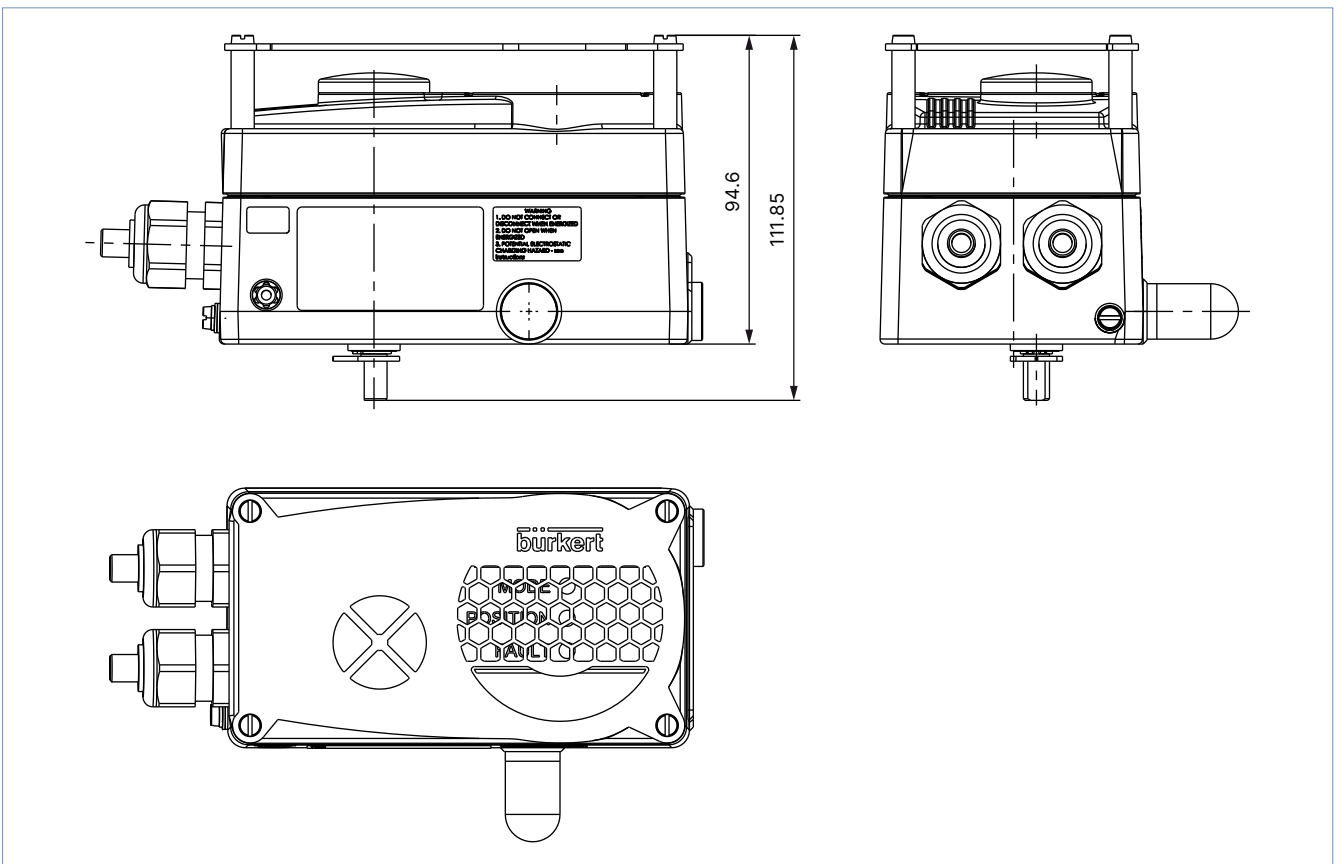
1.) A max. of 150° is possible with the AS-Interface variants and a max. of 180° with all other variants.

Remote variant



3.3. ATEX/IECEx variant

Note:
Dimensions in mm



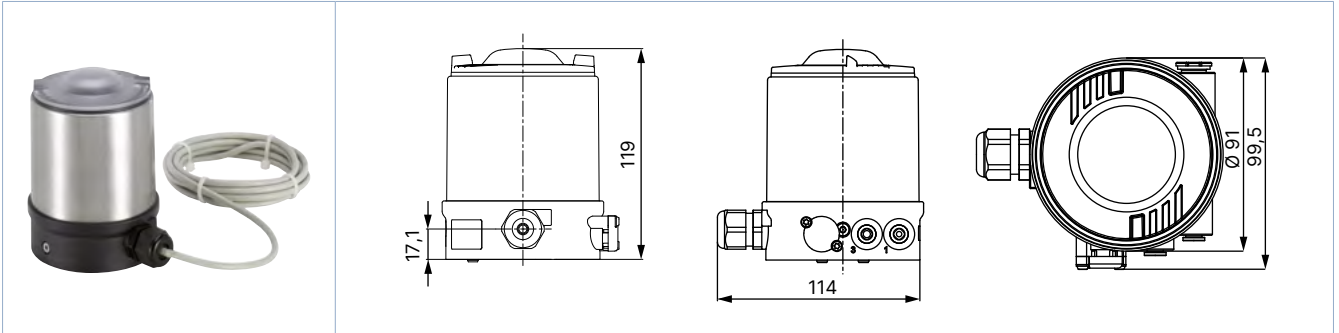
DTS 1000123308 EN Version: AB Status: RL (released | freigegeben | validé) printed: 18.03.2025

3.4. Remote position sensor variant

Note:

Dimensions in mm

Linear position sensor **Type 8798** ▶, for valve position detection of Bürkert ELEMENT valves and hygienic process valves for the remote positioner SideCONTROL.

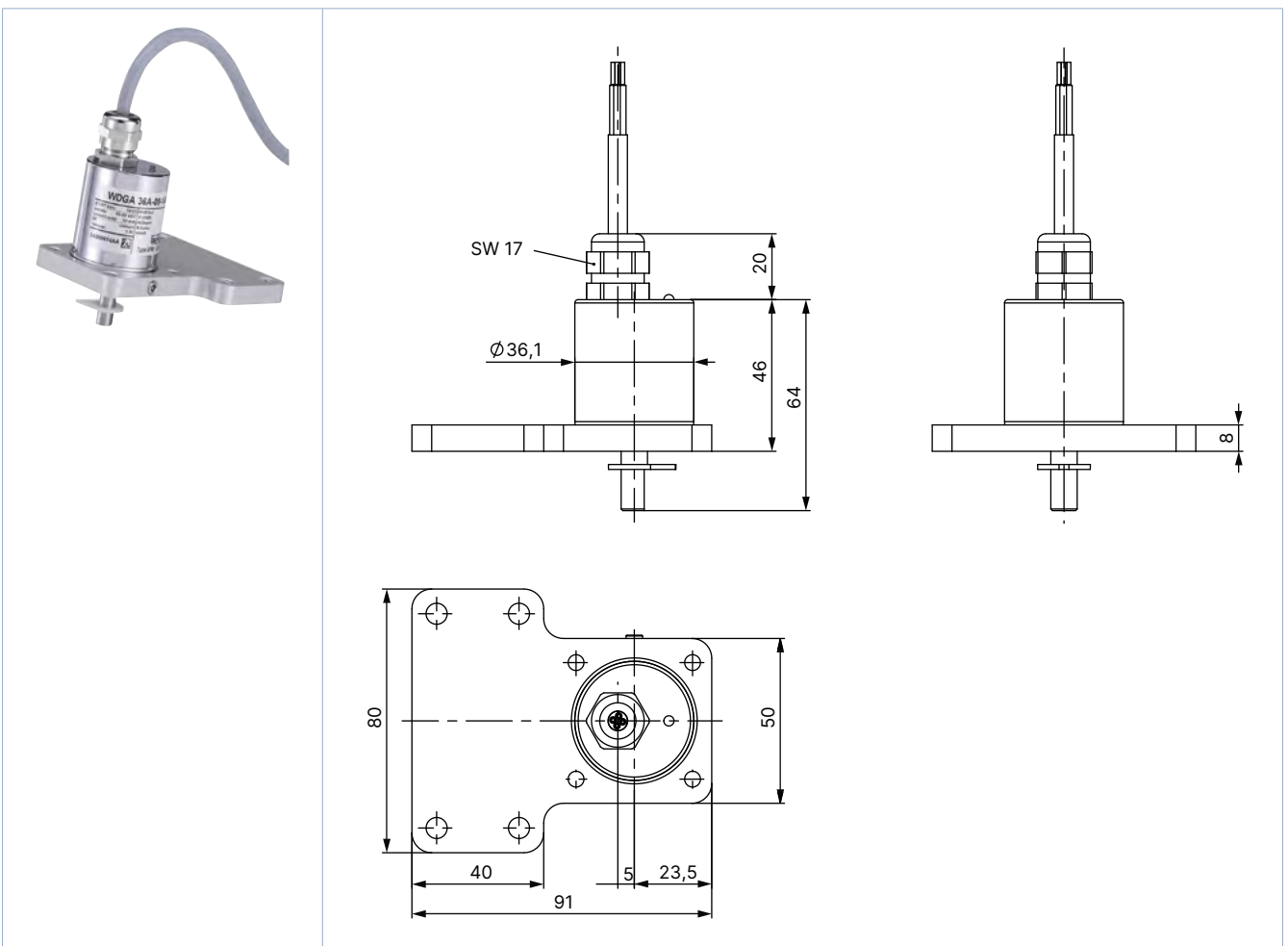


3.5. Mounting on control valve according to NAMUR

Note:

Dimensions in mm

Rotative position sensor to detect rotary motion of rotary actuators according to NAMUR/IEC 60534 - 6 - 1 and VDI/VDE 3845 (IEC 60534 - 6 - 2) for the remote positioner SideCONTROL.



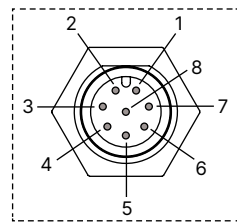
DTS 1000123308 EN Version: AB Status: RL (released | freigegeben | validé) printed: 18.03.2025

4. Device/Process connections

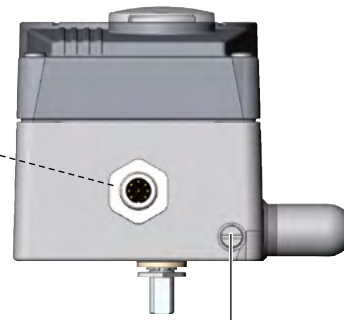
4.1. Electrical connections

Multipole connection

Operating voltage and diverse signals



M12 circular plug , 8-pin



Earthing function

M12 circular plug , 8-pin (input signals of the control centre)

Pin	Wire colour ¹⁾	Pin assignment	Outer circuitry/Signal level
1	White	Setpoint + (0/4...20 mA)	1 + (0/4...20 mA)
2	Brown	Setpoint GND	2 GND (see connection table for 3-wire or 4-wire below)
5	Grey	Digital input	5 + 0...5 V (log „0“)
			10...30 V (log „1“)
Relative to pin 3 (GND)			

Connection type 3-wire or 4-wire (setting via communication software)

Connection type 4-wire (factory setting)	Connection type 3-wire
<p>The setpoint value input is designed as a differential input, i.e. the GND lines of the set-point value input and the supply voltage are not identical.</p> <p>Note: If the GND signals of the set-point value input and the supply voltage are connected, the 3-conductor connection type must be set in the software.</p>	<p>The setpoint value input is related to the GND line of the supply voltage, i.e. setpoint input and supply voltage have a common GND line.</p>

M12 circular plug , 8-pin (output signals to the control centre, only for analogue output variant)

Option analogue feedback			
8	Red	Analogue feedback +	8 + (0/4...20 mA)
7	Blue	Analogue feedback GND	7 GND (identical to GND operating voltage)

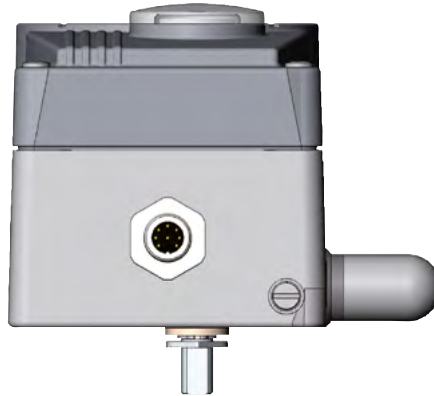
DTS 1000123308 EN Version: AB Status: RL (released | freigegeben | validé) printed: 18.03.2025

Pin assignment for operating voltage

Pin	Wire colour ^{1.)}	Pin assignment	Outer circuitry/Signal level	
3	Green	GND	3	 24 V DC ± 25 % Max. residual ripple 10 %
4	Yellow	+ 24 V	4	

1.) The specified wire colours refer to the connection cable, which is available as an accessory with the Article no. 919061

AS-Interface connection



M12 circular plug, 4-pin, without external power supply		Pin	Description	Pin assignment
	1	Bus +	Bus cable AS-Interface +	
	2	NC	Not assigned	
	3	Bus -	Bus cable AS-Interface -	
	4	NC	Not assigned	

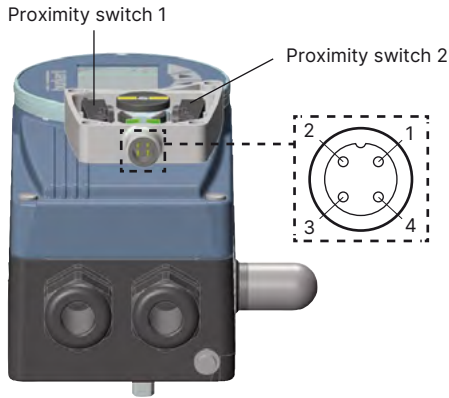
M12 circular plug, 4-pin, with external power supply (on request)		Pin	Description	Pin assignment
	1	Bus +	Bus cable AS-Interface +	
	2	GND	External power supply	
	3	Bus -	Bus cable AS-Interface -	
	4	24 V +	External power supply	

DTS 1000123308 EN Version: AB Status: RL (released | freigegeben | valide) printed: 18.03.2025

Position feedback with proximity switches

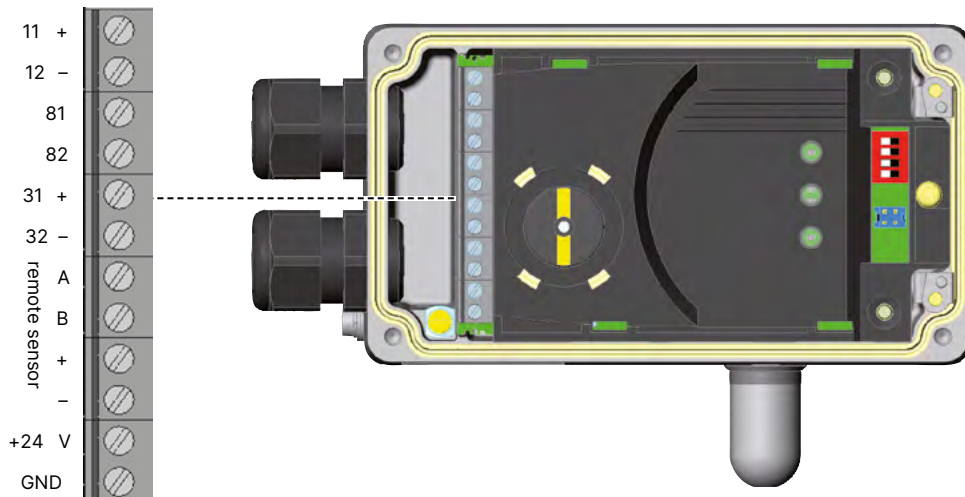
Note:

Accessories for upgrading



No.	Pin assignment	Outer circuitry/Signal level
1	Supply 10...30 V	+ 10...30 V 10...30 V
2	Switching output (NO) proximity switches 1	+ 10...30 V Open/10...30 V
3	GND	GND GND
4	Switching output (NO) proximity switches 2	+ 10...30 V Open/10...30 V

Cable gland



Terminal	Pin assignment	External circuitry/signal level
11 +	Setpoint +	11 + + (0/4...20 mA)
12 -	Setpoint GND	12 - GND (see connection table for 3-wire or 4-wire below)
81 +	Digital input +	81 + + 0...5 V (log. „0“) 10...30 V (log. „1“)
82 -	Digital input -	82 - GND (identical to GND operating voltage)

Connection type 3-wire or 4-wire (setting via communication software)

Connection type 4-wire (factory setting)	Connection type 3-wire
<p>The set-point value input is designed as a differential input, i.e. the GND lines of the set-point value input and the supply voltage are not identical.</p> <p>Note: If the GND signals of the set-point value input and the supply voltage are connected, the 3-wire connection type must be set in the software.</p>	<p>The set-point value input is related to the GND line of the supply voltage, i.e. setpoint input and supply voltage have a common GND line</p>

Option analogue feedback

Terminal	Pin assignment	Outer circuitry/Signal level
31 +	Analogue feedback +	31 + + (0/4...20 mA)
32 -	Analogue feedback GND	32 - GND (identical to GND operating voltage)

Terminal assignment for operating voltage

Terminal	Pin assignment	Outer circuitry/Signal level
+ 24 V	Operating voltage +	+ 24 V 24 V DC ± 25 %
GND	Operating voltage GND	GND Max. residual ripple 10 %

Remote variant option in conjunction with remote position sensor Type 8798

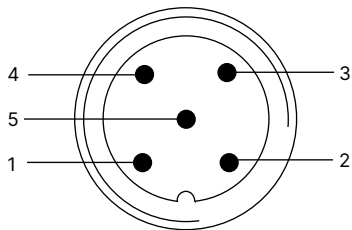
Terminal	Pin assignment	Outer circuitry/Signal level
Position sensor Remote	S +	Sensor supply +
	S -	Sensor supply -
	A	Serial interface, A-line
	B	Serial interface, B-line

DTS 1000123308 EN Version: AB Status: RL (released | freigegeben | validé) printed: 18.03.2025

IO-Link connection

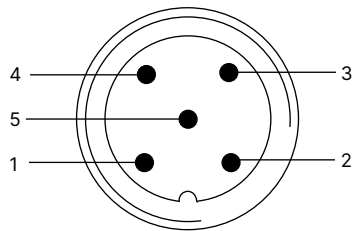


M12 circular plug, 5-pin, Port Class A



Pin	Description	Pin assignment	
1	L +	24 V DC	System supply
2	I/Q	NC	Not connected
3	L -	0 V (GND)	System supply
4	C/Q	IO-Link	Communication
5	NC	NC	Not connected

M12 circular plug, 5-pin, Port Class B



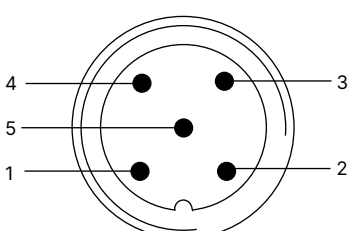
Pin	Description	Pin assignment	
1	L +	24 V DC	System supply
2	P24	24 V DC	Actuator supply
3	L -	0 V (GND)	System supply
4	C/Q	IO-Link	Communication
5	N24	0 V (GND)	Actuator supply

Connection of digital remote position sensor Type 8798, M8 socket, 4-pin (optional)

Circular plug	Pin	Pin assignment	Outer circuitry/Signal level		
	1	Sensor supply +	S +	+	
	2	Sensor supply -	S -	-	
	3	Serial interface, A-line	A	A-line	
	4	Serial interface, B-line	B	B-line	

Bürkert system bus (būS) connection

M12 circular plug, 5-pin



Pin	Description	Cable colour
1	CAN Shielding	CAN Shielding
2	+ 24 V DC ± 25 %, max. residual ripple 10 %	Red
3	GND/CAN_GND	Black
4	CAN_H	White
5	CAN_L	Blue

DTS 1000123308 EN Version: AB Status: RL (released | freigegeben | validé) printed: 18.03.2025

Connection of digital remote position sensor Type 8798, M8 socket, 4-pin (optional)

Circular plug	Pin	Pin assignment	Outer circuitry/Signal level		
	1	Sensor supply +	S +		+
	2	Sensor supply -	S -		-
	3	Serial interface, A-line	A		A-line
	4	Serial interface, B-line	B		B-line

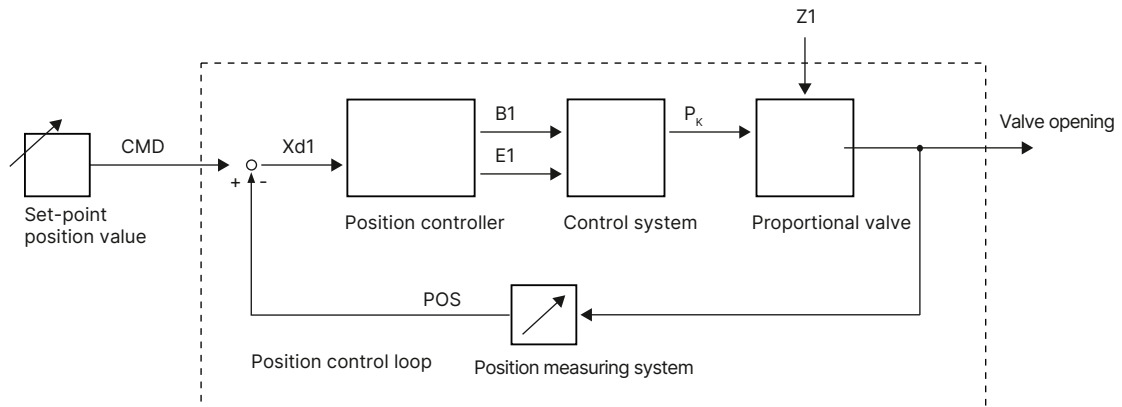
Positioner terminal	Wire colour Remote sensor with cable type 1	Wire colour Remote sensor with cable type 2
S +	Brown	Brown
S -	White	Black
A	Green	Red
B	Yellow	Orange

DTS 1000123308 EN Version: AB Status: RL (released | freigegeben | valide) printed: 18.03.2025

5. Performance specifications

5.1. Signal flow diagram

Position control loop



Additional software options of positioner SideCONTROL Type 8791 (extract)

SideCONTROL BASIC functions

- Automatic commissioning of control system
- Digital input (safety position)
- Analogue position feedback (optional)

DIP-Switch activated device

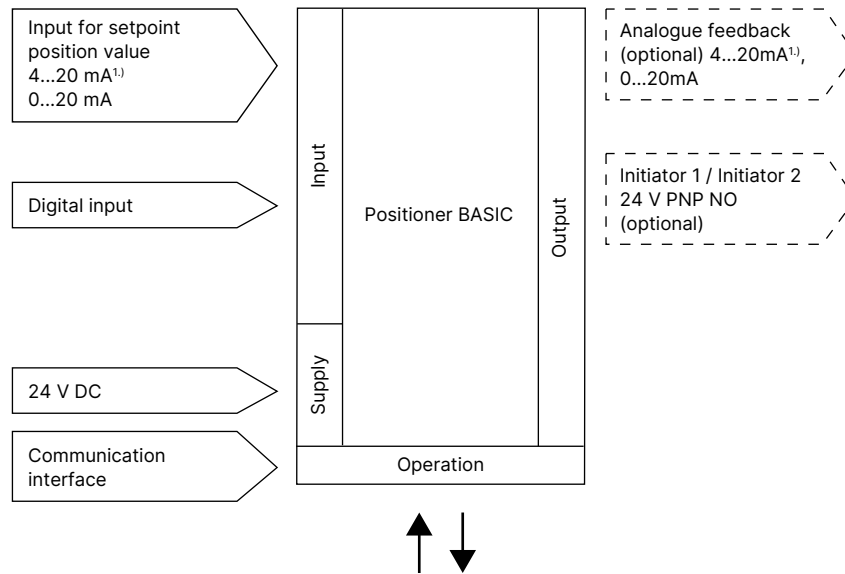
- Close tight function
- Invariant of operating direction of setpoint signal
- Linear characteristic curves selection or customised programming (software interface)
- Manual and automatic operation

Communications software with activatable and parameter driven functions

- Customised programming of transmission characteristics
- Selection of setpoint signal
- Range splitting setpoint signal
- Limitation of valve stroke
- Limitation of operation speed
- Definition of safety position
- Signal failure detection

5.2. Interface diagram

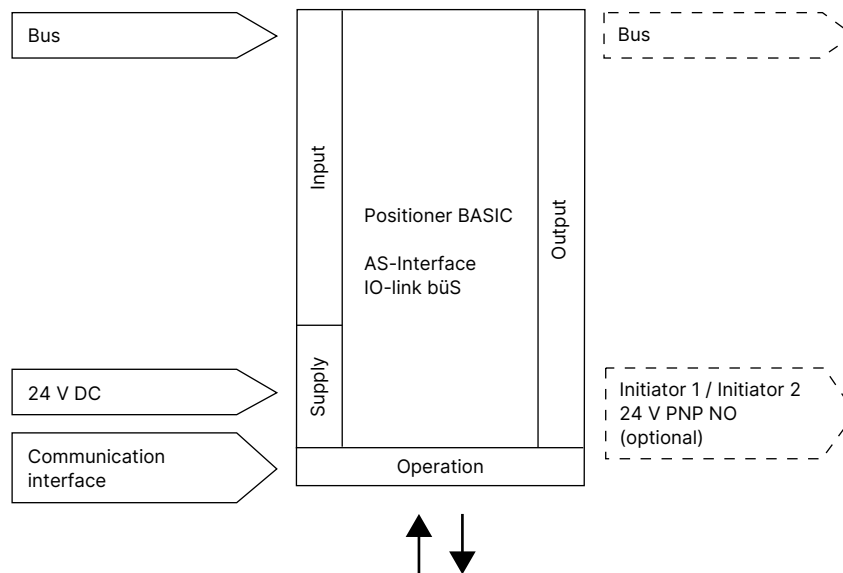
Variant without fieldbus communication



1.) Default setting

Variant with fieldbus communication

AS-Interface, IO-Link and Bürkert system bus (bÜS)



6. Product installation

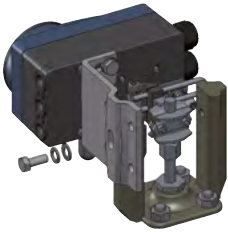

6.1. Mounting options

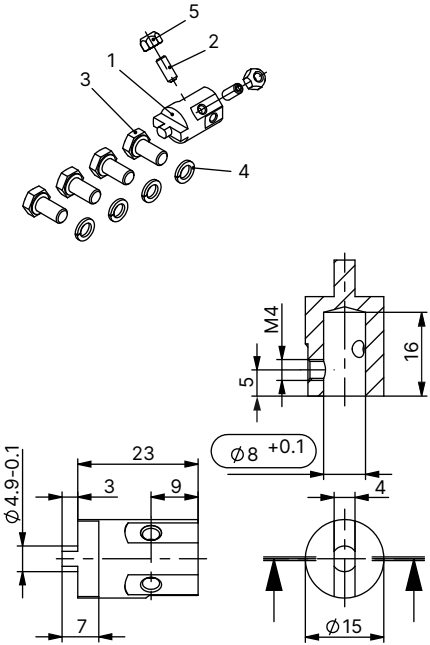
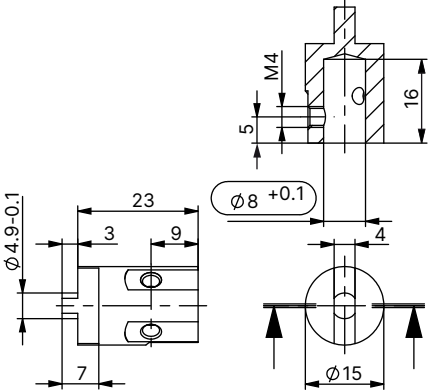
NAMUR variant

Note:

Positioner with integrated position sensor, installation according to NAMUR/IEC 60534 - 6 - 1 and VDI/VDE 3845 (IEC 60534 - 6 - 2)

The NAMUR variant of the positioner SideCONTROL is equipped with an integrated position sensor (linear or rotary). It has a standardised interface for direct attachment to linear actuators according to NAMUR/IEC 60534 - 6 - 1 and VDI/VDE 3845 (IEC 60534 - 6 - 2).

Linear actuators		Rotary actuators	
See operating manual Type 8791 ▶		See operating manual Type 8791 ▶	
			
Description	Article no.	Description	Article no.
Mounting kit for linear actuators in accordance with IEC 60534 - 6 - 1	787215	Coupling set for shaft part-turn actuator	787338
		Mounting bracket stainless steel	770294
		Mounting bracket black powder-coated	775710

Adapter kit for rotary actuators (Article no. 787338)	Mounting bracket for rotary actuator (Article no. 770294)
	

Actuator shaft height [mm]	A [mm]	B [mm]	C [mm]
20	46.5	80	-
30	56.5	80	130
50	76.5	-	130

DTS 1000123308 EN Version: AB Status: RL (released | freigegeben | valide) printed: 18.03.2025

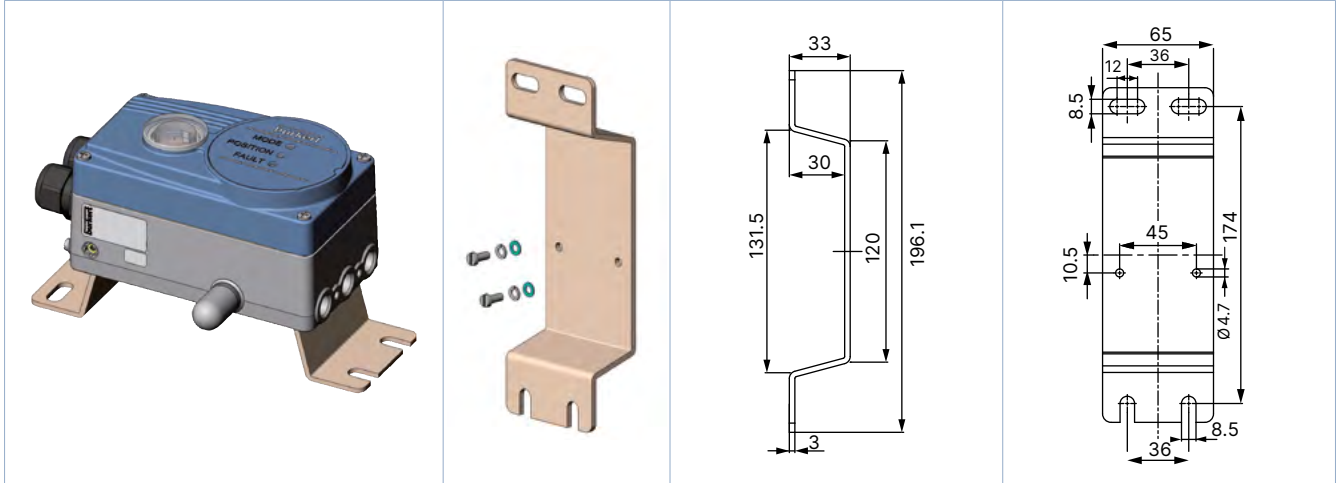
Remote variant

Note:

- Dimensions in mm
- 2 mounting options

The positioner SideCONTROL remote variant is used to control process control valves in combination with a remote position sensor. The remote position sensor is mounted directly on the valve to detect the valve position. The remote positioner can be mounted on the wall or on a standard rail in a control cabinet.

Wall mounting with accessory bracket

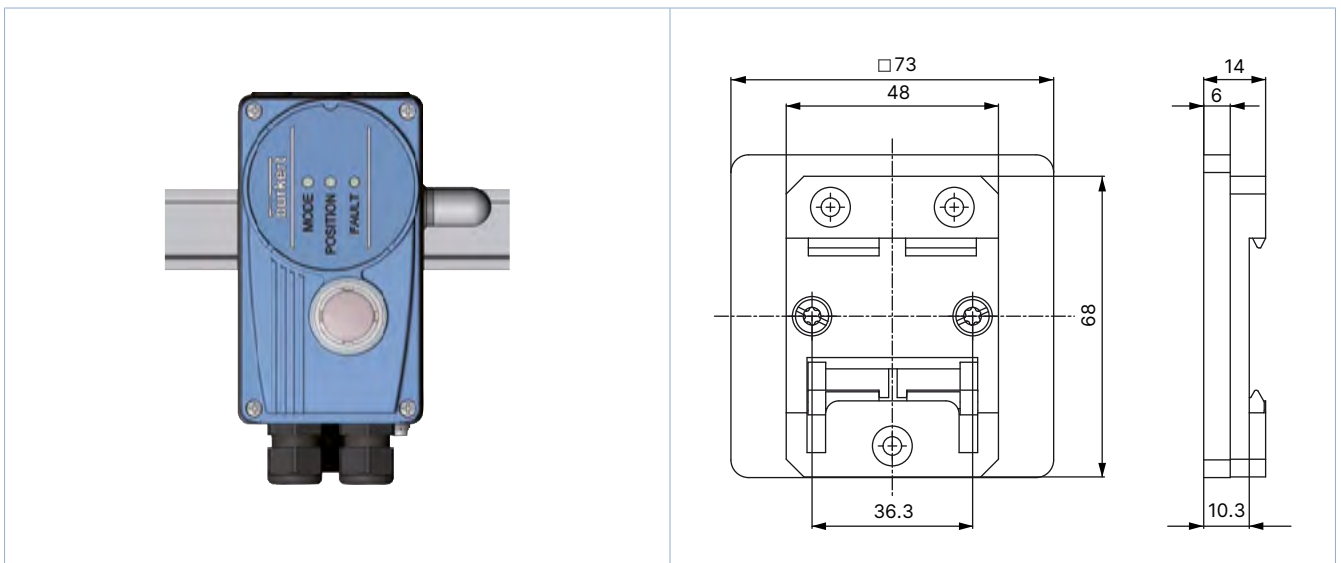


Description	Article no.
Bracket for wall mounting	675715

Mounting on Standard rail

Note:

- Dimensions in mm
- Adapter can be turned by 90° the standard rail.



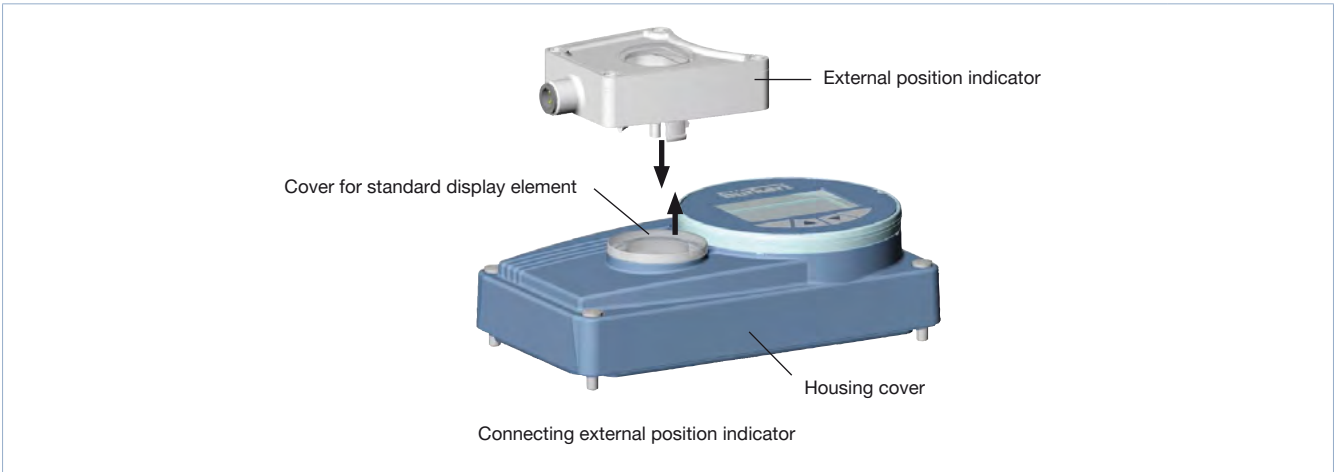
Description	Article no.
Holder for standard rail mounting	675702

DTS 1000123308 EN Version: AB Status: RL (released | freigegeben | valide) printed: 18.03.2025

Position feedback with proximity switches

Note:

Upgrade feature for SideCONTROL NAMUR



Description	Article no.
Position feedback	677218

DTS 1000123308 EN Version: AB Status: RL (released | freigegeben | validé) printed: 18.03.2025

6.2. Mounting options

NAMUR variant for Samson valves

Positioner with integrated position sensor for Samson valves.

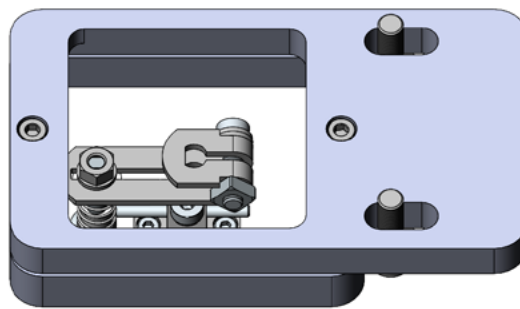
Actuator Type 3277

For Samson actuator Type 3277 and a valve with an effective valve stroke of 7.5...30 mm.

Product choice

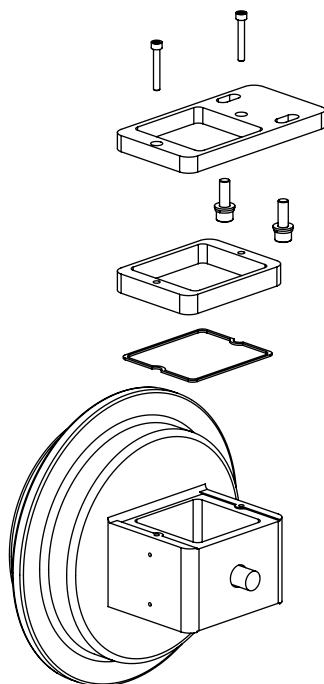
Note:

- The technical data of the listed actuators and valves from third-party manufacturers are subject to change. Sampling of the relevant adapter set is therefore required in all cases. The information on the combinability of the adapter sets is therefore subject to change.
- The ordering tables for adapter sets in chapter "7.4. Ordering chart accessories" on page 31 refer to the valve actuators from third-party manufacturers and not to the valves themselves.
- The actuator is therefore the decisive factor when selecting a suitable adaptation.

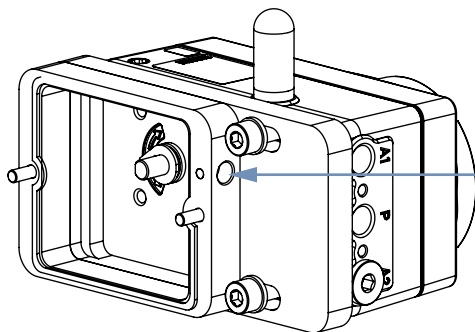
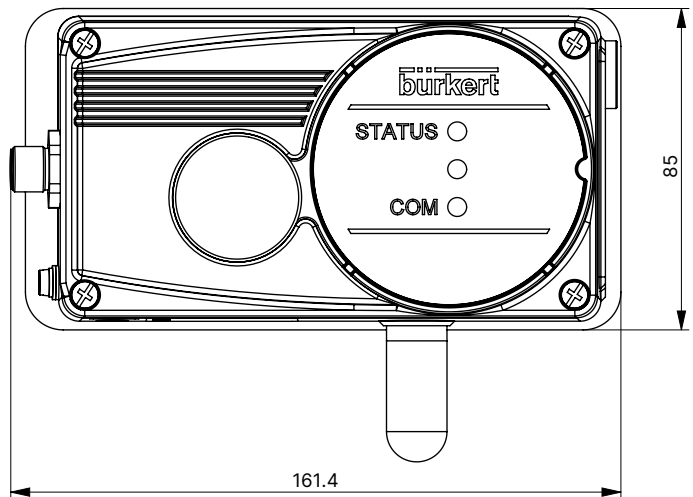
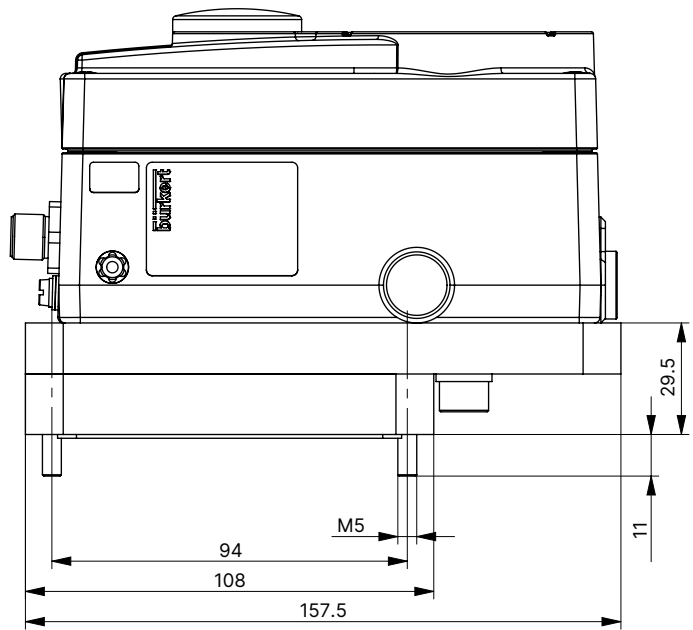
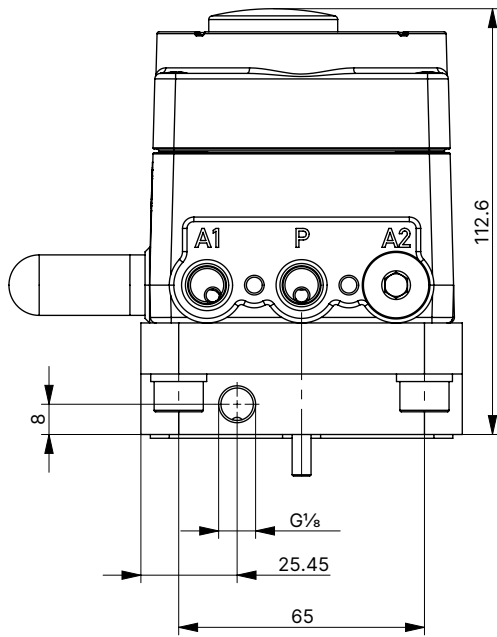


Article no. Adapter set for Bürkert positioner

Description	
Adapter set for Bürkert SideCONTROL with stainless steel adapter plates for valve stroke 15...30 mm	20068379
Adapter set for Bürkert SideCONTROL with plastic adapter plates (POM black) for valve stroke 15...30 mm	20091532
Adapter set for Bürkert SideCONTROL with stainless steel adapter plates for valve stroke 7.5 mm	20111009



DTS 1000123308 EN Version: AB Status: RL (released | freigegeben | valide) printed: 18.03.2025









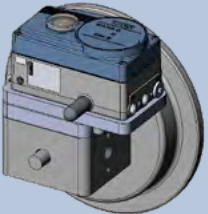



Inside thread G $\frac{1}{8}$ " for pilot air connection
only with adaptation for valve stroke 7.5 mm

6.3. Combination possibilities with pneumatic process valves

Please note:


- Further information can be found in chapter "7. Ordering information" on page 29.
- For other special drives on request

		Type 8791				
Positioner SideCONTROL		NAMUR		Remote		
	▶					
						
Remote IP20¹⁾		Linear actuators IEC 60534 - 6 - 1 Rotary actuators VDI/VDE 3845 (IEC 60534 - 6 - 2)		Linear actuators IEC 60534 - 6 - 1 Rotary actuators VDI/VDE 3845 (IEC 60534 - 6 - 2)		Control valve system
	▶	Type 8805 ▶ Ball valve/Butterfly valve with pneumatic rotary actuator		Type 8798 ▶ Remote sensor for pneumatically actuated process valves		Type 2300 ▶ Pneumatically actuated 2-way angle seat control valve ELEMENT + Type 8798 ▶ Remote sensor for pneumatically actuated process valves
		Special adaptations				
	▶					
		For Samson Type 3277 ▶		For other special actuators on request		

1.) Remote IP20 variant for cabinet mounting

7. Ordering information

7.1. 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](#)

7.2. 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](#)

7.3. Ordering chart

Positioner SideCONTROL Type 8791 NAMUR variant

Note:

Mounting according to NAMUR IEC 60534 - 6 - 1 resp. VDI/VDE 3845 (IEC 60534 - 6 - 2)

Control function	Pilot valve system/ Air capacity	Communication	Electrical connection	Feedback	Digital input	ATEX II 3GD/ IECEX, CCC ¹⁾	Article no.	
Single-acting and double-acting	Universal	Without	Cable gland	–	Yes	–	323214	
				Analogue	Yes	–	323217	
				–	Yes	Yes	391979	
			Multipole	Analogue	Yes	Yes	391981	
				–	Yes	–	323213	
				Analogue	Yes	–	323216	
		AS-Interface	Digital	–	–	239617		
			Digital	–	Yes	310305		
			IO-Link Port Class A	Multipole	Digital	–	–	20032774
					Digital	–	Yes	20032777
			IO-Link Port Class B	Multipole	Digital	–	–	323207
					Digital	–	Yes	20023480
Bürkert system bus (bùS)	Multipole	Digital	–	–	323210			

1.) CCC (China Compulsory Certificate) for device variants with Ex approval

Positioner SideCONTROL Type 8791 Remote-variant

Assembly variations	Actuator size ELEMENT	Control function	Pilot valve system/ Air capacity	Communication	Electrical connection	Feed-back	Digital input	ATEX II 3GD/ IECEx CCC ¹⁾	Article no.	
Remote	Ø 70/90 mm	Single-acting	Low	Without	Cable gland	–	Yes	–	323220	
						Analogue	Yes	–	323225	
		Single and double-acting	–			Yes	–	323219		
			Analogue			Yes	–	323224		
	Ø 70/90 mm	Single-acting	Low	IO-Link Port class A	Multipole	Digital	–	–	20032776	
						Digital	–	Yes	o. r.	
	Ø 130/225 mm	Single and double-acting	Universal			Digital	–	–	20032775	
						Digital	–	Yes	20032477	
	Ø 130/225 mm	Single and double-acting	Universal			IO-Link Port class B	Digital	–	–	323208
							Digital	–	Yes	o. r.
	Ø 70/90 mm	Single-acting	Low	Digital	–		–	323209		
				Digital	–		Yes	o. r.		
Ø 130/225 mm	Single and double-acting	Universal	Bürkert system bus (büS)	Digital	–		–	323212		
				Digital	–		–	323211		
Remote IP20	Ø 70/90 mm	Single-acting		Without	Cable gland	–	Yes	–	o. r.	
						Analogue	Yes	–	o. r.	
	Ø 130/225 mm	Single and double-acting				Universal	–	Yes	–	o. r.
							Analogue	Yes	–	o. r.

o. r. = on request

1.) CCC (China Compulsory Certificate) for device variants with Ex approval

Remote position sensor for remote variant of SideCONTROL Type 8791

Product	Mounting variant	Electrical connection	cULus	ATEX II 3 GD/IECEX CCC ¹⁾	Article no.
Mounting on control valves					
<p>Type 8798 ▶</p>	Control valve Type 23xx	Cable gland - 10 m round cable	Yes	–	300730
		Cable gland - 10 m round cable	–	Yes	20003944
		Multipole - 10 m round cable	Yes	–	307956
	Control valve Type 27xx	Cable gland - 10 m round cable	Yes	–	211535
		Cable gland - 10 m round cable	–	Yes	226859
		Multipole - 10 m round cable	Yes	–	329888
NAMUR mounting					
	NAMUR (rotative)	Cable gland 2 m round cable (extendable to 10 m maximum)	Yes	–	211536

1.) CCC (China Compulsory Certificate) for device variants with Ex approval

Further variants on request













Approval
Remote sensor ATEX Cat. 3

7.4. Ordering chart accessories

Standard accessories

Note:









The associated communication software can be downloaded under [Type 8791 ▶](#).

Description	Article no.
M12 circular socket with cable, 8-pin, cable length: 5 m, for input and output signals	919267 
M8 plug, 4-pin for digital outputs, with remote position sensor	917131 
USB bÜS interface set 2 (Type 8923) for connection to the Bürkert Communicator software: including bÜS stick, connection cable to M12 plug, M12 connection cable on micro USB for the bÜS service interface and Y distributor, cable length: 0.7 m	772551 
bÜS cable extension, M12, cable length: 1 m	772404 
bÜS cable extension, M12, cable length: 3 m	772405 
bÜS cable extension, M12, cable length: 5 m	772406 
bÜS cable extension, M12, cable length: 10 m	772407 
Silencer G ¼	780780 
USB interface for serial communication (for device variants with AS-Interface)	227093 
Bürkert Communicator software	Type 8920 ▶
AS-Interface flat cable clamp, M12 outlet, stainless steel outlet	799646 

Accessories SideCONTROL NAMUR






Note:

Further information can be found in chapter [“6. Product installation” on page 23](#).

Bezeichnung	Article no.
Attachment kit for linear actuators according to IEC 60534 - 6 - 1	787215 
Coupling set for part-turn actuators according to VDI/VDE 3845 (IEC 60534 - 6 - 2) stainless steel	787338 
Universal mounting bridge VDI/VDE 3845 (IEC60534 - 6 - 2) made of stainless steel	770294 
Universal mounting bridge VDI/VDE 3845 (IEC60534 - 6 - 2) made of stainless steel, black powder-coated	775710 
For Samson Type 3277 – Adapter set with stainless steel adapter plates	20068379 
For Samson Type 3277 – Adapter set with plastic adapter plates (POM black)	20091532 
For Samson Type 3277 – Adapter set with stainless steel adapter plates for valve stroke 7.5 mm	20111009 
Position feedback with proximity switches (optional upgrade feature) ¹⁾	677218 

1.) External end position feedback for upgrading SideCONTROL NAMUR.

Accessories SideCONTROL Remote

Description	Article no.
Mounting bracket for stainless steel wall mount (spare part), see “6. Product installation” on page 23	675715 
Standard rail assembly kit aluminium/stainless steel, see “6. Product installation” on page 23	675702 
Attachment kit for Type 21xx/23xx actuator series, actuator size Ø 70/90/130 mm	679917 
Attachment kit for Type 21xx/23xx actuator series, actuator size Ø 225 mm	60025906 
Adapter kit remote sensor, control valves Type 27xx, actuator size Ø 175/225 mm	679945 
Sensor puck (replacement part)	682240 