Transmitters for electromagnetic inductive flow sensors

- Must be combined with sensor Type S051, Type S054, Type S055 or Type S056
- Continuous measurement, high accuracy
- Different housing shapes and materials available
- Compact and remote design selectable, available with or without display

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

Can be combined with

Type S051
Electromagnetic flow sensor, low flow rates

Type S054
Electromagnetic flow sensor without flange (intermediate flange variant)

Type S055
Electromagnetic sensor with flange

Type S056
Electromagnetic flow sensor with hygienic process connections

Type description

The Type SE58 transmitter (in S, M or L variant) associated with the electromagnetic flow sensor (in compact or remote variant) Type S051, Type S054, Type S055 or Type S056 is designed for applications with a minimum conductivity of 5 µS/cm.

The variant S of the transmitter Type SE58 can only be used to build a compact flowmeter, with or without display. It is characterised by a housing with small external dimensions.
The variant without display has a housing and a cover in black painted aluminium or stainless steel.
The variant with display has a black painted aluminium or stainless steel housing and a plastic cover. The display is integrated in the cover. Flow rate and totalizer values are displayed simultaneously, as well as symbols for device status and alarms
The flow rate measurement can be transferred via a digital or an analogue output.
The achievable uncertainty is 0.5 % of the measured value.
The device cannot be extended with the addition of input/output signals and functionalities such as dosing.

The variants M and L of the transmitter Type SE58, are available to build a compact or remote flowmeter, with or without display. Both variants are available with a housing made of painted aluminium, plastic or stainless steel.
The device can be extended with the addition of input/output signals and functionalities such as dosing (only Type SE58 L) and data logger. The Human Machine Interface (HMI) comprising the display and the operating keys allows choosing flexible data presentations, carrying out complete settings and configuring the device.
The L variant is characterized by superior performance as shown by the low uncertainty of 0.2 % of the measured value compared to 0.4 % (option) and 0.8 % with the M variant.

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1. General technical data

1.1. About the device

The transmitter Type SE58 is available in 3 variants:

- SE58 L available with an aluminium, plastic or stainless steel housing and cable glands, with or without display, compact or remote design
- SE58 M available with an aluminium, plastic or stainless steel housing and cable glands, with or without display, compact or remote design
- SE58 S available with an aluminium or stainless steel housing, M12 connector or one cable gland with connected cable and with or without display, no remote variant

SE58 L or SE58 M	SE58 S
	

Settings for SE58 L and SE58 M can be done using the operator keys or by USB cable and PC tool MCP. However, any changes using MCP are not recommended, unless they are:

- done after receiving corresponding training by Burkert,
- carried out by a professional,
- agreed by the end user, and
- done in accordance with the MCP manual.

All transmitters are intended for use with electromagnetic flow sensors Type S051, Type S054, Type S055 or Type S056.

Further information can be found in the data sheets of the electromagnetic-inductive flow sensors, see **data sheet Type S051** ▶, **data sheet Type S054** ▶, **data sheet Type S055** ▶ or **data sheet Type S056** ▶.

1.2. SE58 L transmitter

Product properties	
Material	
Lid	Polycarbonate (PC)
Front panel film	Polyester
Deckel	• Painted aluminium die casting or • Nylon reinforced (PA6) with 15 % glass fibre or • Stainless steel 304 (1.4301), electro-polished
Housing	• Painted aluminium die casting or • Nylon reinforced (PA6) with 15 % of glass fibre or • Stainless steel 304 (1.4301) electro-polished
Seal	Silicone
Cable gland	Polyamide (PA)
Display	Graphic display 8 lines x 16 characters, 128 × 64 pixels with back light
Keypad	3 operating keys
Compatibility	Electromagnetic flow sensors Type S051, Type S054, Type S055 or Type S056 in compact or remote variant Further information can be found in the data sheets, see **data sheet Type S051** ▶, **data sheet Type S054** ▶, **data sheet Type S055** ▶ or **data sheet Type S056** ▶.
Dimensions	Further information can be found in chapter "3. Dimensions" on page 10.

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Data logger	A micro SD memory card 4 GB stores the selected data in a specified interval (option)
Special function	• Bidirectional measure • Dual measurement range • Diagnostic functions such as device self tests and process diagnostics like empty-pipe [1)] or measurement value limit detection • Batch filling functions
Performance data	
At reference conditions and according to internal test procedures: • At room temperature • Constant flow rate during the test, liquid speed > 1 m/s • Pressure: > 30 Kpa • Flow condition: observed inlet and outlet conditions • Zero point stability: ± 0.005 % • Default configuration if ordered together with sensor Type S051, Type S054, Type S055 or Type S056. Further information can be found in chapter "4.2. Default configuration" on page 15.	
Measurement deviation	≤ ± 0.2 % of the measured value for flow velocity > 0.5 m/s Further information can be found in chapter "4.1. Measurement deviation diagram" on page 14.
Repeatability	≤ ± 0.1 % of the measured value for flow velocity > 0.5 m/s
Response time	Minimum time • for analogue output (AO), when damping setting is deactivated and according to sensor size: – DN 03...DN 250: 20 ms – DN 300...DN 400: 100 ms • for digital output (DO): – 100 ms (if used with the sensor Type S054 or Type S055) – 20 ms (if used with the sensor Type S051 or Type S056)
Electrical data	
Operating voltage	• 100...240 V AC, 44 Hz...66 Hz • 12...48 V DC • Others on request
Power consumption	Max. 20 VA with 100...240 V AC operating voltage
Input	1 digital, function use is configurable (e.g. totalizer reset)
Output	• Transistor: – NPN or PNP (according to wiring), open collector – NPN output: 2 digital outputs (DO) – PNP output: only 1 digital output (DO) – configurable as – pulse/frequency (1250 Hz, max. 100 mA, 30 V DC) or – alarm/batch (adjustable usage) • Current: – max. 2 analogue outputs (AO), 0/4...20/22 mA, RL = 1000 Ω – HART (optional) only over first analogue output • Serial interface (optional): RS-485 (available with Modbus protocol (option))
Galvanic isolation	All the input/outputs are galvanically isolated up to 250 V from operating voltage
Protection class	Class I
Connection cable	Between sensor and transmitter: • cable C015/C016 for remote variant • 10 m (other lengths on request) Further information can be found in the data sheets, see **data sheet Type S051 ▶**, **data sheet Type S054 ▶**, **data sheet Type S055 ▶** or **data sheet Type S056 ▶**.
Medium data	
Velocity range	0.4...10 m/s
Minimum conductivity	5 µS/cm
Connections & communication	
Electrical connection	• 5 cable glands PG11 for aluminium or nylon housing or • 6 cable glands PG11 for stainless steel housing

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Plug for configuration connection	USB port for the connection to PC (USB cable with USB mini B and USB type A connectors is required for the configuration and parameter settings)
Industrial communication	
Supported network protocol	• Modbus RTU via RS-485 • HART (available on first analogue output)
Approvals and conformities	
Directives	
CE directive	Further information on the CE directive can be found in chapter "2.2. Standards" on page 9.
Environment and installation	
Ambient temperature	Operation and storage • Aluminium or stainless steel housing: - 20...+ 60 °C (- 4...+ 140 °F) • Reinforced nylon housing: - 10...+ 50 °C (+ 14...+ 122 °F)
Relative air humidity	0...100 %, without condensation
Height above sea level	- 200...+ 4000 m
Operating condition	Continuous
Equipment mobility	Fixed device
Application range	Indoor and outdoor Protect the device against electromagnetic interference, ultraviolet rays and, when installed outdoors, against the effects of climatic conditions.
Degree of protection according to IEC/EN 60529	• Aluminium housing: IP65, IP67 (IP68 option) • Reinforced nylon housing: IP65, IP67 • Stainless steel housing: IP65
Installation category	Category II according to UL/EN 61010-1
Pollution degree	Degree 2 according to UL/EN 61010-1

1.) Empty pipe functionality is not available if sensors are selected in the range of DN 03 to DN 20.

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1.3. SE58 M transmitter

Product properties	
Material	
Lid	Polyamide (PA)
Front panel film	Polyester
Cover	• Painted aluminium die casting or • Nylon reinforced (PA6) with 15 % glass fibre or • Stainless steel 304 (1.4301), electro-polished
Housing	• Painted aluminium die casting or • Nylon reinforced (PA6) with 15 % glass fibre or • Stainless steel 304 (1.4301), electro-polished
Seal	Silicone
Cable gland	Polyamide (PA)
Display	Graphic display 8 lines x 16 characters, 128 × 64 pixels with back light
Keypad	3 operator keys
Compatibility	Electromagnetic flow sensors Type S051, Type S054, Type S055 or Type S056 in compact or remote variant Further information can be found in the data sheets, see **data sheet Type S051** ▶, **data sheet Type S054** ▶, **data sheet Type S055** ▶ or **data sheet Type S056** ▶.
Dimensions	Further information can be found in chapter "3. Dimensions" on page 10.
Data logger	A micro SD memory card 4 GB stores the selected data in a specified interval (option)
Special function	• Bidirectional measure • Dual measurement range • Diagnostic functions such as device self tests and process diagnostics like empty-pipe [1)] or measurement value limit detection
Performance data	
At reference conditions and according to internal test procedures: • At room temperature • Constant flow rate during the test, liquid speed > 1 m/s • Pressure: > 30 Kpa • Flow condition: observed inlet and outlet conditions • Zero point stability: ± 0.005 % • Default configuration if ordered together with sensor Type S051, Type S054, Type S055 or Type S056. Further information can be found in chapter "4.2. Default configuration" on page 15.	
Measurement deviation	≤ ± 0.8 % of the measured value (optional: ± 0.4 % of the measured value) for flow velocity > 0.5 m/s Further information can be found in chapter "4.1. Measurement deviation diagram" on page 14.
Repeatability	≤ ± 0.4 % of the measured value (optional: ± 0.2 % of the measured value) for flow velocity > 0.5 m/s
Response time	Minimum time • for analogue output (AO), when damping setting is deactivated and according to sensor size: – DN 03...DN 250: 20 ms – DN 300...DN 400: 100 ms • for digital output (DO): – 100 ms (if used with the sensor Type S054 or Type S055) – 20 ms (if used with the sensor Type S051 or Type S056)
Electrical data	
Operating voltage	• 100...240 V AC, 44 Hz...66 Hz • 12...48 V DC • Others on request
Power consumption	Max. 20 VA with 100...240 V AC operating voltage
Input	1 digital, function use is configurable (e.g. totalizer reset)

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Output	• Transistor: – NPN or PNP (according to wiring), open collector – NPN output: 2 digital outputs (DO) – PNP output: only 1 digital output (DO) – configurable as – pulse/frequency (1250 Hz, max. 100 mA, 30 V DC) or – alarm • Current: – max. 2 analogue outputs (AO), 0/4...20/22 mA, RL = 1000 Ω – HART (optional) only over first analogue output • Serial interface (optional): RS-485 (available with Modbus protocol (option))
Galvanic isolation	All the input/outputs are galvanically isolated up to 250 V from operating voltage
Protection class	Class I
Connection cable	Between sensor and transmitter: • cable C015/C016 for remote variant • 10 m (other lengths on request) Further information can be found in the data sheets, see **data sheet Type S051 ▶**, **data sheet Type S054 ▶**, **data sheet Type S055 ▶**, **data sheet Type S056 ▶**.
Medium data	
Velocity range	0.4...10 m/s
Minimum conductivity	5 µS/cm
Connections & communication	
Electrical connection	• 5 cable glands PG11 for aluminium or nylon housing or • 6 cable glands PG11 for stainless steel housing
Plug for configuration connection	USB port for the connection to PC (USB cable with USB mini B and USB type A connectors is required for the configuration and parameter settings)
Industrial communication	
Supported network protocol	• Modbus RTU via RS-485 • HART (available on first analogue output)
Approvals and conformities	
Directives	
CE directive	Further information on the CE directive can be found in chapter "2.2. Standards" on page 9.
Environment and installation	
Ambient temperature	Operation and storage • Aluminium or stainless steel housing: - 20...+ 60 °C (- 4...+ 140 °F) • Reinforced nylon: - 10...+ 50 °C (+ 14...+ 122 °F)
Relative air humidity	0...100 %, without condensation
Height above sea level	- 200...+ 4000 m
Operating condition	Continuous
Equipment mobility	Fixed device
Application range	Indoor and outdoor Protect the device against electromagnetic interference, ultraviolet rays and, when installed outdoors, against the effects of climatic conditions.
Degree of protection according to IEC/EN 60529	• Aluminium housing: IP65, IP67 (IP68 optional) • Reinforced nylon housing: IP65, IP67 • Stainless steel housing: IP65
Installation category	Category II according to UL/EN 61010-1
Pollution degree	Degree 2 according to UL/EN 61010-1

1.) Empty pipe functionality is not available if sensors are selected in the range of DN 03 to DN 20.

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1.4. SE58 S transmitter

Product properties	
Material	
Lid	Polyamide (PA)
Cover	PA6
Housing	• Painted Aluminium die casting or • Stainless steel AISI 304 (1.4301) raw or polished
Seal	NBR
Fixed connector	Nickel-plated brass
Cable gland	Polyamide (PA)
Display	LCD dimensions 60 × 40 mm, 2 lines + symbols, icons
Keypad	None
Compatibility	Electromagnetic flow sensors Type S051, Type S054, Type S055, Type S056 in compact variant, up to DN 400. Further information can be found in the data sheets, see **data sheet Type S051 ▶**, **data sheet Type S054 ▶**, **data sheet Type S055 ▶**, **data sheet Type S056 ▶**.
Dimensions	Further information can be found in chapter "3. Dimensions" on page 10.
Parametrisation	Remote configuration by USB cable and PC tool MCP. However, any changes using MCP are not recommended, unless they are: • done after receiving corresponding training by Burkert, • carried out by a professional, • agreed by the end user, and • done in accordance with the MCP manual. Further information can be found in chapters "5. Product operation" on page 16, "6. Product accessories" on page 17 and "8.5. Ordering chart accessories" on page 23.
Data logger	An EEPROM stores the measured values (in case of power failure)
Special function	Bidirectional measure
Performance data	
At reference conditions and according to internal test procedures: • At room temperature • Constant flow rate during the test, liquid speed > 1 m/s • Pressure: > 30 Kpa • Flow condition: observed inlet and outlet conditions • Zero point stability: ± 0.005 % • Default configuration if ordered together with sensor Type S051, Type S054, Type S055, Type S056. Further information can be found in chapter "4.2. Default configuration" on page 15.	
Measurement deviation	≤ ± 0.5 % of the measured value for flow velocity > 0.5 m/s Further information can be found in chapter "4.1. Measurement deviation diagram" on page 14.
Repeatability	≤ ± 0.25 % of the measured value for flow velocity > 0.5 m/s
Response time	Minimum time • for analogue output (AO), when damping setting is deactivated and according to sensor size: – DN 03...DN 250: 20 ms – DN 300...DN 400: 100 ms • for digital output (DO): – 100 ms (if used with the sensor Type S054 or Type S055) – 20 ms (if used with the sensor Type S051 or Type S056)
Electrical data	
Operating voltage	• 12...30 V DC if not using mA output • 18...30 V DC if using mA output
Power consumption	Max. 1 W
Input	None

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Output	• Transistor: – NPN only (PNP not possible), open collector – NPN output: 2 digital outputs (DO) – configurable as – pulse/frequency (1250 Hz, max. 100 mA, 30 V DC) or – alarms • Current: – 1 analogue output (AO), 0/4...20 mA, RL = 500 Ω (18...30 V DC)
Protection class	Class I
Medium data	
Velocity range	0.4...10 m/s
Minimum conductivity	20 µS/cm
Connections & communication	
Electrical connection	• 1 × 5-pin M12 female connector (included in the delivery) or • Cable gland with 2 meter cable, already connected
Plug for configuration connection	USB port for the connection to PC (USB cable with USB mini B and USB type A connectors is required for the configuration and parameter settings)
Approvals and conformities	
Directives	
CE directive	Further information on the CE directive can be found in chapter "2.2. Standards" on page 9.
Environment and installation	
Ambient temperature	Operation and storage: • if analogue output used: - 20...+ 60 °C (- 4...+ 140 °F) • if no analogue output used: - 10...+ 60 °C (14...+ 140 °F)
Relative air humidity	0...100 %, without condensation
Height above sea level	- 200 up to + 2000 m
Operating condition	Continuous
Equipment mobility	Fixed device
Application range	Indoor and outdoor Protect the device against electromagnetic interference, ultraviolet rays and, when installed outdoors, against the effects of climatic conditions.
Degree of protection according to IEC/EN 60529	IP65, IP67 (IP68 optional)
Installation category	Category II according to UL/EN 61010-1
Pollution degree	Degree 2 according to UL/EN 61010-1

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2. Approvals and conformities

2.1. Conformity

In accordance with the Declaration of Conformity, the product is compliant with the EU Directives.

2.2. 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.

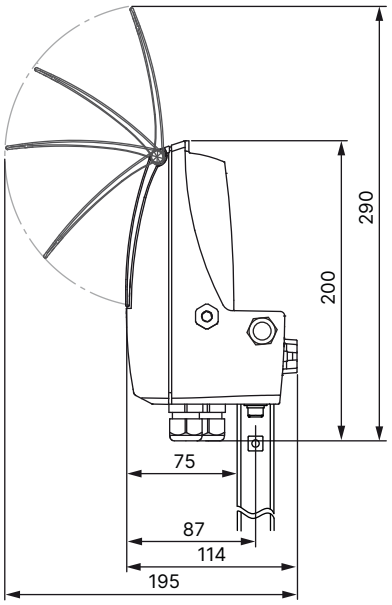
3. Dimensions

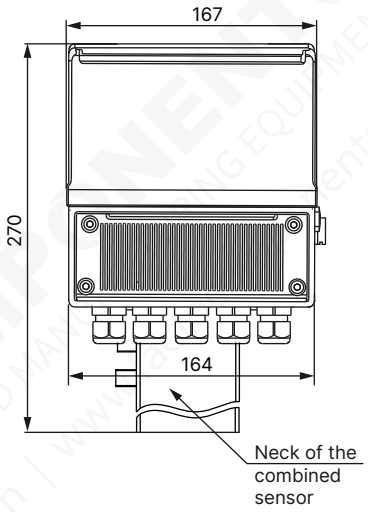
3.1. SE58 L and SE58 M transmitter

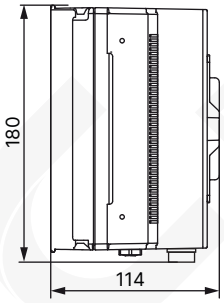
Compact variant with housing in aluminium or reinforced nylon

Note:
Dimensions in mm, unless otherwise stated

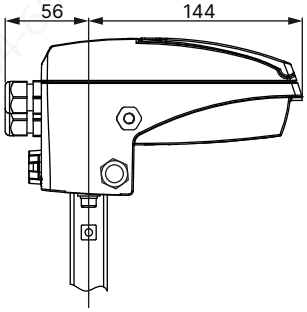
Compact variant, vertical mounting (standard)

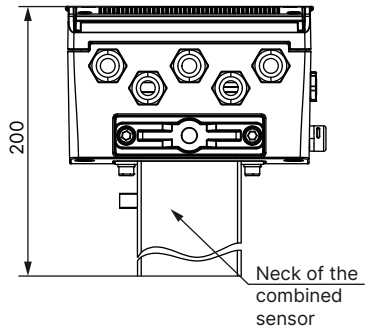






Compact variant, horizontal mounting (option)

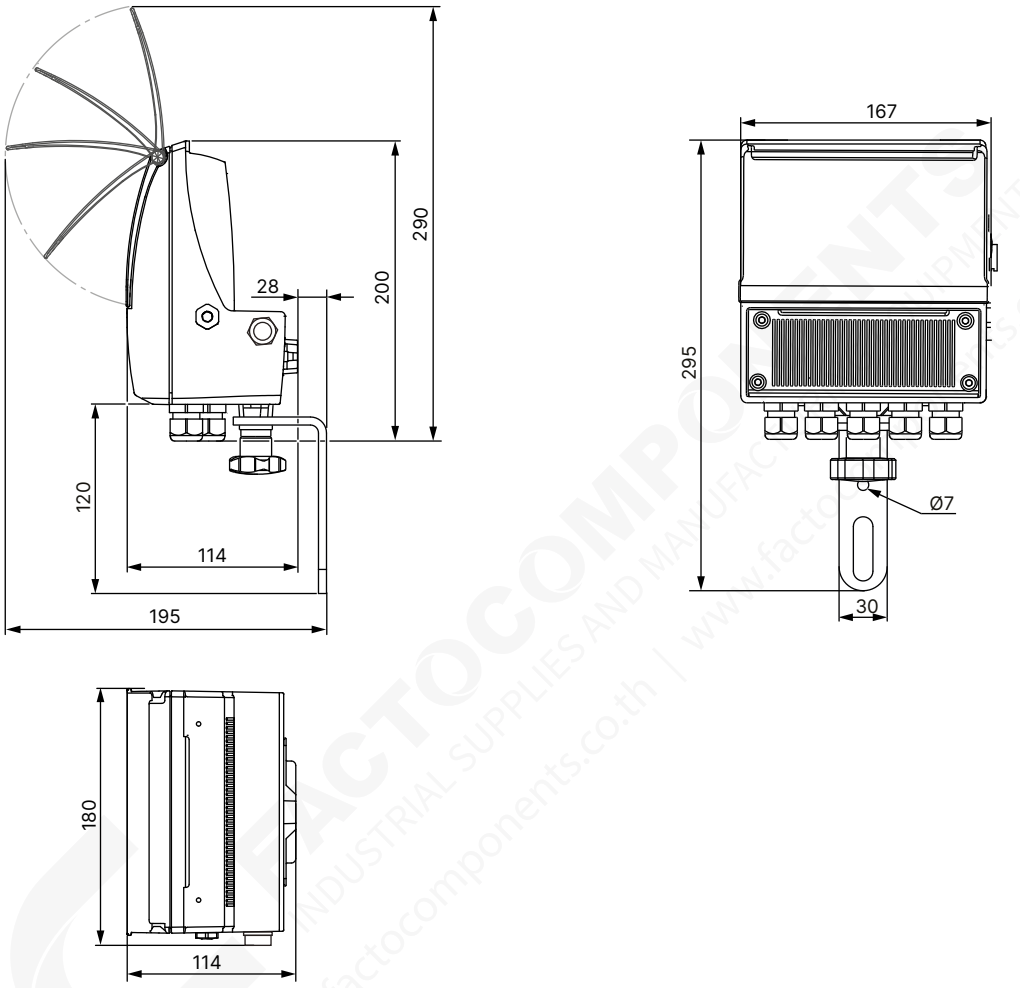




Remote variant with housing in aluminium or reinforced nylon

Note:
Dimensions in mm, unless otherwise stated

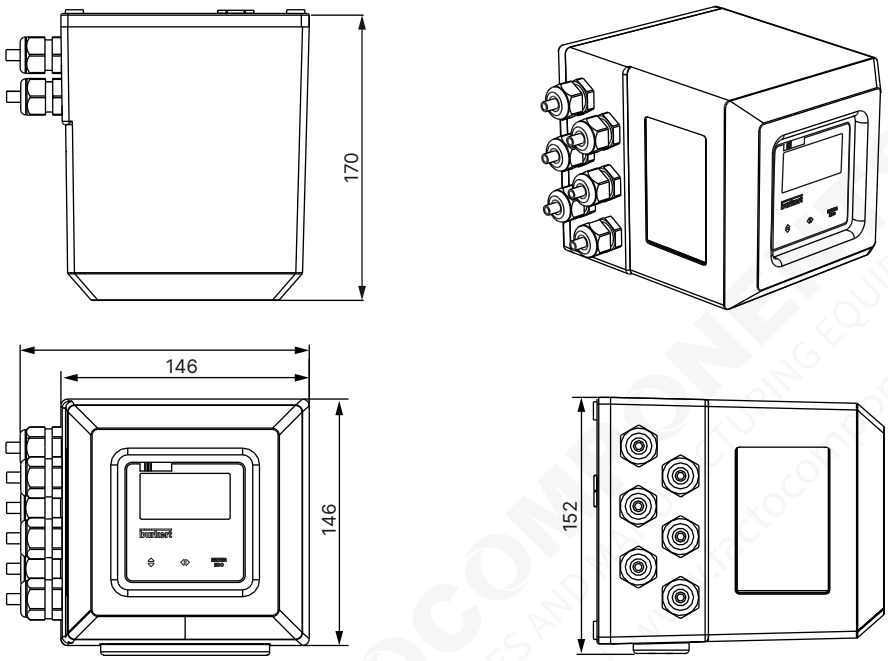
Remote variant



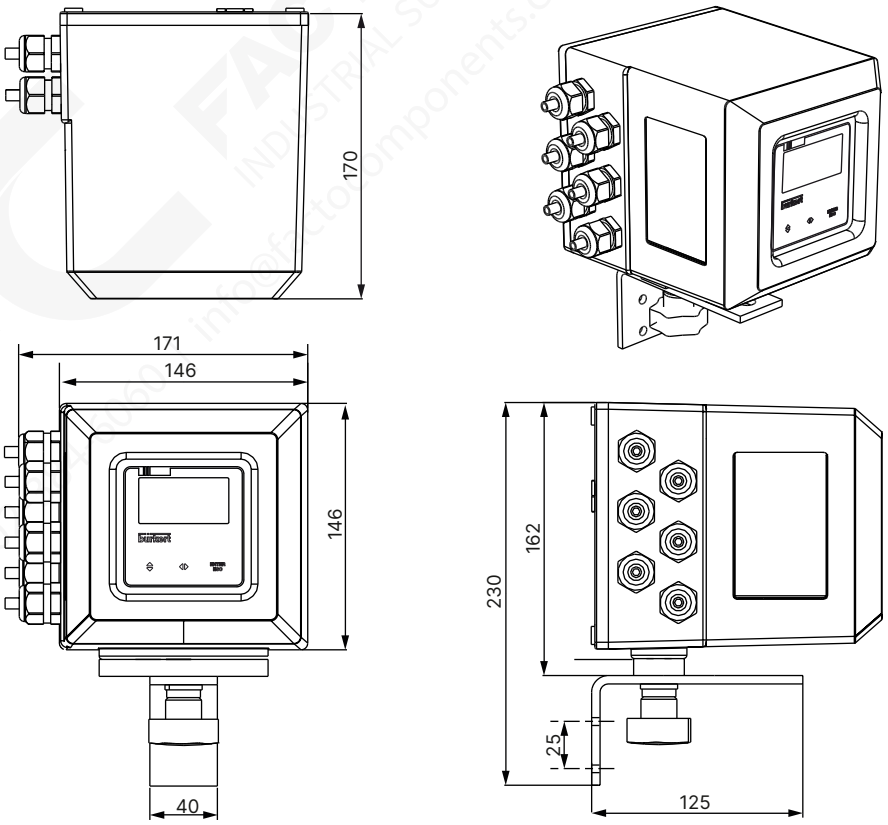
Compact and remote variants with housing in stainless steel

Note:
Dimensions in mm, unless otherwise stated

Compact variant



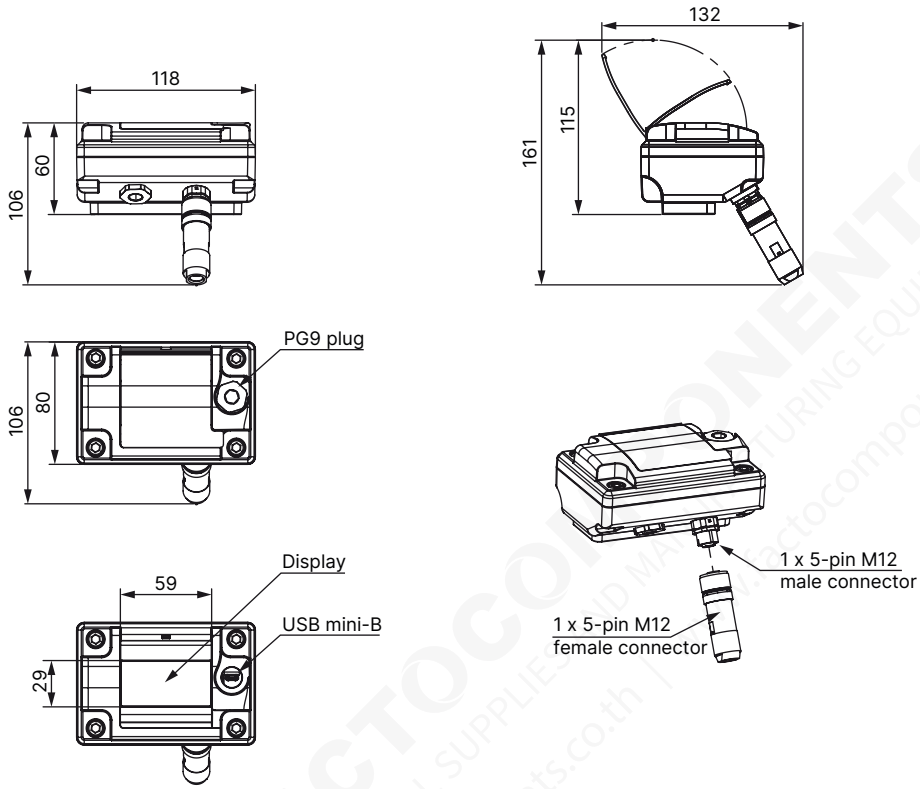
Remote variant



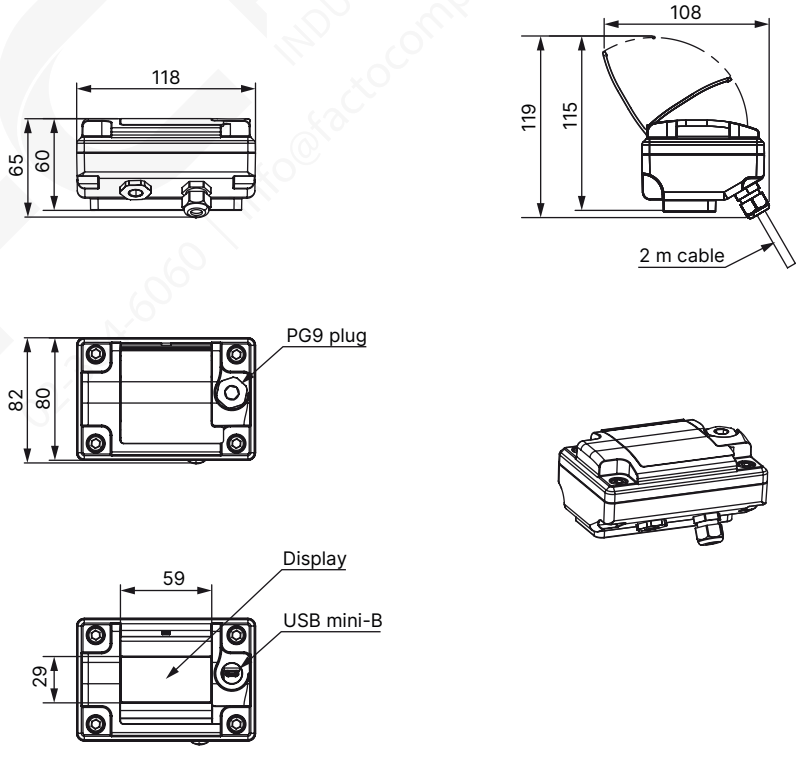
3.2. SE58 S transmitter

Note:
Dimensions in mm, unless otherwise stated

Compact variant with connector



Compact variant with cable gland



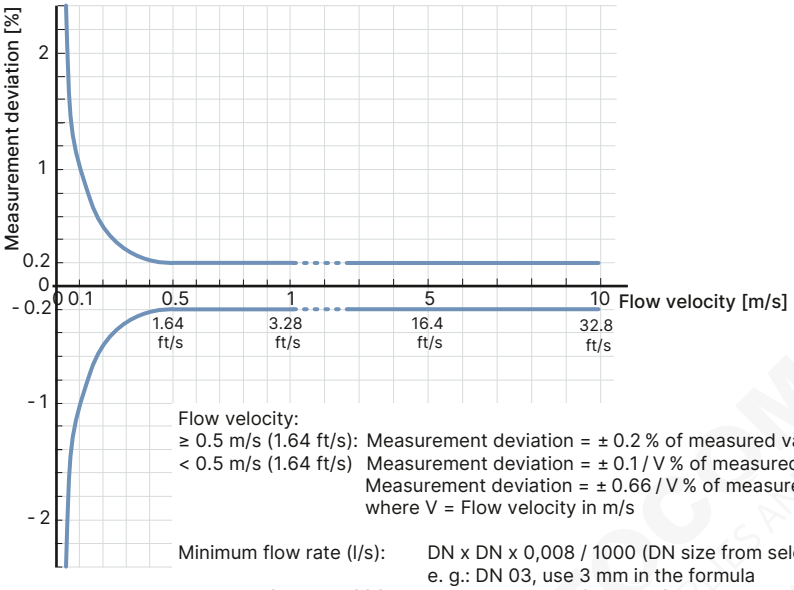
4. Performance specifications

4.1. Measurement deviation diagram

SE58 L transmitter

Note:
This following diagram is valid for the complete device (transmitter Type SE58 L combined with a flow sensor Type S051, Type S054, Type S055 or Type S056).

See **data sheet Type S051** ▸, **Type S054** ▸, **Type S055** ▸ or **Type S056** ▸



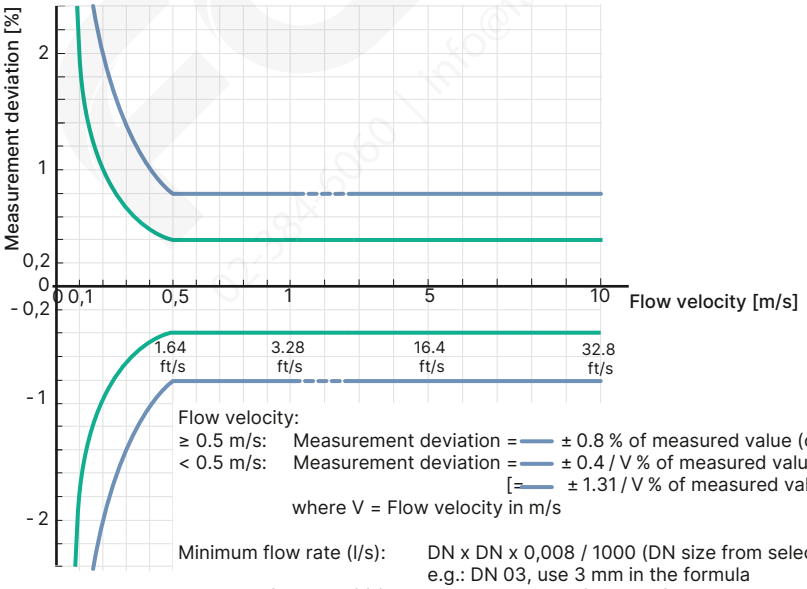
Flow velocity:
≥ 0.5 m/s (1.64 ft/s): Measurement deviation = ± 0.2 % of measured value
< 0.5 m/s (1.64 ft/s) Measurement deviation = ± 0.1 / V % of measured value in m/s or
Measurement deviation = ± 0.66 / V % of measured value in ft/s
where V = Flow velocity in m/s

Minimum flow rate (l/s): DN x DN x 0,008 / 1000 (DN size from selected sensor, expressed in mm)
e. g.: DN 03, use 3 mm in the formula
Maximum flow rate (l/s): DN x DN x 0,008 (DN size from selected sensor, expressed in mm)

SE58 M transmitter

Note:
This following diagram is valid for the complete device (transmitter Type SE58 M combined with a flow sensor Type S051, Type S054, Type S055 or Type S056).

See **data sheet Type S051** ▸, **Type S054** ▸, **Type S055** ▸ or **Type S056** ▸



Flow velocity:
≥ 0.5 m/s: Measurement deviation = ± 0.8 % of measured value (or optional : ± 0.4 % of measured value)
< 0.5 m/s: Measurement deviation = ± 0.4 / V % of measured value (or optional : ± 0.2 / V % of measured value) in m/s
[= ± 1.31 / V % of measured value (or optional : ± 0.66 / V % of measured value) in ft/s]
where V = Flow velocity in m/s

Minimum flow rate (l/s): DN x DN x 0,008 / 1000 (DN size from selected sensor, expressed in mm)
e.g.: DN 03, use 3 mm in the formula
Maximum flow rate (l/s): DN x DN x 0,008 (DN size from selected sensor, expressed in mm)

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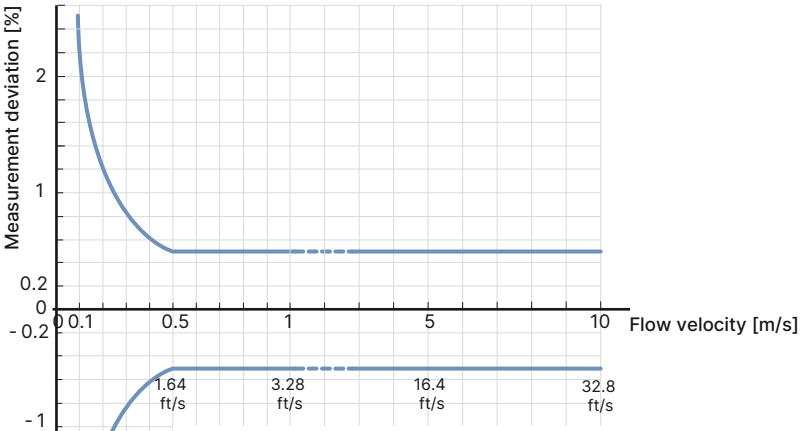
SE58 S transmitter

Note:
This following diagram is valid for the complete device (transmitter Type SE58 L and flow sensor Type S051, Type S054, Type S055 or Type S056).

See **data sheet Type S051** ▶, **Type S054** ▶, **Type S055** ▶ or **Type S056** ▶



Flow velocity:
≥ 0.5 m/s: Measurement deviation = ± 0.5 % of measured value
< 0.5 m/s: Measurement deviation = ± 0.25 / V % of measured value in m/s or
Measurement deviation = ± 0.82 / V % of measured value in ft/s
where V = Flow velocity in m/s

Minimum flow rate (l/s): DN x DN x 0,008 / 1000 (DN size from selected sensor, expressed in mm)
e.g.: DN 03, use 3 mm in the formula
Maximum flow rate (l/s): DN x DN x 0,008 (DN size from selected sensor, expressed in mm)

4.2. Default configuration

Note:
This following diagram is valid for the complete device (transmitter Type SE58 L, Type SE58 M or Type SE58 S combined with a flow sensor Type S051, Type S054, Type S055 or Type S056).

See **data sheet Type S051** ▶, **Type S054** ▶, **Type S055** ▶ or **Type S056** ▶

DN	3	6	10	15	20	25	32	40	50	65	80	100	125	150	200	250	300	350	400	450	500
At 4 mA in m^3/h	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
At 20 mA in m^3/h	0.1	0.6	2	4	8	16	25	40	63	120	160	250	400	630	1000	1600	2500	2500	4000	4000	6300
Litre per pulse	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.5	0.5	1	2	10	10	10	10	10	10	10	100	100

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5. Product operation

The configuration can be done in two different ways:

- by transmitter keypad if equipped with display (except for transmitter SE58 S)
- by USB cable and PC tool MCP (virtual display of instrument) for transmitter with or without display.

This MCP software runs under MS Windows and it is available for download on the Bürkert's website for free. However, any changes using MCP are not recommended, unless they are:

- done after receiving corresponding training by Burkert,
- carried out by a professional,
- agreed by the end user, and
- done in accordance with the MCP manual which can be found under **Type SE58** ▸ on the Bürkert's website.

When using the MCP software, you agree to the following software Tools End User License Agreement "MCP" (STEULA):

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software") to use the software, and to permit persons to whom the software is furnished to do so subject to the conditions of this STEULA.

In a nutshell

- The software is intended for use by professionals and professionally, and in connection with our products only.
- Although we provide access to a convenient tool, it is not required for the use of our products. We are not liable for any consequence in using this software.
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- The software may include technical or other mistakes, inaccuracies or typographical errors.
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To download the MCP software, see **Type SE58** ▸ on the Bürkert's website.

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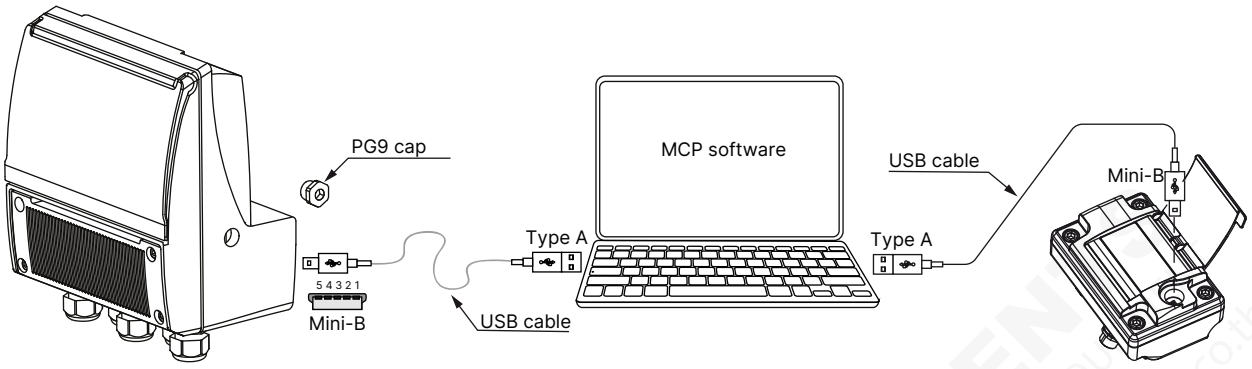
6. Product accessories

An USB cable with USB mini B and USB type A connectors serves as the interface between computer and transmitter (see "8.5. Ordering chart accessories" on page 23 and "5. Product operation" on page 16).



7. Networking and combination with other Bürkert products

7.1. Compact variant

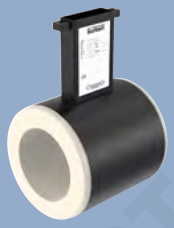
Note:
The compact Type SE58 transmitter is intended for use with Type S051, Type S045, Type S055 or Type S056 compact flow sensors.

Example:

Type SE58

Magnetic flow sensor

Type S051 ▶
For low flow volumes



Type S054 ▶
Without flange (wafer)

Type S055 ▶
With flange

Type S056 ▶
Hygienic process connections

Magnetic flowmeter

Type S051 + Type SE58 S

Type S054 + Type SE58 S

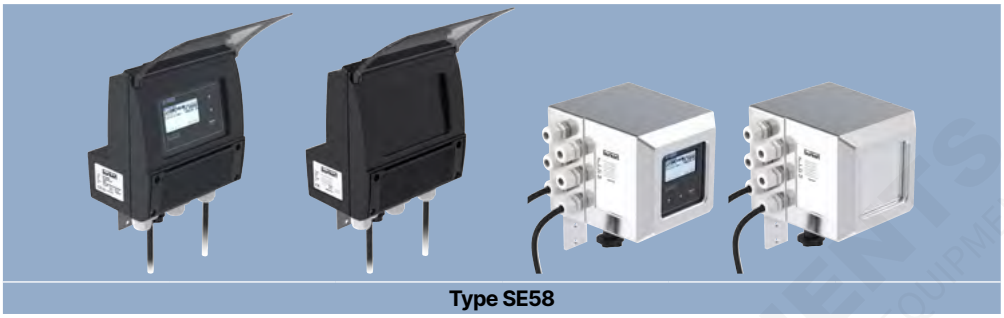
Type S055 + Type SE58 M or Type SE58 L

Type S056 + Type SE58 M or Type SE58 L
made of stainless steel

7.2. Remote variant

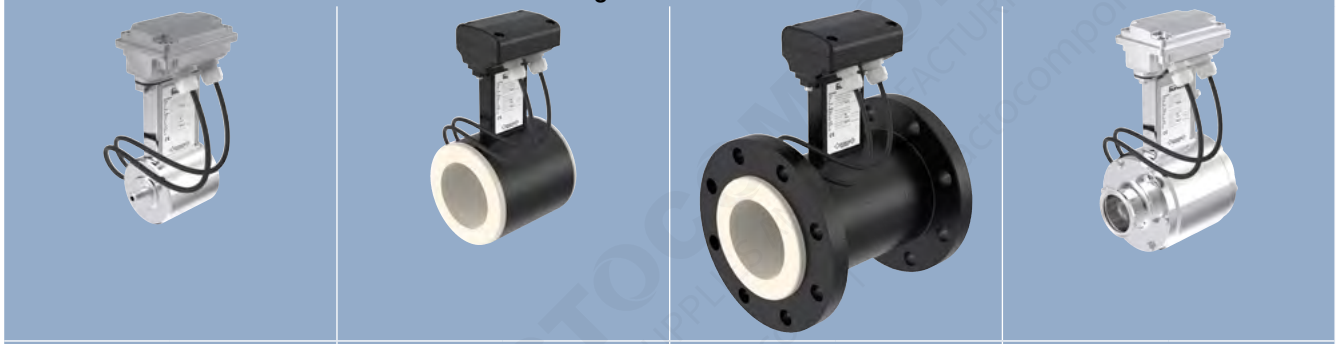
Note:
The Type SE58 transmitter is intended for use with Type S051, Type S045, Type S055 or Type S056 flow sensors, each in design for the remote variant.

Example:



Type SE58

Magnetic flow sensor



Type S051 ▸ For low flow volumes	**Type S054** ▸ Without flange (wafer)	**Type S055** ▸ With flange	**Type S056** ▸ Hygienic process connections

Magnetic flowmeter

Type S051 + Type SE58 M or Type SE58 L made of stainless steel	**Type S054 + Type SE58 M or Type SE58 L** made of painted aluminium	**Type S055 + Type SE58 M or Type SE58 L** made of painted aluminium	**Type S056 + Type SE58 M or Type SE58 L** made of stainless steel

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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. Recommendation regarding product selection

A complete full bore flowmeter consists of a flow sensor (compact or remote variant) Type S051, Type S054, Type S055 or Type S056 and a flow transmitter (compact or remote variant) Type SE58.

See **Data sheet Type S051** ▶, **Type S054** ▶, **Type S055** ▶ or **Type S056** ▶ for more information.

2 different components must be ordered in order to select a complete device. The following information is required:

- **Article no.** of the sensor **Type S051, Type S054, Type S055** or **Type S056** (see **Data sheet Type S051** ▶, **Type S054** ▶, **Type S055** ▶ or **Type S056** ▶ for more information.)
- **Article no.** of the transmitter **Type SE58** (see chapter "SE58 L transmitter" on page 21, "SE58 M transmitter" on page 22 or "SE58 S transmitter" on page 23.)

8.3. 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

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8.4. Ordering chart

SE58 L transmitter

Note:

- Not all SE58 L transmitter variants are listed in the following table. If the desired variant is not mentioned, please contact your Bürkert representative.
- The following variants are vertically mounted variants.

Operating voltage	Output	Network protocol	Housing material	Electrical connection	Article no.
Compact variant with display					
100...240 V AC	2 digital outputs (transistors)	Without	Aluminium	5 cable glands	571500
			Stainless steel	6 cable glands	571507
	2 digital outputs (transistors) + analogue output (4...20 mA)		Aluminium	5 cable glands	571501
			Stainless steel	6 cable glands	571508
12...48 V DC	2 digital outputs (transistors) + analogue output (4...20 mA)		Aluminium	5 cable glands	571502
			Stainless steel	6 cable glands	571509
Remote variant [1.] (wall-mounting) with display					
100...240 V AC	2 digital outputs (transistors)	Without	Aluminium	5 cable glands	571505
			Stainless steel	6 cable glands	571510
	2 digital outputs (transistors) + analogue output (4...20 mA)		Aluminium	5 cable glands	571506
			Stainless steel	6 cable glands	571511
12...48 V DC	2 digital outputs (transistors) + analogue output (4...20 mA)		Aluminium	5 cable glands	571503
			Stainless steel	6 cable glands	571513

1.) Remote variants include two 10 m signal cable. If a longer cable is needed please consider that for ordering.

Further variants on request

Material
Nylon reinforced

Additional

- Compact variant for horizontal mounting or remote variant
- Variant with display (visible from the top or from the front) or without display
- Outputs:
  - 4...20 mA (1 or 2)
  - RS 485 (with protocol Modbus)
  - 2 transistors
- Industrial communication:
  - RS 485 (with protocol Modbus)
  - HART
  - Wi-Fi (for parameter settings)
- Data logger with memory card 4GB
- Degree of protection according to IEC/EN 60529: IP68

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SE58 M transmitter

Note:

- Not all SE58 M transmitter variants are listed in the following table. If the desired variant is not mentioned, please contact your Bürkert representative.
- The following variants are vertically mounted variants and delivered with a measurement deviation of 0.8 % from the measured value.

Operating voltage	Outputs	Industrial communication	Housing material	Electrical connection	Article no.
Compact variant with display					
100...240 V AC	2 digital outputs (transistors)	Without	Nylon reinforced	5 cable glands	571540
			Stainless steel	6 cable glands	571548
	2 digital outputs (transistors) + analogue output (4...20 mA)		Nylon reinforced	5 cable glands	571541
			Stainless steel	6 cable glands	571549
12...48 V DC	2 digital outputs (transistors)		Nylon reinforced	5 cable glands	571542
			Stainless steel	6 cable glands	571550
	2 digital outputs (transistors) + analogue output (4...20 mA)		Nylon reinforced	5 cable glands	571543
			Stainless steel	6 cable glands	571551
Compact variant without display					
100...240 V AC	2 digital outputs (transistors)	Without	Nylon reinforced	5 cable glands	571544
			Stainless steel	6 cable glands	571552
	2 digital outputs (transistors) + analogue output (4...20 mA)		Nylon reinforced	5 cable glands	571545
			Stainless steel	6 cable glands	571553
12...48 V DC	2 digital outputs (transistors)		Nylon reinforced	5 cable glands	571546
			Stainless steel	6 cable glands	571554
	2 digital outputs (transistors) + analogue output (4...20 mA)		Nylon reinforced	5 cable glands	571547
			Stainless steel	6 cable glands	571555

Further variants on request

Material
Aluminium

Additional

- Compact variant for horizontal mounting or remote variant
- Variant with display (visible from the top or from the front) or without display
- Outputs :
  - 4...20 mA (1 or 2)
  - RS 485 (with protocol Modbus)
  - 2 transistors
- Measurement deviation of 0.4 % of the measured value
- Industrial communication:
  - RS 485 (with protocol Modbus)
  - HART
  - Wi-Fi (for parameter settings)
- Data logger with memory card 4GB
- Degree of protection according to IEC/EN 60529: IP68

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SE58 S transmitter

Note:

- Not all SE58 S transmitter variants are listed in the following table. If the desired variant is not mentioned, please contact your Bürkert representative.

Operating voltage	Outputs	Industrial communication	Housing material	Electrical connection	Article no.
Compact variant with display					
12...30 V DC [1.]	2 digital outputs (transistors)	Without	Stainless steel polished	Cable gland with 2 m cable, already connected	571582
	2 digital outputs (transistors) + analogue output (4...20 mA)				571583
Compact variant without display					
12...30 V DC [1.]	2 digital outputs (transistors)	Without	Stainless steel polished	Cable gland with 2 m cable, already connected	571580
	2 digital outputs (transistors) + analogue output (4...20 mA)				571581

1.) 12...30 V DC if not using mA output or 18...30 V DC if using mA output

Further variants on request
Electrical connection 1 × 5-pin M12 female connector
Material Aluminium, raw stainless steel, polished stainless steel
Additional • Variant with display • Degree of protection according to IEC/EN 60529: IP68

8.5. Ordering chart accessories

Description	Article no.
USB cable with mini B and A connectors, cable length: 1.8 m	919499

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