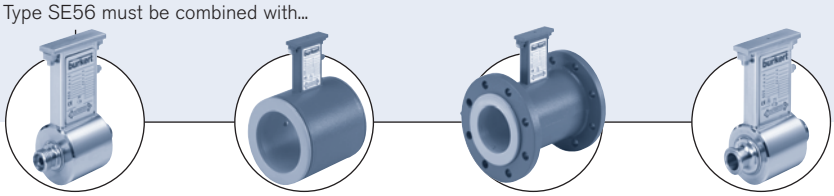
bürkert
FLUID CONTROL SYSTEMS

Magflow transmitter / batch controller

- Must be equipped with magbodies S051, S054, S055 or S056
- Continuous measurement or batch control
- High accuracy
- Data logger, Profibus DP, HART available

Type SE56 must be combined with...



Type S051
Magnetic sensor body
- Low flow version

Type S054
Magnetic sensor body
- wafer version

Type S055
Magnetic sensor body
- Flange version

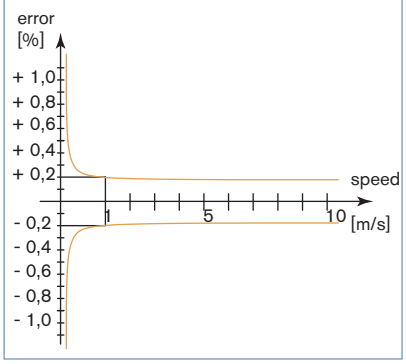
Type S056
Magnetic sensor body
- Hygienic version

The magflow transmitter / batch controller Type SE56 (blind in compact version or with display in compact or separate version) connected to the magnetic flow body Type S051, S054, S055 or S056 is designed for applications with conductivities as low as 5 µS/cm.

The device can be programmed either with 3 keypads (version with display) or by computer via a serial interface.

As standard, the equipment is supplied with one or two transistor outputs and one input. As options, other features are available: such as high frequency output, current output, data logger 2 MB, Profibus DP, HART.

Accuracy diagram



Technical data (transmitter / batch controller with local display)

General data	
Compatibility	S051, S054, S055, S056 sensor (see corresponding datasheet)
Housing material	Die casting aluminium or Stainless steel 304 electro-polish
Display	Graphic display 8 lines x 16 Characters, 128 x 64 pixel with back light or none*
Programming keyboard	3 membrane keys
Electrical connection	6 cable glands

Environment	
Ambient temperature	-20 up to 60°C
Humidity range	0 up to 100 %
Altitude	-200 up to 6000 m

Standard	
Protection class	Class I, IP67, category of installation II
Standard EMI Safety	EN55011 (Group 1, Class B) EN 61326-1, IEC1000-4-2/3/4/5/6/11 EN61010

* on request

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Technical data (transmitter / batch controller with local display) - continued

Electrical data	
Power supply	90 -265 V AC - 44 up to 66 Hz [or others]*
Current consumption	max. 0.25 A
Power consumption	max. 20 W / max. 25 VA
Cable length	max. 20 m (distance between sensor and transmitter)
Input	1 digital, programmable function
Outputs	
Transistor	2 outputs, programmable open collector as pulse / frequency (1250 Hz, 100 mA, 40 V DC) or alarm (programmable)
Current	1 output, 4 ... 20 mA - RL = 1000 Ω (+ 1 in option)*
Serial interface*	RS 485, RS 232, Profibus DP or HART
Datalogger*	2 MB, 32 values + 64 alarm events
FS value	0.4 ... 10 m/s

* on request

Electrical data (continued)	
Measurements tolerance	Flow rate (volume) = ± 0.05% of reading Out 4/20 mA = ± 0.08% of reading Frequency out = ± 0.08% of reading
Accuracy [1]	±0.2% of reading (see diagram, on page 1)
Repeatability	< ±0.1%
Galvanic isolation	All the input/outputs are galvanically isolated from power supply up to 500V
Data storage	An EEPROM stores the measured values (in case of power failure)
Special function	Bi-directional measure Dual range Diagnostic function Empty pipe detection Programming plug in (protected plug in for connection to PC or hand terminal) Batch function

[1] under reference conditions: water temperature = 20°C, ambient temperature = 25°C, test time > 60 s., converter warm-up > 60', constant flow rate during the test, pressure = 500 mbar, liquid speed > 1m/s

Technical data (blind transmitter / batch controller)

General data	
Compatibility	S051, S054, S055, S056 sensor (see corresponding datasheet)
Material	
Housing	Stainless steel
Cover	PPS
Seal	EPDM
Display	None
Programming	through USB cable interface with software (accessories Item No. 559 374)
Electrical connection	2 cable glands

Electrical data	
Power supply	20 - 30 V DC
Current consumption	max. 1 A
Power consumption	10 W
Input	1 digital, programmable function
Outputs	
Transistor	2 outputs, programmable open collector as pulse / frequency (1250 Hz, 100 mA, 40 V DC) or alarm (programmable)
Current	1 output, 4...20 mA - RL = 800 Ω passive
Serial interface	Profibus DP or RS 485
Input/Output	2 configurable as input or output
Measurements tolerance	Flow rate (volume) = ± 0.05% of reading Out 4/20 mA = ± 0.08% of reading Frequency out = ± 0.08% of reading

* on request

Electrical data (continued)	
Accuracy [1]	±0.2% of reading (see diagram, opposite)
Repeatability	< ±0.1%
Galvanic isolation	All the input/outputs are galvanically isolated from power supply up to 500V
Data storage	An EEPROM stores the measured values (in case of power failure)
Special function	Bi-directional measure Diagnostic function Empty pipe detection Programming plug in (protected plug in for connection to PC or hand terminal) Batch function (also, with autopreset)
FS value	0.4 ... 10 m/s

Environment	
Ambient temperature	-20 up to 40°C
Humidity range	0 up to 100 %
Altitude	-200 up to 6000 m

Standard	
Protection class	Class I, IP67, category of installation II
Standard	EN55011 (Group 1, Class B)
EMI	EN 61326-1, IEC1000-4-2/3/4/5/6/11
Safety	EN61010

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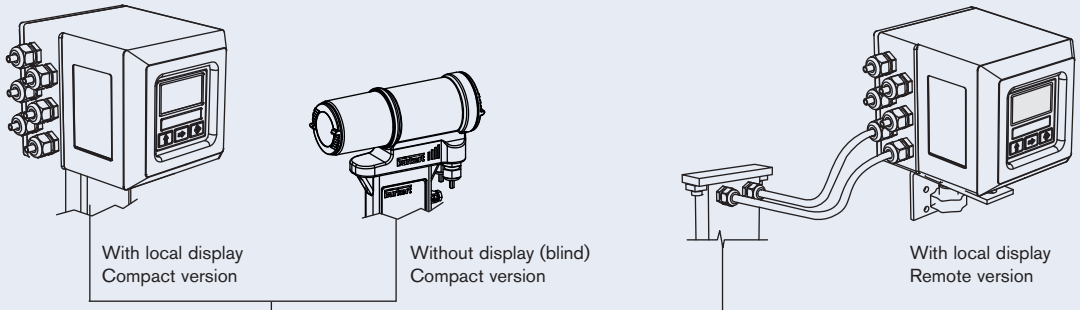
Ordering information for complete full bore magflowmeter Type 8051, 8055 or 8056

A complete full bore magflowmeter consists of a sensor body and an electronic transmitter / batch controller SE56. The transmitter / batch controller is only delivered in combination with the sensor body as a part of a complete magflowmeter.

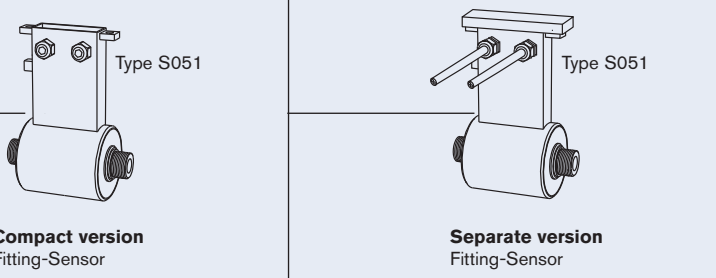
Examples for variations of complete full bore magflowmeter

Transmitter / batch controller Type SE56



Magflowmeter Type 8051

More info.
For more technical information about this product, click on this box... you will come to our website for this product where you can download the datasheet.

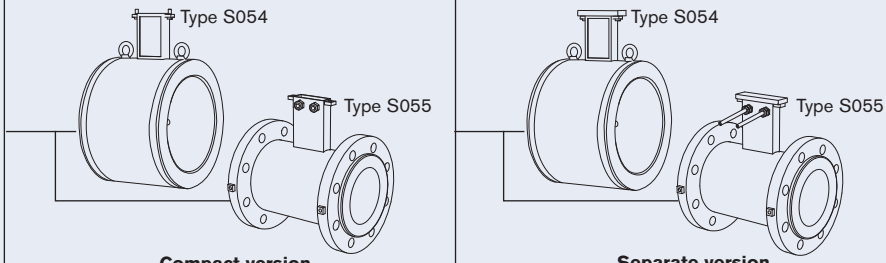


Compact version
Fitting-Sensor

Separate version
Fitting-Sensor

Magflowmeter Type 8055

More info.
For more technical information about this product, click on this box... you will come to our website for this product where you can download the datasheet.

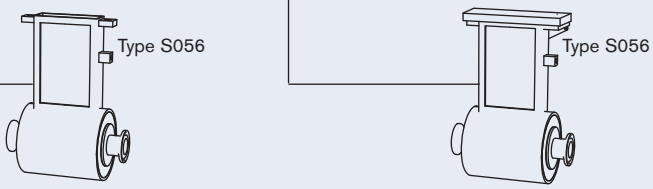


Compact version
Fitting-Sensor

Separate version
Fitting-Sensor

Magflowmeter Type 8056

More info.
For more technical information about this product, click on this box... you will come to our website for this product where you can download the datasheet.



Compact version
Fitting-Sensor

Separate version
Fitting-Sensor

The following information is necessary for the selection of a complete full bore magflowmeter:

- **item no** of the sensor body **Type S051, Type S054, Type S055 or Type S056** (see separate datasheets of the complete corresponding magflowmeter 8051, 8055, 8056)
- **item no** of the transmitter / batch controller **Type SE56** (Ordering chart on page 5)

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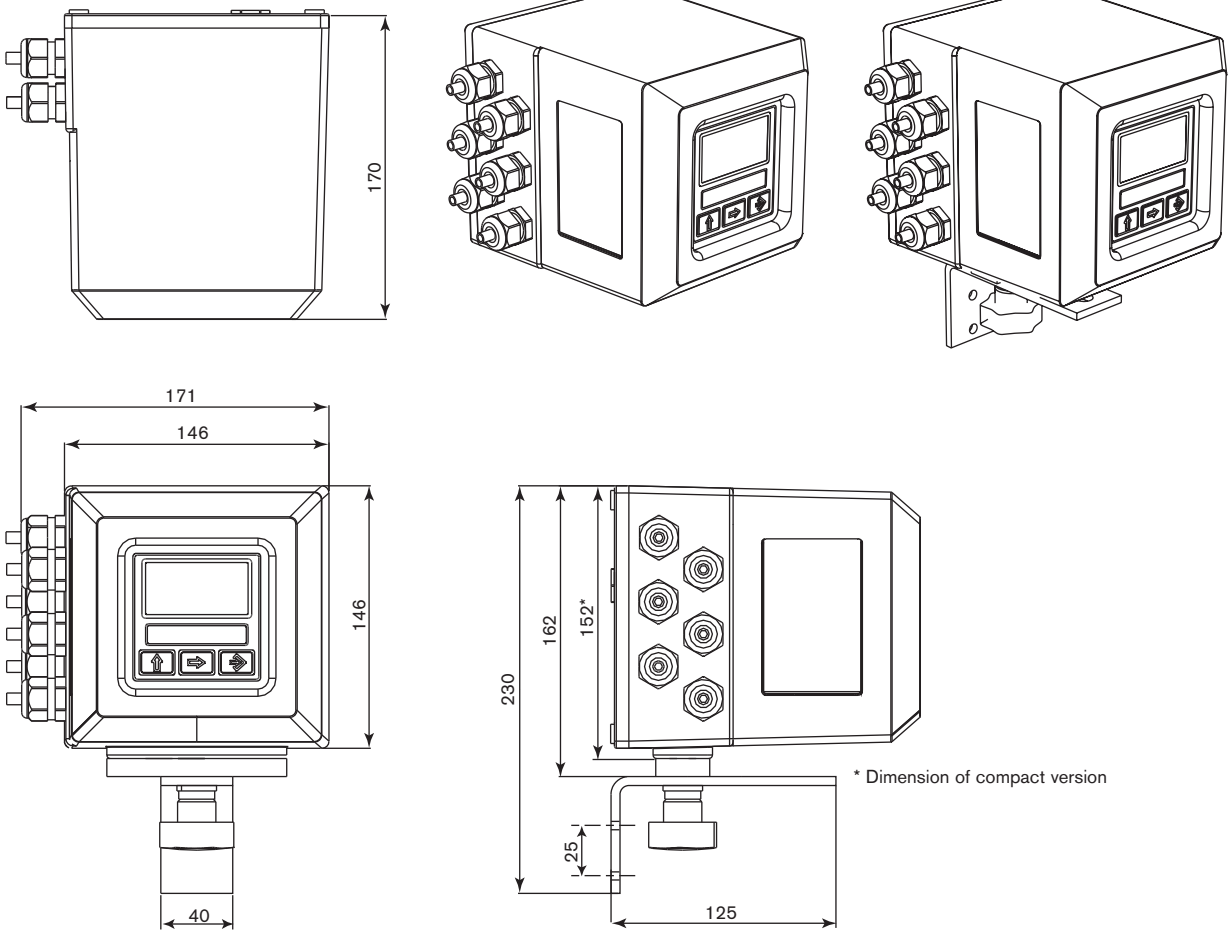
Dimensions [mm]

Transmitter / batch controller with local display

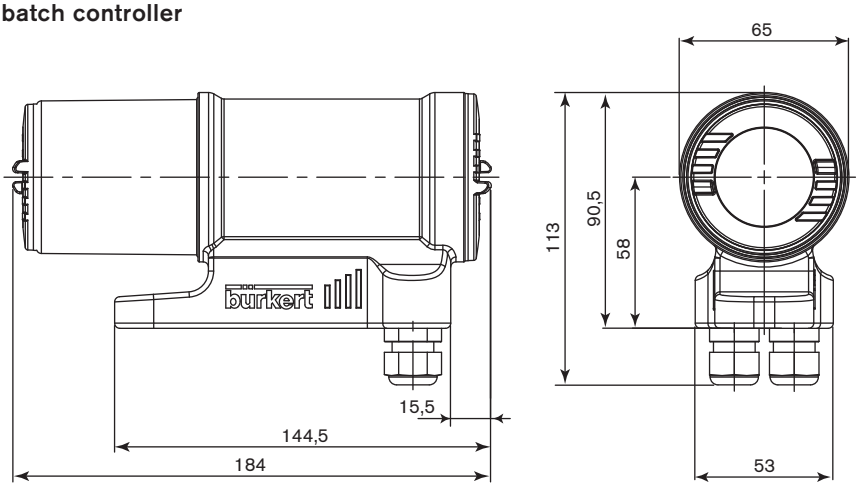
Compact version

Separate version



* Dimension of compact version

Blind transmitter / batch controller



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Ordering chart for magflow transmitter / batch controller Type SE56

Description	Power supply	Outputs	Body material	Electrical connection	Item no.
With local display compact version	90 - 265 V AC	2 transistors	Aluminium	6 cable glands	558 745
			Stainless steel	6 cable glands	559 780
		2 transistors + 4...20 mA	Aluminium	6 cable glands	558 747
			Stainless steel	6 cable glands	558 306
With local display remote version	90 - 265 V AC	2 transistors	Aluminium	6 cable glands	559 781
			Stainless steel	6 cable glands	558 310
		2 transistors + 4...20 mA	Aluminium	6 cable glands	558 750
			Stainless steel	6 cable glands	558 308
Blind compact version	20 - 30 V DC	up to 4 Transistors	Stainless steel	2 cable glands	559 132
		up to 4 Transistors + 4...20 mA	Stainless steel	2 cable glands	559 133
		up to 4 Transistors + Profibus DP	Stainless steel	2 cable glands	559 134

i Further versions on request

Please also use the "request for quotation" form on page 6 for ordering a customized magflow transmitter / batch controller. go to page

Ordering chart - spare parts/accessories for magflow transmitter / batch controller Type SE56

Description	Item no.
USB cable interface + software to program the blind magflow transmitter / batch controller	559 374
Kit to transform a compact version into separate version (only for magflow transmitter / batch controller with display)	560 153

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Magflow transmitter / batch controller Type SE56 - request for quotation

Note
You can fill out the fields directly in the PDF file before printing out the form.

Please fill out and send to your nearest Bürkert facility* with your inquiry or order.

NOTE : Please take into account that the electronic Type SE56 must be associated with a sensor body Type S051, S054, S055 or S056.

Company:	Contact person:
Customer No.:	Department:
Address:	Tel. / Fax.:
Postcode / Town:	E-mail:

Magflow transmitter / batch controller SE56

Quantity: **Desired delivery date:**

- **Transmitter / batch controller** ☐ with local diplay ☐ Blind
- **Mounting version** ☐ Compact ☐ Wall-mounting (max. 1m for blind version) ☐ Panel-mounting
- **Body material** ☐ Aluminium ☐ Stainless steel ☐ Plastic
- **Power supply** ☐ 20-30 VDC ☐ 90-265 V AC ☐ 18-63 V DC / 15-45 V AC ☐ 10-35 V DC
- **Outputs** ☐ 4 - 20 mA ☐ RS 485 ☐ Profibus DP
  ☐ 2 transistors ☐ 2 transistors + 4...20 mA ☐ 2 transistors (one of them: 10 KHz)
  ☐ 2 transistors + 1 x RS 232 ☐ 2 transistors + 4...20 mA + 1 x RS 232 ☐ Data Logger 2 MB
  ☐ HART Protocol ☐ 2 Relays 60 V AC ☐ 2 Relays 250 V AC

reset form

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