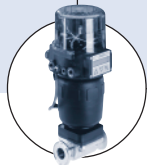


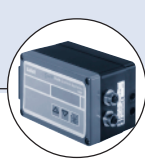


Type 8223 can be combined with...



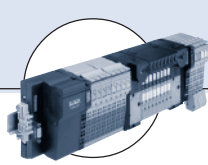
Type 2031 (8630)

Continuous
TopControl



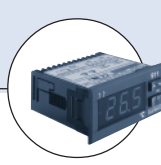
Type 1067

Continuous
SideControl



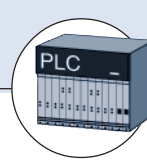
Type 8644-P AirLINE

Valve Island with
electronic I/O



Type 4002

Decentralized
monitoring



PLC

- Fully integrated in Burkert's process control systems
- Insensitive to coating fluids
- Wide range of applications: Fertiliser dosing, cooling water monitoring, concentration measurement

The conductivity transmitter Type 8223 is available in a splash-proof plastic IP65 housing.

The sensor component consists of a pair of magnetic coils in a PVDF or PEEK housing. In order to measure conductivity, an AC voltage source is connected to the primary magnetic coil. The magnetic field induced generates a current in the secondary magnetic coil. The intensity of the induced current is a direct function of the conductivity of the solution.

The integrated temperature sensor for automatic compensation is a standard feature in the sensor housing. The transducer Type 8223 functions in a 3-wire circuit and requires a power supply of 12-30 VDC.

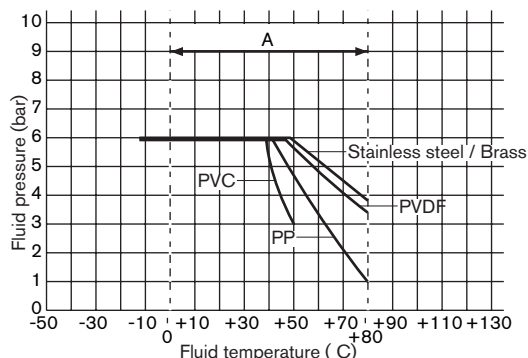
4...20 mA standard signal is available as output signal, proportional to the conductivity or the temperature of the fluid.

A wide range of stainless steel, brass and plastic fittings are available (see datasheet Type S020).

Fitting and sensor data	
Pipe diameter	DN 15 to DN 200
Measuring ranges	
Conductivity	10 µS/cm up to 1 mS/cm 100 µS/cm up to 10 mS/cm 1 mS/cm up to 100 mS/cm 10 mS/cm up to 1 S/cm
Temperature	-10°C up to +80°C
Fitting	S020 (see corresp. data sheet)
Materials wetted parts	
Finger O-Ring	PVDF or PEEK FPM or EPDM
Temperature compensation	Automatic with integrated temperature sensor with reference temperature 25°C
Medium data	
Medium temperature	-10 to 80°C (depends on fitting)
Fluid pressure	max. PN6 (Depends on temperature and fitting material, see temperature-pressure diagram)
Electronic module data	
Accuracy	±2% of full scale (within 0 up to +70°C)
Voltage supply	12 up to 30 VDC
Outputs	
Analog signal	4-20 mA programmable, proportional to the conductivity or temperature
Max. Load	1000 Ω at 30 V 690 Ω at 24 V 300 Ω at 15 V 150 Ω at 12 V
Current consumption	Max. 50 mA + 22 mA analog output
Materials	
Housing	PEHD
General data	
Ambient temperature	
Operating and storage	0° to 60 °C
Protection class	IP65, relative humidity max. 80%, non condensed

Pressure/Temperature diagram

Please be aware of the fluid pressure-temperature dependance according to the respective fitting+sensor material as shown in the diagram.



A: Application range for complete device (fitting + transmitter)

Programming

Configuration is done by DIP switches.

SW1: Selection of

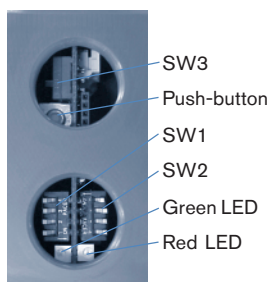
- ▶ measuring range (switches 1 and 2)
- ▶ filtering level of conductivity (switches 3 and 4)

SW2: Selection of

- ▶ temperature compensation or
- ▶ transmission of temperature on 4...20 mA output

SW3: Selection of

- ▶ current output mode, sinking or sourcing

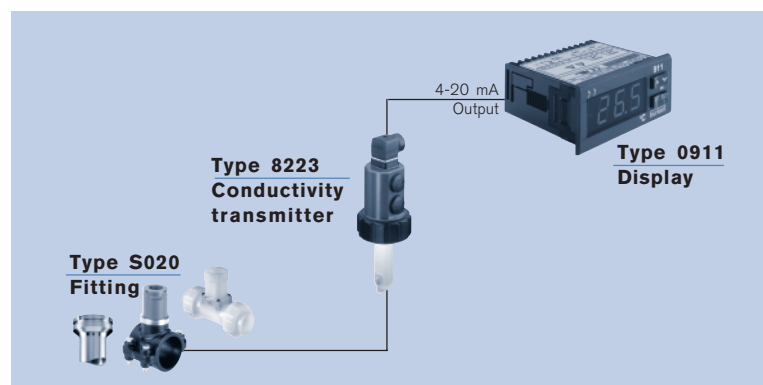


Push-button allows calibration of sensor „zero conductivity“ point.

Ordering chart for Type 8223 - for fitting S020 (to be ordered separately)

Output	Sensor material	Item no.
4-20 mA	PVDF	440 440
	PEEK	550 335

Interconnection possibilities with Type 8223

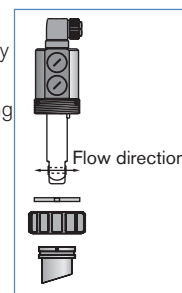


In case of special application conditions, please consult for advice.

We reserve the right to make technical changes without notice.

Installation

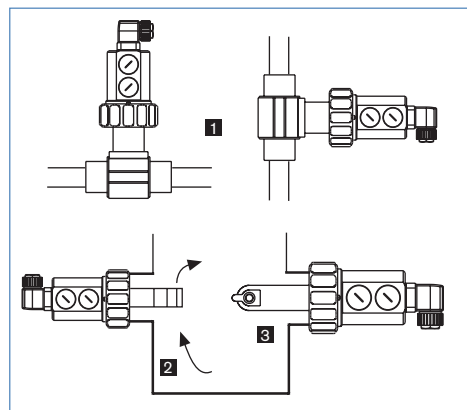
A- The inductive conductivity transmitter 8223 can be easily installed into pipes using our specially designed S020 fitting system.



B- The device must be protected against constant heat radiation and other environmental influences, such as magnetic fields or direct exposure to sunlight.

C- The device can be mounted in following positions:

- 1 Horizontal or vertical pipes
- 2 Mounting in tank without mixer
- 3 Mounting in tank with mixer



Dimensions [mm]

The diagram shows the dimensions of the transmitter and fitting. The main dimensions are 218 mm (total height), 200 mm (height to the fitting), 75 mm (height to the sensor), 78 mm (height to the fitting), and 95 mm (height to the sensor). The fitting has a diameter of 46 mm.

DN [mm]	T-Fitting	Saddle	Plastic spigot	St.St. spigot
15	204.3			
20	201.8			
25	202.0			
32	205.6			
40	209.4			205.3
50	215.5	240		210.3
65	215.5	239	220.3	214.3
80		243	225.3	221.3
100		248	232.3	231.3
110		244		
125		251		242.3
150		261	278.3	253.3
180		285		
200		297	299.3	274.3

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