



Process sensors

For pure water: measure conductivity from 0.04 $\mu\text{S}/\text{cm}$



Analytical sensors



For effective, permanent control of water and process quality

Hygienic approval according to EHEDG and 3A*

Compact sensor requires no further hardware for operation

High resolution enables detection of the smallest deviations



EC 1935 / 2004




IP 67
IP 68
IP 69 K

Safe solution for permanent process quality

The LDL101 conductivity sensor is the right choice where the purity of water is crucial for product quality or process reliability. The sensor detects the conductivity of water from a value of 0.04 $\mu\text{S}/\text{cm}$. This makes it ideal for applications where purified water of all levels is used. This is the case in food and beverage production as well as in the semiconductor industry, the pharmaceutical industry and in energy production. In combination with the SU PureSonic ultrasonic flow sensor, reliable quality control can be established in filtration processes, for example.

*in preparation



Type	Process connection	Insertion depth [mm]	Order no.
	G 1/2	23	LDL101

Quality assurance and condition monitoring

The high resolution and the loss-free digital transmission of the measured values via IO-Link enable a permanently precise analysis of the water quality, ensuring flawless processes.



If the conductivity value rises, this can indicate, for example, that filters in the production process of highly purified water require maintenance.

Used in the monitoring of the cooling circuit, the LDL101 can detect increasing mineralisation of the water so that countermeasures can be taken before the piping system suffers major damage.

Accessories

Type	Description	Order no.
Welding adapters		
	G 1/2 – Ø 30 mm for tanks	E43300
	G 1/2 – Ø 29 mm for pipes	E43301
	G 1/2 – Ø 30 mm for tanks, with leakage port	E43309
	G 1/2 – Ø 29 mm with leakage port, for pipes; pressure rating up to 16 bar	E43412
	G 1/2 – Ø 29 mm with leakage port, for pipes; pressure rating up to 50 bar	E43310
	G 1/2 – Ø 45 mm collar	E30056
	G 1/2 – Ø 35 mm ball	E30055
	G 1/2 – welding mandrel	E43314





Mounting adapters and T-pieces

	G 1/2 – Varivent type N 1.5, (DN40-150); Ø 68 mm	E43307
	G 1/2 – Varivent type F1, (DN25); Ø 50 mm	E43306
	G 1/2 – T-piece, DN50	E43318
	G 1/2 – T-piece, DN40	E43317
	G 1/2 – T-piece, DN25	E43316



Further technical data		
Operating voltage	[V DC]	18...30
Current consumption	[mA]	< 60
Measuring range conductivity	[µS/cm]	0.04...1,000
Measuring range medium temperature	[°C]	-25...100 (< 1h: 150)
Pressure rating	[bar]	16
Conductivity accuracy		3 % MW ± 0.03 µS/cm
Conductivity repeatability		1.5 % MW ± 0.015 µS/cm
Materials		stainless steel (316L/1.4435, 1.4404); PEEK; FKM

MW = value of the measuring range

Accessories

Type	Description	Order no.
IO-Link		
	USB IO-Link master for parameter setting and analysis of units; supported communication protocols: IO-Link (4.8, 38.4 and 230 kbits/s)	ZZ1060
	moneo configure SA Stand-alone licence, software for online and offline parameter setting of IO-Link devices including maintenance and support until the end of the following year	QMP010
	IO-Link Bluetooth adapter	EIO330
	IO-Link Bluetooth adapter	E30446

Connection technology

	M12 socket, 4-pole, 5 m grey, MPPE cable	EVF001
	M12 socket, 4-pole, 2 m grey, MPPE cable	EVF064
	M12 socket, 4-pole, 5 m grey, MPPE cable	EVF004
	M12 socket, 4-pole, 2 m grey, MPPE cable	EVF067