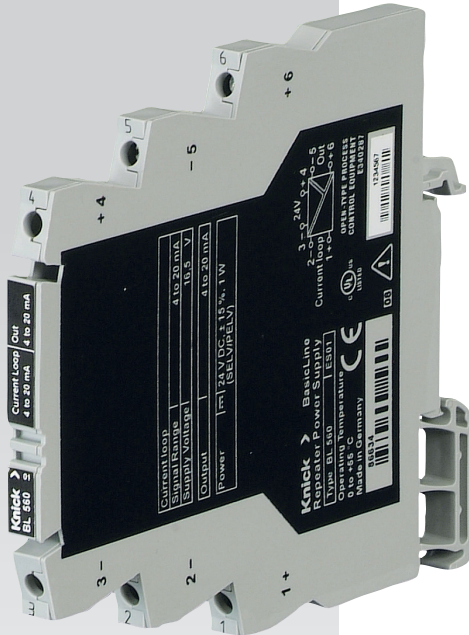


Repeater Power Supplies



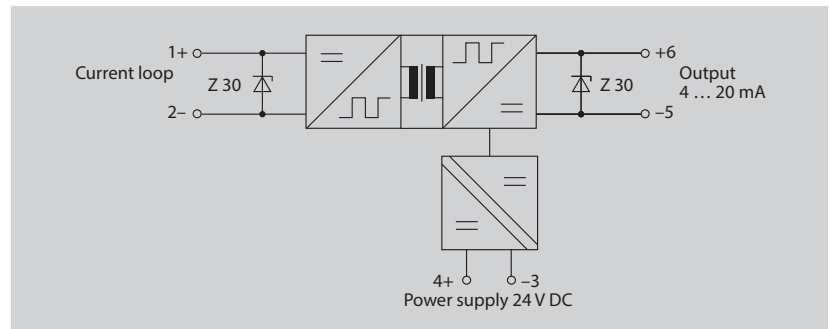
BasicLine BL 560

Repeater power supply for 2-wire sensors, in a 6-mm housing

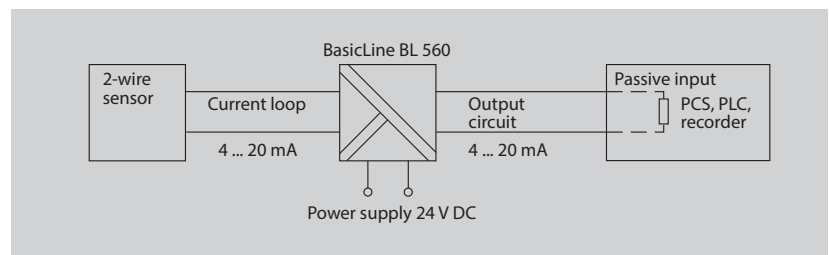
Facts

- For supply and signal decoupling of 2-wire sensors in safe areas
- Suitable for the most loop-powered transmitters / 2-wire sensors
- 16.5 V supply voltage
- Galvanically isolated, active current output with full 500-ohm load
- No problems caused by channel-to-channel coupling through the power supply
- 6-mm housing requires minimal space
- Highest reliability
- Short-circuit-proof
- CE compliant and UL approved
- 3-year warranty
- Perfect price-performance ratio

Block Diagram



Galvanically Isolated Supply of 2-Wire Sensors



Input (current loop)	Output	Power supply
4 ... 20 mA (16.5 V)	4 ... 20 mA	24 V DC

Product Line

Device	Input	Output	Order No.
BasicLine BL 560	4 ... 20 mA	4 ... 20 mA	BL 560

Specifications

Input data

Current loop	4 ... 20 mA Supply voltage 16.5 V, constant for 3 ... 22 mA, current limited to max. 25 mA
Residual ripple	< 10 mV _{rms}

Output data

Range	4 ... 20 mA
Signal in case of short circuit at input	22... 25 mA
Signal in case of open input	< 3 mA
Load	≤ 10 V (≤ 500 ohms at 20 mA)
Residual ripple	< 10 mV _{rms}

Transmission behavior

Gain error	< 0.25 % full scale (DC)
Cutoff frequency	> 30 Hz
Temperature coefficient ¹⁾	0.01 %/K full scale

Power supply

Power supply	24 V DC (± 15 %), approx. 1.2 W
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Isolation

Galvanic isolation	3-port isolation between input, output and power supply
Test voltage	0.51 kV AC current loop against output/power supply
Working voltage	150 V AC/DC (basic insulation) with overvoltage category II / pollution degree 2 according to EN 61010-1

Standards and approvals

Conformity	CE compliant
EMC ²⁾	Product family standard: EN 61326
Approval	UL Listed, File No. E340287, Standard: UL 61010-1 and CAN/CSA C22.2 No. 61010-1

Further data

Ambient conditions	Stationary operation, weatherproof, relative humidity 5 ... 95 %, no condensation, max. altitude 2000 m, water or wind-driven precipitation (rain, hail, snow) excluded
Ambient temperature	Operation: 0 ... +55 °C Transport, storage: -25 ... +85 °C
Housing	Modular housing, screw terminals, IP 20 protection
Mounting	35-mm mounting rail, EN 60715
Dimensions	6.1 mm x 98 mm x 88 mm
Wire cross-section	Max. 2.5 mm ² , 24-14 AWG
Weight	Approx. 50 g

1) Average TC in specified operating temperature range, reference temperature 23 °C

2) Slight deviations are possible while there is interference