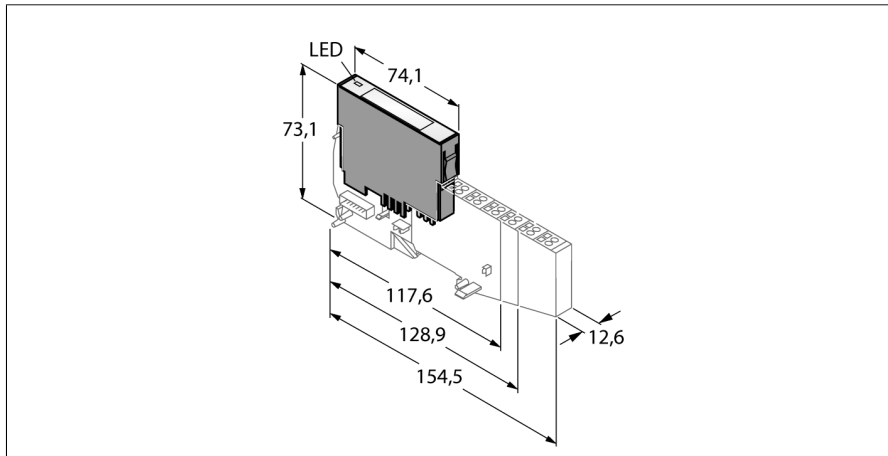


## BL20 electronic module

### 2 Analog Inputs for Voltage

#### BL20-2AI-U(-10/0...+10VDC)



- Fieldbus and connection technology independent
- Protection class IP20
- LEDs indicate status and diagnostic
- Electronics galvanically separated from the field level via optocouplers
- 2 analog inputs -10/0 ...+10 VDC

#### Functional principle

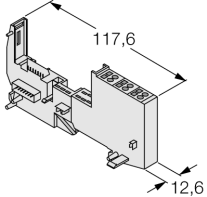
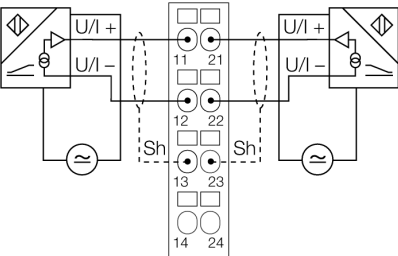
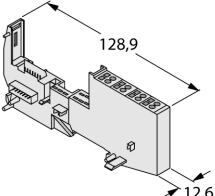
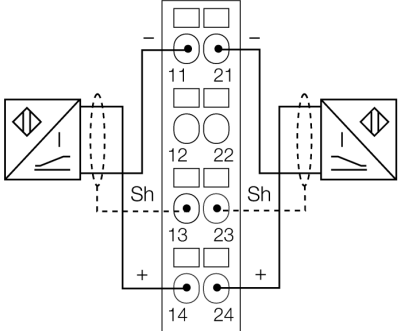
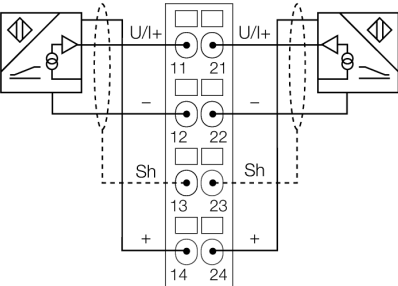
BL20 electronic modules are plugged into the purely passive base modules which are used for connection of field devices. Maintenance is significantly facilitated due to separation of the connection level from the module electronics. Furthermore flexibility is enhanced because the base modules provide a choice of tension spring or screw connection technology.

The electronic modules are completely independent of the type of higher level field bus through the use of gateways.

<b>Type designation</b>	BL20-2AI-U(-10/0...+10VDC)
Ident no.	6827022
<b>Number of channels</b>	2
Rated voltage from the supply terminal	24 VDC
Nominal current from field supply	≤ 12 mA
Nominal current from module bus	≤ 35 mA
Power dissipation, typical	≤ 1 W
<b>Inputs</b>	
Input type	-10/0 ...10 VDC
Input resistance	> 98.5 kΩ
Max. input voltage	35 V continuous
Electrical isolation	electronics for the field level
Output connectivity	Screw, tension spring
<b>Maximum limiting frequency analog</b>	50 Hz
Basic fault limit at 23 °C	< 0.2 %
Repeatability	0.05 %
Temperature coefficient	< 150 ppm / °C of full scale
Resolution	16 Bit
Measuring principle	Delta Sigma
Measured-value display	16 bit signed integer
	12 bit full range left-justified
Cycle time	≤ 10 ms
<b>Number of diagnostics bytes</b>	2
Number of parameter bytes	2
<b>Dimensions (W x L x H)</b>	12.6 x 74.1 x 55.4mm
Approvals	CE, cULus, zone 2, Class I, Div. 2
Ambient temperature	0...+55 °C
Storage temperature	-25...+85 °C
Relative humidity	5 to 95% (internal), Level RH-2, no condensation (at 45 °C storage)
Vibration test	Acc. to EN 61131
Shock test	Acc. to IEC 60068-2-27
Drop and topple	acc. to IEC 68-2-31 and free fall to IEC 68-2-32
Electromagnetic compatibility	Acc. to EN 50082-2
Protection class	IP20
MTTF	612 years acc. to SN 29500 (Ed. 99) 20 °C

**BL20 electronic module**  
**2 Analog Inputs for Voltage**  
**BL20-2AI-U(-10/0...+10VDC)**

**Compatible base modules**

Dimension drawing	Type	Pin configuration
	<p><b>BL20-S3T-SBB</b> 6827044 Tension spring connection with external sensor supply</p> <p><b>BL20-S3S-SBB</b> 6827045 Screw connection with external sensor supply</p>	<p><b>Wiring Diagram</b></p> 
	<p><b>BL20-S4T-SBBS</b> 6827046 Tension spring connection</p> <p><b>BL20-S4S-SBBS</b> 6827047 Screw connection</p>	<p><b>2-wire Connection</b></p>  <p><b>3-wire Connection</b></p> 

**BL20 electronic module**  
**2 Analog Inputs for Voltage**  
**BL20-2AI-U(-10/0...+10VDC)**

**Accessories**

Type code	Ident no.		Dimension drawing
ZBW5-2BETÄTIGUNGSSW	6827106	Tension spring tool	