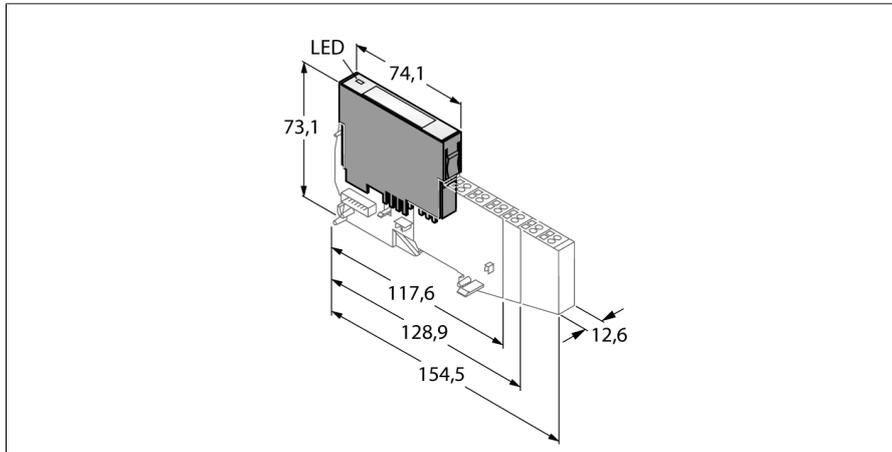


BL20 electronic module

1 Analog Input for Voltage

BL20-1AI-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
- 1 analog input -10/0...+10 VDC

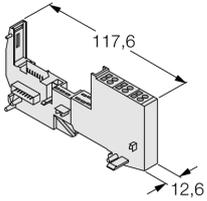
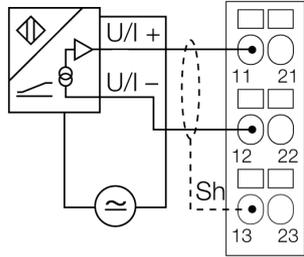
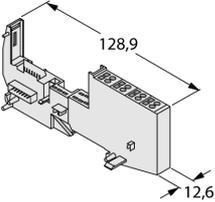
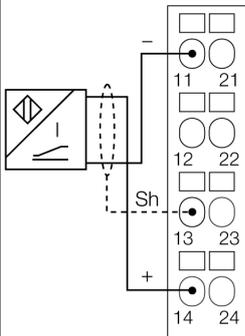
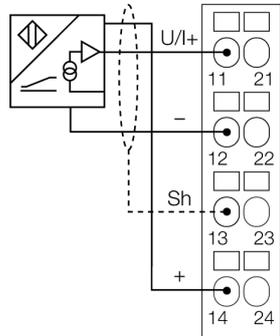
Functional principle

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.

Type	BL20-1AI-U(-10/0...+10VDC)
ID	6827019
Number of channels	
Number of channels	1
Rated voltage from the supply terminal	
Rated voltage from the supply terminal	24 VDC
Nominal current from field supply	
Nominal current from field supply	≤ 50 mA
Nominal current from module bus	
Nominal current from module bus	≤ 41 mA
Power dissipation, typical	
Power dissipation, typical	≤ 1 W
Inputs	
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
Basic fault limit at 23 °C	
Basic fault limit at 23 °C	< 0.2 %
Repeatability	
Repeatability	0.05 %
Temperature coefficient	
Temperature coefficient	< 300 ppm/°C of full scale
Resolution	
Resolution	14 Bit
Measuring principle	
Measuring principle	successive approximation
Measured-value display	
Measured-value display	16 bit signed integer
	12 bit signed integer left-justified
	12 bit full range left justified
Cycle time	
Cycle time	≤ 3 ms
Number of diagnostics bytes	
Number of diagnostics bytes	1
Number of parameter bytes	
Number of parameter bytes	1
Dimensions (W x L x H)	
Dimensions (W x L x H)	12.6 x 74.1 x 55.4 mm
Ambient temperature	
Ambient temperature	0...+55 °C
Storage temperature	
Storage temperature	-25...+85 °C
Relative humidity	
Relative humidity	15...95 %, no condensation allowed
Vibration test	
Vibration test	Acc. to EN 61131
Shock test	
Shock test	Acc. to IEC 60068-2-27
Drop and topple	
Drop and topple	acc. to IEC 68-2-31 and free fall to IEC 68-2-32
Electromagnetic compatibility	
Electromagnetic compatibility	Acc. to EN 50082-2
Protection class	
Protection class	IP20

Compatible base modules

Dimension drawing	Type	Pin configuration
	<p>BL20-S3T-SBB 6827044 tension spring connection with external sensor supply</p> <p>BL20-S3S-SBB 6827045 screw connection with external sensor supply</p>	<p>Wiring Diagram</p> 
	<p>BL20-S4T-SBBS 6827046 tension spring connection</p> <p>BL20-S4S-SBBS 6827047 screw connection</p>	<p>2-wire Connection</p>  <p>3-wire Connection</p>  <p>4-wire connection</p> 