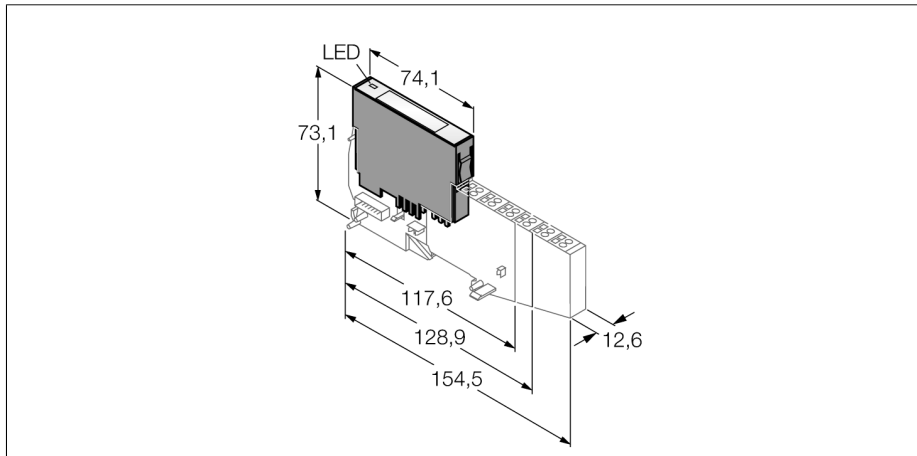


**BL20 electronic module**  
**4 analog inputs**  
**BL20-4AI-U/I**



- Fieldbus and connection technology independent
- Protection class IP20
- LEDs indicate status and diagnostic
- Electronics galvanically separated from the field level via optocouplers
- 4 analog inputs
- 0/4...20 mA or 10/0...+10 V DC
- Selectable per channel

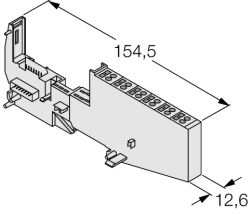
**Functional principle**

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</b>	BL20-4AI-U/I
Ident-No.	6827217
<b>Number of channels</b>	4
Rated voltage from the supply terminal	24 VDC
Supply voltage	24 VDC
Rated current from field supply	≤ 20 mA
Rated current from module bus	≤ 50 mA
Power loss, typical	≤ 1 W
<b>Inputs</b>	
Input type	0/4 ... 20 mA or -10/0 ... +10 VDC
Input resistance	< 0.062 bzw > 98.5
Max. input current	50 mA
Max. input voltage	35 V continuous
Electrical isolation	electronics for the field level
Connection technology	Screw, tension spring
<b>Basic fault limit at 23 °C</b>	< 0.3 %
Repeatability	0.05 %
Temperature coefficient	< 300 ppm/°C of full scale
Resolution	16 Bit
Measuring principle	Delta Sigma
Cycle time	≤ 25 ms
<b>Number of diagnostics bytes</b>	4
Number of parameter bytes	4
<b>Dimensions (W x L x H)</b>	12.6x74.1x55.4mm
Approvals	CE, cULus, zone2, ClassI, div.2.
Operating 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 68-2-27
Drop and topple	acc. to IEC 68-2-31 and free fall to IEC 68-2-32
Electro-magnetic compatibility	acc. to EN 50,082-2
Protection class	IP20

**BL20 electronic module**  
**4 analog inputs**  
**BL20-4AI-U/I**

**Compatible base modules**

Dimension drawing	Type	Pin configuration
	<p><b>BL20-S6T-SBCSBC</b> 6827064 tension spring connection</p> <p><b>BL20-S6S-SBCSBC</b> 6827066 screw connection</p>	<p><b>2-wire connection technology</b></p> <p>Channel 1 U<sub>L</sub> or BR/PF terminal 13</p> <p>Channel 2 U<sub>L</sub> or BR/PF terminal 13</p> <p>Channel 3 U<sub>L</sub> or BR/PF terminal 13</p> <p>Channel 4 U<sub>L</sub> or BR/PF terminal 13</p> <p>Pin connections: 11, 21, 12, 22, 13, 23, 14, 24, 15, 25, 16, 26. Shunt connections (Sh) are shown between pairs (11,12), (21,22), (13,14), (23,24), (15,16), (25,26).</p> <p><b>3-wire technology</b></p> <p>Channel 1 U<sub>L</sub> or BR/PF terminal 13</p> <p>Channel 2 U<sub>L</sub> or BR/PF terminal 13</p> <p>Channel 3 U<sub>L</sub> or BR/PF terminal 13</p> <p>Channel 4 U<sub>L</sub> or BR/PF terminal 13</p> <p>Pin connections: 11, 21, 12, 22, 13, 23, 14, 24, 15, 25, 16, 26. Shunt connections (Sh) are shown between pairs (11,12), (21,22), (13,14), (23,24), (15,16), (25,26). A common terminal 'Klemme 13' is also indicated.</p> <p>U/I+ and U/I- connections are shown for each channel.</p>