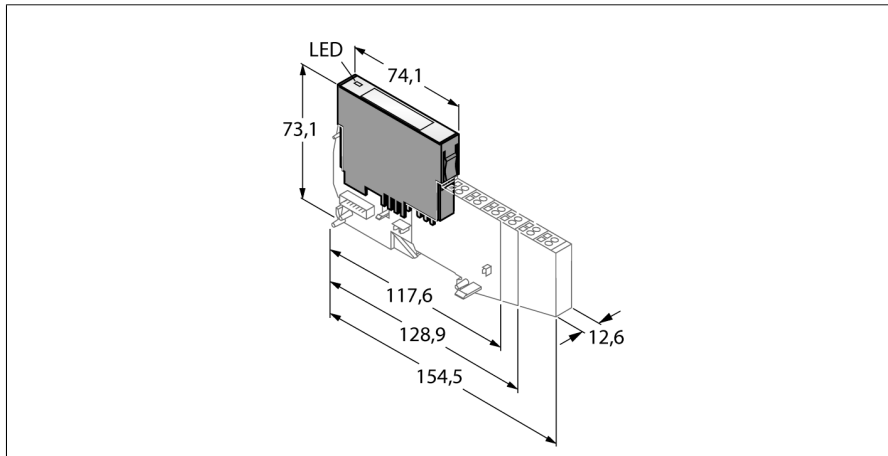


# BL20 electronic module

## 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 VDC
- 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 designation</b>                  | BL20-4AI-U/I                                                        |
| Ident-No.                                | 6827217                                                             |
| Ident-No (TUSA)                          | A9570                                                               |
| <b>Number of channels</b>                | 4                                                                   |
| Rated voltage from the supply terminal   | 24 VDC                                                              |
| Nominal current from field supply        | ≤ 20 mA                                                             |
| Nominal current from module bus          | ≤ 50 mA                                                             |
| Power dissipation, typical               | ≤ 1 W                                                               |
| <b>Inputs</b>                            |                                                                     |
| Input type                               | 0/4 ... 20 mA or -10/0 ... 10 VDC                                   |
| Input resistance                         | < 62 Ω (current) resp. > 98.5 kΩ (voltage)                          |
| Max. input current                       | 50 mA                                                               |
| Max. input voltage                       | 35 V continuous                                                     |
| Potential separation                     | electronics for the field level                                     |
| Connection technology                    | screw, tension spring                                               |
| <b>Maximum limiting frequency analog</b> | 20 Hz                                                               |
| Basic fault limit at 23 °C               | < 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>            | 12.6 x 74.1 x 55.4mm                                                |
| Approvals                                | CE, cULus, zone 2, Class I, Div. 2                                  |
| Operating temperature                    | 0 to +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

|  | Type                                                           | Pin configuration                                                                               |
|--|----------------------------------------------------------------|-------------------------------------------------------------------------------------------------|
|  | <b>BL20-S6T-SBCSBC</b><br>6827064<br>Tension spring connection | <p><b>2-wire Connection</b></p> <p><b>3-wire Connection</b></p> <p><b>4-wire connection</b></p> |
|  | <b>BL20-S6S-SBCSBC</b><br>6827066<br>Screw connection          |                                                                                                 |
|  |                                                                |                                                                                                 |