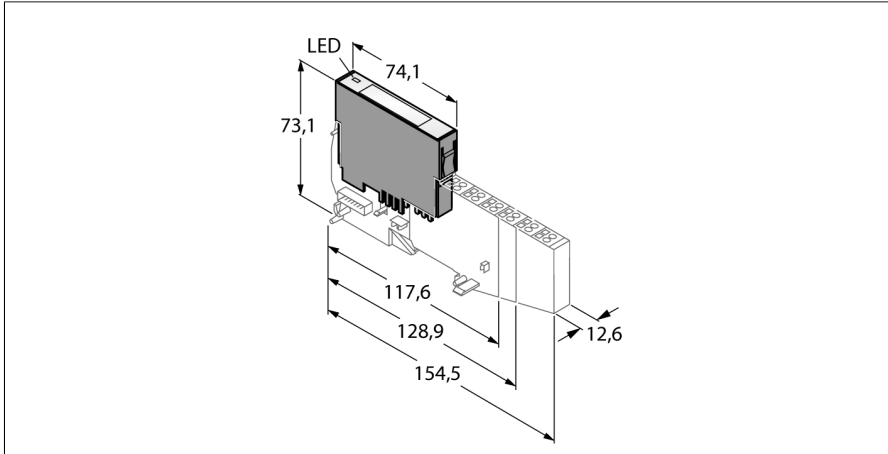# BL20 electronic module
4 Analog Inputs
BL20-4AI-U/I

- 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
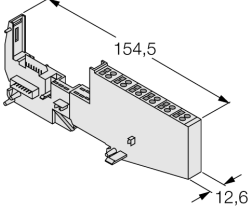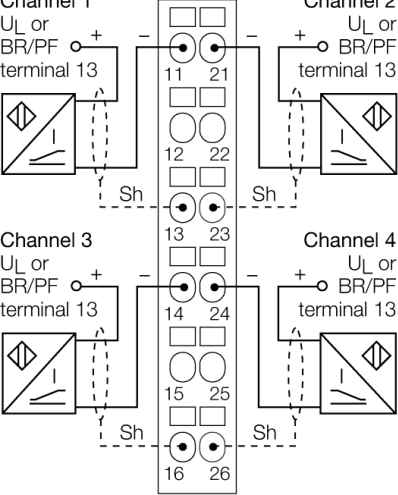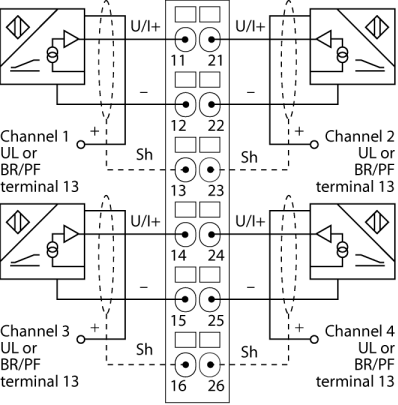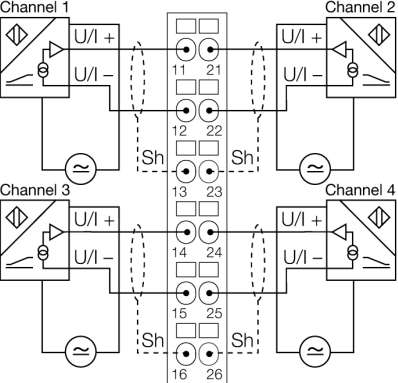- Selectable per channel

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.

Type	BL20-4AI-U/I
ID	6827217

Number of channels	4
Rated voltage from the supply terminal	24 VDC
Nominal current from field supply	$\leq$ 20 mA
Nominal current from module bus	$\leq$ 50 mA
Power dissipation, typical	$\leq$ 1 W

Inputs	
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
Electrical isolation	electronics for the field level
Output connectivity	Screw, tension spring

Maximum limiting frequency analog	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	$\leq$ 25 ms

Number of diagnostics bytes	4
Number of parameter bytes	4

Dimensions (W x L x H)	12.6 x 74.1 x 55.4 mm
Approvals	CE, cULus, zone 2, Class I, Div. 2
Ambient temperature	0…+55 °C
Storage temperature	-25…+85 °C
Relative humidity	15…95 %, no condensation allowed
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	314 years acc. to SN 29500 (Ed. 99) 20 °C

Compatible base modules

Dimension drawing	Type	Pin configuration
154,5 — 12,6	**BL20-S6T-SBCSBC** 6827064 Tension spring connection **BL20-S6S-SBCSBC** 6827066 Screw connection	2-wire Connection / 3-wire Connection / 4-wire connection

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Accessories

Type code	Ident no.		Dimension drawing
ZBW5-2BETÄTIGUNGSWERKZEUG	6827129	Tension spring tool	