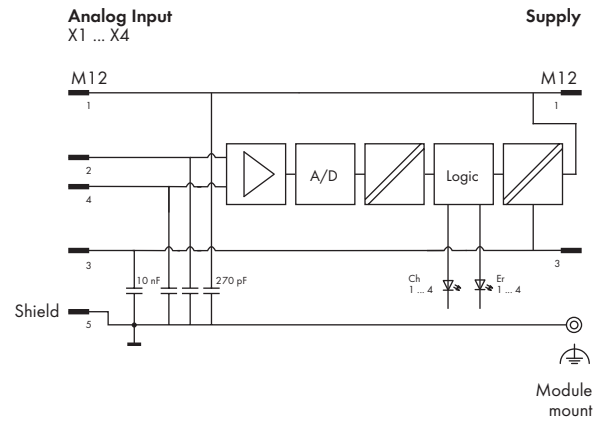


Block diagram of an input



Technical Data	
<b>Analog value creation:</b>	
Resolution	16 bits
Conversion method	SAR
Monotonicity without error code	yes
Conversion time	1 ms
Sampling delay	1 ms (module)
	< 100 μs (channel/channel)
Sampling repeat time	1ms
<b>Failures and errors:</b>	
Voltage proof	up to 32 V (internal current limitation)
Max. measuring error at 25 °C	≤ ± 0.2 % of the measuring range
Temperature error	≤ 100 ppm/K of measuring range
Maximum error over the full temperature range	≤ ± 0.6 % of the measuring range
<b>System bus:</b>	
Connection type (3)	M12 connectors, B coded, 5 poles, shielded
<b>Standards and approvals:</b>	
Conformity marking	CE
Korea Certification	
UL 508	
BVS 15 ATEX E 098 X	II 3G Ex nA IIC T5 Gc, II 3D Ex tc IIIB T90 °C Dc
IECEX BVS 15.0083X	Ex nA IIC T5 Gc, Ex tc IIIB T90 °C Dc

Technical Data	
<b>Isolation:</b>	
Channel - Channel	No
U <sub>IS</sub> , U <sub>A</sub> system bus	500 V DC each
<b>Configurable functions:</b>	
Measuring range (per channel)	0-20 mA, 4-20 mA, ±20 mA, 0-10 V, ±10 V, user-defined
Limiting values (per channel)	Min./Max.
Input filter (per channel)	50 Hz / 60 Hz / filter off
Substitute value (per channel)	Value
Online simulation (per channel)	Lock/unlock; simulation value: (according to measuring range)
Online simulation (per channel/module)	Diagnostics
<b>I/O diagnostics:</b>	
I/O diagnostics (per channel)	Overrange/measuring range underflow and wire break at 4-20 mA
	Overcurrent
	Limit value violation (min/max)
I/O diagnostics (per module)	Short circuit/overload (sensor supply) undervoltage (U <sub>IS</sub> + U <sub>A</sub> )
<b>Process image:</b>	
Process data width	8-byte data + status
<b>LED indicators:</b>	
SB: System bus status	LED (green/red/orange)
F: Error status	LED (red)
Ch1 ... Ch4: Input signal status	LED (yellow)
Er1 ... Er4: Input signal error	LED (red)
U <sub>IS</sub> + U <sub>A</sub> : Supply status	LED (green)
Indicators	Non-latching
<b>General Specifications</b>	
Dimensions (mm) W x H x L	50 x 35.7 x 117
Weight	262 g