

● Characteristics

0620 - LOAD MEASURING - FORCE - OVERLOAD



- Input:	1x strain gauge full bridge, 4-wire
- Bridge resistance:	350 Ω minimum
- Input sensitivity:	1...4 mV/V
- Output:	4...20 mA HART
- Resolution:	16 bit
- Bridge supply:	1 VDC
- Combined error:	0,3% nominal range
- Electrical connection:	Pluggable
- Enclosure:	Stainless steel tube
- Dimensions:	Ø26x78 mm
- Vibration protection:	Electronics completely potted (Option)

● Technical data

Input

Sensor:	1 strain gauge full bridge
Bridge resistance:	350 Ω minimal
Bridge supply:	1 VDC
Bridge connection:	4-wire
Range input signal:	1...4 mV/V
Cable towards sensor:	Length: 10 m maximum Type: Double-shielded

Output

Current signal:	4...20 mA with superimposed communication signal (HART), 2-wire current loop
Current range:	3,6...21 mA
Signal on error:	21 mA (sensor break, sensor open circuit, sensor short circuit, underflow)

Measuring amplifier

Combined error:	0,3% of nominal range
Resolution:	16 Bit
Filter adjustment:	0...99 s
Transmission behaviour:	Linear with strain gauge signal
Turn-on delay time:	<5 s
Measuring rate:	10 Measurements/s
Linearization:	10 calibration points
Configuration:	Via software (HART communication)

Supply

Current loop:	12...40 VDC
Load:	$R = (U_B - 12 \text{ V}) / 21 \text{ mA}$
Reverse battery protection:	Available (no function, no damage)

● Applications

The measuring amplifier is an interface adaption between sensor and control unit. The output of the measuring amplifier is a standard signal and can be processed with eg. SPS and at the same time the higher signal level avoids interferences.



photo: www.pixelquelle.de



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● **Technical data (continued)**

Ambient conditions

Operating temperature: -20...+80°C
Storing temperature: -20...+85°C

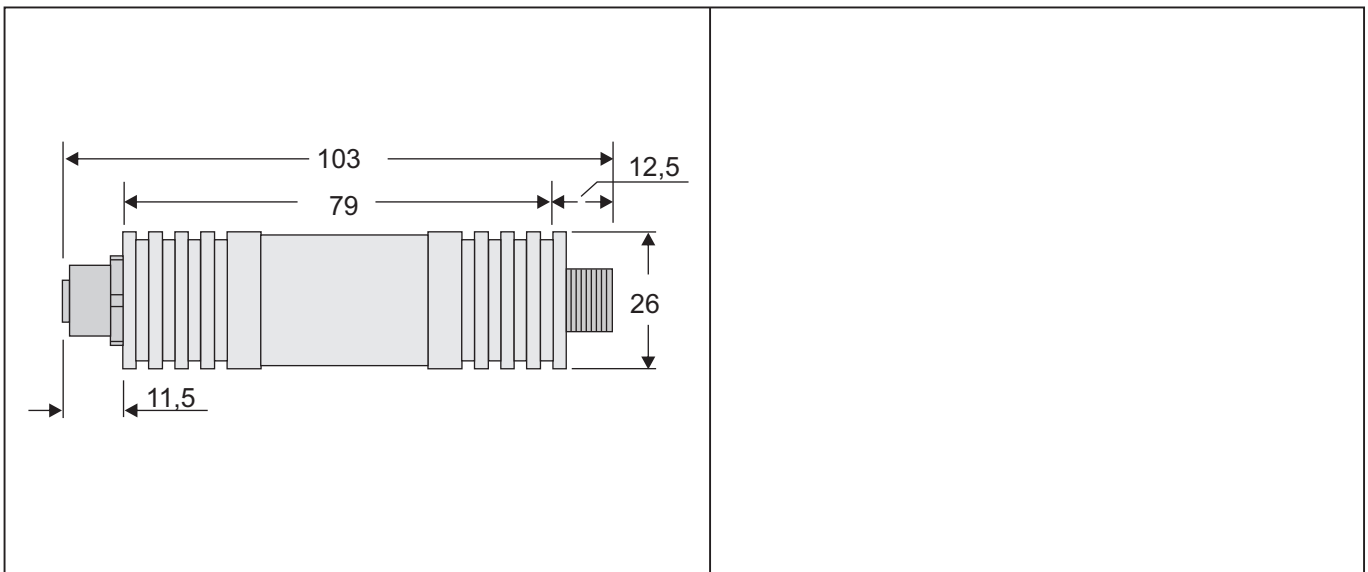
Mechanics

Enclosure:
Type: Metal tube
Dimensions: Ø26 x 79 mm
Material: Stainless steel
Colour: natural
Mounting: with pipe clamp
Protection: Degree IP 65
Weight: approx. 170 g
Vibrating protection: Electronics completely potted (optionally)
Electrical connection:
Towards evaluation: Plug M12x1, 4-pole (standard)
MIL-plug D3899, 6-pole (on request)
MIL-plug VG95234A 14S-6PN, 6-pole (on request)
Towards sensor: Socket plug M12x1, 5-pole

Configurable features

Measuring amplifier: Nominal measuring range start (LRL) / Nominal measuring range end (URL) /
Measuring range start (LRV) / Measuring range end (URV) / Filter function /
Adjustment output current / Simulation output current / HART address /
Linear output signal / 2-point calibration / 10-point calibration (linearization)

● **Dimensions (in mm)**

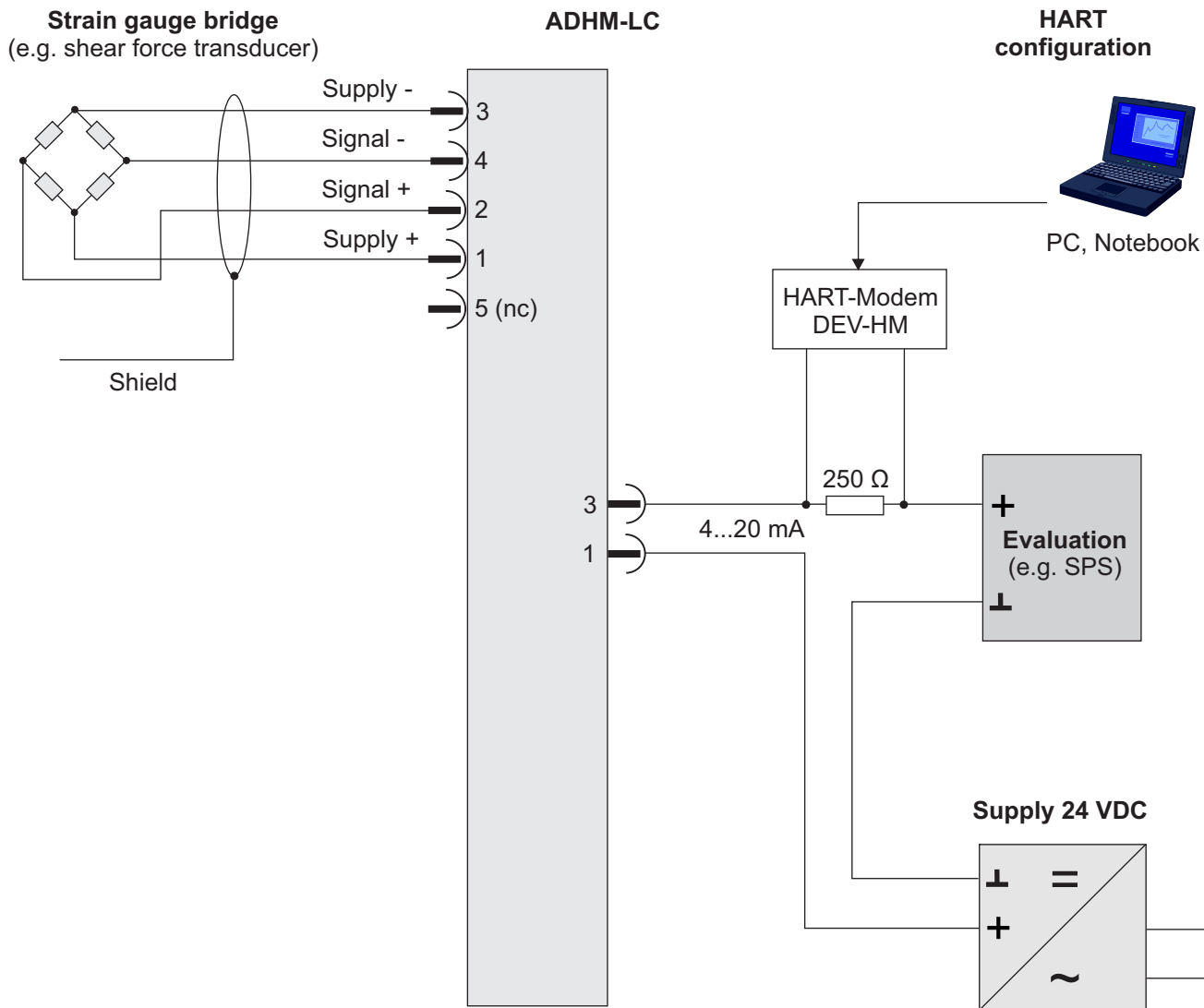


● Electrical connection

General



Socket plug (5-pole, sensor) and plug M12 (4-pole, evaluation)



● **Order code**

L	H	X	X	X	X	X	X	-	X	X	X
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Input:	Strain gauge 1...4 mV/V	A									
Output:	4...20 mA HART	2									
Connection towards evaluation:											
MIL-plug D3899, 6-pole (on request)		2									
MIL-plug VG95234A, 6-pole (on request)		4									
Plug M12x1, 4-pole (standard)		5									
Connection towards sensor:	Steckbuchse M12x1, 5-polig	4									
Supply:	12...40 VDC (out of current loop)	2									
Vibrating protection:	without (standard)								0		
	with (electronics potted)								1		
Enclosure:	Stainless steel metal tube Ø26x79 mm								0		
Configuration:	Customized setting (please indicate) ⁽¹⁾									1	
Special model:	No										0
	Yes (please specify)										1

1) Configuration: Settings are made according order

● **HART-Kommunikation und Konfiguration**

The HART-Tool is a graphical user interface for the ME series with menu-driven program for configuration. It can be used for putting into operation, configuration, analysis of signals, data backup and documentation of the device. Operating systems: Windows 2000, Windows XP, Windows 7 and 8.1

Connection via HART interface (modem) with USB interface of a PC or hand-held HART communicator

Possible settings are:

- | | | |
|--|--------------------------------|-------------------|
| - Adjustment of output current | - Simulation of output current | - Filter function |
| - Limits of nominal measuring range (URL, LRL) | - Linear output signal | - HART address |
| - Limits of measuring range (LRV, URV) | - 2-point calibration | |
| - 10-point calibration (linearization) | | |

Please note: When using communication via a HART modem, a communication resistance of 250 Ω has to be taken into account.

Accessories:

DEV-HM (Interface HART, USB, software)

Order No.: **01310-00220**

Pipe clamp for mounting

Order No.: