Level Sensor with Float HART

MELS-FT

Characteristics

420 - MODULAR - ECONOMIC -

	- Input:	level 1002000 mm
	- Output:	420 mA current loop HART (2-wire)
	- Voltage supply:	out of current loop (1240 VDC)
	- Accuracy:	see technical details
120	- Process connection:	several options
	- Electrical connection:	several plugs
	- Electrical connection:	lateral, Option: upwards
	- Ambient temperature:	-40+80 °C
rith and a second se	- Adjustment:	via software
	- Medium:	non aggressive fluids
	- Protection:	at least IP65 / IP68
4		

Technical Data

Input		
Level: Medium:	1001000 mm non aggressive fluids	
Output		
Current signal: Current range: Signal on error:	3,820,5 mA 3,6 mA (sensor short cir	oosed communication signal (HART), 2-wire current loop cuit, underflow) ensor open circuit, overflow)
Performance		
Sensor:	Resolution: Hysteresis:	4,5 mm, ca. 3mm
Measuring amplifier:	Resolution: Accuracy: Filter setting: Transmission behaviour Measuring rate: Configuration: Turn-on delay time: Response time:	16 Bit 0,3% of range 099 s : linear with level 10 measurements / s via software (HART-communication) <5 s 20 ms
Programmable Feat	ures	
NALL STREET		

Measuring amplifier: measuring range start / measuring range end / filter

Applications

For use in industrial plants, terotechnology and public utility (eg tanks for hydraulic oil). With it's HART interface for configuration and the numerous electrical connections, the level sensor is also suitable for applications with higher requirements.



🛑 Technical Data (Conti	nued)	
Supply		
Voltage: Load: Reverse battery protection:	HART current loop: 12 R = $(U_B-12 V) / 22 mA$ available (no function	A
Environmental Conditions	;	
Temperature:	Operating range: Storing: Medium:	0+80 °C -20+85 °C 0+100 °C
Condensation:	uncritical	
Mechanics		
Dimensions: Process connection: System pressure: Electrical connection: Material:	see page 3 3/4" / 1" / 1,5" / 1" 25 bar lateral Option: Plugs and cables: Protecting tube:	NPT (adaptor) upwards see page 3 stainless steel 1.4571
Weight: Fitting position: System pressure:	Float: Adaptor:	PE Ø24 (density medium: 1 or more) PE Ø29 Option: stainless steel Ø29 (1.4571) stainless steel 1.4571 PBT GF30 PBT GF30
Protection of device:	Ingress protection: PCB:	at least IP 65 (electronics) IP68 (sensor) potted

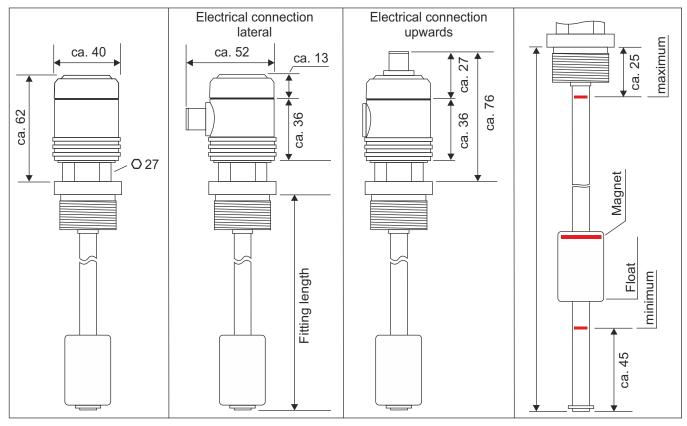
Electrical	Connection						
M12x1	Super Seal	Deutsch	Deutsch	Bayonet	Valve	MIL	Cable
4-, 5-, 8-pole	3-pole	3-pole	4-pole	4-pole	4-pole	6-pole	4-pole

Connection-Exa	mple M12-Plug								
	Plug assignment M12x1, 8-pole								
current loop 420 mA HART									
+ - 1 3									

HART Communication and Configuration

The HART-Tool is a graphical user interface with menu-driven progam for configuration. It can be used for putting into operation, configuration, analysis of signals, data backup and documentation of the device. Operating systems: Windows XP, W7, W8.1, W10 Connection via HART interface (modem) with USB interface of a PC or hand-held HART communicator - Adjustment of output current - Simulation of output current Settings: - Filter function - Limits of measuring range - Linear output signal - HART address - 2-point calibration - Up to 10-point calibration (linearization) Please note: When using communication via a HART modem, a comunication resistance of 250 Ω has to be taken into account.

Dimensions (in mm)



Order Code		Ο	V	X	Χ	Χ	X	-	X	-	X	X	X	X
Input:	Level			0										
Resolution:	4,5 mm				1									
Float:	Plastics Ø24 ¹⁾ Plastics Ø29 (Standard) Stainless steel Ø29					1 2 3								
Process connection:	1" 1,5" 1"NPT 3/4" (for float 24 mm)						0 1 2 3							
Fitting length: ²⁾	100 mm 200 mm 300 mm 400 mm 600 mm 1000 mm								10 20 30 40 60 A0	00 00 00				
Electrical connection:	Lateral (Standard) Upwards										0 1			
Electrical connection:	M12, 4-pole M12, 5-pole M12, 8-pole Deutsch DT04, 3-pole Deutsch DT04, 4-poe Super Seal 1.5, 3-pole Bayonet (DIN), 4-pole Valve plug, 4-pole Cable, 2m MIL, 6-pole											0 1 2 3 4 5 6 7 8 9		
Configuration:	Factory setting ³⁾ Customized (please indicate) ⁴⁾												0 1	
Other:	Special model													0

1) For float with Ø24 mm the minimum density is 1

2) Other fitting lengths: 150 = 150 mm / 250 = 250mm / 350 = 350 mm / 450 = 450 mm / 500 = 500 mm / 550 = 550 mm / 650 = 650 mm / 700 = 750 mm / 800 = 800 mm / 850 = 850 mm / 900 = 950 mm / A05 = 1050 mm / A10 = 1100 mm / A15 = 1150 mm / A20 = 1200 mm / A25 = 1250 mm / A30 = 1300 mm / A35 = 1350 mm / A40 = 1400 mm / A45 = 1450 mm / A50 = 1500 mm / A55 = 1550 mm / A60 = 1600 mm / A65 = 1650 mm / A70 = 1700 mm / A75 = 1750 mm / A80 = 1800 mm / A85 = 1850 mm / A90 = 1900 mm / A95 = 1950 mm / B00 = 2000 mm

3) For factory setting, measuring range equals indicating range

4) Settings as per technical data can be selected.

Accessories:

DEV-HM (Interface HART, USB, software)

Order No.: 01310-00220