



Continuous Oil Particle Sensor LDP100 - Optical Particle Monitor

Article No.	Price £	Price €
LDP100	ON REQUEST	

- Connector
- On board history storage
- P67, M16 process connections, M12 connector
- Process connection: Minimes M16 x 2
- Measuring principle: light extinction principle
- Cleanliness level to ISO 4406:99 / SAE AS4059E ¹⁾
- Size channels [µm]: 4, 6, 14, 21
- CAN interface
- Out 1: analogue (4...20 mA); Out 2: switching output (open collector output)

Application

Mineral oils (e.g. HLP), ester oils (e.g. HEES), biodegradable
Application oils (e.g. HETG)

Medium temperature oil [°C]	-10...80
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Electrical data

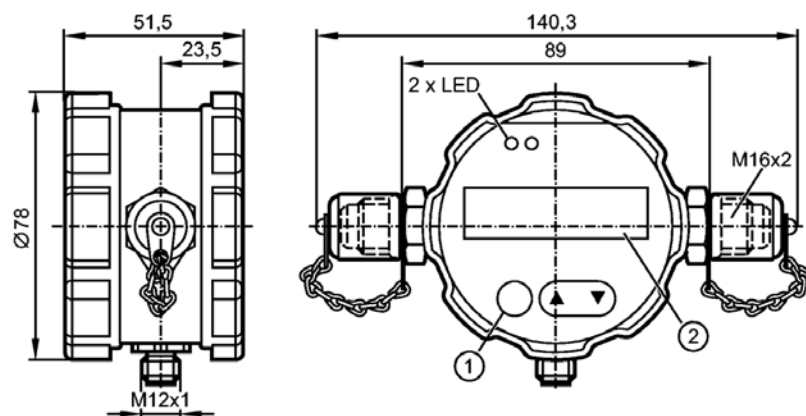
Electrical design	DC
Operating voltage [V]	9...33 DC
Current consumption [mA]	< 180 (9 V DC) / < 50 (33 V DC)
Protection class	III

Inputs

Trigger	In: external, low level activates measuring cycle
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Outputs

Output	Out 1: analogue (4...20 mA); Out 2: switching output (open collector output)
Output function	4...20 mA (can be configured); digital alarm output
Current rating [mA]	500
Short-circuit proof	no
Overload protection	no
Analogue output	4...20 mA
Max. load [Ω]	(U _b - 4 V) / 20 mA; 1000 at U _b = 24 V



¹⁾ SAE AS4059E: No separate evaluation of the size classes 38 µm and 70 µm.
²⁾ In the calibrated range (range numbers 10...22).

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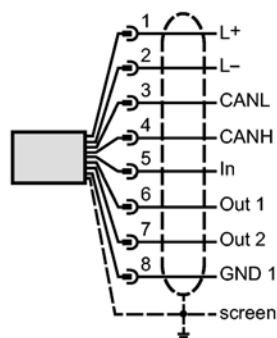


Measuring / setting range	
Measuring range	10...22 (range number)
Display range	0...24 (range number)
Accuracy / deviations	
Accuracy	± 1 range number ²⁾
Software / programming	
Storage capacity	3000 data sets
Programming options	via buttons, PC or digital I/O
Environment	
Operating pressure [bar]	0...420 dynamic / 0...600 static
Flow rate [ml/min]	50...400
Ambient temperature [°C]	-10...60
Storage temperature [°C]	-20...60
Protection	IP 67
Tests / approvals	
EC pressure equipment directive 97/23/EC	Article 3, paragraph (3) - sound engineering practice
MTTF [Years]	129
Mechanical data	
Process connection	Minimess M16 x 2
Materials (wetted parts)	stainless steel 420 / 1.4028; sapphire; NBR; chromium
Weight [kg]	0.85
Displays / operating elements	
Display	LC display: displayed value conforms to the cleanliness level to ISO 4406:99 and SAE AS4059E

Electrical connection

Connection - M12 connector

Wiring



CANL/CANH: CAN bus
 In: Switching input (low level activates measuring cycle)
 Out 1: Analogue output
 Out 2: Switching output
 GND 1: Signal ground Out 1
 L-/screen: connected to the housing