



# LDP100 OPTICAL PARTICLE MONITOR

- Connector
- On board history storage
- IP67, M16 process connections, M12 connector
- Process connection: Minimes M16 x 2
- Measuring principle: light extinction principle
- Cleanliness level to ISO 4406:99 / SAE AS4059E <sup>1)</sup>
- Size channels [µm]: 4, 6, 14, 21
- CAN interface
- Out 1: analogue (4...20 mA); Out 2: switching output (open collector output)

Article No.	Price £	Price €
LDP100	ON REQUEST	

## Application

	Mineral oils (e.g. HLP), ester oils (e.g. HEES), biodegradable Application oils (e.g. HETG)
Medium temperature oil [°C]	-10...80

## 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

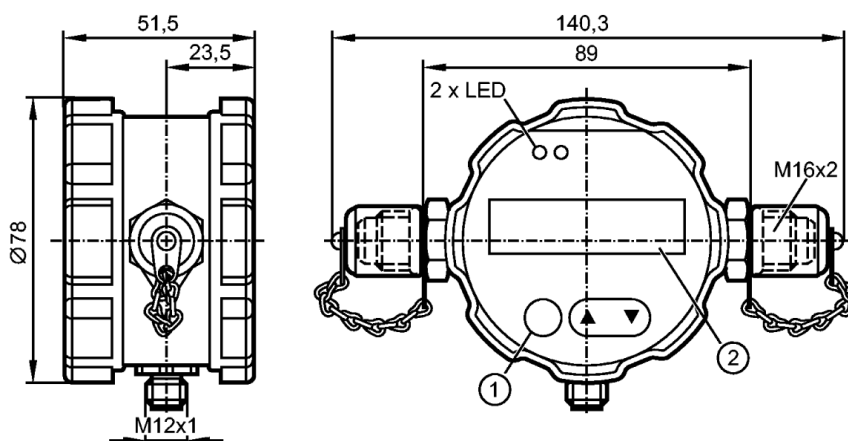
## Inputs

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 <sub>b</sub> - 4 V) / 20 mA; 1000 at U <sub>b</sub> = 24 V

## Dimensions



<sup>1)</sup> SAE AS4059E: No separate evaluation of the size classes 38 µm and 70 µm.

<sup>2)</sup> 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	$\pm 1$ range number <sup>2)</sup>
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## 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

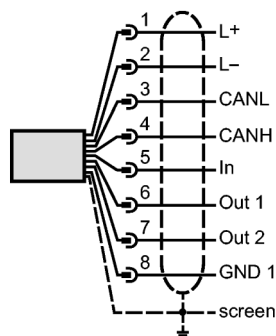
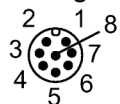
## Displays / operating elements

Display	LC display: displayed value conforms to the cleanliness level to ISO 4406:99 and SAE AS4059E
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## 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