

# Technical Data and Specification

## Optical H<sub>2</sub> – Sensor Type MOHS 3



MOHS 3 modular hydrogen Sensor is designed for use in process controllin and industriel applications  
 Key Features: explosion proof, unaffected by electromagnetic fields, optical measurement in hazardous environments, short response time, low cross sensitivity, long life time, easy handling, DIN – rail mounting

### Performance

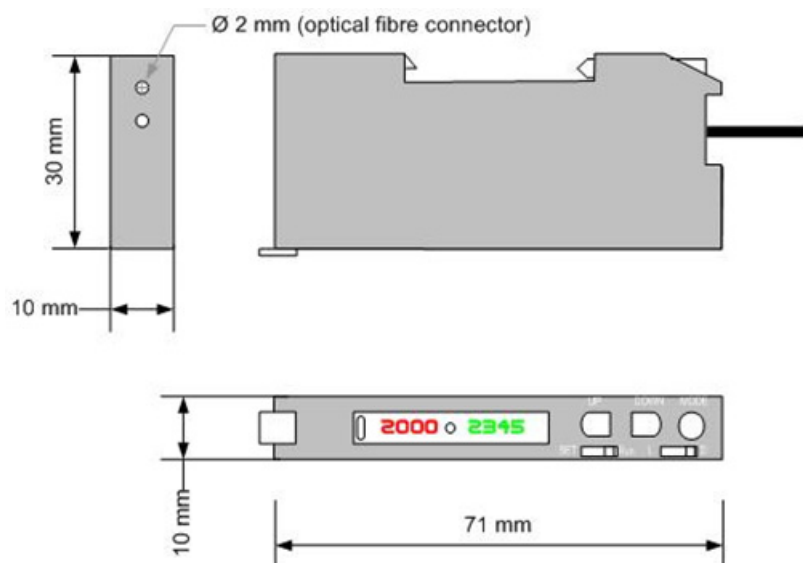
Measurement Range:	0.1 to 100 % hydrogen by volume (LEL)
Accuracy:	from 0.1 to 15 Vol.- %: ±(0.1 x indicated value) Vol.- % from 15 to 30 Vol.- %: ± (0.2 x indicated value) Vol.- % mor then 30 Vol.- %: ± (0.3 x indicated value) Vol.- %
Expected Operation Life:	more than 2 years
Signal Output:	3 ... 5 V DC (logarithmical)
Programmable Treshold:	open collector (26.4 VDC max. ,load current 50 mA)
Power Supply:	12 to 24 VDC ± 10%, ripple(p-p) 10% max.
Power Consumption:	1,3 W max. (54 mA max. at 24 V)
Response Time t <sub>90</sub> :	< 60 s
Operation Temperature:	- 15° C to 50° C
Operation Humidity:	0 % to 70 % RH, non-condensing
Pressure Range:	750 hPa to 1750 hPa
Flow Rate:	0 to 1000 sccm/min (100 sccm recommended)
Interferences:	non to N <sub>2</sub> , O <sub>2</sub> , CO <sub>2</sub> , saturated hydrocarbons, inert gases
Signal Drift:	< 1 % of signal / month in air
Material in Contanct with Medium:	Stainless Steel, Palladium, Nickel, Polymer, Epoxy, Glas

All characteristics are based on conditions on 20°C, 50% RH and 1013 mbar

### Storage Conditions

Temperature Range:	-30°C to 45°C (15°C to 30°C recomanded)
Ambient Pressure:	750 hPa to 1750 hPa
Weight:	approx. 70 g for electronic unit approx. 120 g for sensor „dipping probe“ approx. 180 g for sensor „ambient air“
Dimensions:	71 mm x 29 mm x 10 mm for electronic unit 40 mm x 26 mm x 33 mm for sensor „dipping probe“ 40 mm x 40 mm x 35 mm for sensor „ambient air“

### Electronic unit



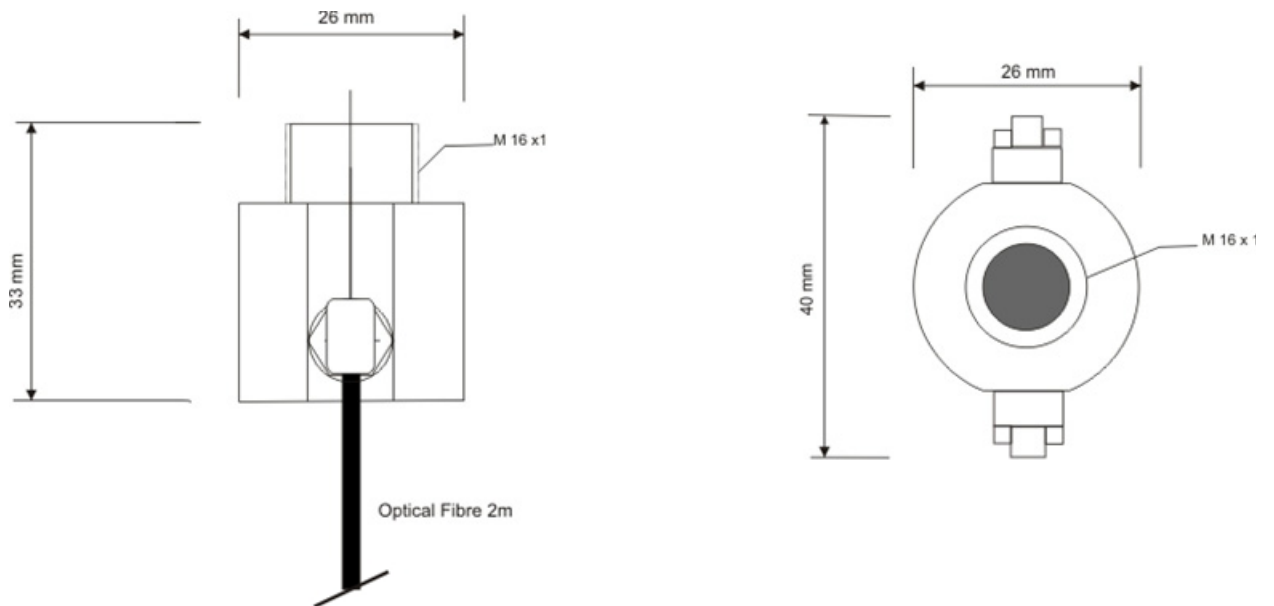
RoHS conform

This data sheet is subject to change without prior notice

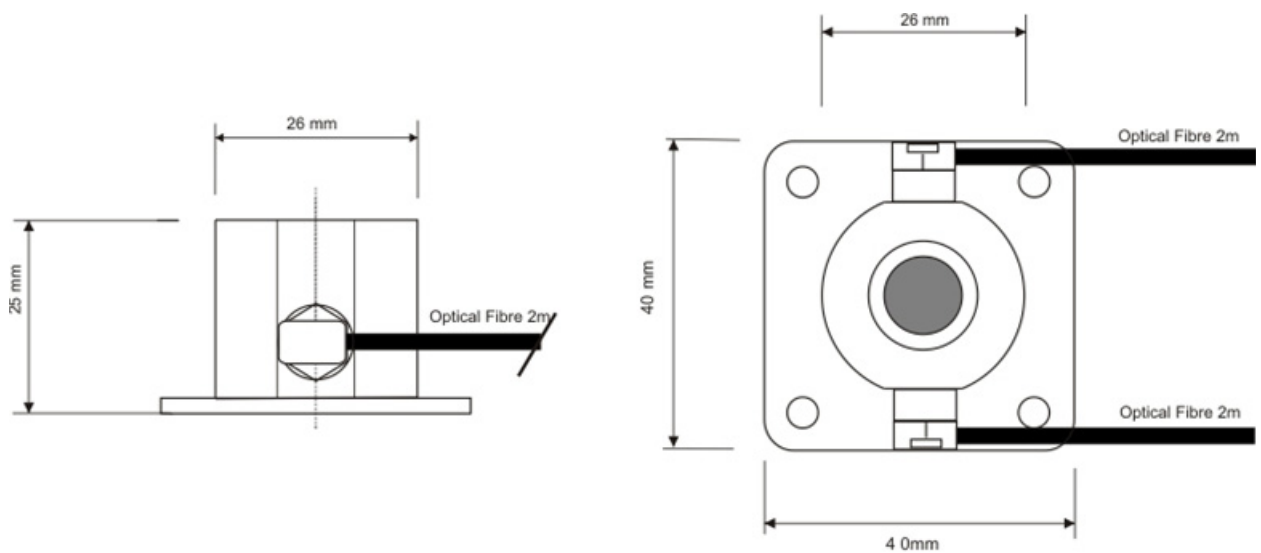
Materion GmbH • Alter Holzhafen 15 • D-23966 Wismar Germany  
 Phone: +49 (0) 3841-7584040 • Fax: +49 (0) 3841-7584041 • info@materion-gmbh.de • www.materion-gmbh.de

# Available Sensor Elements

## External dipping probe



## External Ambient Air Monitoring Sensor



CE

RoHS conform

This data sheet is subject to change without prior notice

Materion GmbH • Alter Holzhafen 15 • D-23966 Wismar Germany  
 Phone: +49 (0) 3841-7584040 • Fax: +49 (0) 3841-7584041 • info@materion-gmbh.de • www.materion-gmbh.de