

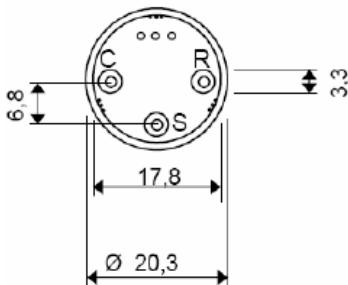
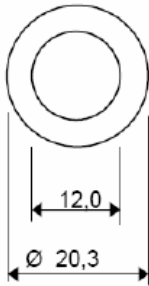
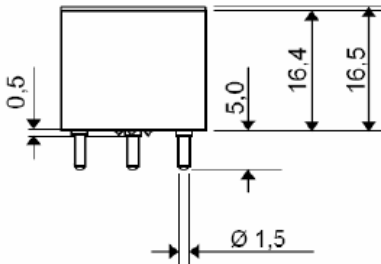
HYDROGEN H₂ SS SENSOR – 4 SERIES



**Hydrogen SS Sensor –
4 series version**

Part Number: 2112B010410

(all dimensions in mm ± 0,15 mm tolerance)



SPECIFICATION – 4 SERIES

Operating Principle:	Amperometric, 3-electrode cell
Gas Detected:	Hydrogen H ₂
Measurement Range:	0 – 20,000 ppm
Lower Detectable Limit (LDL):	10 ppm
Maximum Range:	40,000 ppm
LEL:	40,000 ppm
Expected Operating Life:	5 years
Temperature Range:	-20°C to +80°C
Humidity Range (non-condensing):	15 - 90% RH
Response Time (T50):	< 10 seconds
Response Time (T90):	< 30 seconds
Long Term Sensitivity Drift:	< 10% per year
Linearity at Standard Range:	< 10% FS
Repeatability:	> 98% of signal
Zero Current at Normal Conditions:	+/- 100nA
Sensitivity:	0.4 – 10.0 nA/ppm
Sensor Warm-Up Time (typical):	20 seconds
Temperature Dependence:	< 0.5% per °C
Sensor dimensions:	4 series design Ø 20.3mm; Height 21.5mm
Warranty Period:	2 years from date of despatch
Part Number:	2112B010410



HYDROGEN H2 SS SENSOR – 4 SERIES

CROSS SENSITIVITY DATA

GAS	CONCENTRATION	READING IN PPM
Ammonia NH ₃	25 ppm	0
Carbon Dioxide CO ₂	5000 ppm	0
Carbon Monoxide CO	50 ppm	37
Chlorine Cl ₂	1.0 ppm	0
Hydrocarbons unsaturated	1%	0
Hydrogen H ₂	1000 ppm	1000
Hydrogen Sulphide H ₂ S	10 ppm	440
Isopropanol C ₃ H ₇ OH	1000 ppm	To be advised
Nitric Oxide NO	20 ppm	0
Nitrogen Dioxide NO ₂	10 ppm	To be advised
Ozone O ₃	0.5 ppm	0
Sulphur Dioxide SO ₂	20 ppm	0

Note: Test conditions at 20°C / 1013 hPa, flow rate > 500 qcm/min. Cross-sensitivity gases are not target gases. Relationship can change over time.

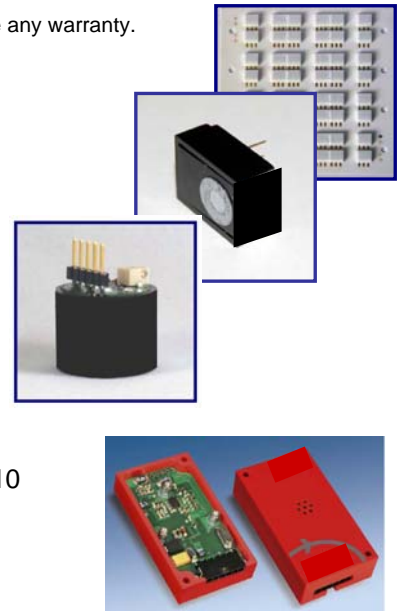
Please note that soldering or gluing the sensor pins will damage the sensor and invalidate any warranty. Please utilise PCB pin sockets for connection.

SENSOR OPTIONS

The H₂ SS is also available in different sensor options ideal for both small and volume requirements, with integrated 1.8V or 5V output transmitter and as housed measuring systems:

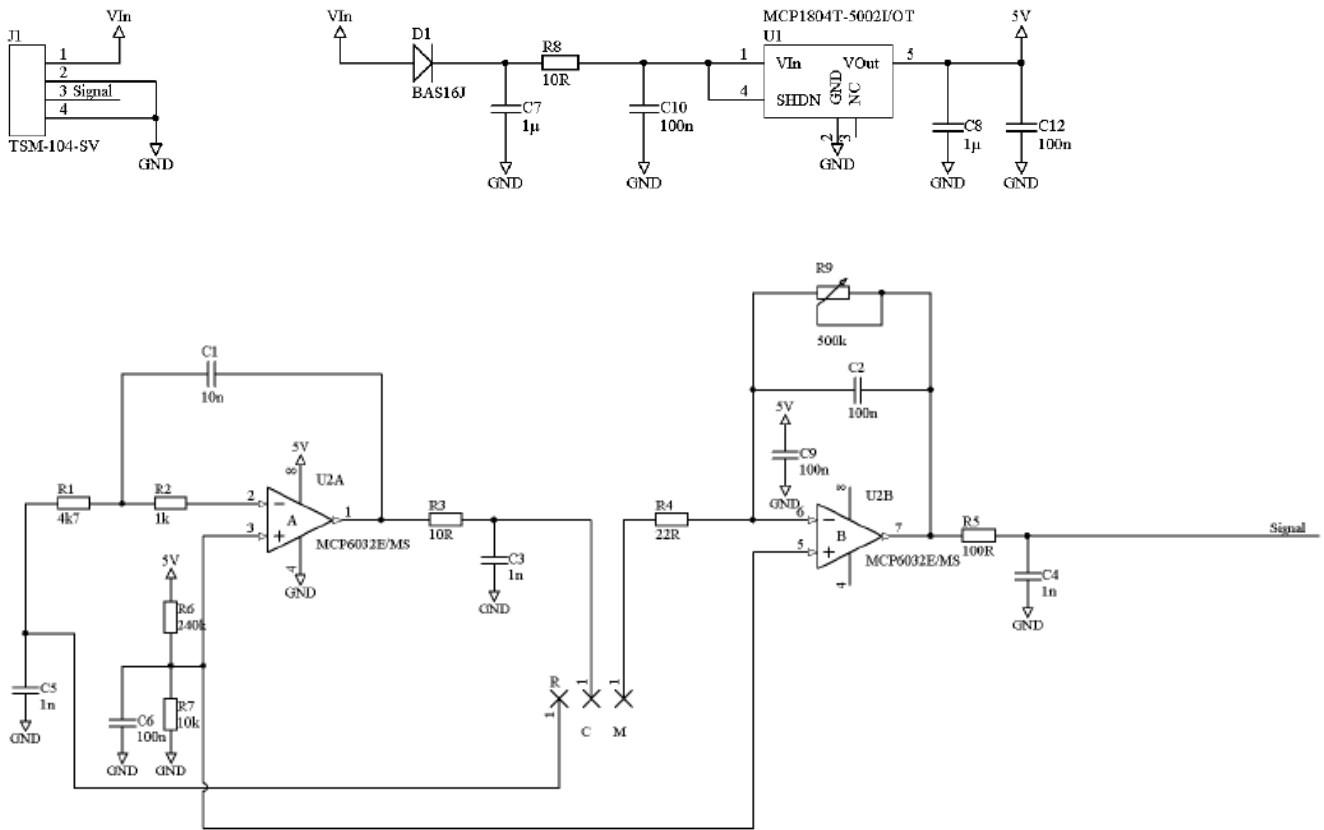
Raw sensor: part no. 2112B010210
Micro sensor: part no. 2112B012710
4 series sensor: part no. 2112B010410
Sensor with 1.8V or 5V transmitter: part no: 2112B012410/3410

H₂ Gas Measuring System in PVC housing: part no. 2112B0090
H₂ Gas Measuring System in aluminium housing: part no. 2112B24420



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EXAMPLE CIRCUIT DIAGRAM



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