

NO_x Sensor

P/N 56.03.004, P/N 56.03.003

Dimensions

- Length of probe 24 mm (0.95")
- Length of sensing element 83.3 mm (3.28")
- Evaluation unit (length x width x height) 104.4 mm x 72.8 mm x 24.3 mm (4.11" x 2.87" x 0.96")
- Length of connection cable 980 mm (38.58")

Measuring Ranges

- Nitrogen oxide (NO_x) 0 ppm to 3,012 ppm
- Measuring accuracy nitric oxide (NO)

Measurement	Accuracy at O ₂ ≥ 1 vol%
0 ppm	± 10 ppm abs
90 ppm	± 12 ppm abs
1,500 ppm	± 10 % rel

- Cross sensitivity NO_x measurement Ammonia (NH₃) typ. 110 %
- Sensitivity NO_x measurement Nitrogen dioxide (NO₂) typ. 85 %
- Oxygen (O₂) 0 % to 20.95 %
- Measuring accuracy oxygen (O₂)

Measurement	Accuracy	Composition
0 %	± 0.3 % abs	N ₂ with 1 % H ₂ O
8.29 %	± 8 % rel	8.29 % O ₂ in N ₂ ; 0 % H ₂ O
12 %	± 8 % rel	12 % O ₂ in N ₂ ; 0 % H ₂ O
20.95 %	± 8 % rel	20.95 % O ₂ in N ₂ ; 0 % H ₂ O

- Exhaust gas measurement temperature range -40 °C to +850 °C (-40 °F to +1,562 °F)
- Exhaust gas velocity 10 m/s to 100 m/s
- NO₂ correction factor (K_{NO2}) 0.85 (set ex works)

Mechanical Data

- IP protection rating as per ISO 20653:2013 IP 6K9K with mating plug of same protection rating connected to evaluation unit and sensing element mounted in suitable welding boss from MOTORTECH
- Service life 8,000 operating hours with ambient temperature max. +90 °C (+194 °F) at evaluation unit

Climatic Environmental Conditions

- Operating temperature evaluation unit -40 °C to +90 °C (-40 °F to +194 °F)
- Operating pressure range 600 mbar abs to 1,500 mbar abs



Electrical Data

- Power supply 24 V DC (16 V DC to 32 V DC)
- Maximum power consumption 75 W
- Required current in measuring operation Max. 1.7 A_{rms}, 6.3 A_{peak}
- Connector evaluation unit 5-pole, connector, Hirschmann, MLK, variant 1, code A

Communication

- Interface CAN 2.0B
- Network protocol CAN SAE J1939
- Data rate CAN bus 250 kbit/s

Overview Drawings
