

## New Product

# Product Announcement: New NO<sub>x</sub> Sensor 56.03.003

MOTORTECH replaces the existing NO<sub>x</sub> sensor 56.03.002 with the new product with the part number **56.03.003**. This sensor is also CE certified and intended for use with the MOTORTECH NO<sub>x</sub> Monitoring.

### Application in EasyNO<sub>x</sub> NO<sub>x</sub> Monitoring

The sensor is provided with its introduction to the original equipment with the EasyNO<sub>x</sub> NO<sub>x</sub> Monitoring and is part of the standard scope of supply. The sensor can be used as a replacement part for the existing EasyNO<sub>x</sub> installation as well as ordered individually as a spare part for it.

### Application as NO<sub>x</sub> Sensor Single Part

The NO<sub>x</sub> sensor can be ordered as an item consisting of measuring probe, connecting cable and electronic housing. These individual parts are not available separately. The use in other NO<sub>x</sub> monitoring systems or SCR applications in the field of stationary gas engines is permitted.

Other applications are not permitted or must be approved by MOTORTECH. For installation, a suitable welding boss and sealing plug can be offered separately, as well as a 15 m CAN bus connection harness.



## Technical Data

- Power supply: 24 V DC
- Cable length: 90 cm
- Connection thread: M20 x 1.5
- Max. exhaust gas temperature: 850 °C
- NO<sub>x</sub> measuring range: 0–3012 ppm
- O<sub>2</sub> measuring range: 0–20.9 Vol %
- 5-Pin Hirschmann Connector
- CAN communication: SAE J1939, 250 kBaud
- Service life expectancy: 8.000 h at 90 °C of evaluation unit

## ! Notice

The new sensor has a different factory-set  $k_{NO_2}$  factor than the predecessor model. In the EasyNO<sub>x</sub> settings, the  $k_{NO_2}$  factor must be reset to 0.85 as a fixed manufacturer-specific value of the sensor (previously 0.8) as soon as sensor 56.03.003 is installed.

It is recommended to enter the installation date in the operator logbook of the EasyNO<sub>x</sub>.

### DISTRIBUTION

Customers / others	Yes
Representatives and Sales Partners	Yes
OEM partners	Yes
MOTORTECH subsidiaries	Yes

## New Product



### Comparison of Technical Data

	56.03.002	56.03.003
Power supply	24 V DC	24 V DC
Ambient temperature min. (electronics)	-40 °C	-40 °C
Ambient temperature max. (electronics)	+115 °C	+90 °C
Exhaust gas temperature max.	800 °C	850 °C
Permissible temperature harness	200 °C	170 °C
Service life expectancy	6.000 h @ 90 °C electronics	8.000 h @ 90 °C electronics
NOx measuring range	0...1500 ppm	0...3012 ppm
Oxygen measuring range	0-20.9 %	0-20.9 %
NOx accuracy	10 ppm / 10 % // 15 % >500 ppm	10-12 ppm (8-10 % rel.)
O <sub>2</sub> accuracy at 12 % O <sub>2</sub>	±5% (rel.)	±6% (rel.)
k factor (factory set)	0.80	0.85
Sensor thread	M20 x 1.5	M20 x 1.5
Mating plug connector	Hirschmann MLK	Hirschmann MLK
Pin assignment	Pin1: Ubatt Pin2: Gnd Pin3: CAN low Pin4: CAN high Pin5: Ident (open => standard address; GND => alternative address)	Pin1: Ubatt Pin2: Gnd Pin3: CAN low Pin4: CAN high Pin5: Ident (open => standard address; GND => alternative address)
CAN bus	SAEJ1939	SAEJ1939
Transfer rate	250 kBaud	250 kBaud
Repeat time	50 msec	50 msec



The new sensor 56.03.003 can be connected and used without restrictions like 56.03.002 with the AIO.GAS (ECU list 1. 8) via CAN bus.

### Order information

P/N	Description
56.03.003	NO <sub>x</sub> sensor, 24 V DC
07.81.074	Welding boss NO <sub>x</sub> sensor (included in EasyNO <sub>x</sub> scope of supply)
75.90.1108	Closing screw for welding boss (included in EasyNO <sub>x</sub> scope of supply)
06.30.172-15	Harness for NO <sub>x</sub> sensor, 15 m length
06.30.173-15	Harness for 2 NO <sub>x</sub> sensors, 15 m length

#### DISTRIBUTION

Customers / others	Yes
Representatives and Sales Partners	Yes
OEM partners	Yes
MOTORTECH subsidiaries	Yes