

## Service Note - 23001

Regarding MES1001 NO<sub>X</sub>, SO2 and NH3 Sensor

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## Dear Customer.

At Danfoss IXA our products are subjects to continuous development and updates. We strive to keep our customers informed regarding these developments and updates hence we send you this Service Note for MES1001. Kindly read the below information.

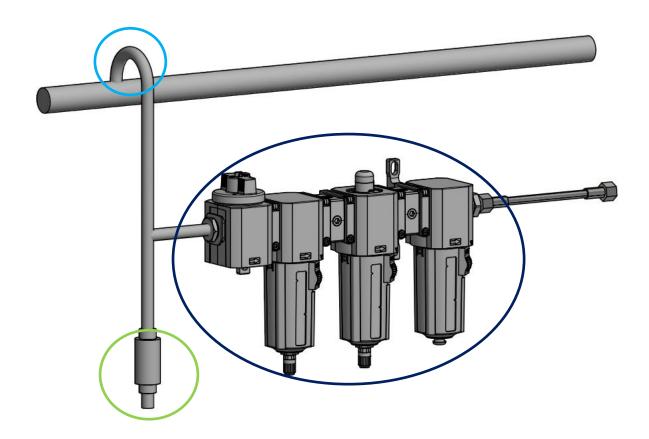
## Recommended filter installation and pipeline arrangements for MES1001 sensor:

A high quality of air must be maintained in the air supply line to the sensors, and it must be free of oil, condensed water, particulate matter, and any kind of impurities in order to keep the sensor in good working condition. Poor quality of air mixed with oil can contaminate the sensor parts for example optical fiber, reflector, lens, air block results damage to the sensor. The typical compressor for the main air supply is lubricated with oil and some of this lubricant can find its way out to the airline. This poses a threat to the sensor and affects their operation. Both oil and water must be removed before the compressed air is supplied to the sensor.

Lubricant content should be close to zero ppm. A filter must be installed before the sensor to ensure that the air delivered to the sensor is compliant with ISO 8573-1:2010 (1:7:2) at all times.

The recommended installation is equipped with air drier/cooler and oil filter with drainage at the main air supply. At the point of use, the piping should be made so that the connection is made at the top on the main supply pipe. And the point of use line designed so that water and oil can be trapped and purged before entering the filter block at the sensor.





Closer view of pneumatic air supply line includes a) gooseneck bent for arresting water/oil shown in light blue circle, b) automatic drain for water and oil shown in green circle, c) filter assembly shown within dark blue circle before the sensor.

Previous Service Notes can be found at our https://danfoss-ixa.com/services-and-support.

Best regards,

Service & Support

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