



GAS AND FLAME DETECTION
DETEKCE PLYNU A PLAMENE

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DEGA NB III

GAS DETECTION TRANSMITTER



- Detection types: catalytic, electrochemical, infrared, photoionization (PID), semiconductor
- Detection of toxic and combustible gases and oxygen
- Protection level IP54
- Produced in compliance with standard SIL



ISO 9001:2015
Quality management Systems
Système de Qualité
www.sgs.com

Gas detection transmitter **DEGA NB III**

DEGA NB III transmitter is a part of the gas detection system. Transmitter is located in monitored premises in which critical situations due to accumulation of flammable or toxic substances can occur. The transmitter can be connected to control panels DEGA UPA III, DEGA UKA III and DEGA UDA III. Standard Output : RS485, with 1x cable gland.

TECHNICAL SPECIFICATION:

Power supply:	8-28 V DC
Output:	4 - 20 mA RS485 (DEGA protocol)
Cover protection level:	IP 54
Input:	1,2 W
Dimensions (WxHxD):	100 x 110 x 40 mm
Weight:	0,3 kg
Sensor technology:	catalytic, electrochemical, infrared, photoionization, semiconductor
Estimated life of sensor in clean environment:	catalytic (1-2 years),electrochemical (1-3 years),infrared (minimum 5 years), photoionization (1 year), semiconductor (1-2 years)
Relative humidity of the ambient air	max. 95%
List of detected substances:	BE1 - environment without danger of explosion

EXPANSION MODULES:

DEGA NB III RS485

MODBUS, Internal module in transmitter

Detected substance	Formula	Range	Sensor	Product type
Flammable and combustible gases	LEL	0-100 % LEL	CL	DEGA NBHC-CL 100 III
Flammable and combustible gases	LEL	0-100 % LEL	IL	DEGA NBHC-IL 100 III
VOC	C3H6O	0-5000 ppm	PID	DEGA NBVOC-PID III
Ammonia	NH3	0-100 ppm	EL	DEGA NBA-EL 100 III
Ammonia	NH3	0-1000 ppm	EL	DEGA NBA-EL 1000 III
Gasoline vapor	C6H14	0-100 % LEL	CL	DEGA NBB-CL 100 III
Hydrogen bromide	HBr	0-20 ppm	EL	DEGA NBHBr-EL 20 III
Butane	C4H10	0-100 % LEL	CL	DEGA NBP-CL 100 III
Butane	C4H10	0-100 % LEL	IL	DEGA NBP-IL 100 III
Butane	C4H10	0-5000 ppm	PID	DEGA NBP-PID III
Ethanol	C2H6O	0-100 % LEL	IL	DEGA NBC2H5OH-IL 100 III
Ethanol	C2H6O	0-450 ppm	PID	DEGA NBC2H5OH-PID 450 III
Ethene	C2H4	0-100 % LEL	IL	DEGA NBC2H4-IL 100 III
Ethylenoxid	C2H4O	0-10 ppm	EL	DEGA NBC2H4O-EL 10 III
Ethylene oxide	C2H4O	0-100 % LEL	IL	DEGA NBC2H4O-IL 100 III
Ethene	C2H4	0-10 ppm	EL	DEGA NBC2H4-EL 10 III
Formaldehyde	CH2O	0-10 ppm	EL	DEGA NBCH2O-EL 10 III
Phosphine	PH3	0-5 ppm	EL	DEGA NBPH3-EL 5 III
Hexane	C6H14	0-100 % LEL	IL	DEGA NBC6H14-IL 100 III
Chlorine	Cl2	0-20 ppm	EL	DEGA NBCL2-EL 20 III
Hydrogen chloride	HCl	0-20 ppm	EL	DEGA NBHCL-EL 20 III
Hydrogen chloride	HCN	0-50 ppm	EL	DEGA NBHCN-EL 50 III
Oxygen	O2	0-100 % LEL	EL	DEGA NBO2-EL 100 III
Methane	CH4	0-100 % LEL	CL	DEGA NBM-CL 100 III

Detected substance	Formula	Range	Sensor	Product type
Methane	CH4	0-100 % LEL	IL	DEGA NBM-IL 100 III
Nitrogen dioxide	NO2	0-20 ppm	EL	DEGA NBN02-EL 20 III
Nitric oxide	NO	0-250 ppm	EL	DEGA NBN0-EL 250 III
Nitrous oxide	N2O	0-1 % LEL	IL	DEGA NBN20-IL 1 III
Chlorine dioxide	ClO2	0-5 ppm	EL	DEGA NBCL02-EL 5 III
Sulfur dioxide	SO2	0-20 ppm	EL	DEGA NBSO2-EL 20 III
Carbon monoxide	CO	0-1000ppm	EL	DEGA NBCO-EL 1000 III
Carbon dioxide	CO2	0-5 % vol.	IL	DEGA NBCO2-IL 5 III
Ozone	O3	0-5 ppm	EL	DEGA NBO3-EL 5 III
Pentane	C5H12	0-100 % LEL	IL	DEGA NBC5H12-IL 100 III
Hydrogen peroxide	H2O2	0-100 ppm	EL	DEGA NBH2O2-EL 100 III
Propylene	C3H6	0-100 % LEL	IL	DEGA NBC3H6-IL 100 III
Silane	SiH4	0-50 ppm	EL	DEGA NBSiH4-EL 50 III
Hydrogen sulfide	H2S	0-50 ppm	EL	DEGA NBH2S-EL 50 III
Hydrogen sulfide	H2S	0-2000 ppm	EL	DEGA NBH2S-EL 2000 III
Hydrogen	H2	0-1000 ppm	EL	DEGA NBH-EL 1000 III
Hydrogen	H2	0-100 % LEL	CL	DEGA NBH-CL 100 III
Hydrogen	H2	0-4000 ppm	EL	DEGA NBH-EL 4000 III
Other toxic gases	-	According gas type	EL	More than 50 other gases
Other combustible gases	-	According gas type	IL	More than 50 other gases
Other combustible gases	-	According gas type	CL	More than 50 other gases



Transmitter is not designed for detection and monitoring in industrial and commercial premises which required ATEX certification. For ATEX application we recommend transmitters DEGA NS II (zone 2) or DEGA NS III (zone 1).

AVAILABLE ACCESSORIES



Cover for transmitter NB III-mechanical



Cover for transmitter NB III Stainless steel 316



DEGA GAS INLET NB III calibration adapter (cup)



DEGA WATER CAP Splash cap, NB III



Sensor DEGA NB III