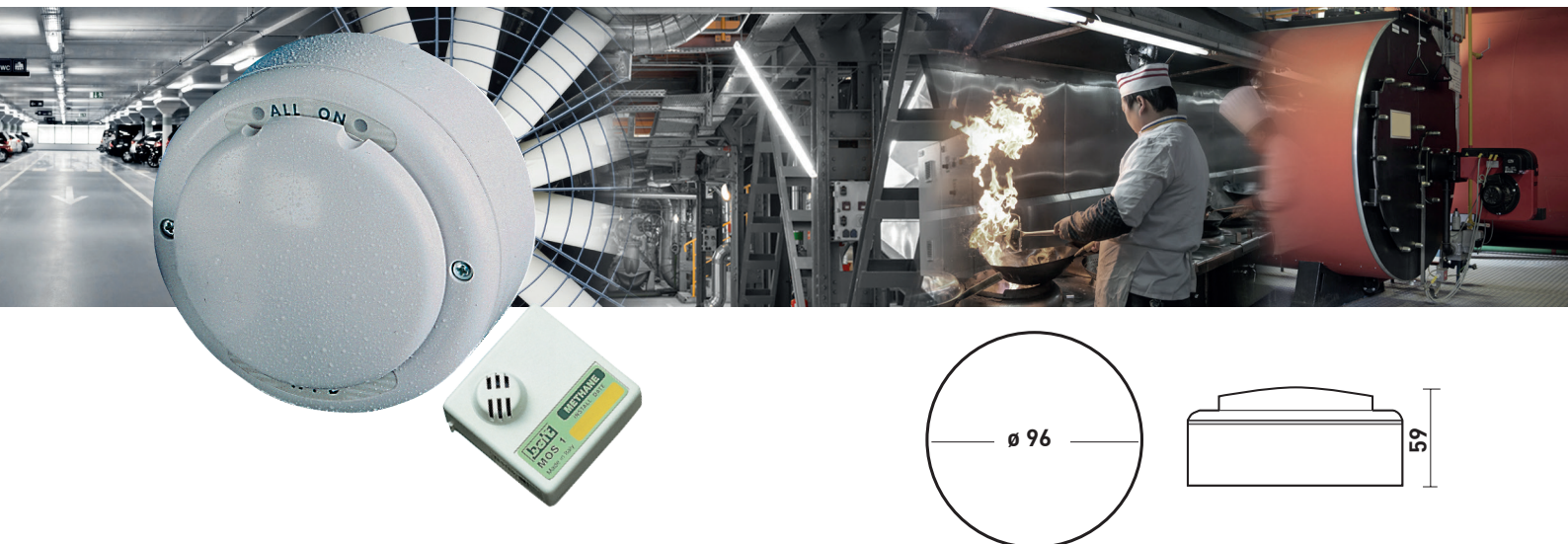


Double threshold gas detector

WPDBR/MOS

with plug-in sensor module
internal buzzer and alarm relay

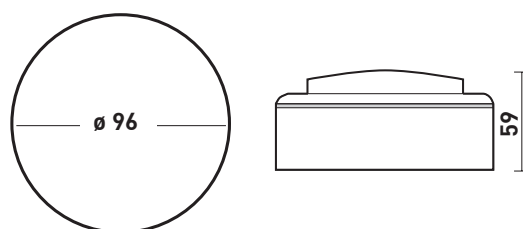


WPDBR/MOS gas detectors use plug-in replaceable catalytic bead sensor modules (MOS). MOS modules are available for combustible gases.

The detectors are designed to be used both in industry and tertiary premises, in all areas not classified as potentially explosive by ATEX directive.

Features

- High quality sensors provide reliable protection, accurate performance and long life
- Plug-in replaceable sensor module
- Factory tested and calibrated, ready for installation
- Fixed threshold output 12/20 mA
12/20 mA (12V models) - 24/40 mA (24V models)
- Selectable alarm threshold (see table)
- Sensor fault indication
- Low current consumption
- IP55 enclosure rating



Ordering Information

Models - 12 Vdc power supply

B20-WPD12BR/M1	with MOS1 - Methane (CH ₄)
B20-WPD12BR/M2	with MOS2 - L.P.G.
B20-WPD12BR/M4	with MOS4 - Hydrogen (H ₂)
B20-WPD12BR/M5	with MOS5 - Gasoline vapors

Models - 24 Vdc power supply

B20-WPD24BR/M1	with MOS1 - Methane (CH ₄)
B20-WPD24BR/M2	with MOS2 - L.P.G.
B20-WPD24BR/M4	with MOS4 - Hydrogen (H ₂)
B20-WPD24BR/M5	with MOS5 - Gasoline vapors

For the CO version install B20-WPD8R/CA3 model and read carefully the datasheet.

Accessories and spares

B95-MOS1	MOS1 module - Methane (CH ₄)
B95-MOS2	MOS2 module - L.P.G.
B95-MOS4	MOS4 module - Hydrogen (H ₂)
B95-MOS5	MOS5 module - Gasoline vapors
B98-BG1	Gas bottle 50 ml propane-butane (for test combustible gas)

For the CO version install pug-in replaceable sensor module B95-CA3 and read carefully the datasheet.

Compatible controllers

(only for 12 Vdc power supply models)

B20-UN2A	UNIKA 2 control unit
B20-UN4A	UNIKA 4 control unit

Specifications

Power

Power input:	WPD12BR: 12 Vdc [-15% / +10%] WPD24BR: 24 Vdc [-15% / +10%]
Power consumption:	see table

Environmental

Operating temperature:	see table
Relative humidity:	see table
Enclosure rating:	IP55

Mechanical

Dimensions:	Ø 69 x 59 mm
Weight:	173 gr
Color:	Light grey (RAL 7035)
Housing:	PC-ABS UL94-V0
Mounting:	Wall mounted

Sensor

Sensor:	Plug-in interchangeable sensor module
Type:	Catalytic bead (combustible gases)
Life expectancy:	5 years
Stabilization time:	< 8 hours (combustible gases);
Warm-up time:	< 1 minute
Alarm setpoints:	see table
Further features:	Highly selective Sensor fault indication

Gas	Sensor module	Response time (T)	Relative humidity*	Operating temperature	Power consumption		Pre-alarm setpoint	Alarm setpoint
					12Vdc	24Vdc		
CH ₄	MOS1	< 15 s	5÷95%	-10/+50°C	77 mA	60 mA	6% L.E.L.	10% L.E.L.
L.P.G.	MOS2	< 15 s	5÷95%	-10/+50°C	77 mA	60 mA	6% L.E.L.	10% L.E.L.
H ₂	MOS4	< 15 s	5÷95%	-10/+50°C	77 mA	60 mA	6% L.E.L.	10% L.E.L.
Gasoline vapors**	MOS5	< 15 s	5÷95%	-10/+50°C	77 mA	60 mA	12% L.E.L.	20% L.E.L.

* non-condensing ** Pentane

Transmitter

Transmitter:	Fixed threshold transmitter
Air:	4 mA [12V] - 8 mA [24V]
Pre-alarm:	12 mA [12V] - 24 mA [24V]
Alarm:	> 20 mA [12V] - 40 mA [24V]

Short-circuit protection
RL 250 Ω ; for positive input controllers;
version for negative input controllers available on request

Led indicators

Green:	Power on/sensor module correctly installed
Red:	Alarm/sensor module not installed or fault

Approvals

EMC (EN 50270)

Warranty

2 years



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www.belt-detection.com

DS-EN-WPDBRMOS-20230726

Double threshold gas detector

WPDBR/MOS

Typical applications

- Industry, tertiary areas
- Underground parking areas, garages
- Handicraft and school laboratories
- Industrial kitchens, canteens and restoration facilities
- Gas detection nearby gas powered air heaters
- Boiler rooms
- Chemical laboratories and other areas classified as non hazardous



This data sheet replaces previous ones.
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