

IRON/CAL

SERIAL and 4÷20 mA

COMBUSTIBLE GAS DETECTOR



The IRON/CAL series combustible gas detectors use professional catalytic sensors.

They are designed to be connected to analytic control panels with 4÷20 mA inputs (like MODULA 4 and MODULA 8) or to digital control panels via RS485 serial connection (like MODULA 40 and MODULA 128).

IRON detectors are suitable for use in all industrial and commercial applications where the detection of combustible gases is required.

IRON detectors are particularly suitable for the detection of combustible gases in covered or underground car parks, garages and thermal power stations.

The head of the IRON/CAL sensor module uses a high quality and precision catalytic sensor combined with industrial-type control electronics, it is replaceable to allow rapid and reliable maintenance of the systems and has a operating life of 5 years.

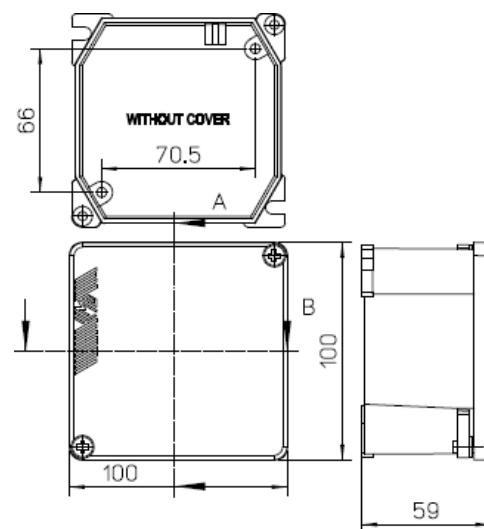
The aluminium alloy container makes the detector particularly suitable for environments with strong chemical aggression, including the marine aggression, giving it a high mechanical resistance.

Thanks to the high selectivity, the IRON/CAL detectors are resistant to interfering gases or combustible vapours often present in industrial environments.

The detectors comply with the CEI 216/5-3 standard for combustible gas detectors used in industrial and commercial environments.

Features

- ▲ Linear transmitter 4÷20 mA (3 wires) and digital RS485
- ▲ Wide range of supply voltage (10÷30 Vdc)
- ▲ Catalytic sensor
- ▲ Low energy detector
- ▲ Corrosion and impact resistant aluminium container
- ▲ Degree of protection IP65
- ▲ Fault signalling during preheating or in case of sensor failure (CEI 216/5-3)
- ▲ Standard versions for 21 types of gas and versions for gas and / or with different measuring ranges on request



AVAILABLE VERSIONS

B40-IRON/CAL01	IP65 4 ÷ 20 mA 10/30 Vdc (CH ₄) METHANE
B40-IRON/CAL02	IP65 4 ÷ 20 mA 10/30 Vdc LPG
B40-IRON/CAL04	IP65 4 ÷ 20 mA 10/30 Vdc HYDROGEN
B40-IRON/CAL05	IP65 4 ÷ 20 mA 10/30 Vdc GASOLINE VAPOUR
B40-IRON/CAL06	IP65 4 ÷ 20 mA 10/30 Vdc PROPANE
B40-IRON/CAL07	IP65 4 ÷ 20 mA 10/30 Vdc BUTANE
B40-IRON/CAL08	IP65 4 ÷ 20 mA 10/30 Vdc ETHYLENE
B40-IRON/CAL09	IP65 4 ÷ 20 mA 10/30 Vdc ETHANOL
B40-IRON/CAL10	IP65 4 ÷ 20 mA 10/30 Vdc METHANOL
B40-IRON/CAL11	IP65 4 ÷ 20 mA 10/30 Vdc ACETYLENE
B40-IRON/CAL12	IP65 4 ÷ 20 mA 10/30 Vdc PENTANO
B40-IRON/CAL13	IP65 4 ÷ 20 mA 10/30 Vdc AMMONIA
B40-IRON/CAL14	IP65 4 ÷ 20 mA 10/30 Vdc TOLUENE
B40-IRON/CAL15	IP65 4 ÷ 20 mA 10/30 Vdc XYLOL
B40-IRON/CAL16	IP65 4 ÷ 20 mA 10/30 Vdc ACETONE
B40-IRON/CAL17	IP65 4 ÷ 20 mA 10/30 Vdc HEXANE
B40-IRON/CAL18	IP65 4 ÷ 20 mA 10/30 Vdc ETHANE
B40-IRON/CAL19	IP65 4 ÷ 20 mA 10/30 Vdc METHYLETHYLKETONE
B40-IRON/CAL20	IP65 4 ÷ 20 mA 10/30 Vdc CYCLOPENTANE
B40-IRON/CAL21	IP65 4 ÷ 20 mA 10/30 Vdc PROPYLENE
B40-IRON/CAL22	IP65 4 ÷ 20 mA 10/30 Vdc ISOBUTANE

Accessories

B98-BG1	50ml propane-butane spray can for testing
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COMPATIBLE CONTROL PANELS

MODULA4	Control panel with linear line 4÷20 mA - 4 zones
MODULA8	Control panel with linear line 4÷20 mA - 8 zones
MODULA40	Control panel with linear line 4÷20 mA - 8 zones and 32 zones on RS485 communication line
MODULA128	Control panel with linear line 4÷20 mA - 8 zones and 128 zones on RS485 communication line

Compatible with all control panels equipped with 4 ÷ 20 mA inputs



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IRON/CAL

COMBUSTIBLE GAS DETECTOR

Applications

- ▲ Industry, tertiary
- ▲ Underground parking, garages
- ▲ Craft and school laboratories
- ▲ Kitchens, canteens, catering
- ▲ Detection of gas leaks near gas-fired hot air generators
- ▲ Thermal power plants
- ▲ Chemical laboratories

Technical specifications

POWER SUPPLY

Power supply voltage: 10÷30 Vdc

Electrical absorption: 95 mA a 10 Vdc; 50 mA a 30 Vdc

WORKING ENVIRONMENT

Operating temperature: -10 / + 50°C

Relative humidity: 5 + 95% without condensation

Degree of protection: IP65

MECHANICS

Dimensions: 130 x 100 x 59 mm

Weight: 520 gr

Color: Grey (RAL 7040)

Body in corrosion resistant aluminium alloy; stainless steel
Container: screws and sensor head
Epoxy painting

Mounting: Wall

SENSOR

Type: Catalytic

Preheating time: < 30 seconds

0-30% L.E.L. per all gases
Measuring range: Based on specific needs, it is possible to provide customized measuring ranges (max 0-50% L.E.L.)

Average life: 5 years

Further characteristics: High selectivity, resistant to exposure to interfering gases and vapours

COMMUNICATIONS

Type: linear 4 ÷ 20 mA (3 wires), digital RS485

Range: 4÷20 mA

Shutdown: 0 mA

Failure: < 2 mA

Overrange: 22 mA
Short circuit output protection

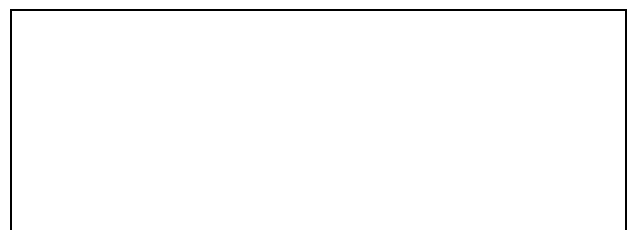
COMPLIANCE

EN 50270
CEI 216/5-3

WARRANTY Two (2) years



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