

Duct Sensor CO₂

For CO₂ measurement in duct applications.
Dual channel CO₂ technology.
NEMA 4X / IP65 rated enclosure.


Type Overview

Type	Output signal active CO ₂	Output signal active temperature
22DC-13	4...20 mA	-
22DTC-13	4...20 mA	4...20 mA

Technical Data

Electrical data	Power Supply DC	15...24 V, ±10%, 1.5 W
	Cable entry	Cable gland PG11 Ø6...10 mm, with strain relief Ø6...8 mm
Functional data	Sensor Technology	NDIR (non dispersive infrared) with stainless steel wire mesh filter
	Output signal active note	Current output: max. 500 Ω load
	Media	Air
Measuring data	Measured values	CO ₂ Temperature
	Measuring range CO ₂	0...2000 ppm
	Measuring range temperature	0...50 °C [32...120 °F]
	Accuracy CO ₂	±75 ppm; >750 ppm: ±10% of measuring value
	Accuracy temperature passive	±0.5 °C @ 21 °C
Materials	Operating condition air flow	min. 0.3 m/s max. 10 m/s
	Cable gland	PA6, black
	Housing	Cover: Lexan, Belimo orange NCS S0580-Y6OR Bottom: Lexan, Belimo orange NCS S0580-Y6OR Seal: 0467 NBR70, black
	Probe material	PA6, black

Safety data	Ambient humidity	85% r.H., non-condensing
	Ambient temperature	0...50 °C [32...120 °F]
	Medium temperature	0...50 °C [32...120 °F]
	Operating condition air flow	min. 0.3 m/s max. 10 m/s
	Protection class IEC/EN	III Safety Extra-Low Voltage (SELV)
	Protection class UL	UL Class 2 Supply
	Certification IEC/EN	IEC/EN 60730-1
	Certification UL	pending
	Degree of protection IEC/EN	IP65
	Degree of protection NEMA/UL	NEMA 4X
	Quality Standard	ISO 9001
	Weight	0.26 kg

Remarks

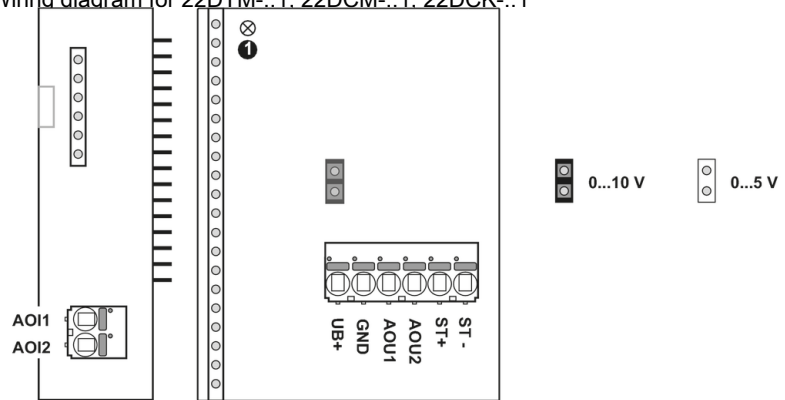
Information Self-Calibration Feature CO₂ All gas sensors are subject to drift caused by components, resulting in regular re-calibration or replacement units. However the dual channel technology integrates automatic self-calibration technology vs common used ABC-Logic sensors. Dual channel self-calibration technology is ideally suited for applications operating 24/7 hours such as hospitals or other commercial applications. Manual calibration is not required.

Accessories

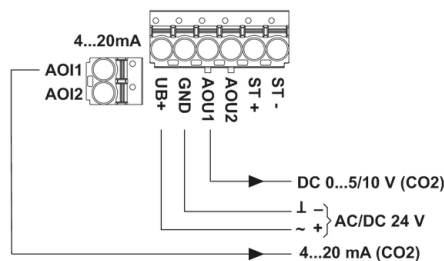
Scope of delivery	Description	Type
Mounting flange		
Optional accessories	Replacement filter Stainless steel, wire mesh	A-22D-A06

Wiring diagram

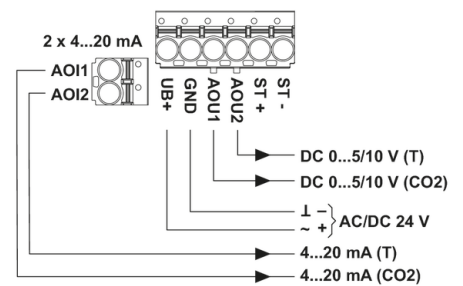
Wiring diagram for 22DTM-..1, 22DCM-..1, 22DCK-..1



22DC-13 / 22DC-53



22DTC-13 / 22DTC-53



① Status LED

Dimensions

