BELIMO

Sensor Datasheet 22D..C..-13

Duct Air Quality Sensor

Duct air quality sensor for detection of CO_2 with 0 to10 V output. Optional integrated temperature, humidity, VOC sensors and LCD display.

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 to 10 mm, with strain relief Ø6 to 8 mm, 1/2" conduit adapter included
Functional Data	Sensor Technology	NDIR (non dispersive infrared) with stainless steel wire mesh filter, dual channel calibration
	Output Signal Active Note	current output: max. 500 Ω load
	Media	air
Measuring Data	Measured Values	CO_2 temperature
	Measuring Range CO_2	0 to 2000 ppm
	Measuring range temperature	32°F to 120°F [0°C to 50°C]
	Accuracy CO_2	±(50 ppm + 3% of measuring value)
	Accuracy temperature passive	±0.5 °C @ 21 °C
	Operating Condition Air Flow	min. 1 ft/s [0.3 m/s] max. 33 ft/s [10 m/s]
Materials	Cable Gland	PA6, black
	Housing	cover: lexan, Belimo orange NCS S0580-Y6OR base: lexan, Belimo orange NCS S0580-Y6OR seal: 0467 NBR70, black
	Probe Material	PA6, black

Safety Data		
	Ambient Humidity	85% RH non-condensing
	Ambient Temperature	32°F to 120°F [0°C to 50°C]
	Medium Temperature	32°F to 120°F [0°C to 50°C]
	Operating Condition Air Flow	min. 1 ft/s [0.3 m/s] max. 33 ft/s [10 m/s]
	Protection Class IEC/EN	III safety extra-low voltage (selv)
	Protection Class UL	UL Class 2 Supply
	EU Conformity	CE Marking
	Certification IEC/EN	IEC/EN 60730-1
	Certification UL	cULus acc. to UL60730-1A/-2-9, CAN/CSA E60730-1:02/-2-9, CE acc. to 2004/108/EC and 2006/95/EC, NEMA 4X, IP65, UL Enclosure Type 4X
	Degree of Protection IEC/EN	IP65
	Degree of Protection NEMA/ UL	NEMA 4X
	Quality Standard	ISO 9001
	Weight	0.26 lbs

Remarks

Information Self-Calibration Feature CO_2

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 hosiptals or other commerical applications. Manual calibration is not required.

Accessories

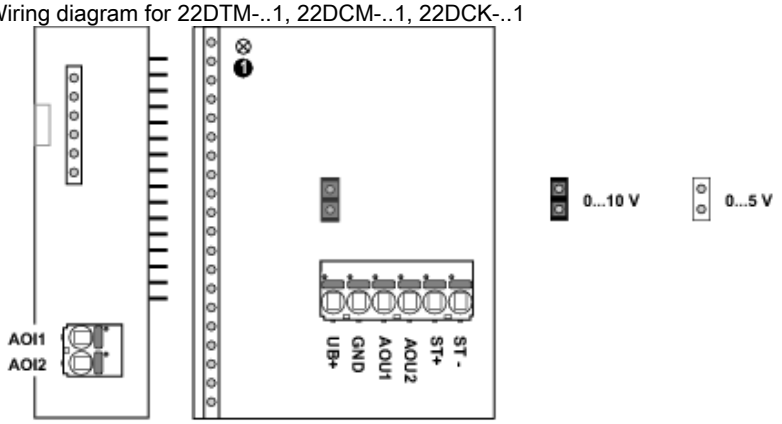
Scope of Delivery mounting flange

Optional Accessories

Description	Type
Replacement filter Stainless steel, wire mesh	A-22D-A06

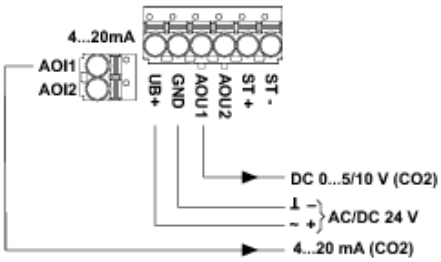
Wiring Diagram

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

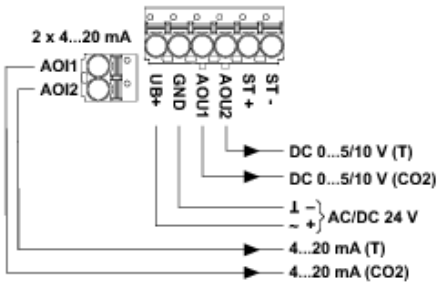


① Status LED

22DC-13 / 22DC-53



22DTC-13 / 22DTC-53



Dimensions