

Differential pressure sensor Water

Active sensor (0...10 V) for differential pressure measurement in HVAC systems. The sensor is suitable for water and water-glycol mixtures. The housing is made of stainless steel and is IP65 / NEMA 4 rated. Optional stainless steel or brass pipe connection adaptors also available.

Technical data sheet







Type Overview

Туре	Measuring range pressure [bar]	Output signal active pressure	Overpressure	Overpressure note	Burst pressure
22WDP-111	01	010 V	6 bar	Single-sided	21 bar
22WDP-112	02.5	010 V	6 bar	Single-sided	21 bar
22WDP-114	04	010 V	16 bar	Single-sided	21 bar
22WDP-115	06	010 V	16 bar	Single-sided	21 bar

Technical data

Electrical data	Nominal voltage	AC/DC 24 V		
	Nominal voltage range	AC 21.626.4 V / DC 13.526.4 V		
	Power consumption AC	0.9 VA		
	Power consumption DC	0.37 W		
	Electrical connection	Connector plug for wire 0.51.5 mm ²		
	Cable entry	Angle plug according to DIN 43650, construction A		
Functional data	Application	Water Water-glycol mixture		
	Voltage output	1 x 010 V, min. resistance 2 kΩ		
	Mechanical connection	pressure connector: G 1/4"		
	Mounting	Installation position unrestricted		
	Response time	740 ms		
Measuring data	Measured values	Differential pressure		
	Accuracy pressure	±1% of measuring range @ -575°C [23167°F]		
	Long-term stability	±2.5% / 10 yr.		
Materials	Housing seal	EPDM		
	Housing	Bottom: Stainless steel 1.4305 Top Cover: Die cast aluminium		
	Fluid wetted parts	Stainless steel 1.4301, Ceramic		
Safety data	Protection class IEC/EN	III, Protective Extra-Low Voltage (PELV)		
	Power source UL	Class 2 Supply		
	Degree of protection IEC/EN	IP65		
	Degree of protection NEMA/UL	NEMA 4		
	EU Conformity	CE Marking		
	Certification IEC/EN	IEC/EN 60730-1		
	Quality Standard	ISO 9001		
	Ambient humidity	Max. 95% RH, non-condensing		



Technical data sheet

Safety data Ambier

Ambient temperature Fluid temperature -10...50°C [15...122°F] -10...80°C [15...175°F] At a fluid temperature of < 2°C [< 36°F], frost protection must be guaranteed

Safety notes



This device has been designed for use in stationary heating, ventilation and air-conditioning systems and must not be used outside the specified field of application. Unauthorised modifications are prohibited. The product must not be used in relation with any equipment that in case of a failure may threaten humans, animals or assets.

Ensure all power is disconnected before installing. Do not connect to live/operating equipment.

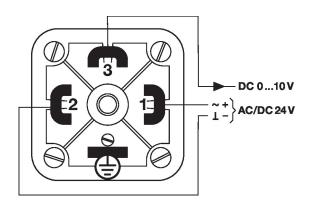
Only authorised specialists may carry out installation. All applicable legal or institutional installation regulations must be complied during installation.

The device contains electrical and electronic components and must not be disposed of as household refuse. All locally valid regulations and requirements must be observed.

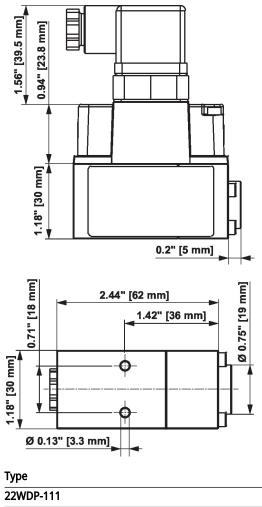
Accessories

Optional accessories	Description	Туре
	Pipe connector, Brass, Pipe 6 mm to G 1/4" (external thread), Set of 2 pcs.	A-22WP-A04
	Pipe connector, Stainless steel, Pipe 6 mm to G 1/4" (external thread), Set of 2 pcs.	A-22WP-A06
	Pipe connector, Brass, Pipe 8 mm to G 1/4" (external thread), Set of 2 pcs.	A-22WP-A08
	Pipe connector, Stainless steel, Pipe 8 mm to G 1/4" (external thread), Set of 2 pcs.	A-22WP-A10
	Mounting bracket for 22WDP, Metal	A-22WP-A11
Electrical accessories	Description	Туре
	Connecting cable 1.5 m for 22WP / 22WDP	EXT-MR-249184
	Connecting cable 5 m for 22WP / 22WDP	EXT-MR-249185

Wiring diagram







Weight
0.55 kg
0.55 kg
0.55 kg
0.55 kg

Further documentation

• Installation instructions