

Differential pressure sensor Water

Active sensor (0...20 mA) 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 NEMA 4 / IP65 rated. Optional stainless steel or brass pipe connection adaptors also available.

Technical data sheet







Type Overview

Туре	Measuring range pressure [psi]	Output signal active pressure	Overpressure	Overpressure note	Burst pressure
22WDP-531	015	420 mA	85 psi	Single-sided	300 psi
22WDP-532	030	420 mA	85 psi	Single-sided	300 psi
22WDP-534	050	420 mA	230 psi	Single-sided	300 psi
22WDP-535	0100	420 mA	230 psi	Single-sided	300 psi

Technical data

Electrical Data	Nominal voltage	DC 24 V	
	Nominal voltage range	DC 13.526.4 V	
	Power consumption DC	0.5 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	
	Current output	1x 420 mA, max. resistance 900 Ω	
	Mechanical connection	pressure connector: 1/4" NPT	
	Mounting	Installation position unrestricted	
	Response time	37 ms	
Measuring Data	Measured values	Differential pressure	
Measuring Data			
	Accuracy pressure	±1% of measuring range @ 23167°F [-575°C]	
	Long-term stability	±2.5% / 10 yr.	
Materials	Housing seal	EPDM	
	Housing	Bottom: Stainless steel 1.4305	
	2	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	
	Ambient temperature	-1050°C [15122°F]	



Technical data sheet

Safety Data Fluid temperature

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

22WDP-53.

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. Unauthorized 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.

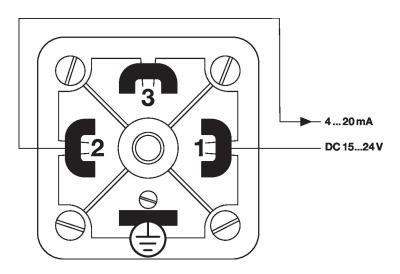
Only authorized specialists may carry out installation. All applicable legal or institutional installation regulations must be complied during installation.

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.

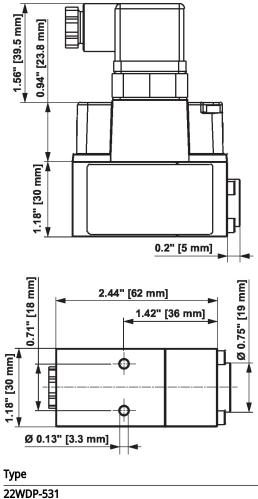
Accessories

Optional accessories	Description	Туре
	Pipe connector, Brass, Pipe 0.24" [6 mm] to 1/4" NPT (external thread), Set of 2 pcs.	A-22WP-A03
	Pipe connector, Stainless steel, Pipe 0.24" [6 mm] to 1/4" NPT (external thread), Set of 2 pcs.	A-22WP-A05
	Pipe connector, Brass, Pipe 0.3" [8 mm] to 1/4" NPT (external thread), Set of 2 pcs.	A-22WP-A07
	Pipe connector, Stainless steel, Pipe 0.3" [8 mm] to 1/4" NPT (external thread), Set of 2 pcs.	A-22WP-A09
	Mounting bracket for 22WDP, Metal	A-22WP-A11

Wiring Diagram







Туре	Weight
22WDP-531	1.2 lb [0.55 kg]
22WDP-532	1.2 lb [0.55 kg]
22WDP-534	1.2 lb [0.55 kg]
22WDP-535	1.2 lb [0.55 kg]

Further documentation

• Installation instructions