

Differential pressure sensor Water

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



5-year warranty

Type Overview

Type	Measuring range [psi] [psi]	Output signal active pressure	Overpressure	Overpressure note	Burst pressure
22WDP-511	0...15	0...10 V	85 psi	Single-sided	300 psi
22WDP-512	0...30	0...10 V	85 psi	Single-sided	300 psi
22WDP-514	0...50	0...10 V	230 psi	Single-sided	300 psi
22WDP-515	0...100	0...10 V	230 psi	Single-sided	300 psi

Technical data

Electrical Data	Nominal voltage	AC/DC 24 V
	Remark about nominal voltage range	AC 21.6...26.4 V / DC 13.5...26.4 V
	Power consumption AC	0.9 VA
	Power consumption DC	0.37 W
	Electrical connection	Connector Plug for wire 0.5...1.5 mm ²
	Cable entry	Angle plug According to DIN 43650, construction A
Functional Data	Application	water Water-glycol mixture steam
	Voltage output	1 x 0...10 V, min. resistance 2 kΩ
	Mechanical connection	pressure connector: 1/4" NPT
	Mounting	Installation location unrestricted
	Typical response time	740 ms
Measuring Data	Measured values	Differential pressure
Specification pressure	Accuracy	±1% of measuring range @ 23...167°F [-5...75°C]
	Long term stability	±2.5% / 10 yr.
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

Safety Data	Ambient temperature	-10...50°C [15...122°F]
	Fluid temperature	15...175°F [-10...80°C] At a fluid temperature of <36°F [<2°C], frost protection must be guaranteed steam inlet @ max. 15 psi [100 kPa]
Materials	Housing seal	EPDM
	Housing	Bottom: Stainless steel 1.4305 Top Cover: Die cast aluminium
	Fluid wetted parts	Stainless steel 1.4301, Ceramic

Safety Notes

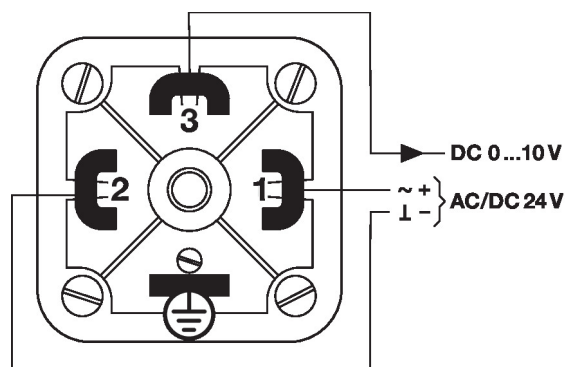

This device has been designed for use in stationary heating, ventilation and air-conditioning systems and must not be used outside the specified field of application. Unauthorized modifications are prohibited. The product must not be used in relation with any equipment that in case of a failure may threaten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

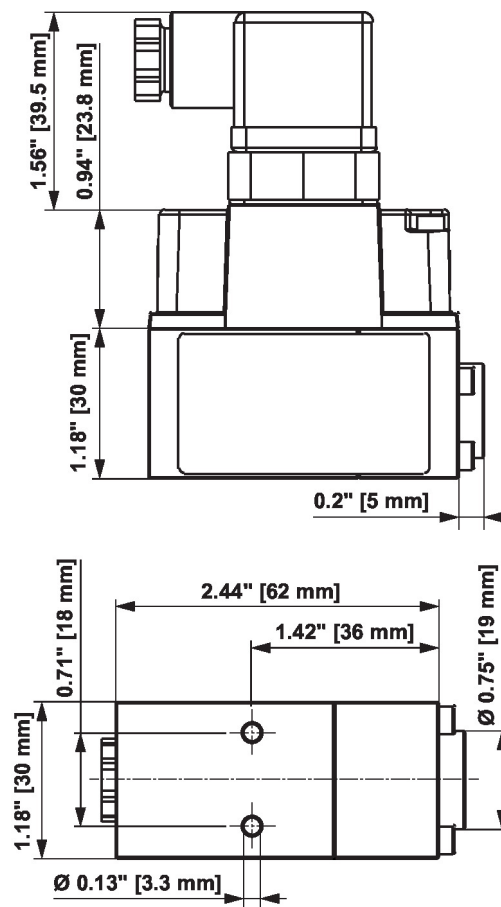
The device contains electrical and electronic components and must not be disposed of as household refuse. All locally valid regulations and requirements must be observed.

Accessories

Optional accessories	Description	Type
	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


Dimensions



Type	Weight
22WDP-511	1.2 lb [0.55 kg]
22WDP-512	1.2 lb [0.55 kg]
22WDP-514	1.2 lb [0.55 kg]
22WDP-515	1.2 lb [0.55 kg]

Further documentation

- Installation instructions