

Differential Pressure Sensor Water

Active sensor (0...10V) 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.



Type Overview

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

Technical Data

Electrical Data	Power supply DC	15...24 V, $\pm 10\%$, 0.37 W
	Power supply AC	24 V, , $\pm 10\%$, 0.9 VA
	Electrical connection	Connector Plug for wire 0.5...1.5 mm ²
	Cable entry	angle plug according to DIN 43650, construction A
Functional Data	Output signal active note	voltage output: min. 2 k Ω load
	Mechanical connection	pressure connector: 1/4" NPT
	Mounting	installation position unrestricted
	Application	water water glycol mixture
Measuring Data	Response time	< 10 ms
	Measuring values	differential pressure
	Accuracy pressure	< $\pm 1\%$ of measuring range @ 23...167°F [-5...75°C]
Materials	Housing seal	EPDM
	Housing	base: stainless steel 1.4305 Top Cover: Die cast aluminium
	Fluid wetted parts	Stainless steel 1.4301, ceramic
Safety Data	Ambient humidity	max. 95% r.H., non-condensing
	Ambient temperature	15...120°F [-10...50°C]
	Fluid temperature	15...175°F [-10...80°C]
	Protection class IEC/EN	III protective extra-low voltage (pelv)
	Protection class UL	UL Class 2 Supply
	EU Conformity	CE Marking
	Certification IEC/EN	IEC/EN 60730-1
	Degree of protection IEC/EN	IP65
	Degree of protection NEMA/UL	NEMA 4
	Quality Standard	ISO 9001

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.

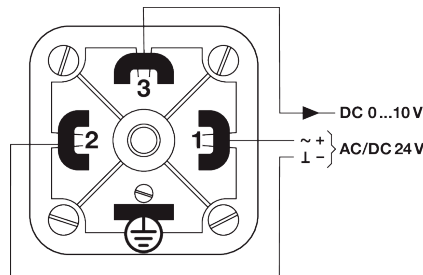
Ensure all power is disconnected before installing. Do not connect to live/operating equipment.

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.

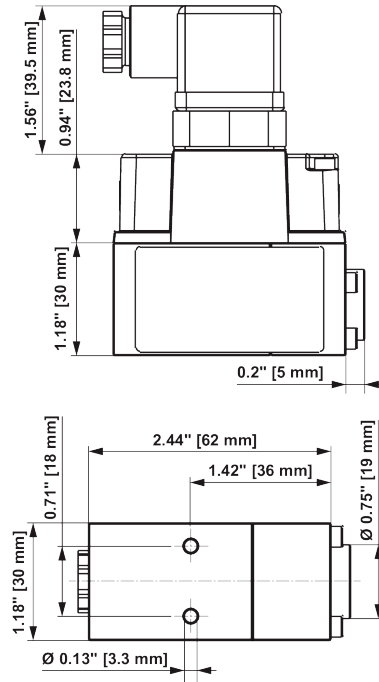
Accessories

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

Wiring Diagram


Dimensions

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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]