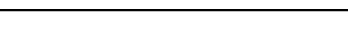


	DS4310en	Data Sheet	
PPE1-Series (dP)	Water Differential Pressure Sensor with Active Output		

The PPE1- Series (dP) is designed to measure differential water pressure in HVAC

heating and cooling systems with light aggressive liquids and refrigerants

The sensor is temperature compensated

The sensor operates with low power supply

The control output is active



Use	Compatible to all common HVAC DDC and Analog Controls systems, with/without BA Systems
	Used in all common HVAC applications
	Used in Commercial and Industrial Buildings

Features	Sensor with active output
	Laser welding, full-sealed construction; protection IP67
	Temperature compensated, high precision device
	Strong anti- interference ability, perfect long-term stability
	Professional and practical product design, withstands rough environmental conditions
	Easy to use, install and maintain

Order Code	Power Supply	Pressure Range	Output Signal	Accuracy Active	IP Rating	Connection Thread	Burst Pressure
PPE1G.EAa	AC/DC 24 V (±10 %)	0 to 0.5 bar	0–10 V	0.5% Full Scale @ 25 °C	IP67 to IEC60529	G1/4 " , female thread	300 % of Measuring Range
PPE1G.AAa		0 to 1 bar					
PPE1G.BAa		0 to 2.5 bar					
PPE1G.CAa		0 to 4 bar					
PPE1G.DAa		0 to 6 bar					
PPE1G.EDa	DC 24 V ±10 %	0 to 0.5 bar	4–20 mA				
PPE1G.ADa		0 to 1 bar					
PPE1G.BDa		0 to 2.5 bar					
PPE1G.CDa		0 to 4 bar					
PPE1G.DDa		0 to 6 bar					

Sensor Specification	Sensor Specification	Measured	Water Differential Pressure
		Sensor Characteristics	Active
Technical Information	Electrical Information	Sensor Output (s)	0–10 V / 4–20 mA
		Accuracy	0.5 % Full Scale @ 25 °C
		Compensated Temperature Range	–10 °C to +80 °C
		Temperature Drift (Full Scale), typically	±0.02 % Full Scale per °C
		Long Term Stability	±0.2 % Full Scale per year
		Medium Temperature Range	–40 °C to +125 °C
		Busting Pressure (diaphragm)	300 % of Measuring Range
		Measuring Range (s)	See product range, page 1
		Power Supply	
		Type: PPE1G.xA	AC/DC 24 V (±10 %)
		Type: PPE1G.xD	DC 24 V (±10 %)
		Frequency	50/60 Hz at AC 24 V
	Mechanical Information	Insulation Resistance	250 MΩ
		Terminal Clamp	Plug-in connector
		Power Consumption	
	User Interface	Type: PPE1G.xA	≤0.3 VA / AC 24 V; ≤0.3 VA / DC 24 V
		Type: PPE1G.xD	≤0.5 VA / DC 24 V
		Type: PPE1G.xD	≤0.5 VA / DC 24 V
Miscellaneous	Materials and Colours	Cable Entry	Angle Plug, DIN 43 650, Construction A
		Sensing Element Position	Inside the housing
		Connection Type	G1/4", female thread
	Environmental Conditions	N/A	
		Housing Cover	PA, black RAL 9017 (Traffic Black)
		Housing Bottom	US: AISI 304; EU: EN X 6 CrNi 18 10; GER: W.N. 1.301
	Norms and Directives	Diaphragm	US: AISI 316L; EU: EN/DIN 1.4404
		O- Ring	VITRON®
		Cable Gland	PP, black RAL 9017 (Traffic Black)
	Accessories	Flammability Standard	UL 94 class HB; IEC 60707; ISO 9770
		Operation Temperature	–25 °C to +70 °C
		Operation Humidity	100 % RH, with condensation
	Shipping & Handling	Transport Temperature	–35 °C to +70 °C
		Transport Humidity	<90 % RH
		Storage Temperature	–10 °C to +70 °C
	Order Notes	Storage Humidity	<85 % RH, no condensation
		IP-Rating	IP67 to IEC60529
		Product Safety	Safety class III, in accord. with EN IEC 60730-1
	Order Notes	Product Standard	Automatic electrical controls for household and similar use
			in accordance with EN IEC 60730-1:2022
		CE marking in accordance with Directive	2014/30/EU Electromagnetic Compatibility (EMC)
	Order Notes	EMC Emissions, in accordance with	EN IEC 60730-1:2022
		EMC Immunity, in accordance with	EN IEC 60730-1:2022
		RoHS Compliance, in accordance with	Directive 2011/65/EU, as amended by (EU) 2015/863
	Order Notes	Operation Climatic Condition	IEC 60 721-3-3
		Operation Mechanical Condition	IEC 60 721-3-2 to class2M2
		Transport to Climatic Condition	IEC 60 721-3-2
	Order Notes	Transport Mechanical Condition	IEC 60 721-3-2 to class2M2
		Storage Climatic Condition	IEC 60 721-3-1
		Storage Mechanical Condition	IEC 60 721-3-1 to class2M2

