

	DS4300en	Data Sheet	
PPI1-Series (P)	Water Pressure Sensor with Active Output		

The PPI1- Series (P) is designed to measure water pressure in HVAC systems with light aggressive liquids and refrigerants

The sensor is temperature compensated

The sensor operates with low power supply

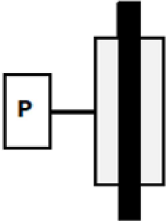
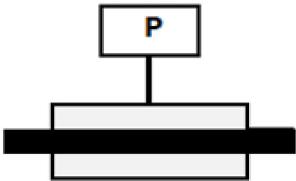
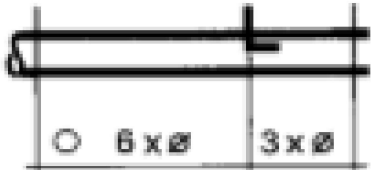
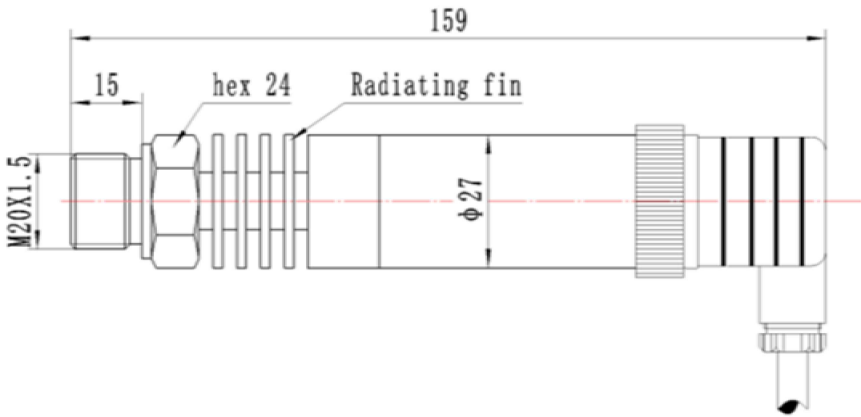
The control output is active



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
	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	Measuring Membrane
PPI1G.BAa	AC/DC 24 V (±10 %)	0 to 1bar	0–10 V	0.5% Full Scale @ 25 °C	IP67 to IEC60529	High Performance Stainless Steel
PPI1G.DAa		0 to 2 bar				
PPI1G.EAa		0 to 2.5 bar				
PPI1G.FAa		0 to 4 bar				
PPI1G.GAa		0 to 6 bar				
PPI1G.HAa		0 to 10 bar				
PPI1G.IAa		0 to 16 bar				
PPI1G.KAa		0 to 25 bar				
PPI1G.LAa		0 to 40 bar				
PPI1G.MAa		0 to 60 bar				
PPI1G.NAa		0 to 100 bar				
PPI1G.BDa	DC 24 V ±10 %	0 to 1bar	4–20 mA			
PPI1G.DDa		0 to 2 bar				
PPI1G.EDa		0 to 2.5 bar				
PPI1G.FDa		0 to 4 bar				
PPI1G.GDa		0 to 6 bar				
PPI1G.HDa		0 to 10 bar				
PPI1G.IDa		0 to 16 bar				
PPI1G.KDa		0 to 25 bar				
PPI1G.LDa		0 to 40 bar				
PPI1G.MDa		0 to 60 bar				
PPI1G.NDa		0 to 100 bar				

Sensor Specification	Sensor Specification	Measured	Water 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
		Response Time	<1 ms
		Max. Over Pressure	200 % of Measuring Range
		Busting Pressure (diaphragm)	300 % of Measuring Range
		Medium Temperature Range	–40 °C to +125 °C
		Measuring Range (s)	See product range, page 1
	Mechanical Information	Power Supply	
		Type: PPI1G.xA	AC/DC 24 V (±10 %)
		Type: PPI1G.xD	DC 24 V (±10 %)
		Frequency	50/60 Hz at AC 24 V
		Insulation Resistance	250 MΩ
		Terminal Clamp	Plug-in connector
		Power Consumption	
		Type: PPI1G.xA	≤0.3 VA / AC 24 V; ≤0.3 VA / DC 24 V
		Type: PPI1G.xD	≤0.5 VA / DC 24 V
		Connection Type	G1/4", male thread
Miscellaneous	User Interface	N/A	
	Materials and Colours	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
	Environmental Conditions	Diaphragm	US:AISI 316L; EU: EN/DIN 1.4404
		O- Ring	VITRON®
		Cable Gland	PA, black RAL 9017 (Traffic Black)
		Flammability Standard	UL 94 class HB; IEC 60707; ISO 9770
	Norms and Directives	Operation Temperature	–25 °C to +70 °C
		Operation Humidity	100 % RH, with condensation
		Transport Temperature	–35 °C to +70 °C
		Transport Humidity	<90 % RH
		Storage Temperature	–10 °C to +70 °C
		Storage Humidity	<85 % RH, no condensation
		IP-Rating	IP67 to IEC60529
		REACH Regulation	Regulation (EC) No. 1907/2006
		Product Safety	Safety class III, in accordance with EN IEC 60730-1
		Product Standard	Automatic electrical controls for household and similar use in accordance with EN IEC 60730-1:2022
	Accessories	CE marking in accordance with Directive	2014/30/EU Electromagnetic Compatibility (EMC)
		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
		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
		Transport Mechanical Condition	IEC 60 721-3-2 to class2M2
Shipping & Handling	Order Notes	Storage Climatic Condition	IEC 60 721-3-1
		Storage Mechanical Condition	IEC 60 721-3-1 to class2M2
	Accessories	N/A	
Order Notes	Shipping & Handling	Minimum Order	1 box with 1 piece
		Packaging	Rigid cardboards packaging
Order Notes	Order Notes	Order Code	See product range, page 1, e.g. PPI1G.BAa

	Installation Notes  Observe the following general regulation for engineering and installation: All relevant national and local electrical installation codes Other country-specific regulations Comply with all local safety regulations, schematics, cable listings, dispositions, specifications, and arrangements from the engineering office in charge Third-party specifications, e.g., general contractors' or constructors' notes
Advices 	Mounting Advices   
Disposal Notes 	Disposal Notes The device is considered an electronic device for disposal in terms of the European Directive 2012/19/EU The device may not be disposed as domestic garbage The device must be disposed through channels provided for this purpose It is mandatory to comply with local currently applying laws and regulations
Dimensional Drawing	
Connection	PPI1G.xA (1) UB+ (AC/DC 24 V) (3) Output 0–10 V  (2) GROUND PPI1G.xD (1) UB+ (DC 24 V) (3) N/A  (3) Output 0–10 V