TI4300en	Product Information	thermokon asia pacific
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 Building Automation System

Pressure measurement in HVAC water 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

Product Range

Order Code	Power Supply	Pressure Range	Output Signal	Accuracy	IP Protection	Measuring Membrane
PPI1.BAa	AC/DC 24V ±10%	0…1bar	0…10V	<= 0.5% Full Scale	IP67	High Performance Stainless Steel
PPI1.DAa		0…2bar				
PPI1.EAa		0…2.5bar				
PPI1.FAa		0…4bar				
PPI1.GAa		0…6bar				
PPI1.HAa		0…10bar				
PPI1.IAa		0…16bar				
PPI1.KAa		0…25bar				
PPI1.LAa		0…40bar				
PPI1.MAa		0…60bar				
PPI1.NAa		0…100bar				
PPI1.BDa	DC 24V ±10%	0…1bar	4…20mA			
PPI1.DDa		0…2bar				
PPI1.EDa		0…2.5bar				
PPI1.FDa		0…4bar				
PPI1.GDa		0…6bar				
PPI1.HDa		0…10bar				
PPI1.IDa		0…16bar				
PPI1.KDa		0…25bar				
PPI1.LDa		0…40bar				
PPI1.MDa		0…60bar				
PPI1.NDa		0…100bar				

Sensor Specification	Sensor Specification	Measured	Water Pressure
		Sensor Characteristics	Active
		Sensor Output (s)	0…10V / 4…20mA
		Accuracy	0.5% Full Scale @ 25ºC
		Compensated Temperature Range	-10ºC…+80ºC
		Temperature Drift (FS), typically	±0.02% FS / ℃
		Long Term Stability	±0.2% FS / Year
		Response Time	<1ms
		Max. Over Pressure	200% of Measuring Range
		Busting Pressure (diaphragm)	300% of Measuring Range
		Medium Temperature Range	-40ºC…+125ºC
		Measuring Range (s)	See Product Range, Page 1
Technical Information	Electrical Information	Power Supply	
		Type: PPI1.xAa	DC 24V (±10%) or AC 24V (±10%)
		Type: PPI1.xDa	DC 24V (±10%)
		Frequency	50 / 60 Hz at AC 24V
		Insulation Resistant	250MΩ
		Terminal Clamp	Plug-in connector
		Power Consumption	
		Type: PPI1.xAa	≤ 0.3VA / AC 24V; ≤ 0.3VA / DC 24V
		Type: PPI1.xDa	≤ 0.5VA / DC 24V
	Mechanical Information	Cable Entry	Angle Plug, DIN 43 650, Construction A
		Sensing Element Position	Inside the housing
		Connection Type	G1/4", male thread
	User Interface	None	
	Color and Materials	Housing Cover	Black PA, RAL 9017 (Traffic Black)
		Housing Bottom	US:AISI 304; EU: EN X 6 CrNi 18 10; GER: W.N. 1.301
		Diaphragm	US:AISI 316L; EU: EN/DIN 1.4404
		O- Ring	VITRON©
		Cable Gland	Black PA, RAL 9017 (Traffic Black)
	Environmental Conditions	Operation Temperature	-25ºC...+70ºC
		Operation Humidity	100% r.h., with condensation
		Transport Temperature	-35ºC...+70ºC
		Transport Humidity	< 90% r.h.
		Storage Temperature	-10ºC...+70ºC
		Storage Humidity	< 85% r.h., no condensation
	Norms and Directives	IP- Rating	IP67 to IEC60529
		Safety Class	III to EN 60 730
		Product Standard 1	Automatic Electric. Controls for household and similar use
		Product Standard 2	2009/EN 60 730-1
		CE Conformities to	2004/108/EG Electromagnetic Compatibility EMV
		CE Electromagnetic Compatibility Emitted Interference	2000/EN60730-1 Emitted Interference
		CE Electromagnetic Compatibility Interference Resistance	2000/EN60730-1 Interference Resistance
		RoHS Compatibility	RoHS 3, Directive 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
		Storage Climatic Condition	IEC 60 721-3-1
		Storage Mechanical Condition	IEC 60 721-3-1 to class2M2
Miscellaneous	Accessories	Mounting Kit, Included in delivery	n/a
	Shipping & Handling	Minimum Order	1 box with 1 piece
		Package Material	Rigid Cardboards Packaging
	Order Notes	Order Code	See Product Range, Page 1, e.g. PPI1.BAa

Advices

Installation Notes

Caution

Observe the following general regulation for engineering and implementation:

All relevant national and heavy power regulations

Other country specific regulations

Country-specific regulations

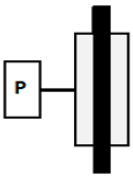
Local electrical supply authority regulation

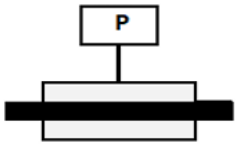
Schematics, cable listings, dispositions, specification and arrangements from the customer or engineering office in charge

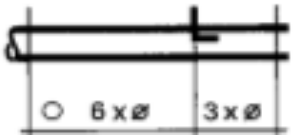
Third party specifications, e.g. general contractors or constructors

Mounting Advices

Caution







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 complying with local currently applying laws and regulations.

Connection

PPI1.xAa

(1) UB+ (AC/DC24V)

(3) Output 0..10V

Shield

(2) GROUND

PPI1.xDa

(1) UB+ (DC24V)

(3) n.a.

Shield

(2) Output 4…20mA

Dimensional Drawing