

## INTRODUCTION

Thank you for choosing an HK Instruments PTL series pressure transmitter for liquids. PTL series pressure transmitters are used for pressure detection in liquids in heating and cooling systems.

PTL-Heat is used for pressure detection in non-condensing applications, whereas PTL-Cool is designed for extreme conditions where condensation is a common problem. PTL-Cool has a two-layer protection for electronics. This is why the possible condensation does not harm the product.

PTL series products are also suitable for refrigerants and non-aggressive gases.

**ATTENTION! Device may be damaged by overpressure if installation is made against fluid and closed valve.**

## APPLICATIONS

PTL-Heat series devices are commonly used in HVAC/R systems for:

- Liquid heat exchangers
- Heating substation
- Air compressor systems

PTL-Cool series devices are commonly used in HVAC/R systems for:

- District cooling
- Fan coil units (FCU)
- Chilled beams

## SPECIFICATIONS

### Performance

**Accuracy (typ. %/FS):**  
(temperature: -20...85 °C)  
±1.0 %

**Overload range:**  
1.5 times full scale

**Bursting pressure:**  
3.0 times full scale

### Technical Specifications

**Pressure type:**  
relative pressure

**Measuring units:**  
bar

#### Environment:

Ambient temperature:  
PTL-Heat: 0...105 °C, non-condensing  
PTL-Cool: -40...60 °C

Temperature of medium:

PTL-Heat 0...85 °C  
PTI-Cool: -40...50 °C

### Physical

**Measuring element:**  
Ceramic sensing element

**Pressure connectors:**  
pressure G1/4", coupling G1/4"-G1/2"

**Protection class:**  
IP65

PTL-Heat: one-layer protection

PTL-Cool: two-layer protection against condensation

### Electrical

#### PTL with current output:

Supply voltage: 10...30 VDC

Output signal: 4...20 mA, max load 800 Ω / 24 VDC

#### PTL with voltage output:

Supply voltage: 15...24 VDC / 24 VAC (±10 %)

Output signal: 0...10 V, min load 5 kΩ

### Conformance

Meets requirements for CE marking:  
EMC Directive 2014/30/EU  
RoHS Directive 2011/65/EU  
WEEE Directive 2012/19/EU

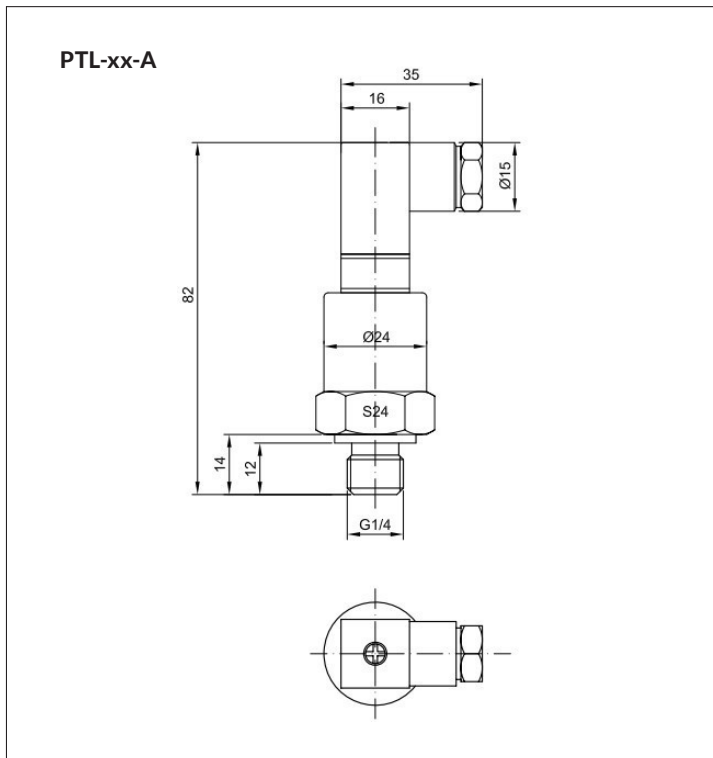
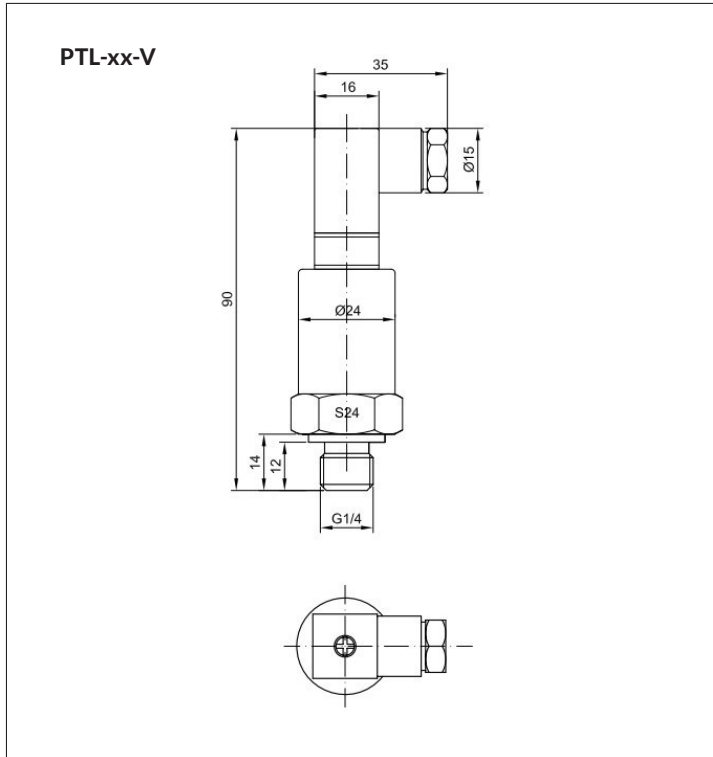
## WARNING

- READ THESE INSTRUCTIONS CAREFULLY BEFORE ATTEMPTING TO INSTALL, OPERATE OR SERVICE THIS DEVICE.
- Failure to observe safety information and comply with instructions can result in PERSONAL INJURY, DEATH AND/OR PROPERTY DAMAGE.
- To avoid electrical shock or damage to equipment, disconnect power before installing or servicing and use only wiring with insulation rated for full device operating voltage.
- To avoid potential fire and/or explosion do not use in potentially flammable or explosive atmospheres.
- Retain these instructions for future reference.
- This product, when installed, will be part of an engineered system whose specifications and performance characteristics are not designed or controlled by HK Instruments. Review applications and national and local codes to assure that the installation will be functional and safe. Use only experienced and knowledgeable technicians to install this device.

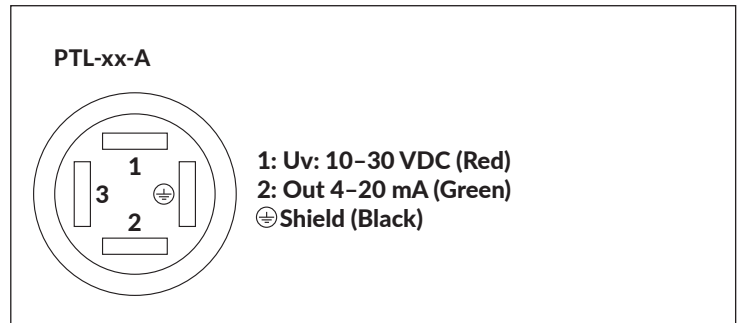
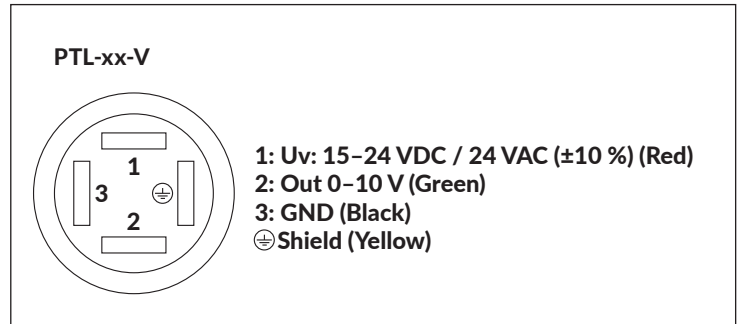
COMPANY WITH  
MANAGEMENT SYSTEM  
CERTIFIED BY DNV GL  
= ISO 9001 = ISO 14001 =



## DIMENSIONS



## ELECTRICAL CONNECTIONS



## RECYCLING/DISPOSAL

The parts left over from installation should be recycled according to your local instructions. Decommissioned devices should be taken to a recycling site that specializes in electronic waste.



## WARRANTY POLICY

The seller is obligated to provide a warranty of five years for the delivered goods regarding material and manufacturing. The warranty period is considered to start on the delivery date of the product. If a defect in raw materials or a production flaw is found, the seller is obligated, when the product is sent to the seller without delay or before expiration of the warranty, to amend the mistake at his/her discretion either by repairing the defective product or by delivering free of charge to the buyer a new flawless product and sending it to the buyer. Delivery costs for the repair under warranty will be paid by the buyer and the return costs by the seller. The warranty does not comprise damages caused by accident, lightning, flood or other natural phenomenon, normal wear and tear, improper or careless handling, abnormal use, overloading, improper storage, incorrect care or reconstruction, or changes and installation work not done by the seller. The selection of materials for devices prone to corrosion is the buyer's responsibility, unless otherwise is legally agreed upon. Should the manufacturer alter the structure of the device, the seller is not obligated to make comparable changes to devices already purchased. Appealing for warranty requires that the buyer has correctly fulfilled his/her duties arisen from the delivery and stated in the contract. The seller will give a new warranty for goods that have been replaced or repaired within the warranty, however only to the expiration of the original product's warranty time. The warranty includes the repair of a defective part or device, or if needed, a new part or device, but not installation or exchange costs. Under no circumstance is the seller liable for damages compensation for indirect damage.