



# Pressure sensors – PT series



## Compact pressure transmitters - Solutions

The pressure transmitters develop their full potential in applications requiring high operational safety and accuracy. Based on proven ceramic technology, these shock and vibration proof devices work reliably even in harsh environments. Thanks to the compact design,

the sensors can be applied in almost all areas of industrial automation. The patented medium-stop system prevents the discharge of liquids when burst pressure exceeds 40 bar. In normal operating mode it works as a peak pressure aperture.



## Made-to-measure solutions

The PT devices with diaphragm are a cost-efficient solution and a proven success regarding the control of filling levels at vessels. Other typical applications for pressure transmitters are machine tools, pneumatic systems and hydraulic power

units. The PT series proves its applicability in refrigeration technology and many other industrial fields with features such as operational safety, accuracy and temperature stability.



## Working reliably even under extreme conditions

Equipped with a ceramic measuring cell, a stainless steel body and a FPM O-ring, the PT pressure transmitters resist temperatures of up to 125 °C without any problems. The devices fulfill industrial standards and guarantee a long-term stable performance.

- Compact and rugged design
- Accuracy 0.6 % f.s.
- Stainless steel housing and pressure connection
- 1.4305 (AISI 303)
- Medium-stop system
- Protection class IP67
- Excellent EMC properties
- -1...+600 bar relative pressure
- 0...25 bar absolute pressure

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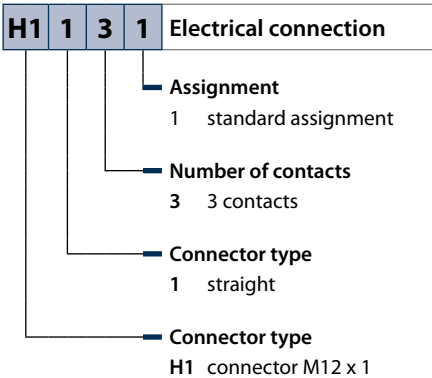
PT 010V - 11 - L13 - H1 1 3 1

PT 010V Functional principle - 11 Mechanical version - L13 Electrical version -

<p><b>Measuring range</b></p> <p>01VR -1...0 bar g *</p> <p>001R 0...1 bar g *</p> <p>002R 0...1.6 bar g *</p> <p>003R 0...2.5 bar g *</p> <p>004R 0...4 bar g *</p> <p>006R 0...6 bar g *</p> <p>010R 0...10 bar g</p> <p>016R 0...16 bar g</p> <p>025R 0...25 bar g</p> <p>040R 0...40 bar g</p> <p>100R 0...100 bar g</p> <p>160R 0...160 bar g</p> <p>250R 0...250 bar g</p> <p>400R 0...400 bar g</p> <p>600R 0...600 bar g</p> <p>001A 0...1 bar a *</p> <p>002A 0...1.6 bar a *</p> <p>003A 0...2.5 bar a *</p> <p>004A 0...4 bar a *</p> <p>006A 0...6 bar a *</p> <p>010A 0...10 bar a *</p> <p>016A 0...16 bar a *</p> <p>025A 0...25 bar a *</p> <p><b>Functional principle</b></p> <p>PT pressure transmitter</p>	<p><b>Pressure connection</b></p> <p>11 G<math>\frac{1}{4}</math>" female thread</p> <p>12 <math>\frac{1}{4}</math>"-18 NPT female thread</p> <p>13 <math>\frac{1}{4}</math>"-18-NPT male thread</p> <p>14 G<math>\frac{1}{4}</math>" male thread</p> <p>26 G<math>\frac{3}{4}</math>" male thread front-flush</p> <p>29 G<math>\frac{1}{2}</math>" male thread front-flush</p>	<p><b>Electrical version</b></p> <p>L13 4...20 mA 2-wire</p> <p>LU2 0...10 V 3-wire *</p>
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\* only for PT 11-14

g = Relative pressure  
a = Absolute pressure



## PT-series – For temperatures up to +125 °C

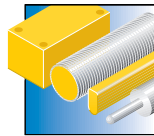


The pressure sensors of the PT series operate with ceramic or fully welded thin-film measuring cells. They are cylindrical shaped, made of stainless and have no display. Depending on the sensor version used, the processed signal is output as 4...20 mA (2-wire) or 0...10 V (3-wire).

### Features

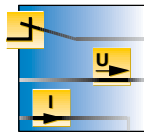
- Compact and rugged design
- Measuring range -1...600 bar relative pressure
- Temperature range up to +125 °C
- 4...20 mA (2-wire) or 0...10 V (3-wire)
- Excellent EMC properties

### Properties



#### Designs

Cylindrical design, non-rotatable, without display



#### Electrical versions

4...20 mA (2-wire)  
0...10 V (3-wire)



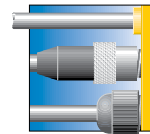
#### Connectivity

G 1/4", 1/4" NPT as well as G 1/2" and G 3/4" front-flush



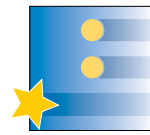
#### Measuring ranges

-1...600 bar rel.



#### Electrical connections

Male M12 x 1



#### Special features

For media temperatures up to +125 °C, IP67



#### Internet link

Scan the QR code to access our products on the internet

## G1/4" – Female – Current output (2-wire)



<b>General data</b>			
<b>Output 1</b>	analog output	<b>Operating range</b>	4...20 mA (2-wire)
<b>Protection class</b>	IP67	<b>Connection</b>	male, M12 x 1
<b>Mechanical connection</b>	G 1/4" female thread	<b>Medium temperature</b>	-40...125 °C
<b>Operating voltage</b>	8...33 VDC	<b>Response time</b>	3 ms
<b>Housing material</b>	1.4305 (AISI 303)/PC	<b>Accuracy LHR analog output</b>	0.3 % of final value BSL

### Types and data – selection table

Type	Relative pressure	Admissible overpressure	w	d
PT001R-11-LI3-H1131	0...1 bar rel.	3 bar	w163	d635
PT002R-11-LI3-H1131	0...1.6 bar rel.	5 bar	w163	d635
PT003R-11-LI3-H1131	0...2.5 bar rel.	7 bar	w163	d635
PT004R-11-LI3-H1131	0...4 bar rel.	12 bar	w163	d635
PT006R-11-LI3-H1131	0...6 bar rel.	15 bar	w163	d635
PT010R-11-LI3-H1131	0...10 bar rel.	25 bar	w163	d635
PT016R-11-LI3-H1131	0...16 bar rel.	40 bar	w163	d635
PT025R-11-LI3-H1131	0...25 bar rel.	65 bar	w163	d635
PT040R-11-LI3-H1131	0...40 bar rel.	100 bar	w163	d635
PT060R-11-LI3-H1131	0...60 bar rel.	150 bar	w163	d635
PT100R-11-LI3-H1131	0...100 bar rel.	250 bar	w163	d635
PT160R-11-LI3-H1131	0...160 bar rel.	400 bar	w163	d635
PT250R-11-LI3-H1131	0...250 bar rel.	625 bar	w163	d635
PT400R-11-LI3-H1131	0...400 bar rel.	900 bar	w163	d635
PT600R-11-LI3-H1131	0...600 bar rel.	900 bar	w163	d635

## G1/4" – Female – Voltage output (3-wire)



<b>General data</b>			
<b>Output 1</b>	analog output	<b>Operating range</b>	0...10 V (3-wire)
<b>Protection class</b>	IP67	<b>Connection</b>	male, M12 x 1
<b>Mechanical connection</b>	G 1/4" female thread	<b>Medium temperature</b>	-40...125 °C
<b>Operating voltage</b>	11.4...33 VDC	<b>Response time</b>	3 ms
<b>Housing material</b>	1.4305 (AISI 303)/PC	<b>Accuracy LHR analog output</b>	0.3 % of final value BSL

### Types and data – selection table

Type	Relative pressure	Admissible overpressure	w	d
PT001R-11-LU2-H1131	0...1 bar rel.	3 bar	w164	d635
PT002R-11-LU2-H1131	0...1.6 bar rel.	5 bar	w164	d635
PT003R-11-LU2-H1131	0...2.5 bar rel.	7 bar	w164	d635
PT004R-11-LU2-H1131	0...4 bar rel.	12 bar	w164	d635

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Type	Relative pressure	Admissible overpressure	w	d
PT006R-11-LU2-H1131	0...6 bar rel.	15 bar	w164	d635
PT010R-11-LU2-H1131	0...10 bar rel.	25 bar	w164	d635
PT016R-11-LU2-H1131	0...16 bar rel.	40 bar	w164	d635
PT01VR-11-LU2-H1131	-1...0 bar rel.	3 bar	w164	d635
PT025R-11-LU2-H1131	0...25 bar rel.	65 bar	w164	d635
PT040R-11-LU2-H1131	0...40 bar rel.	100 bar	w164	d635
PT060R-11-LU2-H1131	0...60 bar rel.	150 bar	w164	d635
PT100R-11-LU2-H1131	0...100 bar rel.	250 bar	w164	d635
PT160R-11-LU2-H1131	0...160 bar rel.	400 bar	w164	d635
PT250R-11-LU2-H1131	0...250 bar rel.	625 bar	w164	d635
PT400R-11-LU2-H1131	0...400 bar rel.	900 bar	w164	d635
PT600R-11-LU2-H1131	0...600 bar rel.	900 bar	w164	d635

### G1/4" – Male thread – Current output (2-wire)



#### General data

<b>Output 1</b>	analog output	<b>Operating range</b>	4...20 mA (2-wire)
<b>Protection class</b>	IP67	<b>Connection</b>	male, M12 x 1
<b>Mechanical connection</b>	G 1/4" male thread	<b>Medium temperature</b>	-40...125 °C
<b>Operating voltage</b>	8...33 VDC	<b>Response time</b>	3 ms
<b>Housing material</b>	1.4305 (AISI 303)/PC	<b>Accuracy LHR analog output</b>	0.3 % of final value BSL

#### Types and data – selection table

Type	Relative pressure	Admissible overpressure	w	d
PT01VR-14-LI3-H1131	-1...0 bar rel.	3 bar	w163	d636
PT001R-14-LI3-H1131	0...1 bar rel.	3 bar	w163	d636
PT002R-14-LI3-H1131	0...1.6 bar rel.	5 bar	w163	d636
PT003R-14-LI3-H1131	0...2.5 bar rel.	7 bar	w163	d636
PT004R-14-LI3-H1131	0...4 bar rel.	12 bar	w163	d636
PT006R-14-LI3-H1131	0...6 bar rel.	15 bar	w163	d636
PT010R-14-LI3-H1131	0...10 bar rel.	25 bar	w163	d636
PT016R-14-LI3-H1131	0...16 bar rel.	40 bar	w163	d636
PT025R-14-LI3-H1131	0...25 bar rel.	65 bar	w163	d636
PT040R-14-LI3-H1131	0...40 bar rel.	100 bar	w163	d636
PT060R-14-LI3-H1131	0...60 bar rel.	150 bar	w163	d636
PT100R-14-LI3-H1131	0...100 bar rel.	250 bar	w163	d636
PT160R-14-LI3-H1131	0...160 bar rel.	400 bar	w163	d636
PT250R-14-LI3-H1131	0...250 bar rel.	625 bar	w163	d636
PT400R-14-LI3-H1131	0...400 bar rel.	900 bar	w163	d636
PT600R-14-LI3-H1131	0...600 bar rel.	900 bar	w163	d636

Many different types available, also with barrel, see type code

## G1/4" – Male – Voltage output (3-wire)



<b>General data</b>			
<b>Output 1</b>	analog output	<b>Operating range</b>	0...10 V (3-wire)
<b>Protection class</b>	IP67	<b>Connection</b>	male, M12 x 1
<b>Mechanical connection</b>	G 1/4" male thread	<b>Medium temperature</b>	-40...125 °C
<b>Operating voltage</b>	11.4...33 VDC	<b>Response time</b>	3 ms
<b>Housing material</b>	1.4305 (AISI 303)/PC	<b>Accuracy LHR analog output</b>	0.3 % of final value BSL

### Types and data – selection table

Type	Relative pressure	Admissible overpressure	w	d
PT01VR-14-LU2-H1131	-1...0 bar rel.	3 bar	w164	d636
PT001R-14-LU2-H1131	0...1 bar rel.	3 bar	w164	d636
PT002R-14-LU2-H1131	0...1.6 bar rel.	5 bar	w164	d636
PT003R-14-LU2-H1131	0...2.5 bar rel.	7 bar	w164	d636
PT004R-14-LU2-H1131	0...4 bar rel.	12 bar	w164	d636
PT006R-14-LU2-H1131	0...6 bar rel.	15 bar	w164	d636
PT010R-14-LU2-H1131	0...10 bar rel.	25 bar	w164	d636
PT016R-14-LU2-H1131	0...16 bar rel.	40 bar	w164	d636
PT025R-14-LU2-H1131	0...25 bar rel.	65 bar	w164	d636
PT040R-14-LU2-H1131	0...40 bar rel.	100 bar	w164	d636
PT060R-14-LU2-H1131	0...60 bar rel.	150 bar	w164	d636
PT100R-14-LU2-H1131	0...100 bar rel.	250 bar	w164	d636
PT160R-14-LU2-H1131	0...160 bar rel.	400 bar	w164	d636
PT250R-14-LU2-H1131	0...250 bar rel.	625 bar	w164	d636
PT400R-14-LU2-H1131	0...400 bar rel.	900 bar	w164	d636
PT600R-14-LU2-H1131	0...600 bar rel.	900 bar	w164	d636

Many different types available, also with barrel, see type code

## G1/2" – Male – Front-flush – Current output (2-wire)



<b>General data</b>			
<b>Output 1</b>	analog output	<b>Operating range</b>	4...20 mA (2-wire)
<b>Protection class</b>	IP67	<b>Connection</b>	male, M12 x 1
<b>Mechanical connection</b>	G 1/2" front-flush	<b>Medium temperature</b>	-25...85 °C
<b>Operating voltage</b>	9...30 VDC	<b>Response time</b>	1 ms
<b>Housing material</b>	1.4435 (316L)	<b>Accuracy LHR analog output</b>	0.5 % of final value BSL

### Types and data – selection table

Type	Relative pressure	Admissible overpressure	w	d
PT010R-29-LI3-H1140	0...10 bar rel.	40 bar	w165	d637
PT016R-29-LI3-H1140	0...16 bar rel.	40 bar	w165	d637

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Type	Relative pressure	Admissible overpressure	w	d
PT025R-29-LI3-H1140	0...25 bar rel.	40 bar	w165	d637
PT040R-29-LI3-H1140	0...40 bar rel.	120 bar	w165	d637
PT060R-29-LI3-H1140	0...60 bar rel.	120 bar	w165	d637
PT100R-29-LI3-H1140	0...100 bar rel.	320 bar	w165	d637
PT160R-29-LI3-H1140	0...160 bar rel.	320 bar	w165	d637
PT250R-29-LI3-H1140	0...250 bar rel.	800 bar	w165	d637
PT400R-29-LI3-H1140	0...400 bar rel.	800 bar	w165	d637

### G3/4" – Male – Front-flush – Current output (2-wire)



**General data**

<b>Output 1</b>	analog output	<b>Operating range</b>	4...20 mA (2-wire)
<b>Protection class</b>	IP67	<b>Connection</b>	male, M12 x 1
<b>Mechanical connection</b>	G 3/4" front-flush	<b>Medium temperature</b>	-25...85 °C
<b>Operating voltage</b>	9...30 VDC	<b>Response time</b>	1 ms
<b>Housing material</b>	1.4435 (316L)	<b>Accuracy LHR analog output</b>	0.5 % of final value BSL

#### Types and data – selection table

Type	Relative pressure	Admissible overpressure	w	d
PT010R-26-LI3-H1140	0...10 bar rel.	40 bar	w165	d638
PT016R-26-LI3-H1140	0...16 bar rel.	40 bar	w165	d638
PT025R-26-LI3-H1140	0...25 bar rel.	40 bar	w165	d638
PT040R-26-LI3-H1140	0...40 bar rel.	120 bar	w165	d638
PT060R-26-LI3-H1140	0...60 bar rel.	120 bar	w165	d638
PT100R-26-LI3-H1140	0...100 bar rel.	320 bar	w165	d638
PT160R-26-LI3-H1140	0...160 bar rel.	320 bar	w165	d638
PT250R-26-LI3-H1140	0...250 bar rel.	800 bar	w165	d638
PT400R-26-LI3-H1140	0...400 bar rel.	800 bar	w165	d638

