

Pressure transmitters without display

PT-1 series - Cylindrical design

PT-1 series – For temperatures up to +125 °C

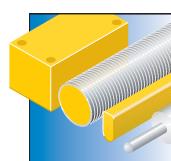


The PT1 pressure transmitters operate with ceramic measuring cells. They are cylindrically shaped, made of stainless steel and have no display. Depending on the type, the processed signal is output as 4...20 mA (2-wire) or 0...10 V (3-wire).

Features

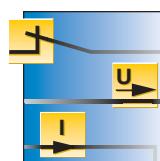
- Compact and rugged design
- Measuring range -1...600 bar relative pressure
- Temperature range -40...+125°C
- 4...20 mA (2-wire) or 0...10 V (3-wire)
- Excellent EMC properties

Properties



Design

Cylindrical design, non-rotatable, without display



Electrical versions

Current output
4...20 mA



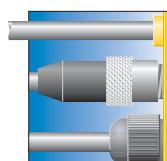
Mechanical connections

Female and male
thread G1/4" and
1/4" NPT



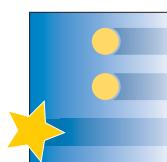
Measuring ranges

-1...600 bar relative
pressure



Electrical connections

M12 x 1 plug connec-
tion, 3-pole



Special features

Media temperature
-40...+125 °C, IP67

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



General data	
Operating voltage	8...33 VDC
Protection type and class	IP67 / III
Operating range	4...20 mA (2-wire)
Accuracy (Lin. + Hys. + Rep.)	0.3% of final value BSL
Calibration accuracy	0.3% of final value
0-point	
Calibration accuracy, of final value	0.3% of final value
Response time	3 ms
Temperature coefficient zero point T_{k0}	0.15% of full scale / 10 K
Temperature coefficient span T_{ks}	0.15% of full scale / 10 K
Medium temperature	-40...125 °C
Ambient temperature	-40...85 °C
Housing material	stainless-steel/plastic, 1.4305 (AISI 303)/PC
Material pressure element	ceramics Al_2O_3
Sealing material	FPM
Electrical connection	connector, M12 x 1
Mechanical connection	G 1/4" female thread

Types and data – selection table

Type	Measuring range	Admissible overpressure	w	d
PT001R-11-LI3-H1131	0...1 bar rel.	3 bar	w098	d474
PT002R-11-LI3-H1131	0...1.6 bar rel.	5 bar	w098	d474
PT003R-11-LI3-H1131	0...2.5 bar rel.	7 bar	w098	d474
PT004R-11-LI3-H1131	0...4 bar rel.	12 bar	w098	d474
PT006R-11-LI3-H1131	0...6 bar rel.	15 bar	w098	d474
PT010R-11-LI3-H1131	0...10 bar rel.	25 bar	w098	d474
PT016R-11-LI3-H1131	0...16 bar rel.	40 bar	w098	d474
PT025R-11-LI3-H1131	0...25 bar rel.	65 bar	w098	d474
PT040R-11-LI3-H1131	0...40 bar rel.	100 bar	w098	d474
PT060R-11-LI3-H1131	0...60 bar rel.	150 bar	w098	d474
PT100R-11-LI3-H1131	0...100 bar rel.	250 bar	w098	d474
PT160R-11-LI3-H1131	0...160 bar rel.	400 bar	w098	d474
PT250R-11-LI3-H1131	0...250 bar rel.	625 bar	w098	d474
PT400R-11-LI3-H1131	0...400 bar rel.	900 bar	w098	d474
PT600R-11-LI3-H1131	0...600 bar rel.	900 bar	w098	d474

Pressure transmitters without display

PT-1 series - Cylindrical design

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

General data	
Operating voltage	11.4...33 VDC
Protection type and class	IP67 / III
Operating range	0...10 V (3-wire)
Accuracy (Lin. + Hys. + Rep.)	0.3% of final value BSL
Calibration accuracy	0.3% of final value
0-point	
Calibration accuracy, of final value	0.3% of final value
Response time	3 ms
Temperature coefficient zero point T_{k0}	0.15% of full scale / 10 K
Temperature coefficient span T_{ks}	0.15% of full scale / 10 K
Medium temperature	-40...125 °C
Ambient temperature	-40...85 °C
Housing material	stainless-steel/plastic, 1.4305 (AISI 303)/PC
Material pressure element	ceramics Al_2O_3
Sealing material	FPM
Electrical connection	connector, M12 x 1
Mechanical connection	G 1/4" female thread

Types and data – selection table

Type	Measuring range	Admissible overpressure	w	d
PT001R-11-LU2-H1131	0...1 bar rel.	3 bar	w099	d474
PT01VR-11-LU2-H1131	-1...0 bar rel.	3 bar	w099	d474
PT002R-11-LU2-H1131	0...1.6 bar rel.	5 bar	w099	d474
PT003R-11-LU2-H1131	0...2.5 bar rel.	7 bar	w099	d474
PT004R-11-LU2-H1131	0...4 bar rel.	12 bar	w099	d474
PT006R-11-LU2-H1131	0...6 bar rel.	15 bar	w099	d474
PT010R-11-LU2-H1131	0...10 bar rel.	25 bar	w099	d474
PT016R-11-LU2-H1131	0...16 bar rel.	40 bar	w099	d474
PT025R-11-LU2-H1131	0...25 bar rel.	65 bar	w099	d474
PT040R-11-LU2-H1131	0...40 bar rel.	100 bar	w099	d474
PT060R-11-LU2-H1131	0...60 bar rel.	150 bar	w099	d474
PT100R-11-LU2-H1131	0...100 bar rel.	250 bar	w099	d474
PT160R-11-LU2-H1131	0...160 bar rel.	400 bar	w099	d474
PT250R-11-LU2-H1131	0...250 bar rel.	625 bar	w099	d474
PT400R-11-LU2-H1131	0...400 bar rel.	900 bar	w099	d474
PT600R-11-LU2-H1131	0...600 bar rel.	900 bar	w099	d474

1/4" NPT – Male – Current output (2-wire)



General data	
Operating voltage	8...33 VDC
Protection type and class	IP67 / III
Operating range	4...20 mA (2-wire)
Accuracy (Lin. + Hys. + Rep.)	0.3% of final value BSL
Calibration accuracy	0.3% of final value
0-point	
Calibration accuracy, of final value	0.3% of final value
Response time	3 ms
Temperature coefficient zero point T_{k0}	0.15% of full scale / 10 K

Temperature coefficient span T_{ks}	0.15% of full scale / 10 K
Medium temperature	-40...125 °C
Ambient temperature	-40...85 °C
Housing material	stainless-steel/plastic, 1.4305 (AISI 303)/PC
material pressure element	ceramics Al_2O_3
Sealing material	FPM
Electrical connection	connector, M12 x 1
Mechanical connection	NPT 1/4" - 18 male thread

Types and data – selection table

Type	Measuring range	Admissible overpressure	w	d
PT004R-13-LI3-H1131	0...4 bar rel.	12 bar	w098	d475
PT010R-13-LI3-H1131	0...10 bar rel.	25 bar	w098	d475
PT016R-13-LI3-H1131	0...16 bar rel.	40 bar	w098	d475
PT025R-13-LI3-H1131	0...25 bar rel.	65 bar	w098	d475
PT040R-13-LI3-H1131	0...40 bar rel.	100 bar	w098	d475
PT060R-13-LI3-H1131	0...60 bar rel.	150 bar	w098	d475
PT100R-13-LI3-H1131	0...100 bar rel.	250 bar	w098	d475
PT160R-13-LI3-H1131	0...160 bar rel.	400 bar	w098	d475
PT250R-13-LI3-H1141	0...250 bar rel.	625 bar	w098	d475
PT400R-13-LI3-H1141	0...400 bar rel.	900 bar	w098	d475
PT600R-13-LI3-H1141	0...600 bar rel.	900 bar	w098	d475

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PT-1 series - Cylindrical design

1/4" NPT – Male – Voltage output (3-wire)

General data	
Operating voltage	11.4...33 VDC
Protection type and class	IP67 / III
Operating range	0...10 V (3-wire)
Accuracy (Lin. + Hys. + Rep.)	0.3% of final value BSL
Calibration accuracy	0.3% of final value
0-point	
Calibration accuracy, of final value	0.3% of final value
Response time	3 ms
Temperature coefficient zero point T_{k0}	0.15% of full scale / 10 K
Temperature coefficient span T_{ks}	0.15% of full scale / 10 K
Medium temperature	-40...125 °C
Ambient temperature	-40...85 °C
Housing material	stainless-steel/plastic, 1.4305 (AISI 303)/PC
Material pressure element	ceramics Al_2O_3
Sealing material	FPM
Electrical connection	connector, M12 x 1
Mechanical connection	NPT 1/4" - 18 male thread

Types and data – selection table

Type	Measuring range	Admissible overpressure	w	d
PT001R-13-LU2-H1141	0...1 bar rel.	3 bar	w099	d475
PT01VR-13-LU2-H1131	-1...0 bar rel.	3 bar	w099	d475
PT002R-13-LU2-H1131	0...1.6 bar rel.	5 bar	w099	d475
PT003R-13-LU2-H1131	0...2.5 bar rel.	7 bar	w099	d475
PT004R-13-LU2-H1131	0...4 bar rel.	12 bar	w099	d475
PT006R-13-LU2-H1131	0...6 bar rel.	15 bar	w099	d475
PT010R-13-LU2-H1131	0...10 bar rel.	25 bar	w099	d475
PT060R-13-LU2-H1131	0...60 bar rel.	150 bar	w099	d475
PT100R-13-LU2-H1131	0...100 bar rel.	250 bar	w099	d475
PT160R-13-LU2-H1131	0...160 bar rel.	400 bar	w099	d475
PT250R-13-LU2-H1131	0...250 bar rel.	625 bar	w099	d475
PT600R-13-LU2-H1131	0...600 bar rel.	900 bar	w099	d475
PT400R-13-LU2-H1131	0...400 bar rel.	900 bar	w099	d475

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



General data	
Operating voltage	8...33 VDC
Protection type and class	IP67 / III
Operating range	4...20 mA (2-wire)
Accuracy (Lin. + Hys. + Rep.)	0.3% of final value BSL
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Ambient temperature	-40...85 °C
Housing material	stainless-steel/plastic, 1.4305 (AISI 303)/PC
Material pressure element	ceramics Al_2O_3
Sealing material	FPM
Electrical connection	connector, M12 x 1
Mechanical connection	G 1/4" male thread

Types and data – selection table

Type	Measuring range	Admissible overpressure	w	d
PT01VR-14-LI3-H1131	-1...0 bar rel.	3 bar	w098	d476
PT001R-14-LI3-H1131	0...1 bar rel.	3 bar	w098	d476
PT002R-14-LI3-H1131	0...1.6 bar rel.	5 bar	w098	d476
PT003R-14-LI3-H1131	0...2.5 bar rel.	7 bar	w098	d476
PT004R-14-LI3-H1131	0...4 bar rel.	12 bar	w098	d476
PT006R-14-LI3-H1131	0...6 bar rel.	15 bar	w098	d476
PT010R-14-LI3-H1131	0...10 bar rel.	25 bar	w098	d476
PT016R-14-LI3-H1131	0...16 bar rel.	40 bar	w098	d476
PT025R-14-LI3-H1131	0...25 bar rel.	65 bar	w098	d476
PT040R-14-LI3-H1131	0...40 bar rel.	100 bar	w098	d476
PT060R-14-LI3-H1131	0...60 bar rel.	150 bar	w098	d476
PT100R-14-LI3-H1131	0...100 bar rel.	250 bar	w098	d476
PT160R-14-LI3-H1131	0...160 bar rel.	400 bar	w098	d476
PT250R-14-LI3-H1131	0...250 bar rel.	625 bar	w098	d476
PT400R-14-LI3-H1131	0...400 bar rel.	900 bar	w098	d476
PT600R-14-LI3-H1131	0...600 bar rel.	900 bar	w098	d476

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Protection type and class	IP67 / III
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Material pressure element	ceramics Al_2O_3
Sealing material	FPM
Electrical connection	connector, M12 x 1
Mechanical connection	G 1/4" male thread

Types and data – selection table

Type	Measuring range	Admissible overpressure	w	d
PT01VR-14-LU2-H1131	-1...0 bar rel.	3 bar	w099	d476
PT001R-14-LU2-H1131	0...1 bar rel.	3 bar	w099	d476
PT002R-14-LU2-H1131	0...1.6 bar rel.	5 bar	w099	d476
PT003R-14-LU2-H1131	0...2.5 bar rel.	7 bar	w099	d476
PT004R-14-LU2-H1131	0...4 bar rel.	12 bar	w099	d476
PT006R-14-LU2-H1131	0...6 bar rel.	15 bar	w099	d476
PT010R-14-LU2-H1131	0...10 bar rel.	25 bar	w099	d476
PT016R-14-LU2-H1131	0...16 bar rel.	40 bar	w099	d476
PT025R-14-LU2-H1131	0...25 bar rel.	65 bar	w099	d476
PT040R-14-LU2-H1131	0...40 bar rel.	100 bar	w099	d476
PT060R-14-LU2-H1131	0...60 bar rel.	150 bar	w099	d476
PT100R-14-LU2-H1131	0...100 bar rel.	250 bar	w099	d476
PT160R-14-LU2-H1131	0...160 bar rel.	400 bar	w099	d476
PT250R-14-LU2-H1131	0...250 bar rel.	625 bar	w099	d476
PT400R-14-LU2-H1131	0...400 bar rel.	900 bar	w099	d476
PT600R-14-LU2-H1131	0...600 bar rel.	900 bar	w099	d476