

Pressure Transducers

Pressure Transducer

PT4 Series

FEATURES

- Piezoresistive sensor element
- Electronic (ASIC) with wide application range

TYPICAL APPLICATIONS

- Air conditioning systems in automotive applications
- Industrial applications
- Medical applications
- Building management
- Automation



The PT4 Pressure Transducer is a cost-effective sensor for the passenger car vehicle HVAC market. This highly reliable transducer was designed with a Piezoresistive sensor element and ASIC with wide application ranges.

A key feature of the sensor is the low PWM levels that are compatible to LIN Protocol 1.2 allowing for a customized fit with electronic engine controls systems (EEC) making it versatile for specific customer requirements.

⚠ WARNING

PERSONAL INJURY

DO NOT USE these products as safety or emergency stop devices or in any other application where failure of the product could result in personal injury.

Failure to comply with these instructions could result in death or serious injury.

⚠ WARNING

MISUSE OF DOCUMENTATION

- The information presented in this product sheet is for reference only. Do not use this document as a product installation guide.
- Complete installation, operation, and maintenance information is provided in the instructions supplied with each product.

Failure to comply with these instructions could result in death or serious injury.

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SPECIFICATIONS

Pressure range	0 bar ... 38 bar abs
Accuracy	< 1% FS/LP range
Operating temperature	-20 °C to 130 °C [-4 °F to 266 °F]
EMC protection	200 V/m
Burst pressure	90 bar
Response time (10% to 90%)	25 ms

OPTIONS

- Customer defined fitting design possible
- Wide customer defined pressure range
- Adjustable characteristic pressure curve
- Accuracy according to specific customer requirements

50 HZ PWM – OUTPUT

High-side driver	
Power supply	10.8 Vdc to 15 Vdc
Load current out	15 mA
High PWM level	> 4 Vdc
Low-side driver	
Power supply	9 Vdc to 16 Vdc
Load current out	-12 mA
High PWM level	< 0.5 Vdc

LIN BUS – OUTPUT

- Rev.to LIN Protocol 1.2
- Single wire 12 volt bus
- Variable Baud rate (9600/9200)

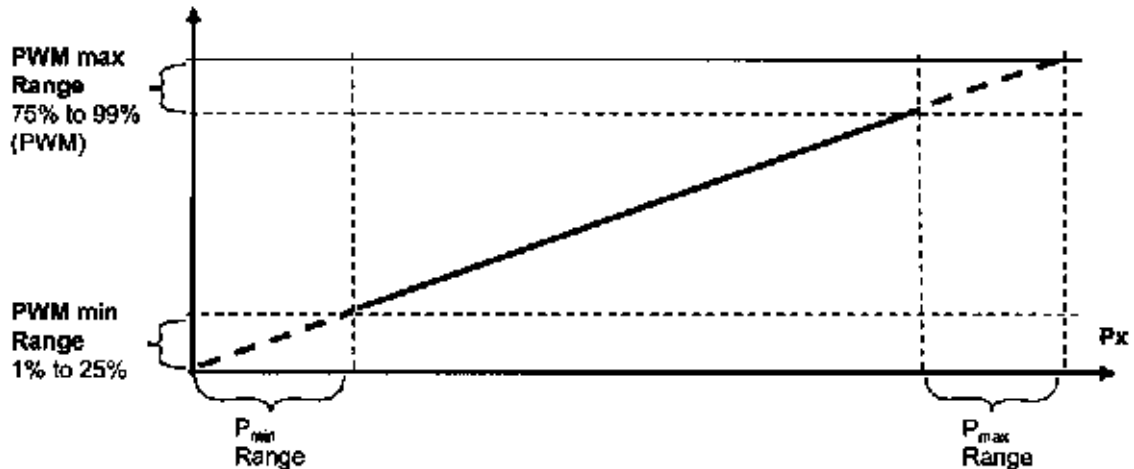
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PT4- OUTPUT = f (PRESSURE)

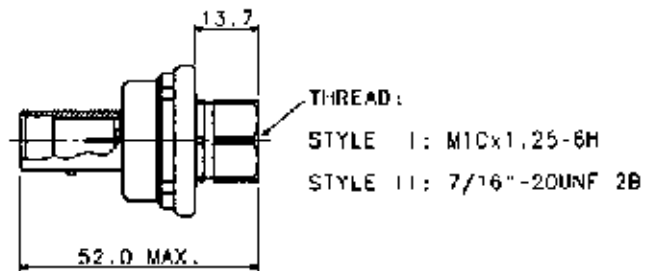
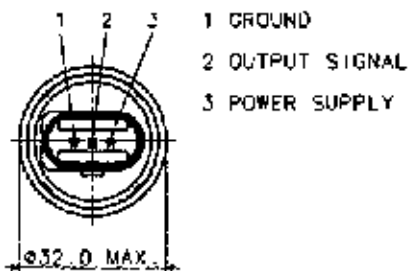
PWM (%) or LIN (11Bit)



$$f_{(PWM)} = PWM_{min} + P_x / P_{max} \times (PWM_{max} - PWM_{min})$$

$$f_{(LIN)} = 11 \text{ Bit (4 Byte Message Frame)}$$

PT4 - DIMENSIONS



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ORDER GUIDE

Model Number	VDC	Output
PT4-H1002	12 Vdc	PWM High-side output
PT4-H1101	12 Vdc	PWM Low-side output
PT5-H1000	12 Vdc	LIN BUS output

WARRANTY/REMEDY

Honeywell warrants goods of its manufacture as being free of defective materials and faulty workmanship. Contact your local sales office for warranty information. If warranted goods are returned to Honeywell during the period of coverage, Honeywell will repair or replace without charge those items it finds defective. **The foregoing is Buyer's sole remedy and is in lieu of all other warranties, expressed or implied, including those of merchantability and fitness for a particular purpose.**

Specifications may change without notice. The information we supply is believed to be accurate and reliable as of this printing. However, we assume no responsibility for its use.

While we provide application assistance personally, through our literature and the Honeywell web site, it is up to the customer to determine the suitability of the product in the application.

For application assistance, current specifications, or name of the nearest Authorized Distributor, contact a nearby sales office. Or call:

1-800-537-6945 USA/Canada

1-815-235-6847 International

FAX

1-815-235-6545 USA

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