## Thermosense

## Datasheet

## APB3/APB3V Pressure/Vacuum Transmitter (4~20mA, G1/4)

The APB range of high accuracy, low cost ceramic pressure and vacuum transmitters are designed for use in most industrial applications and are suitable for the measurement of most pressure mediums.

The transmitters incorporate a high quality thick-film ceramic sensor and special amplified circuit. Output is  $4 \sim 20$ mA current loop (2-wire). The pressure diaphragm is made from ceramic material and its wetted parts are made from 316L stainless steel.

Because of the thermal stability of ceramic and its thickfilm resistance, the transmitters can be operated at a higher temperature range; at the same time this makes the zero and sensitivity thermal shifts over the whole operating temperature range of the transmitter very small.

- · 4~20mA current loop output signal
- · G1/4 1/4" BSP(M) process connection
- · Pressure and vacuum options
- Vast pressure measurement range
- · Wide application scope and long service life
- · Automatic testing and laser trimming compensating zero and sensitivity
- · High accuracy and long-term stability
- · Good anti-corrosion and anti-impact ability
- Available ranges from -1 to +600 bar



## Pressure Medium Gas or liquid compatible with ceramic and stainless steel Pressure Range -1 ... 600 bar Overload Pressure 150%FS **Burst Pressure** 200%FS **Output Signal** 4~20mA Current Loop (2-wire) Accuracy 0.25%FS Load Resistance RL = (U - 6.5V) / 0.02A Long-Term Stability < 0.2%FS/year 84mm 27mm Ø 9~32VDC Supply Voltage **Compensated Temperature Range** 0~70°C Operating/Storage Temperature Range -20°C to +80°C / -30°C to +90°C Temperature Coefficient of Zero/Span 0.3%FS/10°C 27mm Insulation Resistance 100MΩ@50VDC Across Process Connection Flats G1/4 - 1/4" BSP(M) **Electrical Connection** Hirschmann style connector (others available) Material of Wetted Part 1Cr18Ni9Ti Material of Pressure Membrane Ceramic (Piezoresistive pressure sensor above 200 bar) Material of Housing 1Cr18Ni9Ti G1/4 Sealing N-Butvronitrile or Fluoro-Rubber Sealing Ring 20mm Ø Ingress Protection Rating IP65 rated Speed of Response 1ms

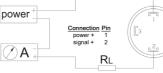
type	range (bar)	order code
Pressure	0 to 1.0	APB3-0010
Pressure	0 to 1.6	APB3-0016
Pressure	0 to 2.5	APB3-0025
Pressure	0 to 4.0	APB3-0040
Pressure	0 to 6.0	APB3-0060
Pressure	0 to 10.0	APB3-0100
Pressure	0 to 16.0	APB3-0160
Pressure	0 to 25.0	APB3-0250
Pressure	0 to 40.0	APB3-0400
Pressure	0 to 60.0	APB3-0600
Pressure	0 to 100.0	APB3-1000
Pressure	0 to 160.0	APB3-1600
Pressure	0 to 250.0	APB3-2500
Pressure	0 to 400.0	APB3-4000
Pressure	0 to 600.0	APB3-6000
Vacuum	-1 to 0.0 *	APB3V-0000
Vacuum	-1 to 1.5	APB3V-0015
Vacuum	-1 to 2.5	APB3V-0025
* supplied with a silicon element		



Main body terminals



Hirschmann style connector



4~20mA (2-wire) output wiring example



🗹 sales@thermosense.co.uk

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