

Features

- Industrial Pressure Transducer
- Piezo-resistive thick film ceramic sensor
- Stainless Steel Body
- Accuracy $<+0.25\%$ FS BSL
- Various outputs including mV, Volts and mA
- Pressure ranges from -1 to 400 bar
- $\frac{1}{4}$ " BSP Pressure port connection

RS PRO Pressure Sensors

RS Stock No.: 797-4955, 797-4961, 797-4964, 797-4967, 797-4970, 797-4973, 797-4983, 797-4986, 797-4989, 797-4992, 797-4995, 797-4999, 797-5002, 797-5005, 797-5009, 797-5011, 797-5015, 797-5018, 797-5021, 797-5024, 797-5027, 797-5030, 797-5033, 797-5037, 797-5043, 797-5046, 797-5049, 828-5741, 828-5745



RS PRO is the own brand of RS. The RS PRO Seal of Approval is your assurance of professional quality, a guarantee that every part is rigorously tested, inspected, and audited against demanding standards. Making RS PRO the Smart Choice for our customers.

Product Description

*This RS PRO series is suitable for use in a wide range of industrial applications. The probe uses a piezo-resistive ceramic sensor, giving excellent media compatibility within a stainless steel housing. The electronics incorporate a microprocessor based amplifier, requiring no adjusting and giving stable electronics, especially industrial applications. Each device is temperature compensated, calibrated and supplied with a traceable serial number and calibration data.**

**Calibration data is supplied as a sticker affixed to the product packaging - do not discard.*

Performance

Accuracy (Non-linearity & Hysteresis)	<+0.25% / FS (BFSL)	
Setting Errors (Offsets)	2-wire	Zero & Full Scale, <+0.5% / FS
	3-wire	Zero & Full Scale, <+0.5% / FS
	4-wire	Zero & Full Scale, <+0.5% / FS
		@ 10 Volts

Material

Housing Material	303 Stainless Steel
"O" Ring Seals	Viton
Diaphragm Material	Ceramic Al ₂ O ₃ 96%
Media Wetted Parts	Housing & Connection, 'O' ring seal, diaphragm
Weight	Approx 100g
Installation Position	Any
Operation Life	>100 x 10 ⁶ cycles
Insulation Resistance	>50M0hms at 50Vdc

Electrical Protection

Supply Reverse Polarity	No damage/no function
Electromagnetic Compatibility	CE EMC directive EN 61326-1:2013

Environmental Conditions

Shock	100g / 11s
Vibration	10g RMS (20 – 2000Hz)
Media Temperature	-40°C to +135°C
Ambient Temperature	-20°C to +80°C
Storage Temperature	-40°C to +125°C
Humidity	5% to 95% RH non-condensing

Temperature & Thermal Effects

Compensated Temperature Range	+20°C to +80°C
Thermal Zero Shift (TZS)	<+0.04% /FS/°C
Thermal Span Shift	<+0.015% /°C

Pressure Ranges & Passive mV/V Outputs

Nominal Pressure, Gauge	bar	1	6	10	16	25	40	100	250	400
Compound Range	bar			-1 to +9		-1 to +24				
Permissible Overpressure	bar	2	10	15	35	100	100	150	350	500
Burst Pressure	bar	3	12	20	50	120	120	200	500	650

Output Signal & Supply Voltage

Wire System	Output	Supply Voltage	Connection Pin Nos		
2-wire	4 – 20mA	9 – 32V dc	+ve Supply Pin 1	-ve Supply Pin 2	Ground Earth Pin
3-wire	0 – 5V dc	9 – 32V dc	+ve Supply Pin 1	-ve Supply Pin 2	
			+ve Output Pin 3	Ground Earth Pin	
4-wire	10mV/V	9 – 32V dc	+ve Supply	Pin 1	
			-ve Supply	Pin 2	
			+ve Output	Pin 3	
			-ve Output	Ground Earth Pin	

Range

RS Stock No.	Pressure Rating	Output
797-4989	0 - 1 Bar G	0 - 100mV
797-4983	0 - 1 Bar G	4 - 20mA
797-5043	0 - 1 Bar G	0 - 5V
797-5009	0 - 6 Bar G	0 - 100mV
797-5011	0 - 6 Bar G	4 - 20mA
797-5046	0 - 6 Bar G	0 - 5V
797-5024	-1 to +9 Bar G	4 - 20mA
797-4970	-1 to +9 Bar G	0 - 5V
797-4992	0 - 10 Bar G	0 - 100mV
797-5018	0 - 10 Bar G	4 - 20mA
797-5037	0 - 10 Bar G	0 - 5V
797-4964	0 - 16 Bar G	0 - 100mV
828-5741	0 - 16 Bar G	4 - 20mA
828-5745	0 - 16 Bar G	0 - 5V
797-4999	-1 to +24 Bar G	4 - 20mA
797-4961	-1 to +24 Bar G	0 - 5V
797-5015	0 - 25 Bar G	4 - 20mA
797-5030	0 - 25 Bar G	0 - 5V
797-5027	0 - 40 Bar G	4 - 20mA
797-5033	0 - 40 Bar G	0 - 5V
797-4995	0 - 100 Bar G	0 - 100mV
797-5021	0 - 100 Bar G	4 - 20mA
797-5005	0 - 100 Bar G	0 - 5V
797-5049	0 - 250 Bar G	0 - 100mV
797-4967	0 - 250 Bar G	4 - 20mA
797-4986	0 - 250 Bar G	0 - 5V
797-5002	0 - 400 Bar G	0 - 100mV
797-4955	0 - 400 Bar G	4 - 20mA
797-4973	0 - 400 Bar G	0 - 5V

All dimensions are in millimeters.

