



# Wet/Wet Differential Pressure Transmitter | Wet/Wet DP Sensor | PR3200

Robust, Corrosion Resistant, Measurement of Liquids and Gases

- Lead Time: 6 weeks



## AT A GLANCE

- Ranges: 0-500mbar up to 0-200bar
- Outputs: 4-20mA
- Line / Common Mode Pressure: 4x range max.
- Accuracy:  $<\pm 0.30\%/FS$
- Optional ATEX Intrinsically Safe Version

- Save Time With User Span and Zero Adjustments** – No need to send in your pressure sensor for minor adjustments.
- Titanium Pressure Diaphragms Offer Excellent Long-Term Performance**
- ATEX Certified Explosive Atmosphere Versions Available**
- Fast Installation with Optional Mounting Plate**

## DESCRIPTION

The PR3200 wet/wet differential pressure transmitter is designed for the **measurement of liquids and gases** across range of general purpose and industrial applications such as filter condition monitoring, flow measurement and hydraulic applications.

Being based on two titanium alloy sensing elements, the PR3200 wet/wet differential pressure transmitter offers **superb chemical and corrosion resistance** and is suited to applications where more aggressive medias are encountered. The sensing elements are coupled via a differential amplifier to provide a 4-20mA output suitable for use with all common measurement and control electronics.

Process connection is made via 2x G $\frac{3}{4}$ " female ports which can be fitted with adapters to provide alternative threads if required. An ATEX certified version is also available for use in hazardous areas.

## TECHNICAL SPECIFICATIONS

Input Pressure Range											
Nominal Pressure Range	Bar	0.5	1	2	4	6	10	20	40	100	200

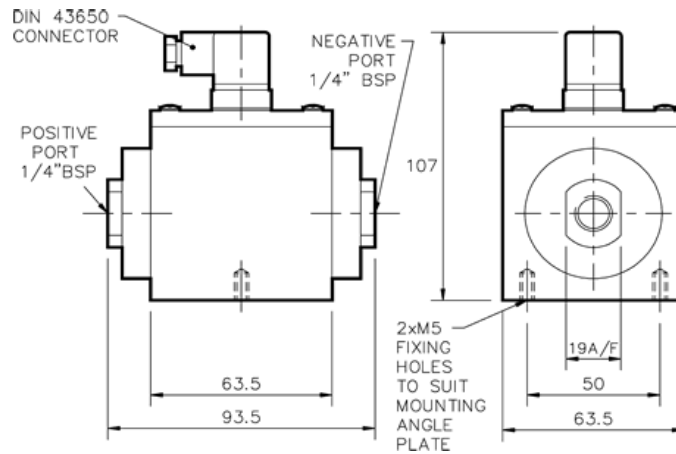


Input Pressure Range												
Permissible Overpressure	Bar	x 1.5	x 1.5	x 1.5	x 1.5	x 1.5	x 1.5	x 1.5	x 1.5	x 1.5	x 1.5	x 1.5
Max. Common Mode Pressure / Static Line Pressure	Bar	2.5	4	10	16	25	40	60	160	400	600	

Output signal & supply voltage	Number of Wires	Output	Supply Voltage	Supply Current
PR3200	2 - wire	4 - 20mA	10 - 36 Vdc	
PR3200X	2 - wire	4 - 20mA (ATEX)	10 to 28Vdc (unregulated)	N/A
PR3200V5	3 - wire	0 - 5Vdc	13 to 30 Vdc (unregulated)	13mA
PR3200V/0	3 - wire	0 - 10Vdc	13 to 30Vdc (unregulated)	13mA

Performance		
Accuracy (non-linearity, hysteresis, repeatability)	% Full Scale Output	<±0.30 (BFSL)
Zero Offset and Span Tolerance	% Span	±1
Zero Offset and Span Adjustment	% Full Scale Output	±5 with easy access trimming potentiometers
Media Temperature	°C	-20 to +85
Ambient Temperature	°C	-20 to +85
Storage Temperature	°C	+5 to +40
Thermal Zero Shift (TZS)	% / FS / °C	<±0.05
Thermal Span Shift (TSS)	% / FS / °C	<±0.05
Reverse Polarity Protection		Protected against supply voltage reversal up to 50Vdc
Media Compatibility		Any media compatible with 304 Stainless Steel and Titanium
Weight	Grams	835 grams for standard unit with DIN43650 socket fitted.
Insulation Resistance	Megohm @ 50 Vdc	>100
Electrical Connection		Mating socket with screw terminal connections to DIN 43650.
Pressure Connection		1/4" BSP female (others on request)
Response Time (10% - 90%)	ms	≤1
Environmental Protection		IP65
Load Driving Capability	4 - 20mA version	supply voltage - 10V / 0.02A (i.e. 36V - 10V / 0.02A = 1300Ω)
	0 - 5V / 0 - 10V versions	>5kΩ / >10kΩ
Long Term Stability	% / Full Scale	< 0.2 / 6 months
Operational Life	Pressure Cycles	> 10 <sup>8</sup> typical
ATEX Approval (4-20mA versions only)		Ex II 1 G Ex ia IIC T4 Ga (zone 0)
		Ex II 1 D Ex ia IIIC T135°C Da (zone 20)
		EX I M 1 Ex ia I Ma (group I M1)

## Product Dimensions



All dimensions are in mm

### Wiring Details

Pin No.	2 Wire (4 - 20mA)	3 Wire (0 - 5Vdc / 0 - 10Vdc)
1	+ve supply	common
2	4 - 20mA signal	+ve supply
3	not fitted	+ve output
±	to case	to case

## ORDERING CODES & OPTIONS

<b>PR3200X-10barg-AA-00-000 (example code)</b>	<b>PR3200</b>	<b>X</b>	<b>-</b>	<b>10bar</b>	<b>-</b>	<b>A</b>	<b>A</b>	<b>-</b>	<b>00</b>	<b>-</b>	<b>000</b>
<b>Product Family</b>											
PR3200	PR3200										
<b>Electrical Output</b>											
Blank = 4-20mA (2-wire)		Blank									
X = 4-20mA (2-wire) (ATEX Certified)		X									
V5 = 0-5Vdc (3-wire)		V5									
V10 = 0-10Vdc (3-wire)		V10									
<b>Pressure Range</b>											
10bar = 0 to 10bar differential			-	10bar							
2400psi = 0 to 2400psi differential			-	2400psi							
M1P1bar = -1 to +1bar differential			-	M1P1bar							
<b>Process Connection</b>											
A = G1/4" Female						-	A				



<b>PR3200X-10barg-AA-00-000 (example code)</b>	<b>PR3200</b>	<b>X</b>	<b>-</b>	<b>10bar</b>	<b>-</b>	<b>A</b>	<b>A</b>	<b>-</b>	<b>00</b>	<b>-</b>	<b>000</b>
<b>Housing Material</b>											
A = Standard							A				
<b>Cable Length</b>											
00 = None									-	00	
01 = 1 metre									-	01	
<b>Specials Code</b>											
000 = No Special Requirements										-	000

## RELATED PRODUCTS & SERVICES



Low Range Wet/Wet  
 Differential Pressure  
 Transmitter | DMD331  
[\(https://appmeas.co.uk/products/pressure-sensors/low-range-wet-wet-differential-pressure-transmitter-dmd331/\)](https://appmeas.co.uk/products/pressure-sensors/low-range-wet-wet-differential-pressure-transmitter-dmd331/)



Low Cost Process Meter  
 | Panel Mount |  
 Intuitive-Lite4-P  
[\(https://appmeas.co.uk/products/instrumentation/low-cost-process-meter-il4-p/\)](https://appmeas.co.uk/products/instrumentation/low-cost-process-meter-il4-p/)



Universal Process Input  
 Digital Indicator |  
 Intuitive4-P  
[\(https://appmeas.co.uk/products/instrumentation/universal-process-input-digital-indicator-int4-p/\)](https://appmeas.co.uk/products/instrumentation/universal-process-input-digital-indicator-int4-p/)



Low Differential  
 Pressure Sensor |  
 Dry/Dry | Low DP  
 Transmitter...  
[\(https://appmeas.co.uk/products/pressure-sensors/low-differential-pressure-sensor-pr3202/\)](https://appmeas.co.uk/products/pressure-sensors/low-differential-pressure-sensor-pr3202/)



Wireless Telemetry for  
 Load Cells, Strain Gauge  
 Sensors & Transducers  
[\(https://appmeas.co.uk/products/instrumentation/t24-wireless-telemetry/\)](https://appmeas.co.uk/products/instrumentation/t24-wireless-telemetry/)

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