



PIEZORESISTIVE PRESSURE TRANSMITTERS

SERIES 23RY

LOW PRESSURE RANGES FOR INDUSTRY APPLICATIONS

The series 23RY pressure transmitters utilize proven media-isolated piezoresistive pressure sensors and sophisticated signal conditioning to provide reliable outstanding value in low-pressure applications. The stainless steel sensor diaphragm and housing offer compatibility for a wide array of media, while the floating sensor installation and sealed electronics provide excellent resistance to the elements, moisture, and vibration.

Signal-conditioning circuitry in the 23RY measures and responds to changes in temperature by adjusting compensation values applied directly to the analog signal path, thereby creating an OEM pressure transmitter with narrow total error band and rapid response to changes in pressure.

Specifications

Pressure Ranges (FS) in bar

PR-23RY	-1	-0,5	-0,2	-0,1	0,1	±0,1	0,2	±0,2	0,5	±0,5	1	±1	2
PA-23RY										±0,5	1	±1	2
PAA-23RY									0,5		1		2
Overpressure	4	4	4	4	4	4	4	4	4	4	4	12	12

PR: Vented Gauge. Zero at atmospheric pressure PA: Sealed Gauge. Zero at 1000 mbar abs. PAA: Absolute. Zero at vacuum

	2-wire	3-wire	3-wire
Signal Output	4...20 mA	0...10 V	0,5...4,5 V
Supply	8...32 VDC	13...32 VDC	8...32 VDC
Load Resistance	< (U-8 V) / 0,025 A	> 5 kΩ	> 5 kΩ
Power Consumption		5 mA max.	4 mA max.
Accuracy	±0,25 %FS typ.	±0,5 %FS max.	
<small>Linearity (Lbfs) + Hysteresis + Repeatability</small>			
Error Band @ 0...50 °C	> 0,25...2 bar ± 2 %FS	0,1...0,25 bar ± 5 mbar	
Long Term Stability	2 mbar typ.	4 mbar max.	
Operating Temperature	-20...80 °C		
Pressure Connection / Seal	G 1/4 male / Viton® USIT O-Ring		
Material in Contact with Media	Pressure connection AISI304 Pressure transducer diaphragm AISI316L		
Electrical Connection	mPm plug and GSP plug incl. cable socket, M12 plug, cable		
Response Time (Supply ON)	< 5ms (0...90%)		
Limiting Frequency	2 kHz		
Isolation	> 10 MΩ @ 300 VDC		
EMC	EN 61000-6-2 / EN 61000-6-3 / EN 61326-2-3		
Protection Class	IP65 (with corresponding mating plug)		
Weight	~ 60 g		



Series 23RY with GSP plug



Series 23RY with mPm plug

Series 23RY

Pin Assignment

Output	Function	GSP	mPm	M12	Cable
2 Wire current	OUT/GND	1	1	2	white
	+Vcc	3	3	3	brown
3 Wire tension	GND	1	1	1	green
	+OUT	2	2	2	white
	+Vcc	3	3	3	brown

Note:
Recommended tightening torque 20...30 Nm

