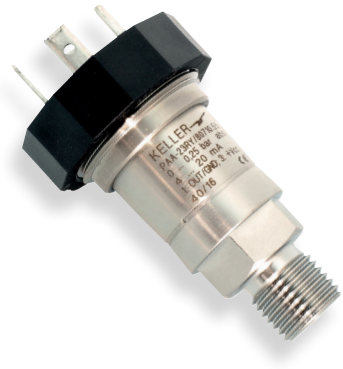
Piezoresistive Pressure Transmitters

Low pressure ranges for industry applications

Series 23 RY

The series 23 RY 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 23 RY 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.



Series 23 RY with GSP plug

Series 23 RY with mPm plug

Specifications

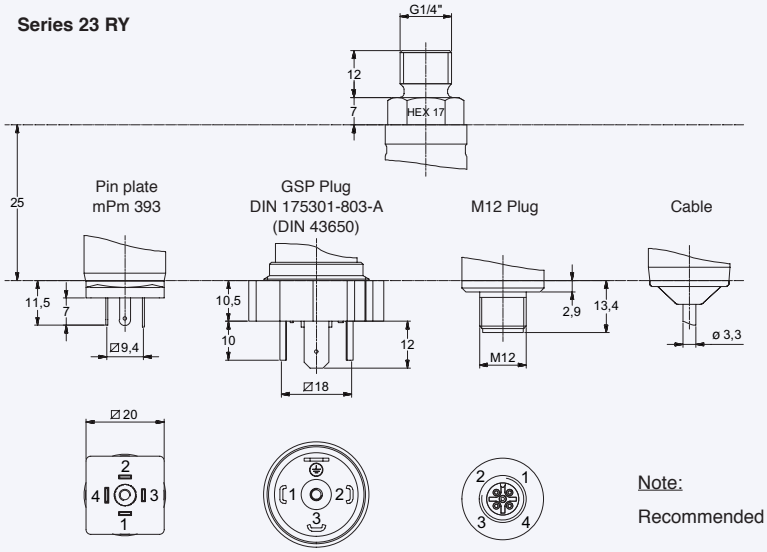
Pressure Ranges (FS) in bar													
PR-23 RY	-1	-0,5	-0,2	-0,1	0,1	± 0,1	0,2	± 0,2	0,5	± 0,5	1	±1	2
PA-23 RY										± 0,5	1	±1	2
PAA-23 RY									0,5		1		2
Overpressure	4	4	4	4	4	4	4	4	4	4	4	12	12

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 Linearity (Lbfsl) + Hysteresis + Repeatability	± 0,25 %FS typ.	± 0,5 %FS max.	
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 Media Contact	Stainless Steel AISI 316L (DIN 1.4404/1.4435) / Viton®
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 23 RY



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

RoHS CE

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Edition 07/2017
Subject to alterations
Companies approved to ISO 9001
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