

# Digital Miniature Pressure Transducer

## RP202C



Accuracy :  $\pm 0.5\%FS$ ;  $0.25\%FS$



Process Temperature upto  $300^{\circ}C$



Range Limit :  $-0.1Mpa \sim 10Mpa$



IP65 Protection

# ROCKSENSOR AT A GLANCE (ABOUT US)

Rocksensor is one of the global leaders specializing in Process Instrumentation, Research and Development and Designing of Industrial Automation Equipment. We provide highly precise pressure sensors and transmitters, flow metres, level transmitters and temperature transmitters with a prime focus to help our clients efficiently, safely and economically run complex industrial processes.

Rocksensor, headquartered in Switzerland, has its footprint in various geographical regions such as the US, Russia, South Korea, Italy, Germany, Singapore, Malaysia, Morocco, China, Taiwan, Australia, UAE, Brazil and India. Our clients come from some of the major industries such as Oil and Gas, Petrochemicals, Pharmaceuticals, FMCG, Automobiles, Water, Cement, Metal & Mining, and mainly from the Power Industry like Nuclear, Thermal, Hydro, and Solar.

Rocksensor deals in a wide range of highly accurate industrial automation instruments ensuring that even the complex industrial processes happen efficiently.

To fulfill the needs of our clients we make sure that our instruments work in even the harsh environmental conditions offering accurate recordings and communication.

We, at Rocksensor, believe in creating bonds that last a lifetime and create a success story for each and every client. Rocksensor aims to achieve a perfect fit in the global market landscape and establish our footprints across the globe.



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## KEY APPLICATION INDUSTRIES

- Oil and Gas sector
- Cement
- Metal
- Pulp and Paper
- Agriculture
- Textiles
- Chemicals
- Power
- Water
- Pharmaceutical
- Fertilizer
- Plastics and HVAC

## 1. Introduction

RP202C pressure transmitter is universal industrial application for gauge, absolute measured with ideal solution for different range measurement, adopts advanced diffusion silicon sensor as sensitive components, digital and stable circuit, precise temperature compensation, excellent sealing and assembly to guarantee the high quality and stability, widely used in various pressure measured industry.

### Used For:

- Hydraulics
- Pumps
- Constant Pressure Water Supply
- Compressor
- Refrigerator
- Air Conditioner Etc. Machine
- Petroleum
- Metallurgy
- Chemical Industry Process Control

## 2. Key Features

- High accuracy and stability:  $\pm 0.5\%$ ,  $0.25\%$
- Gauge, Absolute pressure measured
- Range: -100Kpa to 60Mpa, ex-work range programmable
- With anti- lightning, anti-RF interference
- Digital electrical board, water-proof, dust-proof, anti-interference With reversed polarity protection and instantaneous over current and over cross-voltage protection
- SS316L stainless steel diaphragm, stainless steel material suitable for various complicated environment

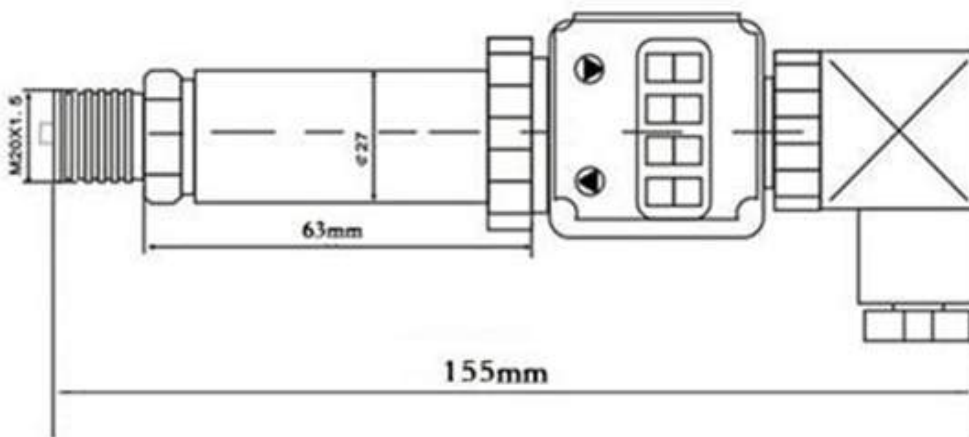


Digital Miniature Pressure Transducer

### 3. Technical Specifications

Characteristics	Parameters
Measured pressure	Gauge, Absolute
Process fluid	Liquid, Gas, Vapor, Oil
Range	-0.1Mpa ~ 10Mpa
Accuracy	±0.5%FS; 0.25%FS
Stability	0.1%F. S/year
Working temperature	-20°C ~ 80°C
Compensation temperature	20°C; -10°C ~ 70°C
Zero temperature Shift	±1.5%FS/°C(acc:0.5%FS), ±0.75%FS/°C(acc:0.25%FS)
Full range temperature Shift	±1.5%FS/°C(acc:0.5%FS), ±0.75%FS/°C(acc:0.25%FS)
Overload pressure	150%FS
Insulation resistance	≥100MΩ(50VDC)
Load resistance	4-20mA: ≥800Ω
(Output)	0-10VDC: ≥10KΩ
Process Connector	G1/2", G1/4', 1/2"NPT, 1/4"NPT
Diaphragm material	SS316L
Connection material	SS304 stainless steel
Body material	SS304 stainless steel
Output	4-20mA
Electrical connector	Hirschman plug
Display	LCD:- 1999 ~ 19999; LED; 9999
Vibration	10g, 20 ~ 2KHz
Shock	100g/10ms
IP protection	IP65
Storage temperature	-10°C ~ 60°C
Storage Humidity	10% ~ 90%
Power supply	12 ~ 30VDC
Standard power supply	24VDC ±5%, ripple < 1%

### 4. Size (mm)



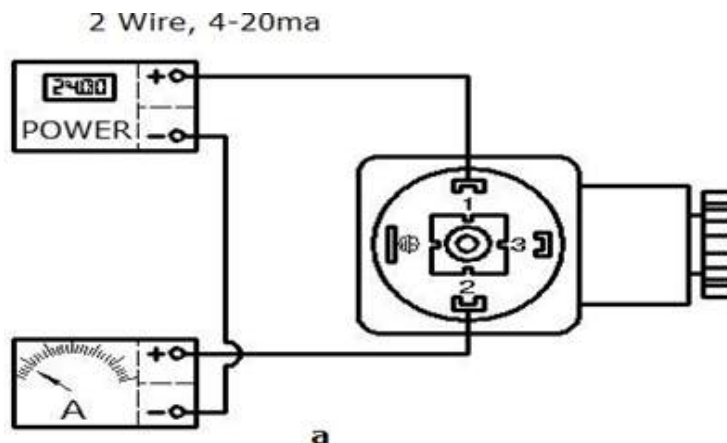
### 5. High Temperature Process Connector (Accessories)

Pigtail Siphon : T2:150°C, 10Mpa	T2: Fluid: 0 ~ 150°C, 100Mpa	T3: Fluid: 0 to 300°C, 100Mpa
		

### 6. Measuring Range

Code	Range	Code	Range
01	0-10Kpa/ 0-0.1bar/0-100mbar	11	0-1.6Mpa / 0-16bar
02	0-20Kpa / 0-0.2bar/0-200mbar	12	0-2.5Mpa / 0-25bar
03	0-35Kpa/ 0-0.35bar/0-350mbar	13	0-4Mpa / 0-40bar
04	0-70Kpa/ 0-0.7bar/0-700mbar	14	0-6Mpa / 0-60bar
05	0-100Kpa/0-0.1Mpa/ 0-1bar	15	0-10Mpa / 0-100bar
06	0-160Kpa/0-0.16Mpa / 0-1.6bar	16	0-16Mpa /0-160bar
07	0-250Kpa/0-0.25Mpa/0-2.5bar	17	0-25Mpa /0-250bar
08	0-400kpa/0-0.4Mpa/0-4.0bar	18	0-40Mpa /0-400bar
09	0-600kpa/0-0.6Mpa/0-6.0bar	19	0-60Mpa /0-600bar
10	0-1Mpa/0-10bar	20	0-100Mpa /0-1000bar

### 7. Electrical Diagram



## 8. Model Selection Table

RP202C		Digital Miniature Pressure Transducer							
Code	1	2	3	4	5	6	7	8	
<b>Type</b>		Gauge pressure measured		G		Absolute pressure measured		A	
<b>Display Type</b>		LED Display		E		LCD Display		D	
<b>Process Temperature</b>		-20°C ~ 80°C		T1		0 ~ 150°C (with high temperature accessory)		T2	
		0 ~ 300°C (with high temperature accessory)		T3					
<b>Measured Range</b>		Negative pressure range		00		0-10Kpa/ 0-0.1bar/0-100mbar		01	
		0-20Kpa / 0-0.2bar/0-200mbar		02		0-35Kpa/ 0-0.35bar/0-350mbar		03	
		0-70Kpa/ 0-0.7bar/0-700mbar		04		0-100Kpa/0-0.1Mpa/ 0-1bar		05	
		0-160Kpa/0-0.16Mpa / 0-1.6bar		06		0-250Kpa/0-0.25Mpa/0-2.5bar		07	
		0-400kpa/0-0.4Mpa/0-4.0bar		08		0-600kpa/0-0.6Mpa/0-6.0bar		09	
		0-1Mpa/0-10bar		10		0-1.6Mpa / 0-16bar		11	
		0-2.5Mpa / 0-25bar		12		0-4Mpa / 0-40bar		13	
		0-6Mpa / 0-60bar		14		0-10Mpa / 0-100bar		15	
		0-16Mpa /0-160bar		16		0-25Mpa /0-250bar		17	
		0-40Mpa /0-400bar		18		0-60Mpa /0-600bar		19	
		0-100Mpa /0-1000bar		20		Above 100Mpa high pressure, special			
				HX					
<b>Special Function</b>		N		None		A2		0.25% High Accuracy for range higher than 100Kpa	
<b>Electrical Connector</b>		S		Hirschman plug		D		Direct cable type	
<b>Process Connection</b>		P1		G1/2", thread		P2		1/2"NPT, thread	
		P3		G1/4", thread		P4		1/4"NPT, thread	
		P5		M20X 15, thread		P6		M14x1.5, thread	
		X		Customized					
<b>Output</b>		A		4-20ma, 2 wire					

### Example: RP202C-GET101AP1SN

RP202C - Digital Miniature Pressure Transducer

G - Type : Gauge pressure measured

E - Display Type : LED Display

T1 - Process Temperature : -20°C ~ 80°C

01 - Measured Range : 0-10Kpa/ 0-0.1bar/0-100mbar

A - Output : 4-20ma, 2 wire

P1 - Process Connection : G1/2", thread

S - Electrical Connector : Hirschman plug

N - Special Function : None

**Note:**

\*Please advise the cable length you required if the electrical connection is direct cable type

\*Absolute pressure range only for code 03, 05 to 12

## Field Instrumentation Range



### Pressure Measurement

- Smart Differential Pressure Transmitter
- Smart Gauge Pressure Transmitter
- Smart Absolute Pressure Transmitter
- Miniature Pressure Transducer without display
- Sanitary Gauge/ Absolute Pressure Transmitter

- Submersible Pressure Transmitter
- Remote Seal Differential P.T. with capillary
- Remote Seal Differential P.T. Direct Mount
- Remote Seal Gauge/Absolute P.T. with capillary
- Remote Seal Gauge/Absolute P.T. Direct Mount



### Flow Measurement

- Coriolis Mass Flowmeter
- Thermal Gas Mass Flowmeter
- Positive Displacement Flowmeter
- Electromagnetic Flowmeter
- Vortex Flowmeter

- Turbine Flowmeter
- Variable Area Flowmeter
- Clamp On Ultrasonic Flowmeter
- Inline Ultrasonic Flowmeter
- Portable Ultrasonic Flowmeter



### Level Measurement

- RADAR Level Transmitter Horn Antenna
- Compact RADAR Level Transmitter
- RADAR Level Transmitter Sanitary
- RADAR Level Transmitter
- Guided Wave RADAR Level Transmitter
- Guided Wave RADAR Level Transmitter
- RADAR Level Transmitter Lens Antenna

- RADAR Level Transmitter Rod Antenna
- Ultrasonic Level Transmitter
- Microwave Barrier Level Switch
- Admittance Level Switch Series
- Vibrating Rod Level Switch Series
- Tuning Fork Level Switch Series



### Temperature Measurement

- Head Mount Temperature Transmitter
- Temperature Transmitter for Sanitary Applications

- DIN Rail Temperature Transmitter
- Field Mount Temperature Transmitter

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