

# Digital Miniature Pressure Transmitter RP202C



# 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: ±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



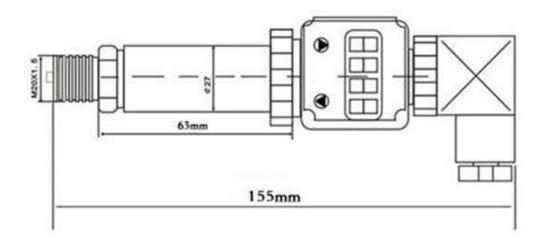
**Digital Miniature Pressure Transducer** 



# 3. Technical Specifications

Characterstics	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)



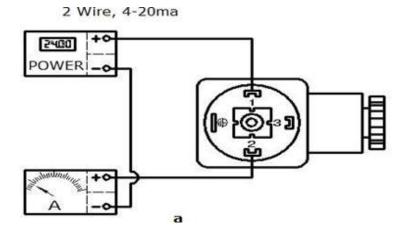
# **5. High Temperature Process Connector (Accessories)**



# 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

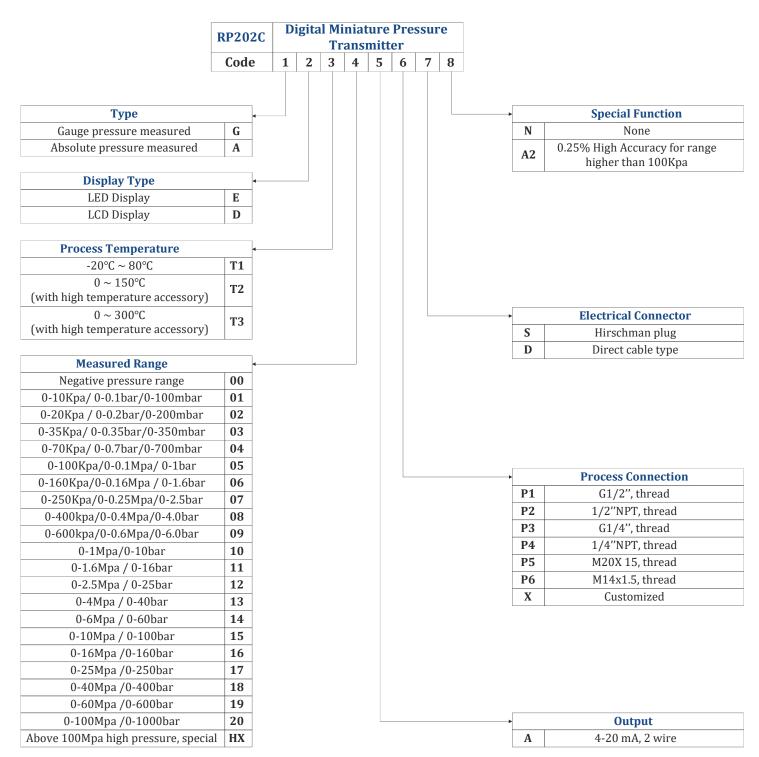
## 7. Electrical Diagram





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#### 8. Model Selection Table



### Example: RP202C-GET101AP1SN

RP202C - Digital Miniature Pressure Transmitter

G - Type : Gauge pressure measured E - Display Type : LED Display

T1 - Process Temperature :  $-20^{\circ}$ C  $\sim 80^{\circ}$ 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

<sup>\*</sup>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 PressureTransmitter
- Miniature Pressure Transducer without display
- Sanitary Gauge/ Absolute Pressure Transmitter



#### **Flow Measurement**

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

#### Temperature Measurement

- Head Mount Temperature Transmitter
- Temperature Transmitter for Sanitary Applications

- 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
- Turbine Flowmeter
- · Variable Area Flowmeter
- · Clamp On Ultrasonic Flowmeter
- Inline Ultrasonic Flowmeter
- Portable Ultrasonic Flowmeter
- 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
- DIN Rail Temperature Transmitter
- Field Mount Temperature Transmitter

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