Model P203 Series

Corrosion Proof Pressure Transmitter

Features

- ▶ High corrosion proot pressure transmitter for industrial applications
- ▶ Measuring ranges from 0 ~ 0.1 to 1.0 MPa
- ▶ Advanced ceramic or teflon lined pressure sensor
- ▶ Teflon body & wetted parts

Applications

The P203 pressure transmitter can be used in the area of corrosion such as acid or something

- ▶ Machine tools and automatic machinery Flow control
- ▶ Semicondutcor processing system
- ▶ Equipments for chemical and petrochemical industry
- ▶ HVAC

Specifications

Input

Technology	Al_2O_3 96 % Ceramic Sensor, Teflon Lined STS316L
Pressure range	0 ~ 0.1 to 1.0 MPa Relative pressure
Pressure reference	Gauge, vacuum, compound
Overload pressure	1.5 times of F.S.

Output

	Current output		Voltage output	
Electrical connection type	2-wire technique		3 or 4-wire technique	
Full scale output signal	20 mA	± 0.05 %	5 V	± 0.05 %
Zero measured output	4 mA	± 0.03 %	1 V	± 0.03 %
	Other signals available on request			

Electrical Specifications

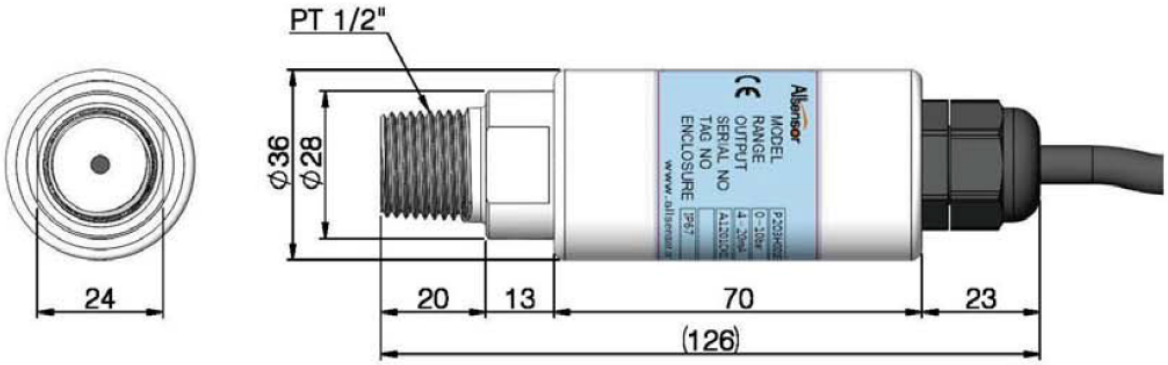
Power supply	12 ~ 36 V DC (It is not free voltage)
Load resistance max@24 V	500 Ω at 24 V
Power ripple	≤ 500 mV P-P
Insulation resistor	≥ 20 MΩ, 25 V DC

Performance Specifications

Accuracy	≤ ± 0.5 % F.S. (<1 bar ; ≤ ± 1.0 % of F.S.)
Non-linearity	± 0.10 % F.S. typical
Repeatability	± 0.05 % F.S. typical
Pressure hysteresis	± 0.05 % F.S. typical
Long term stability	± 0.20 % F.S. over 1 year
Response time(10 ~ 90 %)	≤ 20 ms
Refernce temperature	25 ℃
Working temperature range(Process)	-40 ~ 135 ℃
Compensated temperature range(Process)	-10 ~ 50 ℃
Ambient temperature range	-20 ~ 60 ℃
Thermal offset shift	≤ ± 0.06 % F.S. in reference to +25 ℃ ··· +85 ℃ max.
	≤ ± 0.15 % F.S. in reference to +40 ℃ ··· +25 ℃ / +85 ℃ ··· +135 ℃ max.
Thermal span shift	≤ - 0.020 % F.S. in reference to -40 ℃ ··· 135 ℃ typical

Physical Specifications	
Process connection	R(PT)1/2"(M) standard
Electrical connection	Cable
Process media	Gases and liquids compatible with Al_2O_3, Viton and Teflon
Materials	Wetted parts : Al_2O_3 96 %, Viton and Teflon
	Housing : Teflon
IP grade	None
Explosion proof	None
Influence of mounting position	Not critical
Weight	Approx. 250 g
Option	

Dimension(mm)



Process Connection		Output	mV	V, mA	V, mA	mA
		Wire	4 Wire	4 Wire	3 Wire	2 Wire
C	L	①, Red	Excitation +	Power +	Power +	Power +
PT 1/2"	20	②, Black	Excitation −	Power −	Common −	Return −
		③, Green	Signal +	Signal +	Signal +	
		④, White	Signal −	Signal −		
		Power	V	12~33 V DC		

Ordering Information

P203 G H 0010 B C E C

Model Name
P203
Corrosion Proof P/T

Pressure Type
G : GUAGE

Analog Output
H : 4~20mA(2Wire)
A : 4Wire mV
E : 3Wire 1~5V

Pressure Range
XXXX : Pressure
VXXXX : VACUUM Pressure
LXXXX : LOW Pressure (미 압)

Pressure Unit
M : MPa
B : bar
P : psi
K : kgf/㎠

Pressure Sensor
C : Ceramic

Process connection
E : PT 1/2"

Electric connection
C : Cable

Pressure Range is selected from the following code table.

Pressure Range Code

CODE	kgf/cm²	bar	psi	MPa
0001	0~1	0~1	0~15	0~0.1
0003	0~3	0~3	0~45	0~0.3
0005	0~5	0~5	0~70	0~0.5
0006	0~6	0~6	0~90	0~0.6
0010	0~10	0~10	0~150	0~1
0015	0~15	0~15	0~200	0~1.5
0020	0~20	0~20	0~300	0~2
0025	0~25	0~25	0~350	0~2.5
0030	0~30	0~30	0~450	0~3
0035	0~35	0~35	0~500	0~3.5
0050	0~50	0~50	0~700	0~5
0070	0~70	0~70	0~1000	0~7
0100	0~100	0~100	0~1500	0~10
0200	0~200	0~200	0~3000	0~20
0250	0~250	0~250	0~3500	0~25
0300	0~300	0~300	0~4500	0~30
0350	0~350	0~350	0~5000	0~35
0500	0~500	0~500	0~7000	0~50
0700	0~700	0~700	0~10000	0~70
1000	0~1000	0~1000	0~15000	0~100
2000	0~2000	0~2000	0~28000	0~200
V0000	−76~0 cmHg	−1013~0 mbar	−30~0 inHg	−0.1~0
V0001	−76 cmHg~1	−1013 mbar~1	−30 inHg~15	−0.1~0.1
V0002	−76 cmHg~2	−1013 mbar~2	−30 inHg~30	−0.1~0.2
V0003	−76 cmHg~3	−1013 mbar~3	−30 inHg~45	−0.1~0.3
V0004	−76 cmHg~4	−1013 mbar~4	−30 inHg~60	−0.1~0.4
V0006	−76 cmHg~6	−1013 mbar~6	−30 inHg~90	−0.1~0.6
V0010	−76 cmHg~10	−1013 mbar~10	−30 inHg~150	−0.1~1
V0015	−76 cmHg~15	−1013 mbar~15	−30 inHg~200	−0.1~1.5
V0020	−76 cmHg~20	−1013 mbar~20	−30 inHg~300	−0.1~2
L0600	0~600 mmH2O	0~60 mbar	0~0.9	0~0.006
L1000	0~1000 mmH2O	0~100 mbar	0~1.5	0~0.01
L2000	0~2000 mmH2O	0~200 mbar	0~3	0~0.02
L3000	0~3000 mmH2O	0~300 mbar	0~4.5	0~0.03
L4000	0~4000 mmH2O	0~400 mbar	0~5.5	0~0.04
L5000	0~5000 mmH2O	0~500 mbar	0~7	0~0.05
00000	Other Range			

Application Work Sheet (Pressure)

☐ Quotation ☐ Purchase Order

For better support to the customer, please fill this form out when you request a quotation or place an order. It will help us to provide you the correct solution and minimize a risk which is our goal for the customer.

General Information

Client		Date	
Name		End-User	
TEL. No.		Project	
FAX. No.		Required delivery	
Model			
Quantity			

Performance Specifications

Pressure Range	
Operating Range	
Measuring Unit	☐ MPa ☐ bar ☐ kPa ☐ mmHg ☐ mmH_2O ☐ mbar ☐ kgf/cm^2 ☐ Torr ☐ psi ☐ ℃ ☐ ℉
Pressure reference	☐ Gauge ☐ Absolute ☐ Vacuum ☐ Compound
Output signal	☐ mV/V ☐ 4 ~ 20 mA ☐ 1 ~ 5 V ☐ 0 ~ 10 V
Power Supply	☐ 24 V DC ☐ 12 V DC

Physical Specifications

Process Connection	☐ PT 1/4" ☐ PT 3/8" ☐ PT 1/2" ☐ G1/4" ☐ G1/2" ☐ PF 1/4" ☐ PF 3/8" ☐ PF 1/2" ☐ NPT1/4" ☐ NPT1/2" ☐ Flush 1/2" ☐ Flush 3/4" ☐ Flush 1" ☐ 40A Flange ☐ 50A Flange ☐ 80A Flange ☐ 100A Flange ☐ Sanitary Diaphragm _____ ☐ Other _____
Electrical Connection	☐ Terminal ☐ DIN 43650 ☐ M12 Connector ☐ Cable(1.5 m)
Local Display Unit	☐ None ☐ LCD ☐ LED

Process Conditions

Process Media	
Operating Temperature	
Humidity	
Vibration	
Explosion Protection	☐ Required ☐ No required
Weather Protection	☐ Required ☐ No required