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 ☐ mmH2O ☐ mbar
Pressure reference	☐ kgf/cm2 ☐ Torr ☐ psi ☐ ℃ ☐ ℉
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

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			

P603 Series High Performance Smart Pressure Transmitter

Feature

- Measuring ranges from 0.01 to 40 MPa(Gauge Pressure)
- Measuring ranges from 0.01 to 3 MPa(Differential Pressure)
- Advanced Mono-Crystalline silicon pressure sensor
- High reliability & excellent accuracy
- Long term stability
- Range adjust key Included(HART Option)
- 의장등록 제30-0366814호

Applications

The high precision Smart Pressure Transmitter can be used for a wide range of application in process control, automatic machinery & hydraulic or pneumatic equipments.

- Chemical, petrochemical, food and drug process control.
- Hydraulic and pneumatic equipments
- Machine tools and automatic machinery
- Liquid storage tank monitoring
- HVAC

Input

Technology	Advanced Mono-Crystalline silicon pressure sensor
Pressure range	0 ~ 0.01 to 40 MPa (Gauge Pressure)
	0 ~ 0.01 to 3 MPa (Absolute & Differential Pressure)
Pressure reference	Differential Pressure, Gauge Pressure or Absolute Pressure
Overload Pressure	1.5 times of F.S. (Max. 100 MPa) / Gauge & Absolute Pressure
	Max. 40 MPa / Differential Pressure

Output

OutPut Signal	4 ~ 20 mA 2-wire current output
Localdisplay	Customized LCD with backlight / 5 digits
	Non-indicating
Rangeability	Min. 5 : 1 / Max. 100 : 1

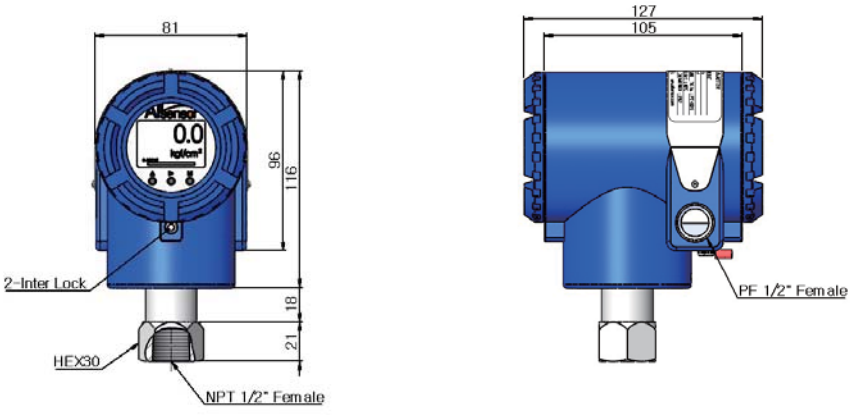
Electrical Specifications

Power supply	24 V DC
Load resistance max@24 V	500 Ω at 24 V
Influence of excitation	0.01 % F.S.
Power ripple	≤ 500 mV P-P
Reverse Polarity	Protected
Shock resistance	≤ 20 g
Vibration	0.1 G (1 ms) maximum
Response time(10 % ~ 90 %)	≤ 2 ms

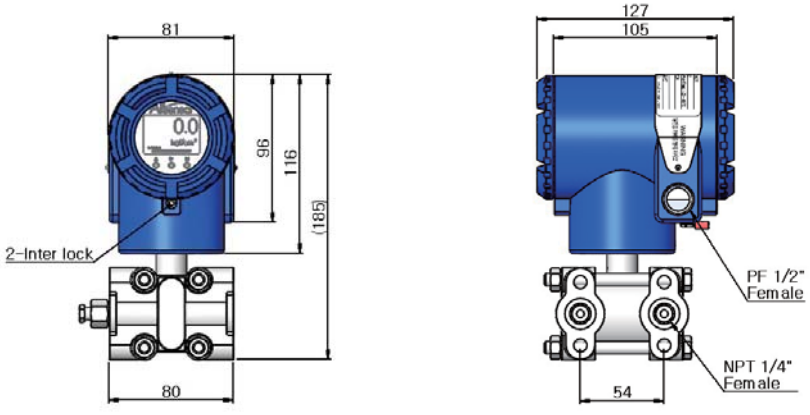
Perfirmance Specifications

Accuracy	≤ ± 0.075 % F.S.
Non-linearity	± 0.02 % F.S.
Repeatability	± 0.01 % F.S.
Pressure hysteresis	± 0.01 % F.S.
Long term stability	± 0.01 % F.S. over 6 month
Cutoff frequency(-3 dB)	≤ 2 kHz
Refernce temperature	25 ℃
Operating temperature range	-25 ~ 80 ℃
Compensated temperature range	-20 ~ 60 ℃
Thermal sensutivity shift	≤ ± 0.02 % F.S. inreference to 25 ℃ typical
Thermal zero shift	≤ ± 0.02 % F.S. inreference to 25 ℃ typical

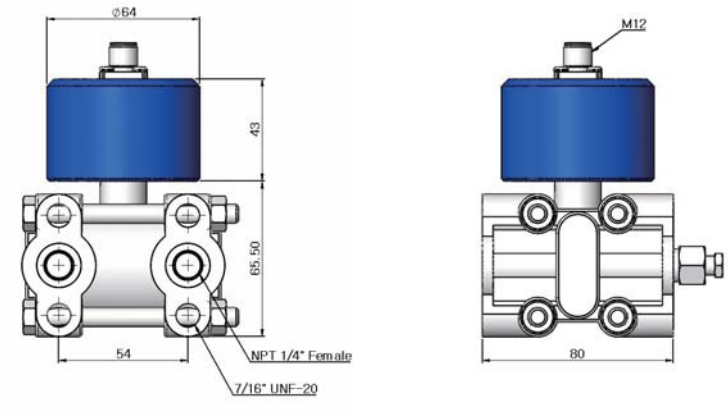
Dimension(mm)



Pressure(Gauge or Absolute) Transmitter



Differential Pressure Transmitter(Indicating)



Differential Pressure Transmitter(Non-Indicating)

Perfirmance Specifications

Process connection	NPT 1/2" Female for gauge & absolute pressure(standard)
	NPT 1/4" Female for differential pressure(standard)
Electrical cable entry	G(PF) 1/2" Female
Process media	Gases and liquids compatible with ANSI 316L
Materials wetted by process	Diaphragm : ANSI 316L
	Gasket ("O" ring) : Viton(FKM) or Teflon(PTFE)
	Housing : Aluminumdie-casting
Enclosure rating	IP67
Explosion protection	Ex d IIC T6(KGS), excluding non-indicating type
Influence of mounting position	Not critical
Weight	Appx 3 kg
Option	2" Pipe Mounting bracket(304SS)
	With Diaphragm(Sanitary) seal / Remote or Direct

Ordering Information

◈ **P603 Pressure Transmitter**

Model	Description		Housing	Indicating		
P603	High Performance Smart Pressure Transmitter		Al Diecasting	LCD		
Code	**Pressure Reference**					
A	Absolute					
G	Gauge					
Code	**Output Signal**					
H	Current	4 to 20 mA DC	2Wire			
Code	**Span Range**				A	G
01	0 ~ 60 ··· 600 mmH2O	(0 ~ 0.6 ··· 6 kPa)	(0 ~ 6 ··· 60 mbar)		X	O
02	0 ~ 200 ··· 4000 mmH2O	(0 ~ 2 ··· 40 kPa)	(0 ~ 20 ··· 400 mbar)		O	O
03	0 ~ 0.025 ··· 2.5 bar	(0 ~ 2.5 ··· 250 kPa)	(0 ~ 25 ··· 2500 mbar)		O	O
04	0 ~ 0.3 ··· 30 bar	(0 ~ 0.03 ··· 3 MPa)			O	O
05	0 ~ 1 ··· 100 bar	(0 ~ 0.1 ··· 10 MPa)			X	O
06	0 ~ 21 ··· 210 bar	(0 ~ 2.1 ··· 21 MPa)			X	O
07	0 ~ 4 ··· 400 bar	(0 ~ 0.4 ··· 40 MPa)			X	O
Code	**Process Connection Style & Size** (1)				A	G
R	NPT 1/2" (Female)				O	O
O	Others (Adapter)				◈	◈
Note 1	Other connection styles are available on request but specify it and the extra price may apply.					
Code	**Electrical Cable Entry**					
G	G(PF) 1/2" Female		M	PIN M12 Connector		
Code	**Applicable Accessory Option**(2)		**Code**	**Applicable Accessory Option**(2)		
J0	Not Apply		DS	Diaphragm Seal		
J1	Vent Plug		SS	Sanitary Seal		
J9	Non-Indicating		NS	2 x SPDT Relay output		
Note 2	On selecting of accessory option, please provide the detail specification.					
Code	**Process Connection Style & Size** (3)				A	
T1	Calibration Report(Test Report) by Manufacturer				O	
T2	Calibration Report(Test Report) by KOLAS				◈	
M1	Material Certificate(Mill Sheet)				◈	
HR	HART Protocol				◈	
SQ	Square Root Output				◈	
OX	Oxygen Cleaning(Oil Free)				◈	
Note 3	On selecting of these option, please specify the detail requirement if any and the extra price may apply.					

P603GH06RGJO-T1 — **Sample Model Selection**

O = Standard / ◈ = Option / X = Not available

Diaphragm Seal can be installed into this series.

Ordering Information

◈ P603 Differential Pressure Transmitter

Model	Description		Housing	Indicating	
P603	High Performance Smart Pressure Transmitter		Al Diecasting	LCD	
Code	Pressure Reference				
D	Differential Pressure				
Code	Output Signal				
H	Current	4 to 20 mA DC	2Wire		
Code	Span Range				
01	0 ~ 20 ··· 600 mmH2O	(0 ~ 0.2 ··· 6 kPa)	(0 ~ 2 ··· 60 mbar)		
02	0 ~ 40 ··· 4000 mmH2O	(0 ~ 0.4 ··· 40 kPa)	(0 ~ 4 ··· 400 mbar)		
03	0 ~ 0.125 ··· 2.5 bar	(0 ~ 12.5 ··· 250 kPa)			
04	0 ~ 0.3 ··· 30 bar	(0 ~ 0.03 ··· 3 MPa)			
Code	Process Connection Style & Size (1)				
P	NPT 1/4" (Female)				
O	Others (Oval Adapter Flange)				
Note 1	Other connection styles are available on request but specify it and the extra price may apply.				
Code	Electrical Cable Entry				
G	G(PF) 1/2" Female		M	PIN M12 Connector	
Code	Applicable Accessory Option(2)		Code	Applicable Accessory Option(2)	
J0	Not Apply		DS	Diaphragm Seal	
J1	Vent Plug		SS	Sanitary Seal	
J9	Non-Indicating		NS	2 x SPDT Relay output	
Note 2	On selecting of accessory option, please provide the detail specification.				
Code	Process Connection Style & Size (3)				A
T1	Calibration Report(Test Report) by Manufacturer				O
T2	Calibration Report(Test Report) by KOLAS				◈
M1	Material Certificate(Mill Sheet)				◈
HR	HART Protocol				◈
SQ	Square Root Output				◈
OX	Oxygen Cleaning(Oil Free)				◈
Note 3	On selecting of these option, please specify the detail requirement if any and the extra price may apply.				

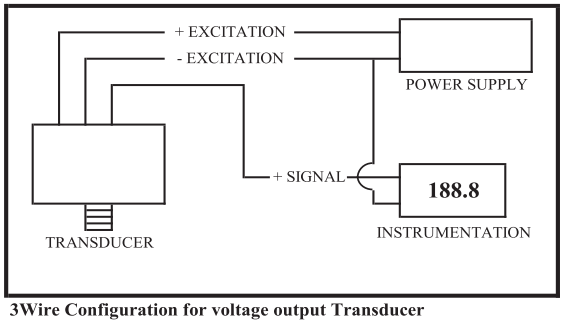
P603DH04PGJO-T1	Sample Model Selection

O = Standard / ◈ = Option / X = Not available

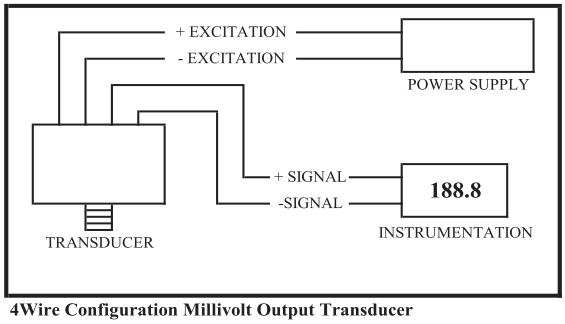
Diaphragm Seal can be installed into this series.

Pressure Transducer & Transmitter

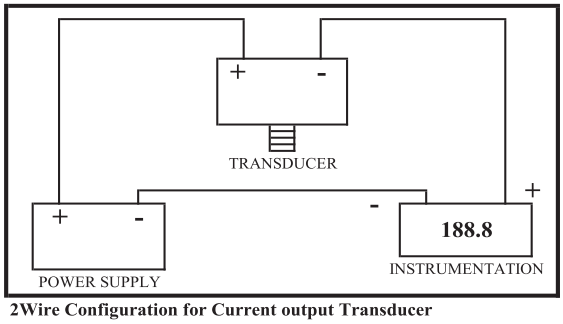
Installation and Wiring



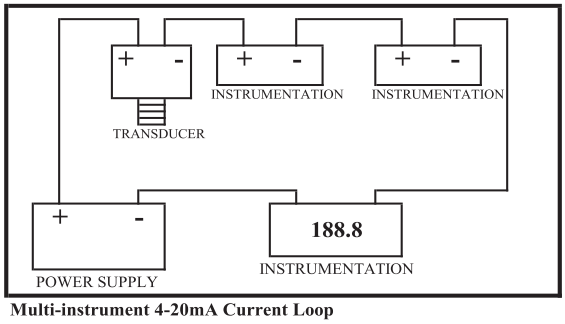
3Wire Configuration for voltage output Transducer ("-"Excitation and "-"Signal Are Common)



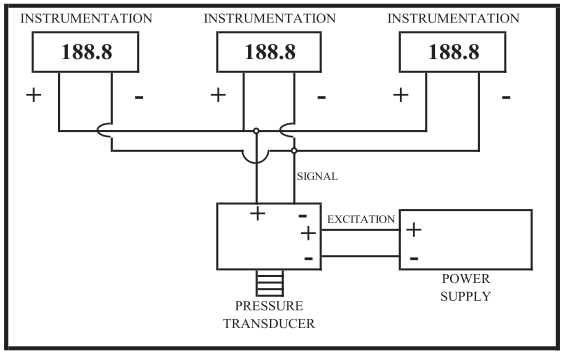
4Wire Configuration Millivolt Output Transducer



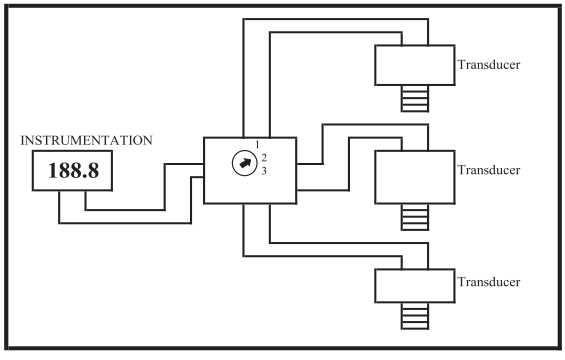
2Wire Configuration for Current output Transducer



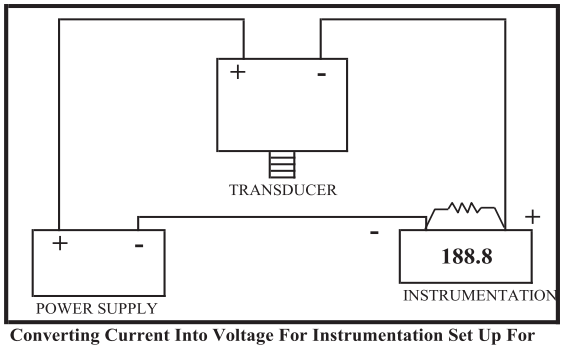
Multi-instrument 4-20mA Current Loop (Panel Meters, Chart Recorder, Computers, etc)



Multiple Instruments Wired In Parallel to a Voltage Output



Multiple Transducer Wired to One Meter and One Switch
(Transducer With Built-in Zero & Span Adjustments, Same outputs & Same Pressure Range)



Converting Current Into Voltage For Instrumentation Set Up For Voltage