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Pressure Meter & Controller

KC-2800



Pressure Meter&Controller(KC-2800)

Feature

- abnormality in the flowmeter Interface (RS-485 Modbus / RTU, Standard)
- Pressure measurement is not required.
- Simple signal processing and calibration in the field
- No moving part
- Excellent reproducibility / excellent long-term stability
- Best price/performance ratio
- Easy to adapt to different applications
- The response speed (1 sec) according to the flow rate change is fast.
- Kolas sword, correction function (optional can be added)



PRESSURE METER & CONTROLLER
KC-2800 TOP



PRESSURE METER & CONTROLLER
KC-2800 FRONT

Description

The Model KC-2800 Series is a digital mass flow meter. It is based on a digital device in which analog sensor signals are sent directly to the microprocessor. It not only delivers the highest quality signal safely and accurately,

but it also directly controls proportionall control valves and other indications, so it is more accurate than convetional analog-based flow meters, and it can be used in various fields and across a wide range of applications.

The components consist of a sensor, base, reducer, control board, and proportional control valve. the sensor, which is a key component, is specialty manufactured to accurately transmit the mass of gas. It is not overtly sensitive and has excellent, reproducibility.

As for the control method, PID and Adaptive are the two methods provided. In particular, the PID control method.

which is programmed based on a mathematical, algorithm, finds the optimal condition within any given environment. Aaptive control methods are added to make the response of the entire flow band efficient and fast.

The product has an FND indicator and buttons for single reading and operation. So even if it is not used for a long time or the pressure and the external environment are changed apidary, the user can quickly and effortlessly adjust the conditions and can easily check the gas status in the product, along with other functions such as forced opening of the valve and error displays.

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Performance Specification

- ◆ Accuracy
 - ±1 % of F.S, F.S의 ±0.25%이내
 - (option : 25~100% of Full Scale)
- ◆ Repeatability
 - ±0.3 % of Full Scale
- ◆ Linearity
 - ±0.3 % of Full Scale
- ◆ Control Range
 - 2 ~ 100% of Full Scale
- ◆ Control Valve Type
 - Nomally Closed Proportional Valve
- ◆ Response Time
 - 1 Sec
- ◆ Prssure Resistance
 - Max. 50 Bar
- ◆ Pressure Range
 - 0 ~ 1 BAR(Absolute), 1 ~ Max. 50 BAR

Operating Specification

- ◆ Fluid
 - Air & All Gas
- ◆ Gas Accumulation Range
 - Up to 1 X 10⁻⁸
- ◆ Gas & Ambient Temp.
 - Within 5 ~ 50 °C
 - (Accuracy Warranty : 15 ~ 35°C)
- ◆ Input Power (Select)
 - +15VDC 또는 +24 VDC / 최대 500mA
- ◆ Output Signal (Option)
 - 0 ~ 5VDC, 0 ~ 10VDC, 0 ~ 20mA, 4 ~ 20mA
- ◆ Display & Key
 - 4 Digit – 7 Segment, Adjustalbe 4 Teck S / W, with Display
 - 8 Digit – 7 Segment, 적산 기능(option)
- ◆ Digital Interface (Std.)
 - RS-485S (Modbus / RTU, Std.)

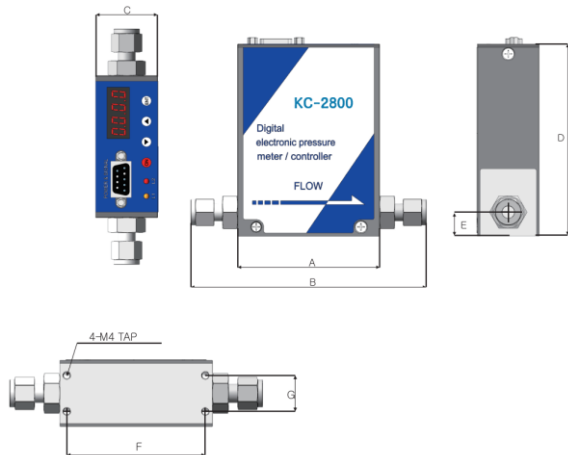
Physical Specification

- ◆ Wetted Materials
 - Flow Body – Display Aluminium
 - Flow Body 316LSS
 - Seal Type - H-NBR, FKM(Viton), FFKM(Kalrez)
- ◆ Electrical Connection
 - 9-Pin Male SEMI Standard Reference pin arrangment
- ◆ Process Connection
 - ¼"SWL(기본), ¼"VCR(옵션), 1/8"SWL(옵션), 3/8", ½" SWL(옵션)
- ◆ Warm-up Time
 - 20 min (Accuracy Warranty : 30 ~ 40 min)
- ◆ Certificate
 - CE

Pressure Meter&Controller(KC-2800)

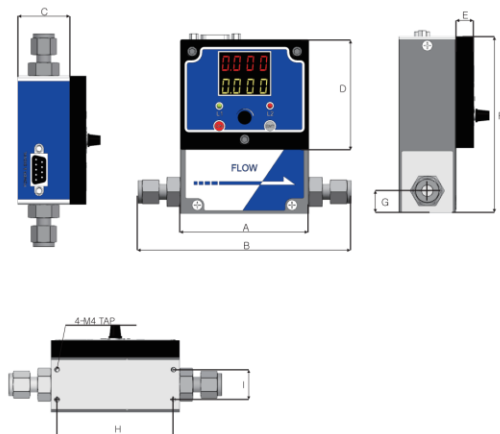
PRESSUR METER & CONTROLLIER_ Dimension I

♣ Top type KC-2800T



SIZE for MFM & MFC	
Size	Top type
A	76
B	1/8" SWL : 122.8 1/4" SWL : 127.4 1/4" SWL : 123.8
C	33
D	102.8
E	12.8
F	69
G	18

♣ Front type KC-2800F

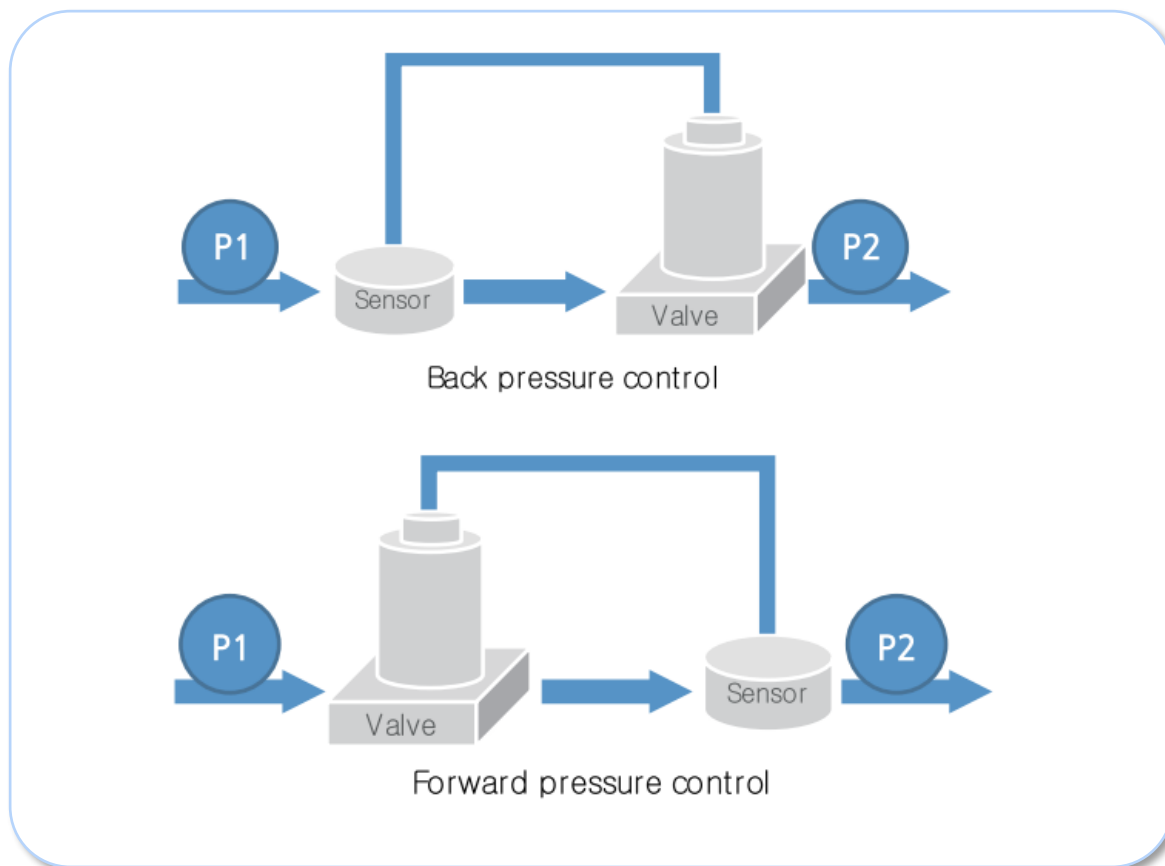


SIZE for MFM & MFC	
Size	Front type
A	76
B	1/8" SWL : 122.8 1/4" SWL : 127.4 1/4" SWL : 123.8
C	33
D	65
E	9
F	102.8
G	12.8
H	69
I	18

- * The shape of the sensor and Housing manufacturers are Subject to Change
- * All dimensions are inches. Millimeters are in parentheses.

Pressure Meter&Controller(KC-2800)

Top display type & Configurations II



Pressure Meter&Controller(KC-2800)

Order Code

KC-28 - - E - P - V - - - - - - -

형식
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프랜지 사양
본체
입력전원
출력
표시 창
유체방향
교정1
교정2
압력범위
선택사양

1
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3 4 5
6 7
8
9
10
11
12
13
14
15

Type	Code 1
Pressure Controller	00C
Pressure Meter	00M
Agency approved, enduser spec	W

Conn. specification	Code 2
SWL 1/4"(Std.), 3/8", 1/2", 1/8"	1
VCR(Optional) 1/4", 3/8", 1/2", 1/8"	2
Agency approved, enduser spec	W

Seal type	Code 3
H-NBR	N
FKM(Viton)	V
FFKM(Kalrez)	K
Agency approved, enduser spec	W

Material	Code 4
Aluminum : Display type	1
316L SS : Flow Body	2
Agency approved, enduser spec	W

Input Power	Code 5
DC 24 V ±10 %, 500 mA	1
+15V DC	2
Agency approved, enduser spec	W

Output Signal	Code 6
None	N
0 – 5V DC	1
0 – 10V DC	2
4-20mA or 0-20mA	3
RS-485 Modbus (RTU)	RS
Agency approved, enduser spec	W

Digital Display (LCD)	Code 7
None	NR
Integral display (Top, Front,)	DD
Agency approved, enduser spec	W

Flow Dirict	Code 8
Horizontal: Left to Right / Vertical Up	1
Horizontal: Right to Left / Vertical Up	2
Agency approved, enduser spec	W

Calibration 1(Air / N2))	Code 9
Basic Calibration	A
Air, 1/2" and large tube sizes	
Comp.Air, 1/2" and large tube sizes	D
Customer Calibration	B
Enduser Calibration	
Agency approved, enduser spec	W

Calibration 2	Code 10
70 °F(21 °C) 14.7 psig (1.103 barg)	A
32 °F(0 °C) 14.7 psig (1.103 barg)	B
Agency approved, enduser spec	W

Pressure Limit	Code 11
Low Pressure 20 barg	L
Medium Pressure 50 barg	M
Agency approved, enduser spec	W

Option	Code 12
None	
Agency approved, enduser spec	W

Note

- Connections shall be classified as 1/2", 3/8", 1/4", 1/8", SWL or VCR.
- For the flowmeter body, IP56 is required for approval by the relevant authorities.
- Wire resistance should be less than 8Ω.
- The turndown ratio is at least 100:1.
- Based on 14.7 psia (1.01 bara) 70°F (21.1°C).
- Customer's specifications should not exceed the temperature and pressure limits of KC-2700 series products of Golden Rule Co., Ltd

**Air & Gas & Steam & Liquid
Mass Flowmeter
Specialized Manufacturer**

Detailer

Certified in accordance with

KC Q ISO 9001 : 2015

KC Q ISO 14001 : 2015

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