



DPE Series



FEATURE

- IECEx & ATEX flameproof and dust explosion-proof certified
- NRTL certified – UL 61010-1, CSA C22.2
- CE certified – LVD (2014/35/EU), EMC (2014/30/EU), RoHS (2011/65/EU)
- Automatic temperature and pressure compensation
- Suitable for measuring liquids, gases, and steam
- Suitable for high-temperature and high-pressure process conditions
- Easy monitoring of instantaneous flow and totalized flow on the display
- Maintains high accuracy under fluctuating temperature and pressure conditions
- Supports various external output signals for integration with control systems
- Available in a wide range of pipe sizes, from small to large diameters to a large diameter

APPLICATIONS

- ▶ Chemical and Other Process Industries
 - Injecting fibric products with adhesiveness
 - Emulsified liquid including latex and emulsion.
 - Condensate and Cooling water
- ▶ Refinery & Gas Industry
 - Injection plant for corrosion, scaling and hydrate inhibitors
 - Nitrogen, Flue gas, etc.
- ▶ Machinery and Equipment (OEM industry)
 - Coolant, Coolant, Lubricant, Air supply
- ▶ Water resources
 - Spray oxygen on the aeration basin
 - Air injection to reduce iron content
- ▶ Power plants and Nuclear power industry

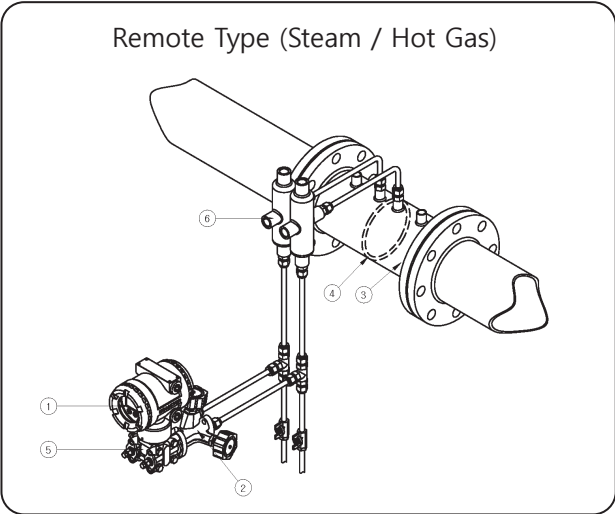
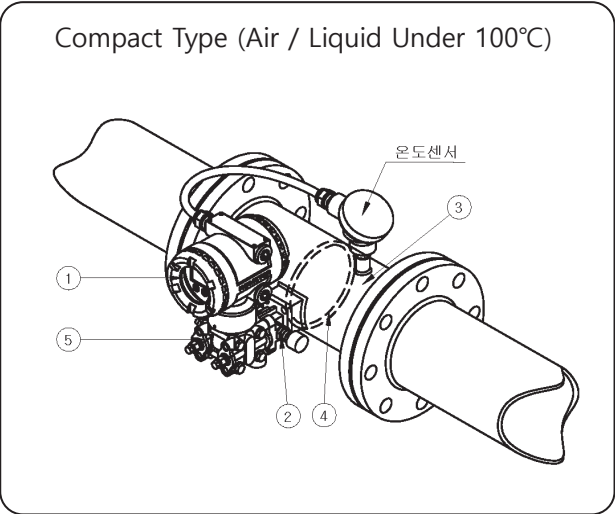
DPE Series General Specifications

DESCRIPTION	SPECIFICATION
Type	Compact, Remote (with Seal Pot)
Size	10A (3/8") - 500A (20")
Process connection	• Flange type - Standard JIS 10K RF (Option. ANSI 150#, DIN 16 bar) • Taper Pipe Thread type (PT)
Measured fluid	Liquid, Gas, Steam
Measuring range	• Water - 0.1 m³/h ~ 2500 m³/h • Air - 0.8 Nm³/h ~ 24000 Nm³/h
Turndown ratio	Up to 20 : 1
Measuring accuracy	±2.0 % F.S (Option ±1.0 % F.S)
Process temperature	Max 120 °C (Option 350 °C)
Ambient temperature	-20 °C ~ 60 °C
Max. operating pressure	20 bar / 290 psi (Option 50 bar / 725 psi)
Power supply	AC 110/220 V (50~60 Hz), DC 24V (4-Wire)
Display	• 4 Lines LCD • Mass Flow, Volume Flow in Standard Condition, Totalizer, Velocity, Time
Output	• Analog : DC 4-20 mA • Pulse : DC (8~30) V (Open collector) • Digital : RS-485
Cable entry	1/2" NPT (Standard), M20 x 1.5 (Optional)
Explosion proof grade	Ex db IIC T5 Gb / Ex tb IIIC T100 Db
Ingress protection grade	IP 67

MODEL CODE

MODEL	SUFFIX CODES	DESCRIPTION
DPE-S		Differential pressure flow meter
Compensation options	-P	Pressure compensation
	-T	Temperature compensation
	-PT	Pressure & Temperature compensation
Classification by connection size	-□	15A (1/2") - 350A (14")

STRUCTURAL DRAWING



STANDARD MATERIAL

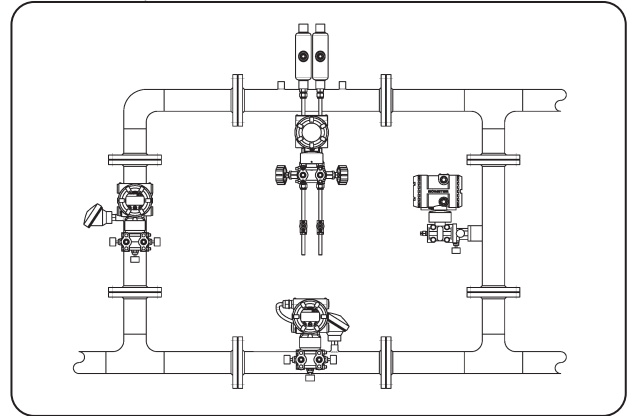
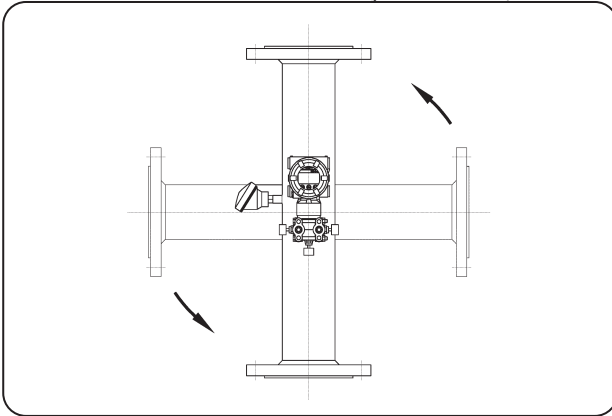
No.	Description	Material		
		A	B	C
1	Transmitter	ADC12		
2	3-Way Valve	304SS		316SS
3	Orifice Body	SS400	304SS	316SS
4	Orifice	304SS		316SS
5	DP Seal	316SS		

■ FLOW RANGE & DIMENSIONS

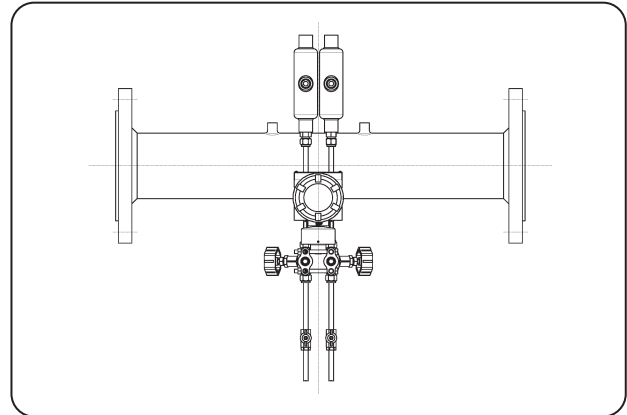
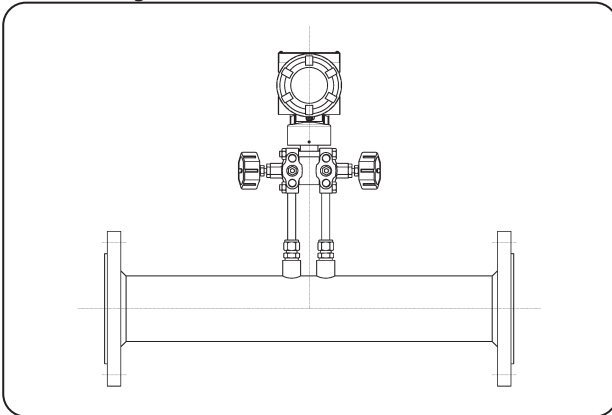
SIZE		Flow Ranges		Length (mm)	
mm	inch	Water (m ³ /h)	Air (Nm ³ /h)	Flange	Screw
10A	3/8 B	0.05 - 0.5	0.4 - 4	350	70
15A	1/2 B	0.1 - 1.0	1 - 10	350	70
20A	3/4 B	0.25 - 2.5	2.5 - 25	350	70
25A	1 B	0.5 - 5	5 - 50	350	70
32A	1-1/4 B	1 - 10	6 - 60	350	70
40A	1-1/2 B	1.5 - 15	10 - 100	350	74
50A	2 B	2.5 - 25	20 - 200	350	85
65A	2-1/2 B	3.5 - 35	30 - 300	350	100
80A	3 B	5 - 50	40 - 400	350	100
100A	4 B	8 - 80	80 - 800	350	-
125A	5 B	12.5 - 125	125 - 1250	350	-
150A	6 B	20 - 200	170 - 1700	350	-
200A	8 B	30 - 300	280 - 2800	400	-
250A	10 B	50 - 500	500 - 5000	400	-
300A	12 B	80 - 800	780 - 7800	400	-
350A	14 B	100 - 1000	950 - 9500	400	-
400A	16 B	150 - 1500	1450 - 14500	400	-
450A	18 B	200 - 2000	1900 - 19000	400	-
500A	20 B	250 - 2500	2400 - 24000	400	-

■ INSTALLATION

The DPE Series can be installed in any orientation (horizontal, vertical, or inverted), as shown below.



If the flowmeter is installed in a location where the display is difficult to read, the connector can be detached as shown below for easier reading.



■ INSTALLATION PRECAUTIONS

1. The pipe diameter of the main pipeline and the bypass pipeline does not necessarily have to be the same.
2. To ensure measurement accuracy, straight pipe runs are required upstream and downstream of the flowmeter. When an elbow is installed, a minimum straight pipe length of 10D upstream and 5D downstream is recommended.

