

3-2. Specifications

3-2-1. Standard specifications

Measuring range (continuously adjustable)

Range	Regular type		Flange type	Remote seal type	Measuring range
	---	High static pressure type			
High ΔP	KDP11	KDP81	KDP61	KDP71	0-25 to 0-500 kPa {0-2500 to 0-50000 mmH ₂ O}
Medium ΔP	KDP22	KDP82	KDP62	KDP72	0-2.5 to 0-53.9 kPa {0-250 to 0-5500 mmH ₂ O}
Low ΔP	KDP33	---	---	---	0-0.5 to 0-6 kPa {0-50 to 0-600 mmH ₂ O}
Very low ΔP	KDP44	---	---	---	0-0.1 to 0-1.2 kPa {0-10 to 0-120 mmH ₂ O}

Process connection

KDP11/22/33/44, KDP61/62 (Flange); Rc1/2 (PT1/2 internal thread)

KDP81/82; Rc1/4 (PT1/4 internal thread)

KDP71/72 Flange

Extended diaphragm type: JIS10K, 20K-100A (RF) equivalent
ANSI150, 300-4B (RF) equivalent

Flash diaphragm type: JIS 10K, 30K-80A (RF) equivalent
ANSI150, 300-3B (RF) equivalent

Air supply connection

Rc1/4 (PT1/4) or 1/4NPT internal thread

Air supply pressure

140±14 kPa {1.4±0.14 kgf/cm²}

Output

20-100 kPa {0.2-1.0 kgf/cm²}

External load

ID 4 mm × Length 3 m + 20 cc or over

Air supply capacity

20 L/minute(N) or over, with 6.7 kPa {50 mmHg} change

Air consumption

5 L/minute(N) or less (when balanced at output 100%)

Accuracy

- KDP11; ±0.5% F.S. (For span 50 to 500 kPa {5000 to 50000 mmH₂O})
±0.75% F.S. (For span 25 to less than 50 kPa {2500 to less than 5000 mmH₂O})
- KDP22; ±0.5% F.S. (For span 5 to 53.9 kPa {500 to 5500 mmH₂O})
±0.75% F.S. (For span 2.5 to less than 5 kPa {250 to less than 500 mmH₂O})
- KDP33; ±0.5% F.S. (For span 1.0 to 6 kPa {100 to 600 mmH₂O})
±1.0% F.S. (For span 0.5 to less than 1 kPa {50 to less than 100 mmH₂O})
- KDP44; ±0.5% F.S. (For span 0.2 to 1.2 kPa {20 to 120 mmH₂O})
±1.0% F.S. (For span 0.1 to less than 0.2 kPa {10 to less than 20 mmH₂O})
- KDP61/71/81; ±0.5% F.S. (For span 50 to 500 kPa {5000 to 50000 mmH₂O})
±1.0% F.S. (For span 25 to less than 50 kPa {2500 to less than 5000 mmH₂O})
- KDP62/72/82; ±0.5% F.S. (For span 5 to 53.9 kPa {500 to 5500 mmH₂O})
±1.0% F.S. (For span 2.5 to less than 5 kPa {250 to less than 500 mmH₂O})

Dead band

0.1% F.S.

Damping (KDP44)

Time constant: Minimum 2 sec. or less, Maximum 25 sec. or over, continuously variable.

Operating pressure range

Model	Cover mate		
	Carbon steel, SUS	Monel	PVC
KDP11/22	-50 kPa to +10 MPa {-0.5 to +100 kgf/cm ² }	-50 kPa to +10 MPa {-0.5 to +100 kgf/cm ² }	-10 kPa to +1.5 MPa {-0.1 to +15 kgf/cm ² }
KDP33	-50 kPa to +3.5 MPa {-0.5 to +35 kgf/cm ² }	-50 kPa to +3.5 MPa {-0.5 to +35 kgf/cm ² }	-10 kPa to +1 MPa {-0.1 to +10 kgf/cm ² }
KDP44	-1.5 kPa to +0.05 kPa {-150 to +5 mmH ₂ O}	---	---
	-50 kPa to maximum flange rated pressure JIS10K: up to 1.4 MPa {14 kgf/cm ² }		-10 kPa to +1.5 MPa {-0.1 to +15 kgf/cm ² }
KDP71/72	JIS30K: up to 5.1 MPa {51 kgf/cm ² } ANSI150: up to 1.4 MPa {14 kgf/cm ² } ANSI300: up to 3.7 MPa {37 kgf/cm ² }		---
KDP81/82	-50 kPa to +42 MPa {-0.5 to +420 kgf/cm ² }	---	---

Note) Refer to the annexed table regarding max. working pressure on flange and remote seal type.

Operating temperature

Meter body (process fluid): -40 to +120°C

Transmitter (ambient): -30 to +80°C

PVC cover: 0 to 55°C

Operating humidity

10 - 90% RH

Construction

Dustproof and waterproof, meets

IEC IP54, NEMA TYPE 3R,

JIS F 8001 Class 3 splashproof, and

JIS C 920 rainproof specifications

Materials

Meter body cover -Carbon steel (SF45A), SUS316... (KDP11/22/33/44/61/62/81/82)

Monel, PVC... (KDP11/22/33/61/62)

Flange - Carbon steel (IF45A), SUS304... (KDP61/62/71/72)

Measuring element: SUS316 (diaphragm: SUS316L), SUS316L, Monel, Tantalum

Wet part gasket: Teflon

Centerbody: SUS304 (KDP44 is Al)

Transmitter case: Aluminum alloy

Capillary tube length

2, 3, 5 m (remote seal type) SUS316

Mounting

KDP11/12.....On vertical or horizontal 2-inch pipe

KDP33/44.....Horizontal 2-inch pipe

KDP61/62.....Directly flange mounted to process flange

KDP71/72.....Directly flange mounted to process flange

(Transmitter body is mounted on vertical or horizontal 2-inch pipe)

Net weight

KDP11/22.....Approx. 8kg

KDP33.....Approx. 14.6 kg

KDP44.....Approx. 17.5kg

KDP61/62.....Approx. 13 kg (80A - JIS 10K Flange)

KDP71/72.....Approx 17.5 kg (80A - JIS 10K Flange)

KDP81/82.....Approx. 15.0 kg

Finish

Acryl baking finish

Color: Light beige (munsell 4Y 7.2/1.3)