



## PREX3000 VECTOR INVOLUTE TYPE PNEUMATIC DIFFERENTIAL PRESSURE TRANSMITTERS

### MODEL: KDP 81/82(HIGH STATIC PRESSURE TYPE)

The PREX3000 instruments are pneumatic type transmitters which employ a combination of vector balance mechanism and involute mechanism.

The instruments are featured by high resistance against adverse environments, high turn-down ratio, high accuracy, and ease of maintenance.

### Standard Specifications

Item	Specifications
<b>Measuring range (continuously adjustable)</b>	KDP81: 0-2,500 to 0-50,000 mmH <sub>2</sub> O KDP82: 0-250 to 0-5,500 mmH <sub>2</sub> O
<b>Process connection</b>	Rc ¼ or ¼ NPT internal thread
<b>Air supply connection</b>	Rc ¼ or ¼ NPT internal thread
<b>Air supply pressure</b>	1.4±0.14 kgf/cm <sup>2</sup>
<b>Output</b>	0.2-1.0 kgf/cm <sup>2</sup> or 3-15 PSI
<b>External load</b>	ID 4mm × Length 3m + 20 cm <sup>3</sup> or over
<b>Air supply capacity</b>	20N ℓ / minute or over, with 50 mmHg change
<b>Air consumption</b>	5 N ℓ / minute or less (when balanced at output 100%)
<b>Accuracy</b>	KDP 81: ±0.5% FS (for spans 0-5,000 to 0-50,000 mmH <sub>2</sub> O) ±1.0% FS (for spans 0-2,500 to 0-less than 5,000 mmH <sub>2</sub> O) KDP 82: ±0.5% FS (for spans 0-500 to 0-5,500 mmH <sub>2</sub> O) ±1.0% FS (for spans 0-250 to 0-less than 500 mmH <sub>2</sub> O)
<b>Dead band</b>	0.1% FS
<b>Working pressure</b>	-0.5 to +420 kgf/cm <sup>2</sup>
<b>Operating temperature</b>	Meter body (process fluid): -40 to +120°C Transmitter (ambient): -30 to +80°C
<b>Operating humidity</b>	10 to 90% RH
<b>Overload protection</b>	Up to 420 kgf/cm <sup>2</sup> in either direction
<b>Construction</b>	Dustproof and waterproof, meets: IEC IP54, NEMA Type 3R, JIS F8001 Class 3 splashproof, JIS C0920 rainproof
<b>Materials</b>	Center body: SUS304 Wetted parts of center body: SUS316 (diaphragm: SUS316L), SUS316L, Monel, Tantalum Meter body cover (differential pressure chambers): Carbon steel (SF45A), SUS304 Wetted parts gasket: Teflon Transmitter case: Aluminium alloy
<b>Finish</b>	Acryl baking finish Color: Light beige (MUNSELL 4Y 7.2 / 1.3)
<b>Mounting</b>	On vertical or horizontal 2-inch pipe
<b>Net weight</b>	Approx. 15kg (add 0.8 kg for air-set)

## Optional Specifications

Item	Specifications			
(1) Suppression and elevation	(unit: mmH <sub>2</sub> O)			
	Model No.	Span	Suppression (max.)	Elevation (max.)
	KDP81	2,500-50,000	50,000	47,500
	KDP82	250-5,500	5,500	5,250
	(note: elevation + span $\leq$ maximum span, suppression $\leq$ maximum span)			
(2) Air-set (filter and pressure regulator)	Primary pressure:	2-9.9 kgf/cm <sup>2</sup>		
	Secondary pressure:	1.4 kgf/cm <sup>2</sup>		
	Filter mesh diameter:	5 microns		
	Connections:	Rc ¼ or ¼ NPT internal thread		

## Model Number Table

Ex: KDP82-2222A1-5.7

Basic Model No.	Cover Mat'l		Wetted Parts Mat'l		Air Piping Connection	Pneumatic Signal. Aug. Scale Unit	Options	Description
	HP	LP	HP	LP				
KDP81								0-2,500 to 0-50,000 mmH <sub>2</sub> O
KDP82								0-250 to 0-5,500 mmH <sub>2</sub> O
	-1							Carbon steel (SF45A)
	-2							SUS316
		1						Carbon steel (SF45A)
		2						SUS316
			2					SUS316 (diaphragm: SUS316L)
			3					MONEL
			4					Tantalum
			8					SUS316L
				2				SUS316 (diaphragm: SUS316L)
				3				MONEL
				4				Tantalum
				8				SUS316L
					A			Rc ¼ internal thread
					B			¼ NPT internal thread
						1		0.2-1.0 kgf/cm <sup>2</sup>
						4		3-15 PSI
						-X		No option
						-5		Elevation
						-6		Suppression
						-7		Air-set

# Dimensions

(Unit: mm)

