

# PREX3000 Vector Involute Type Pneumatic Pressure Transmitters

## Model KKP 25/26/27/28 (Absolute Pressure)



### Introduction

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.

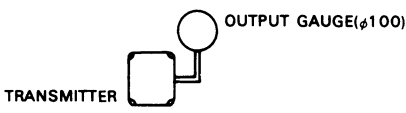
### Standard Specifications

Item	Specifications																																								
<b>Measuring range</b> (continuously adjustable)	KKP 25: 0–35 to 0–686 kPa abs. {0–0.35 to 0–7 kgf/cm <sup>2</sup> abs.} KKP 26: 0–10 to 0–196 kPa abs. {0–0.1 to 0–2 kgf/cm <sup>2</sup> abs.} KKP 27: 0–3.4 to 0–66.6 kPa abs. {0–25 to 0–500 mmHg abs.} KKP 28: 0–0.7 to 0–13.3 kPa abs. {0–5 to 0–100 mmHg abs.}																																								
<b>Working pressure, Overload protection, Process connection</b> (refer to note.)	<table border="1"> <thead> <tr> <th>Model No.</th> <th>Working pressure</th> <th>Overload protection</th> <th>Process connection</th> </tr> </thead> <tbody> <tr> <td>KKP 25</td> <td>0–686 kPa abs. {0–7 kgf/cm<sup>2</sup> abs.}</td> <td>1.4 MPa abs. {14 kgf/cm<sup>2</sup> abs.}</td> <td rowspan="4">Rc 1/2 or 1/4 internal thread, 1/2 or 1/4 NPT internal thread</td> </tr> <tr> <td>KKP 26</td> <td>0–196 kPa abs. {0–2 kgf/cm<sup>2</sup> abs.}</td> <td>0.6 MPa abs. {6 kgf/cm<sup>2</sup> abs.}</td> </tr> <tr> <td>KKP 27</td> <td>0–66.6 kPa abs. {0–500 mmHg abs.}</td> <td>400 kPa abs. {4 kgf/cm<sup>2</sup> abs.}</td> </tr> <tr> <td>KKP 28</td> <td>0–13.3 kPa abs. {0–100 mmHg abs.}</td> <td>400 kPa abs. {4 kgf/cm<sup>2</sup> abs.}</td> </tr> </tbody> </table>	Model No.	Working pressure	Overload protection	Process connection	KKP 25	0–686 kPa abs. {0–7 kgf/cm <sup>2</sup> abs.}	1.4 MPa abs. {14 kgf/cm <sup>2</sup> abs.}	Rc 1/2 or 1/4 internal thread, 1/2 or 1/4 NPT internal thread	KKP 26	0–196 kPa abs. {0–2 kgf/cm <sup>2</sup> abs.}	0.6 MPa abs. {6 kgf/cm <sup>2</sup> abs.}	KKP 27	0–66.6 kPa abs. {0–500 mmHg abs.}	400 kPa abs. {4 kgf/cm <sup>2</sup> abs.}	KKP 28	0–13.3 kPa abs. {0–100 mmHg abs.}	400 kPa abs. {4 kgf/cm <sup>2</sup> abs.}																							
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<b>Air supply connection</b>	Rc 1/4 or 1/4 NPT internal thread																																								
<b>Air supply pressure</b>	140±14 kPa {1.4±0.14 kgf/cm <sup>2</sup> }																																								
<b>Output</b>	20–100 kPa {0.2–1.0 kgf/cm <sup>2</sup> }																																								
<b>External load</b>	ID 4 mm × Length 3 m+20 cm <sup>3</sup> or over																																								
<b>Air supply capacity</b>	20Nℓ/minute or over, with 6.7 kPa {50 mmHg} change																																								
<b>Air consumption</b>	5Nℓ/minute or less (when balanced at output 100%)																																								
<b>Accuracy, Dead band</b>	<table border="1"> <thead> <tr> <th>Model No.</th> <th colspan="2">KKP 25 (kPa {kgf/cm<sup>2</sup>} abs.)</th> <th colspan="2">KKP 26 (kPa {kgf/cm<sup>2</sup>} abs.)</th> <th colspan="2">KKP 27 (kPa {mmHg} abs.)</th> <th colspan="3">KKP 28 (kPa {mmHg} abs.)</th> </tr> </thead> <tbody> <tr> <td>Span</td> <td>35 (0.35) to less than 70 (0.7)</td> <td>70 (0.7) or over</td> <td>10 (0.1) to less than 20 (0.2)</td> <td>20 (0.2) or over</td> <td>3.4 (25) to less than 6.8 (50)</td> <td>6.8 (50) or over</td> <td>0.7 (5) to less than 1.4 (10)</td> <td>1.4 (10) to less than 9.8 (70)</td> <td>9.8 (70) or over</td> </tr> <tr> <td>Accuracy (%FS)</td> <td>±1</td> <td>±0.5</td> <td>±1</td> <td>±0.5</td> <td>±1</td> <td>±0.5</td> <td>±1</td> <td>±0.5</td> <td>±0.75</td> </tr> <tr> <td>Dead band (%FS)</td> <td colspan="2">0.1</td> <td colspan="2">0.1</td> <td colspan="2">0.1</td> <td colspan="3">0.1</td> </tr> </tbody> </table>	Model No.	KKP 25 (kPa {kgf/cm <sup>2</sup> } abs.)		KKP 26 (kPa {kgf/cm <sup>2</sup> } abs.)		KKP 27 (kPa {mmHg} abs.)		KKP 28 (kPa {mmHg} abs.)			Span	35 (0.35) to less than 70 (0.7)	70 (0.7) or over	10 (0.1) to less than 20 (0.2)	20 (0.2) or over	3.4 (25) to less than 6.8 (50)	6.8 (50) or over	0.7 (5) to less than 1.4 (10)	1.4 (10) to less than 9.8 (70)	9.8 (70) or over	Accuracy (%FS)	±1	±0.5	±1	±0.5	±1	±0.5	±1	±0.5	±0.75	Dead band (%FS)	0.1		0.1		0.1		0.1		
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<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>Construction</b>	Dustproof and waterproof, meets IEC IP54, NEMA Type 3R, JIS F8001 Class 3 splashproof, JIS C0920 rainproof																																								
<b>Materials</b>	Bellows: SUS 316 Wetted parts gasket: Teflon Cover: Carbon steel (SF45A) or SUS316 Transmitter case: Aluminium alloy																																								
<b>Finish</b>	Acryl baking finish Color: Light beige (munshell 4Y7.2/1.3)																																								
<b>Mounting</b>	On vertical or horizontal 2-inch pipe.																																								
<b>Net weight</b>	Approx. 8 kg (add 0.8 kg for air-set).																																								

## Optional Specifications

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<b>(2) Air-set (filter and pressure regulator)</b>	Primary pressure: 200 to 990 kPa {2–9.9 kgf/cm <sup>2</sup> } Secondary pressure: 140 kPa {1.4 kgf/cm <sup>2</sup> } Filter mesh diameter: 5 microns Connections: Rc 1/4 or 1/4 NPT internal thread															

## Optional Semi-standard Specifications

Item	Specifications
<b>(1) Steam block (Y29)</b>	Maximum working pressure: 5 MPa {50 kgf/cm <sup>2</sup> } Maximum operating temperature: 250°C (except meter body whose temperature must not exceed 120°C) Steam piping connections: Rc 1/4 or 1/4 NPT internal thread Material of block: Carbon steel (SF45A)
<b>(2) Oil free (Y67)</b>	Wetted parts treatment: Treated for degreasing
<b>(3) Corrosion-resistant and silver finish (Y138)</b>	Corrosion resistant (acryl baking) finish (Y138A): Resistant against corrosive gases. Corrosionproof (epoxy baking) finish (Y138B): Resistant against corrosive liquids. Silver-normal (acryl baking) finish (Y138C): To prevent temperature rise of instrument caused by direct sunlight or radiation from other source of heat. Silver-corrosion-resistant (acryl baking) finish (Y138D): To prevent temperature rise the same as above, plus resistance against corrosive gases. (note: silver finish is not applicable for alkaline gases.)
<b>(4) Output pressure gauge (Y185)</b>	Pressure gauge (100 mm diameter) <div style="text-align: center;">  </div>
<b>(5) High vibration resistant type (Y188)</b>	High vibration resistant type with dashpot.

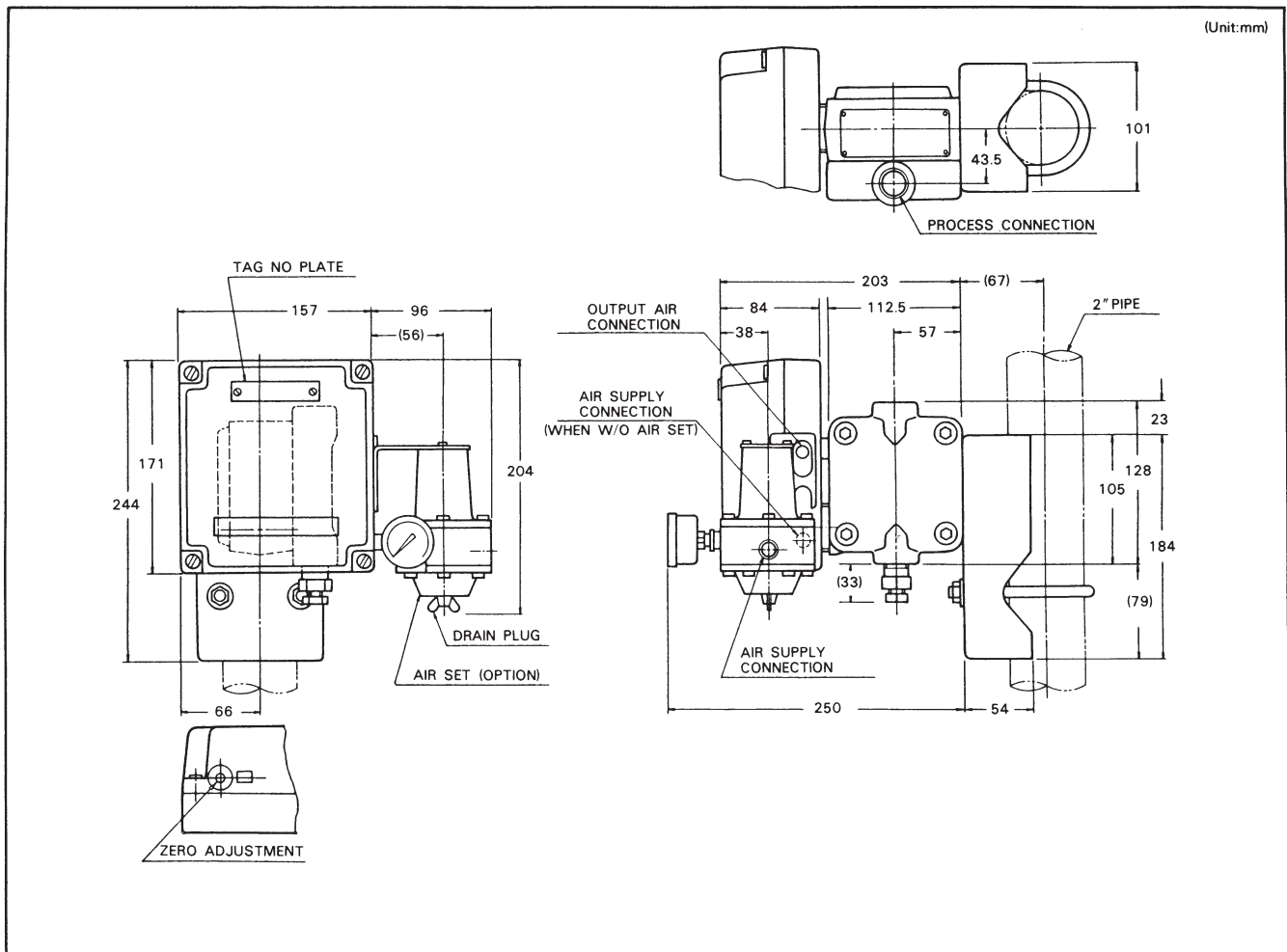
# Model Number Table

Ex: KKP25-22A1-5, 7

Basic Model No.		Cover Mat'l	Bellows Mat'l	Air Piping Connections	Pressure unit / Output	Options	Description
Model No.	Span						
KKP 2							Absolute pressure transmitter
	5						0-35 to 0-686 kPa abs. {0-0.35 to 0-7 kgf/cm <sup>2</sup> abs.}
	6						0-10 to 0-196 kPa abs. {0-0.1 to 0-2 kgf/cm <sup>2</sup> abs.}
	7						0-3.4 to 0-66.6 kPa abs. {0-25 to 0-500 mmHg abs.}
	8						0-0.7 to 0-13.3 kPa abs. {0-5 to 0-100 mmHg abs.}
	-1						Carbon steel (SF45A)
	-2						SUS316
		2					SUS316
				A			Rc 1/4 internal thread
				B			1/4 NPT internal thread
					1		kgf/cm <sup>2</sup> (or mmH <sub>2</sub> O) / 0.2 to 1.0 kgf/cm <sup>2</sup>
					2		PSI / 3 to 15 PSI
					3		bar / 0.2 to 1.0 bar
					4		Pa / 20 to 100 kPa
				8		Pa / 19.6 to 98.1 kPa (equality to 0.2 to 1.0 kgf/cm <sup>2</sup> )	
				-X		No option	
				-5		Elevation	
				-7		Air-set	

Note)  
When ordering "Y" options, please write as:  
KKP25Y-22A1-5,7 (Y □).

## Dimensions



### Ordering Information

When ordering, please specify:

- 1) Model No.
- 2) Measuring range

Note) PREX3000 Transmitter covers a wide measuring range. At a span close to the minimum range point, however, the instrument exhibits particular characteristics. When operating the instrument at this span, refer to Instrumentation Data Sheet ID2-522-002.

- 3) Optional specification
- 4) Optional semi-standard specification

Note) For any combination of two or more Y-specification items, please consult an Azbil Corp. agent.

Reference instruction manual . . .

OM2-5220-0000/  
OM2-5240-1100

Please read the "Terms and Conditions" from the following URL before ordering or use:

<http://www.azbil.com/products/bi/order.html>

Specifications are subject to change without notice.

**azbil**

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