



**Model: PDPT81, 82;**  
**high static pressure type for high or medium differential pressure.**

The pneumatic type transmitters executed with a combination of vector balance mechanism and in volute mechanism.

The pneumatic transmitters are featured by high resistance against adverse environments, high turn-down ratio, high accuracy, and simple maintenance.

Description	Technical specifications	
Adjustable range	PDPT81: 0-2.500 to 0-50.000 mmH <sub>2</sub> O	
	PDPT82: 0-250 to 0-5.500 mmH <sub>2</sub> O	
Process connection	Rc1/4" or 1/4" NPT.F	
Air supply connection	Rc1/4" or 1/4" NPT.F	
Air supply pressure	1,4 ±0,14 bar	
Output	0,2-1 bar or 3-15 psi	
External load	ID 4 mm x length 3 m +20 cm <sup>3</sup> or more	
Air supply capacity	20 NI/minute or more, with 50 mmHG change	
Air consumption	5 NI/minute or less (when balanced at output 100%)	
Accuracy	PDPT81	±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)
	PDPT82	±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)
Dead band	0,1% FS	
Working pressure	-0,5 to +420 bar	
Operating temperature	Body (primary part) -40 to +120°C, process fluid	
	Transmitter (secondary part) -30 to +80°C, ambient	
Operating humidity	10 to 90% RH	
Overload protection	420 bar in either direction	
Construction	Dustproof and waterproof, meets; IEC IP54, NEMA Type 3R, JIS F8001 Class 3 splash proof, JIS C0920 rainproof	
Materials	Center body	304SS
	Wetted parts of center body	316SS, 316L, Monel, Tantalum
	Body cover (chambers)	CS, 304 SS
	Wetted part gasket	Teflon
	Transmitter case	Aluminium alloy
Finish	Acryl baking finish colour light beige (MUNSELL 4Y7.2/1.3)	
Mounting	On vertical or horizontal 2 inch (50 mm) pipe	
Net weight	Approx. 15 kg (+0,8 kg for air set)	

#### Optional specifications

	Model nr.	Span	Elev. (max)	Suppr. (max)
(1) elevation and (2) suppression	PDPT81	2.500-50.000	47.500	50.000
	PDPT82	250-5.500	5.250	5.500
	Units in mmH <sub>2</sub> O			
	Elevation + span ≤ max. span, suppression ≤ max. span			
(3) filter pressure regulator	Adjustable output		2-9,9 bar	
	Supply		1,4 bar	
	Filter mesh		5 microns	
	Connections		Rc1/4" or 1/4" NPT.F	

## Ordering procedure

Basic model nr.	Cover mat'l		Wetted parts mat'l		Process conn.	Output	Option	Descriptions
	HP	LP	HP	LP				
PDPT81	----	---	-----	-----	-----	-----	-----	0-2.500 to 0-50.000 mmH <sub>2</sub> O
PDPT82	----	---	-----	-----	-----	-----	-----	0-250 to 0-5.500 mmH <sub>2</sub> O
	-1	---	-----	-----	-----	-----	-----	Carbon Steel (SF45A)
	-2	---	-----	-----	-----	-----	-----	316 SS
		1	-----	-----	-----	-----	-----	Carbon Steel (SF45A)
		2	-----	-----	-----	-----	-----	316 SS
			2	-----	-----	-----	-----	316 SS (diaphragm 316L SS)
			3	-----	-----	-----	-----	MONEL
			4	-----	-----	-----	-----	Tantalum
			6	-----	-----	-----	-----	316L SS
				2	-----	-----	-----	316 SS (diaphragm 316L SS)
				3	-----	-----	-----	MONEL
				4	-----	-----	-----	Tantalum
				6	-----	-----	-----	316L SS
					A	-----	-----	Rc 1/4" internal thread
					B	-----	-----	1/4" NPT internal thread
						1	-----	0,2-1 bar
						2	-----	3-15 psi
							-X	No option
							-1	Elevation
							-2	Suppression
							-3	Air-set

# Dimensions

(Unit: mm)

