

Datasheet | *base BDP switch*

base BDP

Differential Pressure
Transmitter

The simplest way of
precise measurement.



Highlights:

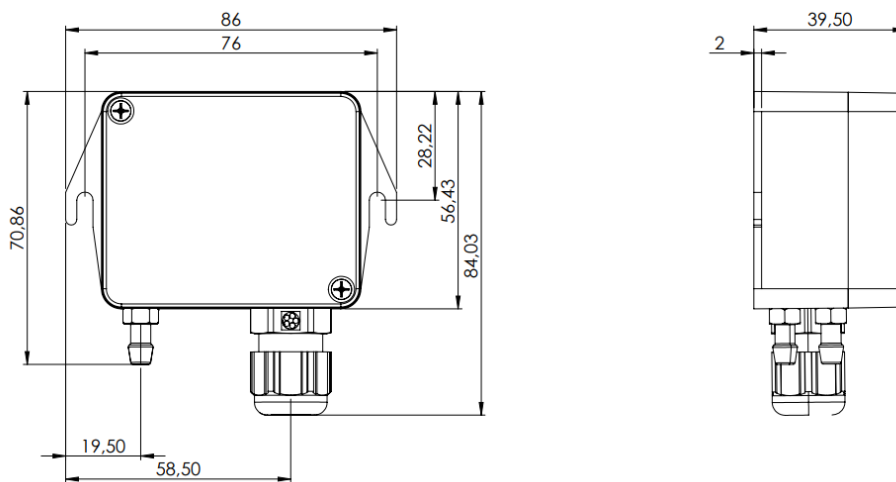
- Differential pressure transmitter for OEM or high-volume applications
- Three different measuring range variants, each switchable 8 times in the field
- Overall accuracy of <1% FS for all available ranges
- Excellent long-term stability of <0.2% FS/year
- Current and voltage output available in parallel
- Display optionally available and retrofittable in the field

Technical Specifications

Measurement data			
Measurement range Selectable via model code Switchable via DIP switch	Variant 250 Pa [0P250P] 0... 250 Pa (Default) 0... 100 Pa 0... 50 Pa 0... 25 Pa -25... 25 Pa -50... 50 Pa -100... 100 Pa -150... 150 Pa	Variant 2500 Pa [0P2500P] 0... 2500 Pa (Default) 0... 2000 Pa 0... 1500 Pa 0... 1000 Pa 0... 500 Pa 0... 250 Pa 0... 100 Pa -100... 100 Pa	Variant 7000 Pa [0P7000P] 0... 7000 Pa (Default) 0... 5000 Pa 0... 4000 Pa 0... 3000 Pa 0... 2500 Pa 0... 1500 Pa 0... 1000 Pa -1000... 1000 Pa
Units Switchable via DIP switch	Pascal [Pa] (Default) inchWC [WC]		
Overpressure resistance	200 hPa	200 hPa	1000 hPa
Overall accuracy	±1 Pa	±10 Pa	±30 Pa
Long-term-stability	≤ 0,2% FS / Year		
Temperature drift	≤ 0,06% FS / K		
Time constant Switchable via DIP switch	50 ms (Default) 1000 ms		
Elektrical Data			
Supply voltage	22...27 VAC (50 Hz) / 19...31 VDC Supply influence: <0.05% of the selected measuring range		
Output signals Switchable via DIP switch	Analog Three-Wire [3WI] Out1: Current Output 4... 20 mA (Default) 0... 20 mA Out2: Voltage Output 0... 10 V (Default) 2... 10 V		
Load resistance	Voltage Output: ≥ 2k Ω Current Output: ≤ 500 Ω		
Burden influence	≤0,3% of the selected measuring range		
Electrical connector	Push-In-clamps max. 1,5 mm²		
Operating conditions	Rel. Humidity: 0... 95% rF (non-condensing) Temperature: -20°C... 60 °C		
Storage conditions	Rel. Humidity: 0... 95% rF (non-condensing) Temperature: -20°C... 80°C		

Housing	
Material Housing	Bayblend PC-ABS UL94 V0
Pressure connectors	2 x Ø 6,6 x 10 mm (for flexible tubes Ø 6 mm)
Cable glands	Skintop M16 x 1,5 mm (4,5 - 10 mm)
Protection class	IP65
Display Selectable via model code	LC-Display without backlighting, 4 lines, 10 digits each [D]

Drawing



Model Code

		Example:	BDP	SW	OP250P	3WI	X	XX
Produkt line	Base BDP		BDP					
Variant	Switch		SW					
Range	250 Pa		OP250P					
Switchable via DIP-Switch	2500 Pa		OP2500P					
	7000 Pa		OP7000P					
Output signal	Three-wire		3WI					
Display	LC-Display		D					
	None		X					
Special variant	-		XX					

Conformity

Excerpt from the EC Declaration of Conformity

We hereby declare under our sole responsibility that the Base product complies with the requirements of the following directives and harmonized standards and thus complies with the provisions:

2014/35/EU	Low-voltage Directive
2014/30/EU	EMC Directive
2011/65/EU	RoHS Directive
EN 61326-1:2013	Electrical equipment for measurement, control and laboratory use – EMC requirements – Part 1: General requirements
EN 61000-3-2:2014	Electromagnetic compatibility (EMC) – Part 3-2: Limits for harmonic current emissions (equipment input current ≤ 16 A per phase)
EN 61000-3-3:2013	Electromagnetic compatibility (EMC) – Part 3-3: Limits - Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems, for equipment with rated current ≤ 16 A per phase and not subject to conditional connection
EN 50581:2012	Technical documentation for the assessment of electrical and electronic products with respect to the restriction of hazardous substances

The device is marked with the CE mark.