

# 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-fold 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 available as an option and can be retrofitted in the field

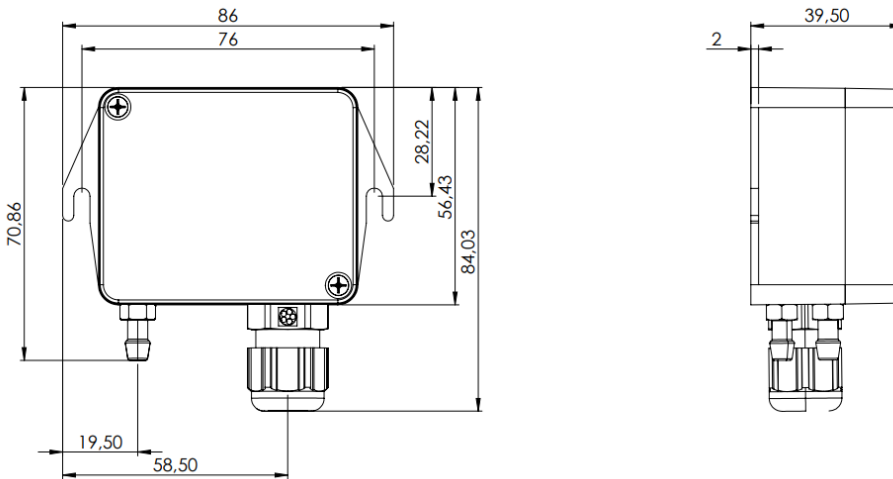


## Technical Specifications

Measurement Data			
Measurement range <i>Switchable via DIP-Switch</i>	<b>Variant 0P250Pa</b> 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	<b>Variant 0P2500P</b> 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	<b>Variant 0P7000P</b> 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 <i>Switchable via DIP-Switch</i>	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 <i>Switchable via DIP-Switch</i>	50 ms (Default) 1000 ms		
Electrical Data			
Supply voltage	22...27 VAC (50 Hz) / 19...31 VDC Supply influence: <0.05% of the selected measuring range		
Output signal <i>Switchable via DIP-Switch. In the 3WI three-wire configuration, current and voltage outputs are available in parallel at different terminals.</i>	<b>Variant 3WI Three-Wire</b> 0... 10 V (Default) 2... 10 V 4... 20 mA (Default) 0... 20 mA	<b>Variant 2WI Two-Wire</b> 4... 20 mA two-wire  (upcoming)	
Load resistance	Voltage output: ≥ 2k Ω   Current output: ≤ 500 Ω		
Burden effect	≤0,3% of the selected measuring range		
Electrical connection	Push-In-Clamps max. 1,5 mm <sup>2</sup>		
Operating and storage conditions	Relative humidity: 0... 95% RH (non-condensing) Temperature: -20°C to 60°C		
Housing			
Material	Bayblend PC-ABS V0		
Pressure connector	Ø 6,6 x 10 mm Stainless steel		
Cable gland	Skintop M16 x 1,5 mm (4,5 - 10 mm)		

Protection class	IP65
Display	<b>Option selectable via model code</b> LC-Display [D]

## Drawing



## Model Code

	<b>Example:</b>	<b>BDP</b>	<b>SW</b>	<b>OP250P</b>	<b>3WI</b>	<b>X</b>	<b>XX</b>
<b>Model code</b>	BDP	BDP					
<b>Variant</b>	Switch	SW					
<b>Measurement range</b>	250 Pa	OP250P					
<i>Note: 8-fold switchable, see measuring ranges</i>	2500 Pa	OP2500P					
	7000 Pa	OP7000P					
<b>Output signal</b>							
<i>Note 3WI Option:</i>							
<i>Switchable via DIP switch. In the 3W three-wire configuration, current and voltage outputs are available in parallel at different terminals.</i>	Three-Wire	3WI					
	4-20 mA Two-Wire (upcoming)	2WI					
<b>Display</b>	LC-Display	D					
	None	X					
<b>Special variant</b>	-	XX					

## Conformity

### Extract from the EC Declaration of Conformity

We hereby declare under our sole responsibility that the Base BDP product complies with the requirements of the following directives and harmonised standards and is therefore in line 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 labeled by the CE mark

