

## DDLU2: Differential pressure transducer

How energy efficiency is improved

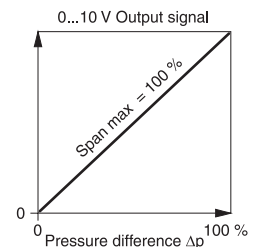
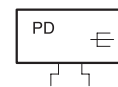
Precise detection of small differential pressures in an air duct

### Features

- Adjustable measuring ranges
- Sensors specially developed for any pressure range, providing measurement that is physically precise and stable over a long period
- Calibrated, temperature-compensated sensor signal
- Quick and easy to fit. Fixing bracket for wall or ceiling mounting, integrated in housing
- Available with or without LCD in pascal
- Reset button for zero point
- End value can be set by customer
- Can be used in positive and negative pressure zones
- Measurement procedure: Ceramic cantilever beam
- Scope of delivery: Transducer, connecting kit with 2 m of PVC hose and connectors



DDLU2\*5F\*01



Technical data		
<b>Power supply</b>		
	Power supply	13.5...33 V=, 24 V~, ±15%
Current consumption	Voltage output	< 10 mA
	Current output	< 30 mA
<b>Parameters</b>		
	Characteristic	Linear/root-extracted
	Linearity	< ±1%
	Hysteresis	< ±1%
	Reproducibility	< ±1%
	Admissible overload on one side	100 mbar
	Filter time constant	OFF/0.2 s/1 s/5 s/20 s
<b>Ambient conditions</b>		
	Admissible ambient temperature	0...70 °C
	Admissible media temperature	0...70 °C
<b>Inputs/outputs</b>		
	Outputs	0...10 V (load > 10 kΩ) 0...20 mA (load < 500 Ω) 4...20 mA (load < 500 Ω)
<b>Construction</b>		
	Housing material	Polycarbonate
	Cable inlet	PG 11
	Pressure connections	Ø 6.2 mm
<b>Standards and directives</b>		
	Type of protection	IP54 (EN 60529)
CE conformity according to	EMC Directive 2014/30/EU	EN 61326-2-3

Overview of types				
Type	Measuring range $\Delta p$ , can be changed	Measuring range $\Delta p$	Weight	Display
DDLU205F001	0...100/300/500 Pa	0...1/3/5 mbar	0.09 kg	–
DDLU225F001	0...1000/1600/2500 Pa	0...10/16/25 mbar	0.09 kg	–
DDLU205F101	0...100/300/500 Pa	0...1/3/5 mbar	0.1 kg	•
DDLU225F101	0...1000/1600/2500 Pa	0...10/16/25 mbar	0.1 kg	•

## Function

The pressure difference to be measured is converted by a pressure sensor into a linear electrical signal and amplified by the measuring amplifier into a continuous unit signal. The pressure ranges, the characteristic curve (linear or radiused) and the filter time constant can be switched by a dip switch. Application in overpressure and vacuum range possible.

## Engineering and fitting notes

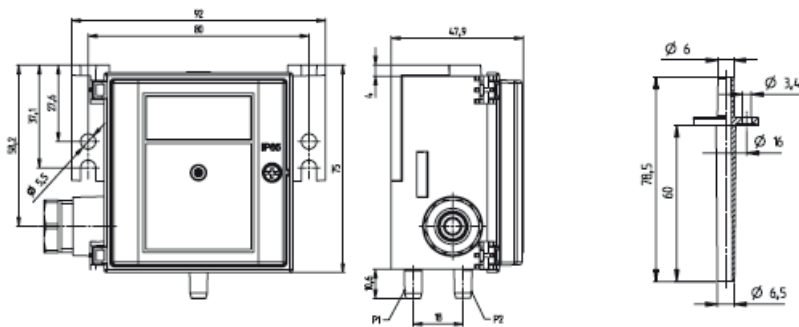
### Fitting position

Vertical (factory calibration), pressure connections downwards. The zero point, and thus the fitting position, can be adjusted using the reset button.

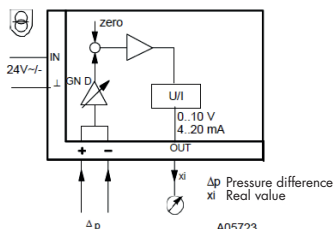
### Setting for DIP switch

			1	2	3	4	5	6	7	8	9	10
Factory setting		1										
		0	x	x	x	x	x	x	x	x	x	x
Pressure/mbar	0...1	0...10	1	0								
	0...3	0...16	0	1								
	0...5	0...25	0	0								
Output	0 ... 10 V, 3W				1	1	0	0	0	0		
	0 ... 20 mA, 3W				0	1	1	1	0	1		
	4 ... 20 mA, 3W				0	1	1	0	0	1		
	4 ... 20 mA, 2W				0	0	1	1	1	0		
Filter	off: 0 on: 1										x	
	linear: 0 root-extracted: 1											x

## Dimension drawing



## Connection diagram



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