CLEAN ROOM PRESSURE TRANSMITTER

DMU

The pressure transmitters of the series DMU measure overpressure, vacuum, difference and absolute pressure and velocity of flow in air and non aggressive gasses.

The measuring values are directed to a 0-10 V analogue output (DMU4) or 4-20 mA output (DMU2). They are shown on a 3,5 digit LED display with a figure height of 12,7 mm. The DMU2 has a 4-20 mA 2-wire output, that means no external power supply is required. Because of the use of piezoresistive cells, the pressure transmitter reaches a high reliability and precision. The housing has protection class IP65. It is suitable for wall mounting. The user is warned against overload pressure by a red LED on the front.

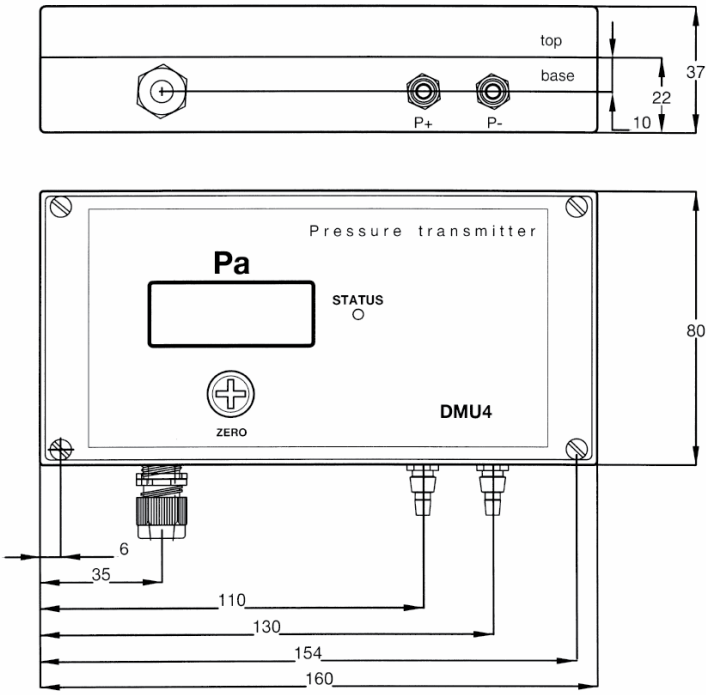
The pressure transmitter DMU4 can be completed by several options:

- switching output with display switching level and LED on the front
- delay of switching output of 60 seconds possible
- power supply 24 VDC, 24 VAC or 230 VAC
- square root for measuring velocity of flow

APPLICATIONS

- Pressure control in cleanrooms or spray chambers
- Control of airblowers
- Supervision of airfilters
- Mechanical and system engineering
- Environmental technology
- Liquid level control
- Ventilating systems
- Medical engineering

DRAWING



SENSOR DATA
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2280 cc rijswijk 2288 bg rijswijk fax 070 3070938 www.sensordata.nl

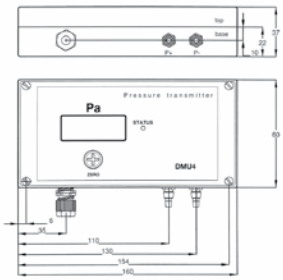
CLEAN ROOM PRESSURE TRANSMITTER

DMU

TECHNICAL SPECIFICATIONS

operation temperature range	-20 to +50°C	
hysteresis	0,1% (range 0-50 Pa 2 %, range 0-100 Pa 1 %)	
medium	air and all not aggressive gases	
power supply and output signals DMU2	U_{supply}	15-30 VDC
	analog output	4-20 mA 2-wire
	burden resistor	R_B = 20...400 Ohm
power supply and output signals DMU4	U_{supply}	15-30 VDC or VAC
	analog output	0-10 V
	load	RL >= 2 kOhm
connections	electrical	cable glands PG9 / screw clamps for 0,14-1,5 mm2
	pneumatical	2 connections for tubes with 4 mm or 6 mm diameter inside
weight	ca. 200 g	
protection class	IP65	

OPTIONS



option 230 VAC power supply	230 VAC +- 10 %	
option 4-20 mA transmitter	analog output	4-20 mA
	burden resistor	R_B = 20...100 Ohm
option switching output	loadability	230 VAC 1A
	switch hysteresis	ca. 2 % v.E.
option square root output	DMU 4 can measure and display the velocity of flow if it is completed with a square root output. Therefor a measuring blend or a Prandtl-tube must be used.	
	analog output	0..10V or 4..20mA

TECHNICAL DATA (DIFFERENTIAL PRESSURE)

pressure range [mbar]	pressure range [kPa]	max. overload pressure [mbar]	linearity error max. [± % F.S.]	temperature error max. [± % F.S.] 0-50°C	long-term stability [% F.S. per year]	repeat precision [±% F. S.]	time of response 0-10 V output [ms]
0 - 0.5	0 - 0.05	250	0,8	3	3	2	100
0 - 2.5	0 - 0.25	250	0.8	2	2	0.3	100
0 - 5	0 - 0.5	350	0.8	1	1	0.3	100
0 - 10	0 - 1	350	0.8	1	0.5	0.2	100
0 - 25	0 - 2.5	350	0.7	1	0.1	0.1	100
0 - 50	0 - 5	350	0.7	1	0.1	0.1	100
0 - 100	0 - 10	350	0.5	1	0.1	0.1	100
0 - 1000	0 - 100	triple	0.5	1	0.1	0.1	100

TECHNICAL DATA (ABSOLUTE PRESSURE)

pressure range [mbar]	pressure range [kPa]	max. overload pressure [mbar]	linearity error max. [± % F.S.]	temperature error max. [± % F.S.] 0-50°C	long-term stability [% F.S. per year]	repeat precision [±% F. S.]	time of response 0-10 V output [ms]
700 - 1100	70 - 110	triple	± 0.9 mbar	3.2 mbar	0.1	0.1	100

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