



Features

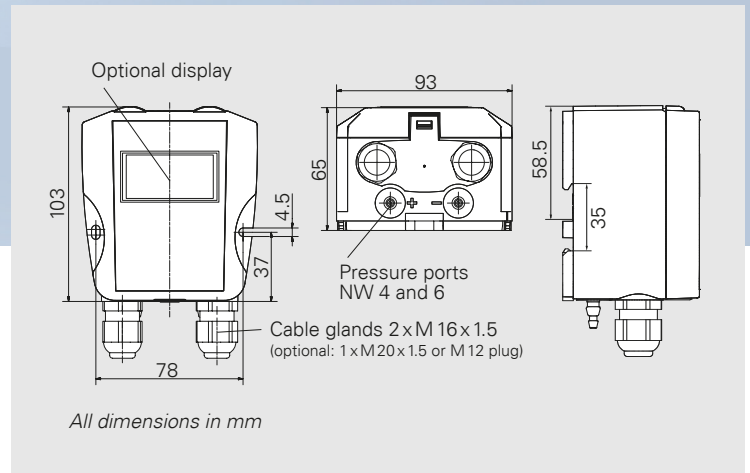
- Compact differential pressure transmitter for basic applications in cleanrooms, machines, HVAC or filter monitoring
- Robust ABS housing with IP67 for top-hat rail or wall mounting
- ± and asymmetric measurement ranges
- Either with one fixed measurement range or toggling between 4 different measurement ranges
- Pressure units Pa, kPa (linear output signal)
- Square-root output signal in % of max. possible value
- Configurable via DIP switches
- Zero point correction and via internal pushbutton or digital input
- Fine adjustment via internal pushbutton

Optional

- 3 ½ digits display
- 2-wire system (ZWL) or relay (6 A)
- Plug for easy commissioning

Measurement ranges (also ±) others available upon request	50/100/200/500 Pa 1/2.5/5/10 kPa
Measurement accuracy ¹⁾ (at 22 °C)	± 1 % of the set value plus ± 0.5 Pa for measurement ranges ≤ 250 Pa plus ± 1 Pa from the set final value ± 1 Pa
Temperature coefficient span	max. 0.1 % value/K
Temperature coefficient zero point	± 0 % FS/°C (manual zero point correction), otherwise max. 0.1 % FS/°C
Air humidity (medium)	0 ... 80 %rH
Max. system pressure / Overload capacity	± 25 kPa: measurement ranges ≤ 250 Pa ± 50 kPa: measurement ranges > 250 Pa
Medium	dry air, all non-aggressive and non-flammable gases
Step response time (T63) (Time constant)	25 ms .. 10s (adjustable)
Rated temperature range	-10..70 °C with display: 0..50 °C
Storage temperature range	-10..70 °C with display: -5..50 °C
Calibration temperature	22 °C
Power consumption	< 1 W (optional relay: < 4 W)
Pressure ports	for tubing NW 4 and 6 mm
Protection class	IP67
Weight	approx. 200 g
Certificates	CE/UKCA

¹⁾ Measurement accuracy for the reference 0.3 Pa, for measuring ranges ≤ ±1.5 kPa



Order code	A	B	C	D	E	F	G	H
PS27								

Output ²⁾	A
0..10 V (R _L ≥ 50 kΩ)	1
2..10 V (R _L ≥ 50 kΩ)	2
0..20 mA (R _L ≤ 500 Ω)	0
4..20 mA (R _L ≤ 500 Ω)	4

Contact point ⁴⁾	D
none	0
1 relay (exchange contacts) ⁴⁾ max. 230 VAC, 6 A (not for two-wire)	1

⁴⁾ Relay parameters can be pre-set on request

²⁾ can be configured using DIP switches, conversion into square root signal adjustable (in % of max. possible value)

Power supply	B
24 VAC/DC 50/60Hz ± 10 % reverse pole protection	AC/DC
15..32 VDC two-wire (only for A=4)	ZWL
24 VDC with galvanic separation	VDC

LCD	E
none	0
3 ½ digits ⁵⁾	1

⁵⁾ Display up to ± 1999

Measurement range	C	
Standard ³⁾ (e.g. 0..100 Pa)		
switchable	50 Pa/100 Pa/ 200 Pa/250 Pa	1
	100 Pa/200 Pa/ 750 Pa/1,25 kPa	2
	250 Pa/500 Pa/ 1 kPa/2,5 kPa	3
	1 kPa/2,5 kPa/ 5 kPa/10 kPa	4
	± 50 Pa/± 100 Pa/ ± 200 Pa/± 250 Pa	1A
	± 100 Pa/± 200 Pa/ ± 750 Pa/± 1,25kPa	2A
	± 250 Pa/± 500 Pa/ ± 1 kPa/± 2,5 kPa	3A
	± 1 kPa/± 2,5 kPa/ ± 5 kPa/± 10 kPa	4A

³⁾ also ± measuring ranges

Step response time	F
25 ms	025
1 s	1
4 s	4
10 s	10

Electrical connection	G
spring-type terminal, 2 x M 16 cable glands clamping range Ø 5 ... 10 mm	16
spring-type terminal, M20 cable gland ⁶⁾ clamping range Ø 8 ... 13 mm	20
M 12 plug ⁶⁾	12

⁶⁾ not for changeover contacts / relay (D)

Calibration certificate	H
none	0
Factory calibration	I
Calibration according to DKDR-6-1	D