

Relative and differential pressure module type 698

Pressure range

-5 ... 5 mbar / 0 ... 1 – 10000 mbar



The pressure modules type 698 are suitable for monitoring pressure and flow in air conditioning systems and in the laboratory sector.

The module is optionally available with a 3 digit LED display, two limit value switches (potential free) as well as a square root extraction.

- Rugged measured value detector, owing to outstanding synergy obtained by combining diaphragm technology with a ceramic element
- High overpressure safety margin, even in the lowest pressure range
- Easy to install and commission
- No maintenance required

Technical overview

Pressure range

Relative	-1 ... 0 bar
	0 ... 10 bar
Differential	-5 ... 5 mbar
	0 ... 500 mbar

Operating conditions

Medium		Air and neutral gases
Temperature	Medium	0 ... +70 °C
	Ambient	-10 ... +70 °C
	Storage	-40 ... +70 °C
Tolerable overload on one side	Differential pressure	0 ... 50 mbar
	Relative pressure	0.1 ... 10 bar
Rupture pressure	Differential pressure	0 ... 50 mbar
	Relative pressure	100 ... 500 mbar
		5x fs
		3x fs ¹⁾

Materials in contact with the medium

Pressure connections	PVC
Hose connection	Silicone / PA
Diaphragm	Silicone / Al ₂ O ₃ (96%) / Silicium
Sensor housing	PA, PC, Ultem
Sealing material	NBR
Sensor	Al ₂ O ₃ (96%) / Silicium

Electrical overview

Output (Selectable by customer)	0 ... 10 V	
	0 ... 20 mA	
	4 ... 20 mA	
Power supply	17 ... 33 VDC	
	24 VAC	
	115 VAC	
	230 VAC	
Tolerable load	0 ... 10 V	
	> 2 kOhm	
Current consumption	0 ... 20 mA / 4 ... 20 mA	
	< 500 Ohm	
Polarity reversal protection	< 4 VA	
	Extra-low voltage	Each connection is protected against crossover up to max. power supply
	Low voltage	230 VAC / 115 VAC only on supply terminals, transformer short-circuit

Dynamic response

Response time	< 20 ms
Load cycle	< 10 Hz

Protection standard

IP 65

Limit switches

Two potential free change over contacts adjustable over the full range (Adjustment with potentiometer).	
Contact rating	250 VAC / 6A
Switching hysteresis	~ 1% fs fixed

Electrical connection

Screw terminals for 1.5 mm ²

Pressure connection

Connection pipe (conical)	Ø 4 ... 7 mm
Quick fitting	Ø 3.9 mm / M6x0.75

Display

LED, 3 digit

Mounting instruction

Installation arrangement	Unrestricted ²⁾
Mounting	Fixing holes integrated in housing

Tests / Admissions

Electromagnetic compatibility	CE conformity acc. EN 61326-2-3
-------------------------------	---------------------------------

Weight

24 VDC, without display	~ 440 g
230 VAC, with display	~ 640 g

Packaging

Single packaging in cardboard

¹⁾ max. 14 bar at 20 °C and max. 7 bar at 70 °C

²⁾ Positional error versions with full scale ≤ 50 mbar = 0.13 mbar

