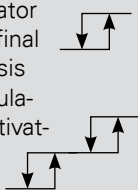


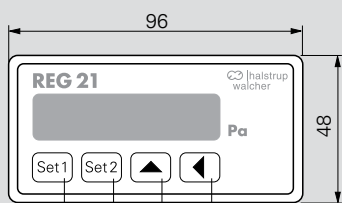


Features

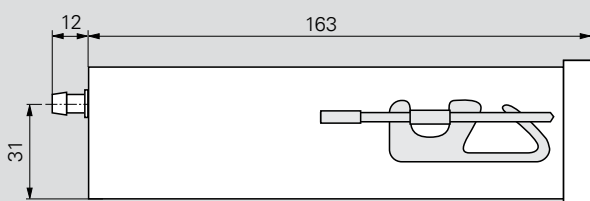
- Pressure measurement and regulation in a device
- Accurate measurement of differential pressure with automatic zero-point correction and high overload protection
- Switching outputs can be used as 2-point regulator (pressure switch), for activating/deactivating a final control element (e.g. pump), with relay hysteresis
- Switching outputs can be used as a 3-point regulator (e.g. ON 1 - OFF - ON 2) for activating/deactivating two final control elements, (e.g. air intake/outflow fans), with relay hysteresis
- Asymmetry also possible, e.g. - 10 .. 40 mbar
- Housing: control panel housing (installed)



Panel housing / control panel installation



start and close settings
select values or parameters
call up parameter settings and display functions



Measurement ranges others available upon request	50/100/250/500 Pa 1/2.5/5/10/20/50/100 kPa
Margin of error (0.3 Pa margin of error for the reference)	0.5 % of max. value (min. 0.3 Pa) 1 % of max. value
Temperature coefficient span	0.04 % of max. value/K (10 .. 60 °C)
Temperature coefficient zero point	± 0 % (cyclical zero-point correction)
Overload capacity	200 x for measurement ranges < 2.5 kPa 600 kPa for measurement ranges ≥ 2.5 kPa
Medium	air, all non-aggressive gases
Max. system pressure	10 kPa for measurement ranges ≤ 10 kPa max. nominal pressure of sensor for measurement ranges above 10 kPa
Sensor response time	20 ms
Display	4 ½ digit
Time constants	adjustable up to 10 s
Operating temperature	10 .. 60 °C
Storage temperature	- 10 .. 70 °C
Power consumption	approx. 5 VA
Weight	approx. 0.8 kg
Pressure ports	for tubing NW 6 mm
Protection class	IP 50 (installed)
Certificates	CE

Output	A
0 .. 10 V ($R_L \geq 2 \text{ k}\Omega$)	1
± 5 V ($R_L \geq 2 \text{ k}\Omega$)	5
0 .. 20 mA ($R_L \leq 500 \Omega$)	0
4 .. 20 mA ($R_L \leq 500 \Omega$)	4

Measurement range	B
Measurement range (e.g. 0 .. 100 Pa, -10 .. 40 mbar, 0 .. 200 mmHg etc.)	

Margin of error	C
0.5 % of max. value (min. 0.3 Pa)	05
1 % of max. value (standard)	1

Power supply	D
24 VDC, + 20 % / - 15 %	24D
24 VAC, + 6 % / - 15 % (50/60 Hz) (with galvanic separation)	24A
115 VAC, + 6 % / - 15 % (50/60 Hz)	115
230 VAC, + 6 % / - 15 % (50/60 Hz)	230

Contact points	E
2 relays with floating changeover contacts 230 VAC (50/ 60 Hz), 6 A	R
2 transistors with open collector $U_{CE} \leq 50 \text{ V}$; $I_C \leq 200 \text{ mA}$, floating	T









Order code	A	B	C	D	E
REG 21	-	-	-	-	-

Can be pre-set on request:
Time constant, relay parameter,
deactivation of the cyclic zeroing

MEASUREMENT OF DIFFERENTIAL PRESSURE

Measurement of differential pressure is useful in a broad range of applications. It is used in ventilation and air-conditioning technology but also in many areas of air handling process technology. The next pages show a number of these. You can find more information about pressure sensor technology on p. 6.

halstrup-walcher offers a wide range of products for stationary measurement of differential pressure.

	PUC24	PUC28(K)	P26	P34	P29	PU/PI/PIZ	PS27	REG21
Details on	p. 18	p. 19	p. 20	p. 21	p. 22	p. 23	p. 24	p. 25
								
Application	Process monitoring for clean-rooms (Pa, °C, % rH), with stainless steel front	Process monitoring panel (optional: with calibration port) (Pa, °C, % rH), aluminium, anodised	High precision, scalable differential pressure transmitter	Measuring transmitter with very small dimensions – ideal for the control cabinet	Like P26, for natural gas	For standard applications. PIZ: PI in two wire technology	A basic sensor for simple applications	Measurement and regulation of pressure
Housing installation	Installed in wall (panel)		Mounted on a wall/top-hat rail					Rack
Max. measurement range	± 250 Pa		± 100 kPa					
Min. measurement range	± 100 Pa		± 10 Pa		± 250 Pa		± 50 Pa	
Degree of measurement uncertainty	0.5 % ¹⁾ (standard)		0.2 % of the scaled range (40..100 % of max. value) ²⁾ (optional) 0.5 % of the scaled range (40..100 % of max. value) ²⁾ (standard)		0.2 % ¹⁾ (optional) 0.5 % ¹⁾ (standard)		0.2 % ^{1) 3)} 0.5 % ^{1) 2)} 1 % ¹⁾ 2 % (≥ 100 Pa) or 3 % (for 50 Pa) of the set value	
Square-root (volume flow)	-	-	✓	✓ ⁴⁾	✓	-	-	-
Display	✓	✓	optional	-	optional	optional	optional	✓

¹⁾ max. value of upper range value

²⁾ but not less than 0.3 Pa

³⁾ for measurement ranges ≥ 250 Pa only

⁴⁾ optionally with stat. pressure sensor and temperature analogue input for compensation

ACCESSORIES

Certificates (see p. 41)

DAkKS calibration certificate (German)	9601.0003
DAkKS calibration certificate (English)	9601.0004
ISO factory calibration certificate	9601.0002

Connecting components

Silicone tubing ID 5 mm, OD 9 mm, red (please state length required)	9601.0160
Silicone tubing ID 5 mm, OD 9 mm, blue (please state length required)	9601.0161
Norprene tubing (please state length required)	9061.0132
Y-piece for tubing	9601.0171

Pressure ports

We can supply a wide range of customer-specific pressure ports, e.g. various cutting ring couplings or hose connectors.

