

Pressure transmitter for low pressure applications Model SL-1

WIKA Data Sheet PE 81.36

Applications

- Filter technology
- Blowing machines for glass and plastics industry
- Heating, ventilation and air-conditioning

Special Features

- Pressure ranges from 0 ... 25 mbar to 0 ... 60 mbar
- Various industrial standard signal outputs
- Wiring with connector or flying leads
- Ingress protection up to IP 67



Fig. Pressure transmitter SL-1

Description

This pressure transmitter has been designed for the measurement of ultra-low pressures with dry, gaseous and non-aggressive media.

It stands out for its high accuracy as well as its rigid and compact design.

This transmitter is available in many variations, since numerous combinations of different industrial standard signal outputs and electrical connections are possible.

Design

The rugged case is made of stainless steel and provides according to the electrical connection an ingress protection up to IP 67.

The pressure transmitters can be supplied with a non-stabilised direct voltage of 10 (14) ... 30 V and provide all commonly used output signals.

Specifications		Model SL-1		
Pressure ranges	mbar	25	40	60
Over pressure safety	mbar	500	500	500
Burst pressure	mbar	1000	1000	1000
Type of pressure		Relative pressure		
Materials				
■ Wetted parts		Stainless steel, silicium, aluminium, gold, silicone		
■ Case		Stainless steel		
Power supply U_B	U_B in DC V	10 < U_B ≤ 30 (14 ... 30 with output signal 0 ... 10 V)		
Signal output and maximum load R_A	R_A in Ohm	4 ... 20 mA, 2-wire	$R_A \leq (U_B - 10 \text{ V}) / 0.02 \text{ A}$	
		0 ... 20 mA, 3-wire	$R_A \leq (U_B - 3 \text{ V}) / 0.02 \text{ A}$	
		{0 ... 5 V, 3-wire}	$R_A > 5000$	
		{0 ... 10 V, 3-wire}	$R_A > 10000$ {other signal outputs on request }	
Adjustability zero/span	%	± 10		
Response time (10 ... 90 %)	ms	≤ 1		
Dielectric strength	DC V	500 ¹⁾		
		¹⁾ NEC Class 02 power supply (low voltage and low current max. 100 VA even under fault conditions)		
Accuracy	% of span	≤ 0.25 (BFSL)		
	% of span	≤ 0.5 ²⁾		
		²⁾ Including non-linearity, hysteresis, non-repeatability, zero point and full scale error (corresponds to error of measurement per IEC 61298-2).		
		Adjusted in vertical mounting position with lower pressure connection.		
Non-linearity	% of span	≤ 0.2 (BFSL) according to IEC 61298-2		
1-year stability	% of span	≤ 0.3 (at reference conditions)		
Permissible temperature of				
■ Medium ³⁾	°C	-30 ... +80	-22 ... +176 °F	
■ Ambient ³⁾	°C	-20 ... +80	-4 ... +176 °F	
■ Storage ³⁾	°C	-40 ... +80	-40 ... +176 °F	
		³⁾ Also complies with EN 50178, Tab. 7, Operation (C) 4K4H, Storage (D) 1K4, Transport (E) 2K3		
■ Compensated	°C	0 ... +80	+32 ... +176 °F	
Temperature coefficients within compensated temp range				
■ Mean TC of zero	% of span	25 mbar: 0.5 / 10 K	40 mbar: 0.4 / 10 K	60 mbar: 0.3 / 10 K
■ Mean TC of range	% of span	≤ 0.3		
CE-conformity		89/336/EWG interference emission and immunity see EN 61 326 Interference emission limit class A and B		
Wiring protection		Protected against reverse polarity and short circuiting on the instrument side		
Mass	kg	Approx. 0.3		

{ } Items in curved brackets { } are optional extras for additional price.

Dimensions in mm

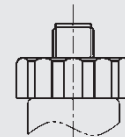
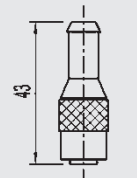
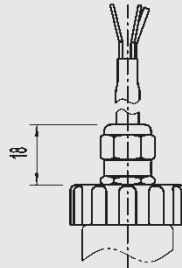
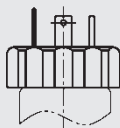
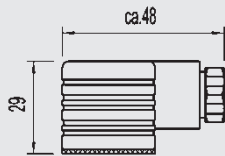
Electrical connections

Ingress Protection IP per IEC 60 529

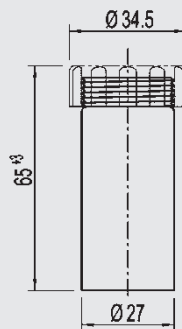
L-Connector per
DIN EN 175301-803, Form A
for conductor cross section up to
max. 1.5 mm²,
conductor outer diameter 6 to 8 mm
IP 65
Order code: A4

Circular connector
M 12x1, IP 67
Order code: M4

Flying leads with 1.5 m of cable,
conductor cross section
up to max. 0.5 mm²,
AWG 20 with end splices,
conductor outer diameter 6.8 mm,
IP 67
Order code: DL



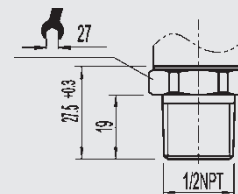
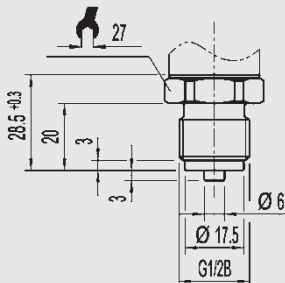
Case



Pressure connections

G 1/2 B per EN 837
Order code: GD

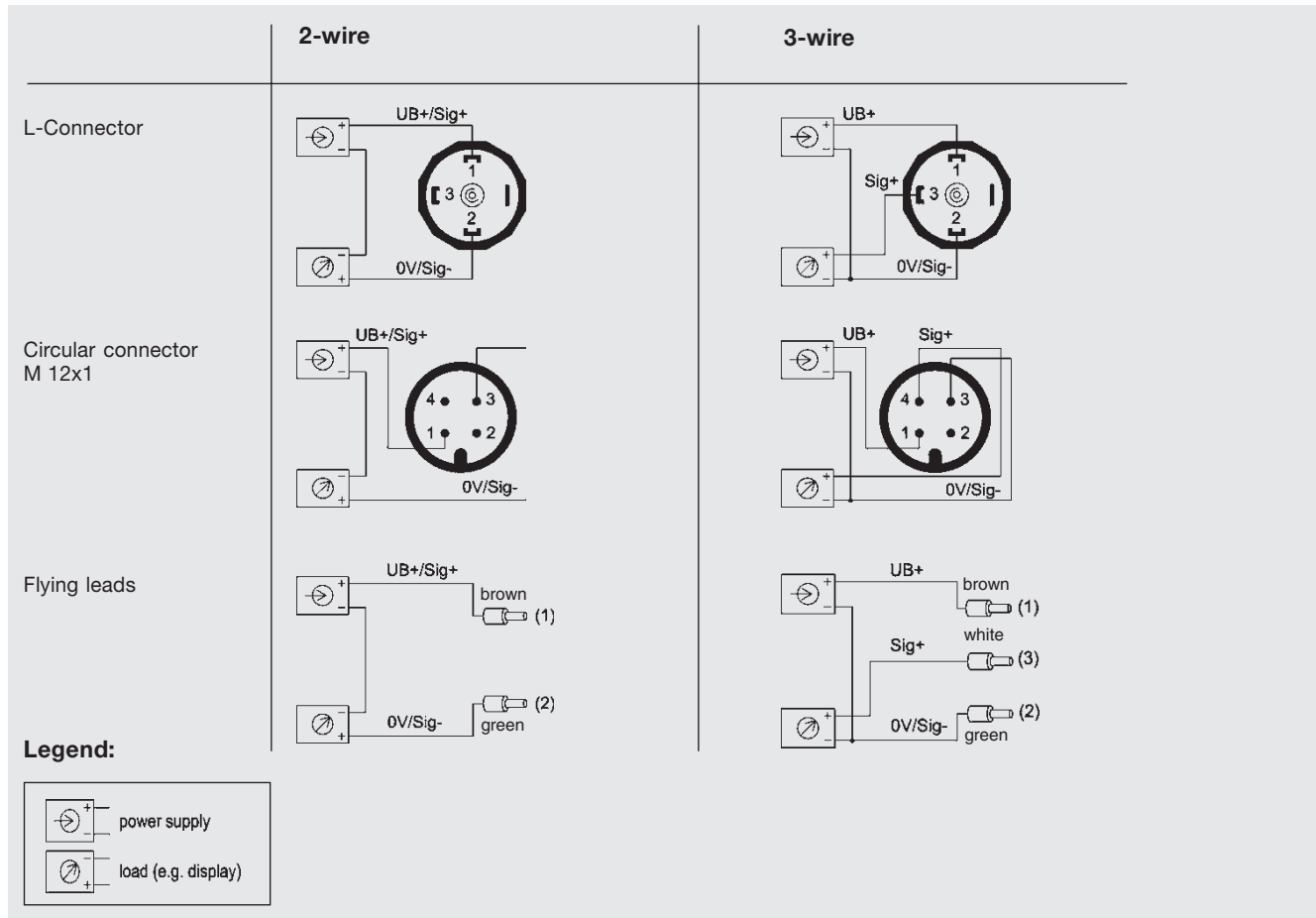
1/2 NPT per „Nominal size
for US standard tapered
pipe thread NPT“
Order code: ND



**For installation and safety instructions see the operating instructions for this product.
For tapped holes and welding sockets please see Technical Information IN 00.14 for download at
www.wika.de -Service**

*) Connectors are not included in delivery

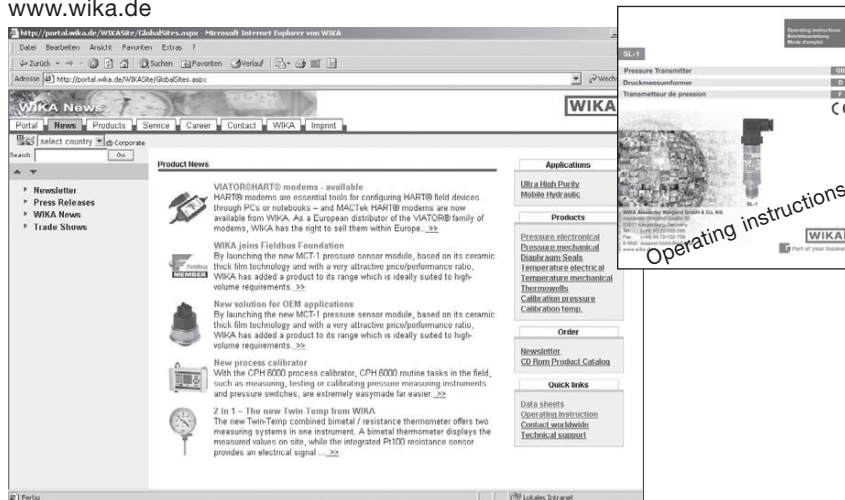
Wiring details



Further information

You can obtain further information (data sheets, instructions, etc.) via our internet address

www.wika.de



Specifications and dimensions given in this leaflet represent the state of engineering at the time of printing. Modifications may take place and materials specified may be replaced by others without prior notice.



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