



**technische import**

# SUCO Productinformatie

# LP 1000



SUCO Robert Scheuffele GmbH & Co. KG

[www.bafa.nl](http://www.bafa.nl)

# Lopress<sup>®</sup> LP1000

LOW PRESSURE TRANSDUCER



- PIEZORESISTIVE SENSOR TECHNOLOGY
- PRESSURE RANGES 0-50mbar TO 0-1000mbar
- OUTPUT OPTIONS 0-100mV, 0-5Vdc, 0-10Vdc OR 4-20mA
- ACCURACY 0.5% NLHR
- ROBUST STAINLESS STEEL CONSTRUCTION
- WIDE OPERATING TEMPERATURE RANGE
- ZERO SPAN & ADJUSTMENT

## DESCRIPTION

LP1000 series now extends the pressure sensor technology into very low-pressure applications, with operating ranges down to 0-50mbar whilst still maintaining high performance. The advanced sensor design provides very low hysteresis and excellent long-term stability not normally achievable when measuring very low pressure.

The LP1000 offers a low cost solution for accurate measurement of very low pressures and is specifically designed for use in media such as air, non-corrosive gases and various liquids compatible with silicon. The stainless steel housing, fluorosilicone seals and silicon sensing element enables the product to maintain accurate performance and provide extremely good durability

Available in pressure ranges from 0-50mbar to 0-1000mbar and with electrical outputs of 0-100mV, 0-5Vdc, 0-10Vdc and 4-20mA.

Applications include laboratory and test, air and gas pressure monitoring, leak detection, low pressure liquid and hydrostatic pressure measurements.

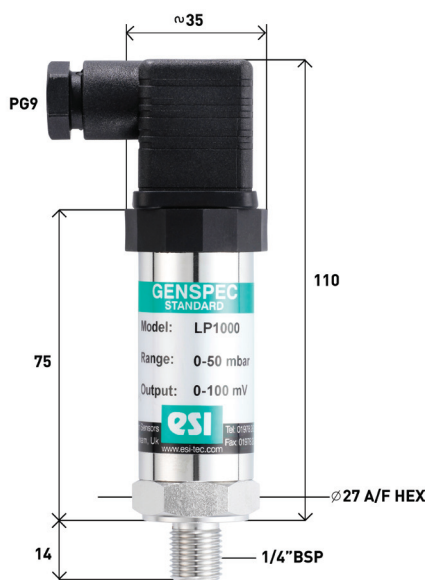


**PRESSURE RANGES**

0 to 50mbar through to 0 to 1000mbar, see table below for list of all standard pressure ranges.

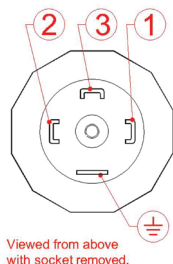
Range (mbar)	Order Code	Range (mbar)	Order Code
0-50	0050	0-500	0500
0-100	0100	0-1000	1000
0-250	0250		

**DIMENSIONS (in mm)**



**ELECTRICAL CONNECTION (mA)**

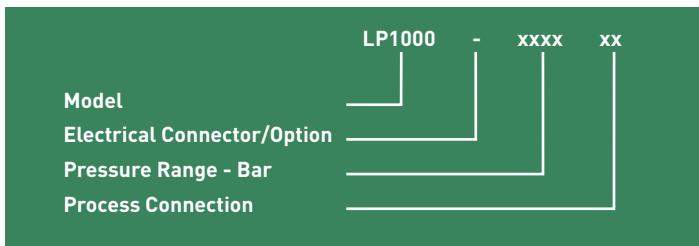
Pin No.	2 wire
1	+supply
2	4-20mA signal
3	not fitted to case



**ELECTRICAL CONNECTION (Vdc)**

Pin No.	4 wire	3 wire
1	-supply	common
2	+supply	+supply
3	+output	+output
	-output	to case

**ORDERING INFORMATION**



**OUTPUT**

- 0-100mV
- 0-5Vdc
- 0-10Vdc
- 4-20mA

**ELECTRICAL CONNECTION/OPTION**

- DIN 43650 plug and socket
- Cable outlet 1 metre screened

**PROCESS CONNECTION**

- 1/4" BSP male thread
- 1/2" BSP male thread
- 1/4" NPT male thread

**EXAMPLE**

- Output signal 4-20mA
- DIN43650 plug and socket
- Pressure range 0-100mbar
- Pressure connection 1/4" BSP male
- Correct Part Number LP1003-0100AB
- For options not listed contact sales team

**Model No.**

- LP1000
- LP1001
- LP1002
- LP1003

**Order Code**

- 
- A

**Order Code**

- AB
- AC
- AM

**Order Code**

- LP1003
- 
- 0100
- AB
- LP1003-0100AB

**SPECIFICATION**

**PRESSURE REFERENCE**

Gauge

**OVERPRESSURE**

Pressure can exceed rated range by the multiple shown below with no damage or change in calibration above  $\pm 0.5\%$ FS.  
 4x for ranges 50mbar to 250mbar  
 3x for ranges 500bar to 1000mbar

**OUTPUT SIGNAL**

0-100mV [nominal] [4 wire non-amplified]  
 Zero offset:  $\pm 1\text{mV/V}$ , Span tolerance:  $\pm 30\%$ FSO  
 0-5 Vdc, 0-10 Vdc (4 wire amplified)  
 Zero Offset and Span Setting  $\pm 0.5\%$ FSO  
 4-20mA (2 wire amplified)  
 Zero Offset and Span Setting  $\pm 0.08\text{mA}$

**ZERO OFFSET AND SPAN TOLERANCE**

$\pm 0.08\text{mA}$   
 $\pm 5\%$ FS adjustment with easy access trimming Potentiometers on amplified version only

**SUPPLY VOLTAGE**

Measured across supply terminals on connector plug  
 10Vdc for 0-100mV version  
 13-30Vdc for 0-5Vdc and 0-10Vdc versions  
 10-36Vdc for 4-20mA version

**PROTECTION OF SUPPLY VOLTAGE**

Protected against supply voltage reversal up to 50Vdc

**LOAD DRIVING CAPABILITY (4-20mA version only)**

Calculate Maximum load  $R_s = (U_b - 13V) / 20\text{mA}$   
 E.g. with supply voltage load of 36vdc, maximum load is 1150ohms.

**ACCURACY (NON LINEARITY, HYSTERESIS & REPEATABILITY)**

$\pm 0.50\%$  FS Typical max. Best fit straight line.

**PRESSURE MEDIA**

All fluids compatible with 316 stainless steel, fluorosilicone and silicon.

**OPERATING TEMPERATURE RANGE**

Ambient/Media:  $-20^\circ\text{C}$  to  $+85^\circ\text{C}$   
 Storage:  $+5^\circ\text{C}$  to  $+40^\circ\text{C}$

**INSULATION RESISTANCE**

100Mohm @50Vdc all electrical connection to case

**PRESSURE CONNECTION**

1/4" BSP male (others on request)

**ELECTRICAL CONNECTION**

Mating socket with screw terminal connections to DIN 43650 rated IP65.

**DISCLAIMER** : ESI Technology Ltd operates a policy of continuous product development. We reserve the right to change specification without prior notice. All products manufactured by ESI Technology Ltd are calibrated using precision calibration equipment with traceability to international standards.



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