

With analog signal and switch output

Safety pressure sensor DAIL



The DAIL fulfils the requirements of EN 1114-1 for overpressure protection of extrusion lines and offers maximum comfort of operation.

The auto-zero function enables calibration directly on the device or from the observation point/controller. On the output side, the melt pressure transmitter provides a switch output in addition to the analog signal which enables switching off the machine in case of overpressure according to EN 13849-1, PL=c.

Technical specifications

Pressure range	0...50 to 0...2000 bar
Accuracy incl. linearity, hysteresis, and reproducibility in % to full scale	0,15 % , 0,25 % or 0,5 %
Reproducibility in % to full scale	± 0,1 %
Membrane coating	G-Coating
Resolution	16 Bit
Max. pressure overload without influence on operating value	2 x range up to 1000 bar (14,500 psi) 1,5 x pressure range over 1000 bar (14,500 psi)
Bridge resistance	3500 Ohm Wheatstone Bridge
Supply voltage	15...32 V DC
Output signal	V oder mA
Transmission medium	NTX™ as standard
Process connection	1/2"20 UNF or M18 x 1,5
Calibration point	80 %
Insulation resistance	>1000 MOhm at 50 V
Max. temperature at diaphragm	300 °C NTX (572 °F) 400 °C HG (750 °F) 500 °C NAK (932 °F)
Max. temperature at terminal head during operation	- 40... +85 °C
Zero point deviation against diaphragm temperature changes at the diaphragm % / ° C (% / 1,8 ° F)	± 0,02 bar / ° C *
Zero point deviation against temperature changes at terminal head in % / ° C (% / 1,8 ° F)	± 0,003 %
Ingress protection housing	IP 65 /
Ingress protection connector	IP 55
Max torque	1/2"20 UNF 30 Nm (22 lbf ft) M18 x 1,5 50 Nm (32 lbf ft)

* With standard diaphragm, transmission medium NTX™ and 1/2"20 UNF. Modifications can differ.

- Switch output for overpressure protection
- Switch-off pressure freely selectable
- Analog output mA or V
- Performance Level c according to EN13849-1
- TÜV certified
- G-coating to counteract adhesive materials
- Compatible with common OEM sensors
- Longlife design

Product variations (examples)



Auto-zero Function

As an option available with optical auto-zero release in the sensor head



Special diaphragm coating

Special coating options available



Integrated temperature measurement

As an option (DTAIL series)