

Sensing element OPTI

Sensors

KEY FEATURES

- Designed for measurement of pressure in liquid and gaseous media, including special gases
- Employs KMW¹⁾ in-house developed and manufactured thin-film strain-gauge measuring technology for high sensitivity and robust performance
- High proof and burst pressures
- Functional layer connected with wire-bonded contacts
- Can be supplied either welded onto stainless steel adapter/support parts or ready for welding by the customer
- Equipped with temperature measurement function.

1) Kaufbeurer Mikrosysteme Wiedemann GmbH, a Wiedemann Group Company

TECHNICAL DATA

- Measuring range: 25 ... 2000 bar
- Hysteresis: < 0.2 % FS TC
- Zero offset: < 0.15 % FS/K
- TC span: < 0.05 % FS/K

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TECHNICAL DATA

Available Pressure Range

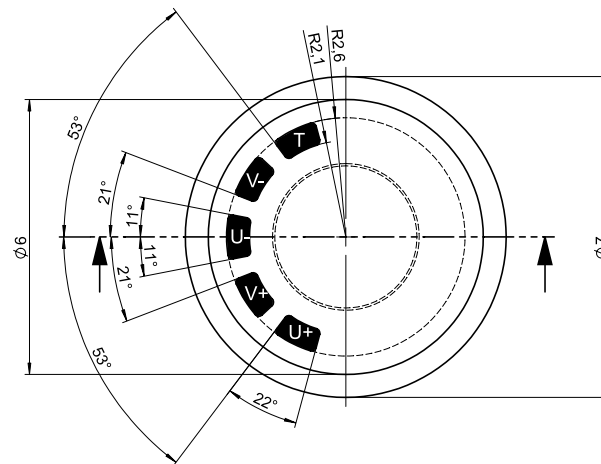
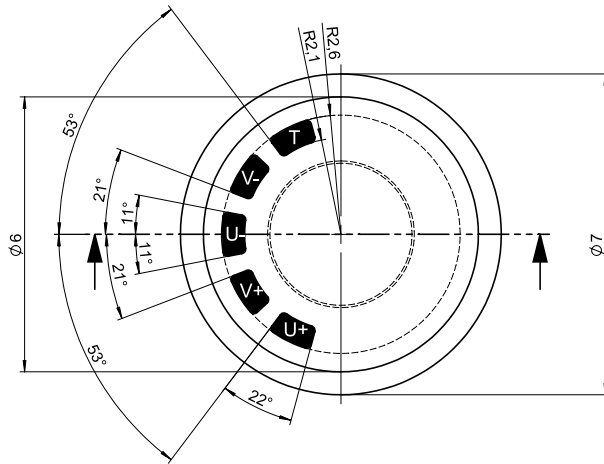
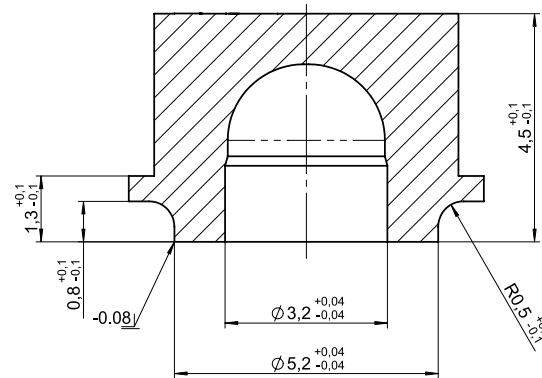
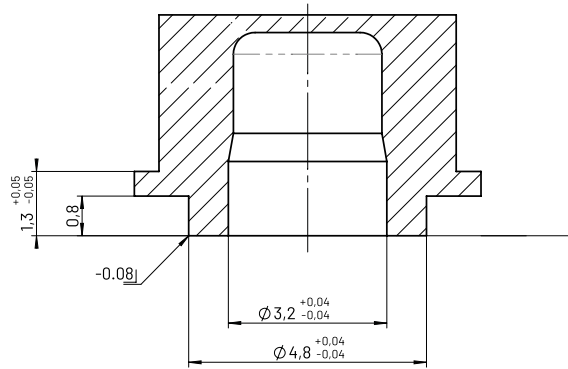
	OD	OF	OI	OL	OQ	OS	OV²⁾
Measuring range	50 bar	100 bar	250 bar	400 bar	800 bar	1200 bar	2000 bar
Overload referred to DIN EN 60770-1	100 bar	200 bar	500 bar	800 bar	1600 bar	2400 bar	4000 bar
Burst pressure referred to DIN EN 60770-1	500 bar	1000 bar	2500 bar	4000 bar	> 4000 bar	> 4000 bar	> 4000 bar
Min. lifetime	> 10 ⁸ cycles	> 10 ⁸ cycles	> 10 ⁸ cycles	> 10 ⁸ cycles	> 10 ⁸ cycles	> 10 ⁸ cycles	on request
Linearity (typical)	< 0.5 % FS						
Hysteresis (typical)	< 0.2 % FS						
TC zero offset (typical)	< 0.15 % FS/K						
TC span (typical)	< 0.05 % FS/K						
Long term stability (typical)	< 0.2 % FS p. a. (under reference conditions)						
Operating temperature	-40 ... +200 °C / -40 ... +392 °F						
Zero offset	0 ±15 mV/V						
Span	2.5 ... 5.4 mV/V	3.2 ... 5.9 mV/V	3.1 ... 4.8 mV/V	3.4 ... 5.1 mV/V	2.8 ... 4.1 mV/V	2.5 ... 3.7 mV/V	1.9 ... 3.0 mV/V
Bridge resistance	3 ... 9 kΩ						
Insulation	500 VDC						
Max. supply voltage	10 VDC						
Material	17-4 PH						

2) For common-rail fuel injection applications; drawings on request

TECHNICAL DRAWING

≤ 1200 bar

≥ 2000 bar



All dimensions in millimeters if not otherwise declared