



U Series

For transducer manufacturers

Special features

- Highly robust standard strain gauge with high resistance to alternating loads

Data sheet

Specifications

SG construction	Foil strain gauge
Carrier	PEEKF (40 ±5) µm
Grid foil	Modco (NiCr) (5) µm
Encapsulation	PEEKF (40 ±5) µm
Connections	Integrated solder pads nickel-plated/pre-tinned or Nickel-plated copper leads
Resistance	175 ... 5,000 Ohm (depended on design)
Resistance tolerance	±0.3% (without leads) ±0.35% (with leads)
Gage factor	Approx. 2.2
Gage factor tolerance	±1.5% for grid length <1.5 mm ±1% for grid length ≥1.5 mm
Reference temperature	23 °C
Operating temperature range static	-40 °C ... 140 °C
Operating temperature range dynamic	-70 °C ... 200 °C
Temperature response α for ferritic steel (1) α for aluminum (3)	10.8 ppm/K (6.0 ppm/°F) 23 ppm/K (12.8 ppm/°F)
Temperature response tolerance	± 0.3 ppm/K
Fatigue life¹⁾	>10 ⁷ cycles at 2.000 µm/m
Maximum elongation Positive direction Negative direction	10,000 µm/m (1%) 35,000 µm/m (3.5%)
Min. bending radius	0.5 mm 5 mm (for leads at the solder pads)
Recommended adhesive	P250 or EP310N
Option "Stick-On"	Pre-coated adhesive layer on request (P250)

¹⁾ Maximum zero point drift ±100 µm/m

Subject to modifications.
All product descriptions are for general information only. They are not to be understood as a guarantee of quality or durability.

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