

Inductive Displacement Transducer

Series SM20



- Stroke up to 8 mm
- External electronic modules
- Gauge type with return spring available
- Protection class IP66
- Accuracy 0,5% or 0,25%

Construction and operating principle:

A nickel-iron core will be moved linear inside of a coil form. The displacement of the core leads to an inductance variation in both coils. An external electronic circuit converts the variation into a signal proportional to the displacement.

Standard measuring strokes:

4 mm	8 mm
------	------

Standard version:

SM200	separate plunger
SM200 ..T	gauge type

Material:

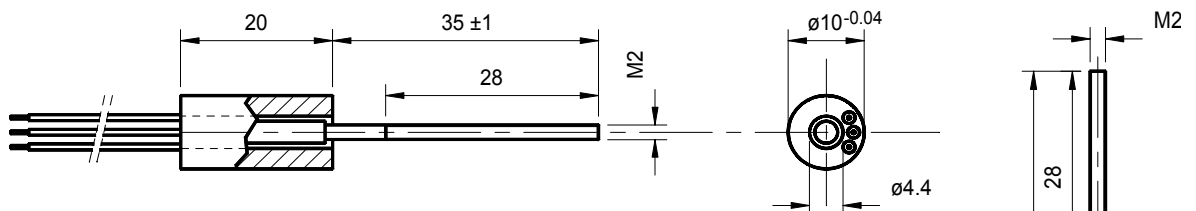
External tube	Stainless nickel iron alloy
Leads	Kynar leads AWG28
Core	Stainless nickel iron alloy
Plunger	Brass
Gauge plunger	Stainless steel
Spring	Stainless steel
Spring plate	Alu, black anodised

Technical data:

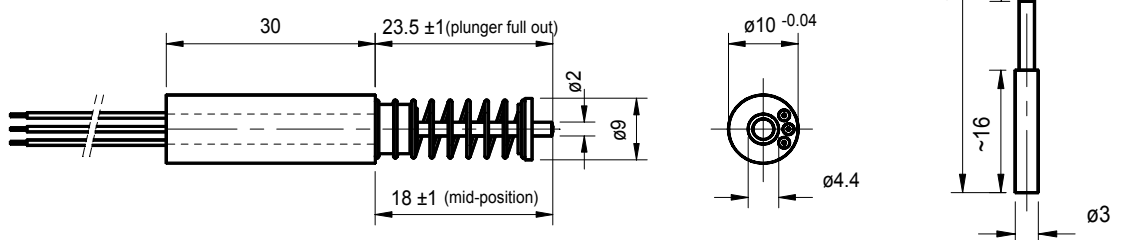
(using our electronic modules)

Accuracy	< 0,5% or 0,25%
Sensitivity	440 mV/mm ($\pm 10\%$)
Temperature drift	< 0,01% / °C
Temperature range	-40°C up to +120°C
Resistance to shock	250g SRS 20-2000Hz
Resistance to vibration	20g rms (50g peak)
Mass transducer	~20g
Mass plunger	~ 4g
Protection class	IP66

Model SM200 (with 3x 300mm Kynar-leads AWG28)



Model SM200 ..T (with 3x 300mm Kynar-leads AWG28)



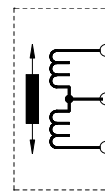
mech. Stroke 12mm springiness in mid-position ~1N

Excitation and signal processing

- SM10: Oscillator / Demodulator in metal case
- SM11: SM10 on Eurocard
- SM12: Oscillator / Demodulator without case
2 channels
- SM14: Eurocard up to 7 channels

Electrical connection

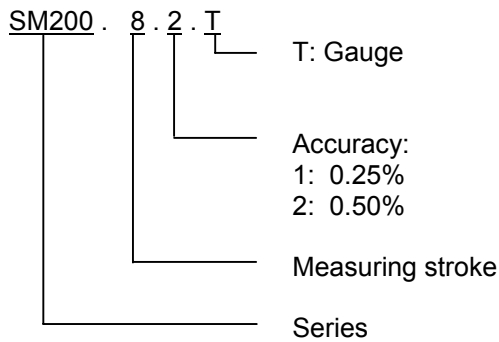
3-pol. Kynar-leads AWG28



Colour of leads:

- blue: WM
- black: MS
- red: WP

Order code



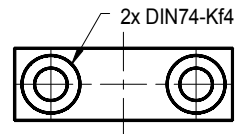
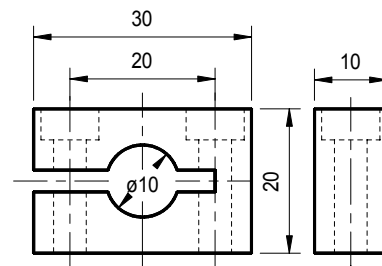
Order codes for customer specified versions will be named at plant.

Example: SM200.4.2

Displacement transducer Series 200, 4mm measuring stroke, accuracy 0.5%, 300mm kynar leads

Mounting block SM906.202

(incl. 2 mounting screws M4x25 DIN912 VA)



other versions:

- Improved sensitivity difference ($\pm 1\%$)
- Double plunger
- Measuring tip DIN878
- Special housing 25x25x15mm steel nickel plated