

MESSKO[®] COMPACT SERIES Universal Retrofit Kit

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MESSKO[®] Universal Retrofit Kit for any oil or winding gauge

Suitable for oil and winding temperature gauges

The MESSKO® Universal Retrofit Kit is used to replace malfunctioning temperature gauges on transformers, reactors or similar devices. It is not relevant whether you are dealing with oil or winding temperature gauges. The Retrofit Kit consists of a gauge with a mechanical pointer that clearly shows the temperature. Depending on the connection the same gauge can be used for either oil temperature indication or for winding temperature indication. A resettable maximum temperature indicator is standard.

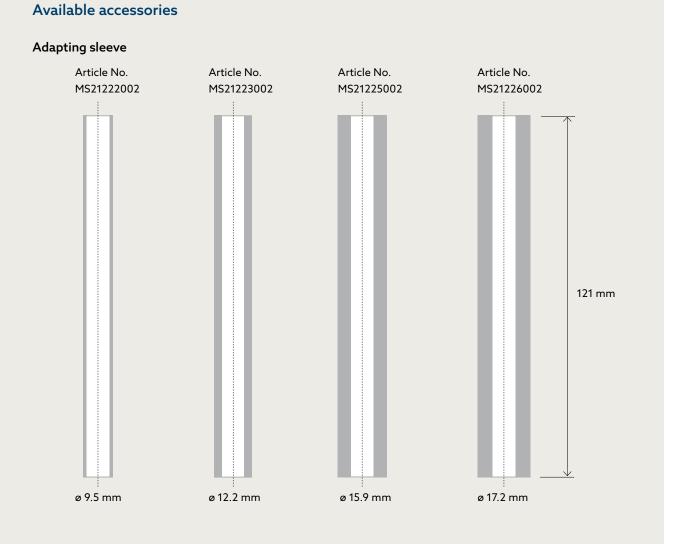
The MESSKO[®] Universal Retrofit Kit consists of:

- A temperature probe connected to the measuring gauge by a liquid filled capillary tube
- A set of probe sleeves to remove the air gap in larger thermo wells
- An adjustable length probe to fit various thermo well depths
- Larger mounting plate with various mounting options
- Two terminal covers to indicate oil or winding temperature (user selectable)

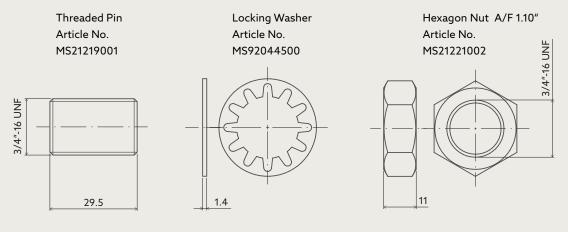
Your advantages at a glance

- Optional output 4...20mA analog
- Easy temperature gauge replacement with a universal mounting bracket
- Thermo well sleeves ensure the probe fits exactly into your well
- Two different terminal covers allow you to simply indicate if the gauge is for oil or winding temperature
- Extremely durable and reliable without re-adjustment or recalibration
- Easy integration into ETOS® Embedded Transformer Operating System





Mounting-Kit for mounting plate (optional)



MESSKO® Universal Retrofit Kit

MESSKO [®] COMPACT	Technical data
Front ring and housing	Galvanized sheet steel, painted RAL 7038 in accordance with DIN EN ISO 12944-9; corrosion protection class C4H (similar to ANSI 70 light grey)
Viewing glass	Composite safety glass with UV filter
Temperature sensor	Brass, bright, angled
Mounting plate	Aluminum, painted RAL 7038
Capillary tube	Copper capillary with sheath
Cable gland	4 x 3/4 - 14 NPT female thread
Sensor	Thin film load cell
	Key figures
Measurement range	0 160 °C (other measuring ranges available on request)
Accuracy	±3 °C in accordance with DIN EN 13190 Class 1 and DIN 16196
Installation height	2,000 m above NN
Operating temperature	-40 °C+80 °C
Ambient air temperature	-50 °C+80 °C
Degree of protection	IP 55 in accordance with IEC 60529 (similar to NEMA 4X)
Aeration	The viewing glass resists fogging up to 80 % relative humidity thanks to an aerator
Drag indicators	All thermometers are equipped with resettable drag indicators, red
Weight	Approx. 2.5 kg (6 m capillary tube)
	Micro switches
Number	3 or 4 adjustable microswitches
Switching capacity	230 V AC – making capacity: 250 VA, cos φ > 0,5 / breaking capacity: 60 VA, cos φ > 0,5 24220 V DC – making capacity: 130 W, L/R < 40 ms / breaking capacity: 25 W, L/R < 40 ms
Switching capacity with gold-plated contacts*	230 V AC – switching capacity: max. 6,9 VA, cos φ = 0,9 24220 V DC – switching capacity: max. 6,6 W, L/R < 25 ms
Minimum switching distance	6 % of the measuring range for standard switch arrangement; < 1 K for narrowing
Contact material	Silver alloy (AgNi10) / optional: gold-plated contacts
Rated insulation voltage	2500 V AC / 1 min; terminals to ground 10000 V AC / 1 min; between open terminals
Switching hysteresis	approx. 5 K (with decreasing temperature)
Output	Analog - 4 20 mA (two wire system)

*) Switching higher loads destroys the gold layer

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Please note: The data in our publications may differ from the data of the devices delivered. We reserve the right to make changes without notice. IN10708001/00 EN - MESSKO® Universal Retrofit Kit - F0420800 - uw - 11/23 ©Maschinenfabrik Reinhausen GmbH 2023