

Fast measurement, fast controlling, fast switching



## KLEIBER 217 R-LWL

*Fast pyrometer with fibre optics and controller*

Response time below 600  $\mu$ s

Measuring distance 60 ... 1000 mm

Small measuring field  
diameter 0.3 ... 11 mm

Integrated pyrometer, controller  
and power supply unit

Optical fibre available with  
vacuum guide



**200 ... 2500 °C**

Thanks to its fibre optic lens the **KLEIBER 217 R - LWL** pyrometer is particularly suited for applications which require very small measuring heads.

This is especially essential if there is no scope to integrate the measuring head because of high ambient temperatures, strong electromagnetic interferences or difficult accessible areas.

The optional desktop housing also makes this pyrometer suitable for use in research facilities and laboratories and additionally allows portable handling.

The optimised electronics of the **KLEIBER 217 R - LWL** features very short **response times** below **600  $\mu$ s** ( $t_{95}$ ).

The **emissivity** is **stepless adjustable** between 0.1 and 1.00 enab-

ling the user to measure temperatures at many different materials.

The customer configured **controller** and the **power supply unit** are also **integrated** into the control panel or desktop housing. This helps to keep the installation as simple as possible.

By using LVO 25 and LVO 35 auxiliary lenses the 217 R-LWL can achieve a measuring field diameter of 1.6 ... 11 mm at measuring distances from 60 to 1000 mm. A special lens helps to measure even **fields of 0.3 mm** diameters. Usage of laser rejection filters is possible.

The pilot light enables to focus the measuring object exactly. The size of the pilot light is identical to the measuring field.

Another outstanding feature is its optical fibre with a vacuum guide. This allows to operate the pyrometer for temperature measurements in vacuum.

The **KLEIBER 217 R-LWL** is available as the standard 217 R/A-LWL, 217 R/B-LWL and 217 R/C-LWL models.

### Applications:

- Machine construction

**KLEIBER combines decades of experience with a passion for cutting-edge technology.**

## Technical data - KLEIBER 217 R-LWL

Type designation:	217 R/A-LWL	217 R/A-LWL	217 R/B-LWL	217 R/B-LWL	217 R/C-LWL	217 R/C-LWL
Temperature range:	600 ... 1600 °C	800 ... 2300 °C	300 ... 1400 °C	500 ... 2500 °C	200 ... 1000 °C	300 ... 2300 °C
Spectral range:	0.85 ... 1.05 µm	0.8 ... 1.05 µm	1.58 ... 1.8 µm	1.58 ... 1.8 µm	2.0 ... 2.2 µm	2.0 ... 2.2 µm

Measuring output:	0 (4)...20 mA linear (please specify on order), max. load 500
Accuracy:	0.75% of measured value at $\epsilon = 1$ and 23°C ambient temperature
Repeatability:	0.3% of the measured value
Response time $t_{95}$ :	< 600 µs
Emissivity $\epsilon$ :	stepless adjustable from 0.1 ... 1.0
Ambient temperature:	max. 40°C, max. 260°C for LVO and optical fibre
Alignment:	LED pilot light
Power supply:	230 V AC 50-60 Hz, 0.2 A
Degree of protection:	IP 54
Housing dimensions:	192 x 96 x 163 mm (WxHxD)
Housing:	control panel housing
CE-symbol:	in accordance with EU directives
Scope of delivery:	KLEIBER 217 R-LWL with power supply in control panel housing, power cable, inspection sheet, user manual

KL0107-01

### Optical heads (\* specifications in mm)

Standard optics	Meas.distance*	Measuring field Ø*	Fibre optical cable	Measuring range	Aperture*
LVO 25	80 ... 300	1.6 ... 4.3	blue	all	18
LVO 35	250 ... 1000	3.5 ... 11.0	blue	all	28
Spezial optics					
LVO 25-S1	115 ... 300	0.4 ... 1.5	red	> 400 °C	18
LVO 25-S2	200 ... 240	0.85 ... 1.1	red	> 350 °C	18
LVO 25-S3	78	0.3	red	> 400 °C	17
LVO 25-S4	60	0.5	red	all	18
LVO 25-S5	70 ... 200	1.0 ... 2.6	blue	all	18
LVO 25-S6	250 ... 500	3.5 ... 6.3	blue	all	18
LVA 25	110 ... 800	0,8 ... 5,0	red	all	17

**Fibre cable:** Available in lengths 1.5 m to 25 m with stainless steel sheathing with vacuum guide on request.



**Made in Germany**

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### Accessories:

Item
Desktop housing for KLEIBER 217 R-LWL
Mounting support for LVO 25 with Ø 10 mm
Mounting support for LVO 35 with Ø 10 mm
Ball and socket mounting for LVO
Air purge unit for LVO 25
Air purge unit for LVO 35
90° mirror for LVO 25
90° mirror for LVO 35
Upgrade response time to 300 µs
Laser refuse filter
Controller to customer specification