

Fast measurement, fast controlling, fast switching



## **KLEIBER KS 730 • KG 730 • KGA 730**

*High speed pyrometer for industry and research areas*

Response time 180  $\mu$ s

Integration time  
0.3 ms ... 5 s

Vario or macro optics

Extremely small spot sizes  
between 0.7 ... 28 mm

Long measuring ranges



**160 ... 3500°C**

The **KLEIBER 730** is a High Speed pyrometer for very fast temperature measurement.

The instrument is designed for applications in **research and development areas and industrial applications** where high speed measurements are required.

The use of **laser rejection filters** provides problem free high speed measurements **for applications in laser areas**.

In particular, the extremely short **response time** of just **180  $\mu$ s ( $t_{95}$ )**, makes it an ideal instrument for such demanding measurements.

The availability of special filters and detectors can also provide reliable **measurements** on such materials as **silicon** and **tungsten**.

Apart from the response time the KLEIBER 730 excels with its stable **vario optic**, which is included in

the standard scope of delivery. This optic provides measurement spots from 2.5 to 28 mm at distances from 450 to 3000 mm.

For very small targets, a **macro optic** is available with a measurement spot of just 0.7 mm at 288 mm measuring distance.

All connections and user controls, including emissivity correction and response time setting, are conveniently located on the rear of the instrument.

The emissivity correction is adjustable between 0.1 and 1.0 (stepless).

To allow customisation for complex applications the response time can be set for periods of up to 5 seconds.

The instrument is offered in three different spectral ranges, making it suitable for a wide range of de-

manding measurement applications.

To cover additional applications, **wide temperature ranges** e.g. from 350°C to 3500°C have been developed for this high speed pyrometer.

An integral **LED-pilot light** is included as the standard targeting aid, the spot size of which is identical to the size of measurement spot.

Optional through-lens sighting is also available on request.

#### **Applications:**

- Laser applications
- Material development/ -testing
- Induction processes
- Welding
- Combustion engines
- Airbag testing
- Wafer control
- Turbines

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

# Technical Data - KLEIBER 730

Product:	KS 730	KS 730	KG 730	KG 730	KGA 730	KGA 730
Temp. range*:	600 ... 1600°C	800 ... 2300°C	300 ... 1400°C	500 ... 2500°C	160 ... 1000°C	300 ... 2300°C
Spectral range:	0.85 ... 1.05 µm	0.85 ... 1.05 µm	1.58 ... 1.8 µm	1.58 ... 1.8 µm	1.58 ... 2.2 µm	2.0 ... 2.2 µm

(\*other temperature ranges on request)

Output signal:	0 (4) ... 20 mA linear (please specify when ordering) Ohmic resistance max. 500 Ω
Accuracy:	0.75% of measured value (25°C, ε=1, t <sub>95</sub> =1s)
Repeatability:	< 0.3% of measured value (25°C, ε=1, t <sub>95</sub> =1s)
Response time t <sub>95</sub> :	180 µs
Emissivity ε:	0.1 ... 1, stepless adjustable
Integration time:	0.3 ms ... 5 s
Optic:	Vario optic (see table below)
Optic optional:	Macro optic
Distance (mm):	288 mm (housing edge ... object = 288 mm)
Spot size (mm):	0.7 mm
Aiming:	LED-pilot light or through-lens-sighting (option)
Water cooling (option):	screwed in neck (R1/8" / Diameter: 6 mm, 0.5 l/min, max. 6 bar)
Cooling water temperature:	10 ... 35°C
Ambient temperature:	max. 40°C, max. 80°C with water cooling
Air purge (option):	max. 0.5 bar
Power supply:	24 V DC 0.2 A or 24 V AC 0.2 A
Safety class:	IP 54
Housing dimensions:	170 mm x 70 mm x 70 mm (L x W x D)
Weight:	approx. 1.2 kg
Test base:	EN 55 011 : 1998, limit class: A
CE-Mark:	according to EU regulations
Scope of delivery:	KLEIBER 730 with retaining pin, vario optics (option: macro optics), inspection sheet, user manual

KL0107-01

## Vario optics

Distance (mm):	450	600	800	1000	1200	1400	1600	1800	2000	2500	3000
Spot size (mm):	2.5	4.0	6.0	8.0	10.5	11.5	13.0	14.0	15.0	20.0	28.0



Made in Germany

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## Accessories (selection)

Item
Connecting cable series 730/740 standard length 4 m (other cable length on request)
Power supply 230 VAC, output 24 VAC for series 730/740 incl. Aluminium housing
Power supply 230 VAC, output 24 VDC for series 730/740 incl. Aluminium housing
Power supply NG-0D, 85...265 VAC, Output 24 VDC, 600mA
Power supply NG-2D with 2 limit switches, 85...265 VAC, Output 24 VDC, 600mA
Ball and socket mounting support, screw mounted with retaining pin
Macro optics for series 730/740
Vario optics with air purge unit for 730/740
Built in maximum value storage for model 730/740 (only possible in comb. with optical scanner SC 1)
Optical scanner SC1 with thread flange for series 730/740 (only with power supply 24 VAC!)