

Non-Contact Temperature Measurement

MAURER – INFRARED – RADIATION THERMOMETER

Temperature range 150 to 850°C (302 - 1562°F)

compact units – Infrared – measuring transducer and electronic process unit in one case with light beam aiming device

Series KTR 2340



MAURER – Infrared – radiation thermometer can also assist you to monitor your heating processes, ensuring a uniform standard of quality for your products.

leaflet KTR 2340

<http://www.maurer-ir.de>

**Dr. Georg Maurer
GmbH
Optoelektronik**

Industriegebiet 10
D-72664 Kohlberg

Telefon +49(0)7025-9219-0
Telefax+49(0)7025-9219-20
Email:info@maurer-ir.de

Infrared Radiation Thermometer Series KTR 2340

The non-contact temperature registration in the measuring technique is unthinkable without it. The **KTR 2340** is placing new standards in the **low temperature measuring technique** for metallic surfaces. It's developed with latest findings and manufactured in **up-dated technology**. Through the approved chopper system a very efficient long-term stability and low-sensitivity contrary to temperature-shocks is achieved. In view of a response time of **only 5 msec.** this thermometer is also useable for high-speed measuring applications. For exact adjustment to the measuring point a **light beam aiming device** is available.

Examples for application:

steel, iron, non-ferrous metal, tempering, wires, induction heating, soft soldering, pre-heating

Temperature-measuring range - linear -

No.	Meas. – range short
1	150 - 450°C (302 - 842°F)
2	200 - 700°C (392 - 1292°F)

No	Meas.-range long
3	200 - 850°C (392 - 1562°F)

(special meas. range on request)

Technical Data

Measuring range	150 - 850°C (302 - 1562°F)
Spectral range	2,3 µm
Response time	0,005 - 0,5 s
Accuracy	1 % ± 1°C
Reproducibility	3 ‰
Emissions factor	100 - 10 %
Working temperature	0°C - 50°C (32 - 122°F)
Stock temperature	-10°C - + 70°C (14 - 158°F)
Temperature-sensitivity	0,05 % / °C
Humidity tolerance	35 - 85 % RF
Output (choiceable)	0 - 20 mA
	4 - 20 mA
	0 - 10 V
Operating voltage	DC 24 V ± 10 %
	AC 24 V ± 10 %
Current input	approx 300 mA
Unit connection	5 - pole socket
Dimensions H / B / D	54 x 54 x 171 mm (2,13x2,13x6,73 inch)
Weight	0,6 kg (1,32 lbs)
Protection grade	IP 65

Fibre optic cables: Type GM-L49, length 1800 mm in metal hose/T-coated
ambient temperature max. 150°C, bend radius min. 40 mm

186-2005	fibre optic cable	Type GM-L49	1800 mm	∅ 1,1 mm fibre bundle
186-2010	fibre optic cable	Type GM-L49	1800 mm	∅ 2,0 mm fibre bundle
186-2036	fibre optic cable	Type GM-L49	1800 mm	0,5 x 2,7 mm fibre bundle

(other length and fibre bundle on request)

Objectives:

For accomodation to the measuring application are several objectives and optic systems available.

Options: - built-in digital display

electronic process unit

AE 1010
AE 1012
AE 1410
AE 1412

electrical assembly

- digital display
- 2 contact outputs
- interface RS 232 o.s.
- power supply 230V/AC - 24 V/DC

mechanical assembly

- units with cooling case
- blowing device
- mirror 90°
- mounting parts

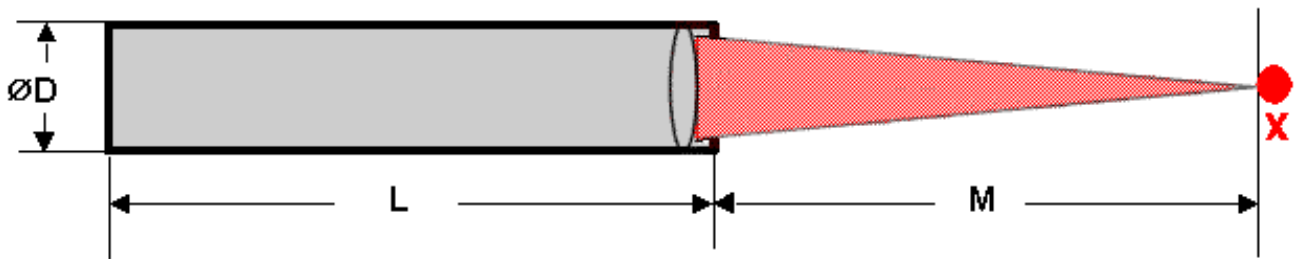
Dr. Georg Maurer GmbH – OPTOELEKTRONIK –

Industriegebiet 10 D-72664 Kohlberg Telefon +49(0)7025-9219-0 Telefax +49(0)7025-9219-20



Reg.-Nr.: Q1 0201014

Objectives for units with fibre optic cable series 2340



fibre - bundle $\varnothing 1,1 \text{ mm}$ / $\varnothing 2,0 \text{ mm}$ / $0,5 \times 2,7 \text{ mm}$

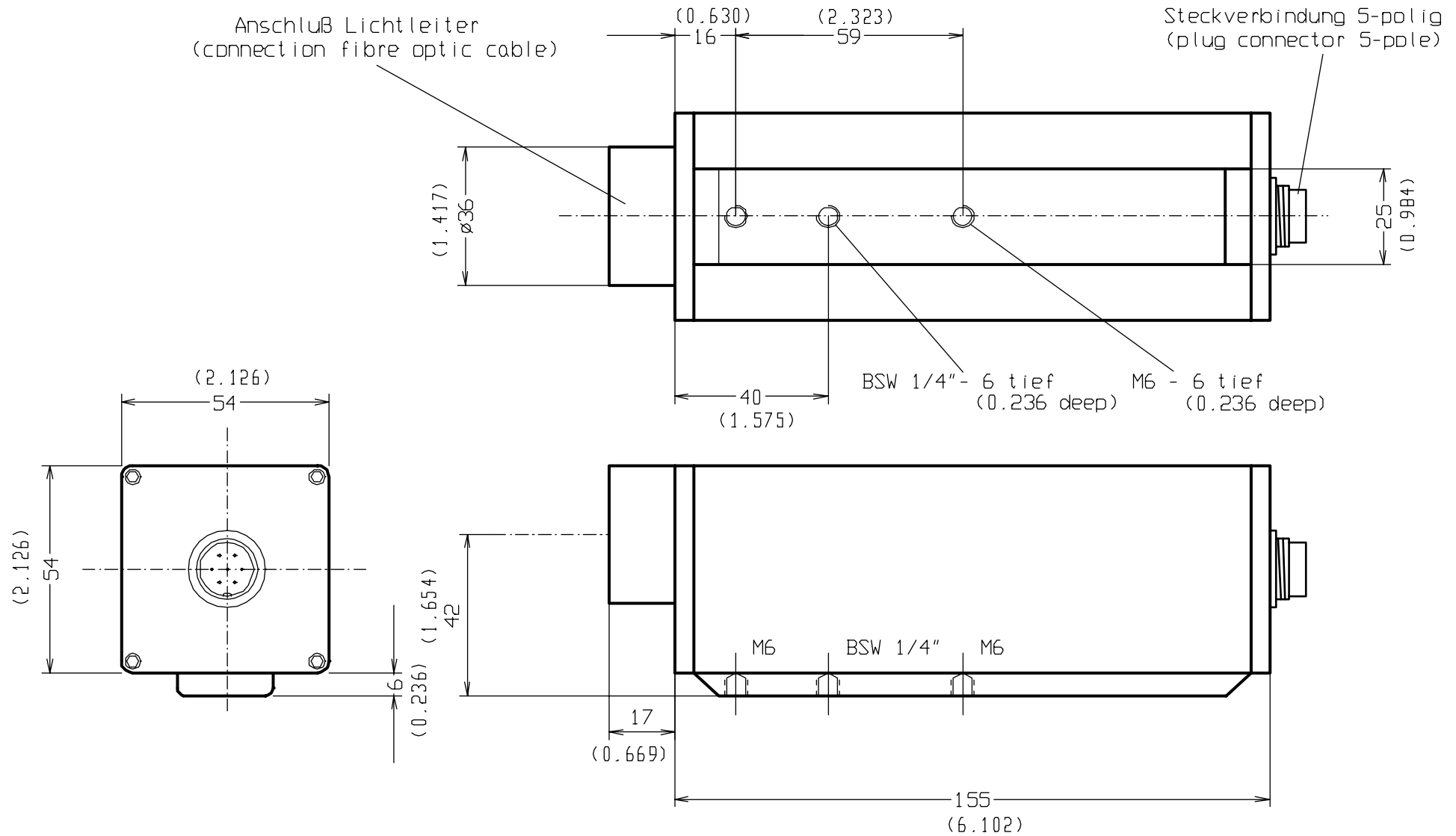
For determination of the respective target size X the fibre optic bundle must be multiplied by the magnification factor of the optic system.

Article-No.:	Optic-type:	\varnothing D mm	Meas. distance M mm	zoom factor V	Länge L mm
117-1028	VL 50-2	18	50	1,0	80,0
117-1029	VL 75-2	18	75	1,5	80,0
117-1050	VL 100-2	18	100	2,0	80,0
117-1074	VL 200-2	18	200	4,0	80,0

(special objectives on request)

Dr. Georg Maurer GmbH – OPTOELEKTRONIK –
 Industriegebiet 10 D-72664 Kohlberg Telefon +49(0)7025-9219-0 Telefax +49(0)7025-9219-20





(xxx) - Maße in Zoll
(dimensions inch)

				Maßstab 1:1	
				Fa. Dr. Maurer GmbH	
		Datum	Name		STANDARDGEHÄUSE (standard case) KTR 2340
	Bearb	19.12.02	Schlotterb.		
	Gepr				
	Norn				
				Blatt	
				Bl.	
Zust	Änderung	Datum	021202		
		11.06.03			