

Digital MAURER Pyrometer

KTRD 1550

Measuring range 100 to 2500 °C

UNIVERSAL DEVICE



Performance, precision and reliability - you can count on MAURER pyrometers. Benefit from maximum adaptability by choosing the right optics, accessories and the appropriate interface. Thus our pyrometer fits perfectly into existing systems.

The most important features and characteristics at a glance:

- Spectral range: 5,0 μm
- Short response time from 0,5 to 5ms
- Emissivity from 100 – 10 %, adjustable directly at the pyrometer or via interface
- Available with either light beam aiming device (LED / Laser) or viewfinder
- With Vario-optic for exact focusing on the measuring spot
- Use with digital and analogue output
- 1 limit output (open collector)
- Grid connection 24 V DC
- Free Software (IR-LOG) for parameter setting, data recording and storage

Measuring Ranges

1. 100 – 1800 °C
 2. 300 – 2500 °C
- Special measuring ranges upon request -

Scope of Applications

Processing of ceramics and glass



Technical Data

Device type	KTRD 1550-1	KTRD 1550-2
Target marking	Light beam aiming device with LED (green) or laser	viewfinder
Response time	Measuring range 1: 5ms measuring range 2: 0,5 ms	
Spectral range	5,0 µm	
Measurement uncertainty	0,5 % ± 1 °C (ε = 1, Tu = 23°C, T95 = 1 s)	
Temperature dependence	0,05 % / °C	
Reproducibility	0,1 % ± 1 °C (ε = 1, Tu = 23°C, T95 = 1 s)	
Emissivity	100 – 10 %, adjustable directly at the pyrometer or via interface	
Resolution	< 0,1 % at the analogue output < 0,1 °C at the interface	
Operating / Storage temperature	0 – 50 °C, Optics 150 °C / -10 – 70 °C 32 – 140 °F, Optics 302 °F / 14 – 158 °F	
Permissible humidity	35 – 85 % RH (non-condensing)	
Analogue output	0 – 20 mA / 4 – 20 mA (Load max. 500 Ω)	
Subranges	freely adjustable within measuring range	
1 limit output (open collector)	24 V 100 mA	
Interface	RS 232 ± 50 V isolated <u>or</u> RS 485 ± 70 V isolated Optional: PROFIBUS, PROFINET, Ethernet, EtherCAT, USB 2.0	
Maximum value memory	Maximum memory, peak value memory double, adjustable time and threshold value, erasing after time, external contact, by software, after every measuring object	
Supply voltage	24 V DC ± 10 %	
Power consumption	< 100 mA	
Device connection	12-pol. plug connector	
Dimensions (LxHxW) / Weight	54 x 54 x 147mm / 0,6 kg	
IP Code	IP65	

Configurations

- Built-in digital display on the backside of the pyrometer
- Extensive selection of objectives, suitable for your application

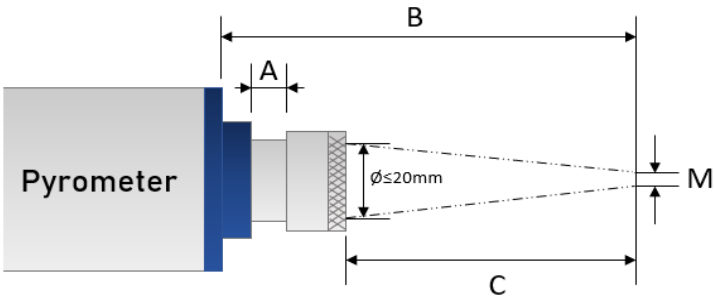
Main Equipment

Electronic Equipment		Mechanical Equipment	
Connection cables	Power Supply 100-270 VAC – 24 VDC	Objectives	Mirror 90° for beam deflection
Electronic process units	PC-Box (USB-connection set)	Mounting parts	Blowing device
(Line-) Scanners		Cooling case	

Optics for MAURER Pyrometer

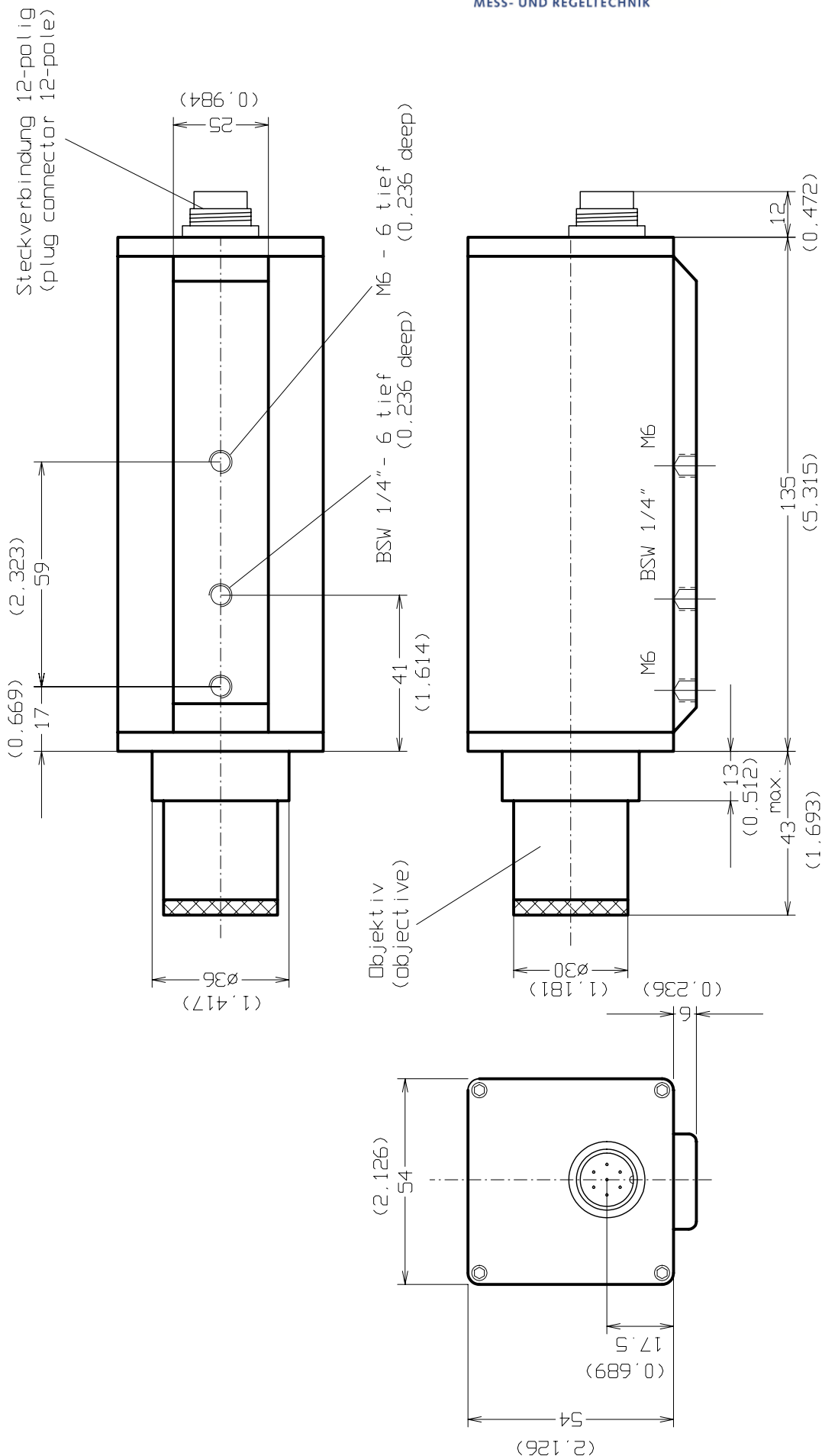
KTRD 1550

OVERVIEW



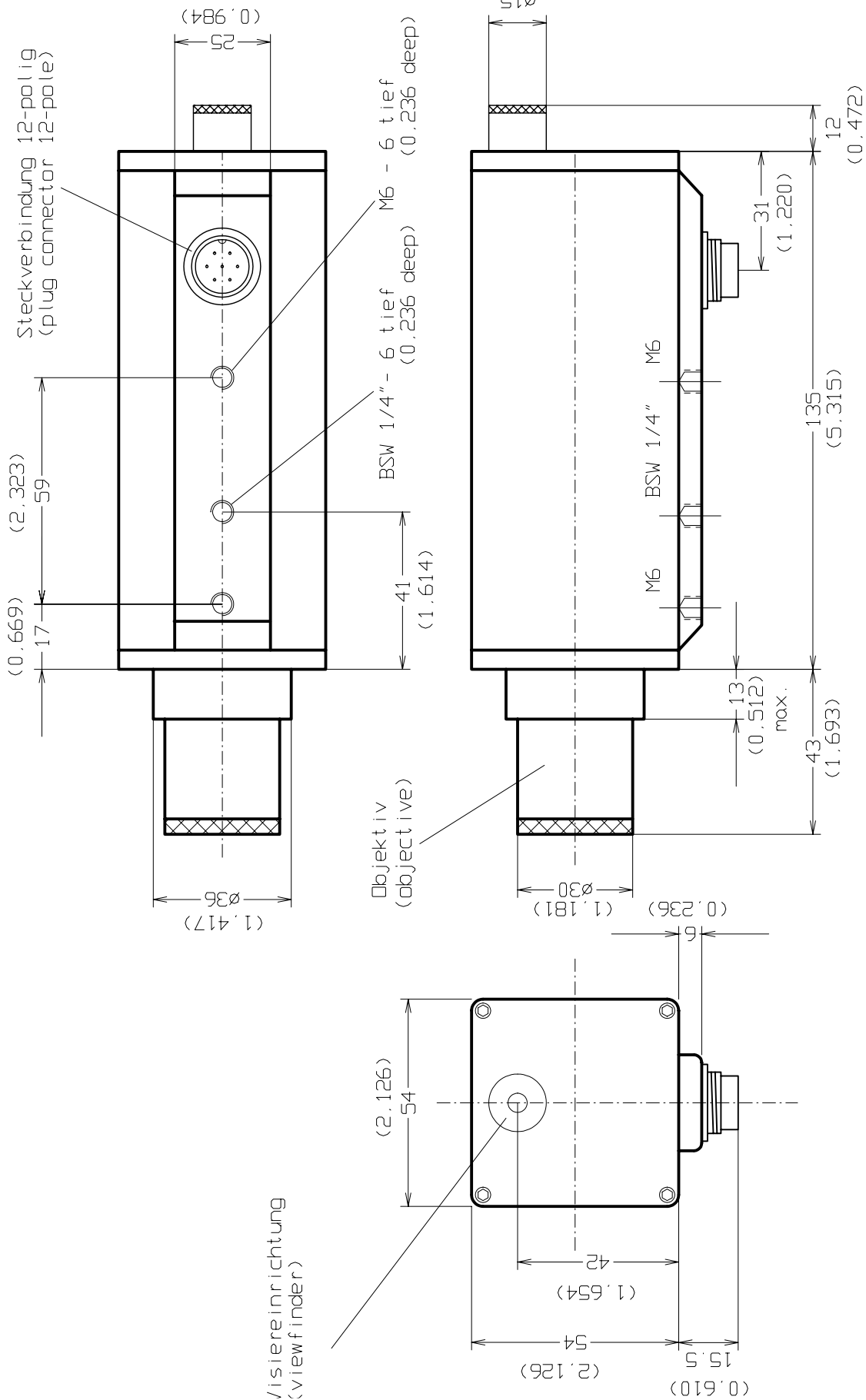
- Legend**
- A Optic extraction
 - B Measuring distance from housing
 - C Measuring distance from optic front edge
 - M Measuring spot size

Optics		IR 2050 T	
Lense		F 50, Ø 25,4 mm	
Measuring aperture		Ø 1,0 mm	
B	C	A	M
[mm]	[mm]	[mm]	[mm]
240	206,0	13,0	2,5
300	270,1	8,9	3,1
400	373,7	5,3	3,9
500	474,9	4,1	5,0
800	777,2	,8	8,7
1000	977,5	1,5	9,8



(xxx) - Maße in Zoll
(dimensions inch)

Maßstab 1:1		Fa. Dr. Maurer GmbH	
STANDARDGEHÄUSE (standard case)		KTRD 1000-1	
100205		Blatt	
Zust.		Bl.	
Änderung		Datum	
Name		Name	
Datum		Schlatterb.	
Bearb.		Gepr.	
Norm		Norm	



(xxx) - Maße in Zoll
(dimensions inch)

					Masstab	1 : 1	Fa.Dr. Maurer GmbH	
				Datum	Name		STANDARDGEHÄUSE (standard case)	
			Bearb.	25.02.10	Schlotterb.		KTRD 1000-2 Stecker 90° (connector 90°)	
			Geprf.				Visiereinrichtung (viewerfinder)	
			Norm					
								Blatt
Zust.	Änderung	Datum	Name				100207	BL.