

**Pyrometer for non-contact temperature measurement  
of non-metallic or coated surfaces between -20 to 500°C**

- **Wide temperature range from -20°C to 500°C**
- **Output: 0 ... 5 V DC (scalable)**
- **Rugged IP65 stainless steel housing**
- **Sensor status / self diagnostic indicator LED**
- **150 ms response time**
- **RS232 digital communications for sensor set-up and monitoring**
- **Alarm output**



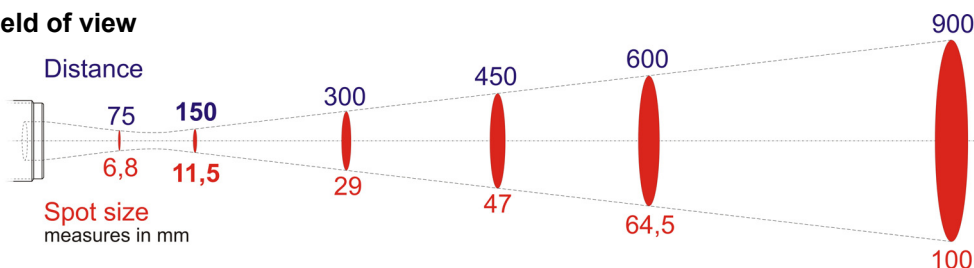
Technical data	
Temperature range	-20 ... 500°C
Spectral range	8 ... 14 µm
Accuracy <sup>1</sup>	±1.5% of reading or ±2°C (whichever is greater) ±3.5°C for T <sub>mess</sub> < 0°C
Repeatability	±0.5% of reading or ±2°C (whichever is greater)
Temperature resolution	0.1°C
Response time	150 ms (95%)
Emissivity ε	0.10 to 1.10 (digital adjustable)
Transmissivity	0.10 to 1.00 (digital adjustable)
Signal processing	Peak hold, valley hold, variable averaging
Self diagnostics	Normal operation, alarm, out of range, unstable, sensor fault
Analog output	0 ... 5 V DC (scalable, min. temperature interval 20°K)
Min. load impedance	50 kΩ
Power supply	12 to 24 V DC, ±20%, 10 mA
Digital output <sup>2</sup>	RS232 (two-way)
Alarm output <sup>2</sup>	24 V DC, ±20%, < 20 mA (transistor)
Cable length	3 m
Ambient temperature	0 to 70°C
Cable temperature	-30 to 105°C
Storage temperature	-20 to 85°C
Relative humidity	10 to 95%, non condensing
Shock	IEC 68-2-27, 50 g's, 11 ms, any axis
Vibration	IEC 68-2-6, 3 g's, any axis, 11-200 Hz
Protection class	IP65
Weight	180 g (incl. 3m cable)

1) at 23°C ±5°C; emissivity = 1.0

2) Digital and alarm output share a common wire.

User selects either alarm output or digital communication via software.

### Field of view



D:S = 13:1 at focal point, 90% energy

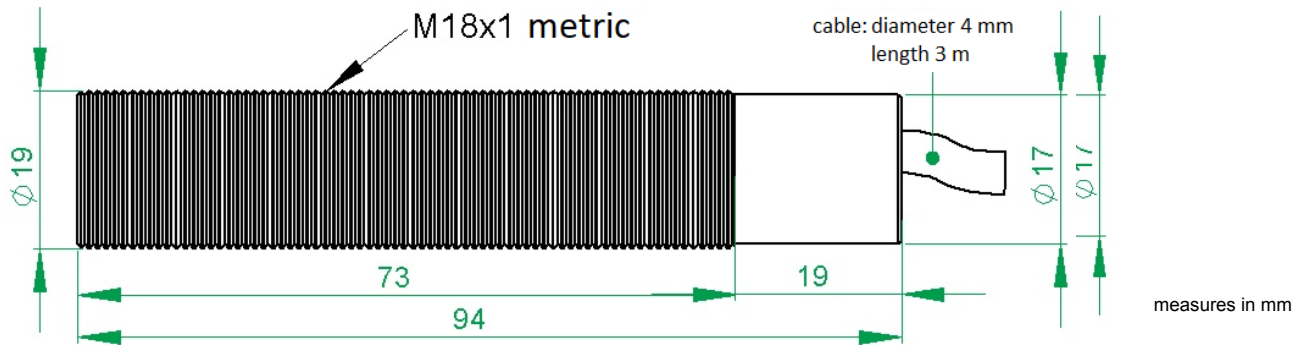
D:S = 9:1 at far field, 90% energy

Alle Preise zzgl. gesetzl. MwSt. – Oktober 2019

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Stand-Dokumentation: 21.10.2019

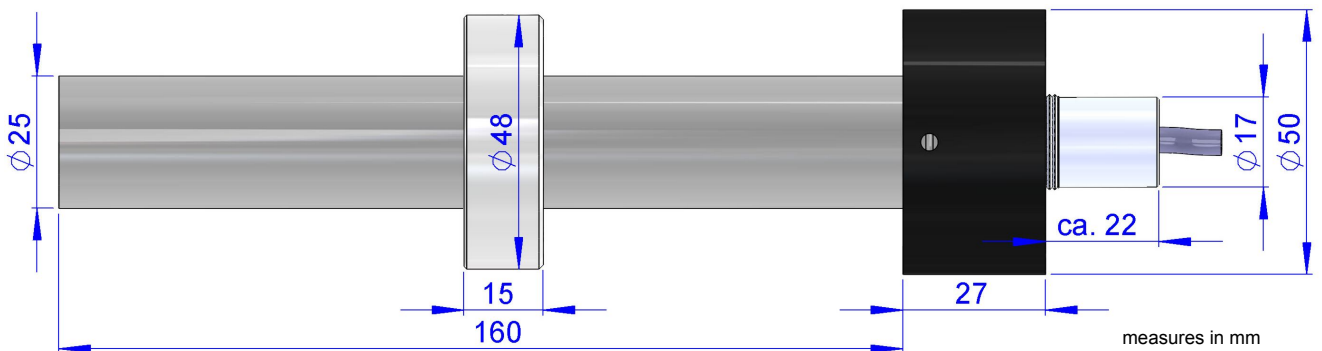
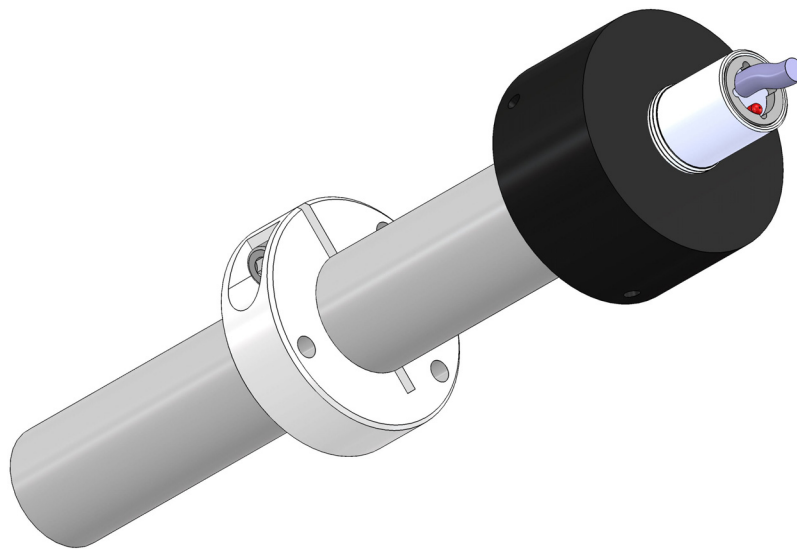
## Abmessungen



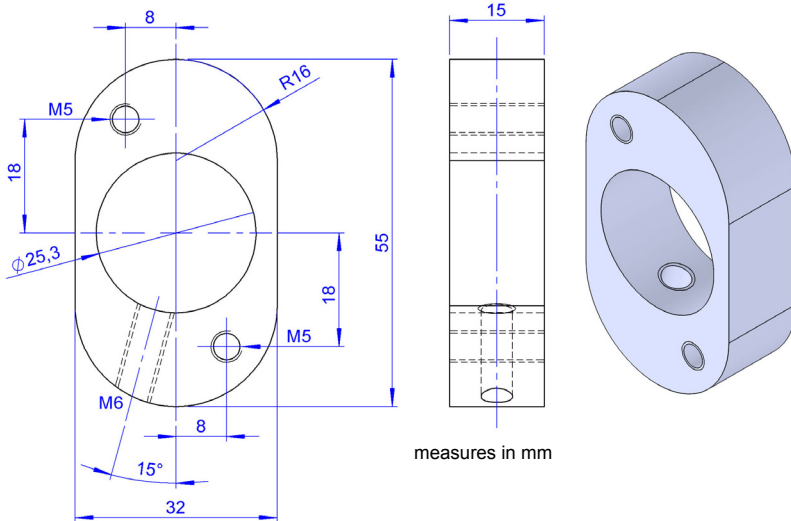
## Accessories

### Protection armature

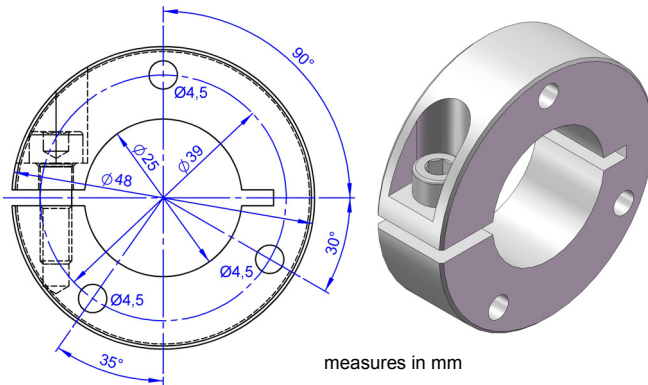
- Robust protection armature for usage in rough surroundings
- Easy to mount by clamping elements



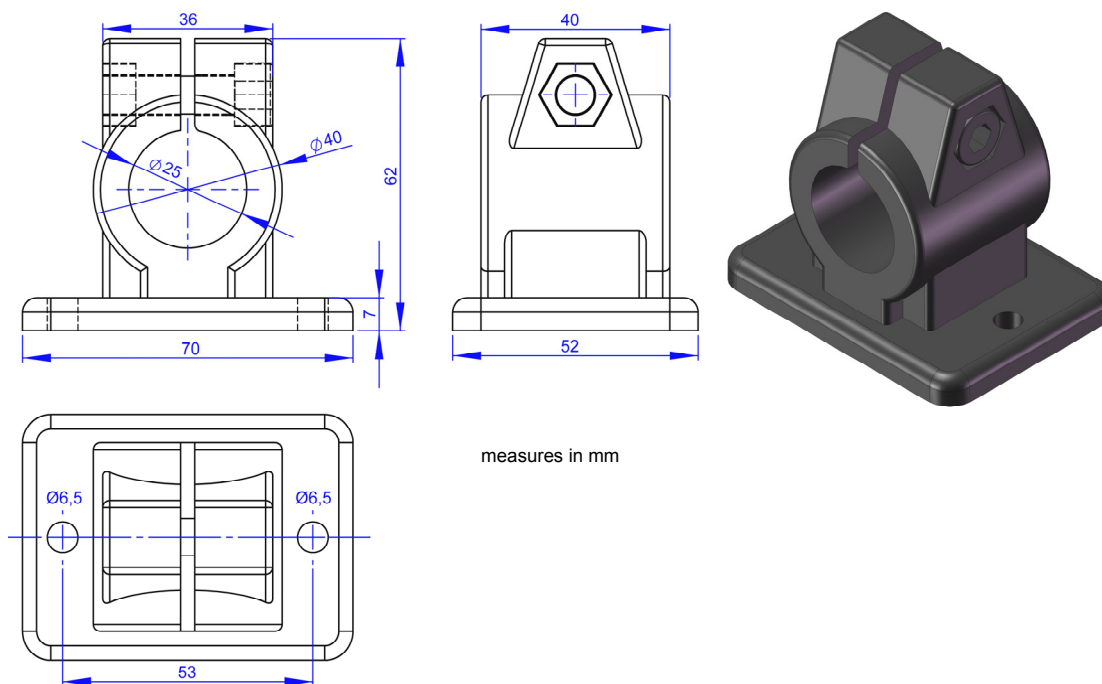
## Clamp ring for protection armature, oval, aluminium,



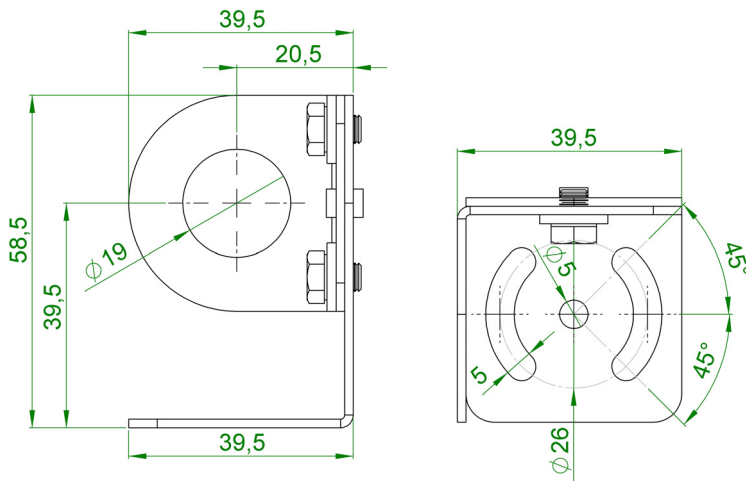
## Clamp ring for protection armature, stainless steel



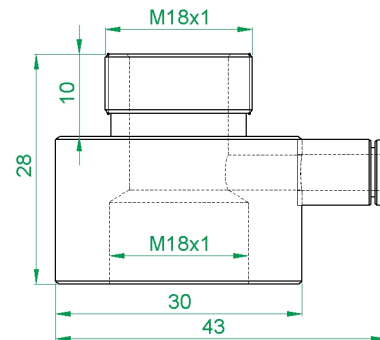
## Flange clamping element for protection armature



## Adjustable mounting angle



## Air purge



measures in mm

Item	Item No.	
IN4000; -20 to 500°C; field of view 13:1; output 0 to 5 V DC (scalable); 3 m cable; protection class IP65	130700	
Schutzarmatur (Edelstahl-Schutzrohr)	121728	
Clamp ring, oval, Aluminium, for assembly of the protection armature on IR-fields, boilers, etc.	3834395	
Clamp ring, stainless steel, for mounting of the protection armature on IR-fields, boilers, etc.	3834390	
Flange clamping element, for sidewise mounting of the armature	3835090	
Adjustable mounting angle	130711	
Air purge (for hose outer diameter 4 mm)	130710	