

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



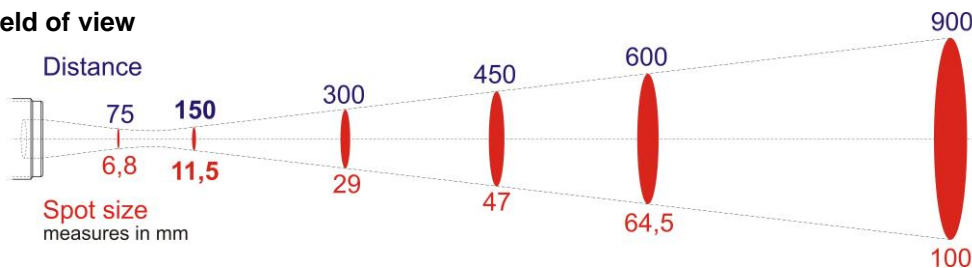
Technical data	
Temperature range	-20 ... 500°C
Spectral range	8 ... 14 μm
Accuracy ¹	±1.5% of reading or ±2°C (whichever is greater) ±3.5°C for T _{mess} < 0°C
Repeatability	±0.5% of reading or ±2°C (whichever is greater)
Temperature resolution	0.1°C
Response time	150 ms (95%)
Emissivity ε	0.10 to 1.10 (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	24 V DC, ±20%, 10 mA
Digital output ²	RS232 (two-way)
Alarm output ²	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.

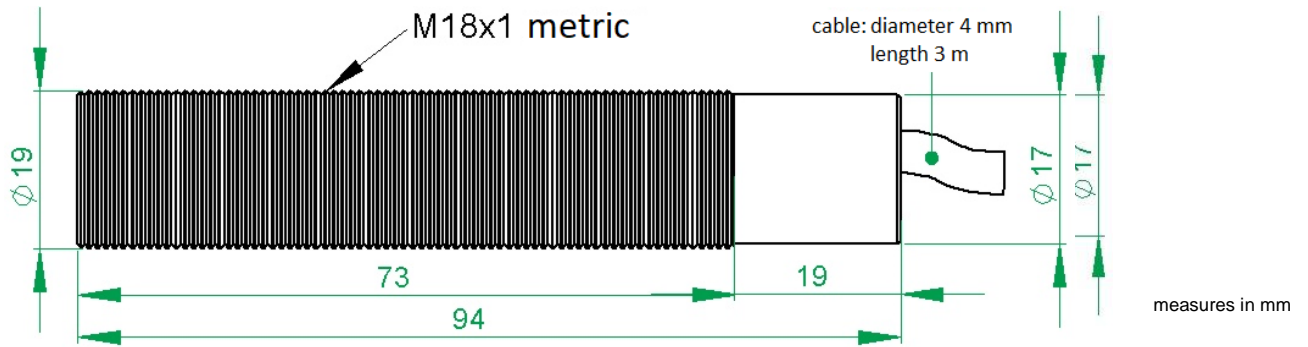
Field of view



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

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

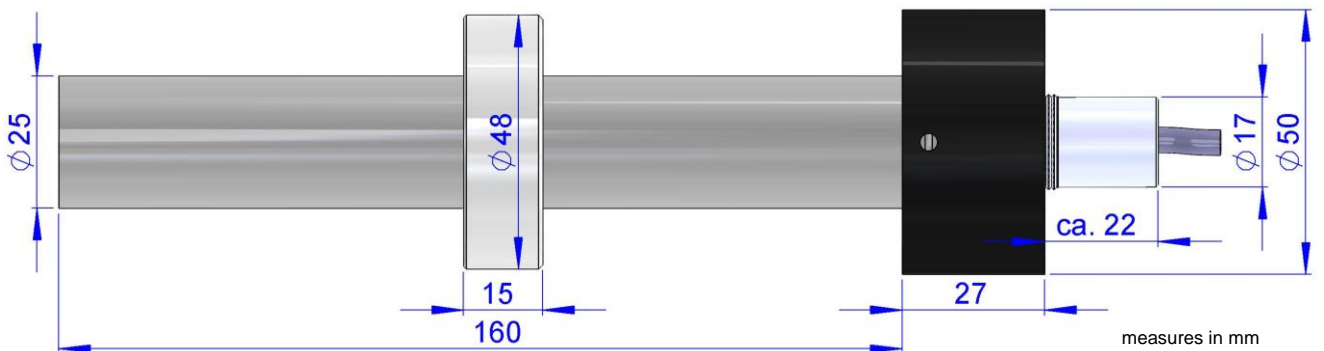
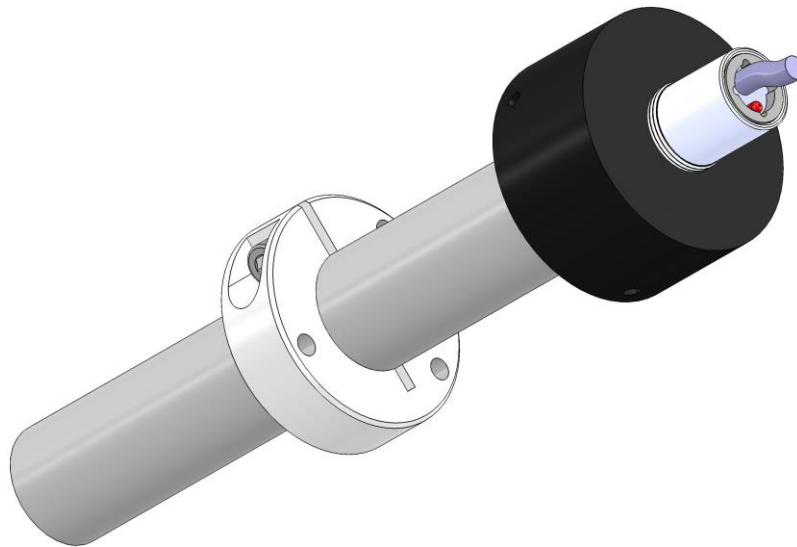
Dimensions



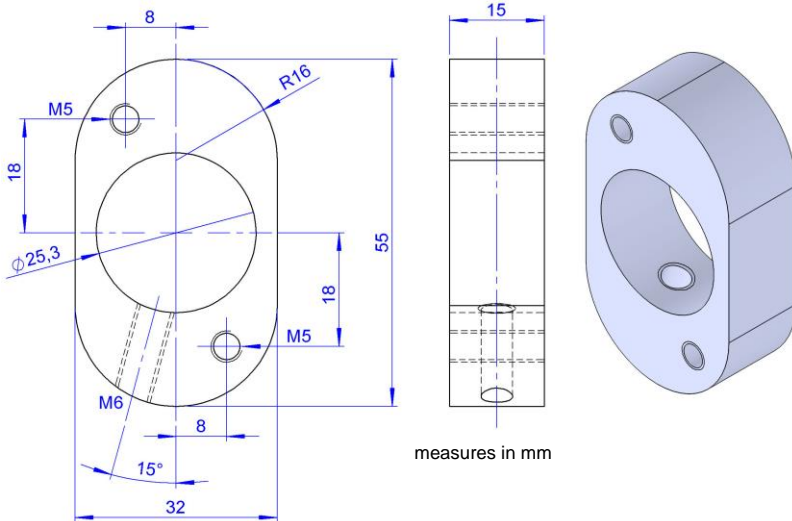
Accessories

Protection armature

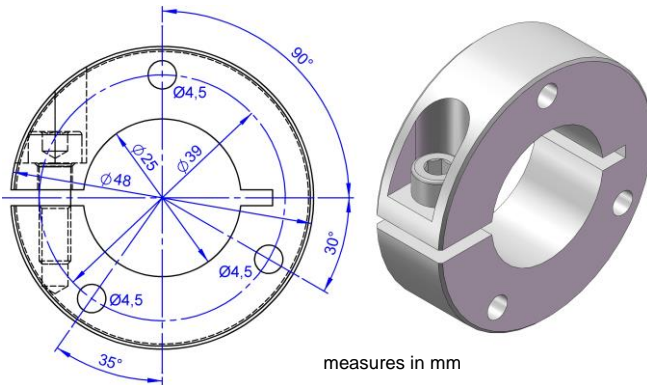
- Robust protection armature for usage in rough surroundings
- Easy to mount by clamping elements



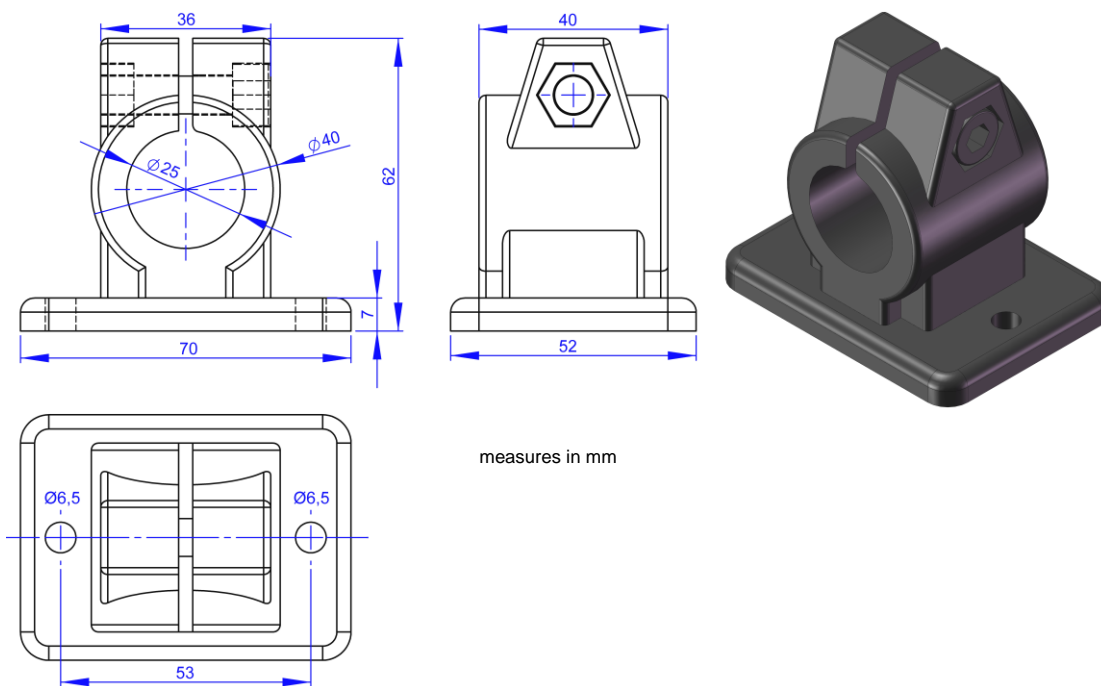
Clamp ring for protection armature, oval, aluminium,



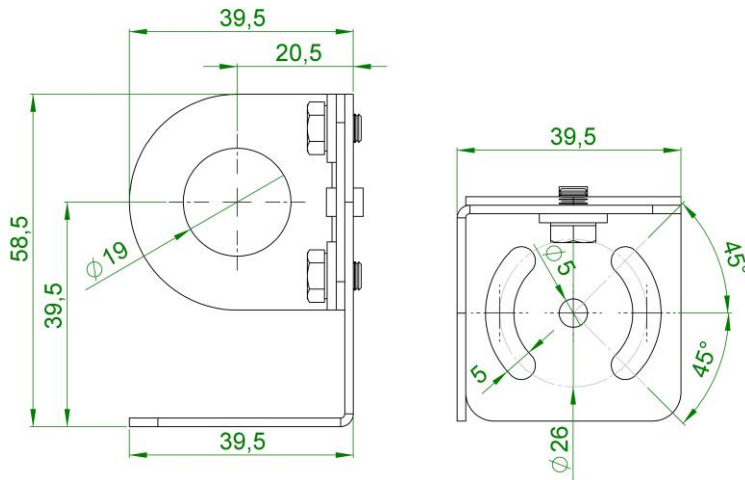
Clamp ring for protection armature, stainless steel



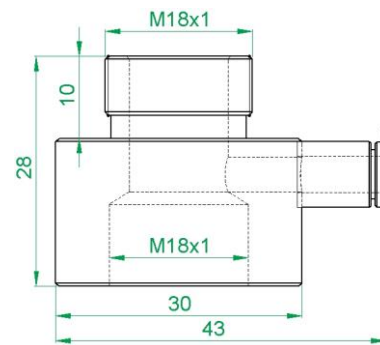
Flange clamping element for protection armature



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
Protection armature (stainless steel)	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