

## CT13 Series

### Infrared Radiation Thermometer

- Temperature ranges for 0 to 2000 °C (32 to 3632 °F)
- Response times  $\geq 30$  ms
- Target size  $\geq 1$  mm (0.04 in.)
- $\pm 0.1$  °C temperature resolution capability
- Pilot Laser aiming option
- Rugged stainless steel housing, IP68

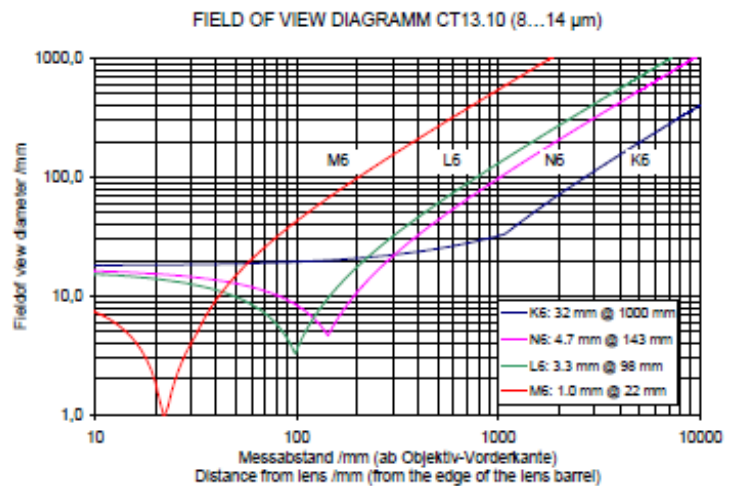
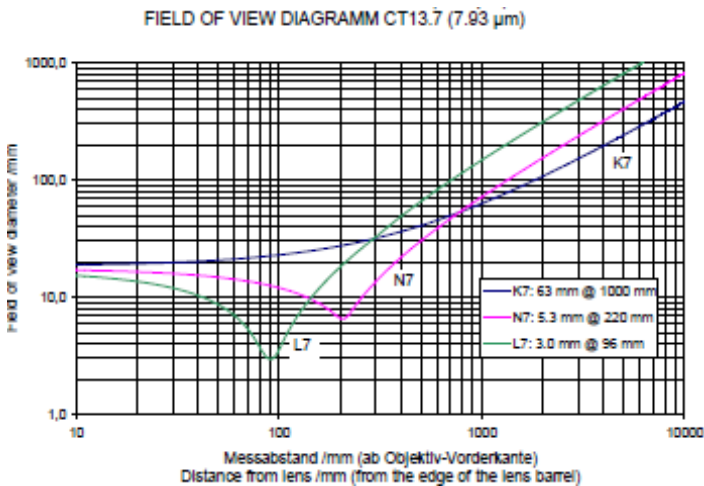
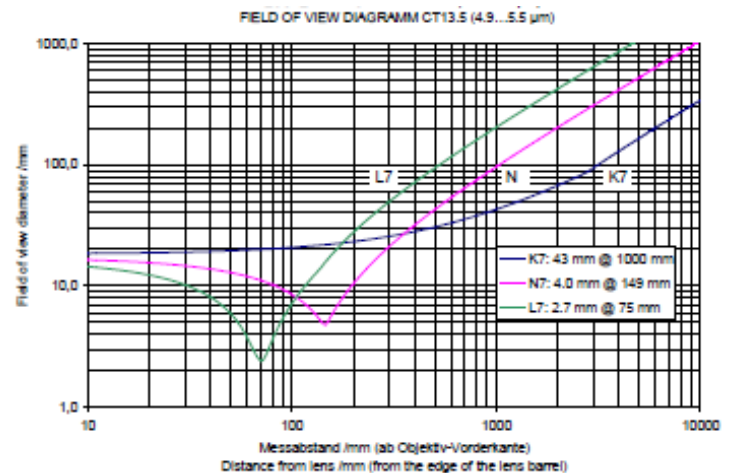
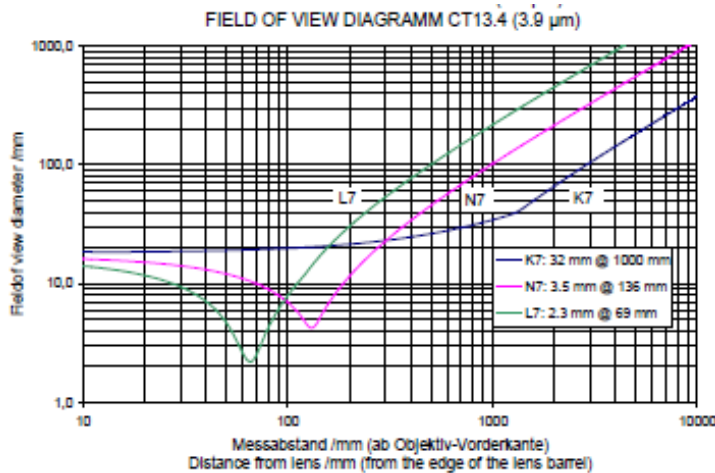
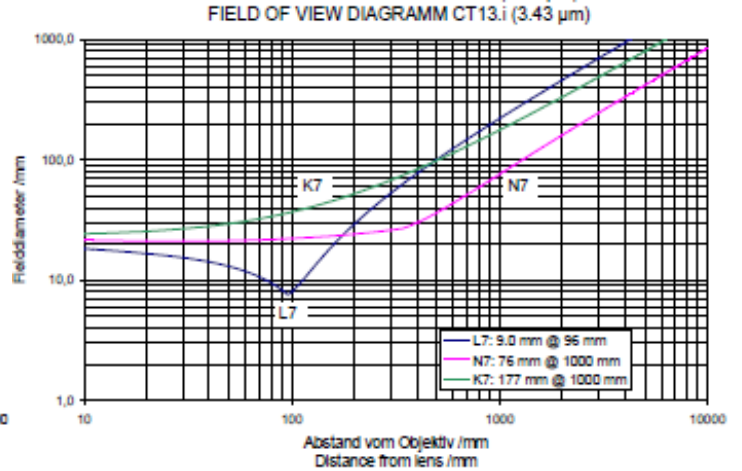
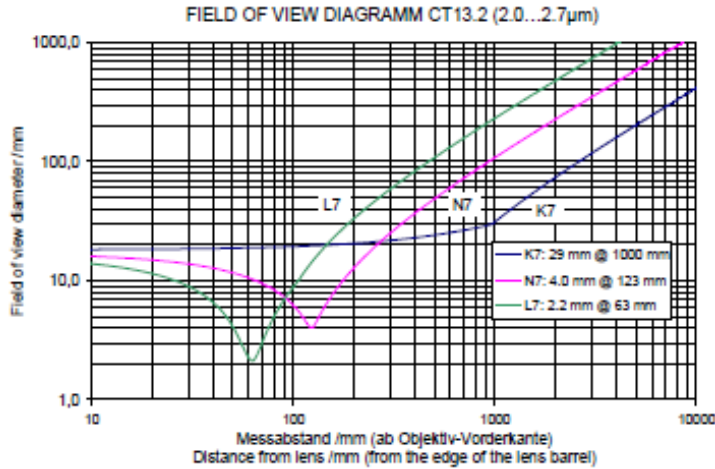


### GENERAL SPECIFICATION

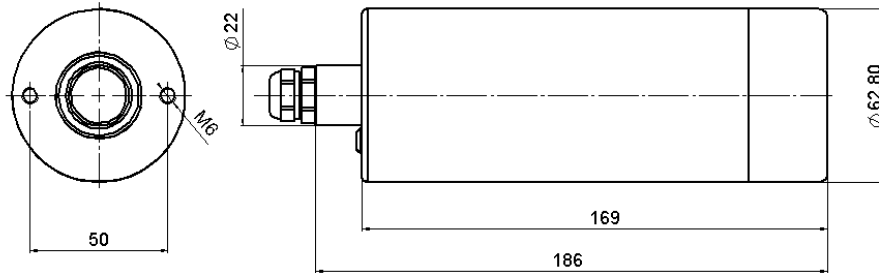
<b>Accuracy:</b>	0.8 °C (1.4 °F) $\pm$ 0.8% of difference between target and thermometer temperature
<b>Long term stability:</b>	Better than 0.01% of the absolute measured value per month
<b>Laser Aiming options:</b>	Pilot Laser; Class II, <1mw, 650nm
<b>Emissivity:</b>	0.100 to 1.000 , in 0.001-steps
<b>Response time:</b>	30 ms to 10 s (0.03, 0.1, 0.3, 1, 3, 10 s)
<b>Temperature unit:</b>	°C, °F or K
<b>Analog output:</b>	0 - 20 mA, or 4 - 20 mA, scalable span $\geq 50$ °C (100 °F), Actual, max or min value, 12 bit resolution
<b>Serial interface:</b>	RS232, 9.6 to 57.6 kb (Networking on Profibus, Ethernet etc options)
<b>Operating voltage:</b>	10.5 to 30 VDC or 12 to 24 VAC ( $\pm 10$ %) ; $\leq 2.5$ W
<b>Permissible ambient temperature:</b>	-25 to 60 °C (-13 to 140 °F); $\leq 300$ °C (570 °F) with WK15 Protective Cooling Housing
<b>Storage temperature:</b>	-40 to 85 °C (-40 to 185 °F)
<b>Protection class:</b>	IP68 ( protects up to immersion-like conditions in water – exceeds NEMA4X )
<b>Housing:</b>	304 stainless steel
<b>PC-based Software:</b>	EasyConfig: Software for parameter setting ( supplied with each CT13 ) EasyMeasure: EasyConfig features plus data recording, storage & evaluation (option )
<b>Programmable functions via RS232 interface:</b>	Emissivity, background temperature, analog output scale & function, response time, temperature unit, valley/peak picker with decay function. <u>Optional laser function, trigger input function and/or open collector alarm output</u>

<u>Application / Material</u>	<u>Model/ Spectral Range</u>	<u>Temperature Range / °C</u>
Metals, Combustion Zone temperature for PetroChem industry	CT13.2 / 2 to 2.7 $\mu$ m	500 ... 2000
Metals, lower temperature applications	CT13.22 / 2 to 4.5 $\mu$ m	140 ... 1000
Thin Film PE, PP, PS , oil film & paint curing	CT13.3i / 3.43 $\mu$ m	50 ... 300
Glass & Quartz volume – sub surface	CT13.4 / 3.9 $\mu$ m	200 ... 1000
Glass & Quartz surface	CT13.5 / 4.9 to 5.5 $\mu$ m	200 ... 1400
Thin Polyester Film, paint curing	CT13.7 / 7.93 $\mu$ m	0 ... 400
Glass surface – thin & ultra thin glass	CT13.77/ 7.5to 7.85 $\mu$ m	0 ... 1000
Glass surface – thin glass	CT13.8 / 7.5 to 8.2 $\mu$ m	0 ... 1000
Paper, Thick Plastics, Rubber, Textiles, Asphalt,	CT13.10 / 8 to 14 $\mu$ m	0 ... 900
Wood, Agriculture, Sea Surface, Ice & Ground, Food etc.....		

## Field of View Diagrams

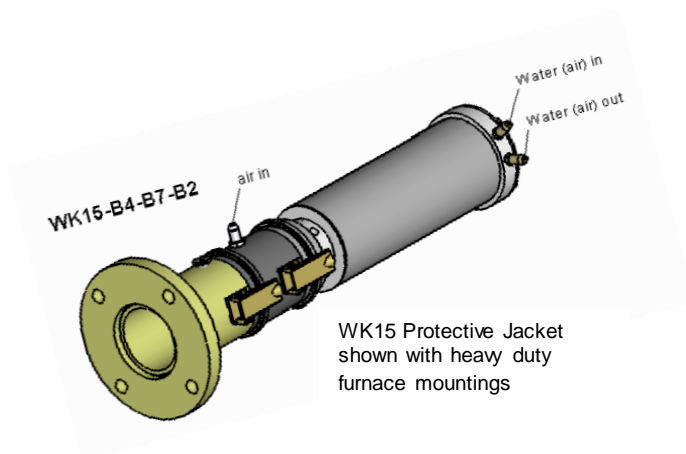


## DIMENSIONS

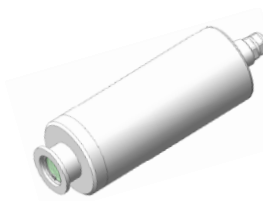


Specify 12 core wiring cable length and jacket material type at time of placing order.....  
2m, 5m etc.  
PVC, TFE, TPE, Silicone Rubber.

## ACCESSORIES and OPTIONS for Housings and Mountings (partial listing of what is available)



WK15 Protective Jacket shown with heavy duty furnace mountings



CT13 shown with optional NW25 vacuum flange ( 40mm dia ) ; others available on request



Lens Air Purge



Protective and Cooling Housing WK15 with Lens Air Purge and Mounting Bracket



Protective and Cooling Housing WK15 with Lens Air Purge, Mounting Bracket and Extension Tube