

Highlights

- Multiple sensor design (up to 8 heads for 1 box)
- Plug & Play (automatic head detection from the box)
- Broad measurement range covered by one single model
- Short wavelength heads for high temperatures
- Dedicated 5 μm head for measuring of glass
- Extended temperature range for LT head up to 1000°C
- Laser sighting for 1M/2M sensing heads
- Spot sizes down to 0,5 mm (with Close Focus Lens)
- Fast 10 ms response time
- Industrial rugged head cable (PUR): Silicone and Halogen free, resistant against oil, bases, and acids
- Networkable OEM head model (without a box)

MI3 Heads
Datasheet



Measurement Specifications

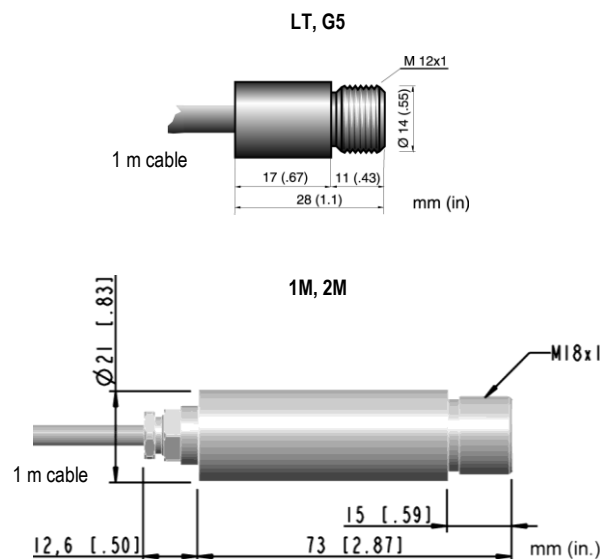
Temperature Range	
LT02, LT10	-40 to 600°C
LT20, LTF	0 to 1000°C
G5	250 to 1650°C
1M	500 to 1800°C
2M	250 to 1400°C
Spectral Response	
LT	8 – 14 μm
G5	5 μm
1M	1 μm
2M	1.6 μm
Optical Resolution¹	
LTS (standard)	2:1, 10:1, 22:1 typ., 21:1 guaranteed
LTF (fast)	10:1
G5	22:1 typ., 21:1 guaranteed
1M, 2M	100:1
SF1 Optics	2 mm spot @ 200 mm distance
SF3 Optics	22 mm spot @ 2200 mm distance
Accuracy²	
LT, G5	±(1% of reading or 1°C) ^{3,4}
1M, 2M	±(0.5% + 2°C)
Repeatability	
LT, G5	±0,5% of reading or ±0,5°C ³
1M, 2M	±(0.25% + 1°C)
Temperature Coefficient	
LT, G5	±0,05K / K or ±0,05% / K of reading ³
1M, 2M	±0,01% / K of reading
Response Time⁵	
LTS (standard)	130 ms
LTF (fast)	20 ms
G5	55 ms
1M, 2M	10 ms

¹ 90% energy
² at ambient temperature 23°C ± 5°C, ε = 1.0, and calibration geometry
³ whichever is greater
⁴ ± 2°C for target temperatures < 20°C
⁵ 90% value

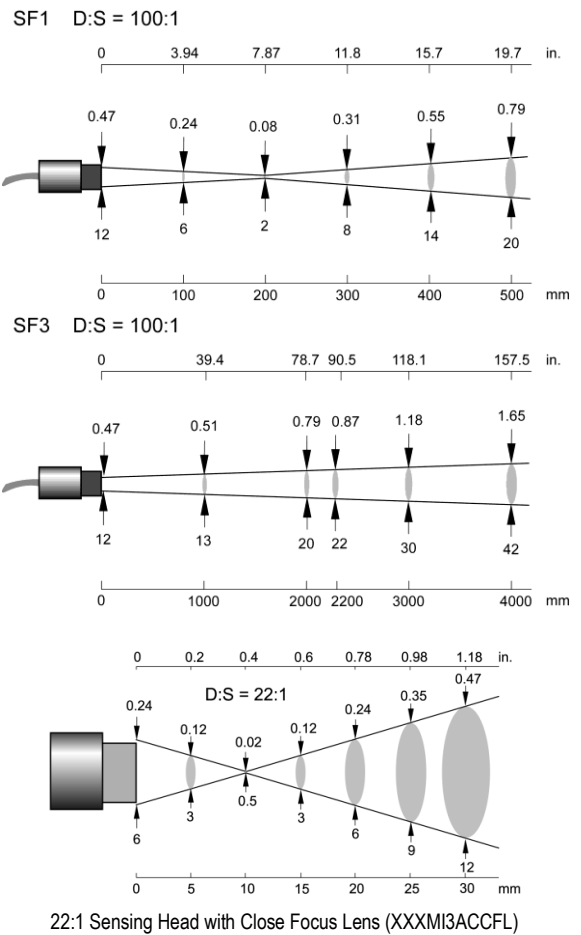
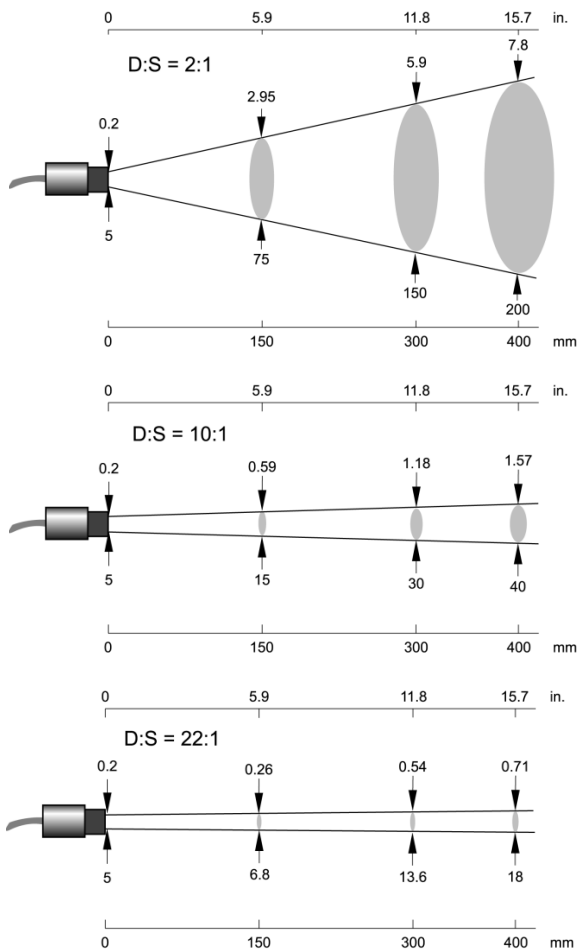
General Specifications

Ambient Temperature	-10 to 120°C
with air cooling (LT, G5)	200°C
Laser (1M, 2M)	automatic switch off at 65°C
Storage Temperature	-20 to 120°C
Environmental Rating	IP65
EMC	EN 61326-1:2006

Dimensions



Optical Specifications (90% energy)



Options

Options must be specified at time of order.

- Longer head cable lengths: 3 m, 8 m, 15 m, 30 m
- Networkable OEM sensing head without the need for a box

Accessories

Accessories include items that may be ordered at any time and added on-site:

- Close Focus Lens (XXXMI3ACCFL) for spot sizes down to 0.5 mm (LT, G5 only)
- Air Cooling Jacket (XXXMIACCJ: 0.8 m, XXXMIACCJ1: 2.8 m) for ambient temperatures up to 200°C (LT, G5 only)

Adjustable Mounting Bracket



for LT, G5 heads
(XXXMIACAB)



for 1M, 2M heads
(XXXMI3100ADJB)

Air Purge Jacket



for LT, G5 heads
(XXXMIACAJ)



for 1M, 2M heads
(XXXMI3100AP)



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