

RaceGrade

Document Number		RG_SPEC-0031	
Title		Infrared Brake Temperature Sensor	
Revision	Date	Prepared By	Change History
1.0	5/2/2014	Steven Bravek	

Part # M ADL IR R1000

A small lightweight infrared brake temperature sensor with a 0°C to 1000°C range. Thread size is M12 x 1.0. This sensor comes in two different mating connector options.

Specifications:

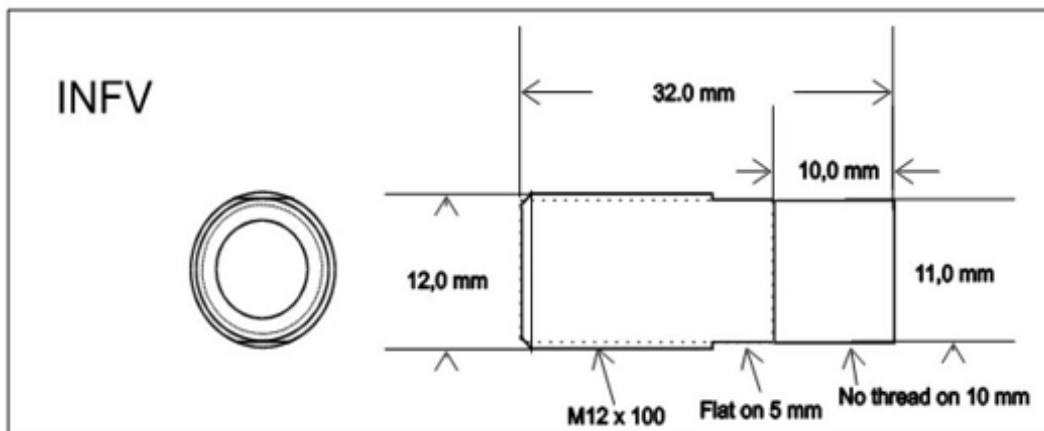
- Thread: M12 x 1.0
- Output: 0 to 5Vdc
- Voltage Supply: 5 to 16Vdc
- Temperature Range: 0°C to 1000°C
- Response Time: 50ms
- Measurement Distance: 30 to 100mm
- Operating Temp: -20°C to 150°C
- Storage Temp: -40°C to 150°C
- Weight: 15g (without cable)
- Material: Aluminium
- Overall Length: 18"



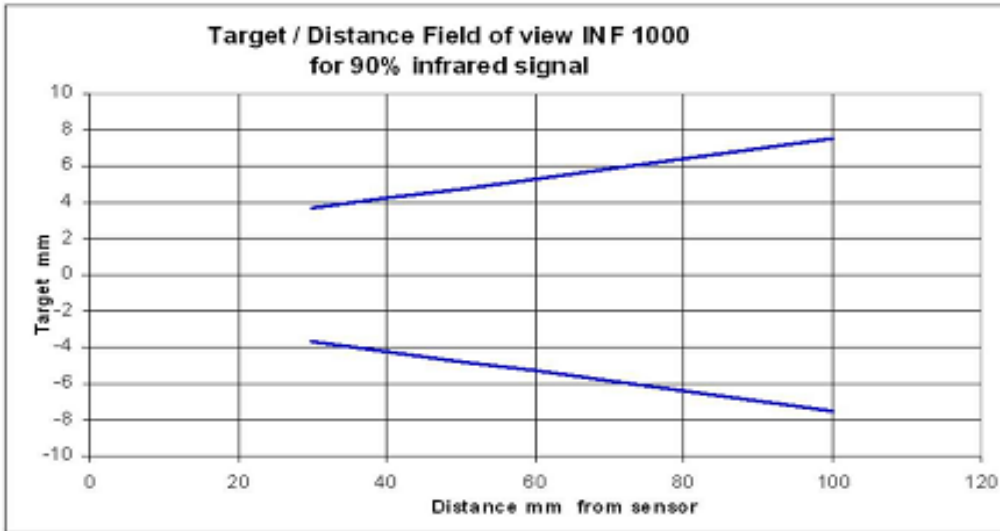
Connections:

Mating Connector: DTM04-04P
 Part # M DTM 4P
 Pin 1 - Drain
 Pin 2 - 0V
 Pin 3 - Signal
 Pin 4 - Supply (5-16V)

Mating Connector: ASL106-05SN
 Part # MS ASL106-05SN
 Pin 1 - Drain
 Pin 2 - 0V
 Pin 3 - Signal
 Pin 4 - N/C
 Pin 5 - Supply (5-16V)



Field of view:



Calibration:

Calibration table		
° C	Volts / Steel	Volts / Carbon
0	0.00	0.00
100	0.02	0.02
200	0.07	0.08
300	0.14	0.18
400	0.27	0.36
500	0.49	0.63
600	0.84	1.03
700	1.34	1.60
800	2.02	2.37
900	2.89	3.39
1000	4.01	4.71