



- 40 ... 700 °C
- 40 ... 1292 °F

IP 700D

The small, digital and very precise Infrared-Mini-Pyrometer consists of a stainless steel mini optical head and a separate box containing the actual instrument and display.

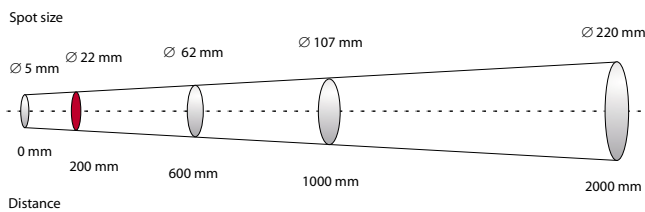
Typical application:

Plastics industry (Thermoforming)
Paper industry, Packaging industry (Coating, Drying)
Food industry

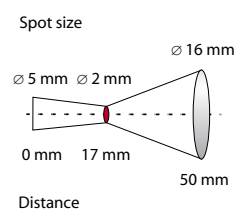
Scope of Delivery:

IP 700D (Controlling box with LCD-Display, sensor head 10:1, RS 485-interface, 3 m sensor head cable, 2 m connection cable, inspection sheet, user manual, supply in INFRAPOINT-Box

IP 700D



IP 700D with close up lens



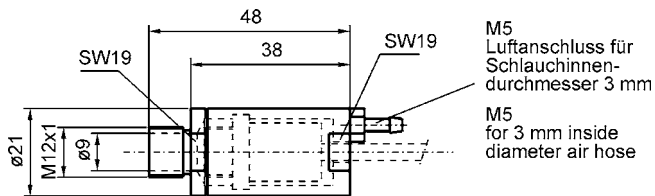
Close up lens
Order-No. 4 749 760

Technical Data	IP 700D
Measuring range	- 40 ... 700 °C, subrange adjustable, min. range 51 °C
Spectral range	8 ... 14 μm
Optics	10 : 1
Power supply	10 ... 30 V DC, ripple < 0.5 V, power consumption max. 60 mA
Analogue output	Linear current (0/ 4 ... 20 mA), voltage (0 ... 5 V) or thermocouple (type J or K),
Additional output	10 mV/ °C for temperature of sensor head
Load	Max. 700 Ohm at 24 V power supply and 500 Ohm at 20 V (for current output)
Output impedance	100 Ohm (for thermocouple or voltage output)
Relais contact	Isolated relais-contact, 50 V DC; 0.2 A
Digital interface	RS 485, UPP® (Universal Pyrometer Protocol)
Emissivity	10 ... 100 %, adjustable in steps of 0.1 %
MAX- / MIN-value storage	Clear time: OFF; 0.1 s; 0.25 s; 0.5 s; 1 s; 5 s; 25 s, extern, auto
Reponse time t_{90}	180 ms, switchable 0.5 s, 1 s, 2 s, 5 s, 10 s, or 30 s
Temperature display	LCD, 4-Digit, 3 values per second, display illumination permanent
Resolution	1/10 °C (1/10 °F from -40 ... 999.9 °F, 1 °F from 1000 to 1292 °F)
Accuracy (EMI = 1; t_{90} = 1 s, $T_{Amb.}$ = 15 ... 30 °C)	0 ... 700 °C: 1 % of measured value in °C or 1 °C (the larger value is valid)
Repeatability	-40 ... 0 °C: 2 °C, with thermocouple output: min. 2.5 °C
Max. ambient temperature: converter	0.5 % of measured value in °C or 0.5 °C (the larger value applies)
Max. ambient temperature: sensor head	0 ... 65 °C (storage temperature: -20 ... 70 °C)
Relative humidity	0 ... 85 °C, 0 ... 200 °C with air cooling and purging accessories
Safety class	10 ... 95 %
Weight	IP 65 (converter, sensor head 10 : 1)
Dimensions in mm	320 g
Housing	Converter: 98 x 64 x 34 (L x B x H) Converter (aluminium), sensor head (stainless steel)
Order-No.	with 3 m sensor head cable 4 874 460
	with 15 m sensor head cable 4 874 470

Accessories	Order-No.
Close up lens	4 749 760
Mounting support (sensor head), fix	4 749 710
Mounting support (sensor head), adjustable	4 749 720
Air purge unit	4 749 730
90° mirror with air purge	4 749 735
Air purge and cooling unit, 0.75 m	4 749 740
Air purge and cooling unit, 2.5 m	4 749 745

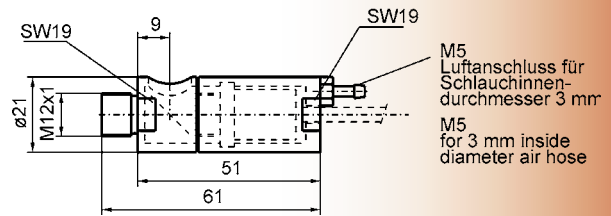
Spare parts	Order-No.
Sensor head IP 700D, Optics 10:1, sensor head cable 1 m	7 749 780
Sensor head IP 700D, Optics 10:1, sensor head cable 3 m	7 749 782
Sensor head IP 700D, Optics 10:1, sensor head cable 15 m	7 749 784

Air purge unit for IP 700D



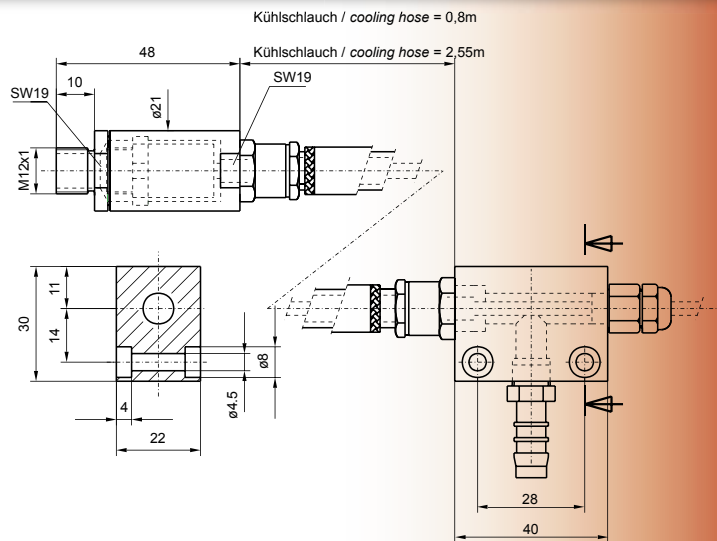
Order-No. 4 749 730

Air purge unit with 90° mirror



Order-No. 4 749 735

Air purge and cooling unit (0.75 m; 2.5 m)



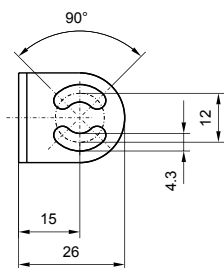
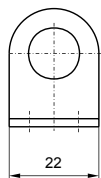
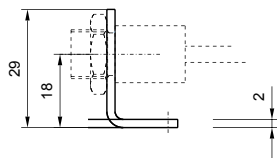
0,75 m

Order-No. 4 749 740

2,5 m

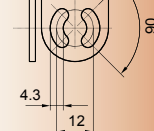
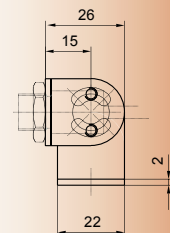
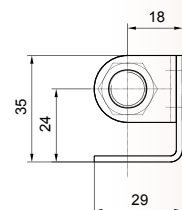
Order-No. 4 749 745

Mounting support, fix



Order-No. 4 749 710

Mounting support, adjustable



Order-No. 4 749 720