

INF-V2

Infrared Temperature Sensor

SN: I#####

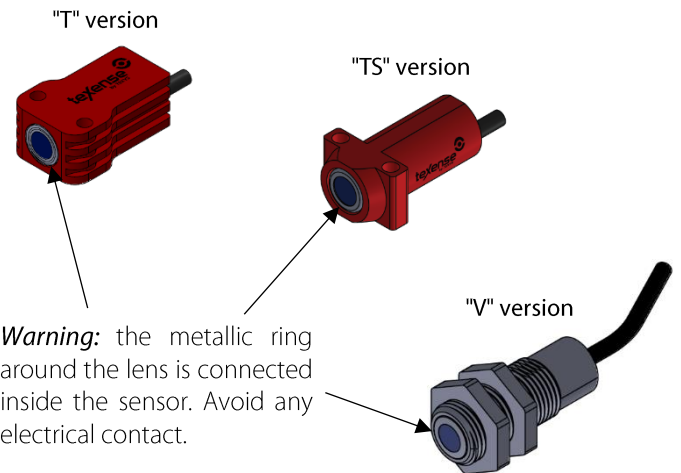
Texense sensors are designed for data logging. Should the users want to include this sensor in a closed loop system, they must undertake total responsibility from doing so.

Measurement features		
Range	700, 1000 or 1200	°C
Accuracy ⁽¹⁾	±1	%FS
Sensitivity at +Full-scale	Range 700°C	20
	Range 1000°C	15
	Range 1200°C	13.5
Response time	50	ms
Sensitive Element	Thermopile with silicon lens	
Wave Length	8 to 14	µm
Measurement distance	30 to 100	mm
Field of view (90% radiation)	5:1 at 50mm	
Calibrator Reference	Land P1200P	
Calibrator Emissivity	99%	
Electrical features		
Supply Voltage	5.5 to 16	V
Supply Current	1.5	mA
Protection	Reverse voltage and short circuit protection	
Output signal	0-5	V
Mechanical features		
Dimensions	"T" housing	27 x 17 x 11
	"V" housing	M12 x 1 x length 32
Material	Aluminum	
Weight (without cable)	15	g
Environment		
Protection	IP64	
Vibration test	20Gpp 5'	
Shock	500	G
Operating Temp	-20 to +150	°C
Storage Temp	-40 to +150	°C

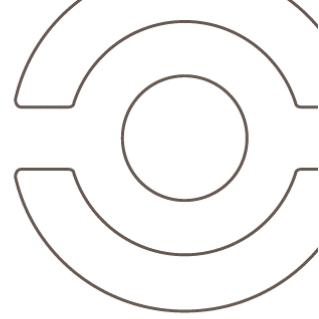
(1) The accuracy is only guaranteed if sensor ambient temperature is within 0°C to 100°C and target temperature ≥300°C

Date		Operator	
Customer			
Order			
Ref	INF#-####-V2		

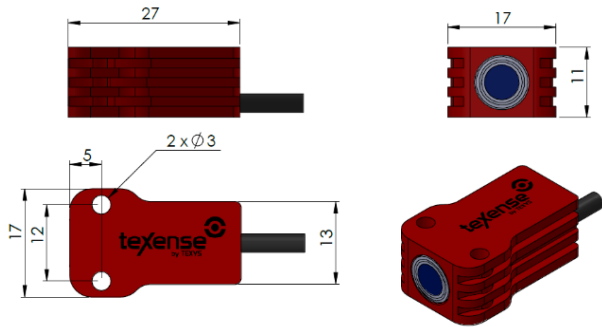
Sensor readings	
Calibrator temperature (°C)	Signal output value (V)
25°C	...V
...°C	...V



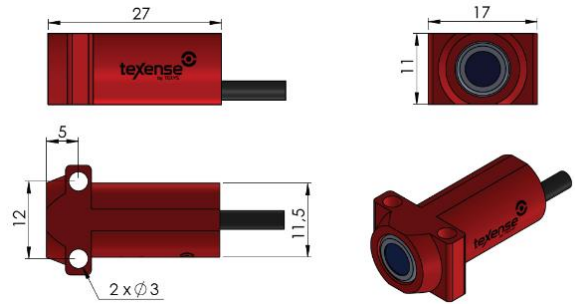
Housing options



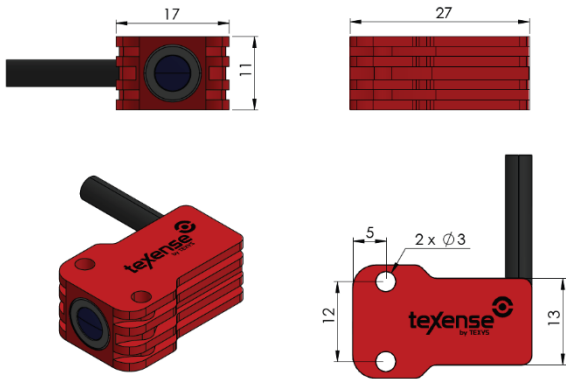
"T" housing



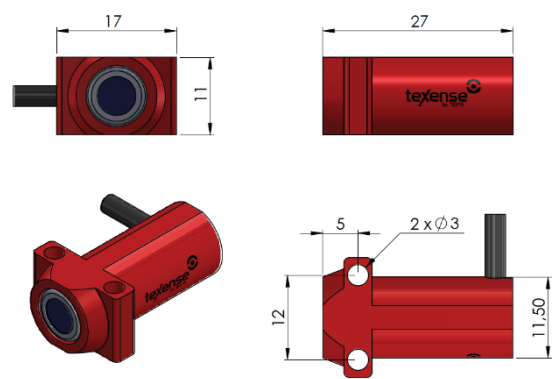
"TS" housing



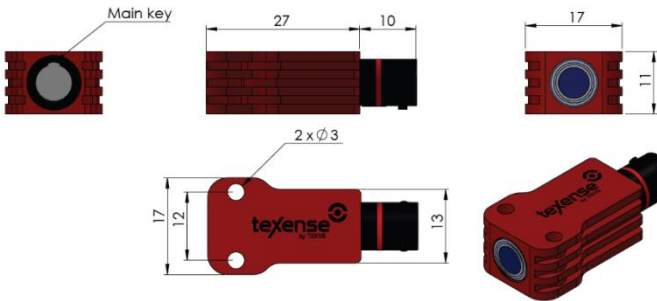
"T-RA" housing



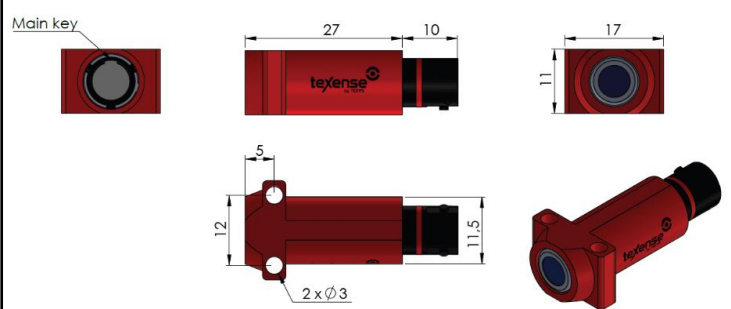
"TS-RA" housing



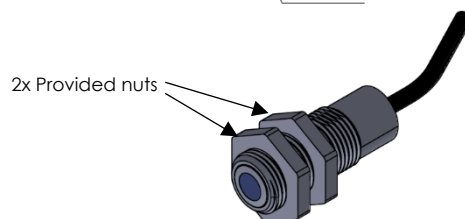
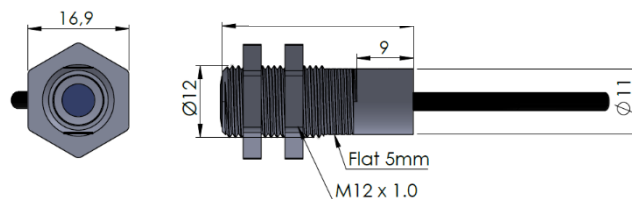
"T-MC" housing

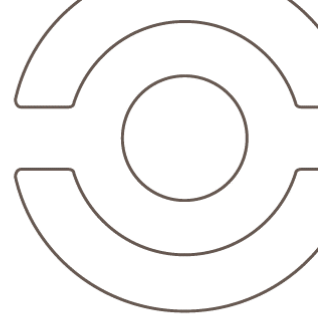


"TS-MC" housing



"V" housing





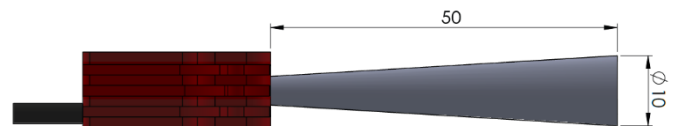
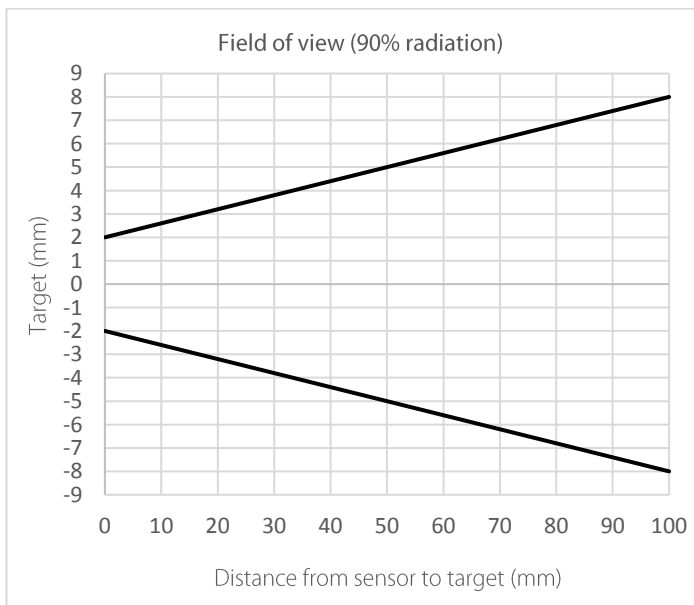
Calibration table

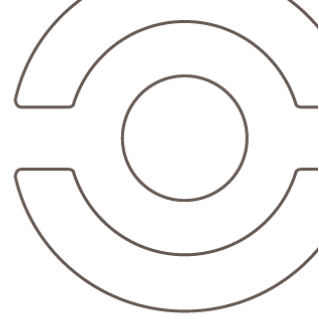
Range 700°C		
Target temperature (°C)	Output for carbon target (V)	Output for steel target (V)
25	0.000	0.000
50	0.016	0.008
100	0.062	0.035
150	0.130	0.082
200	0.228	0.156
250	0.362	0.263
300	0.540	0.410
350	0.771	0.604
400	1.066	0.854
450	1.434	1.168
500	1.886	1.553
550	2.436	2.021
600	3.095	2.579
650	3.878	3.241
700	4.800	4.020

Range 1000°C		
Target temperature (°C)	Output for carbon target (V)	Output for steel target (V)
25	0.000	0.000
100	0.021	0.012
200	0.076	0.052
300	0.180	0.137
400	0.355	0.285
500	0.628	0.517
600	1.031	0.859
700	1.598	1.338
800	2.370	1.992
900	3.391	2.866
1000	4.710	4.016

Range 1200°C		
Target temperature (°C)	Output for carbon target (V)	Output for steel target (V)
25	0.000	0.000
100	0.012	0.007
200	0.045	0.031
300	0.106	0.080
400	0.210	0.168
500	0.371	0.306
600	0.609	0.507
700	0.945	0.791
800	1.401	1.178
900	2.005	1.695
1000	2.784	2.374
1100	3.770	3.249
1200	5.000	4.348

FOV (field of view)





Wiring

Cable version		
<input checked="" type="checkbox"/> Default 3x26AWG FEP tinned copper braided cable 250V 200°C <input type="checkbox"/> Optional EPD117723A Length: 1000 mm ±10% Tubing: None Connector: N/A		
Color	Function	Pin
Red	Supply	-
White	Signal	-
Black	0V	-
Braid (not for EPD 117723A)		-

Connector version "MC" code	
Connector: Souriau 8STA1-0235-PN Mating connector: Souriau 8STA6-0235-SN	
Pin	Function
1	Supply
2	Signal
3	0V

Ordering information

Ordering ref:

INF Housing – Range – V2 – Connector option (only for "T" and "TS" housings)

<p>700: 700°C range 1000: 1000°C range 1200: 1200°C range</p>	<p>MC: Connector</p>
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T: T shape
T-RA: T shape with right angle cable output
TS: TS shape
TS-RA: TS shape with right angle cable output
V: cylindrical shape

ex: INFT-1000-V2