TEMPERATURE

FLOW

HUMIDITY

CONDUCTIVITY

850 °C series

Platinum sensor with wires

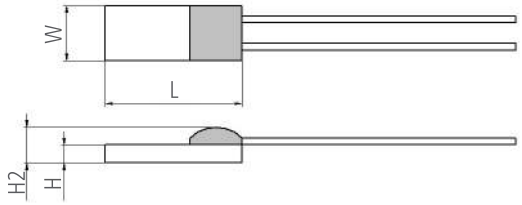
For very high temperatures

INNOVATIVE SENSOR TECHNOLOGY

Benefits & Characteristics

- Excellent long-term stability
- Low self-heating
- Fast response time
- Vibration and temperature shock resistant
- Simple interchangeability
- Customer specific sensor available upon request

Illustration[1)]



1) For actual size, see dimensions

Technical Data

Operating temperature range:	-200 °C to +850 °C	
Nominal resistance:*	100 Ω at 0 °C	
	200 Ω at 0 °C	
	1000 Ω at 0 °C	
Characteristics curve:*	3850 ppm/K	
Long-term stability:	< 0.04 % at 1000 h at maximal operating temperature	
Tolerance class (dependent on temperature range):*		Innovative Sensor Technology IST AG reference
	DIN EN 60751 F0.15	A
	DIN EN 60751 F0.3	B
	DIN EN 60751 F0.6	C
	DIN EN 60751 F0.1	Y
Connection:*	Pt-wire, Ø 0.2 mm (solderable, weldable, crimpable, brazeable)	
Recommended applied current:[1)]	Max. 1 mA	
1) Self-heating must be considered		
Other alternatives:*	Substrate thickness	

* Customer specific alternatives available

TEMPERATURE

FLOW

HUMIDITY

CONDUCTIVITY

850 °C series

Platinum sensor with wires

For very high temperatures

INNOVATIVE SENSOR TECHNOLOGY

Order Information - 8W (Pt-wire, Ø 0.2 mm)

Size	Dimensions (L x W x H / H2 in mm)	F0.1 (class Y)	F0.15 (class A)	F0.3 (class B)
Nominal resistance: 100 Ω at 0 °C				
516	5 x 1.6 x 0.65 / 1.3	Upon request	Upon request	P0K1.516.8W.B.007
Order code				010.01901
102	10 x 2 x 0.65 / 1.3	Upon request	Upon request	P0K1.102.8K.B.007
Order code				010.02303
Nominal resistance: 200 Ω at 0 °C				
420	3.85 x 1.9 x 0.65 / 1.05	Upon request	Upon request	P0K2.420.8W.B.007
Order code				010.02797
Nominal resistance: 1000 Ω at 0 °C				
516	5 x 1.6 x 0.65 / 1.3	Upon request	Upon request	P1K0.516.8W.B.007
Order code				010.02003

Additional Documents

	Document name:
Application note:	ATP_E

TEMPERATURE

FLOW

HUMIDITY

CONDUCTIVITY

Order Information
Platinum Sensor
Secondary reference

INNOVATIVE SENSOR TECHNOLOGY

Material

P	=	Platin

TCR

	=	Pt 3850 ppm/K	G	=	Pt 3911 ppm/K
U	=	Pt 3750 ppm/K	W	=	Pt 3850 ppm/K (extended operating temperature range in class A)

Resistance in Ω at 0 °C

Size in mm

Operating temperature range

1	=	-50 °C to +150 °C	6	=	-200 °C to +600 °C
2	=	-50 °C to +200 °C	7	=	-200 °C to +750 °C
3	=	-200 °C to +300 °C	8	=	-200 °C to +850 °C
4	=	-200 °C to +400 °C	10	=	-70 °C to +1000 °C

Connection

S	=	SIL	FK	=	flat wire customer specific
I	=	insulated wire	SW	=	perpendicular wire
K	=	customer specific	L	=	insulate stranded wire
W	=	wire	E	=	enameled Cu wire
FW	=	flat wire			

Tolerance class

A	=	DIN EN 60751 F0.15	K	=	customer specific
B	=	DIN EN 60751 F0.3	P	=	pair
C	=	DIN EN 60751 F0.6	G	=	group
Y	=	DIN EN 60751 F0.1			

Wire length in mm

Special

T	=	substrate thickness 0.25 mm	M	=	metallized backside
D	=	substrate thickness 0.38 mm	U	=	inverted welding
R	=	round housing	S	=	special
W	=	sintered powder			

P	0K1.	232.	6	W.	A.	010.	U

ISO 9001

RoHS

INNOVATIVE SENSOR TECHNOLOGY
Innovative Sensor Technology IST AG, Stegrütistrasse 14, CH-9642 Ebnat-Kappel, Switzerland,
Phone: +41 (0) 71 992 01 00 | Fax: +41 (0) 71 992 01 99 | E-mail: info@ist-ag.com | Web: www.ist-ag.com