











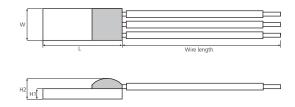


### Benefits & Characteristics

- Compensation of the wire resistance by 3-wire construction
- Excellent long-term stability
- Low self-heating
- Long insulated wires

- Well suited for applications with tight tolerances
- Fast response time
- Metallized backside available
- Customer-specific sensor available upon request

#### Illustration<sup>1)</sup>



1) For actual size, see dimensions

#### Technical Data

Operating temperature range:	-50 °C to +200 °C	(21)
	-200 °C to +400 °C	(4W)
Nominal resistance:*	100 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):*		IST AG reference
	IEC 60751 F0.15	А
	IEC 60751 F0.3	В
	IEC 60751 F0.6	С
Connection:*	-50 °c to +200 °C	Cu/Ag-wire, AWG30, PTFE-insulated (solderable, weldable, crimpable), 5 mm stripped
	-200 °C to +400 °C	Ag wire, Ø 0.25 mm
Recommended applied current:1)	1 mA at 100 $\Omega$	
<sup>1)</sup> Self-heating must be considered	0.5 mA at 500 $\Omega$	
	0.3 mA at 1000 $\Omega$	
Other alternatives:*	Metallized backside	
	Housed in round cer	ramics (for dry environments only)
	Grouped and paired	

Substrate thickness

<sup>\*</sup> Customer-specific alternatives available













# Order Information - 3 wires, 2I (Cu/Ag-wire, AWG30, PTFE-insulated), 5 mm stripped

Chip Dimensions (L x W x H1 / H2 in mm) L ±0.2 mm, W ±0.2 mm, Wire F0.15 (class A) F0.3 (class B) F0.6 (class C) Size:

length

H1 ±0.1 mm, H2 ±0.3 mm

Nominal resistance:	100	Ω	at	0	°C
---------------------	-----	---	----	---	----

232 2.3 x 2 x 0.65 / 1.3 Order code	200	On request	On request	On request
520 5.0 x 2.1 x 0.65 / 1.2 Order code Former order code	200	On request	P0K1.520.2I.B.200-3 100948 <i>010.02200</i>	On request
232 2.3 x 2 x 0.65 / 1.3 Order code	450	On request	On request	On request
520 5.0 x 2.1 x 0.65 / 1.2 Order code Former order code	450	P0K1.520.2I.A.450-3 100962 <i>010.02231</i>	POK1.520.2I.B.450-3 100174 <i>010.00112</i>	P0K1.520.2I.C.450-3 100662 <i>010.01339</i>
232 2.3 x 2 x 0.65 / 1.3 Order code	600	On request	On request	On request
520 5.0 x 2.1 x 0.65 / 1.2 Order code Former order code	600	On request	P0K1.520.2I.B.600-3 100547 <i>010.01009</i>	P0K1.520.2I.C.600-3 100663 <i>010.01340</i>

#### Nominal resistance: 1000 $\Omega$ at 0 $^{\circ}\text{C}$

232	2.3 x 2 x 0.65 / 1.3	200	On request	On request	On request	
Order	code					
520	5.0 x 2.1 x 0.65 / 1.2	200	On request	On request	On request	
Order	code					
232	2.3 x 2 x 0.65 / 1.3	450	On request	On request	On request	
Order	Order code					
520	5.0 x 2.1 x 0.65 / 1.2	450	On request	On request	On request	
Order	Order code					
232	2.3 x 2 x 0.65 / 1.3	600	On request	On request	On request	
Order code						
520	5.0 x 2.1 x 0.65 / 1.2	600	On request	On request	On request	
Order	code					













# Order Information - 3 wires, 4W (Ag wire, Ø 0.25 mm)

	Dimensions		F0.15 (class A)	F0.3 (class B)	F0.6 (class C)
Ciro	/L v \\/ v       1 /	lonath			

(L x W x H1 / H2 in mm) L ±0.2 mm, W ±0.2 mm, H1 ±0.1 mm, H2 ±0.3 mm

Nominal resistance: 100  $\Omega$  at 0 °C

2.3 x 2 x 0.65 / 1.3	200	On request	On request	On request
code				
5.0 x 2.1 x 0.65 / 1.2	200	On request	On request	On request
code				
2.3 x 2 x 0.65 / 1.3	450	On request	On request	On request
code				
5.0 x 2.1 x 0.65 / 1.2	450	On request	On request	On request
code				
2.3 x 2 x 0.65 / 1.3	600	On request	On request	On request
code				
5.0 x 2.1 x 0.65 / 1.2	600	On request	P0K1.520.4W.B.600-3	On request
code			100175	
er order code			010.00116	
5.0 x 3.8 x 0.65 / 1.3	600	On request	P0K1.538.4W.B.600-3	P0K1.538.4W.C.600-3
code			100182	100666
er order code			010.00125	010.01385
	code 5.0 x 2.1 x 0.65 / 1.2 code 2.3 x 2 x 0.65 / 1.3 code 5.0 x 2.1 x 0.65 / 1.2 code 2.3 x 2 x 0.65 / 1.3 code 5.0 x 2.1 x 0.65 / 1.2 code 5.0 x 2.1 x 0.65 / 1.2 code	code 5.0 x 2.1 x 0.65 / 1.2 200 code 2.3 x 2 x 0.65 / 1.3 450 code 5.0 x 2.1 x 0.65 / 1.2 450 code 2.3 x 2 x 0.65 / 1.3 600 code 5.0 x 2.1 x 0.65 / 1.2 600 code 5.0 x 2.1 x 0.65 / 1.2 600 code er order code 5.0 x 3.8 x 0.65 / 1.3 600 code	code  5.0 x 2.1 x 0.65 / 1.2 200 On request  code  2.3 x 2 x 0.65 / 1.3 450 On request  code  5.0 x 2.1 x 0.65 / 1.2 450 On request  code  2.3 x 2 x 0.65 / 1.3 600 On request  code  5.0 x 2.1 x 0.65 / 1.2 600 On request  code  5.0 x 2.1 x 0.65 / 1.2 600 On request  code  5.0 x 3.8 x 0.65 / 1.3 600 On request  code  code	code  5.0 x 2.1 x 0.65 / 1.2 200 On request On request  code  2.3 x 2 x 0.65 / 1.3 450 On request On request  code  5.0 x 2.1 x 0.65 / 1.2 450 On request On request  code  2.3 x 2 x 0.65 / 1.3 600 On request On request  code  5.0 x 2.1 x 0.65 / 1.2 600 On request On request  code  5.0 x 2.1 x 0.65 / 1.2 600 On request POK1.520.4W.B.600-3  code  6.0 x 2.1 x 0.65 / 1.3 600 On request POK1.538.4W.B.600-3  code  7.0 x 3.8 x 0.65 / 1.3 600 On request POK1.538.4W.B.600-3  code  1.00182

Nominal resistance: 1000  $\Omega$  at 0 °C

232	2.3 x 2 x 0.65 / 1.3	200	On request	On request	On request
Order	code				
520	5.0 x 2.1 x 0.65 / 1.2	200	On request	On request	On request
Order	code				
232	2.3 x 2 x 0.65 / 1.3	450	On request	On request	On request
Order	code				
520	5.0 x 2.1 x 0.65 / 1.2	450	On request	On request	On request
Order	code				
232	2.3 x 2 x 0.65 / 1.3	600	On request	On request	On request
Orde	code				
520	5.0 x 2.1 x 0.65 / 1.2	600	On request	On request	On request
Orde	code				

## Additional Documents

	Document name:
Application Note:	ATP_E







# Order Information Platinum sensor Secondary reference







```
Material
 P = Platinum
        TCR
           = Pt 3850 ppm/K
                                  G = Pt 3911 ppm/K
               Pt 3750 ppm/K
                                           Pt 3850 ppm/K (extended operating temperature range in class A)
           Resistance in \Omega at 0 °C
                 Size in mm
                       Operating temperature range
                          = -50 °C to +150 °C
                                                          = -200 °C to +600 °C
                             -50 °C to +200 °C
                                                          = -200 °C to +750 °C
                                                    7
                              -200 °C to +300 °C
                                                          = -200 °C to +850 °C
                              -200 °C to +400 °C
                                                         = -70 \, ^{\circ}\text{C} \text{ to } +1000 \, ^{\circ}\text{C}
                                Connections
                                      = SIL
                                                                      flat wire customer-specific
                                         insulated wire
                                                                       perpendicular wire
                                         customer-specific
                                                                      insulate stranded wire
                                         wire
                                                                      enameled Cu-wire
                                FW
                                     = flat wire
                                       Tolerance class
                                           = IEC 60751 F0.15
                                                                               customer-specific
                                               IEC 60751 F0.3
                                                                                pair
                                               IEC 60751 F0.6
                                                                                group
                                               IEC 60751 F0.1
                                             Wire length in mm (-x: amount of wires if more than 2)
                                                  Special
                                                      = substrate thickness 0.25 mm M = metallized backside
                                                          substrate thickness 0.38 mm U = inverted welding
                                                          round housing
                                                                                            = special
                                                          sintered powder
Ρ
        0K1. 520.
                              1.
                                         450-3
```



Innovative Sensor Technology IST AG, Stegrütistrasse 14, 9642 Ebnat-Kappel, Switzerland Phone: +41 71 992 01 00 | Fax: +41 71 992 01 99 | Email: info@ist-ag.com | www.ist-ag.com

All mechanical dimensions are valid at 25 °C ambient temperature, if not differently indicated • All data except the mechanical dimensions only have information purposes and are not to be understood as assured characteristics • Technical changes without previous announcement as well as mistakes reserved • The information on this data sheet was examined carefully and will be accepted as correct; No liability in case of mistakes • Load with extreme values during a longer period can affect the reliability • The material contained herein may not be reproduced, adapted, merged, translated, stored, or used without the prior written consent of the copyright owner • Typing errors and mistakes reserved • Product specifications are subject to change without notice • All rights reserved