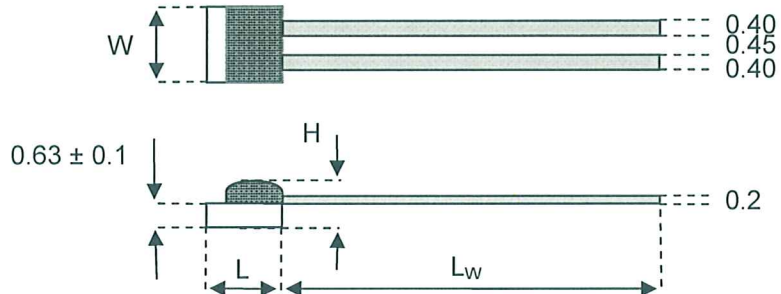


<h1>IST AG</h1>	<h2>Platinum thin film RTD</h2>			
	Sensor Type	Version	Date	Page
	<b>P.202.3FW</b>	1	27.10.09	1/1

### Dimensions [mm]:



### Standard configurations:

R <sub>0</sub> : nominal resistance	class Y (1/3x B) -50°C to 150°C	class A -90°C to 300°C	class B -200°C to 300°C	class C (2x B) -200°C to 300°C
100 Ω, L <sub>w</sub> =07 Order no.	P0K1.202.3FW.Y.007 010.02207	P0K1.202.3FW.A.007 010.02035	P0K1.202.3FW.B.007 010.01983	P0K1.202.3FW.C.007 010.01986
100 Ω, L <sub>w</sub> =10 Order no.			P0K1.202.3FW.B.010 010.02292	P0K1.202.3FW.C.010 010.02294
100 Ω, L <sub>w</sub> =15 Order no.		P0K1.202.3FW.A.015 010.02377	P0K1.202.3FW.B.015 010.02378	P0K1.202.3FW.C.015 010.02383
500 Ω, L <sub>w</sub> =07 Order no.		P0K5.202.3FW.A.007 010.02389	P0K5.202.3FW.B.007 010.02282	P0K5.202.3FW.C.007 010.02390
500 Ω, L <sub>w</sub> =015 Order no.		P0K5.202.3FW.A.015 010.02172	P0K5.202.3FW.B.015 010.02173	P0K5.202.3FW.C.015 010.02174
1'000 Ω, L <sub>w</sub> =07 Order no.	P1K0.202.3FW.Y.007 010.02310	P1K0.202.3FW.A.007 010.02049	P1K0.202.3FW.B.007 010.01982	P1K0.202.3FW.C.007 010.01984

Temperature coefficient (TCR)	3850 ppm/K
Temperature range	-200°C to +300°C
Temperature dependence of resistance	according to IEC 60751: -200 to 0°C $R(T) = R_0 \cdot (1 + A \cdot T + B \cdot T^2 + C \cdot (T - 100) \cdot T^3)$ 0 to 300°C $R(T) = R_0 \cdot (1 + A \cdot T + B \cdot T^2)$ A = $3.9083 \cdot 10^{-3} \cdot ^\circ\text{C}^{-1}$ , B = $-5.775 \cdot 10^{-7} \cdot ^\circ\text{C}^{-2}$ , C = $-4.183 \cdot 10^{-12} \cdot ^\circ\text{C}^{-4}$ R <sub>0</sub> = resistance value in Ohm at T=0°C T = temperature in accordance with ITS90
Dimensions [mm]	L = 2.0 ± 0.2    W = 2.0 ± 0.2    H = 1.2 ± 0.3    L <sub>w</sub> = 7, 10 or 15 ± 1.0
Lead wires	Nickel flat wire, 0.4mm x 0.2mm, length = L <sub>w</sub> , lead spacing: 0.45mm
Self heating (v=0m/s, T=0°C) [mW/K]	Water: 36    air: 3.6
Response time [seconds]	Water (v=0.4m/s): t <sub>0.5</sub> =0.12, t <sub>0.9</sub> =0.42,    air (v=1m/s): t <sub>0.5</sub> =4, t <sub>0.9</sub> =11
Long term stability	max. 0.04% after 1000 hrs at +300°C
Measuring current	100 Ω: typical 0.3 – 1.0mA 1'000 Ω: typical 0.1 – 0.5mA (self heating has to be considered)

Note: other nominal resistance, class and wire length on request

	Title	Name	Signature	Date
DRAWN	R&D	M. Rupflin		27.10.2009
APPROVED	R&D Manager	J. Polak		27.10.2009
QS	QS Manager	A. Polakova		27.10.2009



INNOVATIVE SENSOR TECHNOLOGY