



## **GLASS WIRE WOUND SENSOR TYPE GX**

RTD Temperature Sensor

### SPECIFICATIONS

- **Temperature sensor**
- **Large temperature range**  
From -200°C to +400°C
- **No hysteresis**
- **High vibrations resistant**
- **Resistant to external forces and pressures**
- **Small dimensions**
- **High temperature stability**
- **Short response time**

One or two platinum bands layout are wounded on a glass tube and are protected from environment by a glass layer

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### FEATURES

- Nominal value: 100  $\Omega$  at 0°C  
Tolerance according to IEC 60751: class W 0.3,  
W 0.15 and W 0.1  
Temperature coefficient  $\alpha = 3850$  ppm/K  
Closer tolerances in restricted temperature range
- Connection wires: Platinum coated nickel
- The lead wires connection is pull up force resistant
- Housing advise: To be used preferably in dry environment
- Options: - Lead wires length  
- Extension cable

### APPLICATIONS

- Environments subject to high vibrations
- Cryogenics
- Accurate temperature measurement with high temperature gradient
- Limited mounting space required
- Food industry
- H.V.A.C.

### PERFORMANCE SPECIFICATIONS

Type	Designation	Reference	Nominal reference (Ohm at 0°C)	L WL D AL1 AL2 A (Dimensions in mm)						Self-heating in air (K/mW)	Response time (s)			
				Water v = 0,4 m/s		Air v = 1 m/s								
										t0,5	t0,9	t0,5	t0,9	
<b>Tolerance Class W 0.3 = <math>\pm (0.3+0.005 \text{ Itl})</math> From -196°C to + 400°C</b>														
1Pt100	GX 518	32 205 108	100	5	3	1,8	10	-	0,20	0,36	0,14	0,35	8	30
1Pt100	GX 1013	32 205 113	100	10	6	1,3	10	-	0,20	0,39	0,4	1,30	4	12
1Pt100	GX 1018	32 205 118	100	10	6	1,8	10	-	0,20	0,36	0,14	0,35	8	30
1Pt100	GX 1218	34 015 120	100	12	3	1,8	6	-	0,20	0,36	0,14	0,35	8	30
1Pt100	GX 1513	SB0921	100	15	6	1,3	10	-	0,20	0,39	0,4	1,3	4	12
2Pt100	GX 1528	32 205 228	100	15	7	2,8	10	12	0,25	0,20	0,3	1,0	12	45
<b>Tolerance Class W 0.15 = <math>\pm (0.15+0.002 \text{ Itl})</math> From -100°C to + 250°C</b>														
1Pt100	GX 518	32 205 074	100	5	3	1,8	10	-	0,20	0,36	0,14	0,35	8	30
1Pt100	GX 1013	32 205 458	100	10	6	1,3	10	-	0,20	0,39	0,4	1,30	4	12
1Pt100	GX 1218	34 015 121	100	12	3	1,8	6	-	0,20	0,36	0,14	0,35	8	30
1Pt100	GX 1513	SB0920	100	15	6	1,3	10	-	0,20	0,39	0,4	1,3	4	12
2Pt100	GX 1528	32 205 241	100	15	7	2,8	10	12	0,25	0,20	0,3	1,0	12	45
<b>Tolerance Class W 0.1 = <math>\pm (0.1+0.0017 \text{ Itl})</math> From 0°C to + 150°C</b>														
1Pt100	GX 518	32 205 101	100	5	3	1,8	10	-	0,20	0,36	0,14	0,35	8	30
1Pt100	GX 1013	32 205 463	100	10	6	1,3	10	-	0,20	0,39	0,4	1,3	4	12
1Pt100	GX 1218	34 015 123	100	12	3	1,8	6	-	0,20	0,36	0,14	0,35	8	30
1Pt100	GX 1513	SB0919	100	15	6	1,3	10	-	0,20	0,39	0,4	1,3	4	12

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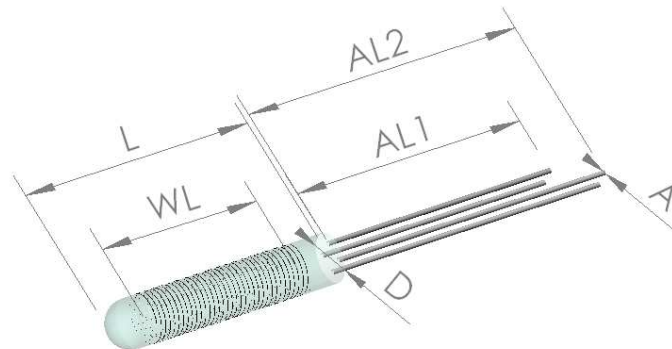
### VALUES FOR PT100

°C	Ohms	Ohms/°C	°C	Ohms	Ohms/°C
-200	18.52	0.432	150	157.33	0.374
-150	39.72	0.417	200	175.86	0.368
-100	60.26	0.405	250	194.10	0.362
-50	80.31	0.397	300	212.05	0.356
0	100	0.391	350	229.72	0.350
50	119.40	0.385	400	247.09	0.345
100	138.51	0.379			

### BLOCK DIAGRAM

#### DIMENSIONAL TOLERANCES:

L (length of body)	= ± 1mm
D (diameter of body)	= +0,1;-0,3mm
AL (connection wire length)	= ± 2mm
A (connection wire diameter)	= ± 0,02 mm



### ORDERING INFORMATION

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