



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

FEATURES

- Nominal value: 100 Ω 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
Tolerance Class W 0.3 = $\pm (0.3+0.005 \text{ ltl})$ From -196°C to + 400°C															
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	
Tolerance Class W 0.15 = $\pm (0.15+0.002 \text{ ltl})$ From -100°C to + 250°C															
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	
Tolerance Class W 0.1 = $\pm (0.1+0.0017 \text{ ltl})$ From 0°C to + 150°C															
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	

GLASS WIRE WOUND SENSOR TYPE GX

RTD Temperature Sensor

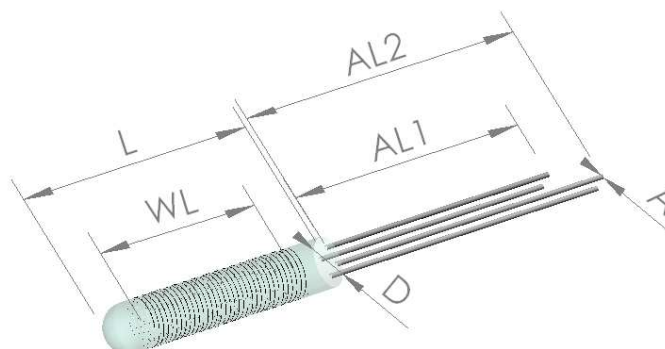
VALUES FOR PT100

°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

NORTH AMERICA

Measurement Specialties, Inc.,
a TE Connectivity Company
910 Turnpike Road
Shrewsbury, MA 01545
United States
+1 508-842-0516
+1 508-842-0342
temperature.cs.amer@meas-spec.com

EUROPE

Measurement Specialties (Europe), Ltd.,
a TE Connectivity Company
48, rue de Frégy
77610 Fontenay Trésigny
France
Tel: +33(0) 1 64 42 52 52
Fax: +33(0) 1 64 42 63 17
sales.ftny.fr@meas-spec.com

ASIA

Measurement Specialties (China), Ltd.,
a TE Connectivity Company
No. 24 Langshan Road
Shenzhen High-Tech Park (North)
Nanshan District, Shenzhen 518057
China
Tel: +86 755 3330 5088
Fax: +86 755 3330 5099
temperature.cs.asia@meas-spec.com

TE.com/sensorsolutions

Measurement Specialties, Inc., a TE Connectivity company.

Measurement Specialties, TE Connectivity, TE Connectivity (logo) and EVERY CONNECTION COUNTS are trademarks. All other logos, products and/or company names referred to herein might be trademarks of their respective owners.

The information given herein, including drawings, illustrations and schematics which are intended for illustration purposes only, is believed to be reliable. However, TE Connectivity makes no warranties as to its accuracy or completeness and disclaims any liability in connection with its use. TE Connectivity's obligations shall only be as set forth in TE Connectivity's Standard Terms and Conditions of Sale for this product and in no case will TE Connectivity be liable for any incidental, indirect or consequential damages arising out of the sale, resale, use or misuse of the product. Users of TE Connectivity products should make their own evaluation to determine the suitability of each such product for the specific application.

© 2015 TE Connectivity Ltd. family of companies All Rights Reserved.