

SENSING DEVICES LTD

SD01529 Ex ia RTD DATA SHEET

The SD01529 Resistance Temperature Detector (RTD) is a simplex or duplex PT100 sensing element (1008 at 0°C) housed in a metal probe. A number of different lengths and styles of probes are available for different temperature measurement applications (see page 2 for a number of examples). Connections are made via a flying lead housed in conduit, terminals on a ceramic block, terminals within a metal/plastic terminal housing or plug/socket.

Working Temperature	-196°C to +650°C (Application and environment will determine which element, cable	
	and insulation is used.)	
Ingress Protection	Minimum requirement IP20, Up to IP68 Depending on application and	
	environment.	
Approval	ATEX and IECEx Approved.	
Cable Length	Maximum 15 Metres.	

The RTD shall be subject to an electric strength test using a test voltage of 500 Vac applied between the circuit(s) and the metal probe housing for 60s, there shall be no evidence of flashover or breakdown and the maximum current flowing shall not exceed 5 mA.

The equipment has the following safety description:

Simplex Version (1 Element)			
Ui	15.0V		
/li	100mA		
Pi	150mW		
Ci	0		
Li	0		

Duplex Version (2 Elements)			
	Element 1	Element 2	
Ui	15.0V	15.0V	
li	100Ma	100mA	
Pi	150mW	150mW	
Ci	0	0	
Li	0	0	

The equipment shall be marked with the following:

<mark>€x</mark> II 2 G D	<mark>ξχ</mark> Ⅱ 1/2 G D
Ex d IIC T6 IP68	Ex ia IIC T4 Ga/Gb
Ex tD A21 T100°C IP68	EX ia IIIC T135°C Da/Db
Ta = -50°C to +60°C	Ta = -50°C to +60°C



