

### IS-SLT4-RTD-M20

#### IS-SLT4-RTD Intrinsically Safe

The intrinsically safe and flameproof IS-SLT range provides surge protection for most twisted pair signal cables associated with intrinsically safe field devices. The IS-SLT4-RTD-M20 is specifically designed to protect Resistance Temperature Detector (RTD) devices in the field. It is suitable for both 3-wire and 4-wire configurations of RTDs.

#### IEC Ex & ATEX Approved

Novaris 'IS-SLT' products are certified intrinsically safe and flameproof according to IEC Ex and ATEX and so may be installed in Ex d rated instruments without loss of integrity.

#### Multistage Design

The multistage design provides a high energy gas discharge tube (GDT) as primary protection for common mode disturbances, commonly associated with lightning strikes and power system earth faults and a secondary metal-oxide varistor clamping stage across the signal lines. This combination provides very robust surge protection with high transient suppression and low let-through voltages. In addition protection is provided for cable screens which may be open circuit at the instrument.

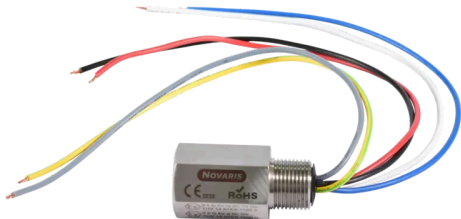
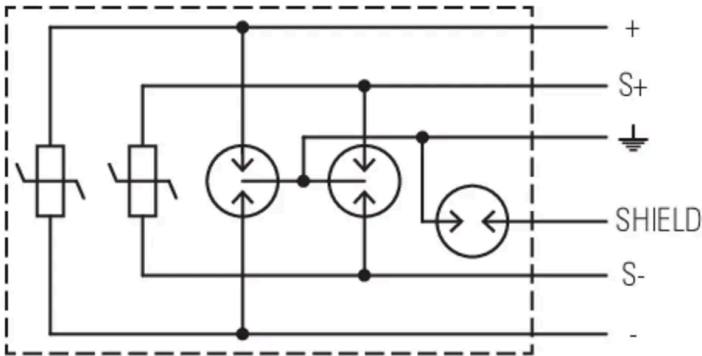
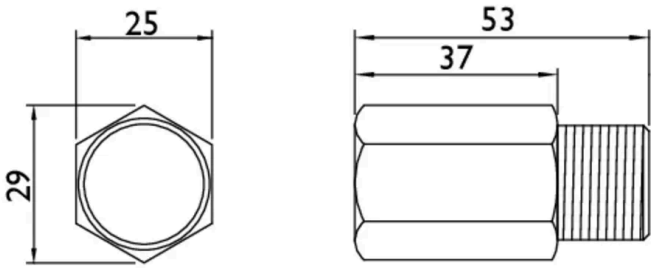


Image for illustrative purposes only

### Wiring






### Dimensions



M20 x 1.5 Thread Size

## Product Datasheet

## Electrical Specifications

Connection type		Shunt
Number of lines		2 pair
Modes of protection		Transverse & Common
Maximum continuous voltage (DC)	$U_c$	8V
Maximum continuous voltage (AC)	$U_c$	6V
Maximum discharge current (8/20 $\mu$ s)	$I_{max}$	5kA
Maximum common mode discharge current (8/20 $\mu$ s)		10kA
Maximum discharge current (10/350 $\mu$ s)	$I_{imp}$	1.25kA
Maximum common mode discharge current (10/350 $\mu$ s)	$I_{imp}$	2.5kA
Impulse durability C2 10x8/20 $\mu$ s		5kA
Impulse durability D1 2x10/350 $\mu$ s		2.5kA
AC durability 5x1s		1A rms
Overstressed fault mode		Mode 1
Response time	$t_A$	<25ns
3 dB Frequency @ 150 $\Omega$		100kHz
Earthing		90V isolation











## Electrical (L-L) Specifications

Voltage protection level @ 1 kV/ $\mu$ s	$U_p$	40V
Voltage protection level @ 100 V/ s		25V
Capacitance	- -	20nF

## Electrical (L-PE) Specifications

Voltage protection level @ 1 kV/ $\mu$ s	$U_p$	350V
Voltage protection level @ 100 V/ s		230V
Capacitance	- -	<1pF

## Mechanical Specifications

Minimum operating temperature		-20°C
Maximum operating temperature		40°C
Minimum operating humidity		5%
Maximum operating humidity		95%
Mounting method		M20 Thread
Environmental rating		IP67
Enclosure material		Stainless steel
Terminal type		Flying lead
Length		53mm
Width		25mm
Height		29mm

## Standard Specifications

IEC 61643-21	SPD connected to telecommunications and signalling networks - Cat C2, D1
AS 1768	Signalling/Telecommunications surge protection
UL 1449 & UL 497B	Protectors for data, communications and fire-alarm circuits
ITU-T K.44	Resistibility tests for telecommunication equipment exposed to overvoltages and overcurrents
Directive 94/9/EC	Equipment and protective systems intended for use in potentially explosive atmospheres
IEC 60079-0	Explosive atmospheres - Part 0: Equipment - General requirements
IEC 60079-1	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures 'd'
IEC 60079-11	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety 'i'

## Shipping Specifications

Weight		165g
Customs tariff		85363000, 85363010

## Other Specifications

Product Code		IS-SLT4-RTD-M20
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