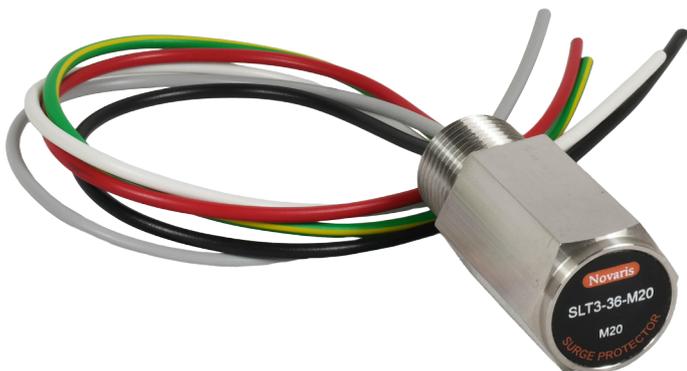


SLT - Threaded Signal Line Protectors



Field Instrument Surge Protectors

Novaris threaded instrument protectors provide surge protection for most twisted pair signalling schemes and are designed to be installed directly at the field equipment providing protection against induced surges and transients.

M20 and 1/2" NPT threads

The threaded enclosure provides an easy installation by directly screwing into a free cable entry on the instrument. Common thread types such as M20 x 1.5 and 1/2" NPT threads are accommodated for. Other threads are available by request.

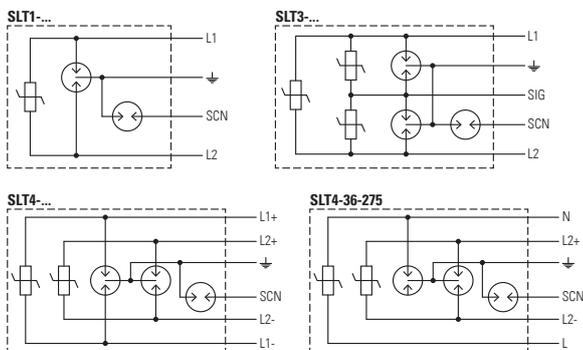
Multistage design

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.

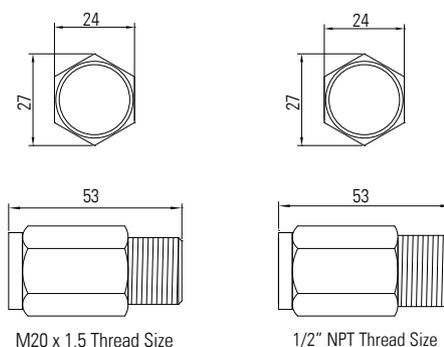
SLT-Y Adapter

Where a field instrument has no free cable entry Novaris can supply a Y-piece adapter to accommodate the threaded instrument protector and cable gland. The SLT-Y is available in the same thread types as the SLT protectors.

Diagram / Installation



Dimensions



Ordering Information

Model	Signal Type		Thread Size		Hazardous Area Product
			M20 x 1.5	1/2" NPT	
SLTx-7v5	0 - 5 VDC analogue	5 V digital	-M20	-N12	IS-SLTx-7v5
SLTx-18	0 - 12 VDC analogue	12 V digital	-M20	-N12	IS-SLTx-18
SLTx-36	0 - 24 VDC analogue	4-20 mA	-M20	-N12	IS-SLTx-36
SLTx-68	0 - 48 VDC analogue	48 V digital	-M20	-N12	-
SLT4-RTD	RTD applications	Thermocouple	-M20	-N12	IS-SLT4-RTD
SLT4-36-275	4-20 mA & Power supply		-M20	on request	-

Product Specifications

Model		SLTx-7v5	SLTx-18	SLTx-36	SLTx-68	SLT4-RTD	SLT4-36-275
Electrical Specifications							
Connection Type		Shunt	Shunt	Shunt	Shunt	Shunt	Shunt
Number of lines			x = 1 → 1 pair x = 3 → 3 lines x = 4 → 4 lines			4 lines	1 pair Signal (S) 1 L & N Power (P)
Modes of protection		Transverse and common mode					
Maximum continuous voltage (DC)	U_c	7 V	18 V	36 V	65 V	8 V	36 V (S) / 350 V (P)
Maximum continuous voltage (AC)	U_c	5 V	14 V	30 V	50 V	6 V	30 V (S) / 275 V (P)
Maximum discharge current (8/20 μ s)	I_{max}	5 kA per line (10 kA common mode)					
Maximum discharge current (10/350 μ s)	I_{imp}	1.25 kA per line (2.5 kA common mode)					
Impulse durability		C2 10 x 2.0 kA 8/20 μ s D1 2 x 0.5 kA 10/350 μ s					C2 10 x 0.5 kA 8/20 μ s
Maximum load current	I_L	-					
L-L Voltage protection level @ 1 kV/ μ s	U_p	45 V	50 V	75 V	100 V	45 V	75 V (S) / - (P)
L-L Voltage protection level @ 1 kA 8/20 μ s	U_p	70 V	75 V	110 V	160 V	70 V	- (S) / - (P)
L-L Voltage protection level @ 100 V/ s		25 V	30 V	60 V	80 V	25 V	55 V (S) / - (P)
L-PE Voltage protection level @ 1 kV/ μ s	U_p	350 V	350 V	350 V	350 V	350 V	350 V (S) / 900 V (P)
L-PE Voltage protection level @ 2 kA 8/20 μ s	U_p	530 V	530 V	530 V	530 V	530 V	- (S) / - (P)
L-PE Voltage protection level @ 100 V/ s		230 V	230 V	230 V	230 V	230 V	230 V (S) / 600 V (P)
AC durability		1 A rms, 5 x 1 s	1 A rms, 5 x 1 s	1 A rms, 5 x 1 s	1 A rms, 5 x 1 s	1 A rms, 5 x 1 s	1 A rms, 5 x 1 s
Overstressed fault mode		Mode 1 (SLT disconnected, line still operable)					
Response time	t_A	< 5 ns					
Line resistance		-					
Line inductance		-					
L-L capacitance		20 nF	10 nF	7 nF	1 nF	20 nF	7 nF (S) / 60 pF (P)
L-PE capacitance		< 1 pF					
Insertion loss @ 150 Ω		-					
3 dB Frequency @ 150 Ω	f_c	100 kHz					
Mechanical Specifications							
Operating temperature		-40 to +85 °C					
Humidity Range		5 to 95%					
Connection type / capacity		250 mm, 0.75 mm ² flying leads					
Terminal screw torque		-					
Environmental		IP 67 installed					
Dimensional Drawing		Given by thread size					
Mounting		Thread options M20 x 1.5 or 1/2 " NTP					
Earthing		via lead; 90 V isolation between earth and shield					
Enclosure / Colour		Stainless steel					
Standards							
IEC 61643-21:2012		SPD connected to telecommunications and signalling networks - Cat C2, D1					
AS/NZS 1768:2007		Signalling/Telecommunications surge protection					
UL 1449 3 rd edition & UL 497B		Protectors for data communications and fire-alarm circuits					
ITU-T K.44: 2012		Resistibility tests for telecommunication equipment exposed to overvoltages and overcurrents					
Shipping							
Weight		165 g	165 g	165 g	165 g	165 g	165 g
Customs Tariff		85363000	85363000	85363000	85363000	85363000	85363000

