



## IS-NSL Intrinsically Safe Signal Line Protectors

The IS-NSL range provides protection to most analogue and digital interfaces. Commonly analogue inputs and outputs are the most susceptible to damage from surge and transients induced onto the signal lines. The IS-NSL range is designed exclusively for low current applications less than 250mA. For applications requiring a higher current rating Bender recommend the IS-NSSP6A range. The Bender IS-NSL range is suitable for both input and output applications.

		IS-NSL7V5	IS-NSL18	IS-NSL36	IS-NSL420
<b>Electrical Specifications</b>					
Maximum continuous voltage (DC)	$U_0$	7V	16V	34V	34V
Maximum continuous voltage (AC)	$U_c$	5V	11V	24V	-
Primary GDT rating 8/20 $\mu$ s		10kA			
Maximum load current	$I_L$	250mA			30mA
<b>Signal Type</b>		<b>Marshalling Cubicle<sup>#</sup></b>		<b>Field / Remote<sup>#</sup></b>	
0-5V analogue		IS-NSL7V5-G		IS-NSL7V5-EC90	
0-10V analogue		IS-NSL18-G		IS-NSL18-EC90	
5V digital		IS-NSL7V5-G		IS-NSL7V5-EC90	
12V digital		IS-NSL18-G		IS-NSL18-EC90	
24V digital		IS-NSL36-G		IS-NSL36-EC90	
0-20mA analogue		IS-NSL36-G / IS-NSL420-G		IS-NSL36-EC90 / IS-NSL420-EC90	
4-20mA analogue		IS-NSL36-G / IS-NSL420-G		IS-NSL36-EC90 / IS-NSL420-EC90	

High-speed data applications are catered for with the IS-NSL485 and IS-NSLDH models feature operation up to 20MHz. The IS-NSL485 is ideal for applications such as RS485 serial communication and protocols such as Profibus and CAN. Similarly IS-NSLDH is designed for other high speed protocols such as Data Highway and Data Highway Plus. Typically, these models are used in conjunction with the EC90 base to provide isolation from earth.

		IS-NSL485	IS-NSLDH	IS-NSL-RTD	IS-NSL-PSTN
<b>Electrical Specifications</b>					
Maximum continuous voltage (DC)	$U_0$	8V	34V	8V	200V
Maximum continuous voltage (AC)	$U_c$	6V	24V	6V	140V
Primary GDT rating 8/20 $\mu$ s		10kA			
Maximum load current	$I_L$	250mA			
<b>Signal Type</b>		<b>Marshalling Cubicle<sup>#</sup></b>			<b>Field / Remote<sup>#</sup></b>
RS485		IS-NSL485-G			IS-NSL485-EC90
Profibus DP		IS-NSL485-G			IS-NSL485-EC90
CAN		IS-NSL485-G			IS-NSL485-EC90
Data Highway		IS-NSLDH-G			IS-NSLDH-EC90
RTD applications		IS-NSL-RTD-G			IS-NSL-RTD-EC90

<sup>#</sup> Typical application