

## SENSOR SPECIFICATION EN60947-5-2

Max Ambient Temperature	-25../.+220°C
Temp Converter	<input type="text" value="00"/> °Fahrenheit <input type="text" value="00"/> °Centigrade
Sensor Size	M12
Nominal Sensing Distance (SN)	2mm <i>EN-50010</i>
Amplifier <i>Tech Note 1*</i>	External ( <i>See Options</i> )
Installation	Flush
Max Switching Frequency	500Hz@220°C
Repeatability	< 3% of SN
Hysteresis	3...15% of SN
Target LED	On Ext Amp
Connecting cable <i>Tech Note 2*</i>	Teflon / PUR
Connector Option	N/A
Environmental Protection	IP66
Housing Material	1.4305 St Stl

### ..Kriz M12 HT Sensor..



*Note,*

All kriz sensor products that operate above 180C are designated with 'EXT' in the product syntax and require an external amplifier to function. There are two types of external amplifier available and are displayed below as Option 1 and 2 respectively. Whilst the 'EXT' amplifiers perform similar functions they have been designed to satisfy differing Electrical, Mechanical and Environmental criteria found in a wide range engineering applications.

## OPTION 1- 'M' Series In-line External Amp



### PRODUCT FEATURES

- Compact design housed in M12 body
- Through hole or bracket mounting
- Yellow target LED
- Stainless steel body
- Factory calibrated
- Reverse polarity protection
- Output overload protection
- Output short circuit protection
- Environmental Protection IP66

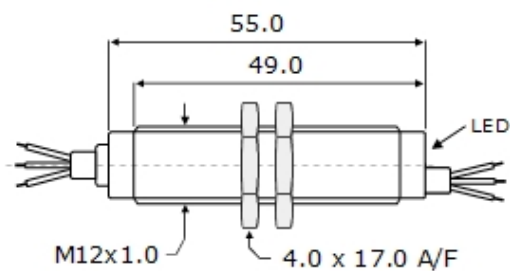
### SPECIFICATIONS...

Supply Voltage Range	10../..30 VDC
Rated Supply Voltage	24 VDC
No Load ( <i>I</i> )	≤ 3mA
Output	N.O. PNP or NPN
Max ( <i>I</i> ) Output	120mA@24VDC
Voltage Drop ( <i>Output</i> )	less than 1.8VDC
Max Ambient Temp	-25../..+70°C

### CONNECTION...

BLUE	0V
BLACK	Output
BROWN	Supply +VDC

### DIMENSIONS...



## OPTION 2- 'SM' Series External Amp



### PRODUCT FEATURES

- Compact design W22,5 x H75 x D98mm
- Standard (35mm) DIN rail mounting
- Target LED on fascia
- High Impact ABS enclosure
- Factory calibrated
- Recessed terminals
- Reverse polarity protection
- Output overload protection
- Output short circuit protection
- Environmental Protection IP54

### SPECIFICATIONS...

Supply Voltage Range	10./../30 VDC
Rated Supply Voltage	24 VDC
No Load ( <i>I</i> )	≤ 3mA
Output	N.O. PNP or NPN
Max ( <i>I</i> ) Output	180mA@24VDC
Voltage Drop ( <i>Output</i> )	less than 1.8VDC
Max Ambient Temp	-25./../+70°C

### CONNECTION DETAIL...

TERMINAL 1,3,5,10,11,12,	N.C.
Terminal 4	Sensor (Brown)
Terminal 5	Sensor (Black)
Terminal 6	Sensor (Blue)
Terminal 7	Supply 0V
Terminal 8	Output
Terminal 9	Supply +

### CABLE / CONNECTOR SYSTEM...

The factory default option for all kriz Sensor products is for the connecting cable to be direct wired to the sensor or together with the amplifier. To enhance application flexibility of the product range the sensors (M18 and larger) can be supplied with the **LEMO** type connector system, which is Industry accepted with approvals in many Engineering fields. The table below illustrates how the LEMO connector system is integrated into the product range. It should be noted that we are not limited to a particular connector system and whilst the LEMO type is common in the EU countries we can fit a connector system designated by the customer, therefore allowing the device to integrate directly into your application.

**Tech Note-1\***- Any sensor head with EXT in the product syntax can be interfaced directly to either the 'M' or 'SM' series amplifiers and are fully interchangeable even when in service with no adjustments required.

#### Format using 'M'-Series EXT amplifier...



The amplifier is supplied with customer specified cable length fitted with **LEMO** type connector, which is hard wired to the 'M' series amplifier. The amplifier is also pre-wired with 2Mtrs PUR cable for connection to power supply and output interfacing etc.

#### Format using 'SM'-Series EXT amplifier...



The amplifier is supplied with a separate connecting lead of customer specified length fitted with LEMO type connector, the plain cable end is prepared for connection to the screw terminals on the 'SM' series amplifier.

### CABLE SPECIFICATIONS...

*Tech Note 2\**-The PTFE cable used on our HT 'EXT' sensor product range exhibits excellent resistance properties to a wide range of chemicals, please check with our technical sales office for further information.

Material	PTFE
Construction	2 x 0.34mm <sup>2</sup> + Braid (Cu)
Ambient Temp Range (Flexible laying)	-55./..+250°C
Ambient Temp Range (Fixed laying)	-90./..+250°C
External Diameter	Nom 3.8mm
Colour	White VDE-D293 01/90
Minimum Bend Radius	20mm @ 250°C

### DIMENSIONS...

