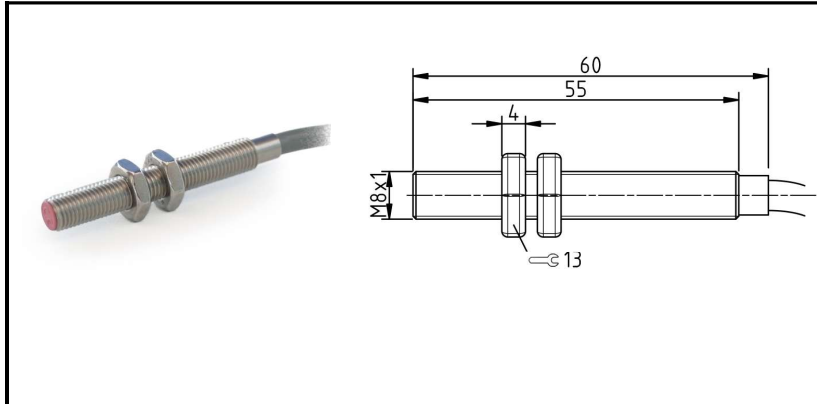


# HIGH TEMPERATURE INDUCTIVE PROXIMITY SENSORS

Sensing Distance: **2 mm** - Housing Diameter: **M8**



Technical Data:	
Mounting:	Shielded
Sensing range in mm:	2
Supply voltage:	10-35 VDC
Output function:	N.O.
Load current:	120 mA up to 266 °F (130 °C), 70 mA up to 284 °F (140 °C)
Switching Frequency:	800 Hz
Short circuit limit:	400 mA
Cable:	Silicone
Operating temperature:	-13 to 284 °F (-25 to 140 °C)
Target size:	8 x 8 x 1 mm ST37
Hysteresis:	3 to 15 %
LED:	No
Options:	Cable length, Cable type

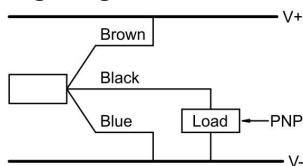
Dimensions are in mm.

Part Numbers:	
PNP/NO	IN2-8HTPS-140
NPN/NO	IN2-8HTNS-140

### This sensor has the following specifications:

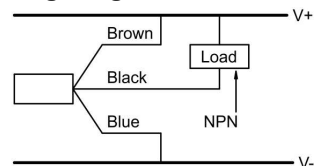
* The EMC (Electromagnetic Compatibility) resistance of the switches: IEC 61000-4-2 Level 2 IEC 61000-4-3 Level 2	IEC 61000-4-4 Level 2 IEC 60255-5 1 kV	* Vibration resistant to 1 mm amplitude at 55 Hz. * Shock resistant to 10 g for a period of 11 ms. * Degree of protection (DIN 40 050) is IP67 (higher IP options may be available). * Reverse polarity protection is incorporated on the supply voltage. * Load resistor of 100 kOhm is incorporated. * Leakage current is 4 mA at 24 V supply voltage. * Residual ripple is 15 %. * Voltage drop is approximately 2 V when sensor is on. * Sensing face material is: LPC-Vectra.
* Sensing range can vary +/-10 %. * Voltage spikes (300 V for 1 ms, 10 Hz) * All standard cables are 3 x 0.25 mm <sup>2</sup> and a length of 2 m +/-5 %. * Output capacity is 100 nF. * Storage temperature -13 °F to +176 °F (-25 °C to 80 °C). * Relative humidity is 100 %.		

#### Wiring Diagram PNP NO



Special types and silicone free versions are available upon request

#### Wiring Diagram NPN NO




Design and technical details subject to change

**Locon Sensor Systems, Inc.**

# HIGH TEMPERATURE INDUCTIVE PROXIMITY SENSORS

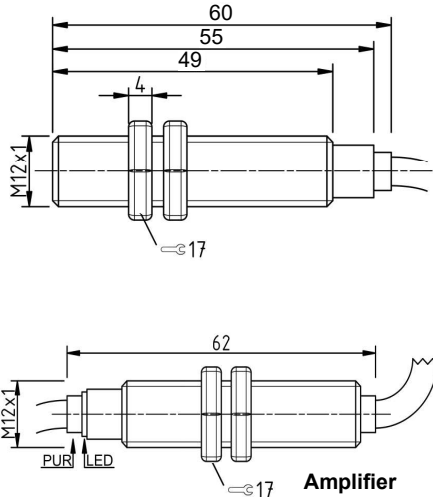
Sensing Distance: **2 mm** - Housing Diameter: **M12**





Dimensions are in mm.

Part Numbers:	
PNP/NO	IN2-12HTPS-200EXT
PNP/NC	IN2-12HTPO-200EXT
NPN/NO	IN2-12HTNS-200EXT
NPN/NC	IN2-12HTNO-200EXT



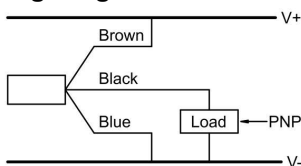
60  
55  
49  
4  
M12x1  
17  
62  
M12x1  
PUR LED  
17 Amplifier

Technical Data:	
Mounting:	flush
Sensing range in mm:	2
Supply voltage:	10-36 VDC
Output function:	N.O. or N.C.
Load current:	200 mA
Switching Frequency:	500 Hz
Short circuit limit:	240 mA
Cable version:	Sensor: PTFE, Amplifier: PUR
Operating temperature:	-13 to 392 °F (-25 to 200 °C)
Target size:	50 x 50 x 1 mm ST37
Hysteresis:	3 to 20 %
LED:	Yes (on amplifier)
Options:	Cable length, Cable type

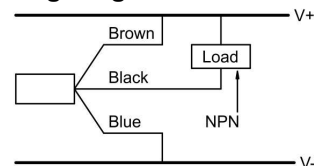
### This sensor has the following specifications:

- |   |  |
|---|--|
| <ul style="list-style-type: none"> <li>* The EMC (Electromagnetic Compatibility) resistance of the switches:<br/>IEC 61000-4-2 Level 2      IEC 61000-4-4 Level 2<br/>IEC 61000-4-3 Level 2      IEC 60255-5 1 kV</li> <li>* Sensing range can vary +/-10 %.</li> <li>* Voltage spikes (300 V for 1 ms, 10 Hz)</li> <li>* All standard cables are 3 x 0.25 mm<sup>2</sup> and a length of 2 m +/-5 %.</li> <li>* Output capacity is 100 nF.</li> <li>* Storage temperature -13 °F to + 176 °F (-25 °C to 80 °C).</li> <li>* Relative humidity is 100 %.</li> <li>* Vibration resistant to 1 mm amplitude at 55 Hz.</li> </ul> | <ul style="list-style-type: none"> <li>* Shock resistant to 5 g for a period of 11 ms.</li> <li>* Degree of protection (DIN 40 050) is IP67 (higher IP options may be available).</li> <li>* Reverse polarity protection is incorporated on the supply voltage.</li> <li>* Load resistor of 100 kOhm is incorporated.</li> <li>* Leakage current is 4 mA at 24 V supply voltage.</li> <li>* Residual ripple is 15 %.</li> <li>* Voltage drop is approximately 2 V when sensor is on.</li> <li>* Sensing face material is: LPC-Vectra.</li> <li>* Temperature specification for external amplifier:<br/>+14 to +158°F (-10 °C to 70 °C).</li> </ul> |
|---|--|

#### Wiring Diagram PNP NO/NC



#### Wiring Diagram NPN NO/NC



**Special types and  
silicone free  
versions are  
available  
upon request**


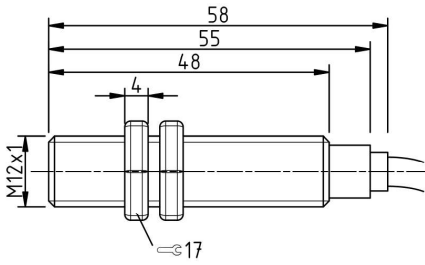
Design and technical details subject to change

**Locon Sensor Systems, Inc.**

# HIGH TEMPERATURE INDUCTIVE PROXIMITY SENSORS

Sensing Distance: **3mm** - Housing Diameter: **M12**


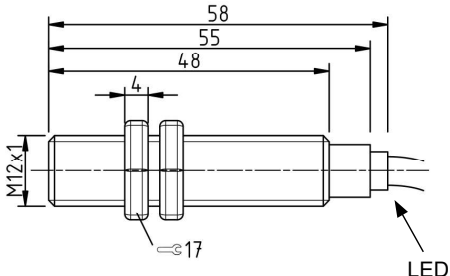


Dimensions are in mm.

Part Numbers:	
PNP/NO	IN3-12HTPS-150
PNP/NC	IN3-12HTPO-150
NPN/NO	IN3-12HTNS-150
NPN/NC	IN3-12HTNO-150

Technical Data:	
Mounting:	Shielded
Sensing range in mm:	3
Supply voltage:	10-35 VDC
Output function:	N.O. or N.C.
Load current:	120 mA up to 266 °F (130 °C), 70 mA up to 302 °F (150 °C)
Switching Frequency:	500 Hz
Short circuit limit:	400 mA
Cable:	Silicone
Operating temperature:	-13 to 302 °F (-25 to 150 °C)
Target size:	12 x 12 x 1 mm ST37
Hysteresis:	3 to 15 %
LED:	No
Options:	Cable length, Cable type

Dimensions are in mm.

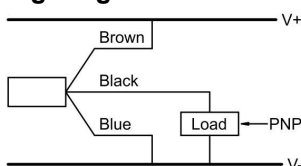
Part Numbers:	
PNP/NO	IN3-12HTPS/L-130
PNP/NC	IN3-12HTPO/L-130
NPN/NO	IN3-12HTNS/L-130
NPN/NC	IN3-12HTNO/L-130

Technical Data:		with LED
Mounting:	Shielded	
Sensing range in mm:	3	
Supply voltage:	10-35 VDC	
Output function:	N.O. or N.C.	
Load current:	120 mA	
Switching Frequency:	500 Hz	
Short circuit limit:	400 mA	
Cable:	PTFE	
Operating temperature:	-13 to 266 °F (-25 to 130 °C)	
Target size:	12 x 12 x 1 mm ST37	
Hysteresis:	3 to 15 %	
LED:	Yes	
Options:	Cable length, Cable type	

**These sensors share the following specifications:**

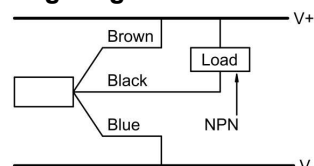
- |   |  |
|---|--|
| <ul style="list-style-type: none"> <li>* The EMC (Electromagnetic Compatibility) resistance of the switches:<br/>IEC 61000-4-2 Level 2      IEC 61000-4-4 Level 2<br/>IEC 61000-4-3 Level 2      IEC 60255-5 1 kV</li> <li>* Sensing range can vary +/-10 %.</li> <li>* Voltage spikes (300 V for 1 ms, 10 Hz)</li> <li>* All standard cables are 3 x 0.25 mm<sup>2</sup> and a length of 2 m +/-5 %.</li> <li>* Output capacity is 100 nF.</li> <li>* Storage temperature -13 °F to +176 °F (-25 °C to 80 °C).</li> <li>* Relative humidity is 100 %.</li> </ul> | <ul style="list-style-type: none"> <li>* Vibration resistant to 1 mm amplitude at 55 Hz.</li> <li>* Shock resistant to 10 g for a period of 11 ms.</li> <li>* Degree of protection (DIN 40 050) is IP67 (higher IP options may be available).</li> <li>* Reverse polarity protection is incorporated on the supply voltage.</li> <li>* Load resistor of 100 kOhm is incorporated.</li> <li>* Leakage current is 4 mA at 24 V supply voltage.</li> <li>* Residual ripple is 15 %.</li> <li>* Voltage drop is approximately 2 V when sensor is on.</li> <li>* Sensing face material is: LPC-Vectra.</li> </ul> |
|---|--|

**Wiring Diagram PNP NO/NC**



**Special types and silicone free versions are available upon request**

**Wiring Diagram NPN NO/NC**

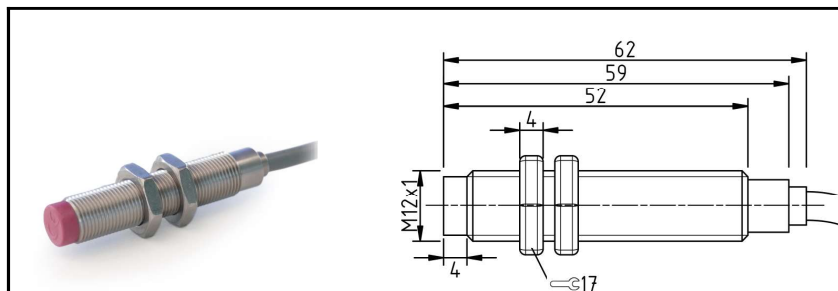


Design and technical details subject to change

**Locon Sensor Systems, Inc.**

# HIGH TEMPERATURE INDUCTIVE PROXIMITY SENSORS

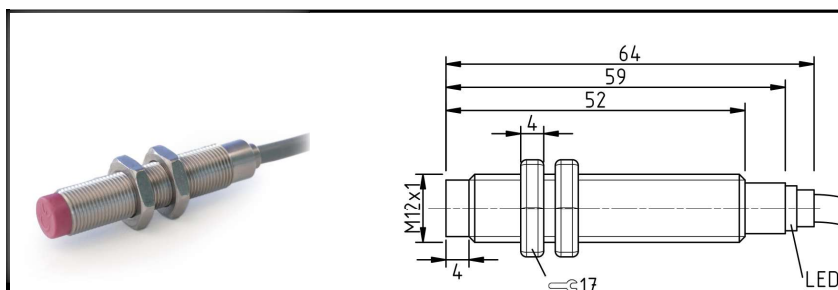
## Sensing Distance: 4mm - Housing Diameter: M12



Dimensions are in mm.

Part Numbers:	
PNP/NO	IN4-12HTPS-150
PNP/NC	IN4-12HTPO-150
NPN/NO	IN4-12HTNS-150
NPN/NC	IN4-12HTNO-150

Technical Data:	
Mounting:	Unshielded
Sensing range in mm:	4
Supply voltage:	10-35 VDC
Output function:	N.O. or N.C.
Load current:	120 mA up to 266 °F (130 °C), 70 mA up to 302 °F (150 °C)
Switching Frequency:	500 Hz
Short circuit limit:	400 mA
Cable:	Silicone
Operating temperature:	-13 to 356 °F (-25 to 150 °C)
Target size:	12 x 12 x 1 mm ST37
Hysteresis:	3 to 15 %
LED:	No
Options:	Cable length, Cable type



Dimensions are in mm.

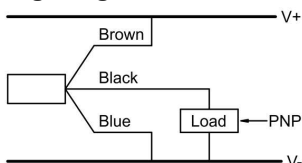
Part Numbers:	
PNP/NO	IN4-12HTPS/L-130
PNP/NC	IN4-12HTPO/L-130
NPN/NO	IN4-12HTNS/L-130
NPN/NC	IN4-12HTNO/L-130

Technical Data: with LED	
Mounting:	Unshielded
Sensing range in mm:	4
Supply voltage:	10-35 VDC
Output function:	N.O. or N.C.
Load current:	120 mA
Switching Frequency:	500 Hz
Short circuit limit:	400 mA
Cable:	PTFE
Operating temperature:	-13 to 266 °F (-25 to 130 °C)
Target size:	12 x 12 x 1 mm ST37
Hysteresis:	3 to 15 %
LED:	Yes
Options:	Cable length, Cable type

### These sensors share the following specifications:

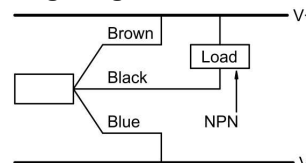
- \* The EMC (Electromagnetic Compatibility) resistance of the switches:
  - IEC 61000-4-2 Level 2
  - IEC 61000-4-3 Level 2
  - IEC 61000-4-4 Level 2
  - IEC 60255-5 1 kV
- \* Sensing range can vary +/-10 %.
- \* Voltage spikes (300 V for 1 ms, 10 Hz)
- \* All standard cables are 3 x 0.25 mm<sup>2</sup> and a length of 2 m +/-5 %.
- \* Output capacity is 100 nF.
- \* Storage temperature -13 °F to + 176 °F (-25 °C to 80 °C).
- \* Relative humidity is 100 %.
- \* Vibration resistant to 1 mm amplitude at 55 Hz.
- \* Shock resistant to 10 g for a period of 11 ms.
- \* Degree of protection (DIN 40 050) is IP67 (higher IP options may be available).
- \* Reverse polarity protection is incorporated on the supply voltage.
- \* Load resistor of 100 kOhm is incorporated.
- \* Leakage current is 4 mA at 24 V supply voltage.
- \* Residual ripple is 15 %.
- \* Voltage drop is approximately 2 V when sensor is on.
- \* Sensing face material is: LPC-Vectra.

#### Wiring Diagram PNP NO/NC



Special types and silicone free versions are available upon request

#### Wiring Diagram NPN NO/NC

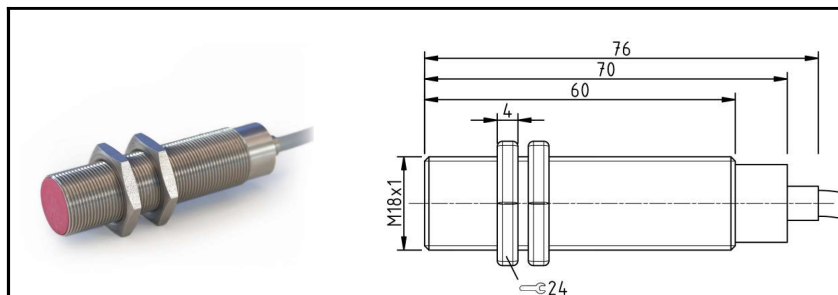


Design and technical details subject to change

**Locon Sensor Systems, Inc.**

# HIGH TEMPERATURE INDUCTIVE PROXIMITY SENSORS

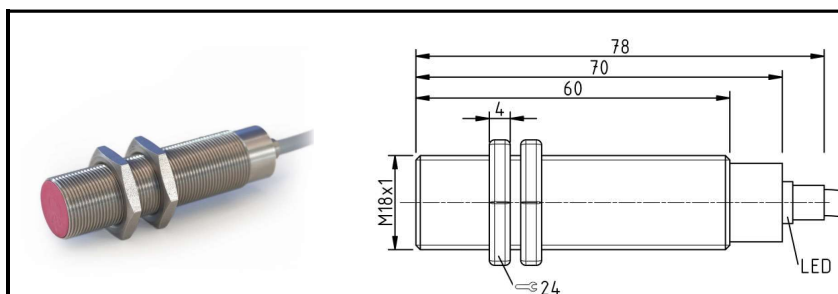
## Sensing Distance: 5mm - Housing Diameter: M18



Dimensions are in mm.

Part Numbers:	
PNP/NO	IN5-18HTPS-180
PNP/NC	IN5-18HTPO-180
NPN/NO	IN5-18HTNS-180
NPN/NC	IN5-18HTNO-180

Technical Data:	
Mounting:	Shielded
Sensing range in mm:	5
Supply voltage:	10-35 VDC
Output function:	N.O. or N.C.
Load current:	120 mA
Switching Frequency:	400 Hz
Short circuit limit:	200 mA
Cable:	Silicone
Operating temperature:	-13 to 356 °F (-25 to 180 °C)
Target size:	18 x 18 x 1 mm ST37
Hysteresis:	2 to 20 %
LED:	No
Options:	Cable length, Cable type



Dimensions are in mm.

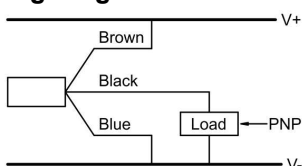
Part Numbers:	
PNP/NO	IN5-18HTPS/L-130
PNP/NC	IN5-18HTPO/L-130
NPN/NO	IN5-18HTNS/L-130
NPN/NC	IN5-18HTNO/L-130

Technical Data:		with LED
Mounting:	Shielded	
Sensing range in mm:	5	
Supply voltage:	10-35 VDC	
Output function:	N.O. or N.C.	
Load current:	120 mA	
Switching Frequency:	400 Hz	
Short circuit limit:	200 mA	
Cable:	Silicone	
Operating temperature:	-13 to 266 °F (-25 to 130 °C)	
Target size:	18 x 18 x 1 mm ST37	
Hysteresis:	2 to 20 %	
LED:	Yes	
Options:	Cable length, Cable type	

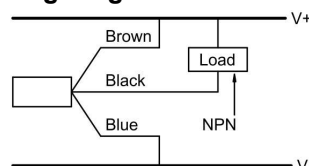
### These sensors share the following specifications:

- \* The EMC (Electromagnetic Compatibility) resistance of the switches:
  - IEC 61000-4-2 Level 2
  - IEC 61000-4-3 Level 2
  - IEC 61000-4-4 Level 2
  - IEC 60255-5 1 kV
- \* Sensing range can vary +/-10 %.
- \* Voltage spikes (300 V for 1 ms, 10 Hz)
- \* All standard cables are 3 x 0.25 mm<sup>2</sup> and a length of 2 m +/-5 %.
- \* Output capacity is 100 nF.
- \* Storage temperature -13 °F to + 176 °F (-25 °C to 80 °C).
- \* Relative humidity is 100 %.
- \* Vibration resistant to 1 mm amplitude at 55 Hz.
- \* Shock resistant to 10 g for a period of 11 ms.
- \* Degree of protection (DIN 40 050) is IP67 (higher IP options may be available).
- \* Reverse polarity protection is incorporated on the supply voltage.
- \* Load resistor of 100 kOhm is incorporated.
- \* Leakage current is 4 mA at 24 V supply voltage.
- \* Residual ripple is 15 %.
- \* Voltage drop is approximately 2 V when sensor is on.
- \* Sensing face material is: LPC-Vectra.

#### Wiring Diagram PNP NO/NC



#### Wiring Diagram NPN NO/NC



Special types and silicone free versions are available upon request


Design and technical details subject to change

**Locon Sensor Systems, Inc.**

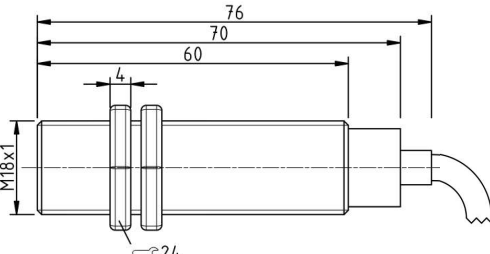
# HIGH TEMPERATURE INDUCTIVE PROXIMITY SENSORS

Sensing Distance: **5mm** - Housing Diameter: **M18**

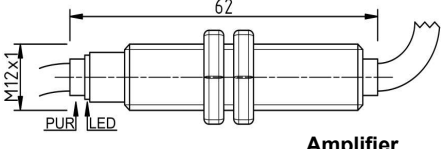




**Sensor**




**Amplifier**



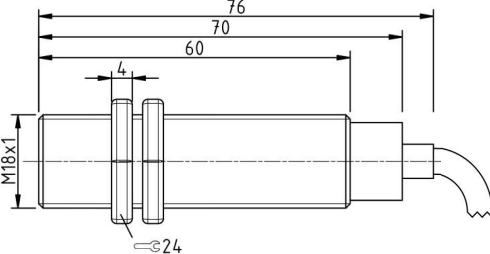
Dimensions are in mm.

Part Numbers:	
PNP/NO	IN5-18HTPS-230EXT
PNP/NC	IN5-18HTPO-230EXT
NPN/NO	IN5-18HTNS-230EXT
NPN/NC	IN5-18HTNO-230EXT

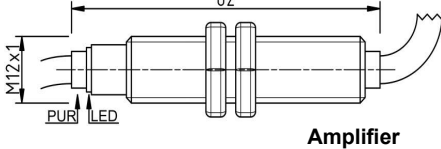
Technical Data:	External amplifier version
Mounting:	Shielded
Sensing range in mm:	5
Supply voltage:	10-35 VDC
Output function:	N.O. or N.C.
Load current:	120 mA
Switching Frequency:	400 Hz
Short circuit limit:	200 mA
Cable:	Sensor: PTFE, Amplifier: PUR
Sensor operating temp.:	-13 to 446 °F (-25 to 230 °C)
Target size:	18 x 18 x 1 mm ST37
Hysteresis:	2 to 20 %
LED:	Yes (on amplifier)
Options:	Cable length, Cable type



**Sensor**



**Amplifier**



Dimensions are in mm.

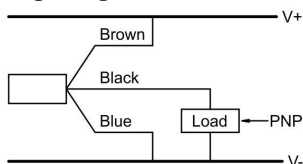
Part Numbers:	
PNP/NO	IN5-18HTPS-250EXT
PNP/NC	IN5-18HTPO-250EXT
NPN/NO	IN5-18HTNS-250EXT
NPN/NC	IN5-18HTNO-250EXT

Technical Data:	External amplifier version
Mounting:	Shielded
Sensing range in mm:	5
Supply voltage:	10-35 VDC
Output function:	N.O. or N.C.
Load current:	120 mA
Switching Frequency:	400 Hz
Short circuit limit:	200 mA
Cable:	Sensor: PTFE, Amplifier: PUR
Sensor operating temp.:	-13 to 482 °F (-25 to 250 °C)
Target size:	18 x 18 x 1 mm ST37
Hysteresis:	2 to 20 %
LED:	Yes (on amplifier)
Options:	Cable length, Cable type

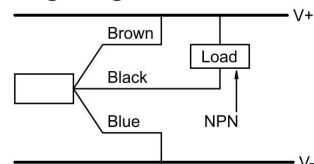
**These sensors share the following specifications:**

- |   |                       |                       |                       |                  |  |
|---|-----------------------|-----------------------|-----------------------|------------------|--|
| <ul style="list-style-type: none"> <li>* The EMC (Electromagnetic Compatibility) resistance of the switches:                             <table style="width: 100%; border: none;"> <tr> <td>IEC 61000-4-2 Level 2</td> <td>IEC 61000-4-4 Level 2</td> </tr> <tr> <td>IEC 61000-4-3 Level 2</td> <td>IEC 60255-5 1 kV</td> </tr> </table> </li> <li>* Sensing range can vary +/-10 %.</li> <li>* Voltage spikes (300 V for 1 ms, 10 Hz)</li> <li>* All standard cables are 3 x 0.25 mm<sup>2</sup> and a length of 2 m +/-5 %.</li> <li>* Output capacity is 100 nF.</li> <li>* Storage temperature -13 °F to +176 °F (-25 °C to 80 °C).</li> <li>* Relative humidity is 100 %.</li> <li>* Vibration resistant to 1 mm amplitude at 55 Hz.</li> </ul> | IEC 61000-4-2 Level 2 | IEC 61000-4-4 Level 2 | IEC 61000-4-3 Level 2 | IEC 60255-5 1 kV | <ul style="list-style-type: none"> <li>* Shock resistant to 10 g for a period of 11 ms.</li> <li>* Degree of protection (DIN 40 050) is IP67 (higher IP options may be available).</li> <li>* Reverse polarity protection is incorporated on the supply voltage.</li> <li>* Load resistor of 100 kOhm is incorporated.</li> <li>* Leakage current is 4 mA at 24 V supply voltage.</li> <li>* Residual ripple is 15 %.</li> <li>* Voltage drop is approximately 2 V when sensor is on.</li> <li>* Sensing face material is: LPC-Vectra.</li> <li>* Temperature specification for external amplifier: +14 to +158°F (-10 °C to +70 °C).</li> </ul> |
| IEC 61000-4-2 Level 2   | IEC 61000-4-4 Level 2 |                       |                       |                  |  |
| IEC 61000-4-3 Level 2   | IEC 60255-5 1 kV      |                       |                       |                  |  |

**Wiring Diagram PNP NO/NC**



**Wiring Diagram NPN NO/NC**



**Special types and silicone free versions are available upon request**


Design and technical details subject to change

**Locon Sensor Systems, Inc.**

# HIGH TEMPERATURE INDUCTIVE PROXIMITY SENSORS

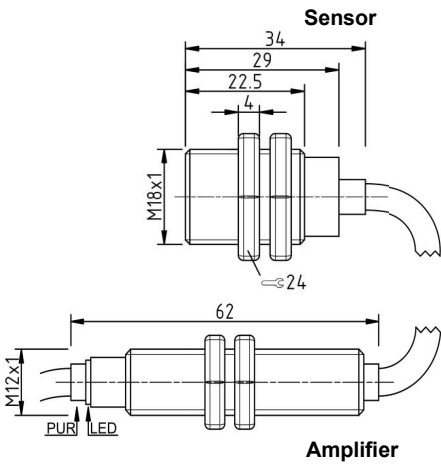
Sensing Distance: **5mm** - Housing Diameter: **M18**






Dimensions are in mm.

Part Numbers:	
PNP/NO	IN5-1835HTPS-230EXT
PNP/NC	IN5-1835HTPO-230EXT
NPN/NO	IN5-1835HTNS-230EXT
NPN/NC	IN5-1835HTNO-230EXT

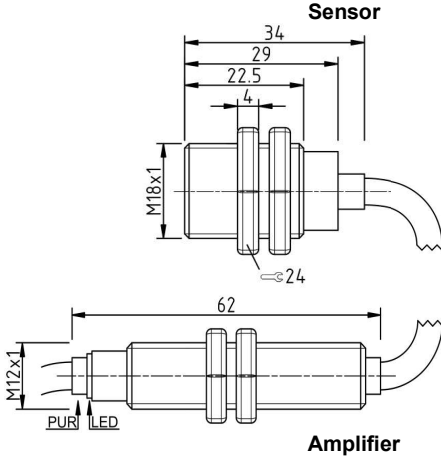


Technical Data:	External amplifier version
Mounting:	Shielded
Sensing range in mm:	5
Supply voltage:	10-35 VDC
Output function:	N.O. or N.C.
Load current:	120 mA
Switching Frequency:	400 Hz
Short circuit limit:	200 mA
Cable:	Sensor: PTFE, Amplifier: PUR
Sensor operating temp.:	-13 to 446 °F (-25 to 230 °C)
Target size:	18 x 18 x 1 mm ST37
Hysteresis:	2 to 20 %
LED:	Yes (on amplifier)
Options:	Cable length, Cable type



Dimensions are in mm.

Part Numbers:	
PNP/NO	IN5-1835HTPS-250EXT
PNP/NC	IN5-1835HTPO-250EXT
NPN/NO	IN5-1835HTNS-250EXT
NPN/NC	IN5-1835HTNO-250EXT

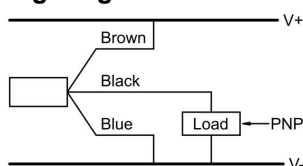


Technical Data:	External amplifier version
Mounting:	Shielded
Sensing range in mm:	5
Supply voltage:	10-35 VDC
Output function:	N.O. or N.C.
Load current:	120 mA
Switching Frequency:	400 Hz
Short circuit limit:	200 mA
Cable:	Sensor: PTFE, Amplifier: PUR
Sensor operating temp.:	-13 to 482 °F (-25 to 250 °C)
Target size:	18 x 18 x 1 mm ST37
Hysteresis:	2 to 20 %
LED:	Yes (on amplifier)
Options:	Cable length, Cable type

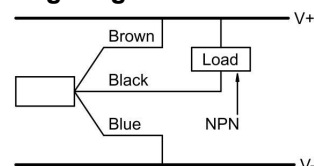
### These sensors share the following specifications:

- \* The EMC (Electromagnetic Compatibility) resistance of the switches:
  - IEC 61000-4-2 Level 2
  - IEC 61000-4-3 Level 2
  - IEC 61000-4-4 Level 2
  - IEC 60255-5 1 kV
- \* Sensing range can vary +/-10 %.
- \* Voltage spikes (300 V for 1 ms, 10 Hz)
- \* All standard cables are 3 x 0.25 mm<sup>2</sup> and a length of 2 m +/-5 %.
- \* Output capacity is 100 nF.
- \* Storage temperature -13 °F to +176 °F (-25 °C to 80 °C).
- \* Relative humidity is 100 %.
- \* Vibration resistant to 1 mm amplitude at 55 Hz.
- \* Shock resistant to 10 g for a period of 11 ms.
- \* Degree of protection (DIN 40 050) is IP67 (higher IP options may be available).
- \* Reverse polarity protection is incorporated on the supply voltage.
- \* Load resistor of 100 kOhm is incorporated.
- \* Leakage current is 4 mA at 24 V supply voltage.
- \* Residual ripple is 15 %.
- \* Voltage drop is approximately 2 V when sensor is on.
- \* Sensing face material is: LPC-Vectra.
- \* Temperature specification for external amplifier: +14 to +158°F (-10 °C to 70 °C).

#### Wiring Diagram PNP NO/NC



#### Wiring Diagram NPN NO/NC



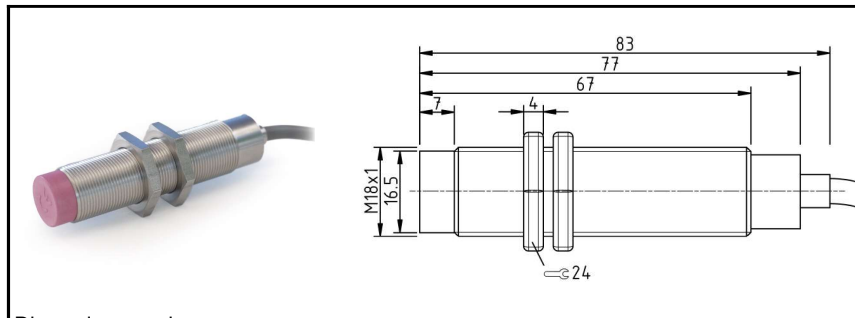
**Special types and silicone free versions are available upon request**

Design and technical details subject to change

**Locon Sensor Systems, Inc.**

# HIGH TEMPERATURE INDUCTIVE PROXIMITY SENSORS

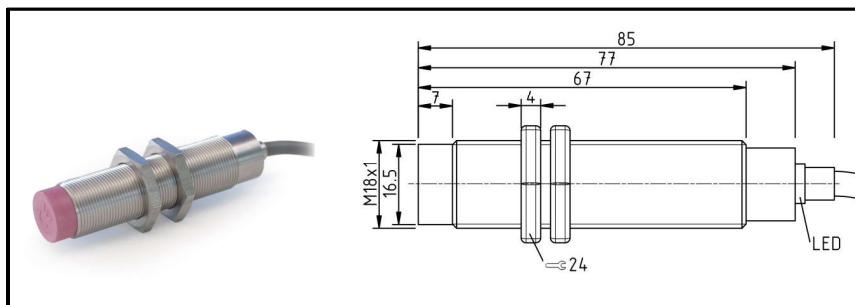
## Sensing Distance: 8mm - Housing Diameter: M18



Dimensions are in mm.

Part Numbers:	
PNP/NO	IN8-18HTPS-180
PNP/NC	IN8-18HTPO-180
NPN/NO	IN8-18HTNS-180
NPN/NC	IN8-18HTNO-180

Technical Data:	
Mounting:	Unshielded
Sensing range in mm:	8
Supply voltage:	10-35 VDC
Output function:	N.O. or N.C.
Load current:	120 mA
Switching Frequency:	400 Hz
Short circuit limit:	200 mA
Cable:	Silicone
Operating temperature:	-13 to 356 °F (-25 to 180 °C)
Target size:	18 x 18 x 1 mm ST37
Hysteresis:	3 to 15 %
LED:	No
Options:	Cable length, Cable type



Dimensions are in mm.

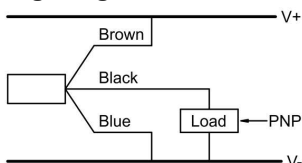
Part Numbers:	
PNP/NO	IN8-18HTPS/L-130
PNP/NC	IN8-18HTPO/L-130
NPN/NO	IN8-18HTNS/L-130
NPN/NC	IN8-18HTNO/L-130

Technical Data:		with LED
Mounting:	Unshielded	
Sensing range in mm:	8	
Supply voltage:	10-35 VDC	
Output function:	N.O. or N.C.	
Load current:	120 mA	
Switching Frequency:	400 Hz	
Short circuit limit:	200 mA	
Cable:	Silicone	
Operating temperature:	-13 to 266 °F (-25 to 130 °C)	
Target size:	18 x 18 x 1 mm ST37	
Hysteresis:	3 to 15 %	
LED:	Yes	
Options:	Cable length, Cable type	

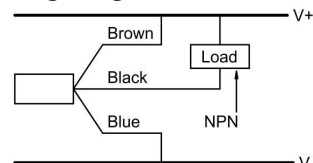
### These sensors share the following specifications:

- \* The EMC (Electromagnetic Compatibility) resistance of the switches:
  - IEC 61000-4-2 Level 2
  - IEC 61000-4-3 Level 2
  - IEC 61000-4-4 Level 2
  - IEC 60255-5 1 kV
- \* Sensing range can vary +/-10 %.
- \* Voltage spikes (300 V for 1 ms, 10 Hz)
- \* All standard cables are 3 x 0.25 mm<sup>2</sup> and a length of 2 m +/-5 %.
- \* Output capacity is 100 nF.
- \* Storage temperature -13 °F to + 176 °F (-25 °C to 80 °C).
- \* Relative humidity is 100 %.
- \* Vibration resistant to 1 mm amplitude at 55 Hz.
- \* Shock resistant to 10 g for a period of 11 ms.
- \* Degree of protection (DIN 40 050) is IP67 (higher IP options may be available).
- \* Reverse polarity protection is incorporated on the supply voltage.
- \* Load resistor of 100 kOhm is incorporated.
- \* Leakage current is 4 mA at 24 V supply voltage.
- \* Residual ripple is 15 %.
- \* Voltage drop is approximately 2 V when sensor is on.
- \* Sensing face material is: LPC-Vectra.

#### Wiring Diagram PNP NO/NC



#### Wiring Diagram NPN NO/NC



Special types and silicone free versions are available upon request

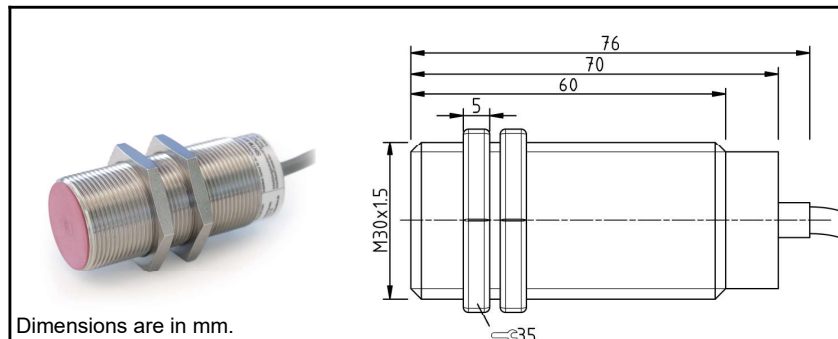
Design and technical details subject to change

**Locon Sensor Systems, Inc.**



# HIGH TEMPERATURE INDUCTIVE PROXIMITY SENSORS

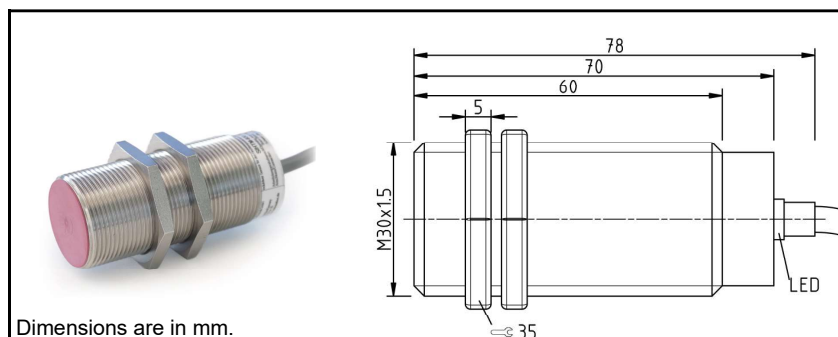
## Sensing Distance: 10mm - Housing Diameter: M30



Dimensions are in mm.

Part Numbers:	
PNP/NO	IN10-30HTPS-180
PNP/NC	IN10-30HTPO-180
NPN/NO	IN10-30HTNS-180
NPN/NC	IN10-30HTNO-180

Technical Data:	
Mounting:	Shielded
Sensing range in mm:	10
Supply voltage:	10-35 VDC
Output function:	N.O. or N.C.
Load current:	120 mA
Switching Frequency:	200 Hz
Short circuit limit:	200 mA
Cable:	Silicone
Operating temperature:	-13 to 356 °F (-25 to 180 °C)
Target size:	30 x 30 x 1 mm ST37
Hysteresis:	3 to 15 %
LED:	No
Options:	Cable length, Cable type, Connector



Dimensions are in mm.

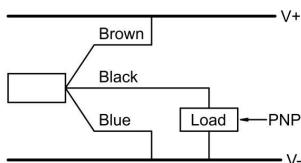
Part Numbers:	
PNP/NO	IN10-30HTPS/L-130
PNP/NC	IN10-30HTPO/L-130
NPN/NO	IN10-30HTNS/L-130
NPN/NC	IN10-30HTNO/L-130

Technical Data:		with LED
Mounting:	Shielded	
Sensing range in mm:	10	
Supply voltage:	10-35 VDC	
Output function:	N.O. or N.C.	
Load current:	120 mA	
Switching Frequency:	200 Hz	
Short circuit limit:	200 mA	
Cable:	Silicone	
Operating temperature:	-13 to 266 °F (-25 to 130 °C)	
Target size:	30 x 30 x 1 mm ST37	
Hysteresis:	3 to 15 %	
LED:	Yes	
Options:	Cable length, Cable type, Connector	

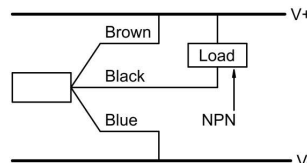
### These sensors share the following specifications:

- \* The EMC (Electromagnetic Compatibility) resistance of the switches:
  - IEC 61000-4-2 Level 2
  - IEC 61000-4-3 Level 2
  - IEC 61000-4-4 Level 2
  - IEC 60255-5 1 kV
- \* Sensing range can vary +/-10 %.
- \* Voltage spikes (300 V for 1 ms, 10 Hz)
- \* All standard cables are 3 x 0.25 mm<sup>2</sup> and a length of 2 m +/- 5 %.
- \* Output capacity is 100 nF.
- \* Storage temperature -13 °F to + 176 °F (-25 °C to 80 °C).
- \* Relative humidity is 100 %.
- \* Vibration resistant to 1 mm amplitude at 55 Hz.
- \* Shock resistant to 10 g for a period of 11 ms.
- \* Degree of protection (DIN 40 050) is IP67 (higher IP options may be available).
- \* Reverse polarity protection is incorporated on the supply voltage.
- \* Load resistor of 100 kOhm is incorporated.
- \* Leakage current is 4 mA at 24 V supply voltage.
- \* Residual ripple is 15 %.
- \* Voltage drop is approximately 2 V when sensor is on.
- \* Sensing face material is: LPC-Vectra.

#### Wiring Diagram PNP NO/NC



#### Wiring Diagram NPN NO/NC



Special types and silicone free versions are available upon request

Design and technical details subject to change

**Locon Sensor Systems, Inc.**

# HIGH TEMPERATURE INDUCTIVE PROXIMITY SENSORS

## Sensing Distance: 10 mm - Housing Diameter: M30



Dimensions are in mm.

Part Numbers:	
PNP/NO	IN10-30HTPS-230EXT
PNP/NC	IN10-30HTPO-230EXT
NPN/NO	IN10-30HTNS-230EXT
NPN/NC	IN10-30HTNO-230EXT

Technical Data:	External amplifier version
Mounting:	Shielded
Sensing range in mm:	10
Supply voltage:	10-35 VDC
Output function:	N.O. or N.C.
Load current:	120 mA
Switching Frequency:	200 Hz
Short circuit limit:	200 mA
Cable:	Sensor: PTFE, Amplifier: PUR
Sensor operating temp.:	-13 to 446 °F (-25 to 230 °C)
Target size:	30 x 30 x 1 mm ST37
Hysteresis:	3 to 15 %
LED:	Yes (on amplifier)
Options:	Cable length, Cable type

Dimensions are in mm.

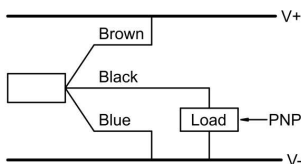
Part Numbers:	
PNP/NO	IN10-30HTPS-250EXT
PNP/NC	IN10-30HTPO-250EXT
NPN/NO	IN10-30HTNS-250EXT
NPN/NC	IN10-30HTNO-250EXT

Technical Data:	External amplifier version
Mounting:	Shielded
Sensing range in mm:	10
Supply voltage:	10-35 VDC
Output function:	N.O. or N.C.
Load current:	120 mA
Switching Frequency:	200 Hz
Short circuit limit:	200 mA
Cable:	Sensor: PTFE, Amplifier: PUR
Sensor operating temp.:	-13 to 482 °F (-25 to 250 °C)
Target size:	30 x 30 x 1 mm ST37
Hysteresis:	3 to 15 %
LED:	Yes (on amplifier)
Options:	Cable length, Cable type

### These sensors share the following specifications:

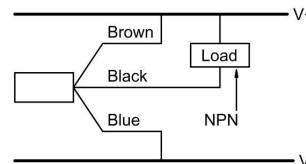
- \* The EMC (Electromagnetic Compatibility) resistance of the switches:
  - IEC 61000-4-2 Level 2
  - IEC 61000-4-3 Level 2
  - IEC 61000-4-4 Level 2
  - IEC 60255-5 1 kV
- \* Sensing range can vary +/-10 %.
- \* Voltage spikes (300 V for 1 ms, 10 Hz)
- \* All standard cables are 3 x 0.25 mm<sup>2</sup> and a length of 2 m +/-5 %.
- \* Output capacity is 100 nF.
- \* Storage temperature -13 °F to + 176 °F (-25 °C to 80 °C).
- \* Relative humidity is 100 %.
- \* Vibration resistant to 1 mm amplitude at 55 Hz.
- \* Shock resistant to 10 g for a period of 11 ms.
- \* Degree of protection (DIN 40 050) is IP67 (higher IP options may be available).
- \* Reverse polarity protection is incorporated on the supply voltage.
- \* Load resistor of 100 kOhm is incorporated.
- \* Leakage current is 4 mA at 24 V supply voltage.
- \* Residual ripple is 15 %.
- \* Voltage drop is approximately 2 V when sensor is on.
- \* Sensing face material is: LPC-Vectra.
- \* Temperature specification for external amplifier: +14 to +158°F (-10 °C to 70 °C).

#### Wiring Diagram PNP NO/NC



Special types and silicone free versions are available upon request

#### Wiring Diagram NPN NO/NC

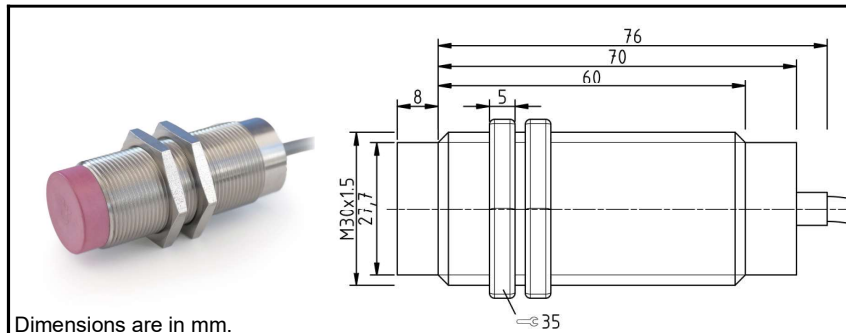


Design and technical details subject to change

**Locon Sensor Systems, Inc.**

# HIGH TEMPERATURE INDUCTIVE PROXIMITY SENSORS

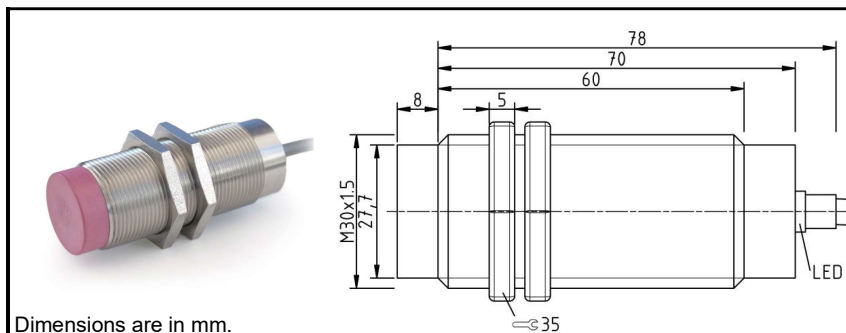
Sensing Distance: **15mm** - Housing Diameter: **M30**



Dimensions are in mm.

Part Numbers:	
PNP/NO	IN15-30HTPS-180
PNP/NC	IN15-30HTPO-180
NPN/NO	IN15-30HTNS-180
NPN/NC	IN15-30HTNO-180

Technical Data:	
Mounting:	Unshielded
Sensing range in mm:	15
Supply voltage:	10-35 VDC
Output function:	N.O. or N.C.
Load current:	120 mA
Switching Frequency:	200 Hz
Short circuit limit:	200 mA
Cable:	Silicone
Operating temperature:	-13 to 356 °F (-25 to 180 °C)
Target size:	30 x 30 x 1 mm ST37
Hysteresis:	3 to 15 %
LED:	No
Options:	Cable length, Cable type, Connector



Dimensions are in mm.

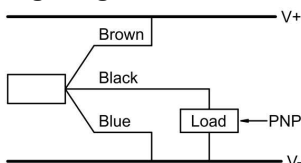
Part Numbers:	
PNP/NO	IN15-30HTPS/L-130
PNP/NC	IN15-30HTPO/L-130
NPN/NO	IN15-30HTNS/L-130
NPN/NC	IN15-30HTNO/L-130

Technical Data:		with LED
Mounting:	Unshielded	
Sensing range in mm:	15	
Supply voltage:	10-35 VDC	
Output function:	N.O. or N.C.	
Load current:	120 mA	
Switching Frequency:	200 Hz	
Short circuit limit:	200 mA	
Cable:	Silicone	
Operating temperature:	-13 to 266 °F (-25 to 130 °C)	
Target size:	30 x 30 x 1 mm ST37	
Hysteresis:	3 to 15 %	
LED:	Yes	
Options:	Cable length, Cable type, Connector	

### These sensors share the following specifications:

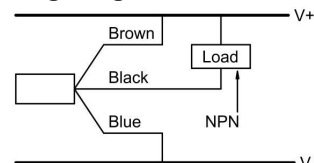
- \* The EMC (Electromagnetic Compatibility) resistance of the switches:
  - IEC 61000-4-2 Level 2
  - IEC 61000-4-3 Level 2
  - IEC 61000-4-4 Level 2
  - IEC 60255-5 1 kV
- \* Sensing range can vary +/-10 %.
- \* Voltage spikes (300 V for 1 ms, 10 Hz)
- \* All standard cables are 3 x 0.25 mm<sup>2</sup> and a length of 2 m +/-5 %.
- \* Output capacity is 100 nF.
- \* Storage temperature -13 °F to + 176 °F (-25 °C to 80 °C).
- \* Relative humidity is 100 %.
- \* Vibration resistant to 1 mm amplitude at 55 Hz.
- \* Shock resistant to 10 g for a period of 11 ms.
- \* Degree of protection (DIN 40 050) is IP67 (higher IP options may be available).
- \* Reverse polarity protection is incorporated on the supply voltage.
- \* Load resistor of 100 kOhm is incorporated.
- \* Leakage current is 4 mA at 24 V supply voltage.
- \* Residual ripple is 15 %.
- \* Voltage drop is approximately 2 V when sensor is on.
- \* Sensing face material is: LPC-Vectra.

#### Wiring Diagram PNP NO/NC



Special types and silicone free versions are available upon request

#### Wiring Diagram NPN NO/NC



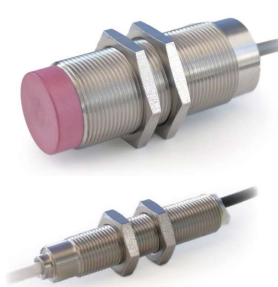
Design and technical details subject to change

**Locon Sensor Systems, Inc.**

# HIGH TEMPERATURE INDUCTIVE PROXIMITY SENSORS

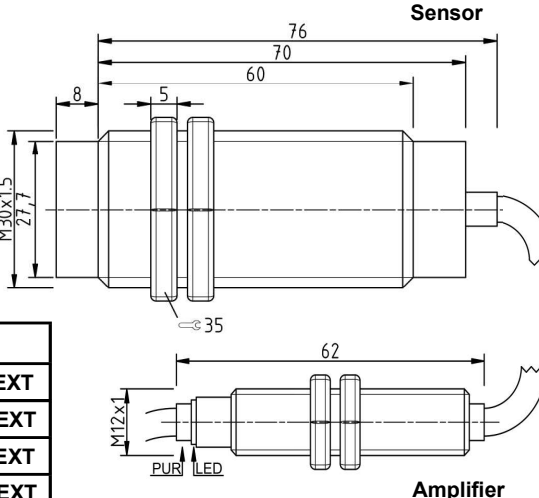
## Sensing Distance: 15mm - Housing Diameter: M30





Dimensions are in mm.

Part Numbers:	
PNP/NO	IN15-30HTPS-230EXT
PNP/NC	IN15-30HTPO-230EXT
NPN/NO	IN15-30HTNS-230EXT
NPN/NC	IN15-30HTNO-230EXT



**Sensor**

76, 70, 60, 8, 5, 35, M30x1.5, 27.7

**Amplifier**

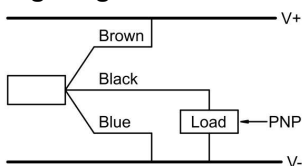
62, M12x1, PUR, LED

Technical Data:	External amplifier version
Mounting:	Unshielded
Sensing range in mm:	15
Supply voltage:	10-35 VDC
Output function:	N.O. or N.C.
Load current:	120 mA
Switching Frequency:	200 Hz
Short circuit limit:	200 mA
Cable:	Sensor: PTFE, Amplifier: PUR
Sensor operating temp.:	-13 to 446 °F (-25 to 230 °C)
Target size:	30 x 30 x 1 mm ST37
Hysteresis:	3 to 15 %
LED:	Yes (on amplifier)
Options:	Cable length, Cable type

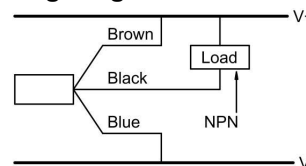
### This sensor has the following specifications:

- |   |   |
|---|---|
| <ul style="list-style-type: none"> <li>* The EMC (Electromagnetic Compatibility) resistance of the switches:<br/>IEC 61000-4-2 Level 2      IEC 61000-4-4 Level 2</li> <li>IEC 61000-4-3 Level 2      IEC 60255-5      1 kV</li> <li>* Sensing range can vary +/-10 %.</li> <li>* Voltage spikes (300 V for 1 ms, 10 Hz)</li> <li>* All standard cables are 3 x 0.25 mm<sup>2</sup> and a length of 2 m +/-5 %.</li> <li>* Output capacity is 100 nF.</li> <li>* Storage temperature -13 °F to + 176 °F (-25 °C to 80 °C).</li> <li>* Relative humidity is 100 %.</li> <li>* Vibration resistant to 1 mm amplitude at 55 Hz.</li> </ul> | <ul style="list-style-type: none"> <li>* Shock resistant to 10 g for a period of 11 ms.</li> <li>* Degree of protection (DIN 40 050) is IP67 (higher IP options may be available).</li> <li>* Reverse polarity protection is incorporated on the supply voltage.</li> <li>* Load resistor of 100 kOhm is incorporated.</li> <li>* Leakage current is 4 mA at 24 V supply voltage.</li> <li>* Residual ripple is 15 %.</li> <li>* Voltage drop is approximately 2 V when sensor is on.</li> <li>* Sensing face material is: LPC-Vectra.</li> <li>* Temperature specification for external amplifier:<br/>+14 to +158°F (-10 °C to 70 °C).</li> </ul> |
|---|---|

#### Wiring Diagram PNP NO/NC



#### Wiring Diagram NPN NO/NC



Special types and silicone free versions are available upon request


Design and technical details subject to change

**Locon Sensor Systems, Inc.**

# HIGH TEMPERATURE INDUCTIVE PROXIMITY SENSORS

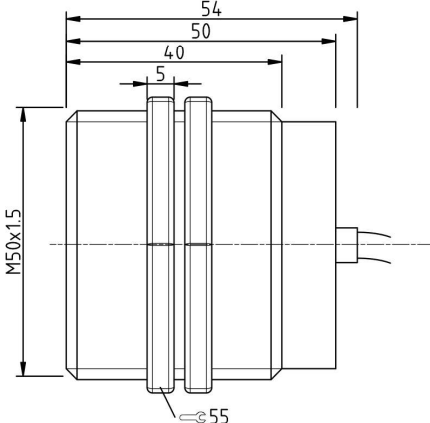
Sensing Distance: **20 mm** - Housing Diameter: **M50**






Dimensions are in mm.

Part Numbers:	
PNP/NO	IN20-50HTPS-180
PNP/NC	IN20-50HTPO-180
NPN/NO	IN20-50HTNS-180
NPN/NC	IN20-50HTNO-180

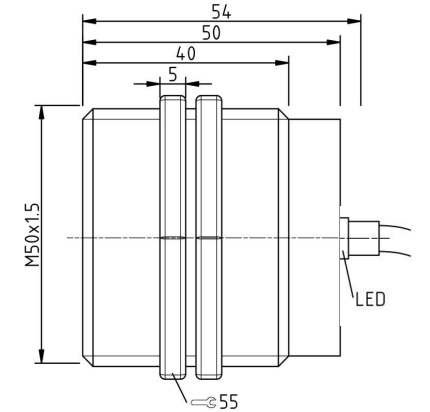


Technical Data:	
Mounting:	Shielded
Sensing range in mm:	20
Supply voltage:	10-35 VDC
Output function:	N.O. or N.C.
Load current:	120 mA
Switching Frequency:	200 Hz
Short circuit limit:	200 mA
Cable:	Silicone
Operating temperature:	-13 to 356 °F (-25 to 180 °C)
Target size:	50 x 50 x 1 mm ST37
Hysteresis:	3 to 20 %
LED:	No
Options:	Cable length, Cable type, Connector



Dimensions are in mm.

Part Numbers:	
PNP/NO	IN20-50HTPS/L-130
PNP/NC	IN20-50HTPO/L-130
NPN/NO	IN20-50HTNS/L-130
NPN/NC	IN20-30HTNO/L-130

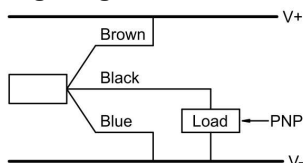


Technical Data:		with LED
Mounting:	Shielded	
Sensing range in mm:	20	
Supply voltage:	10-35 VDC	
Output function:	N.O. or N.C.	
Load current:	120 mA	
Switching Frequency:	200 Hz	
Short circuit limit:	200 mA	
Cable:	Silicone	
Operating temperature:	-13 to 266 °F (-25 to 130 °C)	
Target size:	50 x 50 x 1 mm ST37	
Hysteresis:	3 to 20 %	
LED:	Yes	
Options:	Cable length, Cable type, Connector	

### These sensors share the following specifications:

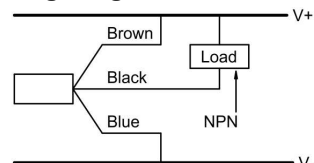
- |  |   |
|--|---|
| <ul style="list-style-type: none"> <li>* The EMC (Electromagnetic Compatibility) resistance of the switches:<br/>IEC 61000-4-2 Level 2      IEC 61000-4-4 Level 2<br/>IEC 61000-4-3 Level 2      IEC 60255-5      1 kV</li> <li>* Sensing range can vary +/-10 %.</li> <li>* Voltage spikes (300 V for 1 ms, 10 Hz)</li> <li>* All standard cables are 3 x 0.25 mm<sup>2</sup> and a length of 2 m +/- 5 %.</li> <li>* Output capacity is 100 nF.</li> <li>* Storage temperature -13 °F to + 176 °F (-25 °C to 80 °C).</li> <li>* Relative humidity is 100 %.</li> </ul> | <ul style="list-style-type: none"> <li>* Vibration resistant to 1 mm amplitude at 55 Hz.</li> <li>* Shock resistant to 5 g for a period of 11 ms.</li> <li>* Degree of protection (DIN 40 050) is IP67 (higher IP options may be available).</li> <li>* Reverse polarity protection is incorporated on the supply voltage.</li> <li>* Load resistor of 100 kOhm is incorporated.</li> <li>* Leakage current is 4 mA at 24 V supply voltage.</li> <li>* Residual ripple is 15 %.</li> <li>* Voltage drop is approximately 2 V when sensor is on.</li> <li>* Sensing face material is: LPC-Vectra.</li> </ul> |
|--|---|

#### Wiring Diagram PNP NO/NC



Special types and silicone free versions are available upon request

#### Wiring Diagram NPN NO/NC




Design and technical details subject to change

**Locon Sensor Systems, Inc.**

# HIGH TEMPERATURE INDUCTIVE PROXIMITY SENSORS

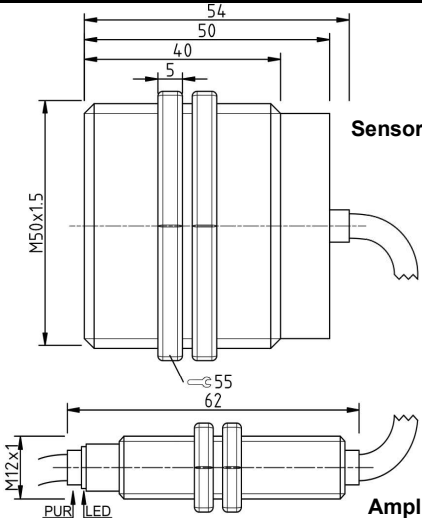
## Sensing Distance: 20 mm - Housing Diameter: M50






Dimensions are in mm.

Part Numbers:	
PNP/NO	IN20-50HTPS-230EXT
PNP/NC	IN20-50HTPO-230EXT
NPN/NO	IN20-50HTNS-230EXT
NPN/NC	IN20-50HTNO-230EXT

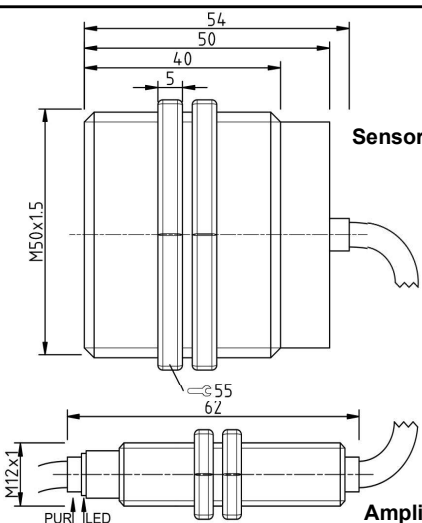


Technical Data:	External amplifier version
Mounting:	Shielded
Sensing range in mm:	20
Supply voltage:	10-35 VDC
Output function:	N.O. or N.C.
Load current:	120 mA
Switching Frequency:	200 Hz
Short circuit limit:	200 mA
Cable:	Sensor: PTFE, Amplifier: PUR
Sensor operating temp.:	-13 to 446 °F (-25 to 230 °C)
Target size:	50 x 50 x 1 mm ST37
Hysteresis:	3 to 20 %
LED:	Yes (on amplifier)
Options:	Cable length, Cable type



Dimensions are in mm.

Part Numbers:	
PNP/NO	IN20-50HTPS-250EXT
PNP/NC	IN20-50HTPO-250EXT
NPN/NO	IN20-50HTNS-250EXT
NPN/NC	IN20-50HTNO-250EXT

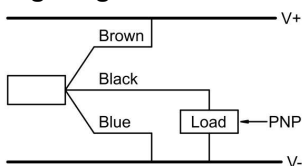


Technical Data:	External amplifier version
Mounting:	Shielded
Sensing range in mm:	20
Supply voltage:	10-35 VDC
Output function:	N.O. or N.C.
Load current:	120 mA
Switching Frequency:	200 Hz
Short circuit limit:	200 mA
Cable:	Sensor: PTFE, Amplifier: PUR
Sensor operating temp.:	-13 to 482 °F (-25 to 250 °C)
Target size:	50 x 50 x 1 mm ST37
Hysteresis:	3 to 20 %
LED:	Yes (on amplifier)
Options:	Cable length, Cable type

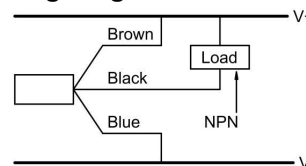
### These sensors share the following specifications:

- \* The EMC (Electromagnetic Compatibility) resistance of the switches:
  - IEC 61000-4-2 Level 2
  - IEC 61000-4-3 Level 2
  - IEC 61000-4-4 Level 2
  - IEC 60255-5 1 kV
- \* Sensing range can vary +/- 10 %.
- \* Voltage spikes (300 V for 1 ms, 10 Hz)
- \* All standard cables are 3 x 0.25 mm<sup>2</sup> and a length of 2 m +/- 5 %.
- \* Output capacity is 100 nF.
- \* Storage temperature -13 °F to + 176 °F (-25 °C to 80 °C).
- \* Relative humidity is 100 %.
- \* Vibration resistant to 1 mm amplitude at 55 Hz.
- \* Shock resistant to 5 g for a period of 11 ms.
- \* Degree of protection (DIN 40 050) is IP67 (higher IP options may be available).
- \* Reverse polarity protection is incorporated on the supply voltage.
- \* Load resistor of 100 kOhm is incorporated.
- \* Leakage current is 4 mA at 24 V supply voltage.
- \* Residual ripple is 15 %.
- \* Voltage drop is approximately 2 V when sensor is on.
- \* Sensing face material is: LPC-Vectra.
- \* Temperature specification for external amplifier: +14 to +158°F (-10 °C to 70 °C).

#### Wiring Diagram PNP NO/NC



#### Wiring Diagram NPN NO/NC



Special types and silicone free versions are available upon request

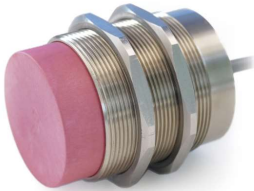
Design and technical details subject to change

**Locon Sensor Systems, Inc.**

# HIGH TEMPERATURE INDUCTIVE PROXIMITY SENSORS

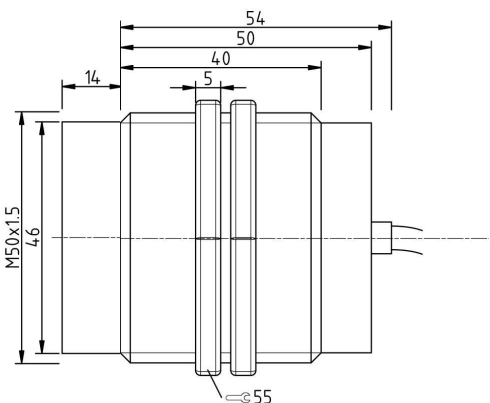
## Sensing Distance: 25 mm - Housing Diameter: M50



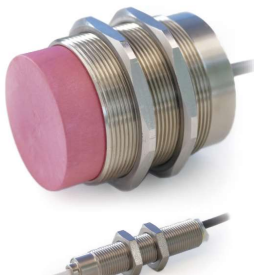


Dimensions are in mm.

Part Numbers:	
PNP/NO	IN25-50HTPS-180
PNP/NC	IN25-50HTPO-180
NPN/NO	IN25-50HTNS-180
NPN/NC	IN25-50HTNO-180

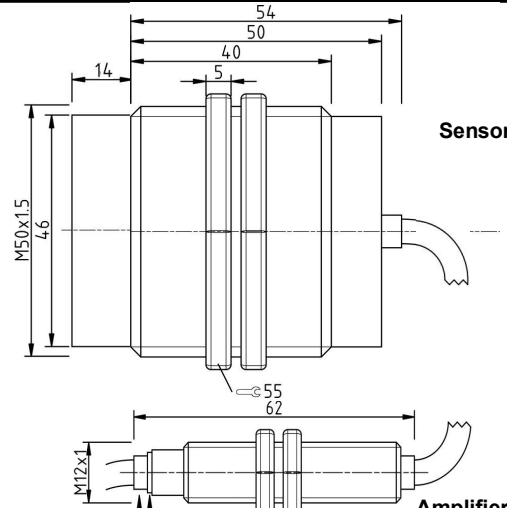


Technical Data:	
Mounting:	Unshielded
Sensing range in mm:	25
Supply voltage:	10-35 VDC
Output function:	N.O. or N.C.
Load current:	120 mA
Switching Frequency:	50 Hz
Short circuit limit:	200 mA
Cable version:	Silicone
Operating temperature:	-13 to 356 °F (-25 to 180 °C)
Target size:	50 x 50 x 1 mm ST37
Hysteresis:	3 to 20 %
LED:	No
Options:	Cable length, Cable type, Connector



Dimensions are in mm.

Part Numbers:	
PNP/NO	IN25-50HTPS-230EXT
PNP/NC	IN25-50HTPO-230EXT
NPN/NO	IN25-50HTNS-230EXT
NPN/NC	IN25-50HTNO-230EXT

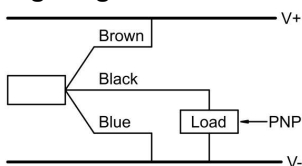


Technical Data:		External amplifier version
Mounting:	Unshielded	
Sensing range in mm:	25	
Supply voltage:	10-35 VDC	
Output function:	N.O. or N.C.	
Load current:	120 mA	
Switching Frequency:	50 Hz	
Short circuit limit:	200 mA	
Cable:	Sensor: PTFE, Amplifier: PUR	
Sensor operating temp.:	-13 to 446 °F (-25 to 230 °C)	
Target size:	50 x 50 x 1 mm ST37	
Hysteresis:	3 to 20 %	
LED:	Yes (on amplifier)	
Options:	Cable length, Cable type	

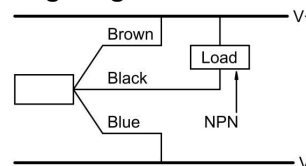
### This sensor has the following specifications:

- \* The EMC (Electromagnetic Compatibility) resistance of the switches:
  - IEC 61000-4-2 Level 2
  - IEC 61000-4-3 Level 2
  - IEC 61000-4-4 Level 2
  - IEC 60255-5 1 kV
- \* Sensing range can vary +/-10 %.
- \* Voltage spikes (300 V for 1 ms, 10 Hz)
- \* All standard cables are 3 x 0.25 mm<sup>2</sup> and a length of 2 m +/-5 %.
- \* Output capacity is 100 nF.
- \* Storage temperature -13 °F to + 176 °F (-25 °C to 80 °C).
- \* Relative humidity is 100 %.
- \* Vibration resistant to 1 mm amplitude at 55 Hz.
- \* Shock resistant to 5 g for a period of 11 ms.
- \* Degree of protection (DIN 40 050) is IP67 (higher IP options may be available).
- \* Reverse polarity protection is incorporated on the supply voltage.
- \* Load resistor of 100 kOhm is incorporated.
- \* Leakage current is 4 mA at 24 V supply voltage.
- \* Residual ripple is 15 %.
- \* Voltage drop is approximately 2 V when sensor is on.
- \* Sensing face material is: LPC-Vectra.
- \* Temperature specification for external amplifier: +14 to +158°F (-10 °C to 70 °C).

#### Wiring Diagram PNP NO/NC



#### Wiring Diagram NPN NO/NC



Special types and silicone free versions are available upon request

Design and technical details subject to change

**Locon Sensor Systems, Inc.**