

IP69k INDUCTIVE WASHDOWN SENSORS



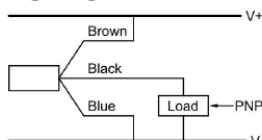
Sensing Distance: **3mm** – Housing Diameter: **M12**

<p>Dimensions are in mm.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2" style="text-align: center;">Part Numbers:</th> </tr> </thead> <tbody> <tr> <td style="width: 15%;">PNP / NO</td> <td>SIMKFHT-912-102</td> </tr> <tr> <td>PNP / NC</td> <td>Contact for Information</td> </tr> </tbody> </table>	Part Numbers:		PNP / NO	SIMKFHT-912-102	PNP / NC	Contact for Information	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2" style="text-align: left;">Technical Data:</th> </tr> </thead> <tbody> <tr> <td>Mounting:</td> <td>Flush, PTFE face</td> </tr> <tr> <td>Sensing Range in mm:</td> <td>3 mm</td> </tr> <tr> <td>Supply Voltage</td> <td>10-40 V DC</td> </tr> <tr> <td>Output function:</td> <td>N.O.</td> </tr> <tr> <td>Load current:</td> <td>< 4 mA 200 at 24V DC, 25°C</td> </tr> <tr> <td>Switching Frequency:</td> <td>1 kHz</td> </tr> <tr> <td>Short circuit limit:</td> <td>< 80mA (SCP)</td> </tr> <tr> <td>Cable:</td> <td>2m silicone cable</td> </tr> <tr> <td>Operating temperature:</td> <td>-25°C to +150°C, IP69k</td> </tr> <tr> <td>Target size</td> <td>8 x 8 x 1 mm ST37</td> </tr> <tr> <td>Hysteresis:</td> <td>3 to 20%</td> </tr> <tr> <td>LED:</td> <td>no</td> </tr> <tr> <td>Options:</td> <td>Cable length, Cable type</td> </tr> </tbody> </table>	Technical Data:		Mounting:	Flush, PTFE face	Sensing Range in mm:	3 mm	Supply Voltage	10-40 V DC	Output function:	N.O.	Load current:	< 4 mA 200 at 24V DC, 25°C	Switching Frequency:	1 kHz	Short circuit limit:	< 80mA (SCP)	Cable:	2m silicone cable	Operating temperature:	-25°C to +150°C, IP69k	Target size	8 x 8 x 1 mm ST37	Hysteresis:	3 to 20%	LED:	no	Options:	Cable length, Cable type
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This sensor has the following specifications:

- | | |
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IEC 61000-4-2 Level 2 IEC 61000-4-4 Level 2
IEC 61000-4-3 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 mm² 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 %. | <ul style="list-style-type: none"> * 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 IP69k. * 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: PTFE. |
|---|---|

Wiring Diagram PNP NO



Special types and silicone free versions are available upon request

Design and technical details subject to change

IP69k INDUCTIVE WASHDOWN SENSORS



Sensing Distance: **4mm** – Housing Diameter: **M12**

		Technical Data:	
		Mounting:	Non- Flush, PTFE face
		Sensing Range in mm:	4 mm
		Supply Voltage	10-40 V DC
		Output function:	N.O.
		Load current:	< 4 mA 200 at 24V DC, 25°C
		Switching Frequency:	500 Hz
		Short circuit limit:	< 80mA (SCP)
		Cable:	2m silicone cable
		Operating temperature:	-25°C to +150°C, IP69k
		Target size	8 x 8 x 1 mm ST37
		Hysteresis:	3 to 20%
		LED:	no
		Options:	Cable length, Cable type

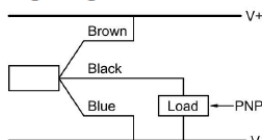
Dimensions are in mm.

Part Numbers:	
PNP / NO	SIMKFHT-912-104
PNP / NC	Contact for Information

This sensor has the following specifications:

<ul style="list-style-type: none"> * The EMC (Electromagnetic Compatibility) resistance of the switches: IEC 61000-4-2 Level 2 IEC 61000-4-4 Level 2 IEC 61000-4-3 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 mm² 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 %. 	<ul style="list-style-type: none"> * 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 IP69k. * 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: PTFE.
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Wiring Diagram PNP NO



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IP69k INDUCTIVE WASHDOWN SENSORS



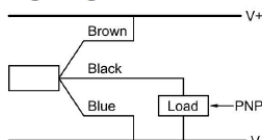
Sensing Distance: **5mm** – Housing Diameter: **M18**

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|---|---|

Wiring Diagram PNP NO



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Design and technical details subject to change

IP69k INDUCTIVE WASHDOWN SENSORS



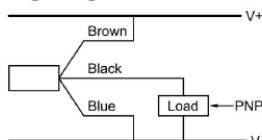
Sensing Distance: **7mm** – Housing Diameter: **M18**

<p>Dimensions are in mm.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th colspan="2" style="text-align: center;">Part Numbers:</th> </tr> <tr> <td style="width: 15%;">PNP / NO</td> <td>SIMKFHT-918-104</td> </tr> <tr> <td>PNP / NC</td> <td>Contact for Information</td> </tr> </table>	Part Numbers:		PNP / NO	SIMKFHT-918-104	PNP / NC	Contact for Information	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th colspan="2" style="text-align: left;">Technical Data:</th> </tr> <tr> <td>Mounting:</td> <td>Non-flush, PTFE face</td> </tr> <tr> <td>Sensing Range in mm:</td> <td>7 mm</td> </tr> <tr> <td>Supply Voltage</td> <td>10-40 V DC</td> </tr> <tr> <td>Output function:</td> <td>N.O.</td> </tr> <tr> <td>Load current:</td> <td>< 4 mA 200 at 24V DC, 25°C</td> </tr> <tr> <td>Switching Frequency:</td> <td>100 Hz</td> </tr> <tr> <td>Short circuit limit:</td> <td>< 80mA (SCP)</td> </tr> <tr> <td>Cable:</td> <td>2m silicone cable</td> </tr> <tr> <td>Operating temperature:</td> <td>-25°C to +150°C, IP69k</td> </tr> <tr> <td>Target size</td> <td>8 x 8 x 1 mm ST37</td> </tr> <tr> <td>Hysteresis:</td> <td>3 to 20%</td> </tr> <tr> <td>LED:</td> <td>no</td> </tr> <tr> <td>Options:</td> <td>Cable length, Cable type</td> </tr> </table>	Technical Data:		Mounting:	Non-flush, PTFE face	Sensing Range in mm:	7 mm	Supply Voltage	10-40 V DC	Output function:	N.O.	Load current:	< 4 mA 200 at 24V DC, 25°C	Switching Frequency:	100 Hz	Short circuit limit:	< 80mA (SCP)	Cable:	2m silicone cable	Operating temperature:	-25°C to +150°C, IP69k	Target size	8 x 8 x 1 mm ST37	Hysteresis:	3 to 20%	LED:	no	Options:	Cable length, Cable type
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Switching Frequency:	100 Hz																																		
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Hysteresis:	3 to 20%																																		
LED:	no																																		
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IEC 61000-4-2 Level 2 IEC 61000-4-4 Level 2
IEC 61000-4-3 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 mm² 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 %. | <ul style="list-style-type: none"> * 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 IP69k. * 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: PTFE. |
|---|---|

Wiring Diagram PNP NO



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Design and technical details subject to change

IP69k INDUCTIVE WASHDOWN SENSORS



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

Dimensions are in mm.

Part Numbers:	
PNP / NO	IN5-18HTPS-230ext-IP69k
NPN / NO	IN5-18HTNS-230ext-IP69k

Technical Data:	
Mounting:	Flush, Ceramic face
Sensing Range in mm:	5 mm
Supply Voltage	10-35 V DC
Output function:	N.O.
Load current:	200 mA at 24V DC, 25°C
Switching Frequency:	200 Hz
Short circuit limit:	240 mA (SCP)
Cable:	L1: 2m Silicon, L2: 2m PUR
Operating temperature:	-20°C to +230°C, IP69k
Target size	8 x 8 x 1 mm ST37
Hysteresis:	3 to 20%
LED:	no
Options:	Cable length, Cable type

Dimensions are in mm.

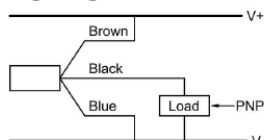
Part Numbers:	
PNP / NO	IN5-18HTPS-230ext-L91-IP69k-PEEK
NPN / NO	IN5-18HTNS-230ext-L91-IP69k-PEEK

Technical Data:	
Mounting:	Flush, PEEK face
Sensing Range in mm:	5 mm
Supply Voltage	10-36 V DC
Output function:	N.O.
Load current:	200 mA at 20V DC, 25°C
Switching Frequency:	200 Hz
Short circuit limit:	240 mA (SCP)
Cable:	L1: 3m Silicon, L2: 2m PUR
Operating temperature:	-25°C to +230°C, IP69k
Target size	8 x 8 x 1 mm ST37
Hysteresis:	3 to 20%
LED:	no
Options:	Cable length, Cable type

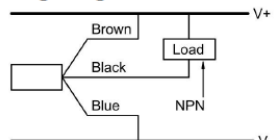
This sensor has the following specifications:

- * The EMC (Electromagnetic Compatibility) resistance of the switches:
IEC 61000-4-2 Level 2 IEC 61000-4-4 Level 2
IEC 61000-4-3 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 mm² and a length of 2 m, or as noted, all lengths are +/-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 IP69k.
- * Reverse polarity protection is incorporated on the supply voltage.
- * Load resistor of 100 kOhm is incorporated.
- * Leakage current is 200 mA at 24 V supply voltage.
- * Residual ripple is 15 %.
- * Voltage drop is approximately 2 V when sensor is on.
- * Sensing face material is: Ceramic / PEEK.
- * Temperature specification for external amplifier:
-13 °F to +140°F (-10 °C to 60 °C).

Wiring Diagram PNP NO



Wiring Diagram NPN NO

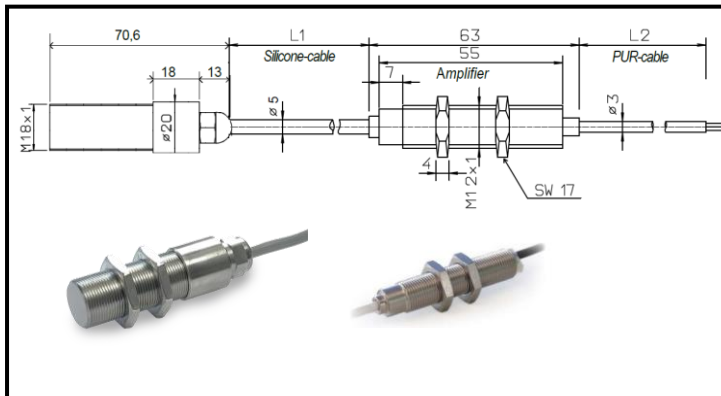


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Design and technical details subject to change

IP69k INDUCTIVE HIGH PRESSURE SENSORS

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



Dimensions are in mm.

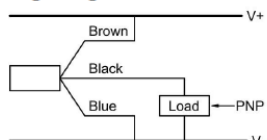
Part Numbers:	
PNP / NO	SIMKFHTD-918-142-L70
NPN / NO	SIMKFHTD-918-141-L70

Technical Data:	
Mounting:	Flush, Ceramic face
Sensing Range in mm:	5 mm
Supply Voltage	10-35 V DC
Output function:	N.O.
Load current:	200 mA at 24V DC, 25°C
Switching Frequency:	300 Hz
Short circuit limit:	240 mA (SCP)
Cable:	L1: 2m Silicon, L2: 2m PUR
Operating temperature:	-20°C to +230°C, <=50 Bar
Target size	8 x 8 x 1 mm ST37
Hysteresis:	3 to 15%
LED:	no
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 61000-4-4 Level 2 IEC 61000-4-3 Level 2 IEC 60255-5 1 kV	* Vibration resistant to 1 mm amplitude at 55 Hz.
* Sensing range can vary +/-10 %.	* Shock resistant to 5 g for a period of 11 ms.
* Voltage spikes (300 V for 1 ms, 10 Hz)	* Degree of protection (DIN 40 050) is IP69k.
* All standard cables are 3 x 0.25 mm ² and a length of 2 m +/- 5 %.	* Reverse polarity protection is incorporated on the supply voltage.
* Output capacity is 100 nF.	* Load resistor of 100 kOhm is incorporated.
* Storage temperature -13 °F to + 176 °F (-25 °C to 80 °C).	* Leakage current is 200 mA at 24 V supply voltage.
* Relative humidity is 100 %.	* Residual ripple is 15 %.
	* Voltage drop is approximately 2 V when sensor is on.
	* Sensing face material is: Ceramic.
	* Temperature specification for external amplifier: -13 °F to +140°F (-10 °C to 60 °C).

Wiring Diagram PNP NO



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