
 <b>DS1365en</b>	<b>Data Sheet</b>	
<b>HPS2-Series (H_lges)</b>	<b>Surface Liquid Detection Switch with extended spot sensor</b> <b>with relay switching output</b>	

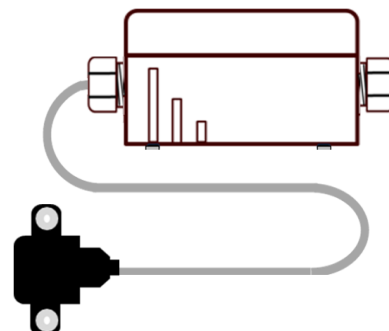
The HPS2-Series (H\_lges) is designed to detect conductive liquid on flat surfaces

The leakage detection is with a extended spot sensor

The surface liquid (Leakage) detection switch has two Status LEDs

The surface liquid (Leakage) detection switch operates with low power supply

The relay switching outputs are potential free (SPDT)



<b>Use</b>	<p>Compatible to all common HVAC DDC and Analog Controls systems, with/without Building Automation System</p> <p>Used in all common HVAC applications</p> <p>Used in Commercial and Industrial Buildings</p>
<b>Features</b>	<p>Low voltage, relay switching output</p> <p>The leakage detection is with a extended spot sensor</p> <p>LEDs for Status Detection</p> <p>Status LEDs can be enabled / disabled</p> <p>Detection of conductive water or similar liquids</p> <p>Calibration potentiometer for the measuring sensitivity</p> <p>Professional, practical design – withstands harsh environmental conditions</p> <p>Easy to use, install and maintain</p>

<b>Product Range</b>	Order Code	Power Supply	Measured	Relay Switching Output	Measuring Connection	Sensor Type	LEDs	Protection
	HPS2G.HA	AC/DC 24 V (±10 %)	Conductive water or similar liquids	SPDT Output Switching Load 3 A	2 m extension cable	Electrolytic conductance	Green = no liquid Red = liquid detected	IP54
	HPS2G.IA				5 m extension cable			

<b>Sensor Specification</b>	Sensor Specification	Measured	Conductive water or similar liquids
		Sensing Type	Electrolytical conductance measurement
		Sensor Characteristics	Passive
		Control Mode	Relay SPDT
		Switching Point	Typically 15k $\Omega$
		Switch Type	Potential free (SPDT)
<b>Technical Information</b>	Electrical Information	Power Supply	AC/DC 24 V ( $\pm 10\%$ )
		Frequency	50 / 60 Hz at AC 24 V
		Relay Rating	24 V / 3 A - peak 5 A
		Relay Type	Relay SPDT
		Terminal Clamp	Screw terminal, max. 1.3 mm <sup>2</sup>
	Mechanical Information	Cable Entry	M16 x 1.5
		Sensing Element Position	Spot measurement end of the extension cable
	User Interface	LED	Green = No liquid detected Red = Liquid detected
		Potentiometer	Detection Sensibility Potentiometer
	Extention Cable	Grey PVC	2 m or 5 m cable lengths - $\varnothing 4.6$ mm
	Color and Materials	Housing Cover	ABS, white
		Housing Bottom	ABS, white
		Cable Gland	M16 x 1.5 mm, white
		Gland Rubber Seal	Transparent
	Environmental Conditions	Operation Temperature	+5 °C to +60 °C
		Operation Humidity	< 85 % RH, no condensation
		Transport Temperature	-35 °C to +70 °C
		Transport Humidity	< 90 % RH
		Storage Temperature	-10 °C to +70 °C
		Storage Humidity	< 85 % RH, no condensation
	Norms and Directives	IP-Rating	IP54 to IEC60529
		Safety Class	III to EN 60 730
		Product Standard 1	Automatic electrical controls for household and similar use
		Product Standard 2	2009/EN 60 730-1
		CE Conformities to	2004/108/EG Electromagnetic Compatibility EMV
		CE Electromagnetic Compatibility Emitted Interference	2000/EN60730-1 Emitted Interference
		CE Electromagnetic Compatibility Interference Resistance	2000/EN60730-1 Interference Resistance
		RoHS Compatibility	RoHS 3, Directive 2015/863
		Operation Environmental Conditions	IEC 60 721-3-3
		Operation Mechanical Conditions	IEC 60 721-3-2 to class2M2
		Transport to Environmental Conditions	IEC 60 721-3-2
		Transport Mechanical Conditions	IEC 60 721-3-2 to class2M2
		Storage Environmental Conditions	IEC 60 721-3-1
		Storage Mechanical Conditions	IEC 60 721-3-1 to class2M2
<b>Miscellaneous</b>	Accessories	N/A	
	Shipping & Handling	Minimum Order	1 box with 2 pieces
		Package Material	Rigid Cardboard Packaging
	Order Notes	Order Code	HPS2G.HA

## Installation Notes



Observe the following general regulation for engineering and implementation:

All relevant national and heavy power regulation

Other country specific regulations

Country-specific regulations

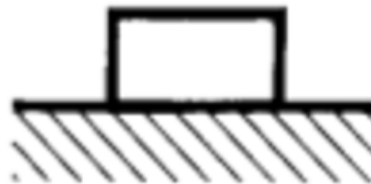
Local electrical supply authority regulation

Schematics, cable listings, dispositions, specification and arrangements from the customer or engineering office in charge

Third party specifications, e.g. general contractors or constructors

## Advices

### Mounting Advices



Surface Liquid (Leakage) Switch must be mounted on a flat surface

### Disposal Notes



The device is considered an electronic device for disposal in terms of the

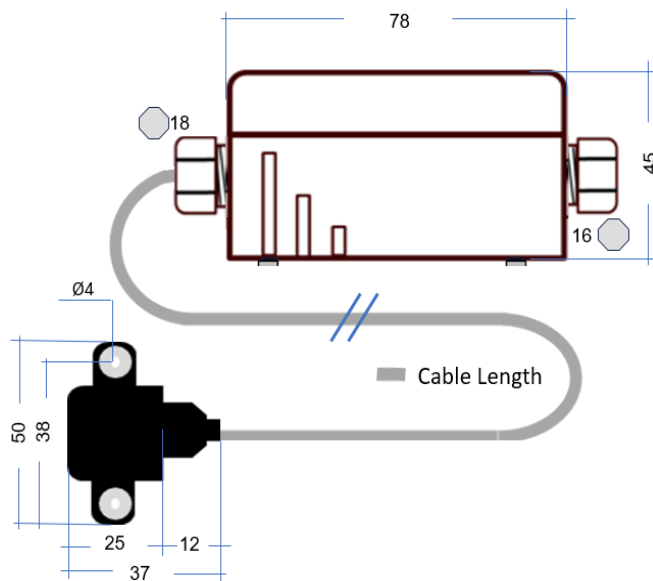
EUROPEAN DIRECTIVE 2012/19/EU.

The device may not be disposed as domestic garbage.

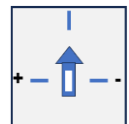
The device must be disposed through channels provided for this purpose.

It is mandatory to complying with local currently applying laws and regulations.

## Dimensional Drawing



Calibration potentiometer  
for measuring sensitivity



## Connection

Power Supply		Relay		
S1	S2	S3	S4	S5
GND	AC/DC 24 V	COM	NO	NC