00	DS1364en			Data	a Sheet				/			
HPS2-	Series (H_lgc)	Surface Liquid Detection Switch with active detection rod						GRUNER				
		with relay switching output										
The HPS2-Series (H_lgc) is designed to detect conductive liquid on flat surfaces												
The	The leakage detection is with active detection over the full lengths of the rod											
The surface liquid (Leakage) detection switch has two Status LEDs												
The surface liquid (Leakage) detection switch operates with lower power supply												
The relay switching outputs are potential free (SPDT)												
	Compatible to all common HVAC DDC and Analog Controls systems, with/without Building Automation System											
Use	Used in all common HVAC applications											
	Used in C	Used in Commercial and Industrial Buildings										
	Low volta	Low voltage, relay switching output										
	The leak	The leakage detection is with active detection over the full lengths of the rod										
	LEDs for Status Detection											
Features	Status LEDs can be enabled / disabled											
Fea	Detection of conductive water or similar liquids											
	Calibration potentiometer for the measuring sensitivity											
	Professional, practical design – withstands harsh environmental conditions											
	Easy to use, install and maintain											
Product Range	Order Code	Power	Magaurad	Relay	Measuring	Sensor	LEDo	Drotootion				
	Order Code	Supply	Measured	Switching Output	Connection	Туре	LEDs	Protection				
	HPS2G.FA	AC/DC 24 V (±10 %)	Conductive water or similar liquids	SPDT Output Switching Load 3 A	2 m active measuring rod	Electrolytic conductance Green = no liquid Red = liquid detected	id sted					
							Green = no liqui Red = liquid detec	IP54				
	HPS2G.GA			SPD	5 m active neasuring rod			_				

Me Us De Cc	Electrical Information Mechanical Information Jser Interface	Sensing Type Sensor Characteristics Control Mode Switching point Switch Type Power Supply Frequency Relay Rating Relay Type Terminal Clamp Cable Entry		Electrolytical conductance measurement Passive Relay SPDT Typically 15k Ω Potential free (SPDT) AC/DC 24 V (±10 %) 50 / 60 Hz at AC 24 V		
Me Us De Co	Mechanical Information	Control Mode Switching point Switch Type Power Supply Frequency Relay Rating Relay Type Terminal Clamp		Relay SPDT Typically 15k Ω Potential free (SPDT) AC/DC 24 V (±10 %) 50 / 60 Hz at AC 24 V		
Me Us De Co	Mechanical Information	Switching point Switch Type Power Supply Frequency Relay Rating Relay Type Terminal Clamp		Typically 15k Ω Potential free (SPDT) AC/DC 24 V (±10 %) 50 / 60 Hz at AC 24 V		
Me Us De Co	Mechanical Information	Switch Type Power Supply Frequency Relay Rating Relay Type Terminal Clamp		Potential free (SPDT) AC/DC 24 V (±10 %) 50 / 60 Hz at AC 24 V		
Me Us De Co	Mechanical Information	Power Supply Frequency Relay Rating Relay Type Terminal Clamp		AC/DC 24 V (±10 %) 50 / 60 Hz at AC 24 V		
Me Us De Cc	Mechanical Information	Frequency Relay Rating Relay Type Terminal Clamp		50 / 60 Hz at AC 24 V		
Us De Co		Relay Rating Relay Type Terminal Clamp				
Us De Co		Relay Type Terminal Clamp		24 V / 3 A - neak 5 Δ		
Us De Co		Terminal Clamp		24 V / 3 A - peak 5 A		
Us De Co		·	Relay Type			
Us De Co		Cable Entry				
De Cc	Jser Interface		Cable Entry			
De Cc	Jser Interface	Sensing Element Position	Active Measuring Rod			
Co		LED	Green = No liquid detected			
Co			Red = Liquid detected			
Co		Potentiometer	Detection Sensibility Potentiometer			
Co	Detection Cable	Twisted cable	2 m or 5 m cable lengths - Ø 6 mm			
nnicai intormation _{ua}	Color and Materials	Housing Cover		ABS, white		
nnicai intormation		Housing Bottom	ABS, white			
nnical information		Cable Gland	M16 x 1.5 mm, white Transparent +5 °C to +60 °C			
nnical intormation		Gland Rubber Seal LEDs Operation Temperature				
nnicai intorma	Environmental Conditions					
nnical Info		Operation Humidity	< 85 % RH, no condensation			
nnical		Transport Temperature	-35 °C to +70 °C			
=		Transport Humidity	< 90 % RH			
ว _ี		Storage Temperature	-10 °C to +70 °C			
9		Storage Humidity	< 85 % RH, no condensation			
No	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 Compatibilities			
		CE Electromagnetic Compatibility Emit	2000/EN60730-1 Emitted Interference			
		CE Electromagnetic Compatibility Interf	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			
<u>σ</u> Ac	Accessories	N/A				
Miscellaneous	Shipping & Handling	Minimum Order		1 box with 2 pieces		
liscell			Rigid Cardboard Packaging			
∑ Or		Package Material		Rigid Cardboard Packaging		

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

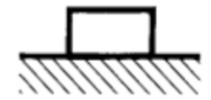
Local electrical supply authority regulation

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

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

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



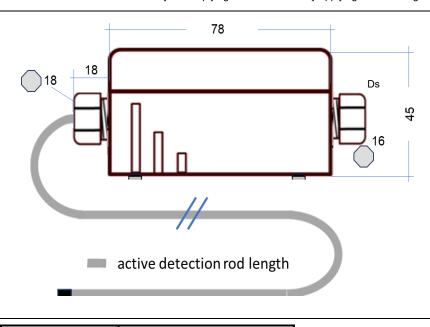
EUROPEAN DIRECTIVE 2012/19/EU.

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	МОЭ	ON	ON		

HPS2-Series (H_lgc) V26.1