

# Well Probe V2

## Mechanical float switch for dry run protection of LORENTZ solar pumps

The well probe provides a reliable method of run dry protection for LORENTZ pumps. The well probe detects that water is present within a well, tank or other water source. The well probe is typically attached to the riser pipe above the pump and connected to the controller. When the well probe becomes dry (water level is below the probe) the pump switches off to avoid dry running.

### Order Information

**Item no.:** 19-000005    **Product name:** Well probe sensor V2

### Features

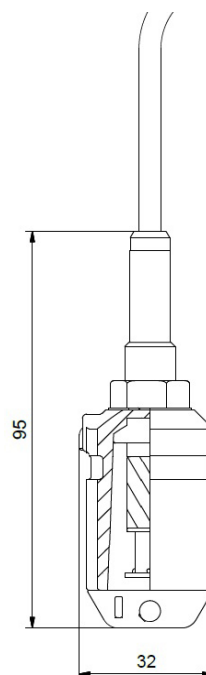
- Reliable dry run protection
- Simple to install using 3 cable ties
- Improved tolerance to dirt
- Splicing kit and cable ties for fixing are included

### Technical Data

- Max. operating temperature 55°C
- Enclosure class: IP68
- Submersion depth: max 50 m (164 ft)
- Cable length: 1.5 m
- Wire size: 2 x 0.50 mm<sup>2</sup> or AWG 20, waterproofed
- Must be mounted in a vertical position
- Meets the requirements for CE

### Dimensions / Weight

- Packaging dimensions: 255 x 170 x 40 mm  
10.0 x 6.7 x 1.6 in
- Total weight: 0.1 kg / 0.2 lbs



# Float Switch

## Mechanically Activated Device for Water Level Detection in Applications with LORENTZ Solar Pump Systems

The switch can be used to detect the water level within a tank. When the water level in the tank reaches the maximum, the LORENTZ Controller will stop the pump and indicates Tank Full LED.

### ORDER INFORMATION

- Item no.: 19-000030    product name: Float Switch

### FEATURES

- **N.O.** (normally open) and **N.C.** (normally closed) function
- Reliable water level detection
- Simple to install
- Trouble free operation
- Not sensitive to rotation
- Corrosion-free

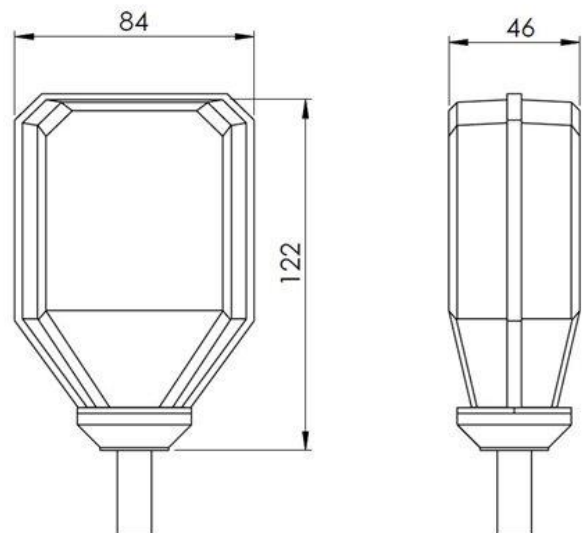


### TECHNICAL DATA

- Operating temperature: -10°C to 55°C
- Storage temperature: : -10°C to 55°C
- Enclosure class: IP68
- Cable length: 3m, waterproof
- Wire size: 3x 1.0mm<sup>2</sup> or AWG 18
- Meets the requirements for CE

### DIMENSION/WEIGHT

- Packaging dimensions: 230 x 160 x 55 mm  
9.1 x 6.3 x 2.2 in
- Total weight: 0.8 kg / 1.8 lbs



# Pressure Switch

## Device for Water Pressure Detection in Applications with LORENTZ Solar Pump Systems

The switch can be used to detect the water level within a tank. When the water level in the tank reaches the maximum, the pressure will increase and the LORENTZ Controller will stop the pump and indicates Tank Full LED.

### ORDER INFORMATION

- **Item no.:** 19-000310    **product name:** Pressure Switch 1-5bar

### FEATURES

- Reliable water pressure detection
- Simple to install
- Trouble free operation
- Corrosion-free

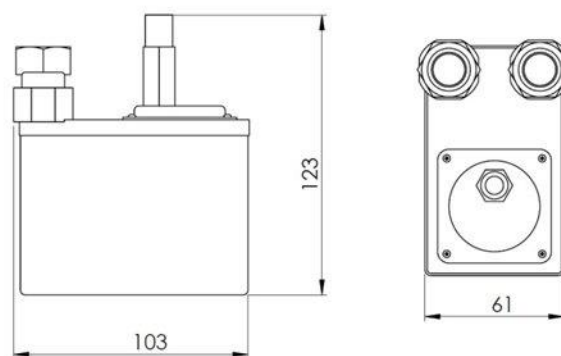
### TECHNICAL DATA

- Pressure range between 1 and 5 bar
- 2x cable gland Ø 5-9mm
- G 1/4" pipe thread
- Meets the requirements for CE



### DIMENSION/WEIGHT

- Packaging dimensions: 130 x 105 x 65 mm  
5.1 x 4.2 x 2.6 in
- Total weight: 0.5 kg / 1 lbs



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# Liquid Level Sensor

Sensor for measuring the level of liquid in a well or tank

## USE / PURPOSE

The range of liquid level sensors use pressure to measure the liquid level in a well or tank. The sensors can be used for collection of long term liquid level monitoring and also for pump control in applications where a well probe cannot be used. The liquid level sensor must be used with a compatible LORENTZ Controller (see requirements).

## FEATURES

- Gauge pressure sensor, pressure measurement relative to atmosphere
- For measuring levels of liquid in a well or tank
- Accurate, robust sensor
- For use with LORENTZ PumpScanner and pumpMANAGER

## REQUIREMENTS

- LORENTZ PS2 controller, LORENTZ PSk2 controller or PS Controller equipped with a licensed PS DataModule
- The cable contains a capillary tube to balance the sensor against atmospheric changes. The sensor must be ordered with the required cable length for the application as it cannot be spliced. Further cable lengths are available on demand, please contact LORENTZ.



## TECHNICAL DATA

- Sensor type: 2 wire gauge sensor
- Enclosure class: IP68
- Sensor housing: stainless steel
- Connects to LORENTZ PS DataModule
- Oil resistant cable with capillary tube
- Overpressure: 2x full scale
- Output signal :4-20mA output
- Voltage : 12-28VDC
- Application temp.: -10 to 80°C  
14 to 176°F
- Accuracy class :0.5% FS
- Meets the requirements for CE

## DIMENSION/WEIGHT

- Packing dimensions:  
19-005040: 350 x 350 x 100 mm / 13.8 x 13.8 x 3.9 in  
19-005050: 350 x 350 x 100 mm / 13.8 x 13.8 x 3.9 in  
19-005080: 350 x 350 x 100 mm / 13.8 x 13.8 x 3.9 in  
19-004395: 350 x 350 x 180 mm / 13.8 x 13.8 x 7.1 in
- Weight:  
19-005040: 4 kg / 8.8 lbs  
19-005050: 5 kg / 11.0 lbs  
19-005080: 7 kg / 15.4 lbs  
19-004395: 11 kg / 24.3 lbs

## ORDER INFORMATION

Item #	Product	Pressure range	Cable length
19-005040	Liquid Level Sensor, 0-10m/33ft, 30m/100ft Cable	0-100 kPa 0 to 10 m / 0 to 33 ft 0 to 1 bar / 0 to 14.5 psi	30 m / 100 ft *
19-005050	Liquid Level Sensor, 0-20m/66ft, 40m/130ft Cable	0-200 kPa 0 to 20 m / 0 to 66 ft 0 to 2 bar / 0 to 29 psi	40 m / 130 ft *
19-005080	Liquid Level Sensor, 0-50m/164ft, 60m/200ft Cable	0-500 kPa 0 to 50 m / 0 to 164 ft 0 to 5 bar / 0 to 72.5 psi	60 m / 200 ft *
19-004395	Liquid Level Sensor, 0-100m/328ft, 140m/460ft Cable	0-1000 kPa 0 to 100 m / 0 to 328 ft 0 to 10 bar / 0 to 145 psi	140 m / 460 ft *

\*Further cable length is available on demand. Please contact LORENTZ.

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# Liquid Pressure Sensor

Sensor for measuring the pressure of liquid in a pipe or vessel

## USE / PURPOSE

The sensors are commonly used to measure the pressure in the delivery pipeline or in a vessel. The pressure signal is used with a suitable LORENTZ pump controller to measure pressure and for pressure switching or constant pressure applications. The liquid pressure sensor must be used with a compatible LORENTZ Controller (see requirements).

## FEATURES

- Gauge pressure sensor, pressure measurement relative to atmosphere
- For measuring pressure in a pipe or vessel
- Accurate, robust sensor
- For use with LORENTZ PumpScanner and pumpMANAGER

## REQUIREMENTS

- LORENTZ PS2 controller, LORENTZ PSk2 controller or PS Controller equipped with a licensed PS DataModule
- Care must be taken to position the sensor without turbulent water to ensure accurate measurement
- G1/4" or G1/2" female threaded filling / air vent hole is required to mount the sensor



## TECHNICAL DATA

- Sensor type: 2 wire gauge sensor
- Enclosure class: IP65
- Sensor housing : stainless steel
- Connects to LORENTZ PS DataModule
- 5m/10m (16ft/33ft) cable length
- Overpressure: 1.5x full scale
- Output signal : 4-20 mA
- Voltage : 11-28 VDC
- Application temp.: -30 to 80°C  
-22 to 176°F
- Accuracy class : 0.5% full scale
- Thread type: G1/2" male (G1/4" with adapter)
- Meets the requirements for CS

## ORDER INFORMATION

Item #	Product	Pressure range
19-004450	Liquid Pressure Sensor, LPS-500	0-500 kPa 0 to 5 bar / 0 to 72.5 psi
19-004460	Liquid Pressure Sensor, LPS-1000	0-1000 kPa 0 to 10 bar / 0 to 145 psi
19-002760	Liquid Pressure Sensor, LPS-2000	0-2000 kPa 0 to 20 bar / 0 to 290 psi

## DIMENSION/WEIGHT

- Packing dimensions: 190 x 180 x 80 mm  
7.5 x 7.1 x 3.2 in
- Weight: 0.6 kg / 1.3 lbs

# Water Meter

Device to measure the water flow rate

## ORDER INFORMATION

- **Item no.:** 19-002160     **product name:** Water Meter, WP-DN40, 0.1cbm/p
- **Item no.:** 19-002165     **product name:** Water Meter, WP-DN50, 0.1cbm/p
- **Item no.:** 19-002170     **product name:** Water Meter, WP-DN65, 0.1cbm/p
- **Item no.:** 19-002180     **product name:** Water Meter, WP-DN80, 0.1cbm/p
- **Item no.:** 19-002190     **product name:** Water Meter, WP-DN100, 0.1cbm/p
- **Item no.:** 19-002200     **product name:** Water Meter, WP-DN125, 0.1cbm/p
- **Item no.:** 19-002210     **product name:** Water Meter, WP-DN150, 1cbm/p
- **Item no.:** 19-002202     **product name:** Water Meter, WP-DN200, 1cbm/p

## FEATURES

- Dry dial register ensures clear reading
- Low pressure loss, long working life
- Easy to install
- **Only for use in combination with DataModule:**
  - The water meter is equipped with a reed switch assembly which can be connected to the DataModule



## TECHNICAL DATA

- Water temperature:     max. 40°C
- Water pressure:     max. 16 bar
- IP64
- Meets the requirements for CE

Nominal Diameter	DN	40	50	65	80	100	125	150	200
Max. flow rate [m³/h]	Q <sub>max</sub>	20	30	50	80	120	200	300	500
Nominal flow rate [m³/h]	Q <sub>n</sub>	10	15	25	40	60	100	150	250
Transition flow rate [m³/h]	Q <sub>t</sub>	3.0	3.0	5.0	8.0	12	20	30	50
Minimum flow rate [m³/h]	Q <sub>min</sub>	0.7	0.7	0.75	1.2	1.8	3.0	4.5	7.5

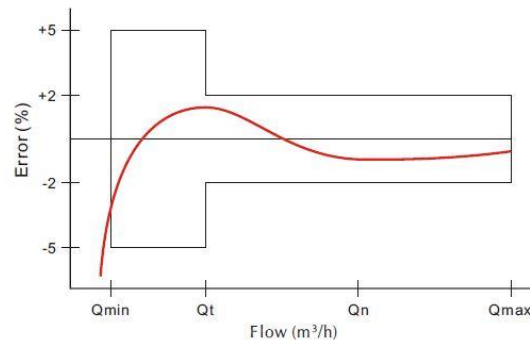
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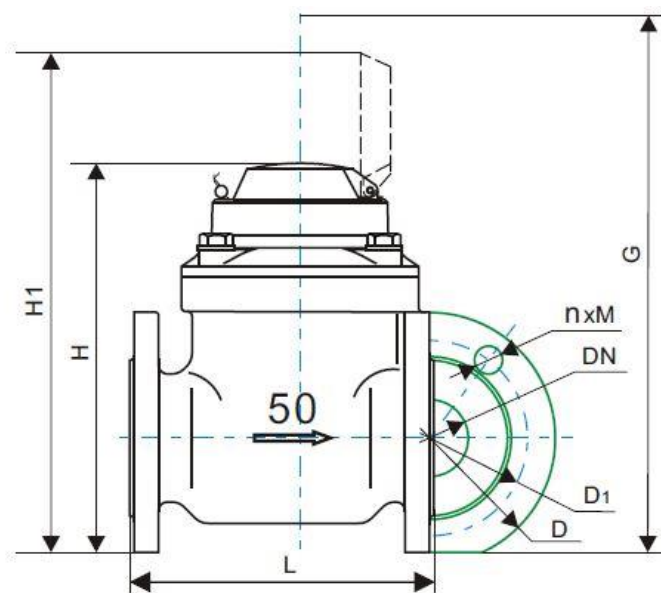
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## DIMENSION/WEIGHT

Nominal Diameter	DN	40	50	65	80	100	125	150	200
Length [mm]	L	260	200	200	225	250	250	300	350
Height [mm]	H	225	232	242	252	262	275	325	355
Working height [mm]	H1	303	303	313	323	333	346	396	426
Height [mm]	G	360	360	360	360	360	360	420	420
Outside diameter [mm]	D	150	165	185	200	220	250	285	340
Circle diameter [mm]	D1	110	125	145	160	180	210	240	295
Connecting bolt quantity		4xM16	4xM16	4xM16	8xM16	8xM16	8xM16	8xM20	12xM20
Weight [kg]		12	12	13	16	18	20	42	74



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# SunSwitch

## Automatic Solar Level Switching Device

The SunSwitch can be used for any application where you need to switch depending on the solar intensity. It is an autonomous working unit that supplies itself with power from the PV-module on its rear side.

## ORDER INFORMATION

- Item no.: 19-000050    product name: SUN SWITCH Light-Sensor

## FEATURES

- Trouble free operation
- Pump will only run when minimum flow rates or pressure levels can be achieved which are required by certain applications
- Reduced wear on the pump and motor since the pump only starts when it will continue to run

## TECHNICAL DATA

- Contact rating:
  - Max. voltage 250 VAC / 220 VDC
  - Max. current 2A
  - Max. power 60 W / 62.5 VA
- Enclosure class: IP54
- Cable length: 4 m
- Wire size: 3x 1.0mm<sup>2</sup> or AWG 18, waterproofed
- Mounted close to the solar array
- Manual with further information is available in PartnerNet
- Meets the requirements for CE

## DIMENSION/WEIGHT

- Packaging dimensions: 230 x 115 x 90 mm  
9.1 x 4.5 x 3.5 in
- Total weight: 1.2 kg / 0.6 lbs



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# PV Disconnect 440-40-1

## Connection box with DC disconnect

### Description

An outdoor rated, combining connection box with DC disconnect switch that allows 1 strings of PV modules to be connected safely to a solar pump system.

The PV disconnect is also designed to accept an optional lightning protection device.

### Features

- DC rated disconnect to provide safe isolation of the system
- Robust weather proof housing designed to make installation simple
- Lockable to secure the system during maintenance (power locked off)
- For professional installation of pumping systems
- Internal touch protection with screws
- Designed to be used with LORENTZ PS2-150 to PS2 4000 systems



photo may differ from actual product

### Ordering and shipping information

- Item no: 19-000125
- Product name: PV Disconnect 440-40-1
- Packed volume 0.01 m<sup>3</sup> (0.35 ft<sup>3</sup>)
- Packed weight 1.9 kg (4.2 lbs)

### Approvals and standards

- Switch IEC 60947-3



### Technical data / Specifications

Maximum voltage	440 V DC	
Maximum current per string	40 A	
Maximum total current	40 A	
Number of strings.	1	
Input cables	4 - 10 mm <sup>2</sup>	AWG 12 - 8
Output cables	4 - 10 mm <sup>2</sup>	AWG 12 - 8
PG glands (input)	2 x M16	
PG glands (output)	2 x M16	
Lightening protection mounting hole	PG16 cap	
Environmental protection	IP68	NEMA6
Housing material	Polycarbonate	

## Optional lightning surge protector

Provides protection for the pump controller from incoming high voltages on the PV side. The surge protector connects through a pre-drilled and blanked mounting hole in the PV connect housing

- Proper grounding of the device is required to achieve protection
- Item no.: 19-002120      MNSPD-115      PS2-150 to PS2-200
- Item no.: 19-002130      MNSPD-300      PS2-600 to PS2-1800
- Item no.: 19-002140      MNSPD-600      PS2-4000



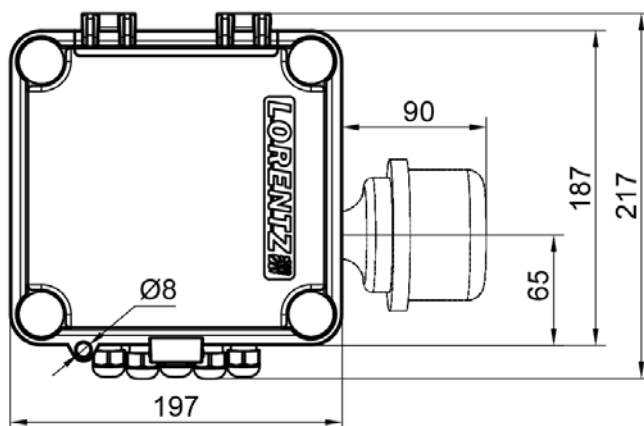
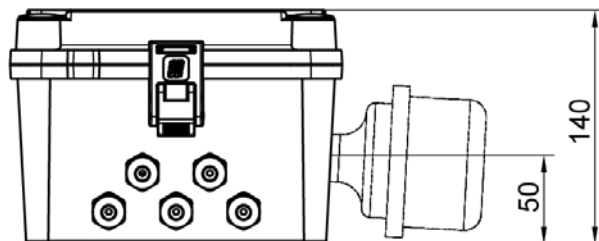
## Mounting options

- Wall mount using 4 holes with weather protection
- Designed for optional pole mounting. Mounting points are pre-marked inside the housing.



## Dimensions and weight

- See diagram for mm sizes
- Max height 220 mm (8.66")
- Max width (no surge protector) 197 mm (7.75")
- Max width (surge protector) 297 mm (Max 11.7")
- depth 140 mm (5.5")
- Weight 1403 g (3.1 lbs)



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# PV Disconnect 440-40-3

## Connection box with DC disconnect

### Description

An outdoor rated, combining connection box with DC disconnect switch that allows up to 3 strings of PV modules to be connected safely to a solar pump system.

The PV disconnect is also designed to accept an optional lightning protection device.

### Features

- DC rated disconnect to provide safe isolation of the system
- Combining function, allows 3 strings to be connected to the solar pump system
- Robust weather proof housing designed to make installation simple
- Lockable to secure the system during maintenance (power locked off)
- For professional installation of pumping systems
- Internal touch protection with screws
- Designed to be used with LORENTZ PS2-150 to PS2 4000 systems

### Ordering and shipping information

- Item no: 19-000126
- Product name: PV Disconnect 440-40-3
- Packed volume: 0.01 m<sup>3</sup> (0.35 ft<sup>3</sup>)
- Packed weight: 2.1 kg (4.6 lbs)

### Approvals and standards

- Switch IEC 60947-3



photo may differ from actual product

### Technical data / Specifications

Maximum voltage	440 V DC	
Maximum current per string	15 A	
Maximum total current	40 A	
Number of strings.	3	
Input cables	2.5 - 4 mm <sup>2</sup>	AWG 14 - 12
Output cables	4 - 10 mm <sup>2</sup>	AWG 12 - 8
PG glands (input)	6 x M16	
PG glands (output)	2 x PG11	
Lightening protection mounting hole	PG16 cap	
Environmental protection	IP68	NEMA6
Housing material	Polycarbonate	

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## Optional lightning surge protector

Provides protection for the pump controller from incoming high voltages on the PV side. The surge protector connects through a pre-drilled and blanked mounting hole in the PV connect housing

- Proper grounding of the device is required to achieve protection
- Item no.: 19-002120      MNSPD-115      PS2-150 to PS2-200
- Item no.: 19-002130      MNSPD-300      PS2-600 to PS2-1800
- Item no.: 19-002140      MNSPD-600      PS2-4000



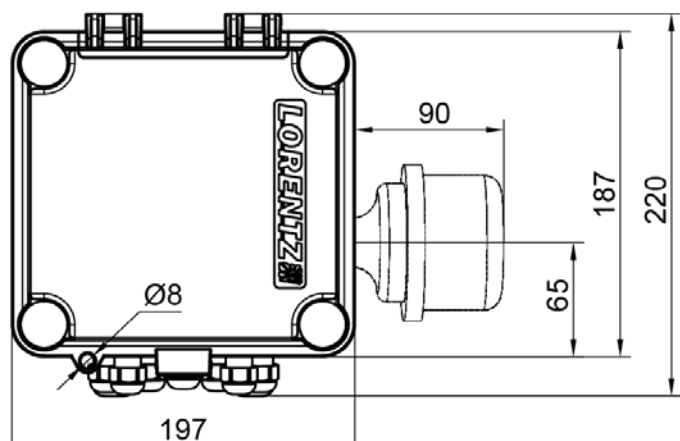
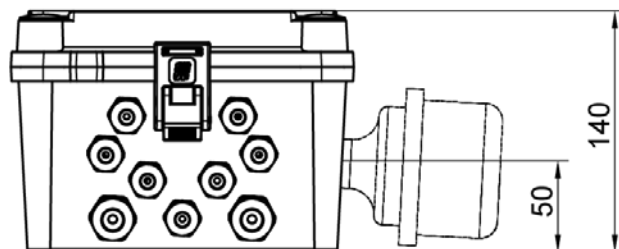
## Mounting options

- Wall mount using 4 holes with weather protection
- Designed for optional pole mounting. Mounting points are pre-marked inside the housing.



## Dimensions and weight

- See diagram for mm sizes
- Max height 220 mm (8.66")
- Max width (no surge protector) 197 mm (7.75")
- Max width (surge protector) 297 mm (Max 11.7")
- depth 140 mm (5.5")
- Weight 1.62 kg (3.56 lbs)



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# PV Disconnect 440-40-6

## Connection box with DC disconnect

### Description

An outdoor rated, combining connection box with DC disconnect switch that allows up to 6 strings of PV modules to be connected safely to a solar pump system.

The PV disconnect is also designed to accept an optional lightning protection device.

### Features

- DC rated disconnect to provide safe isolation of the system
- Combining function, allows 6 strings to be connected to the solar pump system
- Robust weather proof housing designed to make installation simple
- Lockable to secure the system during maintenance (power locked off)
- For professional installation of pumping systems
- Internal touch protection with screws
- Designed to be used with LORENTZ PS2-150 to PS2 4000 systems



photo may differ from actual product

### Ordering and shipping information

- Item no: 19-000124
- Product name: PV Disconnect 440-40-6
- Packed volume: 0.015 m<sup>3</sup> (0.54 ft<sup>3</sup>)
- Packed weight: 2.7 kg (6 lbs)

### Approvals and standards

- Switch IEC 60947-3



### Technical data / Specifications

Maximum voltage	440 V DC	
Maximum current per string	10 A	
Maximum total current	40 A	
Number of strings.	6	
Input cables	2.5 - 4 mm <sup>2</sup>	AWG 14 - 12
Output cables	4 - 10 mm <sup>2</sup>	AWG 12 - 8
PG glands (input)	12 x M16	
PG glands (output)	2 x PG11	
Lightening protection mounting hole	PG16 cap	
Environmental protection	IP68	NEMA6
Housing material	Polycarbonate	

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## Optional lightning surge protector

Provides protection for the pump controller from incoming high voltages on the PV side. The surge protector connects through a pre-drilled and blanked mounting hole in the PV connect housing

- Proper grounding of the device is required to achieve protection
- Item no.: 19-002120      MNSPD-115      PS2-150 to PS2-200
- Item no.: 19-002130      MNSPD-300      PS2-600 to PS2-1800
- Item no.: 19-002140      MNSPD-600      PS2-4000



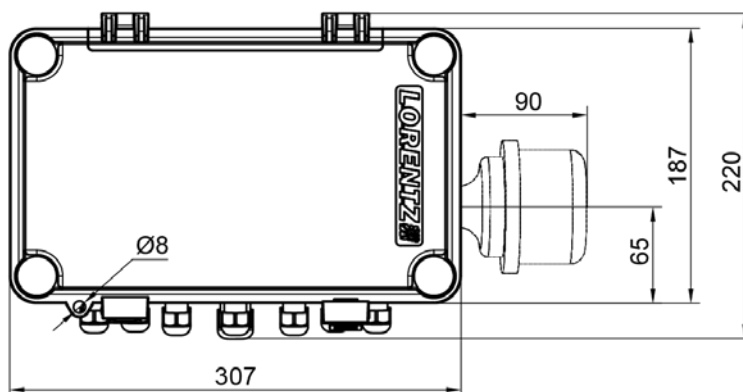
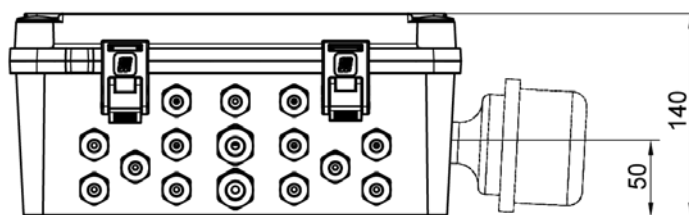
## Mounting options

- Wall mount using 4 holes with weather protection
- Designed for optional pole mounting. Mounting points are pre-marked inside the housing.



## Dimensions and weight

- See diagram for mm sizes
- Max height 220 mm (8.66")
- Max width (no surge protector) 307 mm (12.1")
- Max width (surge protector) 397 mm (Max 15.6")
- depth 140 mm (5.5")
- Weight 2.13 kg (4.7 lbs)



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# PP4000 AC PowerPack

AC/DC Converter to Supply PS2-4000 Pump Systems with Backup Power from a Generator or Mains Supply

## ORDER INFORMATION

- Item no.: 19-000180      **Product name:** Power Pack 4000 380 V AC
- Item no.: 19-000181      **Product name:** Power Pack 4000 460 V AC

## TECHNICAL DATA

Power Pack 4000 380 V AC	Power Pack 4000 460 V AC
3-Phase AC input 380 V ( $\pm 20\%$ ) 45 to 65Hz	3-Phase AC input 460 V ( $\pm 15\%$ ) 45 to 65Hz
DC output: 180-286 V DC 5.7 kW	DC output: 230-330 V DC 6.6 kW
DC output rated current: 20 A at 230 V DC	DC output rated current: 20 A at 330 V DC

- Must be protected from direct mid-day sun
- IP20
- Ambient temperature:  $-5$  to  $45^{\circ}\text{C}$
- Efficiency up to 94%
- Passive cooling, no fan
- All wires must be #14 AWG ( $2.5\text{ mm}^2$ ) or larger
- Manual with further information is available on PartnerNET
- Meets the requirements for CE

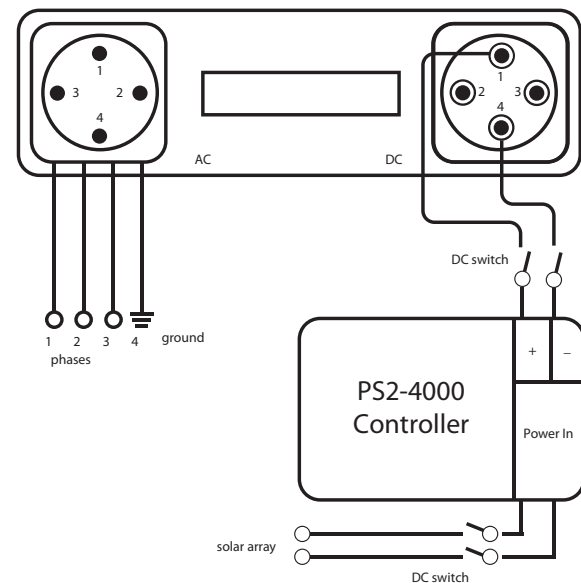
## DIMENSION/WEIGHT

- Packaging dimensions: 332 x 210 x 202 mm  
15.7 x 8.7 x 8.3 in
- Total weight: 14.5 kg / 30 lbs



photo may differ from actual product

Figure 1: Wiring



# Flow Sleeve for C-SJ Pumps

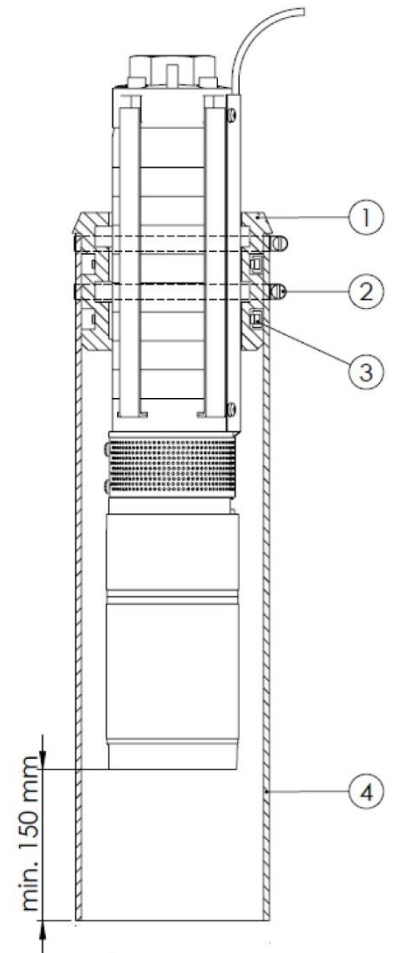
## Device to protect the pump from dirt and for motor cooling

A flow sleeve is a sleeve that goes around the pump body and motor. It has two functions:

1. **A flow sleeve reduces the amount of dirt in the pump.** Where water sources contain sand or have the potential for dirt falling into them (uncapped wells) a flow sleeve is recommended to protect the pump from dirt. Due to the large inner diameter of the flow sleeve the water rises very slowly and dirt deposits at the bottom of the well. Subsequently, water with less sediments enters the pump which increases its lifetime.
2. **A flow sleeve cools the motor.** In open water, tanks or pools there is no natural flow of water across the motor which can lead to heat build-up. The tube enforces water flow across the motor which has a cooling effect.

## FEATURES

- Due to the large inner diameter of the flow sleeve the water rises very slowly allowing dirt to settle at the bottom of the well
- The life expectancy of the pump is increased due to less sand entering the pump
- Simple installation
- The flow sleeve must be selected according to the pump system (see table)
- The required borehole diameter depends on the diameter of the flow sleeve



## ORDER INFORMATION (please compare (1), (2) etc. with the sample flow sleeve)

Item no.	Product name	Scope of delivery	Suitable for
19-000230	Flow Sleeve Kit for 4" C-SJ Pumps with 4" Motor	(1) 1 x adaptor (2) 2 x hose clamp (3) 2 x cable strip (4) 1 x PVC tube: D140x4, 0.5 m length	All 4" C-SJ pump ends with 4" motor
19-000250	Flow Sleeve Adaptor for 4" C-SJ Pumps with 4" Motor	(1) 1 x adaptor (2) 2 x hose clamp (3) 2 x cable strip  A PVC tube D140x4mm (4) is not part of the scope of delivery.	All 4" C-SJ pump ends with 4" motor
19-000255	Flow Sleeve Adaptor for C-SJ17-X/30-X with 4" motor	(1) 1 x adaptor (2) 2 x screw 4.2x16 (3) 1 x hose clamp  A PVC tube D160x4mm (4) is not part of the scope of delivery.	All C-SJ17-X/30-X with 4" motor
19-005170	Flow Sleeve Kit for C-SJ42-X Pumps	(1) 1 x adaptor (2) 2 x hose clamp d =190-210 mm (3) 2 x hose clamp d= 150-170 mm (4) 1 x PVC tube: D200x5, 1.4 m length	All C-SJ42-X pumps
19-005180	Flow Sleeve Adaptor for C-SJ42-X Pumps	(1) 1 x adaptor (2) 2 x hose clamp d=190-210 mm (3) 2 x hose clamp d=150-170 mm  A PVC tube D200x5mm (4) is not part of the scope of delivery.	All C-SJ42-X pumps
19-001400	Flow Sleeve Kit for C-SJ8-x/12-x for 6" motor with tube	(1) 1x adaptor (2) 2x hose clamp d=190-210 mm (3) 2x hose clamp d=150-170 mm (4) 1x PVC tube: D200x5, 1,4m length	All C-SJ8-x and C-SJ12-x pumps with 6" motor
19-001450	Flow Sleeve Adaptor for C-SJ8-x/12-x for 6" motor	(1) 1x adaptor (2) 2x hose clamp d=190-210 mm (3) 2x hose clamp d=150-170 mm  A PVC tube D200x5mm (4) is not part of the scope of delivery.	All C-SJ8-x and C-SJ12-x pumps with 6" motor
19-001410	Flow Sleeve Kit for C-SJ17-x/30-x for 6" motor with tube	(1) 1x adaptor (2) 2x hose clamp d=190-210 mm (3) 2x hose clamp d=150-170 mm (4) 1x PVC tube: D200x5, 1,4m length	All C-SJ17-x and C-SJ30-x pumps with 6" motor
19-001460	Flow Sleeve Adaptor for C-SJ17-x/30-x for 6" motor	1x adaptor 2x hose clamp d=190-210 mm 2x hose clamp d=150-170 mm  A PVC tube D200x5mm (4) is not part of the scope of delivery.	All C-SJ17-x and C-SJ30-x pumps with 6" motor

## DIMENSIONS/WEIGHT

### Flow Sleeve Kit for 4" C-SJ Pumps with 4" Motor (19-000230):

- Packaging dimensions: 590 x 150 x 130 mm  
23.2 x 6.0 x 5.1 in sample flow sleeve
- Total weight: 3.3 kg / 7.3 lbs

### Flow Sleeve Adaptor for 4" C-SJ Pumps with 4" Motor (19-000250, without tube):

- Packaging dimensions: 165 x 165 x 110 mm  
6.5 x 6.5 x 4.3 in
- Total weight: 1.2 kg / 2.6 lbs

### Flow Sleeve Adaptor for C-SJ17-X/30-X with 4" motor (19-000255, without tube):

- Packaging dimensions: 165 x 165 x 110 mm  
6.5 x 6.5 x 4.3 in
- Total weight: 1.2 kg / 2.6 lbs

### Flow Sleeve Kit for C-SJ42-X Pumps (19-005170):

- Packaging dimensions: 1500 x 205 x 215 mm  
59.0 x 8.1 x 8.5 in
- Total weight: 9.3 kg / 20.6 lbs

### Flow Sleeve Adaptor for C-SJ42-X Pumps (19-005180, without tube):

- Packaging dimensions: 230 x 230 x 130 mm  
9.1 x 9.1 x 5.1 in
- Total weight: 1.9 kg / 4.2 lbs

### Flow Sleeve Kit for C-SJ8-X/12-X Pumps (19-001400):

- Packaging dimensions: 1510 x 215 x 235 mm  
59.4 x 8.4 x 9.2 in
- Total weight: 11 kg / 24.3 lbs

### Flow Sleeve Adaptor for C-SJ8-X/12-X Pumps (19-001450, without tube):

- Packaging dimensions: 220 x 220 x 130 mm  
8.6 x 8.6 x 5.1 in
- Total weight: 3 kg / 6.61 lbs

### Flow Sleeve Kit for C-SJ17-X/30-X Pumps (19-001410):

- Packaging dimensions: 1510 x 215 x 235 mm  
59.4 x 8.4 x 9.2 in
- Total weight: 11 kg / 24.3 lbs

### Flow Sleeve Adaptor for C-SJ17-X/30-X Pumps (19-001460, without tube):

- Packaging dimensions: 220 x 220 x 130 mm  
8.6 x 8.6 x 5.1 in
- Total weight: 3 kg / 6.61 lbs

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Pictures may differ from actual products depending on local market requirements and regulations.

# PS2 Manual Speed Controller

**Device to provide manual motor speed control of PS2 systems**

The LORENTZ PS2 Manual Speed Controller allows adjustment of the maximum motor speed without using the PumpScanner App. To use the Manual Speed Controller, it is required to activate this function in the settings of PumpScanner during or before installation.



## ORDER INFORMATION

- Item no.: 19-000035    Product name: PS2 Manual Speed Controller

## FEATURES

- Allows manual control of PS2 motor speed
- Outdoor rated, installed in the housing of the controller

## TECHNICAL DATA

- Voltage: 15-24 V DC
- Enclosure class: IP65
- Ambient temperature: -38...50 °C (-36... 122 F)
- Wire size: 2 x 0,75 mm<sup>2</sup>/18 AWG
- Replaces Ø 20mm cable gland
- Meets the requirements for CE
- Please note that if "Manual Speed Controller" is configured then "Set speed limitation" function is not available in PumpScanner.

## DIMENSION/WEIGHT

- Packing dimension :            100 x 70 x 35 mm; 3.9 x 2.7 x 1.3 in
- Total weight:                    0.2 kg / 0.4 lbs



# PS 2 Controller Plug Kit

## Kit for an easy and electrical safe installation of PS2 Controller

The LORENTZ PS2 Controller Plug Kit can be installed on any PS2 system. The kit extends the internal wiring connections to plugs allowing systems to be pre-wired and delivered to site. Possible uses for the plug kit are where time on site needs to be minimized, where systems are often moved or where the skills available onsite do not allow for a standard installation.

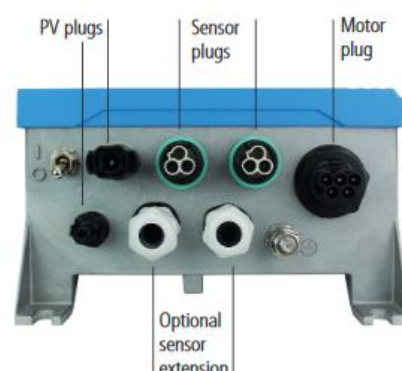
The sensor extension kit allows the installation of two additional sensors, the standard set contains only two plug sets for sensor connections.

### Order Information

- 19-005001 Plug- Kit PS2- Controller
- 19-005011 Sensor Plug Extension Kit

### Features

- Allows fast, easy and electrical safe installation of PS2 Controller
- Customer must not open the controller for installation
- Outdoor rated, all parts are designed for outdoor use



### Technical Data

PLUG	Wire size	max. current	max. voltage	Ambient temperature
Motor	max, 6mm <sup>2</sup> (10 AWG)	32 A	600V DC	-40°C ... +90°C
PV	max 8mm <sup>2</sup> (8 AWG)	40 A (27A at 2.5mm <sup>2</sup> /14AWG)	1500V DC	-40°C ...+90°C
Sensor	max. 1.5mm <sup>2</sup> (16 AWG)	3 A	50V DC	-40°C ...+90°C

### Packing Dimension/Weight

#### 19-005001 Plug- Kit PS2- Controller

- Packing dimension: 16 x 300 x 4cm (6.3x12x1.6inch)
- Total weight: 0.33kg (0,73lb)

#### 19-005011 Sensor Plug Extension Kit

- Packing dimension: 16 x 24 x 2cm (6.3x10x0.8inch)
- Total weight: 0.1kg (0,22lb)



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# Surge Protector2

Device to Protect LORENTZ Pump Accessories from Voltage Spikes

## ORDER INFORMATION

- Item no.: 19-005210    product name: Surge Protector2

## FEATURES/COMPATIBILITY

- Reliable surge protection device for any switched, pulse or analogue (4-20 mA) inputs sensors including:
  - Well Probe Sensor 19-000000
  - Water Sensor 19-000001
  - Float Switch 19-000030
  - Pressure Switch 19-000310
  - Liquid Level (all types, e.g. 19-005040)
  - Liquid Pressure Sensor (all types, e.g. 19-004460)
  - Water Meter (all types, e.g. 19-002160)
  - Sun Switch (19-000050)
- The device must be installed inside the PS2 or PSk2 controller.



## TECHNICAL DATA

- Max. voltage: 30 V DC
- Max current 8/20μs: 500 A
- Enclosure class: IP20
- Ambient temperature: max. 80°C (176°F)
- Wire size: 2 x 1.5mm<sup>2</sup> (AWG 16)
- Meets the requirements for CE

## DIMENSION/WEIGHT

- Packing dimensions:    56 x 26 x 120 mm  
                                     2.2 x 1.02 x 0.47 in
- Total weight                0.1 kg / 0.2 lbs

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