



# Anemometer PCE-WS P PULSES OUTPUT

## PCE-WS P range of PCE Instruments

Wind Speed sensor designed for different industries and sector

PCE-WS P PULSES OUTPUT has a pulses output proportional to the wind speed given by a reed switch. In this way, the power supply just needs to be enough to detect the contact closing and opening, reducing the power consumption.

**Industrial design for extreme environments**

**Reed switch pulses output**

**Stainless Steel bearings**

**Low power consumption**

**2 or 3 wire connection to a PLC**

**Measurement range up to 180 km/h**

**Made in Spain**

## APPLICATIONS

PCE-WS P have been designed to be used in industrial applications: cranes, solar panels, buildings, wind turbines, weather stations...

It is usually connected to tachometer displays ( see references PCE-DPD-Px series), PLCs or data loggers to display the wind speed and/or set alarms to predefined values or to obtain records during predefined periods of time.

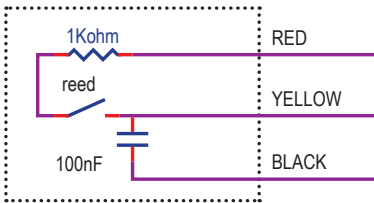
## OPERATION

### Outputs/Inputs

#### Up to 180 km/h of wind speed

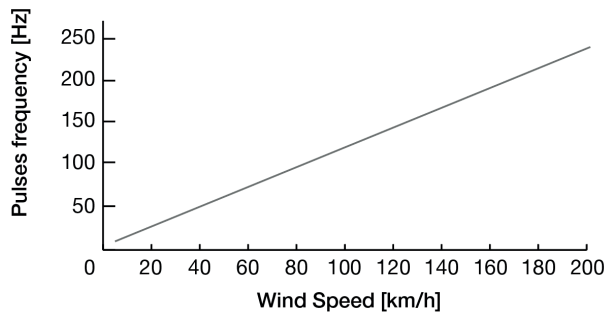
**Output:** Dry reed contact, with a series resistance which switches with a frequency proportional to the wind speed (see graphic). It includes an internal capacitor that can be used as a signal filter.

The wind sensor must be fixed on a vertical position.

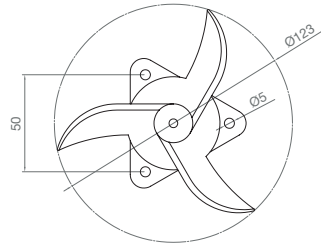


## WIND SPEED / OUTPUT RATIO

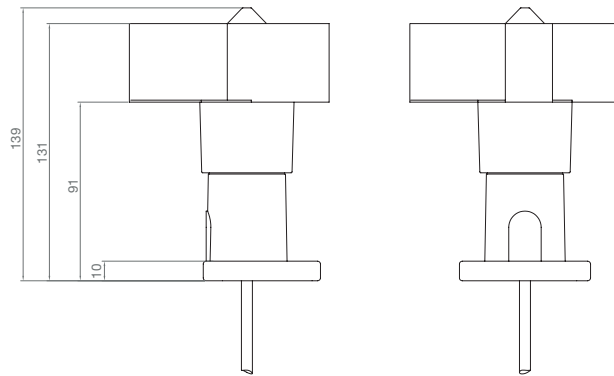
The wind speed is given by the function:  
 $Speed (km/h) = 0.8 * Hz + 3$



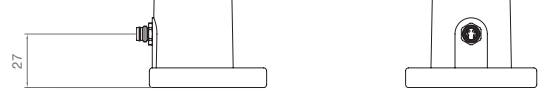
## DIMENSIONS



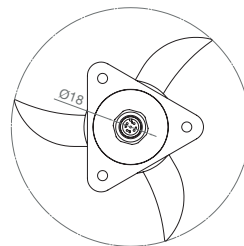
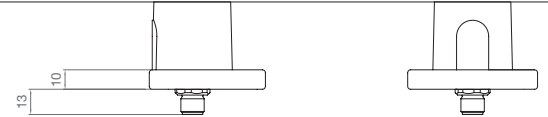
PCE-WS P CABLE



PCE-WS P M8 LATERAL



PCE-WS P M12 UNDERSIDE



## TECHNICAL SPECIFICATIONS

### Electrical features

Power supply	3...24 Vdc
Maximum current	24 mA
Output	Frequency (pulses)
Type of contact	reed

### Measurements

Range	3-180 km/h
Starting speed	8 km/h
Survival speed	200 km/h
Accuracy	1 km/h (3-15 km/h) 3% (15-180 km/h)
Speed-Hz ratio	Speed (km/h) = 0.8*Hz +3

### General features

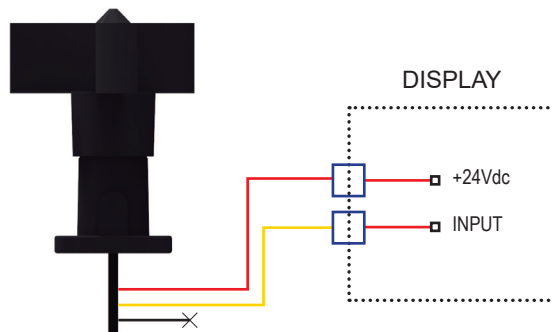
Material	PA + FG
Bearings	Stainless steel X65Cr13
Type of connection	See references (back cover)
Weight (with a 20m cable)	1420 g
Weight (without cable)	130 g
Dimensions	125x139 mm
Storage temperature	-35 °C +80 °C
Working temperature without ice	-20 °C +80 °C
EMC	EN 61000-6-2:2001 EN 55022:2001, Class B
Protection	IP65 (UNE 20324:1993)

## CONNECTION EXAMPLES

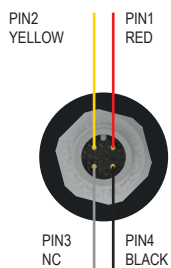
### M8



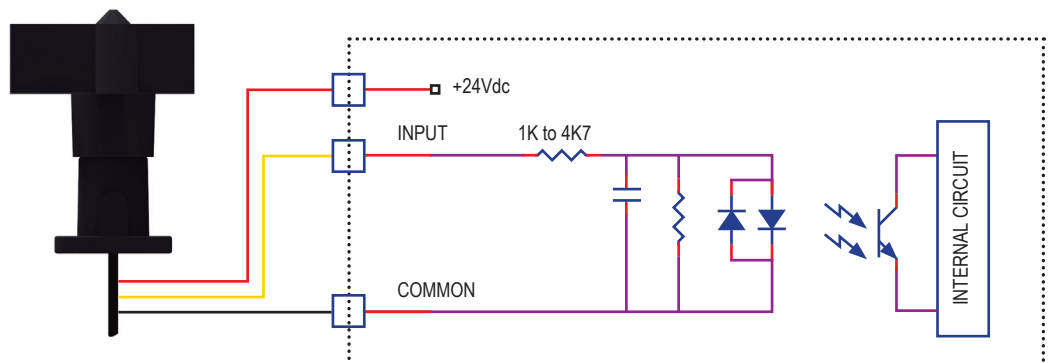
### 2-wire connection to a display



### M12



### 3-wire connection to a PLC



## REFERENCES AND ACCESSORIES

### References

PCE-WS P	Anemometer pulse output 20m cable
PCE-WS P/2,5*	Anemometer pulse output 2,5m cable
PCE-WS P/M12*	Anemometer pulse output M12 underside
PCE-WS P/M8L*	Anemometer pulse output M8 lateral

### Other devices, PCE-WS P Range

PCE-WS PH/M12*	Anemometer pulse output M12 underside, Heated version, includes female connector
PCE-WS NPN*	Anemometer NPN output 20m cable. With configurable scale.

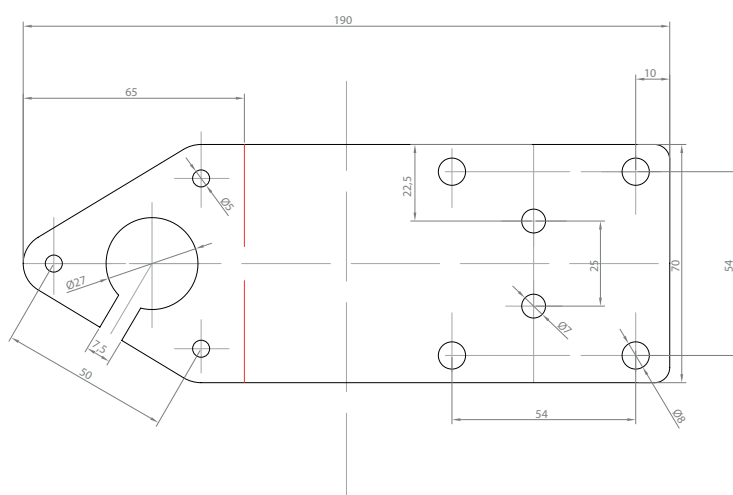
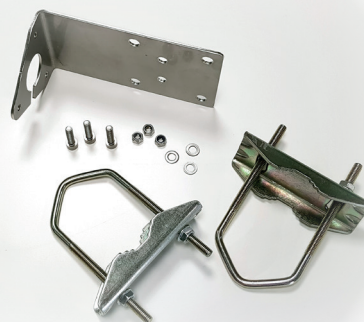
### Displays

PCE-DPD-P1	Panel indicator 96x48 mm pulse input. 6 digits Power 85 to 265 Vac (50/60 Hz)/ dc. IP65
PCE-DPD-P2	Panel indicator 96x48 mm pulse input. 6 digits Power 11 to 60 Vdc & 24/48 Vac. IP65
PCE-DPD-P1-NB*	Panel indicator 96x48 mm pulse input. 6 digits Power 85 to 265 Vac (50/60 Hz)/ dc. IP65 Hidden buttons version
PCE-DPD-P2-NB*	Panel indicator 96x48 mm pulse input. 6 digits Power 11 to 60 Vdc & 24/48 Vac. IP65 Hidden buttons version

\*Check availability and MOQ

### Accessories

PCE-WS/MOUNT	Optional mounting kit for PCE-WS anemometers & PCE-WV wind vanes
--------------	--



### Disposal

For the disposal of batteries in the EU, the 2006/66/EC directive of the European Parliament applies. Due to the contained pollutants, batteries must not be disposed of as household waste. They must be given to collection points designed for that purpose.

In order to comply with the EU directive 2012/19/EU devices must be properly disposed of in accordance with this regulation, we give them to a recycling company which disposes of the devices in line with law. For countries outside the EU, batteries and devices should be disposed of in accordance with your local waste regulations. If you have any questions, please contact PCE Instruments.



Contact information for each country and user manuals in various languages can be found on our website: [www.pce-instruments.com](http://www.pce-instruments.com)



All dimensions and sizes are approximate. Specifications and prices are subject to change without notice.