



# ANEMO4403 V3 PULSES OUTPUT

## **ANEMO V3 range of IED Electronics.**

Wind speed sensor designed for different industries and sectors.

ANEMO4403 V3 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 conditions**

---

**Reed switch pulses output**

---

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

---

**Stainless steel bearings**

---

**Low power consumption**

---

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

## APPLICATIONS

ANEM04403 V3 have been designed to be used in industrial applications: cranes, solar panels, buildings, wind turbines, weather stations...

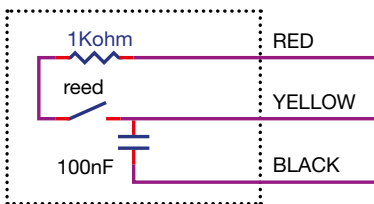
It is usually connected to speed sensors displays such as tachometers ( see references WM44-EVO, WM44-P V3, WM44-DRM V3), PLCs or data loggers to display the wind speed and/or set alarms to predefined values or to obtain records during predefined periods of time.

## OPERATION

### Outputs/Inputs

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

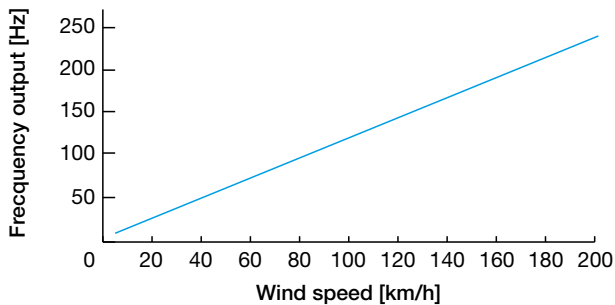
**Output:** Dry reed contact, with a series resistance which switches with a frequency proportional to the wind speed (see graphic). It includes an internal capacitor that can be used as a signal filter. The wind sensor must be fixed on a vertical position.



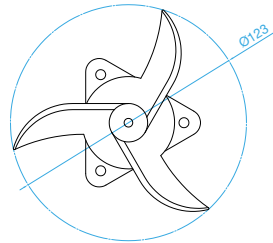
## WIND SPEED / OUTPUT RATIO

The wind speed is given by the function:

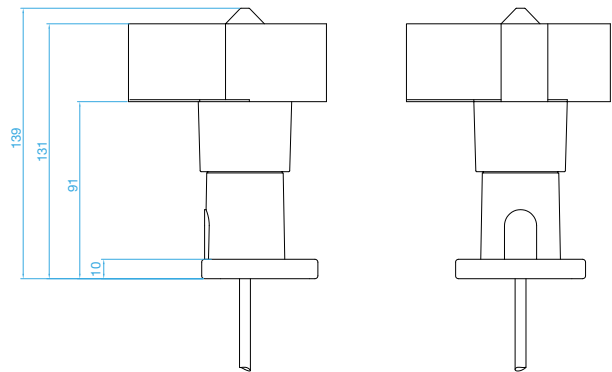
$$\text{Speed (km/h)} = 0.8 \cdot \text{Hz} + 3$$



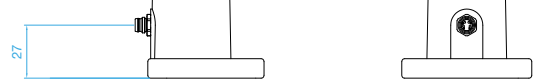
## DIMENSIONS



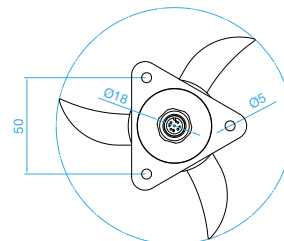
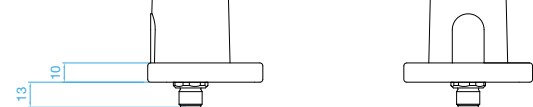
### ANEM04403 V3 CABLE



### ANEM04403 V3 M8 LATERAL



### ANEM04403 V3 M12 UNDERSIDE



## TECHNICAL SPECIFICATIONS

### Electrical features

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

### Measurements

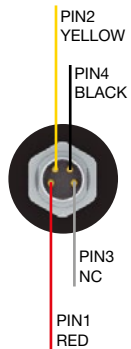
Range	3-180 km/h
Starting speed	8 km/h
Survival speed	200 km/h
Accuracy	1 km/h (3-15 km/h) 3% (15-180 km/h)
Speed-Hz ratio	Speed (km/h) = 0.8*Hz +3

### General features

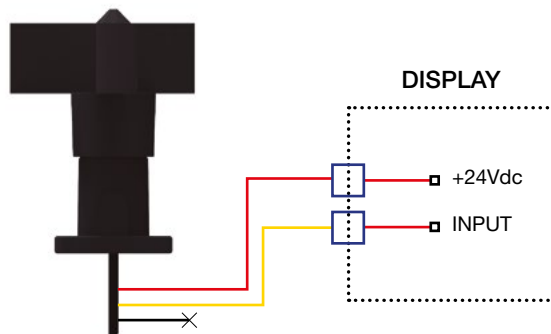
Material	PA + FG
Bearings	Stainless steel X65Cr13
Type of connection	See references (back cover)
Weight (with a 20m cable)	1420 g
Weight (without cable)	130 g
Dimensions	125x139 mm
Storage temperature	-35 °C +80 °C
Working temperature without ice	-20 °C +80 °C
EMC	EN 61000-6-2:2001 EN 55022:2001, Class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

## CONNECTION EXAMPLES

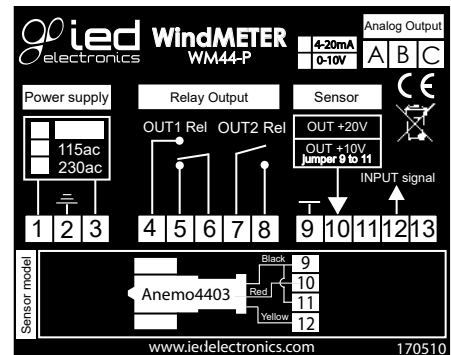
M8



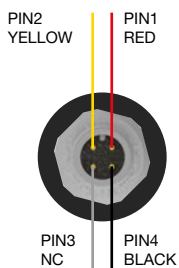
### 2-wire connection to a display



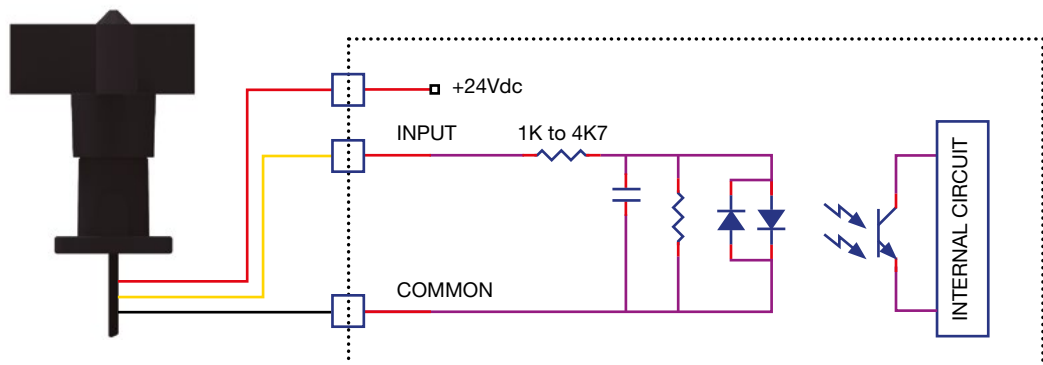
### 3-wire connection to WM44-P V3 display



M12



### 3-wire connection to a PLC



## REFERENCES AND ACCESSORIES

### References

0103010801	ANEMO4403 V3 PULSES OUTPUT M8 LATERAL
0103010804	ANEMO4403 V3 PULSES OUTPUT 2,5m CABLE
0103010806	ANEMO4403 V3 PULSES OUTPUT 20m CABLE
0103010808	ANEMO4403 V3 PULSES OUTPUT M12 UNDERSIDE

### Other devices, ANEMO4403 V3 PULSES Range

#### Heated

0103011301	ANEMO5H25 V3 PULSES OUTPUT M12 UNDERSIDE NO FEMALE CONNECTOR
0103011302	ANEMO5H25 V3 PULSES OUTPUT M12 UNDERSIDE
0103011303	ANEMO5H25 V3 PULSES OUTPUT M12 UNDERSIDE 12m CABLE
0103011304	ANEMO5H25 V3 PULSES OUTPUT M12 UNDERSIDE 25m CABLE

#### Pulses with configurable scale

0103011101	ANEMO4403 V3 NPN OUTPUT 20m CABLE
------------	-----------------------------------

### Displays

0106030501	WM44-P V3 230Vac
0106030502	WM44-P V3 48Vac
0106030503	WM44-P V3 24Vac
0106030504	WM44-P V3 24Vdc NOT INSULATED
0106030505	WM44-P V3 12Vdc NOT INSULATED
0106030601	WM44-SS V3 24Vac
0106030701	WM44-DRM V3 230Vac
0106030702	WM44-DRM V3 48Vac
0106030411	WM44-EV011 V3 IP 65 24Vdc
0106030412	WM44-EV011 V3 IP 65 230Vac

### Accessories

0103010505	Stainless steel bracket AISI 304
0103010506 <sup>1</sup>	Stainless steel bracket plus hardware for mounting the wind sensor on the basket
0103010507 <sup>1</sup>	Magnets for flat ferromagnetic surfaces. This fixation system can support up to 90 kg
0103010508	2 steel clamps kit that can be fixed to irregular parts measuring up to 63 x 45 mm

<sup>1</sup>10 unit minimum order. On sale exclusively with wind sensor.

\*For other references, please contact us.

PDF download here:



IED Electronics Solutions S.L.  
 Pol. Plazaola E 6, 31195 Aizoain. Navarra (Spain)  
 www.iedelectronics.com  
 info@iedelectronics.com





# ANEMO4403 V3 PULSES OUTPUT

## Gama ANEMO V3 de IED Electronics.

Sensor de velocidad de viento diseñado para diferentes industrias y sectores.

El ANEMO4403 V3 PULSES OUTPUT tiene salida de pulsos proporcional a la velocidad del viento dada por un contacto reed. De este modo la alimentación puede reducirse hasta la justamente necesaria para detectar la apertura y cierre del contacto, reduciendo de este modo el consumo del equipo.

**Diseño industrial para entornos hostiles**

**Salida pulsos de contacto reed**

**Rango de medida hasta 180 km/h**

**Rodamientos de acero inoxidable**

**Bajo consumo eléctrico**

**Conexión 2 o 3 hilos a autómatas**

## APLICACIONES

El ANEMO4403 V3 ha sido diseñado para el uso en aplicaciones industriales: grúas, paneles solares, aerogeneradores, estaciones meteorológicas...

Habitualmente se conecta a equipos tacométricos (ver referencias WM44-EVO11 V3, WM44-P V3, WM44-DRM V3), autómatas (PLCs) o dataloggers para visualizar la velocidad del viento y/o programar alarmas a valores predefinidos u obtener registros durante periodos de tiempo prefijados.

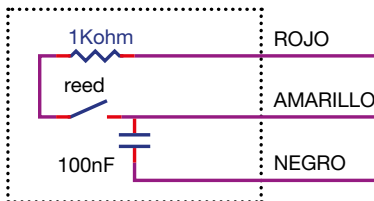
## FUNCIONAMIENTO

### Entradas/salidas

Hasta 180 km/h de velocidad de viento.

**Salida:** Contacto reed libre de tensión, con una resistencia en serie que conmuta a una frecuencia proporcional a la velocidad de viento (ver gráfico). Incluye un condensador interno para el uso opcional como filtro de la señal.

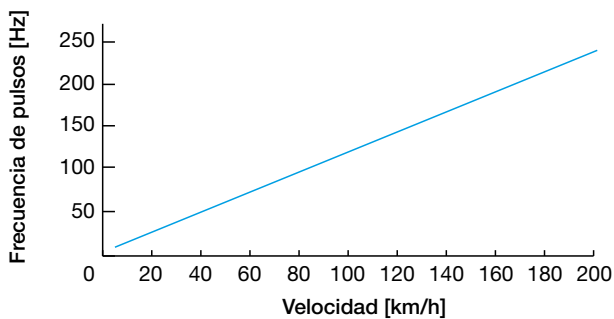
El anemómetro debe colocarse en posición vertical, quedando la parte giratoria hacia arriba.



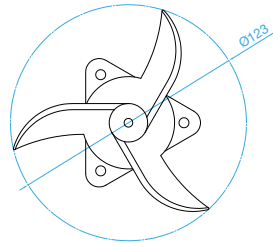
## RELACIÓN VELOCIDAD DEL VIENTO-SALIDA

La velocidad de viento viene dada por la función:

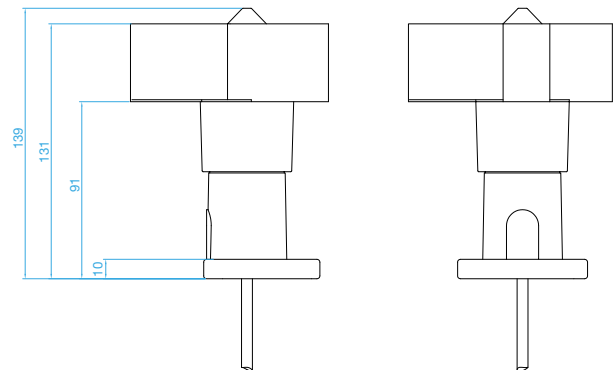
$$\text{Velocidad (Km/h)} = 0.8 \cdot \text{Hz} + 3$$



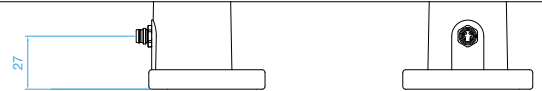
## PLANOS



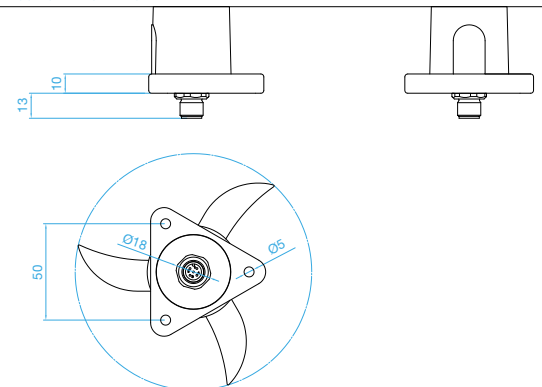
### ANEMO4403 V3 CABLE



### ANEMO4403 V3 M8 LATERAL



### ANEMO4403 V3 M12 UNDERSIDE



## CARACTERÍSTICAS TÉCNICAS

### Características eléctricas

Alimentación	3...24 Vdc
Intensidad máxima	24 mA
Tipo de salida	Frecuencia (pulsos)
Tipo de contacto	reed

### Medida

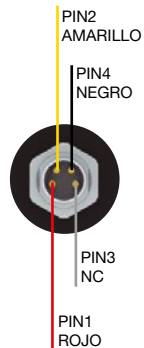
Rango	3-180 km/h
Velocidad de arranque	8 km/h
Velocidad máxima	200 km/h
Precisión	1 km/h (3-15 km/h) 3% (15-180 Km/h)
Relación velocidad-Hz	$V(\text{km/h})=0.8*f + 3$

### General

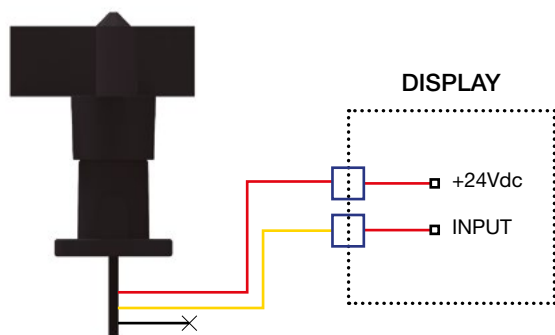
Material	PA + FV
Rodamientos	Acero inoxidable X65Cr13
Tipo de conexión	Ver apartado versiones
Peso (con manguera de 20m)	1420 g
Peso (sin manguera)	130 g
Dimensiones	125x139 mm
Tª almacenamiento	-35°C +80°C
Tª funcionamiento sin hielo	-20°C +80°C
EMC	EN 61000-6-2:2001 EN 55022:2001, Class B
Protección	IP65 (UNE 20324:1993)

## EJEMPLOS DE CONEXIONADO

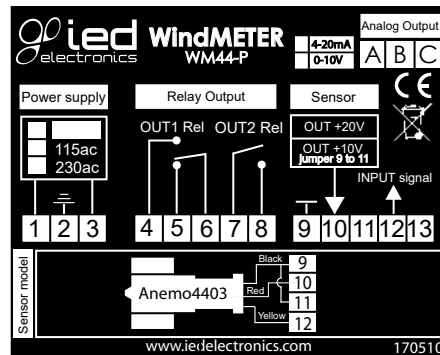
M8



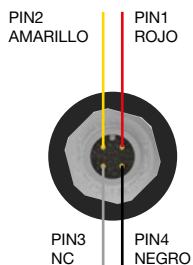
### Conexión 2 hilos a visualizador



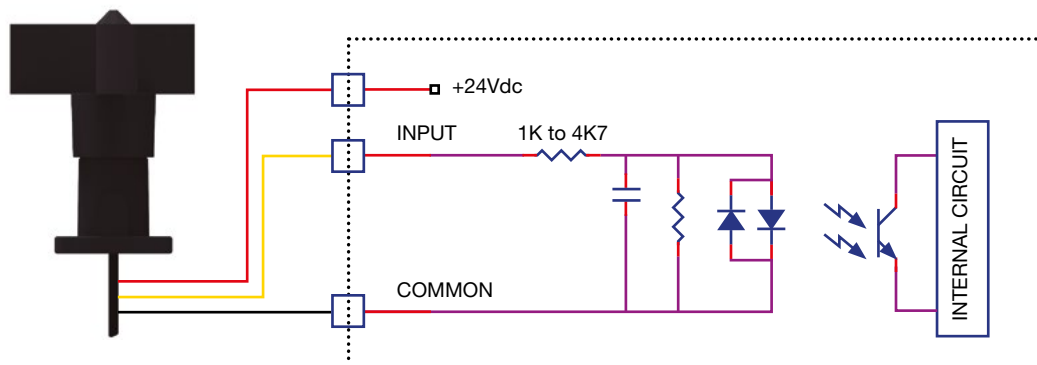
### Conexión 3 hilos a visualizador WM44-P V3



M12



### Conexión 3 hilos a autómatas



## REFERENCIAS Y ACCESORIOS

### Versiones

0103010801	ANEMO4403 V3 PULSES OUTPUT M8 LATERAL
0103010804	ANEMO4403 V3 PULSES OUTPUT 2,5m CABLE
0103010806	ANEMO4403 V3 PULSES OUTPUT 20m CABLE
0103010808	ANEMO4403 V3 PULSES OUTPUT M12 UNDERSIDE

### Otros equipos gama ANEMO4403 V3 Pulsos

#### Calefactados

0103011301	ANEMO5H25 V3 PULSES OUTPUT M12 UNDERSIDE NO FEMALE CONNECTOR
0103011302	ANEMO5H25 V3 PULSES OUTPUT M12 UNDERSIDE
0103011303	ANEMO5H25 V3 PULSES OUTPUT M12 UNDERSIDE 12m CABLE
0103011304	ANEMO5H25 V3 PULSES OUTPUT M12 UNDERSIDE 25m CABLE

#### Pulsos con escala configurable

0103011101	ANEMO4403 V3 NPN OUTPUT 20m CABLE
------------	-----------------------------------

### Visualizadores

0106030501	WM44-P V3 230Vac
0106030502	WM44-P V3 48Vac
0106030503	WM44-P V3 24Vac
0106030504	WM44-P V3 24Vdc NOT INSULATED
0106030505	WM44-P V3 12Vdc NOT INSULATED
0106030601	WM44-SS V3 24Vac
0106030701	WM44-DRM V3 230Vac
0106030702	WM44-DRM V3 48Vac
0106030411	WM44-EV011 V3 IP 65 24Vdc
0106030412	WM44-EV011 V3 IP 65 230Vac

### Accesorios

0103010505	Soporte de acero inoxidable AISI 304 para fijación
0103010506 <sup>1</sup>	Kit de soporte más tornillería para la fijación del anemómetro al soporte
0103010507 <sup>1</sup>	Kit de 4 imanes más tornillería para fijación en superficies ferromagnéticas planas Esta fijación puede soportar hasta 90 kg
0103010508	Kit de 2 bridas de acero para la fijación a elementos irregulares de hasta 63x45mm

<sup>1</sup> Pedido mínimo de 10 ud. Venta exclusiva junto con equipo.

\*Otras versiones, consultar

Descargar PDF aquí:



IED Electronics Solutions S.L.  
Pol. Plazaola E 6, 31195 Aizoain. Navarra (Spain)  
www.iedelectronics.com  
info@iedelectronics.com

