



ANEMO5H25 V3 PULSES OUTPUT (HEATED)

ANEMO5H25 V3 range of IED Electronics.

Heated wind speed sensor designed for different industries and sectors.

Anemo5H25 V3 PULSES OUTPUT has a pulses output proportional to the wind speed that is given by a reed switch. It incorporates a heater to be able to work in -0°C temperatures. When the temperature is higher than $+6^{\circ}\text{C}$, it switches itself off automatically to reduce the consumption.

Industrial design for extreme environments

Reed switch pulses output

Measurement range up to 180 Km/h

Stainless Steel bearings

An external thermostat is not required

It Works from -20°C with ice

APPLICATIONS

ANEM05H25 V3 PULSES OUTPUT has been designed to be used in industrial applications: cranes, solar panels, wind turbines, weather stations... It is a version that has been specially designed to work at low temperatures (from -20°C).

It is usually connected to wind speed displays such as tachometers (see references WM44-EV011 V3, WM44-P V3, WM44-DRM V3), PLC's or dataloggers to display the wind speed and/or set alarms to predefined values or to obtain records during predefined periods of time.

OPERATING

Survival speed: 180 km/h of wind speed.

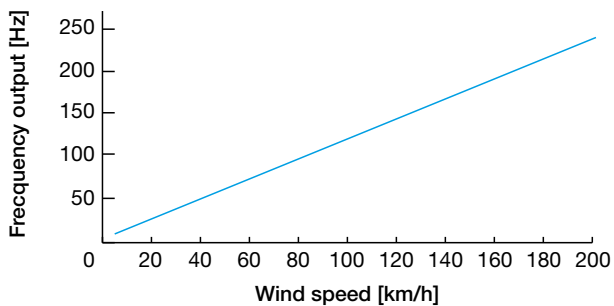
It gives a pulses output that depends on the wind speed (see graphic). The pulses are given by a dry reed switch with a series resistance which switches with a frequency proportional to the wind speed (see graphic). It includes an internal capacitor that can be used as a signal filter.

The heater works from -20°C up to +6°C. Above this temperature, it switches itself off automatically to reduce the consumption. The wind sensor must be fixed on a vertical position.

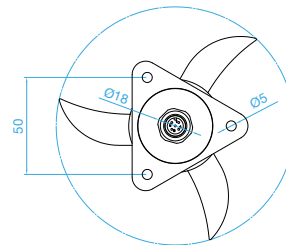
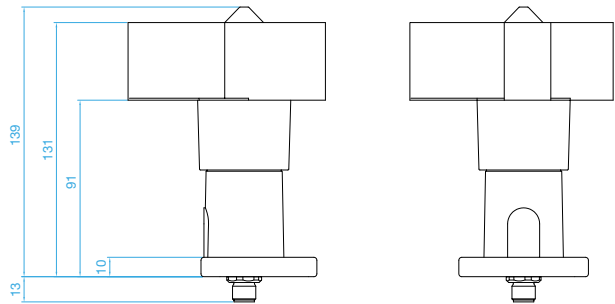
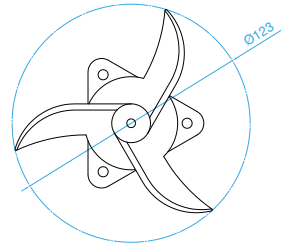
WIND SPEED - OUTPUT RATIO

The wind speed is given by the function:

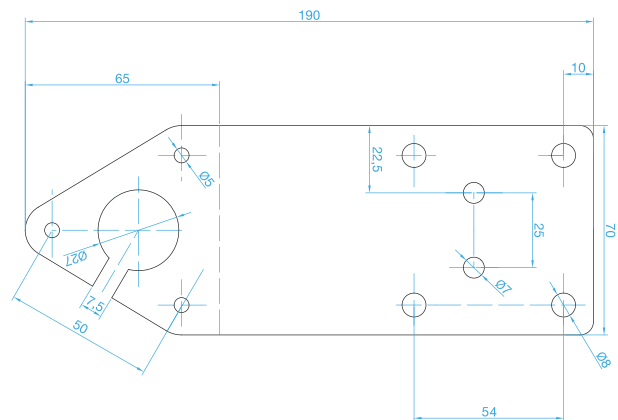
$$\text{Speed (km/h)} = 0.8 * \text{Hz} + 3$$



DIMENSIONS



BRACKET (OPTIONAL ACCESSORY)

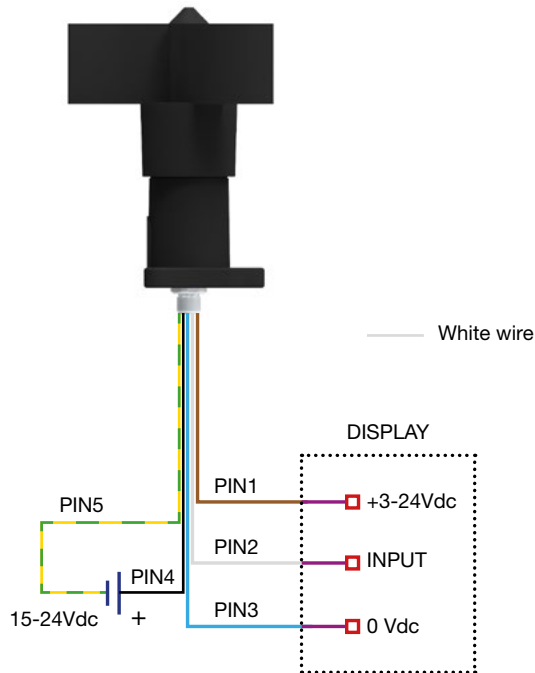


90-degree upward fold, along the dashed line.

2-mm-thick stainless steel.

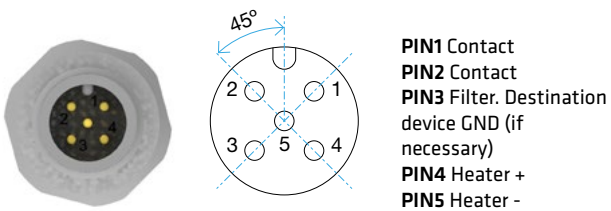
CONNECTION

BLOCKS DIAGRAM



Colour wires referenced to the cable supplied by IED.
Cable not included in any versions.
WM44-P cannot supply the heater, an external power supply is required.

ANEMOSH25 MALE M12 CONNECTOR



TECHNICAL FEATURES

Switch electrical features

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

Heater electrical features

Power supply	15...24 Vdc
Consumption with heater $t^a > 6^{\circ}\text{C}$ ($\pm 3^{\circ}\text{C}$)	<0.5 W
Average consumption with heater $t^a < 6^{\circ}\text{C}$ ($\pm 3^{\circ}\text{C}$)	<17 W
Maximum current	1.8 A @ 24 Vdc 1.2 A @ 15 Vdc

Measurements

Range	3-180 km/h
Starting speed	8 km/h
Survival speed	200 km/h
Accuracy	1km/h (3-15 km/h) 3% (15-180km/h)
Speed-Hz ratio	$V(\text{km/h}) = 0.8 * f + 3$

General

Material	PA + FV
Bearings	Stainless steel X65Cr13
Type of connection	Connector M12*
Weight	150 g
Dimensions	125x155 mm
Storage temperature	-35°C +80°C
Working temperature	-20°C +60°C
EMC	EN 61000-6-2:2001 EN 55022:2001, Class B
Protection	IP65 (UNE 20324:1993)

* See references

REFERENCES AND VERSIONS

References

0103011301	ANEM05H25 V3 PULSES OUTPUT M12 UNDERSIDE NO FEMALE CONNECTOR
0103011302	ANEM05H25 V3 PULSES OUTPUT M12 UNDERSIDE
0103011303	ANEM05H25 V3 PULSES OUTPUT M12 UNDERSIDE 12m CABLE
0103011304	ANEM05H25 V3 PULSES OUTPUT M12 UNDERSIDE 25m CABLE
0103011305	ANEM05H25 V3 PULSE OUTPUT M12 UNDERSIDE + FIXED BRACKET + HARDWARE

Other devices of ANEMO4403 V3 range

Heated

0103011401	ANEM05H25 V3 4-20mA OUTPUT 120km/h M12 UNDERSIDE NO FEMALE CONNECTOR
0103011402	ANEM05H25 V3 4-20mA OUTPUT 120km/h M12 UNDERSIDE
0103011403	ANEM05H25 V3 4-20mA OUTPUT 120km/h M12 UNDERSIDE 12m CABLE
0103011404	ANEM05H25 V3 4-20mA OUTPUT 120km/h M12 UNDERSIDE 25m CABLE
0103011405	ANEM05H25 V3 4-20mA OUTPUT 180km/h M12 UNDERSIDE NO FEMALE CONNECTOR
0103011406	ANEM05H25 V3 4-20mA OUTPUT 180km/h M12 UNDERSIDE
0103011407	ANEM05H25 V3 4-20mA OUTPUT 180km/h M12 UNDERSIDE 12m CABLE
0103011408	ANEM05H25 V3 4-20mA OUTPUT 180km/h M12 UNDERSIDE 25m CABLE

Pulses with configurable scale

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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 IP65 24Vdc
0106030412	WM44-EV011 IP65 230Vac

Accessories

0103010505	Stainless steel bracket AISI 304
0103010506 ¹	Stainless steel bracket plus hardware for mounting the wind sensor on the basket
0103010507 ¹	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

¹ 10 unit minimum order. On sale exclusively with wind sensor.

*For other references, please contact us.

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





ANEMO5H25 V3 PULSES OUTPUT (CALEFACTADO)

Gama ANEMO5H25 V3 de IED Electronics.

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

El Anemo5H25 V3 PULSES OUTPUT tiene salida de pulsos proporcional a la velocidad del viento dada por un contacto reed. Incorpora un calefactor para trabajar en aplicaciones con temperaturas negativas. Cuando la temperatura rebasa +6°C se desconecta el calefactor para evitar consumo innecesario.

Diseño industrial para entornos hostiles

Salida de pulsos de contacto reed

Rango de medida hasta 180 Km/h

Rodamientos de acero inoxidable

No requiere termostato externo

Trabaja desde -20°C con hielo

APLICACIONES

El ANEM05H25 V3 PULSES OUTPUT ha sido diseñado para el uso en aplicaciones industriales: grúas, paneles solares, aerogeneradores, estaciones meteorológicas... Es una versión para trabajar en condiciones meteorológicas de bajas temperaturas (desde -20°C).

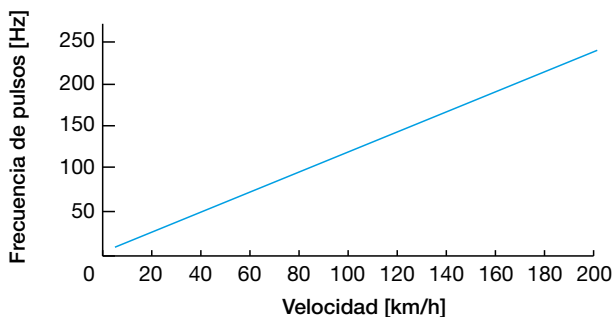
Habitualmente se conecta a equipos tacométricos (ver referencias WM44-EV011 V3, WM44-P V3, WM44-DRM V3), autómatas (PLCs) o dataloggers para visualizar la velocidad del viento y/o programar alarmas a valores predefinidos u obtener registros durante periodos de tiempo prefijados.

FUNCIONAMIENTO

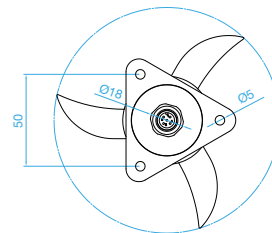
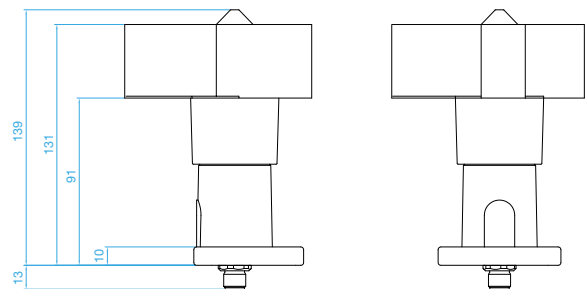
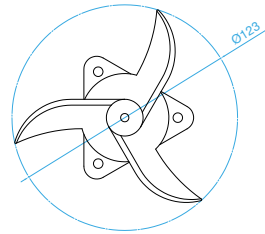
Funciona hasta 180 km/h de velocidad de viento. Da una salida de pulsos en función de la velocidad de viento (ver gráfica). Los pulsos vienen dados por un contacto reed libre de tensión, con una resistencia en serie que conmuta a una frecuencia proporcional a la velocidad del viento. Incluye un condensador interno para el uso opcional como filtro de la señal. El calefactor funciona desde -20 °C con hielo y se desactiva automáticamente a +6 °C para evitar consumos innecesarios. El anemómetro debe colocarse en posición vertical, quedando el conector hacia abajo.

RELACIÓN VELOCIDAD DEL VIENTO-SALIDA

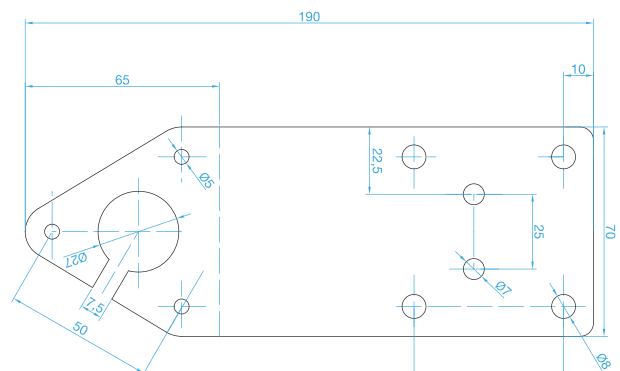
La velocidad de viento viene dada por la función:
Velocidad (Km/h) = 0.8*Hz + 3



PLANOS



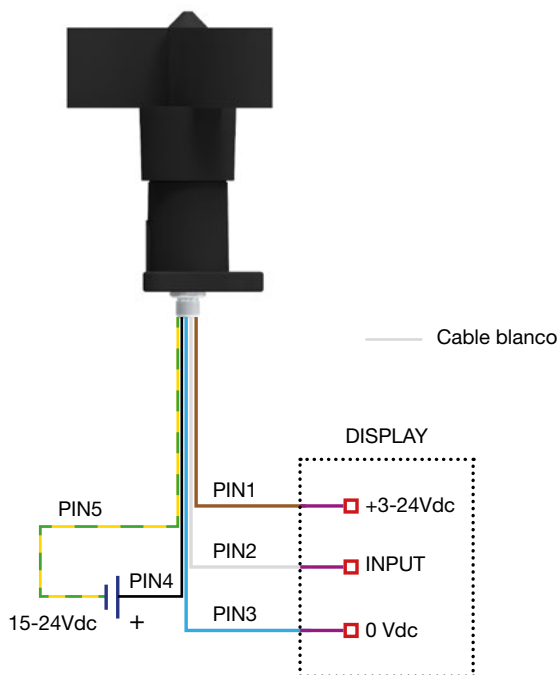
SOPORTE (ACCESORIO OPCIONAL)



Pliegue hacia arriba a 90 grados por línea punteada.
 Acero inoxidable de 2mm de grosor.

CONEXIONADO

DIAGRAMA DE BLOQUES

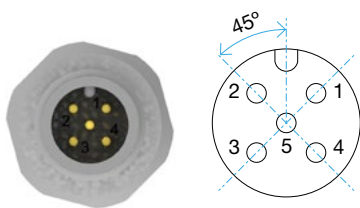


Colores de hilos referenciados al cable suministrado por IED.

Cable no incluido en todas las versiones.

Para conectar con WM44-P utilizar fuente de alimentación externa para el calefactor.

CONECTOR M12 MACHO DEL ANEM05H25



PIN1 Contacto
PIN2 Contacto
PIN3 Filtro. Conectar a masa del dispositivo conectado (si es necesario)
PIN4 Calefactor +
PIN5 Calefactor -

CARACTERÍSTICAS TÉCNICAS

Características eléctricas del contacto

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

Características eléctricas del calefactor

Alimentación	15...24 Vdc
Consumo con calefactor (tª amb. >6°C +3°C)	<0.5 W
Consumo medio con calefactor (tª amb. <6°C +3°C)	<17 W
Intensidad máxima	1.8 A @ 24 Vdc 1.2 A @ 15 Vdc

Medida

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

General

Material	PA + FV
Rodamientos	Acero inoxidable X65Cr13
Tipo de conexión	Conector M12*
Peso	150 g
Dimensiones	125x155 mm
Tª almacenamiento	-35°C +80°C
Tª funcionamiento sin hielo	-20°C +60°C
EMC	EN 61000-6-2:2001 EN 55022:2001, Class B
Protección	IP65 (UNE 20324:1993)

*ver versiones

REFERENCIAS Y ACCESORIOS

Versiones

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0103011302	ANEM05H25 V3 PULSES OUTPUT M12 UNDERSIDE
0103011303	ANEM05H25 V3 PULSES OUTPUT M12 UNDERSIDE 12m CABLE
0103011304	ANEM05H25 V3 PULSES OUTPUT M12 UNDERSIDE 25m CABLE
0103011305	ANEM05H25 V3 PULSE OUTPUT M12 UNDERSIDE + FIXED BRACKET + HARDWARE

Otros equipos gama ANEM05H25 V3

Calefactados 4-20mA

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0103011408	ANEM05H25 V3 4-20mA OUTPUT 180km/h M12 UNDERSIDE 25m CABLE

Pulsos con escala configurable

0103011101	ANEM04403 V3 NPN OUTPUT
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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 V3IP65 24Vdc
0106030412	WM44-EV011 V3 IP65 230Vac

Accesorios

0103010505	Soporte de acero inoxidable AISI 304 para fijación
0103010506 ¹	Kit de soporte más tornillería para la fijación del anemómetro al soporte
0103010507 ¹	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

¹ Pedido mínimo de 10 ud. Venta exclusiva junto con equipo.

*Otras versiones, consultar

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www.iedelectronics.com
info@iedelectronics.com

