

KV-5020 Marine Wind Vane/Anemometer

Features

- Built-in NMEA output indispensable for ocean going vessels
- Stepping motor-driven pointers that are resistant to vibration and offer fairly accurate indication
- LED illumination with dimmer for long life
- Digital indicator accommodates signals of your choice (optional)
- Simplified vessel speed/course signal transmitter (optional) can be installed (using GPS / magnetometric sensor)
- Additional indicators can also be installed

Product overview

The KV-5020 marine wind vane/anemometer sends both wind direction and speed signals simultaneously from the transmitter to the indicator for remote observation.

The transmitter is a windmill type and is used in combination with the wind speed/direction indicator. The indicator, which has an analogue face, receives and processes the transmitter signals to drive the pointers.

VDR
capable

Wind speed/direction
transmitter



Optional equipment

KV-5025 true wind
speed/direction indicator



Remote dimmer switch



Simplified vessel
speed/course
signal transmitter



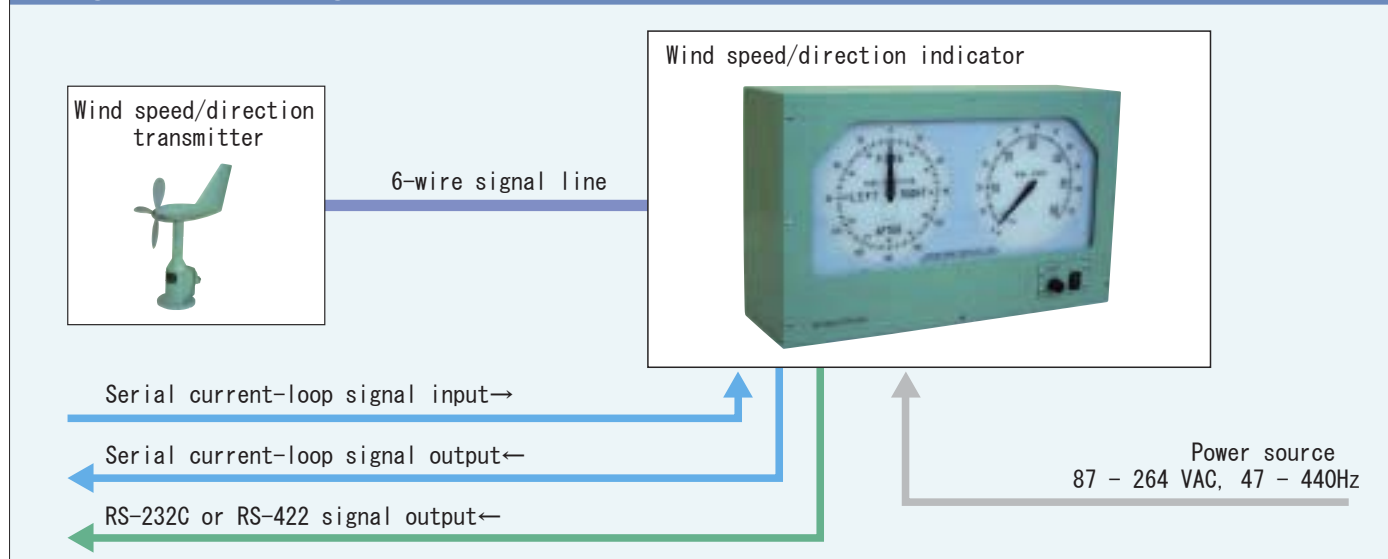
Wind speed/direction indicator

Japan Meteorological Agency's oceanographic research vessel KeiMaru
(on which Koshin Denki's marine weather observation devices are used)



KOSHIN DENKI KOGYO CO., LTD.

Configuration/Block Diagram

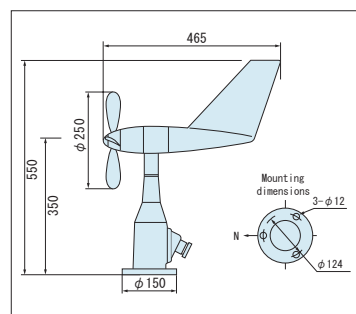


Specifications

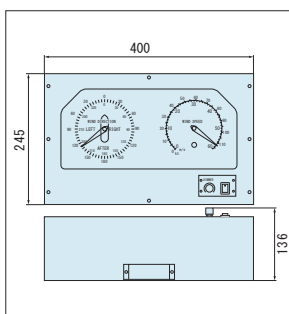
Wind speed/direction transmitter

Type	Propeller
Wind speed detection	Optical pulse; Brushless
Wind direction detection	8-bit optical encoder; Serial signal output
Start wind speed	2m/s or less
Wind speed resistance	90m/s (in wind tunnel tests)
Measurement range	Wind speed: 2 - 60 m/s
Wind direction	All directions
Measurement accuracy	Wind speed: 10m/s or less: Within ± 0.5 m/s 10m/s or more: Within $\pm 5\%$ Wind direction: Within $\pm 5^\circ$
Cable	6-core shielded cable
Cable connection method	Via terminal
Weight	Approx. 2.5kg
Coating color	Munsell 2.5G7/2 Semi-glossy
Working temperature range	-20 to +50°C

Wind speed/direction transmitter



Wind speed/direction indicator



Wind speed/direction indicator

Measurement range	All directions (0 - 360°)
Wind speed	0 - 60 m/s or 0 - 115 kt
Indicator type	Relative wind direction (instantaneous) : Indicating range: 0 - 360° Relative wind speed (instantaneous) : Indicating range: 270 (60m/s) kt or m/s
Computation type	CPU vector operation Data sampling rate: 0.25sec. (for both wind speed and direction) Data processing: instantaneous, second smoothing
Input signal	Dedicated wind speed/direction signals (6-wire) Wind direction: 256-segment, 8-bit gray code serial signal Wind speed: 24 pulses / rev. Serial current loop
Output signal	RS-232C or RS-422 Serial current loop
Pointer driver	Wind speed and direction pointers directly driven by stepping motors. 0.9° / step (corresponding to 0.2m/s wind speed)
Response time	2.4sec. per 180° (corresponding to 40m/s wind speed)
Lighting	LED (with dimmer)
Power source	87 - 264 VAC, 47 - 440 Hz
Coating color	Munsell 2.5G7/2 semi-gloss
Weight	Approx. 7.5kg
Outer dimensions	400 (W) x 245 (H) x 120 (D)
Ambient conditions	Working temperature range: -10 to +50°C Working humidity range: 20 - 95% (no condensation)

Optional equipment

Remote dimmer switch	
KV-5025 true wind speed/direction indicator	
Simplified vessel speed/course signal transmitter	



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*The specifications in this catalog may be changed without prior notice to incorporate improvements.

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