

0183 WIND SENSOR



The NMEA 0183 version of Autonnic's Wind Sensor provides wind-speed and direction data in several standard formats. It is ideal as a direct replacement for existing installations or to enhance a system. It is available in 3 arm lengths for Power, Normal and the Extended is mainly for racing.

- Robustly made
- UV-resistant materials
- Sealed to IP68
- Magnetic sense of Direction
- Magnetic sense of Speed
- NMEA-0183
- Available in 3 different lengths

PERFORMANCE

PARAMETER	DESCRIPTION	NOTES	CONDITIONS	MIN	TYP	MAX	UNIT
ERR _{WS}			10-40 knots		3	5	%
ERR _{DIR}			20knots		4	8	Degrees
t _{DSET}	Direction Settling Time		Minimum filtering			1.3	Second
t _{WSSET}	Speed Settling Time		Minimum filtering			2	Second
WV _{min}	Minimum Wind Velocity			1.7			knots

ORDER INFORMATION

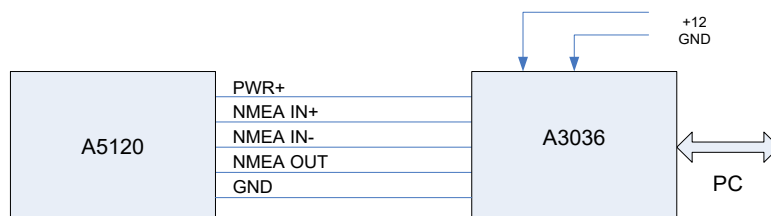
A5120E	0183 Wind Extended	Weight	290g
A5120N	0183 Wind Standard		275g
A5120P	0183 Wind Power		252g
A5901	0183 cable 7.5m		190g
A5902	0183 cable 20m		500g

A5120E A5120N A5120P

ELECTRICAL CHARACTERISTICS AT 20°C

PARAMETER	DESCRIPTION	NOTES	MIN	TYP	MAX	UNITS
V _{CC}	Supply Voltage		8	12	18	Vdc
I _{CC}	Current consumption	No NMEA loads		25		mA
N	Number of Output Loads				4	NMEA loads

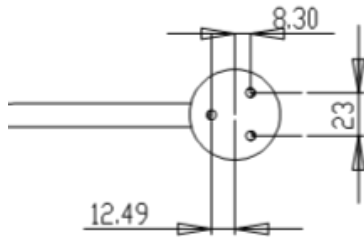
CONNECTIONS



ABSOLUTE MAXIMUM RATINGS

PARAMETER	DESCRIPTION	NOTES	CONDITIONS	VALUE	UNIT
θ_{stor}	Storage Temp Range			-40 to +100	°C
θ_{op}	Operating Temp Range			-25 to +50	°C
V _{CC}	Supply Voltage			18	V
S _{MAX}	Wind Speed			80	Knots

MECHANICAL DETAILS



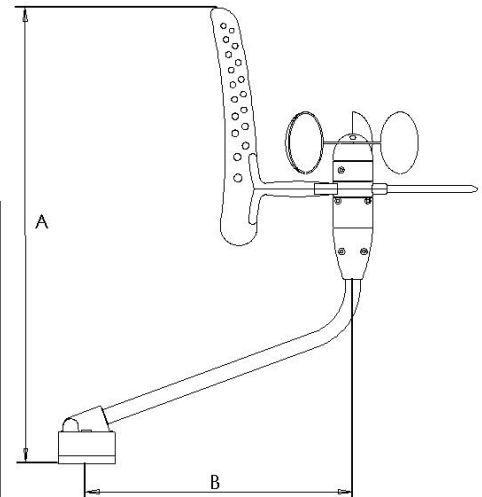
Base fixing centres.
Holes are 5mm dia

The A5120E, N and P are supplied with 1m cable terminated in a Binder pin connector type 99 9113 03 05 with mating socket supplied

Dimensions mm

A5120X

X	A	B
E	540	300
N	390	225
P	330	60



NMEA COMMANDS

Output sentences

\$WIMWV,a.a,R,s.s,N,A*hhhh<CR><LF>

where a.a = dir s.s= speed (kn)

*hhhh is set by the configure command: x=0 omit; x=1 hhhh = 2char checksum; x=2 hhhh = ID

\$YXXDR,C,x.x,C,WND*hhhh<CR><LF>

x.x = °C. This sentence not sent if y in configure command = 0; sent regularly if y=1 without *hhhh; if y=2 regularly with ID=hhhh

\$PATC,WIMWV,ACK<CR><LF> acknowledgement that a command was received

\$PATC,WIMWV,RID,xxxxx<CR><LF> ID = xxxxx

Input sentences

\$PATC,IIMWV,AHD,x.x<CR><LF> set reference direction offset

\$PATC,IIMWV,DWD,x.x<CR><LF> set dir damping % - 000 to 999 (default 500ms)

\$PATC,IIMWV,TXP,xxx<CR><LF> output sentence rate in ms (default 500ms)

\$PATC,IIMWV,DSP,xxx<CR><LF> set speed damping % - 000 to 999 (default 500)

\$PATC,IIMWV,RID<CR><LF> report ID

\$PATC,IIMWV,CFG,xy<CR><LF> configure command. Default x=y=0. See manual for details.