Check dimensions before cutting

10"

250 mm

IMPORTANT. Do not use this template if it has been rescaled by copying or printing. If this is not the original, or is a print from a file, please check the dimension lines below are to scale before use.

IMPORTANT. Ne pas utiliser ce gabarit s'il a été photocopié ou imprimée en format réduit ou agrandi. Si ce gabarit n'est pas un original, ou si c'est une version imprimée d'un fichier PDF, veuillez vérifier qu'il est à l'échelle avant de l'utiliser.

IMPORTANTE. No utilizar esta plantilla si ha sido reajustada por fotocopiadora o por impresora. Si esta no es la plantilla original, o es una impresión desde un archivo, por favor verifique que las líneas de dimensión están a escala antes de su uso.

WICHTIG. Diesen Vordruck nicht verwenden, wenn er durch Kopieren oder Drucken im Maßstab verändert wurde. Sollte es nicht das Original oder ein PDF-Ausdruck sein, müssen untenstehende Zeilen vor erwendung an den richtigen Maßstab angepasst werden.

BELANGRIJK. Gebruik deze mal niet indien de schaal is veranderd doordat het is gecopieerd of gedrukt. Indien deze mal niet het origineel of een print van PDF is, controleer dan of de onderstaande lijnen de juiste schaal zijn voordat u ze gebruikt.

IMPORTANTE. Não utilize este gabarito se a escala do mesmo tiver sido alterada por cópia ou impressão. Se não for o original ou uma cópia impressa de um arquivo PDF, verifique as linhas abaixo, para acertar a escala antes da utilização.

VIKTIGT. Använd inte denna mall om den skalats om genom utskrift eller kopiering. Om detta inte är originalet eller en utskrift från en PDF, kontrollera att linjerna nedan stämmer med skalan innan det används.

IMPORTANTE. Non utilizzare questo modello se è stato ridimensionato copiandolo o stampandolo. Se questo non è l'originale o la stampa di un file PDF, verificare se le linee che seguono devono essere dimensionate prima di essere utilizzate.

TÄRKEÄÄ. Älä käytä tätä kaaviota, jos sen mittakaava on muuttunut kopioidessa tai tulostaessa. Jos tämä ei ole alkuperäinen tai PDF tuloste tarkista rajat mittakaavasta alla ennen käyttöä.
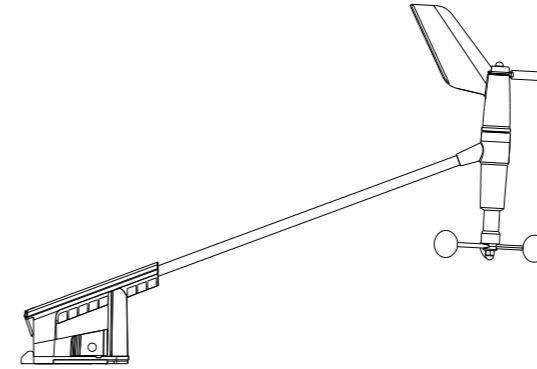
注意：请尽量不要使用本安装挖孔尺寸模版图的复印件。如果使用复印件，则在使用之前请确认其比例一定要与原件大小必须一致。

중요: 복사나 출력으로 크기가 조정 된 경우 이 템플릿을 사용하지 마십시오. 원본이 아니거나 인쇄물이면, 사용하기 전 아래 치수선의 눈금을 확인 해 주십시오.

注：このテンプレ┌トは印刷やコピ┌によって縮尺が┌わっていることがありますので使用しないで下さい。テンプレ┌トがオリジナルのもので ない場合には、下の寸法線を使って縮尺を確認してください。

ВНИМАНИЕ: Не используйте эту инструкцию, если она была изменена в размерах при копировании или распечатке. Если вы используете не оригинал, а распечатку из файла, убедитесь в соответствии размеров линейки в нижней части инструкции с действительными размерами.

B&G

WS320 WIND SENSOR INSTALLATION GUIDE

For product manuals, technical specifications, certificates and declarations refer to the product website:
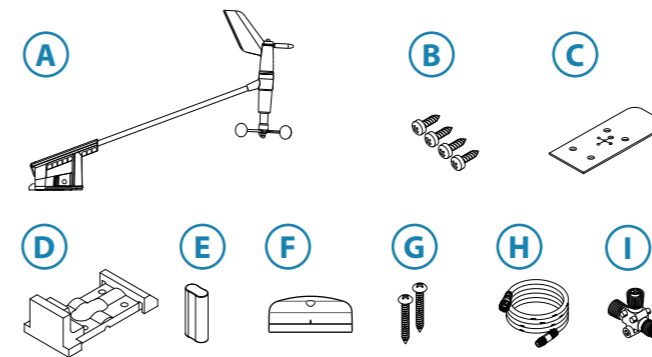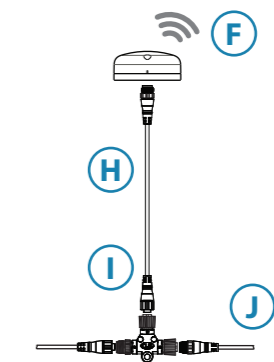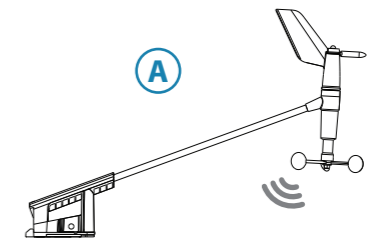**www.bandg.com**

CE

CE under 2014/53/EU Directive

988-12029-001

Parts included

	Wind pack	Sensor only
A. WS320 wind sensor	x	x
B. Screws 4x No.10 x 5/8	x	x
C. Gasket	x	x
D. Masthead bracket	x	x
E. Battery	x	x
F. Bluetooth base station	x	
G. Screw 2x M4 30 mm SS316	x	
H. NMEA 2000 drop cable	x	
I. Micro-C T-Joiner	x	

Wiring

A. WS320 wind sensor
F. Bluetooth station
H. NMEA 2000 drop cable
I. Micro-C T-Joiner
J. Micro-C backbone
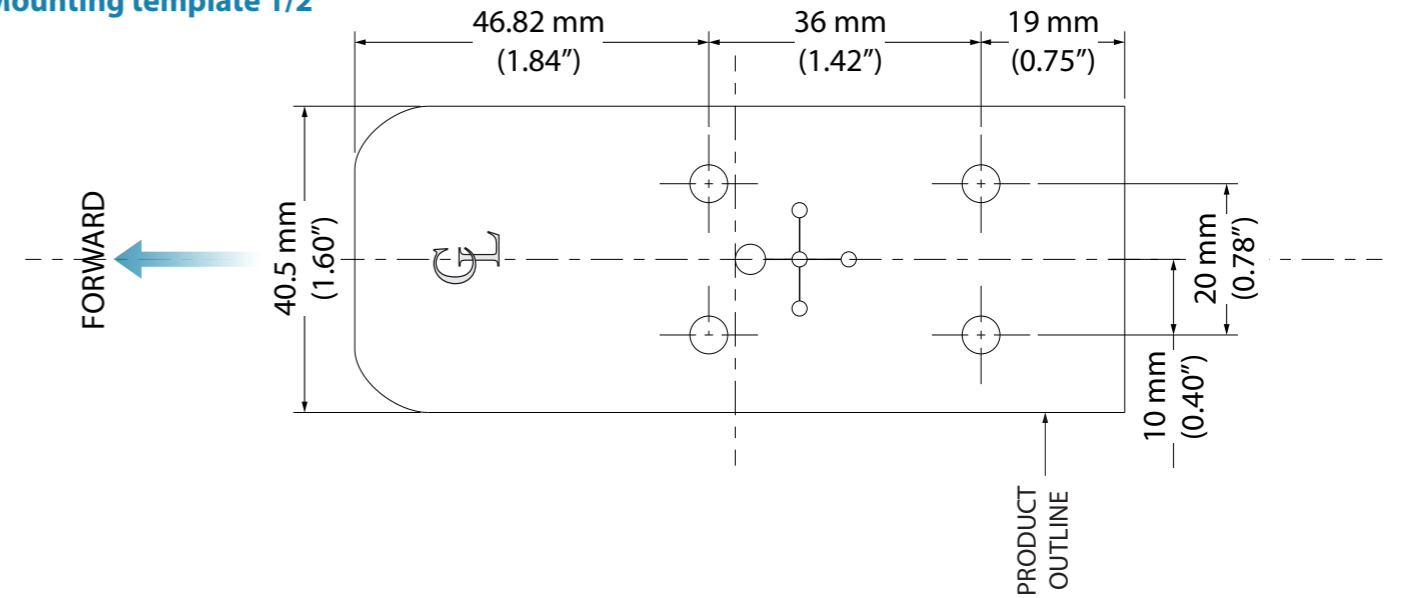
Technical specifications

WS320	
Weight	0.32 kg (0.7 lbs)
Waterproof	IPx6 and IPx7
Temperature	-25℃ to 65℃
Power usage	Solar powered
Wind speed resolution	0.05 m/sec (0.1 Knots)
Wind speed accuracy	+/- 0.1 m/sec (0.2 kt) from 1 - 40 m/sec (2 - 80 kt)
Wind speed range	0.25 - 50 m/sec (0.5 - 97 knots)
Wind angle resolution	0.1°
Wind angle accuray	+/- 0.5°
Wireless connectivity	<=30m (98 ft)
Data output	Apparent wind speed and angle at 5 Hz

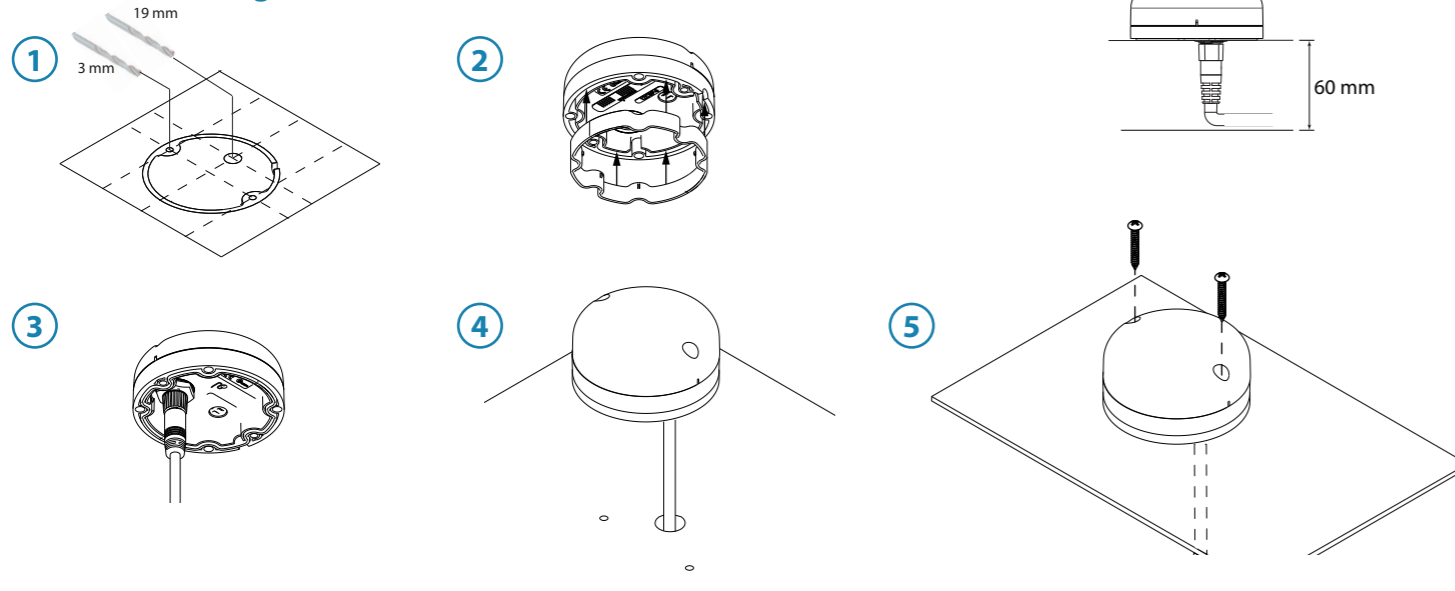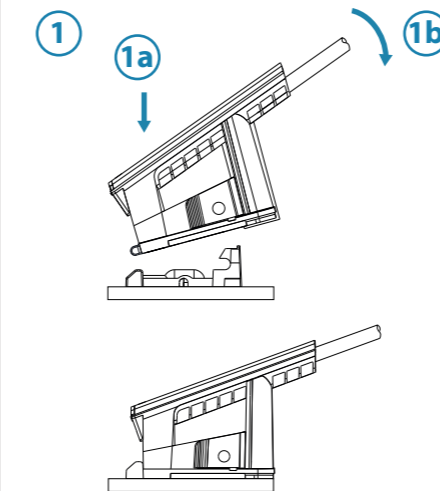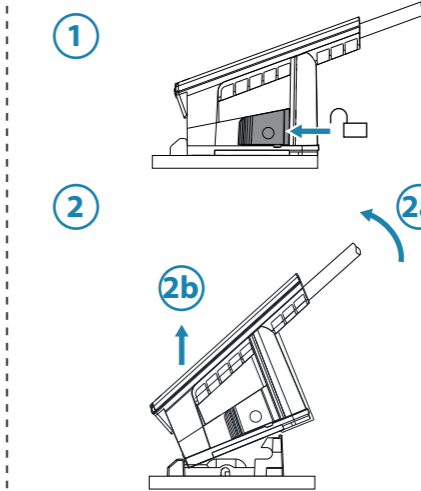| Base station	
Dimensions	Ø 90 mm, H 38 mm (Ø 3.54" H 1.50")
Power supply and interface	9-16 V DC via Micro-C network
Power consumption	1.2 W (<100 mA at 12 V DC)
Network Load	2 LEN (100 mA)
Temperature	Operating: -25℃ to +60℃, Storage: -40℃ to +85℃
Humidity	66℃, 95% RH, 18 hrs
Environmental protection	IPx7
In-rush current	2 A for 20 ms (@ internal 5 V)
Connection cable:	Micro-C drop cable 1.8 m (6 ft)

Mounting template 1/2

46.82 mm (1.84")　36 mm (1.42")　19 mm (0.75")

40.5 mm (1.60")　20 mm (0.78")　10 mm (0.40")

FORWARD

PRODUCT OUTLINE

Surface mounting the Bluetooth base station
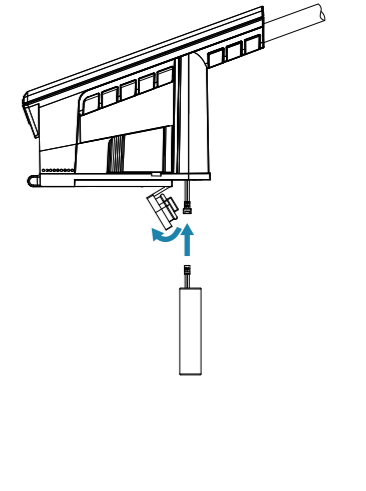

19 mm

3 mm

60 mm

Attaching the wind sensor

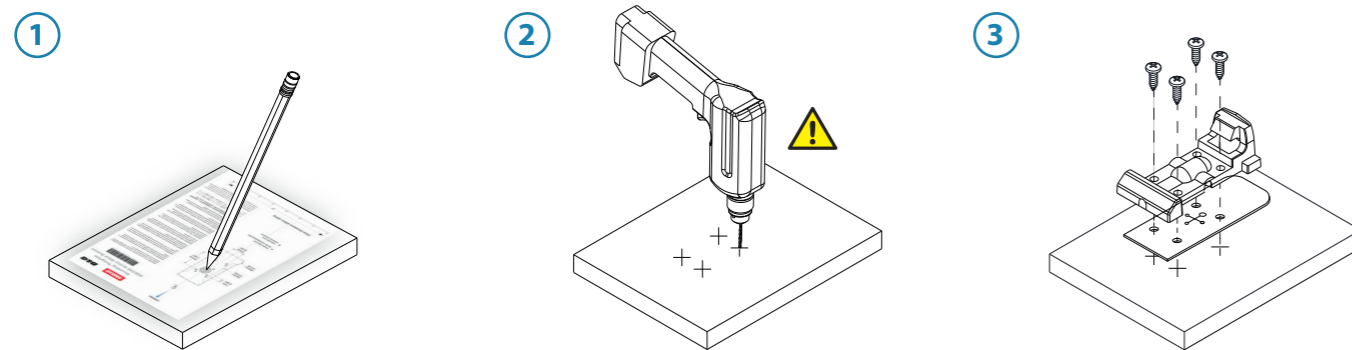## Removing the wind sensor

Insert the battery

Warning: Risk of explosion if battery is replaced by incorrect type. Dispose of used batteries according to the local laws and regulations

Bracket installation

⚠ Recommended pilot holes:

Material	10# screw
Hard materials e.g. fiberglass, aluminum, carbon fibre	Ø 4.1-4.7 mm (3/16")

Pairing

Pairing should be carried out prior to installing the wind senor on the mast.

Prior to pairing:
1. Connect the Bluetooth base station to the NMEA 2000 network
2. Have the battery for the wireless wind sensor on-hand for later installation
3. The wind sensor must be less than or equal to 2 meters from the Bluetooth base station for pairing to succeed

Ready to pair:
4. Power on the NMEA 2000 network
5. Insert and connect the battery to the wind sensor
6. The Bluetooth base station and wind sensor will now attempt to pair. This can take up to 30 seconds to complete

➔ *Note:* If the battery is disconnected, the sensor will lose its pairing with the base station

Successful pairing:
7. On an MFD or instrument display go to the Device List in the Network Settings dialog
8. Select the WS320 device to display the device information dialog
9. Select the Data Option to display information
10. Check that the apparent wind angle and speed are correctly updating

The wind sensor is now ready to be installed at the top of the mast. Wind angle calibration can be done later from the Calibration option in the Network Settings dialog.