

# Reflector Compass

## SR-165



# SAURA

Navigation Instruments

### Class A Magnetic Compass to meet with ISO 449

Saura SR-165 is a Reflector Magnetic Compass designed for sea navigation, complying with the relevant IMO and other major Authority requirements such as; ISO-449(1997), ISO-694(2000), ISO-1069(1973), ISO-2269(1992) and IEC-60945 (2002) .



#### COMPASS BOWL

- Precision directional system design; Card dia. 165mm
- Pivot bearings: iridium and sapphire
- Long lasting inner paint finish, without blister, cracks or discolouring over a long period of time
- Unique bowl design to absorb liquid expansion for leakage and air bubble free operation

#### BINNACLE STAND

- Full deviation correcting facility including; "B", "C" & Heeling error compensation, Quadrantal correctors and Flinders bars
- Illumination of compass card with dimmer control
- Dual power supply; 100, 110, 200, or 220VAC & 24VDC
- Light in weight for ease of shipyard installation

#### PERISCOPE

- Telescopic with vertical length of 720mm as standard. Longer telescopic length available on request

#### INT'L TYPE APPROVAL CERTIFICATE:

- being applied for MED and other Maritime Authorities

#### Standard accessories

Reflector compass bowl	Card dia 165mm
Periscope/optics	Length 680mm as standard (Longer length available; 820mm, 960mm and 1100mm)
Dimmer control; dual current	24VDC, 10w and 100, 110, 200 or 220VAC
Cover sheet	Canvas w/Tie down strings
Installation materials	Gasket, bolts & nuts
Shadow pins (supplied with Azimuth Device AD-02)	140mm length, 2 pcs 100mm length, 1 pce Pin stand, 1 pce
Deviation adjusting accessories	Correcting magnets; Strong 10Φ x 140mm, 10 pcs Weak 10Φ x 140mm, 6 pcs D Correcting plates, 10 pcs Flinders's bars, 5 pcs
Spare parts	Electric bulb, 4 pcs
Optional accessories	Azimuth device AD-02 Spare bowl in wooden box TMC sensor w/NMEA output

#### Optional Accessories



Spare bowl



SCP-NT

Sensor for transmitting  
compass capability



Azimuth device AD-02

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# Accessories for SR-165



**SAURA**  
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## SCP-NT Smart Sensor

SCP-NT is a pick-off sensor/detector which directly mounts on Saura range of magnetic compasses and provides the magnetic heading reference output to offer TMC capability.

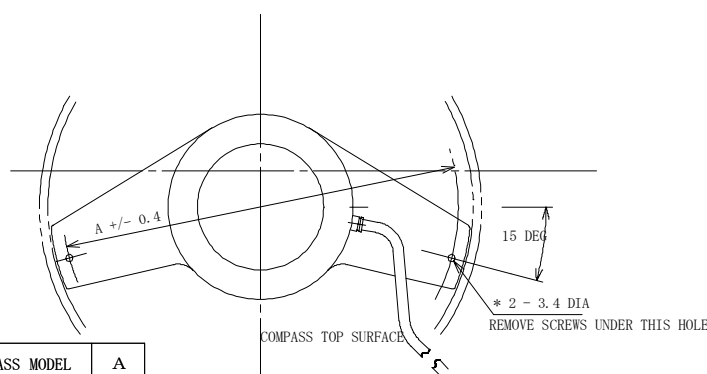
Some of the outstanding features are;

- NMEA Serial data output for direct input to navigational instruments  
SCP-NT provides heading reference output in NMEA compatible serial sentence format.  
No interface or junction box is required.
- A choice of HDM and HDT sentences  
With inner short-pin arrangements, you can select either HDM or HDT output.
- Fine adjustment capability  
SCP-NT is fitted with a trim adjustment control, which makes it possible to adjust its output for trim outset of  $\pm 10$  degrees if necessary.
- Small and light in weight  
Precision detector/sensing unit and modern electronics for processing the signal – all contained in a small low profile enclosure, ensuring the clear visibility of compass card.
- Acrylic mounting base for simple and easy attachment on to Saura range of magnetic compasses  
SCP-NT will be mounted over the top surface glass of a magnetic compass, thus it is always free from interference which may be caused by deviation correcting magnets beneath the compass bowl.

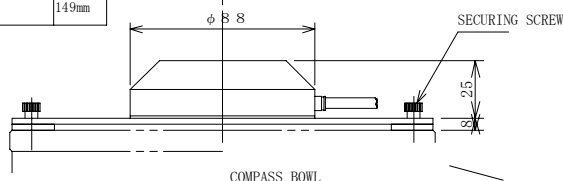


### Specifications

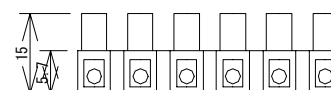
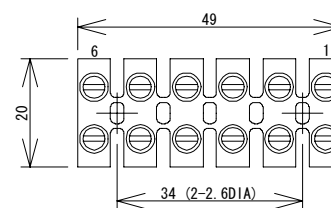
Power supply	12VDC – 15VDC
Current drain	120mA typical (under no load)
Output data	NMEA-HDM or NMEA-HDT; selectable by inner-short pins
Output cycle	200mS average (fixed)
Azimuth accuracy	$\pm 1$ deg average at 12 cardinal points, max $\pm 2$ deg
Resolution	min. 0.3 deg
Follow-up speed	max. 45 deg/sec
Ambient temperature	$-10$ to $+50$ deg Celcius
Dimensions & weight	88mm $\Phi$ , 25mm height, 200 grs (mounting plate not included)



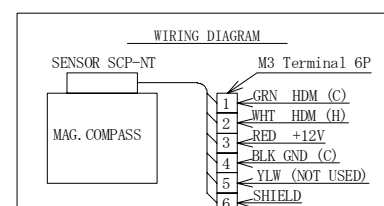
COMPASS MODEL	A
SR-165/MR-165C MR-150/T-180	289mm
T-130	199mm
T-130	149mm



REMOVE SCREWS BEHIND THE HOLES OF MOUNTING PLATES  
AND FIX THE SENSOR WITH THE SCREWS PROVIDED.



M3 Terminal 6P



NO. 3, 4 & 2, (1) WIRES TO BE CONNECTED TO NAV. EQUIPMENT

Specifications to change without prior notice.