

SAURA № K 3074

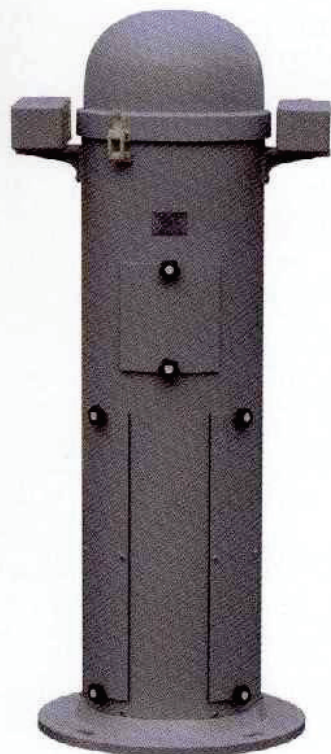
SAURA THE BEST MAGNETIC COMPASS



SR-165

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.



Periscope/Viewing mirror

COMPASS BOWL

- Precision directional system design; card dia. 165mm
- Pivot bearings: platinum-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; 24VDC & 100, 110 or 220VAC
- Light in weight for ease of shipyard installation

PERISCOPE

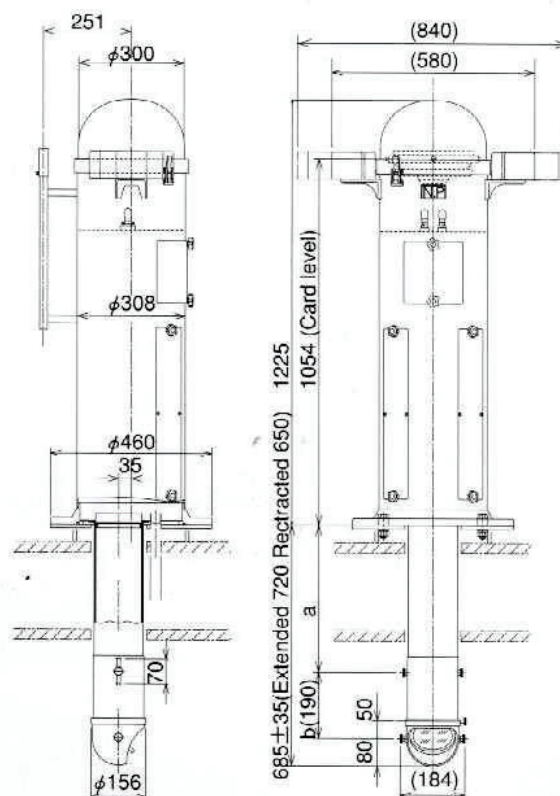
- Telescopic length of 685mm as standard with vertical adjustable length ± 35 mm with traveling tube.
- Its length is determined by $a+b$ (190mm) + 80mm, and longer telescopes are available on request.

INTERNATIONAL TYPE APPROVAL CERTIFICATION

- Type approved to MED and other maritime Authorities; JG, CCS

Standard Specifications	
Type of compass	Reflector compass
Compass bowl	card dia 165mm
Binnacle stand	with top cover
Periscope (a+b)	685mm \pm 35 as standard longer length available
Dimmer control	Dual current; 24VDC and 100/110 or 220VAC
Standard Accessories	
Correcting magnets for B, C and H	10 x strong 6 x weak
Quadrantal correctors	10 x permalloy plates
Flinders bars	5 x Flinders's bars
Shadow pin	Long & short with pin stand
Cover sheet	with tie down strings
Installation materials	gasket, bolts and nuts
Optional accessories	
Azimuth reading device *	AD-02
Spare compass bowl	in wooden box
TMC sensor	SCP-NT

* an indispensable accessory as defined by relevant International standards

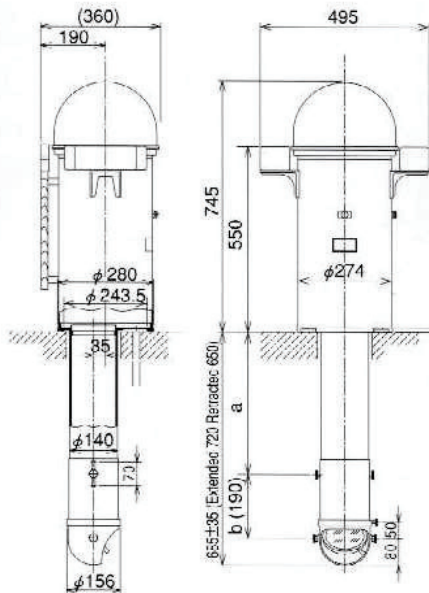


Reflector Compass

FOR COMMERCIAL VESSELS & WORK/FISHING BOATS



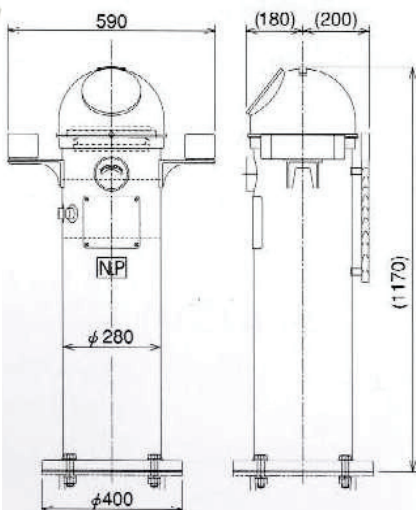
Periscope/Viewing mirror



MR-165C & MR-150

	MR-165C	MR-150
Type of compass	Reflector compass	←
Compass bowl	card dia 165mm	card dia 150mm
Binnacle stand	with top cover	
Periscope/optics	685mm±35 as standard longer periscope available	←
Dimmer control	24VDC & 100/110/220VAC	24VDC only
Type approvals	CCS	JG
Standard accessories		
Deviation correctors		
Correcting magnets	10 x Ø6 by 17mm 6 x Ø6 by 45mm	←
Quadrantal correctors	10 x pure iron plates	←
Flinder's bars	5 x Flinders's bars	←
Shadow pins	Long & short with pin stand	←
Cover sheet	canvas w/Tie down strings	←
Installation materials	gasket, bolts and nuts	←

Binnacle Stand Compass



S-165III & S-180III

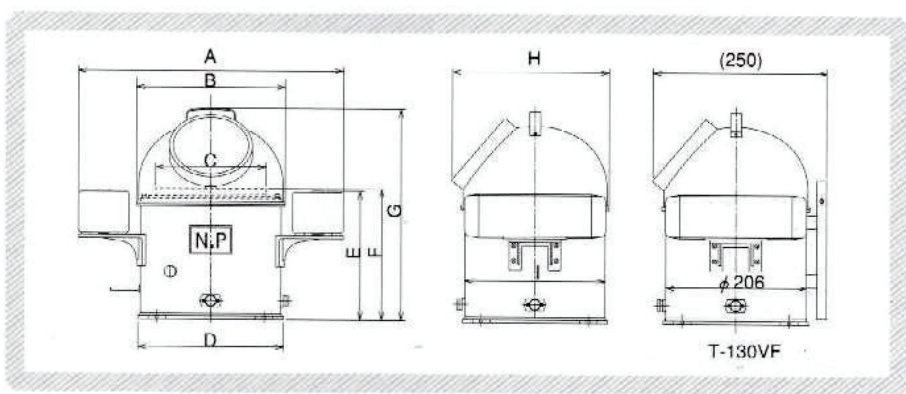
	S-165III	S-180III
Type of compass	binnacle stand type	←
Compass bowl	card dia 165mm	card dia 180mm
Dimmer control	24VDC and 100 or 200VAC	←
Type approvals	JG and CCS	JG
Standard accessories		
Deviation correctors		
Correcting magnets	8 x Ø6 by 45mm 7 x Ø6 by 34mm	←
Quadrantal correctors	10 x pure iron plates	←
Flinder's bars	5 x Flinders's bars	←
Shadow pins	Long & short with pin stand	←
Shade plate	1 pce	←
Installation materials	gasket, bolts and nuts	←



T-150IIF & T-180IIF

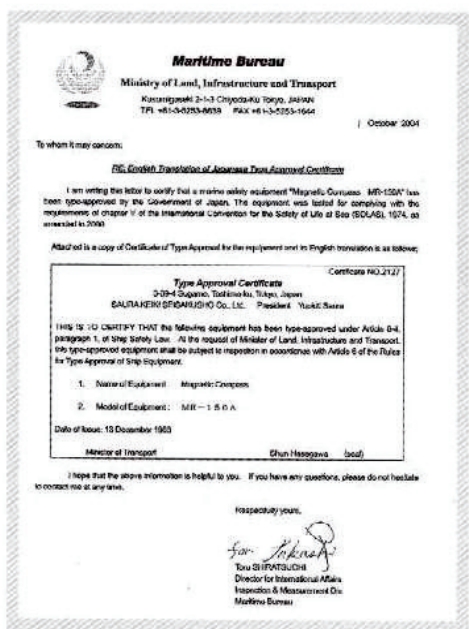
Illumination lamp: 24VDC
 Type approval: JG (Japanese DOT)
 Card illuminated from beneath the compass bowl
 Full deviation correctors: B+C, D, Heeling & Flinders Bar

Model	Card dia	Card lighting	A	B	C	D	E	F	G	H	I	Weight	Approvals
T-150IIF	150mm	on bottom	460	274	202	253	215	235	390	288	244	11 kgs	JG & ZY
T-165IIF	165mm	on bottom	490	310	228	278	235	255	420	324	274	14 kgs	JG
T-180IIF	180mm	on bottom	490	310	228	278	235	255	420	324	274	14 kgs	JG



T-130VD T-130VF T-130VB

Model	Card dia	Card lighting	A	B	C	D	E	F	G	H	I	Weight	Approvals
T-130VB	130mm	on top	430	220	161	212	220	222	352	230	206	6.3kgs	n/a
T-130VD	130mm	on bottom	430	220	161	212	220	222	352	230	206	6.3kgs	JG
T-130VF	130mm	on bottom	430	220	161	212	220	222	352	230	206	6.3kgs	JG



JG Certificate issued by Maritime Bureau of Japan (DOT)

Optional Accessories

Spare Compass Bowl



in wooden box

Azimuth Reading Devices



Azimuth Device
AD-02 for SR-165



Azimuth Circle

AC-02 MR-165C, MR-150, T-180
AC-03 T-150
AC-04 T-130

Transmitting Heading Device (THD/TMC)

Pick-off sensor



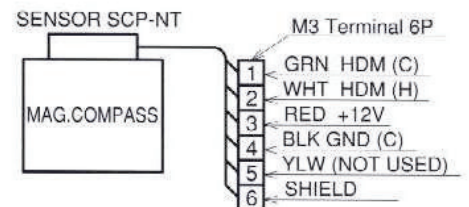
SCP-NT

Provides magnetic compass heading reference by serial data in NMEA format for direct connection to navigational instruments.

Mounts on top surface of a magnetic compass, therefore, free from interference from the correcting magnets beneath the compass bowl.

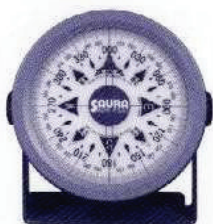
Inner trim control allows output off-set adjustment by +/- 10 deg.

Power supply : 12 - 15VDC
Current drain : 120mA typical
Output sentence : HDM or HDT (selectable)
Output cycle : 200mS average (fixed)



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

Repeater Compass



NRC-150

Large easy to read 150mm dia card
Smooth and quiet card movement, similar to that of a magnetic compass.

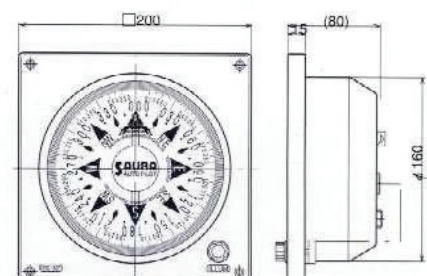
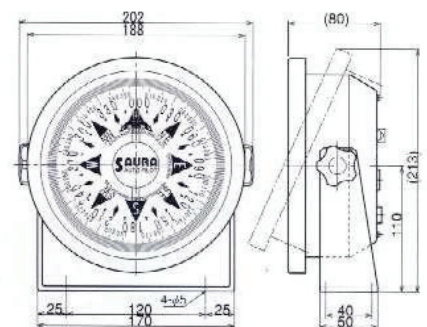
Light in weight and low profile design.

Back-lit illumination.

Dimmer control provided for night use.

Unlimited number of slave repeater connections
Simple connection direct to SCP-NT Pick-off sensor, no interface required.

Power supply : 13.8 - 30VDC
Current drain : 200mA nominal, 400mA (max)
Heading input : Sine/Cosine, Saura format signal, NMEA-HDT or HDM
Heading output : NMEA-HDT or HDM, Sine/Cosine



NRC-150P