

Reflector Compass MR-165C



SAURA
Navigation Instruments

FOR COMMERCIAL & OCEAN GOING FISHING VESSELS



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; 100-110VAC & 24VDC
- Light in weight for ease of shipyard installation
- Top cover with detachable card viewing lid
- Clinometer attached

PERISCOPE

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

TYPE APPROVED TO CCS (IMO A382 Class A):

- China Classification Society Approval No.DBT02420052

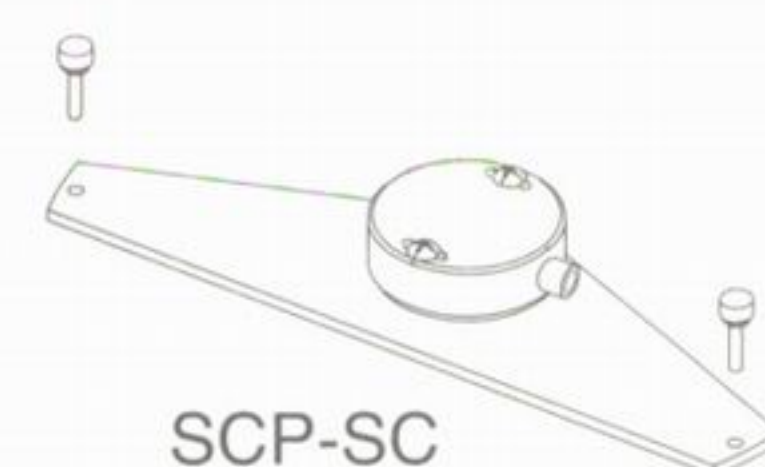
Standard accessories:

Reflector compass bowl	card dia 165mm
Binnacle stand	with lidded top cover
Periscope/optics	traveling tube 720mm length
Dimmer control	24VDC, 10w and 100-110VAC
Cover sheet	Canvas w/Tie down strings
Installation materials	gasket, bolts & nuts
Shade plate	1 pce
Shadow pins	140mm length × 2 100mm length × 1 Pin stand × 1
Deviation adjusting accessories	Correcting magnets; φ6 × 45mm, 6 pcs φ6 × 17mm, 10 pcs Permalloy plates, 10 pcs Flinders bars, 5 pcs
Spare parts	in a wooden box Reflector mirror 1 pce Electric bulb 2 pcs

Optional Accessories:



Spare bowl



Sensor for transmitting compass capability



Azimuth circle AC-02 in wooden box



Distributed by:

SAURA KEIKI SEISAKU-SHO CO., LTD.

TOP NAME IN RELIABILITY SINCE 1918

Saitama, Japan

Overseas enquiries to:

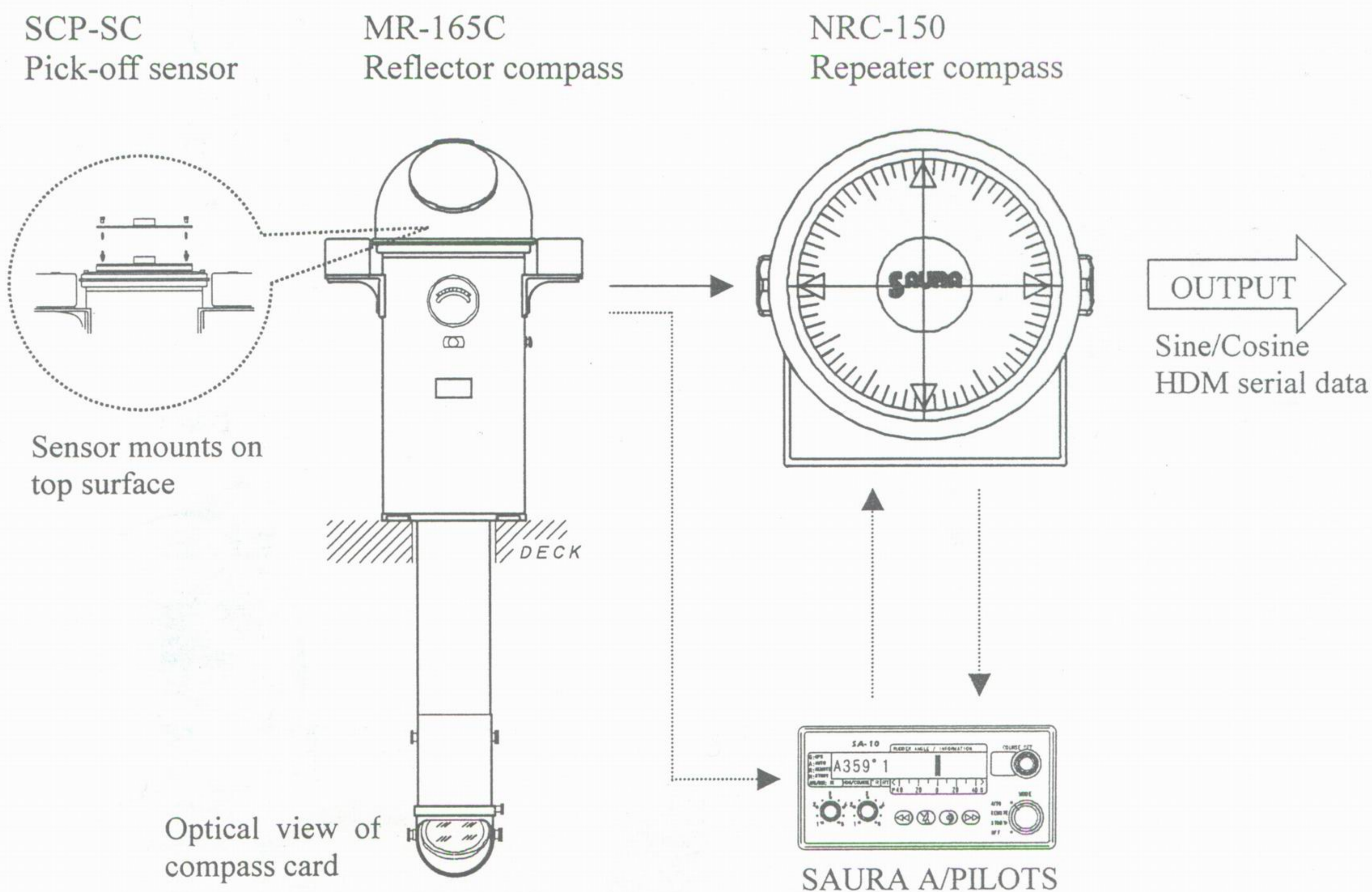
TEL:+81 33256 8549 FAX:+81 33256 8540

TRANSMITTING COMPASS SYSTEM

with MR-165C & NRC-150

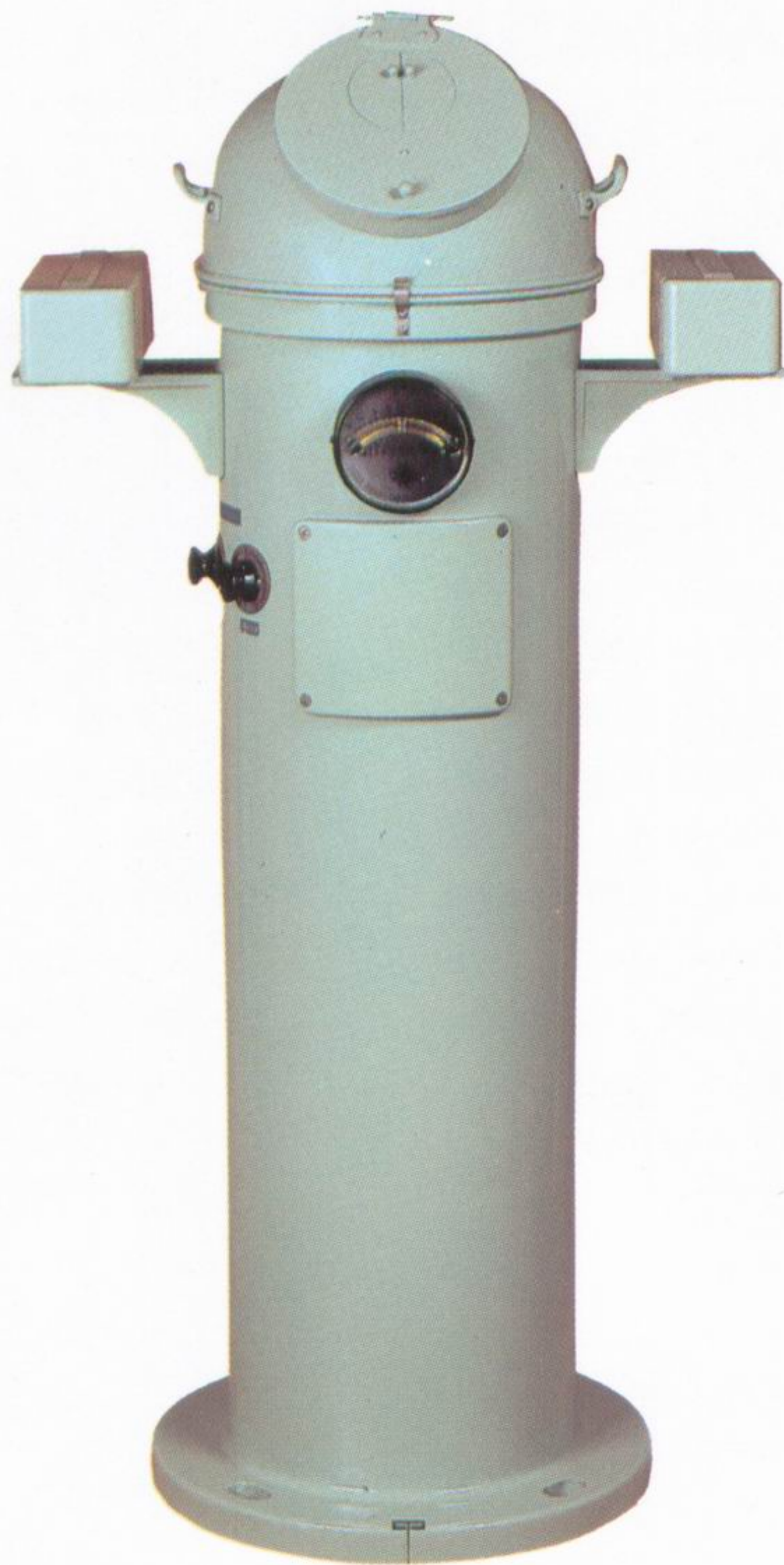
A basic system configuration consisting of:-

- Reflector Compass MR-165C
- Pick-off Sensor SCP-SC
- Repeater Compass NRC-150



- In addition to optical image on MR-165C reflector mirror, NRC-150 repeaters the full compass card presentation at remote location(s) onboard
- NRC-150 provides heading reference for input to other navigation equipment. Output; sine-cosine and HDM serial data (NMEA0183)
- Pick-off sensor SCP-SC – small low profile design and light in weight, causing no hindrance to free dynamic motion of compass bowl in gimbals.
- Top surface mount keeps Pick-off sensor free from magnetic interference caused by deviation correcting magnets fitted beneath compass bowl, ensuring correct and accurate heading detection.

STAND COMPASS



S-165III·S-180III

TYPE APPROVAL	S-165III A	S-180III A
APPROVED NO.	NO. 1835	NO. 1836

DIRECTIONAL SYSTEM

- Card 6½" (7") in diameter; transparent mica card; graduated 0° – 360°
- Needle Two short alnico alloy magnets attached securely to card float.
- Pivot Alloy of Platinum and Iridium.
- Cap Artificial Sapphire.

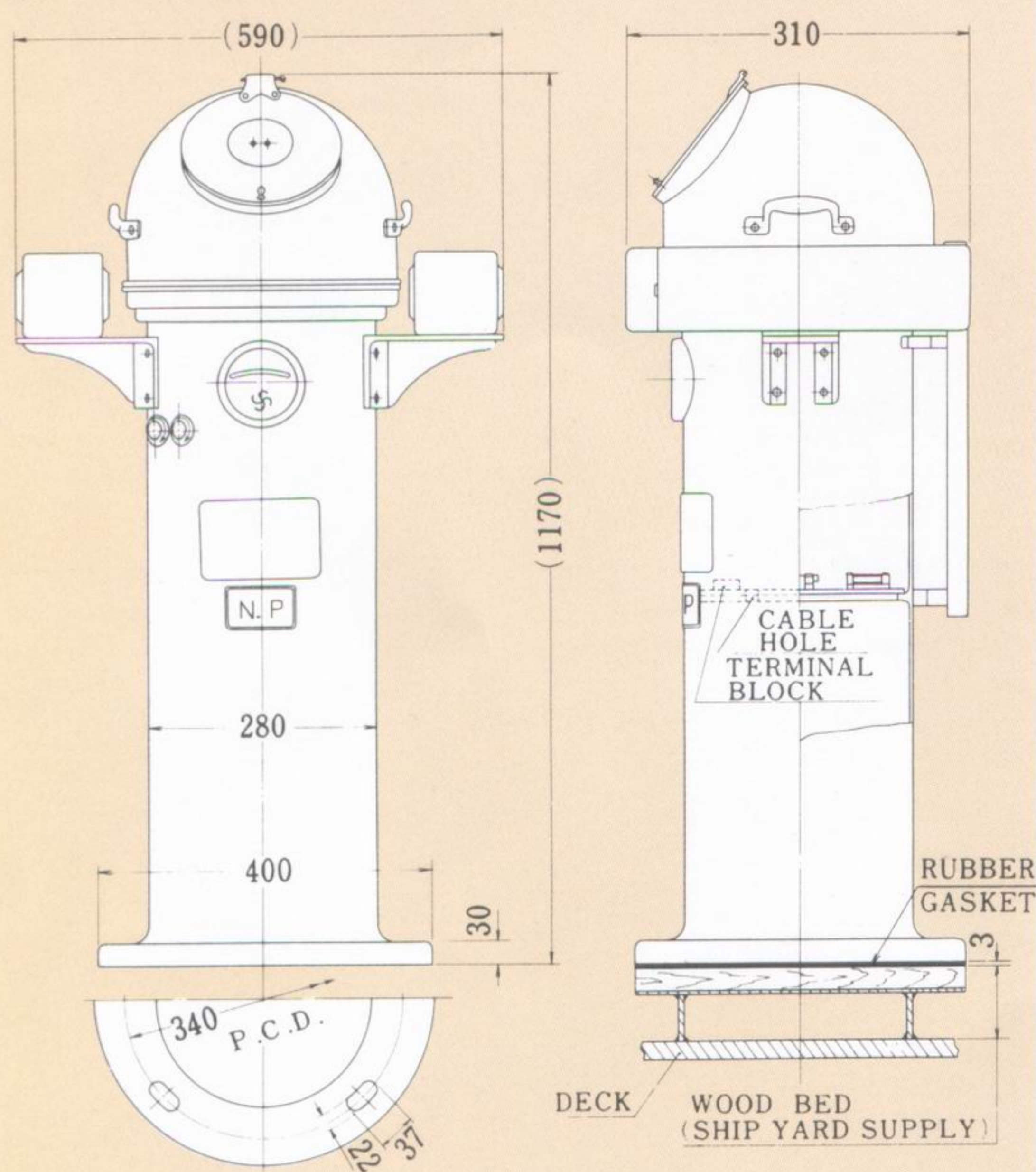
BINNACLE STAND

- Top Dome-top; hinged front shutter with sliding night shade and open V-sight; lifting handles.
- Stand Hydronalium of thickness over 9 mm.
- Lighting Electric lighting from below; electricity A.C. and D.C. 24V
- Clinometer Curved level in round brass case.
- Dimmer Dimmer switch.
- Corrector 10 plates of soft iron in two boxes affixed both sides of the stand by bolts and nuts.
- Corrector Magnet 15 magnets.
- Flinder's bar Three long and two short bars; super-permalloy contained in brass tubes; a 5-section Flinder's bar insertion wood board.
- Heeling adjustment 1 vessel in 7 cylindric haies.

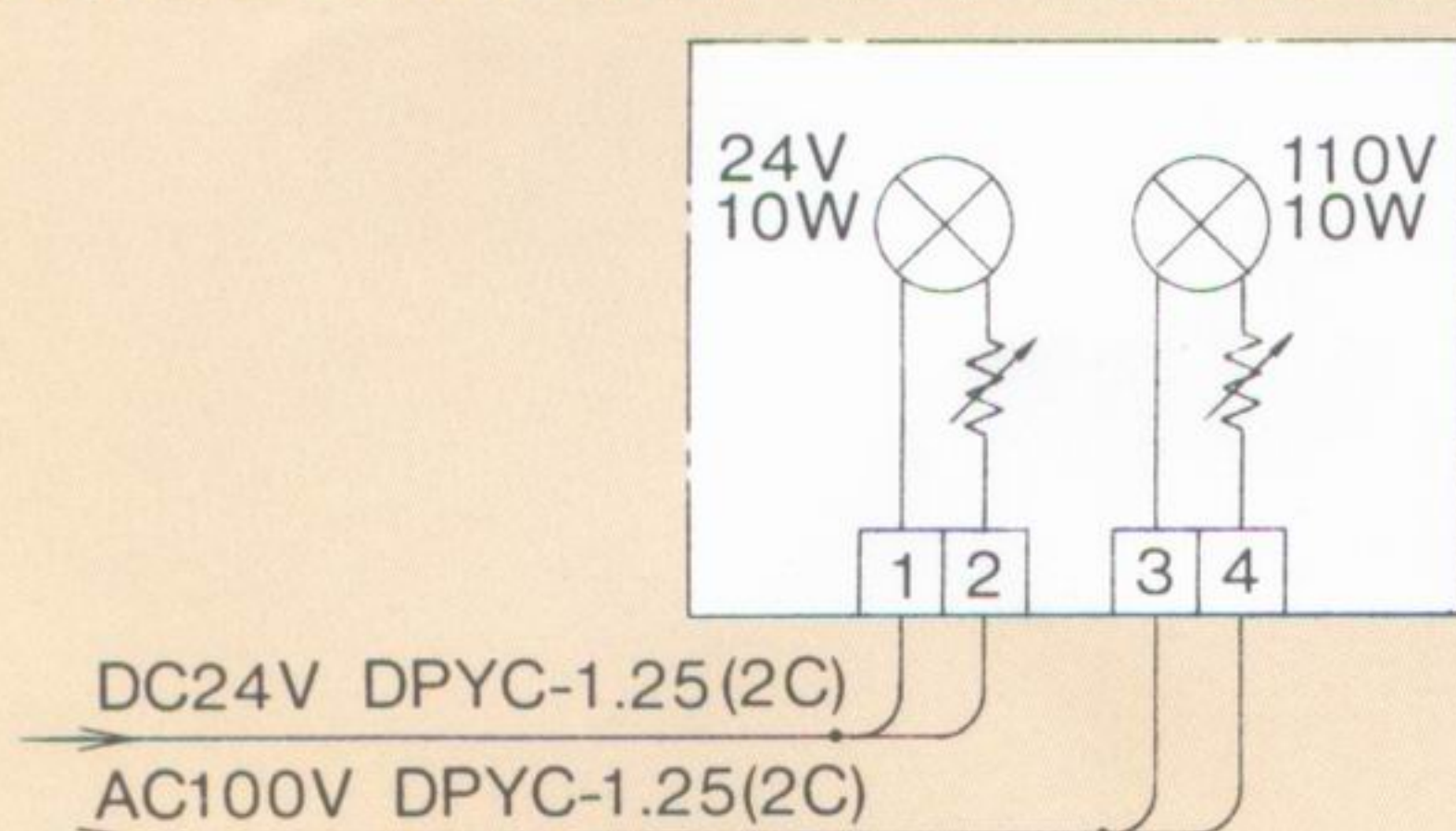
FINISH

Binnacle top: Painted Munsell 2.5G 7/2
Stand: Painted Munsell 2.5G 7/2

DIMENSION



CONNECTION DIAGRAM



Type	Card dia.	Bowl dia.	Size	Net Weight
S 165-III	165mm (6½")	228mm (9")	Deck to card 960mm (38")	35kgs
S 180-III	180mm (7")		Overall 1,170mm (46") Width 590mm (23")	

Standard Accessories	Quantity	Remarks
Shadow pin	1 set	1 pin stand, 3 pins
Correcting magnet	1 set	15 magnets of MK steel
Quadrantal corrector	1 set	10 plates of soft iron
Flinder's bar	1 set	3 long and 2 short ones (super permalloy)
Shade plate	1 pce	
Deck bolt	1 set	4 units with washers
Lamp	1 pce	110V/10W 24V/10W

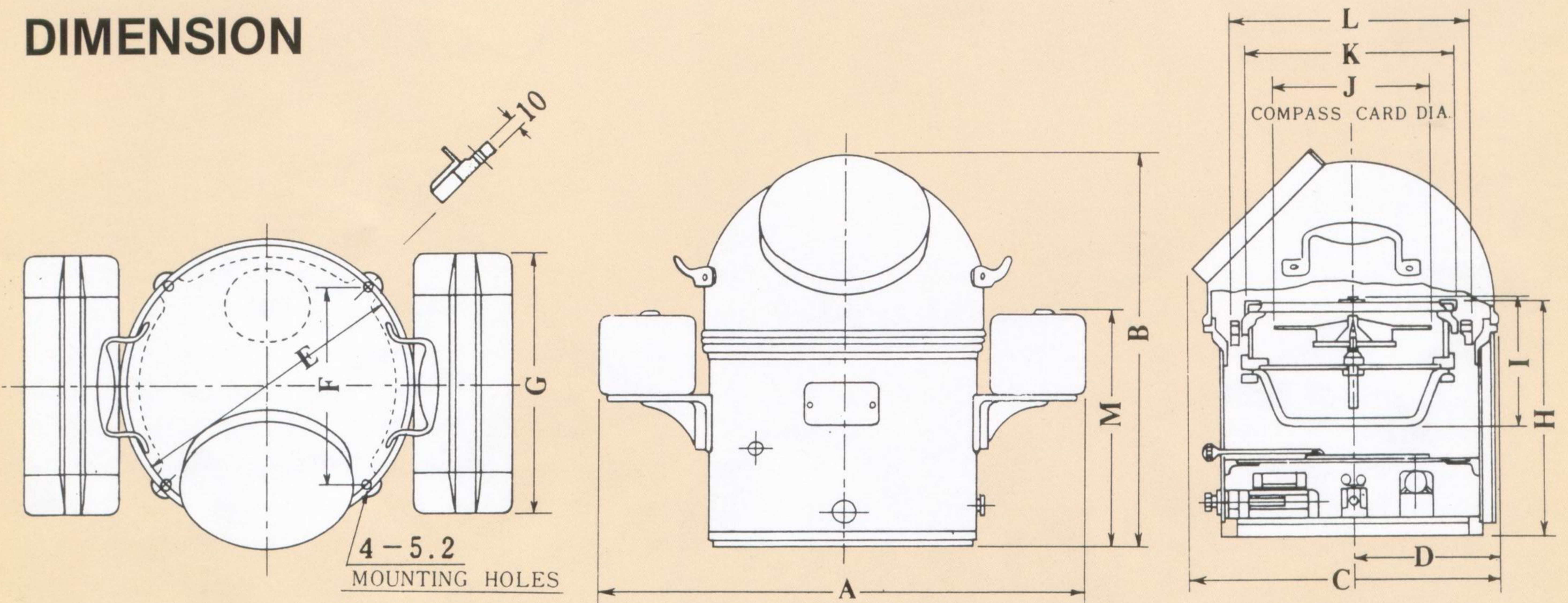
TABLE TYPE COMPASS

T-150II F · T-165II F · T-180II F

TYPE APPROVAL	T-150II FA	T-165II FA	T-180II FA
APPROVED NO.	NO. 1729	NO.1835	NO. 1836



DIMENSION



MODEL	A	B	C	D	E	F	G	H	I	J	K	L	M	WEIGHT
T150II F	460	380	300	140	264	187	250	235	130	150	202	230	215	11kg
T165II F	490	420	330	160	295	209	250	255	135	165	228	260	235	14kg
T180II F	490	420	330	160	295	209	250	255	135	175	228	260	235	14kg

Standard Accessories	Quantity	Packing	Remarks
Shadow pins	1 set	in a wooden case	1 pin stand, 3 pins
Correcting magnets	1 set	in a wooden case	6 pcs ($\phi 6-45$) 10 pcs ($\phi 6-17$)
Set screws	1 set		4 pcs
Correcting handle	1 pce		
Quadrantal corrector	1 set	in a wooden case	10 plates of malleable iron.
Flinder's bar	1 set		5 pcs ($\phi 4 \times 190$)
Shade plate	1 pce		