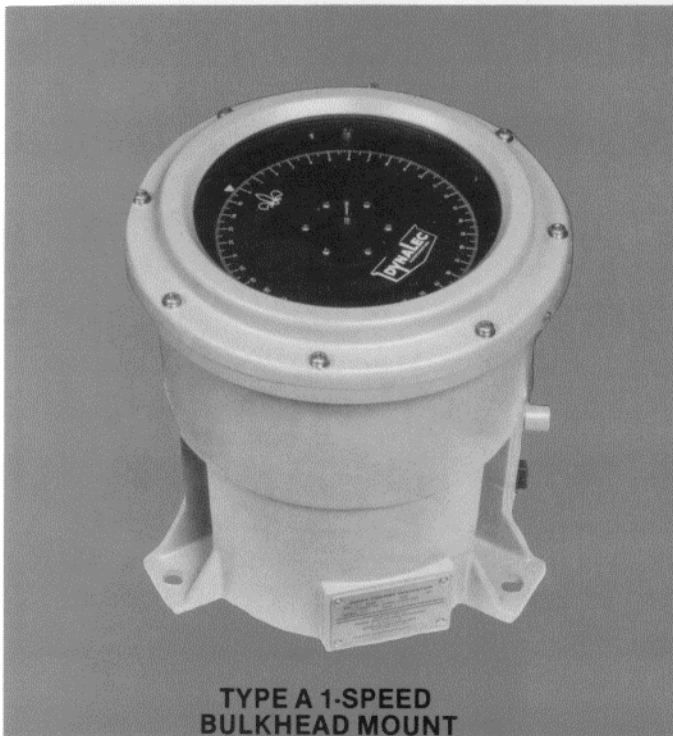


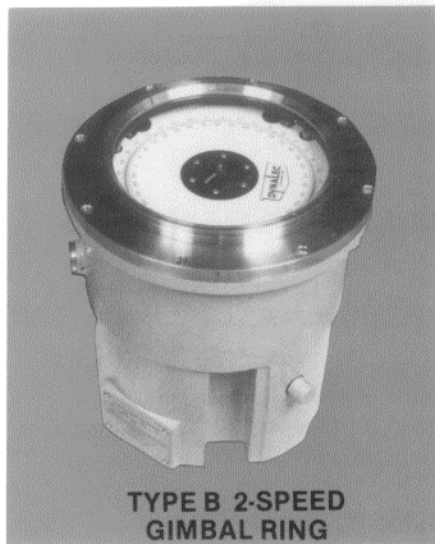
**DESIGN SPECIFICATIONS
TECHNICAL MANUAL**
**MIL-I-15676K
NAVSHIPS 0924-039-4010**
FEATURES

- Ship's Course Indicators (SCI) function as remote repeaters to indicate the ship's heading or course-to-steer. These devices may be installed at any desired location on the ship and oriented at the location in any convenient direction.
- A number of types is available. Each is designated by a type number and by mark and modification numbers.
- Types A, B, E, F and M indicators are servo-driven. Types L and N are synchro-driven. A servo-driven version of Type L is available. Types G and H have a servo-driven course-to-steer dial and a synchro-driven heading dial.
- All indicators receive synchro heading data from the ship's gyrocompass or other synchro transmitting equipment. The gyrocompass signals and the reference power from the ship's supply actuate the indicators to position graduated dials which show the ship's heading.
- There are two basic types: one-speed and two-speed (1X and 36X) units. Two-speed indicators provide greater accuracy because 1X synchro only provides coarse control of the dial and the 36X synchro provides fine control.

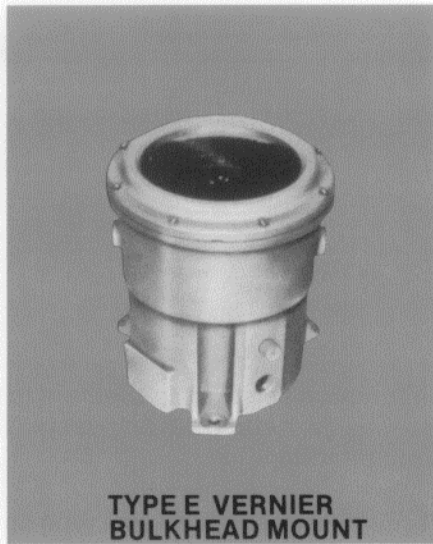

**TYPE A 1-SPEED
BULKHEAD MOUNT**

- Types E and F may have two dials geared together to be read as a mechanical vernier. Types G and H have two independent concentric dials, one displaying ship's heading and the other dial displaying course-to-steer.
- Any SCI is available in either low or non-low noise variations. In the non-low noise variation, the servo and dial assembly mount directly to the cast housing. In the low-noise variation, the servo and dial mount on vibration isolators inside the cast housing.
- All types, except F and H, have integral dimmer rheostats for dial illumination control. Types F and H require a remote dimmer rheostat. Type L can be used with either an integral dimmer control or remote rheostat.
- Each Ship's Course Indicator is complete unit with facilities or mounting and for external electrical connections.

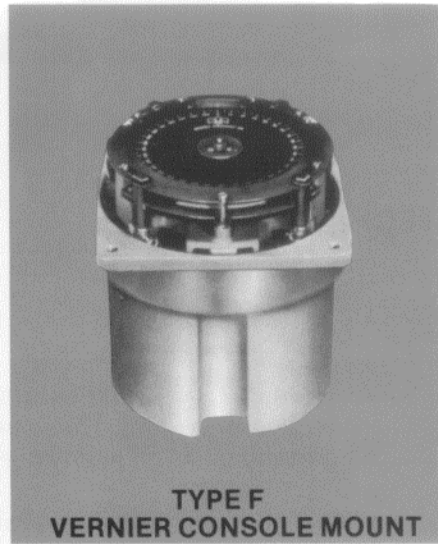
SHIP'S COURSE INDICATORS



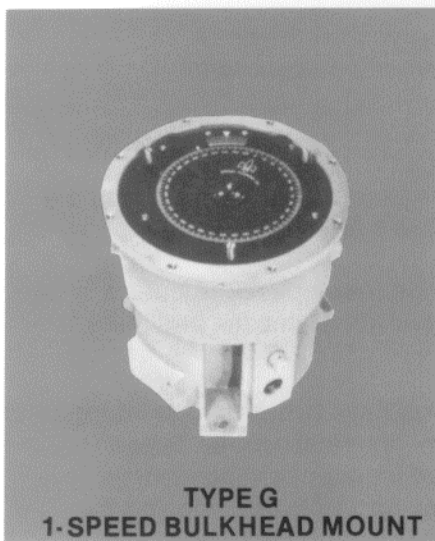
**TYPE B 2-SPEED
GIMBAL RING**



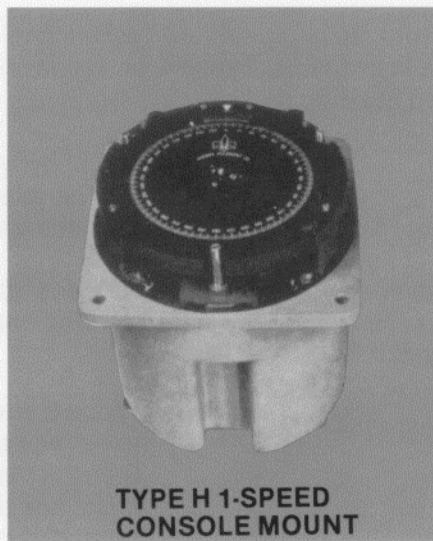
**TYPE E VERNIER
BULKHEAD MOUNT**



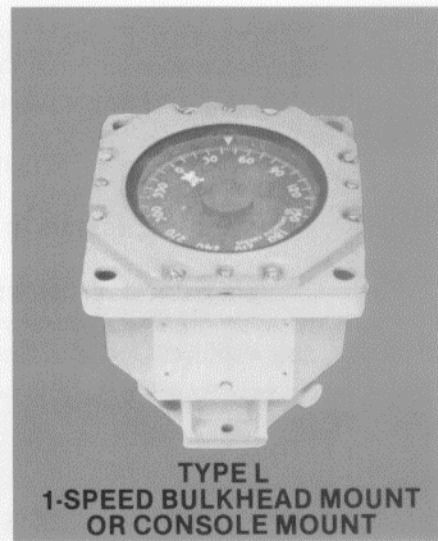
**TYPE F
VERNIER CONSOLE MOUNT**



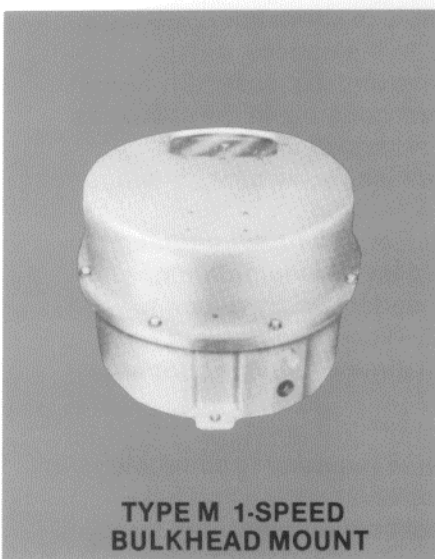
**TYPE G
1-SPEED BULKHEAD MOUNT**



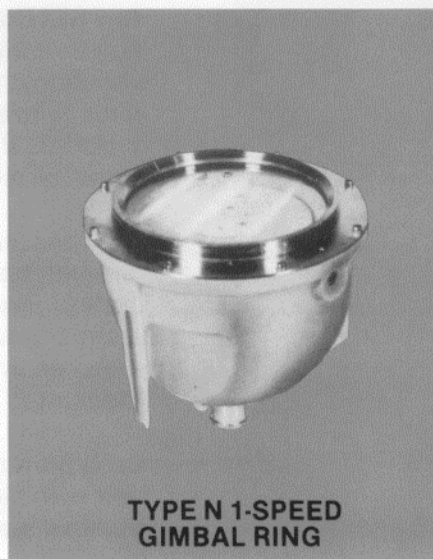
**TYPE H 1-SPEED
CONSOLE MOUNT**



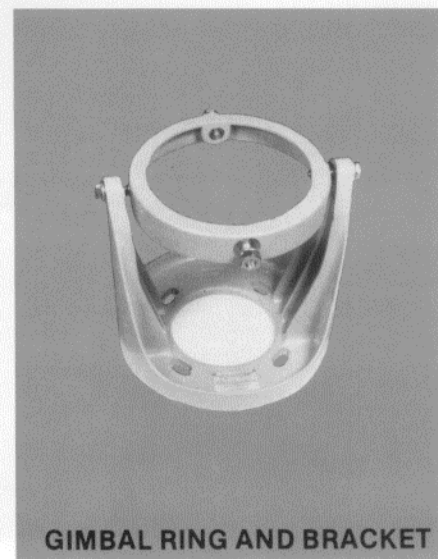
**TYPE L
1-SPEED BULKHEAD MOUNT
OR CONSOLE MOUNT**



**TYPE M 1-SPEED
BULKHEAD MOUNT**



**TYPE N 1-SPEED
GIMBAL RING**



GIMBAL RING AND BRACKET

- Each Ship's Course Indicator is a complete unit with facilities for mounting and for external electrical connections.
- **TYPE A**, Mark 3 Mod 6, is a 400 Hz, one-speed single dial servo-driven Ship's Course Indicator. Available for bulkhead mounting.

TYPE B, Mark 2 Mod 6, is a 400 Hz, two-speed single dial SCI. Housing mounts in a gimbal which is supported by a bracket, mounted on a shelf or on a pelorus stand for bearing determination.

TYPE E, Mark 1 Mod 6, is a 400 Hz, two-speed vernier dial servo SCI for steering. Available for bulkhead mounting.

TYPE F, Mark 1 Mod 6A, is a 400 Hz, two-speed vernier dial servo SCI for steering. Housing mounts to the subplate of a console panel.

TYPE G, Mark 6 Mod 6, is a 60 Hz, one-speed dual dial unit. The outer dial contains only a solitary diamond-shaped mark which indicates course-to steer. It is driven through a servo. The inner dial indicates heading and is directly gear-driven by a receiver synchro. The drive mechanisms and dials mount as a single assembly inside the cast housing. The housing, in turn, mounts to a bulkhead.

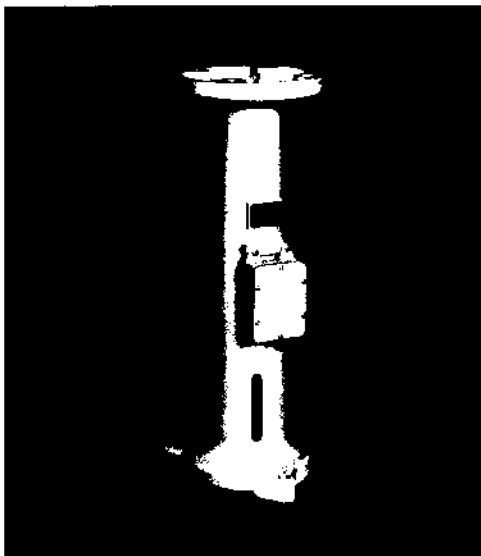
TYPE H, Mark 6 Mod 6A, is identical to the Type G, except for the housing which mounts to the subplate of a control panel.

TYPE L, Mark 7 Mod 6, is a one-speed, single dial synchro motor-driven miniature SCI. Mod 6 is a 400 Hz unit and Mod 6A is 60 Hz. The servo-driven Type L uses a special servo built into a standard BuOrd Size 23 configuration. It can be used on either 60 or 400 Hz. Housing for all variations mounts either to a bulkhead or to a panel.

TYPE M, Mark 9 Mod 6, is a 400 Hz, one-speed, single dial servo SCI for bulkhead mounting. Its large dial makes it suitable for distant viewing.

- **ACCESSORIES:**

GIMBAL RING and BRACKET (SURFACE) - DYNALEC PART 1878032 - provide mechanical mounting for Types B and N, usually on a Pelorus Stand.



PELORUS STAND - DYNALEC PART 1675676 - is a deck-mounting stand. It contains a terminal board which serves as a junction between ship's wiring and the SCI. A Gimbal Ring and Bracket can be bolted on top of the stand.

GIMBAL RING and BRACKET (SUBMARINES) - DYNALEC PART 1880789 - provide for mounting of Type N SCI for use on submarines. The indicator and ring are quickly removable from the bracket; and the bracket is, in turn, removable from the mounting plate.

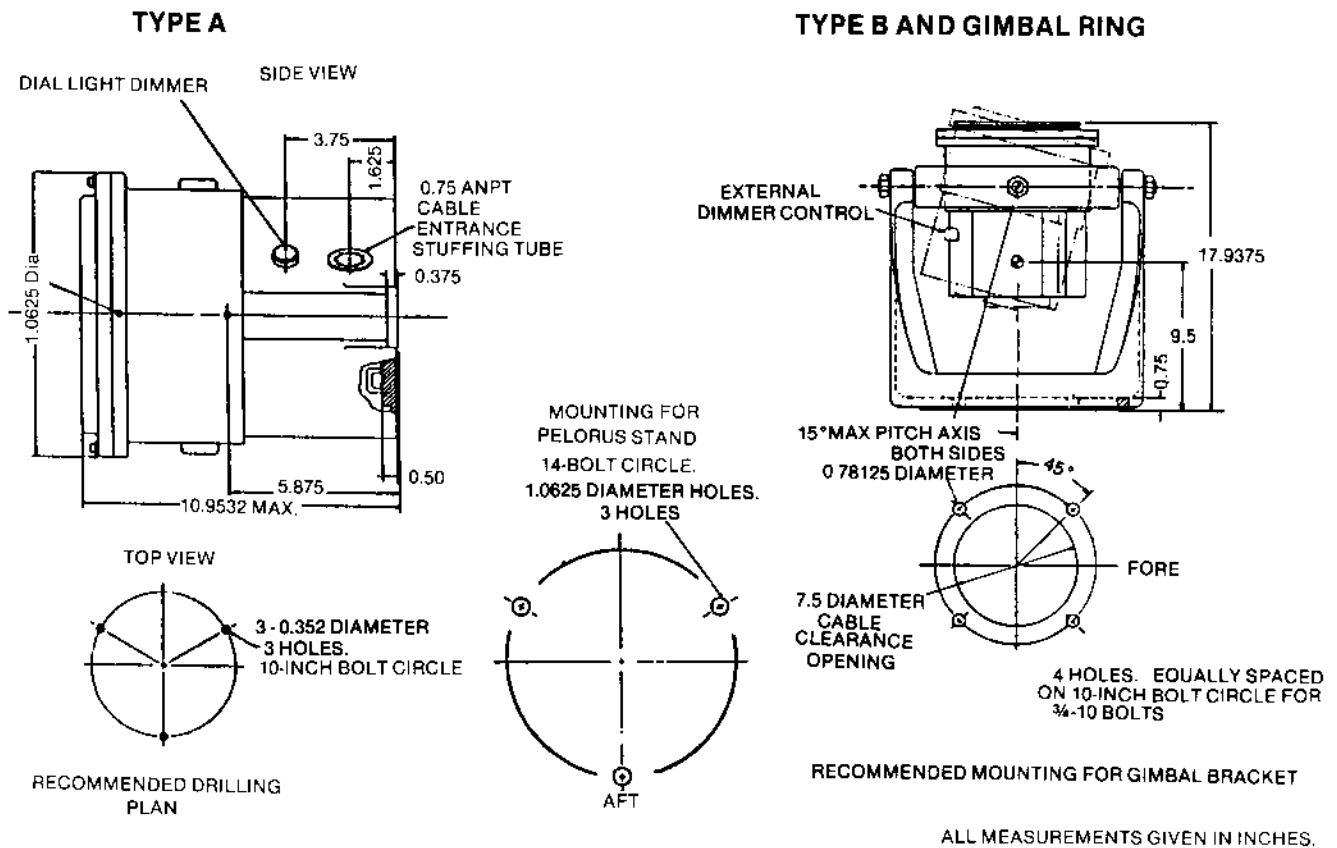
SINUOUS CLOCK ADAPTER RING - DYNALEC PART 1677075 - provides for the use of a clock with Types E and F SCI's by replacing the bezel with an adapter ring.

SHIP'S COURSE INDICATORS

DYNALEC PART NUMBERS, POWER REQUIREMENTS AND PHYSICAL CHARACTERISTICS

DYNALEC PART	TYPE	MARK	MOD	VOLTAGE	SERVO POWER (WATTAGE)	LIGHTS	FREQUENCY	OVERALL SIZE			
								WIDTH	HEIGHT	DEPTH	WEIGHT (POUNDS)
1878094-1	A	3	6	115VAC	7	7	400 Hz	10	10	10.75	22
1878091-1	B	2	6	115 VAC	7	7	400 Hz	10	10	10.75	28
1878089-1	E	1	6	115 VAC	7	7	400 Hz	10	10	10.875	24
1878088-1	F	1	6A	115 VAC	7	7	400 Hz	8.875	8.875	10.875	20
1878086-1	G	6	6	115 VAC	8	7	60 Hz	10	10	10.875	32
1878085-1	H	6	6A	115 VAC	8	7	60 Hz	8.875	8.875	10.875	30
1878158-1	L	7	6	115 VAC	4	6	400 Hz	6	6	6	9
1878158-2a	L	7	6A	115 VAC	4	6	60 Hz	6	6	6	9
1878158-2b	L	-	-	115 VAC	6	6	60/400 Hz	6	6	6	9
1880160-1	M	9	6	115 VAC	7	4	400 Hz	15.5625	16.5625	10.4375	33
1880787	N	10	6	115 VAC	4	7	400Hz	10	10	7.5	13

MOUNTING INFORMATION



DYNALEC CORPORATION

For over thirty years, Dynalec Corporation has established a solid reputation for quality, design excellence and manufacturing expertise. With unsurpassed attention to detail and strict adherence to specifications and all other standards, Dynalec continues to strive to provide its customers with reliable products. Dynalec is ready to offer information about its products or quote on any project.



DYNALEC
CORPORATION

87 WEST MAIN STREET
P.O. BOX 188
SODUS, NEW YORK 14551-0188

TELEPHONE 315-483-6923
CABLE DYNALEC SODUS
TELEX 322392
FAX 315-483-2298