



Vittlefields Tech. Ctr. Forest Road,
Newport, Isle of Wight, PO30 4LY, UK.
Telephone: +44 (0) 1983 822180
Facsimile: +44 (0) 1983 822181
E-mail: sales@marine-data.co.uk
Web: www.marine-data.co.uk

MD54

Electromagnetic Sensor Mounting Spacer

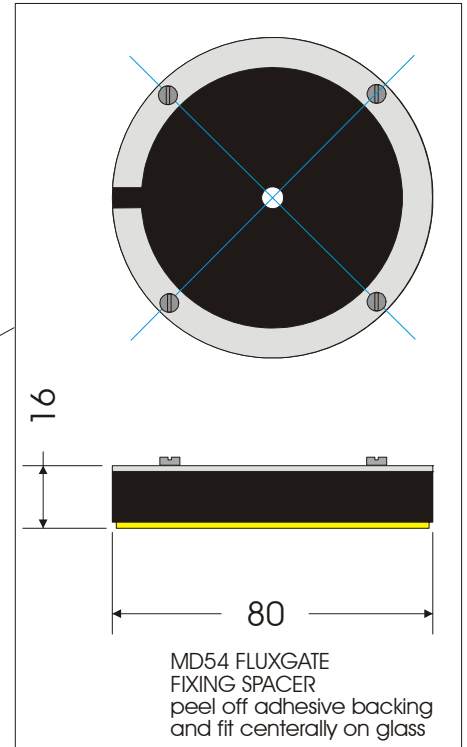
LIQUID COMPASS BOWL
(CARD = 2000 C.G.S.)

PIVOT
ASSEMBLY

STABILIZER RING
FILLED WITH LEAD

MD52A
ELECTROMAGNETIC SENSOR
(CENTRALLY FIXED)

MD52A
FIXING SCREWS



- Introduction**

The MD 54 is an electromagnetic sensor coil mounting bracket. It has been designed to fit a majority of externally gimballed magnetic compasses. Compasses which have their own coil mounting bracket must be suitably non magnetic and rigid. Under no circumstances must the coil be glued to compass or else performance will be degraded maintenance will be difficult and the coil may be damaged.

- Installation guide lines**

	Description	Remark
1	It is important that the coil, when mounted on the bracket, is parallel and central to the card in the bowl.	Unacceptable errors may occur otherwise.
2	When fitting any bracket height adjustment may be necessary. The distance the sensor is mounted from the compass magnet is important or else errors may occur. (To find the correct height position use a small needle compass placed centrally to the compass card. Find the vertical null point i.e. where the compass card has no effect, the coil must then be placed midway between this point and the card. On a compass card of 2000 CGS, which is typical, this is approximately 90mm from the card.)	a) If the coil is too close an error may be induced in the compass card reading. To check there is no effect once mounted on the compass switch the coil on and off observe the compass cards heading at fixed headings. Ensure there is no measurable difference in heading when on or off. b) If the coil is mounted too far away from the compass card the field strength between the compass card and coil is not strong enough and the reading device will become inaccurate.
3	The bracket must be positioned on the compass so, if a reflector is fitted, the bracket does not obscure the viewing of the compass card.	
4	Effect of corrector magnets.	provided the nearest corrector does not have a distance ratio between coil and compass card of more than 1.2:1.0 accuracy should not be effected.