

Ships and marine technology - Marine gyro-compasses

Contents

	Page
Foreword	v
Introduction	vi
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Abbreviated terms	3
5 Construction requirements	4
6 Performance requirements	5
6.1 Accuracy in latitudes up to 60°	5
6.1.1 Settling time	5
6.1.2 Settle point error	5
6.1.3 Settling time under operational conditions	5
6.1.4 Settle point error under general conditions	5
6.1.5 Residual error in correction	5
6.1.6 Effect of alteration of speed	5
6.1.7 Effect of alteration of course	5
6.1.8 Accuracy on a Scorsby table	5
6.1.9 Synchronization between the master compass and repeaters	6
6.2 Interface	6
6.3 Alert management	6
6.3.1 General	6
6.3.2 Power failure in the gyro-compass ("Power fail" alert)	6
6.3.3 Malfunction of the gyro-compass system ("System fault" alert)	7
7 Type tests	7
7.1 General	7
7.2 Settling time test	7
7.3 Settle point error test	7
7.4 Settle point heading repeatability test	7
7.5 Settling time on a Scorsby table	7
7.6 Scorsby test	8
7.7 Intercardinal motion test	8
7.8 Repeater accuracy test	8
7.9 Speed correction test	9
7.10 General requirement test	9
7.10.1 General	9
7.10.2 Voltage variation test	9
7.10.3 Frequency variation test	10
7.10.4 Vibration tests	10
7.10.5 Temperature test	11
7.10.6 Damp heat test	11
7.10.7 Other tests	11
7.11 Interface test	11
7.12 Alert management test	12
7.12.1 Basic test for alert management	12
7.12.2 "Power fail" alert or output of a status signal on the EUT power	12

7.12.3 “System fault” alert.....	12
8 Marking.....	12
9 Information.....	12
Annex A (normative) Requirements for ship surveyors for the installation of gyro-compasses and repeater compasses on board ships.....	13
Annex B (normative) Alerts definition for gyro-compasses.....	14
Annex C (normative) IEC 61162 interfaces for VDR and other external equipment.....	15
Bibliography.....	17