



中国船级社
CHINA CLASSIFICATION SOCIETY

证书编号/Certificate No.
TJ23PTB00016

型式认可证书
CERTIFICATE OF TYPE APPROVAL

兹证明本证书所述制造厂具备按照下列标准的要求生产本证书所列产品的能力和条件。

This is to certify that the manufacturer stated in the certificate meets the requirements of the standards listed below and is available with the ability and conditions to produce the products described in the certificate.

制造厂/Manufacturer

北京中航天佑科技有限公司
BEIJING FOGSINS TECHNOLOGY CO.,LTD.

地址/Address

北京市朝阳区五里桥二街1号院1号楼3层0325

产品名称/Product

船用光纤陀螺罗经
Marine Fiber Optic Gyro-Compass
光纤陀螺罗经
Fiber Optic Gyro-Compass

认可标准/Approval Standard

1. 国际海事组织大会决议 A. 424 (XI) 《陀螺罗经性能标准》
IMO Resolution A.424 (XI) Performance Standards for Gyro-Compasses
2. 国际海事组织大会决议 A. 821 (19) 《高速船陀螺罗经性能标准》
IMO Resolution A.821(19) Performance Standards for Gyro-compasses for High-speed Craft
3. 国际海事组织大会决议 A. 694 (17) 《作为全球海上遇险和安全系统 (遇险和安全系统) 组成部分的船载无线电设备和电子助航设备的一般要求》
IMO Resolution A.694(17) General Requirements for Shipborne Radio Equipment Forming Part of the Global Maritime Distress and Safety System (GMDSS) and for Electronic Navigational Aids
4. 国际海事组织海安会决议 MSC. 191 (79) 《船载航行显示器有关航行信息显示的性能标准》
IMO Resolution MSC.191(79) Performance Standards for the Presentation of Navigation-Related Information on Shipborne Navigational Displays
5. 国际海事组织海安会决议 MSC. 302 (87) 《通过驾驶室警报管理性能标准》
IMO Resolution MSC.302 (87) Adoption of performance standards for Bridge Alert Management
6. IEC 60945:2002/COR1:2008 《船用航行和无线电通信设备及系统-通用要求-试验方法和试验结果的要求》
IEC 60945:2002/COR1:2008 Maritime Navigation and Radiocommunication Equipment and Systems -General Requirements - Methods of Testing and Required Test Results

证书有效期至/ This Certificate is valid until 2027年07月04日/ Jul. 04,2027

发证机构/ Issued by 中国船级社天津分社
CCS Tianjin Branch

签发日期/ Date 2023年07月05日
Jul. 05,2023

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Form No: T01.

联系方式/Contact Us, 见本社官方网站/See official web site of the Society (<http://www.ccs.org.cn>)

UTN:P023-18953195

用于/Intended for

船舶/Ships

产品明细/Product Description

光纤陀螺罗经/Fiber Optic Gyro-Compass (M0001)

名称/Name	属性(值)/Value	单位/Unit
型号/Type	Fogcompass-I, Fogcompass-II, Fogcompass-III, Fogcompass-IV	
电源/Power Source	AC 220/ DC 24	V
稳定点误差/L.M. Settle Point Error	$\pm 0.5^\circ \times \text{sec } \Phi$	
稳定时间/Settling Time	20	min
产品组成/Product Components	主罗经, 电源盒, 操作显示单元, 接口盒 Main Compass, Power Box, Operation and Display Unit, Interface Box ,	
罗经安全距离/Compass Safe Distance	65	cm
外壳防护等级/Degree of Protection of Enclosure	主罗经/Main Compass: IP54; 电源盒/Power Box, 操作显示单元/Operation and Display Unit, 接口盒/Interface Box: IP22,	

光纤陀螺罗经/Fiber Optic Gyro-Compass (M0002)

名称/Name	属性(值)/Value	单位/Unit
型号/Type	CHN-COMPASS-I; CHN-COMPASS-II; CHN-COMPASS-III; CHN-COMPASS-IV;	
电源/Power Source	AC 220/ DC 24	V
稳定点误差/L.M. Settle Point Error	$\pm 0.75^\circ \times \text{sec } \Phi$	
稳定时间/Settling Time	20	min
产品组成/Product Components	主罗经, 电源盒, 操作显示单元, 接口盒 Main Compass, Power Box, Operation and Display Unit, Interface Box ,	
罗经安全距离/Compass Safe Distance	60	cm
外壳防护等级/Degree of Protection of Enclosure	主罗经/Main Compass: IP54; 电源盒/Power Box, 操作显示单元/Operation and Display Unit, 接口盒/Interface Box: IP22,	

批准的图纸/Approved Drawings

图纸批准号/ Drawings Approval No. : NP22PPP03719, NP22PPP03719_1

产品认可试验报告/ Approval Test Report

试验报告编号/ Test Report No. : E20230303021901-1
 试验报告日期/ Test Report Date : 2023-06-20

试验报告编号/ Test Report No. : E20230303021901-2
 试验报告日期/ Test Report Date : 2023-06-20

试验报告编号/ Test Report No. : H202304212900-01
 试验报告日期/ Test Report Date : 2023-06-21

试验报告编号/ Test Report No. : ZHTY-LJ-001
 试验报告日期/ Test Report Date : 2023-06-14

认可后的产品检验方式/ Method of Product Inspection after Approval

按规范认可后应进行产品检验的产品/The product should be inspected in term of the rules.
 认可后的产品检验应由本社验船师根据本社规范规定按批准的产品检验计划进行检验, 经检验合格后由本社颁发船用产品证书。

After approval, product inspection should be carried out by the Surveyor of the Society in accordance with the approved product inspection scheme, and the Marine Product Certificate will be issued by the Society upon satisfactory inspection.

认可保持条件/ Maintenance Requirements of Approval

1. 型式认可后, 如果产品及其重要零部件的设计、所用材料或制造方法有所改变, 且影响到产品的主要特性、特征; 或产品的性能指标有所更改, 且超过认可的范围, 则有关图纸和文件应经检验机构审批。并在检验机构认为必要时, 经本社检验人员见证有关试验和进行检查, 其结果应能证实仍符合认可条件。

After type approval, if there are changes to the design, materials used or manufacturing method of the product and important components and such changes affect major characteristics and properties of the product, or property indexes of the product are changed and exceed the scope of approval, related drawings and documents are to be examined and approved by the concerned survey office. Where deemed necessary by the survey office, the surveyor to the Society will go to witness relevant tests and conduct inspection and the results should be able to demonstrate compliance with the approval conditions.

2. 工厂的质量管理体系应保持有效运行, 并且与认可时一致。如果质量管理体系发生改变, 应经原体系认证机构审核并报本社批准。

The quality management system of the factory shall be ensure effective operation, and shall be the same as the situation of approval. If there are any changes to the quality management system, auditing of the original certification organization for quality management system and the society's approval shall be obtained.

3. 认可证书有效期内, 如果出现可能导致本社取消认可的情况, 工厂应及时采取有效的纠正措施。

Within the validity of the approval certificate, if cases occur that may cause the Society to withdraw the approval, the manufacturer should take corrective actions in a prompt and effective manner.

4. 在认可证书有效期内, 本社检验人员可在未经事先通知的情况下对工厂的产品制造过程进行审核, 以验证产品的生产是否符合业经本社批准的图纸和文件。工厂应予以配合。

Within the validity of the approval certificate, the surveyor to the Society may pay unannounced audit to the manufacturing process of the product in order to confirm whether it is in compliance with the drawings and documents approved by the Society. The factory should provide an active cooperation and necessary for the surveyor.

5. 如果属于获得型式认可B 模式证书, 且无需颁发船用产品证书/等效证明文件的情况, 证书获得者应接受本社每年一次的定期审核, 定期审核日为认可证书期满之日对应的每一周年日, 检查工作应在周年日的前后三个月内进行。

If belong to the situation of the product has type approval mode B certificate, and marine product certificate/equivalent document is not necessary, those who have obtained the certificate should be subject to periodical audit every year. The date of periodical audit shall be each anniversary date which corresponds to the date of expiry of the relevant certificate and the periodical audit shall be done within a time span of three months before and after the annual surveillance date.

备注/Remarks

1、本产品使用时应输入卫星定位信号。

This product must be connected to ship GNSS device.

2、适用纬度/Operation Latitude: 0~60° (N,S)。

Applicable latitude: 0-60 ° (N, S).

3、适用航速/Operation ship speed: 0~70 Kn;

Applicable speed/Operation ship speed: 0-70 Kn.

4、姿态精度/Attitude accuracy: ± 0.03° ;

5、本产品用于高速船时, 供电电源应连接不间断电源。

This product should be connected to uninterrupted power supply, when applied to high speed craft.

6、本社已审核了产品厂无石棉声明, 但本社的审核不免除产品厂按照合同关系向订货方保证产品无石棉的责任。

The declaration of asbestos-free submitted by manufacturer has been reviewed by the Society. However, liability of the manufacturer to guarantee the products are asbestos-free to purchaser under contract will not be exempted.

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