

# 中国船级社 CHINA CLASSIFICATION SOCIETY

证书编号/Certificate No. **TJ23PTB00014** 

# 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

## 麦克传感器股份有限公司 Micro Sensor Co.,Ltd.

#### 地址/Address

陕西省宝鸡市渭滨区英达路18号 No. 18, Yingda Road, Weibin District, Baoji City, Shaanxi Province, China

## 产品名称/Product

#### 压力变送器,液位变送器 Pressure Transmitter ,Level Transmitter

#### 附加标志/Notations

无/Nil.

## 认可标准/Approval Standard

1. 中国船级社《钢质海船入级规范》(2022)及其变更通告第4篇第1章

Chapter 1, Part Four of China Classification Society Rules for Classification of Sea-Going Steel Ships 2022 and its Change Notices

2. 中国船级社《钢质海船入级规范》(2022)及其变更通告第7篇第1、2章

Chapter 1 and 2, Part Seven of China Classification Society Rules for Classification of Sea-Going Steel Ships 2022 and its Change Notices

## 用于/Intended for

船舶/Ships

证书有效期至 his Certificate is valid until

2027年03月27日/Mar. 27,2027

签发日期 2023年06月16日 Date Jun. 16,2023

本证书根据中国船级社规范和相关规定签发。所有证书页为一个整体,必须同时使用。纸质证书每页均须由本社盖章方为有效,电子证书含数字签名方为有效,本证书复印件无效。任何单位和个人均不应摘录或节选本证书的部分内容。有关方对所持证书的真实性有疑问时,可以向我社检验机构咨询。This Certificate is issued pursuant to the Rules of the Society and related regulation. All pages of the certificate are taken as a whole and are used simultaneously. No paper certificate page is valid without bearing the stamp of the Society, no electronic certificates is valid without the digital signature, and no copied form of the certificate is regarded as valid. Any part of the certificate is not to be extracted or abridged by any unit or individual in any form. Related parties who are doubted about the authenticity of the certificate may inquire of the Society or its offices.

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:P023-03331084

Issued by

## 产品明细/Product Description

#### 压力变送器/Pressure Transmitter (M0001)

名称/Name	属性 ( 值 ) /Value	单位/Unit
型号/Type	见附页   See additional page	
产品名称/Product Name	见附页 See additional page	
精度/Accuracy	见附页 See additional page	
测量范围/Measure Range	见附页 See additional page	
额定电压/Rated Voltage	见附页 See additional page	
外壳防护等级/Degree of protection of	见附页   See additional page	
enclosure	July See additional page	
防爆标志/Explosion-Proof Marking	见附页 See additional page	

#### 液位变送器/Level Transmitter (M0001)

名称/Name	属性(值)/Value	单位/Unit
型号/Type	见附页   See additional page	
产品名称/Product Name	见附页 See additional page	
精度/Accuracy	见附页 See additional page	
测量范围/Measure Range	见附页 See additional page	
额定电压/Rated Voltage	见附页 See additional page	
外壳防护等级/Degree of protection of enclosure	见附页 See additional page	
防爆标志/Explosion-Proof Marking	见附页 See additional page	

## 批准的图纸/Approved Drawings

图纸批准号/ Drawings Approval No.: TJ15A00018、TJ16A00049、TJ22PPP20075

#### 产品认可试验报告/ Approval Test Report

试验报告编号/ Test Report No.: EM201500398-2 试验报告日期/ Test Report Date: 2015-05-25

试验报告编号/ Test Report No.: MSJY2015005 试验报告日期/ Test Report Date: 2016-06-16

试验报告编号/ Test Report No.: E201611140882-1、H201611142789-01

试验报告日期/ Test Report Date: 2017-01-18

试验报告编号/ Test Report No.: MSJY2016011 试验报告日期/ Test Report Date: 2017-02-04

试验报告编号/ Test Report No.: MSJY2019003 试验报告日期/ Test Report Date: 2019-04-02

试验报告编号/ Test Report No.: H202303287125-01 试验报告日期/ Test Report Date: 2023-05-17

试验报告编号/ Test Report No.: E202303286241-2 试验报告日期/ Test Report Date: 2023-05-18

试验报告编号/ Test Report No.: 202304002 试验报告日期/ Test Report Date: 2023-05-28

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

按照规范只认可不进行产品检验的产品/The product approved only in term of the rules: 认可后的产品检验由制造厂按本社批准的产品检验计划进行检验,经检验合格后由制造厂签发合格证明,并连同该 产品的本社认可证书复印件一并交付用户,制造厂对产品符合公约、法规、本社规范和本社认可的标准规定负责。After approval, product inspection should be carried out by the Manufacturer in accordance with the product inspection scheme approved by the Society. Upon satisfactory inspection, and the Quality Certificate issued by the Manufacturer should be provided to the purchaser together with the copy of the approval certificate issued by the Society. The manufacturer should take responsibility for the product being in compliance with the convention, statutory regulation, the Society rules and the standard accepted by the Society.

## 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.
- 2. 本证书由原型式认可证书(No. TJ19PTB00004\_01, TJ19PTB00004\_02) 变更并换新。 This certificate is modified and renewed from the previous Type Approval Certificate No. TJ19PTB00004\_01, TJ19PTB00004\_02.
- 3. 本认可产品的防爆性能参数基于制造厂提交的防爆合格证(签发机构、证书号、防爆标准见证书附页),非中国船级社认可。

The Ex-Proof parameters of the approved products originate from Ex- Certificate received from manufacturer (Issuing Body, Ex- Certificate No., Standards for Ex- Proof see additional page ), not approved by CCS.

4. 认可产品应持有有效的防爆合格证,否则该产品的认可将自动失效。 This type approval certificate will be invalid if the product doesn't hold valid Ex-Certificate.

#### 中国船级社天津分社

#### **CCS Tianjin Branch**

注: 本证书含有附页, 共2页

Note: The certificate is attached with additional 2 page(s)

# 产品明细/Product Description

产品明细 Particulars 产品名称 Product Name	型号 Type	精度 Accuracy	测量范围 Measure Range	防护等级 Degree of Protection of Enclosure	额定电压 Rated Voltage	防爆标志 Explosion-Proof Marking
液位变送器 Level Transmitter	MPM426W MPM416W MPM4700	±0.1%FS ±0.25%FS ±0.5%FS	0~200mH₂0	主体/Main body: IP68 接线盒/Junction	15~28VDC 15~28VDC 10~28VDC	Ex ia IIC T6 Ga
	MPM489W MPM416WK MPM416WRK		$0 \sim 4 \text{mH}_2 0$ $0 \sim 20 \text{mH}_2 0$	box、电子壳体 /Electronic shell: IP65	10~28VDC 15~28VDC 15~28VDC	Ex ia IIC T6 Ga
压力变送器 Pressure Transmitter	MPM480	±0.1%FS ±0.25%FS ±0.5%FS	-0.1~60MPa	IP65	10~28VDC	Ex ia IIC T6 Ga Ex db IIC T6 Gb
	MPM483				15~28VDC	Ex ia II C T6 Ga Ex db II C T6 Gb Ex ia II C T6 Ga
	MPM489 MPM4730			IP66	10~28VDC 10~28VDC	Ex d II C T6 Gb  Ex ia II B T6 Ga
	MDM490		0∼2MPa	IP65	15~28VDC	Ex ia IIC T6 Ga
	MDM3051S		-0.1∼60MPa	IP65	12~42VDC (带 15~42VDC (带 液晶背光显示 表头/With backlit LCD header)	Ex ia IIC T4 Ga Ex d IIC T6 Gb
	MDM7000	$\pm 0.05\%FS$ $\pm 0.075\%FS$ $\pm 0.1\%FS$ $\pm 0.2\%FS$ $\pm 0.25\%FS$	0∼40MPa	IP67	10.5∼55VDC	Ex ia IIC T4 Ga Ex db IIC T6 Gb

#### 证书编号/Certificate No.:TJ23PTB00014 附页/Additional Page

## 防爆合格证信息/Ex- Certificate Information

	別除日間皿目心/LX-Certificat	1	,	
产品型号	签发机构 Issuing Body	证书号 Ex-Certificate No.	防爆标准 Standards for	
Product Type	Issuing Body	Ex-Certificate No.	Ex- Proof	
MPM426W		CE20. 2433		
MPM416W、MPM416WK		CE20. 2436X	ap 2002 1 2010	
MPM4700、MPM4730	国家防爆产品质量监督检验中心	CE19. 2061X	GB 3836. 1-2010 GB 3836. 4-2010	
MPM489W	(天津)	CE20. 2434		
MPM480、MDM490	National Ex-Product Quality	CE20. 2349	<u> </u>	
MPM480	Supervision and Inspection Center(TianJin)	CE22. 1478X	GB/T 3836. 1–2021 GB/T 3836. 2–2021	
		CE20. 2435X	GB 3836. 1-2010 GB 3836. 4-2010	
MPM483	国家防爆电气产品质量监督检验中心 Supervision &Test Center of Electrical Ex-products of China	CNEx23. 2336X	GB/T 3836. 1-2021 GB/T 3836. 2-2021	
MPM489	国家防爆产品质量监督检验中心 (天津) National Ex-Product Quality Supervision and Inspection Center(TianJin)	CE20. 2356	GB 3836. 1–2010 GB 3836. 4–2010	
	国家防爆电气产品质量监督检验中心 Supervision &Test Center of Electrical Ex-products of China	CNEx19. 3370	GB 3836. 1-2010 GB 3836. 2-2010	
MDM3051S	되었다. 변수 다 또 팀 바 된 사고, 그, 그	CE20. 2291X	GB 3836. 1-2010 GB 3836. 4-2010	
	国家防爆产品质量监督检验中心 (天津)	CE20. 1508	GB 3836. 1-2010 GB 3836. 2-2010	
MDMZQQQ	National Ex-Product Quality  Supervision and Inspection	CE23. 7688X	GB/T 3836. 1-2021 GB/T 3836. 4-2021	
MDM7000	Center(TianJin)	CE23. 6650	GB/T 3836. 1-2021 GB/T 3836. 2-2021	

\*\*\*\*\*本证书附页完/End of additional page\*\*\*\*\*