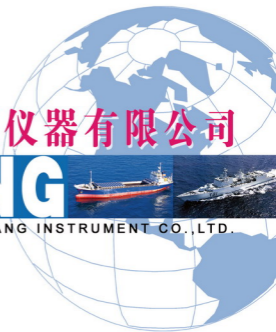




CHINA 江苏远望仪器有限公司

YUAN WANG

JIANGSU YUANWANG INSTRUMENT CO.,LTD.



江苏·远望
YUANWANG JIANGSU
2013版



公司简介

江苏远望仪器集团由江苏远望仪器有限公司(总部)、江苏远望仪器工程有限公司、江苏远望仪器科技有限公司和泰州市姜堰区远望船舶设备有限公司组成,是集科研、生产、工程、贸易为一体的科技创新型企业。

公司拥有先进的科研、生产、检测设备和完善的管理体系,专业生产压力、温度、液位、流量等测量控制仪器仪表、舱柜监测报警、液位遥测、阀门遥控、机舱监测、船舶电站等成套测控设备。公司以产品品种多、规格齐全、质量可靠在仪器仪表行业形成鲜明特色。产品技术性能达到国内先进水平,多项产品取代进口,填补国内空白。企业创建了省船舶自动化测控工程技术研究中心,与江苏科技大学和江苏大学联合共建了企业研究生工作站。公司研制的多项船舶测控设备,其技术水平可与国外同类产品相媲美。

产品分别获得中国 CCS、德国 GL、英国 LR、法国 BV、美国 ABS、挪威 DNV、意大利 RINA、日本 NK、韩国 KR 等船级社的认可及欧盟 EC 认证。五项江苏省高新技术产品,十五项产品技术获得国家专利,多项产品为海军队重点工程配套。产品长期被大连船舶重工集团有限公司、上海外高桥造船有限公司、沪东中华造船(集团)有限公司、江南造船(集团)有限责任公司、广州广船国际股份有限公司、渤海船舶重工有限责任公司、武昌船舶重工集团有限公司、中国长江航运集团、太平洋造船集团、浙江省海运集团有限公司、扬子江船舶(控股)有限公司、南通中远川崎船舶工程有限公司、江苏新时代造船有限公司等国内所有知名船厂及船舶配套设备厂商广泛选用。产品亦可用于石油、化工、电力及其它工业领域。

公司连续多年被评为国家级“守合同重信用企业”、“江苏省著名商标”、“江苏省工商银行“AA”信用企业、省创新型企业和、省标准化良好行为企业、泰州市“A 级纳税信用企业”。企业通过了 ISO9001;2008 质量管理体系认证和 GJB9001B-2009 国家军用标准质量体系认证,取得了军品生产许可证,是江苏省高新技术企业。

“产品精工细作,服务至诚至信”是远望的宗旨,推动测控技术创新是远望的责任,不断满足用户的需求是远望的目标。

Jiangsu Yuanwang Group Corporation consists of Jiangsu Yuanwang Instrument Co., Ltd (the headquarter), Jiangsu Yuanwang Instrument Engineering Co., Ltd, Jiangsu Yuanwang Instrument Science and Technology Co., Ltd and TaiZhou City Jiangyan Yuanwang Ship Equipment Co., Ltd. Our company is a Science and technology innovative enterprise integrated scientific research, manufacture, engineering and trade.

Our company has advanced scientific research, production, testing facilities and perfect management system. We mainly produce measurement & control instruments and complete equipments for pressure, temperature, level, flow, tank monitoring alarm, remote level gauging, valve remote control, engine room monitoring, and ship power station etc. Because of many varieties, complete specifications, and reliable quality, we have formed our bright future in instrument industry. The technical performance of products reached advanced domestic level and many products replaced imports, which filled the domestic blank. We have established Jiangsu Engineering Research Center for Ship Automatic Monitoring, and Enterprise Graduate Workstation together with Jiangsu University of Science and Technology and Jiangsu University. A number of marine measurement & control devices researched by our company can compare to similar foreign products on the technical level.

Our products have been approved by the classification societies of CCS, GL, LR, BV, ABS, NK, DNV, RINA and KR etc. and EC type examination. We obtained Jiangsu Province High-new Technology products on five items and national patent on fifteen items and supported many products for key projects of naval national defense. Our products have been chronically and widely chosen by internal famous shipyards and ship equipment manufacturers, such as DSIC, SWS, Hudong-Zhonghua Shipbuilding, Jiangnan Shipyard, GSI, BSHIC, Wuchang shipyard (CSIC), Sinotrans-CSC, Sinopacific Ship Building Group, Zhejiang Shipping Group, Zhejiang Shipping Group, NACKS, NTS etc. as well as petroleum, chemical, electric power and other industry areas.

We have been continuously awarded as "National level Enterprise of observing contracts and keeping promise", "The famous brand of Jiangsu Province", "AA grade creditable enterprise of Industrial and Commercial Bank of Jiangsu Province", Jiangsu Province Innovative Enterprise, Jiangsu Province Good Standardizing Practice Enterprise, "A grade ratemying creditable company" of Taizhou city for many years. Our company is Jiangsu Province High-new Technology Enterprise, has obtained ISO9001:2008 Quality Management System Certificate, GJB9001B-2009 National Military Standard Quality Management System Certificate, and Military production license.

"High quality products, careful and faithful service" is Yuanwang's tenet, contributing to promote innovation of monitoring technology is Yuanwang's duty, continuous satisfaction for clients' requirements is Yuanwang's aim.

以诚为本 以信待人 至诚至信 和谐发展

江苏远望仪器有限公司





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企业资质

ENTERPRISE QUALIFICATIONS



CCS



LR



RINA



BV



GL



DNV



ABS



NK



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YC 型压力表
PRESSURE GAUGE



YZB 型压力表组合板
PRESSURE GAUGE COMBINE PANEL



YSZK 型压力传感器
PRESSURE TRANSMITTER



YJK 型压力控制器
PRESSURE CONTROLLER



YWK / YPK 型压力控制器
PRESSURE CONTROLLER



WLG 型金属套温度计
METALLIC PROTECTOR THERMOMETER



WZPK 型温度传感器
TEMPERATURE TRANSMITTER



WSS / WTY 型温度计
THERMOMETER



WTZ / Q-280 型温度计
THERMOMETER



RY 型电加热器
ELECTRIC HEATER



WJK / WTZK 型温度控制器
TEMPERATURE CONTROLLER



ULG 型玻璃管液位计
TUBULAR TYPE GLASS LEVEL GAUGE



ULB 型玻璃板液位计
FLAT TYPE GLASS LEVEL GAUGE



UHZ-511 / 512 / 515 型磁性浮子液位计
MAGNETIC FLOAT TYPE LEVEL GAUGE



UHB 型液位传感器
LEVEL TRANSMITTER



UQK-01 / 02 / 03 型液位控制器
FLOAT LEVEL CONTROLLER



UQK-651 / 652 型液位控制器
FLOAT LEVEL CONTROLLER



UQK 型溢流观察报警器
OVERFLOW OBSERVING
ANNUNCIATOR



CP-63A / B 型管路油污检测传感器
PIPELINE OIL CONTAMINATION
DETECTION TRANSMITTER



QBN 型气体传感器
GAS TRANSMITTER



ZDF 型自动反冲洗滤器
AUTOMATIC BACK-FLUSHING FLTR



LC 型椭圆齿轮流量计
ELLIPSE GEAR FLOWMETER



螺旋转子流量计
SPIRAL ROTOR FLOWMETER



流量计配套仪表

MATCHED INSTRUMENTS FOR FLOWMETER



柴油机燃油供应单元
DIESEL FUEL OIL SUPPLY UNIT



分油机组合单元
OIL SEPARATOR ASSEMBLY UNIT





UWKS 型货舱进水报警装置
CARGO WATER INGRESS ALARM DEVICE



UKS 型舱柜液位报警装置
TANK LEVEL ALARM DEVICE



WBS 型温度监测报警装置
TEMP MONITORING AND ALARM DEVICE



QBN 型气体监测报警装置
GAS MONITORING AND ALARM DEVICE



UBX 便携式油水界面探测器
PORTABLE OIL/WATER INTERFACE DETECTOR



BWAS 型航行值班报警装置
BRIDGE NAVIGATIONAL WATCH ALARM SYSTEM



防海生物(防腐)装置
MARINE GROWTH PREVENTING/ANTI-CORROSION DEVICE



YSZK 型压力式液位测量装置
PRESSURE TYPE LEVEL GAUGING DEVICE



UHB 型浮球式液位温度(压力)测量装置
FLOAT TYPE LEVEL AND TEMPERATURE GAUGING DEVICE



QPS 型气动式液位遥测装置
PNEUMATIC TYPE REMOTE LEVEL GAUGING DEVICE



RYF 型温度测量控制装置
TEMPERATURE MONITORING DEVICE



ODME-1000 型排油监控装置
OIL DISCHARGE MONITORING DEVICE



YDKS 型船用监测报警控制装置
MARINE MONITORING ALARM CONTROL DEVICE



YFK-06Y 型液压式阀门遥控装置
HYDRAULIC VALVE REMOTE CONTROL DEVICE



YFK-06D 型电动式阀门遥控装置
ELECTRIC VALVE REMOTE CONTROL DEVICE

手动液压式阀门遥控装置
MANUAL HYDRAULIC VALVE REMOTE CONTROL DEVICE

液压式应急操作泵
HYDRAULIC EMERGENCY PUMP



YFK-06Q 型气动式阀门遥控装置
PNEUMATIC VALVE REMOTE CONTROL DEVICE

气动快关阀组
PNEUMATIC QUICK-CLOSING VALVE UNIT

液压截止/止回阀
HYDRAULIC SHUT-OFF/
NON-RETURN VALVE



YFK-06DY 型电液式阀门遥控装置
ELECTRO-HYDRAULIC VALVE REMOTE CONTROL DEVICE

WQB型 曲柄销油温监测报警装置
CRANKPIN OIL TEMP. MONITORING AND ALARM DEVICE



舰船配电板
MARINE SWITCH BOARD



船用应急配电板
MARINE EMERGENCY SWITCH BOARD



组合启停屏
PACKAGED ACTIVATION CABINET



船舶驾驶控制台
BRIDGE CONSOLE



机舱集中控制台
ENGINE ROOM MONITORING CONSOLE



磁力启动器
MAGNETISM CONTACTOR



电气试验板
ELECTRICAL TEST PANEL



岸电箱
SHORE CONNECTION BOX



充放电板
CHARGE & DISCHARGE BOARD



液体流量标准装置
STANDARD FACILITIES FOR LIQUID FLOWRATE

● YC 型 压力表 PRESSURE GAUGE

压力表是以金属弹性元件为核心的压力测量仪表,产品符合舰船通用技术规范,适用于舰船及其它工业设备中测量气体、液体等介质的压力。

Pressure gauge that use metal spring elements as core is a locale measuring instrument, which accords with general ship technical specification. It can be used to measure pressure of gas and liquid etc. in ship and industrial equipment.



YC 型压力表
Pressure gauge

ZC 型真空表
Vacuum gauge

YZC 型压力真空表
Vacuum pressure gauge

耐震表

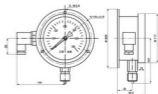
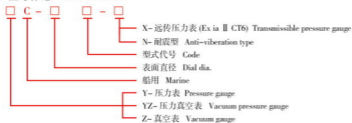
远传压力表
Transmissible pressure gauge

● 主要技术参数 MAIN TECHNICAL SPECIFICATION

型式特征 Type and feature	型式代号 Model code		表面直径 Dial diameter (mm)	测量范围 Measuring Range (MPa)	精度 Accuracy	接口螺纹 Connection thread	材料 Material			
径向无边 Radial no side type	I	—	60	0-0.06 0-0.1 0-0.16 0-0.25 0-0.4 0-0.6	2.5 级 (Grade)	M14X1.5	铁合金 Ferralloy 铝合金 Aluminum alloy 铜合金 Copper alloy 全不锈钢 Stainless steel			
径向后边 Radial back side type	II	T								
轴向无边 Axial no side type	IV	Z								
轴向前边 Axial front square type	—	ZF				75		0-1 0-1.6 0-2.5	M10X1 M14X1.5	
轴向有边 Axial front side type	III	ZT								
径向切边 Radial cutted side type	II	T								
径向无边 Radial no side type	I	—	100	0-10 0-16 0-25 0-40 0-60	1.6 级 (Grade)	M20X1.5 G 1/2"				
径向后边 Radial back side type	II	T								
轴向无边 Axial no side type	IV	Z								
轴向有边 Axial front side type	III	ZT								
径向后边 Axial back square type	—	TF								
径向无边 Radial no side type	I	—						150	-0.1-0 -0.1-0.15 -0.1-0.3 -0.1-0.5 -0.1-0.9	1.6 级 (Grade)
径向后边 Radial back side type	II	T								
径向无边 Radial no side type	I	—	200	-0.1-1.5 -0.1-2.4	1.6 级 (Grade)	M20X1.5 G 1/2"				
径向后边 Radial back side type	II	T								
径向无边 Radial no side type	I	—								
径向后边 Radial back side type	II	T								

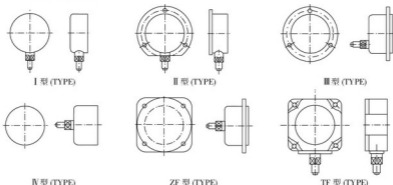


● 型号标记 MODEL SIGN



X型 (TYPE)

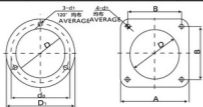
● 型式及代号 TYPE AND CODE



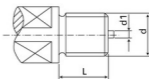
● 压力表主要安装尺寸 PRESSURE GAUGE'S MOUNTING DIMENSION (图一 FIGURE I)

(mm)

D	D ₁	A	B	d ₂	d ₃	d ₁
60	Φ85	64	48	Φ4.5	72	Φ5
75	Φ98	-	-	-	88	Φ4.5
100	Φ130	102	80	Φ5.5	118	Φ6
150	Φ180	-	-	-	165	Φ6
200	Φ230	-	-	-	215	Φ6



(图一) (Figure I)



(图二) (Figure II)

● 压力表接头螺纹尺寸表 PRESSURE GAUGE CONNECTION SCREW THREAD DIMENSION LIST (图二 FIGURE II)

表面公称直径 Dial nominal dia. D (mm)	接头尺寸 Connection size		
	d	L (mm)	d ₁ (mm)
60	M10X1	10	Φ4.5
	M14X1.5	14	
75	G 3/8"	16	Φ5
100	M20X1.5 G 1/2"	20	Φ6
150			
200			

注：当对压力表的接头螺纹有特殊要求时，请与我公司联系。
Note: When have special requirements to the connection screw thread, please contact us.

YZB 型 压力表组合板 PRESSURE GAUGE COMBINE PANEL



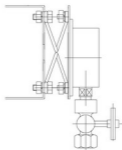
主要技术参数 MAIN TECHNICAL SPECIFICATION

产品型号 Product Model	表面直径 (mm) Dial diameter	L (mm)	H ₁ (mm)	H ₂ (mm)	B (mm)	可选用阀门 (参见 P123) Valve option (Refer to P123)		
						代号 Code	接口 Connection	阀门型号及规格 Model and spec of valve
YZB-□/ I □ 单联压力表组合板 Single unit pressure gauge panel	Φ60	100	60	120	—	A	M22X1.5	CB/T312-2008 A40006
	Φ75	120	72	128	—			CB/T312-2008 B100006/B160006
	Φ100	145	85	140	—	B		
YZB-□/ II □ 双联压力表组合板 Two units pressure gauge panel	Φ60	200	60	120	90	C	Φ6X1	针型压力表 pressure gauge's needle valve
	Φ75	260	72	128	95	D	-	其它型式的阀门 Valves of other models
	Φ100	285	85	140	145			

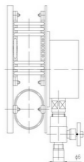
压力表组合板型号标记 MODEL SIGN OF PRESSURE GAUGE COMBINE PANEL

YZB-□/□□□

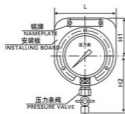
- 附加减振器 Appended absorber:
 - T: 弹簧减振器 Spring absorber
 - C: 钢丝绳减振器 Wire rope absorber
- 阀门代号 (可选项): A、B、C、D
Valve code (Option): A、B、C、D
- 压力表数量 Qty. of pressure gauge: I、II、III
- 压力表表面直径 Dial dia.: Φ60、Φ75、Φ100
- 压力表组合板 Pressure gauge combine panel



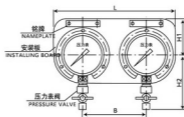
弹簧减振器
Spring absorber



钢丝绳减振器
Wire rope absorber



单联压力表组合板
One unit pressure
gauge board



双联压力表组合板
Two units pressure
gauge board

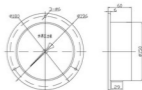


特种压力仪表 SPECIAL PRESSURE GAUGES

● 外界压力表 EXTERNAL PRESSURE GAUGE



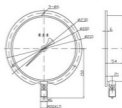
型号 Model : YC-150W
测量范围 Measure range : 0-1.6 0-2.5MPa
精度 Accuracy : 1.6, 2.5
表面直径 Dial dia. : Φ 150
用途 : 用于测量舰船外界压力
Application: measure external pressure for ships



● 深度表 DEPTH GAUGE



型号 Model : YC-150S YC-200S
测量范围 Measure range : 0-30 -600m
精度 Accuracy : 1.6, 2.5
表面直径 Dial dia. : Φ 150, Φ 200
用途 : 用于测量舰船外界液位的深度
Application: measure external depth for ships



● 最大压力表 MAXIMUM PRESSURE GAUGE



型号 Model : YZC-1D YZC-2D
测量范围 Measure range : 0-10-25MPa
精度 Accuracy : 1.6
产品外形尺寸 Outline dimensions : Φ 100X287
 Φ 100X390
接口螺纹 : M27X2.5, M27X3, G3/4" 等, 或订货时注明
Connection: M27X2.5, M27X3, G3/4" etc. or others required
用途 : 用于测量柴油机的最大爆炸压力
Application: measure max. explosion pressure of diesel engine



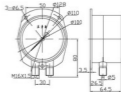
型号 Model : ZD-60J
测量范围 Measure range : 0-10MPa, 0-16MPa, 0-25MPa
精度 Accuracy : 2.5级
产品外形尺寸 Outline dimensions : 约 155X110X82mm
接口螺纹 : M27X2.5, M27X3, G3/4" 等, 或订货时注明
Connection: M27X2.5, M27X3, G3/4" etc. or others required
用途 : 用于测量柴油机的最大爆炸压力
Application: measure max. explosion pressure of diesel engine



● 双针双管压力表 DUPLEX NEEDLES & TUBES PRESSURE GAUGE



型号 Model : YZC-100S
测量范围 Measure range : 0-1, 0-1.2, 0-1.6MPa
精度 Accuracy : 1.6
表面直径 Dial dia. : Φ 100
用途 : 用于测量两个不同压力场的压力和压差
Application: measure pressure and pressure error of two different pressure yields



● YC-M 型 隔膜式压力表 DIAPHRAGM SEALED PRESSURE GAUGE

● 概述 GENERAL

隔膜式压力表可用于舰船及其它工业设备中,测量具有腐蚀性、高粘度、易结晶、含有固体状颗粒、温度较高的液体介质的压力。

Diaphragm sealed pressure gauge can be used to measure pressure of liquid which have the characteristic of corrosive, high viscosity, easily riming, solid state granule, higher temp. in ship and industrial equipment.

● 主要技术参数 MAIN TECHNICAL SPECIFICATION

测量范围 Range : -0.1-0 ; 0-0.1-60MPa

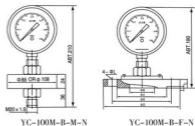
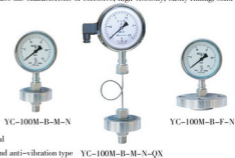
精度等级 Accuracy : 1.6, 2.5

介质温度 Medium temp. : ≤ 80℃

● 型号标记 MODEL SIGN

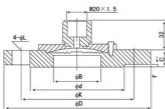
YC-100 M-□-□-□-□-□

- Q-遥测 Remote measuring
- X-信号远传 (Ex ia II CT6) Output signal
- N-表头充液防震型 Dial is liquid filled and anti-vibration type
- 接口型式 Connection type
- M M1-螺纹型 Screw thread type
- F F1 F2 F3-法兰型 Flange type
- 壳体材料 Material of body :
- B-不锈钢 Stainless steel
- 隔膜式 Diaphragm sealed type
- 表面直径 Dial dia.
- 船用压力表 Marine pressure gauge

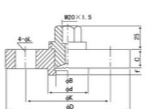


● 隔膜装置尺寸 THE MOUNTING DIMENSION

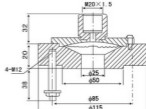
型号 Model	测量上限 Upper limit	法兰标准 Flange standard	D	K	d	f	L	C	B	图号 Drawing No.	材料 Material
F	4MPa	GB2506-2005	185	145	122	3	18	20	65	图一 Figure I	SUS304 SUS316
F1	6-10MPa		165	125	102	3	18	20	50	图二 Figure II	
	16-25MPa		115	85	68	2	14	18	25		



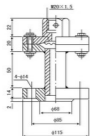
图一 Figure 1 (P ≤ 4 MPa) F



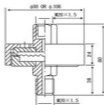
图二 Figure 2 (16MPa ≤ P ≤ 25 MPa) F1



图三 Figure 3 (P ≤ 4 MPa) F2



图四 Figure 4 (P ≤ 4 MPa) F3



图五 Figure 5 (P ≤ 4 MPa) M



图六 Figure 6 (P ≤ 60 MPa) M1



YSZK型 压力传感器 PRESSURE TRANSMITTER

● 概述 GENERAL

YSZK 型压力传感器由扩散硅压力感应器和数字式信号变送电路组成，具有测量精度高、稳定可靠、体积小、安装方便等特点。可用于船舶及其它工业设备中测量各种液体、气体介质的压力。

YSZK type pressure sensor consists of diffuse silicon pressure inductor and signal transform circuit, which have the characteristics of high measuring precision, dependable stability, small cubage, convenient installation. It is to measure pressure of kinds of medium of liquids, gas in ship and other industrial equipments.

● 主要技术参数 MAIN TECHNICAL SPECIFICATION

电源电压: DC 24V

测量精度: $\pm 0.5\%$ FS

工作温度: $-20\sim 60^{\circ}\text{C}$

输出信号: DC 4~20mA(二线制 HART)

防护等级: IP66

抗过载能力: 2.5倍量程

接口螺纹尺寸: M20X1.5, G1/4", G1/2"

防爆标志: Ex ia II CT4-T6

Ex d II CT4-T6

Power voltage: DC 24V

Measuring accuracy: $\pm 0.5\%$ FS

Working Temp.: $-20\sim 60^{\circ}\text{C}$

Output signal: DC 4~20mA(two wires HART)

Protection: IP66

Over load: 2.5time of full range

Press connection size: M20X1.5, G1/4", G1/2"

Explosion proof: Ex ia II CT4-T6

Ex d II CT4-T6

● 测量范围 MEASURING RANGE

型式 Type	测量范围 Measuring range (MPa)
表压型 Gauge type	-0.1~0.1, -0.1~0, 0~0.10, 0~0.16, 0~0.25, 0~0.40, 0~0.60, 0~1.0, 0~1.6, 0~2.5, 0~4.0, 0~6.0, 0~10, 0~16, 0~25, 0~40, 0~60
绝压型 Abs. type	0~0.10, 0~0.16, 0~0.25, 0~0.40, 0~0.60, 0~1.0, 0~1.6, 0~2.5, 0~4.0, 0~6.0, 0~10, 0~16, 0~25, 0~40, 0~60
差压型 Seal type	0~0.01, 0~0.002, 0~0.05, 0~0.10, 0~0.20, 0~0.50, 0~1.0, 0~2.0

● 型号标记 MODEL SIGN



YSZK-01G-C-E



YSZK-01S-C-E

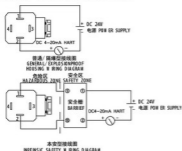


YSZK-01G-C-B

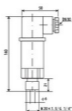


YSZK-01G-C-EJ

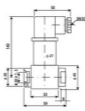
● 接线图 WIRING DIAGRAM



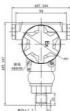
● 外型尺寸 OUTLINE DIMENSION



YSZK-01G-C-E



YSZK-01S-C-E



YSZK-01G-C-B

YSZK-01L 型 压力式液位传感器 PRESSURE TYPE LEVEL TRANSMITTER

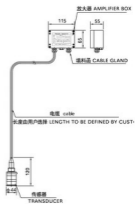
概述 GENERAL

压力式液位传感器主要由传感器、信号放大器等组成。适用于持续测量压载舱、吃水计以及燃油舱等多种介质的液位。安装在液舱底部的传感器可及时感应由于液位变化而引起的压力的变化，并将压力变化转换成电信号，通过电缆传送给信号放大器，输出 4-20mA（二线制）直流信号，此信号可由液位显示器直接显示液位的数值，亦可由装载计算机显示和控制舱柜的液位。

Pressure type level transmitter consists of transmitter, signal amplifier etc. It is used for continuously measuring the liquid level of ballast tank, draft and fuel oil tank. The pressure type transmitter in the liquid tank bottom can timely sense the pressure change due to the height change, and change the level height signal into pressure electric signal. The output signal is changed into 4-20mA (2-wire) DC level signal via amplifier. The level signal is transformed to the level indicator in the control panel via safety barrier, or tank level is indicated and controlled by loading computer.

主要技术参数 MAIN TECHNICAL SPECIFICATION

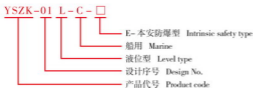
输出电流: DC 4-20mA (HART)	Output: 4-20mA(HART)
测量精度: $\pm 0.5\%$ F.S.	Accuracy: $\pm 0.5\%$ F.S.
电源电压: DC 24V	Supply voltage: DC 24V
测量范围: 0-40 米	Range: 0-40m
传感隔膜: 压电式	Diaphragm cell: Capacitive transmitter
材料:	Materials:
隔膜: SUS316L 或陶瓷	Diaphragm: SUS316L or ceramic
传感器主体: SUS316L	Sensor body: SUS316L
工作温度: $-20-60^{\circ}\text{C}$	Working temperature: $-20-60^{\circ}\text{C}$
防护等级:	Protection class:
传感器: IP68 / 可潜入型	Transmitter: IP68 / submersible
放大器: IP66 / IP68	Amplifier: IP66 / IP68
本安型: Ex ia II C T4-T6	Intrinsic: Ex ia II C T4-T6
电缆长度: 标准 3m (可选至 50m)	Cable length: 3m in standard (option: up to 50m)



用途 APPLICATION

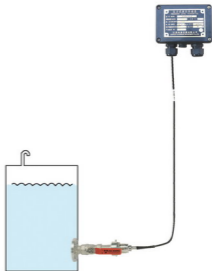
横倾舱液位遥测	Heeling and trim remote reading
舱吃水深度遥测	Draft remote reading
压载舱液位遥测	Ballast tank remote reading
燃油舱液位遥测	Fuel oil tank remote reading

型号标记 MODEL SIGN



特征 FEATURES

测量精度高	High measuring accuracy
优异的稳定性	Excellent stability
超负荷能力强	High over-load ability
数字远程调整	Digital remote adjustment
抗腐蚀	Corrosion resistance
无测量滞后现象	No hysteresis





YJK 型 舰船用压力控制器 MARINE PRESSURE CONTROLLER

● 概述 GENERAL

YJK 系列压力、压差控制器可用于舰船及其它工业设备中，对气体、液体等介质的压力、压差进行二位式控制。

YJK series pressure, pressure differential controllers can be used to control pressure and pressure differential of gas and liquids etc. by two position in ship and other industrial instrument.



压力控制器
Pressure controller

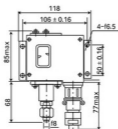


压差控制器
Pressure differential controller

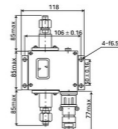
● 主要技术参数 MAIN TECHNICAL SPECIFICATION

产品型号 Model	设定值范围 Enactment Range (MPa)	切换差可调范围 Switching differential adjustable range		设定值误差 Enactment Error (MPa)	重复性误差 Repeatability error (MPa)	触点容量 Contact Capacity	备注 Remarks
		最小切换差 Min. switching differential	最大切换差 Max. switching differential				
YJK-21 K 1-1-01	-0.03~ 0.4	≤ 0.04	≥ 0.25	± 0.016	≤ 0.005	AC 220V 1A	被控介质对黄铜、铅、1Cr18-Ni9Ti 不锈钢、铜锡焊料无腐蚀作用 The controlled medium is in corrosive to brass, lead, stainless steel and solders of tin and copper.
YJK-21 K 1-2-01		≤ 0.04					
YJK-21 K 1-1-1-01		≤ 0.04					
YJK-21 K 1-1-1-02	0.1 - 0.7	≤ 0.1	≥ 0.25	± 0.016	≤ 0.005		
YJK-21 K 1-2-02		≤ 0.04					
YJK-21 K 1-1-03	0.7 - 1.9	≤ 0.2	≥ 0.5	± 0.076	≤ 0.015		
YJK-21 K 1-1-04		≤ 0.04					
YJK-21 K 1-1-1-04	-0.09 ~ 0.25	≤ 0.04		± 0.016	≤ 0.005		
YJK-2-0M5-04	-0.07 ~ 0.25	≤ 0.03		± 0.016	≤ 0.005		
YJK-21 K 1-2-05	0.7 - 3.0	≤ 0.2	≥ 0.5	± 0.076	≤ 0.015		
YJK-231 K 1-01		≤ 0.04				± 0.010	≤ 0.004
YJK-231 K 1-03	0.06 ~ 0.60	≤ 0.07		± 0.025	≤ 0.008		

● 外型尺寸 OUTLINE DIMENSIONS



YJK-21K1 型压力控制器
Pressure controller



YJK-231K1 型压差控制器
Pressure differential controller

YWK-50-C 型 压力控制器 PRESSURE CONTROLLER

● 概述 GENERAL

YWK-50-C 型压力控制器是随被测介质压力变化而使电路闭合或断开的电开关。用于船舶、冷冻设备及其它工业设备中与执行机构配套，对气体、蒸汽或液体介质的压力进行两位式控制。

YWK-50-C type pressure controller is an electric switch that can make the circuit close or open following the change of pressure. It can be used to control pressure gas, steam or liquid by two position type to support performance structure in ship and freeze equipment or other industrial equipment.

● 主要技术参数 MAIN TECHNICAL SPECIFICATION

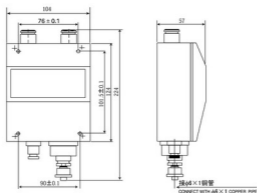
(MPa)

压力控制范围 Control range	切换差可调范围 Switching error adjustable limit		设定值误差 Enactment error	重复性误差 Repeatability error	触点容量 Contact capacity	外壳防护 Protection	备注 Remark
	最小 Min.	最大 Max.					
-0.1~0	≤ 0.006	≥ 0.028	± 0.004	± 0.003	AC 380V 3A DC 220V 2.5A	IP44	被控介质对黄铜、1Cr18Ni9Ti 不锈钢及锡铅焊料无腐蚀作用 The medium is inersicive to brass, stainless steel and solders of tin and lead.
0~0.1	≤ 0.006	≥ 0.028	± 0.004	± 0.003			
0~0.2	≤ 0.01	≥ 0.08	± 0.008	± 0.006			
0~0.3	≤ 0.025	≥ 0.10	± 0.012	± 0.008			
0~0.5	≤ 0.03	≥ 0.10	± 0.02	± 0.008			
0~0.8	≤ 0.07	≥ 0.25	± 0.032	± 0.015			
0~1.0	≤ 0.07	≥ 0.25	± 0.04	± 0.02			
0~1.5	≤ 0.10	≥ 0.28	± 0.06	± 0.025			
0~2.0	≤ 0.12	≥ 0.30	± 0.08	± 0.035			
0~3.0	≤ 0.15	≥ 0.50	± 0.12	± 0.05			
0~4.0	≤ 0.25	≥ 0.60	± 0.16	± 0.07			被控介质对黄铜、铅、1Cr18Ni9Ti 不锈钢、铜锡焊料无腐蚀作用 The medium is inersicive to brass, lead, stainless steel and solders of tin and copper.

● 型号标记 MODEL SIGN

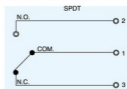


● 外形尺寸 OUTLINE DIMENSION



YWK-50-C 型 (TYPE)

● 接线图 CONTACT FORM



当压力上升时 1-2 接通
1-2MAKES ON RISING PRESSURE
当压力下降时 1-3 接通
1-3MAKES ON FALLING PRESSURE



YPK-03-C 型 压力控制器 PRESSURE CONTROLLER

● 概述 GENERAL

YPK-03 型 (膜片式) 压力控制器可用于电动方式控制电路中, 控制水、油、气体等介质的压力保持在设定值。

YPK-03 type (diaphragm type) pressure controller can be used to keep the pressure of water, oil, gas and steam at the setting point in electro-motion control circuit.

● 主要技术参数 MAIN TECHNICAL SPECIFICATION

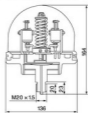
型号 Model	控制范围 MPa Control range	精度 MPa Accuracy	触点容量 Contact Capacity
YPK-03-C-01	0.1~0.5	±0.02	AC380V 15A 二组触点 two contacts
YPK-03-C-02	0.1~1.2	±0.04	
YPK-03-C-03	0.6~3	±0.1	



● 型号标记 MODEL SIGN



● 外形尺寸 OUTLINE DIMENSION



CXK-60 型 压力信号器 PRESSURE ANNUNCIATOR

● 概述 GENERAL

CXK-60 型船用压力信号器由弹性膜片和信号转换电路组成。具有测量精度高、稳定可靠、体积小、安装方便等特点。可用于舰船及其它工业设备中对淡水、海水、油以及其它无腐蚀性液体液位的测量和控制。

Marine pressure annunciator CXK-60 consists of spring diaphragm and signal conversion circuits. It has the features of high measuring accuracy, steady performance, small cubage, easy installation etc. It can be used for level measuring of fresh water, seawater, oil and other noncorrosive liquid in warships and other industrial equipments.

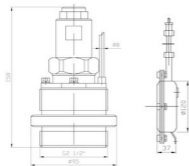
● 主要技术参数 MAIN TECHNICAL SPECIFICATION

电源电压: DC 24V	Power voltage: DC 24V
工作温度: -20~70℃	Working temp.: -20~70℃
输出信号: SPST	Output signal: SPST
防护等级: IP68	Protection: IP68
防爆标志: Ex ia II CT 3-6	Ex.mark: Ex ia II CT 3-6

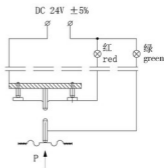
● 型号标记 MODEL SIGN



● 外形尺寸 OUTLINE DIMENSION



● 接线图 CONTACT FORM



WLG 型 金属套温度计 METALLIC PROTECTOR THERMOMETER



金属套温度计由玻璃温度计和金属保护套构成,适用于舰船及其它工业设备的舱柜或管路中,测量液体、气体等介质的温度。

Metallic protector thermometer consists of glass thermometer and metallic protector. It is used to measure medium temperature of liquid, gas of tank and pipeline in ship and other industrial equipment.

● 型号标记 MODEL SIGN

WLG-□□/□-C

- 船用 Marine Protector (Option)
- 附加保护套 (可选项) S- 双层保护套 Double protector
- 结构型式 Structure type
 - 1- 直型 Straight type
 - 2-90° 角型 Angle type
 - 3-135° 角型 Angle type
- 壳体形式 Housing type:
 - 1- 镀铬铁金属套 Chromeplate metal tube type
 - 42- 铝合金扁壳式 Aluminum alloy flat type
 - 1/2P- 直型镀铬铁扁壳式 Straight chromeplate flat type
 - 1/2PL- 角型镀铬铁扁壳式 Range chromeplate flat type
 - 3/8- 直型铜金属套式 Straight coppermetal tube type
 - 162、212、242- 直型铝金属套式 Straight aluminum metal tube type
- 金属套温度计 Metallic protector thermometer

● 主要技术参数 MAIN TECHNICAL SPECIFICATION

测量范围℃ Measuring range	感温液体 Temp. sensing liquid	型号 Model	公称长度尺寸 (mm) Nominal Length Dimension		接口螺纹 尺寸 M Connector Dimension
			上体长度 H Upward length	下体长度 L Downward length	
-50~+50 -30~+50 -30~+100 -20~+100 -30~+160	有机液 Organic liquid	WLG-11-C	130 ± 2	25	G1/2" G3/4" M20x1.5 M27x2
		WLG-12-C	150 ± 2	30	
		WLG-13-C	200 ± 2	40	
	水银 (Hg) Mercury	WLG-421-C	110 ± 2	60	
		WLG-422-C	150 ± 2	80	
		WLG-423-C	200 ± 2	100	
0~100 0~150 0~200	有机液 Organic liquid	WLG-1/2P-C	110	40	G1/2"
		WLG-1/2PL-C	110	100	G1/2"
		WLG-3/8-C	70	25	G3/8"
0~500 0~600	水银 (Hg) Mercury	WLG-162-G	162	95	G1/2"
		WLG-212-C	212	125	G1/2"
		WLG-242-C	242	95	G1/2"

测量精度: ±1~2 分度值。
Measuring accuracy: ±1~2 scale

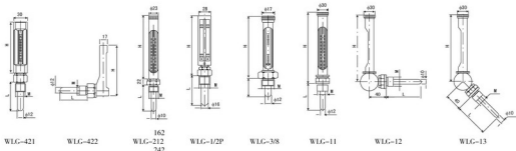
特殊要求请咨询我公司
When other conditions are required please consult us

● 选型说明 ORDER INSTRUCTION

请标注产品的型号、测量范围及 H、L、M 的尺寸。

Please make out the product's model, measuring range and dimension of H, L, M.

● 外形尺寸 OUTLINE DIMENSION





WZPK型 温度传感器 TEMPERATURE TRANSMITTER

● 概述 GENERAL

温度传感器采用优质铂电阻作为感温元件，具有测量精度高、稳定可靠、寿命长等优点。广泛适用于舰船及其它工业设备中测量液体、气体或蒸汽等介质的温度。

Temperature transmitters adopt high quality Pt resistance as temp. sensing component, and have characteristics of high measuring accuracy, good stability and reliability, and long life. They are widely used to measure temp. of liquid, gas and steam in ship and other industrial equipment.

● 主要技术参数 TECHNICAL SPECIFICATION

型号 Model	感温元件 Temp. affect element	测量范围℃ Measuring range	保护套 Socket		公称压力 PN	输出信号(可选) Output(option)
			材料 Material	直径 Dia.mm		
WZPK	Pt100	-70~500	SUS304	Φ 12	1.0 MPa	1.输出电阻值(二、三线) Output resistance (two-, three-wires) 2.输出DC 4~20mA(二线) Output DC 4~20mA(two wires)
	Pt500		SUS316L	Φ 16		
	Pt1000		单/双层保护套 Single/double socket			

1.电源电压Power voltage: DC 24V ±10%

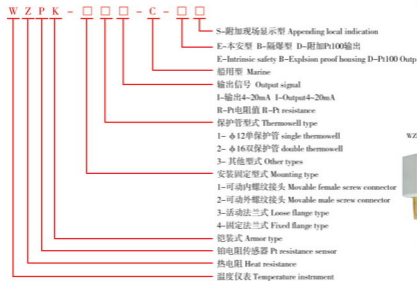
2.测量精度Measuring accuracy: ±0.5% F.S

3.防护等级Protection: IP66/IP68

4.工作温度Working temp: -20~60℃

5.防爆标志Ex.mark: Ex ia ll CT3-T6 / Ex d ll CT4-T6

● 型号标记 MODEL SIGN



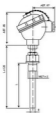
WZPK-221-C-E

WZPK-221-C-B

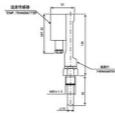


WZPK-221(C)-C-D WZPK-231-C WZPK-221-C-S

● 外形尺寸 OUTLINE DIMENSION



WZPK-221-C



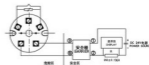
WZPK-211-C-D

● 接线图 WIRING DIAGRAM



Pt100电阻信号输出接线图

RESISTANCE OUTPUT WIRING DIAGRAM



本质安全型4~20mA电流信号输出接线图

INTRINSIC SAFETY 4~20mA CURRENT OUTPUT WIRING DIAGRAM

WSS 型 双金属温度计 BIMETAL THERMOMETER

● 概述 GENERAL

双金属温度计是适用于测量中、低温介质的现场检测仪表，可用于船舶及其它工业设备中直接测量气体、液体或蒸汽等介质的温度。

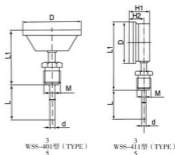
Bimetal thermometer is used for measuring instrument for mid & low temp. medium, and can be used to directly measure temp. of gas, liquid or steam in ship and other industrial equipment.



● 型号标记 MODEL SIGN



● 外形尺寸 OUTLINE DIMENSION



● 主要技术参数 MAIN TECHNICAL SPECIFICATION

型号 Model	表面直径 dial dia. D(mm)	测量范围 Measure range ($^{\circ}\text{C}$)	分度值 Scale ($^{\circ}\text{C}$)	精度 等级 Accuracy	保护管直径 Protector dia. d(mm)	插入长度 Insert length L(mm)	安装螺纹 M Connection	L ₁	H ₁	H ₂
WSS-301	$\Phi 60$	-40~80	2	2.5	$\Phi 6$ (单) $\Phi 10$ (双)	75	M16X1.5 G 1/4"	61	-	-
		0~50	1			100				
		0~100	2			150				
		0~150	2			200				
		0~200	5			250				
WSS-311		0~300	5		300	110	44	32		
		0~500	10							
WSS-401	$\Phi 100$	-40~80	2	1.5	$\Phi 8$ (单) $\Phi 12$ (双)	75	M27X2 G 3/4"	80	-	-
		0~50	1			100				
		0~100	2			150				
		0~150	2			200				
		0~200	5			250				
WSS-411		0~300	5		300	140	51	33		
		0~500	10							
WSS-501	$\Phi 150$	0~200	5		$\Phi 10$ $\Phi 12$	400	M27X2 G 3/4"	81	-	-
		0~300	5			500				
		0~400	10			750				
		0~500	10			1000				

订货时请注明产品型号及 L、M 的尺寸。若有特殊要求请与我公司联系。

Note product model and dimension of L, M when you order the products. If you have special requirements please contact us.



WTY 型 压力式耐震温度计 PRESSURE TYPE ANTI-VIBRATION THERMOMETER

● 概述 GENERAL

WTY 型温度计具有体积小、耐震抗振等特点,适用于测量船用柴油机的轴瓦温度、油温及排气温度,亦可用于其它工业设备中测量各种气体、液体或蒸汽介质的温度。

WTY type thermometers have characteristics of small cubage, anti-corrosive & anti-vibration, which can be used to measure temp. of bush for marine diesel engine, oil and exhaust, and also can be used to measure temp. of gas, liquid and steam in other industrial equipment.



轴向型
Axial type



径向型
Radial type

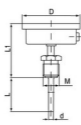


遥测型
Remote measuring type

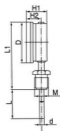
● 型号标记 MODEL SIGN



● 外形尺寸 OUTLINE DIMENSION



WTY - 401型 (TYPE)



WTY - 411型 (TYPE)

● 主要技术参数 MAIN TECHNICAL SPECIFICATION

型号 Model	公称直径 dial dia. D(mm)	测量范围 (°C) Measure range	分度值 Scale	精度 等级 Accuracy	温包直径 d(mm) Bulb dia.	插入长度 L(mm) Insert length	安装螺纹 M Connection	L ₁	H ₁	H ₂
WTY-401	Φ100	-40~60	2	1.5	Φ12(单) Φ15(双)	40	M27X2 G 3/4"	100	-	-
		75								
		100								
		150								
WTY-411	Φ100	0~300	10	1.5	Φ12(单) Φ15(双)	200	M27X2 G 3/4"	230	38	25
		250								
		300								

遥测型技术参数参见 311 和 411 型的技术参数,毛细管长度 1~4 米(可选),订货时请注明产品型号及 L、M 的尺寸。若有特殊要求请与我公司联系。

Remote measuring technical specification refers to 311 and 411 types, length of capillary is 1~4m(option),note the product model and dimension of L, M when you order the products.If you have special requirement please contact us.

WTZ/Q-280 型 压力式温度计 PRESSURE TYPE THERMOMETER

● 概述 GENERAL

WTZ/Q-280 型压力式温度计，适用于船舶及其它工业设备中远距离测量液体、气体及蒸汽等介质的温度。

WTZ/Q-280 type pressure type thermometer can be used to remotely measure liquid, gas and steam etc in ship and other industrial equipment.



● 主要技术参数 MAIN TECHNICAL SPECIFICATION

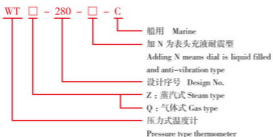
型号 Model	测量范围 (°C) Measuring range		精度等级 Accuracy	温包插入深度调节范围 L(mm) Bulb insert length adjustable range	温包直径 Bulb dia.	安装螺纹 Connection	壳体材料 Casing material
WTZ-280	-40~+60 -20~+60 0~50 0~100	0~150 20~120 60~160	1.5	150~2000	Φ15	M27X2 G 1/2"	酚醛树脂 Phenolic resin 铜合金 Copper alloy 不锈钢 Stainless steel
WTQ-280	-60~+40 -40~+60	0~200 0~250 0~300 0~400 0~500	2.5	320~420	Φ22	G 3/4"	

型 式 Type	毛细管长度 (m) Capillary tube length	温包及毛细管材料 (m) Bulb and capillary tube material	毛细管极限长度 (m) Max. length of capillary tube
普通型 General type	1~20	T2	20
防腐型 Anti-corrosive	1~10	1Cr18Ni9Ti	15

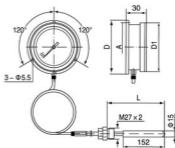
注：订货时应注明型号、测量范围、安装螺纹及毛细管长度。

Note: Please mark model, measuring range connection and capillary length when order our products.

● 型号标记 MODEL SIGN



● 外形尺寸 OUTLINE DIMENSION



● 尺寸参数 DIMENSION SPECIFICATION

表面直径 Dial diameter	D1	A	D
Φ100	Φ117	Φ120	Φ130
Φ150	Φ156	Φ160	Φ172



RY 型 润滑油电加热器 LUBRICANT OIL ELECTRIC HEATER

概述 GENERAL

RY 型润滑油电加热器适用于船舶及其它工业设备中对润滑油、水等介质进行加热。

RY type lubricant oil electric heater can be used to heat L.O. and water in ship and other industrial instrument.



RYF 型



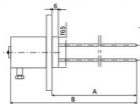
RYL 型

型号标记 MODEL SIGN

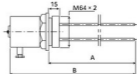
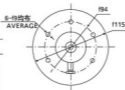


RYZ 型

外形尺寸 OUTLINE DIMENSION



RYF 型 (法兰型)
RYF type (Flange type)



RYL 型 (螺纹型)
RYL type (Thread type)

主要技术参数 MAIN TECHNICAL SPECIFICATION

型号 Model	A (mm)	B (mm)	电源 Power source	额定消耗功率(W) Rating power consumption				接线型式 Wiring type	外壳材料 Casing material
				24V	110V	220V	380V		
RYF	220	296	AC	350				并联 Parallel	紫铜镀铬 不锈钢 碳钢 Copper chromeplate, Stainless steel carbon steel
				600				串联 In series	
	1000	600				并联 Parallel			
	1500	1000				串联 In series			
		1500				并联 Parallel			
RYL	590	666	DC			2000		串联 In series	
						2500		并联 Parallel	
						串联 In series			
				3000		并联 Parallel			
				4000	2000	串联 In series			
RYZ	333	410	AC			4000	2000	并联 Parallel	
						4500	3000	串联 In series	
	483	560				并联 Parallel			
	623	700				串联 In series			
	773	850				并联 Parallel			
RYZ	可为用户设计制造 12-60KW 大功率电加热器组。We can design and manufacture 12-60KW heater for users.								

WTF 型 温度调节阀 TEMPERATURE REGULATING VALVE

● 概述 GENERAL

WTF 型温度调节阀是根据介质热膨胀的原理设计而成的自力式温度控制装置。可广泛应用于军、民舰船及其它工业设备中,对热交换器、燃油预热、集中供热、中央空调等设备进行温度自动调节。

WTF type temp. regulating valve is a temp. controlling equipment that based on heat expansion principle. It can be widely used to auto regulate temp. of heat exchanger, fuel preheating, central heating, central air-condition etc. in ship and other industrial equipment.



单座阀
Single seater valve



平衡阀
Balance valve



双座阀
Two seater valve



调节器
Regulator

● 主要技术参数 MAIN TECHNICAL SPECIFICATION

公称口径: 15、20、25、32、40、50、65、80、100 mm;

公称压力: 1.6 MPa;

温度调节范围: 30~90℃、60~120℃、0~120℃;

适用介质: 蒸汽、热油 (T ≤ 185℃)、热水;

超温安全范围: ≤ 20℃;

动作灵敏度: ≤ ± 2℃;

温包型式: 圆柱管式、螺旋管式;

基本参数:

Nominal diameter: 15, 20, 25, 32, 40, 50, 65, 80, 100 mm;

Nominal pressure: 1.6 MPa;

Temperature regulated range: 30~90℃, 60~120℃, 0~120℃;

Applicable medium: steam, hot oil (T ≤ 185℃), hot water;

Over temperature safety range: ≤ 20℃;

Action sensitivity: ≤ ± 2℃;

Bulb type: column pipe type, helix pipe type;

Basic specification:

型号 Model	通径 mm DN	额定蒸汽流量 kg/h Rating flow of steam	额定水流量 m ³ /h Rating flow of water	最大允许压差 MPa Max. pressure drop			泄漏量 Leakage
				D	P	S	
WTF-15	15	120	2.75	1.50			≤ 0.05%
WTF-20	20	200	5.00	0.66			
WTF-25	25	320	7.50	0.47	1.50		
WTF-32	32	520	12.50	0.19	1.20	2.40	
WTF-40	40	800	20.00	0.08	0.82	2.00	
WTF-50	50	1400	30.00	0.04	0.58	1.60	≤ 0.5%
WTF-65	65	2000	50.00		0.50	0.84	
WTF-80	80	3200	80.00			0.65	
WTF-100	100	5000	125.00			0.50	

注: 1. 额定流量是指阀的进口压力为 0.49MPa, 两端压力差为 0.1MPa 且全开时的流量。

2. 最大允许压差是指阀关闭时阀两端的压差。

3. 订货时需注明: 产品型号、毛细管长度、控制范围、热媒名称 (蒸汽或热油)

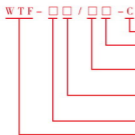
1.Rating flow is the flow when import pressure of valve is 0.49MPa, pressure differential between two ends is 0.1 MPa, and valves are open.

2.Max. pressure drop is the pressure differential when the valve is closed.

3.Please note product model, capillary length, control range, hot medium (steam or hot oil) when you order the products.

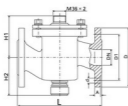
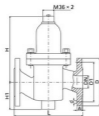
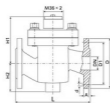


● 型号标记 MODEL SIGN



- C- 船用 Marine
- Z- 圆柱管式温包 (控制液体介质) Column pipe bulb (Control liquid medium)
- L- 螺旋管式温包 (控制气体介质) Helix pipe bulb (Control gas medium)
- 温包推力 Thrust of bulb
- 2-200N、4-400N、8-800N
- D- 单座式 P- 平衡式 S- 双座式
- D-Single seater type P-Balance type S-Two seater type
- 调节阀公称口径 Nominal diameter of regulating valve
- 温度调节阀 Temperature regulating valve

● 外形尺寸及应用 OUTLINE DIMENSION AND APPLICATIONS



单座阀尺寸 Single seater valve dimension : (mm)

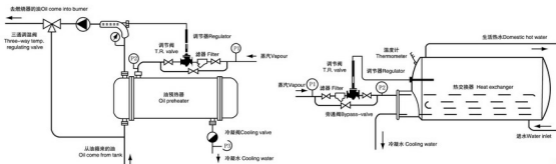
DN	L	H ₁	H ₂	D	D ₁	d	A
15	130	80	60	95	65	4-Φ12	12
20	150	85	65	105	75	4-Φ14	14
25	160	95	70	115	85	4-Φ14	16
32	180	105	75	140	100	4-Φ18	18
40	200	110	85	150	110	4-Φ18	18
50	230	125	95	165	125	4-Φ18	20

平衡阀尺寸 Balance valve dimension : (mm)

DN	L	H ₁	H ₂	D	D ₁	d	A
25	160	95	180	Φ115	Φ85	4-Φ14	16
32	180	105	195	Φ140	Φ100	4-Φ18	18
40	200	110	205	Φ150	Φ110	4-Φ18	18
50	230	125	225	Φ165	Φ125	4-Φ18	20
65	290	135	240	Φ185	Φ145	4-Φ18	20

双座阀尺寸 Two seater valve dimension : (mm)

DN	L	H ₁	H ₂	D	D ₁	d	A
32	180	105	82	Φ140	Φ100	4-Φ18	18
40	200	110	92	Φ150	Φ110	4-Φ18	18
50	230	125	102	Φ165	Φ125	4-Φ18	20
65	290	130	110	Φ185	Φ145	4-Φ18	20
80	310	135	118	Φ200	Φ160	8-Φ18	25
100	350	165	126	Φ220	Φ180	10-Φ18	25

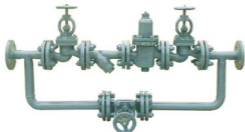


WTFK 型 温度调节阀单元 TEMPERATURE REGULATING VALVE UNIT

● 概述 GENERAL

WTFK 温度调节阀单元主要由温度调节器、调节阀、过滤器、应急截止阀、旁通截止阀、连接法兰等组成。产品适用于船舶、化工及其它工业生产过程中热交换器、燃油预热、集中供热等系统的温度控制。

WTFK temperature regulating valve unit consists of temperature regulator, regulating valve, filter, emergency shut-off valve, bypass valve, flange and other components. It is applicable to the heat exchanger, pre-heating fuel and central heating to control temperature in ship-manufacturing, chemical and other industries.



自力式温度调节阀单元
Self-powered type temperature regulating unit



电动式温度调节阀单元
Electric type temperature regulating unit

● 主要技术参数 MAIN TECHNICAL SPECIFICATION

自力式温度调节阀单元

公称口径: 20、25、32、40、50mm ;
公称压力: 1.6MPa
温度调节范围: 0~120℃ (可选);
适用介质: 蒸汽、热油、热水;
超温安全范围: $\leq 40^\circ\text{C}$;
响应时间: $\leq 130\text{S}$;
动作灵敏度: $\leq \pm 2^\circ\text{C}$

Self-powered type temperature regulating unit

Nominal diameter (DN): 20, 25, 32, 40, 50 mm ;
Nominal pressure (PN): 1.6MPa ;
Temperature regulated range: 0~120°C (optional) ;
Medium: steam, thermal oil, thermal water
Over temperature safety range: $\leq 40^\circ\text{C}$;
Response time: $\leq 130\text{S}$;
Action sensitivity: $\leq \pm 2^\circ\text{C}$

电动式温度调节阀单元

公称口径: 20、25、32、40、50mm ;
公称压力: 1.6MPa
温度调节范围: 0~120℃ (可选);
适用介质: 蒸汽、热水 ;
电源电压: AC220V 50Hz ;
控制信号: 1~5V、4~20mA ;
控制速度: 2.1mm/s

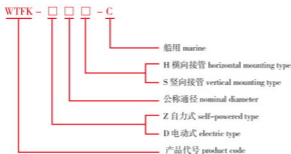
Electric type temperature regulating unit

Nominal diameter (DN) : 20, 25, 32, 40, 50mm ;
Nominal pressure (PN): 1.6MPa ;
Temperature regulated range: 0~120°C (optional) ;
Medium: steam, thermal water ;
Power supply: AC220V 50Hz ;
Control signal: 1~5V, 4~20mA ;
Control speed: 2.1mm/s

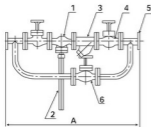
型号 Model	公称口径 DN (mm)	工作介质medium		工作介质medium 蒸汽、热水 Steam, thermal water		最大泄漏量 Leakage Kvs%
		介质名称 Name of medium	介质温度 Temperature of medium ℃	流量系数 flow coefficient Kvs(m ³ /h)	最大压差 Maximum pressure difference MPa	
WTFK-□20□	20	蒸汽、热水 (热油) Steam, thermal water (hot oil)	170℃	5	0.6	≤0.05%
WTFK-□25□	25			8	0.47	
WTFK-□32□	32			12	1.2	
WTFK-□40□	40			20	0.82	
WTFK-□50□	50			32	0.58	



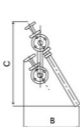
● 型号标记 MODEL SIGN



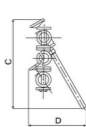
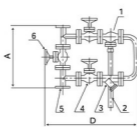
● 外形尺寸 OUTLINE DIMENSION



WTFK-□20H 型



WTFK-□20S 型



1. 温度调节器 2. 调节阀 3. 过滤器 4. 截止阀 5. 连接法兰 6. 旁通截止阀
 1. Temperature regulator 2. Regulating valve 3. Filter 4. Shut-off valve 5. Conn. flange 6. Bypass shut-off valve

型号 Model	A	B	C	D
WTFK-□20H	900	360	570	
WTFK-□25H	900	365	575	
WTFK-□32H	1050	450	640	
WTFK-□40H	1250	470	680	
WTFK-□50H	1400	500	700	
WTFK-□20D	450	680	570	680
WTFK-□25D	490	710	575	710
WTFK-□32D	590	905	640	905
WTFK-□40D	610	1080	680	1060
WTFK-□50D	630	1100	700	1160

DZF 型 电动温度调节器 ELECTRIC TEMPERATURE REGULATOR

● 概述 GENERAL

DZF 型电动温度调节器主要由三通电动温度调节阀、电控箱及温度传感器等构成。具有控制精确、动作灵敏、任意温度设定等特点。适用于控制温度精度要求较高的船舶柴油动力装置、燃气轮机、发电机组、调滑设备等冷却系统中的淡水、滑油温度的自动调节。

DZF type electric temperature regulator mainly consists of three-way electric temperature regulating valve, electric cabinet, and temperature sensor etc. It has the features of highly accuracy, quick reaction, any temperature setting etc. It is suitable for high accuracy temperature control of fresh water, lube oil in cooling system, such as diesel engine, turbine, generator or lube oil equipment etc.



电控箱 (温度控制仪)
Electric cabinet (temperature controller)



电动三通温度调节阀
Three-way electric temperature regulating valve



WZPK-221-C-B

● 主要技术参数 MAIN TECHNICAL SPECIFICATION

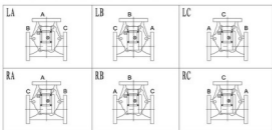
- | | |
|-----------------------------|---|
| 1、公称口径：DN50-400； | Nominal diameter: DN50-400; |
| 2、不灵敏度：小于 1℃ (电动阀)； | The insensitivity: less than 1℃ (electric valve); |
| 3、控制温度：在 0-120℃ 范围内任意设定； | Control temperature: any setting between 0℃ ~120℃; |
| 4、相对泄漏量：小于额定流量的 3% (电动阀)； | Relative leakage: less than 3% of rated flow rate (electric valve); |
| 5、电动阀具有应急手动控制装置； | Electric valve has emergency manual handle; |
| 6、电源电压：AC220V (电控箱)； | Power voltage: AC220V (electric cabinet); |
| 7、输出控制信号：DC 4-20mA (PID)； | Output signal: DC 4-20mA (PID); |
| 8、测温精度：± 0.5% F.S. (温度传感器)； | Measuring accuracy: ± 0.5% F.S. (temperature sensor); |
| 9、适用介质：淡水、滑油。 | Applicable medium: fresh water, lube oil. |

● 基本参数 BASIC PARAMETERS

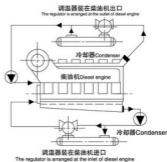
型号 Type	公称口径 DN (mm)	流量系数 Kvs (m ³ /h)	公称压力 PN (MPa)	电源 Power	法兰标准 Flange standard	阀体材料 Body material
DZF-50	50	30	1.0	AC220V 50/60Hz	GB2503-89 GB9119-2000 (可选) (other flange standards also can be supplied)	球墨铸铁 Ductile iron QT400-15 (其他材质可商定) (other body materials also can be supplied)
DZF-65	65	50				
DZF-80	80	80				
DZF-100	100	125				
DZF-125	125	215				
DZF-150	150	310				
DZF-200	200	555				
DZF-250	250	865				
DZF-300	300	1250				
DZF-350	350	1620				
DZF-400	400	2200				



● 电动阀安装形式 INSTALLATION TYPE



A: 进(出)口 IN (OUT) LET PORT B: 旁通口 BYPASS PORT C: 冷却口 COOLING PORT



● 型号标记 MODEL SIGN



安装方式: LA LB LC RA RB RC
Installation type: LA LB LC RA RB RC

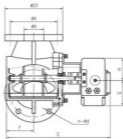
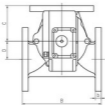
公称直径 DN Nominal diameter

阀体材质: A 铸铁 B 不锈钢 E 铸钢 T 铜

Body material: A cast iron B stainless steel E cast steel T copper

电动温度调节器 Electric temperature regulator

● 电动阀外形及安装尺寸 OUTLINE AND SIZES



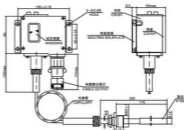
型号 Type	A	B	C	D	E	F	G	H	D1	K	b	n-d	重量 weight (kg)
DZF-50	50	254	115	57	360	67	109	98	165	125	20	4-Φ18	24
DZF-65	65	254	115	57	360	84	109	98	185	145	20	4-Φ18	27
DZF-80	80	254	115	57	360	84	109	98	200	160	22	8-Φ18	30
DZF-100	100	297	148	57	440	104	109	98	220	180	22	8-Φ18	41
DZF-125	125	297	165	64	460	118	109	98	250	210	24	8-Φ18	58
DZF-150	150	356	178	76	530	148	133	123	285	240	24	8-Φ22	78
DZF-200	200	485	242	102	650	222	133	123	340	295	26	8-Φ22	145
DZF-250	250	560	280	127	770	264	133	123	395	350	28	12-Φ22	205
DZF-300	300	660	330	152	880	308	200	182	445	400	28	12-Φ22	355
DZF-350	350	764	382	178	1070	399	200	182	505	460	30	16-Φ22	530
DZF-400	400	764	382	178	1070	399	200	182	565	515	32	16-Φ26	620

WJK 型 舰船用温度控制器 MARINE TEMPERATURE CONTROLLER

概述 GENERAL

WJK 型温度控制器可用于舰船及其它工业设备中,对气体、液体等介质的温度进行二位式控制。

WJK series temperature controller can be used to control medium temperature of gas, liquid etc. by two position type in ship and other industrial instrument.



主要技术参数 MAIN TECHNICAL SPECIFICATION

序号 No.	规格型号 Model	设定值可调范围 (°C) Enactment adjustable range	切换差可调范围 Switching error adjustable range		设定值基本 误差 (°C) Enactment basic error	重复性误差 (°C) Repeatability error	触点容量 Contact capacity	备注 Remark
			最小值 (°C) Min.	最大值 (°C) Max.				
1	WJK-21K1-1-01-C	-35 ~ +5	≤ 2.8	≥ 6.0	± 1.5	≤ 0.3	AC220V 1A	被控介质对黄铜、铅、1Cr18Ni9Ti 不锈钢、铜锡焊料无腐蚀作用 Mediums be controlled have not corrosive to brass, lead, stainless steel, copper and tin solder
2	WJK-21K1-1-02-C	-20 ~ +10						
3	WJK-21K1-1-03-1-C	5 ~ 35	≤ 2.5	≥ 6.0				
4	WJK-21K1-1-03-2-C							
5	WJK-21K1-1-04-1-C							
6	WJK-21K1-1-04-2-C	30 ~ 60	≤ 2.8	≥ 6.0				
7	WJK-21K1-1-04-2-C							
8	WJK-21K1-2-08-1-C	55 ~ 100	≤ 3.0					

WYZ 型 压力式温度计 PRESSURE TYPE THERMOMETER

概述 GENERAL

压力式温度计可用于远距离测量发动机水冷却及润滑油系统的水温或油温。

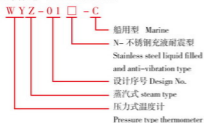
Pressure type thermometer can be used to remotely measure temperature of water or oil in engine cooling water system and L.O. system.

主要技术参数 MAIN TECHNICAL SPECIFICATION

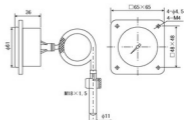
测量范围 (°C) Measuring range	精度等级 Accuracy	温包尺寸 (mm) Bulb dimension		表面直径 Dial diameter	安装螺纹 Connection	壳体材料 Casing material
		直径 Dia.	长度 Length			
0-125	4 级 Grade	11	102 120 150	Φ60	M18X1.5(内) M22X1.5(外)	胶木 Bakelite 不锈钢 Stainless steel 铝合金 Aluminum alloy



型号标记 MODEL SIGN



外形尺寸 OUTLINE DIMENSION





WTZK 型 温度控制器 TEMPERATURE CONTROLLER

● 概述 GENERAL

WTZK 型温度控制器是随被控介质温度变化而使电路闭合或断开的电开关。适用于船舶、冷冻设备或其它工业设备中与执行机构配套，对气体、液体或蒸汽介质的温度进行两位式控制。

WTZK type temp. controller is an electrical switch that can make circuit close or open following change of controlled medium temp. It can be used to support performance structure in ship, freeze instrument or other industrial equipment by controlling temp. of gas, liquid or steam through two position type.

● 主要技术参数 MAIN TECHNICAL SPECIFICATION

序号 No.	温度调节范围(℃) Temperature regulated range	切换差可调节范围(℃) Switching error adjustable range(℃)	设定值误差(℃) Enactment error	重复性误差(℃) Repeatability error	触点容量 Contact capacity	防护等级 Protection
1	-25~0	3~5	± 2	≤ 2	AC 380V 3A DC 220V 2.5A	IP44
2	-15~+15	3~5	± 2	≤ 2		
3	10~40	3~5	± 2	≤ 2		
4	40~80	3~5	± 2	≤ 2		
5	60~100	3~5	± 3	≤ 2		
6	80~120	3~5	± 3	≤ 2		
7	110~150	3~5	± 3	≤ 2		
8	130~170	3~5	± 3	≤ 2		

● 型号标记 MODEL SIGN

WTZK-50-C

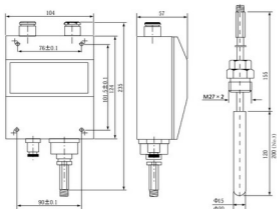
C- 船用 Marine

设计序号 Design No.

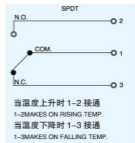
温度控制器 Temperature controller



● 外形尺寸 OUTLINE DIMENSION



● 接线图 CONTACT FORM



ULG 型 玻璃管液位计 TUBULAR TYPE GLASS LEVEL GAUGE

● 概述 GENERAL

ULG 型玻璃管式液位计设计新颖, 安装方便, 适用于小型舱柜内低粘度介质的液位测量。

ULG type tubular type glass level gauge which has the characteristic of designing novelty, installing conveniently is used to measure low viscosity medium's level in miniature tank.



ULG-□H

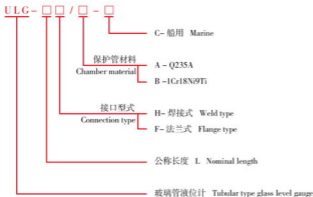


ULG-□F

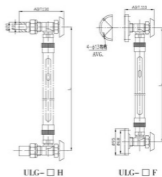
● 主要技术参数 MAIN TECHNICAL SPECIFICATION

型号 Model	工作压力 Max working pressure	工作温度 Working temperature	适用介质 Medium	接口形式 Connection type
ULG-□□/□	0.2MPa	0~100℃	油、水 Oil, water	焊接式 (H 型) Weld type(H type) 法兰式 (F) Flange type: GB/T 46-2007 DN20 PN16
产品特征 Product characteristic	当玻璃管意外破裂时, 内置阀门可自动关闭, 无液体渗漏。 When the glass tube breaks accidentally, the inside valve can close automatically without liquid leakage.			

● 型号标记 MODEL SIGN



● 外形尺寸 OUTLINE DIMENSION



● 公称长度 NOMINAL LENGTH

公称长度 L (mm)	300	350	400	450	500	550	600	650
Center to center length	700	750	800	850	900	950	1000	1100
	1200	1300	1400	1500	1600	1700	1800	1900



ULG-01 型 玻璃管液位计 TUBULAR TYPE GLASS LEVEL GAUGE



ULG-01A
ULG-01AS



ULG-01B
ULG-01BS



ULG-01C
ULG-01CS



ULG-01D
ULG-01DS



ULG-01E
ULG-01ES



ULG-01F
ULG-01FS

● 概述 GENERAL

ULG-01 型玻璃管液位计符合 CB/T3665-1996 标准的技术要求

ULG-01 type tubular glass level gauges accord with technical requirement of CB/T 3665-1996 standard.

● 用途 APPLICATION

ULG-01A、01B、01C 型玻璃管液位计适用于水箱的液位显示和测量。

ULG-01A, 01B, 01C type tubular glass level gauges can be used to indicate and measure water tank level.

ULG-01D、01E、01F 型玻璃管液位计适用于船舶的小型水柜和轻质油柜 (小于 500L) 液位的显示和测量。

ULG-01D, 01E, 01F type tubular glass level gauges can be used to indicate and measure level of small water tank and clean oil tank (less than 500L).

● 规格型号及技术参数 STANDARD MODEL AND TECHNICAL SPECIFICATION

型号 Model	连接型式 Connecting type		材料 Material			中心距 H Center to Center length	公称压力 PN	工作温度 Working Temp.	连接尺寸 Connection size
	上部 Upper part	下部 Lower part	保护罩 Protector	玻璃管 Glass-tube	阀 Valve				
ULG-01A ULG-01AS	通气管 Vent	自闭阀 Self-closing Valve	Q235A	GG-17	ZQSn5-5-5 H59-1	325 ~ 3765 (mm)	0.3MPa	0~100℃	JIS F 7211 5K 10A JIS F 7212 10K 10A (16K 10A) GB/T11693- 2008 R 型, S 型 PN1.6 DN20
ULG-01B ULG-01BS	直通孔 Tank return								
ULG-01C ULG-01CS	截止阀 Shut-off valve								
ULG-01D ULG-01DS	通气管 Vent	截止阀 Shut-off Valve							
ULG-01E ULG-01ES	直通孔 Tank return								
ULG-01F ULG-01FS	截止阀 Shut-off valve								

ULB-3 型 双色玻璃板液位计 FLAT TYPE GLASS LEVEL GAUGE

● 概述 GENERAL

ULB-3 型双色玻璃板液位计适用于舰船及其它工业设备中对舱箱内介质的液位进行测量。

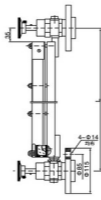
ULB-3 type flat type glass level gauge is used to measure level of the tank in ship and other industrial equipment.



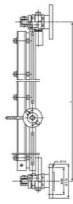
ULB-3A



ULB-3B



ULB-3A



ULB-3B

● 主要技术参数 MAIN TECHNICAL SPECIFICATION

公称压力：0.2MPa

试验压力：0.5MPa

适用介质：水或闪点大于 65℃ 的油

工作温度：0-80℃

材 料：自闭阀 - 铜合金

本 体 - SUS304 或 Q235A

玻璃板 - 硼硅玻璃

Nominal pressure：0.2MPa

Test pressure：0.5MPa

Application: water or oil flash point higher than 65℃

Working temperature：0-80℃

Material：Self-closing Valve-copper alloy

Body- SUS304 or Q235A

Glass plate - Boron silicon glass

● 型号标记 MODEL SIGN

ULB-3 □ / □ / □ - □

- C- 船用 Marine
- 连接方式：(可选) Conn. type (option)
- F- 法兰式 Flange type
- M- 焊接螺母式 welding nut type
- 公称长度 Nominal length
- 自闭阀启闭形式(可选)
- Self-closing valve type (option)
- A- 两端分置手动式
- Manual type on both ends
- B- 两端机械联动式
- Mechanical linkage type on both ends
- C- 单端手动式 Manual type on one end
- 玻璃板液位计 Flat type glass level gauge

型号 Model	中心距长度(可选) Center to center length L(mm)	玻璃板数量(块) Glass plate No.
ULB-3A	360、650、940、 1230	1-4
ULB-3C	1520、1810、2100、 2390、2680、2970、 3260、3550、3840、 4130、4420、4710	5-16



ULB-3G 型 锅炉液位计 BOILER LEVEL GAUGE

概述 GENERAL

ULB-3G 型锅炉液位计适用于船用锅炉及其它工业锅炉中液位的测量。

ULB-3G type boiler level gauge is used to measure the level of marine boiler and other industrial boiler.



ULB-3G R 型



ULB-3G T 型

主要技术参数 MAIN TECHNICAL SPECIFICATION

公称压力: 反射式 2.5 MPa

透射式 4.0MPa

工作温度: 反射式 220℃

透射式 260℃

接口法兰: DIN DN20 DN25

适用介质: 蒸汽、水

材 料: 本 体 - 20Mn

玻 璃 板 - 硼硅玻璃

阀 体 - WCB (ZG230-450)

Nominal pressure : Reflex type 2.5MPa

Transparent type 4.0MPa

Working temperature : Reflex type 220℃

Transparent type 260℃

Connection flange : DIN DN20 DN25

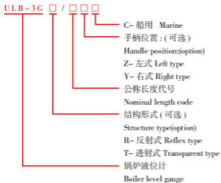
Medium: Steam, water

Material : Body - 20Mn

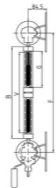
Glass plate - Boron silicon glass

Valve - WCB (ZG230-450)

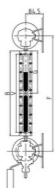
型号标记 MODEL SIGN



外形尺寸 OUTLINE DIMENSION:



ULB-3G R 型



ULB-3G T 型

代号 Code	公称长度 L Nominal length	代号 Code	公称长度 L Nominal length	代号 Code	公称长度 L Nominal length	代号 Code	公称长度 L Nominal length	代号 Code	公称长度 L Nominal length
1X4	310	1X9	460	2X8	775	3X9	1170	5X7	1580
1X5	340	2N4	515	2X9	815	4X6	1350	5X8	1780
1X6	370	2X5	575	3X6	900	4X7	1285	5X9	1880
1X7	400	2X6	635	3X7	990	4X8	1445	6X8	2115
1X8	440	2X7	695	3X8	1110	4X9	1525	6X9	2235

UHZ-511 型 磁性浮子液位计 MAGNETIC FLOAT TYPE LEVEL GAUGE

● 概述 GENERAL

UHZ-511 型磁性浮子液位计适用于舰船及其它工业设备中对舱柜内介质的液位进行测量和控制。

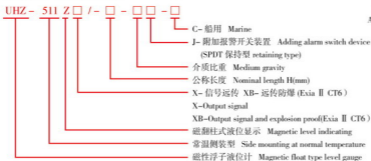
UHZ-511 type magnetic float type level gauge can be used to measure and control level of the tank in ship and other industrial equipment.

● 主要技术参数 MAIN TECHNICAL SPECIFICATION

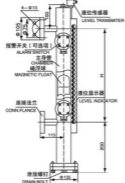
型号规格 Model	UHZ-511Z □ / - □ - □ □ - □
指示精度 Indication accuracy	± 20mm
公称长度 Nominal length	500-6000mm
介质比重 Medium gravity	≥ 0.5
工作压力 Working pressure	1.0 (1.6, 2.5) MPa
介质温度 Medium temperature	≤ 120°C
接口法兰 Connection flange	GB2506-2005 DN20 PN16
报警开关 Alarm switch	AC220V L0A 保持型 retaining type (可选 Option)
远传信号 Output signal	DC24V 4-20mA (可选 Option)
配套阀门 Matched valve	①截止阀 ②自闭阀 ③球阀 (可选) ① Shut-off valve ② Self-close valve ③ Ball valve (Option)



● 型号标记 MODEL SIGN



● 外形尺寸 OUTLINE DIMENSION



● 配套阀门 SUPPORTING THE VALVE



截止阀
Cut-off valve



自闭阀
Self-closing valve



直通自闭阀
Self-closing valve



UHZ-512 型 磁性浮子液位计 MAGNETIC FLOAT TYPE LEVEL GAUGE

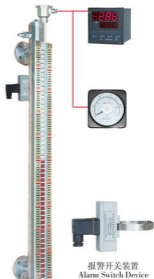
● 概述 GENERAL

UHZ-512 型磁性浮子液位计适用于船舶及其它工业设备中对舱内的易凝固及低温下流动性差的介质液位进行测量和控制。

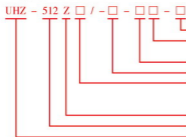
UHZ-512 type magnetic float level gauges are used to measure and control level of the liquid in the tank with low freezing point and poor fluidity in ship and other industrial equipment.

● 主要技术参数 MAIN TECHNICAL SPECIFICATION

型号规格 Model	UHZ-512Z □ / - □ - □ □ - □
指示精度 Indicating accuracy	± 20 mm
公称长度 Nominal length	500-6000 mm
介质比重 Medium gravity	≥ 0.6
工作压力 Working temperature	1.0 (1.6, 2.5) MPa
介质温度 Medium temperature	≤ 200 °C
介质粘度 Medium viscosity	≤ 0.02 Pa · S
蒸汽压力 Steam pressure	≤ 0.8 MPa
接口法兰 Connection flange	GB2506-2005 DN20 PN16
报警开关 Alarm switch	AC220V 1.0A 保持型 retaining type (可选 Option)
远传信号 Output signal	DC24V 4-20mA (可选 Option)
配套阀门 Matched valve	①截止阀 ②自闭阀 ③球阀 (可选) ① Shut-off valve ② Self-close valve ③ Ball valve (Option)



● 型号标记 MODEL SIGN



- C- 船用 Marine
- J- 附加报警开关装置 Adding alarm switch d (SPDT 保持型 retaining type)
- 介质比重 Medium gravity
- 公称长度 Nominal length H(mm)
- X- 信号远传 XB- 远传防爆 (Ex ia II CT6)
- X- Output signal
- XB- Output signal and explosion proof (Ex ia II CT6)
- 磁翻柱式液位显示 Magnetic level indication
- 夹套式侧装型 (蒸汽加热) Clamp side mounting type (steam heating)
- 磁性浮子液位计 Magnetic float type level gauge

● 外形尺寸 OUTLINE DIMENSION



● 配套阀门 MATCHED VALVES



截止阀
Cut-off valve



自闭阀
Self-off valve



直通自闭阀
Self-closing valve

UHZ-515 型 磁性浮子液位计 MAGNETIC FLOAT TYPE LEVEL GAUGE

● 概述 GENERAL

UHZ-515 (顶装型) 磁性浮子液位计适用于舰船及其它工业设备中对地下能柜内液体介质的液位进行测量和控制。

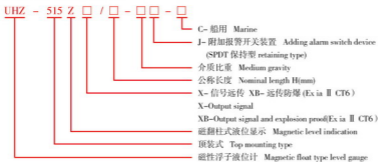
UHZ-515 (top mounting type) magnetic float type level gauges are used to measure and control liquid level in underground tank in ship and other industrial equipment.

● 主要技术参数 MAIN TECHNICAL SPECIFICATION

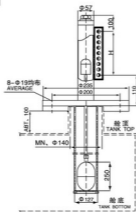
型号规格 Model	UHZ-515Z □ / □ - □ □ - □
指示精度 Indicating accuracy	± 20mm
公称长度 Nominal length	500-3000mm
介质比重 Medium gravity	> 0.8
工作压力 Working pressure	≤ 1.6MPa
介质温度 Medium temperature	≤ 150℃
介质粘度 Medium viscosity	≤ 0.01 Pa · S
接口法兰 Connection flange	CBM1012-81 DN125 PN5
报警开关 Alarm switch	AC220V 1A 保持型 retaining type (可选 Option)
远传信号 Output signal	DC24V 4-20mA (可选 Option)



● 型号标记 MODEL SIGN



● 外形尺寸 OUTLINE DIMENSION



报警开关装置
Alarm Switch Device



UFT 型 浮筒式液位计 FLOAT TYPE LEVEL GAUGE

● 概述 GENERAL

UFT 型浮筒式液位计具有结构简单、稳定可靠的特点，可应用于测量各类船舶的液位舱柜内介质的液位。

With the characteristics of simple structure, stability and reliability, UFT type float type level gauge can be used to measure level liquid tanks in all kinds of ships.

● 特征 FEATURE

- | | |
|----------|--------------------------|
| 1. 密封可靠 | 1. Airproof and reliable |
| 2. 易维护保养 | 2. Easy maintenance |
| 3. 易安装 | 3. Easy installation |
| 4. 易读数 | 4. Easy reading |
| 5. 测量精度高 | 5. Exact indication |

● 分类 CLASSIFICATION

型号 Model	安装形式 Mounting type	公称口径 Nominal dia.	应用 Application
UFT-2A-100	内侧装式 Inner horizontal mounting type	100	中型舱柜 Medium tanks
UFT-2A-150		150	大型舱柜 Large tanks
UFT-2B-100L UFT-2B-100R	外侧装式 Outer horizontal mounting type	100	大、中型舱柜 Large and medium tanks
UFT-2C-100	顶装式 Top mounting type	100	可动式舱柜 Removable tanks
UFT-2C-150		150	双层底舱(滑油, 水)舱 Double bottoms (Lubrication oil, water) tanks
UFT-2C-200		200	



● 规格型号及参数 STANDARD MODEL AND CONSTRUCTION MATERIAL

型号 Model	主管 Chamber	浮筒 Float	轮盘 Sheave	芯杆 Spindle	法兰 Flange	金属绳 Wire rope	视窗玻璃 Sight glass
UFT-2A	SGP	SUS304	SS41	N/A	SS41	SUS304	N/A
UFT-2B	SGP	SUS304	SS41	N/A	SS41	SUS304	N/A
UFT-2C	SGP	SUS304	N/A	SUS304	SS41	N/A	硬质 Hard

● 主要技术参数 MAIN TECHNICAL SPECIFICATION

型号 Model	工作条件 Working condition		连接尺寸 Conn.size	主管尺寸 Chamber size	比重为 0.92 时的最大测量范围 Max.Measuring range at Sp.Gr 0.92
	公称压力 Press.	工作温度 Temp.			
UFT-2A-100	Atm.	80℃	5K100A	100A	-
UFT-2A-150	Atm.	80℃	5K150A	150A	-
UFT-2B-100	Atm.	80℃	5K100A	100A	-
UFT-2C-100	3kg/cm ²	80℃	5K100A	100A	3000~
UFT-2C-150	3kg/cm ²	80℃	5K150A	150A	6000~
UFT-2C-200	3kg/cm ²	80℃	5K200A	200A	10000~

标尺和连接阀门为可选项

The scale board and connection valve are optional items.

HB-SPCG 型 自力式表盘液位计 SELF-POWERED CONTENT GAUGE

● 概述 GENERAL

自力式表盘液位计由传感器、毛细管、显示器等组成。广泛应用于柴油、滑油、重质燃油、汽油、水及其它无腐蚀性液体的液位测量。

Self-powered content gauge unit consists of transmitter chamber, capillary tube and indication gauge. Self-powered content gauge is widely used for Diesel oil, Luboil, Heavy fuel oil, Solvents gas oil, Fresh water and all no corrosive liquid.

● 工作原理 OPERATING PRINCIPLE

敞开式舱柜内的液体静液柱压力由传感器转换为本仪表的测量压力，并通过毛细管传递给显示器，在表盘上直接显示液位的高度。

The weight of the fluid column in the tank will be transformed into gas pressure in the transmitter chamber. The gas pressure is transferred to the indicating gauge through the capillary tube. That means, the weight of the fluid column in the tank is directly proportional to the indication. In case of over or under-pressure in the tank, it is impossible to compensate the value of gauging.

● 主要技术参数 MAIN TECHNICAL SPECIFICATION

测量范围 Range: 1~50m

测量精度 Accuracy: 1.6 级

超负荷 Over load: 最大量程的 120% 120% above maximum range

工作温度 Operation temperature:

显示器 Indication gauge: -20℃ ~ 55℃

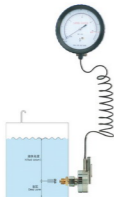
传感器 Transmitter chamber: -20℃ ~ 80℃

表面直径 Dial diameters: φ150 mm

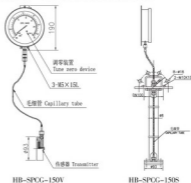
壳体材质 Casing material: 铝合金或 SUS 304 AC 或 SUS 304

计量单位 Measuring unit: m/m³

● 型号标记 MODEL SIGN



● 外形尺寸 OUTLINE DIMENSION



● 规格型号及参数 STANDARD MODEL AND SPECIFICATION

型号 Model	适用介质 Application	连接尺寸 Connection Size		精度 Accuracy	毛细管长度 Capillary Tube Length	材料 Material		
		低粘度介质 Low viscosity	高粘度介质 High viscosity			显示器 Indication Gauge	毛细管 Capillary Tube	膜片 Diaphragm
HB-SPCG-150V	一般液体 General Liquid	5K,10K25A	5K,10K40A	1.6 级	≥ 1m ≤ 8m	AC 或 SUS304	SUS304	QRe-2.0
HB-SPCG-150S		JIS 5K,10K100A GB2506-2005 DN100 PN6						

订货时请注明：型号、毛细管长度、介质比重。特殊要求可定制。Please consult with factory when other condition are required



UHB型 液位传感器 LEVEL TRANSMITTER

● 概述 GENERAL

UHB 型液位传感器与液位显示器配套,可连续测量舱柜内介质的液位。适用于舰船及其它工业设备的舱柜中,测量液体介质的液位。

UHB type level transmitter matched with level indicator can measure medium's level in the tank continuously. It is used to measure level in tanks of ships and other industrial equipments.

● 主要技术参数 MAIN TECHNICAL SPECIFICATION

连接法兰 Conn. flange	浮球 (Float)		安装形式 Mounting type	介质比重 Medium gravity	输出信号 Output signal	适用介质 Medium application
	材料 Material	工作温度 Working temp				
GB2506-2005 PN1.0 DN 100	SUS304 SUS316L	-20~100°C	顶装 Top mounting	≥0.80	DC24V 4~20 mA 0~1 KΩ	水、海水、燃油、柴油、滑油 Water, Seawater, F.O., D.O., L.O.

1. 测量精度: ±10mm

2. 测量范围: 0~500至6000mm (可选)

3. 防护等级: IP66/IP68

4. 公称压力: 1.0MPa

5. 电源电压: DC 24V ±10%

6. 防爆标志: Ex ia II CT4-T6 Ex d II CT4-T6

1. Measuring accuracy: ±10mm

2. Measuring range: 0~500 to 6000mm (option)

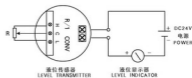
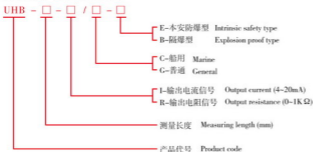
3. Protection: IP66/IP68

4. Nominal pressure: 1.0MPa

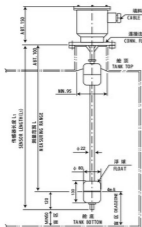
5. Power voltage: DC 24V ±10%

6. Ex. mark: Ex ia II CT4-T6 Ex d II CT4-T6

● 型号标记 MODEL SIGN



● 外形尺寸 OUTLINE DIMENSION



UQK-01/02/03 型 浮球液位控制器 FLOAT LEVEL CONTROLLER

概述 GENERAL

UQK-01/02/03 型浮球液位控制器适用于船舶、化工及其它工业设备中对舱柜内介质的液位进行两位式控制或报警。

UQK type float level controller is widely used in ship, chemical industry and other industrial equipment to control and alarm the level in tank by two position type.

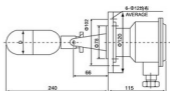
主要技术参数 MAIN TECHNICAL SPECIFICATION

型号规格 Model	控制范围 mm Control range	整定方式 Regulated type	安装位置 Mounting position	公称压力 PN	介质温度 Medium tem.	触点容量 Contact capacity	防爆型式 Explosion proof type	浮球直径 Float dia. D	防护等级 Protection
UQK-01-C	10-30	定值不可调 Fixed value & unadjustable	侧装 Horizontal mounting	≤ 1MPa	≤ 120°C	SPDT AC:220V 1.5A 可适用 250VAC 10A	Ex dIBCT3-T6 ExiaIBCT3-T5	Φ50 Φ60 Φ76	IP66 or IP68
UQK-01-C-B			顶装 Top mounting						
UQK-01-C			顶装 Top mounting						
UQK-02-C	25-550	分级可调整 grading & adjustable	侧装 Horizontal mounting						
UQK-02-C-B			顶装 Top mounting						
UQK-03-C	8-1000	无级可调整 continuous & adjustable	顶装 Top mounting						
UQK-03-C-B			顶装 Top mounting						

外形尺寸 OUTLINE DIMENSION



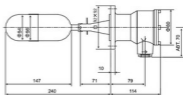
UQK-01-C (铝或不锈钢壳 Aluminium or Stainless steel housing)



UQK-01-C



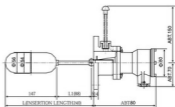
UQK-01-C (铜壳型 Copper housing)



UQK-01-C



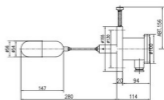
UQK-01-C-Z (铜壳自检型 Copper housing with test device)



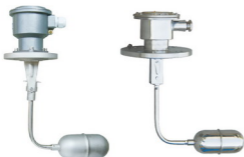
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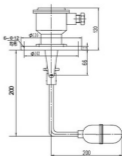
UQK-01-C-Z
(铝壳自检型 Aluminium housing with test device)



UQK-01-C-Z



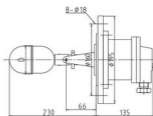
UQK-01-C (顶装型 Top mounting type)



UQK-01-C



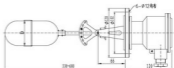
UQK-01-C-B



UQK-01-C-B



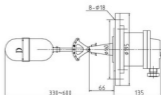
UQK-02-C



UQK-02-C



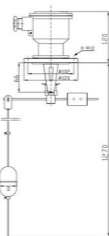
UQK-02-C-B



UQK-02-C-B



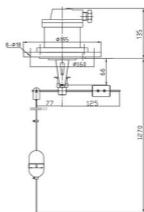
UQK-03-C



UQK-03-C

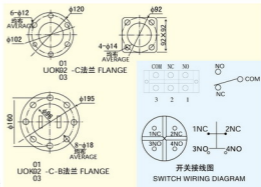


UQK-03-C-B



UQK-03-C-B

● 型号标记 MODEL SIGN





UQK-651/652 型 浮球液位控制器 FLOAT LEVEL CONTROLLER

概述 GENERAL

UQK-65 型浮球液位控制器适用于船舶、化工及其它工业设备的舱柜中对液位进行两位式控制和报警。

UQK-65 float level controller is widely used in ship, chemical industry and other equipment to control and alarm the level in tank by two position type.



UQK-651-C



UQK-651-C-B



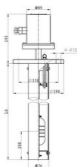
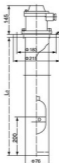
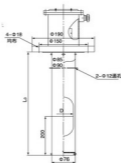
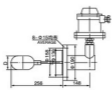
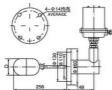
UQK-652-C



UQK-652-C-B



UQK-652-C-Z



主要技术参数 MAIN TECHNICAL SPECIFICATION

型号 Model	安装形式 Mounting type	开关形式 Switch type	切换差 (mm) Switching error	盲区 (mm) Dead zone		介质比重 Medium gravity	精度 (mm) Accuracy	工作压力 (MPa) Working pressure	介质温度 (°C) Medium temp.	介质比重 Medium gravity	保护管直径 Φ(mm) Protecting pipe dia.	浮球直径 D(mm) Float dia.	防护等级 Protection
				上端 Upper part	下端 Lower part								
UQK-651-C UQK-651-C-B	侧装 Horizontal mounting	SPDT	20-70	---	---	≥ 0.85	< 20	1.0	≤ 150	0.8-1.2	---	Φ60	IP66 or IP68
UQK-652-C UQK-652-C-B	顶装 Top mounting		10-40	< 150	< 150						Φ76	Φ60	
UQK-651-C UQK-651-C-B	法兰标准 Flange standard	GB2506-2005 CB/T 46-2007 651-C PN0.6 DN65 652-C PN0.6 DN80 652-B PN1.0 DN125	触点容量 contact capacity	SPDT AC:250V 10A DC:125V 0.6A 2X SPDT (可选 Option)	防爆型标记 Ex, mark : Exd II CT3-T6 Ex ia II CT3-T6			设定范围 (mm) Range L _s	300-2500	Φ76	Φ60		
UQK-652-C UQK-652-C-B													

UQK-652-C/S 型 浮球液位控制器 FLOAT LEVEL CONTROLLER

● 概述 GENERAL

UQK-652-C/S 型浮球液位控制器适用于船舰及其它工业设备的舱柜中对介质的液位进行多点控制或报警。

UQK-652-C/S type float level controller is used in ship and other industrial equipment to carry multipoint control or alarm the level in the tank.

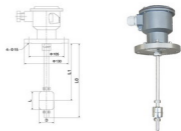
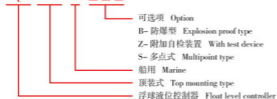
● 主要技术参数 MAIN TECHNICAL SPECIFICATION

控制范围 I Control range I	60-3000 mm
下盲区 I ₁ Lower dead zone	50 mm
上盲区 I ₂ Upper dead zone	≤ 40 mm
浮球直径 D Float dia, D	Φ28 Φ45 Φ52 Φ60 mm
保护管直径 Protected pipe dia.	Φ60 Φ76 mm
工作温度 Working temp.	≤ 100°C
公称压力 PN	1.0 MPa
介质比重 Medium gravity	≥ 0.80
触点容量 Contact capacity	AC 220V 1.0A
触点形式 Contact form	SPST SPDT
控制点数 No. of control point	1-3
防护等级 Protection	IP66 / IP68
防爆等级 Enclosure	Ex ia II CT 3-6 / Exd II CT6

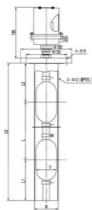


● 型号标记 MODEL SIGN

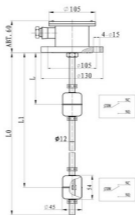
UQK-652-C/□□□



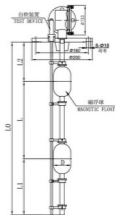
● 外形尺寸 OUTLINE DIMENSION



UQK-652-CS A



UQK-652-CS B



UQK-652-CS Z



UHC 型 电极式水位传感器 ELECTRODE TYPE WATER INGRESS DETECTION SENSOR

概述 GENERAL

UHC 型电极式水位传感器可连续监测被测场所的水位。适用于舰船及其它工业场所进行水位监测报警。

UHC type electrode type water ingress detection sensor can continuously monitor water level of measured place. It is suitable for monitor and alarm of ships and other industrial places.

主要技术参数 MAIN TECHNICAL SPECIFICATION

安装形式 Mounting type	介质比重 Sp. Gr.	输出信号 Output signal	切换差 (mm) Switching error	适用介质 Applicable medium
顶装式 Top mounting type	1.0, 1.025	SPDT	≤ 5mm	水、海水 water, seawater

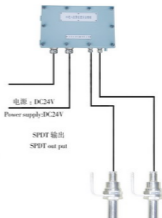
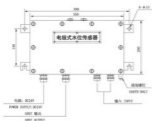
- | | | |
|-------------------------------|------------------------------|--------------------------|
| 1. 报警精度: ± 5mm | 2. 电源电压: DC24V | 3. 防护等级: IP68 |
| 4. 触点容量: DC24V 1A | 5. 工作温度: -20°C ~80°C | 6. 防爆标志: Ex ia II CT6 |
| 1. Alarm accuracy: ± 5mm | 2. Power voltage: DC24V | 3. Protection: IP68 |
| 4. Contact capacity: DC24V 1A | 5. Working Temp: -20°C ~80°C | 6. Ex.mark: Ex ia II CT6 |

型号标记 MODEL SIGN

UHC-01C-E

UHC-01C-E
 ———— 本安防爆 IS, explosion proof
 ———— 设计序号 Design No.
 ———— 水位传感器 Water ingress detection sensor

外形尺寸 OUTLINE DIMENSION



UQK 型流向开关 FLOW SWITCH

UQK 型流向开关利用流体流动推动叶片发生偏转,由磁钢带动磁性开关动作,输出信号。适用于船舶的压载管路、油水管路中,对液体流向的监测和报警。

UQK type flow switch makes deflection by fluid-flow pushing blade, magnetic switch is acted by magnet steel, and then output signal. It is used for monitoring liquid flow and alarm in ballast pipe and oil water pipe of ship.

主要技术参数 MAIN TECHNICAL SPECIFICATION

适用管径: 2" 以上 Applicable pipe dia.: 2" above

叶片材质: SUS316 / 钛合金

Material of blade: SUS316 / titanium alloy

最大耐压: 1.5MPa Max. allowed pressure: 1.5MPa

设定动作点误差: ≤ ± 10%

Setting action point tolerance: ≤ ± 10%

重复动作误差: ≤ 5% Repeat action error: ≤ 5%

触点容量: AC220V 0.5A

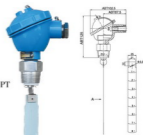
Contact capacity: AC220V 0.5A

触点型式: SPST Contact type: SPST

工作温度: 0~70°C Working temperature: 0~70°C

接口方式: ZG1" / 1 NPT Connection type: ZG1" / 1 NPT

防护等级: IP56 Protection: IP56



型号标志 MODEL SIGN

UQK-01L

UQK-01L
 ———— 工作压力(MPa) Working pressure
 ———— 管径(mm) Pipe dia
 ———— 产品代号 Product no

UHK 型 液位测量控制器 LEVEL MEASURING CONTROLLER

● 概述 GENERAL

UHK 型液位测量控制器具有液位测量和液位报警双重功能。产品结构紧凑、稳定可靠。适用于船舶的各类舱、柜、罐的液位测量显示和高、低位报警，亦可用于其它工业设备中进行液位测量和报警。

UHK type level measuring controller has dual functions of level measuring and level alarm. With characteristics of compact structure and reliable performance, it is used for level measuring, display, and alarm in tanks of ships and other industrial equipments.

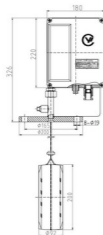
● 主要技术参数 MAIN TECHNICAL SPECIFICATION

测量范围 Measure range	0-0.5, 0-1.0, 0-2.0, 0-3.0, 0-4.0 m
测量精度 Measure accuracy	± 2% F.S
开关型式 Switch type	SPST (2 路独立设置输出) SPST (2 channel sett. independent output)
最大触点容量 Max. contact capacity	10W or 10VA
最大闭合电流 Max. close current	0.5A
最大工作电压 Max. working voltage	125V AC or 100V DC
防护等级 Protection	IP 66
防爆标志 Ex.mark	Ex ia II C T3-6

● 型号标记 MODEL SIGN

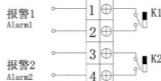


● 外形尺寸 OUTLINE DIMENSION



● 接线图 WIRING DIAGRAM

外部接线图
External wiring diagram



内部电路图
Internal circuit diagram





RYK 型 燃油泄漏报警开关 F.O. LEAKAGE ALARM SWITCH

● 概述 GENERAL

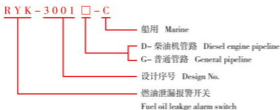
RYK 型燃油泄漏液位开关由磁浮球、导杆、磁控开关和箱体等构成。具有体积小、灵敏度高、抗振动、安全可靠等特点。适用于船用柴油机及其它工业设备中，对供油回路的燃油泄漏进行控制和报警。

RYK type F.O. leakage level switch consists of float, lever, magnet switch and case body etc. It is made of airproof magnet switch conversion framework and stainless steel material. Its characteristics are small cubage, high sensitivity, anti-vibration, working reliably etc. They can be widely used in diesel engine and other industrial instrument, to carry controlling and alarm for oil supplying loop's F.O. leakiness.

● 主要技术参数 MAIN TECHNICAL SPECIFICATION

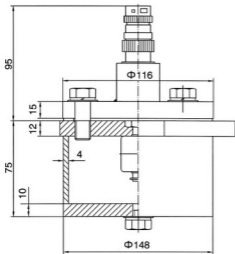
规格型号 Model	公称压力 PN	触点容量 Contact capacity	工作温度 Working temp.	适用介质比重 Medium gravity	控制点数 No. of Control points	浮球及护管材料 Material of float and chamber	箱体材料 Casing material
RYK-3001	1.0MPa	AC220V 0.5A (SPDT)	-10~80℃	≥ 0.8	1	SUS 304	Q235A SUS304

● 型号标记 MODEL SIGN



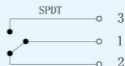
RYK-3001 D-C

● 外形尺寸 OUTLINE DIMENSION



RYK-3001 G-C

● 接线图 CONTACT FORM



当油位上升时1-2断开
1-2 MARKES OFF RISING OIL LEVEL
当油位下降时1-3断开
1-3 MARKES OFF FALLING OIL LEVEL

UQK 型 溢流观察报警器 OVERFLOW OBSERVING ANNUNCIATOR

● 概述 GENERAL

UQK 型溢流观察报警器系溢流观察显示和液位报警组合而成的新型溢流观察报警装置。产品集溢流观察和液位报警于一体，具有结构紧凑、性能可靠、安全实用等特点。适用于舰船及其它工业设备中，对贮液、供液设备的溢流管路的运行安全进行监测、报警或控制。

UQK type overflow observing annunciator is a new type overflow observing alarm device composed of indication and level alarm. It can observe liquid and output level alarm, and has characteristics of compact structure, reliable performance, safety and practicality etc. It can be used in ship and other industrial instrument to monitor, alarm and control the safe run of liquid saving and supplying instrument's overflow pipeline.

● 主要技术参数 MAIN TECHNICAL SPECIFICATION

公称口径: 32~250 mm	DN: 32~250 mm
触点容量: AC 220V 1.0A	Contact capacity: AC 220V 1.0A
触点型式: SPDT	Contact type: SPDT
公称压力: 0.2 MPa	PN: 0.2 MPa
介质温度: $\leq 100^{\circ}\text{C}$	Medium temperature: $\leq 100^{\circ}\text{C}$
介质比重: ≥ 0.80	Medium gravity: ≥ 0.80
介质粘度: $\leq 0.02 \text{ Pa}\cdot\text{s}$	Medium viscosity: $\leq 0.02 \text{ Pa}\cdot\text{s}$
连接法兰: CB/T 46-2007 GB2506-2005	Conn. flange: CB/T 46-2007 GB2506-2005

● 型号标记 MODEL SIGN

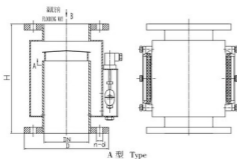


A 型 Type



B 型 Type

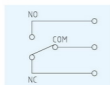
● 外形尺寸 OUTLINE DIMENSION



A 型外形尺寸 A TYPE OUTLINE DIMENSION

通径 DN	尺寸 Dimension (mm)						
	H	B	D	D1	d	n	
32	230	95	115	83	15	6	
40	230	100	125	93			
50	280	110	135	103			
65	280	120	155	123			
80	300	125	170	138	15	8	
100	350	135	190	158			
125	370	145	215	183			
150	370	155	240	208			
200	370	190	295	264	17	12	
250	370	225	365	327			17

● 接线图 WIRING DIAGRAM



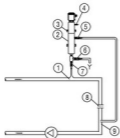


CP-63A型 管路油污检测传感器 PIPELINE OIL CONTAMINATION DETECTION TRANSMITTER

● 概述 GENERAL

本装置由油污检测腔体、电容式报警开关、球阀及管路组件等组成，安装在船舶的冷却水管路上，用于检测混入管路中的油，并输出报警信号。电容式报警开关安装在油污检测腔体的上部，其检测头位于余液出口截止阀附近。当节流片处于节流位置时，管路中的水进入检测腔体，若水中混有油污则会浮在报警开关的检测头处，报警开关输出油污报警信号。

This device is installed in the cooling water line of ship and is designed to detect oil in cooling water. This system consists of oil detection pot, capacitive compact switch and control unit. Oil detection pot for separating oil and water has not cock valve for isolating the input and output line. Capacitive type oil detector is installed in oil detection pot, detecting oil isolated from water on the top of oil detection pot. Control unit receive whether it is detected or not in signal from the capacitive compact switch and convert point of contact to relay contact.



管路连接图

PRINCIPAL PIPING DIAGRAM

- ①安装在冷却水管上部的1/2" PT接口
- ②油污检测腔体
- ③端盖安装固定板
- ④通气阀
- ⑤余液出口截止阀
- ⑥取样/清洗阀
- ⑦入口截止阀
- ⑧节流孔板
- ⑨3/8" PT回流接口
- ①Tapping point for partial flow 1/2" PT on the top of the cooling water line
- ②Measuring pot with oil detector
- ③Wall mounting plate
- ④Vent valve
- ⑤Outlet isolating valve with cleaning process
- ⑥Sampling & cleaning cock
- ⑦Inlet isolating valve
- ⑧Outlet plate
- ⑨Return partial flow 3/8" PT

● 主要技术参数 MAIN TECHNICAL SPECIFICATION

构成：油污检测腔体
电容式报警开关
最大压力：0.5 MPa
最高温度：150°C 200°C
流量：100-300L/h
灵敏度：ABT 50ml (油)
电源：AC 110/220V
信号输出：继电器输出 (DPDT)
Consists of Oil detection pot
- Capacitive oil detector
Max. Pressure: 0.5MPa
Max. Temp: 150°C 200°C
Flow: 100-300L/h
Sensitivity: Approx. 50ml oil
Power supply: AC 110/220V
Output: Relay output (DPDT)

CP-63B型 箱式油污检测传感器 TANK TYPE CONTAMINATION DETECTION TRANSMITTER

● 概述 GENERAL

本装置由油污检测箱、电容式报警开关等组成，安装在锅炉给水过滤系统中，用于检测供应给锅炉的水中油污的进入情况，并输出油污报警信号。油污检测箱采用井式结构设计，给水管从油污检测箱的上部插入箱底，报警开关的检测头安装在位于箱体上部的出水口附近。当混有油污的水通过给水管进入检测箱中时，油污上浮并漂浮在水面。正常情况下，报警开关电极的末端处于水面中，一旦水面出现油污，即可被报警开关检测，并输出信号启动警报。在检测箱中的油污排出后，检测器恢复至常态。

Boiler feed filter tank has a inspection chamber or divide area in tank to accumulate oil when oil contamination in boiler water. When incoming oil contaminated water in inspection chamber, the feed water only go out to feed filter tank and oil will be accumulate in inspection chamber until drainage. When the normal conditions, the end part of electrode will be in water level always. But the water contaminate oil that the oil is accumulate top level in inspection chamber, the electrode will be in oil level instead of water level. The oil detector will activate alarm. After drain oil in inspection chamber, the oil detector return to normal condition.



安装图
INSTALLATION ARRANGEMENT



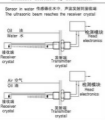
● 主要技术参数 MAIN TECHNICAL SPECIFICATION

型式：电容式油污检测器
Type: Capacitive oil detector
电源：AC 110/220V
Power supply: AC 110/220V
输出：继电器触点 (DPDT)
Output: Relay contact (DPDT)
公称压力：1.0 MPa
Operating pressure: 1.0MPa
工作温度：150°C 200°C
Max. Temp: 150°C 200°C
防护等级：IP66
Protection: IP66
连接尺寸：G1"
Conn. Size: G1"

OMK-08型 油水界面探测器 OIL/WATER INTERFACE DETECTOR

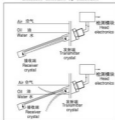
图一 声波衰减

Interface detection by attenuation



图二 声波反射折射

Interface detection by reflection



概述 GENERAL

本探测器由传感器和放大器组成，利用超声波在通过不同的液体或界面时能量衰减或折射的物理原理检测油水界面。如图一所示，传感器水平侧装，且检测间隙完全浸没在液体中。当通过传感器的检测间隙的液体介质为水平时，其超声波衰减量一定，可调节检测模块放大器的增益，使超声波顺利地通过传感器的间隙，信号放大器无信号输出；当传感器检测间隙中出现衰减度更大的油液介质时，超声波的传播就会被阻断，放大器输出检测信号。由此可见，通过对检测模块增益的合理设定，不同的液体即可被检测区分。如图二所示，当两种不相溶的液体对超声波有相似的衰减时，则将传感器侧装且与水平方向成 10° ，利用超声波在通过两种不同液体界面时的反射和折射现象，区分不同液体的界面。当传感器的检测间隙浸没在同一种液体中时，超声波能够顺利通过传感器的间隙；当检测间隙中出现二种不同的液体时，由于不同的液体介质的反射和折射作用，几乎没有超声波到达传感器的接收端，液体界面即被检测，放大器输出检测信号。值得注意的是，若空气进入传感器的检测间隙，此种状况亦会出现。

Ultrasonic attenuation is the reduction in energy of the beam as it is transmitted through the liquid. Viscous liquids, emulsions and liquids with entrained solids generally have a higher ultrasonic attenuation than low viscosity clear liquids such as water. When the attenuation difference is sufficient, the amplifier gain can be adjusted so that the ultrasound beam passes through the less attenuative liquid but is stopped by the more attenuative liquid. The output relay can then be set to monitor which liquid is in the gap. The ultrasonic attenuation of a liquid depends on many factors, the main ones being the complexity of the molecule, followed by the viscosity, assuming there is no aeration. Many liquids can be distinguished by this technique and for further information on previously tested liquid systems consult our technical sales. If samples of the liquids are available then a simple site test can often be done. When two immiscible liquids have similar attenuations the above method cannot be used, however it is likely that the velocity of ultrasound will be different. In this case a beam of ultrasound passing through the interface will be reflected and refracted and if the sensor is arranged at thus effectively attenuated. An angle of 10 degrees is chosen and often this results in gap of the angled sensor, very little ultrasound reaches the receiver, but when the interface is above or below the sensor (ie in either liquid) then there is a large signal present. The control unit gain is set to actuate the relay when the interface is in the gap. Note this condition will also occur if the upper liquid drains away and air (gas) is in the gap. Note for further information on suitability of this application consult our technical sales.

用途 APPLICATION

石油加工	Petroleum processing
化学品加工	Chemical processing
食品加工	Food processing
船舶及海上作业	Marine operation
水产业	Water industry

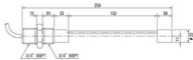
主要技术参数 MAIN TECHNICAL SPECIFICATION

型号(MODEL)	OMK-08A	OMK-08B
电源电压 Power supply (Selector switch)	AC110/220V AC220/240V	DC24V
功率 Power consumption	6VA	
继电器输出 Relay output	DPDT	
触点容量 Relay rating	AC 230V 5A	
外形尺寸 Box dimensions	200 × 120 × 75	
外壳及防护 Box rating	聚碳酸酯/Polycarbonate IP65	
填料函 Holes for glands	φ3 cover φ16mm	
安装尺寸 Fixing centres (W × H)	188 × 88	
安装孔径 Fixing hole diameter	φ4mm	

特征 FEATURES

无可移动部件； No moving parts	无固定形式； Ignores forms
安装方便； Convenient installation	性能稳定可靠 Performance is stable and reliable

402SD 型传感器外形尺寸 Sensor Outline Dimension TYPE 402SD



402SD 型 SPECIFICATION FOR 402SD

材料: SUS316	Material: SUS316
连接尺寸: 3/4" BSP 螺纹	Conn. Size: 3/4" BSP Thread
用途: 油水界面检测	Design or Duty: Chemical interface
液体形式: 清洁/伴有固体	Liquid Type: Clean, viscous with solids
温度: -70°C - 150°C	Temperature: -70°C - 150°C
最大压力: 105bar	Max. Pressure: 105bar
标准频率: 3.7MHz	Standard frequency: 3.7MHz
防护等级: IP65	Enclose: IP65
电缆长度: 3m	Cable Length: 3m



JBF 型 甲板阀 DECK VALVE

● 概述 GENERAL

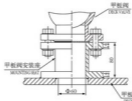
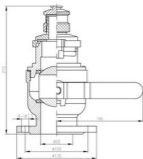
JBF 型甲板阀是油船及油化船专用的一种连接装置，可用于快速连接油水界面检测器、密闭取样器、油舱压力测量装置、油泥尺等便携式测量设备，亦可供石油、化工、等其它工业场所所有类似要求的场合使用。

JBF type deck valve is a specialized connecting device for tanker and oil & chemical ship, which can be used for quick connecting portable measuring equipments as oil/water interface detector, hermetic sampler, oil tanker pressure gauging device, and sludge tape etc., as well as other industrial places with similar requirements.

● 主要技术参数 MAIN TECHNICAL SPECIFICATION

1.公称通径: DN 50 (2")	Nominal diameter: DN 50 (2")
2.公称压力: 0.20MPa	Nominal pressure: 0.20MPa
3.阀体材料: SUS304、SUS316	Material of valve body: SUS304, SUS316
4.阀座材料: 聚四氟乙烯	Material of valve seat: PTFE
5.适用介质: 油、海水及化学品	Applicable medium: oil, seawater and chemicals
6.快速接口: 1"、2" 快速接头	Quick connection: 1" , 2" quick connector
7.接口法兰: CBM1012-81、PN0.5	Connection flange: CBM1012-81, PN0.5

● 外形尺寸 OUTLINE DIMENSION



● 安装和使用 INSTALLATION AND USAGE

当操作人员需要使用油水界面仪、油泥尺等测量设备对油舱进行测量时，将甲板阀罩帽拔下，并将所用设备的快速接头套在甲板阀的快速接头座上，然后将球阀开启（向上旋 90 度），所接的设备即可按各自的要求投入使用。当需要使用油舱密闭取样装置时，旋下上部分，取样装置的底座便可安装并固定在 JBF 型甲板阀上部的法兰上。将 JBF 型甲板阀开启后（向上旋 90 度），操作人员即可进行取样操作。JBF 型甲板阀使用完毕后，应将球阀置于关闭位置，以免油舱内油气外泄。

When the operator needs to use measuring equipments as oil/water interface detector and sludge ruler etc. for oil tanks, pull out the cup of deck valve, and connect quick connector to deck valve, then open ball valve (rotate 90 degree upward) and all connected equipments can be used. When oil tank hermetic sampling device is needed, screw off the upper part and the bed of sampling device can be installed and fixed on upper flange of JBF ball valve. After opening JBF ball valve (rotate 90 degree upward), the operator can sample. After using JBF deck valve, the ball valve should be set in closed position to avoid oil gas leakage from oil tank.

UBX型 便携式油水界面探测器 PORTABLE INTERFACE DETECTOR

概述 GENERAL

UBX 型便携式油水界面探测器可方便地对同一舱柜中的油水等介质的位置进行探测,同时可测量介质的温度。产品符合 CBT4182-2011《船用油水界面探测器技术条件》及 MEPC.5(XII)《油水界面探测器技术条件》。产品适用油船、油化船、石油、化工及其它工业场所,对压载舱、液货舱、污油舱、油罐等舱设备内的油水界面和温度进行测量。

UBX type portable interface detector can detect the position of oil/water in the same tank conveniently, as well as the medium temperature at the same time. The product accords with CBT4182-2011 <Technical Requirements for Marine Oil/ Water Interface Detector> and MEPC.5 (XII) <Technical Requirements for Oil/ Water Interface Detector>. The product is applicable for oil/water interface and temperature measurement of ballast tanks, liquid tanks, slop tanks, oil tanks etc. in oil tanker, oil & chemical ship, petroleum, chemical and other industrial place.



主要技术参数 MAIN TECHNICAL SPECIFICATION

界面探测精度: $\pm 20\text{mm}$
 卷尺长度: 15 m、30m
 卷尺制式: 公 / 英
 卷尺分辨率: 1mm
 卷尺精度: $\pm 3\text{mm}/30\text{m}$
 最小检测液位: 4mm
 显示模式: LED 文本及声响
 温度精度: $\pm 0.5\%F.S.$
 温度分辨率: 1°C
 电源电压: DC 9V (电池)
 环境温度: $-25\sim 55^\circ\text{C}$
 介质温度: $-25\sim 110^\circ\text{C}$
 防爆标志: Ex ia II BT4Ga
 防护等级: IP44 (传感器 IPX8)
 证书认证: EC 及 CCS
 连接尺寸: 2" 甲板阀 1" 快速接头
 适用介质: 油、水及化学品

Interface detection accuracy: $\pm 20\text{mm}$
 Tape length: 15 m、30m
 Tape system: metric/ British
 Tape resolution: 1mm
 Tape accuracy: $\pm 3\text{mm}/30\text{m}$
 Min. detection level: 4mm
 Display mode: LED text and sound
 Temperature accuracy: $\pm 0.5\%F.S.$
 Temperature resolution: 1°C
 Power voltage: DC 9V (battery)
 Ambient temperature: $-25\sim 55^\circ\text{C}$
 Probe temperature: $-25\sim 110^\circ\text{C}$
 Ex. mark: Ex ia II BT4Ga
 Protection class: IP44 (sensor IPX8)
 Certificate approval: EC and CCS
 Connection size: 2" deck valve 1" quick connector
 Applicable medium: oil, water and chemical



● 产品特点 FEATURES

100% 可重复性；
连续温度可读；
高精度和稳定性；
更换电池简便；
更换探头不需要重新校正；
重量轻，便于携带；
长时间温度稳定，不易老化；
采用多种适配器可以和不同的甲板阀门连接；
具有卷尺清洁装置、窗口擦拭器及卷尺保护器；
模块化设计，易于维护。

100% repeatability
Readable continuous temperature;
High accuracy and stability;
Easy changing battery;
No need to recalculate after changing probe;
Light weight, easy to carry;
Longtime steady temperature, no easy to aging;
Multi-adaptor can be connected with different dock valve;
Tape cleaning device, window wiper and tape protector;
Modular design, easy to maintenance.

● 型号标记 MODEL SIGN



● 产品构成及测量原理 PRODUCT COMPOSITION AND ITS MEASURING PRINCIPLE

UBX 型便携式油水界面探测器由传感器、外壳、卷尺、显示屏等组成。

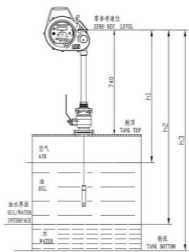
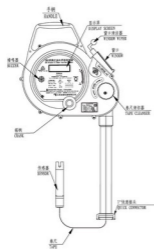
该产品用一个专业的探测油、水及空气介质的探头放入液舱内，当该探头处于空气、油或水等不同的介质中时，便会输出不同的数据信号经过铜芯线传到处理模块。

该数据信号经模块处理后，以不同的蜂鸣器鸣响信号来区别不同的介质。同时，显示屏上会显示出空气、水或油字样。当测量人员听到蜂鸣器的不同鸣响，就可以从卷尺读数口读出此时的某介质的液位并记录下来。再继续放下探头，当再次听到蜂鸣器鸣响，再读出并记录。这二次读数的差值便是该介质的高度。

UBX type portable oil/water interface detector is composed of detecting sensor, casing, steel tape, display unit, etc.

A special sensor detecting medium of oil, water and air is put into the liquid tank. The different data will be transmitted to the process module by the communication cable as soon as the sensor located in different medium of air, oil or water.

This different data is processed in the module and then activated the buzzer by different ringing signal; therefore the different medium can be identified. At the same time, the LCD display screen shows the letter of AIR, OIL or WATER. The surveyor then reads out and records the reading from the reading port of steel tape as soon as the buzzer sounds. After that further put down the sensor, read out and record the reading when the buzzer sounds again. The difference between two readings is just the height of medium (oil layer or water layer).



RQY型 密闭取样器 HERMETIC SAMPLER

● 概述 GENERAL

RQY型密闭取样器主要由升降装置、主体保护管、取样阀、取样桶等部分组成。产品按照密闭提取液体样品的要求设计，可以在密闭的条件下完成液体样品的提取。具有采样精度高、操作方便、安全可靠等特点。产品适用于船舶、石油、化工及其它工业领域，对舱柜、罐体及各类容器中不同层面的液体进行取样。

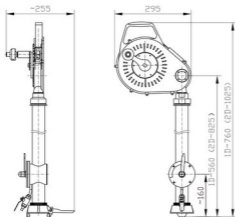
RQY type hermetic sampler consists of lifting device, protection chamber, sample discharging valve, sample barrel etc. The product is designed for closed sampling of liquid. It has the characteristics of high accuracy, convenient operation, safety and reliability etc. It is suitable to take the liquid sample of different liquid level from cabins, tanks and various vessels in ships, petroleum, chemical and other industry.

● 主要技术参数 MAIN TECHNICAL SPECIFICATION

1. 型号: RQY-2;
2. 安装形式: 2" 快速接头;
3. 卷尺规格: 长度15m或30m;
4. 卷尺分辨率: 1mm;
5. 取样介质密度范围: 0.6~3.5g/cm³;
6. 介质温度范围: -25℃~110℃;
7. 工作压力: 0.3bar;
8. 取样容积: 0.15、0.45L;
9. 配套阀门: 2" 甲板阀;

- Model: RQY-2
Type: 2" quick connector;
Tape size: length 15 m or 30m;
Tape resolution: 1mm;
Density scope of sample medium: 0.6~3.5g/cm³;
Medium temperature range: -25℃~110℃;
Working pressure: 0.3bar;
Sampling volume: 0.15 , 0.45L;
Matched valve: 2" deck valve

● 外形尺寸图: OUTLINE DIMENSION



● 型号标记: MODEL SIGN

RQY -2- □ - □

- 1L—最大取样高度15米 2L—最大取样高度25米
1L—Max. sample volume 15m 2L—Max. sample volume 25m
1D—单次取样量0.15L 2D—单次取样量0.45L
1D—Single sample volume 0.15L 2D—Single sample volume 0.45L
密闭取样器 Hermetic sampler



● QBN-10型 便携式气体检测仪 PORTABLE GAS DETECTOR

● 概述 GENERAL

QBN-10型便携式气体检测仪有泵吸式和扩散式二种型式,既可检测单一气体,也可检测多个气体。产品具有体积小、灵敏度高、安全可靠等特点,广泛应用于船舶、石油、化工、矿井等行业对现场环境中可燃、有毒气体浓度的检测和报警。

QBN-10 type portable gas detector can be divided into pumping type and diffusion type, it can detect single gas or complex gas. With the characteristics of small volume, high sensitivity, safety and reliability, it is widely used for concentration detection and alarm for flammable gas and poisonous gas in ship, petrochemical, fire control, mine etc.

泵吸式配有采样泵,可将气体直接吸入至采样泵再进行检测。适用于检测密闭空间或井下气体的检测。

Sampling pump is matched for pumping type gas detector, and the gas can be directly suctioned into sampling pump for detection. This type is suitable for closed space or mine gas.

扩散式仪器直接放在被测环境中检测气体。通常需要人为携带检测。多数适用于危险区域的工作人员携带,或人可进入的环境。

Diffusion type can be located in detected condition for gas detection. Normally it needs to be taken along by man for detection, it is suitable for worker in hazardous area or the environment that man can access.

● 型号标记 MODEL SIGN



● 主要技术参数 MAIN TECHNICAL SPECIFICATION

- 检测气体类别:可燃气体:氧气、硫化氢、一氧化碳
- 检测原理:红外、催化燃烧、电化学检测
- 量程:0-100%LEL, 0-40vol%, 0-100ppm, 0-500ppm
- 报警参数:
 - 可燃气体:一级:10%LEL, 二级:50%LEL, 超量程:100%LEL;
 - 氧气:低报警:19.5%vol, 高报警:23.5%vol, 超量程:40.0%vol
 - 硫化氢:一级:10.0ppm, 二级:30.0ppm, 超量程:100.0ppm
 - 一氧化碳:一级:10.0ppm, 二级:30.0ppm, 超量程:100.0ppm
- 液晶显示:同时显示一种或四种气体的浓度;
 - 液晶数段显示;
 - 警报时背光自动点亮
- 报警声音:30cm 处 95dB
- 报警类型:气体报警:两级预设报警点,超量程报警,故障报警;传感器未连接;低电压;电路板故障;校准范围错误
- 报警显示:气体报警:
 - LED灯闪烁、蜂鸣器鸣叫、气体浓度值闪烁、振动。
 - 故障报警:LED灯闪烁、蜂鸣器鸣叫、显示故障信息。
- 采样方式:扩散式\泵吸式
- 防爆标志:Ex ia IIC T4 Ga
- 防护等级:IP66
- 连续工作时间:MAX 20小时
- 使用电源:镍氢充电电池组,可直接充电。
- 工作温度:-20°C-50°C
- 环境湿度:5%~95%RH
- 反应时间:T90 小于 30秒

Detected gas type: flammable gas, oxygen gas, hydrogen sulfide, carbon monoxide

Detection principle: infrared, catalytic combustion, electrochemistry

Range: 0-100%LEL, 0-40vol%, 0-100ppm, 0-500ppm

Alarm parameters:

Flammable gas: one class: 10%LEL, two class: 50%LEL, over range: 100%LEL;
Oxygen gas: low alarm: 19.5%vol, high alarm: 23.5%vol, over range: 40.0%vol
Hydrogen sulfide: one class: 10.0ppm, two class: 30.0ppm over range: 100.0ppm
Carbon monoxide: one class: 10.0ppm, two class: 30.0ppm over range: 100.0ppm

LCD display: display one or four types of gas concentration at the same time;

LED digit display;
backlight is auto-lighted when alarm

Alarm sound: 95dB at 30cm

Alarm type: Gas alarm: two class preset alarm point, over range alarm

Fault alarm: sensor disconnection; low voltage; circuit board fault; wrong calibration range

Alarm display: Gas alarm:

LED lamp flickering, buzzer calling, gas concentration value flickering, vibration

Fault alarm: LED lamp flickering; buzzer calling; fault information display

Sampling type: pumping type, diffusion type

Ex. Mark: Ex ia IIC T4 Ga

Protection class: IP66

Continuous working hours: Max. 20 hours

Power supply: Nickel metal hydride battery pack, can be charged directly

Working temp: -20°C-50°C

Ambient humidity: 5%~95%RH

Response time: T90 less than 30s

QBN-09 型 气体传感器 GAS TRANSMITTER

● 概述 GENERAL

QBN-09 型气体传感器主要用于可燃气体、硫化氢、氧气等易燃、有毒等气体的检测。产品具有稳定可靠、安装方便等特点。适用于各类船舶、石油平台及其它工业场合，对易燃、有毒气体的检测和报警。

QBN-09 is used for detecting combustible gas and toxic gas. It has the advantages of reliability and easy-installation. It applies in ships, oil platform and other industrial fields.

● 主要技术参数 MAIN TECHNICAL SPECIFICATION

检测气体 Detecting gas	量程 Range	传感器类型 Type of sensor	精度 Accuracy	最小读数 Min. reading	防爆等级 Explosion	响应时间 Response time
可燃气 (CH ₄) Flammable gas	0-100%LEL	催化燃烧 / 红外式 catalytic combustion / infrared type	≤ ± 5%F.S	1%LEL	Ex d II CT 6 Ex ia II CT 4	≤ 30S
氧气 (O ₂) Oxygen	0-30%VOL	电化学 Electrochemistry	≤ ± 5%F.S	0.1%VOL	Ex d II CT 6	
硫化氢 (H ₂ S) Hydrogen sulfide	0-100ppm	电化学 Electrochemist	≤ ± 5%F.S	1ppm	Ex d II CT 6 Ex ia II CT 4	

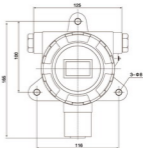
- 重复性: ≤ 2% F.S
Repeatability: ≤ 2% F.S
- 工作温度: -20 ~ 70℃
Operating temperature: -20 ~ 70℃
- 环境湿度: ≤ 90%
Ambient humidity: ≤ 90%
- 检测方式: 扩散式
Detecting type: diffusion type
- 工作方式: 固定式长期连续工作
Operating type: fixed type long continuous operating
- 工作电压: DC 24V
Working voltage: DC 24V
- 输出信号: 三线制 4-20mA / RS485
Output signal: three wires 4-20mA / RS485
- 外型结构: 压铸铝壳体
Outline: cast aluminum case body
- 外形尺寸: 183 × 143 × 107mm(显示型)
183 × 143 × 93mm(无显示型)
Outline size: 183 × 143 × 107mm(indication type)
183 × 143 × 93mm(No indication type)
- 安装方式: 壁挂式, 管道式
Mounting type: wall mounting, pipeline mounting
- 防爆标志: Ex d II CT6 Ex ia II CT4
Ex. mark: Ex d II CT6 Ex ia II CT4
- 防护等级: IP66
Protection: IP66



B 型 (Type)

D 型 (Type)

● 型号标记 MODEL SIGN





YSZK 型 舱室压力传感器 CABIN PRESSURE TRANSMITTER

● 概述 GENERAL

YSZK 型舱室压力传感器采用进口硅压阻压力传感器芯片，配套新型带微处理器的数字补偿放大电路和坚固耐用的铸铝外壳，具有精度高、稳定性好、量程范围宽、防护等级高等优点。用于船舶舱室压力检测、锅炉护胶负压检测、空调净化系统、风机流速流量测量、工业除尘设备、净化车间、纺织机械、设备检漏及其它工业场所微小压力的测量。

YSZK type cabin pressure transmitter uses importing silicon piezoresistive pressure sensor chip, matched with new digital compensation amplifier circuit and robust cast aluminium housing, it has the advantages of high precision, good stability, wide scaling range, high protection grade etc. It is used for measuring micro pressure in ship's cabin pressure, boiler furnace negative pressure detection, air-condition purification system, fan flow rate measurement, industrial dusting equipment, cleaning shop, textile machinery, leakage detection equipment and other industrial places.

● 主要技术参数 MAIN TECHNICAL SPECIFICATION

电源电压 : DC24V

测量精度 : $\pm 1.0\%FS / \pm 0.5\%FS$

工作温度 : $-20\sim 60^{\circ}C$

输出信号 : 4-20mA(二线制)/-5VDC

防护等级 : IP56

防爆标志 : ExiaIICT6

最大过压能力 : 3psi (20kPa)

接口尺寸 : $\Phi 6$ 不锈钢卡套接头 / $\Phi 8$ 塔形黄铜接口

Power voltage: DC24V

Measuring accuracy: $\pm 1.0\%FS / \pm 0.5\%FS$

Working temp.: $-20\sim 60^{\circ}C$

Output signal: 4-20mA (two wires)/ -5VDC

Protection grade: IP56

Explosion proof mark: ExiaIICT6

Max. overload capability: 3psi (20kPa)

Connection size: $\Phi 6$ stainless steel biting connector / $\Phi 8$ tower brass connection

● 测量范围 MEASURING RANGE

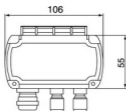
型号 Type	测量范围 Measuring range (kPa)
单向型 One-way type	0-50、0-100、0-250、0-500、0-1000、0-2500、0-5000
双向型 Two-way type	-50-0-50、-100-0-100、-250-0-250、-500-0-500、-1000-0-1000、-2500-0-2500、-5000-0-5000

● 型号标记 MODEL SIGN

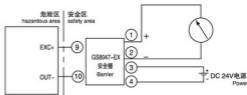
YSZK - 01S - C - E



● 外形尺寸图 OUTLINE DIMENSION



● 接线图 WIRING DIAGRAM



4-20mA 电流输出型电气连接图 (本安型)
4-20mA current output type electric connection diagram (intrinsic safety type)

分油机组合单元 OIL SEPARATOR ASSEMBLY UNIT

● 概述 GENERAL

分油机组合单元主要由矿物油分离器及全自动控制系统组成，主要用于船舶主机、发电机所需的燃油和润滑油的净化处理。

Oil separator assembly unit consists of mineral oil separator and full-auto control system. It is mainly applied in purifying treatment for fuel oil and lubricating oil used in main engine and generator.

● 采用 ALFA LAVAL 分油机的分油机组合单元 OIL SEPARATOR ASSEMBLY UNIT WITH ALFA LAVAL SEPARATOR

产品选用 ALFA LAVAL 公司生产的最新型的 SA 和 PA 系列分油机。单元将分油机、加热器、供给泵、传感器、自动控制装置、管道、仪表、阀门等组合在一起，实现对燃油或滑油的自动加热、进油、分离、排渣等一系列过程。可实现无人操作和集中控制的要求，是船舶的主机、发电机配套使用最多的分油机组合单元之一。

Its main configurations are the latest type SA & PA series separators manufactured by ALFA LABAL company, which integrates separator, heater, supply pump, sensor, automatic control device, pipes, meters, valves to realize a series of procedures such as automatic heating, oil-taking, sludge discharging and realize unmanned operation and centralized control. The product can be widely used in ship building and the industries related to diesel engine.



● 采用国产分油机的分油机组合单元 OIL SEPARATOR ASSEMBLY UNIT WITH DOMESTIC SEPARATOR

本组合单元的主要配置为国产分油机（KDY 系列）。单元将分油机、加热器、供给泵、传感器、自动控制装置、管道、仪表、阀门等组合在一起，实现对燃油或滑油的加热、进油、分离、排渣等一系列过程。主要应用于中小型船舶中与主机和发电机配套的燃油和滑油的净化处理。

Its main configuration is domestic separator (KDY series), which integrates separator, heater, supply pump, sensor, automatic control device, pipes, meters, valves to realize a series of procedures such as automatic heating, oil-taking, separating, sludge discharging. The product is mainly applicable to the manufacture of small and medium size ships.





BQF 型 对夹超薄型球阀 CLAMP ULTRA-THIN BALL VALVE

概述 GENERAL

BQF 型对夹超薄型球阀与普通球阀相比, 具有结构长度短、重量轻、安装方便、节省材料等显著的优点。适用于工业设备的各类管路上截断或接通管路中的水、海水、油品、硝酸、醋酸、氧化性介质、尿素等多种介质。

Compared with common ball valve, BQF type clamp ultra-thin ball valve has the advantages of short structure length, light-weight, easy installation, saving in material etc. It is suitable for cut-off or cut-in in pipelines of industrial equipments for the mediums as water, sea water, oils, nitric acid, acetic acid, oxidant, urea etc.

对夹保温夹套球阀保温效果好。网座采用弹性密封结构, 密封可靠, 启闭轻松, 设有耐火结构, 万一发生火灾时, 仍然能够可靠操作并具有良好的密封性。根据用户需要, 可设有防静电结构。设置了 90° 开关孔定位片, 根据需要可以加锁, 防止误操作。

Clamp thermal insulation jacket ball valve has good heat preservation. In addition, the valve sea adopts spring sealing structure with reliable sealing and easy on and off. Fire-proof structure with good sealing can be reliably operated in case of breaking out of fire. Anti-static structure can be set according to needs of users. 90° switch with hole locating plate is set and can be locked according to needs to avoid misoperation.

主要技术参数 MAIN TECHNICAL SPECIFICATION

1. 公称口径: DN 15-50

2. 公称压力: 1.6MPa, 2.5MPa (ANSI CLASS150)

3. 工作温度: -20-180°C (密封圈为增强聚四氟乙烯)

4. 适用介质: 水、海水、油品、硝酸、醋酸、氧化性介质、尿素等。

5. 驱动方式: 手动、气动、电动等

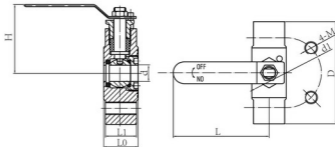
Nominal diameter: DN 15-50

Nominal pressure: 1.6MPa, 2.5MPa (ANSI CLASS150)

Working temp: -20-180°C (reinforced PTFE sealing gasket)

Applicable medium: water, sea water, oils, nitric acid, acetic acid, oxidant, urea

Drive mode: manual, pneumatic, electric type etc



外形尺寸 OUTLINE DIMENSION

DN	d	d ₁	D	L ₀	L ₁	L	H	4-M
15	15	65	95	32	29	110	62	4-M12
20	20	75	105	39	36	125	70	4-M12
25	25	85	115	45	42	135	79	4-M12
32	32	100	140	55	52	150	86	4-M16
40	40	110	150	62	60	160	105	4-M16
50	50	125	165	72	68	180	120	4-M16

FSU 型 柴油机燃油供应单元 DIESEL FUEL OIL SUPPLY UNIT

● 概述 GENERAL

燃油供应单元主要用于船用柴油机的重质燃油供油。本产品是将所需要的设备组成独立的装置,具有结构紧凑、连接可靠、使用维护方便、利于集中管理等特点。产品可为柴油机提供合适的流量、压力、温度的重质燃油,同时通过三通阀可实现轻、重油供油转换,是保障柴油机正常运行的理想设备。

Fuel Oil Supply Unit is designed to supply heavy fuel oil (HFO) for marine diesel. The manufacture forms a complete unit by systematically putting together necessary equipment of fuel oil supply system. Thus, it is convenient for customers in planning and location, installation and adjustment. It is also easy for operator to operate and control in actual operation. Fuel Oil Supply Unit is designed to have such advantages as compact construction and reliable connection, easy operation and convenient maintenance.

● 燃油供应单元总图 GENERAL DIAGRAM



● 工作原理 WORKING PRINCIPLE

日用柴油箱和日用重油箱通过油管,经三通切换阀和粗滤器,连接到两台供应泵进口。两台供应泵互为备用,泵出口各自装有截止止回阀,以保证各油泵能单独工作。泵出口处装有压力调节阀,当泵出口压力升高到一定值时,调节阀即打开,泵出口油回流到进口。从供应泵出来的燃油流入并联的自动逆洗滤器和 SBL 手动逆洗滤器。自动逆洗滤器为常用, SBL 手动逆洗滤器作为备用。然后经流量计,进入混油桶。在混油桶内温度较低的燃油与从发动机回流的高温回油进行混合。并且,混油桶顶部装有自动排气阀,能自动排除油中的气体。

混油桶的燃油出口与两台循环泵进口相连,两台循环泵互为备用,泵出口各自装有截止止回阀,以保证各油泵能单独工作。燃油从循环泵出口后,即进入蒸汽加热器加热,使重质燃油的粘度下降,满足发动机的需要。两台加热器互为备用。

加热后燃油进入粘度计传感器,当粘度不符合发机要求时,粘度计将会发出信号,控制蒸汽调节阀的开度大小,以控制进入加热器的蒸汽量,使加热器的油温升高或降低,以保证单元出口的油粘度符合发动机的要求。

燃油最后进入发动机,通过喷油泵,多余的油回到混油桶,再进入循环油泵循环使用。本单元的出口有一路管路直接回到混油桶或重油日用柜,作为调节单元流量或者快速换油之用。

Fuel oil from MDO service tank or HFO service tank flows into the inlet of two oil supply pumps through oil pipe, crude filter and three-way valve. Two oil pumps can act as main supply pump and stand-by pump alternatively. Non-return valve is mounted at the outlet of each pump to ensure each pump can run separately. Pressure regulating valve is mounted at the outlet of oil pumps. If oil pressure of MFO Fuel Supply Unit increases and reaches the specified range, pressure regulator valve will open and the oil that flows from pumps outlet returns to the pumps inlet. Fuel oil from supply pump flows into parallel-mounted auto back-flush filter and SBL manual-flush filter. Normally auto back-flush filter is main filter while SBL manual-flush filter is stand-by filter. It flows into mixing tank through flow meter. When mixed the lower fuel oil in mixing tank and the high temperature return oil in the motor, as well as auto discharge valve is on the top of mixing tank. It can remove air from oil.

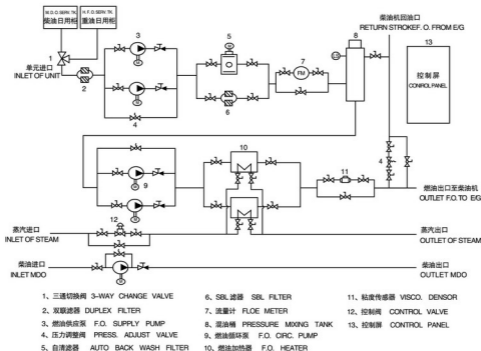
Fuel oil outlet of mixing tank connects into the inlet of two circling pumps. Two oil pumps can act as main supply pump and stand-by pump alternatively. Non-return valve is mounted at the outlet of each pump to ensure each pump can run separately. Fuel oil from the outlet of circling pumps flows into steam heater to be heated so that the viscosity of fuel oil is falling and becomes suitable for the demands of engine. Two heaters can act as main heater and stand-by heater alternatively.

After heating, fuel oil flows into viscometer sensor. When the viscosity of fuel oil does not match with the demands of engine, viscometer will give signal and control opening degree of steam regulating valve, in order to control the steam came into heater and temperature of fuel oil in steam heater is regulated high or low to ensure oil viscosity in the outlet of MFO Fuel Supply Unit is suitable for the demands of the engine.

Finally, fuel oil flows into engine through injection pump, and surplus fuel oil returns to mixing tank, and then it goes into oil circling pumps to undergo treatment. There is a pipeline return to mixing tank or HFO service tank at the outlet of this unit, its used for regulating unit flow or quickly changing oil.



● 燃油供应单元原理图 F.O. SUPPLY UNIT WORKING PRINCIPLE DIAGRAM



● 主要技术参数 MAIN TECHNICAL SPECIFICATION

技术参数 Technical Specification	单元型号 Model				
	FSU-2000	FSU-4020	FSU-6540	FSU-10065	FSU-150100
单元出口流量 (l/h) Flow Rate Range (l/h)	2000	2500	4000	5000	≥ 8000
单元出口压力 (MPa) Pressure Range (MPa)	0.5-1.0	0.5-1.0	0.5-1.0	0.5-1.0	0.5-1.0
最高使用温度 (°C) Max. Temp	150	150	150	150	150
过滤精度 (μm) Accuracy	10-40	10-40	10-40	10-40	10-40
柴油功率 (kw) Engine power	≤ 2000	≤ 4000	≤ 6500	≤ 10000	≤ 15000
粘度控制范围 (Cst) Viscosity Control Range	0-25				
温度控制范围 (°C) Temp. Control Range	50-145				
电源 Power Source	380V 50Hz/440V 60Hz				
外形尺寸 Outline Dimension	符合客户认可的技术文件和图样 Technical conditions to meet customer requirements				

● 型号标记 MODEL SIGN



BQF 型 夹套超薄球阀
Clamp Ultra-thin Ball Valve

ZDF 型 自动反冲洗滤器 AUTOMATIC BACK-FLUSHING FILTER

● 概述 GENERAL

ZDF 型自动反冲滤器主要用于燃油、润滑油、水及乳化液等多种液体介质的自动过滤。

产品设计合理，维护方便，低功耗低成本运行。滤芯采用特殊的不锈钢金属线缠绕而成，强度高，使用寿命长。全自动清洗过滤杂质，过滤能力强，适用于船舶机舱的自动化管理。

ZDF type automatic back-flushing filter can be applied for F.O, L.O, water and emulsion filtration.

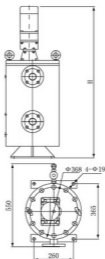
The products have characters of reasonable design, easy maintenance, low consumption and low cost. The filter core is made of special stainless metallic wire which has high strength and long life-span. It can clean impurity full automatically and applied for auto management in engine room.

● 主要技术参数 TECHNICAL SPECIFICATION

参数 data / 型号 type	ZDF-32	ZDF-40	ZDF-50	ZDF-65
额定流量 rated flow (L/h)	1800	4000	6000	8000
工作压力 working pressure (MPa)	1.5	1.5	1.5	1.5
进出口径 DN (mm)	32	40	50	65
工作温度 working temp. (°C)	150			
过滤精度 filtration fineness (μ.m)	10			
电源 power (V/Hz)	AC380/50 440/60			
容量 volume (L)	22	27	33	40
重量 weight (kg)	110	125	145	165
高度 highly H (mm)	850	930	1000	1080

注：进、出口法兰可根据用户需要的相关标准制造
 NOTE: The flange can be manufactured according to clients requirements.
 额定流量：试验介质粘度为 24cst 的清洁油液，工作压力 ≤ 0.8MPa 压降 ≤ 0.08MPa
 Rated flow: the test medium viscosity is oil liquid of 24cst, working pressure ≤ 0.8MPa pressure drop ≤ 0.08MPa

● 外形尺寸 OUTLINE DIMENSION





LPG 型 过滤器 FILTER

● 概述 GENERAL

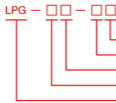
LPG 型过滤器主要用于过滤液体中含有的颗粒杂质, 以保证被保护设备正常运行, 可用于燃油、润滑油、水及乳化液等多种液体输送管路, 尤其高精度流量计系统燃油供应单元及其它工业设备中不可缺少的辅助设备。

LPG type filter is a standard accessory in volume type flow meter pipe design used to filter particle impurity in the measured liquid to ensure normal operation of flow meter. It can be applied in pipes for F.O., L.O., water and emulsion, especially for high accuracy flow systems, it is a very necessary accessory.

● 主要技术参数 MAIN TECHNICAL SPECIFICATION

- | | |
|---|---|
| 1、公称口径: DN10~400 mm | DN: DN10~400 mm |
| 2、过滤精度: 10~200 μ m | Filter accuracy: 10~200 μ m |
| 3、工作温度: ; -20~120 $^{\circ}$ C | Working temperature: ; -20~120 $^{\circ}$ C |
| 4、介质粘度: ; \leq 500 mPa.s | Medium viscosity: \leq 500 mPa.s |
| 5、材质 a. 壳体 (A) 铸铁 (E) 耐蚀钢 (B, C)
b. 过滤网: 铜丝网、不锈钢丝网 | Material A: casing: cast iron (A) cast steel (E) anti-erosion steel (B, C)
B: filter screen: copper, stainless steel |
| 6、连接法兰: GB/T9112-2000 或 JB/T79-82-1994 | Flange: GB/T9112-2000 or JB/T79-82-1994 |

● 型号标记 MODEL SIGN

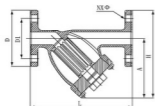


- 壳体材料 Casing material (A, E, B or C)
公称压力 PN
产品型式 Product type Y, U 或 H
公称口径 DN
产品代号 Product symbol



● 外形尺寸 OUTLINE DIMENSION

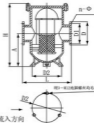
1. Y型过滤器 Y type filter



2. U型过滤器 U type filter



3. 焊接式过滤器 Weld type filter



材质 material	DN	额定流量 rated flow (m ³ /h)	L	A	H	D		D1	n	工作压力 working pressure MPa
						JB	GB			
A	10	0.4	150	80	125	90	90	60	4~14	
	15	1.5	150	80	125	95	95	65		
	20	4.5	180	100	153	105	105	75		
	25	10	180	95	153	115	115	85		
B	40	15	300	155	304	145	150	110	4~18	
	50	40	300	155	304	160	165	125		
	80	100	400	250	420	195	200	160		
	100	150	500	305	502	215	230	180		
C	150	250	600	335	650	280	285	240	8~23	1.6
	200	340	786	395	770	335	340	295		
	300	400	950	425	920	360	365	310		
	400	500	1100	475	1070	400	405	340		
E	10	0.4	165	77	127	100	100	70	4~14	
	15	1.5	165	77	131	105	105	75		
	20	4.5	200	91	154	125	130	90		
	25	10	210	96	159	135	140	100		
	40	15	320	155	308	165	170	125	4~23	
	50	40	320	155	310	175	180	135		
	80	100	420	250	430	210	215	170		
	100	150	525	295	510	250	250	200		
	150	250	600	335	650	300	300	250	8~26	6.3
	200	340	786	395	780	360	360	310		
	300	400	950	425	920	390	390	340		
	400	500	1100	475	1070	420	420	370		

型式 type	DN	额定流量 rated flow (m ³ /h)	L	A	H	D		D1	n	工作压力 working pressure MPa
						JB	GB			
U型	80	100	420	250	450	210	215	170	8~23	
	100	150	525	295	550	250	250	200	8~25	
	150	250	600	335	650	300	300	250	8~26	
	200	340	786	395	780	360	360	310	12~26	
H型	250	500	950	425	1150	425	425	370	12~30	4.0
	300	600	1100	475	1250	475	475	430	16~30	
	350	1000	1100	750	1320	550	555	490	16~34	
	400	1500	1200	750	1380	610	620	550	16~36	

注: 进出口法兰可根据用户需要的相关标准制造
Note: The flange can be manufactured according to the client's requirements.
表中 in the table JB/T9112-2000 GB/T9112-2000
额定流量: 试验介质粘度为24cSt的清洁油液, 工作压力 \leq 0.8MPa 压力降 \leq 0.08MPa
Rated flow: The test medium viscosity is oil liquid of 24cSt, working pressure \leq 0.8MPa, pressure drop \leq 0.08MPa

● LC 型 椭圆齿轮流量计 ELLIPSE GEAR FLOWMETER

● 概述 GENERAL

椭圆齿轮流量计, 是计量流经管道内液体流量总和的容积式流量计, 该产品适用于船舶、化工、石油、医药、电力、冶金和食品等工业部门的液体介质流量的计量。

Ellipse gear flowmeter is a volume type flowmeter, which measure liquid summation through pipeline. It can be used for ship, chemical, petroleum, medicine, electric power, metallurgy and food etc.

● 主要技术参数 MAIN TECHNICAL SPECIFICATION

材 质: 铸铁、铸钢、不锈钢

Material: cast iron, cast steel, stainless steel

公称压力: 1.6MPa (铸铁);

Nominal pressure: 1.6MPa (cast iron);

2.5、4.0、6.3 MPa (铸钢);

2.5、4.0、6.3 MPa (cast steel);

1.6、2.5 MPa (不锈钢)

1.6、2.5 MPa (stainless steel)

被测液体温度: -10~100℃

Liquid temp. to be measured: -10~100℃

精度等级: 0.5、0.2

Accuracy: 0.5、0.2

公称口径: 10~200mm

DN: 10~200mm



● 流量范围 FLOW RANGE

 (m³/h)

型号 MODEL	公称 口径 DN	被测液体粘度 Liquid viscosity to be measured mPa.s										
		< 0.3	0.3-0.8	0.8-2	2-8	8-200	200-1000	1000-2000				
精度等级 Precision class		0.5	0.5	0.2	0.5	0.2	0.5	0.2	0.5	0.2	0.5	0.5
LC-A (E) 10	10		0.2-0.4		0.08-0.4	0.1-0.4	0.08-0.4	0.08-0.4	0.04-0.4	0.06-0.3	0.03-0.3	0.3-0.2
LC-A (E) 15	15		0.8-1.5		0.08-0.4	0.3-1.5	0.3-1.5	0.3-1.5	0.15-1.5	0.2-1.0	0.1-1.05	0.075-0.75
LC-A (E) 20	20		1.5-3	1-3	0.3-1.5	0.6-3	0.4-3	0.5-3	0.3-3	0.42-2.1	0.21-2.1	0.15-1.5
LC-A (E) 25	25	4-6	3-6	2-6	0.4-3	1.2-6	0.8-6	1-6	0.6-6	0.84-4.2	0.42-4.2	0.3-3
LC-A (E) 40	40	9-15	7.5-15	5-15	0.8-6	3-15	2-15	2.5-15	1.5-15	2.1-10.5	1.05-10.5	0.75-7.5
LC-A (E) 50	50	10-24	8-24	8-24	2-15	4.8-24	3-24	4-24	2.4-24	3.36-16.8	1.68-16.8	1.2-12
LC-A (E) 80	80	30-60	24-60	20-60	3-24	12-60	6-60	10-60	6-60	8.4-42	4.2-42	3-30
LC-A (E) 100	100	50-100	40-100	34-100	10-100	20-100	10-100	16-100	10-100	14-70	6-70	5-50
LC-A (E) 150	150	95-190	75-190	64-190	19-190	38-190	19-190	32-190	19-190	26.6-133	13.3-133	9.5-95
LC-A (E) 200	200	170-340	140-340	114-340	34-340	68-340	34-340	56-340	34-340	47.6-238	23.8-238	17-170

注: 当被测液体温度高于 80℃ 时, 流量计的最大流量为流量计原最大流量的 90%, 最小流量为原流量计最小流量的 120%。

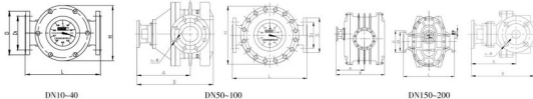
Note: when the temperature of liquid to be measured is higher than 80℃, max. flow rate of flow meter is 90% of designed max. flow rate, min. flow rate if 120% of designed min. flow rate.

 (m³/h)

型号 MODEL	公称 口径 DN	介质粘度 Liquid viscosity to be measured mPa.s						
		< 0.3	0.3-0.8	0.8-2	2-8	8-200	200-1000	1000-2000
LC-B10	10	0.5-0.75	0.2-0.4	0.25-0.75	0.15-0.75	0.13-0.75	0.05-0.75	0.03-0.75
LC-B15	15	1-1.5	0.75-1.5	0.5-1.5	0.3-1.5	0.25-1.5	0.1-1.05	0.075-0.75
LC-B20	20	2-3	1.5-3	1-3	0.6-3	0.5-3	0.21-2.1	0.15-1.5
LC-B25	25	4-6	3-6	2-6	1.2-6	1-6	0.42-4.2	0.3-3
LC-B40	40							
LC-B50	50	8-20	7-20	2.5-20	2-20	2-20	2-20	1-10
LC-B80	80	24-60	20-60	12-60	8-60	6-60	4.5-45	3-30
LC-B100	100	40-100	38-100	34-100	20-100	16-100	14-70	5-50
LC-B150	150	75-190	70-190	64-190	38-190	32-190	28-135	9.5-95
LC-B200	200	140-340	125-340	114-340	68-340	56-340	48-238	17-170



● 外形尺寸（只限直读型） OUTLINE DIMENSIONS (ONLY FOR DIRECT READING TYPE)



● 铸铁型外形尺寸 Outline dimensions for cast iron type

单位 unit : mm

型号 model	通径 DN	L	H	B	A	D	D ₁	N(个)	~
LC-A10	10	150	100	210	165	90	60	4	14
LC-A15	15	170	118	226	175	95	65	4	14
LC-A20	20	200	150	238	180	105	75	4	14
LC-A25	25	260	180	246	194	115	85	4	14
LC-A40	40	245	180	271	200	145	110	4	18
LC-A50	50	340	250	372	285	160	125	4	18
LC-A80	80	420	325	433	360	195	160	8	18
LC-A100	100	515	418	458	380	220	180	8	18
LC-A150	150	540	510	557	400	280	240	8	23
LC-A200	200	650	650	720	476	340	295	12	23

● 铸钢型外形尺寸 Outline dimensions for cast steel type

单位 unit : mm

型号 model	通径 DN	L	H	B	A	D	D ₁	N(个)	~
LC-E15	15	200	138	232	180	95	65	4	14
LC-E20	20	250	164	240	190	105	75	4	14
LC-E25	25	300	202	252	198	115	85	4	14
LC-E40	40	300	202	293	222	150	110	4	18
LC-E50	50	384	262	394	306	165	125	4	18
LC-E80	80	450	337	452	334	200	160	8	18
LC-E100	100	555	442	478	348	220	180	8	18
LC-E150	150	540	510	557	400	280	240	8	23
LC-E200	200	650	650	720	476	340	295	12	23

● 不锈钢型外形尺寸 Outline dimensions for stainless steel type

单位 unit : mm

型号 Model	通径 DN	L	H	B	A	D	D ₁	N(个)	~
LC-B10	10	179	100	206	167	90	60	4	14
LC-B15	15	208	120	216	172	95	65	4	14
LC-B20	20	236	150	226	225	105	75	4	14
LC-B25	25	265	195	238	232	115	85	4	14
LC-B40	40	287	178	246	265	150	110	4	18
LC-B50	50	365	178	349	265	165	125	4	18
LC-B80	80	420	305	349	324	200	160	8	18
LC-B100	100	515	400	459	373	220	180	8	18
LC-B150	150	540	515	554	397	280	240	8	23
LC-B200	200	650	650	607	399	340	295	12	23

注：铸钢高温椭圆齿轮流量计外形尺寸；DN15-DN25A、B尺寸按上表数据加160mm（带有热延伸管），其余尺寸同上表相应尺寸；DN40-DN200A、B尺寸按上表尺寸加300mm（带有热延伸管）其余尺寸同上表相应尺寸

Notes: Outline dimensions for cast steel high temp. ellipse gear flow meter: DN15-DN25, sizes for A and B add 160mm (have hot extend tube), other sizes are same as the table above; DN40 - DN200, sizes for A and B add 300mm (have hot extend tube), other sizes are same as the table above.

LC 型 高精度型椭圆齿轮流量计 HIGH VISCOSITY TYPE ELLIPSE GEAR FLOWMETER

● 主要技术参数 MAIN TECHNICAL SPECIFICATION

材 质：铸铁、铸钢、不锈钢

公称压力：铸铁 1.6MPa；

铸钢 2.5、4.0、6.3MPa；

不锈钢 1.6、2.5MPa；

被测液体粘度：200-2000（mPa.s）

被测液体温度：-10-100℃

精度等级：0.5、0.2

Material: cast iron, cast steel, stainless steel

Nominal pressure: cast iron 1.6MPa;

cast steel 2.5, 4.0, 6.3MPa;

stainless steel 1.6, 2.5MPa;

Liquid viscosity to be measured: 200-2000 (mPa.s)

Liquid temp. to be measured: -10-100℃

Accuracy class: 0.5, 0.2

型 号 Model	DN mm	介质粘度 Liquid viscosity to be measured mPa.s	
		200-2000	
LC-NA (E) 15	15	Flow rate range 流量范围 m ³ /h	0.075-0.75
LC-NA (E) 20	20		0.15-1.5
LC-NA (E) 25	25		0.3-3
LC-NA (E) 40	40		0.75-7.5
LC-NA (E) 50	50		1.2-12
LC-NA (E) 80	80		3-30
LC-NA (E) 100	100		5-50
LC-NA (E) 150	150		9.5-95
LC-NA (E) 200	200		17-170

LC 型 高温型椭圆齿轮流量计 HIGH TEMP. TYPE ELLIPSE GEAR FLOWMETER

● 主要技术参数 MAIN TECHNICAL SPECIFICATION

材 质：铸铁、铸钢、不锈钢

公称压力：铸铁 1.6MPa；

铸钢 2.5、4.0、6.3MPa；

不锈钢 1.6、2.5MPa

被测液体温度：100-200℃

精度等级：0.5

Material: cast iron, cast steel, stainless steel

Nominal pressure: cast iron 1.6MPa;

cast steel 2.5, 4.0, 6.3MPa;

stainless steel 1.6, 2.5MPa

Liquid temp. to be measured: 100-200℃

Accuracy class: 0.5



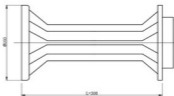
型 号 Model	LC-TA 铸铁高温型 LC-TA cast iron high temp. type		LC-TE 铸钢高温型、LC-TB 不锈钢高温型 LC-TE cast steel high temp. type、LC-TB stainless steel high temp. type	
	公称压力 PN	1.6MPa		2.5 4.0 6.3MPa
被测液体温度 Liquid temp. to be measured	100-200℃			
精度等级 Accuracy class	0.5			
流量范围 Flow rate range m ³ /h				
型 号 Model	DN mm	被测液体粘度 mPa.s Liquid viscosity to be measured		
		0.8-2	2-8	8-200
LC-TA (E) 15	15	0.45-1.35	0.36-1.35	0.18-1.35
LC-TA (E) 20	20	0.9-2.7	0.48-2.7	0.36-2.7
LC-TA (E) 25	25	1.8-5.4	0.96-5.4	0.72-5.4
LC-TA (E) 40	40	3.6-13.5	2.4-13.5	1.8-13.5
LC-TA (E) 50	50	5.8-21.6	3.6-21.6	2.9-21.6
LC-TA (E) 80	80	15-54	9.6-54	7.2-54
LC-TA (E) 100	100	24-90	22-90	12-90



散热筒：用于高温型流量计 Heat loss adaptor: use for high temp. flowmeter



用于DN15-40高温型流量计
For DN15-40 high temp. flowmeter



用于DN50-200高温型流量计
For DN50-200 high temp. flowmeter

● 型号标记 MODEL SIGN

LC □ - □ □ □ / □ □ C

船用 marine

脉冲发信器 pulse transmitter

GF- I 12V 脉冲发信器 GF- I 12V pulse transmitter

GF- II 24V 脉冲发信器 GF- II 24V pulse transmitter

QF- I 12V 电感发信器 QF- I 12V Inductance transmitter

QF- II 24V 电感发信器 QF- II 24V Inductance transmitter

MF 4-20mA 模拟量输出信号 MF 4-20mA analog output signal

计数器 counter

A 指针滚轮显示累计流量 DN40 以下 A pointer & idler wheel indicate accumulative flow DN40 below

A₁ 指针滚轮显示累计流量 DN40 以上可配发信器

A₁ pointer & idler wheel indicate accumulative flow DN40 above with transmitter

J₁ 指针字轮显示累计流量 DN50 J₁ pointer & idler wheel indicate accumulative flow DN50 above

A₂ 指针字轮显示累计流量 FT, GTF 调速器

A₂ pointer & character wheel indicate accumulative flow FT, GTF speed regulator

A₃ 大字轮显示累计流量, 指针小字轮可同时间回零 FT, GTF 调速器

A₃ big character wheel indicates accumulative flow, pointer & small character wheel can return to zero at the same time FT, GTF speed regulator

ELZ 液晶显示 ELZ LCD

注: A1, J1, A5, A6 可配 GF, QF, MF 发信器

Note: A1, J1, A5, A6 can be matched with GF, QF, MF transmitters

公称压力 nominal pressure

1 公称压力为 1.0MPa PN 1.0 MPa

2 公称压力为 1.6MPa PN 1.6 MPa

3 公称压力为 2.5MPa PN 2.5 MPa

4 公称压力为 4.0 MPa PN 4.0 MPa

5 公称压力为 6.3 MPa PN 6.3 MPa

公称口径 nominal diameter

材料 material

A 铸铁 cast iron

E 铸钢 cast steel

B 不锈钢 stainless steel

专用标志 special marking

L 椭圆齿轮为铝材质 ellipse gear is Aluminum

N 计量高精度液体流量计 flowmeter for high viscosity liquid

T 高温流量计 flowmeter for high temp

SP 食品用流量计 flowmeter for food

形式代号 form code

11 表头为现场直读式 gauge dial is local reading type

12 表头为现场直读式并能二次远传 gauge dial is local reading type with remote transmission

13 只能二次远传 only for remote transmission

椭圆齿轮流量计 ellipse gear flowmeter

注: 铸铁为材质, 公称压力为 1.6MPa, 现场指针式计数器, 无其它特殊要求的流量计, 其代号可简写为 LC-XX(XX 为公称口径)

Note: The flowmeter which is cast iron, PN 1.6MPa, locale pointer counter and without other special requirements can be short for LC-XX (XX means DN)

LXZ 型 螺旋转子流量计 SPIRAL ROTOR FLOWMETER

● 概述 GENERAL

螺旋转子流量计是引进技术制造的最新一代容积式流量计，由于它采用一对特殊齿形的螺旋转子。产品具有无脉动，噪音极低，高精度，高可靠性，体积小、流量大、环境适应性强等显著特点。它广泛应用于船舶、石油化工、冶金、电子、码头等部门的商业贸易计量和工程管理控制。双转子（螺杆）流量计与 GF、MF 发信器配套使用，输出电脉冲信号，供远程程指示或控制。

Spiral rotor flowmeter is a latest volume type flowmeter which applies introduced technology. It has the characteristics of pulseless, low noise, high accuracy, high reliability, large flow and high applicability because it has a couple of special gear screw rotors. It can be widely used for ships, chemical, petroleum, electron and dock etc.

With GF, MF transmitter, spiral birotor (screw) flowmeter outputs electric impulse signal for remote integrating indication or control.

This product implements People's Republic of China Professional Standard JB/T9242-1999 <General technical conditions for volume type flowmeter>.

● 主要技术参数 MAIN TECHNICAL SPECIFICATION

精度等级：0.5 (0.2)

公称压力：1.6、2.5、4.0MPa

工作温度：-20~60、60~100、100~200℃

公称口径：DN25~300mm

主要部件材质：本体 ZG25

转子 HT250

轴承 石墨

远传显示现场防爆等级：ExialICT5

法兰标准：GB2506-89

Accuracy class: 0.5 (0.2)

PN: 1.6, 2.5, 4.0MPa

Working temp.: -20~60, 60~100, 100~200℃

DN: DN25~300mm

Material of main parts: Body - ZG25

Rotor - HT250

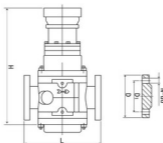
Bearing - graphite

Local explosion proof class for remote indication: ExialICT5

Flange standard: GB2506-89



● 外形尺寸 OUTLINE DIMENSION



DH9000型流量数显仪
DH9000 type flow digital indicator

型号 Model	口径 DN	外形尺寸 Outline dimensions (mm)						被测液体粘度(mPa.s) Viscosity of measured liquid		
		L	H	D	D ₁	N	d	0.3-8	8-200	200-1000
LXZ25	25	280	420	115	85	4	14	1.8-9	1.2-9	0.5-5
LXZ50	50	360	465	165	125	4	18	8-32	5-40	2.5-24
LXZ50(S)	(40)			(150)	(110)					
LXZ80	80	400	520	200	160	8	18	20-77	10-100	5-55
LXZ80(S)	(65)			(185)	(145)					
LXZ100	100	440	600	220	180	8	22	28-110	15-150	7-80
LXZ150	150	555	680	285	240	8	22	30-180	25-250	8-130
LXZ200	200	640	760	340	295	8	22	50-260	34-340	12-290
LXZ250	250	800	850	425	370	12	26	70-380	50-500	25-280
LXZ300	300	800	950	485	430	16	30	140-630	90-800	45-460

散热筒：用于高温流量计 Heat loss adaptor; use for high temp. flowmeter



● 型号标记 MODEL SIGN



● LC、LXZ 型 流量计单元 FLOWMETER UNIT

● 概述 GENERAL

LC、LXZ 型流量计单元是由流量计、过滤器、阀门、法兰管道、温度计、压力表等组成的计量系统，具有计量精确，安装方便，可靠性强的显著特点。它广泛应用于船舶、石油化工、冶金、电子、码头等部门。

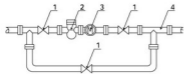
LC、LXZ type flowmeter unit consists of flowmeter, filter, valve, flange pipe, thermometer, pressure gauge etc. It has the characteristics of high accuracy, easy installation, high reliability etc. It is widely used in ships, for ships, chemical, petroleum, electric power and dock etc.

● 主要技术参数 MAIN TECHNICAL SPECIFICATION

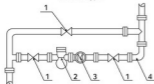
精度等级: 0.5 (0.2)	Accuracy class: 0.5 (0.2)
公称压力: 1.6、2.5、4.0MPa	PN: 1.6, 2.5, 4.0MPa
工作温度: -20~100、100~200℃	Working Temp.: -20~100, 100~200℃
公称口径: DN15~300mm	DN: DN15~300mm
流量范围: 0.3~800m ³ /h	Measuring range: 0.3~800m ³ /h
被测液体粘度 0.3~2000mPa.s	Viscosity of the measured liquid: 0.3~2000mPa.s

结构形式 Type of construction

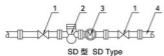
流量计单元结构示意图
CONSTRUCTION DIAGRAM OF FLOWMETER UNIT



S型 S Type



P型 P Type



SD型 SD Type

- 1、阀门 Valve 2、过滤器 Filter
3、流量计 Flowmeter 4、管道 Pipe line

用户订货时，应说明如下内容和要求，按产品型号标记填写
Please specify following items and write correct model sign when you order the products.

1. 被测液体：名称、粘度、浓度、比重、其它杂质名称等
Measured liquid: name, viscosity, concentration, specific gravity and name of other impurities etc.
2. 流量范围：最大、常用、最小
Flow range: max., normal and min.
3. 温度范围：最高、常用、最低
Temp. range: max., normal, and min.
4. 压力：最高、常用、最低
Pressure: max., normal, and min.
5. 流体流向
Direction of the liquid
6. 连接方式及规格：法兰标准
Conn. type and specification: Flange standard
7. 所要求的精度
Accuracy required
8. 所要附件：过滤器、消气器、压力表、温度计等
Accessories required: filter, LPX, pressure gauge, thermometer etc.
9. 计数器种类形式
Counter type
10. 流量单元安装空间尺寸
Dimension of mounting space for flowmeter unit

YZ 型 智能流量积算仪 INTELLIGENT FLOW TOTALIZER

● 概述 GENERAL

YZ 型智能流量积算仪是与各种流量计配套的二次仪表。它既可以作为一般的流量积算仪使用，还可在压力温度变送器的配合下，运用高精度的数学模型实现流量的自动补偿和积算，并提供多种输出和控制信号，供给记录仪及计算机数据采集和流量调节设备使用。采用单片微处理器控制，使仪表的系统稳定性、可靠性及安全性等大为提高。采用先进的微机技术，可满足各种不同的一次仪表的要求，功能齐全，通用性好。

YZ type intelligent flow totalizer is a secondary instrument which can be used together with kinds of flow meters. It can not only be used as normal flow integration instrument, but can also realize flow compensation automatically and integration with high accuracy module under the cooperation of pressure & temperature transmitter. It can provide output and control signal to recorder and computer for data collecting and flow regulating. It adopts chip micro process for control which improves stability, reliability and safety. The micro computer technology which is adopted can meet requirements of kinds of primary instrument. It has many functions good universality.

● 功能特点 FUNCTION CHARACTERS

1. 可对体积或质量流量自动进行计算和累积。
 2. 可配微型打印机，对累积流量手动或自动定时打印（订货时注明）。
 3. 可同时显示瞬时流量值及流量累积值。
 4. 可自动进行温度、压力补偿。
 5. 可对瞬时流量输出 4~20mA 电流信号，供记录仪或上位机使用。
 6. 具有断电保护功能，且重新上电后能自动投入运行，数据保存时间长。
 7. 可设定流量小信号切除功能（瞬时流量小于设定值时流量不累积）。
 8. 可进行瞬时流量上限和下限超限报警及输出报警控制信号。
1. Can calculate volume and flow automatically.
 2. Can equipped with micro printer, print accumulative flow manually or automatically. (note when order placed)
 3. Can indicate transient flow and accumulative flow at the same time.
 4. Can process temperature & pressure compensation automatically.
 5. Can output 4~20mA signal according to transient flow for recorder or upper monitor.
 6. With power fail safeguard, when re-powered, it can operate automatically and save data for a long time.
 7. Can set small flow delete function(when transient flow is less than set value, the flow can not be accumulated to accumulative flow).
 8. Can set high & low limit for transient flow and output alarm and control signal.

● 主要技术参数 MAIN TECHNICAL SPECIFICATION

1. 输入信号：
 - 电压脉冲，信号幅度 $V_p-p \geq 3V$
 - 电流脉冲，信号幅度 $I_p-p \geq 3mA$ DC12V/24V。
 - 模拟量 4~20mA 或 0~10mA 流量信号输入。
 - 温度压力补偿信号：4~20mA 电流信号
2. 输出信号：
 - 模拟量输出：4~20mA ($\leq 500\Omega$) 或 1~5V ($\leq 250\Omega$)
 - 报警开关量输出；继电器控制输出（无源 AC220V 3A DC24V 5A, 阻性负载）
 - RS232 或 RS422 或 RS485 通讯输出。
3. 电源：AC 220 V。
4. 精度：测量显示精度 $\pm 0.2\%$ FS 频率转换精度： ± 1 脉冲
5. 使用工作条件：环境温度：0~50℃ 相对湿度： $\leq 85\%$ 。



1. Input signal :
 - voltage pulse, signal amplitude: $V_p-p \geq 3V$
 - current pulse, signal amplitude: $I_p-p \geq 3Ma$ DC12V/24V
 - analog quantity 4~20mA or 0~10mA flow signal input
 - temperature & pressure compensation signal: 4~20mA current signal
2. Output signal:
 - analog quantity output ; 4~20mA ($\leq 500\Omega$) or 1~5V ($\leq 250\Omega$)
 - alarm output: relay control output (AC220V 3A DC24V 5A, resistive load)
 - RS232or RS422 or RS485communicative output.
3. Power supply : AC 220 V
4. Accuracy ; measure and indicate accuracy: $\pm 0.2\%$ FS amplitude convert accuracy : ± 1 pulse
5. Working conditions ; ambient temperature : 0~50℃. relative humidity ; $\leq 85\%$



流量计配套仪表 MATCHED INSTRUMENTS FOR FLOWMETER

A₅ 型计数器 A₅ TYPE COUNTER



型号: A₅
量 程: 0-99999.9
显示方式: 指针指示及单滚轮累积
计量单位: L或m³
表面直径: 100mm
用 途: 与各种形式的流量计配套, 显示累计流量。

Type: A₅
Measuring range: 0-99999.9
Indicate type: pointer & single idler wheel accumulative indicate
Unit: L or m³
Dial diameter: 100mm
Application: with kinds of flow meters, indicate accumulative flow

A₆ 型计数器 A₆ TYPE COUNTER



型号: A₆
量 程: 0-99999.9(累积显示)
0-99999.9(回零显示)
显示方式: 指针指示及单滚轮累积, 指针及小滚轮可复位。
计量单位: L或m³
表面直径: 100mm
用 途: 与各种形式的流量计配套, 显示累计流量。

Model: A₆
Measuring range: 0-99999.9 (Cumulative display)
0-99999.9 (Back to zero display)
Indicate type: double idler wheel accumulative indicate, pointer and tiny idler wheel can return to zero
Unit: L or m³
Dial diameter: 100mm
Application: with kinds of flow meters, indicate accumulative

液晶数显定值控制仪 LED INDICATE FIXED VALVE CONTROLLER



流量信号输入:
电压信号: >3V 电流信号: >3mA
温度信号: 4-20mA(-50~100℃)
外控信号: SPST
信号输出:
定值量输出: DC24V 0.1A
提前量输出: DC24V 0.1A
通讯输出: RS485
最大累计数: 999999
定值范围: 1-999999
脉冲当量: 0.00001-9.99999
密 度: 0.00001-9.99999
累计误差: ±1脉冲
批 次: 1-999, 间隔时间: 1-999S
电源电压: AC220V ± 10%
用 途: 与流量计配套可对流量进行质量或体积量计量

Flow signal input:
Voltage signal: >3V current signal: >3mA
Temp. signal: 4-20mA(-50~100℃)
Out control signal: SPST
Signal output:
Fixed value output: DC24V 0.1A
Initial value output: DC24V 0.1A
Communicative output: RS485
Max accumulative value: 999999
Fixed value range: 1-999999
Pulse equivalent: 0.00001-9.99999
Density: 0.00001-9.99999
Accumulative error: ±1pulse
Batch: 1-999, Interval: 1-999S
Power supply: AC220V ± 10%
Application: with flowmeter, calculate volume and weight

高精度脉冲发信器 HIGH ACCURACY PULSE TRANSMITTER



型号: GF-I GF-II MF
电源电压: DC12V (GF-I 型), DC24V (GF-II 型)
脉冲幅度: GF-I 型: VL<0.5V, VH>9V
GF-II 型: VL<0.5V, VH>20V
精 度: ±1 个脉冲
传输距离: ≥1km (三线制 R<39Ω)
工作温度: -20~70℃
防爆标志: Exia II CT5, Ex d II BT4
配套安全栅: GF-I 型配KN9714C型安全栅,
GF-II 型配KN9714型安全栅

Type: GF-I GF-II MF
Power supply: DC12V (GF-I), DC24V (GF-II)
Pulse amplitude: GF-I: VL<0.5V, VH>9V
GF-II: VL<0.5V, VH>20V
Accuracy: ±1 pulse
Transmission distance: ≥1km (three-wire R<39Ω)
Working temperature: -20~70℃
Ex. mark: Exia II CT5, Ex d II BT4
Safety barrier: GF-I with KN9714C safety barrier
GF-II with KN9714 safety barrier

用 途: 与流量计配套, 将被测介质的流量转换为电脉冲信号, 输出供远传使用。

Application: with ellipse gear flow meter, change the measured fluid flow to electric pulse signal for distance transmission

UKS型 舱柜液位报警装置 TANK LEVEL ALARM DEVICE

● 概述 GENERAL

UKS型舱柜液位报警装置由液位控制器、安全栅及报警控制箱等组成。装置分别独立设置对舱高的95%高位报警和98%高高位报警。适用于对油船、化学品船及其它液货船货舱的液位监测报警。

This alarm device consists of level controller, safety barrier and alarm control panel. The device separately sets independent 95% of tank height for high level alarm and 98% of tank height for overfill alarm. The device is applied for level monitoring & alarm of oil tankers, chemical tanker and the other carriers.

● 特征 FEATURES

采用高质量元件 性能可靠

High-quality element, reliable performance

产品适用于各种液体

Suitable for various liquids

结构紧凑

Compact construction

本安型单元设计可应用于各种易燃易爆液体

Intrinsic safety unit designed for various flammable liquids

手动自检装置可检测其功能

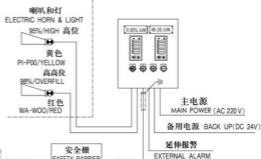
Manual test device can check the function

● 工作原理 OPERATING PRINCIPLE

当被监测舱柜内的液体高度达到报警设置值时，液位控制器的磁性浮球先后启动相应的高位和高高位于簧管开关，输出开关报警信号。报警开关信号通过安全栅传至报警控制板上的报警控制模块，发出声、光报警。亦可延伸输出声、光报警信号。

When the liquid height in the tank reaches a alarm setting point, the relevant reed switches at high level and overfill level are actuated by magnetic float of level controller, and output alarm switch signal. This signal is transferred to alarm module on the alarm control board through safety barrier, and provides audible & visual alarms. As well as outputs external audible & visual alarm signal.

● 型号标记 MODEL SIGN



高位及高高位液位控制器
HIGH & OVERFILL ALARM LEVEL CONTROLLER





● 主要技术参数 MAIN TECHNICAL SPECIFICATION

液位控制器

型号: 高位报警: UQK-652-C
高位及高高位报警: UQK-652-C
连接法兰尺寸: DN100 PN10 GB2506-89
材料: 护罩: SUS304
法兰: SUS304或SUS316
导管: SUS304或SUS316
磁性浮球: SUS304或SUS316

触点容量: SPST/250V AC 0.5A
精度: $\pm 20\text{mm}$
介质比重: 0.60-1.40
工作温度: $-25^{\circ}\text{C} \sim +70^{\circ}\text{C}$
报警点: 高位报警为舱高的95%
高高位报警为舱高的98%

防护等级: IP66, IP68
本安型: Ex ia IIC T6

液位报警控制箱

电源: AC 220V 50/60Hz (主)
DC 24V (备用)

组成:

AYK-03H报警模块
安全栅
电源指示灯
交直流电源自动切换装置
蜂鸣器/LED报警灯
延伸报警输出: DPDT 220V 2A
高位、高高位及故障报警输出
防护等级: IP22

LEVEL CONTROLLER

Model: High-level alarm: UQK-652-C
High-level and overflow alarm: UQK-652-C
Conn. flange: DN100 PN10 GB2506-89
Material: - Housing: SUS304
- Flange: SUS304 or SUS316
- Guide pipe: SUS304 or SUS316
- Magnetic float: SUS304 or SUS316

Contact rating: SPST/250V AC, 0.5A
Accuracy: $\pm 20\text{mm}$
Specific gravity: 0.60-1.40
Working temp.: $-25^{\circ}\text{C} \sim +70^{\circ}\text{C}$
Alarm points: 95% of tank height for high level alarm
98% of tank height for overflow alarm

Protection: IP66, IP68
Intrinsic Safety: Ex ia IIC T6

LEVEL ALARM CONTROL BOX

Power supply: AC 220V 50/60Hz (Main)
DC 24V (Standby)

Composition:

- AYK-03H alarm module
- Safety Barrier
- Power lamp
- AC/DC power automatic switchover fitting
- Alarm buzzer/ alarm lamp
External alarm: DPDT 220V 2A
high level, overflow and alarm fail output
Protection: IP22

AYK-03H报警模块 ALARM MODULE



技术参数

型号: AYK-03H
通道数量: 10个
电源: DC 24V
LED显示: 10 x 红色 (报警显示)
1 x 黄色 (领航/故障)
1 x 绿色 (电源指示)
功能: 蜂鸣器报警
LED闪光报警
灯光/声音自检功能
消音/消内/变光功能/锁板
交直流电源失电报警
报警输入延时: 0-99s (可选)

TECHNICAL SPECIFICATION

Model: AYK-03H
No. of channels: 10
Power supply: DC 24V
Indication LED's: -10 x Red (alarm)
-1 x Yellow (navigation/fail)
-1 x Green (power)

Function: - Buzzer alarm
- LED flash alarm
- Light & horn test function
- Buzzer stop/flash stop/dimming/navigation
- AC/DC power fail alarm
Input time delay: 0-99s (option)

高位和高位报警控制箱 HIGH LEVEL AND OVERFILL ALARM PANEL



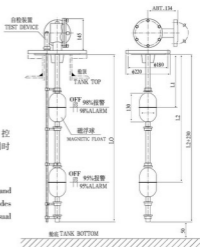
功能说明 INSTRUCTION FOR FUNCTION

本装置适用于对多个液舱的液位进行监测报警, 采用灯光及音响输出报警信号。控制模块可同时监测各个舱柜的报警状态, 并由蜂鸣器及LED灯光发出声、光报警。同时可输出延伸声光报警信号。

外部报警器可应客户要求提供。

The device is suitable for monitoring the liquid level in multi-tanks, adopts lamplight and audio to output alarm signal. Control module can monitor alarm status of each tank, and provides audible & visual alarms by buzzer and LED. At the same time outputs external audible & visual alarm signal.

The external annunciator can be provided according to client's request.



UWKS型 货舱进水报警装置 CARGO WATER INGRESS ALARM DEVICE

● 概述 GENERAL

本装置是根据SOLAS公约第Ⅱ章第12条规范中关于“散货船的货舱、压载舱和干舱水位报警装置”的要求而设计。系统配置合理、安全可靠。适用于散货船货舱、压载舱和干舱的进水监测和报警。

This device is designed according to SOLAS Ⅱ-12, water level monitor and alarm of bulk carrier cargo hold, ballast tank and close dry space. The characters of this system are easily operation, convenient for maintain and running safe stability. When the water ingress bulk carrier cargo hold, ballast tank and close dry space etc and reaching the limited water level, the system will give alarm.

● 装置功能 FUNCTION OF DEVICE

本装置由位于机舱控制室的主报警控制箱、驾驶室延伸报警仪表盘、安全棚和位于各个测量点的水位传感器等组成。水位传感器安装在货舱的后端或近中纵附近。当货舱内水位达到0.5米时,装置发出声、光报警;当货舱内水位达到舱总深的15%且不超过2米时,装置发出声、光主报警;当干舱或空舱的水位高于0.1米时装置发出声、光报警;对防撞舱壁前方的任一压载舱,在水位达到不超过舱容的10%时,装置发出声、光报警。

The device consists of main alarm control panel in ECR, extended alarm panel on the bridge, safety barrier and water ingress detection sensor located on each gauge point etc. The detector is to be fitted in the all part of each cargo hold, as close to the center line as practicable, and arranged to provide visual & audible pre-alarm signal when the water depth in the cargo hold reaches 0.5m; the device provides visual & audible main alarm signal when the water depth in the cargo hold reaches 2m but not more than 15% of hold depth; the device provides audible & visual alarm signal when the water level in dry space or void space reaches 0.1m above bottom space; the device provides audible & visual alarm signal when the water level in ballasts water tank, collision bulkhead reaches 10% of the volume of the tank.

● 工作原理 OPERATING PRINCIPLE

装置的预、主水位传感器用于货舱水位的检测,当被测舱柜的水位达到设定的报警点时,水位传感器输出水位报警信号,信号经安全棚送至装置的主报警仪表盘,并发出声、光报警。同时位于驾驶室的延伸报警仪表盘也发出水位声、光报警。装置具有消音、消闪、变光、越控、自检、主电源失电报警、传感器故障报警等功能。本装置支持多点检测报警。

The pre & main water ingress detection sensors are used for detecting the water level of cargo hold, when the water in the tank to be measured reaches the set alarm point, water ingress detection sensor outputs water level alarm signal to main alarm panel of the system through safety barrier, and provides audible & visual alarms. At the same time, the audible & visual alarms are activated on the main alarm panel installed on the bridge. The system has the functions of accept horn, accept flash, dimming, overriding, test function, main power fail alarm, sensor fail alarm etc. The device can support multipoint detection alarm.

● 特征 FEATURES

本装置设计可用于危险区域
同时检测任意多点的水位
方便灵活的监测配置
功能齐全稳定可靠

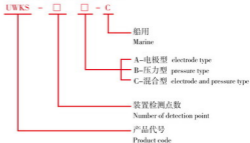
Intrinsically safe design can be applicable to dangerous area
Available for any number of detecting points
Convenient and flexible monitoring configuration
Complete function, steady and reliable

● 主要技术参数 MAIN TECHNICAL SPECIFICATION

1、报警控制模块

型号: AYK-03W
通道数量: 10个
外形尺寸: 160 × 80 × 140 mm
电源: DC24V
输入功率: 5.0W (DC 24V)
输入信号: NC或NO开关信号
动作延时: 0-99 S
通道输出: 10通道延伸报警输出NC或NO
报警输出: 继电器SPDT干触点输出 AC 220V 2A
音响控制: 面板按钮操作(正常/消音)
灯光控制: 面板按钮操作(正常/消闪)
自检功能: 面板双按钮操作(正常/自检)
其它功能: 故障报警、变光功能

● 型号标记 MODEL SIGN



1. Alarm control module

Model: AYK-03W
No. of channels: 10
Outline size: 160 × 80 × 140 mm
Power source: DC 24V
Power consumption: 5.0W (DC 24V)
Input signals: NC or NO switch signal
Time delays: 0-99 seconds
Channel output: 10 channels extended alarm output, NC or NO
Horn output: Relay SPDT dry contact output AC 220V 2A
Accept horn: By means of push button on the front, or externally
Accept flash: By means of push button on the front, or externally
Test function: by pushing both accept push buttons
Other function: malfunction alarm and dimming function



报警控制模块
ALARM CONTROL MODULE



2. 主报警控制箱

主电源电压: AC 220V 50/60Hz

备用电源电压: DC 24V

检测点数: 无限制

检测精度: $\pm 20\text{mm}$

功能:

主、预水位报警分组设置

多通道LED闪光报警

蜂鸣器声报警

主、各双电源供电

AC/DC 电源失电报警及自动报警复位

灯光/音响自检功能

水位传感器故障报警

报警输入延时0-99S (可调)

自动灯光调节功能

消闪、消音、越控功能

分路开关量延伸报警信号输出

RS485通信报警信号输出(至VDR)

安装方式: 壁挂或控制台嵌入安装

3. 延伸报警仪表盘

电源电压: DC 24V

功能: 主、预水位报警分组装置

多通道LED闪光报警

公共报警蜂鸣器

灯光自检功能

灯光调节功能

安装方式: 壁挂或控制台嵌入安装

4. 水位传感器(UHC型、YSZK-011型、LQK-652型)

功能: 当被监测舱内水位达到0.5米和2.0米的报警点时, 传感器分别输出开关信号(干舱和空舱为0.1米或10%舱高), 此开关信号直接提供至主报警控制箱, 主控制箱及延伸报警仪表盘同时发出声、光报警。

报警水位: 500 \pm 10mm, 2000 \pm 10mm

电源电压: DC24V

切换差: $\leq 10\text{mm}$

防护等级: IP68

型式: 电极式或压力式

触点容量: DC24V 1A

工作温度: $-25^{\circ}\text{C} \sim 70^{\circ}\text{C}$

防爆标志: Ex ia II CT6

2. Main alarm panel

Power source: AC 220V 50/60HZ

Stand-by power voltage: DC 24V

Number of detection point: No limits

Accuracy of detecting: $\pm 20\text{mm}$

Function:

Audible main & pre-level alarm for individual detection

Multichannel LED flash alarm

Buzzer alarm

Main & pre power supply

AC/DC power fail alarm & alarm reset

Lamp & horn test

Water ingress detection sensor fail alarm

Input alarm time delay 0-99s (adjustable)

Dimming function

Flash stop, horn stop and overriding

Multi-way extended alarm signal output

RS485port alarm signal output (to VDR)

Mounting method: wall or console mounting type

3. External alarm panel

Power supply: DC 24V

Function: Audible main & pre-level alarm for individual detection

Multichannel LED flash alarm

Common alarm buzzer

Lamp test

Dimming function

Mounting method: wall or console mounting type

4. Water level transmitter (UHC or YSZK-011 or LQK-652 type)

Function: When the level reaches 0.5m and 2.0m alarm point, transmitter circuit output switch signal the alarm height can be set as 0.1m or 10% tank height for dry space and void space). This appropriate contact signal is transmitted to main alarm panel on which the audible and visual alarm is provided.

Alarm water line: 500 \pm 10mm, 2000 \pm 10mm

Power supply: DC24V

Differential: $\leq 10\text{mm}$

Protection: IP 68

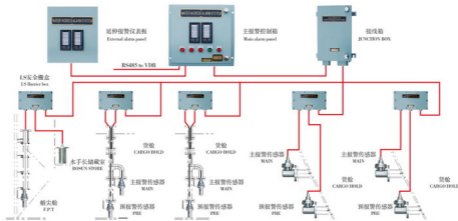
Type: electrode or pressure type

Contact capacity: DC24V 1A

Working temp.: $-25^{\circ}\text{C} \sim 70^{\circ}\text{C}$

Ex. mark: Ex ia II CT6

装置总图 GENERAL DIAGRAM



WBS型 泵舱温度监测报警装置 PUMP ROOM TEMP. MONITORING AND ALARM DEVICE

概述 GENERAL

本装置系按照2000 SOLAS（修正）第II-2章第4款有关油轮货油泵安全保护的要求而设计。装置具有温度检测、显示、报警、控制等功能。主要用于对各类货船泵舱设备的工作温度进行检测和报警。

This device has been specially designed, manufactured in conformity with 2000 SOLAS Amendment, Chap. II-2, Reg.4 amended for protecting the cargo pump room. It has the functions of temp. monitoring, display, alarm and control etc. It is mainly used to monitor and alarm the working temp. of pump room equipments for all kinds of cargo carriers.

工作原理 OPERATING PRINCIPLE

本装置主要由Pt100型温度传感器、接线盒、安全栅及显示控制箱等组成。Pt100温度传感器安装在泵的轴承、轴封及泵壳等处，随时检测其工作温度，并将检测的温度数据转换为电信号，通过安全栅传送到显示控制箱上相应的显示控制单元，由LED显示检测的温度数值。当检测的温度值达到设定的报警温度值时，装置发出超温警报。温度报警的设定值可根据用户需要调整。

This device consists of Pt100 type temperature sensors, junction boxes, safety barriers and LED display & alarm panel etc. The device is intended for monitoring the temperature values measured from any number of temperature sensors installed on the each pump. The electrical sensor signals measured from Pt100 temperature sensors are connected to the "pump room temperature monitoring and alarm panel" which provided with temperature display & alarm unit, power supply and power fail alarm as well as high temperature alarm via safety barriers if required. The signals measured from Pt100 temperature sensors are indicated to LED display on the temperature display & alarm unit continuously and the high temperature alarm can be also provided on that unit depending on the configured set-point value.

用途 APPLICATION

本装置主要用于对货油泵、压载泵、扫舱泵的各个轴承、穿舱轴封和泵壳的工作温度进行连续检测和报警，亦可用于其它船舶中工作在危险区的油泵轴承的工作温度进行检测和报警。

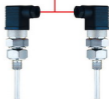
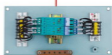
This device is used for continuous monitoring of the temperature values on the bulkhead shaft glands, bearings and pump casings of cargo pumps, ballast pumps and stripping pumps, installed in the cargo pump room and driven by shaft passing through pump room bulkheads.

特征 FEATURES

- 装置采用本安型设计，适用于所有危险区域
- 各测量点的报警温度可单独设定
- 各测量点的检测温度可独立显示
- 采用先进的电子技术，性能可靠、耐用
- 装置设计合理，简单适用

Intrinsically safe design is applicable to all dangerous area.
Individual adjustable high temp. Alarm for each measuring points.
Available for any number of measuring points.
Most advanced electric technology for high reliability and durability.
Simple construction

泵舱温度监测报警装置
PUMP ROOM TEMPERATURE MONITORING & ALARM DEVICE



装置的显示控制箱提供声、光报警
可应用户要求提供外部延伸报警
本装置可应用户需求附加舱底污水报警功能

The pumps temperature monitoring and alarm panel gives an audible and visible alarm.
The individual external alarm can be provided in accordance with customer requirement as optional item
The bilge level alarm can be provided with this device if required by customer.



● 主要技术参数 MAIN TECHNICAL SPECIFICATION

电源电压: AC 220V 50Hz (主电源)

DC 24V (备用)

测量点数: 8或16个

测量精度: $\pm 0.5\%$ F.S

温度测量范围: 0-200°C

温度传感器: Pt100 3线

防爆标志: Ex ia II CT6

防护等级: IP22(控制箱)IP66 (传感器)

装置功能: 温度值显示

超温声、光报警

消闪/消音/变光

灯光自检及故障报警

交流/直流自动切换及失电报警

Power supply: AC 220V 50Hz (main)

DC 24V (Standby)

Number of measuring point: 8 or 16

Temperature accuracy: $\pm 0.5\%$ F.S

Temperature display range: 0-200°C

Temp. transmitter: Pt100, 3 wire

Ex. mark: Ex ia II CT6

Protection: IP22 (Control Box) IP66 (Transmitter)

Function: Temp. Value Display

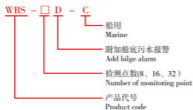
Audible & visible over temp. alarm

Buzzer stop, Flicker stop, Dimming

Light test and fail alarm

AC/DC auto-switchover and power fail alarm

● 型号标记 MODEL SIGN



温度报警模块
TEMP. DISPLAY & ALARM MODULE



温度报警模块

型号: AYK-03T (8路报警显示控制模块)

输入信号: 8 x Pt100, 3线

报警延时: 0-99s (可调)

输出端口: 8路开关信号输出

报警输出: 常开或常闭触点输出 AC 220V 2A

报警消音: 面板按钮操作

报警消闪: 面板按钮操作

声光自检: 面板双按钮操作

其它功能: 变光/故障报警

电压: 24V DC

精度: $\pm 0.5\%$ F.S

Tem. Alarm control module

Model: AYK-03T (8 alarm control module)

Input: 8 x Pt100, 3 Wire

Lock delay time: 0-99 seconds (adjustable)

Channel outputs: 8 switch signals output

Alarm output: contact output, NO or NC, AC 220V 2A

Accept horns: by means of push button on the front, or externally

Accept flash: by means of push button on the front, or externally

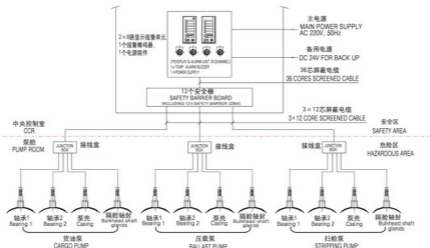
Function test: by pushing both accept and flash push buttons during at least 2 sec.

Other function: dimming/fail alarm

Supply voltage: 24V DC

Accuracy: $\pm 0.5\%$ F.S

● 装置总图 GENERAL DIAGRAM



QBN型 气体监测报警装置 GAS MONITORING AND ALARM DEVICE

概述 GENERAL

本装置系按2000 SOLAS (修正) 第II-2章第4款有关连续监测泵室内燃气浓度的修正案而设计生产。本装置由可燃气体检测传感器、智能型显示控制仪及装置仪表箱等构成。装置可用于油船、化学品船、石油平台等碳氢可燃气体、有毒气体及其它气体的监测报警。

This device has been designed, manufactured in conformity with 2000 SOLAS Amendment, Chap. II-2, Reg. 4 amended for continuous monitoring the connection of hydrocarbon gases in the PUMP ROOM. It consists of complete flammable gas sensors, intelligent display controller and gauging cabinet of system. The device can be used to monitor & alarm the hydrocarbon gas in the pump rooms and other tanks of oil tanker, chemical tanker etc.

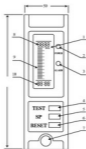
工作原理 OPERATING PRINCIPLE

装置的QBN型可燃气体传感器安装在被测舱柜内, 随时检测空气中的可燃气体浓度并向装置仪表箱输出检测信号, 该信号由位于仪表箱上的智能型显示报警仪进行信号处理, 并显示所测气体浓度值。当被测舱柜内的可燃气体浓度达到设定报警值时装置发出声、光报警。装置分别在可燃气体浓度达到5%、和10%时报警。装置采用配置曲线拟合、数字滤波及单片机智能信号处理技术, 保证了装置的稳定可靠。

The flammable gas sensors of QBN in the tanks are used to detect the flammable gas concentration in the air at any times and output detection signal to gauging cabinet of device. The signal is processed by the intelligent display controller in the gauging cabinet and indicated percentage of gas concentration. The device provides audible & visible alarm when the flammable gas concentration in the tanks reaches the setting alarm value. The device respectively alarms while the flammable gas concentration reaches 5% and 10%. The device configures curve fit, figure filtering and SCM intelligent signal processing technology to ensure the device steady and reliable.



气体检测控制单元
GAS DETECTION CONTROL UNIT



- | | |
|---------------------------|--|
| 1、浓度计量单位 | Measuring unit of concentration |
| 2、电源指示灯 (绿色) | Power lamp (green) |
| 3、报警故障指示灯
(红色报警, 黄色故障) | Alarm/Fail display LED
(Red for alarm, yellow for fail) |
| 4、自检键 | Test key |
| 5、报警设定值显示键 | Display key of alarm setting value |
| 6、消声键/确认键 | Reset key |
| 7、面板锁紧螺钉 | Front panel lock screw |
| 8、浓度值 | Concentration value |
| 9、光柱浓度显示区 | Beam display area for concentration |
| 10、时钟显示 | Time display |

主要技术参数 MAIN TECHNICAL SPECIFICATION

装置技术参数

检测点数: 1~30个
 检测气体: 燃油蒸汽、液化石油气、醇、烷烃类等
 测量范围: 0~100%LEL (数字显示)
 报警设置: 5% 低值报警、10% 高值报警
 报警方式: 声、光报警及延伸报警输出
 装置电源: AC 220V 50 Hz (主)
 DC 24V (备用)
 工作温度: 0~55℃
 防爆标志: Ex ia II C T4 // Ex d II C T6
 防护等级: IP22
 安装方式: 挂壁式或嵌入式

Technical specification for device

No. of detecting points: 1~30
 Detecting gas: fuel steam, LPG, mellow, alkyl etc.
 Measuring range: 0~100%LEL (digital indication)
 Alarm setting: 5% low alarm, 10% high alarm
 Alarm mode: audible & visible and extended alarm output
 Power supply: AC 220V 50 Hz (main)
 DC 24V (standby)
 Working temp.: 0~55℃
 Ex. mark: Ex ia II C T4 // Ex d II C T6
 Protection: IP22
 Mounting mode: wall mounting or built-in type

特征 FEATURES

高质量传感器 测量精度高
 智能控制 稳定可靠
 多种显示报警输出模式
 模块化设计 易维护

High-quality sensor, high measuring accuracy
 Intelligent control, steady & reliable
 Multi-display alarm output mode
 Modular design, easy maintenance



传感器技术参数

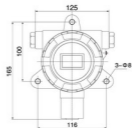
检测原理：催化燃烧型
检测气体：燃油蒸汽、液化石油气、醇、烷烃类等
测量范围：0-100%LEL
测量精度： $\pm 5\%$ F.S
输出信号：4-20mA
电源电压：DC 24V
工作温度： $-25\sim 70^{\circ}\text{C}$
防爆标志：Ex ia II CT4
防护等级：IP66
电缆要求： $3 \times 1\text{mm}^2$ 船用阻燃屏蔽电缆

Technical specification for sensors

Detecting principle: catalytic combustion
Detecting gas: fuel steam, LPG, medlow, alkyl etc.
Measuring range: 0-100%LEL
Measuring accuracy: $\pm 5\%$ F.S
Output signal: 4-20mA
Power voltage: DC 24V
Working temperature: $-25\sim 70^{\circ}\text{C}$
Ex. mark: Ex ia II CT4
Protection: IP66
Request for cable: $3 \times 1\text{mm}^2$ marine fire-retardant screened cable

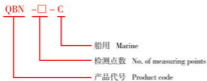


QBN-09 型传感器
QBN-09 TYPE SENSOR

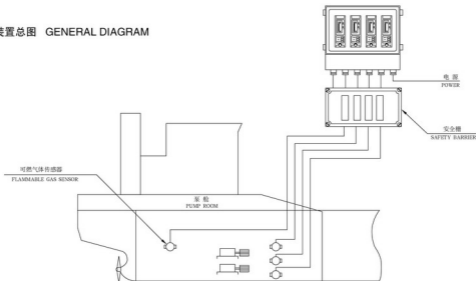


气体传感器结构图
STRUCTURE DIAGRAM OF GAS SENSOR

型号标记 MODEL SIGN



装置总图 GENERAL DIAGRAM



BWAS型 航行值班报警装置 BRIDGE NAVIGATIONAL WATCH ALARM SYSTEM

● 概述 GENERAL

BWAS型航行值班报警系统是根据IMO制定的MSC.128国际公约对航行值班报警的要求而设计的监测报警设备。产品适用于各类船舶的航行值班监测报警。

BWAS has been designed and manufactured in conformity MSC.128, the requirements for bridge navigational watch alarm. It is applicable for all kinds of ships.

● 主要技术参数 MAIN TECHNICAL SPECIFICATION

装置电源: AC220V 50Hz (主) DC24V (辅)

工作温度: 0~55℃

环境湿度: ≤90%

报警/复位: ≤30秒

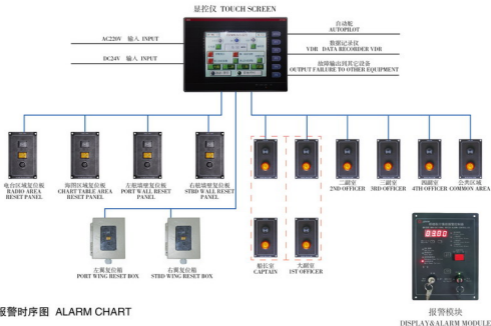
Power supply: AC220V 50Hz (main) DC24V (standby)

Working temperature: 0~55℃

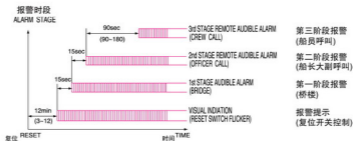
Ambient humidity: ≤90%

Alarm/reset: ≤30points

● 型号标记 MODEL SIGN



● 报警时序图 ALARM CHART





SFW 型 防海生物(防腐)装置 MARINE GROWTH PREVENTING (ANTI-CORROSION) DEVICE

● 概述 GENERAL

SFW型防海生物装置由控制箱和铜铝电极组成。产品可防止海生物生长、附着堵塞海水管路，同时也可以防止海水腐蚀管道。防海生物阳极和防腐蚀阳极安装在船舶海底门处。通过对阳极通电电解海水，进而产生防海生物离子和防腐蚀Ⅱ型离子的电解液，再由海水泵抽出，分布到整个海水冷却管路中，从而达到效杀灭管路系统中的海生物，确保海水管道畅通及防止管系腐蚀的目的。适用于远洋及近海船舶、海上石油钻井平台的海水冷却循环系统。

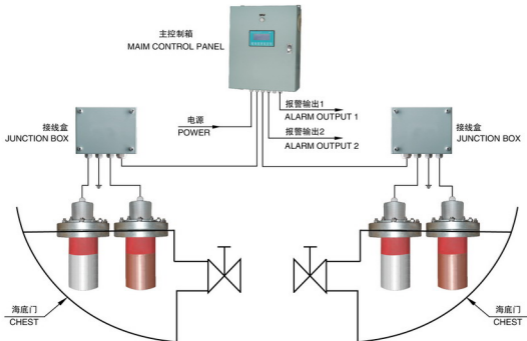
SFW marine growth preventing device consists of control box, copper electrode and aluminum electrode. The products can prevent marine growth to avoid blocking of pipeline, meanwhile to avoid corrosion of pipeline. The marine growth preventing anode and corrosion anode are installed at sea chest. Through electrolysis of anode, the electrolyte of marine growth preventing and anti-corrosion is formed and then be sent to the entire seawater cooling piping by seawater pump in order to prevent marine growth in the pipeline as well as prevent corrosive damage to pipeline. The device is applicable to the seawater cooling circulation system for ocean and coastal ships, offshore oil drilling platform.

● 产品特点 FEATURES

防海生物效率高	High efficiency for marine growth preventing
防腐性能延长海水管路寿命	Long life-span of seawater pipeline
电解效率高，离子浓度高	High efficiency of electrolysis, high density of ion
电极密封性能好，安全可靠	Good and reliable sealing of electrode

● 主要技术参数 MAIN TECHNICAL SPECIFICATION

输入电压: AC110V/220V/380V, 50/60 HZ	Input voltage: AC110V/220V 50HZ/60 HZ
输出电压: 0-DC24V /阳极 (可调)	Output voltage: DC24V/anode (adjustable)
输出电流: 0-2A /阳极 (可调)	Output current: 0-2A / anode(adjustable)
电极尺寸: $\Phi 75-\Phi 120$ mm	Electrode size: $\Phi 75-\Phi 120$ mm
处理水量: 100-800 m ³ /h	Processed seawater volume: 100-800 m ³ /h

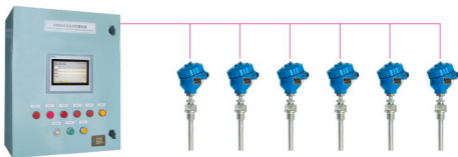


WQB型 曲柄销油温监测报警装置 CRANKPIN OIL TEMP.MONITORING AND ALARM DEVICE

● 概述 GENERAL

WQB型曲柄销油温监测报警装置主要由温度传感器和报警控制箱组成。产品设计满足规范要求。具有配置合理、测量精度高、稳定性好、安全可靠等特点。可与PA、PC型柴油机配套，实时监测柴油机曲柄销的运行温度，智能分析判断曲柄销的工作状态，及时对柴油机各缸的故障进行报警，在紧急故障状态出现时，装置发出停车信号，以避免事故的发生。

WQB type crankpin oil temperature monitoring and alarm device mainly consists of temperature sensor and alarm control box. The product design meets requirements of rules. It has the characteristics of reasonable configuration, high precision, good stability, safety and reliability etc. matching with PA, PC type diesel engine, the device can monitor real-time running temperature of crankpin, intelligent analysis and judgment of crankpin's working condition, and alarm failure of each diesel cylinder timely. When emergent failure occurs, the device will send out stop signal to avoid accident.



● 主要技术参数 MAIN TECHNICAL SPECIFICATION

- 1.电源电压: AC220V、DC24V (可选)
- 2.监测点数: 8个 (可选);
- 3.测量精度: $\pm 0.5\%FS$ (0~200℃);
- 4.报警精度: $\pm 1.0\%$;
- 5.防护等级: IP44 (控制箱) IP66 (传感器);
- 6.控制箱安装方式: 挂壁式;
- 7.防爆标志: Exia II CT6;
- 8.工作温度: 0~70℃
- 9.触点容量: AC220V 2A (SPST输出)
- 10.信号输出: RS485

- Power voltage: AC220V, DC24V (option);
Monitoring points: 8 (option);
Measuring accuracy: $\pm 0.5\%FS$ (0~200℃);
Alarm accuracy: $\pm 1.0\%$;
Protection class: IP44 (control panel) IP66 (sensor);
Installation type of control panel: wall mounting type;
Ex. mark: Exia II CT6;
Working temperature: 0~70℃;
Contact capacity: AC220V 2A (SPST output);
Signal output: RS485.

● 主要功能 MAIN FUNCTIONS

实时显示各通道的温度值
实时显示各通道平均温度值
实时显示各通道温度与平均温度的偏差值
温度超限报警
温度超上限停车报警
温度偏差超限报警
温度偏差超上限停车报警
传感器故障报警

Real-time display temperature value of each channel
Real-time display average temperature value of each channel
Real-time display deviation value between temperature of each channel and average temperature value
Alarm for temperature over-limit
Alarm for temperature over upper limit stop
Alarm for temperature deviation over-limit
Alarm for temperature deviation over upper limit stop
Alarm for sensor failure



WFG型 柴油机温度测量装置 DIESEL ENGINE TEMPERATURE MEASURING DEVICE

● 概述 GENERAL

柴油机温度测量装置主要由排温方管、排温传感器、轴承方管、轴承温度传感器以及配套的连接电缆组成。用于对中/低速柴油机的各个排气管温度和增压器进出口温度及各轴承的温度进行实时监测，并将各缸和各轴承的温度信号集中传输给上位机，便于监测和诊断柴油机的运行状态。

Diesel engine temperature measuring device consists of exhaust temperature square tube, exhaust temperature sensor, main bearing square tube, bearing temperature sensor and matched connection cables. It is used for temperature real-time monitoring of each exhaust pipe and inlet & outlet of supercharger of middle/low speed diesel engine, and intensively transfer temperature signal of each cylinder and bearing to upper computer to monitor and diagnose running state of diesel engine.



● 主要技术参数 MAIN TECHNICAL SPECIFICATION

- | | |
|---|--|
| 1. 产品型号：
排温方管：WFG-AP、WFG-BP；
轴承方管：WFG-ZC； | Product type
Exhaust temperature square tube: WFG-AP, WFG-BP;
Bearing square tube: WFG-ZC; |
| 2. 监测点数：1-50个； | Monitoring points: 1-50; |
| 3. 测量精度：轴承温度传感器（Pt100） $\pm 0.5\%$ FS；
排温传感器（K偶） $\pm 6\%$ ； | Measuring accuracy: Bearing temperature sensor (Pt100) $\pm 0.5\%$ FS;
Exhaust temperature sensor (K couple); |
| 4. 排温方管输出信号：mv电压信号； | Output signal of exhaust temperature square tube: mv voltage signal; |
| 5. 轴承方管输出信号：三线制Pt100电阻信号； | Output signal of bearing square tube: three-wire Pt100 resistance signal; |
| 6. 工作环境温度：5-70℃； | Working temperature: 5-70℃; |
| 7. 防护等级：IP65； | Protection class: IP65; |
| 8. 接插件接口数量：根据柴油机机型来确定。 | Number of connector port: confirmed according to model of diesel engine. |
| 9. 排温传感器
型号：WZPK-23RD-C；
分度号：K偶；
测量范围：0-800℃；
测量精度： $\pm 6\%$ ；
输出信号：mv电压信号；
防护等级：IP56； | Exhaust temperature sensor
Model: WZPK-23RD-C；
Element: K couple；
Measuring range: 0-800℃；
Measuring accuracy: $\pm 6\%$ ；
Output signal: mv voltage signal；
Protection class: IP56； |
| 10. 轴承温度传感器
产品型号：WZPK-23RZ-C；
分度号：三线制Pt100；
测量范围：0-300℃；
测量精度： $\pm 0.5\%$ FS；
输出信号：Pt100电阻信号；
防护等级：IP56； | Bearing temperature sensor
Model: WZPK-23RZ-C；
Element: three-wire Pt100；
Measuring range: 0-300℃；
Measuring accuracy: $\pm 0.5\%$ FS；
Output signal: Pt100 resistance signal；
Protection class: IP56； |
| 11. 安装接口：M18X1.5, G1/2", G3/4" | Installation connection: M18X1.5, G1/2", G3/4" |



● YSZK型 压力式液位测量装置 PRESSURE TYPE LEVEL GAUGING DEVICE

● 概述 GENERAL

YSZK型压力式液位测量装置主要由压力式传感器、安全栅和测量控制箱等组成。装置包含多个液位测量单元，亦可与其它不同类型的液位测量单元构成液位监测系统。适用于对油船、集装箱船及其它各类船舶中各类舱柜的液位测量，亦可用于其它工业设备中对多点液位的集中测量。

YSZK type pressure type level gauging device consists of pressure type transmitter, safety barrier and gauging control panel etc. The device includes many level gauging units, and can establish level gauging system with the other level measuring units. The device is suitable for level measuring for tanks of oil tanker, container vessel and the other ships, also used for multi-point concentrative level gauging of industrial equipments.

● 工作原理 OPERATING PRINCIPLE

安装在液舱底部的压力式传感器可及时感应由于液位高度变化而引起的压力变化，并将液位高度信号转换为电压信号，该信号经放大器转换为4~20mA（二线制）模拟信号输出。此信号通过安全栅传递至测量控制箱上的液位显示仪显示液位的数值，或由装载计算机显示和控制舱柜的液位。

The pressure type transmitter in the liquid tank bottom can timely sense the pressure change due to the height change, and change the level height signal into pressure electric signal. The output signal is changed into 4~20mA (2-wire) DC level signal via amplifier. The level signal is transformed to the level indicator in the control panel via safety barrier, or tank level is indicated and controlled by loading computer.

● 主要技术参数 MAIN TECHNICAL SPECIFICATION

控制箱:

测量范围: 0~40 m HART

测量点数: 1~50点

测量精度: $\pm 0.5\%$ F.S

电源: AC 220V 50/60Hz (主)
DC 24V (备用)

工作温度: $-20\sim 60^{\circ}\text{C}$

防爆标志: Ex ia II CT 6

防护等级: IP22

安装方式: 挂壁式或嵌入式

传感器:

传感器型式: 压力型

传感器材料:

- 隔膜: 陶瓷、扩散硅
- 壳体: SUS304/ SUS316

工作温度: $-20\sim 60^{\circ}\text{C}$

防护等级:

- 传感器: IP68
- 接线盒: IP66

本安型: Ex ia IIC T6

电缆长度: 标准 3m, (可选至20m)

Control panel

Measuring rang: 0~40m HART

No. of measuring points: 1~50

Accuracy: $\pm 0.5\%$ F.S

Power supply: AC 220V 50/60Hz (main)
DC 24V (standby)

working temp.: $-20\sim 60^{\circ}\text{C}$

Ex. mark: Ex ia IIC T 6

Protection: IP22

Mounting type: wall mounting or built-in type

Transmitter

Type of transmitter: pressure type

Material of transmitter:

- Diaphragm cell: ceramics, diffused silicon
- Body: SUS304/ SUS316

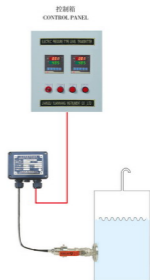
Working temperature: $-20\sim 60^{\circ}\text{C}$

Protection:

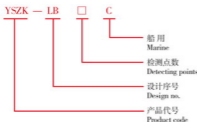
- Transmitter: IP68
- Amplifier: IP66

Intrinsic safety: Ex ia IIC T6

Length of cable: 3m in standard (option: up to 20m)



● 型号标记 MODEL SIGN



● 用途 APPLICATION

- 横舱液位遥测
- 舰船吃水深度遥测
- 压载舱液位遥测
- 燃油箱液位遥测

- Heeling and trim remote reading
- Draft remote reading
- Ballast tank remote reading
- Fuel oil tank remote reading

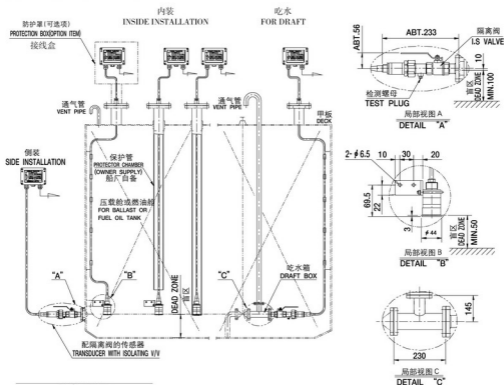
● 特征 FEATURES

- 测量精度高
- 优异的稳定性
- 超负荷能力强
- 耐高温稳定
- 抗腐蚀
- 数字化信号处理

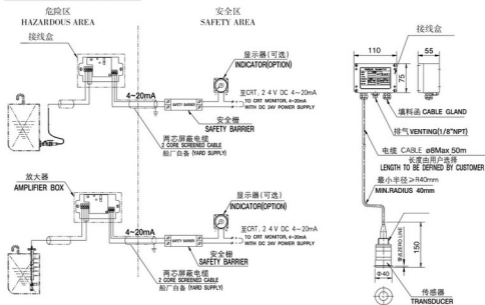
- High measuring accuracy
- Excellent stability
- High over load limit
- High temperature stability
- Corrosion resistance
- Digital signal processing



● 安装方式 MOUNTING METHOD



系统连接图
GENERAL WIRING DIAGRAM





UHB型 浮球式液位温度测量装置 FLOAT TYPE LEVEL AND TEMPERATURE GAUGING DEVICE

● 概述 GENERAL

本装置的设计符合对船舶液位的、温度应进行检测的相关规定。装置集液位、温度测量为一体，可同时检测舱柜内液体的液位和温度等。液位、温度的检测各自采用独立的电路，无相互干扰，稳定可靠。装置具有液位、温度测量、显示、报警和控制等多种功能，适用于油船、化学品船及其它船舶中贮液舱柜液位、温度的测量和报警。

This device has been specially designed, manufactured in conformity with the rules that the liquid level and temperature should be monitored. The device integrates level and temp. measuring, can monitor the liquid level and temp. in the tanks at the same time. The device adopts independent circuit for level and temp. monitoring without interference each other, which is steady and reliable. The system has the functions of level & temp. measuring, display, alarm and control etc., and is suitable for oil tanker, chemical vessel and liquid-storing tanks of the other ships.

● 工作原理 OPERATING PRINCIPLE

本装置主要由UHB型液位传感器、Pt100型温度传感器、安全栅及显示控制箱等组成。液位传感器和温度传感器一体化安装在被测舱柜上，随时检测液位的和温度，并将检测的数据转换为电信号，通过安全栅送至显示控制箱上相应的显示控制单元，由数显仪显示检测的液位和温度的数值。装置亦可附加压力传感器和独立的液位控制器，同时监测舱柜内的液位、温度、压力。当检测数据达到设定的报警值时，装置发出高位/高液位、超温 and 超压报警。各类报警的设定值，可根据用户需要调整。

The device consists of UHB type level transmitter, Pt type temp. transmitter, safety barrier and display control panel etc. Level transmitter and temp. transmitter are installed in the tanks to detect the level and temperature of liquid in the tank at any moment, and change the detection data into electric signal, and then transformed to correspondent display control unit in the display control panel via safety barrier, and the value of level and temp. are indicated by the digital indicator. The device also can add pressure transmitter and independent level controller to monitor the level, temp. and pressure of the tanks at the same time. The device provides high level/overflow, over temp, and over pressure alarm when the detection data reach the set-point values. We also can provide all kinds of alarm set-point value according to client's requirement.

● 主要技术参数 MAIN TECHNICAL SPECIFICATION

装置控制箱

电源电压: AC 220V 50Hz (主电源)
DC 24V (备用)
测量点数: 无上限
测量范围: 液位 0-6 m
温度 0-200℃
压力 -10~+30KPa
液位报警 95%高位 98%高高位
测量精度: 液位 ± 10 mm
温度 ± 0.5%F.S
压力 ± 0.5%F.S
液位报警 ± 15 mm
防护等级: IP22 (控制箱) IP66 (传感器)
防爆标志: Ex ia II CT6 (传感器)
装置功能: 液位、温度、压力值显示
声、光报警
消音/消音
声/光自检及故障报警
交流/直流自动切换及失电报警

Control panel for device

Power supply: AC 220V 50Hz (main)
DC 24V (standby)
Number of measuring point: No limits
Measuring range: Level 0-6 m
Temp. 0-200℃
Pressure -10~+30KPa
Level alarm 95% high level, 98% overflow
Measuring accuracy: Level ± 10 mm
Temp. ± 0.5%F.S
Pressure ± 0.5%F.S
Level alarm ± 15 mm
Protection: IP22 (Control Box) IP66(Transmitter)
Ex. mark: Ex ia II CT6 (Transmitter)
Function of device: Level, temp., pressure value display
Audible & visible alarm
Buzzer stop, Flicker stop
Audible & visible test and fail alarm
AC/DC power auto-switchover and power fail alarm

● 特征 FEATURES

设计紧凑、稳定可靠
本大型设计，适用于所有危险区域
多温度点测量，体积小
电路相对独立，无干扰
智能化信号处理，技术先进
Compact design, steady & reliable
Intrinsically design is applicable to all of dangerous area.
Multi-temp. point measuring, small cubage
Independent circuit without interference each other
Intelligent signal process, advanced technology

● 型号标记 MODEL SIGN





报警模块 ALARM MODULE



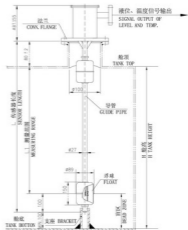
报警控制模块

型号: AYK-03H
通道数量: 10个
电源: DC 24V
LED显示: 10 × 红色 (报警显示)
1 × 黄色 (领航)
1 × 绿色 (电源指示)
功能: 蜂鸣器报警
LED闪光报警
声、光自检功能
消音/消闪/变光功能
报警输入延时: 0-99s (可选)

ALARM CONTROL MODULE

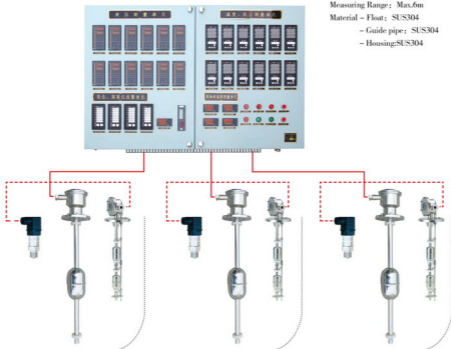
Model: AYK-03H
No. of channel: 10
Power supply: DC 24V
LED display: 10 × red (alarm)
1 × yellow (navigation)
1 × green (power)
Function: Buzzer alarm
LED flash alarm
Lamp/horn test
Accept horn/accept flash/dimming function
Alarm input time delay: 0-99s (option)

液位传感器 LEVEL TRANSMITTER



安装形式: 顶装
连接法兰: GB2506-89 DN100 PN1.0
介质比重: 0.6-1.2
测量范围: Max.6m
材料 - 浮球: SUS304
- 护导管: SUS304
- 护罩: SUS304
Installation: Top mounting
Connection Flange: GB2506-89 DN100 PN1.0
Sp.Gr: 0.6-1.2
Measuring Range: Max.6m
Material - Float: SUS304
- Guide pipe: SUS304
- Housing: SUS304

装置总图 GENERAL DIAGRAM



QPS型气动式液位遥测装置 PNEUMATIC TYPE REMOTE LEVEL GAUGING DEVICE

● 概述 GENERAL

QPS-100型气动式液位遥测装置适用于各类舰船、船坞、采油平台的压载舱、吃水计、润滑油舱、燃油舱等舱柜的液位测量和控制。

QPS-100 type air bubble type remote level gauging device is applied to measure and control the level in ballast tank, draft, L.O. tank, F.O. tank of various warship, dock, oil extraction flat roof etc.

● 工作原理 OPERATING PRINCIPLE

本系统由气源通过气压调节阀向插入被测舱底的液位测深管提供一定压力和流量的空气，该气压在与舱柜内液体介质的静压力相平衡后，多余的气压从液位测深管的底端以气泡的形式溢出，管内的平衡气压即为液位的深度静压力，该压力既可直接由指针式显示器显示，亦可通过PI转换器转换为4~20mA液位信号远传输出，由集控室的显示控制仪显示和控制舱柜液位的高度。

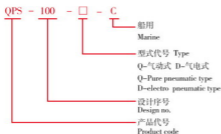
The operating principle is based upon the measurement of the hydrostatic pressure by providing a constant low flow of air or pressure into a probe which opens at the tank bottom. After the air pressure keeps in balance with the hydrostatic pressure of the liquid in the tank, the remaining air pressure overflows as air bubble from the end of the sounding pipe, the balanced air pressure in the pipe is hydrostatic pressure of the liquid depth. The pressure can be directly indicated by indicator, also can be outputted as 4~20mA DC signal by PI converter.

● 特征 FEATURES

可连续显示各舱液位的瞬时值
 结构紧凑、安装方便
 具有高压管路清洁功能
 双重防回流装置，安全可靠
 测量、控制多功能组合

Continuous display of moment level value for each tank
 Compact structure, easy installation
 Pipeline purge with high air pressure
 Duplex liquid check device, safe and reliable.
 Multi-function combination of measure and control

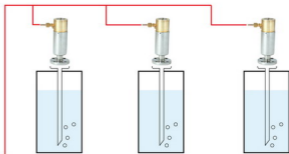
● 型号标记 MODEL SIGN



● 主要技术参数 MAIN TECHNICAL SPECIFICATION

量程范围: 0~40 m (可选)
 测量精度: $\pm 1.5\%FS$
 工作温度: -20~100℃
 空气流量: 10~80 L/h
 气源压力: 7.5kg/cm²
 输出距离: Max 400 m (管路输出)
 输出信号: 4~20mA 二线
 电源电压: DC24V

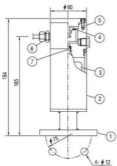
Range: 0~40 m (Option)
 Accuracy: $\pm 1.5\%FS$
 Working temp.: -20~100℃
 Air consumption: 10~80 L/h
 Air pressure: 7.5 kg/cm²
 Output distance: Max 400 m (pipeline output)
 Output: 4~20mA two wire
 Power voltage: DC24V





装置构成
COMPONENTS OF DEVICE

双止回液位探测器
DUAL CHECK TYPE SAFETY CHAMBER
(AIR PURGE HEAD)



在气源出现故障时，避免液体进入设备
连接尺寸JIS 5K 25A, 或 5K 20A.

最大工作压力: 10kg/cm²

检测接口连接尺寸:PT 1/4"

材料: 海军铜

包括用于检测实际液位自检接口

Avoids entry of liquid inside the device in case of air supply failure.

Connection size:JIS 5K 25A, or 5K 20A.

Working pressure:Max. 10kg/cm²

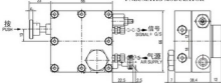
Connection size of local test device:PT 1/4"

Material:Naval brass.

Including local test device for check of actual level.

NO	名称Description	材料Material	Qty
1	法兰Flange	SUS 304	1
2	护罩Float chamber	SUS 304	1
3	浮球Float	SUS 316	1
4	上止回片Upper disc	海军铜 NAVAL BRASS	1
5	外壳Chamber	海军铜 NAVAL BRASS	1
6	接头Connector	HS	1
7	下止回片Lower	海军铜 NAVAL BRASS	1

气压调节器
PNEUMATIC MODULATOR



气压: 4.5kg/cm²

空气流量: 10~800L/h

输出气压: 4.5kg/cm²

气源管路接口:~PT1/8"

测量管路接口:~PT1/8"

包括流量调整和主气源止回阀。

Air pressure: 4.5kg/cm²

Flow rating: 10~800L/h

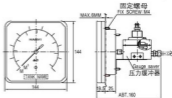
Blowing pressure: 4.5kg/cm²

Connections: Air supply~PT1/8"

Signal line~PT1/8"

Including the Flow rate adjuster and main air non-return check valve.

液位缓冲显示器组
LEVEL INDICATOR WITH GAUGE SAVER



液位显示器

尺寸:144×144

精度等级: 1.5级

-可选1.0级

-可选0.5级

计量单位: 高度或容量

高度和容量

零位可调整

压力缓冲器

材料: AL6061

差压: 0.01kg/cm²

保护压力可调整

LEVEL INDICATOR

Size:144×144

Class: 1.5 standard

-Class 1.0 option

-Class 0.5 option

Graduation: Height or volume

Height and volume

Including the zero adjuster

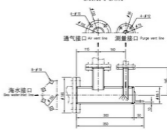
GAUGE SAVER

Body material: AL6061

Differential: Below 0.01kg/cm²

Including the range Adjuster

吃水箱
DRAFT BOX



材料:~SUS316

连接尺寸

-测量接口JIS 5K 25A

-通气接口JIS 5K 20A

-海水接口JIS 10K 80A

Material:~SUS316

Connection size:

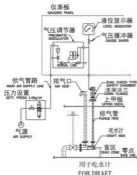
-Signal line:JIS 5K 25A

-Vent line:JIS 5K 20A

-Sea water inlet:JIS 10K 80A

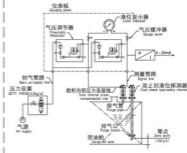
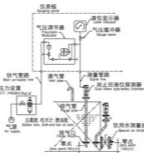
装置应用图
DEVICE EXAMPLE

QFS-100Q-C



用于吃水计
FOR DRAFT

QFS-100D-C



RYF型 温度测量控制装置 TEMPERATURE MONITORING DEVICE

● 概述 GENERAL

本装置集液体加热、温度测量、温度控制为一体，采用先进的自动测控技术，可对被加热的液体介质进行加温、测量显示和温度控制。适用于船舶的舱、柜或罐中需要加热的各类液体（重油、滑油、水等）的测量、控制和报警。

This device integrates liquid heating, temp. measure, temp. control, which adopts advanced observe and control technology, are suitable for the liquids (heavy oil, lubricant oil and water etc.) of all kinds of tanks in the ships.

● 工作原理 OPERATING PRINCIPLE

本装置主要由RY型电加热器、P100型温度传感器及显示控制箱等组成。电加热器和温度传感器安装在被测舱柜上，温度传感器随时检测被控液体介质的温度，并将检测的数据转换为电信号，传送至显示控制箱上智能显示控制仪。控制仪按照设定的温度要求，通过控温电气单元启动或停止电加热器工作，将被控介质的温度恒定在设定范围内。装置具有完善的安全保护，当出现温度超标时，可切断加热电源，并发出超限报警。温度控制值及报警值为可设定值，用户可根据需要调整。

This device consists of RY type electric heater, P100 type temp. transmitter and display control panel etc. The data detected by electric heater and temp. transmitter is transformed into electric signal and then to display controller. The controller can set the temp. of the medium within the setting range according to setting request via temp. control unit. The device has perfect safety protection, which can cut off heating power supply during over temp. The control value and alarm value is setting value which can be adjusted according to client's request.

● 特征 FEATURES

设计合理，结构紧凑
双重超温保护，安全可靠
控温精度高
装置配置灵活
智能化控制，技术先进

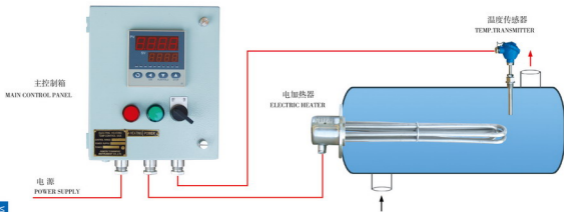
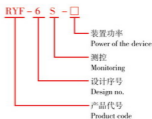
Reasonable design, compact structure
Dual over temp. Protection, safe & reliable
High accuracy in temp. control
Flexible configuration
Intellectualized control, advanced technology

● 主要技术参数 MAIN TECHNICAL SPECIFICATION

装置电源: AC 220V 50Hz (主电源)
加热电源: AC380/440V 50/60Hz
测量范围: 0~200℃
测量精度: $\pm 1.0^\circ\text{C}$
控温精度: $\pm 2.0^\circ\text{C}$
防护等级: IP44 (电加热器)
IP22 (测控箱)
装置功能: 温度测量
温度控制
超温报警

Power supply: AC 220V 50Hz (main)
Heating power supply: AC380/440V 50/60Hz
Measuring range: 0~200℃
Measuring accuracy: $\pm 1.0^\circ\text{C}$
Temp. control accuracy: $\pm 2.0^\circ\text{C}$
Protection: IP44 (electric heater)
IP22 (monitoring panel)
Functions of device: Temp. measuring
Temp. control
Over temp. alarm

● 型号标记 MODEL SIGN





ODME-1000型 排油监控装置 OIL DISCHARGE MONITORING DEVICE

● 概述 GENERAL

本装置是根据IMO制定的MARPOL73/78及IMO MEPC.108 (49) 国际公约中有关船舶排污限制而设计的船舶油污排放监控设备。产品适用于油船及其它船舶中，将船舶排水中油的含量控制在规定的范围内，以减少油对海洋的污染。

The device is developed under the IMO MARPOL 73/78 and IMO MEPC.108 (49) international convention on ship sewage restrictions for the design of the ship oil discharge monitoring and control equipment. The product are applicable to oil tankers and other ships, the oil content of ship sewage is limited in appropriate scope to reduce marine oil pollution.

● 工作原理 OPERATING PRINCIPLE

装置主要由取样单元、分析单元、测控单元及显示控制单元等组成。装置取样泵连续在船舶的排水总管进行污水取样分析，当污水排放超过30升/海里或排放总量（上次装载量/30000）超过标准要求时，装置将自动关闭排放总管防止污水排放，同时装置发出声、光报警，并完成存储、打印等功能。

The device is made up of sampling unit, analysis unit, measuring and control unit and so on. Continuous sampling devices in the ship's drainage mains acquire sewage samples for analysis. When sewage discharges are more than 30 L/n mile or total discharges (the last loading/30,000) exceeded the standard requirements. The device will automatically close discharge sewage mains. Meanwhile the device issues sound, light alarm, and complete storage, tabulation and other functions.

● 特征 FEATURES

技术先进，结构新颖
高品质传感器，检测可靠
功能齐全，操作方便
设计合理，简单适用

Advanced technology, novel structure
High-quality sensor, reliable detection
Multifunctional, convenient operation
Reasonable design, simple application

● 型号标记 MODEL SIGN

ODME - 1000 - C

船用 Marine

设计序号 Design no.

产品代号 Product code

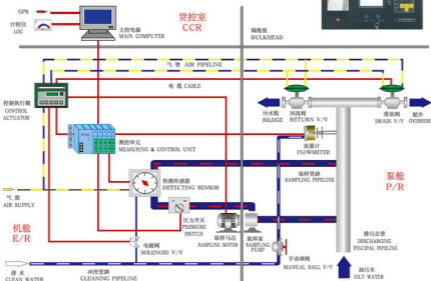
● 技术参数 TECHNICAL SPECIFICATION

装置电源: AC220V 50Hz
工作温度: 0~55℃
环境湿度: ≤90%
测量范围: 0~1000ppm
测量精度: ±10% F.S
响应时间: ≤40S

Power supply: AC220V 50Hz
Working temperature: 0~55℃
Environmental humidity: ≤90%
Measurement range: 0~1000ppm
Measurement Accuracy: ±10% F.S
Reaction time: ≤40S



● 装置总图 GENERAL DIAGRAM





YDKS型 船用监测报警控制装置 MARINE MONITORING ALARM CONTROL DEVICE

● 概述 GENERAL

本装置是采用先进架构的高科技产品，具有强大的功能和灵活的组态能力。装置可接受传感器采集的液位、温度、压力及其它各种信号，经程序处理后实现综合测量、显示、报警和控制等功能。适用于各类船舶的机舱监测报警、泵阀控制、液位监测、压载控制、平衡测控、挠度测量及其它工业系统的自动化综合测量控制。

Marine Synthesized Measuring and Monitoring System is a high-tech product based on advanced configuration technology with powerful function and flexible application. It can receive diversified signals collected by sensors, such as level, temperature, pressure and the other signals, and synchronously carry out the functions of integrative measuring, display, alarm and control etc. It is suitable for engine room monitoring and alarm, pump and valve control, cargo tank level monitoring, ballast control, balance measuring and control, and deflection measuring of all kinds of ships and other automatic integrative measuring and control.

● 工作原理 OPERATING PRINCIPLE

本系统采用先进的嵌入式双核结构，上位机与下位机均自带CPU模块，独立运行系统软件。上、下位机通过现场总线进行通讯，下位机单元可完全脱离上位机独立工作，形成高可靠性的系统硬件配置。同时，使用现场总线进行通讯，在提高抗干扰能力的同时，还可方便的实现系统冗余，进一步提高可靠性。

The system adopts advanced embedding double kernel structure. Upper computer and Lower computer have their own CPUs and system software which communicate through Field BUS. Lower computer can work independently without Upper machine. This structure and the communication method through Field BUS have both advantages of anti-jamming and raising reliability.

上位机采用嵌入式平板电脑，既具有计算机的强大处理能力又具有坚固紧凑的特点，适合于船舶等空间狭小及恶劣条件下的工作需求。同时，上位机运行可靠，人机界面友好，能运行液位监测、阀门遥控、纵横倾测量、挠度测量等多种测量控制程序，符合船舶运行的各项规范要求。

Upper computer uses embedding tablet computer with powerful calculating ability and the advantage of firmness and compactness, which is fit to be used in occasion of narrow space and bad condition as ships. Upper computer has the advantage of stability and reliability with nice Human-machine interface. It can perform several measuring and control program as level monitoring, remote valve control, incline measuring and deflection measuring to satisfy all marine standards.

下位机可采用先进的软逻辑控制器，与一般的PLC相比具有更强的运算处理能力。下位机还具有RS485、RS232、TP/IP等多种接口及通用的通讯协议，便于信号远传或与第三方设备进行通讯。下位机同时具有灵活的组态能力，能根据不同控制需求配置不同的采集控制模块，更好的为客户节省硬件成本。

Lower computer uses Soft-Logic controller, which has better calculating and operating ability than common PLC. It use RS485, RS232, TP/IP and diversified universal communication protocols, which is convenient in signal transition and communication with third-part device. It is also flexible to configure different collecting and controlling modules to meet different controlling need.

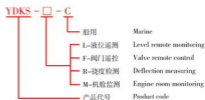
系统可接受来自现场传感器的各类量值信号，经采集模块传至PLC或PAC控制器对这些信号进行计算与处理，通过驱动输出模块发出各种显示、控制、报警信号。同时PAC将信号转换为数字量，通过多种接口提供给上位机，上位机可以对各种量值、设备状态及报警信息进行显示与设置，并完成存储、制表等功能。

The system could receive all quantity signals from field sensors, send them to Soft-logic Controller via collection module and operate them, give out display, control and alarm signals via driver output module, synchronously translate them to digital quantity and supply them to Upper computer, which can display and configure all the quantities, device status and alarm information, then finish the function of storing and making tables.

● 特征 FEATURES

功能强大、高可靠性	Powerful and highly reliable
通讯多样，综合覆盖	With diverse communication methods,
智能控制，操作简便	Intellectualized control, easy operation
配置灵活，性价比高	Flexible configuration, High performance/price ratio
多项专利，技术先进	Several patents with advanced technology

● 型号标记 MODEL SIGN





● 主要技术参数 MAIN TECHNICAL SPECIFICATION

系统电源: AC 220V 50Hz (主电源)
DC24V (备用)

系统输入: 模拟量 数字量 开关量

系统输出: 模拟量 数字量 开关量

防护等级: IP22 (控制台安装)

系统功能: 机舱监测:

液位遥测:

阀门遥控:

挠度检测:

船坞自动沉浮控制:

System source: AC 220V 50Hz (Main power)

DC 24V (Spare power)

System input: Analog signal, Digital signal

System output: Analog signal, Digital signal

Protection class: IP22 (Installed on Control platform)

System function: Engine room monitoring

Level remote monitoring

Valve remote control

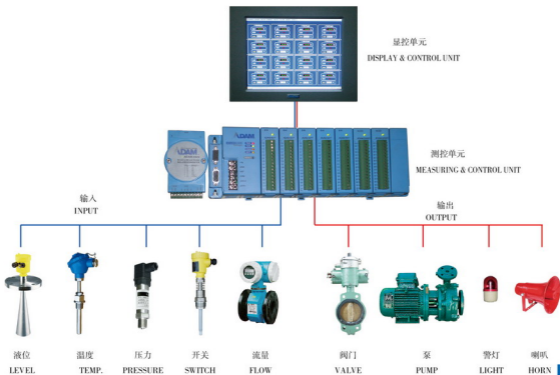
Deflection measuring

Dock auto up-and-downs control



机舱监测报警装置
Engine room monitoring

● 系统总图 SYSTEM DIAGRAM



YFK型 阀门遥控装置 VALVE REMOTE CONTROL DEVICE

● 概述 GENERAL

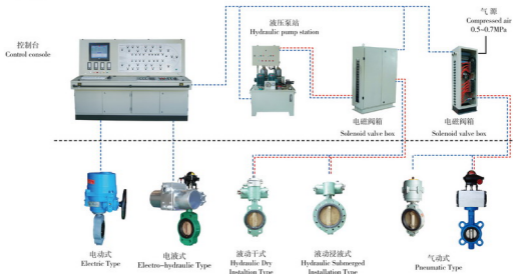
阀门遥控装置是由装置控制台利用液压、气压、电等为动力源，对阀门的启、闭进行远距离集中控制的装置。装置结合了国内外同类产品的优点精心设计，具有结构先进、操作方便、配置灵活、安全可靠的特点。装置采用先进的电脑软件控制技术，可与本公司的液位遥测装置配套，实现船舶压载系统的全自动控制。产品适用于船舶的压载水、舱底水及其它工业设备中对管道阀门进行远距离控制。

Valve remote control device utilizes oil pressure, air pressure and electricity etc. as power source to carry out remote collective control toward the start & stop of the valve by the control console. The device specially designed by combining advantages of same kinds of products of home and abroad, has the characteristics of advanced structure, convenient operation, flexible configuration, safety and reliability etc. The device adopts advanced soft logical computer control technology which matches with level remote control device to achieve full auto control for ship's ballast device. The device is suitable for remote control the piping valve of ship's ballast water, bilge and other industrial equipment.

● 型号标记 MODEL SIGN



● 装置总图 GENERAL DIAGRAM





● 液压式阀门遥控装置 HYDRAULIC VALVE REMOTE CONTROL DEVICE

● 概述 GENERAL

YFK-06Y型液压阀门遥控装置由控制台、液压泵站、电磁阀箱、液动阀门、应急手动泵及应急阀块等组成。装置以液压油为动力，可手动或电脑自动对阀门进行远距离集中控制，具有操作方便、安全可靠的特点。适用于油船、化学品船、石油平台、散货船等各类船舶中管路阀门的远距离启、闭控制。

Hydraulic valve remote control device consists of control console, hydraulic pump station, Solenoid valve, emergent manual pump and emergent valve block etc. The device utilizes hydraulic oil as power source and can remote collective control valve by manual or computer automatic control. The system has the characteristics of easy installation, safety & reliability, can be used for remote control piping valve's start & stop of all kinds of ships, such as oil tanker, chemical vessel, petroleum flat and bulk carrier etc.

● 主要技术参数 MAIN TECHNICAL SPECIFICATION

装置型号: YFK-06Y	Model: YFK-06Y
装置电源: AC 380V/440V 50Hz (三相)	Power supply: AC 380V/440V 50Hz (three phase)
工作温度: -10~55℃	Working temp.: -10~55℃
相对湿度: ≤95%	Relative humidity: ≤95%
工作压力: 6.3~11.0MPa	Output working pressure: 6.3~11.0MPa
油箱容积: 250 L	Volume of oil tank: 250L
过滤精度: 20 μm	Filtering accuracy: 20 μm
电机功率: 2.2~4.5KW	Power of electric machinery: 2.2~4.5KW
防护等级: IP22 (控制台)	Protection: IP22 (control console)
控制点数: 无限制	No. of control point: no limit

控制台

本设备有电脑操作型和开关操作型二种基本型式。

设备功能:

操作控制阀门启、闭

显示被控阀门的工作状态

监控液压泵站工作(起、停及报警)

其它相关设备的监控

Control console

It is one of the key equipments of remote control device. It includes computer-operated type and switch-operated type.

Function:

Managing valve's start & stop

Indicating working state of controlled valve

Monitoring operation of hydraulic pump station (start, stop and alarm)

Monitoring other associated equipments



柜式控制台
CONTROL CONSOLE

液压泵站

设备功能:

向装置提供8.5~12MPa的液压动力;

配备二台互为备用的油泵机组;

泵排量: 4.8~6.2L/min

油箱低液位报警;

高、低油压报警;

超油压自动溢流;

10~16L蓄能器。

Hydraulic pump station

Function:

Providing 8.5~12MPa hydraulic power to device;

Matching two sets spare oil pump units each other;

Pump delivery: 4.8~6.2L/min

Low level alarm for oil tank;

High & low oil pressure alarm;

Auto-overfill at over oil pressure;

10~16L accumulators



液压泵站
HYDRAULIC PUMP STATION

电磁阀箱 Solenoid valve box

电磁阀箱由阀块组、电磁换向阀、压力表、应急阀块、截止阀、快速接头、压力开关（可选）、开度指示（可选）等组成。控制台控制电磁换向阀改变油路方向，由液压执行器驱动液阀门的启、闭。

在遥控功能失效时，可用手动泵上的快速接头与应急阀块上的快速接头对接，对每一只阀门进行应急操作。

The solenoid valve box consists of valve block assembly, solenoid divert valve, pressure gauge, emergency valve block, non-return valve, quick joint, pressure switch (optional) and opening position indicator (optional). Control console control solenoid valve to change oil line, it opens and closes hydraulic valve by hydraulic actuator.

When remote control function is invalid, it can carry out emergent operation to each valve by connecting with quick joints on manual pump and emergent block.



电磁阀箱
SOLENOID VALVE BOX



流量式开度指示器
FLOW OPENING INDICATOR

应急手动泵及应急阀块 Emergent manual pump

当装置遇到失电等紧急情况时，可采用应急手动泵对单个的阀门的启、闭进行手动应急操作。

This device can be used to start or stop single valve during the emergent circs, such as power fail.



应急阀块
EMERGENT VALVE BLOCK



应急手动泵
EMERGENT MANUAL PUMP



应急手动泵
EMERGENT MANUAL PUMP

电动式阀门遥控装置 ELECTRIC VALVE REMOTE CONTROL DEVICE

概述 GENERAL

电动式阀门遥控装置由控制台、电动驱动头、阀门、电源等组成。装置以交流电源为动力，对阀门进行远距离集中控制。具有配置灵活、安装简便、操作方便等特点。适用于船坞、坞门、散货船、集装箱船、工程船、驳船等各类船舶中管路阀门的启、闭控制。

Electric valve remote control device consists of remote control console, electric driving head, valve, power etc. The device carries out remote collective control to the valves by taking alternating current as power. The device has the characteristics of flexible configuration, easy installation and convenient operation etc. It is suitable for control the pipeline valves on/off in the ships, such as dock, bulk carrier, container vessel, engineering vessel, barge etc.

主要技术参数 MAIN TECHNICAL SPECIFICATION

装置型号: YFK-06D
装置电源: AC380V/440V 50/60Hz
工作温度: -10~55℃
相对湿度: ≤95%
防护等级: IP22 (控制台)
IP55(68)(电动阀)
控制点数: unlimited
阀门通径: DN50~1200mm
电泵装置型号: JQ、QW、PSQ、UM3型

Model: YFK-06D
Power supply: AC380V/440V 50/60Hz
Working temp.: -10~55℃
Relative humidity: ≤95%
Protection: IP22 (control console)
IP55(68)(Electric valve)
Controlling points: no limit
Nominal diameter: DN50~1200mm
Type of actuator: JQ or QW or PSQ or UM3 type



ZW型 Type

JQ型 Type



QB型 Type

AYK型 Type



控制台
Control console



电动蝶阀
Electric Butterfly Valve



气动式阀门遥控装置 PNEUMATIC VALVE REMOTE CONTROL DEVICE

● 概述 GENERAL

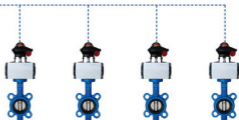
气动阀门遥控装置由控制台、电磁阀箱、气动阀门、气源等组成。装置以压缩空气为动力，对阀门进行远距离集中控制。具有结构简单、操作方便、安全可靠等特点。适用于散货船、集装箱船等各类船舶中管路阀门的启、闭控制。

Pneumatic valve remote control device consists of control console, solenoid valve box, pneumatic valve, air supply etc. The device carries out remote collective control to the valves by taking compressed air as power. The device has the simple structure, easy operation, safe and reliable etc. It is suitable for control the piping valves on/off in the ships, such as bulk carrier, container vessel.

● 主要技术参数 MAIN TECHNICAL SPECIFICATION

装置型号: YFK-06Q
装置电源: AC220V 50Hz
工作温度: -10~55℃
相对湿度: ≤95%
气源压力: 0.5~0.7MPa
防护等级: IP22 (控制台)
IP44 (气动蝶阀)
控制点数: 无限制
阀门口径: DN50~350mm

Model: YFK-06Q
Power supply: AC220V 50Hz
Working temp.: -10~55℃
Relative humidity: ≤95%
Air pressure: 0.5~0.7MPa
Protection: IP22 (control console)
IP44 (pneumatic butterfly valve)
Controlling points: no limit
Nominal diameter: DN50~350mm



电液式阀门遥控装置 ELECTRO-HYDRAULIC VALVE REMOTE CONTROL DEVICE

概述 GENERAL

电液式阀门遥控装置由控制台、电液驱动器、蝶阀及手动液压应急泵组成。装置集液压与电动遥控装置的优点为一体，具有结构紧凑、动作平稳、低能耗、低噪音、操作维护方便等特点。适用于油船、化学品船、石油平台、浮船坞等各类船舶中管路阀门的远距离启、闭控制。

Electro-hydraulic valve remote control device consists of control console, electro-hydraulic actuator, butterfly valve and manual hydraulic emergent pump station. The device has advantage of hydraulic and electric remote control device; it has characteristics of compact structure, steady act, low consumption, low noise, and easy maintenance etc. It's used for remote control piping valve's start & stop of all kinds of ships, such as oil tanker, chemical vessel, petroleum flat and float dock etc.

主要技术参数 MAIN TECHNICAL SPECIFICATION

装置型号: YFK-06DY
装置电源: AC220V / 50(60)Hz
工作温度: -10~55℃
相对湿度: ≤95%
工作压力: 11MPa
防护等级: IP22 (控制台)
IP56 (电液蝶阀)

Model: YFK-06DY
Power supply: AC 220V/50(60)Hz
Working temp: -10~55℃
Relative humidity: ≤95%
Working pressure: 11MPa
Protection: IP22 (control console)
IP56 (Electro-hydraulic valve)



手动液压式阀门遥控装置 MANUAL HYDRAULIC VALVE REMOTE CONTROL DEVICE

手动式阀门遥控装置由固定式手动液压泵、液压驱动器及蝶阀组成。装置以单一阀门为遥控操作对象，具有结构紧凑、操作简单、操作维护方便等特点。适用于油船、化学品船、石油平台等各类船舶中特殊位置阀门的远距离启、闭控制。

Pneumatic valve remote control device consists of control console, solenoid valve box, pneumatic valve, air supply etc. The device carries out remote collective control to the valves by taking compressed air as power. The device has the simple structure, easy operation, safe and reliable. It is suitable for the on/off control of the pipeline valves in the ships, such as bulk carrier, container vessel.

主要技术参数 MAIN TECHNICAL SPECIFICATION

装置型号: YFK-06S
工作温度: -20~70℃
工作压力: 6.3MPa
泵排量: 20ml/r
安装形式: 固定式
阀门通径: DN50~800mm

Model: YFK-06S
Working temp.: -20~70℃
Working pressure: 6.3MPa
Discharge capacity of pump: 20ml/r
Mounting type: Fixed type
Nominal diameter: DN50~800mm





双作用液压驱动器 DOUBLE ACTING HYDRAULIC ACTUATOR

● 主要技术参数 MAIN TECHNICAL SPECIFICATION

型号: Y-01S	Model: Y-01S
最大工作压力: 11 MPa	Max. Working pressure: 11MPa
旋转角度: $90 \pm 5^\circ$	Rotating angle: $90 \pm 5^\circ$
液压粘度: 22-46cst/40°C	Viscosity of hydraulic oil: 22-46cst/40°C
环境温度: $-20^\circ\text{C} \sim 80^\circ\text{C}$	Ambient temperature: $-20^\circ\text{C} \sim 80^\circ\text{C}$

● 特征 FEATURES

齿轮齿条式传动结构, 动作平稳、低耗能、低噪音。

齿轮齿条工作稳定, 安全系数高。

双行程调节, 阀门启、闭更准确。

优质的YX密封圈, 寿命更长, 使用更可靠

Driven by rack and pinion, steady act, low consumption and low noise.

Gear rack with steady work and high safety.

Double stroke adjusting, valve open and close is more exact.

High quality YX sealing ring with long life-span and reliable using.



单缸型 Single Cylinder



信号反馈器
Valve position
signal feedback device



双缸型 Double Cylinder

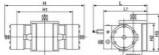


图1 Figure 1

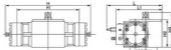


图2 Figure 2



图3 Figure 3

● 主要技术参数 MAIN TECHNICAL SPECIFICATION

图1 Figure 1

规格 Specification	H	H1	H2	H3	L	L1	力矩 Torque
DN50 单缸 Single-cylinder	275	190	105	140	190	160	485 N
DN60 单缸 Single-cylinder	290	205	106	141	206	181	816 N
DN70 单缸 Single-cylinder	380	266	134	170	250	217	1332 N

图2 Figure 2

规格 Specification	H	H1	H2	H3	L	L1	力矩 Torque
DN80 单缸 Single-cylinder	470	340	150	190	280	250	2431 N
DN100 单缸 Single-cylinder	580	460	190	240	325	295	4317 N

图3 Figure 3

规格 Specification	H	H1	H2	H3	L	L1	力矩 Torque
DN80 双缸 Double-cylinder	670	508	170	215	360	330	7100 N
DN100 双缸 Double-cylinder	810	641	210	260	440	410	11050 N

● 选配说明 OPTIONS

反馈箱体: 输出开、关信号

反馈箱体的防护等级: IP44

Feedback box: output open/close signal

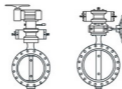
Protection of feedback box: IP44

手动蜗轮机构 (顶装、侧装)

Manual worm gear (Top mounting,
horizontal mounting)

浸没式安装(防护等级IP68)

Submerged installation (IP68)



单作用液压驱动器 SINGLE ACTING HYDRAULIC ACTUATOR

● 主要技术参数 MAIN TECHNICAL SPECIFICATION

型号: Y-01D	Model: Y-01D
最大工作压力: 11 MPa	Max. Working pressure: 11 MPa
旋转角度: $90 \pm 5^\circ$	Rotating angle: $90 \pm 5^\circ$
液压粘度: 22-46cst/40°C	Viscosity of hydraulic oil: 22-46cst/40°C
环境温度: $-20^\circ\text{C}-80^\circ\text{C}$	Ambient temperature: $-20^\circ\text{C}-80^\circ\text{C}$



● 产品特性 FEATURES

齿轮齿条式传动结构, 动作平稳、低耗能、低噪音。
 齿轮齿条工作稳定, 安全系数高。
 采用蝶形弹簧, 驱动力更大, 阀门关闭更迅速。
 设置双向行程调节螺钉, 阀门关闭位置更准确。
 采用进口YX密封圈, 寿命更长、使用更可靠。

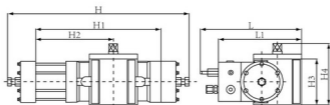
Driven by rack and pinion, steady act, low consumption and low noise.

Gear rack with steady work and high safety.

Butterfly springs are adopted, larger driving force and reduce closing time of valve.

Double stroke adjusting, valve open and close is more exactly.

Adopt imported YX sealing ring with long life-span and reliable using.



● 主要技术参数 MAIN TECHNICAL SPECIFICATION

规格 Specification	H	H1	H2	H3	L	L1	力矩 Torque
DN60	540	400	297.5	106	206	181	408
DN70	720	600	467	134	250	217	650
DN80	905	805	615	140	280	250	800





● 液压式截止阀/止回阀 HYDRAULIC SHUTOFF VALVE AND NONRETURN VALVE

● 主要技术参数 MAIN TECHNICAL SPECIFICATION

型号: Y-01JZ

最大工作压力: 11 MPa

旋转角度: $90 \pm 5^\circ$

液压粘度: 22~46cst/40°C

环境温度: -20°C ~ 80°C

阀门类型: 截止/止回阀

Model: Y-01JZ

Max. Working pressure: 11 MPa

Rotating angle: $90 \pm 5^\circ$

Viscosity of hydraulic oil: 22~46cst/40°C

Ambient temperature: -20°C ~ 80°C

Valve type: shut-off/non-return valve



● 产品特性 FEATURES

方便的集中远程控制。

结构紧凑, 动作平稳、低能耗、低噪音。

采用蝶形弹簧, 阀门关闭更迅速。

设有手动装置, 方便的应急操作。

准确的显示阀门的开启度。

Convenient to make centrally remote control

Compact structure, steady act, low consumption and low noise.

Butterfly springs are adopted, reduce closing time of valve

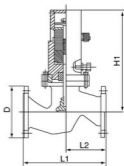
With manual device, convenient to emergent operation.

Exact display for open degree of valve.

DN	D	L1	H2	L2
32	140	180	349	105
40	150	200	356	115
50	165	230	358	326
65	185	290	377	145
80	200	310	386	155
100	220	350	400	175
125	250	400	582	200
150	285	480	617	225
175	315	550	710	250
200	340	600	720	275
250	405	730	782	325

截止阀至阀的法兰标准按GB2506-2005, 如按其它标准订货时另行说明

The standard of hydraulic shut-off valve is GB2506-2005. It is necessary to state if other standard required when placing order.



● LXJ 型 船尖舱防撞阀 FORE PEAK TANK ANTI-COLLISION VALVE

● 概述 GENERAL

船尖舱防撞阀（以下简称防撞阀）是根据SOLAS第II-1章/12条规定设计。产品采用螺旋式截止阀，具有结构合理、安全可靠。安装在船舶尖舱内的防撞舱壁内，浸没在海水中用于船尖舱压载管路的控制。适用于散货船等各类船舶船尖舱压载管路中压载水的控制。

F.P.T anti-collision valve (hereinafter referred to as the "anti-collision valve") is designed on the basis of rule of SOLAS chapter II-1 article 12. This product adopts spiral shutoff valve and the structure is reasonable, safe and reliable. It is installed in the anti-collision bulkhead of fore peak tank, immersed in the sea water for ballast line control in the fore peak tank. It is suitable for water ballast control in fore peak tank of bulk carrier and other kinds of ships.



电动式防撞阀
Electric Anti-Collision Valve



浸没式防撞阀
Submerged Anti-Collision Valve



液动式防撞阀
Hydraulic Anti-Collision Valve

● 主要技术参数 MAIN TECHNICAL SPECIFICATION

1. 公称口径: DN50, DN65, DN80, DN100, DN125, DN150, DN200, DN250, DN300, DN350, DN400

2. 公称压力: 0.6MPa

3. 连接法兰标准: GB2506-2005

4. 主壳体材质: 铸钢

5. 阀座、阀芯材质: SUS304, 青铜

6. 壳体内外表面喷涂环氧漆

7. 操作形式: 手动, 电动, 液动

8. 安装形式: 干式安装, 浸没式安装

9. 阀位指示器: 本地指示器, 远程信号输出

Nominal diameter: DN50, DN65, DN80, DN100, DN125, DN150, DN200, DN250, DN300, DN350, DN400

Nominal pressure: 0.6MPa

Connecting flange standard: GB2506-2005

Main housing material: cast steel

Material of valve seat and valve core: SUS304, bronze

The inside and outside surface of housing is coated epoxy paint

Operation types: manual, electric, hydraulic

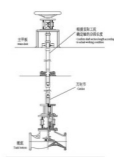
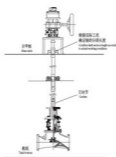
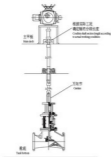
Installation type: dry installation, immersion installation

Valve position indicator: local indicator, remote signal output

● 结构原理 STRUCTURE PRINCIPLE

船尖舱防撞阀主要三种形式: 电动、液动（包含手液动）、手动

Main three types of LXJ F.P.T anti-collision valve: electric, hydraulic (including manual hydraulic), manual





● 型号标记 MODEL SIGN



例: LXJ-Y300M 为船尖舱防撞阀液动 DN300 浸没式安装。

Eg LXJ-Y300M means hydraulic DN300 immersion type installation of the F.P.T anti-collision valve

● 防撞阀遥控执行器选型参数 MODEL SPECIFICATION OF ANTI-COLLISION VALVE REMOTE CONTROL ACTUATOR

执行器参数 Actuator parameters	电动执行 Electric actuators					液动执行器 Hydraulic actuators					
	型号 Model	扭力 Torision N.m	电制 Power system	安装 Installation	信号 Signal	型号 Model	扭力 Torision N.m	工作压力 MPa	排量 displacement ml/r	安装 Installation	信号 Signal
DN50	ZW10	100	AC380V	干式 Dry type	无源触点 信号和本地 指示器 Passive contact signal and local indicator	AKS05-60	150	13.5	59	干式或 浸没式 Dry type or immer- sion type	无源触点信 号和本地指 示器 Passive contact signal and local indicator
DN65	ZW10	100				AKS05-60	150		59		
DN80	ZW15	150				AKS05-60	150		59		
DN100	ZW20	200				AKS05-75	200		74		
DN125	ZW30	300				AKS05-90	300		86		
DN150	ZW45	450				AKS05-130	450		129		
DN200	ZW60	600				AKS05-150	600		151		
DN250	ZW90	900				AKS05-200	900		191		
DN300	ZW90	900				AKS1-200	900		191		
DN350	ZW120	1200				AKS1-300	1200		290		
DN400	ZW180	1800				AKS2-630	1800		340		

● 安装及维护 INSTALLATION AND MAINTENANCE

1. 安装前认真阅读随产品附带的产品完工图;
2. 严格按照完工图完成安装, 布管和接线;
3. 液压防撞阀注意 A、B 口的进油, A 口进油阀门打开; B 口进油阀门关闭;
4. 液压船尖舱防撞阀所用电磁阀一定要为三位四通电磁阀(中泄式), 保证马达的使用寿命;
5. 安装是要保证小轴传动方向节旋转灵活;
6. 装在甲板上的电动执行器, 请使用防水雨罩, 防止生锈影响使用。

Please read enclosed final drawings of the products carefully before installation;

Installation, arrangement and wire connection should be done according to final drawing strictly.

For hydraulic anti-collision valve, please pay attention to the oil inlet of A and B entrance, when A oil inlet valve is open, B oil inlet valve (inflow type) should be closed.

In order to ensure the service life of the motor, when you use hydraulic anti-collision valve, three digit four-way solenoid valve must be used.

During installation please ensure the rotation of small shaft driving cardan being flexible enough.

During installation please ensure the rotation of small shaft driving cardan being flexible enough.

● 阀门电动装置 VALVE ELECTRIC DEVICE

● 概述 GENERAL

电动装置主要由电机、减速器、信号控制器等组成，具有动力源广泛，操作迅速，安装方便等特点，可满足阀门的各种控制要求。

Electric device main consists of motor, reducer and signal controller etc. It has the characterize of extensive power supply, quick operation and convenient installation, it can meet all kinds of control requirements of valve.

● 主要技术参数 MAIN TECHNICAL SPECIFICATION

型 号: JQ 型 / QW 型	Model: JQ type / QW type
电 压: AC380/220V 50Hz	Voltage: AC380/220V 50Hz
环境温度: -20~55℃	Ambient temperature: -20~55℃
防护等级: IP55 / 68	Protection: IP55/68
行 程: 90 ± 5° 或多回转	Stroke: 90 ± 5° or multi-revolution
输出信号: DPDT 和 4~20mA 位置信号	Output signal: DPDT and 4~20mA position signal

规格型号 Model	输出转矩 Output torque	输出转速 Output revolution speed (r/min)	90° 运行时 Running time (S)	功率 Power (W)	额定电流 Rated current (A)	手动速比 Manual speed rate
JQ10-1	100	1	15	0.06		72:1
JQ15-1	150	1	15	0.09		72:1
JQ20-1	200	1	15	0.12		72:1
JQ30-1	300	1	15	0.18		72:1
JQ45-1	450	1	15	0.18		72:1
QW60	600	0.75	20	0.18	0.85	34
QW120	1200	0.75	20	0.25	1.3	34
QW180	1800	0.5	30	0.37	1.6	45
QW250	2500	0.5	30	0.55	2.4	45
QW500	5000	0.5	30	0.75	2.9	45



JQ 型 Type



QW 型 Type



QB 型 Type



AYK 型 Type



阀门气动装置 VALVE PNEUMATIC DEVICE

概述 GENERAL

气动装置主要由气动驱动器、电磁阀、信号器等组成，具有结构紧凑，安装方便等特点，可满足小口径阀门的控制要求。

Pneumatic device main consists of pneumatic actuator, solenoid valve and annunciator etc. It has the characterize of compact structure and convenient installation etc. It can meet control requirement of valve with small normal diameter.

主要技术参数 MAIN TECHNICAL SPECIFICATION

型号: QD-01A 型

Model: QD-01A type

气源压力: 0.4~0.7MPa

Air supply pressure: 0.4~0.7MPa

环境温度: -20~70℃

Ambient temperature: -20~70℃

防护等级: IP65

Protection: IP565

最大扭矩: 3000N.m

Max. torque: 3000N.m

行程: 90 ± 10°

Stroke: 90 ± 10°

输出信号: DPDT和4~20mA位置信号

Output signal: DPDT and 4~20mA position signal



产品特性 FEATURES

压铸铝合金壳体，粉末涂层，外型美观，坚固耐用。

开关位置可由指示器清楚辨识。

方便的自动、手动切换操作。

NAMUR标准，方便安装。

Casting aluminum alloy case, powder coating, beautiful appearance, firm and durable.

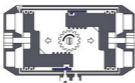
Switch position can be identified by indicator.

Change over between auto and manual operation conveniently.

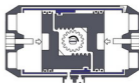
NAMUR standard, convenient installation.



结构原理 STRUCTURE PRINCIPLE



阀门关闭的位置
position of the valve closing



阀门打开的位置
position of the valve opening

● 双作用电液式驱动器 DOUBLE ACTING ELECTRO-HYDRAULIC ACTUATOR

● 主要技术参数 MAIN TECHNICAL SPECIFICATION

电 压：AC220(230) / 50(60)Hz

电 机：单相电容电机

最大工作压力：11MPa

回转角度：90 ± 5°

防护等级：IP67

输出信号：开、关或DC 1-5V

环境温度：-20-60℃

防爆等级：Exd II BT6 (可选)

Voltage: AC220(230) / 50(60)Hz

Motor: Single phase capacitor motor

Max.working pressure: 11MPa

Rotating angle: 90 ± 5°

Protection grade: IP67

Output signal: Open/close or DC 1-5V

Ambient temperature: -20-60℃

Explosion - proof grade: Exd II BT6 (option)



● 产品特性 FEATURES

结构紧凑，动作平稳、低能耗、低噪音

与电动驱动头相比，同体积输出扭矩大，启动功耗小，无需变速箱，控制精度高
传统液压系统相比，其模块化的集成度高，无需任何外接管，不污染环境，维护方便
采用模块化集成设计，功能扩充范围广，性能稳定可靠。

主体采用分段式设计，油缸密封圈可直接更换，维护方便。

Compact structure, steady act, low consumption and low noise

Compared with electric actuator, larger output torque of same volume and lower starting power.

No gear box and high control precision.

Compared with the traditional hydraulic system, high modularized integration level,
no any external pipe, environment protecting and more convenient maintenance.

Designed as a unit, integrate and functions can be extended freely.

Main body is designed as section unit, seals for oil tank can be changed directly, easy maintained.



● 单作用电液式驱动器 SINGLE ACTING ELECTRO-HYDRAULIC ACTUATOR

● 主要技术参数 MAIN TECHNICAL SPECIFICATION

电 压: AC220 (230)V / 50(60)Hz

电 机: 单相电容电机

最大工作压力: 11MPa

回转角度: $90 \pm 5^\circ$

防护等级: IP67

输出信号: 开、关或DC 0-10V

环境温度: $-20 \sim 60^\circ\text{C}$

防爆等级: Exd II BT6 (可选)

Voltage: AC220 (230)V/50(60)Hz

Motor: Single phase capacitor motor

Max.working pressure: 11MPa

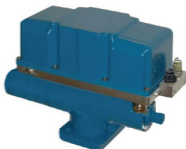
Rotating angle: $90 \pm 5^\circ$

Protection grade: IP67

Output signal: Open/close or DC 0-10V

Ambient temperature: $-20 \sim 60^\circ\text{C}$

Explosion-proof grade: Exd II BT6 (option)



● 产品特性 FEATURES

采用自带的微型动力单元提供高压油, 减少了传统的动力泵站与电磁阀箱的设置。

结构紧凑, 动作平稳、低能耗、低噪音。

采用蝶形弹簧, 关闭时驱动力大, 减少阀门的关闭时间

应急阀块可以在动力单元失效的情况下配合应急手插泵对阀门进行应急操作。

采用模块化集成设计, 功能扩充范围广, 性能稳定可靠。

主体采用分段式设计, 油缸密封圈可直接更换, 维护方便。

Micro power unit is adopted to supply high pressure oil, which could cancel traditional power pump station and solenoid valve cabinet.

Compact structure, steady act, low consumption and low noise

Adopt butterfly springs, larger driving force by closing and reduce the closing time of valves.

Emergency valve block can be conducted emergency operation with emergency hand pump in the condition of power unit failure.

Designed as a unit, integrate and functions can be extended freely, steady and reliable function.

Main body is designed as section unit; seals for oil tank can be changed directly, easy maintained.

蝶阀选型说明 BUTTERFLY VALVE

● 型号标记 MODEL SIGN



注: 阀芯材料未说明为青铜 (ZQA19-2), 如其材料在特殊订货说明中未说明, 代号见表2。
Note: The material of valve core should be bronze (ZQA19-2), if no special remark in order for other material, the code defined in Table 2

表1 TABLE 1

代号 Figure-Number	驱动型式 Operating type
SB	手柄手动式 Handle manual
SG	蜗杆手动式 Worm manual
SX	螺旋手动式 Spiral manual
D	电动式 Electric
Q	气动式 Pneumatic
Y	液动式 Hydraulic
DY	电液动式 Electro-hydraulic

表2 TABLE 2

零件名称 Parts appellation	材料 Material	代号 Figure-Number
阀体 Valve body	碳钢 Cast steel ZC230-450	G
	灰铁 Cast iron HT150	T
	球墨铸铁 Ductile cast iron QT400-15	QT
	青铜 Bronze ZQA19-2	Q
阀芯 Valve core	不锈钢 ZGCr18Ni9Ti	B1
	青铜 Bronze ZQA19-2	Q
阀座 Valve seat	丁腈橡胶 NBR	N
	氟橡胶 Viton	F
	四氟乙烯 PTFE	F4
阀杆 Valve rod	不锈钢 Stainless steel	S

● 示例 Example

YW-1SB10200TNJ表示: 中心型对夹手柄式蝶阀, 公称压力为1.0MPa, 公称直径为200mm, 阀体材料为灰铸铁, 阀座材料为丁腈橡胶, 法兰标准为“JIS”。

YW-1SB10200 TNJ means: central clamp handle butterfly valve, Nominal pressure is 1.0MPa, Nominal diameter is 200mm, Material of body is cast iron, Material of valve seat is NBR, Flange standard is "JIS".

使用说明

- 1、适用介质: 海水、淡水、空气、 $t \leq 70^\circ\text{C}$ 的原油、成品油、化学品。
- 2、对于汽油介质及 $t > 70^\circ\text{C}$ 的其它介质, 只能用 F 型阀座。化学品采用 F4 型阀座。
- 3、安装形式“A”为标准型。
- 4、操作油压力 5~12 MPa。
- 5、驱动轴需加长时请在订货清单中说明。

Using instruction:

1. Applicable medium: Seawater, fresh water, air, crude oil, product oil and chemical with $t \leq 70^\circ\text{C}$.
2. For gasoline and other medium with $t > 70^\circ\text{C}$, only the F type can be used. Only F4 type valve seat can be used for chemicals
3. Installation type A is standard.
4. Operating oil pressure is 5~12 MPa.
5. The need for lengthened driving axle should be specified in the order.

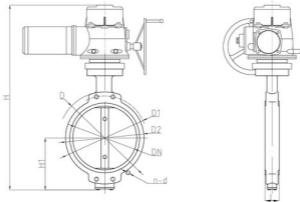


1D型 电动中心对夹式蝶阀 ELECTRIC CENTRAL WAFER TYPE BUTTERFLY VALVE

概述 GENERAL

电动蝶阀由蝶阀和电驱动装置组成。蝶阀符合GB/T3036标准。具有密封性能好，操作力矩小，使用寿命长，安装方便等特点。适用于散货船、浮船坞、坞门、工程船中输液管路的控制。

Electrical butterfly valve consists of butterfly valve and drive device. The butterfly valve is in conformity with GB/T 3036. It has the characteristics of good sealing function, small operational force, long life-span and convenient installation. It is applicable to control pipeline of bulk carrier, floating dock, ship-caisson, and working ships.



主要技术参数 MAIN TECHNICAL SPECIFICATION

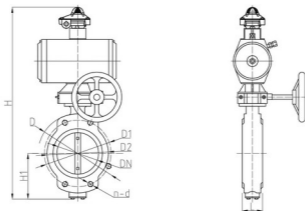
公称 压力 PN	公称 口径 DN	结构及法兰尺寸 Structure & Flange Dimension																			
		ISO/JIS/GB		ISO/GB2506-2005)						JIS						GB/GB/T1693-2008 R型)					
		H1	H	L	D	D1	D2	n	d	L	D	D1	D2	n	d	L	D	D1	D2	n	d
50	104	559	43	165	125	102	4	M16/18	43	165	120	102	4	M16/19	43	165	103	102	6	M14/16	
65	110	579	46	185	145	122	4	M16/18	46	185	140	122	4	M16/19	46	185	123	122	8	M14/16	
80	120	600	46	200	160	133	8	M16/18	46	200	150	133	8	M16/19	46	200	138	133	8	M14/16	
100	125	611	52	220	180	158	8	M16/18	52	220	175	158	8	M16/18	52	220	158	158	8	M14/16	
125	140	640	56	250	210	158	8	M16/18	56	250	210	158	8	M20/23	56	250	183	158	10	M14/16	
150	160	670	56	285	240	212	8	M20/22	56	285	240	212	8	M20/23	56	285	208	212	12	M14/16	
200	190	731	60	340	295	268	8	M20/22	60	340	290	268	12	M20/23	60	340	273	268	12	M16/18	
250	225	811	68	395	350	320	12	M20/22	68	395	355	320	12	M22/25	68	395	336	320	14	M20/22	
300	250	861	78	445	400	370	12	M20/22	78	445	400	370	16	M22/25	78	445	391	370	16	M20/22	
350	294	964	78	505	460	430	16	M20/22	78	505	445	430	16	M22/25	78	505	441	430	18	M20/22	
400	306	1015	102	565	515	482	16	M24/26	102	565	510	482	16	M24/27	102	565	496	482	18	M24/26	
450	358	1084	114	615	565	532	20	M24/26	114	615	565	532	20	M24/27	114	615	551	532	20	M24/26	
500	397	1134	127	670	620	585	20	M24/26	127	670	620	585	20	M24/27	127	670	601	585	20	M24/26	
550	424	1298	154	730	675	635	20	M27/30	154	730	680	635	20	M30/33	154						
600	458	1397	154	780	725	685	20	M27/30	154	780	730	685	24	M30/33	154						
650	485	1452	165	835	780	740	24	M27/30	165	835	780	740	24	M30/33	165						
700	515	1561	165	895	840	800	24	M27/30	165	895	840	800	24	M30/33	165						
750	552	1674	190	965	900	855	24	M30/33	190	965	900	840	24	M30/33	190						
800	580	1756	190	1015	950	905	24	M30/33	190	1015	950	890	28	M30/33	190						

1Q型 气动中心对夹式蝶阀 PNEUMATIC CENTRAL WAFER TYPE BUTTERFLY VALVE

● 概述 GENERAL

气动蝶阀由蝶阀和气压驱动器组成。蝶阀符合GB/T3036标准。具有密封性能好、操作力矩小、使用寿命长等特点。适用于各类船舶的小直径输液管路的控制。

Pneumatic butterfly valve consists of butterfly valve and drive device. The butterfly valve is in conformity with GB/T 3036. It has the characteristics of good sealing function, small operational force, long life-span and convenient installation. It is applicable to control small dia. pipeline of all kinds of ships.



● 主要技术参数 MAIN TECHNICAL SPECIFICATION

公称压力 PN	公称通径 DN	结构及法兰尺寸 Structure & Flange Dimension																			
		ISO/JIS/GB		ISO/GB2506-2005)						JIS						GB/GR/T11693-2008 R型)					
		H1	H	L	D	D1	D2	n	d	L	D	D1	D2	n	d	L	D	D1	D2	n	d
1.0	50	104	510	43	165	125	102	4	M16/18	43	165	120	102	4	M16/19	43	165	103	102	6	M14/16
	65	110	529	46	185	145	122	4	M16/18	46	185	140	122	4	M16/19	46	185	123	122	8	M14/16
	80	120	558	46	200	160	133	8	M16/18	46	200	150	133	8	M16/19	46	200	138	133	8	M14/16
	100	125	569	52	220	180	158	8	M16/18	52	220	175	158	8	M16/18	52	220	158	158	8	M14/16
	125	140	607	56	250	210	158	8	M16/18	56	250	210	158	8	M20/23	56	250	183	158	10	M14/16
	150	160	672	56	285	240	212	8	M20/22	56	285	240	212	8	M20/23	56	285	208	212	12	M14/16
	200	190	732	60	340	295	268	8	M20/22	60	340	290	268	12	M20/23	60	340	273	268	12	M16/18
	250	225	844	68	395	350	320	12	M20/22	68	395	355	320	12	M22/25	68	395	336	320	14	M20/22
	300	250	896	78	445	400	370	12	M20/22	78	445	400	370	16	M22/25	78	445	391	370	16	M20/22
	350	294	999	78	505	460	430	16	M20/22	78	505	445	430	16	M22/25	78	505	441	430	18	M20/22
	400	306	1118	102	565	515	482	16	M24/26	102	565	510	482	16	M24/27	102	565	496	482	18	M24/26
	450	358	1258	114	615	565	532	20	M24/26	114	615	565	532	20	M24/27	114	615	551	532	20	M24/26
	500	397	1308	127	670	620	585	20	M24/26	127	670	620	585	20	M24/27	127	670	601	585	20	M24/26
	550	424	1335	154	730	675	635	20	M27/30	154	730	680	635	20	M30/33	154					
	600	458	1580	154	780	725	685	20	M27/30	154	780	730	685	24	M30/33	154					
	650	485	1635	165	835	780	740	24	M27/30	165	835	780	740	24	M30/33	165					
700	515	1723	165	895	840	800	24	M27/30	165	895	840	800	24	M30/33	165						
750	552	1836	190	965	900	855	24	M30/33	190	965	900	840	24	M30/33	190						
800	580	1918	190	1015	950	905	24	M30/33	190	1015	950	890	28	M30/33	190						

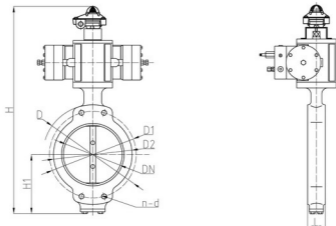


1Y型 液动中心对夹式蝶阀 HYDRAULIC CENTRAL WAFER TYPE BUTTERFLY VALVE

● 概述 GENERAL

液动蝶阀由蝶阀和液压驱动器组成。蝶阀符合GB/T3036标准。具有密封性能好，操作力矩小，使用寿命长等特点。适用于油船、化学品船、散货船等各类船舶中输液管路控制。

Hydraulic butterfly valve consists of butterfly valve and drive device. The butterfly valve is in conformity with GB/T 3036. It has the characteristics of good sealing function, small operational force and long life-span. It is applicable to control pipeline of oil tank, chemical ships and bulk carrier.



● 主要技术参数 MAIN TECHNICAL SPECIFICATION

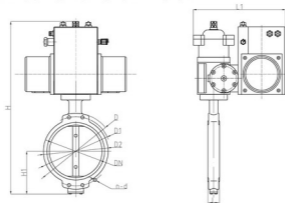
公称压力 PN	公称通径 DN	结构及法兰尺寸 Structure & Flange Dimension																			
		ISO/JIS/GB		ISO/GB2506-2005)						JIS						GB/GB/T11693-2008 R型)					
		H1	H	L	D	D1	D2	n	d	L	D	D1	D2	n	d	L	D	D1	D2	n	d
1.0	50	104	446	43	165	125	102	4	M16/18	43	165	120	102	4	M16/19	43	165	103	102	6	M14/16
	65	110	465	46	185	145	122	4	M16/18	46	185	140	122	4	M16/19	46	185	123	122	8	M14/16
	80	120	486	46	200	160	133	8	M16/18	46	200	150	133	8	M16/19	46	200	138	133	8	M14/16
	100	125	498	52	220	180	158	8	M16/18	52	220	175	158	8	M16/18	52	220	158	158	8	M14/16
	125	140	527	56	250	210	158	8	M16/18	56	250	210	158	8	M20/23	56	250	183	158	10	M14/16
	150	160	557	56	285	240	212	8	M20/22	56	285	240	212	8	M20/23	56	285	208	212	12	M14/16
	200	190	645	60	340	295	268	8	M20/22	60	340	290	268	12	M20/23	60	340	273	268	12	M16/18
	250	225	725	68	395	350	320	12	M20/22	68	395	355	320	12	M22/25	68	395	336	320	14	M20/22
	300	250	751	78	445	400	370	12	M20/22	78	445	400	370	16	M22/25	78	445	391	370	16	M20/22
	350	294	854	78	505	460	430	16	M20/22	78	505	445	430	16	M22/25	78	505	441	430	18	M20/22
	400	306	921	102	565	515	482	16	M24/26	102	565	510	482	16	M24/27	102	565	496	482	18	M24/26
	450	358	990	114	615	565	532	20	M24/26	114	615	565	532	20	M24/27	114	615	551	532	20	M24/26
	500	397	1080	127	670	620	585	20	M24/26	127	670	620	585	20	M24/27	127	670	601	585	20	M24/26
	550	424	1137	154	730	675	635	20	M27/30	154	730	680	635	20	M30/33	154					
	600	458	1256	154	780	725	685	20	M27/30	154	780	730	685	24	M30/33	154					
	650	485	1311	165	835	780	740	24	M27/30	165	835	780	740	24	M30/33	165					
700	515	1381	165	895	840	800	24	M27/30	165	895	840	800	24	M30/33	165						
750	552	1494	190	965	900	855	24	M30/33	190	965	900	840	24	M30/33	190						
800	580	1576	190	1015	950	905	24	M30/33	190	1015	950	890	28	M30/33	190						

电液中心对夹式蝶阀 ELECTRO-HYDRAULIC CENTRAL WAFER TYPE BUTTERFLY VALVE

概述 GENERAL

电液型中心对夹式蝶阀由中心对夹式蝶阀和电液型驱动器组成。产品符合GB/T3036标准。具有密封性能好、操作力矩小、使用寿命长、安装方便等特点。适用于各类船舶、浮船坞、坞门、工程船中输液管路的控制。

Electro-hydraulic central wafer type butterfly valve consists of central wafer type butterfly valve and electro-hydraulic actuator. The butterfly valve accorded with standard GB/T3036. It has the characteristics of good sealing function, small operational force, long service life and convenient installation. It is suitable for pipeline control of various ships, floating docks, door gates, and working ships.



主要技术参数 MAIN TECHNICAL SPECIFICATION

公称压力 PN	公称直径 DN	结构及法兰尺寸 Structure & Flange Dimension																					
		ISO/JIS/GB			ISO(GB2506-2005)						JIS						GB(GB/T11693-2008 R型)						
		H1	H	L1	L	D	D1	D2	n	d	L	D	D1	D2	n	d	L	D	D1	D2	n	d	
1.0	50	104	446	260	43	165	125	102	4	M16/18	43	165	120	102	4	M16/19	43	165	103	102	6	M14/16	
	65	110	465	260	46	185	145	122	4	M16/18	46	185	140	122	4	M16/19	46	185	123	122	8	M14/16	
	80	120	486	260	46	200	160	133	8	M16/18	46	200	150	133	8	M16/19	46	200	138	133	8	M14/16	
	100	125	498	260	52	220	180	158	8	M16/18	52	220	175	158	8	M16/18	52	220	158	158	8	M14/16	
	125	140	527	281	56	250	210	158	8	M16/18	56	250	210	158	8	M20/23	56	250	183	158	10	M14/16	
	150	160	557	281	56	285	240	212	8	M20/22	56	285	240	212	8	M20/23	56	285	208	212	12	M14/16	
	200	190	645	320	60	340	295	268	8	M20/22	60	340	290	268	12	M20/23	60	340	273	268	12	M16/18	
	250	225	725	320	68	395	350	320	12	M20/22	68	395	355	320	12	M22/25	68	395	336	320	14	M20/22	
	300	250	751	320	78	445	400	370	12	M20/22	78	445	400	370	16	M22/25	78	445	391	370	16	M20/22	
	350	294	854	350	78	505	460	430	16	M20/22	78	505	445	430	16	M22/25	78	505	441	430	18	M20/22	
	400	306	921	350	102	565	515	482	16	M24/26	102	565	510	482	16	M24/27	102	565	496	482	18	M24/26	
	450	358	990	350	114	615	565	532	20	M24/26	114	615	565	532	20	M24/27	114	615	551	532	20	M24/26	
	500	397	1080	395	127	670	620	585	20	M24/26	127	670	620	585	20	M24/27	127	670	601	585	20	M24/26	
	550	424	1137	395	154	730	675	635	20	M27/30	154	730	680	635	20	M30/33	154						
	600	458	1256	395	154	780	725	685	20	M27/30	154	780	730	685	24	M30/33	154						
	650	485	1311	430	165	835	780	740	24	M27/30	165	835	780	740	24	M30/33	165						
700	515	1381	430	165	895	840	800	24	M27/30	165	895	840	800	24	M30/33	165							
750	552	1494	510	190	965	900	855	24	M30/33	190	965	900	840	24	M30/33	190							
800	580	1576	510	190	1015	950	905	24	M30/33	190	1015	950	890	28	M30/33	190							



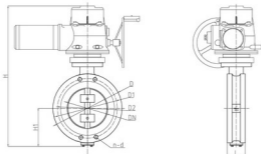
FD型 电动双偏心法兰式蝶阀

ELECTRIC DUAL ECCENTRIC FLANGE TYPE BUTTERFLY VALVE

概述 GENERAL

电动蝶阀由蝶阀和电驱动装置组成。蝶阀符合GB/T3037标准。具有密封性能好，操作力矩小，使用寿命长，安装方便等特点。适用于散货船、浮船坞、坞门、工程船中输液管路的控制。

Electric butterfly valve consists of butterfly valve and drive device. The butterfly valve is in conformity with GB/T 3037. It has the characteristics of good sealing function, small operational force, long life-span and convenient installation. It is applicable to control pipeline of bulk carrier, floating dock, ship-caisson, and working ships.



主要技术参数 MAIN TECHNICAL SPECIFICATION

GB (GB69-65)

公称压力 Nominal Pressure	公称口径 Nominal Diameter	结构及法兰尺寸 Structure & Flange Dimension																							
		ISO、JIS、GB						ISO (GB2506-2005)						JIS						GB/GB/T11693-2008 R型					
		H1	H	L	D	D ₁	D ₂	L	D	D ₁	D ₂	n	d	L	D	D ₁	D ₂	n	d	L	D	D ₁	D ₂	n	d
1.0	80	85	560	46	200	160	133	8	M16/18	46	185	150	128	8	M16/19	46	170	138	120	8	M14/16				
	100	130	620	64	220	180	158	8	M16/18	52	210	175	153	8	M16/18	52	190	158	140	8	M14/16				
	125	140	655	70	250	210	158	8	M16/18	56	250	210	184	8	M20/23	56	215	183	166	10	M14/16				
	150	160	685	76	285	240	212	8	M20/22	56	280	240	214	8	M20/23	56	240	208	192	12	M14/16				
	200	190	750	89	340	295	268	8	M20/22	60	330	290	264	12	M22/25	60	310	273	252	12	M16/18				
	250	220	840	114	395	350	320	12	M20/22	68	400	355	326	12	M22/25	68	380	336	312	14	M20/22				
	300	255	905	114	445	400	370	12	M20/22	78	445	400	370	16	M22/25	78	435	391	366	16	M20/22				
	350	265	955	127	505	460	430	16	M20/22	78	490	445	415	16	M22/25	78	485	441	416	18	M20/22				
	400	310	1087	140	565	515	482	16	M24/26	102	560	510	478	16	M24/27	102	545	496	468	18	M24/26				
	450	325	1182	152	615	565	532	20	M24/26	114	620	565	532	20	M24/27	114	600	551	522	20	M24/26				
	500	390	1277	152	670	620	585	20	M24/26	127	675	620	587	20	M24/27	127	650	601	575	20	M24/26				
	550	428	1335	170	730	675	635	20	M27/30	154	745	680	642	20	M30/33	154									
	600	430	1347	178	780	725	685	20	M27/30	154	795	730	692	24	M30/33	154									
	650	460	1566	210	835	780	740	24	M27/30	165	845	780	742	24	M30/33	165									
700	480	1616	229	895	840	800	24	M27/30	165	905	840	802	24	M30/33	165										
750	530	1661	230	965	900	855	24	M30/33	190	970	900	857	24	M30/33	190										
800	560	1696	241	1015	950	905	24	M30/33	190	1020	950	907	28	M30/33	190										
1.6	80	85	560	46	200	160	133	8	M16/18	46	200	160	133	8	M20/23	46	185	147	128	8	M16/18				
	100	130	620	64	220	180	158	8	M16/18	52	225	185	162	8	M20/23	52	205	167	148	10	M16/18				
	125	140	655	70	250	210	158	8	M16/18	56	270	225	198	8	M22/25	56	225	187	170	10	M16/18				
	150	160	685	76	285	240	212	8	M20/22	56	305	260	230	12	M22/25	56	255	217	198	12	M16/18				
	200	190	750	89	340	295	268	12	M20/22	60	350	305	276	12	M22/25	60	325	281	256	12	M20/22				
	250	220	840	114	405	355	320	12	M24/26	68	430	380	346	12	M24/27	68	390	341	314	14	M24/27				
	300	255	905	114	460	410	370	12	M24/26	78	480	430	396	16	M24/27	78	445	396	368	16	M24/27				
	350	265	955	127	520	470	430	16	M24/26	78	540	480	442	16	M30/33	78	495	447	418	18	M24/27				
	400	310	1087	140	580	525	482	16	M27/30	102	605	540	496	16	M30/33	102	560	505	474	18	M27/30				
	450	325	1182	152	640	585	535	20	M27/30	114	675	605	562	20	M30/33	114	610	555	524	20	M27/30				
	500	400	1297	152	715	650	585	20	M30/33	127	730	660	618	20	M30/33	127	665	620	580	22	M27/30				
	550	428	1345	170	775	710	635	20	M30/33	154	795	720	672	20	M36/39	154									
	600	435	1357	178	840	770	685	20	M30/33	154	845	770	722	24	M36/39	154									
	650	465	1576	210	860	790	740	24	M33/36	165	895	820	772	24	M36/39	165									
700	485	1626	229	910	840	800	24	M33/36	165	960	875	822	24	M39/342	165										
750	535	1671	230	970	900	855	24	M33/36	190	1020	935	882	24	M39/342	190										
800	565	1710	241	1025	950	905	24	M36/39	190	1085	990	932	24	M45/348	190										

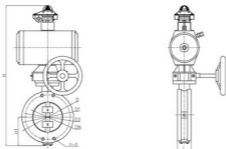
FQ型 气动双偏心法兰式蝶阀

PNEUMATIC DUAL ECCENTRIC FLANGE TYPE BUTTERFLY VALVE

● 概述 GENERAL

气动蝶阀由蝶阀和气压驱动组成。蝶阀符合GB/T3036标准。具有密封性能好，操作力矩小，使用寿命长等特点。适用于各类船舶中输油管路控制。

Pneumatic butterfly valve consists of butterfly valve and drive device. The butterfly valve is in conformity with GB/T 3036. It has the characteristics of good sealing function, small operational force and long life-span. It is applicable to control pipeline of all kinds of ships.



● 主要技术参数 MAIN TECHNICAL SPECIFICATION

公称压力 (MPa) Nominal Pressure	公称 通径 Nominal Diameter	结构及法兰尺寸Structure&Flange Dimension																															
		ISO、JIS、GB								ISO (GB206-2005)								JIS								GB(GB/T1693-2008 R型)							
		H1	H	L	D	D ₁	D ₂	n	d	L	D	D ₁	n	d	L	D	D ₁	n	d	L	D	D ₁	n	d									
1.0	80	85	517	46	200	160	133	8	M16/18	46	185	150	128	8	M16/19	46	170	138	120	8	M14/16												
	100	130	587	64	220	180	158	8	M16/18	52	210	175	153	8	M16/18	52	190	158	140	8	M14/16												
	125	140	645	70	250	210	158	8	M16/18	56	250	210	184	8	M20/23	56	215	183	166	10	M14/16												
	150	160	675	76	285	240	212	8	M20/22	56	280	240	214	8	M20/23	56	240	208	192	12	M14/16												
	200	190	810	89	340	295	268	8	M20/22	60	330	290	264	12	M20/23	60	310	273	252	12	M16/18												
	250	220	886	114	395	350	320	12	M20/22	68	400	355	326	12	M22/25	68	380	336	312	14	M20/22												
	300	255	1008	114	445	400	370	12	M20/22	78	445	400	370	16	M22/25	78	435	391	366	16	M20/22												
	350	265	1129	127	505	460	430	16	M20/22	78	490	445	415	16	M22/25	78	485	441	416	18	M20/22												
	400	310	1195	140	565	515	482	16	M24/26	102	560	510	478	16	M24/27	102	545	496	468	18	M24/26												
	450	325	1290	152	615	565	532	20	M24/26	114	620	565	532	20	M24/27	114	600	551	522	20	M24/26												
	500	390	1385	152	670	620	585	20	M24/26	127	675	620	587	20	M24/27	127	650	601	575	20	M24/26												
	550	428	1503	170	730	675	635	20	M27/30	154	745	680	642	20	M30/33	154																	
	600	430	1573	178	780	725	685	20	M27/30	154	795	730	692	24	M30/33	154																	
	650	460	1713	210	835	780	740	24	M27/30	165	845	780	742	24	M30/33	165																	
	700	480	1778	229	895	840	800	24	M27/30	165	905	840	802	24	M30/33	165																	
	750	530	1935	230	965	900	855	24	M30/33	190	970	900	857	24	M30/33	190																	
	800	560	1952	241	1015	950	905	24	M30/33	190	1020	950	907	28	M30/33	190																	
1.6	80	85	517	46	200	160	133	8	M16/18	46	200	160	133	8	M20/23	46	185	147	128	8	M16/18												
	100	130	587	64	220	180	158	8	M16/18	52	225	185	162	8	M20/23	52	205	167	148	10	M16/18												
	125	140	645	70	250	210	158	8	M16/18	56	270	225	198	8	M22/25	56	225	187	170	10	M16/18												
	150	160	675	76	285	240	212	8	M20/22	56	305	260	230	12	M22/25	56	255	217	198	12	M16/18												
	200	190	810	89	340	295	268	12	M20/22	60	350	305	276	12	M22/25	60	325	281	256	12	M20/22												
	250	220	886	114	405	355	320	12	M24/26	68	430	380	346	12	M24/27	68	390	341	314	14	M24/27												
	300	255	1008	114	460	410	370	12	M24/26	78	480	430	396	16	M27/30	78	445	396	368	16	M24/27												
	350	265	1129	127	520	470	430	16	M24/26	78	540	480	442	16	M30 x 3/33	78	495	447	418	18	M24/27												
	400	310	1195	140	580	525	482	16	M27/30	102	605	540	496	16	M30 x 3/33	102	560	505	474	18	M27/30												
	450	325	1290	152	640	585	532	20	M27/30	114	675	605	562	20	M30 x 3/33	114	610	555	524	20	M27/30												
	500	400	1395	152	715	650	585	20	M30/33	127	730	660	618	20	M30 x 3/33	127	665	610	580	22	M27/30												
	550	428	1503	170	775	710	635	20	M30/33	154	795	720	672	20	M36 x 3/39	154																	
	600	435	1583	178	840	770	685	20	M30/33	154	845	770	722	24	M36 x 3/39	154																	
	650	465	1723	210	860	790	740	24	M33/36	165	895	820	772	24	M36 x 3/39	165																	
	700	485	1788	229	910	840	800	24	M33/36	165	960	875	822	24	M36 x 3/42	165																	
	750	535	1965	230	970	900	855	24	M33/36	190	1020	935	882	24	M39 x 3/42	190																	
	800	565	1962	241	1025	950	905	24	M36/39	190	1085	990	932	24	M45 x 3/48	190																	



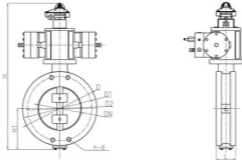
FY型 液动双偏心法兰式蝶阀

HYDRAULIC DUAL ECCENTRIC FLANGE TYPE BUTTERFLY VALVE

概述 GENERAL

液动蝶阀由蝶阀和液压驱动器组成。蝶阀符合GB/T3037标准。具有密封性能好，操作力矩小，使用寿命长等特点。适用于油船、化学品船、散货船等各类船舶中输液管路的控制。

Hydraulic butterfly valve consists of butterfly valve and drive device. The butterfly valve is in conformity with GB/T 3037. It has the characteristics of good sealing function, small operational force and long life-span. It is applicable to control pipeline of oil tank, chemical ships and bulk carrier.



主要技术参数 MAIN TECHNICAL SPECIFICATION

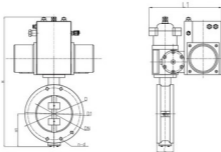
公称压力 (MPa) Nominal Pressure	公称 口径 Nominal Diameter	结构及法兰尺寸 Structure & Flange Dimension																			
		ISO, JIS, GB		ISO (GB2506-2005)						JIS				GB/GB/T11693-2008 R型							
		H1	H	L	D	D ₁	D ₂	n	d	L	D	D ₁	D ₂	n	d	L	D	D ₁	D ₂	n	d
1.0	80	85	437	46	200	160	133	8	M16/18	46	185	150	128	8	M16/19	46	170	138	120	8	M14/16
	100	130	507	64	220	180	158	8	M16/18	52	210	175	153	8	M16/18	52	190	158	140	8	M14/16
	125	140	542	70	250	210	158	8	M16/18	56	250	210	184	8	M20/23	56	215	183	166	10	M14/16
	150	160	600	76	285	240	212	8	M20/22	56	280	240	214	8	M20/23	56	240	208	192	12	M14/16
	200	190	665	89	340	295	268	8	M20/22	60	330	290	264	12	M20/23	60	310	273	252	12	M16/18
	250	220	730	114	395	350	320	12	M20/22	68	400	355	326	12	M22/25	68	380	336	312	14	M20/22
	300	255	795	114	445	400	370	12	M20/22	78	445	400	370	16	M22/25	78	435	391	366	16	M20/22
	350	265	861	127	505	460	430	16	M20/22	78	490	445	415	16	M22/25	78	485	441	416	18	M20/22
	400	310	926	140	565	515	482	16	M24/26	102	560	510	478	16	M24/27	102	545	496	468	18	M24/26
	450	325	1021	152	615	565	532	20	M24/26	114	620	565	532	20	M24/27	114	600	551	522	20	M24/26
	500	390	1156	152	670	620	585	20	M24/26	127	675	620	587	20	M24/27	127	650	601	575	20	M24/26
	550	428	1214	170	730	675	635	20	M27/30	154	745	680	642	20	M30/33	154					
	600	430	1206	178	780	725	685	20	M27/30	154	795	730	692	24	M30/33	154					
	650	460	1346	210	835	780	740	24	M27/30	165	845	780	742	24	M30/33	165					
	700	480	1396	229	895	840	800	24	M27/30	165	905	840	802	24	M30/33	165					
	750	530	1481	230	965	900	855	24	M30/33	190	970	900	857	24	M30/33	190					
800	560	1516	241	1015	950	905	24	M30/33	190	1020	950	807	28	M30/33	190						
1.6	80	85	437	46	200	160	133	8	M16/18	46	200	160	133	8	M20/23	46	185	147	128	8	M16/18
	100	130	507	64	220	180	158	8	M16/18	52	225	185	162	8	M20/23	52	205	167	148	10	M16/18
	125	140	542	70	250	210	158	8	M16/18	56	270	225	198	8	M22/25	56	225	187	170	10	M16/18
	150	160	600	76	285	240	212	8	M20/22	56	305	260	230	12	M22/25	56	255	217	198	12	M16/18
	200	190	665	89	340	295	268	12	M20/22	60	350	305	276	12	M22/25	60	325	281	256	12	M20/22
	250	220	730	114	405	355	320	12	M24/26	68	430	380	346	12	M24/27	68	390	341	314	14	M24/27
	300	255	795	114	460	410	370	12	M24/26	78	480	430	396	16	M24/27	78	445	396	368	16	M24/27
	350	265	861	127	520	470	430	16	M24/26	78	540	480	442	16	M30×3/33	78	495	447	418	18	M24/27
	400	310	926	140	580	525	482	16	M27/30	102	605	540	496	16	M30×3/33	102	560	505	474	18	M27/30
	450	325	1021	152	640	585	532	20	M27/30	114	675	605	562	20	M30×3/33	114	610	555	524	20	M27/30
	500	400	1166	152	715	650	585	20	M30/33	127	730	660	618	20	M30×3/33	127	665	610	580	22	M27/30
	550	428	1214	170	775	710	635	20	M30/33	154	795	720	672	20	M36×3/39	154					
	600	435	1216	178	840	770	685	20	M30/33	154	845	770	722	24	M36×3/39	154					
	650	465	1356	210	860	790	740	24	M33/36	165	895	820	772	24	M36×3/39	165					
	700	485	1406	229	910	840	800	24	M33/36	165	960	875	822	24	M36×3/42	165					
	750	535	1491	230	970	900	855	24	M33/36	190	1020	935	882	24	M36×3/42	190					
800	565	1526	241	1025	950	905	24	M36/39	190	1085	990	932	24	M45×3/48	190						

电液双偏心法兰式蝶阀 ELECTRO-HYDRAULIC ECCENTRIC FLANGE TYPE BUTTERFLY VALVE

概述 GENERAL

电液型双偏心法兰式蝶阀由双偏心法兰式蝶阀和电液型驱动器组成。产品符合GB/T3037标准。具有密封性能好，操作力矩小，使用寿命长，安装方便等特点。适用于各类船舶、浮船坞、坞门、工程船中输液管路的控制。

Electro-hydraulic dual eccentric flange type butterfly valve consists of dual eccentric flange type butterfly valve and electro-hydraulic actuator. The butterfly valve accorded with standard GB/T3037. It has the characteristics of good sealing function, small operational force, long service life and convenient installation. It is suitable for pipeline control of various ships, floating docks, door gates, and working ships.

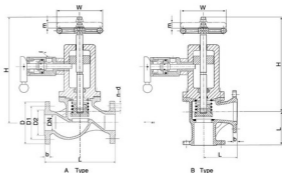


主要技术参数 MAIN TECHNICAL SPECIFICATION

公称压力 Nominal Pressure	公称 通径 Nominal Diameter	结构及法兰尺寸 Structure & Flange Dimension																	
		ISO (GB206-2005)								JIS				GB(GB/T1693-2008 R型)					
		H1	H1	L1	L	D	D1	n	d	L	D	D1	n	d	L	D	D1	n	d
1.0	80	85	395	437	46	200	160	8	M16/18	46	185	150	8	M16/19	46	170	138	8	M14/16
	100	130	500	507	64	220	180	8	M16/18	52	210	175	8	M16/18	52	190	158	8	M14/16
	125	140	530	542	70	250	210	8	M16/18	56	250	210	8	M20/23	56	215	183	10	M14/16
	150	160	595	600	76	285	240	8	M20/22	56	280	240	8	M20/23	56	240	208	12	M14/16
	200	190	660	665	89	340	295	8	M20/22	60	330	290	12	M20/23	60	310	273	12	M16/18
	250	220	725	730	114	395	350	12	M20/22	68	400	355	12	M22/25	68	380	336	14	M20/22
	300	255	775	795	114	445	400	12	M20/22	78	445	400	16	M22/25	78	435	391	16	M20/22
	350	265	840	861	127	505	460	16	M20/22	78	490	445	16	M22/25	78	485	441	18	M20/22
	400	310	935	926	140	565	515	16	M24/26	102	560	510	16	M24/27	102	545	496	18	M24/26
	450	325	1040	1021	152	615	565	20	M24/26	114	620	565	20	M24/27	114	600	551	20	M24/26
	500	390	1108	1156	152	670	620	20	M24/26	127	675	620	20	M24/27	127	650	601	20	M24/26
	550	428	1168	1214	170	730	675	20	M27/30	154	745	680	20	M30/33	154				
	600	430	1250	1206	178	780	725	20	M27/30	154	795	730	24	M30/33	154				
	650	460	1390	1346	210	835	780	24	M27/30	165	845	780	24	M30/33	165				
	700	480	1470	1396	229	895	840	24	M27/30	165	905	840	24	M30/33	165				
	750	530	1515	1481	230	965	900	24	M30/33	190	970	900	24	M30/33	190				
800	560	1550	1516	241	1015	950	24	M30/33	190	1020	950	28	M30/33	190					
1.6	80	85	395	437	46	200	160	8	M16/18	46	200	160	8	M20/23	46	185	147	8	M16/18
	100	130	500	507	64	220	180	8	M16/18	52	225	185	8	M20/23	52	205	167	10	M16/18
	125	140	530	542	70	250	210	8	M16/18	56	270	225	8	M22/25	56	225	187	10	M16/18
	150	160	595	600	76	285	240	8	M20/22	56	305	260	12	M22/25	56	255	217	12	M16/18
	200	190	660	665	89	340	295	12	M20/22	60	350	305	12	M22/25	60	325	281	12	M20/22
	250	220	725	730	114	405	355	12	M24/26	68	430	380	12	M24/27	68	390	341	14	M24/27
	300	255	775	795	114	460	410	12	M24/26	78	480	430	16	M24/27	78	445	396	16	M24/27
	350	265	840	861	127	520	470	16	M24/26	78	540	480	16	M30/33	78	495	447	18	M24/27
	400	310	935	926	140	580	525	16	M27/30	102	605	540	16	M30/33	102	560	505	18	M27/30
	450	325	1040	1021	152	640	585	20	M27/30	114	675	605	20	M30/33	114	610	555	20	M27/30
	500	400	1118	1166	152	715	650	20	M30/33	127	730	660	20	M30/33	127	665	610	22	M27/30
	550	428	1168	1214	170	775	710	20	M30/33	154	795	720	20	M36/39	154				
	600	435	1260	1216	178	840	770	20	M30/33	154	845	770	24	M36/39	154				
	650	465	1400	1356	210	860	790	24	M33/36	165	895	820	24	M36/39	165				
	700	485	1480	1406	229	910	840	24	M33/36	165	960	875	24	M39/342	165				
	750	535	1525	1491	230	970	900	24	M33/36	190	1020	935	24	M39/342	190				
800	565	1560	1526	241	1025	950	24	M36/39	190	1085	990	24	M45/348	190					



气动快关阀及控制箱 PNEUMATIC QUICK-CLOSING VALVE AND CONTROL BOX



主要技术参数 MAIN TECHNICAL SPECIFICATION

型式 TYPE	名称 NAME	公称压力 Nominal Pressure MPa	公称口径 Nominal Diameter (mm)
1	法兰连接尺寸按ISO的气动快关阀 Flanges joint dimension conform to ISO	0.6、1.0、1.6	15-150
2	法兰连接尺寸按JIS的气动快关阀 Flanges joint dimension conform to JIS	0.5、1.0、1.6	15-150
3	法兰连接尺寸按GB596的气动快关阀 Flanges joint dimension conform to GB596	0.6、1.0、1.6	15-150

PN	DN	结构尺寸 Structure Character				法兰尺寸 Flange dimension						手轮 Hand Wheel(W)	升程 Lift m
		L		H		D	D1	D2	b	n	do		
		A	B	A	B								
1.0	15	130	90	240	220	95	65	47	14	4	14	100	8
	20	150	95	240	220	105	75	58	16	4	14	100	8
	25	160	100	240	220	115	85	68	16	4	14	100	10
	32	180	105	240	220	140	100	78	16	4	18	120	11
	40	200	115	290	265	150	110	88	16	4	18	140	13
	50	230	125	290	265	165	125	102	18	4	18	140	16
	65	290	145	335	300	185	145	122	18	4	18	140	19
	80	310	155	360	320	200	160	133	18	8	18	160	23
	100	350	175	385	335	220	180	158	20	8	18	200	30
	125	400	200	415	365	250	210	184	22	8	18	200	40
150	480	225	460	400	285	240	212	22	8	22	250	44	

注：本快关阀还可以根据客户要求提供GB、JIS、DIN等法兰标准。

- 本控制箱内压缩空气瓶的设计压力为0.1-1.0MPa。
The design pressure of the compressed air is 0.1-1.0MPa.
- 本控制箱有多路气源对不同场合的速关阀进行控制。
There are several ways of compressed air to control different conditions of quick closing valve.
- 箱体内部表面及管路涂白漆，外表面涂红色。特殊可提供不锈钢箱体。
The control box is painted in white for inside surface and pipeline, red for surface of control box. Special ones can offer stainless steel box.
- 箱内压缩空气瓶、管路及附件组装后，进行气压试验。试验压力为0.875MPa，试验压力下，保持5分钟，不得有渗漏。
After assembled the air bottle, pipeline and accessories, the box should be tested by air pressure test at 0.875MPa, and kept it for 5 minutes without any leaks.
- 控制箱表面应光滑、无毛刺。
The surface of the box should be smooth and without burr.

集中控制箱
Central control box

舰船配电箱 MARINE SWITCH BOARD

PB 型配电箱可以对发电机进行短路、过载、欠压、逆功、分级卸载等保护；同时还可以实现自动同步并车、自动调频调载、发电机自动启动等功能。在发电机运行过程中，对电压、频率、电流、功率、功率因数等参数进行实时监测、报警和控制。根据客户要求，可以提供手动、半自动、全自动三种电站管理模式。

PB type switch board can provide protections for generator in short circuit, overload, undervoltage, reverse power, load shedding etc, at the same time it owns the function of automatic synchronization combining engine, automatic frequency and load, auto-start of generator. It can monitor, alarm and control the parameters of the voltage, frequency, current, power and power factor when the generator is working. Besides, it will provide three kinds of power plant management mode, such as manual, semi-automatic and fully automatic.

1. 功率、电压、电流、频率等参数的显示。

Indication of the parameters of the power, voltage, current and frequency.

2. 发电机状态显示

Indication of the state of generator

3. 发电机起、停控制，主开关合、分闸控制

Start & stop control of the generator, control of switching on & off break of main switch.

4. 发电机组同步并车；

Synchronization combining engines of generator set

5. 发电机组有功和无功分配；

Active power and reactive power distribution of generator set

6. 重载回向状态显示及控制

Indication and control of overloading information state

7. 发电机组逆功、欠压、过载、分级卸载和短路保护

Reverse power, undervoltage, overload, load shedding and short circuit protection of generator set

8. 报警指示和控制(自动增减机组, 自动卸载)

Alarm indication and control (Automatically increase or decrease unit, automatic unloading)

9. 报警记录查询, 参数设定, 密码保护功能

Functions of alarm record query, parameter setting, and password protection



主配电箱

Main switch board



电站管理系统 PPM



应急配电箱

Emergency switch board

船用应急配电箱 MARINE EMERGENCY SWITCH BOARD

应急配电箱正常情况下由主配电箱供电，当主配电箱失电时，应急配电箱发出应急发电机组自启动命令，各参数正常后，应发主开关自动合闸；当主配电箱恢复供电，应急配电箱应发主开关自动分闸，联络主开关自动合闸，同时发出应急发电机组停车命令。

Usually the emergency switchboard is supplied by the main distribution board, when the main distribution board is power-losing, the emergency switchboard will provide auto-start command of emergency generator set, after all parameters are normal, the main switch of emergency generator will be switched on automatically; when the main distribution board recover power, main switch of emergency generator on emergency switchboard will switch off automatically, contact main switch will switch on automatically and meanwhile give stop command of emergency generator set.

提供应急和停泊两种工作状态，提供发电机短路、过载、欠压和分级卸载等保护功能

Provide two working conditions of emergency and mooring, provide protection functions as short circuit, overload, undervoltage, and load shedding

船用组合起动屏 MARINE PACKAGED ACTIVATION CABINET

用于控制三相异步电动机的起动、停止和正反转，并对电机实施过载、短路、失压和断相等保护。可实现程序起动、故障自动切换等功能。结构分为固定式和抽屉式。

It is used to control the activation, stop, rotating and contranotating of three-phase asynchronous electromotor. At the same time, it has the protections of overloading, short circuit, disvoltage and phase cut off to the electromotor. Programme activation and bridge-cut-off of breakdown can be carried out. Its structure includes fixed and drawered.



组合起动屏

Packaged activation cabinet



机舱监控台 ENGINE ROOM MONITORING

● 概述 GENERAL

机舱监测集中控制台是现代船舶自动化控制的重要组成部分,能实现对主机、各类辅机的集中监控、报警监视、安全保护等。

YSDK 型机舱监测集中控制台具有造型美观、结构合理、维修方便、技术先进、使用可靠等特点,负荷“人机工程”要求,适用与各大中型船舶机舱设备的集中操纵和监控。

ECC is the important part of the automatic control system in the vessel. It has the function of monitoring and alarm for the main engine, machinery equipment and safety protection.

YSDK type ECC have a beautiful shape, reasonable structure, easy maintenance, advanced technology, reliable operation and in line with "human engineering" requirement. Applicable to the control and monitor system of all medium and large marine engine.

● 主要功能 MAIN FUNCTIONS

船内通信模块主要由声力电话、自动电话、轮机员呼叫主机、广播遥控台分站等组成,进行船内通信、联络等作用。

主机监控模块由主机遥控、监测报警灯和各种仪表组成,进行主机操纵、主机及各种辅助设备工作状态监控及显示,声光报警、应急处理及其它有关功能,以实现对手机等的操纵和监控。机舱监测具备双击冗余功能。

发电机监控模块由检测报警灯和各种仪表等组成,进行发电机及各种辅助设备工作状态监控及显示,声光报警、应急处理及其它有关功能,以实现发电机的监控。

其他电气设备和舱柜液位的检测、显示和报警系统,用于集中检测、显示各报警各种船用设备的工作状态,如压力、温度、电流、电压、功率及其运行状态等参数,和各个舱柜的液位和温度。

Internal communication modules include sound power telephone, automatic exchange telephone and engineer call system, public address remote control station.

Main engine control and monitor module include engine remote control, monitor alarm and all the instruments. It has the function of control, monitor and alarm for the main engine and other auxiliary machinery. Indicate the primary parameter, sound and light alarm, emergency shut down and others. Engine monitoring has dual redundant function.

Generator control and monitor module including monitor alarm and all the instruments. It has the function of monitor and alarm for the generator and other auxiliary machinery. Indicate the primary parameter, sound and light alarm, emergency shut down and others.

Detecting display & alarm system. It can display the equipment working status, such as pressure, temperature, electrical current, voltage, power, etc. Also the liquid tank level and temperature.



机舱集中控制台
Engine room monitoring

● 集控台 CENTRALIZED CONSOLE

集控台主要由控制台架、压载管路阀门遥控、液货管路阀门遥控、压载泵货油泵启停控制、舱底水报警单元等组成。具有外形美观、结构紧凑、操作可靠、维修方便等特点,适用于油船、化学品船、散货船、工程船等各类船舶设备的集中控制。

Central control console consists of console, ballast pipe valve remote control, fluid pipe valve remote control, ballast pump & oil pump on-off control, bilge water alarm unit etc. It has the characters of nice appearance, compact structure, reliable operation and easy maintenance. The central control console is widely applied in central control for equipments in oil tankers, chemical ships, bulk carrier, working ship etc.



集控台
Central control console

船用驾控台 MARINE BRIDGE CONTROL CONSOLE

● 概述 GENERAL

JSKT 系列驾驶室集控台是驾驶室内的核心操作装置,主要由五个功能模块组成,即导航、航行保障、操舵、主机监控和指挥通讯。装置以“集中控制、方便操作、模块组合、布置合理、美观实用、符合人机工程要求”为设计理念。外观款式上紧跟国际最新潮流,美观新颖,大方得体,维修方便,使用可靠。台内台面布置整洁清晰,巧妙合理。广泛应用于各类船舶的驾驶系统。

JSKT wheelhouse control console is a key operating device in the wheelhouse. It is a compact device used for ME control and Navig./automation equipments. It is designed according to the principles of centralized control, convenient operation, modular construction, rational layout, elegant appearance and practical use. It reaches the required standard of human-machine engineering and follows the latest international trend in appearance and style. It is easy to maintain and reliable to operate and is widely used in various types of vessels.

● 主要功能 MAIN FUNCTIONS

导航模块主要由雷达显示组成。

航行保障模块由航行灯、信号灯、闪光灯、雾笛控制器、火灾报警、雨雪清除器等组成。

操舵模块由操舵仪、磁罗经显示器组成。

主机监控模块由主机遥控、监控、应急车钟、各种状态显示板组成。

指挥通讯模块由声力电话、指挥电话、广播播控盒、扩音机组成。此外还有为各种设备提供电源灯的 AC220V、DC24V 分电箱。

The bridge control consoles will be designed as free-standing steel. The console is divided into stand alone parts; the portside are included the switches for the outside lighting, navigational lighting and the fire alarm panel, the middle part is equipped with systems for steering (repeater compass, tiller for steering gear, main giro unit).

The radar plants will be arranged as stand alone units.

The console will be completely wired and ready for connection.

The cable insert will be from below. The colour for the console will be according to the yard / owner request.



驾驶室控制台
Bridge console

分配电箱 DISTRIBUTION BOX

PX 船用分配电箱适用于交流 50Hz 380V、60Hz 440V 或直流 220V 以下电气线路中作为电力、照明配电之用,并对所控制的配电线路起过载和短路保护作用,广泛用于船舶、大型建筑、公共住宅等场所。

The distribution box for ships is fit for electric power, light distribution, which is used in electric line of DC 50Hz 380V, 60Hz 440V or under AC 220V. It also has the functions of short circuit and overloading protection in the controlled distribution line, and is widely used in ship, large building and public domestic building, etc.



分配电箱
Distribution box



磁力起动器 MAGNETISM CONTACTOR

PQ 型系列船用交流磁力起动器适用于交流 50Hz、380V 或 60Hz、440V 电气线路中，直接控制三相异步电机的启动、停止及可逆运转，并对电机起过载、断相和延时保护作用。

Series marine alternating magnetism contactor, which is fit for alternating 50Hz 380V or 60Hz 440V electric wires, controls the activation, stop and reversible rotating of three-phase asynchronous electromotor directly, and also it has the functions of overloading, phase cut-off and delayed protections to the electromotor.



磁力起动器
Magnetism contactor

电工试验板 ELECTRICAL TEST PANEL

PS 系列电工试验板适用于各类船舶，供船舶电工维护保养各类电机、电气、电子设备、照明设备作电源装置或试验电源装置之用。

Series electrical panel, which is fit for all kinds of ships, is used as power equipment or test power equipment for marine electricians to maintain all kinds of electromotor, electric and electronic equipment, light equipment.



电工试验板
Electrical test panel

岸电箱 SHORE CONNECTION BOX

PA 型系列岸电箱适用于直流 220V 以下、交流 50 或 60Hz、660V 以下电气线路中，供船舶停泊码头时用岸电供电，具有欠压、过载和短路保护，相序检测及断相保护；手动、自动相序转换；电力计量，电压、电流测量等。

Series shore connection boxes, which are fit for electricline of alternating current 60Hz, 440V or direct current under 220V, are used to supply shore power when ships berth. It has the functions of under voltage, short circuit and overloading protection; phase-sequence test and phase cut-off protection; manual-automatic phase-sequence; electric metering, voltage and current test.



岸电箱
Shore connection box

充放电板 CHARGE & DISCHARGE BOARD

PC 型船用充放电板适用于远洋船舶、海洋石油平台、港口、码头等领域，配备蓄电池可以不间断向直流负载供电。额定充电电压 DC24V 和 DC220V 可选。

Marine charge & discharge board is used to charge, discharge and floating charge to accumulators in the yields of ocean ship, ocean petroleum platform, port, dock etc., at the same time outputs electric energy to other direct current load and provides protection.



充放电板
Charge & discharge board



可控硅充放电板
Silicon controlled charge & discharge board



仪表附件 INSTRUMENT ACCESSORIES



GB/T584-2008 截止阀
GB/T584-2008 Shut-off valve



GB/T587-2008 截止阀
GB/T587-2008 Shut-off valve



直通自闭阀
Self-closing valve



GB3265-94 自闭阀
GB3265-94 Self-closing valve



甲板阀
Deck valve



三通根部阀
Three-way root valve



CB312 压力表阀 (A 型)
CB312 Pressure gauge Valve (A type)



CB312 压力表阀 (B 型)
CB312 Pressure gauge Valve (B type)



压力表针型阀
Pressure gauge needle valve



钢丝绳减震器
wire rope absorber



温度计保护套 (铜)
Thermometer thermowell (copper)

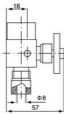
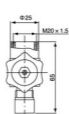
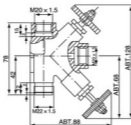
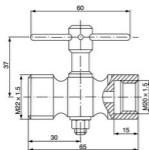


温度计保护套 (不锈钢)
Thermometer thermowell (stainless steel)



● 主要技术参数 MAIN TECHNICAL SPECIFICATION

型号 Model	名称 Name	公称压力 PN (MPa)	公称通径 DN (mm)	工作温度 Working Temp.	适用介质 Applicable medium
CB/T312-2008 A40006	压力表阀 Pressure gauge valve	4.0	6	≤ 250℃	淡水、空气、燃油、滑油、蒸汽 F.W, air, F.O, L.O, steam
CB/T312-2008 B100006	压力表阀 Pressure gauge valve	10.0			
CB/T312-2008 B160006	不锈钢压力表阀 Stainless steel pressure gauge valve	16.0			
	压力表针型阀 Pressure gauge needle valve	10.0	4	≤ 120℃	淡水、空气、燃油、滑油 F.W, air, F.O, L.O
	直通自闭阀 Self-closing valve	0.6	20, 25	≤ 100℃	淡水、海水、燃油、滑油 F.W, S.W, F.O, L.O
GB/T584-2008	截止阀 Shut-off valve	2.5	20 25	≤ 250℃	淡水、海水、燃油、滑油 F.W, S.W, F.O, L.O
GB/T587-2008	截止阀 Shut-off valve	2.5	20 25	≤ 250℃	淡水、海水、燃油、滑油 F.W, S.W, F.O, L.O
GB3265-94	自闭阀 Self-closing valve	0.1	25	≤ 80℃	燃油、滑油 F.O, L.O
铜质温度计温包保护套 Copper thermometer stem thermowell		1.0	G1/2" G3/4"	≤ 500℃	淡水、空气、燃油、滑油、蒸汽 F.W, air, F.O, L.O, steam
不锈钢温度计温包保护套 Stainless thermometer stem thermowell		1.6	M20X1.5 M27X2	≤ 900℃	海水、空气、CO ₂ 、燃油、滑油、蒸汽 S.W, air, CO ₂ , F.O, L.O, steam



● 内管附 PIPELINE ACCESSORY

用途：用于辅助测量燃油管路中的压力。
功能：隔断燃油与压力表，使压力表不限塞。
最大工作压力：60 MPa

Application: help to measure pressure inside fuel oil pipeline
Function: separate fuel oil and pressure gauge to make pressure gauge smooth
Max. working pressure: 60 MPa



内管附
Pipeline accessory

显示仪表 DISPLAY INSTRUMENT



AYK-03 型报警控制仪
AYK-03 type alarm control instrument

通道数量 No. of channels : 10 个
电 源 Power supply : DC 24V
LED 显示 Indication LEDs : 10X 红色 (报警显示) 10XRed (alarm)
1X 黄色 (领航/故障) 1XYellow (navigation/fail)
1X 绿色 (电源指示) 1XGreen (power)
功 能 Function : 蜂鸣器报警 Buzzer alarm
LED 闪光报警 LED flash alarm
灯光/声音自检功能 Light & horn test function
消音/消闪/变光功能/领航
Buzzer stop/flash stop/dimming/navigation
交/直流电源失电报警 AC/DC power fail alarm
报警输入延时 Input time delay : 0~99s (可选 option)



AI501 型数显控制仪
AI501 digital display control instrument

精 度 Accuracy : $\pm 0.2\%FS$
测量范围 Range: 999~999
输入信号 Input signal : DC 4~20mA
电源电压 Power voltage: DC 24V $\pm 10\%$
工作温度 Working temp. : $\leq -10\sim 55^{\circ}C$
控制点数 Control points : ≤ 4
触点容量 Contact capacity: AC220V 2A
面板尺寸 size : 96X96 mm 96X48mm 160X80mm
安装方法 Mounting method : 面板安装 Panel front mounting
用 途 Application : 控制箱和现场显示 Panel and local indication



SWT 型无纸记录仪
SWT type no paper recorder

仪表尺寸 Size : 144X144X240mm
通道数 No. of channels : 2~12 个
输入信号 Input signal : 1~5V ; 4~20mA; Pt100 等
输出信号 : 开关量 ; 模拟量及带电信号
Output signal: switch; analog and feedback electrical signal
电源 Power supply : 220VAC ; 24VDC
工作温度 Working temp. : 0~50 $^{\circ}C$
触点容量 Contact capacity : 30V DC/5A; 250V AC/5A
串行口通信 Series port : RS232 或 RS485 RS232 或 RS485
用途 : 现场显示并可与上位机联网通信
Application: locale display and communication with upper computer

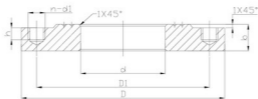


45C3 型广角显示仪
45C3 wide angle type indicator

外形尺寸 Outline dimension : 110X110mm
安装方法 Mounting method : 面板安装 Panel front mounting
输入信号 Input signal : DC 4~20mA
内 阻 Internal resistance : 1.5 Ω
精 度 Accuracy : $\pm 1.5\%FS$
刻度范围 Scale range : 0~100% 或用户要求 0~100% or as required
指示角度 Indicating angle : 250 度 250 deg.
工作温度 Working temp. : $-10\sim 55^{\circ}C$
重 量 Weight : 450g
应 用 Application : 控制箱和现场指示 Panel and local indication



座板 BEDPLATE



座板标准 Standard	公称压力 PN	通径 DN	外径 OD	中心圆直径 PCD	密封面外径 Sealing face OD	直径(螺纹) Diameter (thread)	数量 Qty	备注 Remark
GB/T 2501-2010	0.25、0.6	32	120	90	70	M12	4	
		50	140	110	90	M12	4	
		80	190	150	128	M16	4	
	1.0、1.6	15	95	65	47	M12	4	
		20	105	75	47	M12	4	
		25	115	85	58	M12	4	
		32	140	100	68	M16	4	
		50	165	125	78	M16	4	
		65	185	145	102	M16	4	
		80	200	160	122	M16	8	
GB/T 4196-2011	0.6、1.0 1.6、2.5	20	95	88	48	M12	4	
		25	105	73	56	M12	4	
		32	115	83	64	M14	6	
	0.6、1.0	100	190	158	138	M14	8	
		125	215	183	164	M14	10	

船用吃水计 MARINE DRAFT

用途：用于测量船舶实际吃水深度。

功能：吃水计可在波浪中测量水位的平均高度。

测量范围：0-750 mm

Application: measure actual draft depth of ships

Function: draft can measure average height of water level

Measuring range : 0-750 mm

磁性锚 MAGNETIC ANCHOR

用途：磁性锚用于将小船锚泊在船体外舷。

Application: magnetic anchor can make small ship close to outside shipbody



磁性锚

Magnetic anchor



吃水计

Draft

安全栅 SAFETY BARRIER

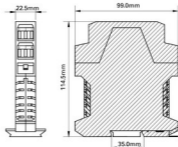
● 概述 GENERAL

GS8000-EX 系列隔离式安全栅采用电磁耦合技术, 实现电源、信号输入、信号输出的可靠隔离, 无需本安接地, 大大加强了检测和控制回路的抗干扰能力。它是通用型隔离安全栅, 能满足各种现场本安仪表的匹配。

GS8000-EX series isolated safety barrier adopt electromagnetic coupling technique, realize reliable isolation among power, signal input, and signal output, and no need intrinsic safety earth, which greatly strengthens anti-jamming abilities for monitor and control loop. It is general type isolated safety barrier, which can match with all kinds of local intrinsic safety instruments.



● 外形尺寸 OUTLINE DIMENSIONS



● 电流输入型安全栅 CURRENT INPUT TYPE SAFETY BARRIER

型号 Model	输入数 / 输出数 Input no. /output no.	传输精度 Transmission accuracy	温度漂移 Temp. excursion	绝缘强度 Insulation strength	使用环境温度 Ambient temp.
GS8047-EX	一进一出 one in one out	0.1%F.S.	0.05%F.S.	2500V a.c.;1min	-20~60℃
GS8035-EX	一进二出 one in two out	0.1%F.S.	0.05%F.S.	2500V a.c.;1min	-20~60℃
GS8036-EX	二进二出 two in two out	0.1%F.S.	0.05%F.S.	2500V a.c.;1min	-20~60℃
GS8049-EX	一进一出 one in one out	0.1%F.S.	0.05%F.S.	2500V a.c.;1min	-20~60℃
GS8043-EX	一进一出 one in one out	0.1%F.S.	0.05%F.S.	2500V a.c.;1min	-20~60℃
GS8039-EX	二进二出 two in two out	0.1%F.S.	0.05%F.S.	2500V a.c.;1min	-20~60℃

● 电阻输入型安全栅 RESISTANCE INPUT TYPE SAFETY BARRIER

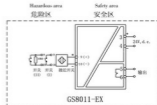
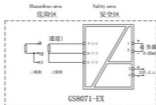
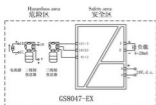
型号 Model	输入数 / 输出数 Input no. /output no.	传输精度 Transmission accuracy	温度漂移 Temp. excursion	绝缘强度 Insulation strength	使用环境温度 Ambient temp.
GS8071-EX	一进一出 one in one out	0.1%F.S.	0.05%F.S.	2500V a.c.;1min	-20~60℃
GS8076-EX	一进二出 one in two out	0.1%F.S.	0.05%F.S.	2500V a.c.;1min	-20~60℃
GS8079-EX	二进二出 two in two out	0.1%F.S.	0.05%F.S.	2500V a.c.;1min	-20~60℃
GS8073-EX	一进一出 one in one out	0.1%F.S.	0.05%F.S.	2500V a.c.;1min	-20~60℃
GS8077-EX	一进一出 one in one out	0.1%F.S.	0.05%F.S.	2500V a.c.;1min	-20~60℃
GS8078-EX	二进二出 two in two out	0.1%F.S.	0.1%F.S.	2500V a.c.;1min	-20~60℃
GS8075-EX	一进一出 one in one out	0.2%F.S.	0.1%F.S.	2500V a.c.;1min	-20~60℃
GS8074-EX	一进一出 one in one out	0.1%F.S.	0.1%F.S.	2500V a.c.;1min	-20~60℃



● 开关量输入型安全栅 SWITCH INPUT TYPE SAFETY BARRIER

型号 Model	输入数/输出数 Input no./output no.	响应时间 Response time	使用环境温度 Ambient temp.
GS8011-EX	一进一出 one in one out	≤ 20ms	-20~60℃
GS8111-EX	一进二出 one in two out	≤ 20ms	-20~60℃
GS8018-EX	二进二出 two in two out	≤ 20ms	-20~60℃
GS8012-EX	二进二出 two in two out	≤ 20ms	-20~60℃
GS8112-EX	三进三出 three in three out	≤ 20ms	-20~60℃
GS8114-EX	四进四出 four in four out	≤ 20ms	-20~60℃

● 接线图 CONTACT FORM



● 液体流量标准装置 STANDARD FACILITIES FOR LIQUID FLOWRATE

● 概述 GENERAL

液体流量标准装置是封闭管道液体流量的量值传递标准。本装置采用柴油作为检测介质，具有流量范围宽，运行稳定，检测精度高等特点，可适应各种流量计的检定要求。装置经江苏省质量技术监督局考核合格，可为用户提供流量仪表检测业务。

Standard facilities for liquid flowrate is a liquid flow standard for quantity transmission in closed pipeline. The device adopts diesel oil as detecting medium, can be suitable for calibrated requirements of various flowmeters. It has the features of wide flow range, steady running, and high detecting accuracy etc. The device passed qualified examination by Jiangsu Province Quality and Technical Supervision Bureau etc., and can provide detection of flow instrument for clients.

● 主要技术参数 MAIN TECHNICAL SPECIFICATION

1. 检定方法：静态容积法、标准表法；
2. 装置不确定度：静态容积法 $\pm 0.05\%$ ，标准表法 $\pm 0.1\%$ ；
3. 流量稳定度： $\pm 0.2\%$ ；
4. 工作压力： $0.3-0.4\text{MPa}$ ；
5. 检表口径：DN10-DN300；
6. 检表种类：液体容积式流量计。

1. Calibration method: static volume, standard meter;
2. Uncertainty: static volume method $\pm 0.05\%$, standard meter method $\pm 0.1\%$;
3. Flow stability: $\pm 0.2\%$;
4. Working pressure: $0.3-0.4\text{MPa}$;
5. Calibrated diameter: DN10-DN300;
6. Calibrated type: liquid volumetric flowmeter.



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YUAN WANG INSTRUMENT



江苏远望仪器有限公司

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