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JIANGSU · CHINA



以专业引领科技，以科技成就专业
Professionalism navigates science & technology, science & technology conceives speciality



泰州市华泰船舶仪器有限公司
TAIZHOU HUATAI SHIP INSTRUMENT CO., LTD.

泰州市华泰船舶仪器有限公司地处经济发达的姜堰区域中工业园区，公司致力于研究、开发、生产船舶用压力、温度、液位显示测量控制仪器仪表及集中控制系统。产品满足并取得了CCS、ABS、DNV-GL、LR、BV、NK、KR、RINA和ZC的规范及证书。船用压力表获计量器具制造许可证。

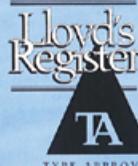
公司经过多年的发展，已拥有一支高素质的管理、科研、生产、销售、服务团队。具有一定的市场占有率和知名度。公司按ISO9001的要求建立了一套完整的质量管理体系。

我们秉承“以质量求生存，以服务求发展，以诚信求市场”的理念，持续创新，锐意进取，努力为用户提供更新，更完善的产品。与用户共同发展，共创辉煌。

Taizhou huatai ship instrument co., ltd is located economic development zone of Jiangyan City Industrial Park. The company specified on researching, developing, and producing marine pressure, temperature, the level measuring instrument and central controlled system. These products meet the requirements and specification of marine products rules of CCS, ABS, DNV-GL, LR, BV, NK, KR, RINA and ZC. Marine pressure gauge gain the production licenses of measuring instrument.

After years of development, our company has a high quality talent of scientific research, management, production, sales, and service team. It has the market share and gain more popularity. In accordance to the requirements of ISO 9001, it established a complete range of quality management system.

We inherit concept of "survival by the quality, serve for development and in good faith to market", continuous innovation, improving, and try our best to offer the newest and perfect products for customers. Pursue for mutual development and create a bright future with our customers.



资 质荣誉

Quality Honor



品质◎更优, 服务更好。

荣誉是对历史贡献的肯定, 我们的眼光将更加远瞻!
具备长远的目标, 使我们阔步向前



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YC 型舰船用压力表 MARINE PRESSURE GAUGE

压力表是以金属弹性元件为核心的现场测量仪表,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

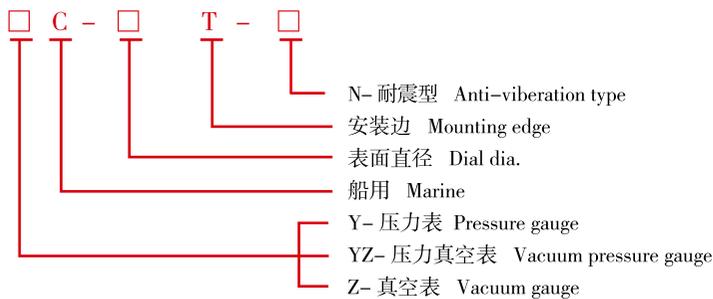


耐震表
Anti-vibration gauge

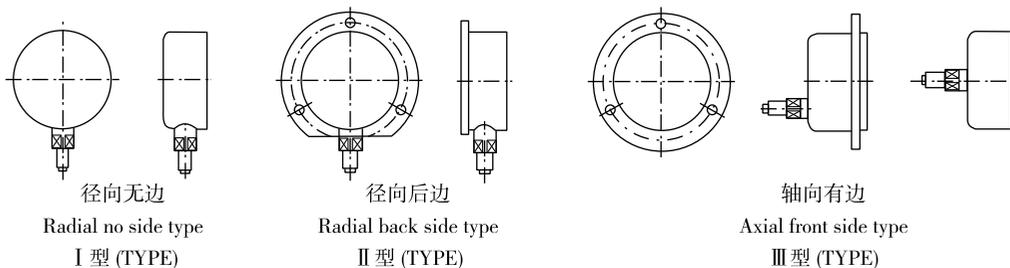
主要技术参数 TECHNICAL SPECIFICATION :

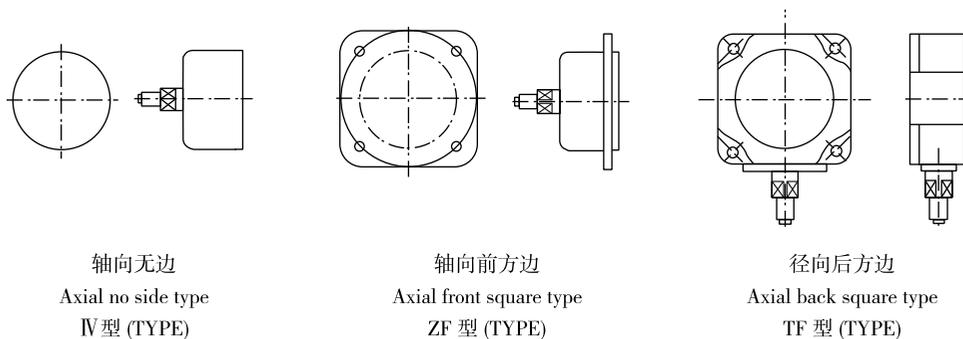
- 1、表面直径 Dial diameter(mm) : 60、75、100、150、200
- 2、测量范围 Measuring Range(MPa) : 0~0.06、0~0.1、0~0.16、0~0.25、0~0.4、0~0.6、0~1、0~1.6、0~2.5、0~4、0~6、0~10、0~16、0~25、0~40、0~60
-0.1~0、-0.1~0.1、-0.1~0.15、-0.1~0.3、-0.1~0.5、-0.1~0.9
-0.1~1.5、-0.1~2.4
- 3、精度 Accuracy : 2.5 级 (Grade)、1.6 级 (Grade)
- 4、接口螺纹 Connection thread:M14×1.5、G 3/8”、M20×1.5、G1/2”
- 5、材料 Materia: 铁合金 Ferroalloy、铝合金 Aluminum alloy、铜合金 Copper alloy、全不锈钢 Stainless steel

型号标记 MODEL SIGN :



型式及代号 TYPE AND CODE :

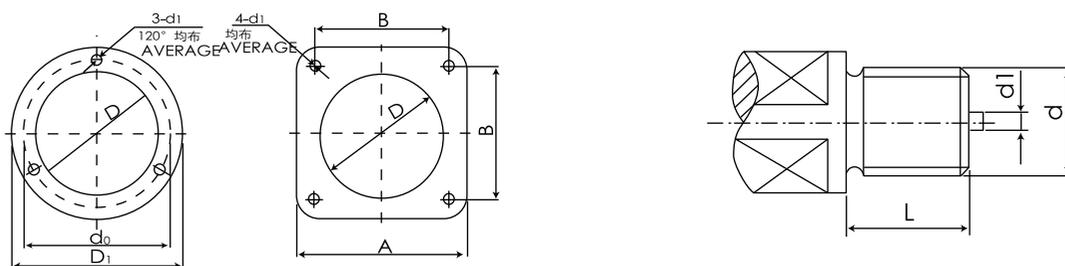




压力表主要安装尺寸 PRESSURE GAUGE'S MOUNTING DIMENSION : (图一)(FIGURE I)

(mm)

D	D ₁	A	B	d ₂	d ₀	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



YZB 型船用压力表组合板 MARINE PRESSURE GAUGE COMBINE PANEL



(图二) (Figure II)



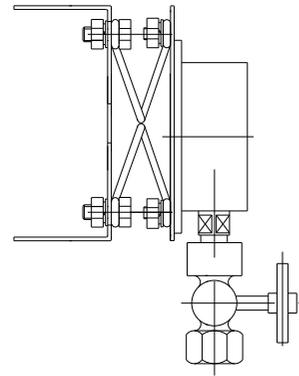
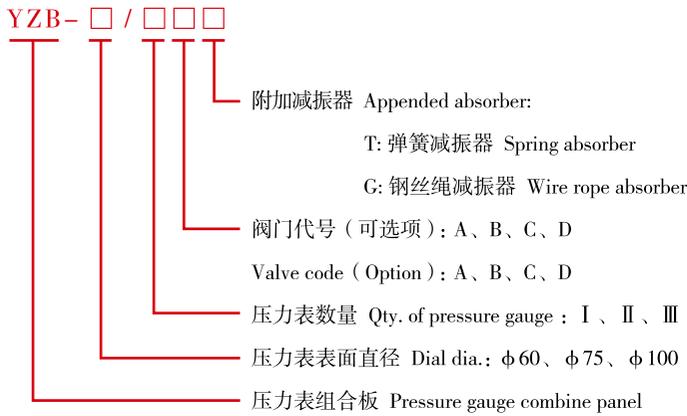
(图一) (Figure I)



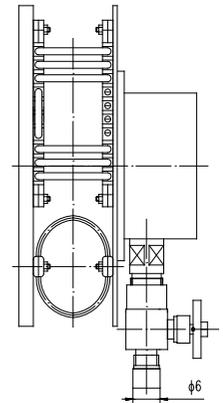
产品型号 Product Model	表面直径 (mm) Dial diameter	L (mm)	H ₁ (mm)	H ₂ (mm)	B (mm)	可选用阀门 (参见 P46) Valve option (Refer to P46)		
						代号 Code	接口 Connection	阀门型号及规格 Model and spec of valve
YZB-□/ I □ 单联压力表组合板 Single unit pressure gauge panel	Φ60	100	60	120	—	A	M20X1.5	CB312-77 A40006
	Φ75	120	72	128	—	B		
	Φ100	145	85	140	—	C		
YZB-□/ II □ 双联压力表组合板 Two units pressure gauge pane	Φ60	200	60	120	90	C	Φ8X1	针型压力表阀 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	D	-	其它型式的阀门 Valves of other models



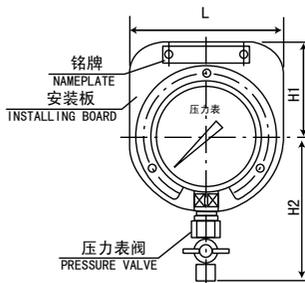
压力表组合板型号标记 MODEL SIGN OF PRESSURE GAUGE COMBINE PANEL :



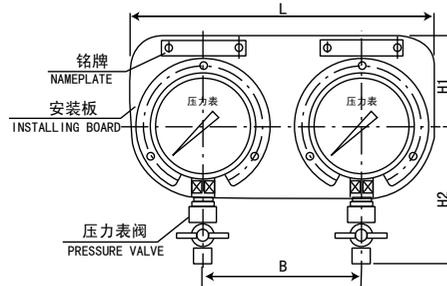
弹簧减振器
Spring absorber



钢丝绳减振器
Wire rope absorber



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



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

压力表用阀 Valve of Pressure Gauge



三通试验阀
Three way valve



压力表针型阀
Pressure gauge needle 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)

技术参数 TECHNICAL PARAMETER:

型号 Model	名称 Name	公称压力 PN(MPa)	公称通径 DN(mm)	工作温度 Working Temperature	适用介质 Applicable Medium
CB312-77 A40006	压力表阀 Pressure gauge valve	4.0	6	$\leq 250^{\circ}\text{C}$	淡水、空气、燃油、滑油、蒸汽 Fresh water,air,fuel,oil,steam
CB312-77 B100006	压力表阀 Pressure gauge valve	10.0			
CB312-77 B160006	不锈钢压力表阀 SS Pressure gauge valve	16.0		$\leq 400^{\circ}\text{C}$	
	压力表针型阀 Pressure gauge needle valve	10.0	4	$\leq 120^{\circ}\text{C}$	淡水、空气、燃油、滑油 Fresh water, air, fuel, oil

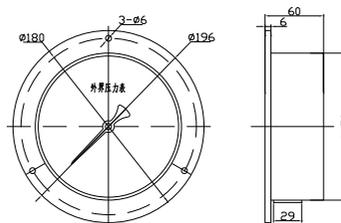


特种压力仪表 SPECIAL PRESSURE GAUGES

外界压力表 ENVIRONMENT PRESSURE GAUGE :



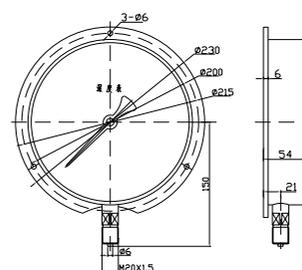
型 号 Model : YC-150W
测量范围 Measure range : 0-1.6 0-2.5MPa
精 度 Accuracy : 1.6, 2.5
表面直径 Dial dia. : $\Phi 150$
用 途 : 用于测量舰船外界压力
Application: measure external pressure for ships



深度表 DEPTH GAUGE :



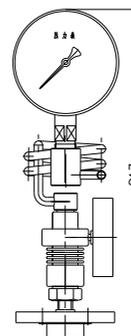
型 号 Model : YC-150S YC-200S
测量范围 Measure range : 0-30 ~600m
精 度 Accuracy : 1.6, 2.5
表面直径 Dial dia. : $\Phi 150, \Phi 200$
用 途 : 用于测量舰船外界液位的深度
Application: measure the depth of ships outside level



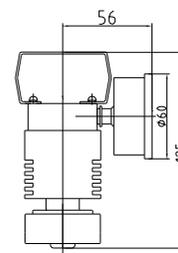
最大压力表 MOST PRESSURE GAUGE :



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 : $\Phi 100 \times 287$
 $\Phi 100 \times 390$
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



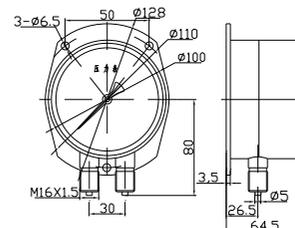
型 号 Model : DY-60Z 型
测量范围 Measure range : 0-10MPa、0-16MPa、0-25MPa
精 度 Accuracy : 2.5 级
产品外形尺寸 Outline dimensions : 约 155X110X82mm
接口螺纹 : M27X2.5、M27X3、G3/4" 等, 或订货时注明
Connection: M27X2.5, M27X3, G3/4" etc. or others required
用 途 : 用于测量柴油机的最大爆炸压力
Application: measure max. explosion pressure of diesel 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. : $\Phi 100$
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 型船用隔膜式压力表 MARINE DIAPHRAGM SEALED PRESSURE GAUGE

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.

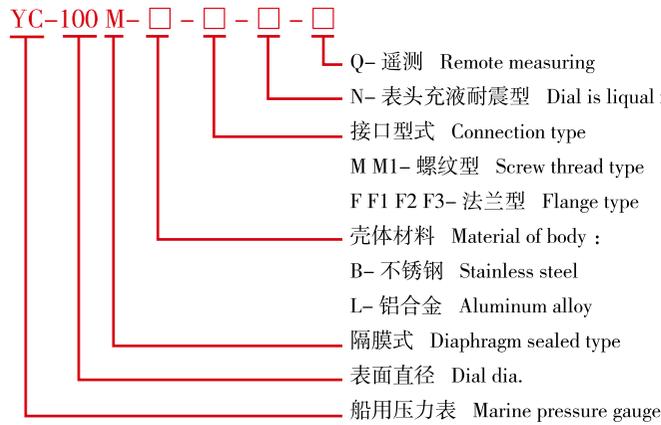
主要技术参数 MAIN TECHNICAL SPECIFICATION :

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. : $\leq 80^{\circ}\text{C}$

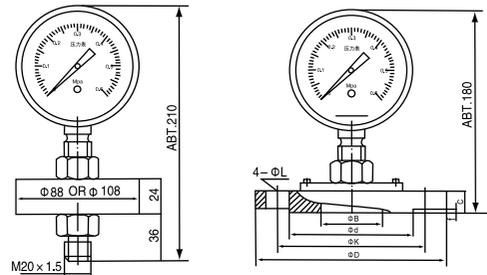
型号标记 MODEL SIGN :



YC-100M-B-M-N

YC-100M-B-F-N

YC-100M-B-M-N-Q

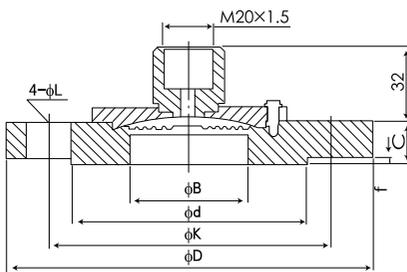


YC-100M-B-M-N

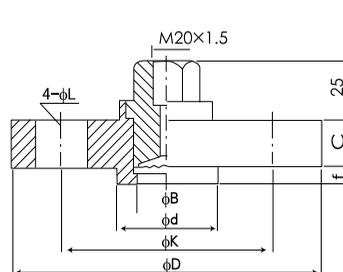
YC-100M-B-F-N

隔膜装置尺寸 THE MOUNTING DIMENSION :

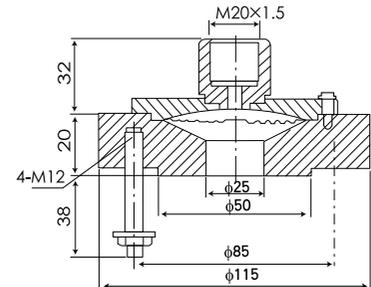
型式 Model	测量上限 Upper limit	法兰标准 Flange standard	D	K	d	f	L	C	B	图号 Drawing No.	材料 Material
F	4MPa	GB2506-89	185	145	122	3	18	20	65	图一 Figure I	SUS304 SUS316
F1	6~10MPa		165	125	102	3	18	20	50	图二 Figure II	
	16~25MPa		115	85	68	2	14	68	25		



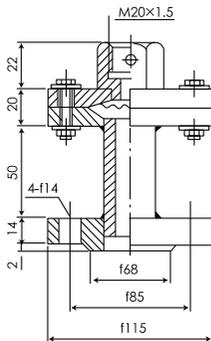
图一 Figure 1 ($P \leq 4 \text{ MPa}$) F



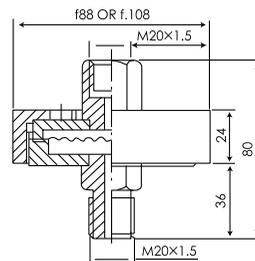
图二 Figure 2 ($16 \text{ MPa} \leq P \leq 25 \text{ MPa}$) F1



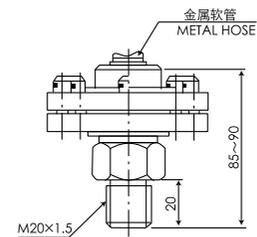
图三 Figure 3 ($P \leq 4 \text{ MPa}$) F2



图四 Figure 4 ($P \leq 4 \text{ MPa}$) F3



图五 Figure 5 ($P \leq 4 \text{ MPa}$) M



图六 Figure 6 ($P \leq 60 \text{ MPa}$) M1



YSZK型船用压力传感器 MARINE PRESSURE TRANSMITTER

YSZK 型压力传感器由扩散硅压力感应器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测量各种液体、气体介质的压力。

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

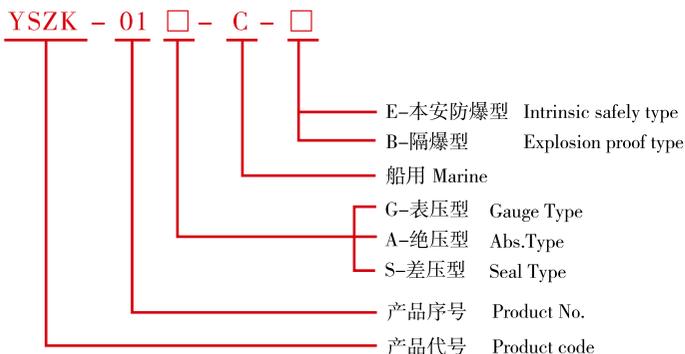
主要技术参数 TECHNICAL SPECIFICATION :

1.电源电压: DC 24V	Power voltage: DC 24V
2.测量精度: $\pm 0.5\%$ FS	Measuring accuracy: $\pm 0.5\%$ FS
3.工作温度: $-20\sim+60^{\circ}\text{C}$	Working Temp.: $-20\sim+60^{\circ}\text{C}$
4.输出信号: DC 4~20mA(二线制 HART)	Output signal: DC 4~20mA(two wires HART)
5.防护等级: IP66	Protection: IP66
6.抗过载能力: 2.5倍量程	Over load: 250% above max. range
7.接口螺纹尺寸: M20X1.5、G1/4"、G1/2"	Press connection size: M20X1.5、G1/4"、G1/2"
8.防爆标志: ExiaIICT3~6 ExdIICT3~6	Explosion proof: ExiaIICT3~6 ExdIICT3~6

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、0~0.02、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-01A-C-E

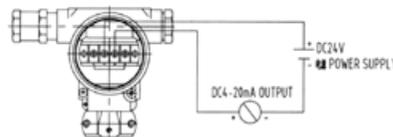
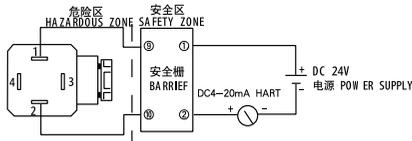
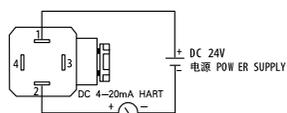


YSZK-01G-C-B

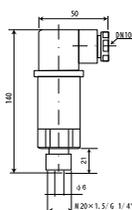


YSZK-01G-C-E

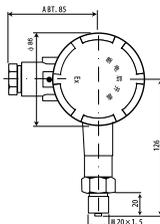
接线图 WIRING DIAGRAM



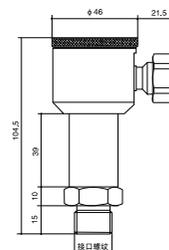
外形尺寸 OUTLINE DIMENSION



YSZK-01G-01A-C-E



YSZK-01G-C-B



YSZK-01S-C-E



YWK-50-C 型舰船用压力控制器 MARINE PRESSURE CONTROLLER

YWK-50-C 型压力控制器是可随被控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.

(MPa)

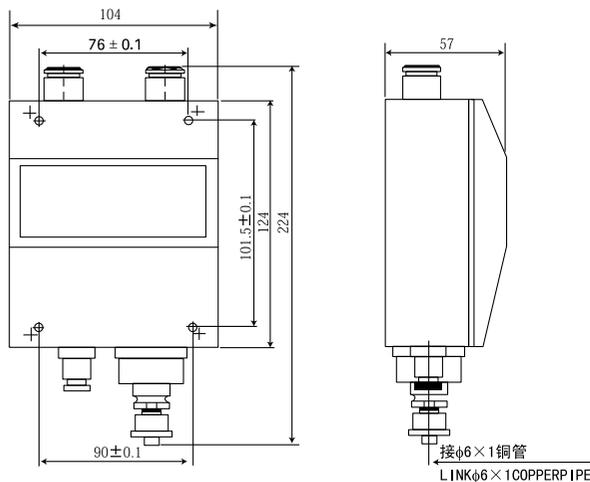
主要技术参数 TECHNICAL SPECIFICATION :

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 incorrosive 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、青铜、铜锡焊料无腐蚀作用 The medium is incorrosive to brass, lead, stainless steel and solders of tin and copper.

型号标记 MODEL SIGN:

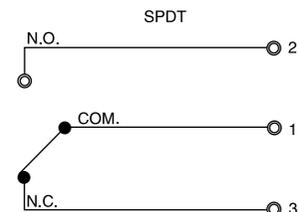


外形尺寸 OUTLINE DIMENSION:



YWK-50-C 型 (TYPE)

接线图 CONTACT FORM :



当压力上升时 1-2 接通

1-2 MAKES ON RISING PRESSURE

当压力下降时 1-3 接通

1-3 MAKES ON FALLING PRESSURE



YPK-03-C 型船用压力控制器 MARINE PRESSURE CONTROLLER

YPK-03 型（膜片式）压力控制器可用于电动位式控制电路中，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.

技术参数 TECHNICAL SPECIFICATION:

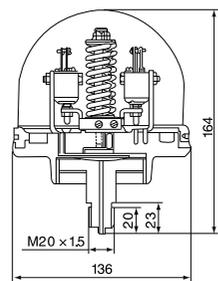
型号 Model	控制范围 MPa Control range	精度 MPa Accuracy	触点容量 Contact Capacity
YPK-03-C-01	0.1~0.5	± 0.02	AC380V 15A 二组触点 two contacts
YPK-03-C-02	0.1~1.2	± 0.04	
YPK-03-C-03	0.6~3	± 0.1	



型号标记 MODEL SIGN:



外形尺寸 OUTLINE DIMENSION :



WLG 型船用金属套温度计 MARINE METALLIC PROTECTOR THERMOMETER



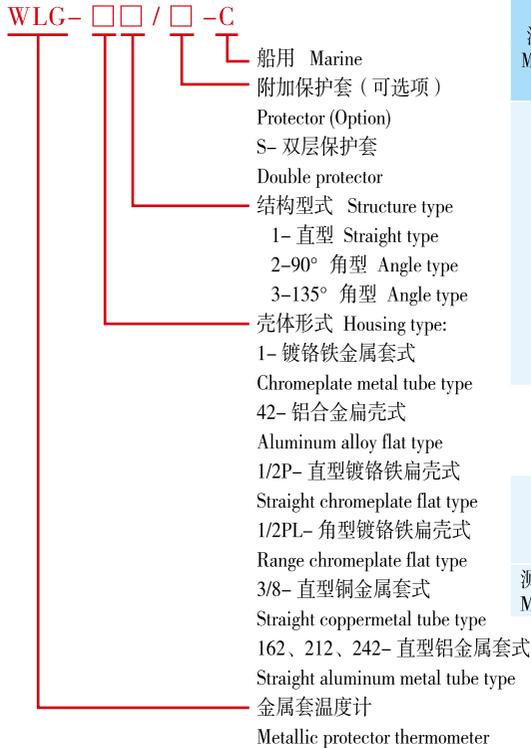
金属套温度计由玻璃温度计和金属保护套构成，适用于舰船及其它工业设备的舱柜或管路中，测量液体、气体等介质的温度。

Metallc 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:

主要技术参数 TECHNICAL SPECIFICATION:

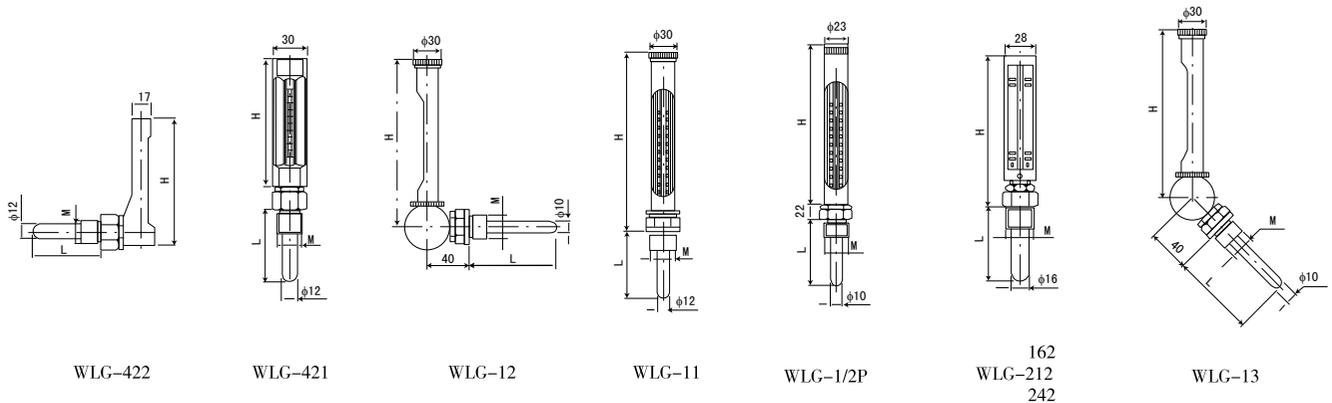


测量范围℃ Measuring range	感温液体 Temp. sensing Liquid	型号 Model	公称长度尺寸 (mm) Nominal Length Dimension		接口螺纹 尺寸 M Connector Dimension
			上体长度 H Upward length	下体长度 L Downward length	
-50~+50	有机液 Organic liquid 水银 (Hg) Mercury	WLG-11-C	130 ± 2	25	G1/2" G3/4" M20x1.5 M27x2
-30~+50		WLG-12-C	150 ± 2	30	
0~50		WLG-13-C	200 ± 2	40	
0~100				60	
0~150				80	
0~200				100	
0~300				120	
0~350				160	
0~400				200	
0~450					
0~500		WLG-421-C	110 ± 2	100	
0~600		WLG-422-C	150 ± 2	120	
		WLG-423-C	200 ± 2	200	
0~100	有机液 Organic liquid	WLG-1/2P-C	110	40	G1/2"
0~150		WLG-1/2PL-C	110	100	G1/2"
0~200		WLG-3/8-C	70	25	G3/8"
0~500	水银 (Hg) Mercury	WLG-162-C	162	95	G1/2"
0~600		WLG-212-C	212	125	G1/2"
0~600		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型船用温度传感器 MARINE TEMPERATURE TRANSMITTER

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%

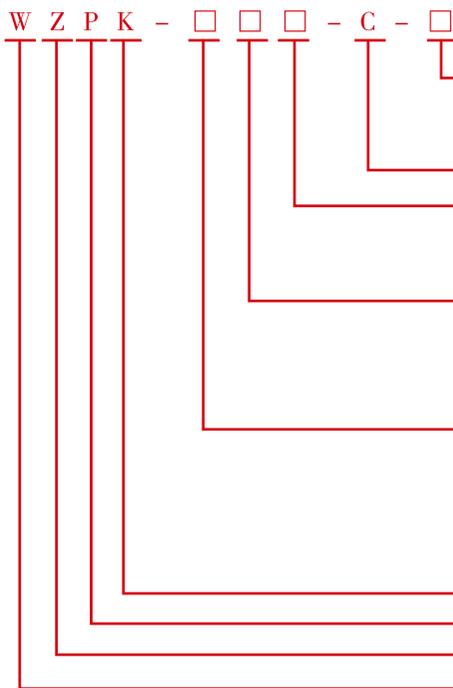
2.测量精度Measuring accuracy: ± 0.5% F.S

3.防护等级Protection: IP66

4.工作温度Working temp: -20~80℃

5.防爆标志Explosion proof: ExiaII CT3~6 / Ex dII CT4~6

型号标记 MODEL SIGN



- E-本安型 B-隔爆型 D-附加现场显示型
E-Intrinsic safety B-Explosion proof housing
D-Appending locale indication
- 船用型 Marine
- 输出信号 Output signal
- I-输出4~20mA I-Output4~20mA
- R-Pt电阻值 R-Pt resistance
- 保护管型式 Thermowell type
- 1- φ 12单保护管 single thermowell
- 2- φ 16双保护管 double thermowell
- 3- 其他型式 Other types
- 安装固定型式 Mounting type
- 1-可动内螺纹接头 Movable female screw connector
- 2-可动外螺纹接头 Movable male screw connector
- 3-活动法兰式 Loose flange type
- 4-固定法兰式 Fixed flange type
- 铠装式 Armor type
- 铂电阻传感器 Pt resistance sensor
- 热电阻 Heat resistance
- 温度仪表 Temperature instrument

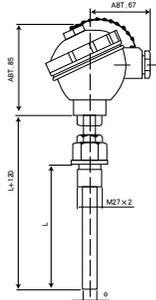


WZPK-221-C WZPK-221-C-B

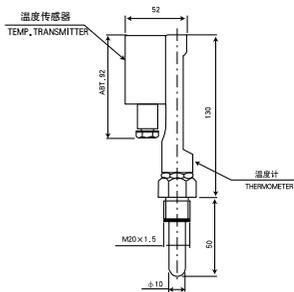


WZPK-211-C-D WZPK-23R-C

外形尺寸 OUTLINE DIMENSION

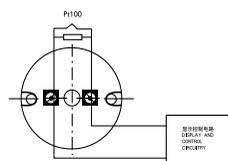


WZPK-221-C

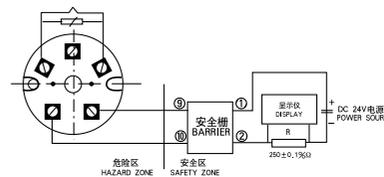


WZPK-211-C-D

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



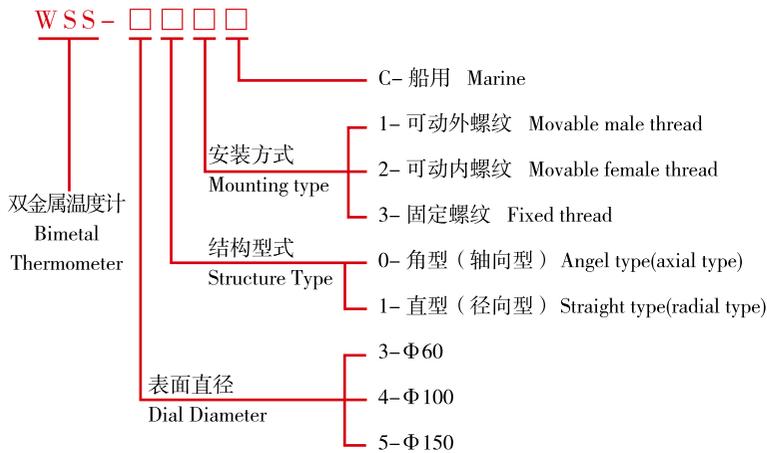
WSS 型船用双金属温度计 MARINE BIMETAL THERMOMETER

双金属温度计是适用于测量中、低温介质温度的现场检测仪表，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。

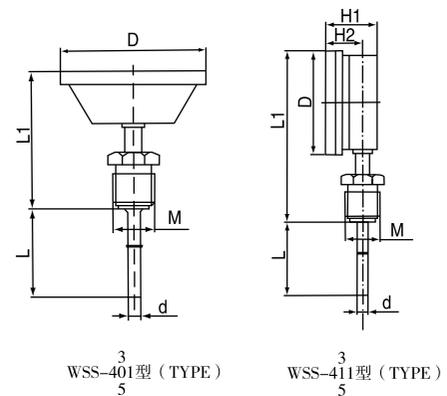
Bimetal thermometer is locale measuring instrument for mid & low temp. medium, and can be used to directly measure temp. of gas, liquid or steam in ship and other industrial equipment.



型号标记 MODEL SIGN:



外形尺寸 OUTLINE DIMENSION:



主要技术参数 TECHNICAL SPECIFICATION :

型号 Model	表面直径 DN D(mm)	测量范围 (°C) Measure range	分度值 (°C) Scale	精度 等级 Accuracy	保护管直径 d(mm) Protector dia.	插入长度 L(mm) Insert length	安装螺纹 M Connection	L ₁	H ₁	H ₂
WSS-301	Φ60	-40~80	2	2.5	Φ6	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	Φ60	0~300	5	300	110	44	32			
		0~500	10							
WSS-401	Φ100	-40~80	2	Φ10	75	M27X2 G 3/4"	140	51	33	
0~50		1	100							
0~100		2	150							
0~150		2	200							
0~500		10	300							
WSS-501	Φ150	0~200	5	Φ10	400	M27X2 G 3/4"	180	60	38	
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 型船用耐震压力式温度计 MARINE ANTI-VIBRATION PRESSURE TYPE THERMOMETER

WTY 型温度计具有体积小、耐腐抗振等特点, 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 that have characteristics of small cubage, anti-corrosive & anti-vibration can be used to measure temp. of bush for of marine diesel engine, oil and exhaust, and also can be used to measure temp. of gas, liquid and steam in other industrial equipment.

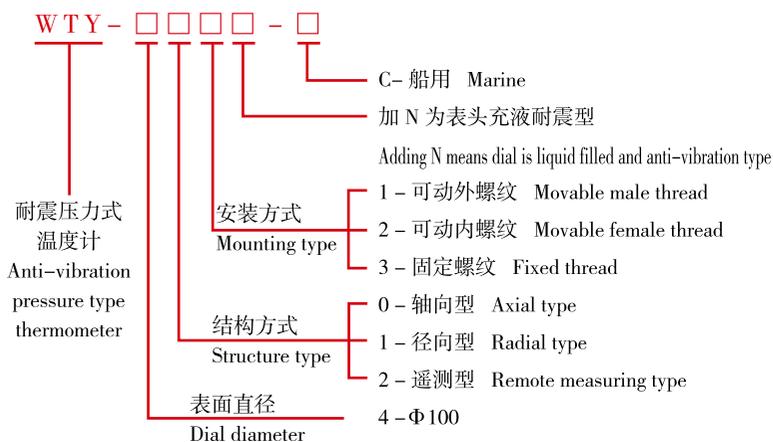


轴向型
Axial type

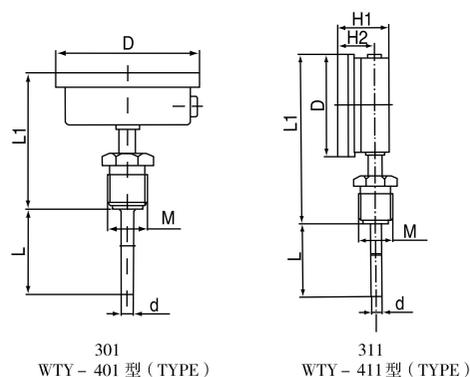
径向型
Radial type

遥测型
Remote measuring type

型号标记 MODEL SIGN:



外形尺寸 OUTLINE DIMENSION:



主要技术参数 TECHNICAL SPECIFICATION :

型号 Model	公称直径 DN D(mm)	测量范围 (°C) Measure range	分度值 (°C) 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	1.6	Φ8~Φ12	75	M27X2	150	-	-
		0~100								
		0~150								
		0~200								
WTY-411	Φ100	0~300	5	10	Φ8~Φ12	200	G 3/4"	230	38	25
		0~400								
		0~500								
		0~600								

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 tube 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 型船用压力式温度计 MARINE PRESSURE TYPE THERMOMETER

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 TECHNICAL SPECIFICATION :

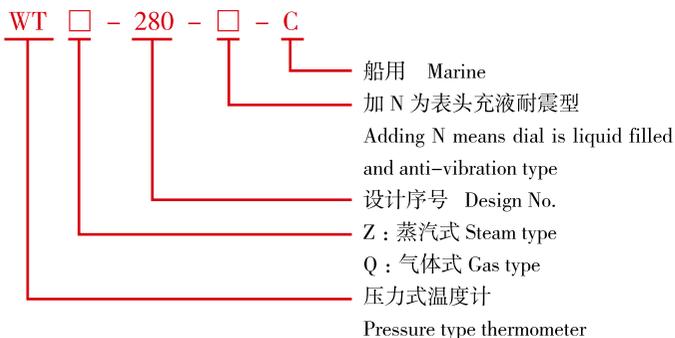
型号 Model	测量范围 (°C) Measuring range	精度等级 Accuracy	温包插入深度调节范围 L(mm) Bulb insert length adjustable range	温包直径 Bulb dia.	安装螺纹 Connection	壳体材料 Casing material
WTZ-280	-40~+60	0~150	170~260	Φ15	M27X2	胶木 Bakelite
	-20~+60	20~120				
	0~50	60~160				
	0~100					
WTQ-280		0~200	320~420	Φ22	G 1/2"	铜合金 Copper alloy
		0~250				
	-60~+40	0~300				
	-40~+60	0~400				
		0~500				

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

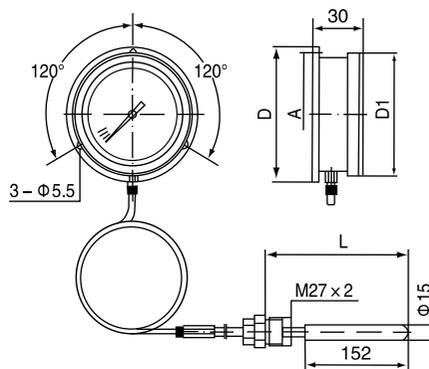
注：订货时应注明型号、测量范围、安装螺纹及毛细管长度。

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



WTF 型船用温度调节阀 MARINE TEMPERATURE REGULATING VALVE

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. regulated valve is a temp. controlling equipment that based on heat expansion principle can be widely used to auto regulate temp. of heat exchanger, fuel warm-up, centralize heat supplying, 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 TECHNICAL SPECIFICATION :

- 公称通径：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	

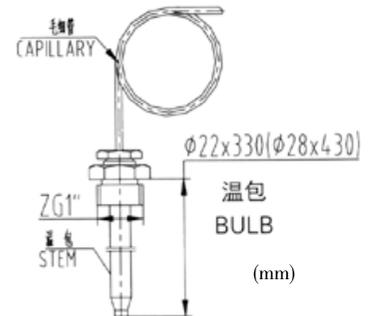
- 注：1、额定流量是指阀的进口压力为 0.49MPa 两端压力差为 0.1MPa 且全开时的流量。
2、最大允许压差是指阀关闭时两端的压差。
3、订货时需注明：产品型号、毛细管长度、控制范围、热媒名称（蒸汽或热油）
1.Rating flow is the flow when import pressure of valve is 0.49MPa, pressure differential between two ends is 0.1 MPa, and valves are open.
2.Max. pressure drop is the pressure differential when the valve is closed.
3.Please note product model, capillary length, control range, hot medium(steam or hot oil) when you order the products.



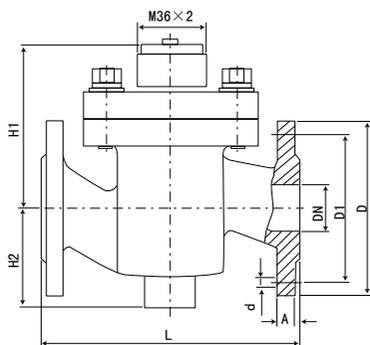
型号标记 MODEL SIGN:

W T F - □ □ / □ □ - C

- 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
- 调节阀公称通径 Nominal diameter of regulated valve
- 温度调节阀 Temperature regulated valve

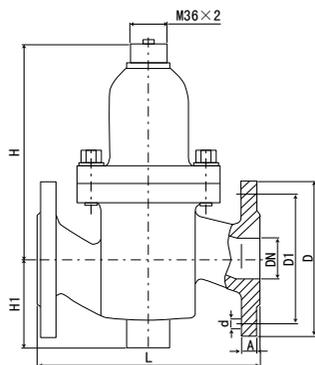


外形尺寸 OUTLINE DIMENSION:



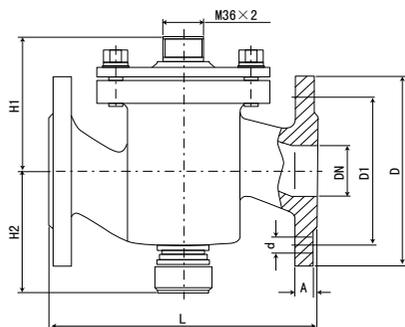
单座阀尺寸 Single seater valve dimension :

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



WTZK 型船用温度控制器 MARINE TEMPERATURE CONTROLLER

WTZK 型温度控制器是可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.

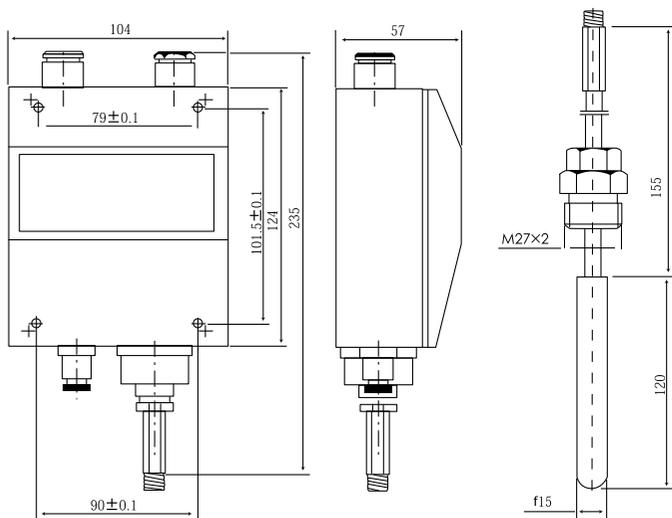
主要技术参数 TECHNICAL SPECIFICATION :

序号 No.	温度调节范围 (°C) Temperature regulated range	切换差可调范围 (°C) Switching error adjustable range (°C)	设定值误差 (°C) Enactment error	重复性误差 (°C) 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		

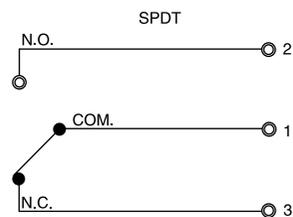
型号标记 MODEL SIGN:



外形尺寸 OUTLINE DIMENSION:



接线图 CONTACT FORM :



当温度上升时 1-2 接通
1-2MAKES ON RISING TEMP.
当温度下降时 1-3 接通
1-3MAKES ON FALLING TEMP.



ULG 型船用自闭式玻璃管液位计 MARINE SELF-CLOSING TUBULAR TYPE GLASS LEVEL GAUGE

ULG 型船用自闭式玻璃管液位计设计新颖，安装方便，适用于小型舱柜内低粘度介质的液位测量。当玻璃管意外破裂时，内置阀门可自动关闭，无液体渗漏。

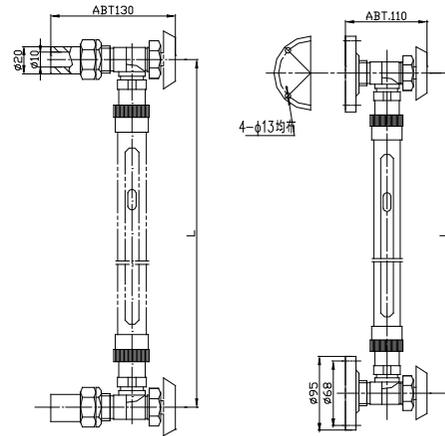
ULG type marine self-closing tubular type glass level gauge which has the characteristics of designing novelty, installing conveniently is used for level measuring for low viscosity medium in miniature tank. When the glass tube breaks accidentally, the internal valve can close automatically without liquid leakage.



ULG-H/B



ULG-F/B

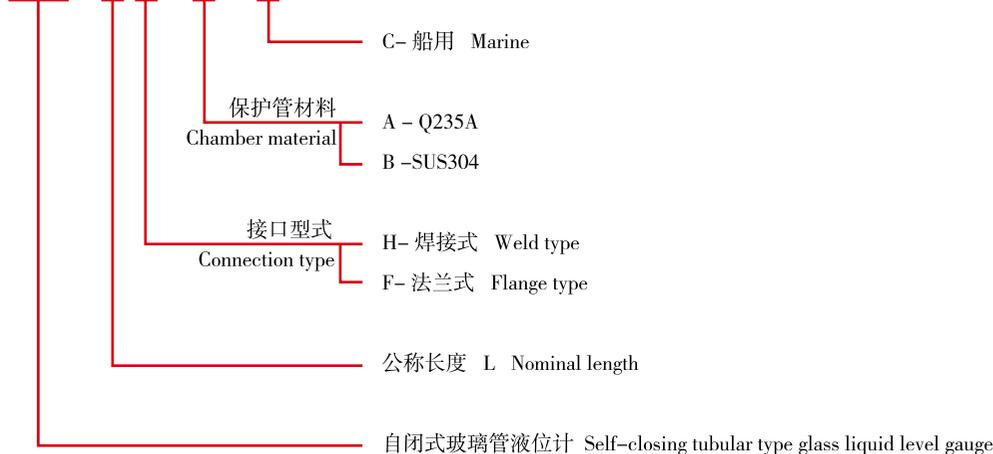


技术参数 TECHNICAL SPECIFICATION :

型号 Model	工作压力 Working pressure	工作温度 Working temperature	适用介质 Medium	接口型式 Connection type	公称长度 Nominal length(mm)
ULG- □□ / □ - □	0.5MPa	0~100℃	油、水 Oil, water	焊接式 (H 型) Weld type(H type) 法兰式 (F) GB573-65 DN20 PN16 Flange type (F) GB573-65 DN20 PN16	300~1000

型号标记 MODEL SIGN:

ULG - □ □ / □ - □





ULB-3 型船用双色玻璃板液位计 MARINE FLAT TYPE GLASS LEVEL GAUGE

ULB-3 型船用双色玻璃板液位计适用于船舶及其它工业设备中对舱柜内介质的液位进行测量。

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



ULB-3A-C



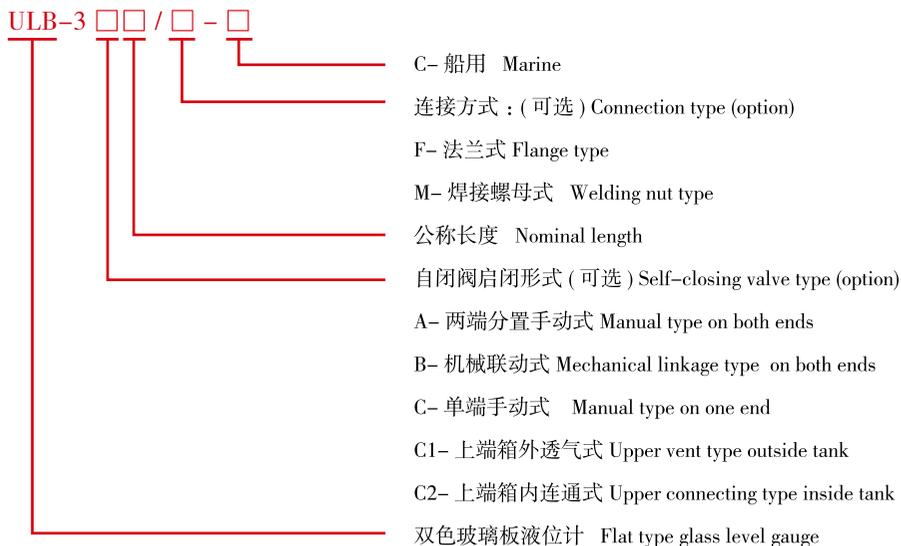
ULB-3B-C



ULB-3C-C

型号标记 MODEL SIGN:

ULB-3 □□ / □ - □





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

公称长度 : 270 ~ 4710mm

Nominal pressure : 0.2MPa

Test pressure : 0.5MPa

Application: water or oil flash point higher than 65℃

Working temperature : 0~80℃

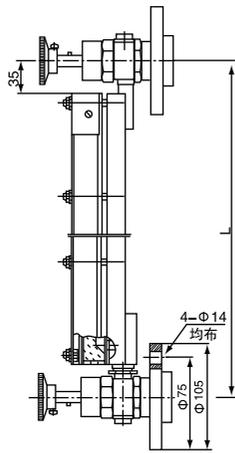
Material : Self-closing Valve-copper alloy

Body- SUS304 or Q235A

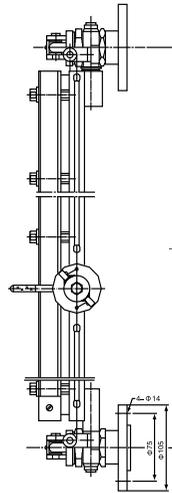
Glass plate - Boron silicon glass

Nominal length:270~4710mm

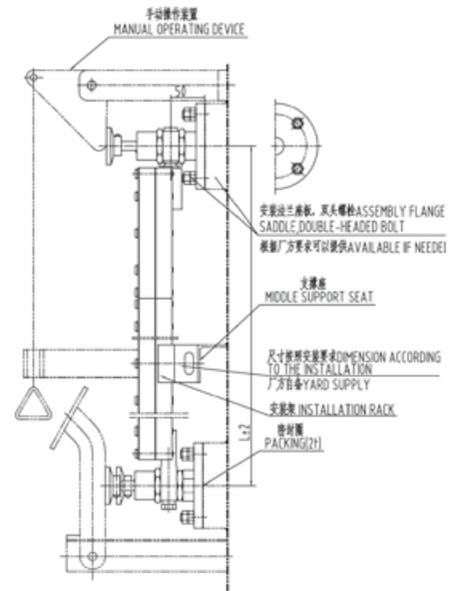
安装及外形尺寸 ASSEMBLY AND OUTLINE DIMENSION :



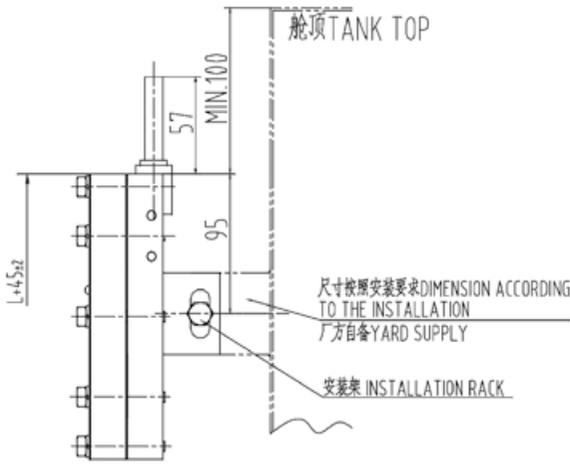
ULB-3A



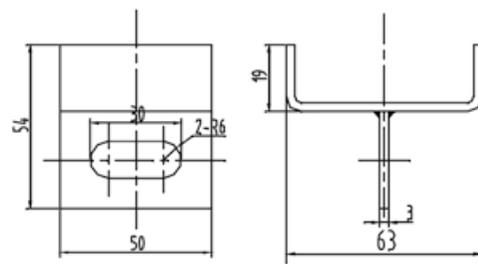
ULB-3B



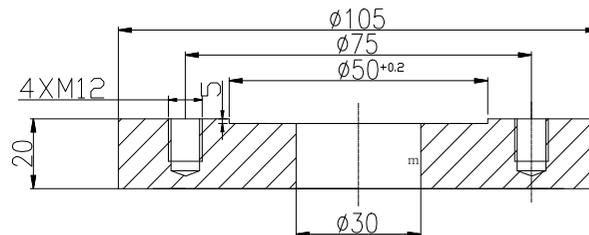
ULB-3B1



ULB-3C



安装架
INSTALLATION RACK



焊接座板
Welding plate



ULB-3G 型船用锅炉液位计 MARINE BOILER LEVEL GAUGE

ULB-3G 型船用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 marine boiler level gauge is applicable to measure the level of marine boiler and other industrial boiler.



ULB-3G



ULB-3G

主要技术参数 MAIN TECHNICAL SPECIFICATION :

公称压力 : 2.5 MPa

工作温度 : 220℃

公称长度 : 310 ~ 2235mm

接口法兰 : GB2506-89 PN1.6 DN20 DN25

适用介质 : 蒸汽、水

材 料 : 本 体 - Q235A 玻璃块 - 硼硅玻璃

Nominal pressure : 2.5MPa

Working temperature : 220℃

Nominal length : 310 ~ 2235mm

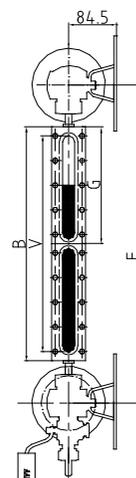
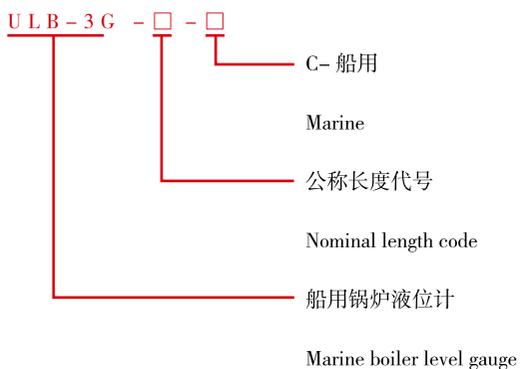
Connection flange:GB2506-89 PN1.6 DN20 DN25

Medium: Steam, water

Material : Body - Q235A

Glass plate - boron silicon glass

型号标记 MODEL SIGN:



ULB-3G

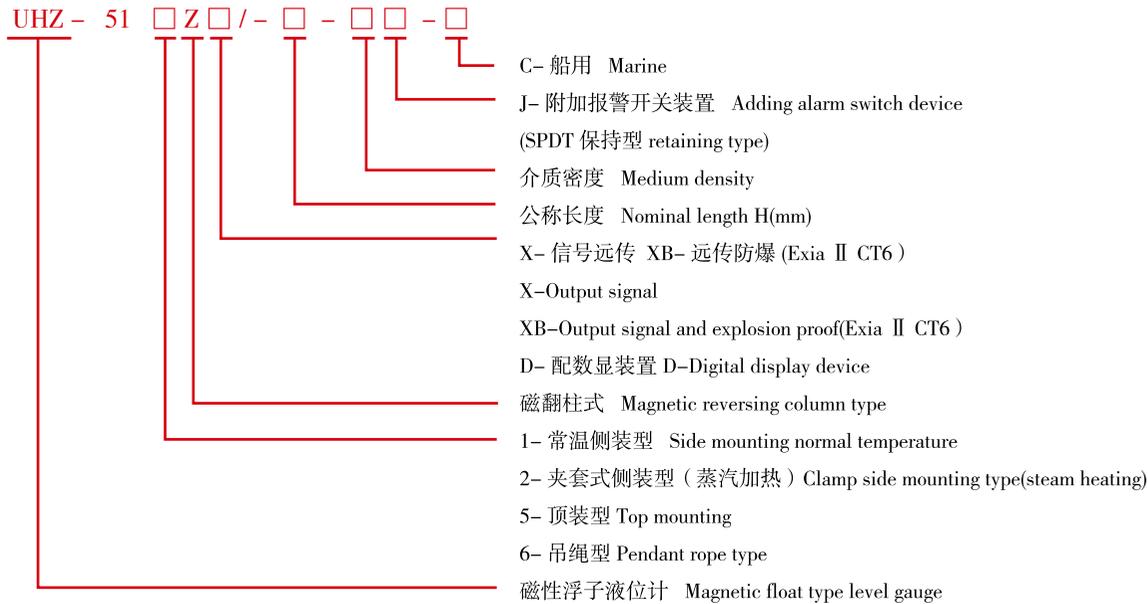


UHZ 系列船用磁性浮子液位计 UHZ SERIES MARINE MAGNETIC FLOAT LEVEL GAUGE

UHZ 系列船用磁性浮子液位计可以在高温、高压、高粘度条件下安全可靠地测量液位，显示醒目，读数直观，且测量范围大，显示面板可任意旋转，便于观察，配上控制开关，可实现液位或界位的上、下限报警和控制，配上液位变送器，可将液位、界位信号转换成二线制 4 ~ 20mA DC 标准信号，实现远距离检测。

UHZ series marine magnetic float level gauge have advantages such as reliable operation in high temperature, high pressure, high viscosity and strong corrosive situation. striking in display, clear in reading and wide in range. Matched with control switch, the level or interface can be alarm or controlled at upper or lower points while matched with transmitter, the liquid level or interface can be transferred into 4~20mA DC standard signal to realize measure, indication, recording and control with long distance.

型号标记 MODEL SIGN:



UHZ-511 船用磁性浮子液位计 MARINE MAGNETIC FLOAT LEVEL GAUGE

技术参数 TECHNICAL PARAMETER:

型号规格 Model	UHZ-511Z □ / - □ - □ □ - □
指示精度 Indication accuracy	± 10mm
公称长度 Nominal length	300~6000mm
介质密度 Medium density	≥ 0.8
工作压力 Working pressure	1.0 (1.6, 2.5) MPa
介质温度 Medium temperature	≤ 120℃





UHZ-512 船用磁性浮子液位计 MARINE MAGNETIC FLOAT LEVEL GAUGE

技术参数 TECHNICAL PARAMETER:

型号规格 Model	UHZ-512Z □ / - □ - □□ - □
指示精度 Indication accuracy	± 10mm
公称长度 Nominal length	300~6000mm
介质密度 Medium density	> 0.8
工作压力 Working temperature	1.0 (1.6、2.5) MPa
介质温度 Medium temperature	≤ 200℃



UHZ-515 I型船用磁性浮子液位计 MARINE MAGNETIC FLOAT LEVEL GAUGE

技术参数 TECHNICAL PARAMETER:

型号规格 Model	UHZ-515Z □ / - □ - □□ - □
指示精度 Indication accuracy	± 10mm
公称长度 Nominal length	500~3000mm
介质密度 Medium density	> 0.8
工作压力 Working temperature	≤ 1.6MPa
介质温度 Medium temperature	≤ 150℃

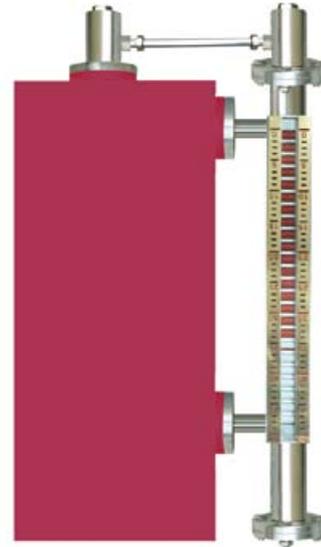




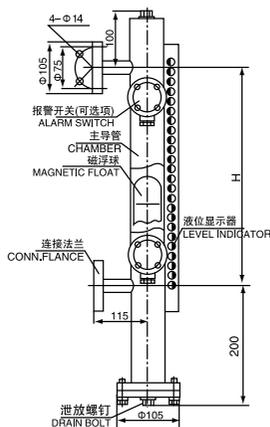
UHZ-515 II型船用磁性浮子液位计 MARINE MAGNETIC FLOAT LEVEL GAUGE

技术参数 TECHNICAL PARAMETER:

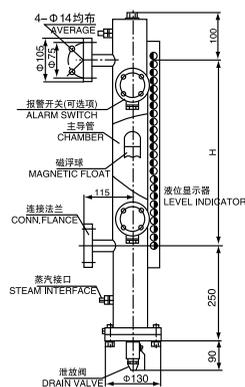
型号规格 Model	UHZ-516Z □ / - □ - □ □ - □
指示精度 Indication accuracy	± 10mm
公称长度 Nominal length	500~6000mm
介质密度 Medium density	≥ 0.8
工作压力 Working pressure	1.0 (1.6, 2.5) MPa
介质温度 Medium temperature	≤ 250℃



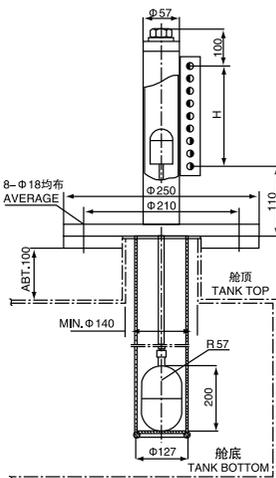
安装及外形尺寸 ASSEMBLY AND OUTLINE DIMENSION :



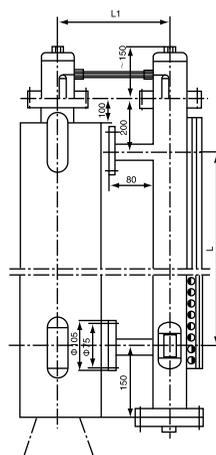
UHZ-511



UHZ-512

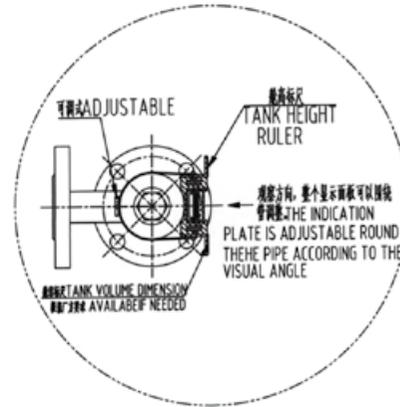
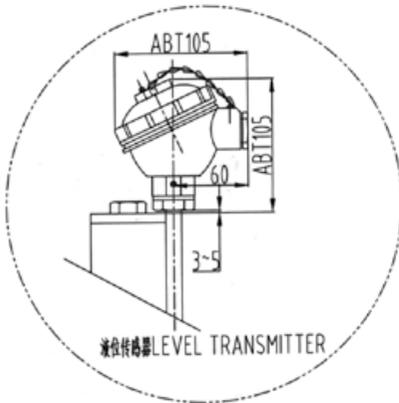
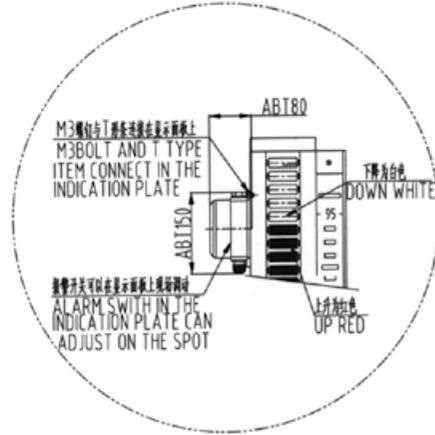
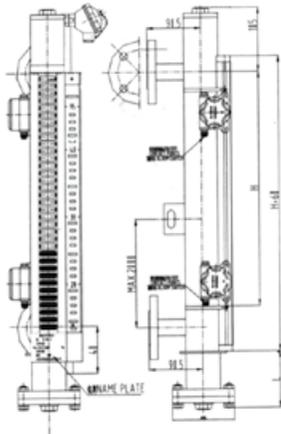


UHZ-515 I 型



UHZ-515 II 型





磁性浮子液位计用变送器 MAGNETIC LEVEL GAUGE TRANSMITTER

变送器的检测管内装有一组干簧管和精密电阻，当管外磁性浮子随液位上下变化时，检测管内位于液面处的干簧管依次接通使变送器的电阻值发生变化，接线盒内的转换电路模块将其阻值转换成电流输出。

There is a set of dry reed switch and precise resistor in the detecting tube of transmitter. The dry reed switch at liquid surface will close in turn resulting in resistance change, and the converting circuit module in junction box changes the resistance into current output.

技术参数 TECHNICAL PARAMETER:

测量范围 Measuring range: 300-6000mm

精确度 Accuracy: $\pm 1.5\%$ F.S (测量范围大于 1000mm) (measuring range: more than 1000mm)

电源 Power supply: 24V DC (15-35V)

输出信号 Output signal: 4-20mA DC 二线制 two wire



磁性浮子液位计报警开关：磁驱动型液位开关

MAGNETIC LEVEL GAUGE ALARM SWITCH:MAGNETIC DRIVING LEVEL SWITCH

报警开关是应用在磁翻柱液位计上最可靠、实用型液位开关，经磁力驱动，使该开关具有双稳态记忆功能。开关安装在磁翻柱面板上，处于和液位计同一磁耦合系统中，与工艺介质不接触，具有耐高温、防爆和防震保护功能。

Alarm switch is the most reliable and economic switch matched with magnetic level gauge. The switch acts by magnet force to make switch have bistable and memorial performances. The switch is fixed on scale board of magnetic level gauge, so they are in the same magnetic coupling system, and it doesn't contact with process medium. Besides, it is high temperature resistant, explosion proof and shockproof.

技术参数 TECHNICAL PARAMETER:

开关类型 Switch type

磁驱动开关，单刀双掷，具有防震保护。

Magnetic driving switch, SPDT, and shock-proof.

触点容量 Contact capacity AC220V 0.5A

工作温度 Operating temperature: -20~80℃

防护等级 Protection class: IP66 or IP68

本安型 Intrinsically safety type: Exia II CT3-T6

隔爆型 Isolated explosion proof type: Exd II CT3-T6



阀门选择项 OPTION FOR VALVE:



GB/T584-99截止阀
GB/T584-99 Shut-off valve



GB/T3265-94自闭阀
GB/T3265-94 Self-closing valve



GB/T-601直通自闭阀
GB/T-601 Self-closing valve



UFT 型浮筒液位计 CFT TYPE FLOAT LEVEL GAUGE

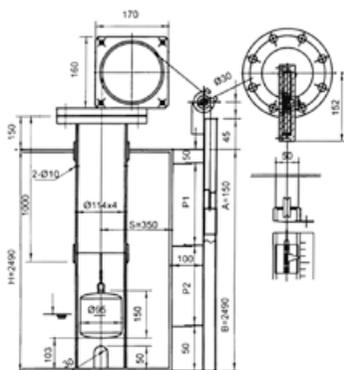
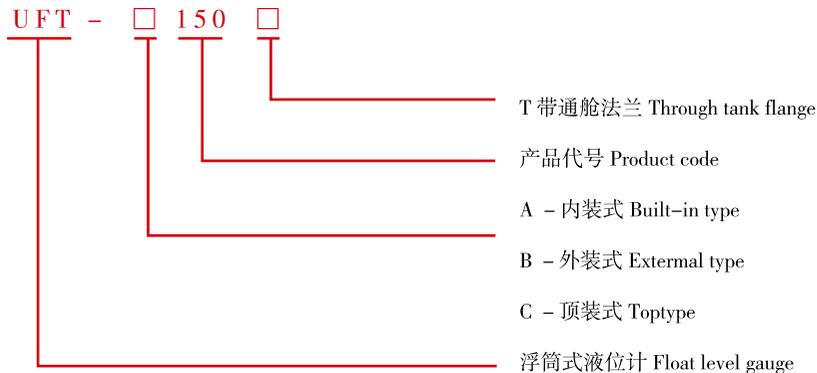
UFT 型浮筒液位计是根据 GB/T3210-94 标准生产，适用于船舶及其它工业设备中对舱柜内介质的液位进行测量及控制。

UFT type float level gauge is referring to GB/T3210-94, it can be used ship and other industrial instruments to measure and control level in the tank.

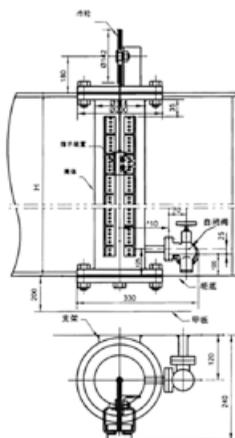
主要技术参数 MAIN TECHNICAL PARAMETERS:

型号 Type	安装型式 Installation method	公称通径 DN Nominal diameter	用途 Application	备注 Remark
A150	内装式 \\ Built-in type	150	大型舱柜 \\ Large tank 大型舱柜 \\ Large tank	
B150	外装式 \\ External type	100	大、中型舱柜 \\ Large or meddle tank 大、中型舱柜 \\ Large or meddle tank	
C	顶装式 \\ Top type	150	可移式油柜 \\ Portable oil tank 可移式油柜 \\ Portable oil tank	$L+L3 \leq 3000$
		100	双层底 (滑油、水) 舱柜 \\ Double bottom (LO, Water) tank 双层底 (滑油、水) 舱柜 \\ Double bottom (LO, Water) tank	$L+L3 \leq 6000$
		200	双层底 (滑油、水) 舱柜 \\ Double bottom (LO, Water) tank 双层底 (滑油、水) 舱柜 \\ Double bottom (LO, Water) tank	$L+L3 \leq 10000$

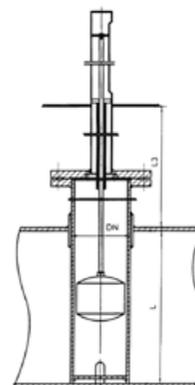
标记示例 MARK OF EXAMPLE:



A 型
A type



B 型
B type



C 型
C type



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

概述 GENERAL :

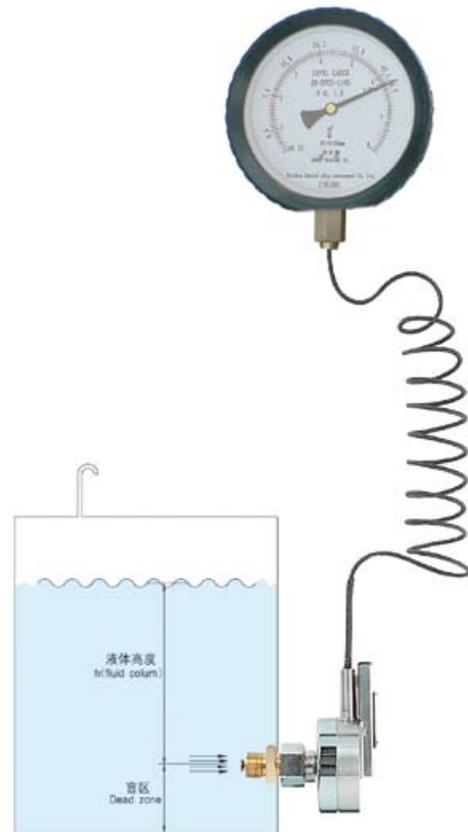
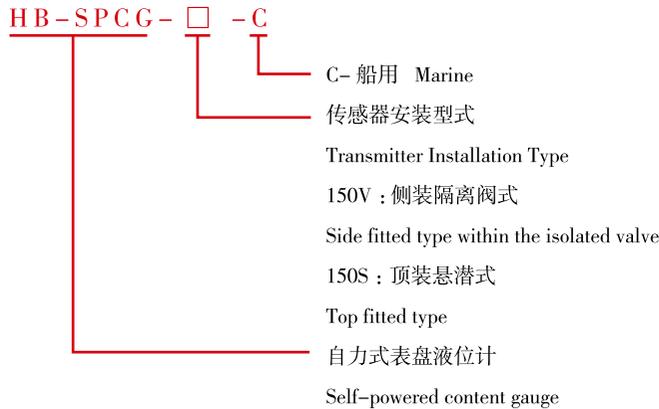
自力式表盘液位计由传感器、毛细管、显示器等组成,具有体积小、重量轻、安装方便、测量精度高、稳定性好、寿命长等特点。可广泛应用于舰船及其它工业设备中测量舱柜内液体介质的液位。

The self-powered content gauge consists of transmitter, capillary and indication gauge. Within the characteristic of small volume, light weight, easy-to-install, high accuracy, stable and durable, can be widely used to measure the liquid level in tanks of ships and other industrial equipment.

技术参数 TECHNICAL SPECIFICATION :

测量范围 1-50m	Measuring range 1-50m
测量精度 1.6 级	Accuracy 1.6
超 负 荷 最大量程的 110%	Overload 110% of max range
工作温度	Working temperature
显示器 -20℃ ~55℃	Indication gauge -20℃ ~55℃
传感器 -20℃ ~90℃	Transmitter -20℃ ~90℃
表面直径 φ 150 mm	Dial dia. φ 150 mm
壳体材质 铝合金或 SUS 304	Casing material AC or SUS 304
计量单位 m/m ³	Measurement unit m/m ³

型号标记 MODEL SIGN



技术参数 TECHNICAL PARAMETER :

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 ≤ 10m	AC or SUS304	SUS304	QBe2.0
HB-SPCG-150S		JIS5K,10K100A GB2506-2005 DN100 PN6						

订货请注明型号、毛细管长度、介质密度,特殊要求可定制。

Pls mark the model, capillary length and the density of the medium of the product when order.

Special requests can be customized.



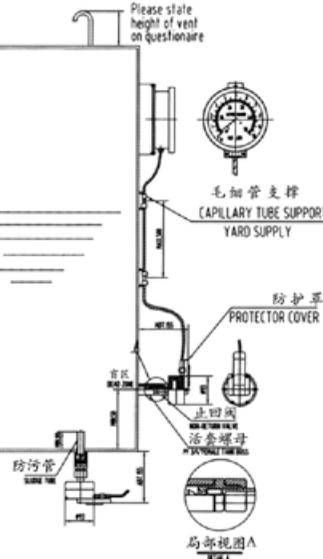
安装及外形尺寸 ASSEMBLY AND OUTLINE DIMENSION :

外形尺寸
OUTLINE/DIMENSIONS

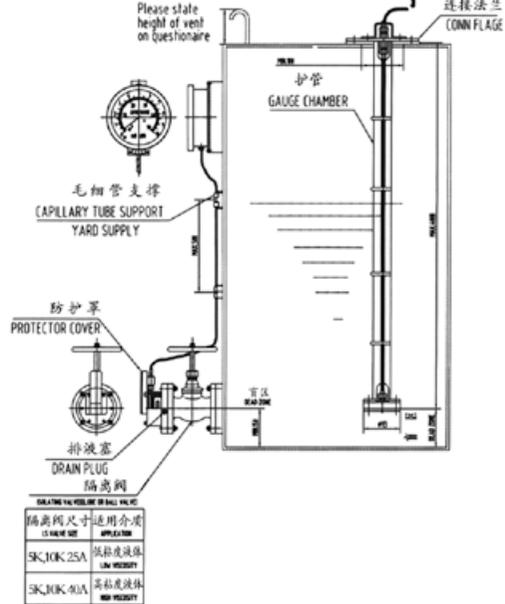
型号: HB-SPCG-F150
侧装法兰式 (适用于高粘度液体)
MODEL HB-SPCG-F150/NON-RETURN FLANGE TYPE
(FOR HIGH VISCOSITY FLUID)



型号: HB-SPCG-B150
侧装螺纹式 (适用于低粘度液体)
MODEL HB-SPCG-B150/NON-RETURN BOSS TYPE
(FOR LOW VISCOSITY FLUID)



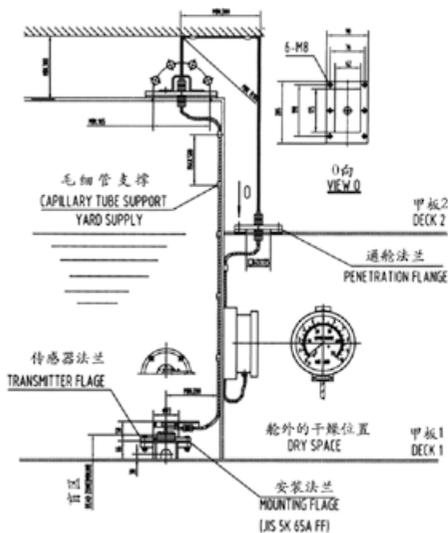
型号: HB-SPCG-V150
侧装隔离阀式 (适用于低或高粘度液体)
MODEL HB-SPCG-V150/ISOLATING VALVE TYPE
(FOR LOW OR HIGH VISCOSITY FLUID)



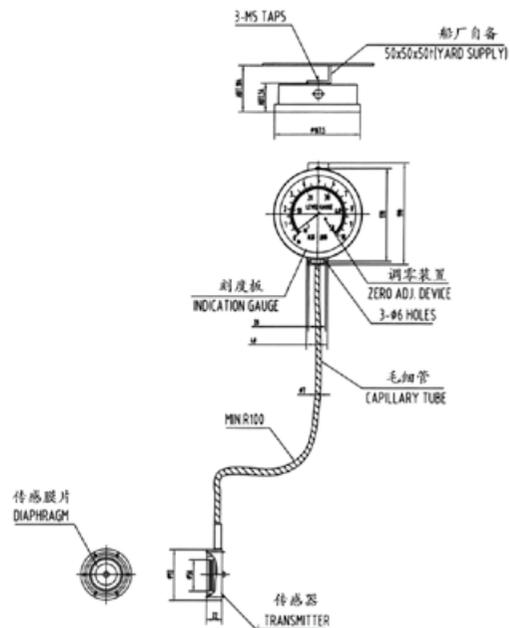
隔离阀尺寸	适用介质的粘度
SK,10K,25A	低粘度液体 LOW VISCOSITY
SK,10K,50A	高粘度液体 HIGH VISCOSITY

外形尺寸
OUTLINE/DIMENSIONS

型号: HB-SPCG-150DIM
双甲板底潜式 适用于低或高粘度液体
MODEL HB-SPCG-150DIM/SUBMERSIBLE TYPE FOR
DOUBLE DECK
(FOR LOW OR HIGH VISCOSITY FLUID)



详图
DETAILED OUTLINE





UHB型船用液位传感器 MARINE LEVEL TRANSMITTER

概述 GENERAL :

UHB 型磁浮球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。

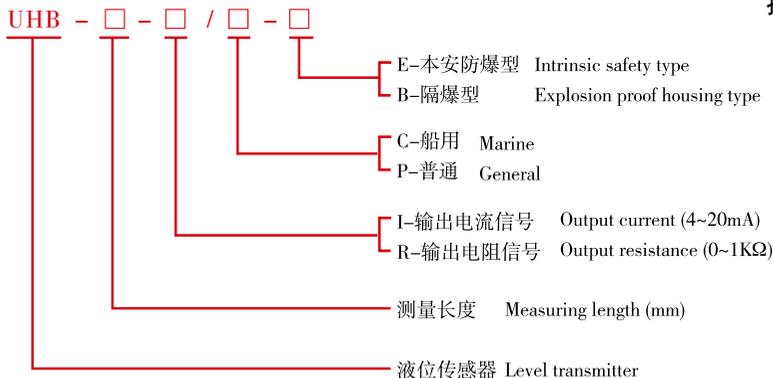
UHB type float level transmitter matched with level indicator can measure medium's level in the tank continuously.It is used in ship and other industrial instrument to measure level in the tank.

主要技术参数 MAIN TECHNICAL SPECIFICATION

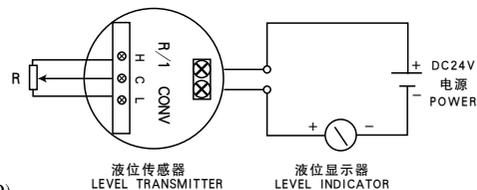
连接法兰 Conn.flange	浮球 (Float)		安装形式 Mounting type	介质比重 Medium gravity	输出信号 Output signal	适用介质 Medium application
	材料 Material	工作温度 Working temp				
GB2506-89 PN1.0 DN 100	SUS304 SUS316L	≤100℃	顶装 Top mounting	≥0.80	DC24V 4~20 mA 0~1 K Ω	水、燃油、柴油、滑油 Water,F.O., D.O.,L.O.

- | | | |
|-----------------------------|---|---------------------------------|
| 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.本安型防爆: Exia II CT6 |
| 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.Intrinsic safety: Exia II CT6 |

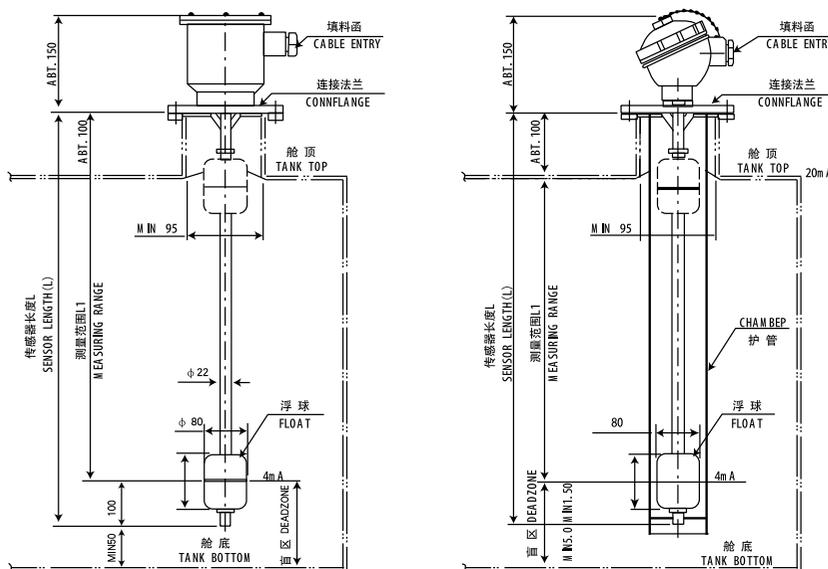
型号标记 MODEL SIGN



接线图 WIRING DLAGRAM:



外形尺寸 OUTLINE DIMENSION





UQK-01/02/03 型船用浮球液位控制器 MARINE FLOAT LEVEL CONTROLLER

UQK-01/02/03 型船用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和报警。

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

技术参数 TECHNICAL SPECIFICATION :

型号 Model	型式 Model type	工作压力 Working pressure(MPa)	工作温度 Working temperature(°C)	球体直径 Float diameter(mm)	材料 Material		
					浮球 Float	法兰 Flange	护罩壳体 Shield housing
UQK-01-C	侧装基本型 Side-mounting basic type	1MPa	80℃	Φ60	SUS304	SUS304	ZL102
UQK-01L-C	侧装长杆型 Side-mounting extension type	1MPa	80℃	Φ60	SUS304	SUS304	ZL102
UQK-01Y-C	侧装异位型 Side mounting different level type	1MPa	80℃	Φ60	SUS304	SUS304	ZL102
UQK-02-C	侧装大切换型 Side-mounting large switching	1MPa	80℃	Φ60	SUS304	SUS304	ZL102
UQK-03-C	顶装型 Top mounting	1MPa	80℃	Φ76	SUS304	SUS304	ZL102
UQK-03W-C	顶装弯杆型 Top mounting bend pole type	1MPa	80℃	Φ60	SUS304	SUS304	ZL102
UQK-□-C-□-F	防腐型 Anti-corrosive type	1MPa	80℃	Φ60	SUS304	SUS304	SUS304
UQK-□-C-B	防爆型 Explosion-proof type	防爆型 :Exd II CT3-T6 Explosion-proof type:Exd II CT3-T6 本安型 ; 配用安全栅 Exia II CT3-T6 Intrinsically safe type:with safety barrier Exia II CT3-T6					

型号标记 MODEL SIGN:





UQK-01-C



UQK-02-C



UQK-03-C



UQK-01-C-B

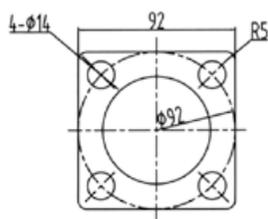


UQK-01-C-T



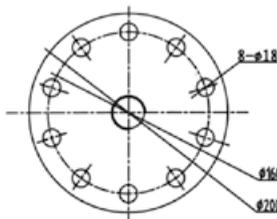
UQK-01W-C

安装及外形尺寸 ASSEMBLY AND OUTLINE DIMENSION



方型法兰

SQUARE FLANGE TYPE



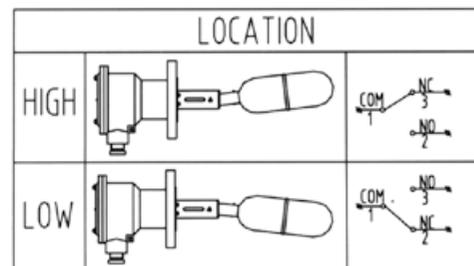
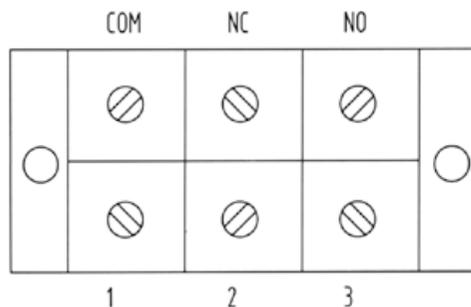
防爆型法兰

EXPIOSION-PROOF FLANGE TYPE

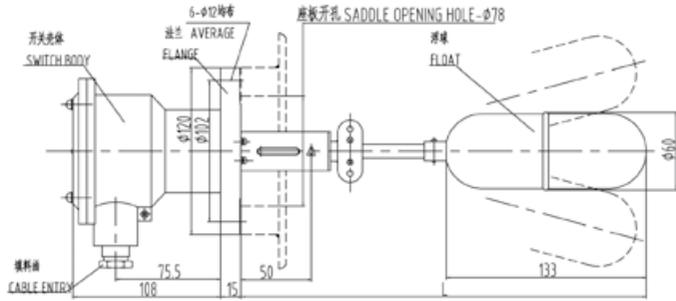


通用型法兰

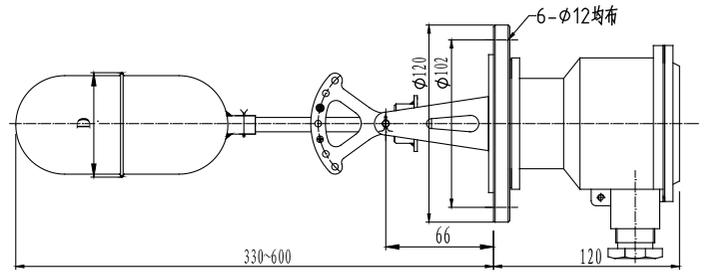
GENERAL FLANGE TYPE



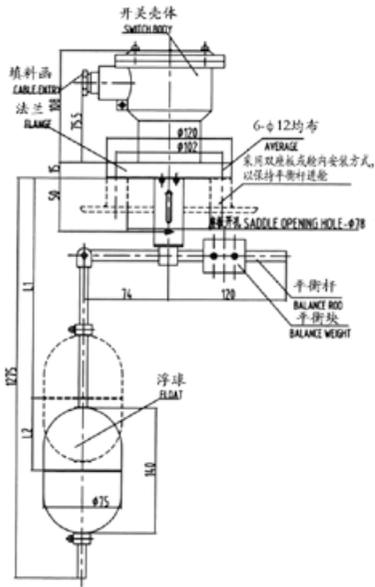
开关接线图
SWITCH WIRING DIAGRAW



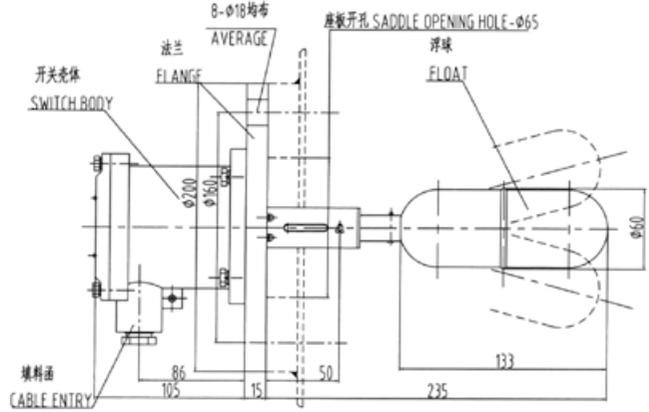
UQK-01-C



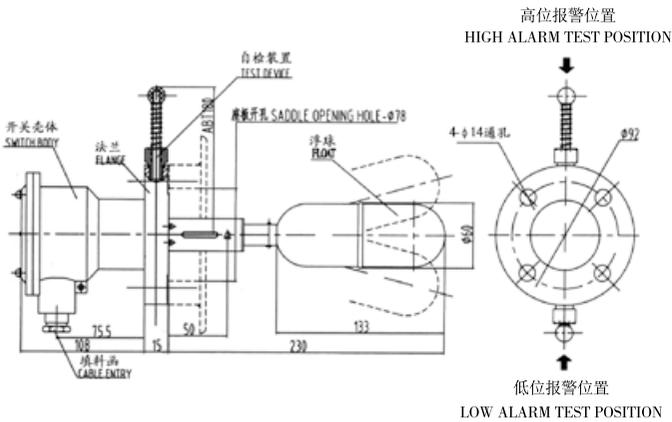
UQK-02-C



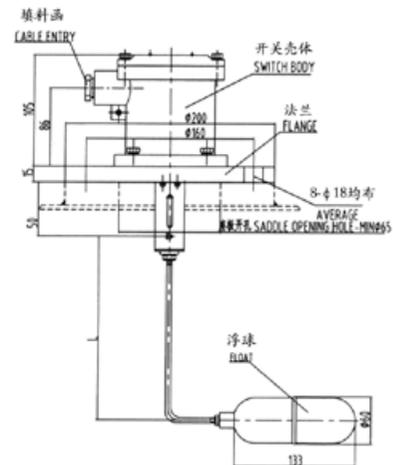
UQK-03-C



UQK-01-C-B



UQK-01-C-T



UQK-01W-C



UQK-65 型船用浮球液位控制器 MARINE FLOAT LEVEL CONTROLLER

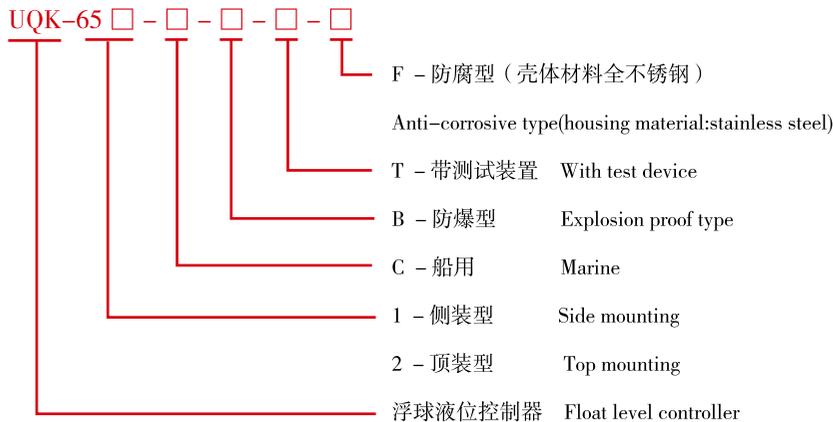
UQK-65 型浮球液位控制器适用于船舶、化工及其它工业设备舱柜中的液位进行两位式控制和报警。

UQK-65 marine float level controller is widely used in ship, chemical industry and other industrial instrument to carry two position controlling and alarm to the level in the tank.

主要技术参数 MAIN TECHNICAL SPECIFICATION

型号 Model	型式 Model type	工作压力 Working pressure(MPa)	工作温度 Working temperature(°C)	球体直径 Float diameter(mm)	材料 Material			外壳防护等级 Enclosure protection class
					浮球 Float	法兰 Flange	护罩壳体 Shield housing	
UQK-651-C	侧装型 Side mounting type	1MPa	80℃	Φ60	SUS304	SUS304	ZL102	IP66 or 68
UQK-652-C	顶装型 Top mounting	1MPa	80℃	Φ45 or Φ60	SUS304	SUS304	ZL102	IP66 or 68
UQK-65-C-□-F	防腐型 Anti-corrosive type	1MPa	80℃	Φ45 or Φ60	SUS304	SUS304	SUS304	IP68
UQK-65-C-B	防爆型 Explosion-proof type	防爆型 :Exd II CT3-T6 Explosion-proof type:Exd II CT3-T6 配用安全栅 - 本安型 Exia II CT3-T6 Matched with safe barrier-intrinsically safe type certificate Exia II CT3-T6						IP66 or 68

型号标记 MODEL SIGN:



UQK-651-C



UQK-652-C



UQK-652-C-T



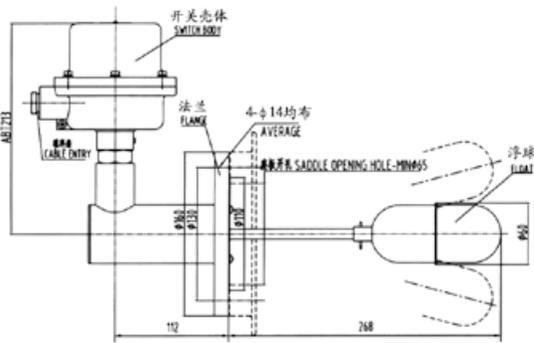
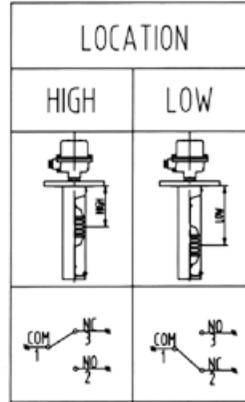
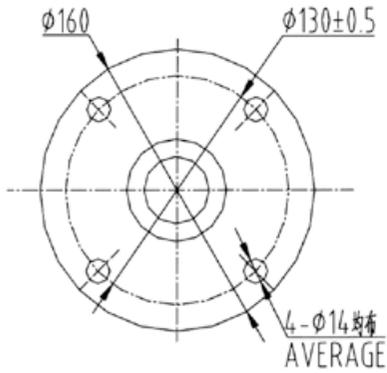
UQK-652-C-T/F



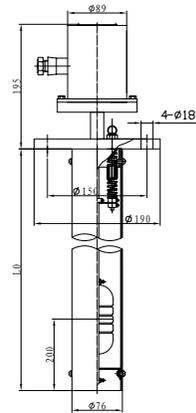
UQK-652-C-B



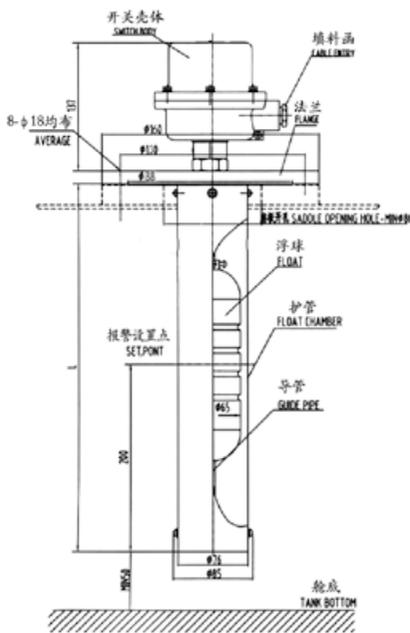
安装及外形尺寸 ASSEMBLY AND OUTLINE DIMENSION



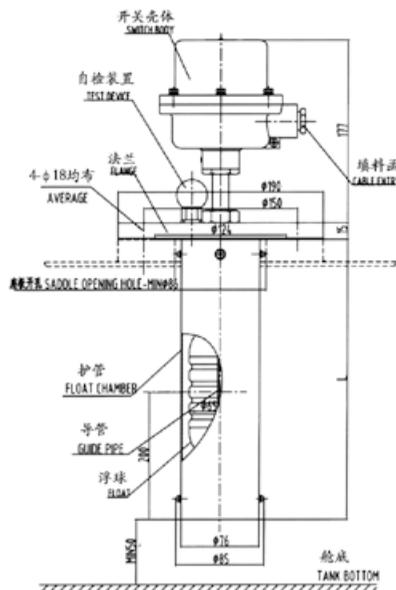
UQK-651-C



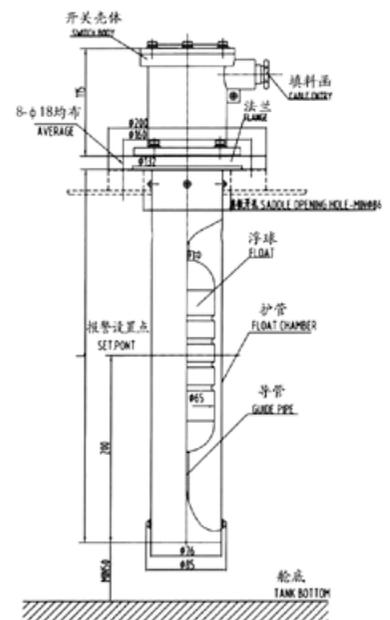
UQK-652-C-T



UQK-652-C



UQK-652-C-T



UQK-652-C-B



UQK-652-C/S 型船用浮球液位控制器 MARINE FLOAT LEVEL CONTROLLER

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 instrument to carry multipoint control to the level in the tank.

技术参数 TECHNICAL SPECIFICATION:

控制范围 L Controlling range L	200~5000 mm
下盲区 L ₁ Lower dead zone	110 mm
上盲区 L ₂ Up dead zone	≤ 110 mm
浮球直径 D Float dia. D	Φ28 Φ45 Φ60 mm
保护管直径 Protected pipe dia.	Φ60 Φ76 mm
工作温度 Working temp.	≤ 100℃
公称压力 PN	1.0 MPa
介质比重 Medium gravity	≥ 0.80
触点容量 Contact capacity	AC 220V 0.5A
触点形式 Contact form	SPST SPDT
控制点数 No. of control point	1~4
防护等级 Protection	IP66 IP68
防爆等级 Enclosure	Exia II CT 3-6

型号标记 MODEL SIGN:

U Q K - 6 5 2 - C / □ □ □

- 可选项 Option
- B- 本安防爆型 Explosion proof type
- T- 自检装置 Test device
- S- 多点式 Multipoint type
- 船用 Marine
- 顶装式 Top mounting type
- 浮球液位控制器 Float level controller

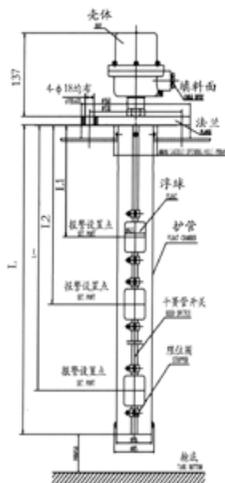


UQK-652-C/S

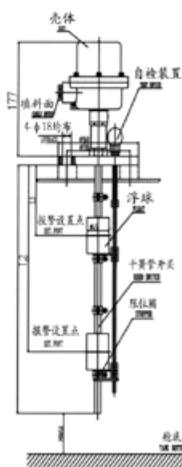


UQK-652-C/S-T

外形尺寸 OUTLINE DIMENSION:



UQK-652-C/S



UQK-652-C/S-T



UQK 型船用溢流观察报警器 MARINE OVERFLOW OBSERVING ANNUNCIATOR

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。产品集液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。

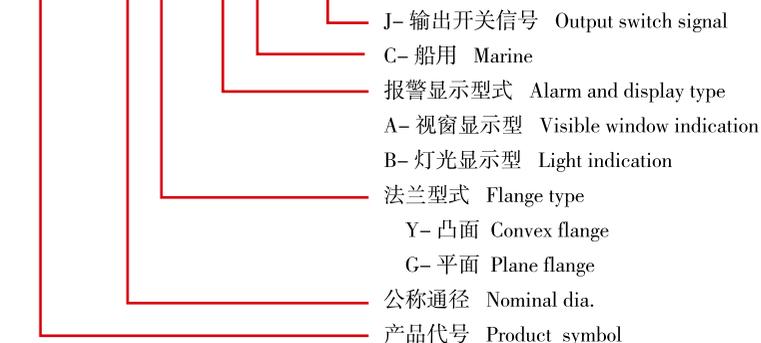
UQK type overflow observing annunciator is a new type overflow observing alarm device composed of indication and level alarm. It can observe liquid and output level alarm, and has characteristics of compact structure, reliable performance, safety and practicality etc. It can be used in ship and other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

技术参数 TECHNICAL SPECIFICATION :

公称通径 : 32 ~250 mm	DN : 32 ~250 mm
触点容量 : AC 220V 0.5A	Contact capacity : AC 220V 0.5A
触点型式 : SPDT	Contact type : SPDT
公称压力 : 1.0 MPa	PN : 1.0 MPa
介质温度 : ≤ 80 °C	Medium temperature : ≤ 80 °C
介质比重 : ≥ 0.80	Medium gravity : ≥ 0.80
介质粘度 : ≤ 0.02 Pa.s	Medium viscosity : ≤ 0.02 Pa.s
连接法兰 : GB573-65	Conn. flange : GB573-65

型号标记 MODEL SIGN:

U Q K - □ □ / □ □ - □

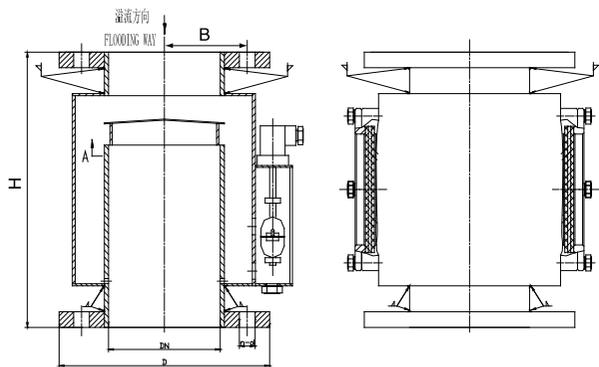


A 型 Type



B 型 Type

外形尺寸 OUTLINE DIMENSION:

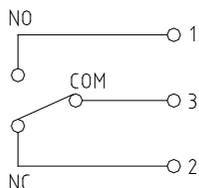


A 型 Type

A 型外形尺寸 A TYPE OUTLINE DIMENSION:

通径 DN	尺寸 Dimension (mm)					
	H	B	D	D1	d	n
25	230	95	100	75	4	11
32		95	120	90		
40		100	130	100		
50	280	110	140	110	4	14
65		120	160	130		
80		125	190	150		
100	350	135	210	170	8	18
125	370	145	240	200		
150		155	265	225		
200		190	320	280		
250		225	375	335		

接线图 WIRING DIAGRAM:





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，尤其是高精度流量计量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、公称通径：DN10~400 mm

DN : DN10~400 mm

2、过滤精度：10~200 μm

Filter accuracy : 10~200 μm

3、工作温度：：-20~120℃

Working temperature : : -20~ 120℃

4、介质粘度：：≤ 500 mPa.s

Medium viscosity : ≤ 500 mPa.s

5、材质 a. 壳体：铸铁 (A) 铸钢 (E) 耐蚀钢 (B、C)

Material A.casing: cast iron (A) cast steel (E) anti-erosion steel (B、C)

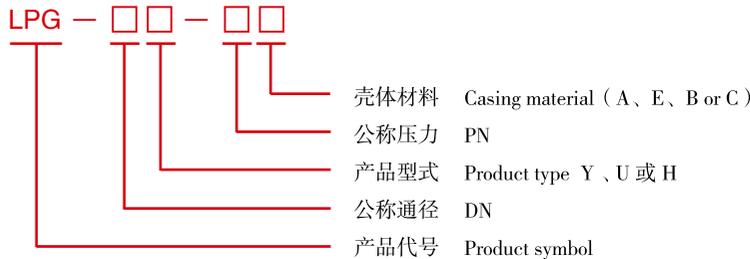
b. 过滤网：铜丝网、不锈钢丝网

B.filter screen: copper, stainless steel

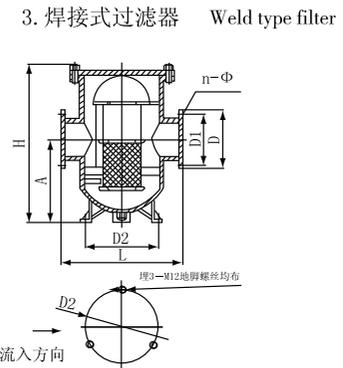
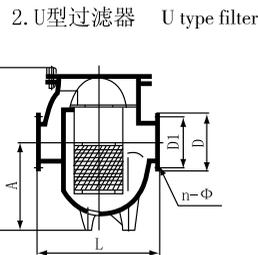
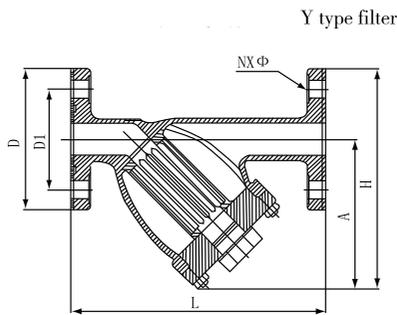
6、连接法兰：GB/T9112-2000 或 JB/T79-82-1994

Flange : GB/T9112-2000 or JB/T79-82-1994

型号标记 MODEL SIGN



外形尺寸 OUTLINE DIMENSION



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	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										JB	GB			
A	10	0.4	150	80	125	90	90	60	4-14	1.6	U型	80	100	420	250	450	210	215	170	8-23	1.6
	15	1.5	150	80	125	95	95	65				8-25									
	20	4.5	180	100	153	105	105	75				8-26									
	25	10	180	95	153	115	115	85				12-26									
	40	15	300	155	304	145	150	110				12-30									
B	40	15	300	155	304	145	150	110	8-18	4.0	H型	250	500	950	650	1150	425	425	370	16-30	6.3
	50	40	300	155	304	160	165	125				16-34									
	80	100	400	250	420	195	200	160				16-36									
	100	150	500	295	502	215	220	180				16-36									
	150	250	600	335	650	280	285	240				16-36									
C	200	340	786	395	770	335	340	295	12-23	2.5	U型	350	1000	1100	750	1320	550	555	490	16-34	2.5
	10	0.4	165	77	127	100	100	70	4-14												
	15	1.5	165	79	131	105	105	75	4-18												
	20	4.5	200	91	154	125	130	90	4-18												
	25	10	210	96	159	135	140	100	4-23												
E	40	15	320	155	308	165	170	125	4-23	6.3	H型	400	1500	1200	750	1380	610	620	550	16-36	4.0
	50	40	320	155	310	175	180	135	8-23												
	80	100	420	250	430	210	215	170	8-25												
	100	150	525	295	510	250	250	200	8-26												
	150	250	600	335	650	300	300	250	8-26												
200	340	786	395	780	360	360	310	12-26													

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.
表中 in the table JB: JB/T79-82-94 GB: GB/T9112-2000
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



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）； 2.5、4.0、6.3 MPa（铸钢）； 1.6、2.5 MPa（不锈钢）	Nominal pressure : 1.6MPa（ cast iron ）； 2.5、4.0、6.3 MPa（ cast steel ）； 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
公称通径：10 ~ 200mm	DN : 10 ~ 200mm



流量范围 FLOW RANGE

(m³/h)

型号 MODEL	公称 通径 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%。

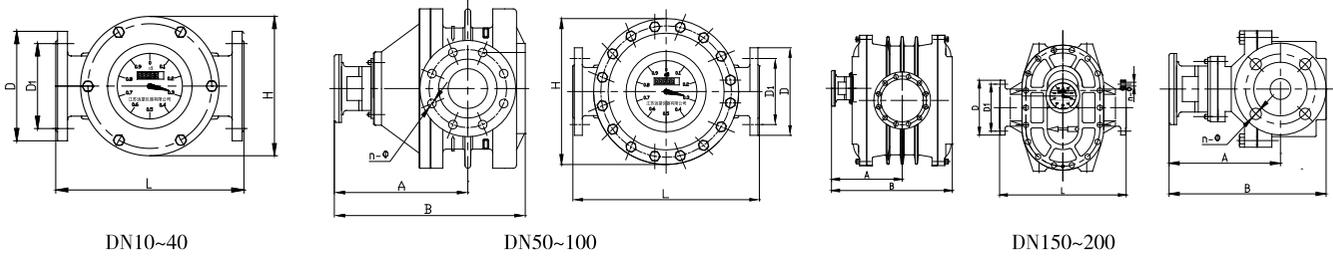
Note: when the temperature of liquid to be measured is higher than 80℃, max. flow rate of flow meter is 90% of designed max. flow rate, min. flow rate if 120% of designed min. flow rate.

(m³/h)

型号 MODEL	公称 通径 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(pc)	~
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(pc)	~
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(pc)	~
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-DN25,A、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 - DN200, A、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

Note: 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 型高粘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

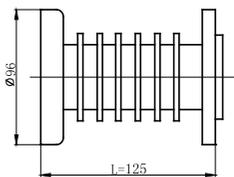
Material: cast iron, cast steel, stainless steel
Nominal pressure : cast iron 1.6MPa;
cast steel 2.5, 4.0, 6.3MPa;
stainless steel 1.6, 2.5MPa
Liquid temp. to be measured : 100~200℃
Accuracy class: 0.5



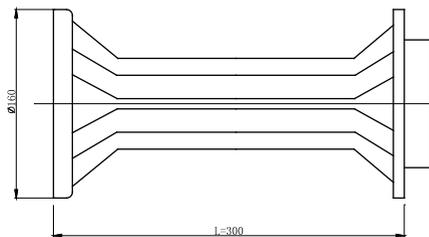
型 号 Model	LC-TA 铸铁高温型 LC-TA cast iron high temp. type		LC-TE 铸钢高温型、LC-TB 不锈钢高温型 LC-TE cast steel high temp. type、LC-TB stainless steel high temp.type		
	公称压力 PN	1.6MPa		2.5 4.0 6.3MPa	
被测液体温度 Liquid temp. to be measured	100~200℃				
精度等级 Accuracy class	0.5				
流量范围 Flow rate range m ³ /h					
型 号 Model	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 acumulative flow DN40 above with tranmitter

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

A₅ 指针字轮显示累计流量 FT,GT/F 调速器

A₅ pointer & character wheel indicate accumulative flow FT, GT/F speed regulator

A₆ 大字轮显示累计流量, 指针小字轮可同时回零 FT, GT/F 调速器

A₆ big character wheel indicates accumulative flow, pointer & small character wheel can return to zero at the same time FT, GT/F 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

公称通径 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 计量高粘度液体流量计 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 为公称通径)

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，供远程积算指示或控制。

本产品执行中华人民共和国专业标准 JB/T9242-1999 容积式流量计通用技术条件。

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℃

公称通径：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：ExiaIICT5

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

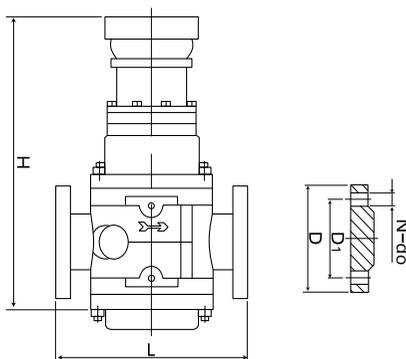
Bearing - graphite

Local explosion proof class for remote indication: ExiaIICT5

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	通径 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
								流量范围 Flow rate range (m ³ /h)		
LXZ25	25	280	420	115	85	4	14	1.8~9	1.2~9	0.5~5
LXZ50 LXZ50(S)	50 (40)	360	465	165 (150)	125 (110)	4	18	8~32	5~40	2.5~24
LXZ80 LXZ(80S)	80 (65)	400	520	200 (185)	160 (145)	8	18	20~77	10~100	5~55
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



HTLB 智能靶式流量计 TGF INTELLIGENT TARGET FLOWMETER

概述 GENERAL

HTLB 智能靶式流量计是应用单剪切梁式力感应测量工作原理，通过力感应传感器测量应力变量并结合机电一体化测量技术，经高精度的传感器获取与流量一致的信号，此信号经高精度 A/D 转换器、微处理器 CPU、D/A 转换器等处理运算。输出现场液晶显示或 4~20mA（HART、脉冲等）实现工况流量过程计量测控。测量管内接触流体无可动部件，测量精度可以与容积、质量流量计相媲美，同时还具备抗震、抗杂质的特性，特别是应用于高粘度、低雷诺数流体测量，效果极佳，其广泛应用于船舶、石油、化工、冶金、食品、造纸、环保、制药、纺织、路政建设等领域。

根据安装连接方式为管道法兰型、对夹型、管锥螺纹型、插入型四大类。

靶式流量计结构比较简单，维护方便，不易堵塞，适用于测量高粘度、高脏污及有悬浮固体颗粒介质的测量。靶式流量计由于无可动零件，所以有较强的抗震性。

HTLB intelligent target flowmeter is applied but the shear beam type induction measurement principle, through the force sensor to measure stress variables and combined with the integration of mechanical and electrical measurement technology, the high precision sensor signal acquisition and flow line, the signal by high precision A/D converter, D/A converter, CPU microprocessor and other processing operations, the output of the scene the liquid crystal display or 4~20mA (HART, pulse) to achieve flow calculation and control conditions. The measuring tube contact fluid has no movable parts, the measurement accuracy can be comparable with the volume, mass flowmeter, colleagues also has characteristics of anti vibration and anti magazine, especially used in high viscosity, low Reynolds number fluid measurement, the effect is excellent, which are widely used in petroleum, chemical, shipbuilding, metallurgy, papermaking, food, environmental protection, pharmaceutical textile, road construction and other fields.

According to the installation of connections for pipe flange type, clamp type, taper thread type, insert type four categories.

The target flowmeter has the advantages of simple structure, convenient maintenance, easy to plug, suitable for measuring the measurement of high viscosity, high dirt and suspended solid particles of the medium. Because the target flowmeter has no movable parts, it has strong seismic resistance.

主要技术参数 MAIN TECHNICAL SPECIFICATION

公称通径：10~600mm

温度范围：-200~+450℃

量程比：1：5 1：10

输出信号：现场液晶显示脉冲、4~20mA（二线制）

测量本体材质：SUS304, SUS316, SUS316L, 碳钢

防护等级：IP66、IP68

法兰规格：GB2506-89（可根据客户要求定制）

Nominal diameter: 10~600mm

Temperature range: -200~+450

Range ratio: 1:5 1:10

Output signal: on-site LCD pulse, 4~20mA (two-wire)

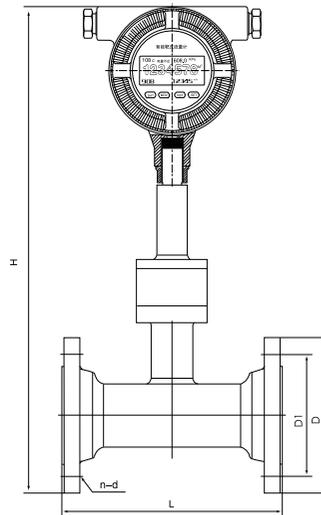
Measurement of body material: SUS304, SUS316, SUS316L, carbon steel

Protection level: IP66, IP68

Flange specifications: GB2506-89 (can be customized according to customer requirements)



外形尺寸 OUTLINE DIMENSION



备注：尺寸仅供选型参考，实际尺寸应以订货时确认为准，靶式的具体结构与流量大小、高温/常温等是有关系的。

Remarks: dimensions are for reference only, the actual size should be confirmed when ordering, the specific structure of the target and the size of the flow, high temperature / room temperature are related.



法兰管道型 Flange type

公称通径 Nominal diameter	L	H	常规产品连接法兰规格 Standard Specification for connecting flanges for conventional products
DN10	200	405	
DN15	200	410	
DN20	200	415	
DN25	200	420	1.6 ~ 4.0MPa
DN32	200	430	
DN40	200	440	
DN50	200	450	
DN65	250	470	
DN80	250	485	
DN100	250	510	1.0 ~ 1.6MPa
DN125	300	545	
DN150	300	575	
DN200	350	635	
DN250	400	700	
DN300	500	760	
DN350	500	820	1.6MPa
DN400	500	875	
DN450	500	935	
DN500	500	1000	
DN600	500	1120	

HTLDJ 智能电磁流量计 EMF INTELLIGENT ELECTROMAGNETIC FLOWMETER

概述 GENERAL

HTLDJ 智能电磁流量计是采用国内外最先进技术研制开发的全智能型电磁流量计，其中英文界面电磁转换器内核采用高速中央处理器。运算速度快、精度高、测量性能可靠。转换器电路设计采用国际先进技术，输入阻抗高达 1015Ω，共模抑制比优于 100db，对于外来干扰以及 60Hz/50Hz 干扰抑制能力优于 90db，可以测量更低的电导率的流体介质流量。其传感器采用非均匀磁场技术及特殊的磁路结构，磁场稳定可靠，而且大的缩小了体积，减轻了重量，使流量计小型轻量化的特点。由于电磁流量计有其独特的优点，因此被广泛应用于船舶、钢铁、石油、化工化纤、冶金、食品、造纸、制糖、水利水工、制药、纺织、等工业领域中，用来测量各种酸、碱、盐溶液、泥浆、矿浆、纸浆、各种饮料、黑液、绿液等导电液体介质的体积流量。

HTLDJ intelligent electromagnetic flowmeter is developed by the most advanced technology at home and abroad to develop a fully intelligent electromagnetic flowmeter, in which the interface of the electromagnetic converter core. Running speed, high precision, reliable measurement. The converter circuit design using international advanced technology, high input impedance of 1015 ohm, common mode rejection ratio is better than 100db, for foreign interference and interference suppression ability of 60Hz/50Hz is better than 90db, the fluid flow can lower the conductivity measurement. The sensor adopts the non-uniform magnetic field technology and the special magnetic circuit structure, the magnetic field is stable and reliable, and the volume is reduced, the weight is reduced, and the flowmeter is small and lightweight. The electromagnetic flowmeter has its unique advantages, it is widely used in shipbuilding, steel, petroleum, chemical, metallurgy, food, papermaking, sugar, water, pharmaceutical, textile, and other industries, is used to measure the volume flow of all kinds of acid, alkali and salt solution, slurry, pulp, paper pulp, various black liquor, beverage, green liquid conductive liquid medium.



公称通径系列 NOMINAL DIAMETER SERIES

管道式四氟衬里：10、15、20、25、32、40、50、65、80、100、125、150、200、250、300、350、400、450、500、600

管道式橡胶衬里：40、50、65、80、100、125、150、200、300、350、400、500、600、800、1000、1200、1400、1600、1800、2000

注：特殊规格可以定制。

流动方向：正、反、净流量

量程比：1：50

重复性：测量值的 $\pm 0.1\%$

被测介质温度：

普通橡胶衬里 $-20\sim+60^{\circ}\text{C}$

高温橡胶衬里 $-20\sim+90^{\circ}\text{C}$

聚四氟乙烯衬里 $-30\sim+100^{\circ}\text{C}$

高温型乙烯衬里 $-30\sim+180^{\circ}\text{C}$

额定工作压力：DN10~DN65, 小于等于 2.5MPa, DN80~DN150, 小于等于 1.6MPa, DN200~DN2000, 小于等于 1.0MPa

流量测量范围：流量测量范围对应流速范围是 0.25m/s ~ 12m/s

电导率范围：被测流体电导率 $\geq 5\mu\text{s/cm}$ (一体式) 以水为成份的介质, 其电导率在 200 - 800 $\mu\text{s/cm}$ 范围内, 均可选用电磁流量

输出电流及负载电阻：4 ~ 20mA 全隔离负载电阻 $< 750\Omega$ ；脉冲频率 0 - 5KHz 光电隔离 OCT 外接电源 $\leq 35\text{V}$, 导通时集电极最大电流为 25mA

电极材料：含钼不锈钢、钛 (Ti)、钽 (Ta)、哈氏合金 (HC)、铂 (Pt) 或其他特殊电极材料

防护等级：潜水型：IP68, 其他型 IP65

供电电源：85 ~ 265VAC, 45 ~ 63HZ；18 ~ 28VDC

直管段长度：管道式；上游 $\geq 5D$, 下游 $\geq 2D$

连接方式：流量计与配管之间均采用法兰连接, 法兰连接尺寸符合 GB9113-2000 或 HG20592 标准要求

防爆标志：EdIICT4

环境温度： $-30^{\circ}\text{C} \sim +80^{\circ}\text{C}$

相对湿度：5% ~ 95%

消耗总功率：小于 20W

Pipeline type PTFE liner: 10, 15, 20, 25, 32, 40, 50, 65, 80, 100, 125, 150, 200, 250, 300, 350, 400, 450, 500, 600

Pipeline rubber lining: 40, 50, 65, 80, 100, 125, 150, 200, 300, 350, 400, 500, 600, 800, 1000, 1200, 1400, 1800, 2000

Note: special specifications can be customized.

Flow direction: positive, negative, net flow

Range ratio: 1:50

Repeatability: 0.1% of the measured value

Measured medium temperature:

Ordinary rubber lining $-20\sim+60$

High temperature rubber lining $-20\sim+90$

PTFE lining $-30\sim+100$

High temperature vinyl lining $-30\sim+180$

Rated working pressure: DN10~DN65, less than or equal to 2.5MPa, DN80~DN150, less than or equal to 1.6MPa, DN200~DN2000, less than or equal to 1.0MPa

Flow measurement range: flow measurement range is 0.25m/s ~ 12m/s of flow velocity range

The conductivity range: measured fluid conductivity of more than 5 s/cm (integrated) with water as the medium composition, its conductivity at 200 - 800 s/cm range, can be made of electromagnetic flow

The output current and load resistance: 4 ~ 20mA full load isolation resistance is lower than 750 ohm; the pulse frequency of 0 5KHz opticalisolation OCT external power less than 35V conduction, 25mA maximum current collector

Electrode material: Molybdenum Stainless steel, titanium (Ti), tantalum (Ta), Hastelloy (HC), platinum (Pt) or other special electrode materials

Protection level: diving type: IP68, other type IP65

Power supply: 85 ~ 265VAC, 45 ~ 63HZ, 18 ~ 28VDC;

The length of straight pipe: pipe; upstream is larger than 5D, lower than 2D

Connection: flange is employed between the flowmeter and the pipe flange size meets the requirement of GB9113-2000 or HG20592 standard

Explosion proof mark: EdIICT4

Ambient temperature: -30 DEG to 80 DEG C

Relative humidity: 5% ~ 95%

Total power consumption: less than 20W



电极材料的选择 SELECTION OF ELECTRODE MATERIALS

应根据被测介质的腐蚀性，由用户负责选定。对一般介质，可查有关防腐蚀手册，选定电极材料。对混酸等成份复杂的介质，应做挂片试验。It is selected by users according to the corrosivity of measured media. For general media, relevant guides about corrosion resistance may be referred to for selection of electrode materials. For media with complicated compositions, such as mixed acid, coupon corrosion test is required.

电极材料的耐腐蚀性（仅供参考）

CORROSION RESISTANCE OF ELECTRODE MATERIAL (FOR REFERENCE ONLY)

电极材料	耐腐蚀性能
耐碳钢 (1Cr18Ni9Ti) 含钼不锈钢 0Cr18Ni12Mo2Ti	对于硝酸、室温下 < 5% 硫酸，沸腾的磷酸，蚁酸、碱溶液，在一定压力下的亚硫酸，海水、醋酸等介质，有较强的耐腐蚀性，可广泛用于石油化工、尿素、维尼纶等工业。 海水、盐水、弱酸、弱碱。
哈氏合金B (HB)	对沸点以下一切浓度的盐酸有良好的耐腐蚀性，也耐硫酸、磷酸、氢氟酸、有机酸等非氧化性酸、碱、非氧化盐液的腐蚀。
哈氏合金C (HC)	能耐氧化性碱。如硝酸、酸或铬酸与硫酸的混合介质的腐蚀，也耐氧化性的盐酸类，如 Fe ⁺⁺⁺ 、Cu ⁺⁺ 或含其它氧化剂的腐蚀。如高于常温的次氯酸盐溶液、油水的腐蚀。
钛 (Ti)	能耐盐水、各种氯化物和次氯化盐、氧化性酸（包括发烟硫酸、硝酸）、有机酸、碱等的腐蚀。 不耐较纯的还原性酸（如硫酸、盐酸）的腐蚀，但如果酸中含有氯化剂时，则腐蚀大为降低。
钽 (Ta)	具有优良的耐腐蚀性，和玻璃很相似。除了氢氟酸、发烟硫酸、碱外，几乎能耐一切化学介质腐蚀。
铂 (Pt)	适用几乎所有酸碱液耐腐蚀，王水、铵盐等少数介质不适合。

衬里材料的选择 SELECTION OF LINING MATERIAL

应根据被测介质的腐蚀性，磨损性及温度来选择。氯丁橡胶，可耐一般的弱酸，耐温 80℃，氯丁橡胶有耐磨性，聚四氟乙烯几乎能耐除磷酸以外的强酸、碱腐蚀，介质温度可达 180℃ 但不耐磨损。聚氨酯橡胶有较好的耐磨损性，但不耐酸、碱腐蚀。耐温度性也差，介质温度小于 65℃。

The selection should be based on corrosivity, abrasiveness and temperature of media to be measured. Neoprene can be resistant to general weak acids and 80℃ temperature and has abrasion resistance; polytetrafluoroethylene (PTFE) can be resistant to almost all strong acids and bases except for phosphoric acid and to media temperature up to 180℃, but it is not resistant to abrasion. Polyurethane rubber (PU) has preferable abrasion resistance, but it is not resistant to acids and bases. It also has bad high-temperature resistance and only temperature below 65℃ is acceptable.

常用衬里材料的性能及其适用范围（仅供参考）

PROPERTIES OF COMMON LINING MATERIALS AND THEIR SCOPE OF APPLICATION (FOR REFERENCE ONLY)

衬里材料	耐腐蚀性能	适用范围
聚四氟乙烯 PTFE	1、它是塑料中化学性能最稳定的一种材料，能耐沸腾的盐酸、硫酸、硝酸、和王水，也能耐浓碱和各种有机溶剂 2、耐磨性和粘接性能差	1、-40℃ ~ +180℃ 2、酸、碱等强腐蚀性介质 3、卫生类介质
氯丁橡胶 (Neoprene)	1、有极好的弹性，高强的扯断力，耐磨性能好 2、耐一般低浓度酸、碱、盐介质的腐蚀，不耐氧化性介质的腐蚀	1、< 80℃ 2、测量一般、污水、泥浆、矿浆
聚氨酯橡胶 (Polyurethane)	1、具有极好的耐磨性能（相当于天然橡胶的十倍） 2、耐酸、碱性能较差	1、< 65℃ 2、中性强磨损的矿浆、煤浆、泥浆



外型结构及规格尺寸图 EXTERIOR STRUCTURE AND SIZE



1、分体结构

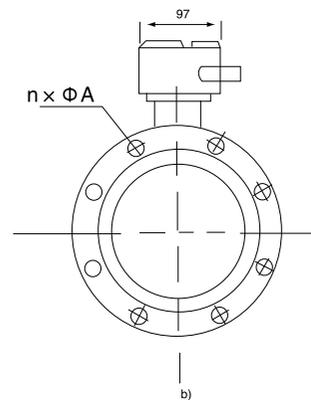
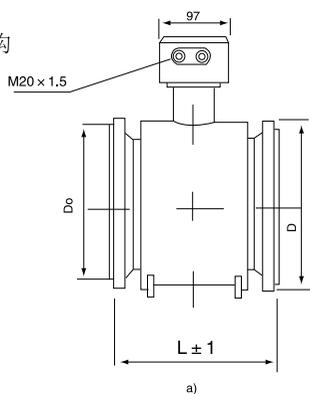


图1

2、一体化结构

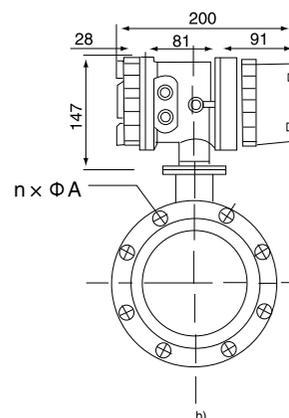
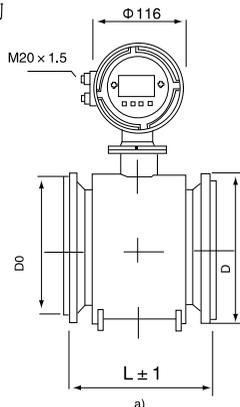


图2

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℃ Working temperature: 0-70℃

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

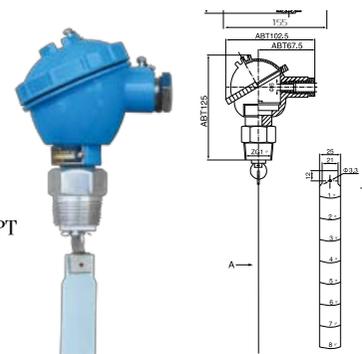
UQK-01L



工作压力(MPa) Working pressure

管径(mm) Pipe dia

产品代号 Product no





UKS型舱柜液位报警装置 TANK LEVEL ALARM DEVICE

概述 GENERAL

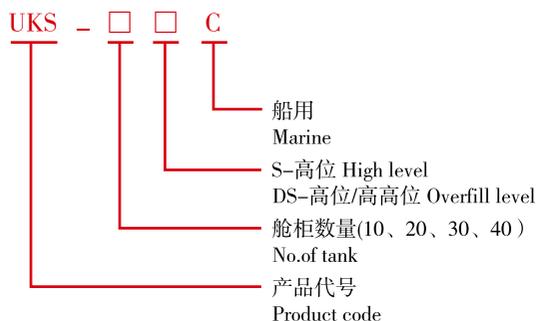
UKS型舱柜液位报警装置由UQK-652-T型浮球液位控制器及报警集控箱组成。各舱柜报警分别独立设置。可对舱柜内液位进行高位和高高位报警。

UKS type tank level alarm system consists of UQK-652-T type float level controller and alarm control panel. The alarm for each tank is isolated. This system can carry out high level alarm and overfill alarm.

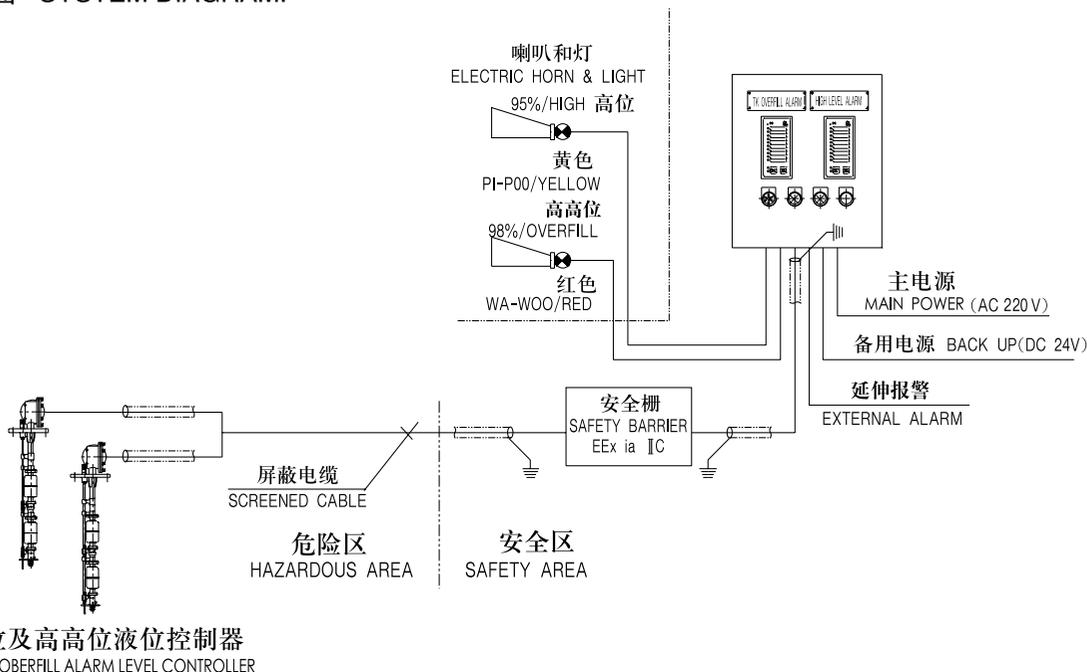
技术参数 TECHNICAL SPECIFICATION :

1. 报警报道 : (8,16,24,32)	Number of alarm channels: (8,16,24,32)
2. 报警点 : 高位、高高位	Alarm points: high level alarm and overfill alarm
3. 触点容量 : AC 250V 1A	Contact rating: AC 250V 1A
4. 报警型式 : 高位、高高位 声光分别报警	Alarm type: high level alarm, overfill alarm au- dible and visual alarm
5. 防护等级 : 浮球液位控制器 Protection 控制箱	Protection: float level controller IP66 or IP44 control panel IP44
6. 防爆等级 : Exia II CT3~CT6	Explosion proof: Exia II CT3~CT6
7. 供电电源 : AC 220V DC 24V	Power supply: AC 220V DC 24V
8. 具有声光自检功能	audible and visual self-test

型号标记 MODEL SIGN



系统总图 SYSTEM DIAGRAM:





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XII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。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、安全栅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线附近。当货舱内水位达到0.5米时，装置发出声、光预报警；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。

This device is designed according to SOLAS XII-12, water lever monitor and alarm of bulk carrier cargo hold, ballast tank and close dry space. The system 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 aft 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.

主要技术参数 MAIN TECHNICAL SPECIFICATION

1、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： $\pm 3\text{mm}$

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、备双电源供电

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

安装方式：壁挂或控制台嵌入安装

2、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

1. Main alarm control panel

Main power voltage: AC 220V 50/60HZ

Standby power voltage: DC 24V

Test points: no limits

Test accuracy: $\pm 3\text{mm}$

Function:

Main and pre-level alarm for individual detection

Multichannel LED flash alarm

Buzzer alarm

Main and standby power supply

AC/DC power fail alarm and alarm reset

Lamp and 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

RS485 communication alarm signal output

Fitting type: wall or console fitting type

2. Extended alarm panel

Power voltage: DC 24V

Function: Main and pre-level alarm for individual detection

Multichannel LED flash alarm

Common alarm buzzer

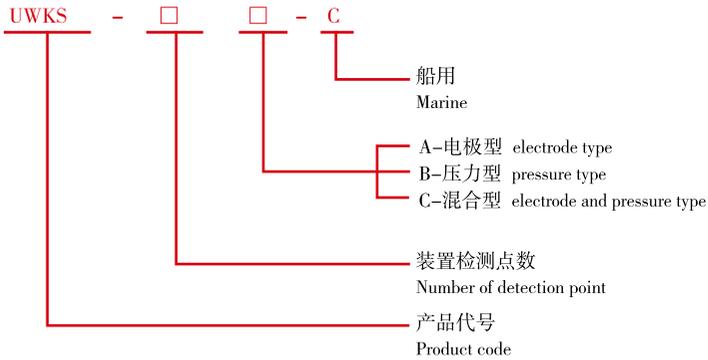
Lamp test

Dimming function

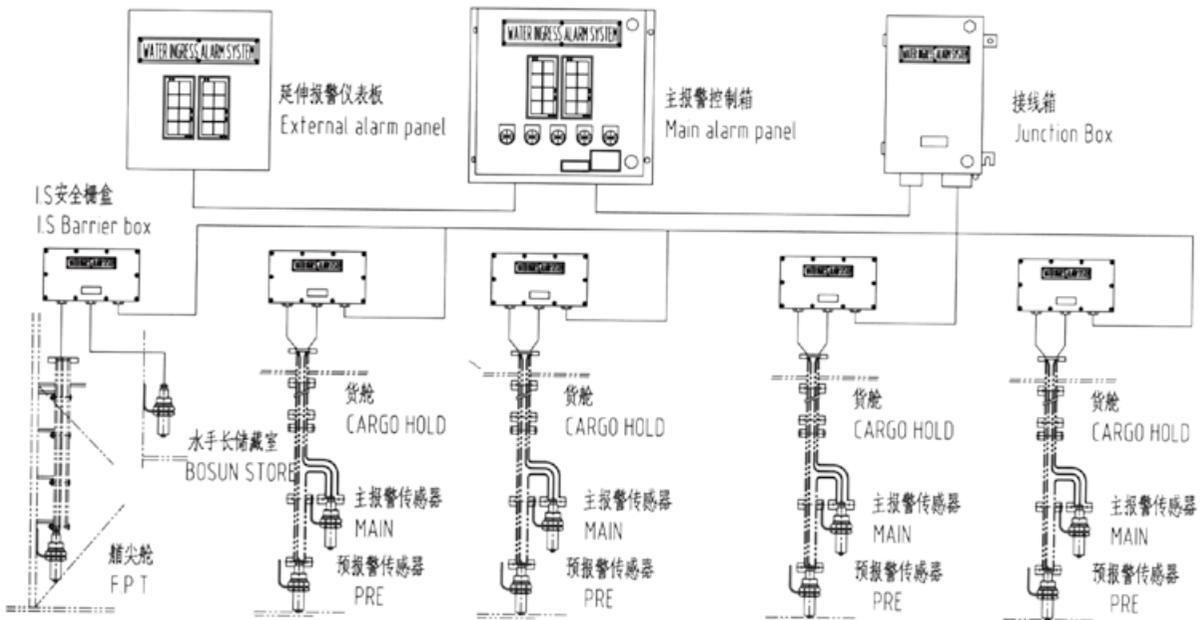
Fitting type: wall or console fitting type



型号标记 MODEL SIGN



系统总图 SYSTEM DIAGRAM:





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

概述 GENERAL

WBS泵舱温度监测报警系统是按照2000SOLAS（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。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。

WBS pump bearing temp. monitoring and alarm system 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. 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.

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：± 0.5% F.S

温度测量范围：0~200℃

温度传感器：Pt100 3线

防护等级：Exia II CT3~6

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 voltage：AC 220V 50Hz (main)

DC 24V (Standby)

Number of test point：8 or 16

Accuracy：± 0.5% F.S

Temp. measuring range：0~200℃

Temp. sensors：Pt100

Explosion proof：Exia II CT3~6

Device function：temp.value display

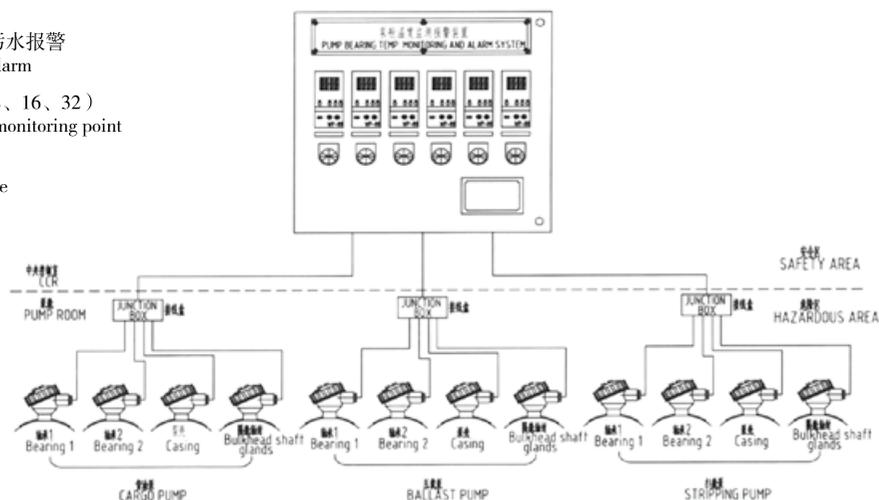
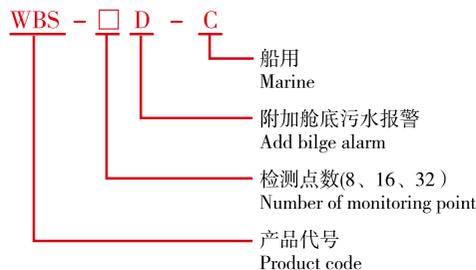
audible & visual over temp. alarm

Buzzer stop, Flicker stop, dimming

Lamp test and fail alarm

AC/DC auto-switchover and power fail alarm

型号标记 MODEL SIGN





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

概述 GENERAL

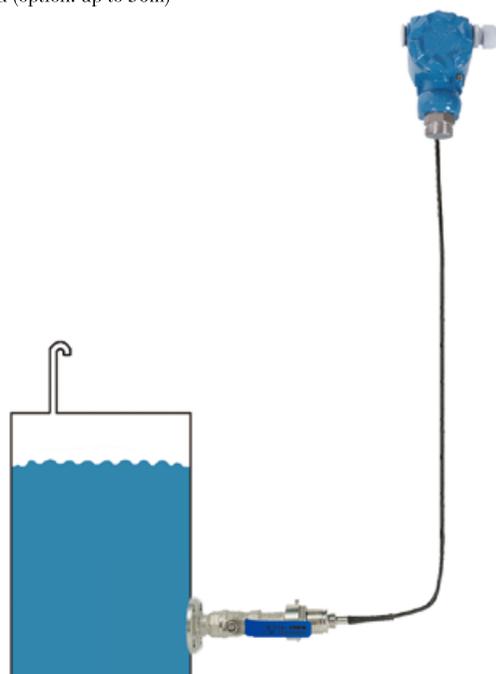
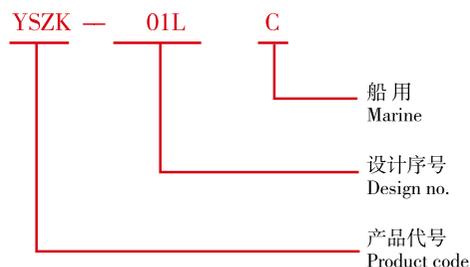
YSZK型压力式液位测量装置主要由传感器、信号放大器等组成。适用于持续测量压载舱、吃水计以及燃油舱等多种介质的液位。安装在液舱底部的传感器可及时感应由于液位变化而引起的压力变化，并将压力变化转换成电信号，通过电缆传送给信号放大器，输出4~20mA（二线制）直流信号，此信号可由液位显示器直接显示液位的数值，亦可由装载计算机显示和控制舱柜的液位。

YSZK type 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 pressure signal into electric signal. An output 4~20mA signal (two-wire DC) is supplied by the cable via amplifier. The signal then transform to level value by level indicator or by the loaded computer which display and control the level of the tank.

主要技术参数 MAIN TECHNICAL SPECIFICATION

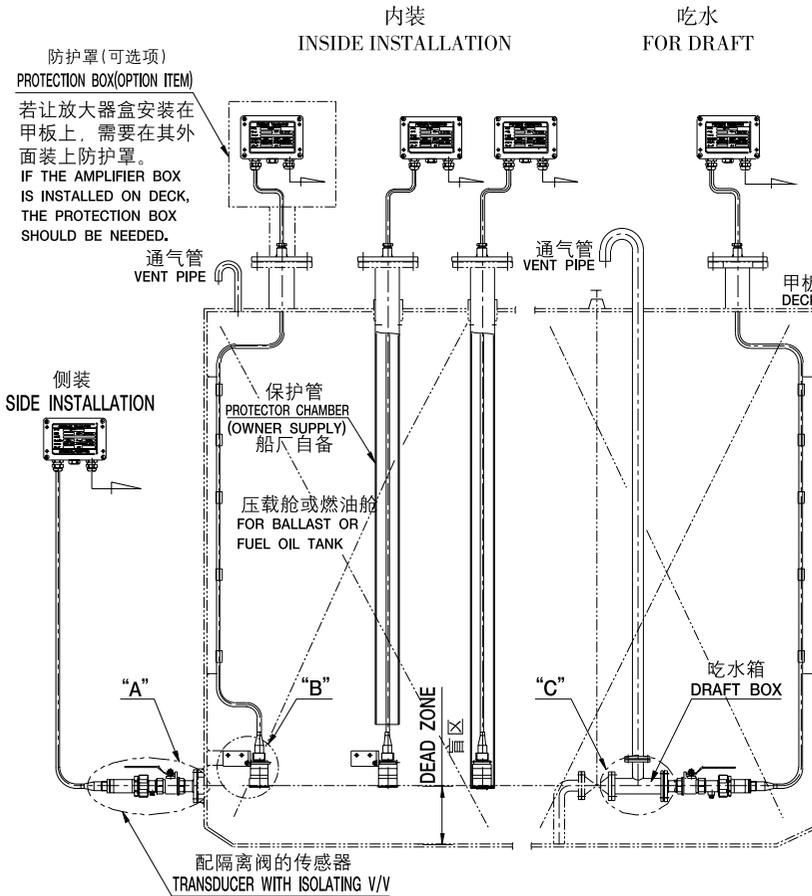
输出电流: DC4~20mA	Output: 4~20mA DC
测量精度: $\leq \pm 0.5\%$ F.S	Accuracy: $\leq \pm 0.5\%$ F.S
电源电压: DC12~28V	Supply voltage: 12~28V DC
测量范围: 标准175 ~ 4000 mbar 绝对1400 ~ 4000 mbar	Range: Standard 175 ~ 4000 mbar Absolute 1400 ~ 4000 mbar
压力负荷: 标准6 ~ 25 bar 绝对10 ~ 25 bar	Overpressure: Standard 6~25 bar Absolute: 10 ~ 25 bar
传感隔膜: 压电式陶瓷隔膜	Diaphragm cell: Capacitive transmitter with ceramic diaphragm
材料:	Materials:
隔膜: 陶瓷	Diaphragm: ceramic
传感器主体: SUS304/ SUS316L	Sensor body: SUS304/SUS316L
工作温度:	Operating temperature range:
传感器: - 40 ~ 125℃	Transmitter: - 40 ~ 125℃
放大器: - 25 ~ 55℃	Amplifier: - 25 ~ 55℃
防护等级:	Protection class:
传感器: IP68/可潜入型	Transmitter: IP68/submersible
放大器: IP66	Amplifier: IP66
本安型: Exia II CT3-T6	Intrinsically safe type: Exia II CT3-T6
电缆长度: 标准3m (可选至50m)	Cable length: 3m in standard (option: up to 50m)

型号标记 MODEL SIGN

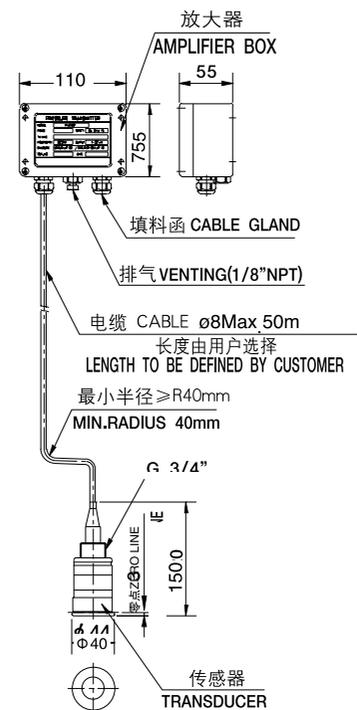
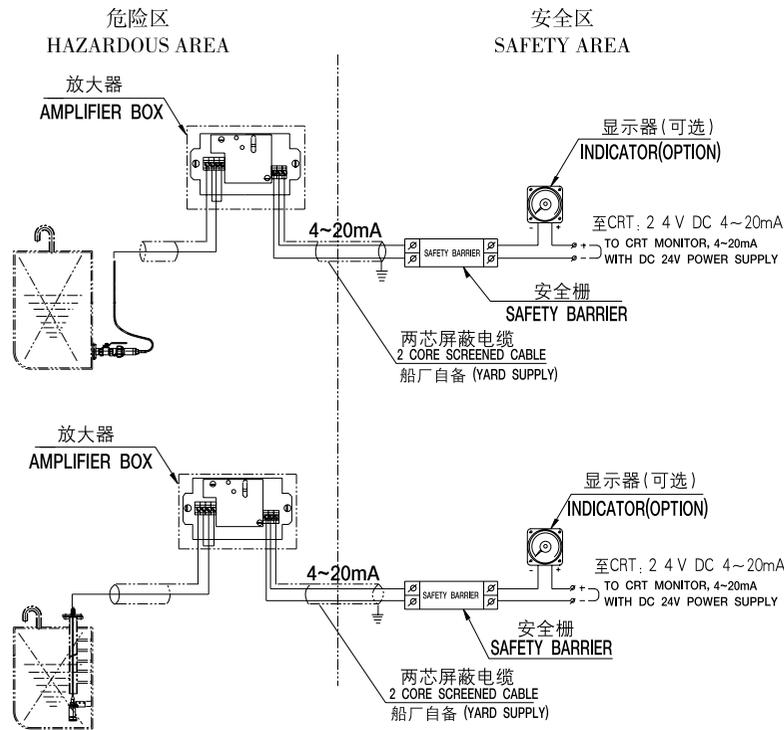
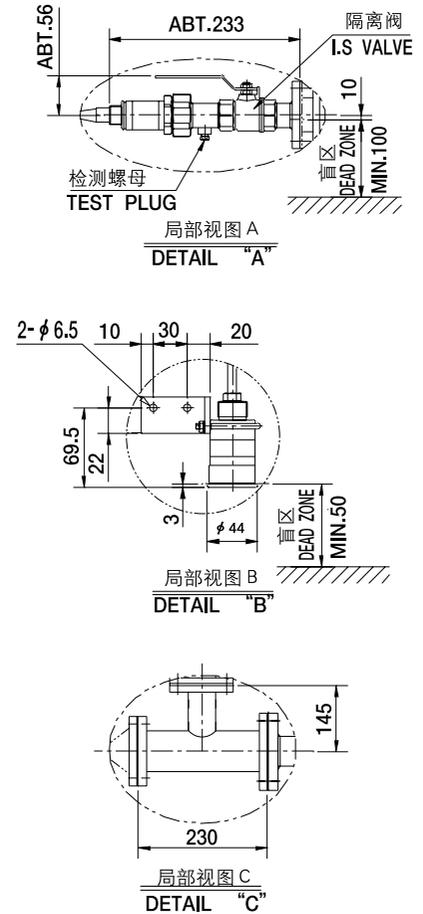




安装方式 MOUNTING METHOD



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

UHB货舱液位温度监测系统由一体化安装的浮球液位传感器、PT100温度传感器及安全栅、智能数显控制仪等组成。数显仪显示各点的液位和温度值。当监测数据达到设定的报警值时，系统发出高位、高高位或高温、高高温报警。

UHB cargo hold level and temperature monitoring system consists of float level transmitter, PT100 temperature transmitter and safety barrier, intellectual digital display control instrument. The digital display instrument can indicate the level and temperature value of each point. The system provides high level/overflow, high/over temperature alarm when the detection date reach the set point values.

主要技术参数 MAIN TECHNICAL SPECIFICATION

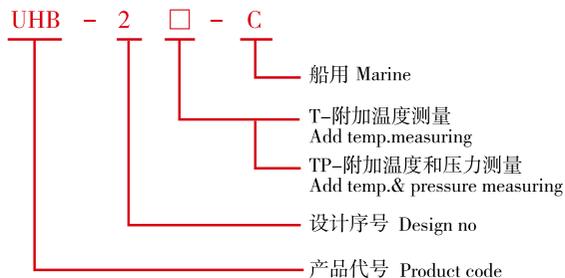
装置控制箱

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 0~10 m
温度 0~200℃
液位报警 95%高位 98%高高位
测量精度: 液位 ± 10 mm
温度 ± 1.0
液位报警 ± 5 mm
防护等级: IP66
防爆等级: Exia II CT6
装置功能: 液位、温度显示
声、光报警
消闪/消音
声/光自检及故障报警
交流/直流自动切换及失电报警

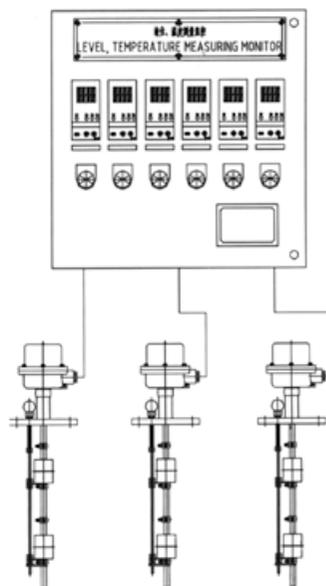
Control panel for device

Power supply: AC 220V 50Hz (main)
DC 24V (standby)
Number of measuring point: No limits
Measuring range: level 0~10m
temperature 0~200℃
level alarm 95% high level 98% overflow
Accuracy: level ± 10 mm
temperature ± 1.0
level alarm ± 5 mm
Protection: IP66
Explosion proof: Exia II CT6
Device Function: level, temperature value display
audible and visual alarm
flash stop and sound-off alarm
audible/light test and fail alarm
AC/DC power auto-switchover and power fail alarm

型号标记 MODEL SIGN



系统总图 SYSTEM DIAGRAM





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

用途 APPLICATION:

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、润滑油舱等舱柜的液位测量和控制。

QPS-100 pneumatic type remote level gauging device is applied to measure and control the level in ballast tank, draft, L.O. tank, of various warship, dock, oil production platform etc.

工作原理 OPERATING PRINCIPLE

本系统由气源通过气压调节器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其显示，亦可通过P/I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。

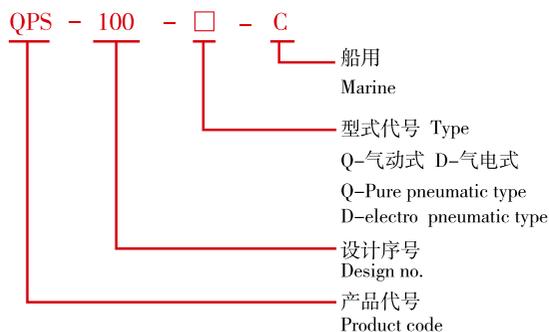
The operating principle is based upon the measurement of the hydrostatic pressure by providing a constant low flow of air or pressure into a probe which opens at the tank bottom. After the air pressure keeps in balance with the hydrostatic pressure of the liquid in the tank, the remaining air pressure 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 P/I 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
双重防液回流装置，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
High pressure pipeline clean function
Duplex liquid check device, safe and reliable.
Multi-function combination of measure and control

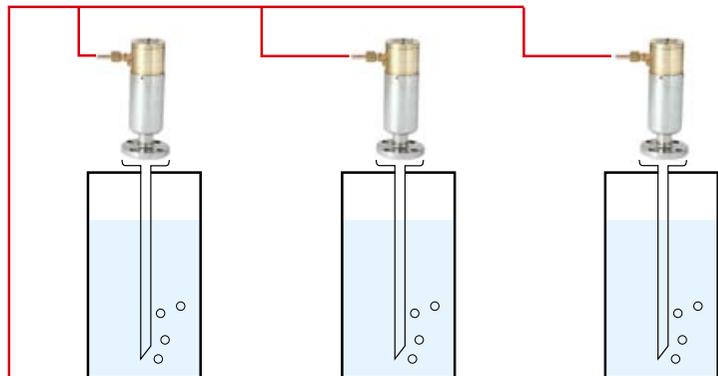
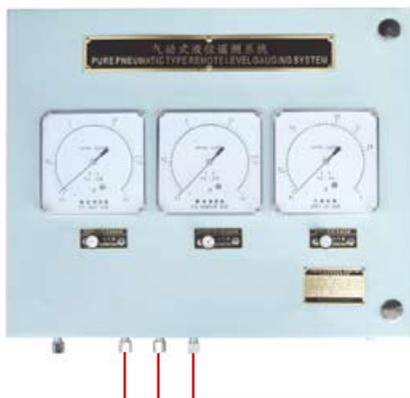
型号标记 MODEL SIGN



主要技术参数 MAIN TECHNICAL SPECIFICATION

量程范围: 0~40 m (可选)
测量精度: $\pm 1.5\%$ F.S
工作温度: $-30\sim 70^{\circ}\text{C}$
空气流量: 10~80 L/h
气源压力: $7.5\text{kg}/\text{m}^2$
输出距离: Max 400 m (管路输出)
输出信号: 4~20mA 二线
电源电压: DC24V

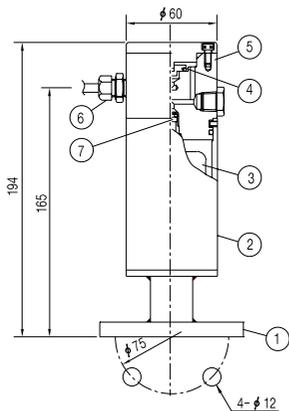
Range: 0~40 m (Option)
Accuracy: $\pm 1.5\%$ F.S
Working temp.: $-30\sim 70^{\circ}\text{C}$
Air consumption: 10~80 L/h
Air pressure: $7.5\text{ kg}/\text{cm}^2$
Output distance: Max 400 m (pipeline output)
Output: 4~20mA two wire
Power voltage: DC24V





装置构成
COMPONENTS OF DEVICE

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

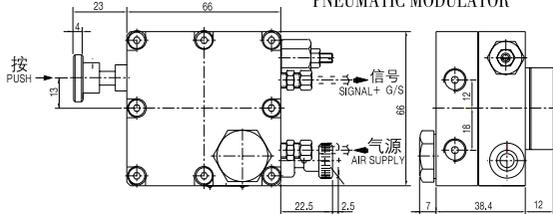


在气源出现故障时，避免液体进入设备
连接尺寸:JIS 5K 25A, 或5K 20A.
最大工作压力: 10kg/cm²
检测接口连接尺寸:PT 1/4"
材料: 海军铜
包括用于检测实际液位自检接口

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:Nabal brass.
Including local test device for check of actual level.

NO	名称Description	材料Material	Q'ty
1	法兰Flange	SUS 304	1
2	护管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	BS	1
7	下止回片Lower	海军铜 NAVAL BRASS	1

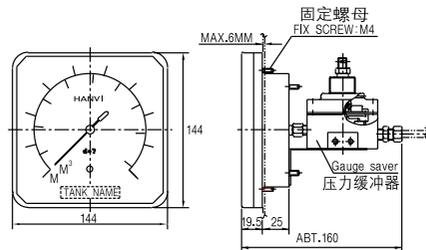
气压调节器
PNEUMATIC MODULATOR



气压: 4.5kg/cm²
空气流量: 10~80l/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: 10~80l/h
Blowing pressure: 4.5kg/cm²
Connection: 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



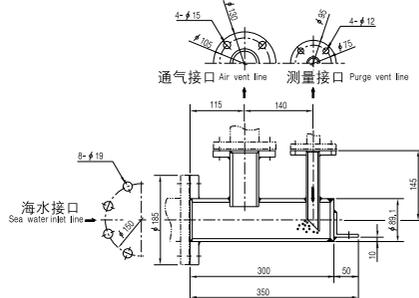
液位显示器
尺寸:144 × 144
精度等级: 1.5级
-可选1.0级
-可选0.5级
计量单位: 高度或容量
高度和容量

LEVEL INDICATOR
Size:144 × 144
Class 1.5 standard
-Class 1.0 option
-Class 0.5 option
Graduation: Height or volume
Height and volume

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

Including the zero adjuster
GAUGE SAVER
Body material: AL6061
Differential: Below 0.01kg/cm²
Including the range Adjuster

吃水箱
DRAFT BOX

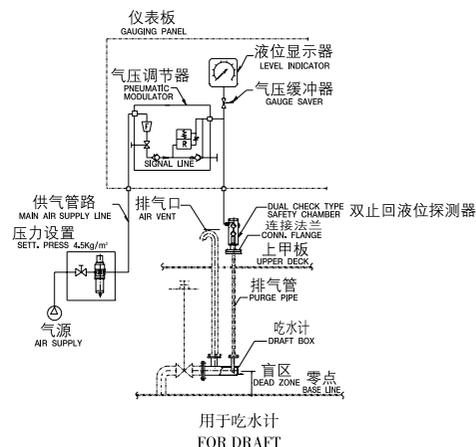


材料-SUS316
连接尺寸
-测量接口:JIS 5K 25A
-通气接口:JIS 5K 20A
-海水接口:JIS 10K 80A

Material-SUS316
Connection size:
-Signal line:JIS 5K 25A
-Vent line:JIS 5K 20A
-Sea water inlet:JIS 10K 80A

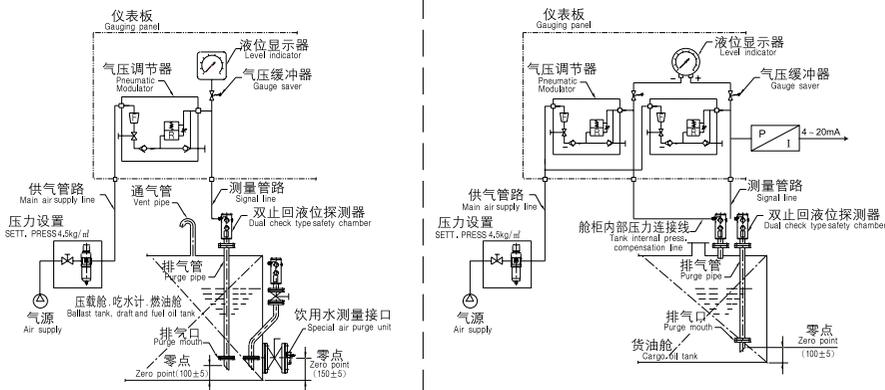
装置应用图
DEVICE EXAMPLE

QPS-100Q-C



用于吃水计
FOR DRAFT

QPS-100D-C





RYP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热、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 functions, The device adopts advanced observe 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、Pt100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，并发出超温报警。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, Pt100 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.

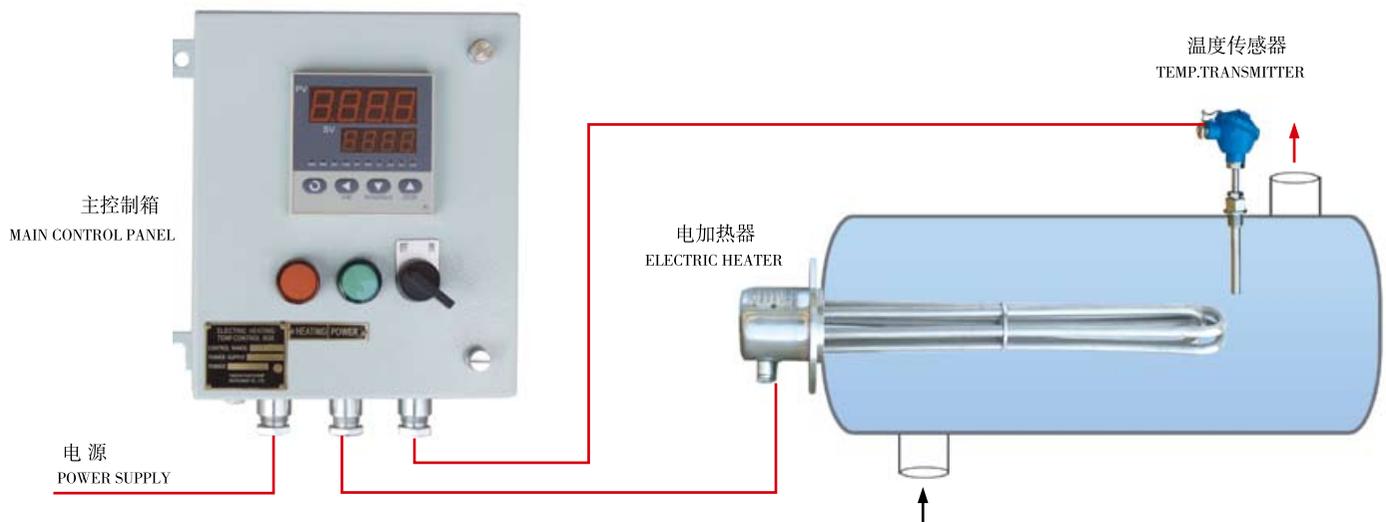
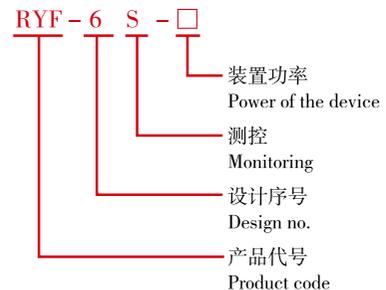
特征 FEATURES

设计合理，结构紧凑	Reasonable design, compact structure
双重超温保护，安全可靠	Dual over temp. Protection, safe & reliable
控温精度高	High accuracy in temp. control
装置配置灵活	Flexible configuration
智能化控制，技术先进	Intellectualized control, advanced technology

主要技术参数 MAIN TECHNICAL SPECIFICATION

装置电源：AC 220V 50Hz（主电源）	Power supply: AC 220V 50Hz (main)
加热电源：AC380 / 440V 50/60Hz	Heating power supply: AC380 / 440V 50/60Hz
测量范围：0~200℃	Measuring range: 0~200℃
测量精度：±1.0℃	Measuring accuracy: ±1.0℃
控温精度：±2.0℃	Temp. control accuracy: ±2.0℃
防护等级：IP44（电加热器） IP22（测控箱）	Protection: IP44 (electric heater) IP22 (monitoring panel)
装置功能：温度测量 温度控制 超温报警	Functions of device: Temp. measuring Temp. control Over temp. alarm

型号标记 MODEL SIGN





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、电为动力对阀门的启、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。装置采用先进的软逻辑电脑控制技术，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、舱底水及石油、化工等工程中对管道阀门进行远距离控制。

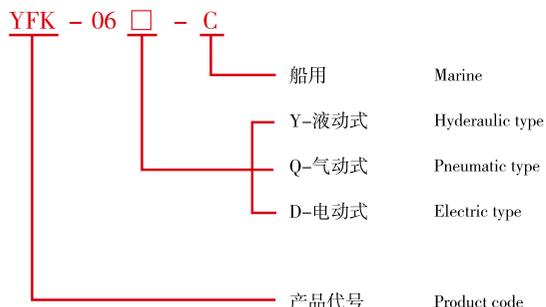
Valve remote control device utilizes oil pressure, air pressure and electricity as power to carry out remote collective control toward the start & stop of the valve by the console. The device specially designed by combining advantages of same kinds of products of home and abroad, has the characteristics 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 autocontrol for ship's ballast device. The device is suitable for remote control of ship's ballast water, bilge and the pipetine valve in the projects of petroleum and chemical.

工作原理 OPERATING PRINCIPLE:

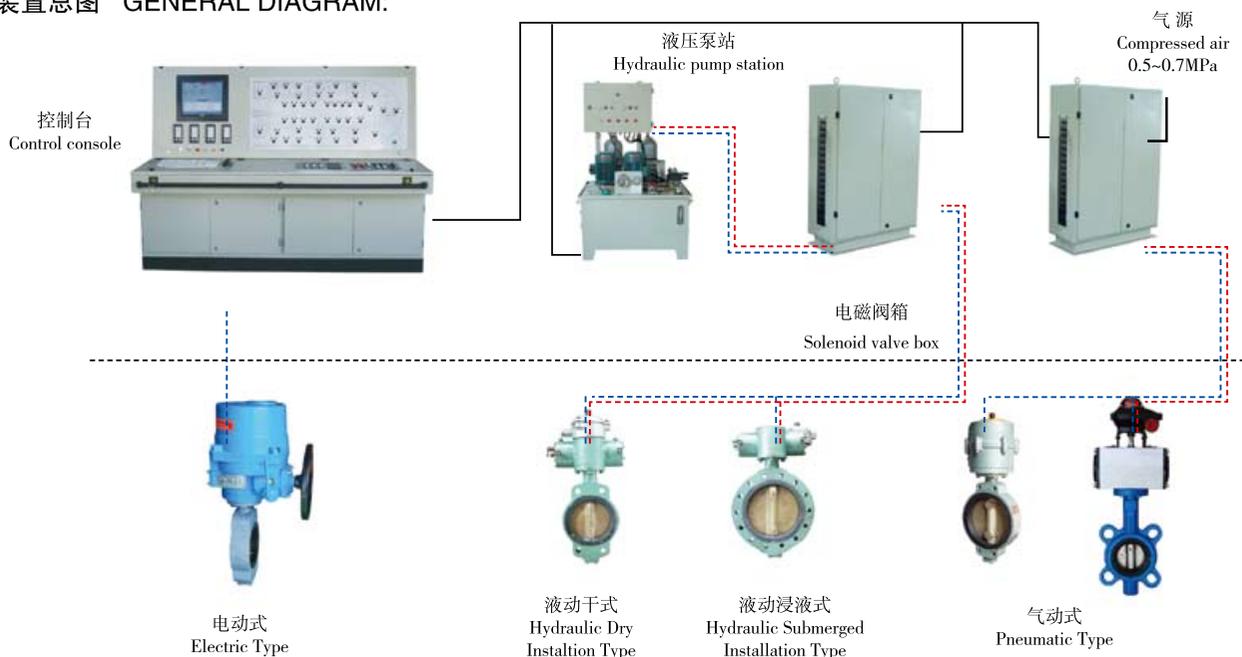
阀门遥控装置按形式主要分为液动、气动、电动等三种基本类型。装置主要由控制台、动力源、驱动执行器及阀门等组成。控制台配备工控电脑或手动开关发送开、闭阀门的指令、电磁阀（或继电器）接通相应的开、闭阀门动力管路（或电路），由驱动执行器驱动阀门进行开、闭阀动作。有工控电脑配置的阀门遥控装置可与液位遥测配套组成全自动阀门遥控系统，工控软件可将各种量值、设备状态及报警信息显示出来，并完成存储、制表等功能。

The device includes three types:hydraulic valve remote control,pneumatic valve remote control,and electric valve remote control.The device consists of control console,power source,driving actuator and valves.The control console provides on/off instruction of valve by industrial computer or manual switch,and then the solenoid valve(or relay)energizes corresponding power pipeline(or circuit)of valve by driving actuator.The device with industrial computer matched with remote level gauging device can compose full automatic valve remote control device,and the control soft can indicate various value,state and alarm to finish storage and tabling.

型号标记 MODEL SIGN



装置总图 GENERAL DIAGRAM:





液动式阀门遥控装置 HYDRAULIC VALVE REMOTE CONTROL DEVICE

概述 GENERAL

液动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，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、化学品船等各类船舶中管路阀门的启、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 system has the characteristics of easy installation, safety & reliability, can be used for pipeline valve's start & stop of all kinds of ships, such as oil tanker, chemical vessel.

主要技术参数 MAIN TECHNICAL SPECIFICATION

装置型号: YFK-06Y

装置电源: AC 380V /440V 50Hz (三相)

工作温度: -10~55℃

相对湿度: ≤95%

工作压力: 6.3MPa

油箱容积: 250 L

过滤精度: 20 μm

电机功率: 4KW

齿轮泵排量: 10L/min

防护等级: IP22 (控制台)

控制点数: 无限制

Model: YFK-06Y

Power supply: AC 380V/440V 50Hz (three phase) working

Temp.: -10~55℃

Relative humidity: ≤95%

Output working pressure: 6.3MPa

Volume of oil tank: 250L

Filtering accuracy: 20 μm

Power of electric machinery: 4KW

Displacement of gear pumpp:10L/min

Protection: IP22 (control console)

No. of control point: no limit



柜式控制台
CONTROL CONSOLE

控制台

本设备是遥控装置的关键设备之一。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

液压泵站

设备功能:

向装置提供6.3MPa的液压动力;

配备二台互为备用的油泵机组;

油箱低液位报警;

高、低油压报警;

超油压自动溢流;

二只16L蓄能器。

Hydraulic pump station

Function:

Providing 6.3MPa hydraulic power to device;

Matching two sets spare oil pump units each other;

Low level alarm for oil tank;

High & low oil pressure alarm;

Auto-overfill at over oil pressure;

Two pieces of 16L accumulators



液压泵站
HYDRAULIC PUMP STATION



电磁阀箱

设备根据所需遥控的阀门数量，将分路电磁阀和组合阀块集中安装，用于执行控制台对液压控制管路的开、关控制指令。每个电磁阀对应一个被控制的阀门，当电磁阀线圈的电时，电磁阀动作，改变油路方向，由执行器驱动阀门启、闭。

在遥控功能失效时，该设备可与应急手动泵配合使用，对单只阀门进行应急操作。

Solenoid valve box

According to the number of controlled valve, the device integrates separated solenoid valves and combined valve blocks, and carries out on/off instruction from the control console which is toward hydraulic control pipeline. Each solenoid valve represented one controlled valve, the solenoid valve act and change the direction of the oil line while the solenoid is energized, then the actuator drives on/off of the valve. The device matched with emergent manual pump can carry out emergent operation to single valve when the remote control function is invalid.



电磁阀箱
SOLENOID VALVE BOX

应急手动泵及应急阀块

当装置遇到失电等紧急情况时，可用此设备手动应急启、闭单只阀门。

Emergent manual pump and emergent valve block

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



应急手动泵及应急阀块
EMERGENT MAUUAL PUMP AND EMERGENT VALVE BLOCK

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

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. 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-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)

控制点数: 无限制

阀门通径: 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)

Controlling points: no limit

Nominal diameter: DN50~350mm



气动控制箱
CONTROL BOX



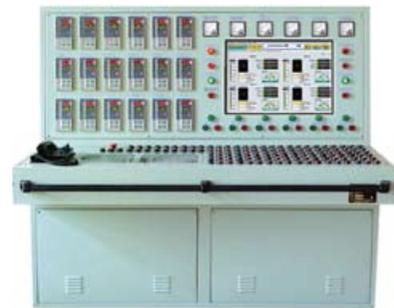
电动式阀门遥控装置 ELECTRIC VALVE REMOTE CONTROL DEVICE

电动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。适用于散货船、集装箱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 operation etc. 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-06D	Model: YFK-06D
装置电源: AC380V/440V 50/60Hz	Power supply: AC380V/440V 50/60Hz
工作温度: -10~55℃	Working temp.: -10~55℃
相对湿度: ≤95%	Relative humidity: ≤95%
防护等级: IP22 (控制台)	Protection: IP22 (control console)
控制点数: 无限制	Controlling points: no limit
阀门通径: DN50~400mm	Nominal diameter: DN50~400mm



遥控阀门 REMOTE CONTROL VALVE

遥控装置相应配套船用中心型、双偏心型液压蝶阀、气动蝶阀或电动蝶阀。

The remote control device can be matched with marine centric type, dual-eccentric hydraulic butterfly valve, pneumatic butterfly valve or electric butterfly valve.



液动
Hydraulic



气动
Pneumatic



电动
Electric



浸液式
Submerged
Installation



干式
Dry Installation

主要技术参数 MAIN TECHNICAL SPECIFICATION

蝶阀型式: 中心型、双偏心型	Type of butterfly valve: centric type, dual-eccentric type
驱动型式: 液压驱动、气压驱动、电驱动	Driving type: hydraulic type, pneumatic type, electric type
阀门通径: DN50 ~ 500	Nominal diameter: DN50~500
材料	Materials

部件名称 Parts name	材料 Material
阀体 Valve body	铸钢、球墨铸铁、青铜、不锈钢、铝合金 Cast steel, Nodular cast iron, Bronze, Stainless steel, Aluminum alloy
阀板 Valve plate	青铜、不锈钢 Bronze, Stainless steel
阀座 Valve seat	丁腈橡胶、氟橡胶、乙丙橡胶、不锈钢 NBR, Fluor rubber, Ethylene-propylene rubber, Stainless steel
阀杆 Valve rod	不锈钢 Stainless steel



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
可燃气体 (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 Electrochemistr	≤ ± 5%F.S	1ppm	Ex d II CT 6 Ex ia II CT 4	

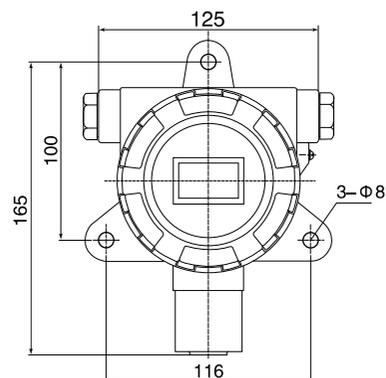
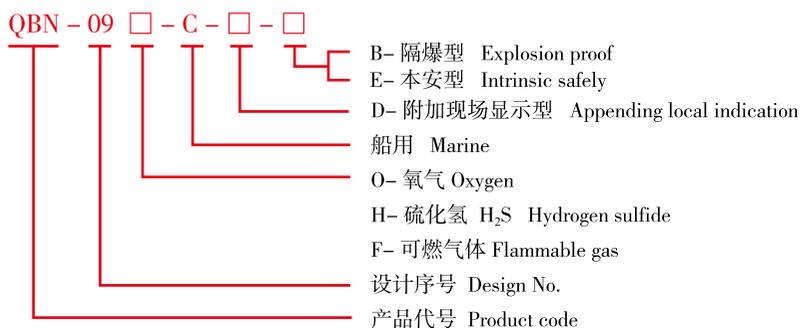
- 重复性 : ≤ 2% F.S
Repeatability: ≤ 2% F.S
- 工作温度 : -20 ~ 70℃
Operating temperature: -20 ~ 70℃
- 环境湿度 : ≤ 90%
Ambient humidity: ≤ 90%
- 检测方式 : 扩散式
Detecting type: diffusion type
- 工作方式 : 固定式长期连续工作
Operating type: fixed type long continuous operating
- 工作电压 : DC 24V
Working voltage: DC 24V
- 输出信号 : 三线制 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 : 墙壁式, 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、锅炉炉膛负压检测、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 dedusting equipment, cleaning shop, textile machinery, leakage detection equipment and other industrial places.

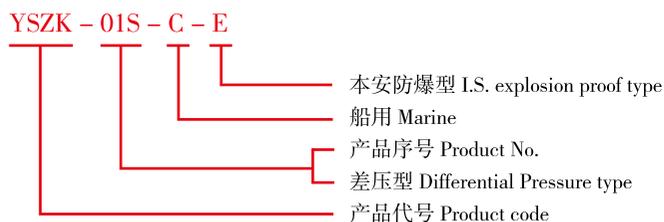
主要技术参数 MAIN TECHNICAL SPECIFICATION

电源电压 :DC24V	Power voltage: DC24V
测量精度 : ± 1.0%F.S / ± 0.5%F.S	Measuring accuracy: ± 1.0%F.S / ± 0.5%F.S
工作温度 : -20~60℃	Working temp.: -20~60℃
输出信号 : 4~20mA(二线制)/1~5VDC	Output signal: 4~20mA (two wires)/ 1~5VDC
防护等级 : IP56	Protection grade: IP56
防爆标志 : ExiaIICT6	Explosion proof mark: ExiaIICT6
最大过压能力 : 3psi (20kPa)	Max. overload capability: 3psi (20kPa)
接口尺寸 : Φ6 不锈钢卡套接头 / Φ8 塔形黄铜接口	Connection size: Φ6 stainless steel biting connector/ Φ8 tower brass connection

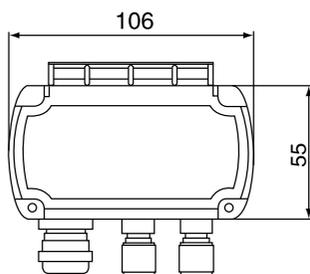
测量范围 MEASURING RANGE

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

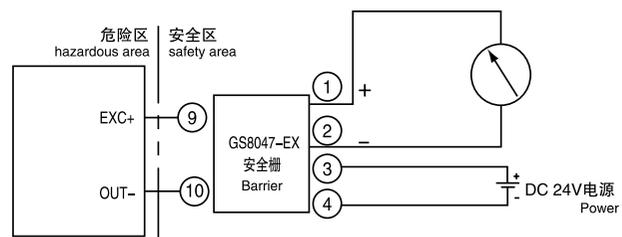
型号标记 MODEL SIGN



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)

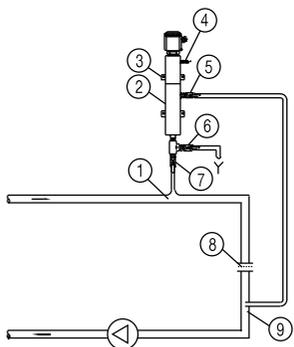


CP-63A型管路油污检测传感器 PIPELINE OIL CONTAMINATION DETECTION TRANSMITTER

概述 GENERAL

本装置由油污检测腔体、电容式报警开关、球阀及组件等构成，安装在船舶的冷却水管路中，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 | ①Tapping point for partial flow 1/2" PT on the top of the cooling water line |
| ②油污检测腔体 | ②Measuring pot with oil detector |
| ③墙装安装固定板 | ③Wall mounting plate |
| ④通气阀 | ④Vent valve |
| ⑤余液出口截止阀 | ⑤Outlet isolating valve with cleaning process |
| ⑥取样/清洁阀 | ⑥Sampling & cleaning cock |
| ⑦入口截止阀 | ⑦Inlet isolating valve |
| ⑧节流孔板 | ⑧Orifice plate |
| ⑨3/8" PT回流接口 | ⑨Return partial flow 3/8" PT |

主要技术参数 MAIN TECHNICAL SPECIFICATION

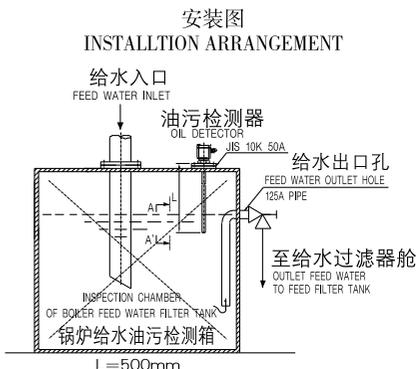
构成：油污检测腔体
电容式报警开关(CAP63)
最大压力：0.5 MPa
最高温度：150℃
流量：100~300L/h
灵敏度：ABT 50ml (油)
电源：AC 110/220V
信号输出：继电器输出 (SPDT)
Consists of Oil detection pot
- Capacitive oil detector (CAP63)
Max. Pressure: 0.5MPa
Max. Temp: 150℃
Flow: 100~300L/h
Sensitivity: Approx. 50ml oil
Power supply: AC 110/220V
Output: Relay output (SPDT)

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。当混有油污的通过给水管路进入检测箱中时，油污上浮并漂浮在水面。正常条件下，报警开关电极的末端处在水面中，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 have a inspection chamber or devide area in tank to accumulate oil when oil contamination boiler water. When incoan inspection chamber, the feed water only goes out to feed filter tank and oil with be accumulated in inspection chamber until drainage. in the normal conditions, the end part of electrode will be in water level always. But when the oily water comes,the oil will be accumulated on the 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

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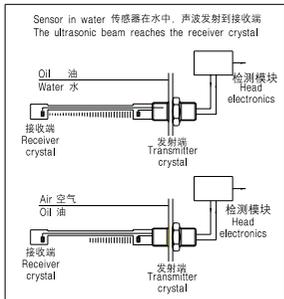
型式：电容式油污检测器	Type: Capacitive oil detector
电源：AC 110/220V	Power supply: AC 110/220V
输出：继电器触点 (SPDT)	Output: Relay contact (SPDT)
公称压力：1.0 MPa	Operating pressure: 1.0MPa
工作温度：≤100℃	Max. Temp: ≤100℃
防护等级：IP66	Protection: IP66
连接尺寸：G1"-1/2"	Conn. Size: G1"-1/2"



OMK-08型油水界面检测器 OIL/WATER INTERFACE DETECTOR

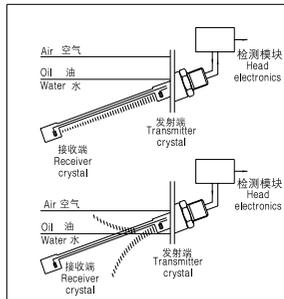
图一 声波衰减

Interface detection by attenuation



图二 声波反射折射

Interface detection by reflection



概述 GENERAL

本检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



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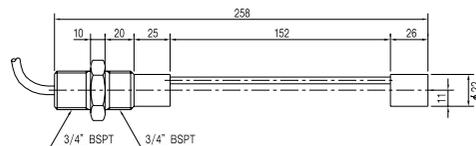
型号(MODEL)	OMK-08A	OMK-08B
电源电压 Power supply (Selector switch)	AC110/220V AC220/240V	DC24V
功率 Power consumption	6VA	
继电器输出 Relay output	DPDT	
触点容量 Relay rating	AC 230V 5A	
外形尺寸 Box dimensions	200 × 120 × 75	
外壳及防护 Box rating	聚碳酸酯Polycarbonate IP65	
填料函 Holes for glands	φ 3 over φ 16mm	
安装尺寸 Fixing centers (W × H)	188 × 88	
安装孔径 Fixing hole diameter	φ 4mm	

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

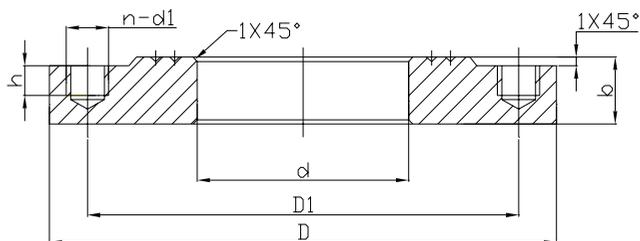


402SD 型 SPECIFICATION FOR 402SD

材料: SUS316	Material: SUS316
连接尺寸: 3/4" BSPT螺纹	Conn. Size: 3/4" BSPT Thread
用途: 油水界面检测	Design or Duty: Chemical interface
液体形式: 清/粘/伴有固体	Liquid Type: Clean, viscous with solids
温度: -70℃~150℃	Temperature: -70℃~150℃
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



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/T2506-89	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	133	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	
0.6、1.0 1.6、2.5	20	95	68	48	M12	4		
	GB569	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		

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，使压力表不阻塞。

最大工作压力：60MPa

Application: help to measure pressure inside fuel oil piping

Function: separate fuel oil and pressure gauge to make pressure gauge smooth

Max. working pressure: 60 MPa



内管附
Pipeline accessory

诚信经营 用心服务



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