

X-Coil Meter X-Coil仪表



e.g. 例: KLY-C96-XE-±180(4-20mA)-DC24V

1. **Enterprise Code**企业识别号 Model is 固定为“KLY”;
2. **Structure Type Code**结构型式代码; Model is 固定为“C”;
3. **Outline Dimension Code**外形尺寸代码;

72: 77×77
 96: 101×101
 144: 148×148
 192: 196×196

4. **The meter is built in with X-coil movement, "XE" for embedded installation, "BW" for bridge wing installation**

本机都使用X-coil机芯并配编码器,“XE”内嵌式安装,“BW”壁挂式安装

5. **Scale Display Specification**面板指示规格

6. **Input Signal Specification**输入信号规格

7. **Auxiliary Power**辅助电源规格 DC24V

X-COIL Meter

- > Using on controlling cab in vessels, indicating rotational speed and rudder angle. The meter has self-developed X-Coil movement with built-in micro controller; pointer can do 360° clockwise or anti-clockwise rotation, providing illumination on display with auxiliary power (DC 7-30V). Before the meter is energized, pointer can stop on any position. The analogue signal can be input from single channel. For example, the standard signal is 0-10V, 4-20mA and so on. It also can be input from dual channels. For special SIN/COS, dual channels can share the same terminal. The meter has the error warning indication, the alarm LED is on the upper of the front case. If the meter is mal-function or failure, the LED will be blinking.

Feature:

- > a) Waterproof, Salt-mist resistance, Suitable for marine environment;
- b) After energized and switched on supplementary light, the light beam fill out the transparent pointer, easy to get reading;
- c) Good mechanic performance, Shock resistance.

> Specification:

- 1) Accuracy class: 0.5;
- 2) Ingress Protection: front panel IP66, rear part IP20;
- 3) Auxiliary power for supplementary light: DC7~30V.

X-COIL 仪表

- > 用于船舶驾控台上,指示转速和舵角等。采用公司自主研发的内置微控制器的X-coil机芯,指针可作360°顺时针或逆时针旋转,配辅助电源(DC 7~30V),可提供夜光照明带有夜光功能。当仪表未上电时,指针会指在一个随机的位置。模拟量信号可单通道输入,如标准的模拟信号0-10V,4-20mA等;也可双通道输入,如特殊的SIN/COS,双通道时其共用一个公共端。仪表带有出错报警指示功能,报警灯位于仪表上方,当仪表内部失效或出现故障失去控制时灯会闪烁。

特色:

- a) 防水,防盐雾,适用于海洋环境;
- b) 通电时,背光光源开启,指针导光,便于读数;
- c) 具有优良的机械性能,抗震性强。

技术规格:

- 1) 准确度等级: 0.5;
- 2) 前面板部分防护等级IP66,后端部分防护等级IP20;
- 3) 指示灯供电辅助电源: DC7~30V。

Product Description 产品描述 Technical Symbol 技术符号	Type 产品型号	Installation Method 安装方式	Measurement Parameters 测量参数	Measurement Range 测量范围	Auxiliary Power 辅助电源	Accuracy Class 准确度等级	Scale 指示角度
X-Coil meter X-Coil仪表	KLY-C72-XE	Panel Mount 面板内嵌式	rpm, r/min, °, Pa, ... 转速, 转数, 舵角, 压力等	DC Current 直流电流 -25mA...0-0...25mA DC Voltage 直流电压 -30V...0-0...30V	DC 24 V	0.5	250° or 360° 250° 或360°
	KLY-C96-XE						
	KLY-C144-XE						
	KLY-C192-XE						
	KLY-C144-BW	Bridge Wing 壁挂式					
	KLY-C192-BW						

Dimension 尺寸图

Unit 单位: mm

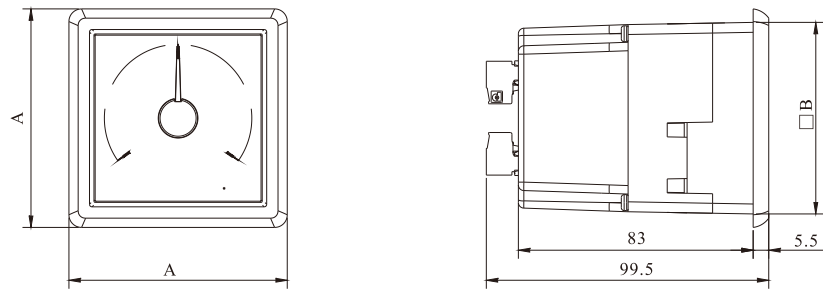


Figure 1 Dimension(Panel Mount) 图1 面板内嵌式尺寸

Type 产品型号	Unit 单位	A	B	Cut-Out Size 开口尺寸
KLY-C72-XE	mm	77	67.5	68 × 68
KLY-C96-XE	mm	101	91.5	92 × 92
KLY-C144-XE	mm	148	137	138 × 138
KLY-C192-XE	mm	196	185.5	186 × 186

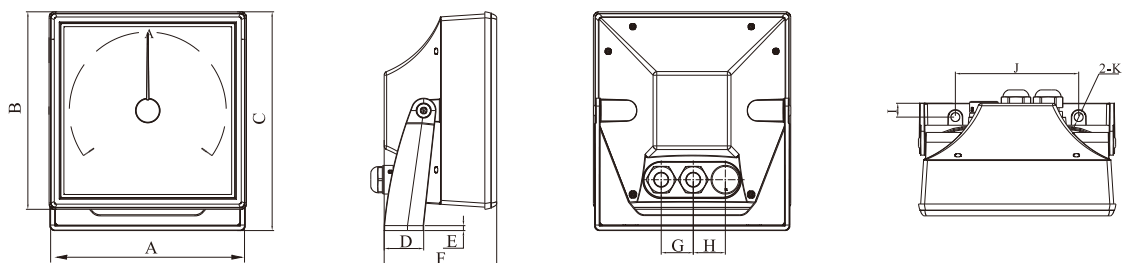


Figure 2 Dimension(Bridge Wing) 图2 壁挂式尺寸

Type 产品型号	Unit 单位	A	B	C	D	E	F	G	H	I	J	K
KLY-C144-BW	mm	152	152	172	40	5	114	22.5	26.5	14	125	φ 9
KLY-C192-BW	mm	200	200	221.5	40	5	114	32.5	32.5	14	125	φ 9



Panorama Rudder Angle Indicator 三视窗舵角指示器



E.g.例: KLY-RA200TW- ±45° (4-20mA)- DC24V

1. **Enterprise Code**企业识别码: KLY
2. **Structure Type Code**结构型式代码: RA200TW
3. **Measurement Range**测量范围
4. **Input Signal**输入信号: 4-20mA, 10V, ±10V等
5. **Auxiliary Power**辅助电源规格: DC24V

Panorama Rudder Angle Indicator

With Illuminated function, built-in long-life LED, can ensure to get reading normally in dimmer condition.

This series of indicator is water-proof, anti-salt mist, suitable for marine environment. Model prefix is KLY-RA200TW.

Indicator offers two styles on scale plate

It Indicates vessel' s rudder angle position, adopting traditional moving-coil movement, ensure quick response time; This indicator, has 3 big windows with large fonts and scale, and visible areas, let user can quickly and easily to get the indicator' s reading from any angle up to 250° and from a distance of up to 5m.

Notice

- a) Please DO the connection properly according to the wiring diagram
- b) Please cut off the power before any connection.
- c) DO NOT apply voltage over than the range of the suggested voltage; otherwise the instrument will malfunction.
- d) DO NOT use the instrument under the condensation environment.
- e) DO NOT touches any part of the applied voltage when you use the instrument near the area of the exposed live parts, wearing the insulated hand gloves is recommended.

全视窗舵角指示器

具有夜光功能, 内部配有长寿命LED灯, 可保证在较昏暗的环境下正常的读取数据。

本系列仪表防水, 防盐雾, 适用于海洋环境。

代表型号为KLY-RA200TW

指示器有两种显示风格供选择

用于指示船舶的舵角位置, 采用传统的动圈式机芯, 保证了极短的响应时间; 该指示器有三个比较大的刻度及可视区域, 保证用户能从250° 范围内的任意角度和5m的距离内可快速地、轻松地读取舵角指示器的指示位置;

注意事项

- a) 请按照接线图正确接线。
- b) 在接线连接前, 请务必切断测量物的电源。
- c) 请勿施加超过指示值以上的测量值, 这会引引起本仪表发生故障。
- d) 请勿在结露状态下使用。
- e) 当在裸露、带电部分的周围使用仪器时, 请勿碰触到施加电压的部分, 此时, 推荐使用橡胶手套等保护工具。

No. 编号	Scale plate 刻度盘	Scale Division 刻度线	Scale Numbers 刻度数字	Pointer 指针
1	White白色	Black黑色	Black黑色	Blac黑色
2	Black黑色	Yellow黄色	Yellow黄色	Yellow黄色

Technical Specification 技术参数

Parameters 参数	KLY-RA200TW			
Accuracy 精度	1.5			
Dimmer power supply 调光电源 V	24V AC/DC -25/+30%			
Consumption 功耗 W	≤4W			
Analog output 模拟量输入 可选量程	mA	DC 0-1mA	0-20mA	DC 0-100mA
		DC -1-0-1mA	4-20mA	DC -100-0-100mA
	V	DC 0-1V	0-10V	DC 0-100V
		DC -1-0-1V	-10-0-10V	DC -100-0-100V
Input load 输入负载 -	Voltage 电压: 1KΩ/V Current 电流: 4V			
Wire capacity 接线容量	Soft wire 柔性导线: 0.2-2.5mm ² Hard wire 刚性导线: 0.2-2.5mm ² Gauge 线规: 24-12AWG			
Meter mounting hole 仪表固定孔 mm	Φ 5.5 x 6			
	Minimum 最小值	Standard 标准值	Maximum 最大值	
Operating temperature 工作环境温度 °C	-10	-	55	
Storage temperature 保存环境温度 °C	-20	-	70	
Relative Humidity (No condensation) 相对湿度(无结露) %	25	-	93	
Temperature Affect 温度影响	etween -15 and 55°C Max. ± 1.5% 在-15...55°C时最多 ± 1.5%			
Ingress Protection 防护等级	Front panel 面板: IP54			
Safety Standard 安规	Safety Class 安全等级: CAT.III. -300V			
	Pollution degree 污染等级: 2			
Material 材料	LG LUPOY GP-1006-F			
Size 外形尺寸 mm	Φ 370x115			
Weight 重量 Kg	-	-	1.5	

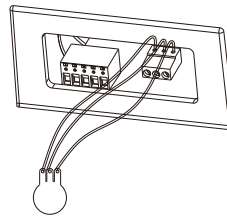
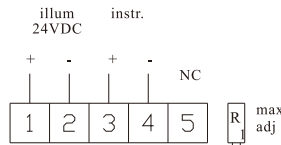
Wiring Diagram 接线图

After removal of back panel cover, you can see internal terminals immediately.

当拆除指示器的后面板后, 即可看到内部的连接端子。

Pin no. 脚序	Function 功能	Illustration 说明	Remark 备注
1	Illuminated power supply 照明调光电源	Positive 正极	DC24V
2		Negative 负极	
3	Analog input 模拟量输入	Signal + ' ve 信号正	
4		Signal - ' ve 信号负	
5	Empty 空脚		
6	Potentiometer (Dimmer) 调光电位器	Middle Lead 中心头	1kΩ /2w Potentiometer 电位器
7			
8			

For general current/voltage:



Caution: If middle lead of potentiometer (dimmer) is wrongly wired, internal circuits of this indicator will be damaged!

注意: 当将调光电位器的中心脚接错位置时会损坏此舵角指示器的内部电路!

Dimension 尺寸图

