

OLC-D1-B 光电式液位监视器



油位监视器在接通供电电压约 3 秒钟后启动，继电器吸合。在低液位时，LED 亮红橙色，继电器延迟 5S 后断开，LED 亮红色；当液位在正常区域时，LED 灯熄灭，继电器延迟 5S 后重新接通，LED 亮绿色。

LED 灯颜色代码

红(橙)色闪烁 (10 次/秒): 电子头未与监测棱镜正确装配
供电电压不匹配或者内部错误

红色: 液位低-继电器断开

绿色: 液位正常-继电器吸合

橙色: 液位低-继电器延时断开

测试及安装说明

装配玻璃头后 LED 亮红灯，把玻璃头浸入液体中-亮绿灯，玻璃头离开液面短时亮橙色灯，5 秒后亮红灯为正常；

当未装玻璃头时，LED 红灯闪烁!

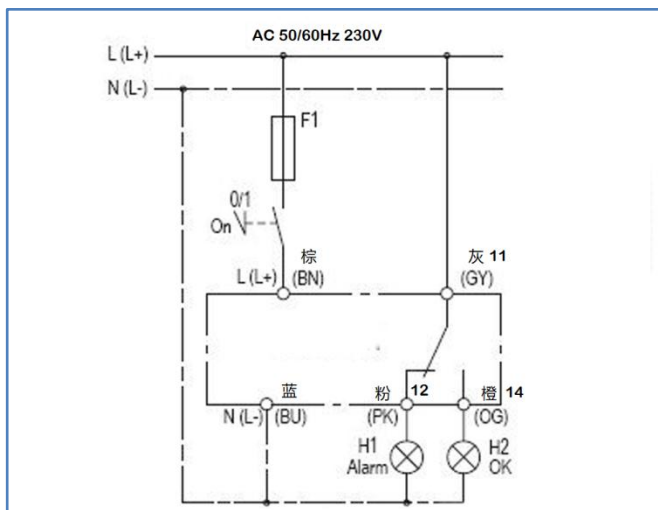
安装时保证玻璃头的密封，1/2" NPT 玻璃头宜用液体黄胶作为螺纹密封胶，拧入力矩不大于 75N.M，过大的力矩玻璃头容易碎裂，24 小时螺纹密封胶完全固化后，投入使用承压。电子头安装前须检查该监视器（尤其是玻璃）的清洁度，并在电子头上套上 O 型圈向玻璃头压紧并同时旋合，保证与棱镜精密配合。

电缆接口朝下。依接线图进行电气连接。

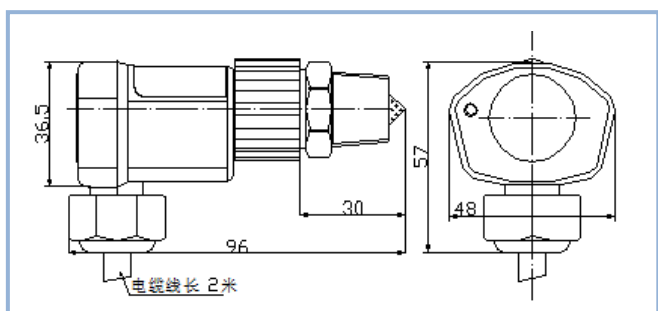
⚠ 必须由专业电气人员安装。

技术参数

监测棱镜组件（玻璃头）	
介质温度	+100℃ +110℃(max.2h)
最大运行压力	46bar(-10℃...+120℃)
连接螺纹	订货号 1/2"NPT 短丝 15G15 460 01 11/8UNFE-18 15G15 462 01
重量	约 110g
光电探测装置（电子头）	
供电电压	AC 230V -15%...+10% 3VA
环境温度	-30...+70℃
环境湿度	20%...90%（不得凝露与结霜）
延时:	
上电继电器延时吸合	3s±1s
低液位时继电器断开	5s±2s, 橙色/红色 LED 亮
液位正常继电器吸合	5s±2s, 绿色 LED 亮
输出继电器	Max,AC 240V 2.5A C300 Min,AC/DC >24V >20mA
机械寿命	约 1 百万次（开关循环）
连接线	5 芯电缆, AWG18#-0.75mm ² L 长度=2m
保护等级 (EN 60529)	IP54（连接棱镜）
安装	螺纹连接
重量	约 220g



线路参考图



尺寸图 mm

应用

OLC-D1-B 光电式油位监视器是非接触式的液位监测器，此监控功能的实现是通过安装在所需测量位置的液位测量棱镜组件(玻璃头)以及可拆卸式光电探测装置(电子头)共同完成。无需从被测设备拆卸油位测量棱镜组件，便可自由更换其探测装置，因此不会影响系统的密封性。

OLC-D1-B Optical Level Switch



after connecting the supply voltage. If no level is detected, the red-orange LED illuminates, after a delay the relay switches off after a delay and the red LED is ON. If the level reaches the good range, the relay picks up again after a delay and the green LED is ON. The own monitoring system of the optics integrated into the OLC-D1 ensures increased operational reliability. An installation check monitors the proper assembly. If there is a fault, the relay switches off after a delay, the red LED illuminates.

A built-in LED signals the current status(see flash code)

Red (orange) flashing: Internal error, voltage supply too low or faulty assembly.

Red LED On: level missing

Green LED On:Level good, no error

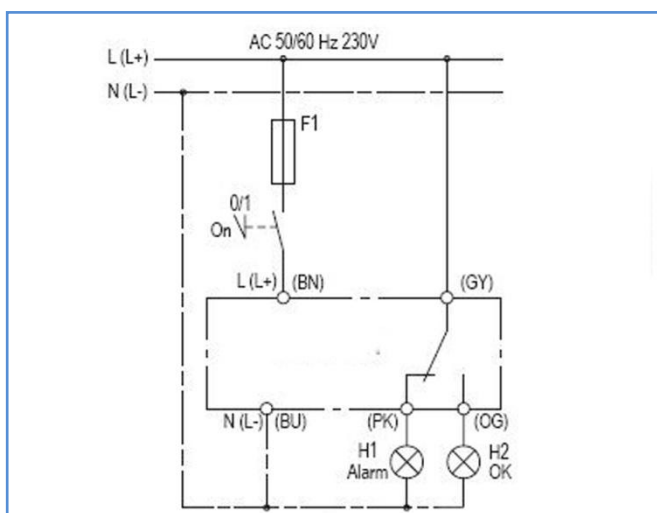
Orange LED On: low Level for delay

Installation instructions

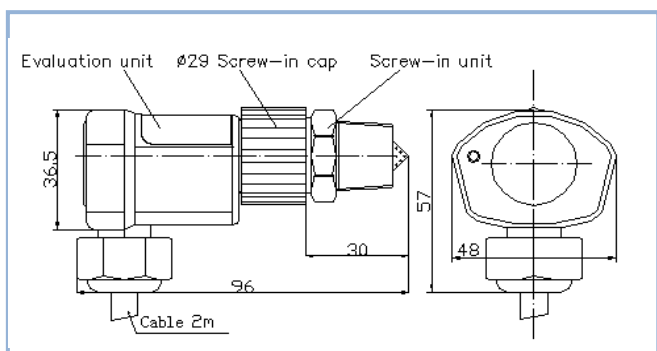
Mounting:The installer must ensure seal tightness for the specific application. The maximum tightening torque is approx. 75Nm. Clean the inside of the screw-in part as well as the prism. Fit the electrical part in the screw-in part and tighten the coupling ring(torque approx. 10Nm). Pay attention to the position of the lead(cable exit downwards). Complete the electrical wiring in accordance with the attached circuit suggestions. After filling the tank, Check the tightness of all joints.



The unit must be connected by trained electrical personnel.



Wiring diagram



Dimensions in mm

Application

The OLC-D1 optical level switches | sensor is used for contactless monitoring of the liquid level. This is accomplished by a screw-in unit installed at the measuring point for optical level scanning as well as an electronic, removable evaluation unit. The evaluation unit can be replaced without opening the reservoir of the monitored media. The relay trips 3 seconds

Technical specifications

Screw-in unit

Max. Medium temperature	+120°C (max.16000h) +100°C
Max. Operating pressure	46bar(-10°C ...+120°C)
Connection thread	Order No. 1/2" NPT short 1 1/8-18UNFE short
Weight	15G15 460 01(standard) 15G15 462 01
	Approx.110g

Evaluation unit

Supply voltage	AC 230V -15%...+10% 3VA
Permitted ambient temp.	-30...+70°C
Relative humidity	Max. 95%RH non-condensing. Circuit board is coated
Delay:	
-Relay On after applying the supply voltage	3s±1s
-Relay off(level missing)	5s±2s, Orange/Red LED On
-Relay On(level good)	5s±2s, Green LED On
Output relay	Max,AC 240V 2.5A, C300 Min,AC/DC> 24V> 20mA
Mechanical service life	Approx.1millionswitching cycles
Connection type	Cable 5xAWG-18(0.75mm ²), L=2m, coloure coded
Protection class acc. To EN60529	IP54 in mounted condition
Mounting	Union nut
Weight	Approx. 220g