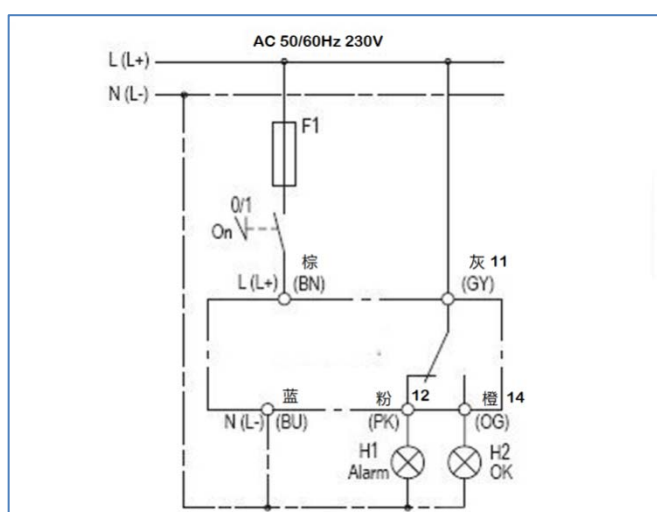
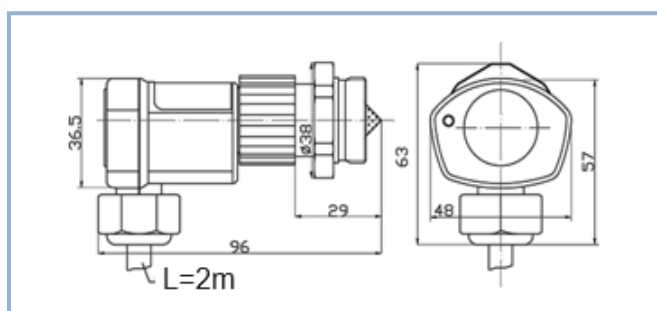


OLC-D 系列光电式液位监视器

OLC-D Series Optical Level monitoring



线路参考图 Wiring diagram



尺寸图 mm Dimensions in mm

特征 Characteristics

- 光电平探测装置 (电子头) 与旋入式光学棱镜 (玻璃头) 可以拆分, 并具有未连接玻璃头保护、不受光线直射影响、液位检测防抖动延时处理。
Evaluation unit (Electronic head) and screw-in optical prism (Glass head) can be detached, With unconnected Glass head protection, not affected by direct light, level detection anti-jitter delay processing.
- 玻璃头接液温度为 $-55^{\circ}\text{C} \sim 125^{\circ}\text{C}$ (见技术参数栏)
Glass head can withstand $-55^{\circ}\text{C} \sim 125^{\circ}\text{C}$ liquid
(See Technical parameters).

- OLC-D1 装于容器下部, 监测液位过低故障
OLC-D1 is installed on the lower side of the vessel to monitor the low level alarm.
- OLC-D2 装于容器上部, 监测液位过高故障
OLC-D2 is installed on the upper side of the vessel to monitor the level high alarm.
- 选配隔沫罩后, 不对泡沫敏感 (隔沫罩只能与 118XP 光学棱镜相配)
It is not sensitive to foam when equipped with the foam isolation cap (118XP optical prism only).

OLC-D 系列光电式液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旋入式光学棱镜 (玻璃头) 以及可拆卸式光电探测装置 (电子头) 共同完成。

The OLC-D Series optical level monitoring is used for contactless monitoring of the level. This is accomplished by a screw-in optical prism installed at the measuring point for optical level scanning as well as an electronic, removable evaluation unit.

无需从被测容器拆卸旋入式光学棱镜, 便可更换其光电探测装置, 因此不会影响系统的密封性。

The evaluation unit can be replaced without opening the reservoir of the monitored media.

液位监视器在接通电源后开始监测液位。

The level monitoring starts to monitor the level after it is powered on.

当液位在正常区域时, 继电器延迟 5S 后吸合, LED 亮绿色;

When the level is OK, the relay is turned ON after 5S delay, and the LED is bright green;

当液位故障时 LED 亮橙色, 继电器延迟 6S 后断开, LED 亮红色。

When the level is in the fault area, the LED is bright orange, the relay is turned OFF after a delay of 6S, and the LED is bright red.

当光电平探测装置没有与旋入式光学棱镜联接时, LED 红灯闪烁, 继电器延迟 6S 后断开。

When the evaluation unit is not connected with the screw-in optical prism, the LED red light flashes and the relay is turned OFF after a delay of 6S.

LED 灯颜色代码 A built-in LED signals the current status

红色闪烁 (10 Hz): 光电平探测装置未与旋入式光学棱镜联接
Red flashing (10Hz): The evaluation unit is not connected with the screw-in optical prism.

红色: 液位故障-继电器断开

Red LED On: The level is in the fault area

绿色: 液位正常-继电器吸合

Green LED On: Level is OK, relay is turn On, No error

橙色: 液位故障-继电器将延时断开

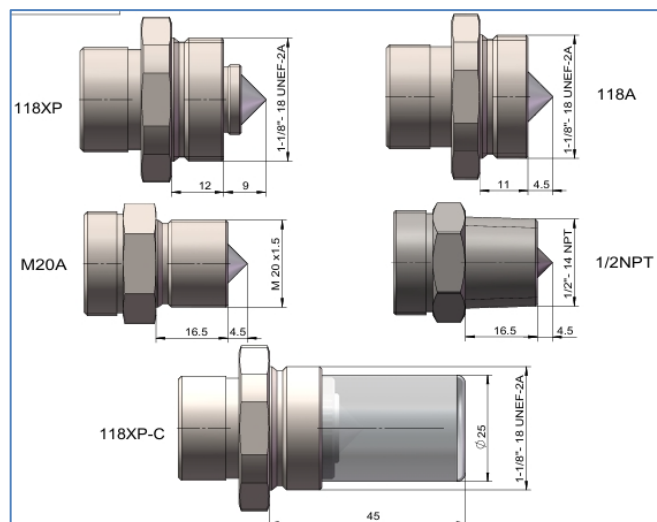
Orange LED On: The level is in the fault area for delay

技术参数 Technical specifications

光电平探测装置(电子头) Evaluation unit (Electronic head)

供电电压 Supply voltage	AC 230V -15%...+10% 3VA AC/DC 24V -5%...+6% 3VA
环境温度 Ambient temp.	-30...+70℃
环境湿度 Relative humidity	最高 Max. 95% (不得凝露与结霜) (no condensation and frost)
OLC-D1 湿型 Type wet	有液时: 继电器吸合, 亮绿灯 With liquid: Relay On, Green LED On
OLC-D2 干型 Type dry	无液时: 继电器吸合, 亮绿灯 Without liquid: Relay On, Green LED On
输出继电器 Output relay	Max,AC 240V 2.5A, C300 Min,AC/DC > 24V > 20mA
机械寿命 Mechanical service life	约 1 百万次 (开关循环) Approx.1millionswitching cycles
连接线 Connection type	5 芯电缆, AWG18# L 长度=2m Cable 5xAWG-18 L=2m, colure coded
保护等级 (EN 60529) Protection class	IP54 (连接棱镜) IP54 in mounted condition
安装 Mounting	螺纹连接 Union nut
重量 Weight	约 220g Approx. 220g

旋入式光学棱镜 (玻璃头) Screw-in optical prism(Glass head)



118XP 光学棱镜 运行压力/ 接液温度 (适用于 CO2 跨临界)	连接螺纹: 1-1/8"-18 UNEF -2A 140bar / -10...+125℃ 105bar / -55...-10℃
118XP-C 光学棱镜 带隔沫罩	
118A 光学棱镜 运行压力 (接液温度)	连接螺纹: 1-1/8"-18 UNEF -2A 60bar / -40...+125℃
M20A 光学棱镜 运行压力 (接液温度)	连接螺纹: M20x1.5 60bar / -40...+125℃
1/2NPT 光学棱镜 运行压力 (接液温度)	连接螺纹: 1/2"-14 NPT 60bar / -40...+125℃
净重	约 110 克

Screw-in optical prism

118XP Operating P/at the liquid temp. (Used for CO2 transcriticality)	Connecting thread: 1-1/8" -18UN EF-2A 140bar / -10...+125℃ 105bar / -55...-10℃
118XP-C With Foam shield	
118A Operating P / at the liquid temp.	Connecting thread): 1-1/8" -18UNFE -2A 60bar / -40...+125℃
M20A Operating P / at the liquid temp.	Connecting thread: M20x1.5 60bar / -40...+125℃
1/2NPT Operating P / at the liquid temp.	Connecting thread: 1/2" -14 NPT 60bar / -40...+125℃
Weight	Approx.110g

注 1: 118A,118XP 与 M20A 玻璃头随货附上Φ32xΦ28.5x2 与

Φ24xΦ20x1.1 铝合金垫片。

The 118A,118XP and M20A glass heads are enclosed with
Φ32xΦ28.5x2 and Φ24xΦ20x1.1 aluminum gasket.

注 2: 118A, 118XP 玻璃头在无压状态低温测试 -60℃。

118A, 118XP Glass head is tested at low temperature under
no pressure -60℃

注 3: 所有光学棱镜均适用于氨液。

All Glass head are suitable for ammonia.

安装说明 Installation instructions

1/2NPT 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。

M20A, 118A, 118XP 玻璃头安装时不需要密封胶, 用金属平垫片密封, 旋入最大力矩不超过 75N. M。

Installation: The maximum torque of the Glass head is 75Nm and needs to be ensured by a ring spanner or a socket key. After installation, check for leaks.

电子头安装前须检玻璃头的清洁度, 并在电子头上套上 0 型圈向玻璃头压紧并同时旋合, 保证与棱镜精密旋合。电缆接口朝下, 依接线图进行电气连接。

Clean the inside of the Glass head. Fit the Electronic head in the Glass head and tighten the coupling ring (torque approx. 6Nm). 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.