



**LEEMIN**  
黎明液压

## 过滤器用污染物堵塞发讯器 THE INDICATORS FOR FILTERS

### (一) CS、CMS和CM型压差式

压差发讯器主要用于管路过滤器。当液压系统工作时,过滤器中的滤芯因拦截系统中的污染物而逐渐堵塞,进出口的压力产生压差(即滤芯压力损失)。当压差值增大至发讯器调定值时,发讯器自动发出信号,指示系统操作人员应清洗或更换滤芯,确保系统安全运行。

1. CS系列发讯器以开关形式对滤油器的堵塞报警,或以开关形式切断与液压系统相关的控制电路,从而保护系统的安全,压差发讯器的连接螺纹为M22X1.5。

CM型压差发讯器的连接尺寸与CS-II及CS-V型相同。

CMS型压差发讯器适用场合与CM型类似,并带有目测指示。

2. CM-I、CM-IA、CM-IC型为目视式压差发讯器,发讯器上端的红色指示按钮突出表示发讯器动作并已报警,当清洗或更换滤芯后发讯器的红色指示自动复位,发讯器的连接螺纹为M22X1.5。

3. CMS-III, CMS-IIIC型为目视压差发讯器,发讯器六角凸台中间的红色指示突出表示发讯器动作并已报警,当清洗或更换滤芯后发讯器的红色指示自动复位。



### CS、CMS AND CM DIFFERENTIAL PRESSURE INDICATOR

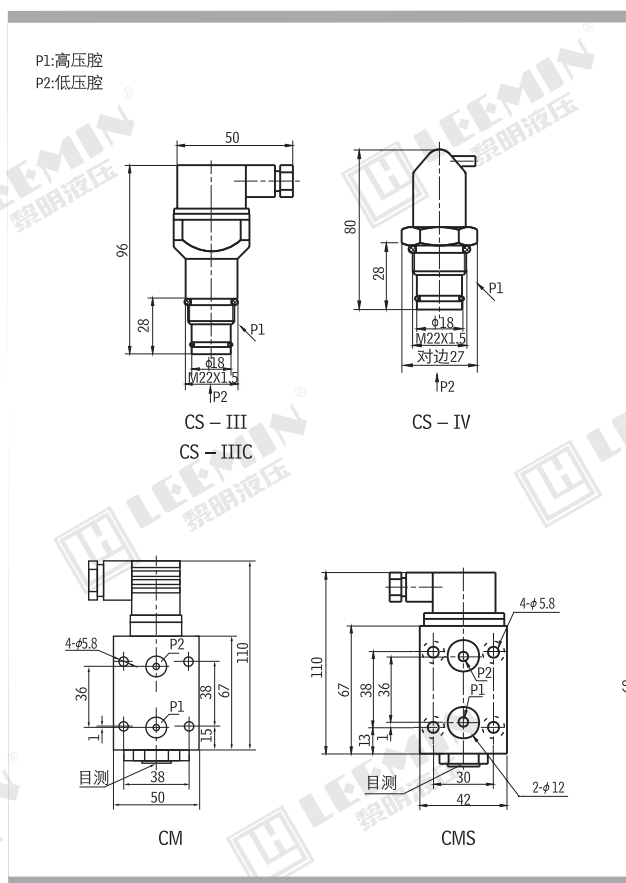
Differential indicator is mainly used for pipe line filters. When hydraulic system is working, the filter cartridge intercepting the system pollutants gradually into clogged, inlet and outlet of the oil has a differential pressure (that is, the filter pressure loss). When the differential pressure value increases to the indicator setting value, the indicator will give signal automatically. Operator should clean or replace the filter element to ensure the safe operation of the system.

1. CS type filter indicator operate with switch of oil filter clogging alarm, or as a switch to cut off the hydraulic control circuit, in order to ensure the safety of the system, indicator thread connection is M22X1.5. CM indicator connection size is same as CS-II & CS-V

CMS indicator usage is same as CM, and both with visual indicate function

2. CM-I、CM-IA、CM-IC is visual differential type indicator, the red button on the indicator is pulled out, which means the indicator is action and alarm. After clean or replace the new element, should put the red button reset by hand.. The indicator thread connection is M22X1.5.

3. CMS-III, CMS-IIIC is visual differential type indicator, the red button on the Hexagon among convex platform is pulled out, which means the indicator is action and alarm. After clean or replace the new element, should put the red button reset by hand.





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## (二) CY、YM和CYB型压力式发讯器

CY-I、CY-II和CYB型压力式发讯器主要为回油过滤器配套，同时适用于液压系统和稀油润滑系统正常供油的压力监控。

1.CY型压力式发讯器一般安装在回油过滤器的进油腔。当液压系统工作时，油液中的污染物在回油循环中不断被滤芯拦截，使回油过滤器的进油口压力逐渐增大，当压力增大到发讯器的调定值时，发讯器动作。并以开关形式接通指示灯或蜂鸣器报警，指示人们应及时清洗或更换滤芯或以开关形式切断与液压系统相关的控制电路，以确保液压系统正常运行。发讯器与过滤器的连接螺纹为M18×1.5。

2.YM-I型为目视式压力发讯器，当发讯器上端的指示芯棒伸出红圈时表示报警，清洗或更换滤芯后指示芯棒自动复位，发讯器的连接螺纹为M18×1.5。

3.CYB-I型为压力表式发讯器，常回油压力到0.35MPa时，指针进入红色区，以提示应清洗或更换滤芯，也可以开关形式接通指示灯或蜂鸣器报警。

4.CYB-III型为压力表式目视发讯器，常回油压力到0.35MPa时，指针进入红区，以提示应清洗或更换滤芯。

注：它不能与计算机配套使用。

CY-I、CY-II and CYB pressure indicator is mainly used on return line filter, is also used in hydraulic system and the normal oil pressure monitoring of oil lubrication system

1. CY pressure indicator is generally installed in the return filter inlet chamber. When hydraulic system is working, the oil contaminants in the oil return cycle repeatedly blocked by the filter element, make the oil return filter inlet pressure gradually increases, when the pressure increases to the indicator setting value, the indicator will action as a switch to turn on the light or buzzer alarm. Indicating people to clean or replace filter element or associated with the hydraulic system in the form of a switch to cut off the control circuit, to ensure the normal operation of the hydraulic system. Indicator connected to the filter thread is M18 x 1.5.

2.YM-I is visual pressure type indicator, when the top of the indicator bar is pull out, means the alarming, clean or replace the element, the bar will reset itself. Indicator connect thread is M18x1.5.

3.CYB-I is pressure type indicator, when return pressure reach to 0.35MPa, the pointer goes to the red area, indicate to clean or replace element, also can as a switch to turn on the light or buzzer alarm.

CYB-III is visual pressure type indicator, when return pressure reach to 0.35MPa, the pointer goes to the red area, indicate to clean or replace element, also can as a switch to turn on the light or buzzer alarm.

Note: It can't connect with the computer to use.

## (三) ZS和ZKF- II 型真空压力式发讯器

ZS- I型真空压力式发讯器为吸油过滤器配套用来保护油泵。在液压系统工作时，吸油过滤器由于污染物堵塞使油泵产生真空，当真空度达到发讯器调定值时，发讯器动作并以开关形式接通指示灯或蜂鸣器报警，指示操作人员及时清洗或更换滤芯，或在报警时切断液压系统的控制电路，确保油泵工作安全：发讯器与过滤器的连接螺纹为M18×1.5。

ZKF- II 型真空压力式发讯器可以直接显示真空值，当真空达到0.018MPa时，也可以开关形式接通指示灯或蜂鸣器报警。

ZKF-III型为真空压力表式目视发讯器，常吸油真空到-0.018MPa时，指针进入红区，以提示应清洗或更换滤芯。

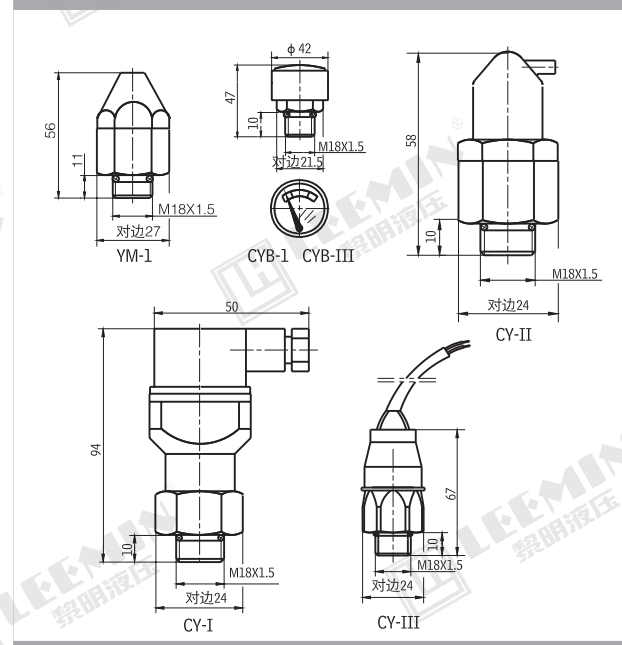
ZS-III型真空压力式发讯器，当真空达到-0.018MPa时，开关形式接通指示灯或蜂鸣器，以提示应清洗或更换滤芯。

注：ZKF-II和ZS-III不能与计算机配套使用。

## ZS AND ZKF-II VACUUM PRESSURE TYPE INDICATOR

ZS-I is vacuum pressure type indicator used in suction filter to protect the pump. When hydraulic system is working, the pump will be vacuum due to pollutants

## CY、YM AND CYB PREASSURE INDICATOR



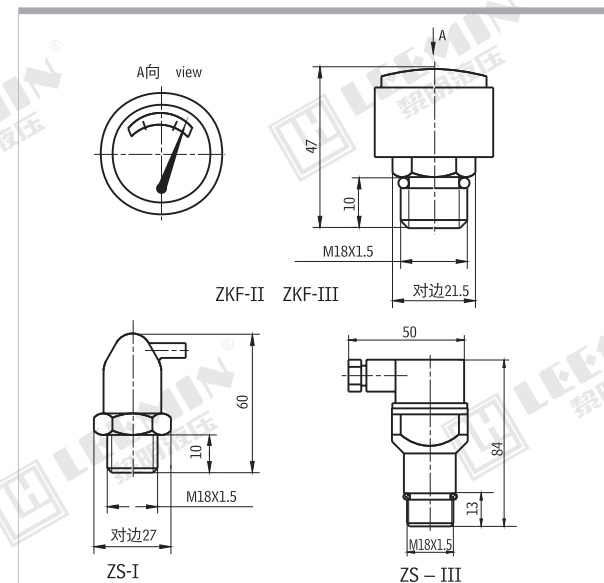
blocked. when the vacuum value increases to the indicator setting value, the indicator will action as a switch to turn on the light or buzzer alarm. Indicating people to clean or replace filter element or associated with the hydraulic system in the form of a switch to cut off the control circuit, to ensure the normal operation of the hydraulic system. Indicator connected to the filter thread is M18 x 1.5.

ZKF-II is pressure gauge type indicator which can show the vacuity degree. When the vacuity degree reach to 0.018Mpa , will action as a switch to turn on the light or buzzer alarm

ZKF-III is vacuum visual type indicator. when suction pressure reach to -0.018 MPA, the pointer goes to the red area, indicate to clean or replace element

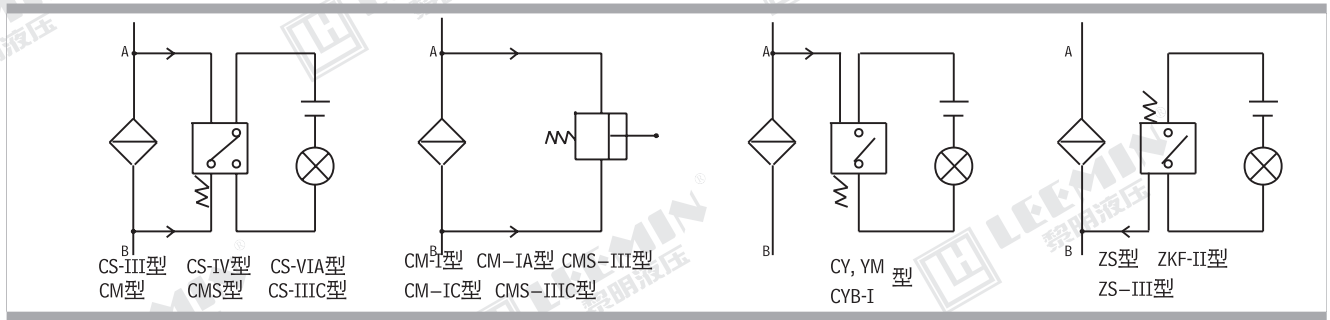
ZS-III is vacuum pressure type indicator. When the vacuity degree reach to 0.018Mpa , will action as a switch to turn on the light or buzzer alarm

Note: ZKF-II and ZS-III can't connect with the computer to use.

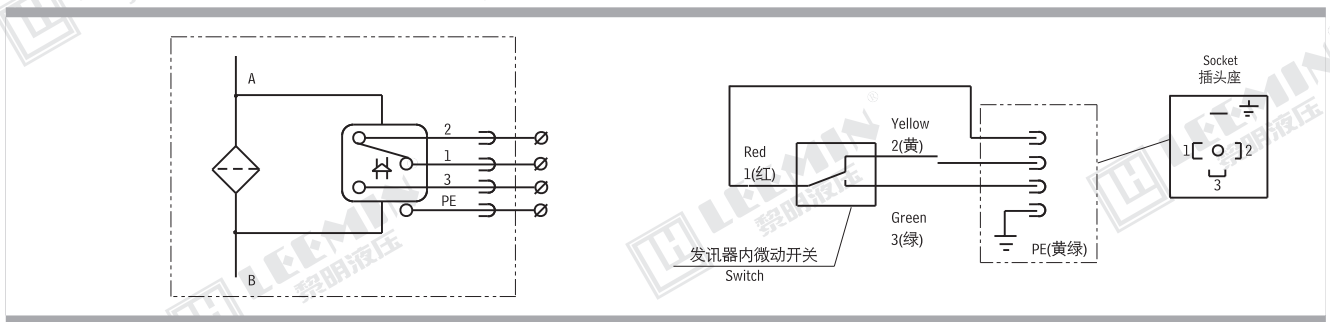




#### (四) 发讯器原理图

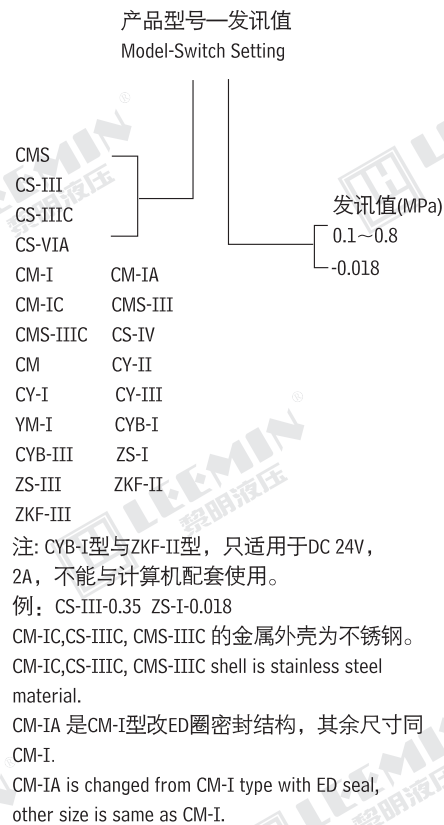


#### (五) 压差式发讯器接线说明



#### (六) 产品订货说明

##### ORDERING INFORMATION



#### (七) 发讯器主要技术参数 TECHNICAL DATA

型 号 Model	代号 Code	发讯类别 Indicator type	工作压力 Working Pressure (MPa)	发讯值 Switch Setting (MPa)	工作温度 Temp. range (℃)	发讯器功率 Power
CMS	P或C	电+目视	32	0.1+0.05 0.2+0.05 0.35+0.05 0.5+0.05 0.6+0.05 0.8+0.05	-20~+80	≤220V 0.25A
CS-III	C	电				/
CS-IIIC	C或C1	电				
CS-VIA	C	电				
CM-I	M	目视				
CM-IA	M	目视				
CM-IC	M1	目视				
CMS-III	M	目视				
CMS-IIIC	M1	目视				
CS-IV	C	电				
CM		电+目视	1.6		≤220V 0.25A	
CY-II	C	电			/	
CY-III	C3	电				
CY-I	C2	电				
YM-I	M2	目视				
CYB-I	Y	电+目视	0.4	0.35+0.05	DC 24V 2A	
CYB-III	M	目视			/	
ZS-I	C	电				
ZS-III	C2	电	-0.1	-0.01~0.018		≤220V 0.25A
ZKF-II	Y	电+目视	-0.04	-0.018	DC 24V 2A	
ZKF-III	M	目视			/	

- 注: 1、代号后面加1的为金属外壳为不锈钢;  
2、代号后面加2的为带插头(具体见样本图形)  
3、具体代号详见相关过滤器选型型号说明。
- Note 1. The code with 1 marked is with stainless steel shell;  
2. the code with 2 marked is with plug(see the catalogue drawing);  
3. for details of the code meaning pls find the filter data for reference.