



## PLF系列压力管路过滤器(6.3MPa、16MPa、32MPa)

### PLF HIGH PRESSURE LINE FILTER SERIES(6.3MPa、16MPa、32MPa)

#### (一) 简介

该系列过滤器，可安装在不同压力等级的压力管路上，用以进一步清除或阻挡由于外界带入元件工作时磨损，以及介质本身化学作用所产生的杂质。特别适用于自动控制系统和伺服系统。它可防止高精度的控制元件和执行元件由于污染而过早磨损或卡死，从而可减少故障，延长元件使用寿命。

该过滤器采用进口玻璃纤维滤材，具有过滤精度高，通油能力强，原始压力损失小，纳污量大等优点。过滤精度以绝对过滤精度标定，其过滤比 $\beta_{3, 5, 10, 20} \geq 200$ 过滤效率 $n \geq 99.5\%$ 。符合ISO标准。

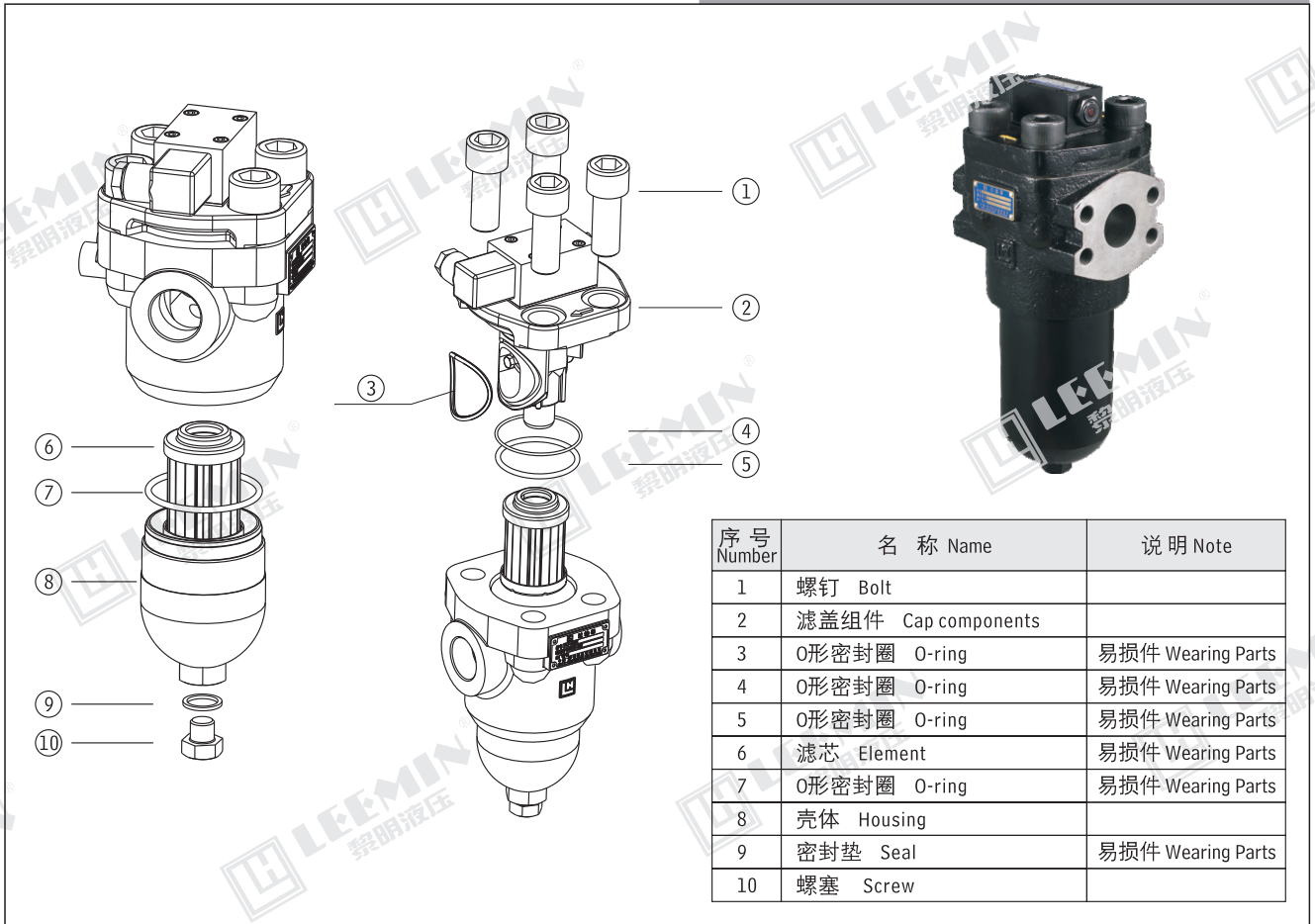
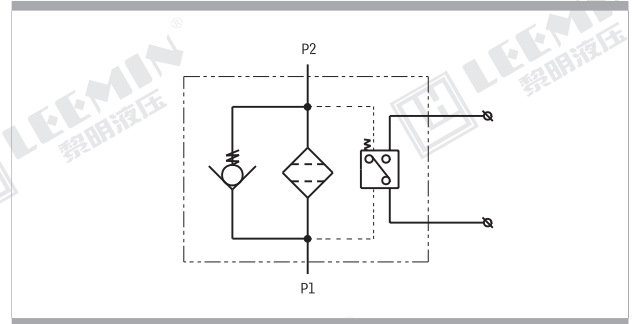
该过滤器结构有以下特点：

- 1、与同等流量过滤器相比，结构紧凑体积小。
- 2、使用压力范围宽。
- 3、换滤芯方便，用户可根据安装空间，打开上盖，更换滤芯，也可旋下外壳(先放油)从下面取下滤芯。
- 4、安装固定方便：如用户按标准流向安装有困难时可拆下盖上4个螺钉，把盖转动180度。这样就改变了介质流动方向。
- 5、该过滤器设有旁通阀和压差发讯装置，双重保护功能。当滤芯污染堵塞至进出口压差值为发讯器调定值时，发讯器发讯，此时必须更换滤芯。

#### INTRODUCTION

PLF series filter is of high pressure type, and used in the pressure line of hydraulic system. It can remove all the contaminants from the hydraulic system. The element of this series is made of glass fibre. It has high efficiency and filtration, large dirt capacity and low initial pressure drop. Beta ratio is over 200.

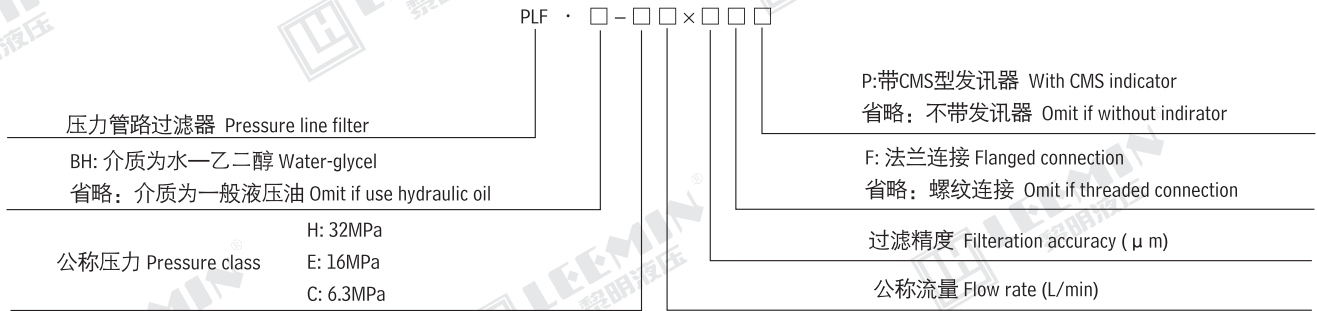
It has two protection equipment which are by-pass valve and contamination indicator. The indicator will act when the pressure drop across element attains adjustable pressure. The element should be cleaned or changed in time. Compare to other filters, this kind of filter is designed into small size. It can be used in different pressure levels and can be easily installed and the filter element also can be easily changed.



| 序号<br>Number | 名称<br>Name          | 说明<br>Note        |
|--------------|---------------------|-------------------|
| 1            | 螺钉 Bolt             |                   |
| 2            | 滤盖组件 Cap components |                   |
| 3            | O形密封圈 O-ring        | 易损件 Wearing Parts |
| 4            | O形密封圈 O-ring        | 易损件 Wearing Parts |
| 5            | O形密封圈 O-ring        | 易损件 Wearing Parts |
| 6            | 滤芯 Element          | 易损件 Wearing Parts |
| 7            | O形密封圈 O-ring        | 易损件 Wearing Parts |
| 8            | 壳体 Housing          |                   |
| 9            | 密封垫 Seal            | 易损件 Wearing Parts |
| 10           | 螺塞 Screw            |                   |



(二) 型号说明 MODEL CODE



(三) 技术参数 TECHNICAL DATA

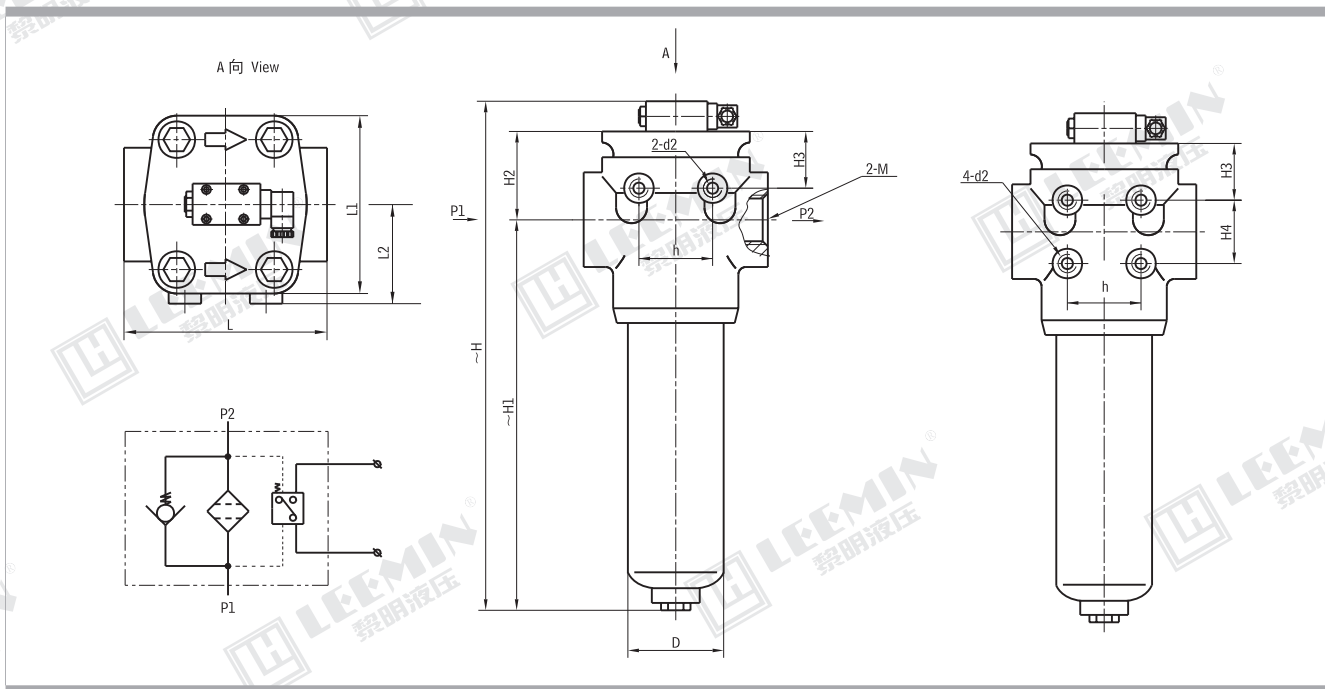
| 型号<br>Model      | 公称流量<br>Flow rate<br>(L/min) | 过滤精度<br>Filtr.<br>( $\mu\text{m}$ ) | 公称压力<br>Press.<br>(MPa) | 压力损失<br>Initial $\Delta P$ (MPa) |     | 发讯装置功率<br>Indicator power<br>(V/W) | 滤芯型号<br>Model of element | 连接方式<br>Connect |
|------------------|------------------------------|-------------------------------------|-------------------------|----------------------------------|-----|------------------------------------|--------------------------|-----------------|
|                  |                              |                                     |                         | Initial                          | Max |                                    |                          |                 |
| PLF - □30 × *P   | 30                           | 3                                   | H=32                    | ≤0.1                             | 0.5 | 24/48                              | PLFX-30-X*               | 管式<br>Thread    |
| PLF - □60 × *P   | 60                           |                                     |                         |                                  |     |                                    | LH0060D*BN3HC            |                 |
| PLF - □110 × *P  | 110                          |                                     |                         |                                  |     |                                    | LH0110D*BN3HC            |                 |
| PLF - □160 × *P  | 160                          | 5                                   | E=16                    | ≤0.1                             | 0.5 | 220/50                             | LH0160D*BN3HC            | 法兰式<br>Flange   |
| PLF - □240 × *FP | 240                          |                                     |                         |                                  |     |                                    | LH0240D*BN3HC            |                 |
| PLF - □330 × *FP | 330                          | 20                                  | C=6.3                   | ≤0.1                             | 0.5 | 220/50                             | LH0330D*BN3HC            |                 |
| PLF - □500 × *FP | 500                          |                                     |                         |                                  |     |                                    | LH0500D*BN3HC            |                 |
| PLF - □660 × *FP | 660                          |                                     |                         |                                  |     |                                    | LH0660D*BN3HC            |                 |

注: \*为过滤精度。使用介质为水—乙二醇, 使用压力32MPa, 公称流量60L/min, 过滤精度10 $\mu\text{m}$ , 带发讯器。则过滤器型号为PLF · BH-H60 × 10P, 滤芯型号为LH0060D010BN3HC.BH

Note: \*is represents filtration. If the filter fluid is water-glycol, usage pressure 32MPa, flow rate 60L/min, filtration accuracy 10 $\mu\text{m}$  and the filter equipped and CMS indicator. The model of the filter is PLF · BH-H60 × 10P, the model of element is LH0060D010BN3HC.BH

(四) 安装外形尺寸 MOUNTING SIZE

一、管式 THREADED CONNECTION





**LEEMIN**  
黎明液压

1、32MPa压力管路过滤器 32MPa PRESSURE LINE FILTER

| 型号<br>Model | 尺寸 Size (mm) |     |    |    |    |    |     |     |    |     |         |       |
|-------------|--------------|-----|----|----|----|----|-----|-----|----|-----|---------|-------|
|             | ~H           | ~H1 | H2 | H3 | H4 | h  | L   | L1  | L2 | D   | M       | d2    |
| PLF-H30×*P  | 239          | 146 | 58 | 45 |    | 35 | 118 | 114 | 69 | 73  | 2-M33×2 | 2-M10 |
| PLF-H60×*P  | 255          | 162 | 58 | 45 |    | 35 | 118 | 114 | 69 | 73  | 2-M33×2 | 2-M10 |
| PLF-H110×*P | 329          | 236 | 58 | 45 |    | 35 | 118 | 114 | 69 | 73  | 2-M42×2 | 2-M10 |
| PLF-H160×*P | 319          | 215 | 69 | 49 | 45 | 50 | 150 | 140 | 82 | 102 | 2-M48×2 | 4-M10 |

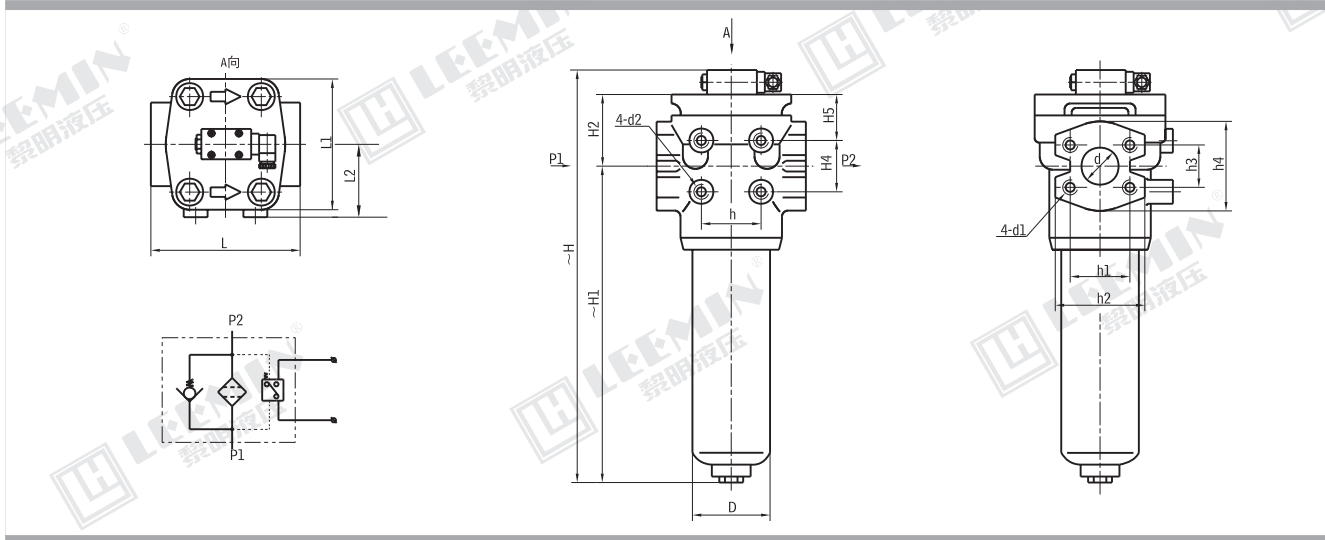
2、16MPa压力管路过滤器 16MPa PRESSURE LINE FILTER

| 型号<br>Model | 尺寸 Size (mm) |     |    |    |    |    |     |     |    |    |         |       |
|-------------|--------------|-----|----|----|----|----|-----|-----|----|----|---------|-------|
|             | ~H           | ~H1 | H2 | H3 | H4 | h  | L   | L1  | L2 | D  | M       | d2    |
| PLF-E30×*P  | 223          | 136 | 52 | 39 |    | 35 | 110 | 100 | 62 | 73 | 2-M33×2 | 2-M10 |
| PLF-E60×*P  | 239          | 152 | 52 | 39 |    | 35 | 110 | 100 | 62 | 73 | 2-M33×2 | 2-M10 |
| PLF-E110×*P | 308          | 221 | 52 | 39 |    | 35 | 110 | 100 | 62 | 73 | 2-M42×2 | 2-M10 |
| PLF-E160×*P | 294          | 196 | 63 | 43 | 45 | 45 | 140 | 130 | 77 | 95 | 2-M48×2 | 4-M10 |

3、6.3MPa压力管路过滤器 6.3MPa PRESSURE LINE FILTER

| 型号<br>Model | 尺寸 Size (mm) |     |    |    |    |    |     |     |    |    |         |       |
|-------------|--------------|-----|----|----|----|----|-----|-----|----|----|---------|-------|
|             | ~H           | ~H1 | H2 | H3 | H4 | h  | L   | L1  | L2 | D  | M       | d2    |
| PLF-C30×*P  | 223          | 136 | 52 | 39 |    | 35 | 110 | 88  | 56 | 73 | 2-M33×2 | 2-M10 |
| PLF-C60×*P  | 239          | 152 | 52 | 39 |    | 35 | 110 | 88  | 56 | 73 | 2-M33×2 | 2-M10 |
| PLF-C110×*P | 308          | 221 | 52 | 39 |    | 35 | 110 | 88  | 56 | 73 | 2-M42×2 | 2-M10 |
| PLF-C160×*P | 290          | 196 | 59 | 39 | 45 | 45 | 140 | 114 | 69 | 95 | 2-M48×2 | 2-M10 |

二、法兰式 FLANGED CONNECTION



1、32MPa压力管路过滤器 32MPa PRESSURE LINE FILTER

| 型号<br>Model  | 尺寸 Size (mm) |     |    |    |    |    |             |     |             |     |     |     |     |     |       |       |       |
|--------------|--------------|-----|----|----|----|----|-------------|-----|-------------|-----|-----|-----|-----|-----|-------|-------|-------|
|              | ~H           | ~H1 | H2 | H4 | H5 | h  | h1          | h2  | h3          | h4  | L   | L1  | L2  | D   | d     | d1    | d2    |
| PLF-H240×*FP | 377          | 273 | 69 | 45 | 49 | 50 | 79.4 ± 0.25 | 110 | 36.5 ± 0.25 | 90  | 150 | 140 | 82  | 102 | 2-φ38 | 4-M16 | 4-M10 |
| PLF-H330×*FP | 400          | 277 | 88 | 60 | 63 | 80 | 96.8 ± 0.25 | 130 | 44.5 ± 0.25 | 110 | 190 | 180 | 108 | 146 | 2-φ51 | 4-M20 | 4-M12 |
| PLF-H500×*FP | 493          | 370 | 88 | 60 | 63 | 80 | 96.8 ± 0.25 | 130 | 44.5 ± 0.25 | 110 | 190 | 180 | 108 | 146 | 2-φ51 | 4-M20 | 4-M12 |
| PLF-H660×*FP | 567          | 444 | 88 | 60 | 63 | 80 | 96.8 ± 0.25 | 130 | 44.5 ± 0.25 | 110 | 190 | 180 | 108 | 146 | 2-φ51 | 4-M20 | 4-M12 |



2、16MPa压力管路过滤器 16MPa PRESSURE LINE FILTER

| 型号<br>Model    | 尺寸 Size (mm) |     |    |    |    |    |             |     |             |    |     |     |     |     |       |       |       |
|----------------|--------------|-----|----|----|----|----|-------------|-----|-------------|----|-----|-----|-----|-----|-------|-------|-------|
|                | ~H           | ~H1 | H2 | H4 | H5 | h  | h1          | h2  | h3          | h4 | L   | L1  | L2  | D   | d     | d1    | d2    |
| PLF-E240 × *FP | 352          | 254 | 63 | 45 | 43 | 45 | 69.9 ± 0.25 | 94  | 35.7 ± 0.25 | 82 | 140 | 130 | 77  | 95  | 2-φ38 | 4-M12 | 4-M10 |
| PLF-E330 × *FP | 368          | 257 | 76 | 55 | 56 | 75 | 77.8 ± 0.25 | 102 | 42.9 ± 0.25 | 96 | 180 | 164 | 100 | 140 | 2-φ51 | 4-M12 | 4-M12 |
| PLF-E500 × *FP | 461          | 350 | 76 | 55 | 56 | 75 | 77.8 ± 0.25 | 102 | 42.9 ± 0.25 | 96 | 180 | 164 | 100 | 140 | 2-φ51 | 4-M12 | 4-M12 |
| PLF-E660 × *FP | 535          | 424 | 76 | 55 | 56 | 75 | 77.8 ± 0.25 | 102 | 42.9 ± 0.25 | 96 | 180 | 164 | 100 | 140 | 2-φ51 | 4-M12 | 4-M12 |

3、6.3MPa压力管路过滤器 6.3MPa PRESSURE LINE FILTER

| 型号<br>Model    | 尺寸 Size (mm) |     |    |    |    |    |             |     |             |    |     |     |    |     |       |       |       |
|----------------|--------------|-----|----|----|----|----|-------------|-----|-------------|----|-----|-----|----|-----|-------|-------|-------|
|                | ~H           | ~H1 | H2 | H4 | H5 | h  | h1          | h2  | h3          | h4 | L   | L1  | L2 | D   | d     | d1    | d2    |
| PLF-C240 × *FP | 348          | 254 | 59 | 45 | 39 | 45 | 69.9 ± 0.25 | 94  | 35.7 ± 0.25 | 82 | 140 | 114 | 69 | 95  | 2-φ38 | 4-M12 | 4-M10 |
| PLF-C330 × *FP | 350          | 249 | 66 | 55 | 46 | 65 | 77.8 ± 0.25 | 102 | 42.9 ± 0.25 | 96 | 180 | 144 | 90 | 133 | 2-φ51 | 4-M12 | 4-M12 |
| PLF-C500 × *FP | 443          | 342 | 66 | 55 | 46 | 65 | 77.8 ± 0.25 | 102 | 42.9 ± 0.25 | 96 | 180 | 144 | 90 | 133 | 2-φ51 | 4-M12 | 4-M12 |
| PLF-C660 × *FP | 517          | 416 | 66 | 55 | 46 | 65 | 77.8 ± 0.25 | 102 | 42.9 ± 0.25 | 96 | 180 | 144 | 90 | 133 | 2-φ51 | 4-M12 | 4-M12 |

(五) 滤芯压差流量曲线 ELEMENT PRESSURE DROP(ΔP) AGAINST FLOW CURVES

滤芯 LH\*D\*BN3HC(由试验测得数据)  
Q-ΔP 曲线 油液粘度 Viscosity 30CST

