

产品选型手册
Product Selection
Manual for ZUOSEN

ISO9001:2015

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斜盘式变量柱塞泵 是如何做到节能的？

How does the slant-disc variable piston pump achieve energy savings?

► 图1：当油泵还没有达到调压阀A设定的压力时，斜盘B保持最大角度，柱塞C拥有最大行程，此时油泵以最大排量输出；

Figure 1: When the oil pump has not yet reached the pressure set by relief valve A, slant disc B maintains the maximum angle, and piston C has the maximum stroke. At this point, the oil pump outputs at its maximum flow rate.

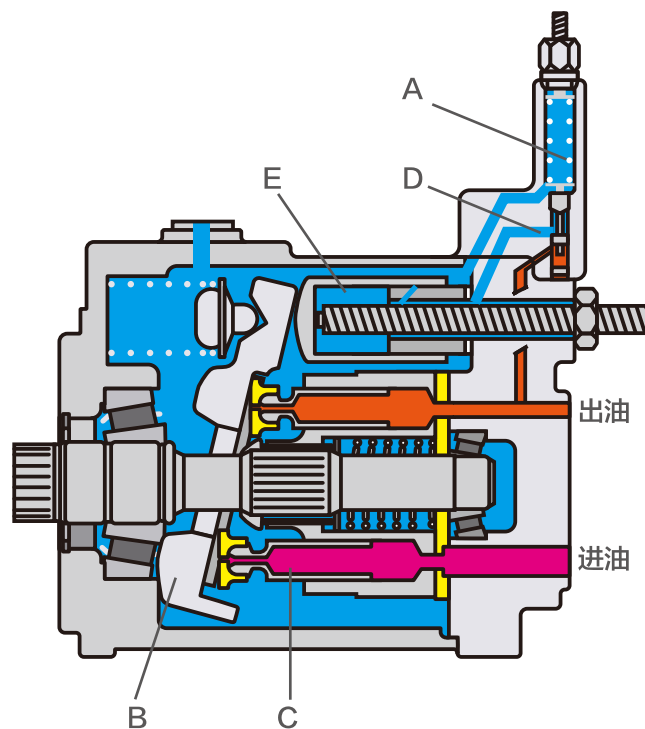


图1
Figure 1

- 图2：当油泵达到调压阀A设定的压力时，压力油推开调压阀阀芯，油液通过先导油孔D注入活塞杆E，活塞杆推动斜盘，使斜盘角度变为90度，此时柱塞C行程无限接近于0，油泵以最小排量输出，这时候油泵所需的输入功率最小。

Figure 2: When the oil pump reaches the pressure set by relief valve A, hydraulic pressure pushes the relief valve core open, and hydraulic fluid is injected through pilot oil hole D into piston rod E. The piston rod pushes the slant disc, changing the slant disc angle to 90 degrees. At this point, the stroke of piston C is nearly zero, and the oil pump outputs at its minimum flow rate, requiring the least input power.

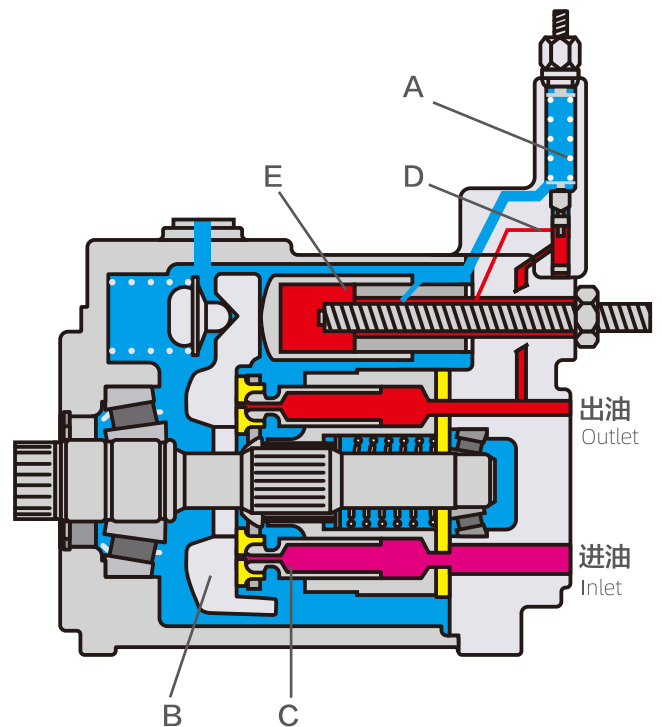
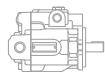


图2
Figure 2

- 因此，相比较于定量泵，变量柱塞泵不存在溢流损失。变量柱塞泵容积效率高，温升慢，节省输入功率，广泛用于多种工况。同时变量柱塞泵拥有更强的扩展性，控制方式及组合方式更丰富，能够有效简化系统油路设计。

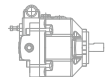
Therefore, compared to fixed-displacement pumps, variable-displacement piston pumps have no overflow losses, slower temperature rise, high volumetric efficiency, and save input power. They are widely applicable to various working conditions. Additionally, variable-displacement piston pumps offer greater versatility with a variety of control methods and combinations, effectively simplifying hydraulic system design.

产品系列Product Series



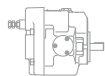
ARL1系列
ARL1 series

基本型号 Basic model	理论排量cm³/rev Displacement cm³/rev	最高使用压力MPa Max pressure MPa	转速范围r/min Speed range r/min
ARL1-8	8.5	7	600~1800
ARL1-12	12.3	7	600~1800
ARL1-16	16.3	7	600~1800



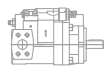
AR系列
AR series

基本型号 Basic model	理论排量cm³/rev Displacement cm³/rev	最高使用压力MPa Max pressure MPa	转速范围r/min Speed range r/min
AR16	15.8	21	600~1800
AR22	22.2	21	600~1800



A系列
AR series

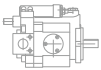
基本型号 Basic model	理论排量cm³/rev Displacement cm³/rev	最高使用压力MPa Max pressure MPa	转速范围r/min Speed range r/min
A10	10.0	21	600~1800
A16	15.8	21	600~1800
A22	22.2	16	600~1800
A37	36.9	21	600~1800
A56	56.2	21	600~1800
A70	70.0	28	600~1800
A90	91.0	28	600~1800
A100	100	21	600~1800
A145	145	28	600~1800



P系列
P series

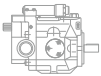
基本型号 Basic model	理论排量cm³/rev Displacement cm³/rev	最高使用压力MPa Max pressure MPa	转速范围r/min Speed range r/min
P08	8.0	25.5	300~2000
P10	10.0	25.5	300~2000
P12	12.3	25.5	300~2000
P16	16.5	25.5	300~2000
P22	22	25.5	300~2000
P36	36	25.5	300~2000
P46	46	25.5	300~2000
P70	70	28.6	300~2000
P100	100	28.6	300~2000

产品系列
Product Series



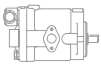
V系列
V series

基本型号 Basic model	理论排量cm ³ /rev Displacement cm ³ /rev	最高使用压力MPa Max pressure MPa	转速范围r/min Speed range r/min
V15	15	25	500~1800
V18	17.8	25	500~1800
V23	23	25	500~1800
V25	25	25	500~1800
V38	37.8	25	500~1800
V42	42	25	500~1800
V50	51.5	21	500~1800
V70	69.7	21	500~1800



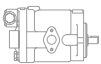
VR系列
VR series

基本型号 Basic model	理论排量cm ³ /rev Displacement cm ³ /rev	最高使用压力MPa Max pressure MPa	转速范围r/min Speed range r/min
VR8	8	7	500~1800
VR15	15	21	500~1800
VR18	18	21	500~1800
VR23	23	25	500~1800
VR38	37.7	25	500~1800
VR50	51.6	21	500~1800
VR70	69.7	21	500~1800



PVB系列
PVB series

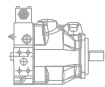
基本型号 Basic model	理论排量cm ³ /rev Displacement cm ³ /rev	最高使用压力MPa Max pressure MPa	转速范围r/min Speed range r/min
PVB5	10.55	21	500~1800
PVB6	13.81	21	500~1800
PVB10	21.1	21	500~1800
PVB15	33	21	500~1800



PVQ系列
PVQ series

基本型号 Basic model	理论排量cm ³ /rev Displacement cm ³ /rev	最高使用压力MPa Max pressure MPa	转速范围r/min Speed range r/min
PVQ10	10.5	21	500~1800
PVQ13	13.8	21	500~1800
PVQ20	21.1	21	500~1800
PVQ32	32.9	21	500~1800

产品系列Product Series



PV系列
PV series

基本型号 Basic model	理论排量cm³/rev Displacement cm³/rev	最高使用压力MPa Max pressure MPa	转速范围r/min Speed range r/min
PV016	16	42	300~2750
PV020	20	42	300~2750
PV023	23	42	300~2750
PV028	28	35	300~2750
PV032	32	42	300~2400
PV040	40	42	300~2400
PV046	46	42	300~2400
PV056	56	35	300~2400
PV065	65	31.5	300~2400



使用注意事项

Precautions for use

液压油的使用管理 Hydraulic Oil Usage Management

可使用温度为5~60°C时，液压油的黏度范围为20~400mm²/s，清洁的石油基液压油(相当于ISO VG32~68)。液压油的污染是引起泵的故障和缩短寿命的原因，必须注意液压油的污染控制，请保持污染度在NAS10级以内。吸油口必须安装至少为100μm(150目)吸油过滤器，回油管路必须安装一个小于10μm的管道式滤油器。

It recommended to use clean, petroleum-based hydraulic oil equivalent to ISO VG2-68, hydraulic oil with a viscosity range of 20-400 mm²/s at a temperature of 5-60°C. Contamination of hydraulic oil can lead to pump failures and reduced lifespan, so it's important to maintain oil cleanliness within NAS 10 levels. The suction port should be equipped with a suction filter with a minimum rating of 100μm (150 mesh), and the return oil line should have a pipeline-style filter with a rating of less than 10μm.

轴的安装 Shaft Installation

尽可能使用挠性联轴器，以避免由于弯曲或推力引起的任何应力，驱动轴心之中心线误差最大应小于0.1mm，最大允许角度误差小于0.2°。

Using flexible couplings is advisable to avoid stress caused by bending or thrust. The maximum allowable center line error of the drive shaft should be less than 0.1mm, and the maximum allowable angular error should be less than 0.2°.

吸入压力 Suction Pressure

泵吸入口压力当在最大吐出流量时，应在-0.3~+0.3 bar以内，流速在2m/sec以下使用，吸入口配管的直进要与规定的管法兰的直进相同，或大于法兰的直进1级尺寸。

The pump's suction port pressure at maximum discharge flow should be within -0.3~ + 0.3 bar. When the flow rate is below 2 m/sec, the straight run of the suction piping should match the required flange or exceed it by 1 size.

配管须知 Piping Instructions

在吸入口或输出口使用钢管时，由于配管对泵的额外震动负载是产生噪声的原因，为了避免额外的负载请使用橡胶软管。如泵高于液面安装时，吸入管和吸入管滤油器不要高于泵的接口位置，吸入管滤油器的配置位置和回油管路末端应隔开，以防止空气进入吸入管。

When using steel piping at the suction or discharge, the additional load vibration on the pump due to piping can generate noise. To avoid this, use rubber hoses instead. If the pump is installed above the liquid level, make sure that the suction pipe and the suction pipe filter are not higher than the pump's interface position. Keep the location of the suction pipe filter and the end of the return line separate to prevent air from entering the suction pipe.

泄油管注意事项 Drain Port Pipe Precautions

油泵泄油口应朝上，泄油管必须直接引到油箱，不得连接于任何其他回油管，泄油管的末端必须低于油箱中的最低液面，并尽量远离油泵吸入口滤油器的配置位置。泄油口的压力其背压值应低于1bar的正常压力，冲击力应小于5 bar。

The pump's drain port discharge should face upward, and the drain pipe should be directly connected to the oil tank without connecting it to any other return lines. The end of the drain pipe must be below the lowest level in the oil tank and as far away as possible from the pump suction inlet filter configuration position. The pressure at the relief valve outlet should have a back pressure value lower than 1 bar, with an impact force less than 5 bar.

启动时注意 Startup Attention

油泵在第一次启动前必须先由油泵注油口处注油，使泵壳内充满清静液压油。确定油泵回转方向。油泵内部及系统管路内如有气体混入，会产生异常的噪音及震动过大，开始启动泵浦时应在吐出侧，在无负荷之操作下把气体排出，如启动时系统内难以排除空气，建议加装空气释放阀。

Before the first startup, make sure to fill the pump housing with clean hydraulic oil through the pump's oil filling port to ensure that the pump casing is filled. Ensuring the direction of rotation of the hydraulic pump. If air enters the pump's internal components or the system's pipelines, it can result in abnormal noise and excessive vibration. To remove air from the system, perform an initial start-up without a load on the discharge port's side. If air is difficult to remove from the system during startup, consider installing an air release valve.

压力、流量的调节 Pressure, Flow Adjustment

出厂时，油泵调节在最大流量和最小的压力值。可依工作情况作调节流量和压力。
压力调整：压力调整螺丝顺时针时为压力上升。
流量调整：流量调整螺丝顺时针时为流量减少。

Before shipping from factory, the pump is shipped with the adjustment set at maximum flow and minimum pressure. Flow and pressure adjustments can be adjusted according to the specific operating conditions. Pressure adjustment: Clockwise rotation of the pressure adjustment screw increases pressure. Flow adjustment: Clockwise rotation of the flow adjustment screw decreases flow.

控制方式目录

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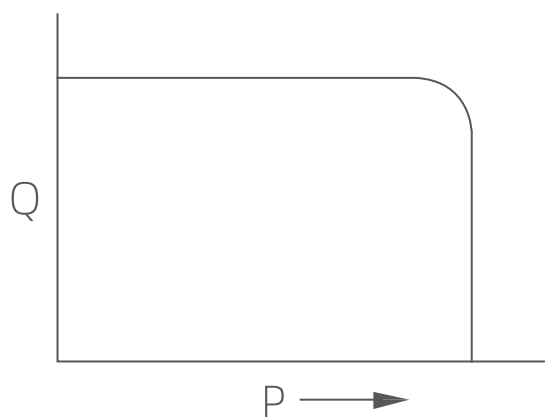
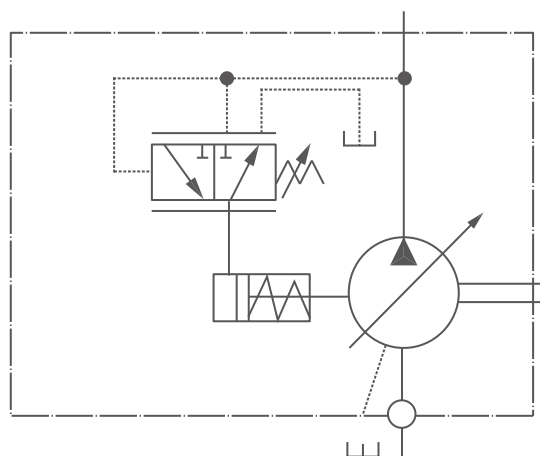


压力补偿控制型

- 当油泵出口压力达到泵设定的压力时，泵的流量自动下降接近于零，只提供极小流量用于补充系统内部泄漏，压力保持恒定。
- 油泵保压状态下，由于流量接近于零，此时所需电机功率最小，达到节能效果。
- 油泵的最大排量和最高压力可手动调节。

Pressure Compensation

- When the outlet pressure of the oil pump reaches the set pressure of the pump, the flow rate of the pump automatically decreases to close to zero, Provide minimal flow to supplement internal leaks in the system, maintaining a constant pressure.
- Under the pressure maintaining state of the oil pump, due to the flow rate approaching zero, the required motor power is minimized to achieve energy-saving effect.
- The maximum displacement and maximum pressure of the oil pump can be manually adjusted.

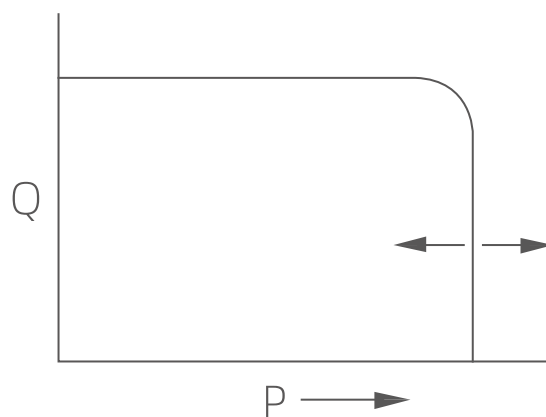
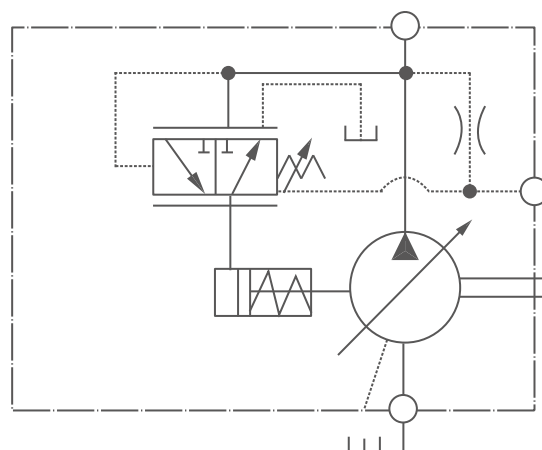


遥控压力控制型

- 与压力补偿控制型（B01页）一样特性。
- 增加了外接控制油路连接遥控调压阀的功能，当油泵出口压力达到遥控调压阀调定的压力时，泵的流量自动下降接近于零，只提供用于补充系统内部泄漏所需的极小流量，压力保持恒定。
- 外部遥控调压阀可调整油泵压力范围。

Remote Pressure Control

- Shares the same characteristics as the Pressure Compensation Control Type (Page B01).
- Added an external control oil line connection for remote pressure control valve. When the outlet pressure of the oil pump reaches the pressure set by the remote pressure control valve, the pump's flow automatically decreases to near zero, providing only a minimal flow required to compensate for internal system leaks, maintaining a constant pressure.
- External remote pressure control valve allows for adjusting the pressure range of the oil pump.

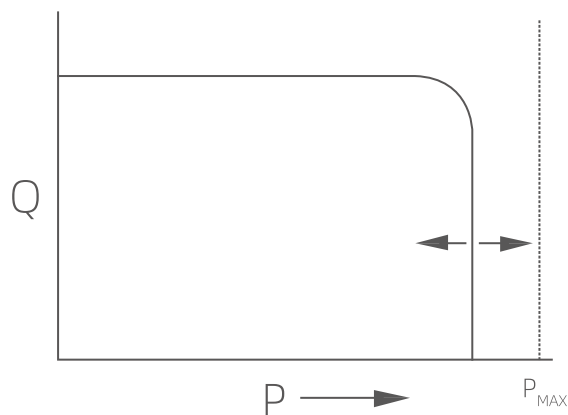
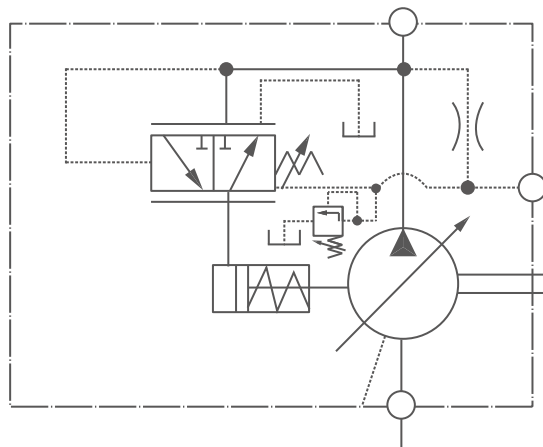


遥控压力控制型+高压保护

- 在遥控压力控制型（B03页）基础上，增加了高压保护功能，即增加了一个安全阀功能。
- 高压保护螺栓可调整最高安全压力，遥控调压阀调整的最高压力范围无法超过安全阀设定的最高压力。可避免人工误操作导致系统压力超过限定值。

Remote Pressure Control + High Pressure Protection

- Building upon the foundation of the remote pressure control type, a high-pressure protection function has been added, namely, the inclusion of a safety valve feature.
- The high-pressure protection bolt is adjustable to set the maximum safe pressure, ensuring that the maximum pressure range set by the remote pressure control valve cannot exceed the limit defined by the safety valve. This prevents manual errors from causing the system pressure to exceed its specified limit.

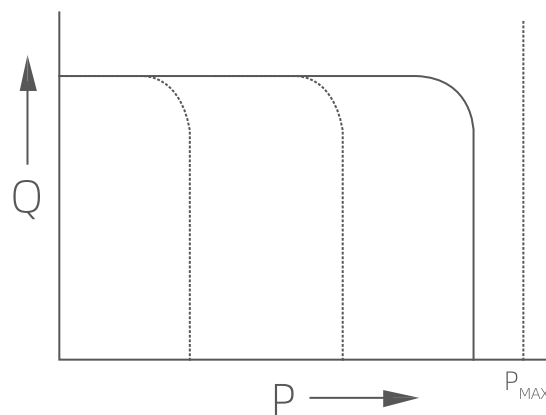
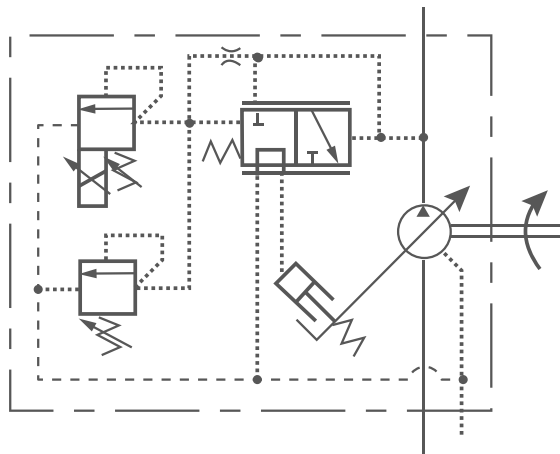


压力比例控制型+高压保护

- 使用比例压力阀调整油泵的压力，实现电控精准调节压力，节省能源。
- 同时具备高压保护功能，高压保护螺栓可调整最高安全压力，比例压力阀调整的最高压力范围无法超过安全阀设定的最高压力，可避免人工误操作导致系统压力超过限定值。

Pressure Compensation + High Pressure Protection

- Using a proportional pressure valve to adjust the pressure of the oil pump enables precise electronic control of pressure, resulting in energy savings.
- Equipped with high-pressure protection, the high-pressure protection bolt is adjustable to set the maximum safe pressure. The maximum pressure range adjusted by the proportional pressure valve cannot exceed the limit set by the safety valve, preventing manual errors from causing the system pressure to exceed its specified limit.

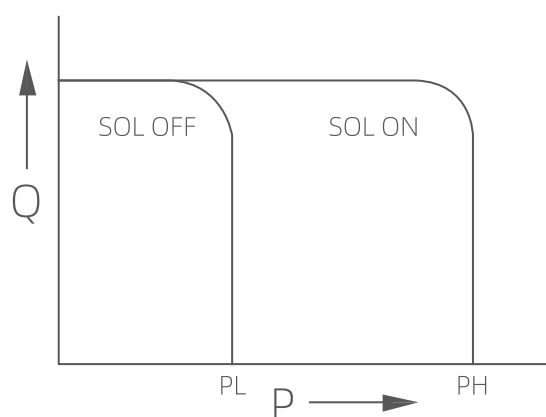
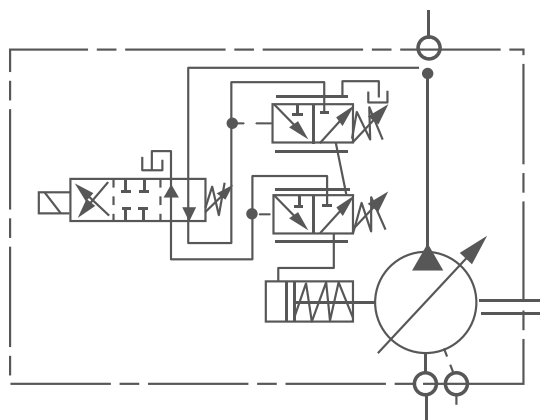


电控两段压力控制型

- 依靠电磁换向阀，控制两个不同的限压压力。
- 适用于执行器速度不变，即排量不变的情况下，设定油泵两段工作压力时使用。
- PL与PH两个压力均可实现达到设定压力时，油泵流量自动变为零，有效节省能耗。

Electrically Controlled Two-Stage Pressure Control Type

- Controlling two different limiting pressure levels using an electromagnetic switching valve.
- Intended for setting two-stage operating pressures for the oil pump when the actuator speed remains constant, i.e., with unchanged displacement.
- When both PL and PH pressures reach the set values, the oil pump flow automatically reduces to zero, effectively saving energy.

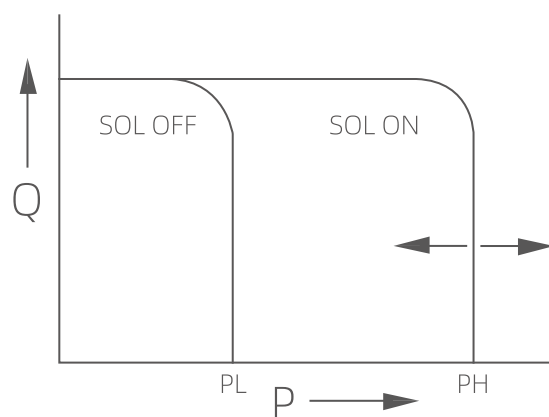
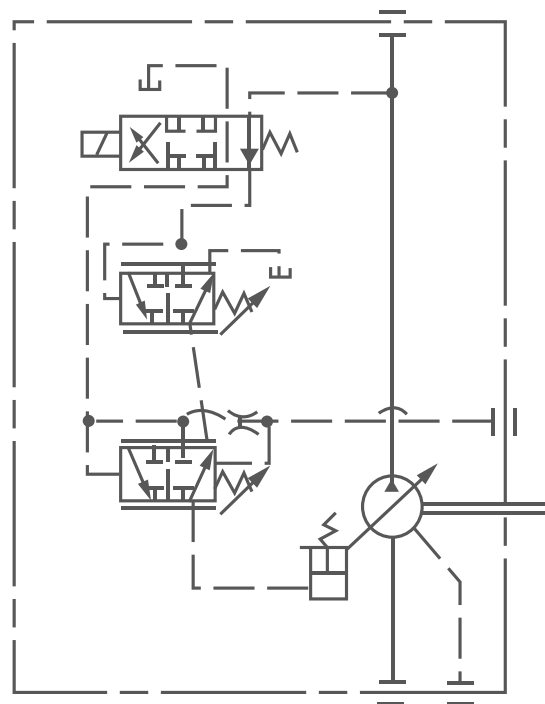


电控两段压力控制+遥控控制型

- 与电控两段压力控制型相同（B05页）。
- 增加了遥控调整压力，外接调压阀可调整压力范围。
- 遥控油口也可以配合比例阀，达成电控比例压力控制。

Electric Two-Stage Pressure Control + Remote Control

- Same as the Electric Two-Stage Pressure Control Type (Page B05).
- Added remote pressure adjustment, with an external pressure control valve for adjustable pressure range.
- The remote control oil port can also be used in conjunction with a proportional valve to achieve electronic proportional pressure control.

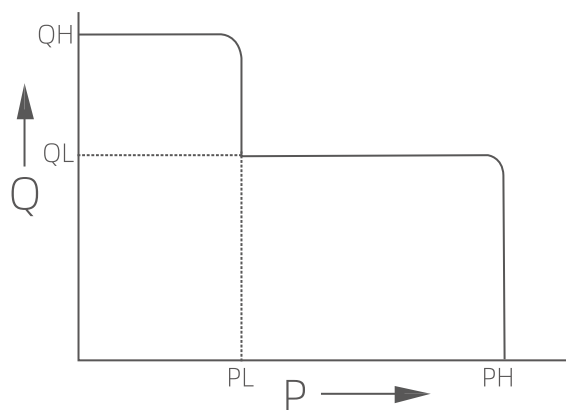
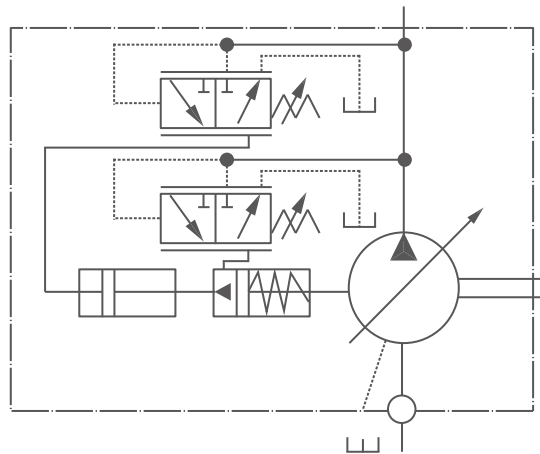


两段压力两段流量控制型

- 一台单泵可起到双联泵的作用，即低压大流量和高压小流量两种工作状态，因而可以选择更小功率的电机。
- 低压快进时，泵全流量QH输出；当负载增大，泵的输出压力逐渐接近于设定压力“PL”时，泵的流量自动减小到“QL”。
- 适用于低压快进，加压工进的工况，比如压机等，快进至加压开始的同时，转变为低速进给。

Two-Stage Pressure and Flow Control

- A single pump can serve as a dual pump, offering both low pressure and high flow as well as high pressure and low flow operational modes, allowing for the use of a smaller motor.
- During low-pressure fast forward, the pump outputs the full flow QH; as the load increases, and the pump's output pressure gradually approaches the set pressure 'PL', the pump's flow automatically decreases to 'QL'.
- Applicable to conditions involving low-pressure rapid advance and pressurized slow advance, such as in hydraulic presses. It transitions from rapid advance to slow feed upon reaching the pressurization point.

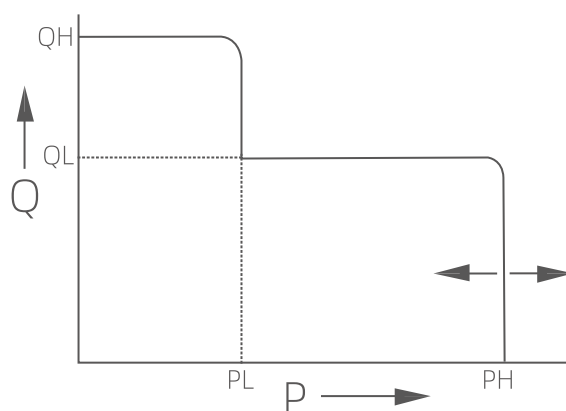
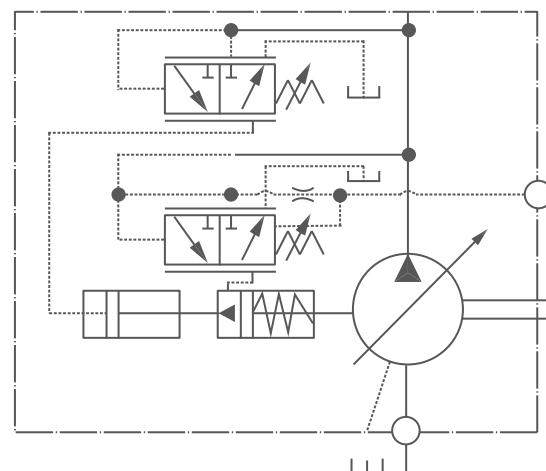


遥控两段压力两段流量控制型

- 拥有单泵两段压力两段流量控制型的全部功能（B07页），即拥有低压大流量及高压小流量两种工作状态。
- 增加了遥控调整压力的功能，由外接调压阀调整压力范围。
- 可在遥控口配合比例压力阀，实现远程电控比例压力控制。

Remote-Controlled Two-Stage Pressure and Flow Control

- Possesses all the features of the single pump two-stage pressure and flow control type (Page B07), offering both low pressure high flow and high pressure low flow operational modes.
- Added remote pressure adjustment capability, with pressure range adjustable by an external pressure control valve.
- Can be used in conjunction with a proportional pressure valve at the remote control port to achieve remote electronic proportional pressure control.

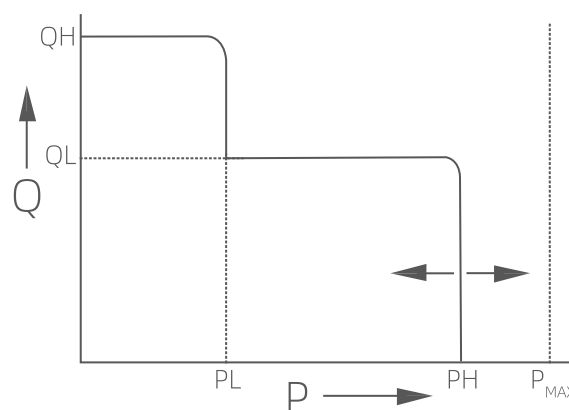
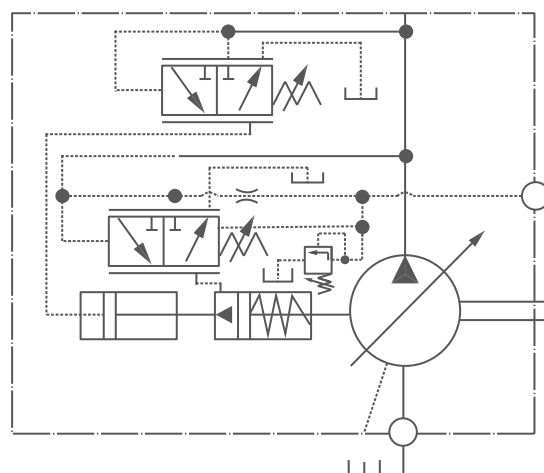


遥控两段压力两段流量控制型+高压保护

- 拥有遥控两段压力两段流量控制型（B08页）所有功能。
- 高压保护螺栓可调整最高安全压力，远程遥控调压阀调整的最高压力范围无法超过安全阀设定的最高压力。可避免人工误操作导致系统压力超过限定值。

Remote-Controlled Two-Stage Pressure and Flow Control + High-Pressure Protection.

- Possesses all the features of the Remote-Controlled Dual-Stage Pressure and Flow Control (Page B08).
- The high-pressure protection bolt sets the maximum safe pressure, preventing the remote pressure control valve from exceeding the safety valve's limit, thus avoiding manual errors that might lead to excess system pressure.

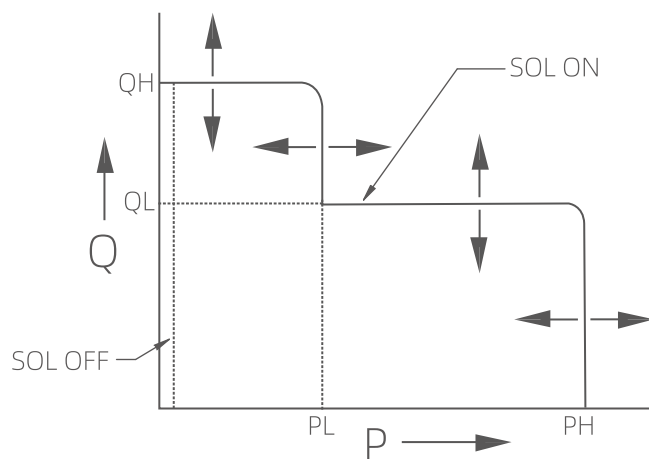
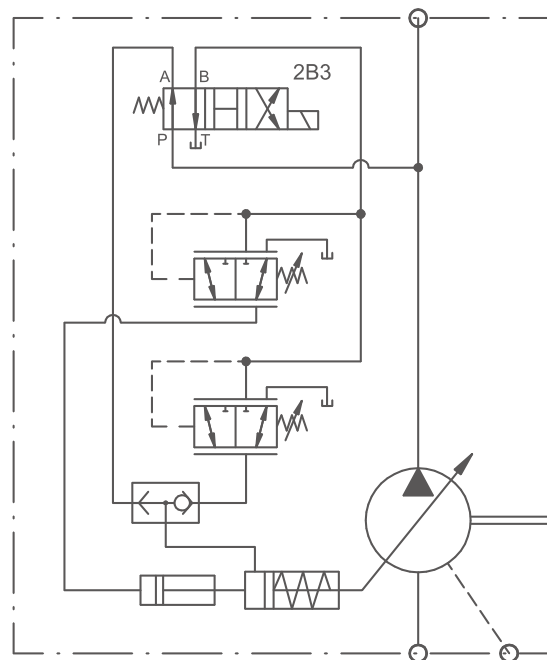


两段压力两段流量+低压卸载控制型

- 电磁阀断电时（SOL OFF）：处于低压卸载状态，油泵待机；电磁阀通电时（SOL ON）：处于两段压力两段流量工作状态（B07页）。
- 依靠电磁阀换向，控制两个不同的限压压力。
- PL与PH阀可任选一方作为高压。
- 即可满足低压快进和高压工进的工况，又可以兼顾长期待机工况，有效节省能源。

Two-Stage Pressure and Two-Stage Flow + Low-Pressure Unloading Control

- When the solenoid valve is de-energized (SOL OFF): it is in low-pressure unloading mode, and the oil pump is on standby. When the solenoid valve is energized (SOL ON): it operates in the two-stage pressure and two-stage flow mode (Page B07).
- Using a solenoid valve for switching, control two different limiting pressure levels.
- Either PL or PH valve can be chosen as the high-pressure option.
- It can meet the conditions of low-pressure fast forward and high-pressure work advance while also accommodating long-term standby conditions, effectively saving energy.

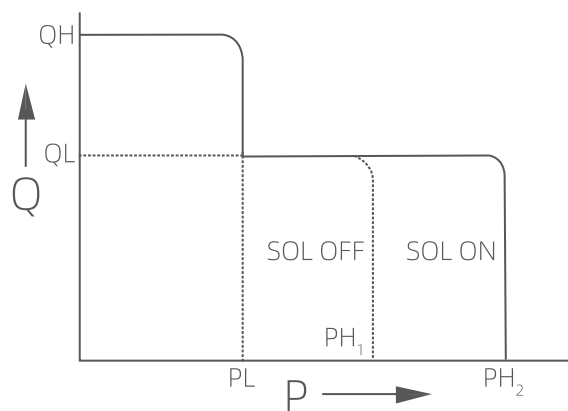
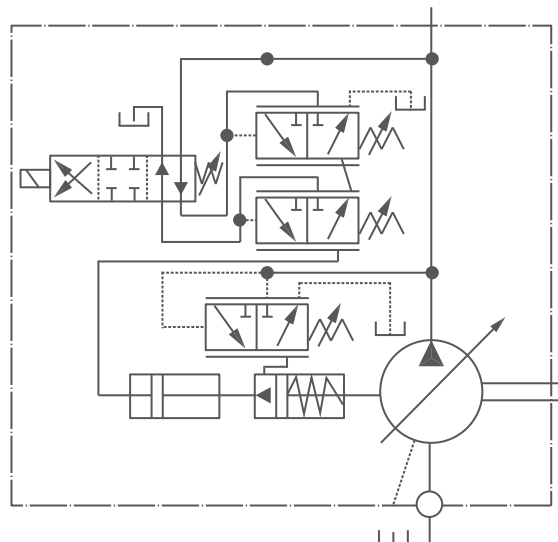


两段压力两段流量+电控两段压力控制型

- 拥有两段压力两段流量控制型（B07页）的所有功能，同时增加了高压端的电控两段压力控制，相当于油泵拥有了三段压力，两段流量控制。
- 低压快进时，油泵以大流量QH输出；达到压力PL时，油泵以小流量QL输出，同时高压端的限压压力可通过电磁阀切换成PH₁和PH₂两种压力。
- 适用于低压快进，加压工进的工况，比如压机等，快进至加压开始的同时，转变为低速进给。

Two-Stage Pressure and Two-Stage Flow + Electrically Controlled Two-Stage Pressure Control

- It possesses all the features of the two-stage pressure and two-stage flow control type (Page B07), with the added capability of high-pressure end electrically controlled two-stage pressure control, effectively providing the pump with three-stage pressure and two-stage flow control.
- When in low-pressure fast advance mode, the pump delivers a large flow rate QH; upon reaching pressure PL, the pump switches to a small flow rate QL. Meanwhile, the high-pressure end allows for switching between limit pressures PH₁ and PH₂ using a solenoid valve.
- Suitable for conditions involving low-pressure rapid advance and pressurized slow advance, such as in hydraulic presses. It transitions from rapid advance to slow feed upon reaching the pressurization point.

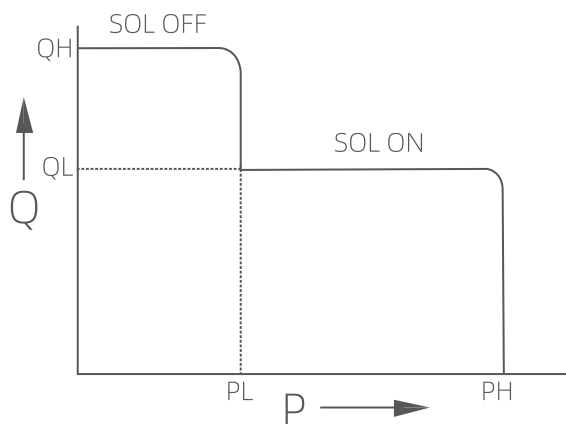
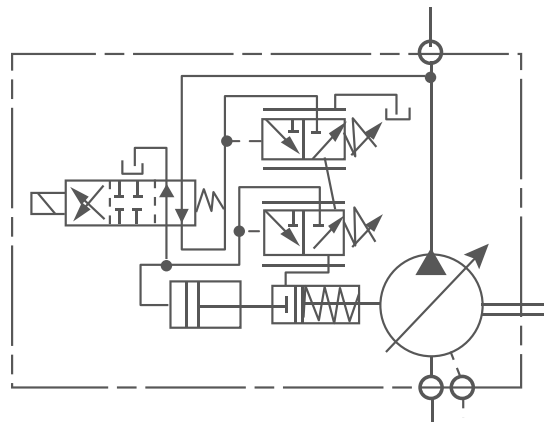


电控两段压力+两段流量控制型

- 依靠电磁换向阀控制低压大流量及高压小流量的功能，当电磁阀通电时，限压压力升高至PH，全流量降至QL。
- 压力PL、PH及流量QL、QH可以任意调节。
- 适用于低压快进，高压慢进之类的机床设备等。

Electrically Controlled Two-Stage Pressure + Two-Stage Flow Control

- It achieves the function of controlling low-pressure high flow and high-pressure low flow through a solenoid switching valve. When the solenoid valve is energized, the limiting pressure rises to PH, and the full flow decreases to QL.
- Pressure PL, PH, and flow rates QL, QH are adjustable as desired.
- Suitable for machine tools and similar equipment requiring low-pressure rapid advance and high-pressure slow advance.

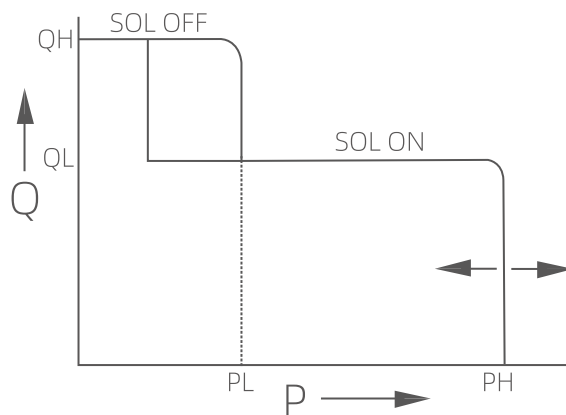
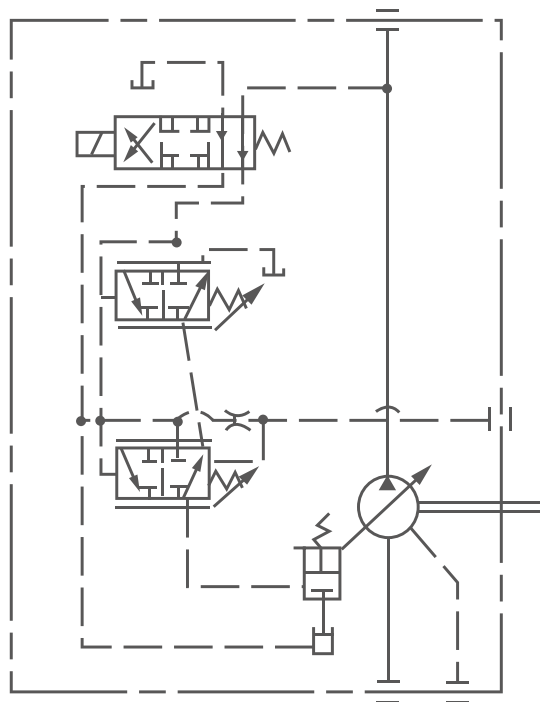


电控两段压力两段流量+遥控控制型

- 与电控两段压力+两段流量控制相同（B12页）。
- 增加了遥控调整压力功能，由外接遥控阀调整压力范围。
- 遥控油口配合比例压力阀，可实现电控比例压力控制。

Electrically Controlled Two-Stage Pressure and Two-Stage Flow + Remote Control

- Same as Electric Two-Stage Pressure and Two-Stage Flow Control (Page B12).
- Added remote pressure adjustment capability, adjustable by an external remote control valve.
- Remote control oil port combined with a proportional pressure valve allows for electronic proportional pressure control.

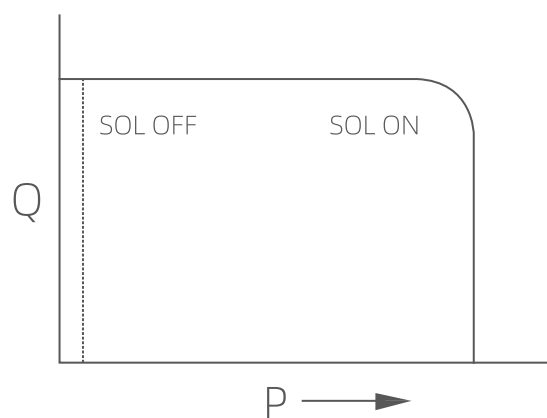
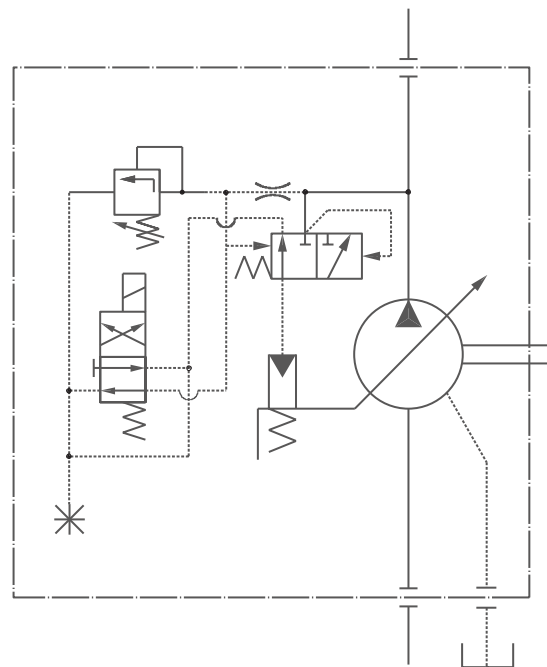


电磁低压卸载+压力补偿控制型

- 在标准压力补偿控制（第B01页）基础上增加了低压卸压功能，适用于停机时间长的工况。
- 电磁阀通电时，油泵处于压力补偿控制功能，油泵达到设定压力时，输出流量自动变为零；电磁阀断电时，油泵保持保持极低的压力，流量变为零，没有溢流浪费，以此保持待机待机状态，使系统油温和噪音保持较低水平。
- 油泵处于待机卸载状态时，电机功率降至最小，节省耗电量。

Solenoid Low-Pressure Unloading + Pressure Compensation Control

- Built upon the standard pressure compensation control (Page B01) with the addition of low-pressure unloading capability, suitable for extended periods of machine downtime.
- When the solenoid valve is energized, the pump operates in pressure compensation control mode, and the pump's flow automatically drops to zero upon reaching the set pressure. When the solenoid valve is de-energized, the pump maintains very low pressure with zero flow, eliminating overflow waste and keeping the system in standby mode. This helps maintain lower oil temperatures and noise levels.
- When the oil pump is in standby unloading mode, the motor power decreases to a minimum, saving electrical energy.

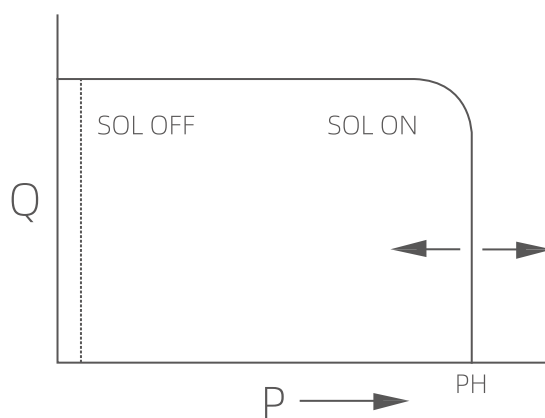
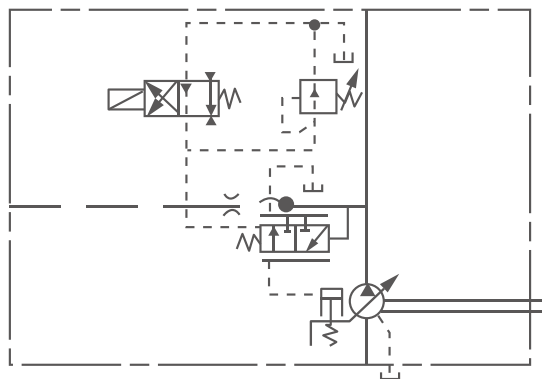


电磁低压卸载+遥控压力控制型

- 在低压卸载+压力控制型（B14页）的基础上增加了遥控压力控制。
- 电磁阀通电时（SOL ON）：油泵处于遥控压力补偿控制功能，油泵达到遥控压力阀调节的压力时，输出流量自动变为零；电磁阀断电时（SOL OFF）：油泵处于卸载状态，压力极低，流量为零，电机功率降至最小，节能降噪。
- 远程油口可配合比例压力阀，实现电控比例压力控制。

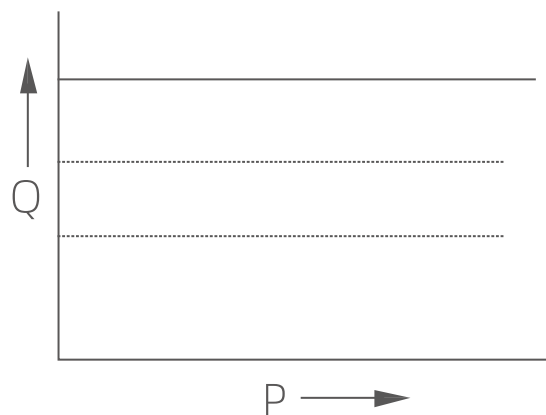
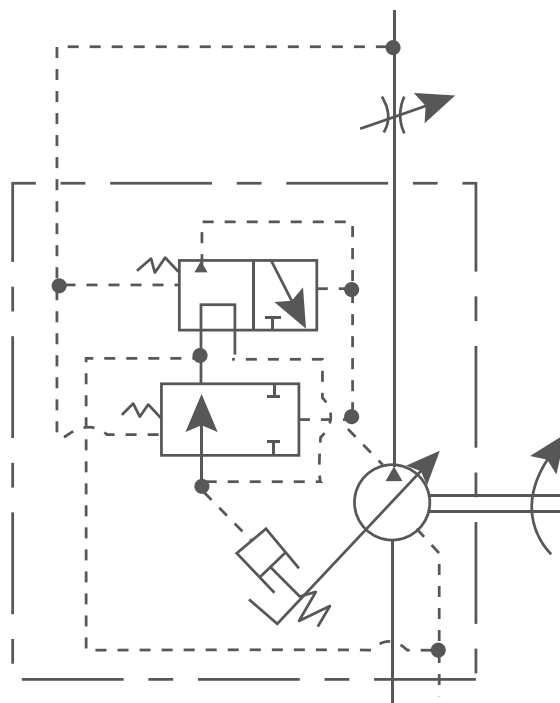
Solenoid Low-Pressure Unloading + Remote Pressure Control

- Built upon the low-pressure unloading and pressure control type (Page B14) with the addition of remote pressure control.
- When the solenoid valve is energized (SOL ON): the pump operates in remote pressure compensation control mode, and the pump's flow automatically drops to zero upon reaching the pressure set by the remote pressure control valve. When the solenoid valve is de-energized (SOL OFF): the pump is in unloading mode with very low pressure, zero flow, and the motor power decreases to a minimum, saving energy and reducing noise.
- The remote oil port can be used in conjunction with a proportional pressure valve to achieve electronic proportional pressure control.



- 泵上的负载敏感阀通过与串接在泵出油路上的节流阀相连，可实现对泵的流量控制，在负载发生波动或者传动转速发生变化时，在一较宽的工作范围内不会影响执行机构的速度。
- 同时泵上的压力补偿阀具有限压功能。
- 泵上的负载敏感阀可保持与之连接的节流阀前后压差不变，而流量依节流阀开口大小改变，油泵自动感应油路负载回馈保持系统的恒定流量，减少压力损耗，达到低油温省能源的功能。

- The load-sensitive valve on the pump, connected in series with a throttle valve in the pump's outlet oil circuit, allows for flow control of the pump. This ensures that, within a broad operating range, fluctuations in load or changes in transmission speed do not affect the actuator's speed.
- At the same time, the pressure compensation valve on the pump has a pressure limiting function.
- The load-sensitive valve on the pump can maintain a constant pressure difference across the throttle valve it is connected to, while the flow changes depending on the opening of the throttle valve. The pump automatically senses load feedback in the hydraulic circuit to maintain a constant system flow, reducing pressure losses and achieving energy savings with lower oil temperature.

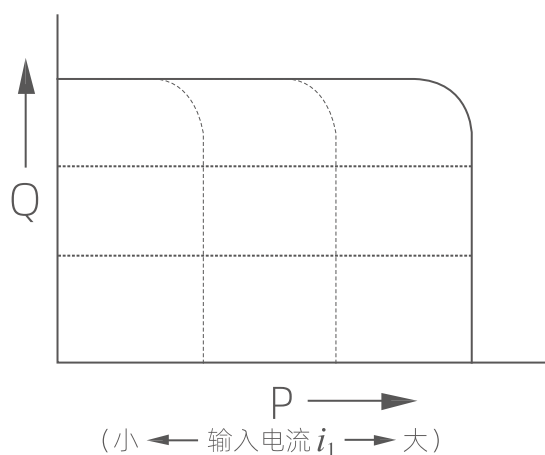
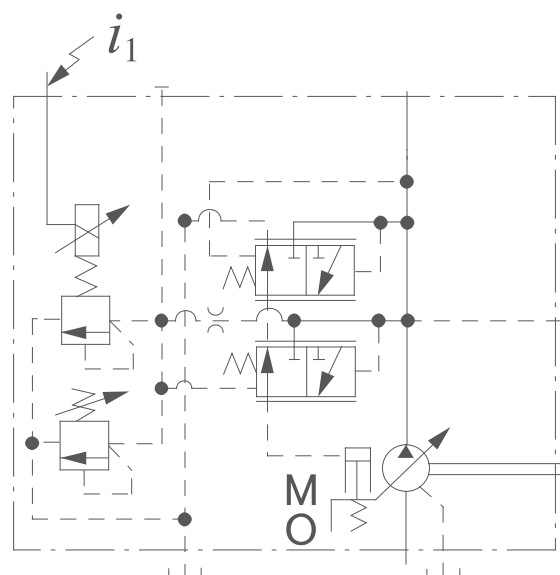


负载敏感+比例压力控制型

- 拥有负载敏感控制泵（B16页）的所有功能，同时增加了电控比例压力控制。
- 在负载发生波动或者转动转速发生变化时，油泵可保证在一个较宽的工作范围内不会影响执行机构的速度，比例压力精准控制了设备所需要的压力，又进一步实现了节能的效果。

Load-Sensitive + Proportional Pressure Control

- It possesses all the features of the load-sensitive control pump (Page B16) and adds electrically controlled proportional pressure control.
- When load fluctuations or changes in rotational speed occur, the pump ensures that the actuator's speed remains unaffected within a wide operating range. Proportional pressure control precisely regulates the pressure required by the equipment, further achieving energy-saving effects.

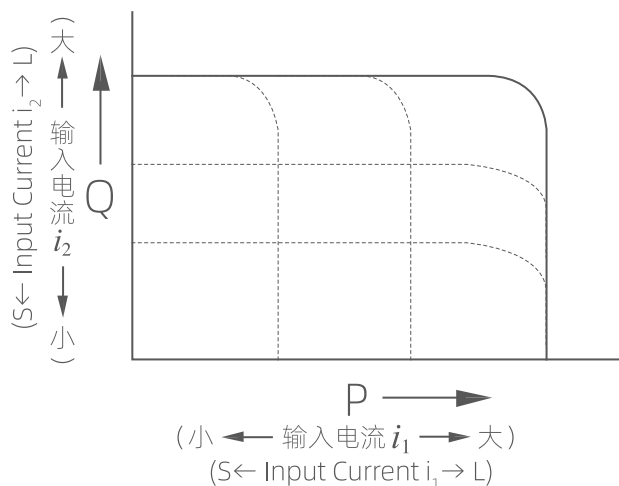
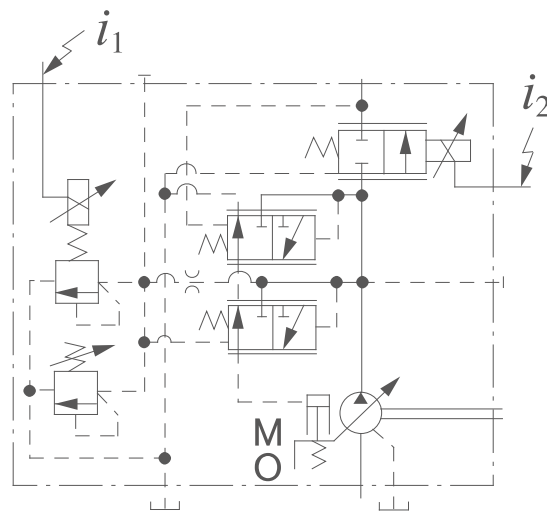


电-液比例负载敏感控制型

- 负载敏感控制与比例阀构成一体，按照电流大小控制比例压力、比例流量，按照负载的大小提供系统所需要的压力与流量，节省不必要的能源消耗。
- 当待机时柱塞泵流量接近零，电机功率损耗输出亦接近零，当系统压力升高到设定值时，柱塞泵的流量会自动减少，只补充系统所需流量，而压力值维持不变的，可大幅减低油温上升，节省不必要的能源浪费。
- 电-液比例泵与一般叶片泵或齿轮泵+PQ阀所配合的油路相互比较，约可以节省电力30%~50%能源，油箱液压油容量亦可较小，省电环保效果更佳。

Electro-Hydraulic Proportional Load-Sensitive Control

- Load-sensitive control integrated with a proportional valve, controlling proportional pressure and flow based on current magnitude and providing the pressure and flow required by the system according to the load size, thus saving unnecessary energy consumption.
- When in standby mode, the plunger pump's flow rate approaches zero, and the motor power consumption output is also close to zero. When the system pressure rises to the set value, the plunger pump's flow automatically decreases, only supplying the required flow to the system, while maintaining a constant pressure level. This significantly reduces the increase in oil temperature and saves unnecessary energy waste.
- Compared to the hydraulic circuit with a typical vane or gear pump and PQ valve, the electro-hydraulic proportional pump can save approximately 30% to 50% of energy and allows for a smaller hydraulic oil tank capacity, resulting in better energy savings and environmental benefits.

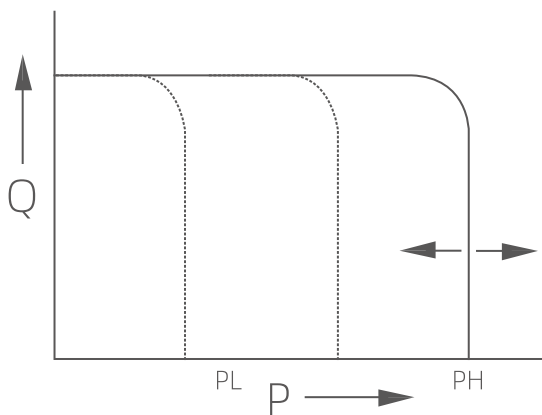
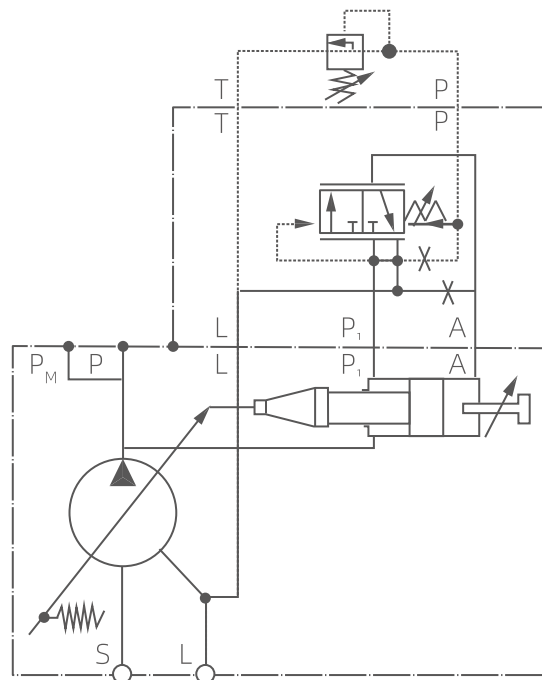


带遥控型调节器控制型（含NG6界面）

- 将遥控控制型做为一个带扩展功能的集成调节器，调节器上含有NG6界面，可直接把调压阀叠加安装在调节器扩展口上，调节油泵所需压力，也可以由集成调节器直接设定压力。
- 反应速度较快，提供压力更为稳定。
- 可叠加手动或电液比例压力阀进行控制调节压力。

With Remote Control Regulator Control (Including NG6 Interface)

- Using the remote control control type as an integrated regulator with extended functionality, the regulator features an NG6 interface, allowing the direct stacking of pressure control valves onto the regulator's expansion port to adjust the required pressure for the pump, or the pressure can be directly set by the integrated regulator.
- Faster response time, providing more stable pressure.
- Can be stacked with manual or electro-hydraulic proportional pressure valves for pressure control and adjustment.

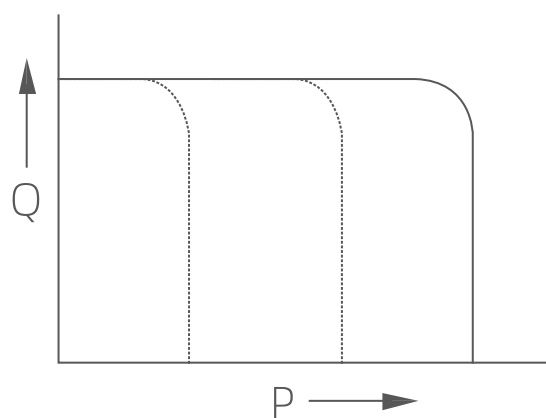
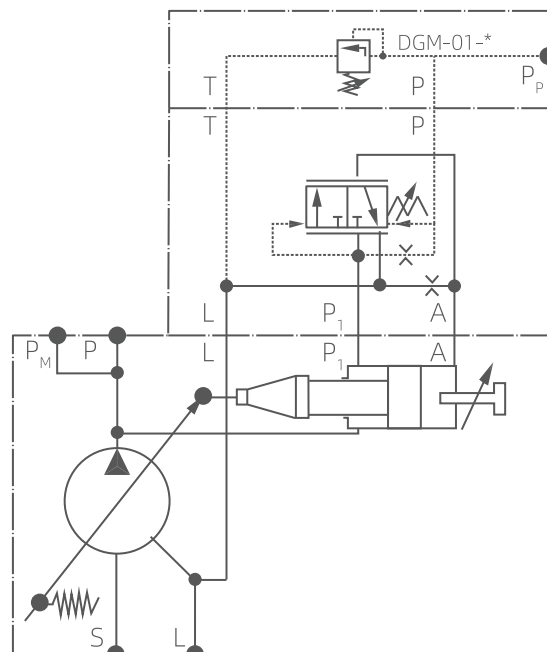


遥控调节器控制型+溢流阀

- 将遥控控制型作为一个带扩展功能的集成调节器，调节器上含有NG6界面，可直接把调压阀叠加安装在调节器扩展口上，调节油泵所需压力，也可以由集成调节器直接设定压力。
- 在调节器上叠加一个先导溢流阀，增加一个压力先导调节功能。

Remote Control Regulator Controlled + Relief Valve

- Using the remote control control type as an integrated regulator with extended functionality, the regulator features an NG6 interface, allowing the direct stacking of pressure control valves onto the regulator's expansion port to adjust the required pressure for the pump, or the pressure can be directly set by the integrated regulator.
- Adding a pilot-operated relief valve on top of the regulator to introduce pressure pilot adjustment functionality.

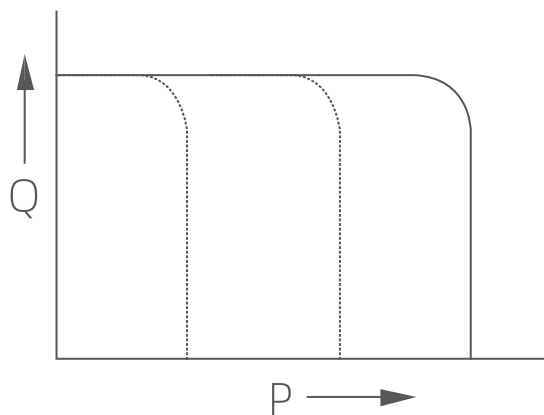
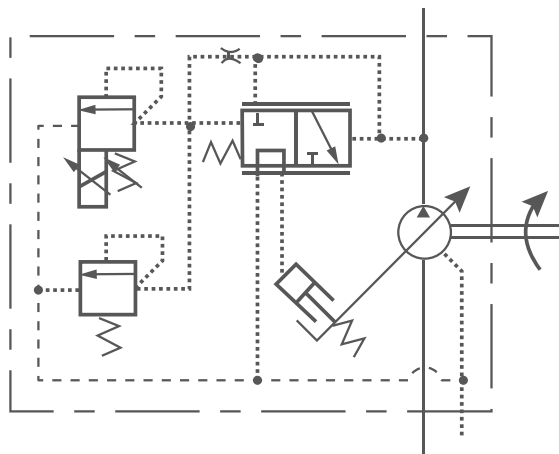


遥控型调节器+比例压力控制型

- 在遥控型集成调节器（B19页）NG6接口上叠加比例压力阀，实现电控比例压力控制，节省能源系统。

Remote Control Regulator + Proportional Pressure Control

- Adding a proportional pressure valve on the NG6 interface of the remote control integrated regulator (Page B19) to achieve electronic proportional pressure control, saving energy for the system.

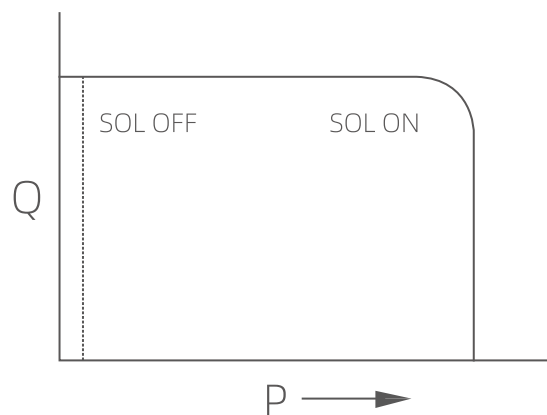
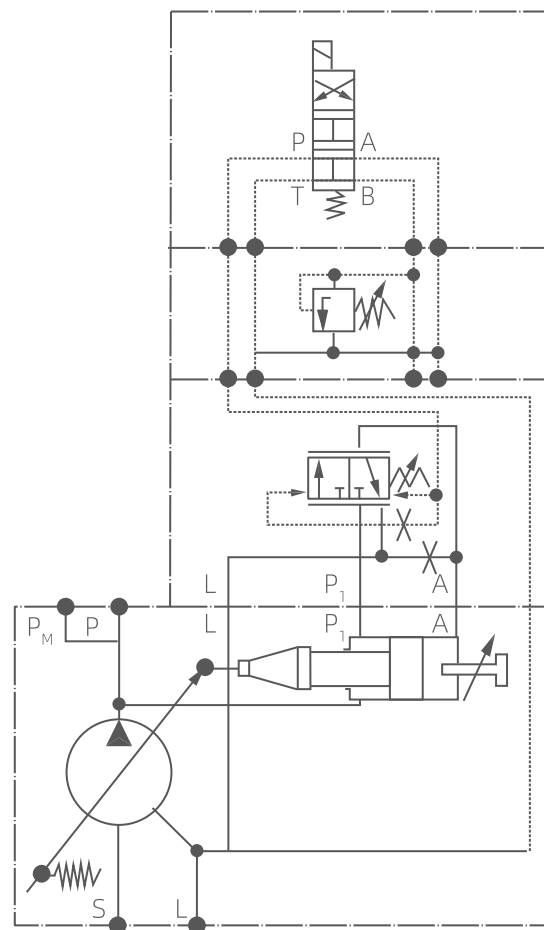


遥控型调节器+电控卸载控制型

- 在遥控型集成调节器（B19页）NG6接口上叠加一个溢流阀及电磁换向阀，可以实现压力先导调节功能及低压卸载功能。
- 电磁阀通电时（SOL ON）：由溢流阀调节油泵压力；电磁阀断电时（SOL OFF）：油泵处于低压卸载的状态。
- 适用于长期停机需要低压卸载的工况。

Remote Control Regulator + Electric Unloading Control

- By adding a relief valve and a solenoid directional valve on the NG6 interface of the remote control integrated regulator (Page B19), pressure pilot adjustment functionality and low-pressure unloading functionality can be achieved.
- When the solenoid valve is energized (SOL ON): the pump pressure is regulated by the relief valve; when the solenoid valve is de-energized (SOL OFF): the pump is in a low-pressure unloading state.
- Suitable for situations where long-term shutdown requires low-pressure unloading.

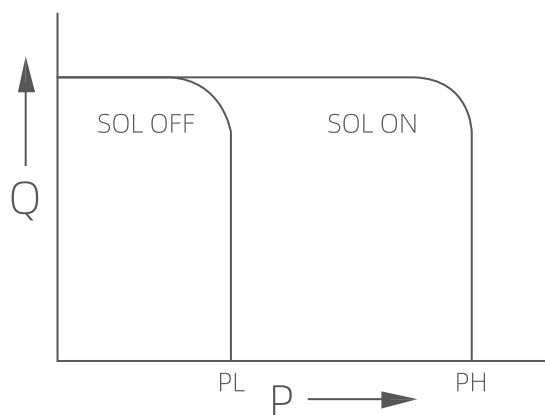
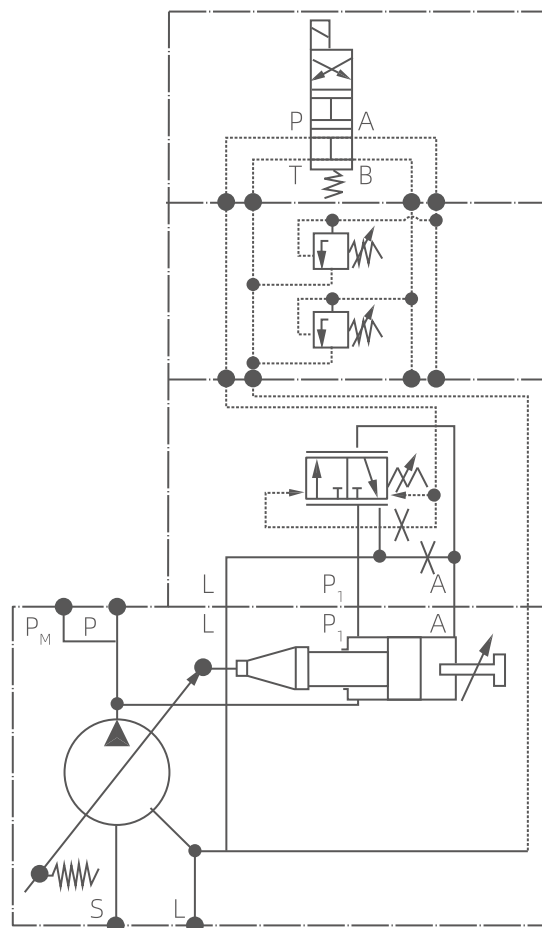


遥控型调节器+电控两段压力控制型

- 在遥控型集成调节器（B19页）NG6接口上叠加一个溢流阀及电磁换向阀，可以调节两个高低不同的限压压力，通过电磁阀换向实现电控两段压力切换。
- 适合在执行器速度不变的情况下，设定两段工作压力的工况。
- PL、PH可任选一方作为高压。

Remote Control Regulator + Electric Two-Stage Pressure Control

- By adding a relief valve and a solenoid directional valve on the NG6 interface of the remote control integrated regulator (Page B19), it is possible to adjust two different high and low pressure limits. Pressure switching between the two stages can be achieved through solenoid valve direction changes.
- Suitable for situations where two-stage working pressures are set while the actuator speed remains constant.
- PL and PH can be chosen as high pressure interchangeably.

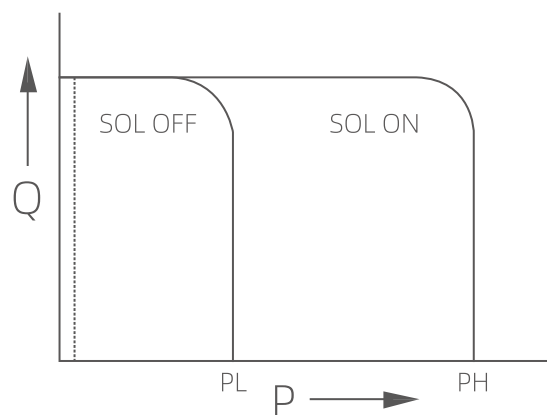
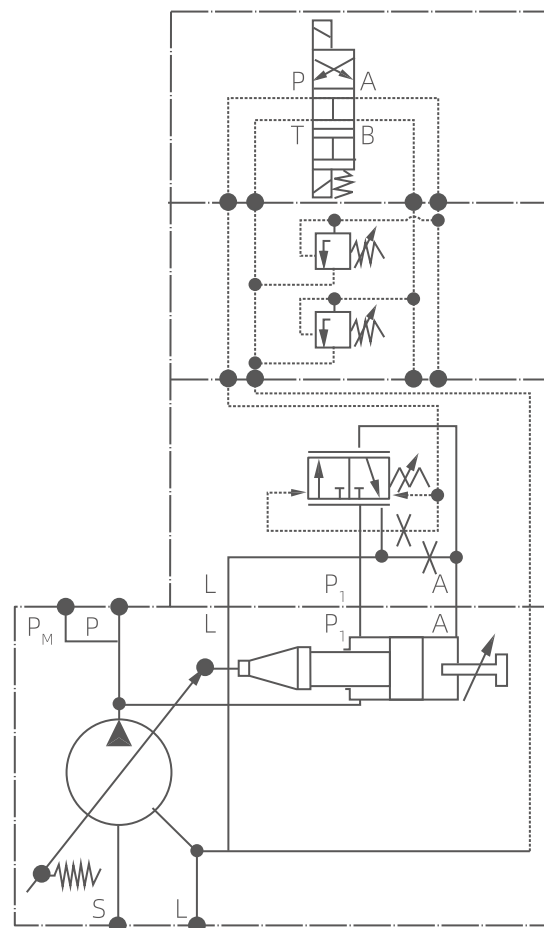


遥控型调节器+电控卸载+两段压力控制型

- 在遥控型集成调节器（B19页）NG6接口上叠加溢流阀及电磁换向阀，使用电磁阀控制两个高低不同的限压压力；同时增加了低压卸载功能，系统停机时，油泵改变斜盘角度，使油泵输出流量几乎为零，避免了溢流损失，使系统油温和噪音更低。
- 适用于执行器速度不变的情况下使用两段压力，并且待机时间较长的工况。
- PL、PH可任选一方作为高压。

Remote Control Regulator + Electric Unloading + Two-Stage Pressure Control

- By adding a relief valve and a solenoid directional valve on the NG6 interface of the remote control integrated regulator (Page B19), using solenoid valves to control two different high and low pressure limits. Additionally, it includes low-pressure unloading functionality; when the system is shut down, the pump changes the swashplate angle, causing the pump's output flow to be nearly zero, preventing overflow losses and maintaining lower system oil temperature and noise.
- Suitable for situations where two-stage pressure is needed with a constant actuator speed and longer standby periods.
- PL and PH can be chosen interchangeably as high pressure.

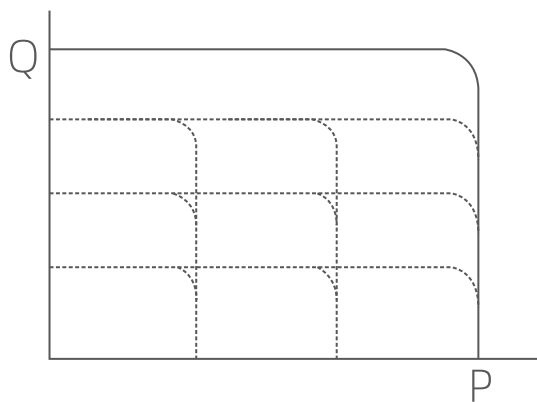
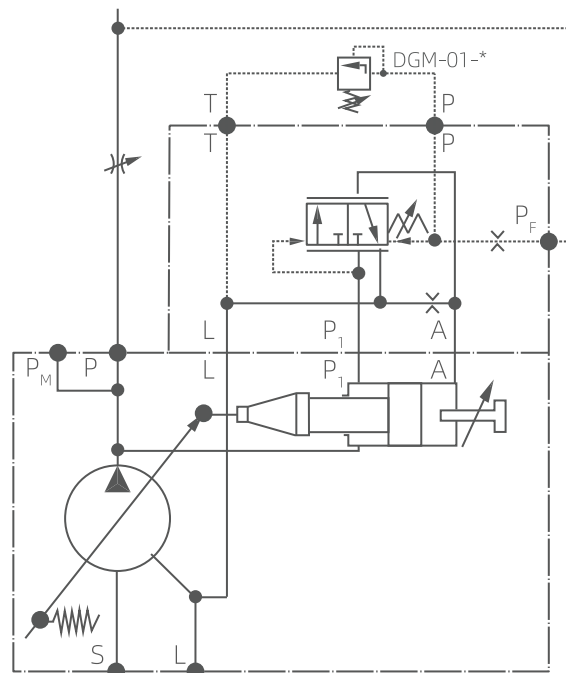


负载感应调节器（含NG6界面）

- 泵上的负载感应调节器通过与串接在泵出油路上的节流阀相连，可实现对泵的流量控制，在负载发生波动或者传动转速发生变化时，在一较宽的工作范围内不会影响执行机构的速度。
- 负载感应调节器NG6界面上可叠加各种控制阀，实现更多的控制方式。
- 泵上的负载敏感调节器可保持与之连接的节流阀前后压差不变，而流量依节流阀开口大小改变，油泵自动感应油路反馈保持系统的恒定流量，减少压力损耗，达到低油温省能源的功能。

Load-Sensing Regulator (with NG6 Interface)

- The load-sensing regulator on the pump, connected in series with a throttle valve in the pump's oil outlet circuit, allows for flow control of the pump. This ensures that within a wide operating range, changes in load or transmission speed do not affect the actuator's speed.
- On the NG6 interface of the load-sensing regulator, various control valves can be added to enable a wider range of control methods.
- The load-sensing regulator on the pump can maintain a constant pressure difference across the connected throttle valve while adjusting flow based on the throttle valve's opening. This enables the pump to automatically respond to hydraulic circuit feedback, maintaining a consistent system flow, reducing pressure losses, and achieving lower oil temperature and energy savings.

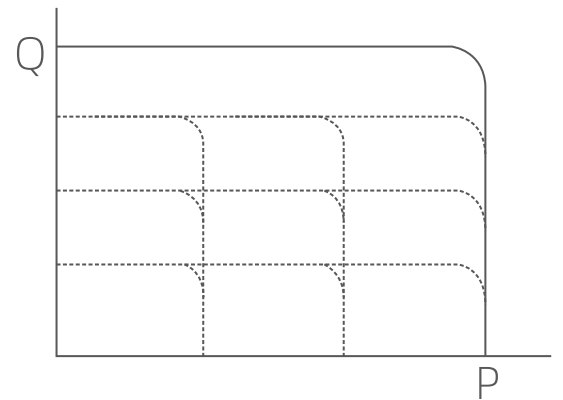
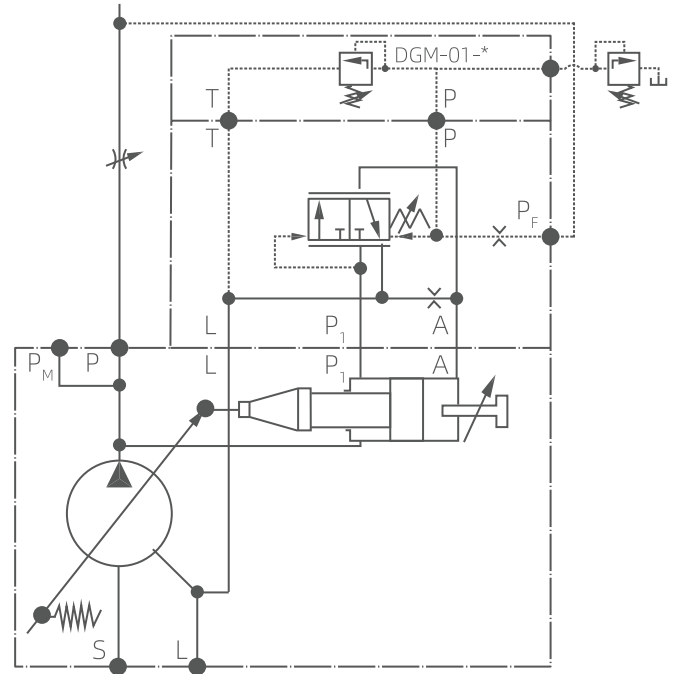


负载感应调节器+溢流阀

- 泵上的负载感应调节器通过与串接在泵出油路上的节流阀相连，可实现对泵的流量控制，在负载发生波动或者传动转速发生变化时，在一较宽的工作范围内不会影响执行机构的速度。
- 在负载感应调节器（B25页）上叠加一个先导溢流阀，可进行压力调节。
- 泵上的负载敏感调节器可保持与之连接的节流阀前后压差不变，而流量依节流阀开口大小改变，油泵自动感应油路回馈保持系统的恒定流量，减少压力损耗，达到低油温省能源的功能。

Load-Sensing Regulator + Relief Valve

- The load-sensing regulator on the pump, connected in series with a throttle valve in the pump's oil outlet circuit, allows for flow control of the pump. This ensures that within a wide operating range, changes in load or transmission speed do not affect the actuator's speed.
- Adding a pilot-operated relief valve on top of the load-sensing regulator (Page B25) allows for pressure adjustment.
- The load-sensing regulator on the pump can maintain a constant pressure difference across the connected throttle valve while adjusting flow based on the throttle valve's opening. This allows the pump to automatically respond to hydraulic circuit feedback, maintaining a consistent system flow, reducing pressure losses, and achieving lower oil temperature for energy savings.

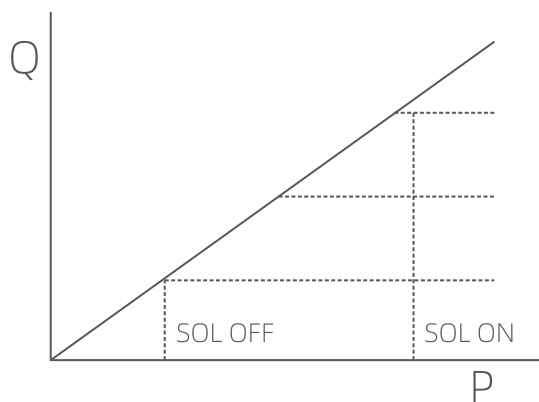
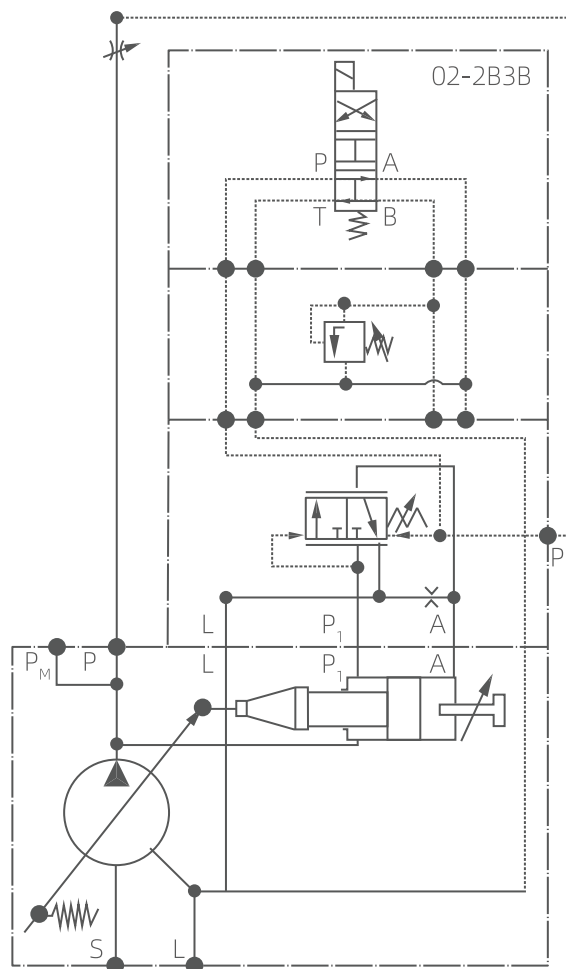


负载感应调节器+电控卸载

- 泵上的负载感应调节器通过与串接在泵出油路上的节流阀相连，可实现对泵的流量控制，在负载发生波动或者传动转速发生变化时，在一较宽的工作范围内不会影响执行机构的速度。
- 在负载感应调节器（B25页）上叠加一个先导溢流阀及电磁换向阀，可增加压力先导调节及电控卸载功能。适用于机器卸载时间长得工况，系统停机时，通过泵的泄压运转，油温更低，噪音更小。
- 油泵自动感应油路回馈保持系统的恒定流量，减少压力损耗，达到低油温省能源的功能。

Load-Sensing Regulator + Electric Unloading

- The load-sensing regulator on the pump, connected in series with a throttle valve in the pump's oil outlet circuit, allows for flow control of the pump. This ensures that within a wide operating range, changes in load or transmission speed do not affect the actuator's speed.
- By adding a pilot-operated relief valve and a solenoid directional valve on top of the load-sensing regulator (Page B25), it is possible to enhance pressure pilot adjustment and electric unloading functionality. This is suitable for situations where the machine is unloaded for an extended period. When the system is shut down, the pump operates in pressure relief mode, resulting in lower oil temperature and reduced noise.
- The pump automatically responds to hydraulic circuit feedback to maintain a constant system flow, reducing pressure losses and achieving lower oil temperature for energy savings.

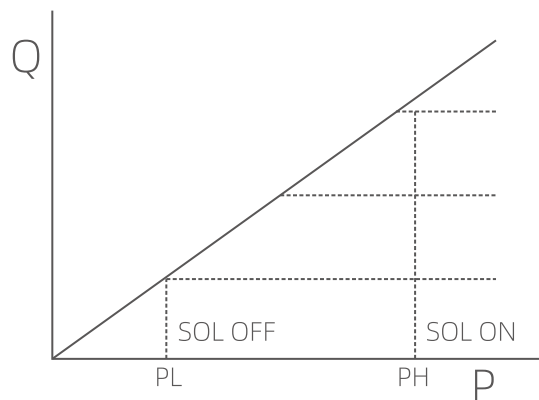
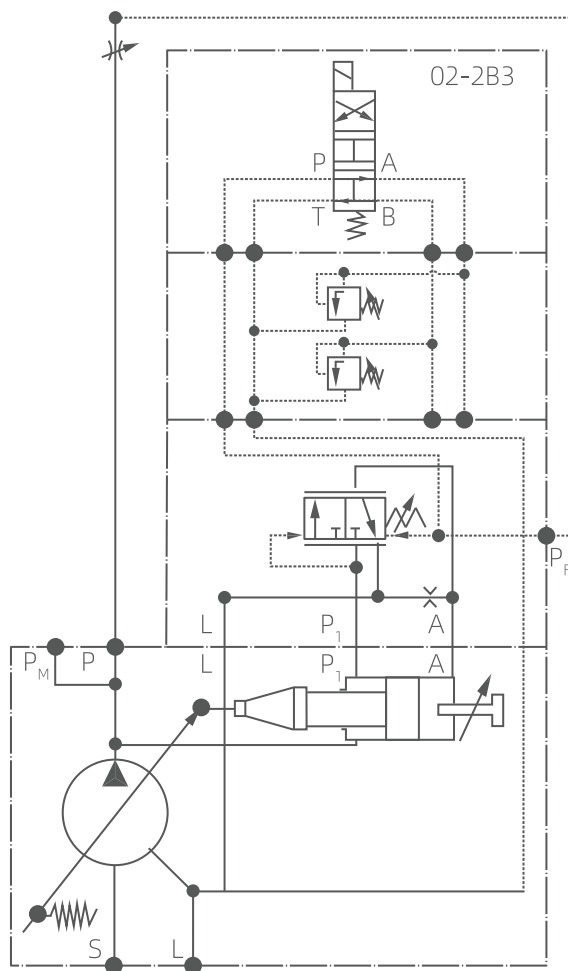


负载感应调节器+电控两段压力

- 泵上的负载感应调节器通过与串接在泵出油路上的节流阀相连，可实现对泵的流量控制，在负载发生波动或者传动转速发生变化时，在一较宽的工作范围内不会影响到执行机构的速度。
- 在负载感应调节器（B25页）NG6界面上叠加一个两段压力溢流阀及电磁换向阀，可调节高低两个不同的限压压力，并达到电控两段压力切换。
- 适用于油缸在恒定速度下，切换两段工作压力时使用。PL和PH可任选一作为高压。

Load-Sensing Regulator + Electric Two-Stage Pressure

- The load-sensing regulator on the pump, connected in series with a throttle valve in the pump's oil outlet circuit, allows for flow control of the pump. This ensures that within a wide operating range, changes in load or transmission speed do not affect the actuator's speed.
- By adding a two-stage pressure relief valve and a solenoid directional valve on the NG6 interface of the load-sensing regulator (Page B25), it is possible to adjust two different limit pressures, achieving electric control of two-stage pressure switching.
- Suitable for use when switching between two-stage working pressures while the hydraulic cylinder is operating at a constant speed. PL and PH can be chosen interchangeably as high pressure.

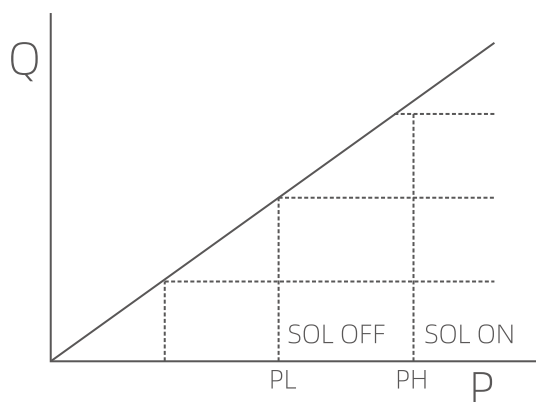
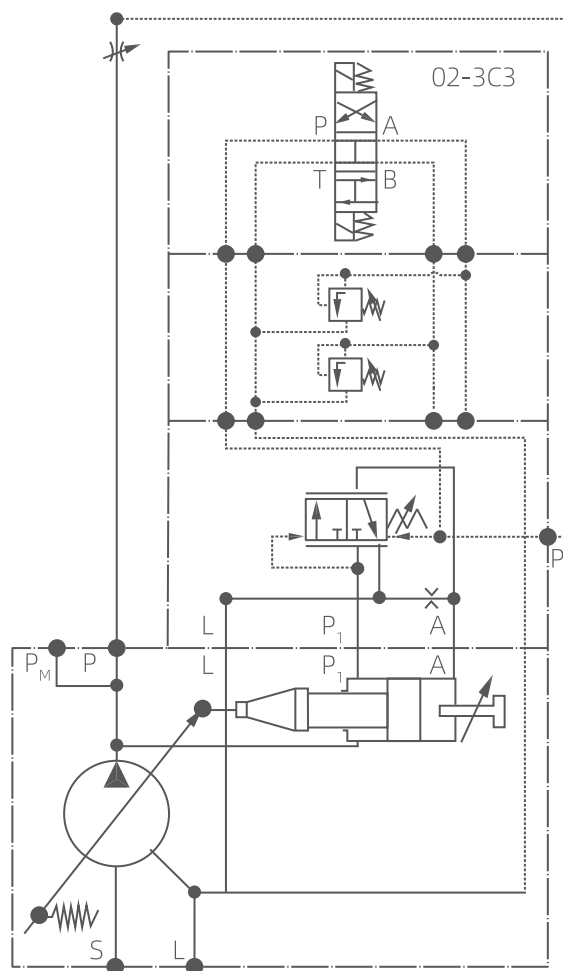


负载感应调节器+电控卸载+两段压力

- 泵上的负载敏感调节器通过与串接在泵出油路上的节流阀相连，可实现对泵的流量控制，在负载发生波动或者传动转速发生变化时，在一较宽的工作范围内不会影响执行机构的速度。
- 在负载感应调节器（B25页）NG6界面上叠加一个两段压力溢流阀及电磁换向阀，可调节高低两个不同的限压压力，达到电控两段压力切换，并追加了卸载功能，适用于机器卸载时间长得工况，系统停机时，通过泵的泄压运转，油温更低，噪音更小。

Load-Sensing Regulator + Electric Unloading + Two-Stage Pressure

- The load-sensing regulator on the pump, connected in series with a throttle valve in the pump's oil outlet circuit, allows for flow control of the pump. This ensures that within a wide operating range, changes in load or transmission speed do not affect the actuator's speed.
- By adding a two-stage pressure relief valve and a solenoid directional valve on the NG6 interface of the load-sensing regulator (Page B25), it is possible to adjust two different limit pressures, achieving electric control of two-stage pressure switching. Additionally, it includes unloading functionality, making it suitable for situations where the machine is unloaded for an extended period. When the system is shut down, the pump operates in pressure relief mode, resulting in lower oil temperature and reduced noise.

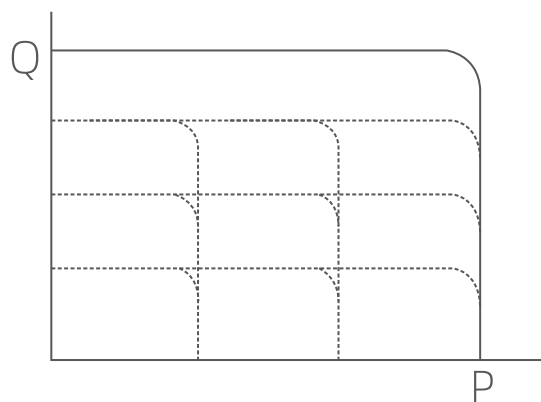
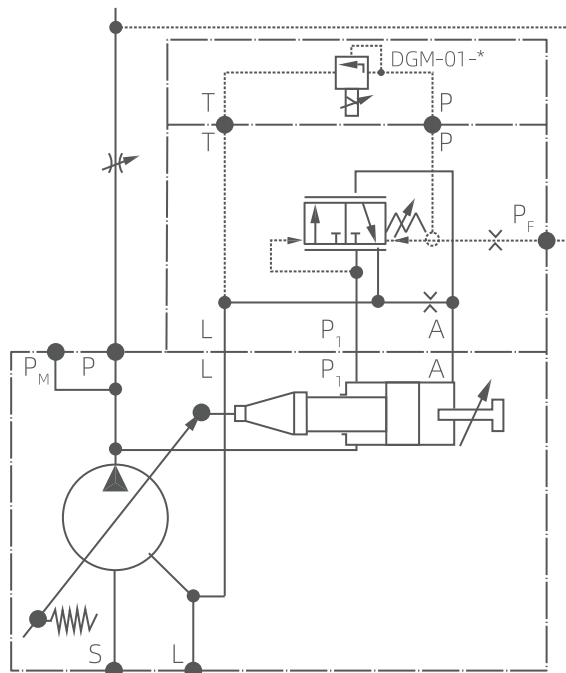


负载感应调节器+比例压力控制型

- 泵上的负载敏感调节器通过与串接在泵出油路上的节流阀相连，可实现对泵的流量控制，在负载发生波动或者传动转速发生变化时，在一较宽的工作范围内不会影响执行机构的速度。
- 在负载感应调节器（B25页）NG6界面上叠加比例压力阀，实现电控比例压力调节。
- 泵上的负载敏感调节器可保持与之连接的节流阀前后压差不变，而流量依节流阀开口大小改变，油泵自动感应油路反馈保持系统的恒定流量，减少压力损耗，达到低油温省能源的功能。

Load-Sensing Regulator + Proportional Pressure Control

- The load-sensing regulator on the pump, connected in series with a throttle valve in the pump's oil outlet circuit, allows for flow control of the pump. This ensures that within a wide operating range, changes in load or transmission speed do not affect the actuator's speed.
- Adding a proportional pressure valve on the NG6 interface of the load-sensing regulator (page B25) enables electronic proportional pressure control.
- The load-sensing regulator on the pump can maintain a consistent pressure differential across the connected throttle valve, while the flow adjusts based on the throttle valve's opening, allowing the pump to automatically sense hydraulic system feedback and maintain a constant flow. This reduces pressure losses and results in lower oil temperatures, saving energy.

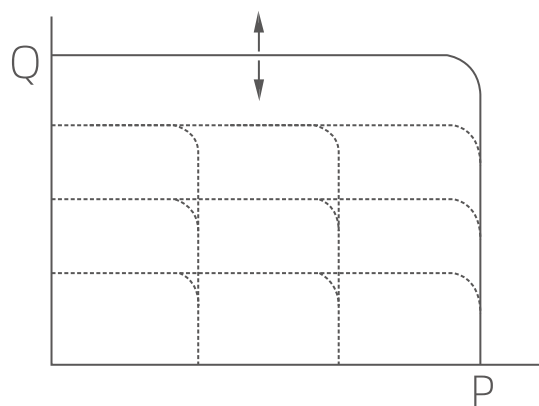
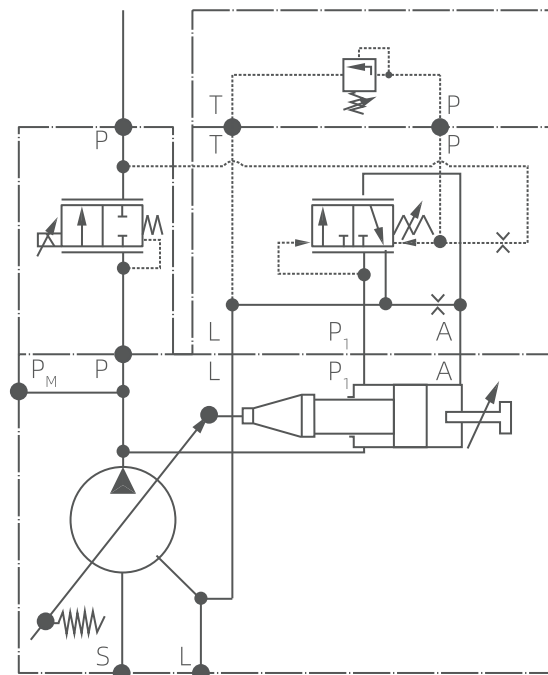


负载感应调节器+比例流量+溢流阀

- 泵上的负载感应调节器通过与串接在泵出油路上的节流阀相连，可实现对泵的流量控制，在负载发生波动或者传动转速发生变化时，在一较宽的工作范围内不会影响到执行机构的速度。
- 在负载感应调节器（B25页）NG6界面上叠加比例流量阀，可实现电控比例流量控制。
- 适用于需精准调节油缸速度，但是又需要在一定范围内不受负载影响。

Load-sensing Regulator + Proportional Flow + Relief Valve

- The load-sensing regulator on the pump, connected to the flow control valve in the pump outlet oil circuit, enables flow control of the pump. This system ensures that the speed of the actuator remains unaffected within a broad working range, even when the load fluctuates or the transmission speed changes.
- By adding a proportional flow control valve to the load-sensing regulator on the NG6 interface of the pump, you can achieve electronic proportional flow control.
- This is suitable for applications where precise control of cylinder speed is required while ensuring that it is not affected by variations in the load within a certain range.

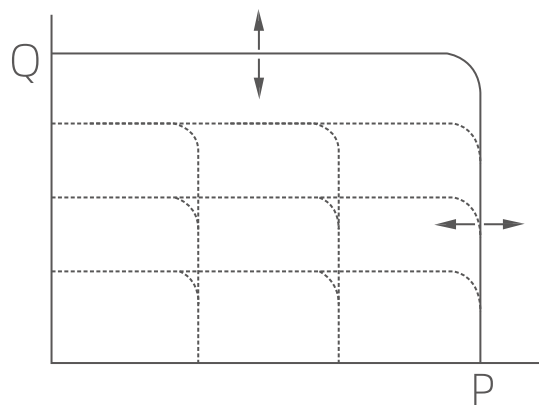
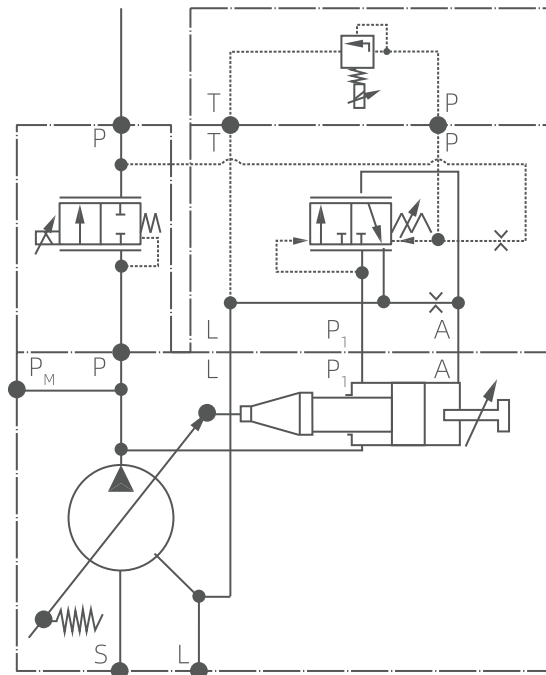


负载感应调节器+比例压力+比例流量

- 具有节能的特性，它可以根据系统的要求，提供所需要的最小压力与流量，可节省不必要的能源损耗。
- 与一般叶片或齿轮泵+PQ阀所配合的油路相互比较，约可以节省电力30%~50%能源，油箱液压油容量亦可较小，省电环保效果更佳。
- 在负载感应调节器（B25页）上叠加一个比例压力调节阀，可实现电控比例压力调节，P口加装一个比例流量阀，可实现电控比例流量调节。

Load Sensing Regulator + Proportional Pressure + Proportional Flow

- It has energy-saving characteristics as it can provide the minimum required pressure and flow according to the system's needs, thereby saving unnecessary energy consumption.
- Compared to hydraulic systems using conventional vane or gear pumps with pressure compensated flow control valves, it can save approximately 30% to 50% of energy and allow for a smaller hydraulic oil reservoir, leading to a more energy-efficient and environmentally friendly operation.
- By adding a proportional pressure control valve to the load-sensing regulator (page B25), it is possible to achieve electronic proportional pressure control. Additionally, installing a proportional flow control valve at port P allows for electronic proportional flow control.

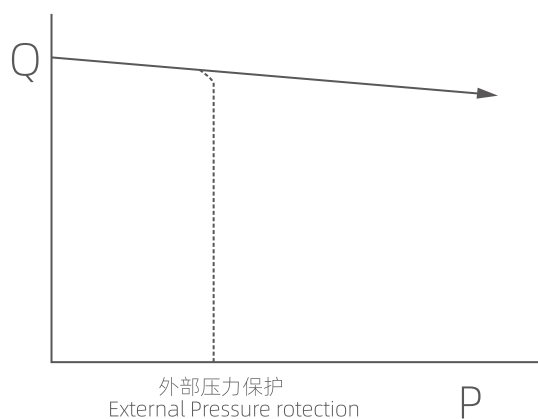
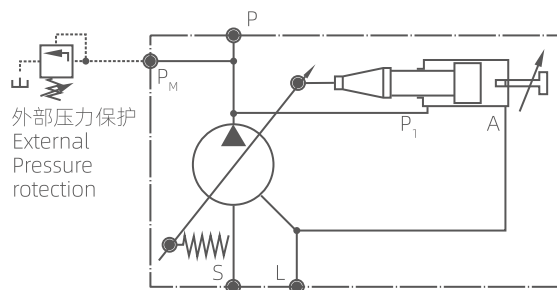


无调节定量泵

- 不可调节排量，始终以全排量输出，系统压力需要依靠外部溢流阀来调节。
- 功能特性与定量叶片泵齿轮泵相同。

Unregulated Fixed Displacement Pump

- Non-adjustable displacement, always outputting full displacement, and system pressure needs to be regulated by an external relief valve.
- Same functional characteristics as fixed displacement vane pumps or gear pumps.

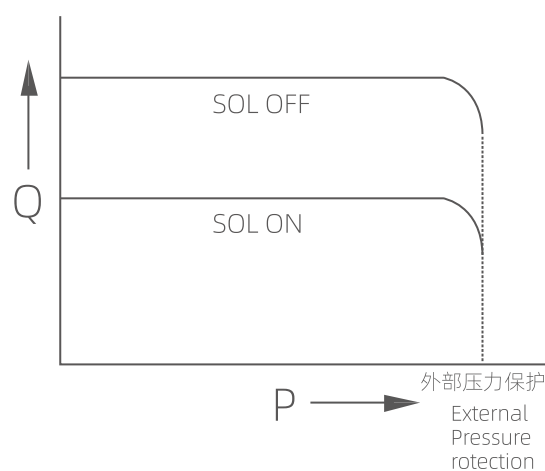
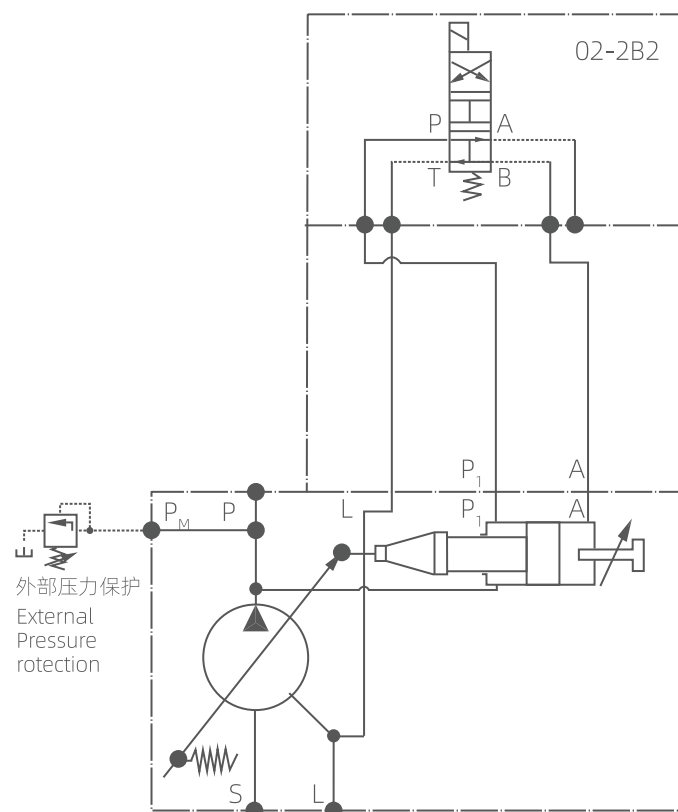


定量电控两段流量控制

- 利用电磁换向阀来控制，使油泵切换大流量或者小流量两方式运行，适用于两段行程、速度不同的液压系统。
- 必须要注意的是，必须要在PM口加装外部压力保护，以限制油泵的最高压力，如果没有加装压力保护可能造成系统压力过高。

Fixed Displacement Electric 2-stage Flow Control

- Achieved through an electromagnetic directional valve, making the pump to operate in either high-flow or low-flow mode. This is suitable for hydraulic systems with 2-stage strokes and varying speeds.
- It is essential to note that external pressure protection must be added to the PM port to limit the maximum pump pressure. Failure to add pressure protection may result in excessively high system pressure.

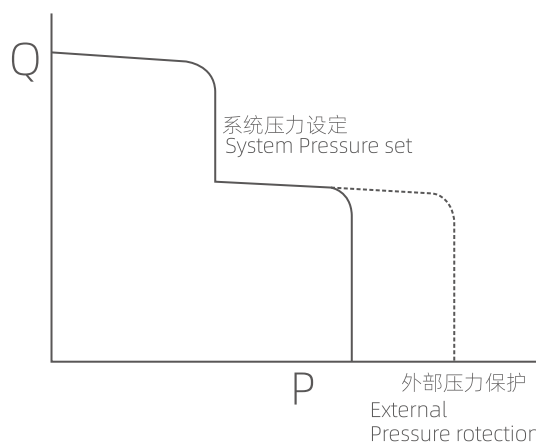
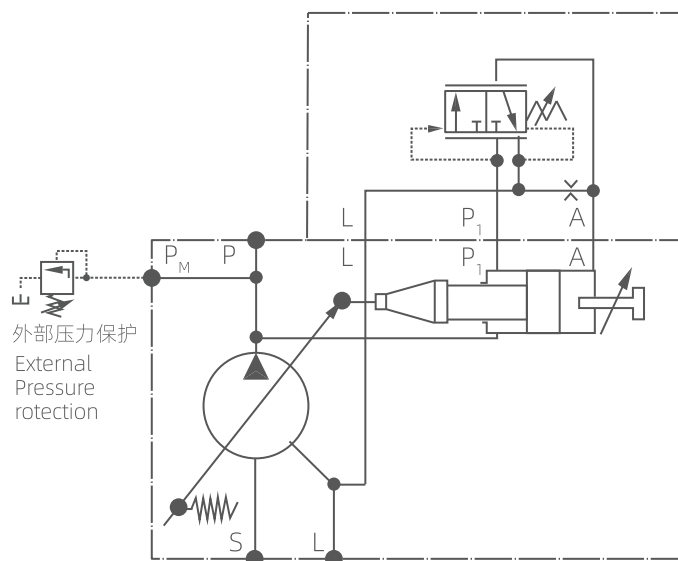


定量自压两端流量控制

- 系统设定一个压力值，当油泵达到这个压力值时，达到大流量与小流量之间的切换，适用于两段行程、速度不同的液压系统。
- 必须要注意的是，必须要在PM口加装外部压力保护，以限制油泵的最高压力，如果没有加装压力保护可能造成系统压力过高。

Fixed-displacement Self-pressure 2-stage Flow Control

- A system that sets a specific pressure value. When the pump reaches this pressure value, it switches between high flow and low flow. It is suitable for hydraulic systems with 2-stage strokes and varying speeds.
- It is essential to note that external pressure protection must be added to the PM port to limit the maximum pump pressure. Failure to add pressure protection may result in excessively high system pressure.

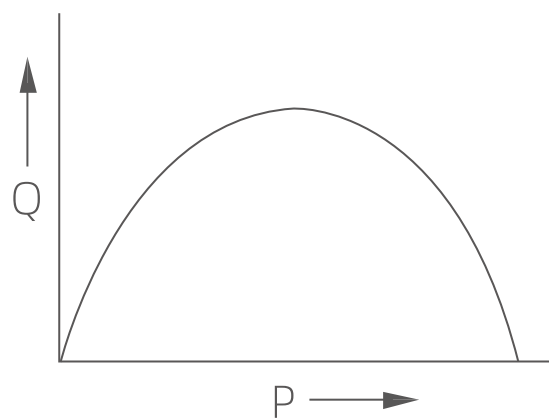
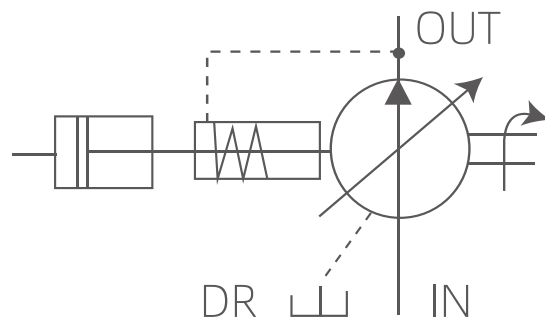


无级变速控制型

- 流量可从0调到最大，从最大调到最小，可任意变化控制，压力保持设定压力。
- 多用于需要随时调速的机械设计，机械在上升、下降具有缓动使用，可防止冲撞、震动，适合专用机，升降起重机械。

Continuously Variable Speed Control

- Adjustment the flow from zero to maximum and vice versa, can control at will. The pressure is maintained at the set pressure.
- This type is commonly used in machinery designs that require on-the-fly speed adjustments. It provides smooth motion during both ascent and descent, preventing impacts and vibrations. It's well-suited for specialized machinery and lifting equipment.



ARL1

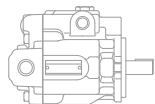


ARL1系列变量柱塞泵 ARL1-series piston pump

- 斜盘式结构，高容积效率，无溢流损失，功率损耗小；
超小型体积设计，体积比A系列小40%，适合紧凑型工作站；
极致轻量化，重量比A系列轻20%；
超低噪音，起压工作时噪音低至55dB。
 - Swash plate structure, high volumetric efficiency, no overflow loss, and low power loss;
Ultra small volume design, 40% smaller than the A series, suitable for compact power stations;
Extremely lightweight, 20% lighter than the A series;
Ultra low noise, with a noise level as low as 55dB during pressure operation.
-
- 排量：8.5~16.3cm³/rev
压力：达7MPa
转速：达1800r/min
 - Displacement: 8.5~16.3cm³/rev
Pressure: up to 7MPa
Speed: up to 1800r/min

C01

ARL1订货型号
ARL1-Product Series



ARL1	-	16	-	F	R	01	S	-	10
01		02		03	04	05	06		07

01	ARL1系列变量柱塞泵 ARL1-series piston pump
----	--

02	排量 Displacement
	8: 8.5cm ³ /rev
	12: 12.3cm ³ /rev
	16: 16.3cm ³ /rev

03	安装方式 Mounting
	F: 法兰安装 F: Flange Mounting
	L: 脚架安装 L: Foot stand Mounting

04	旋转方向（从轴端看） Rotation direction (viewed from the shaft end)
	R: 顺时针（标准） R: Clockwise

05	控制方式 (详情查看B01~B36) Control option (Details are shown on page B01~B36)
	01: 压力补偿控制型 01: Pressure Compensator Type

06	吸油口方向 Suction port
	S: 吸油口向右 S:Suction port -Right
	A: 吸油口向下 S:Suction port -Downward

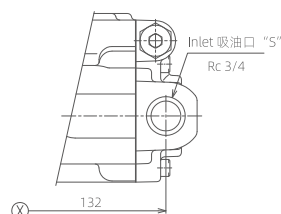
07	设计代号 Design No.
----	--------------------

*更多参数请参考A01页
More specification in A01

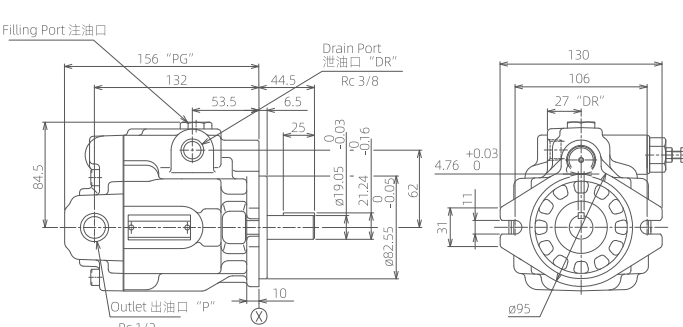
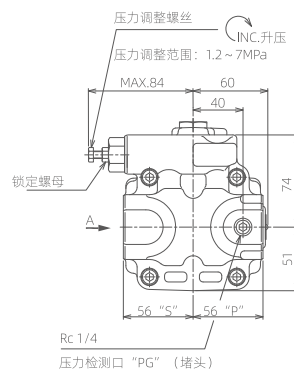
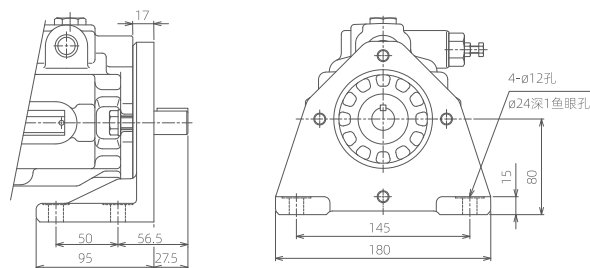
安装尺寸

Mounting dimensions

- ARL1-※-FR01S-法兰安装型
Flange Mounting (mm)



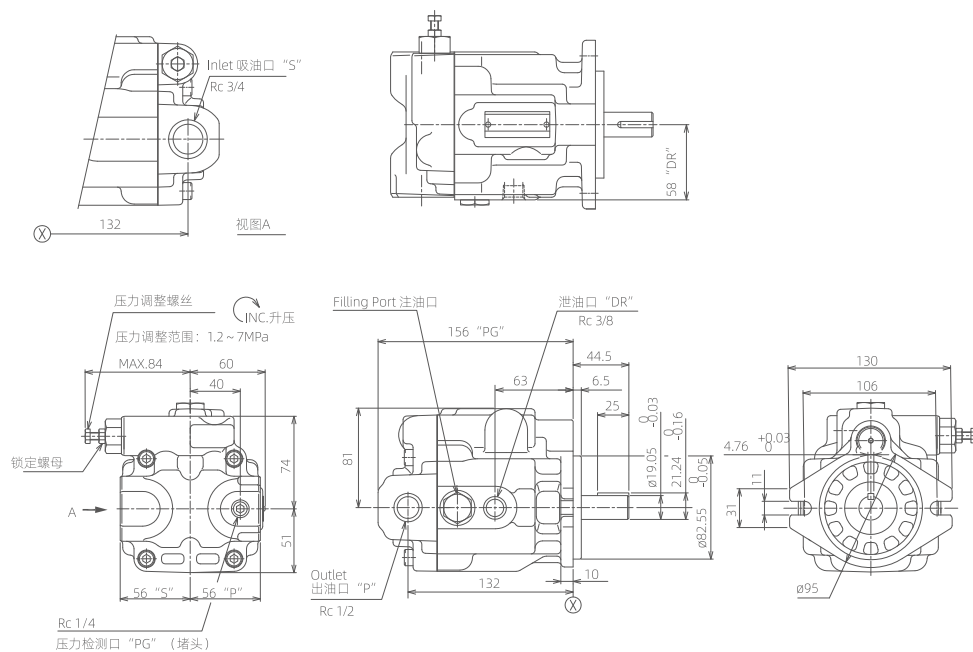
- ARL1-※-FR01S-底座安裝型
Foot stand Mounting (mm)



安装尺寸

Dimension

- ARL1-※-FR01A-法兰安装型
Flange Mounting(mm)



AR series



AR系列变量柱塞泵 AR-series piston pump

- 斜盘式轴向柱塞泵，高容积效率，无溢流损失，功耗小；
小型轻量化设计，装配容易，节省油箱配件及空间；
适用范围广，恒压16MPa，瞬间压力21MPa 以下的工况均可；
扩展性强，丰富的控制方式，能够简化系统油路设计。
- Swash plate axial piston pump, high volumetric efficiency, no spillage loss, low power consumption;
Compact and lightweight design, easy assembly, saving on tank accessories and space;
Wide range of applications, suitable for conditions with a constant pressure of 16 MPa and momentary pressures below 21 MPa;
Highly versatile with various control options, capable of simplifying system hydraulic circuit design.

-
- 排量：15.8cm³/rev~22.2cm³/rev
压力：额定压力16MPa，最高压力21MPa
转速：最高1800r/min
 - Displacement: 15.8cm³/rev~22.2cm³/rev
Pressure: Rated pressure 16 MPa; Max 21 MPa.
Speed: Maximum 1800 r/min.

D01

AR订货型号
AR Product Series

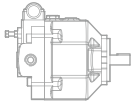


Table with 14 columns: AR, 16, -, F, R, 01, C, S, 08, 09, -, 10, 22. Row 1: 01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11.

Table with 2 columns: Option code, Description. Rows include: 01 AR系列变量柱塞泵; 02 排量 (16: 15.8cm³/rev, 22: 22.2cm³/rev); 03 安装方式 (F: 法兰安装, L: 脚架安装); 04 旋转方向 (R: 顺时针, L: 逆时针); 05 控制方式 (01: 压力补偿控制型, 07: 遥控压力补偿控制型, HL: 负载敏感控制型, C: 两段压力两段流量控制型, CG: 遥控两段压力两段流量控制型, CR: 两段压力两段流量+低压卸载控制型, D: 电磁低压卸载+压力补偿控制型, DG: 电磁低压卸载+遥控压力补偿控制型, E: 电控两段压力控制型, EG: 电控两段压力+遥控控制型, F: 电控两段压力+两段流量控制型, FG: 电控两段压力两段流量+遥控控制型, GM: 带遥控型调节器, GJ: 遥控型调节器+比例压力控制型, GR: 遥控型调节器+电控卸载控制型, GB: 遥控型调节器+电控两段压力控制型, GC: 遥控型调节器+电控卸载+两段压力, LN: 无控制); 06 压力调整范围 (B: 1.2~7MPa, C: 1.2~21MPa).

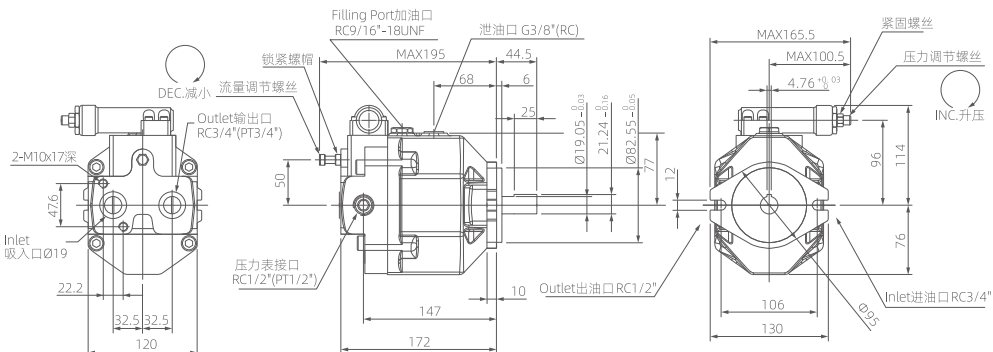
Table with 2 columns: Option code, Description. Rows include: 07 吸油口、出油口方向 (S: 两侧油口, F: 两侧油口管牙型, H: 两侧油口法兰型); 08 轴伸型式 (G: 花键轴 13T 16/32 DP, T: 花键轴 9T 16/32 DP); 09 电压 (A: AC100V, B: AC110V, C: AC200V, D: AC220V, E: DC 12V, F: DC 24V); 10 油封 (V: 氟橡胶); 11 设计代号.

*更多参数请参考A01页
For more parameters, please refer to page A01

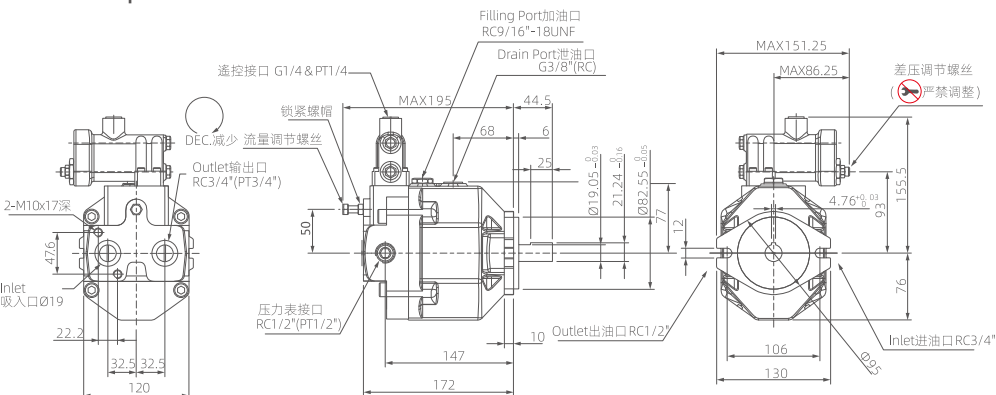
安装尺寸

Dimension

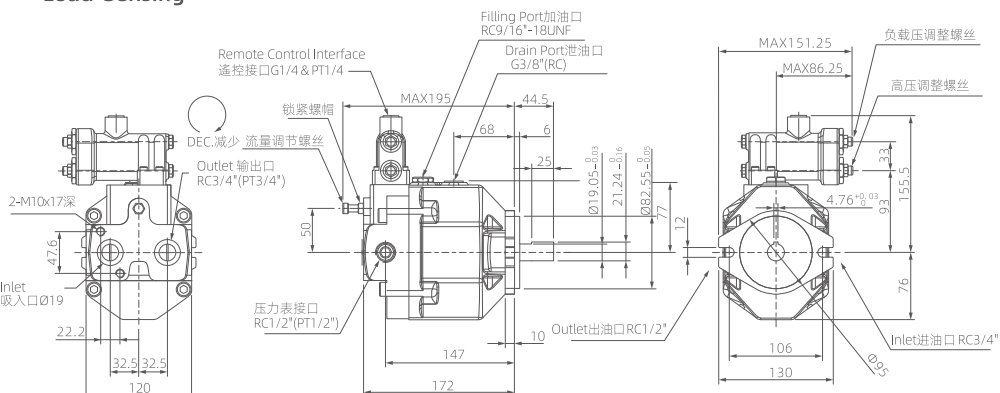
AR16/AR22-01压力补偿控制型 Pressure Compensator Type



AR16/AR22-07遥控压力补偿控制型 Remote pressure control



AR16/AR22-HL负载敏感控制型 Load-Sensing

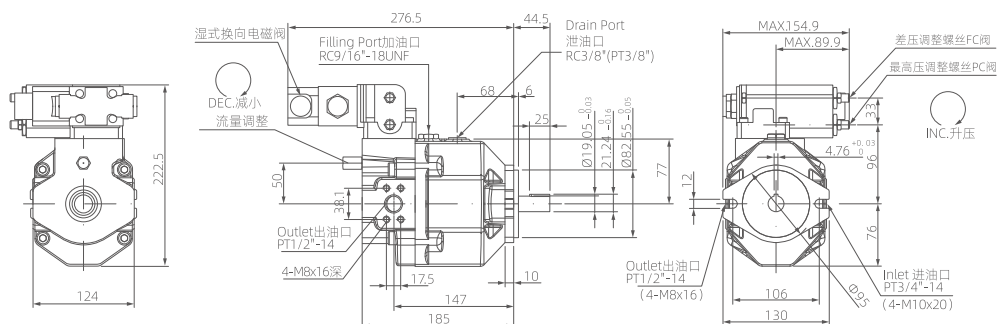


安装尺寸

Dimension

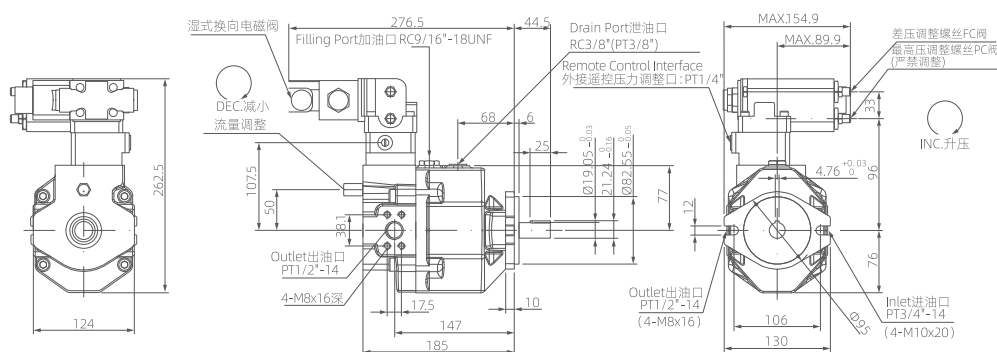
● AR16/AR22-D电磁低压卸载+压力补偿控制型

Low tension unloading + Pressure control



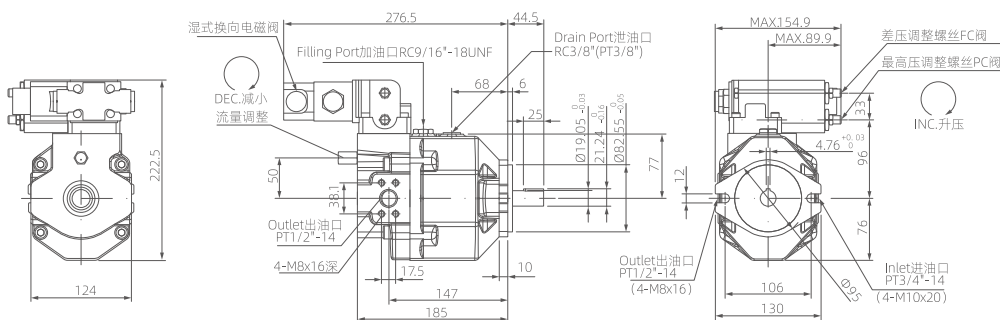
● AR16/AR22-DG电磁低压卸载+遥控压力补偿控制型

Low tension unloading + Pressure control + Remote



● AR16/AR22-E电控两段压力控制型

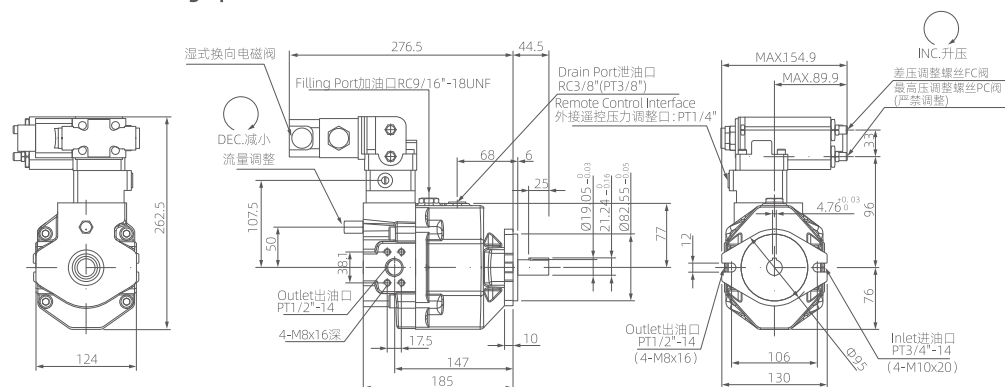
Electric 2-stage pressure control



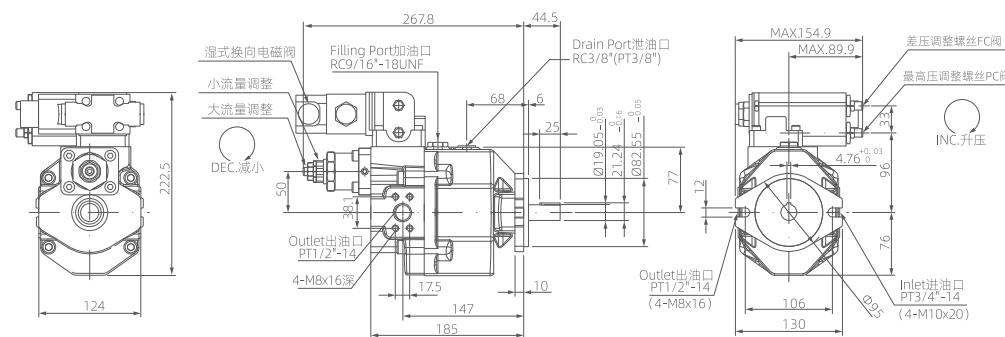
安装尺寸

Dimension

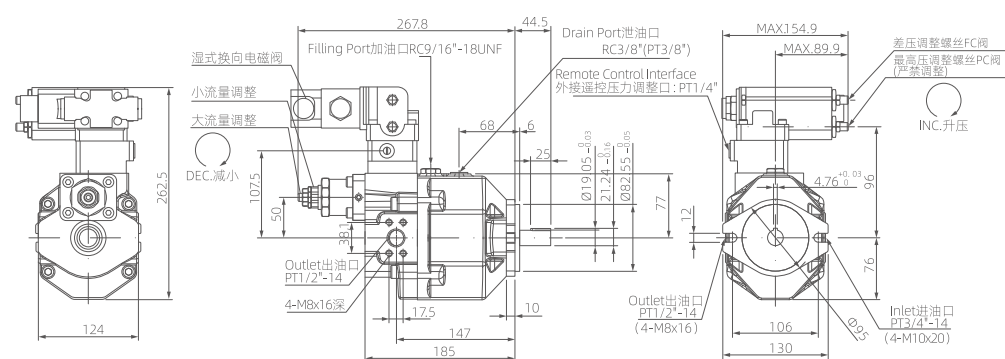
AR16/AR22-EG电控两段压力+遥控控制型 Electric 2-stage pressure control + Remote



AR16/AR22-F电控两段压力+两段流量控制型 Electric 2-stage pressure control & Flow control



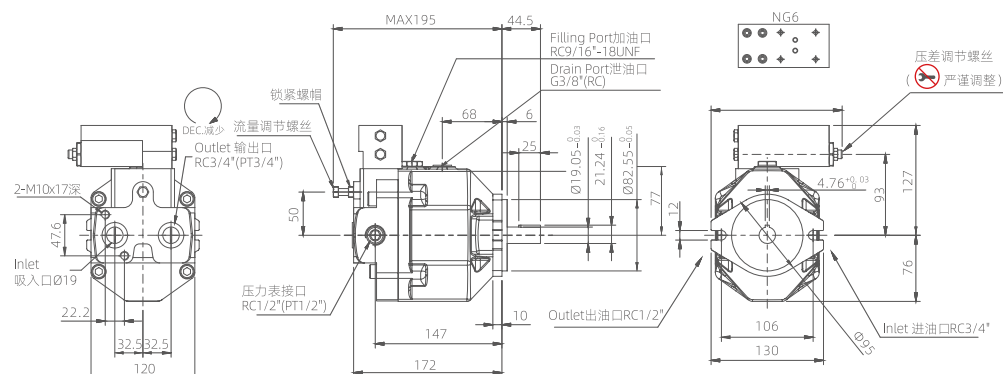
AR16/AR22-FG电控两段压力两段流量+遥控控制型 Electric 2-stage pressure control & Flow control + Remote



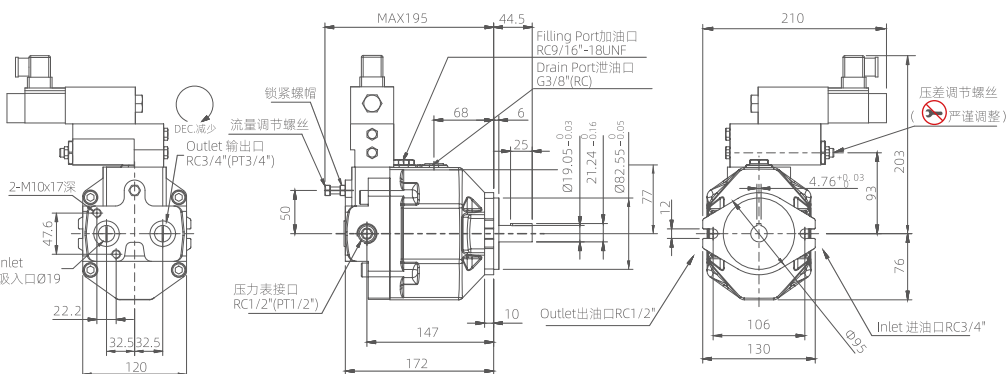
安装尺寸

Dimension

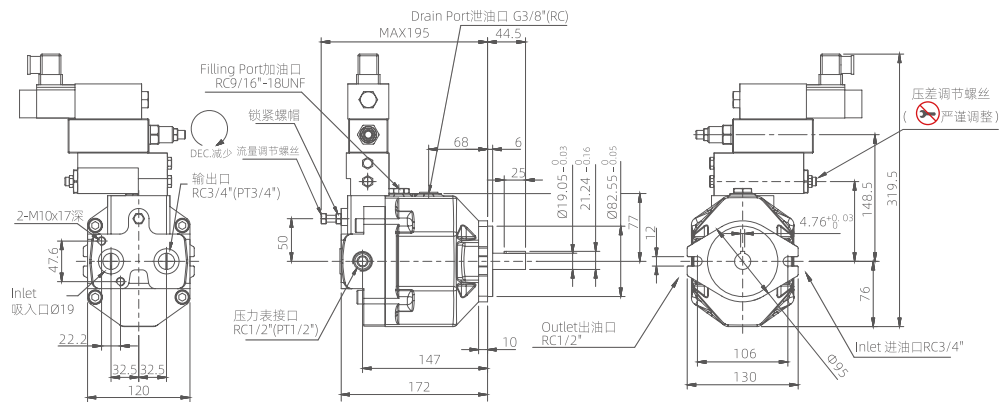
● AR16/AR22-GM带遥控型调节器 (含NG6界面) Remote pressure compensator with NG6 interface



● AR16/AR22-GJ遥控型调节器+比例压力控制 Remote pressure compensator + Proportional pressure valve



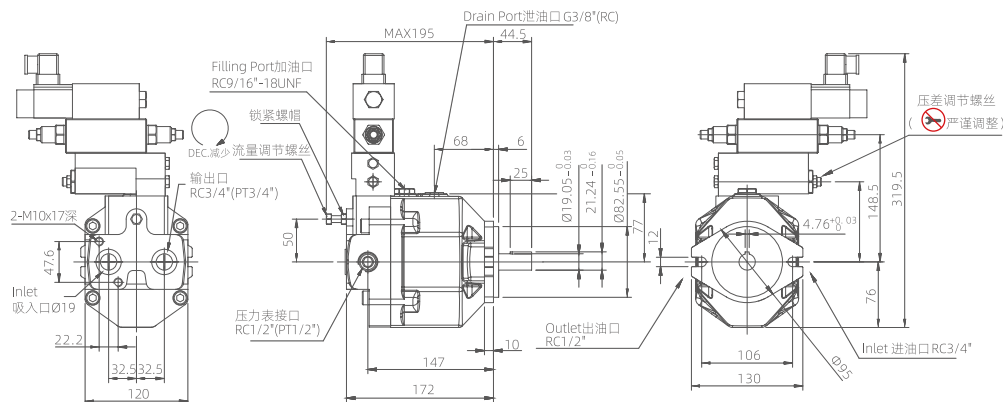
● AR16/AR22-GR遥控型调节器+电控卸载控制型 Remote pressure compensator + Electrical unloading



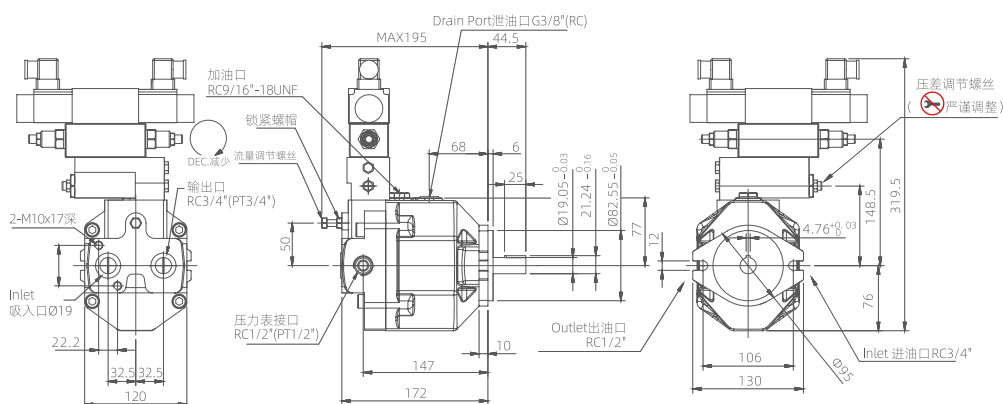
安装尺寸

Dimension

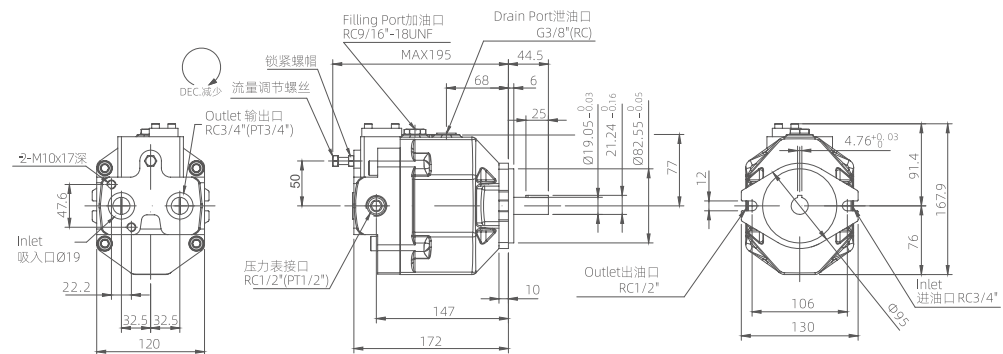
● AR16/AR22-GB遥控型调节器+电控两段压力控制型 Remote pressure compensator + 2-stage pressure control



● AR16/AR22-GC遥控型调节器+电控卸载+两段压力控制型 Remote + Electrical unloading + 2-stage pressure control



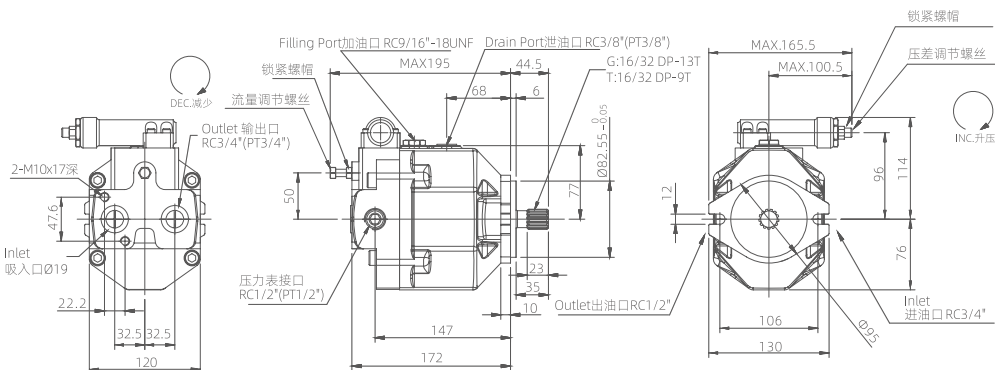
● AR16/AR22-LN无控制（定量泵） No controller (constant displacement pump)



安装尺寸

Dimension

● AR16/AR22-花键轴Spline shaft



A-series



A系列变量柱塞泵 A-series piston pump

- 斜盘式轴向柱塞泵，高容积效率，功率损耗小，具有良好截流特性，节省输入功率；
发热少，因为功率损失小，油液的升温慢，可减小油箱的容量；
扩展性强，较丰富的控制方式，可简化油路设计。

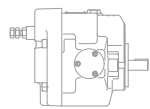
- Swash plate axial piston pump, high volumetric efficiency, low power loss, excellent shut-off characteristics, saving input power;
Low heat generation due to low power loss, slow oil temperature rise, reducing the size of the oil tank;
Strong expandability with a variety of control methods, simplifying hydraulic circuit design.

-
- 排量：10.0cm³/rev~145cm³/rev
压力：额定压力16~25MPa，最高压力28MPa
转速：最高1800r/min
 - Displacement: 10.0cm³/rev~145cm³/rev
Pressure: Rated pressure 16~25 MPa; Max 28 MPa.
Speed: Maximum 1800 r/min.

E01

A16 ~ A56订货型号

A16 ~ A56 Product Series

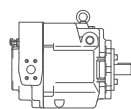


A16	-F	-R	-01	-B	-S	-K	-A100	-A	-32
01	02	03	04	05	06	07	08	09	10
01	规格排量 Displacement								
	A16: 15.8cm ³ /rev								
	A22: 22.2cm ³ /rev								
	A37: 36.9cm ³ /rev								
02	安装方式 Mounting								
	F: 法兰安装 F: Flange Mounting								
	L: 脚架安装 L: Foot stand Mounting								
03	旋转方向 (从轴端看) Rotation direction (View from the shaft end)								
	R: 顺时针 (标准) R: Clockwise								
04	控制方式 (详情查看B01~B22) Control option (Details are shown on page B01~B36)								
	01: 压力补偿控制型 01: Pressure Compensator Type								
	02: 电控两段压力控制型 02: Electric 2-stage pressure control & Flow control								
	03: 电磁低压卸载+压力补偿控制型 03: Low tension unloading + Pressure control								
	04: 电-液比例负载敏感控制型 04: Electro-Hydraulic Proportional Load-Sensitive Control								
	05: 两段压力两段流量控制型 05: 2-stage pressure & Flow control								
	06: 电控两段压力两段流量控制型 06: Electric 2-stage pressure control & Flow control								
	07: 遥控压力补偿控制型 07: Remote pressure control								
	00: 遥控两段压力两段流量控制型 00: 2-stage pressure & Flow control + Remote								
05	压力调节范围 Pressure Adjusting Range								
	B: 1.2 ~ 7MPa								
	C: 1.2 ~ 16MPa								
	H: 1.2 ~ 16MPa								
06	油口位置 Port position								
	无标记: 后方油口 None: Rear port								
07	轴伸型式 Shaft type								
	K: 平键 None: Key								
08	电磁阀电压 Voltage								
	交流AC: A100, A120, A200, A240								
	直流DC: D12, D24, D48								
09	交流 (交直整流): R100, R200 AC (AC DC rectification)								
10	无: 不带比例背压控制 None: Without proportional back pressure control								
	A: 带比例背压控制 A: With proportional back pressure control								
10	设计代号 Design No.								

*更多参数请参考A01页
For more parameters, please refer to page A01

A10, A70 ~ A145订货型号

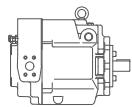
A10, A70 ~ A145 Product Series



A10	-F	R	01	B	S	A100	-60
01	02	03	04	05	06	07	08
01	规格排量 Displacement						
	A10: 10.0cm ³ /rev						
	A70: 70.0cm ³ /rev						
	A90: 91.0cm ³ /rev						
	A100: 100cm ³ /rev						
02	安装方式 Mounting						
	F: 法兰安装 F: Flange Mounting						
	L: 脚架安装 L: Foot stand Mounting						
03	旋转方向 (从轴端看) Rotation direction (View from the shaft end)						
	R: 顺时针 (标准) R: Clockwise						
04	控制方式 (详情查看B01~B22) Control option (Details are shown on page B01~B36)						
	01: 压力补偿控制型 01: Pressure Compensator Type						
	02: 电控两段压力控制型 02: Electric 2-stage pressure control & Flow control						
	03: 电磁低压卸载+压力补偿控制型 03: Low tension unloading + Pressure control						
	04: 电-液比例负载敏感控制型 04: Electro-Hydraulic Proportional Load-Sensitive Control						
	05: 两段压力两段流量控制型 05: 2-stage pressure & Flow control						
	06: 电控两段压力两段流量控制型 06: Electric 2-stage pressure control & Flow control						
	07: 遥控压力补偿控制型 07: Remote pressure control						
	00: 遥控两段压力两段流量控制型 00: 2-stage pressure & Flow control + Remote						
05	压力调节范围 Pressure Adjusting Range						
	B: 1.2 ~ 7MPa						
	C: 1.2 ~ 16MPa						
	H: 1.2 ~ 16MPa						

A10, A70 ~ A145订货型号

A10, A70 ~ A145 Product Series



A10	-F	R	01	B	S	A100	-A	-60
01	02	03	04	05	06	07	08	09

06	油口位置 Port position
	S: 侧面油口 S: Side port.

08	无: 不带比例背压控制 None: Without proportional back pressure control
	A: 带比例背压控制 A: With proportional back pressure control

07	电磁阀电压 Voltage
	交流AC: A100, A120, A200, A240
	直流DC: D12, D24, D48
	交流(交直整流): R100, R200 AC (AC DC rectification)

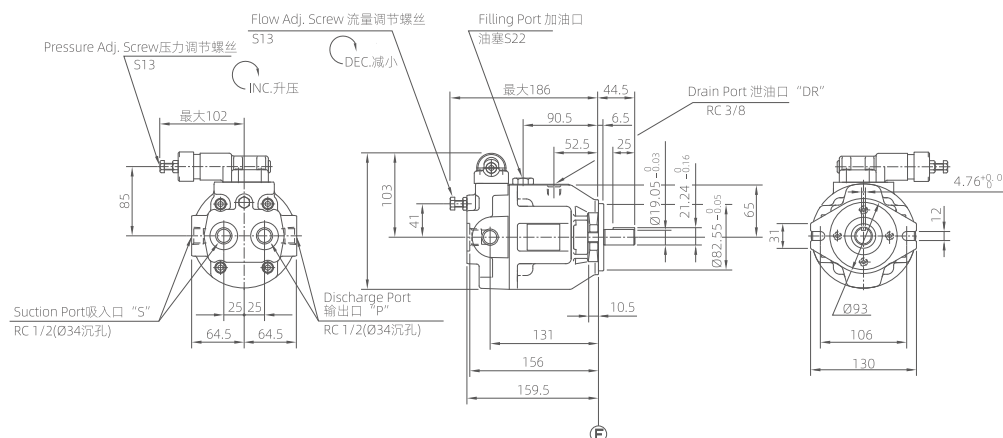
09	设计代号 Design No.
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*更多参数请参考A01页
For more parameters, please refer to page A01

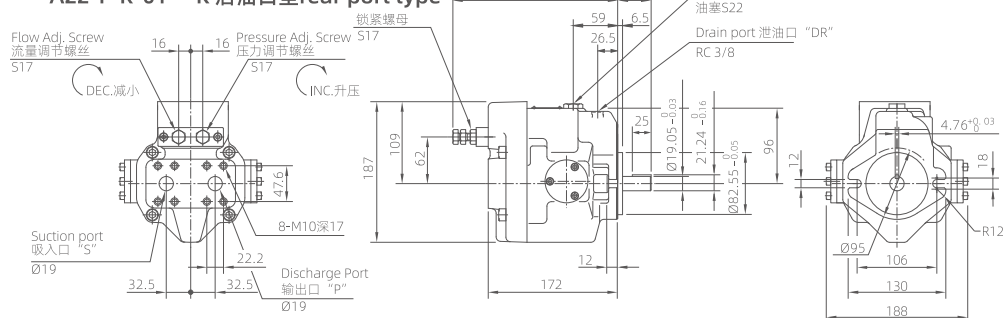
安装尺寸

Dimension

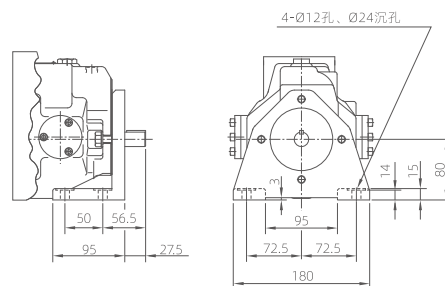
● A10-FR01法兰安装型Flange Mtg.



● A16-F-R-01-*K 法兰安装Flange Mtg. A22-F-R-01-*K 后油口型rear port type

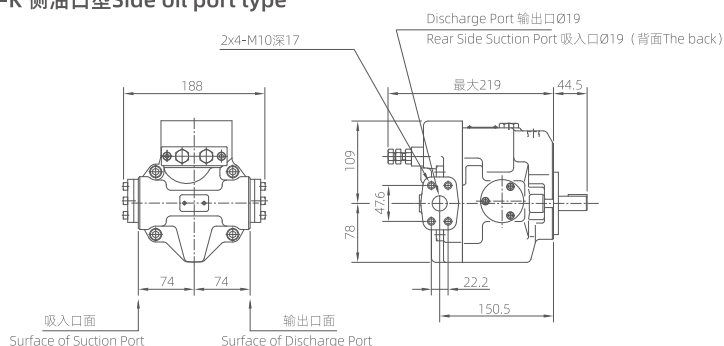


● A16-F-R-01-*K 底座安装型 A22-F-R-01-*K Foot Mtg.

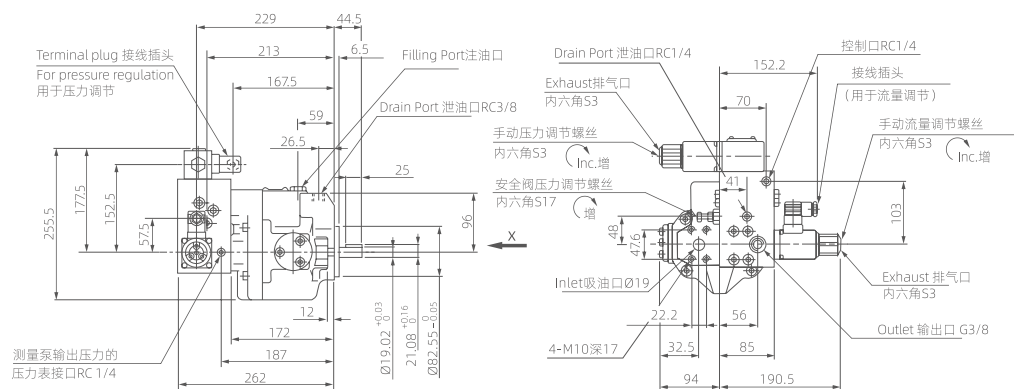


安装尺寸 Dimension

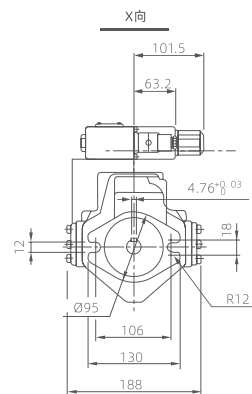
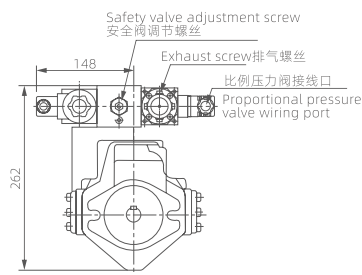
- A16-F-R-01-* -K 法兰安装 Flange Mtg.
A22-F-R-01-* -K 侧油口型 Side oil port type



- A16-F-R-04-* -K 法兰安装 Flange Mtg.
A22-F-R-04-* -K 后油口型 Rear port type

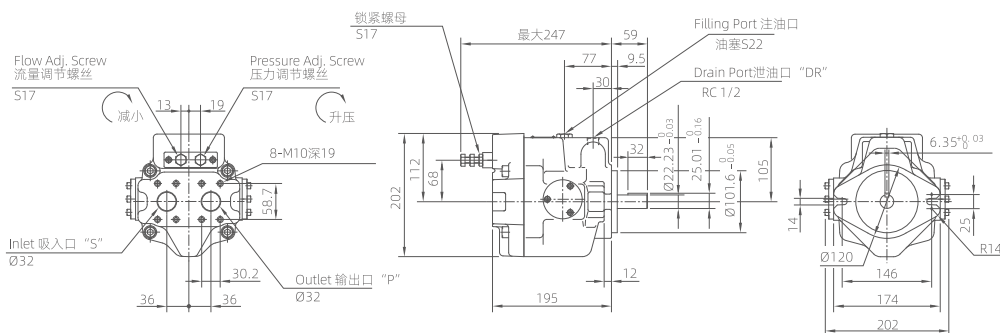


- A16-F-R-04-* -K-A 带比例背压板
A22-F-R-04-* -K-A 带比例背压板
With proportional back pressure control

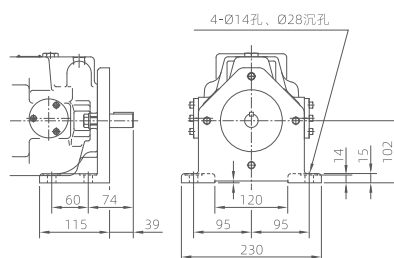


安装尺寸 Dimension

- A37-F-R-01-***-K** 法兰安装 Flange Mtg.
A45-F-R-01-***-K** 后油口型 Rear oil port type

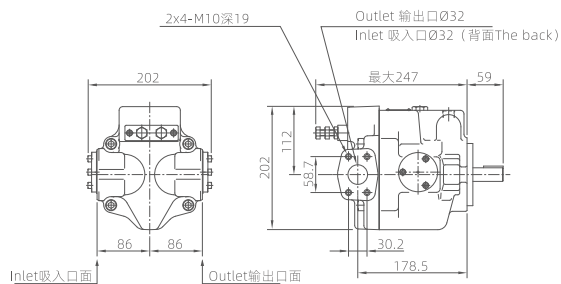


- A37-L-R-01-***-K** 底座安装型 Foot Mtg.
A45-L-R-01-***-K**



其余尺寸请参见 "法兰安装型"
For other dimensions, refer to "Flange Mtg.".

- A37-F-R-01-***-S-K** 法兰安装 Flange Mtg.
A45-F-R-01-***-S-K** 侧油口型 side oil port type

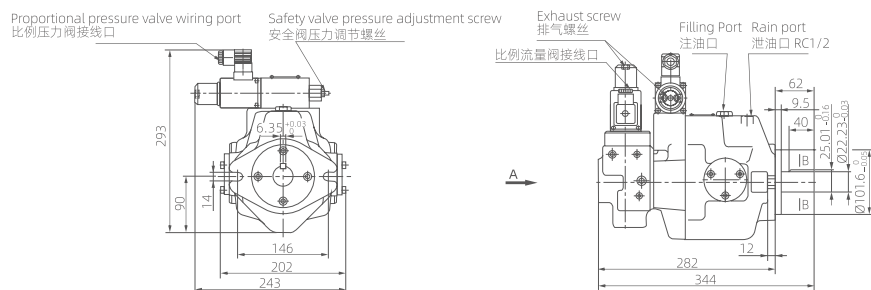


其余尺寸请参见 "法兰安装型"
For other dimensions, refer to "Flange Mtg.".

安装尺寸

Dimension

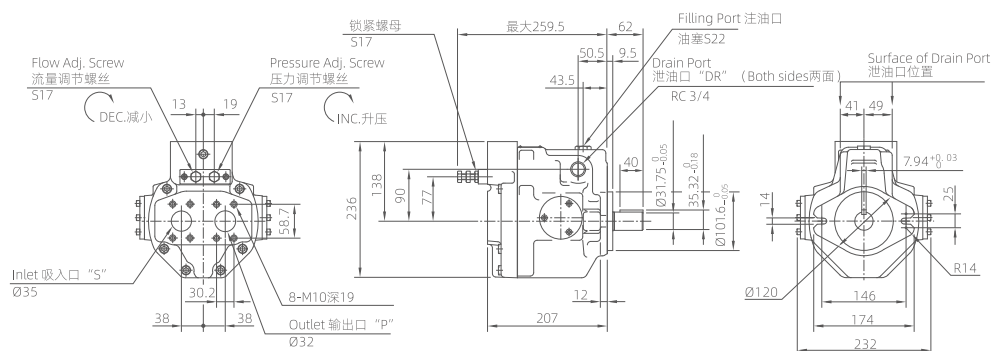
● A37-F-R-04-*-K法兰安装Flange Mtg. A45-F-R-04-*-K侧油口型Side oil port type



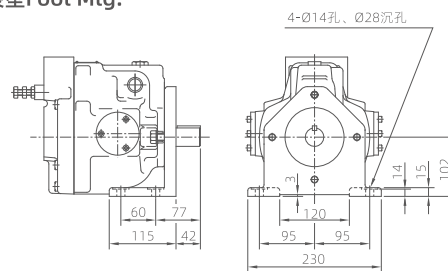
● A37-F-R-04-*-K-A A45-F-R-04-*-K-A 带比例背压板 With proportional back pressure control



● A56-F-R-01-*-K法兰安装型Flange Mtg.



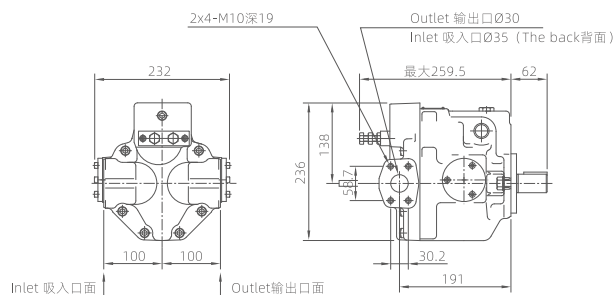
● A56-L-R-01-*-K底座安装型Foot Mtg.



其余尺寸请参见“法兰安装型”
For other dimensions, refer to "Flange Mtg.".

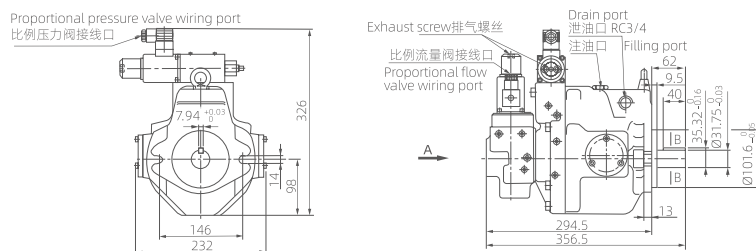
安装尺寸 Dimension

● A56-F-R-01-*-S-K法兰安装测油口型 Flange mounting oil measuring port type

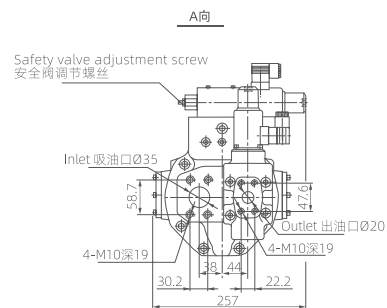
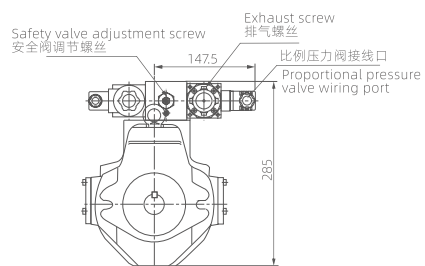


其余尺寸请参见“法兰安装型”
For other dimensions, refer to "Flange Mtg.".

● A56-F-R-04-*-K法兰安装后油口型 Flange mounting rear oil port type

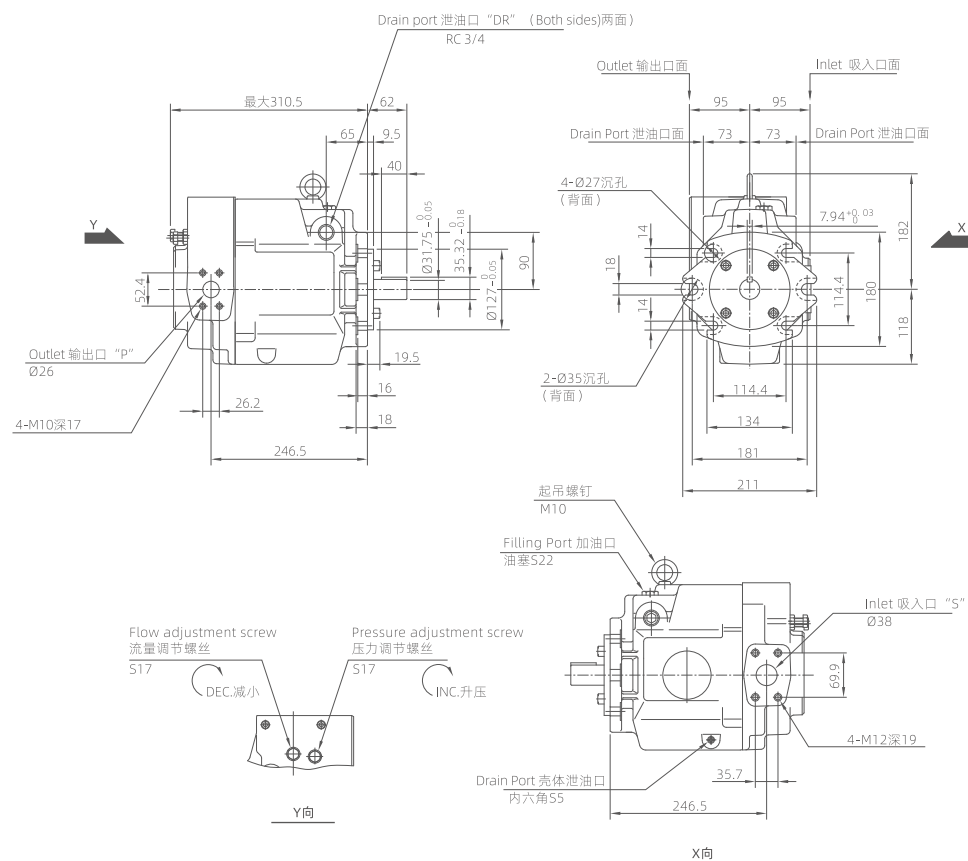


● A56-F-R-04-*-K带比例背压板 With proportional back pressure control

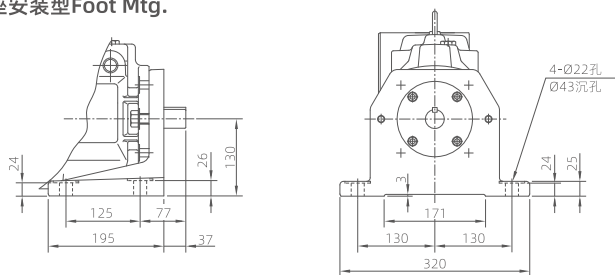


安装尺寸 Dimension

● A70-FR01*S法兰安装型Flange Mtg.



● A70-LR01*S底座安装型Foot Mtg.

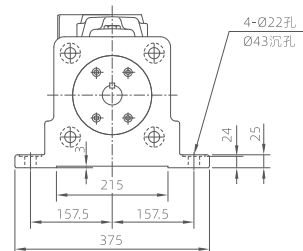
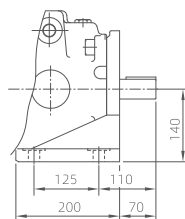


其余尺寸请参见 "法兰安装型"
For other dimensions, refer to "Flange Mtg."

安装尺寸

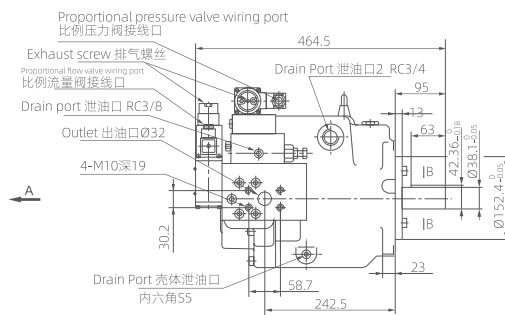
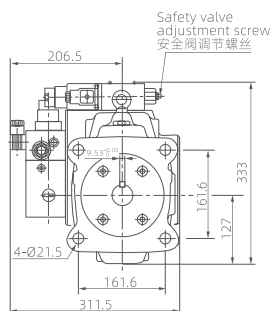
Dimension

- A90-LR01*S 底座安装型
- A100-LR01*S Foot Mtg.

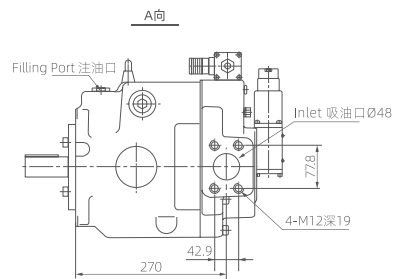
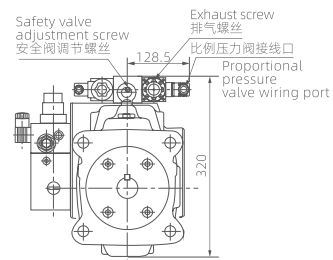


其余尺寸请参见“法兰安装型”
For other dimensions, refer to "Flange Mtg."

- A90-FR04*S 法兰安装型
- A100-FR04*S Flange Mtg.

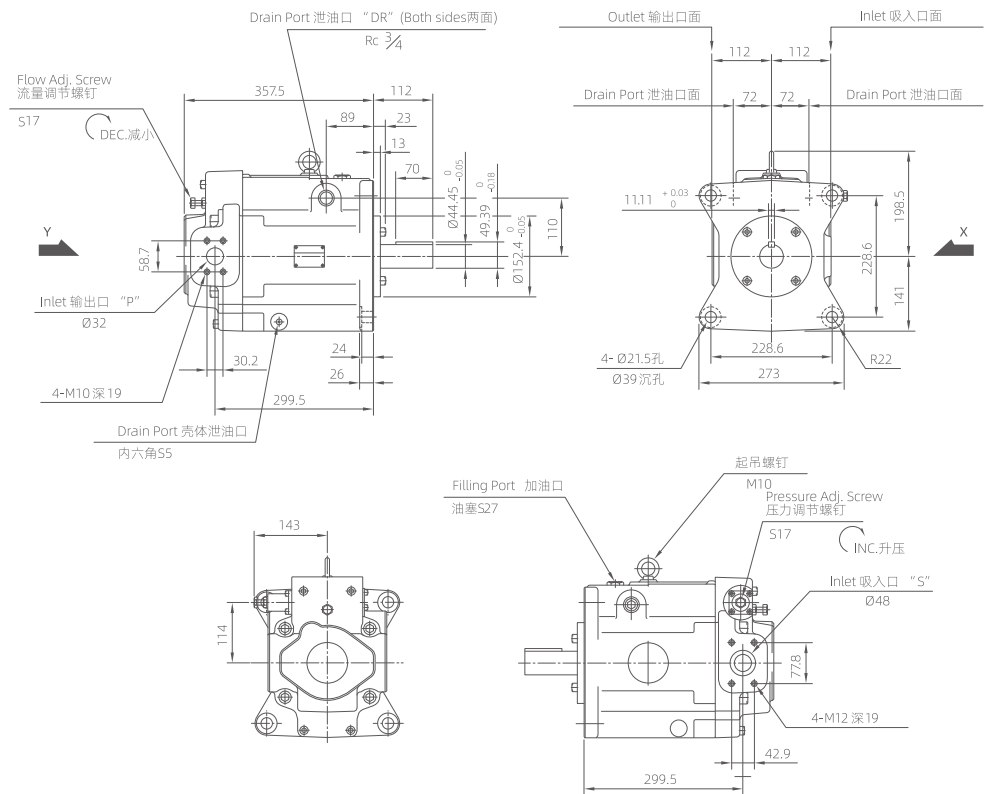


- A90-FR04*S-A 带比例背压型
- A100-FR04*S-A 带比例背压型

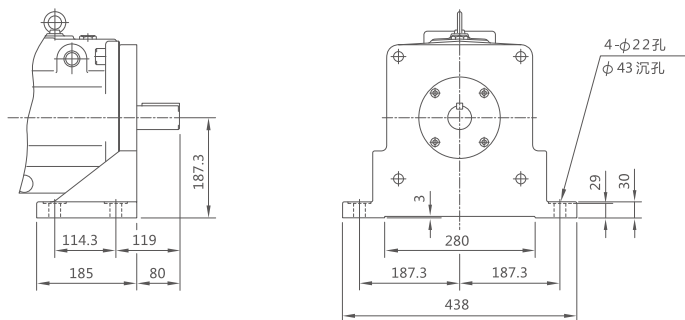


安装尺寸 Dimension

- A145-FR01*S法兰安装型Flange Mtg.



- A145-LR01*S底座安裝型Foot Mtg.

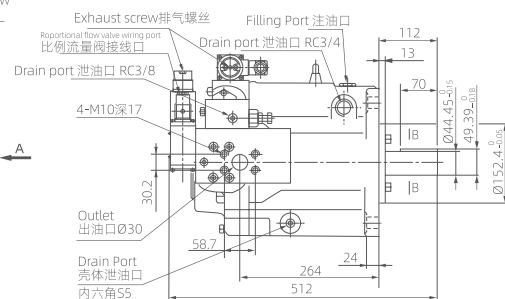
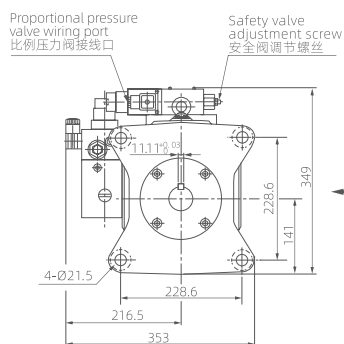


其余尺寸请参见“法兰安装型”
For other dimensions, refer to "Flange Mtg."

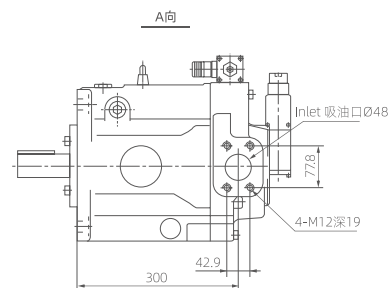
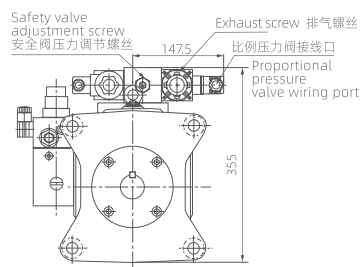
安装尺寸

Dimension

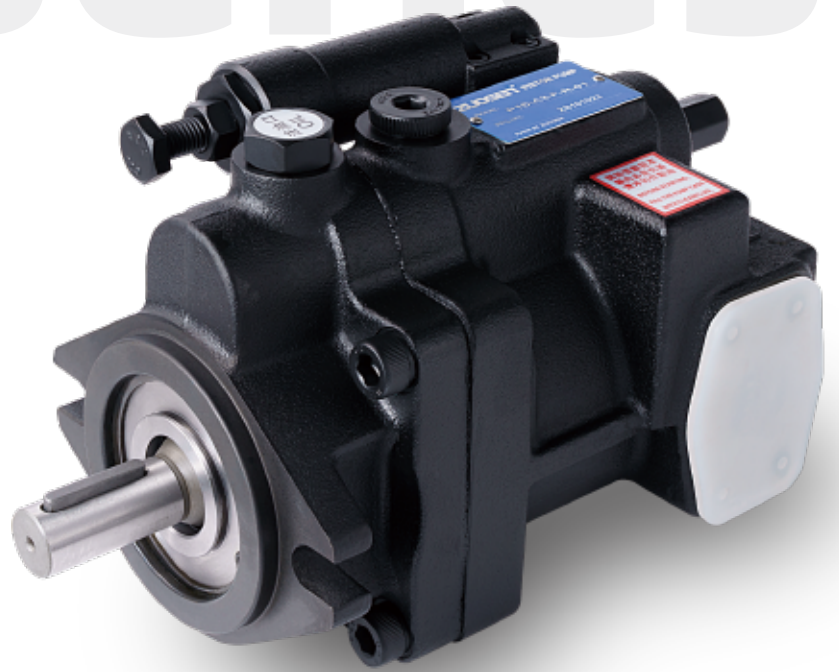
● A145-FR04*S法兰安装型Flange Mtg.



● A145-FR04*S-A带比例背压板 With proportional back pressure control



P-series



P系列变量柱塞泵 P-series piston pump

- 斜盘式轴向柱塞泵，容积效率高，快速截流，无溢流损耗；
压力流量大小控制反应迅速，结构简单，可靠性高，故障维修少；
功率损失小，可减小油液的升温，其消声结构有效降低噪音；
扩展性强，较丰富的控制方式及组合，油路设计有更多可能性。
 - Swash plate axial piston pump with high volumetric efficiency, rapid cut-off, and no overflow loss;
Quick response to pressure and flow control, simple structure, high reliability, and minimal maintenance;
Low power loss, reducing oil temperature rise, and an effective noise reduction mechanism;
Strong expandability with a variety of control methods and combinations, offering more possibilities for hydraulic circuit design.
-
- 排量：8.0cm³/rev~100cm³/rev
压力：额定压力21MPa，最高压力28.6MPa
转速：最高2000r/min
 - Displacement: 8.0cm³/rev~100cm³/rev
Pressure: Rated pressure 21 MPa; Max 28.6 MPa.
Speed: Maximum 2000 r/min.

F01

P系列订货型号

P-Product Series



P16	-A	3	-F	-R	-S	-01
01	02	03	04	05	06	07

01	规格排量 Displacement
	P08: 8.0cm ³ /rev
	P16: 16.5cm ³ /rev
	P22: 22.0cm ³ /rev
	P36: 36.0cm ³ /rev
	P46: 46.0cm ³ /rev
	P70: 70.0cm ³ /rev
	P100: 100.0cm ³ /rev

06	轴伸型式 Shaft type
	无: 平键轴 None: Key
	S: 花键轴 S: Splind shaft

07	设计代号 Design No.
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02	控制方式 (详情查看B01~B36) Control option (Details are shown on page B01~B36)
	A: 压力补偿控制型 A: Pressure Compensator Type
	B: 遥控压力补偿控制型 B: Remote pressure control
	BH: 遥控+高压保护控制型 BH: Remote Pressure Control + High Pressure Protection
	D: 电磁低压卸载+压力补偿控制型 D: Low tension unloading + Pressure control
	E: 电控两段压力控制型 E: Electric 2-stage pressure control
	HL: 负载敏感控制型 HL: Load-sensing Control
	BH*-EDG: 高压保护+比例压力控制型 BH*-EDG: Pressure Compensation + High Pressure Protection
	HL*-EDG: 负载敏感+比例压力控制型 HL*-EDG: Load-Sensitive + Proportional Pressure Control
	C*1-A*1: 两段压力两段流量控制型 C*1-A*1: 2-stage pressure & Flow control
	C*1-B*1: 遥控两段压力两段流量控制型 C*1-B*1: 遥控两段压力两段流量控制型 C*1-B*1: Low tension unloading + Pressure control + Remote
	C*1-BH*1: 两段压力两段流量+高压保护型 C*1-BH*1: 2-Stage Pressure and Flow Control + High-Pressure Protection
	C*1-D*1: 两段压力两段流量+低压卸载控制型 C*1-D*1: 2-stage pressure & Flow control + Low tension unloading
	C*1-E*1: 两段压力两段流量+电控两段压力型 C*1-E*1: 2-Stage Pressure and Stage Flow + Electrically Controlled 2-Stage Pressure
	CL*1-H*1: 电控两段压力两段流量控制型 CL*1-H*1: Electric 2-stage pressure control & Flow control
	HL-EDPV: 电-液比例负载敏感控制型 HL-EDPV: Electro-Hydraulic Proportional Load-Sensitive Control

03	压力调节范围 Pressure Adjusting Range
	0: 15 ~ 45bar
	1: 20 ~ 75bar
	2: 25 ~ 145bar
	3: 30 ~ 215bar
	4: 30 ~ 215bar

04	安装方式 Mounting
	F: 法兰安装 F: Flange Mounting
	L: 脚架安装 L: Foot stand Mounting

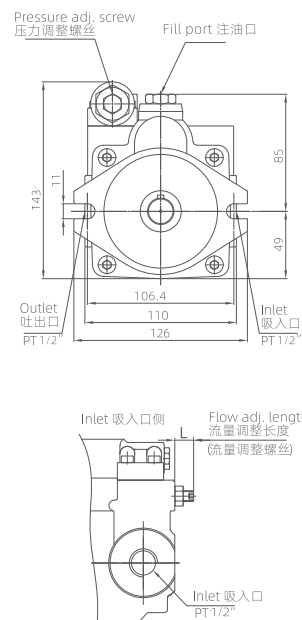
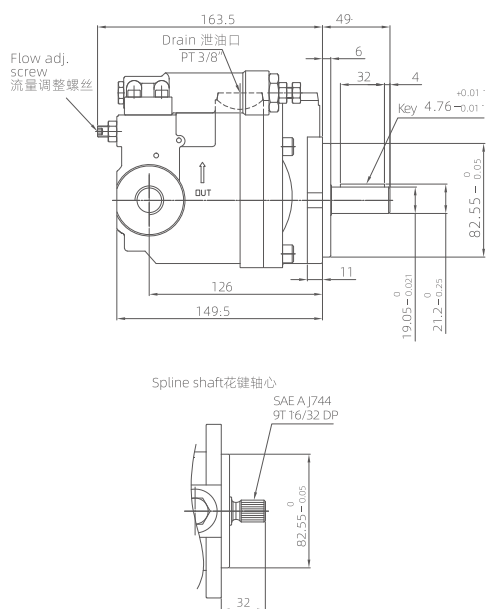
05	旋转方向 Rotation direction (View from the shaft end)
	R: 顺时针 R: Clockwise
	L: 逆时针 L: Counter clockwise

*1 压力调整范围
Pressure Adjusting Range

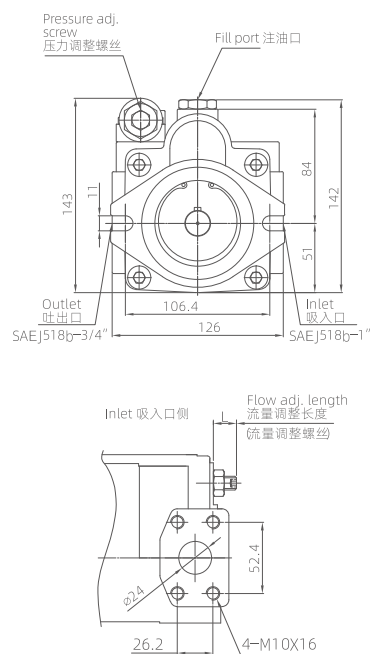
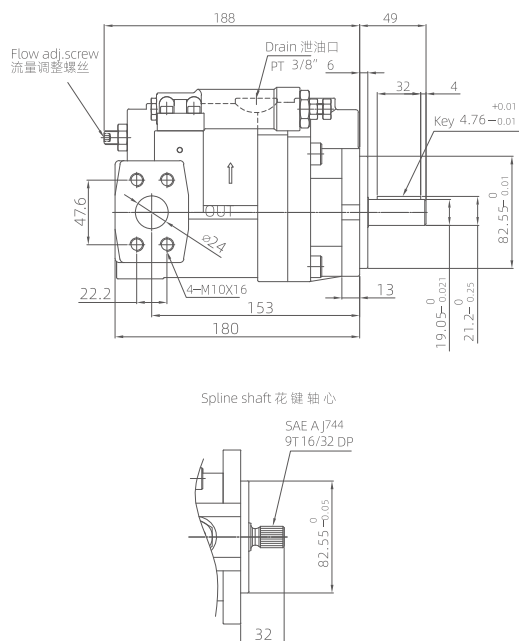
*2 更多参数请查阅A01页
For more parameters, please refer to page A01

安装尺寸 Dimension

- P08-A*-F-R-TYPE压力补偿控制型
Pressure Compensator Type

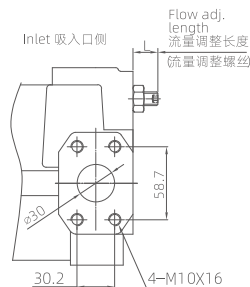
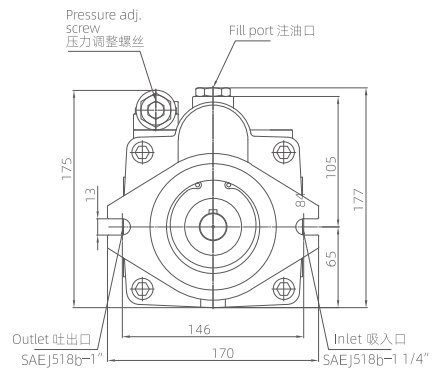
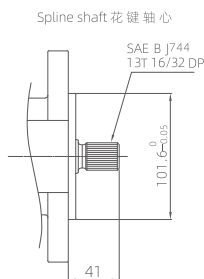
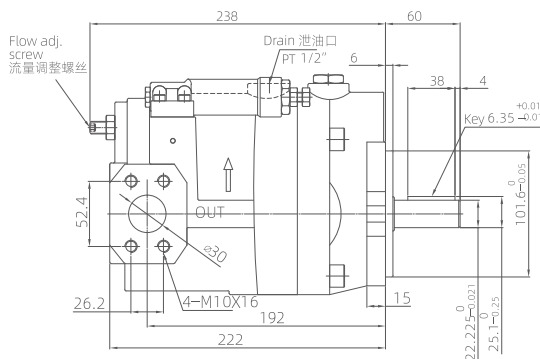


- P16/P22-A*-F-R-TYP压力补偿控制型
Pressure Compensator Type

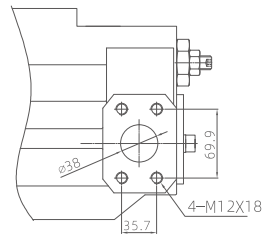
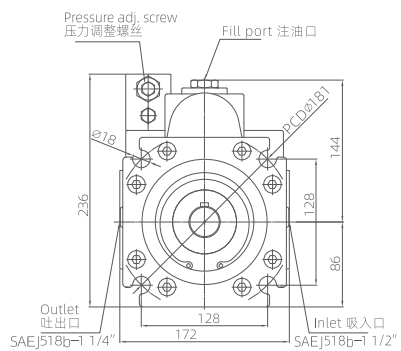
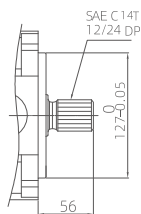
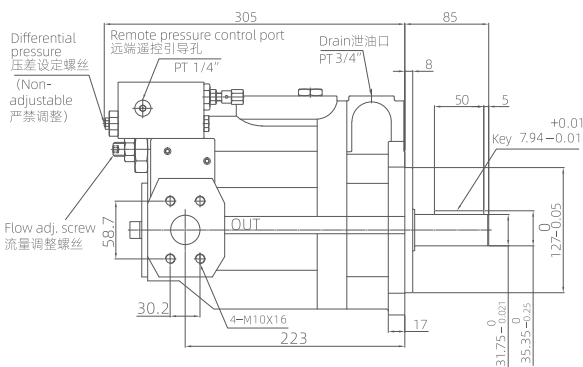


Dimension

- P36/P46-A*-F-R-TYPE压力补偿控制型
Pressure Compensator Type

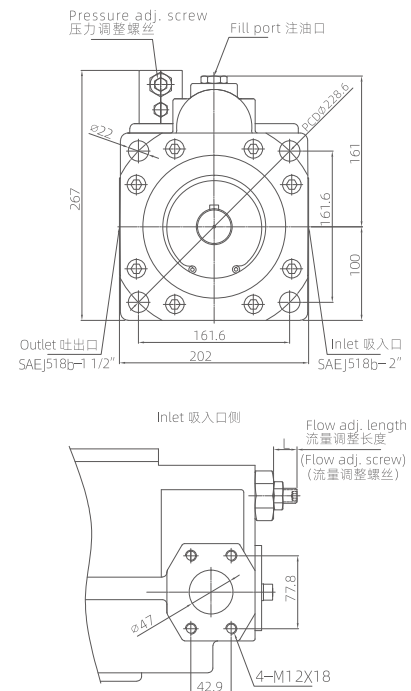
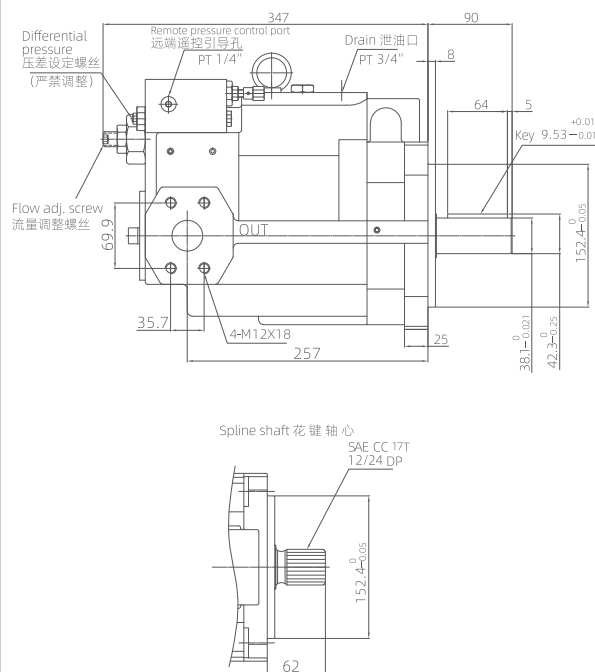


- P70-A*-F-R-TYPE压力补偿控制型
Pressure Compensator Type

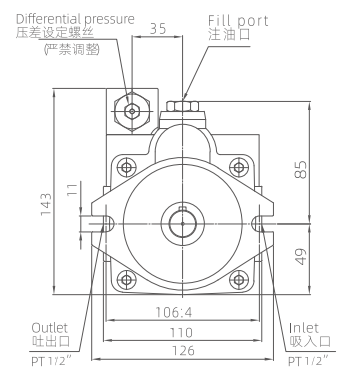
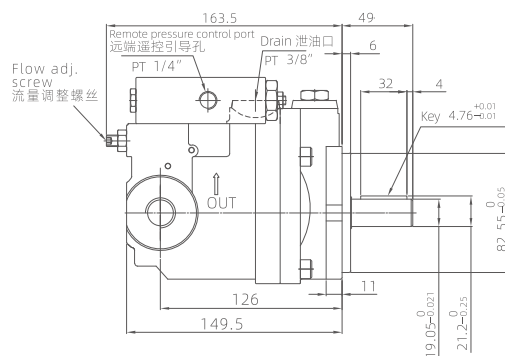


安装尺寸 Dimension

- P100-A*-F-R-TYPE压力补偿控制型
Pressure compensating type

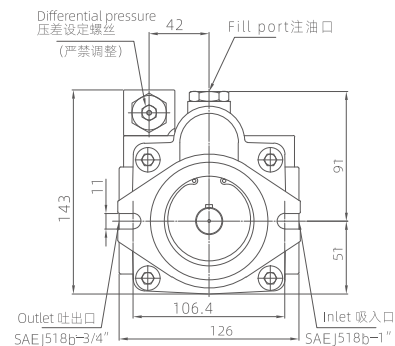
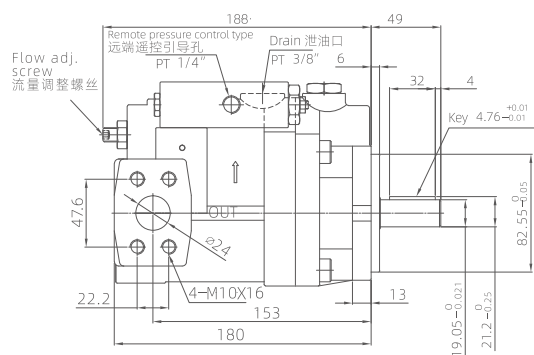


- P08-B*-F-R-TYPE遥控压力补偿控制型
Remote pressure control type

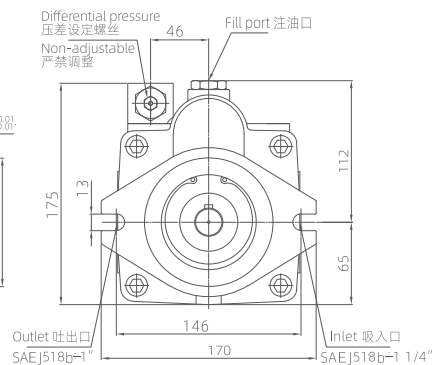
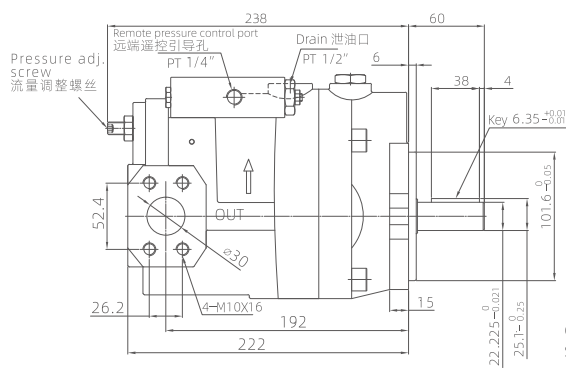


安装尺寸 Dimension

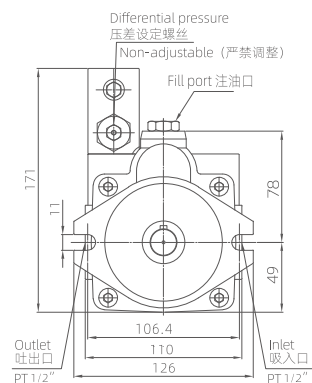
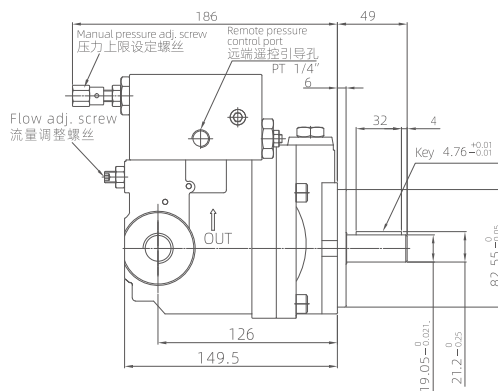
● P16/P22-B*-F-R-TYPE遥控压力补偿控制型 Remote pressure control type



● P36/46-B*-F-R-TYPE遥控压力补偿控制型 Remote pressure control type

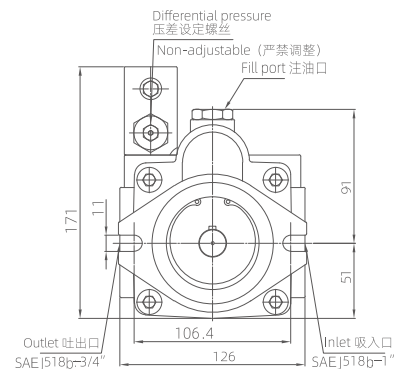
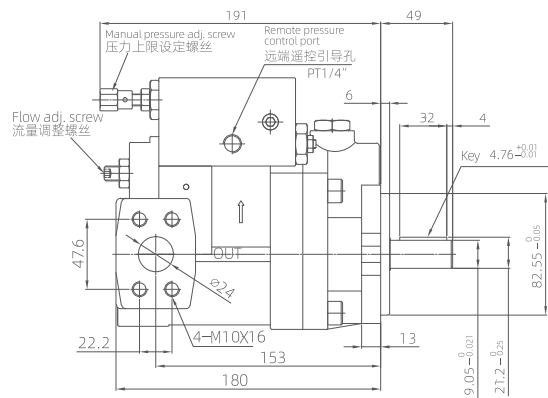


● P08-BH*-F-R-TYPE遥控+高压保护控制型 Remote Pressure Control + High Pressure Protection

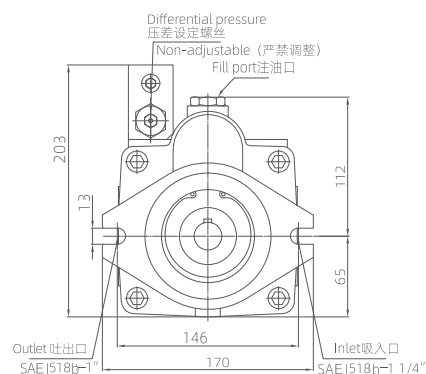
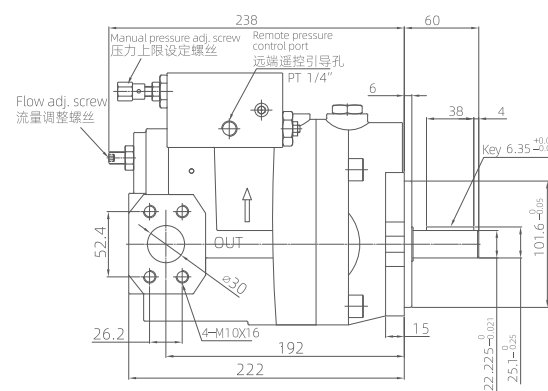


安装尺寸 Dimension

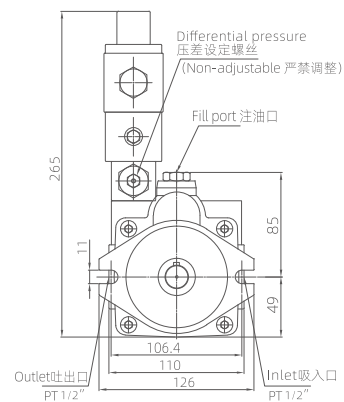
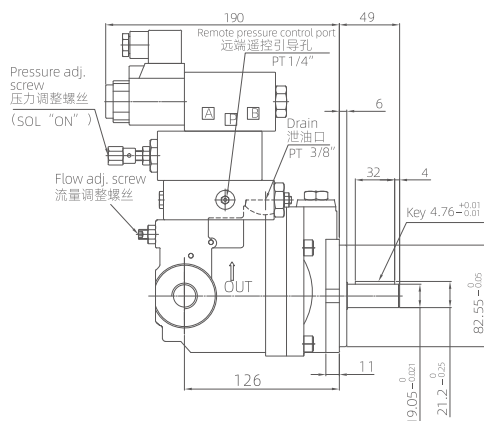
● P16/22-BH*-F-R-TYPE遥控+高压保护控制型 Remote Pressure Control + High Pressure Protection



● P36/46-BH*-F-R-TYPE遥控+高压保护控制型 Remote Pressure Control + High Pressure Protection

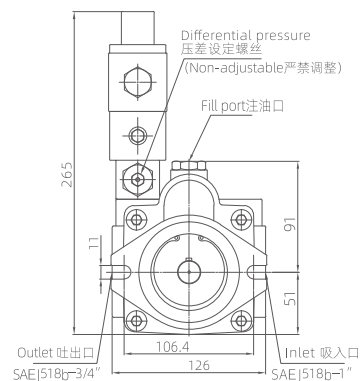
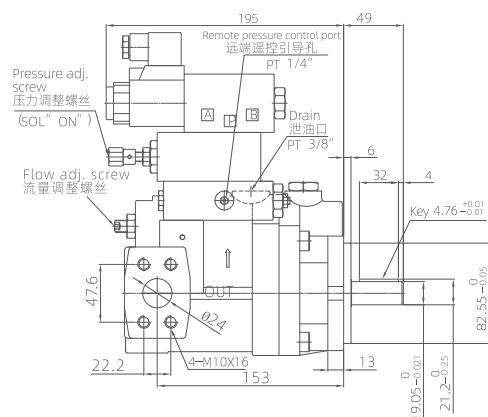


● P08-D*-F-R-TYPE电磁低压卸载+压力补偿控制型 Low tension unloading + Pressure control

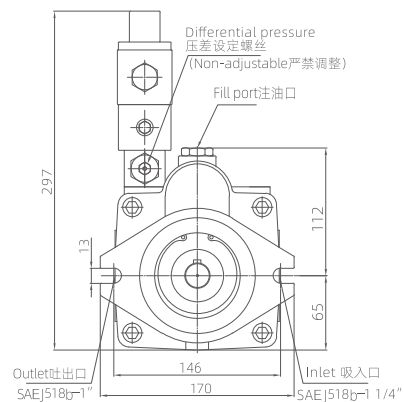
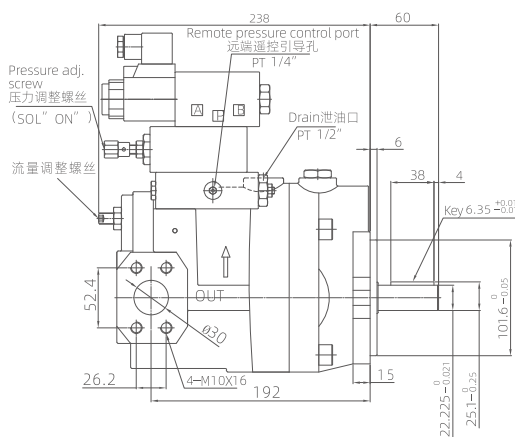


安装尺寸 Dimension

● P16/P22-D*-F-R-TYPE电磁低压卸载+压力补偿控制型 Low tension unloading + Pressure control

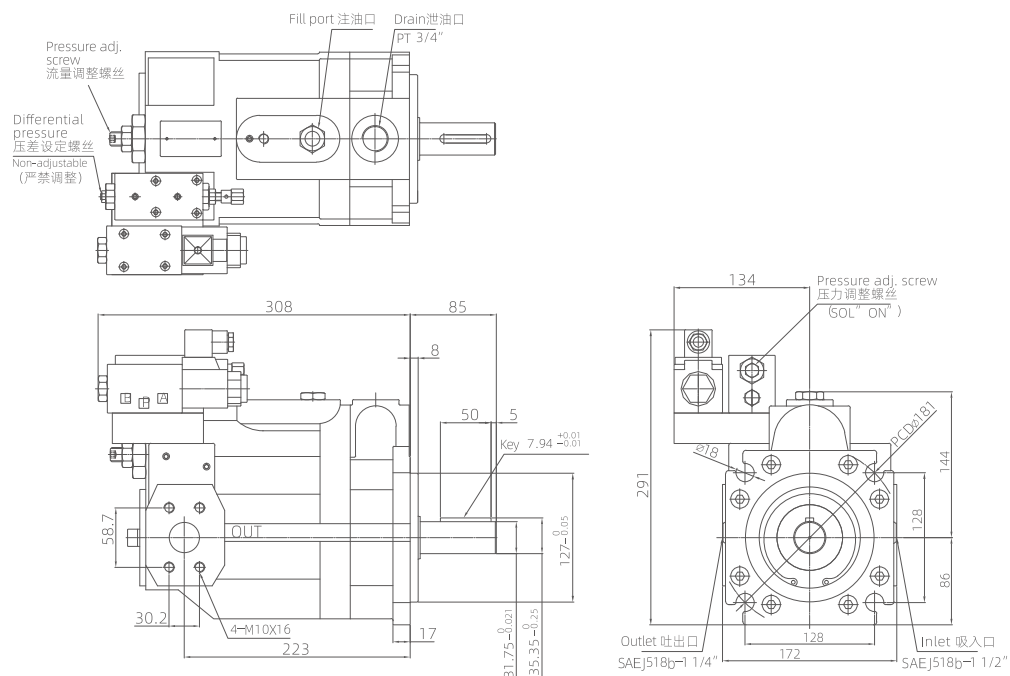


● P36/46-D*-F-R-TYPE电磁低压卸载+压力补偿控制型 Low tension unloading + Pressure control

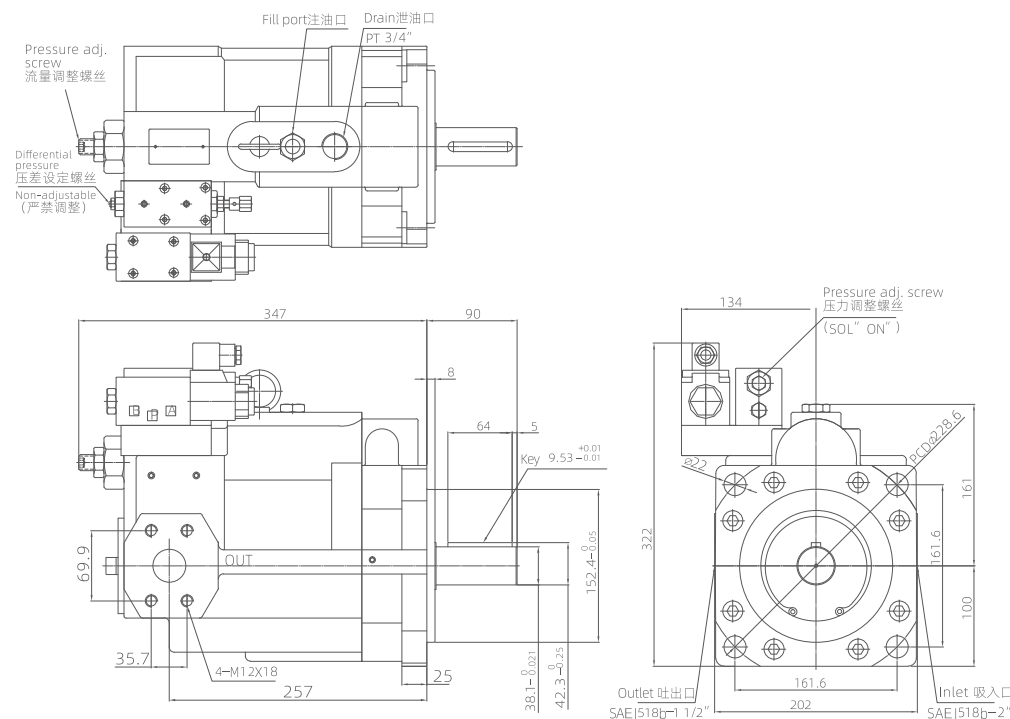


Dimension

- P70-D*-F-R-TYPE电磁低压卸载+压力补偿控制型
Low tension unloading + Pressure control

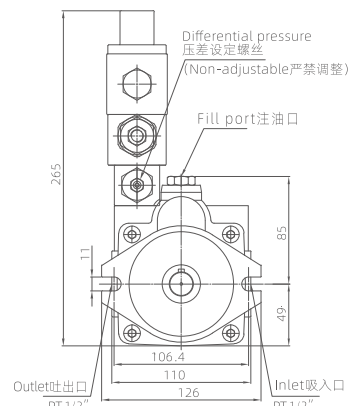
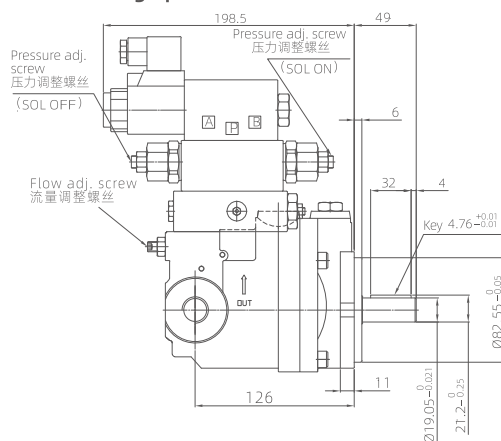


- P100-D*-F-R-TYPE电磁低压卸载+压力补偿控制型
Low tension unloading + Pressure control

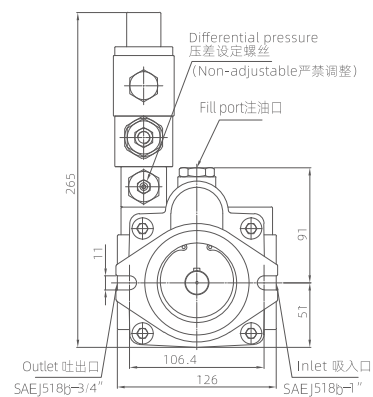
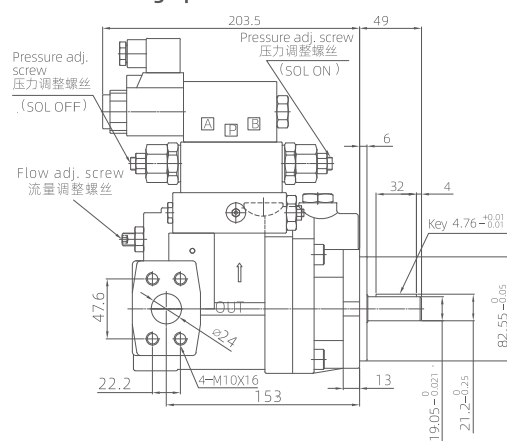


安装尺寸 Dimension

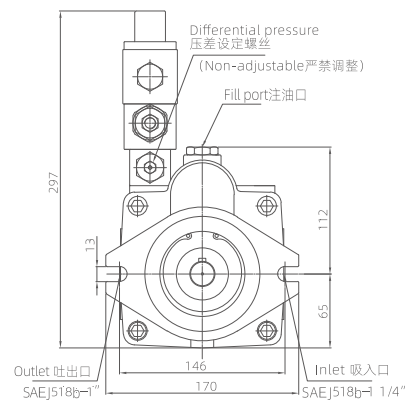
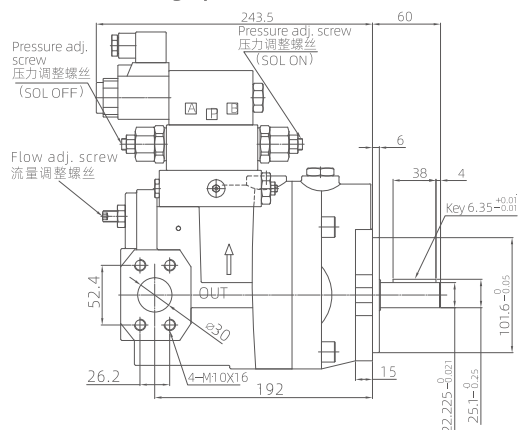
● P08-E*-F-R-TYPE电控两段压力控制型 Electric 2-stage pressure control



● P16/22-E*-F-R-TYPE电控两段压力控制型 Electric 2-stage pressure control

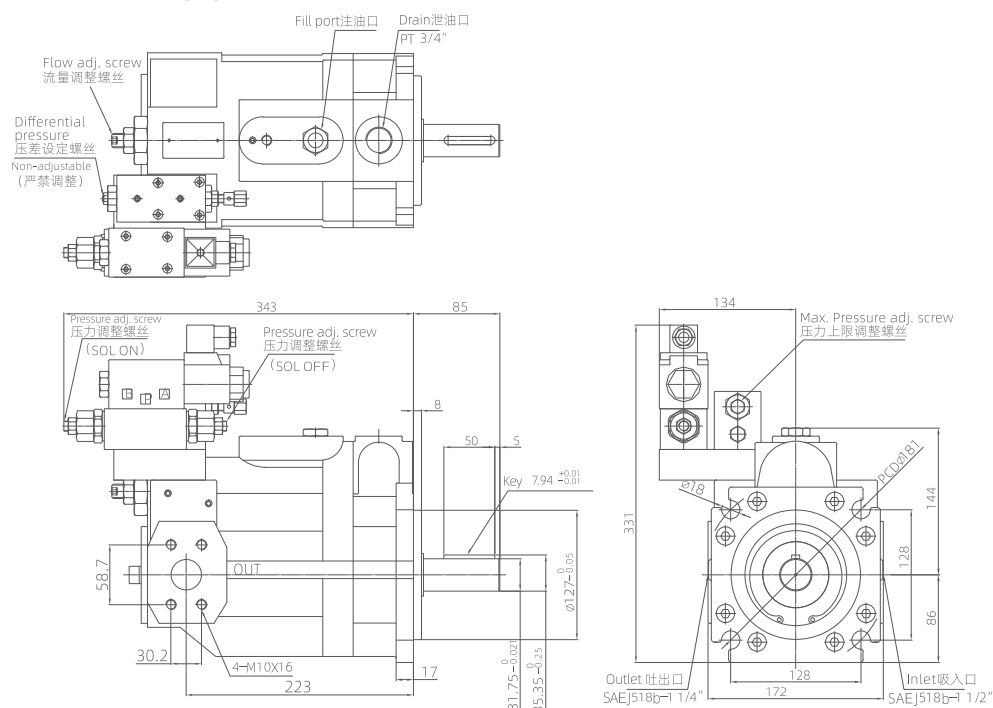


● P36/46-E*-F-R-TYPE电控两段压力控制型 Electric 2-stage pressure control

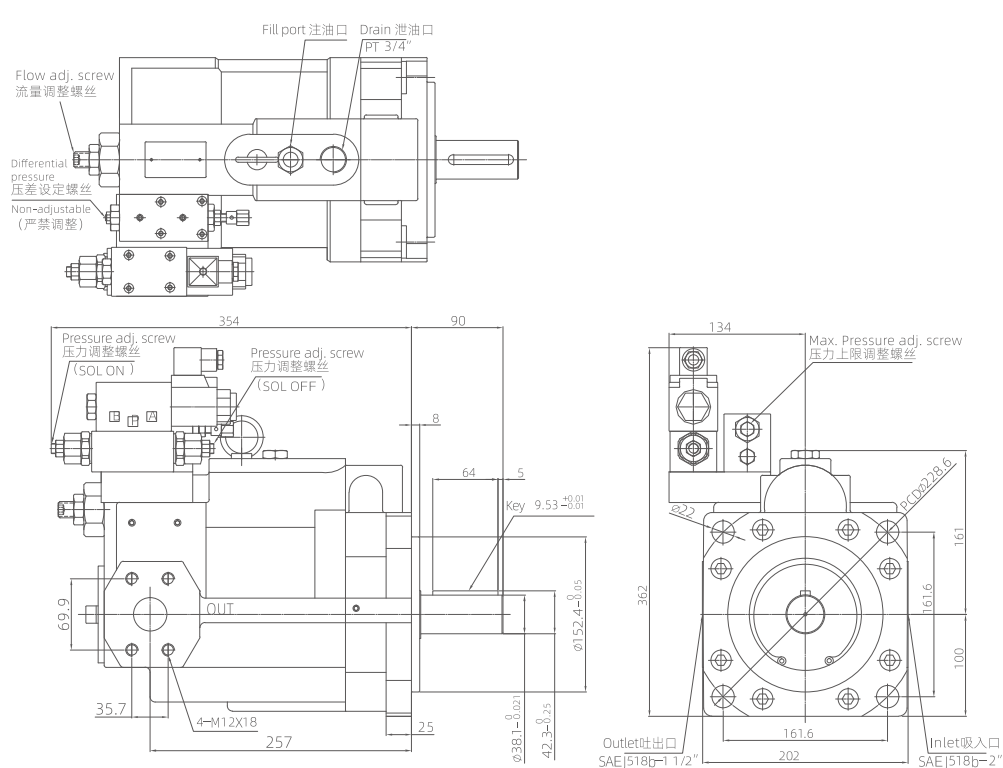


安装尺寸 Dimension

● P70-E*-F-R-TYPE电控两段压力控制型 Electric 2-stage pressure control

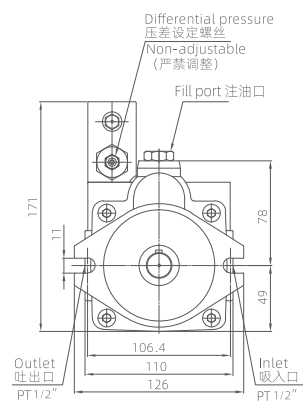
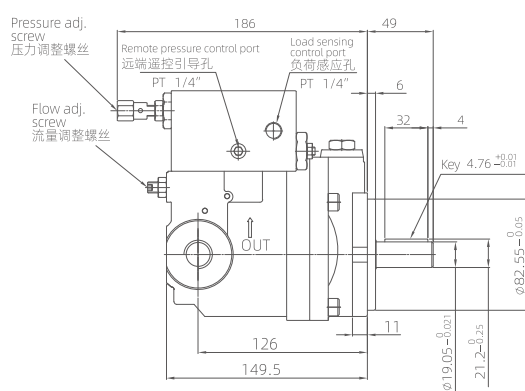


● P100-E*-F-R-TYPE电控两段压力控制型 Electric 2-stage pressure control

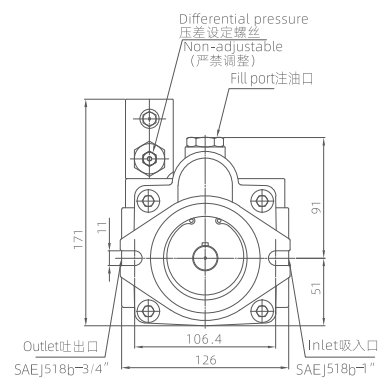
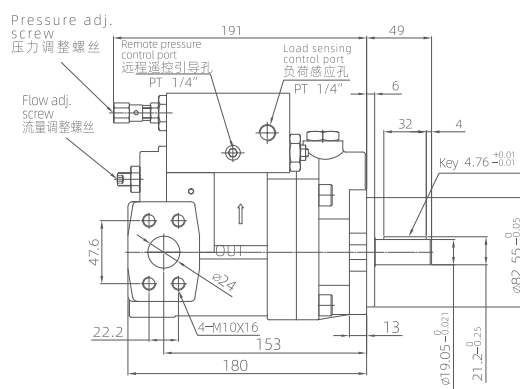


安装尺寸 Dimension

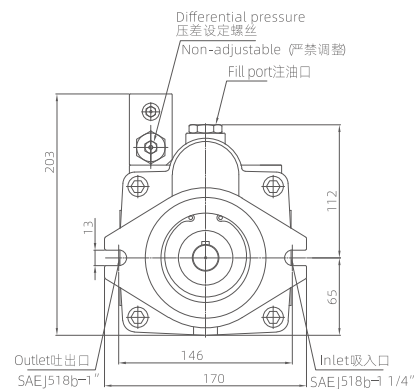
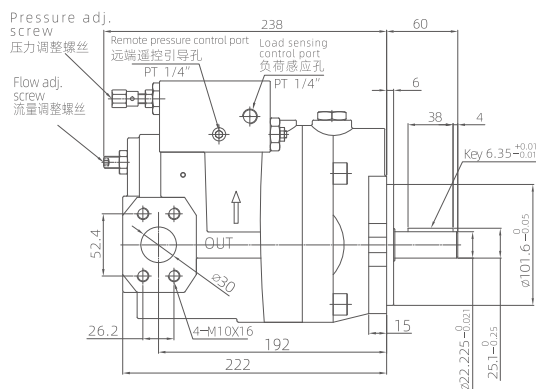
● P08-HL*-F-R-TYPE负载敏感控制型 Load-sensing Control



● P16/22-HL*-F-R-TYPE负载敏感控制型 Load-sensing Control

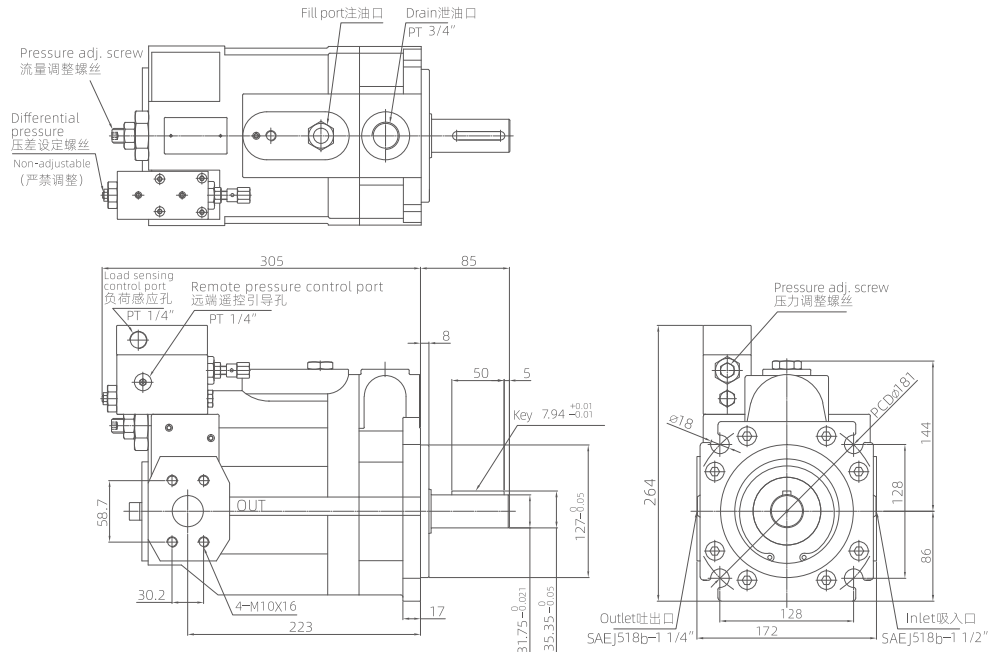


● P36/46-HL*-F-R-TYPE负载敏感控制型 Load-sensing Control

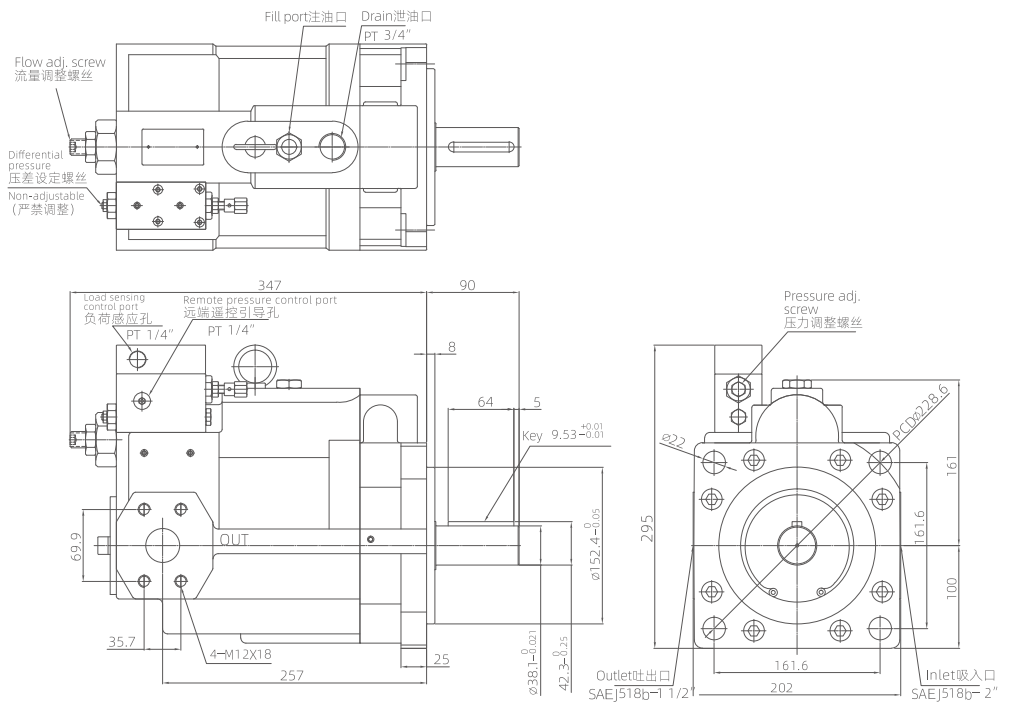


安装尺寸 Dimension

- P70-HL*-F-R-TYPE负载敏感控制型
Load-sensing Control

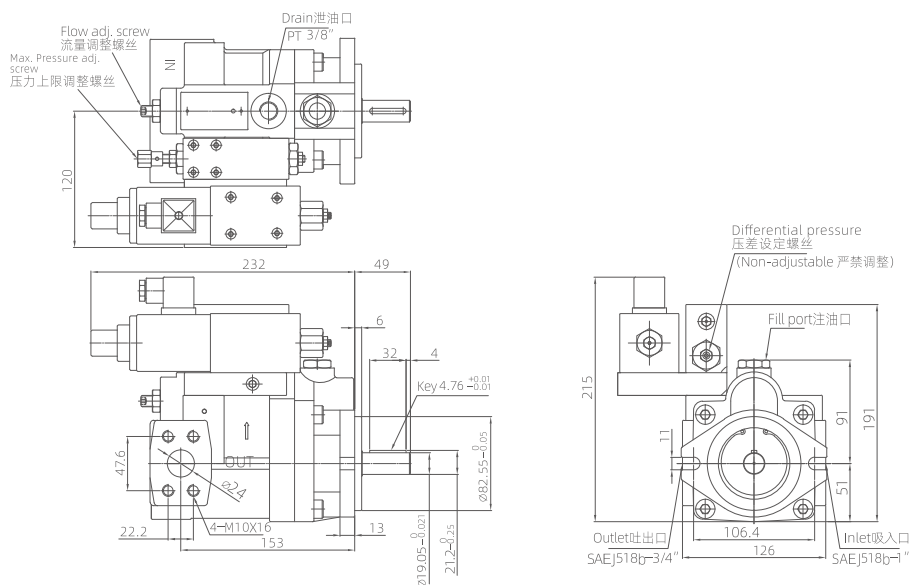


- P100-HL*-F-R-TYPE负载敏感控制型
Load-sensing Control

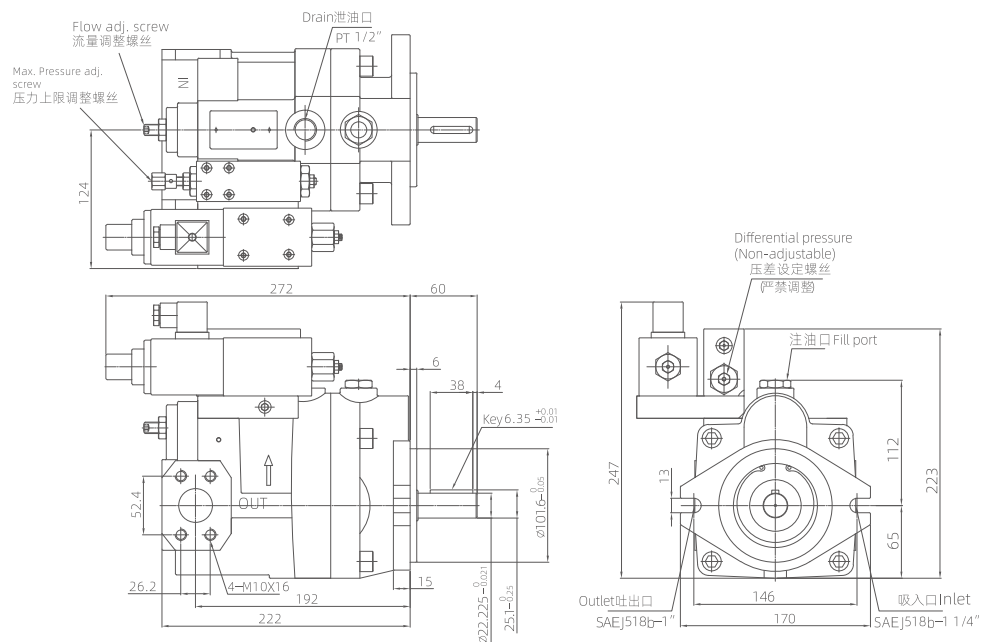


安装尺寸 Dimension

● P16/22-BH*-EDG-F-R-TYPE高压保护+比例压力控制 Pressure Compensation + High Pressure Protection

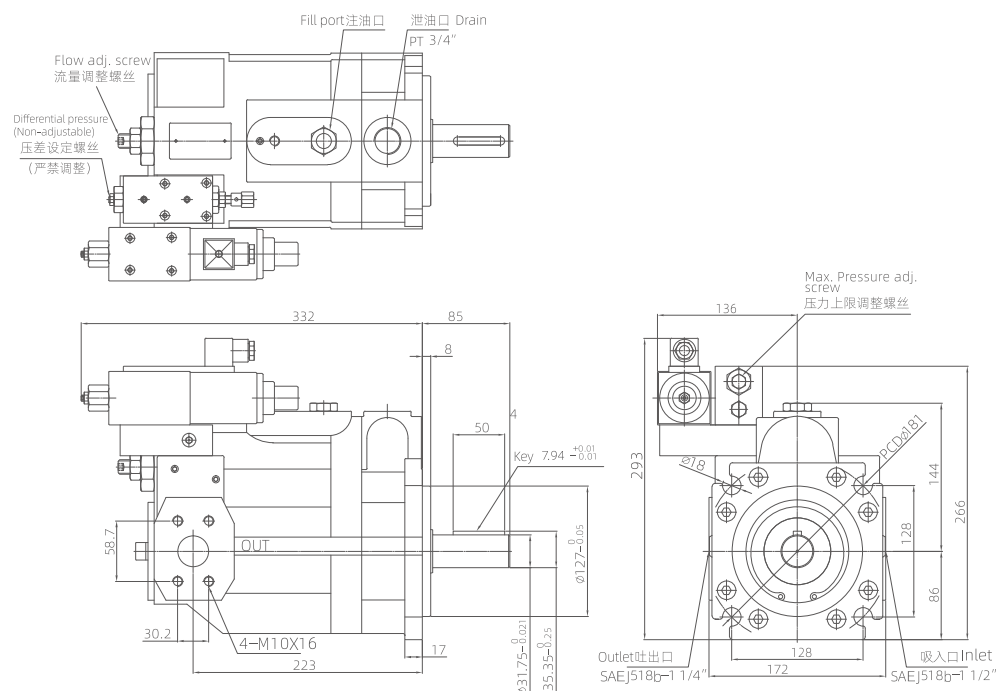


● P36/46-BH*-EDG-F-R-TYPE高压保护+比例压力控制 Pressure Compensation + High Pressure Protection

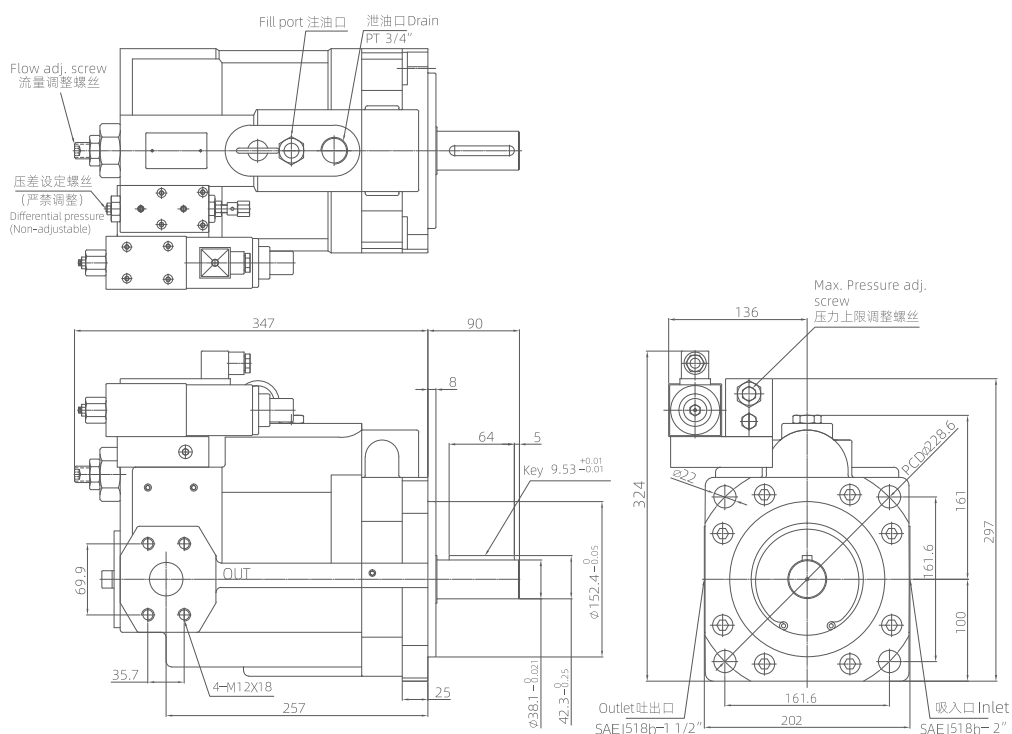


安装尺寸 Dimension

● P70-BH*-EDG-F-R-TYPE高压保护+比例压力控制型 Pressure Compensation + High Pressure Protection

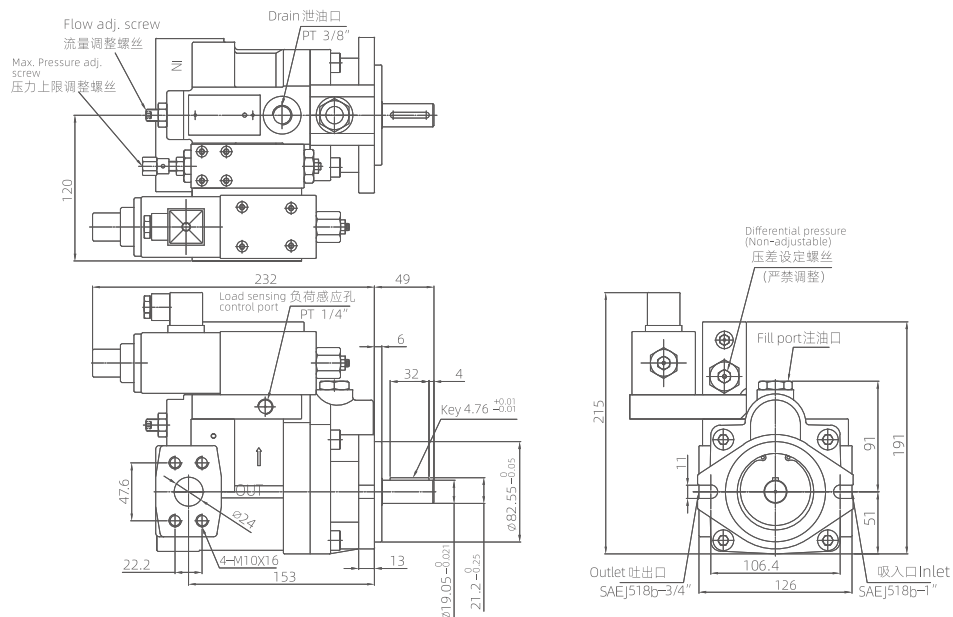


● P100-BH*-EDG-F-R-TYPE高压保护+比例压力控制型 Pressure Compensation + High Pressure Protection

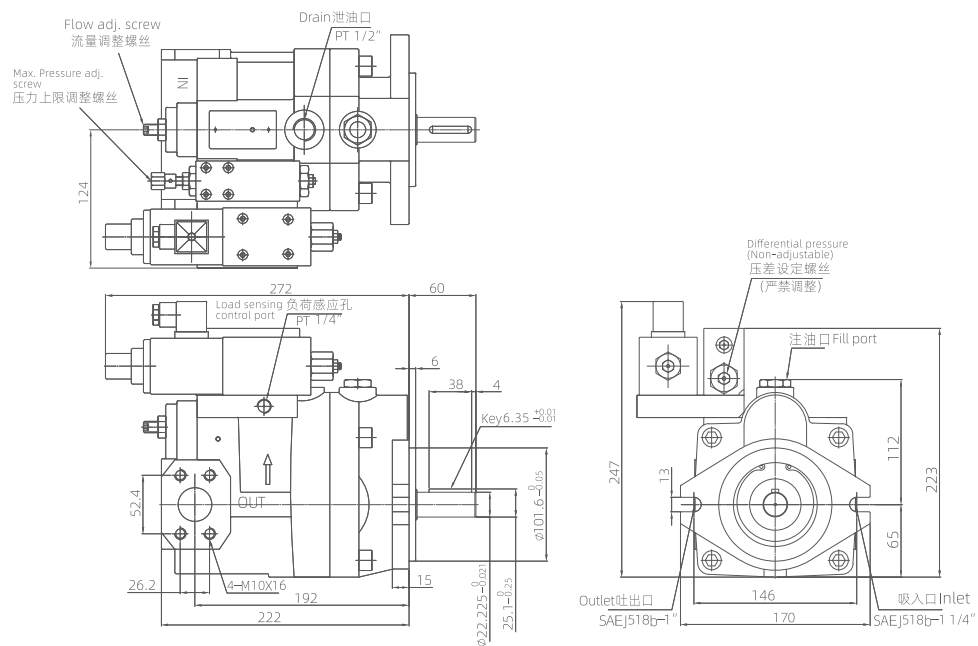


安装尺寸 Dimension

● P16/22-HL*-EDG-F-R-TYPE负载敏感+比例压力控制型 Load-Sensitive + Proportional Pressure Control

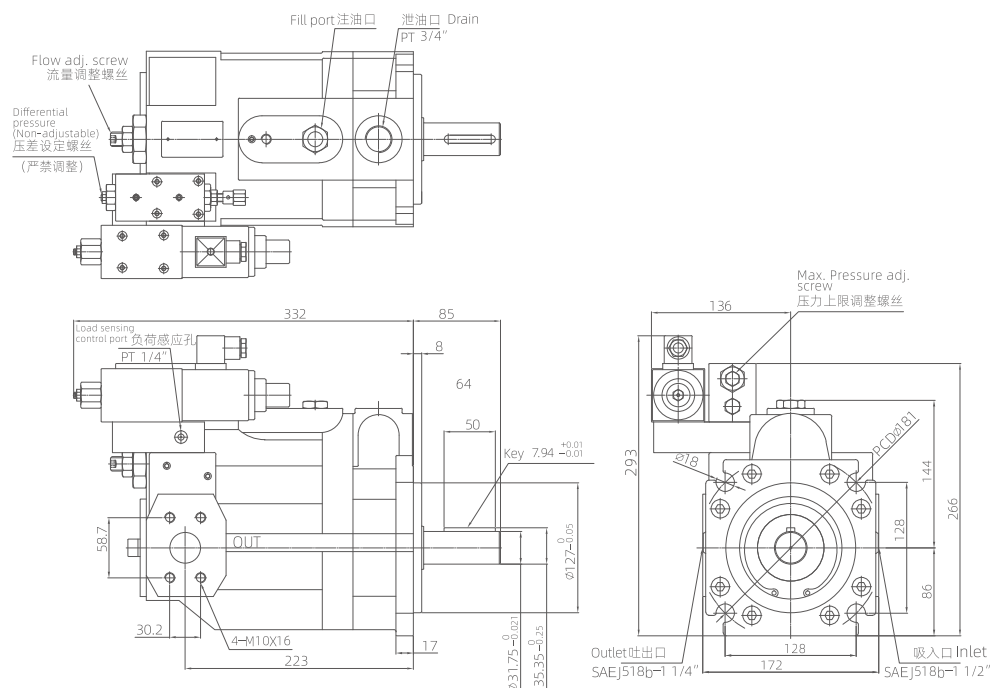


● P36/46-HL*-EDG-F-R-TYPE负载敏感+比例压力控制型 Load-Sensitive + Proportional Pressure Control

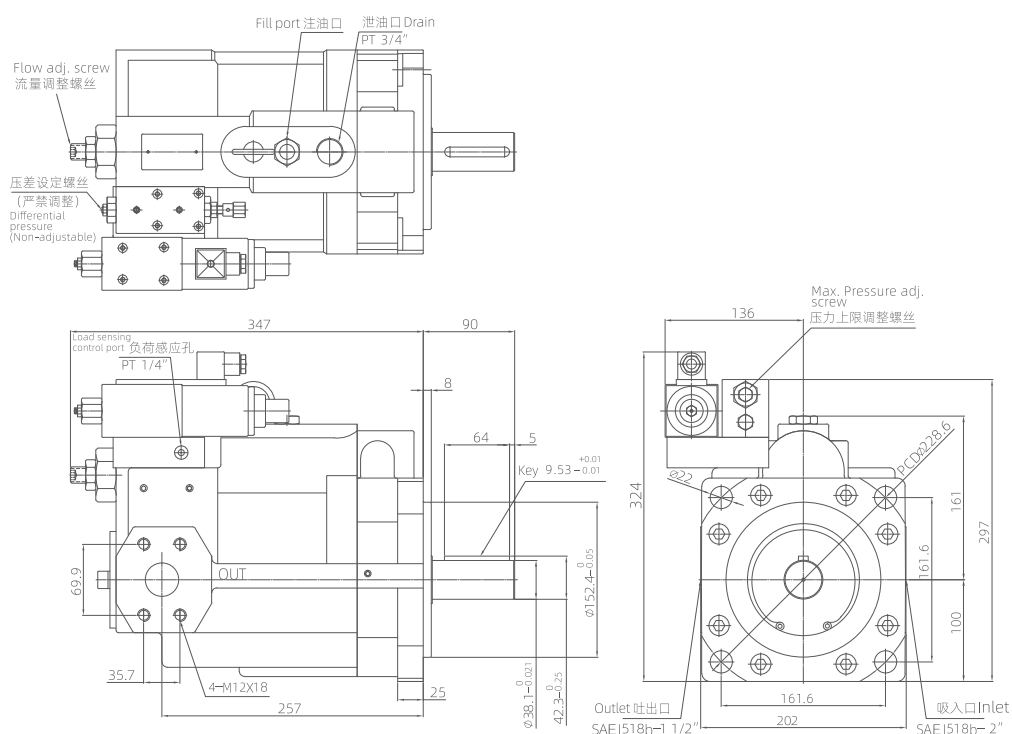


安装尺寸 Dimension

● P70-HL*-EDG-F-R-TYPE负载敏感+比例压力控制型 Load-Sensitive + Proportional Pressure Control

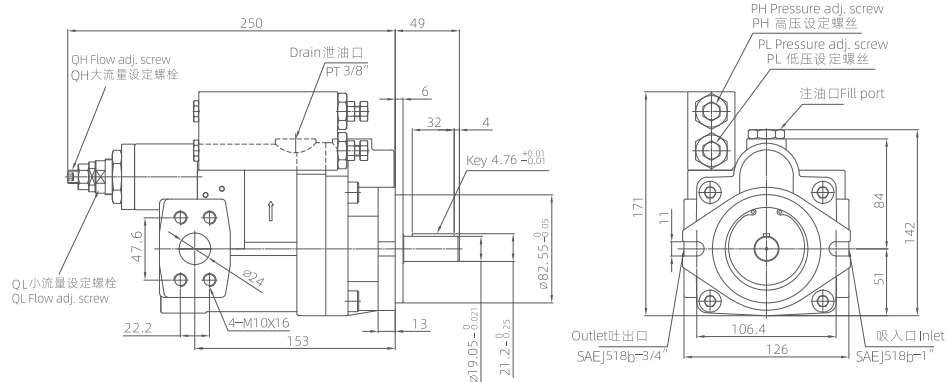


● P100-HL*-EDG-F-R-TYPE负载敏感+比例压力控制型 Load-Sensitive + Proportional Pressure Control

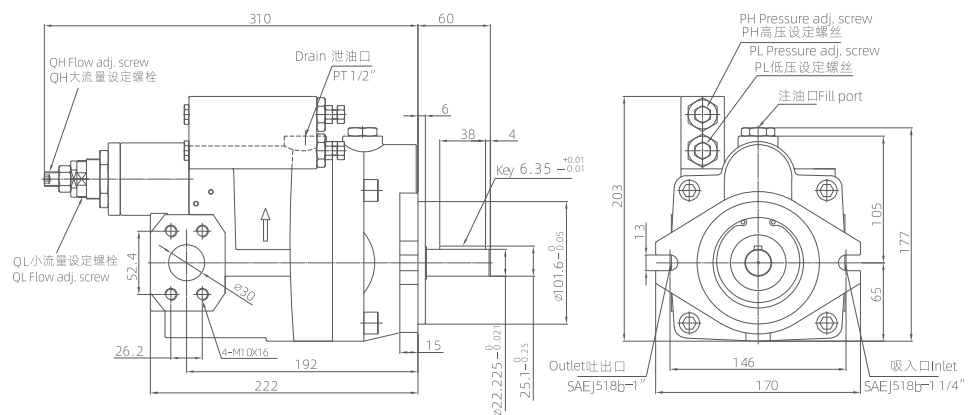


安装尺寸 Dimension

● P16/22-C*-A*-F-R-TYPE两段压力两段流量控制型 2-stage pressure & Flow control

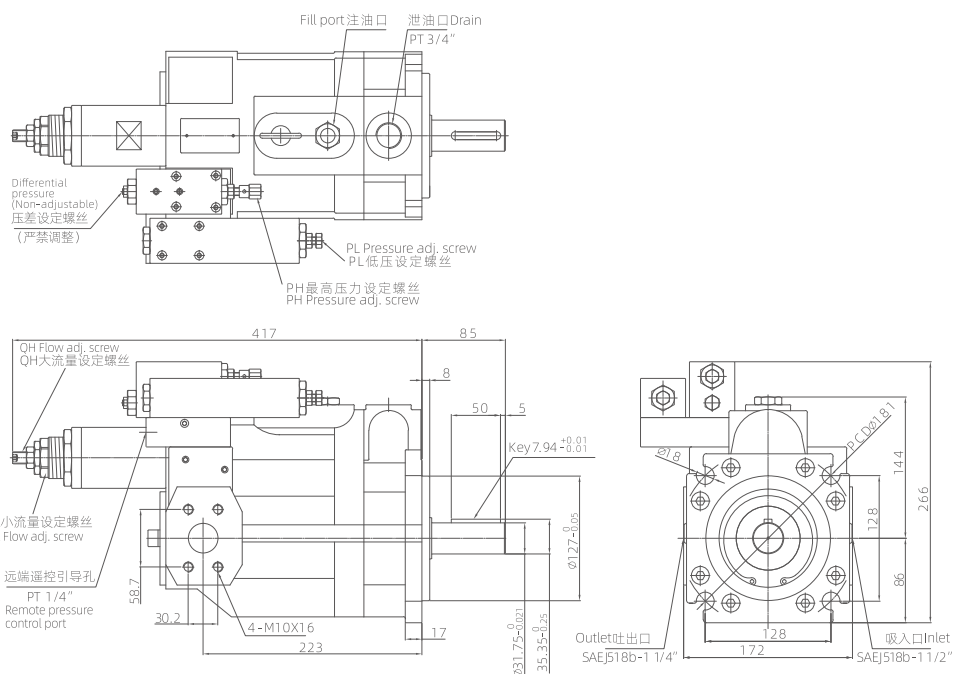


● P36/46-C*-A*-F-R-TYPE两段压力两段流量控制型 2-stage pressure & Flow control

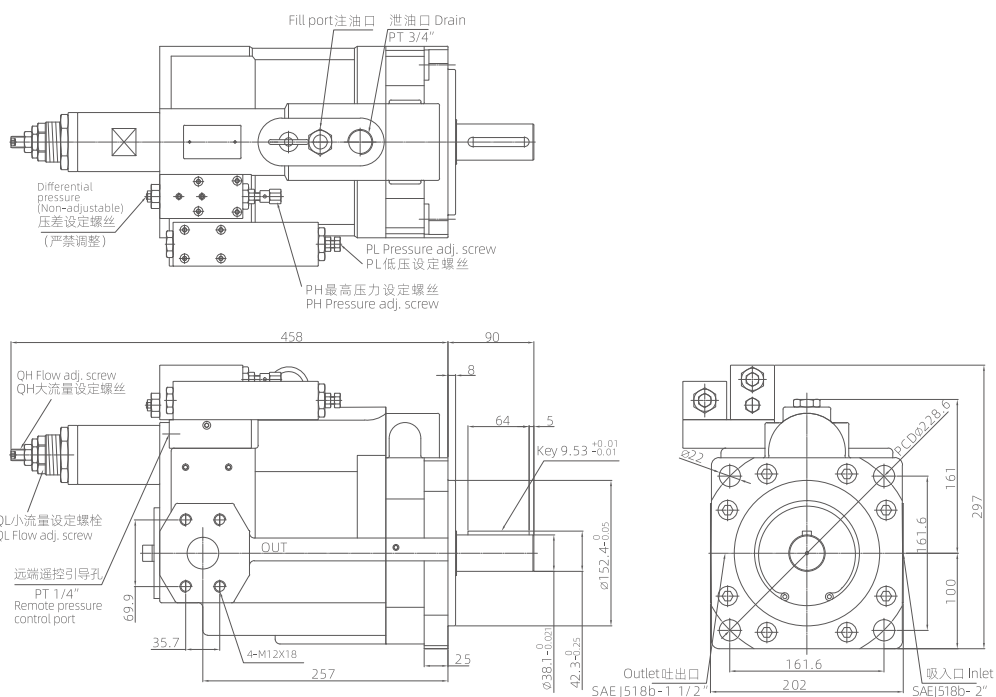


安装尺寸 Dimension

- P70-C*-A*-F-R-TYPE两段压力两段流量控制型
2-stage pressure & Flow control



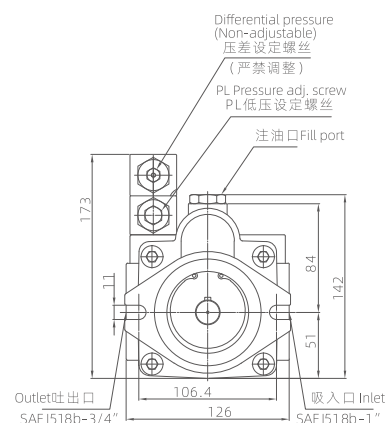
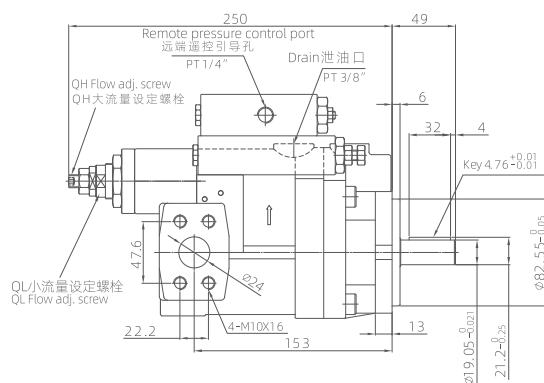
- P100-C*-A*-F-R-TYPE两段压力两段流量控制型
2-stage pressure & Flow control



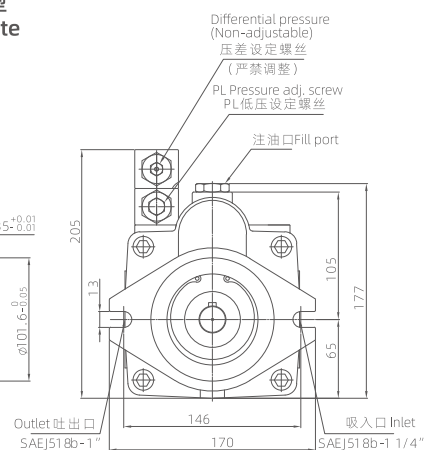
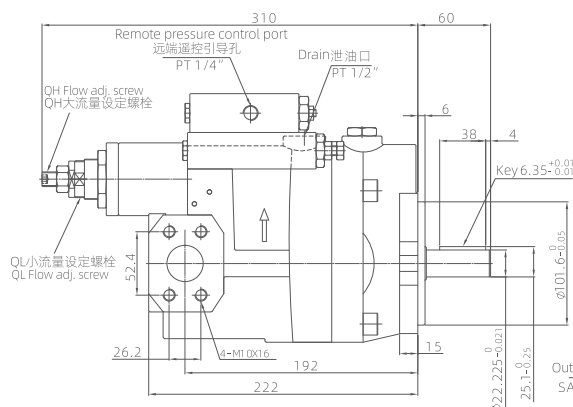
安装尺寸

Dimension

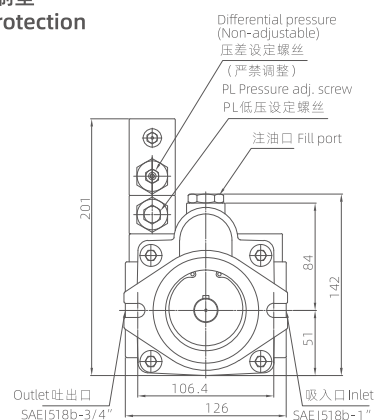
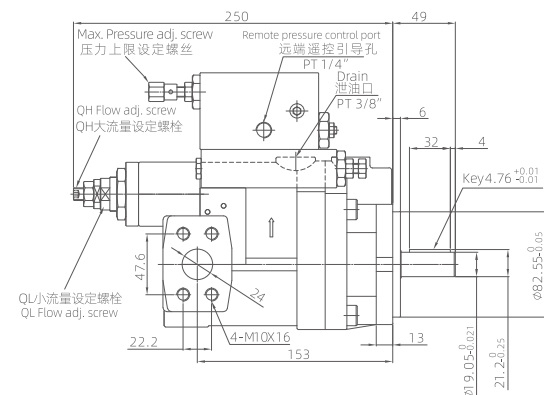
● P16/22-C*-B*-F-R-TYPE遥控两段压力两段流量控制型 Low tension unloading + Pressure control + Remote



● P36/46-C*-B*-F-R-TYPE遥控两段压力两段流量控制型 Low tension unloading + Pressure control + Remote

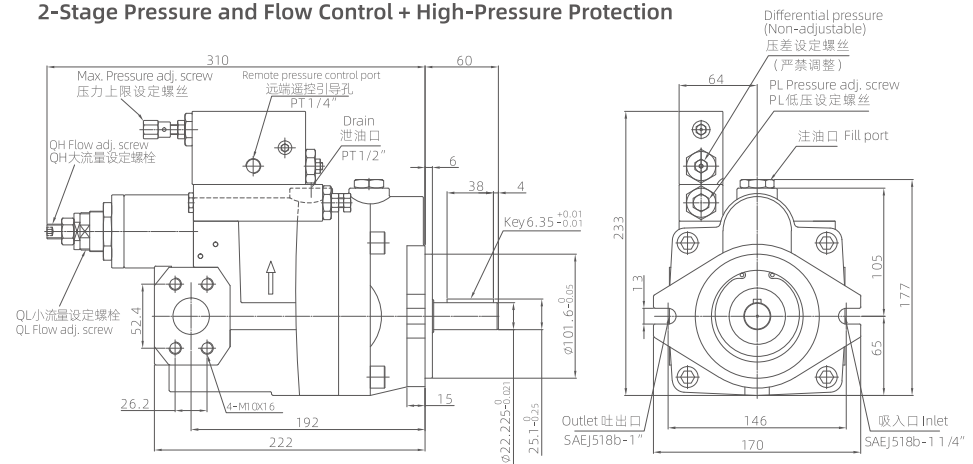


● P16/22-C*-BH*-F-R-TYPE两段压力两段流量+高压保护控制型 2-Stage Pressure and Flow Control + High-Pressure Protection

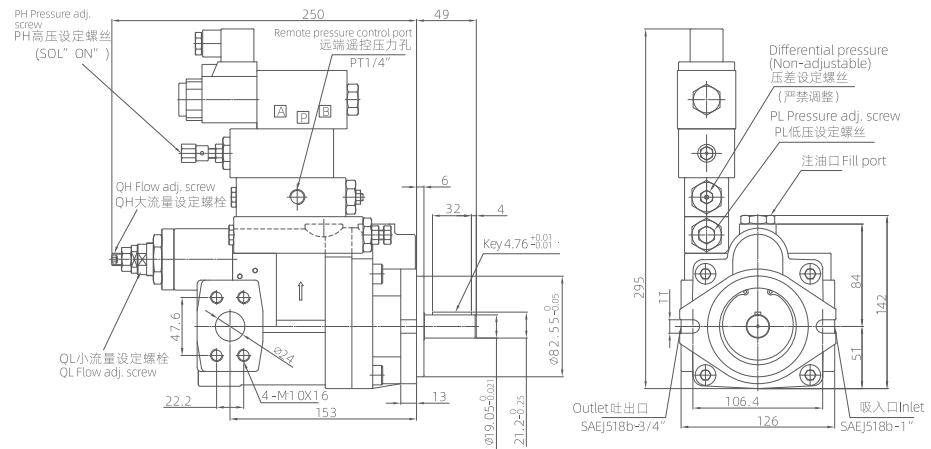


安装尺寸 Dimension

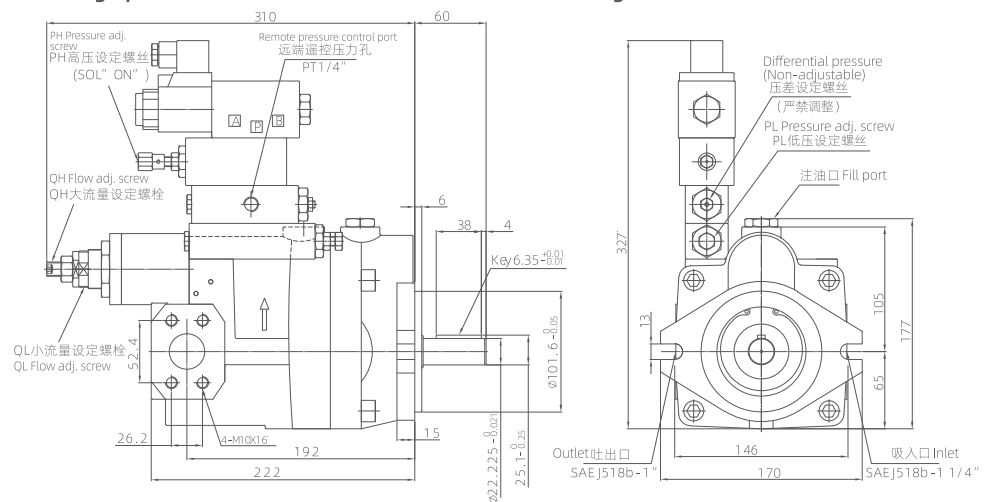
- **P36/46-C*-BH*-F-R-TYPE两段压力两段流量+高压保护控制型**
2-Stage Pressure and Flow Control + High-Pressure Protection



- P16/22-C*-D*-F-R-TYPE两段压力两段流量+低压卸载控制型
2-stage pressure & Flow control + Low tension unloading

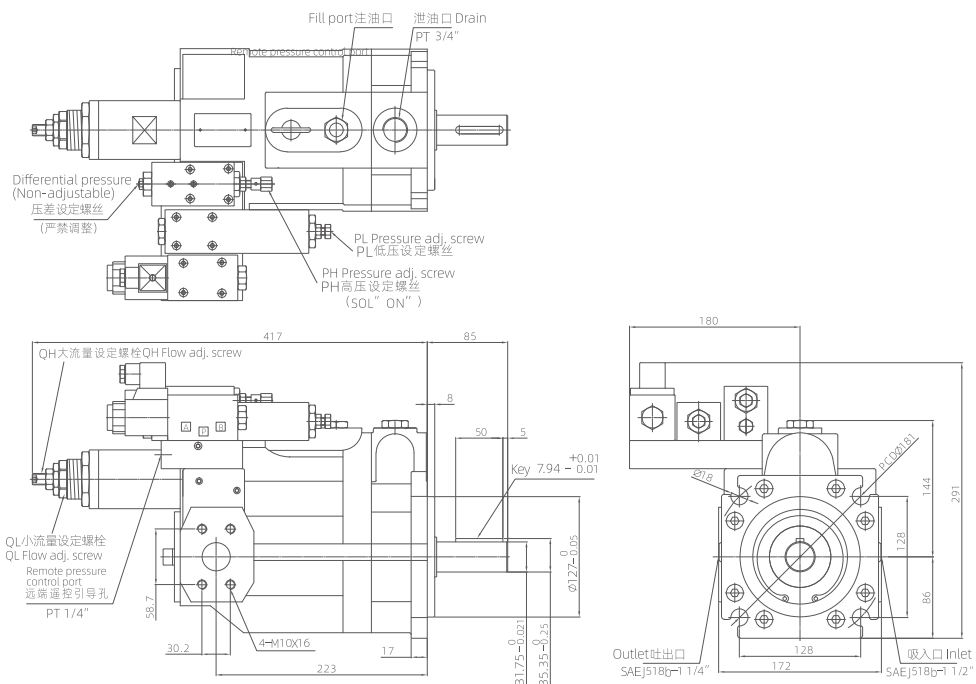


- **P36/46-C*-D*-F-R-TYPE**两段压力两段流量+低压卸载控制型
2-stage pressure & Flow control + Low tension unloading

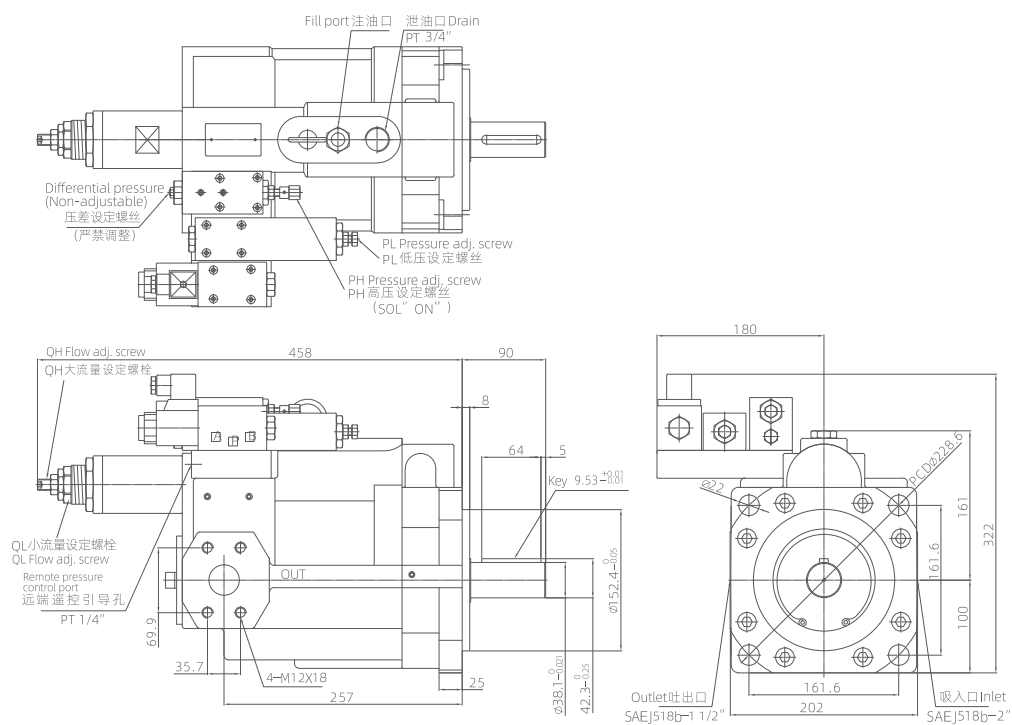


安装尺寸 Dimension

● P70-C*-D*-F-R-TYPE两段压力两段流量+低压卸载控制型 2-stage pressure & Flow control + Low tension unloading



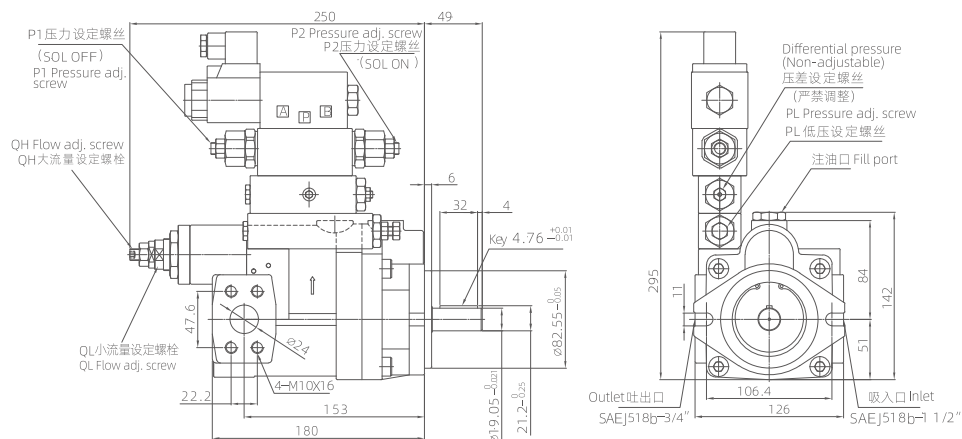
● P100-C*-D*-F-R-TYPE两段压力两段流量+低压卸载控制型 2-stage pressure & Flow control + Low tension unloading



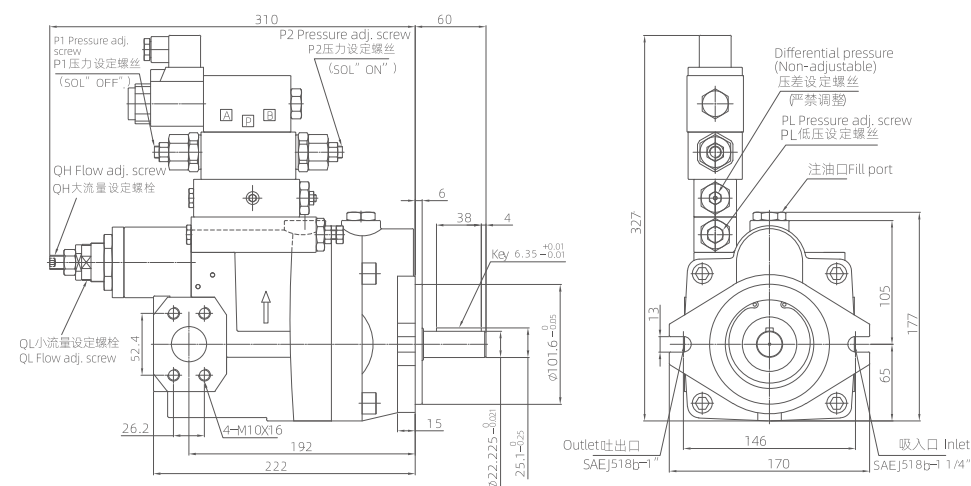
安装尺寸

Dimension

● P16/22-C*-E*-F-R-TYPE两段压力两段流量+电控两段压力型 2-Stage Pressure and Stage Flow + Electrically Controlled 2-Stage Pressure



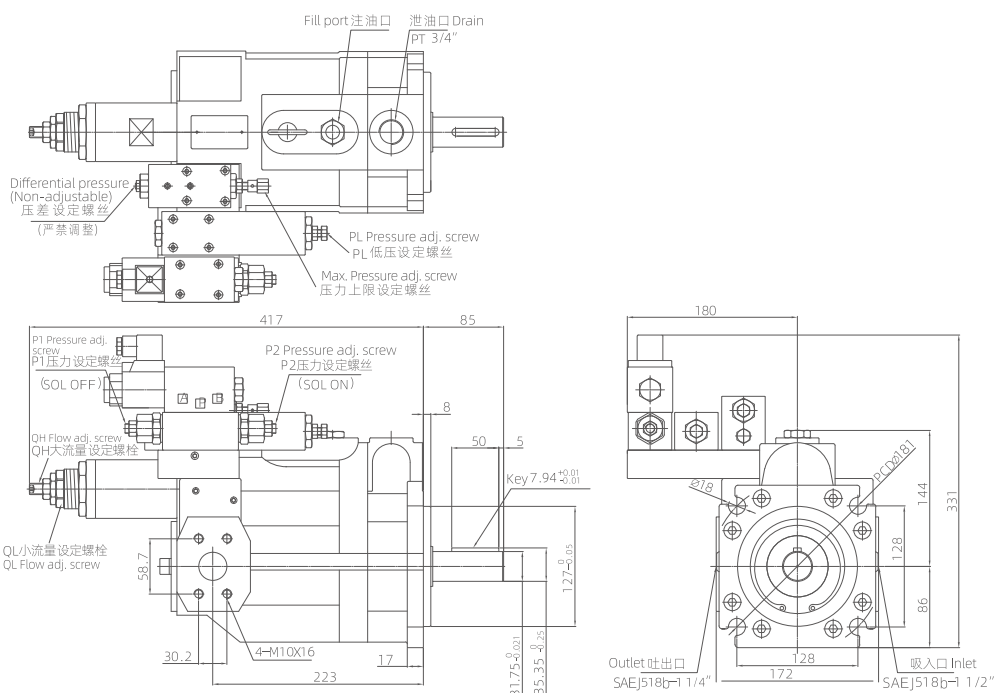
● P36/46-C*-E*-F-R-TYPE两段压力两段流量+电控两段压力型 2-Stage Pressure and Stage Flow + Electrically Controlled 2-Stage Pressure



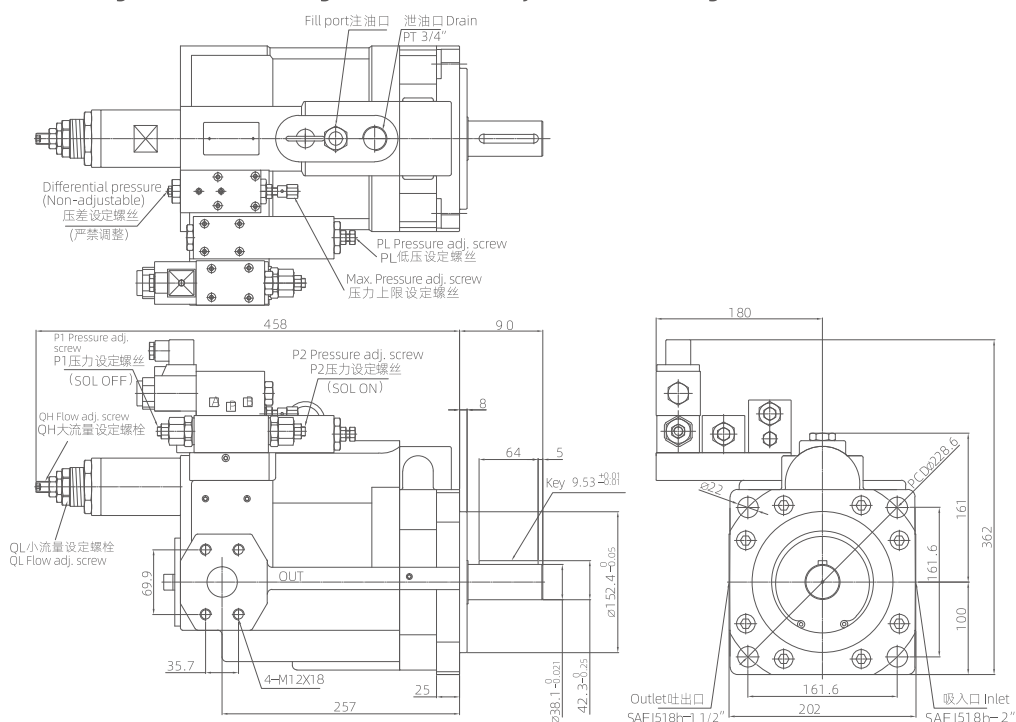
安装尺寸

Dimension

● P70-C*-E*-F-R-TYPE两段压力两段流量+电控两段压力型 2-Stage Pressure and Stage Flow + Electrically Controlled 2-Stage Pressure



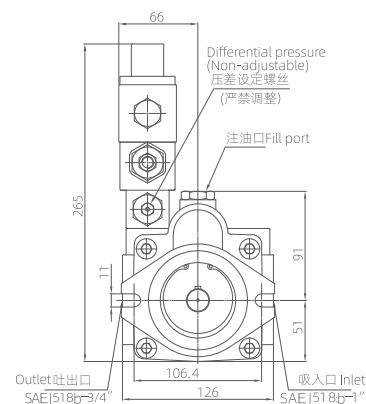
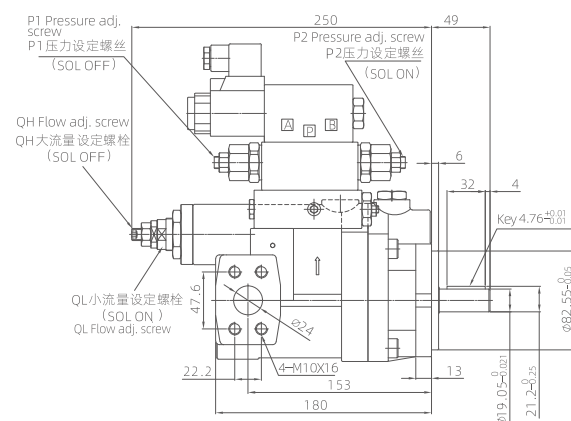
● P100-C*-E*-F-R-TYPE两段压力两段流量+电控两段压力型 2-Stage Pressure and Stage Flow + Electrically Controlled 2-Stage Pressure



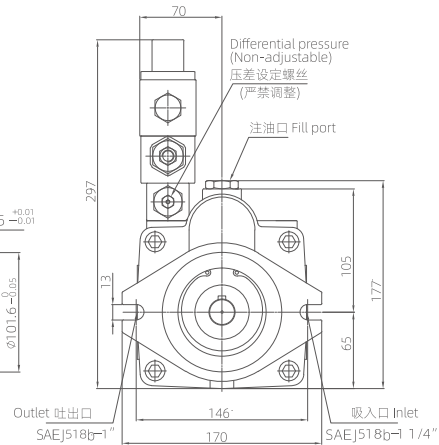
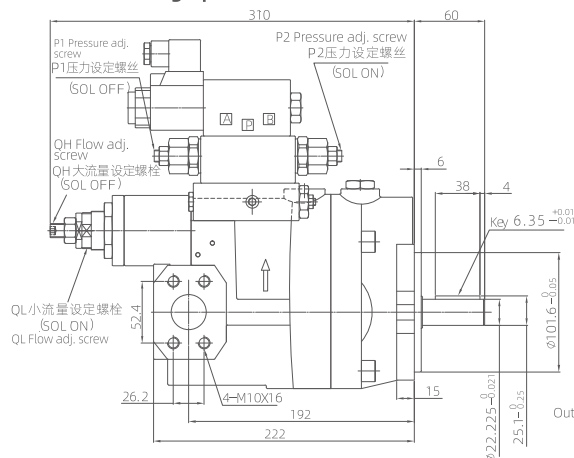
安装尺寸

Dimension

- P16/22-CL*-H*-F-R-TYPE电控两段压力两段流量控制型
Electric 2-stage pressure control & Flow control

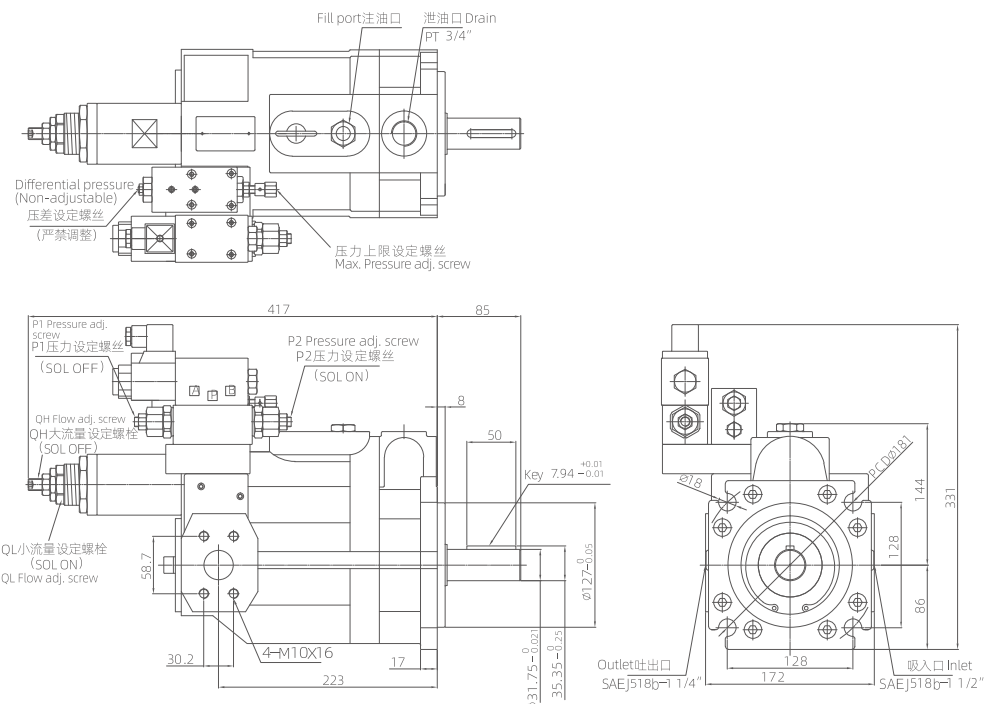


- P36/46-CL*-H*-F-R-TYPE电控两段压力两段流量控制型
Electric 2-stage pressure control & Flow control

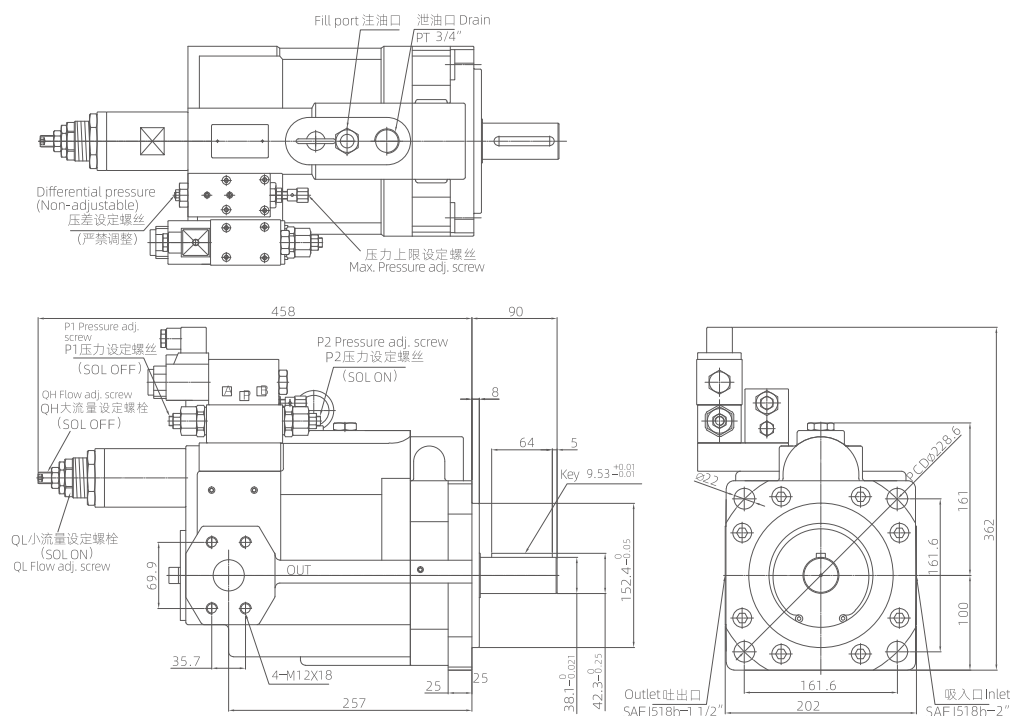


安装尺寸 Dimension

● P70-CL*-H*-F-R-TYPE电控两段压力两段流量控制型 Electric 2-stage pressure control & Flow control

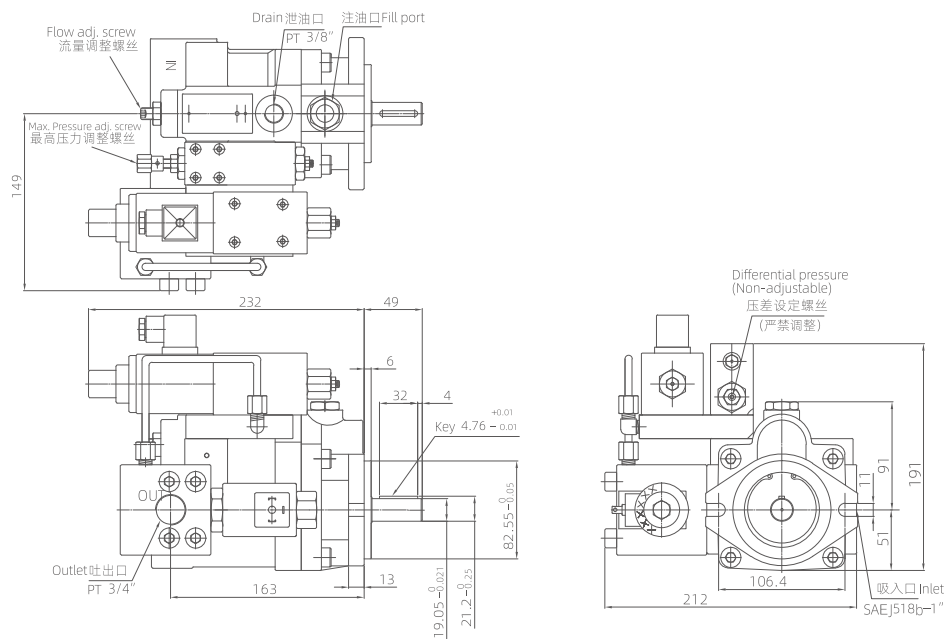


● P100-CL*-H*-F-R-TYPE电控两段压力两段流量控制型 Electric 2-stage pressure control & Flow control

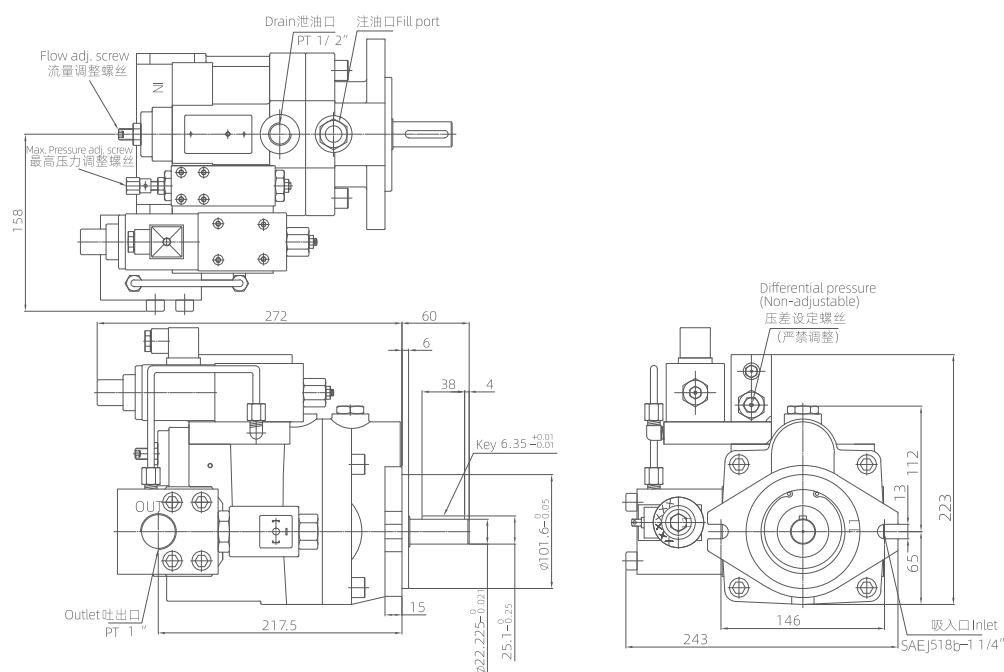


安装尺寸 Dimension

● P16/22-HL*-EDPV-F-R-TYPE电-液比例负载敏感控制型 Electro-Hydraulic Proportional Load-Sensitive Control

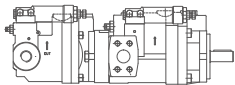


● P36/46-HL*-EDPV-F-R-TYPE电-液比例负载敏感控制型 Electro-Hydraulic Proportional Load-Sensitive Control



P系列双联泵订货型号

P-Product Series



PP	16	-A	3	-F	-R	-2A
01	02	03	04	05	06	07

双联变量柱塞泵-前泵型号表示

Double pumps- Shaft end pump model

01	双联变量柱塞泵 Double Variable volume piston pump
02	规格排量 Displacement 08: 8.0cm³/rev 16: 16.5cm³/rev 22: 22.0cm³/rev 36: 36.0cm³/rev 46: 46.0cm³/rev 70: 70.0cm³/rev 100: 100.0cm³/rev
03	控制方式 (详情查看B01~B36) Control option (Details are shown on page B01~B36) A: 压力补偿控制型 A: Pressure Compensator Type B: 遥控压力补偿控制型 B: Remote pressure control BH: 遥控+高压保护控制型 BH: Remote Pressure Control + High Pressure Protection D: 电磁低压卸载+压力补偿控制型 D: Low tension unloading + Pressure control E: 电控两段压力控制型 E: Electric 2-stage pressure control HL: 负载敏感控制型 HL: Load-sensing Control
04	压力调节范围 Pressure Adjusting Range 0: 15~45bar 1: 20~75bar 2: 25~145bar 3: 30~215bar
05	安装方式 Mounting F: 法兰安装 F: Flange Mounting L: 脚架安装 L: Foot stand Mounting
06	旋转方向 Rotation direction (View from the shaft end) R: 顺时针 R: Clockwise L: 逆时针 L: Counter clockwise
07	后端连接型式 Thru-drive 2A: 2固定孔 Ø82.55连接盘 2A: SAE ApØ82.55 2B: 2固定孔 Ø101.6连接盘 2B: SAE BpØ101.6

P16	-A	3	-S
01	02	03	04

双联变量柱塞泵-后泵型号表示

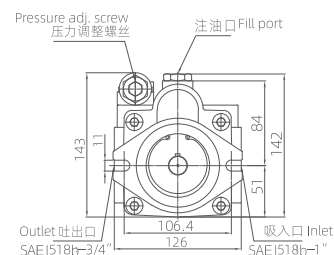
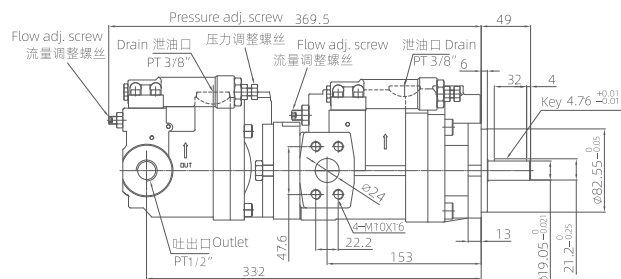
Double pumps- Cover end pump model

01	变量柱塞泵 (双联泵后泵) Variable volume piston pump (Cover end pump)
02	规格排量 Displacement 08: 8.0cm³/rev 16: 16.5cm³/rev 22: 22.0cm³/rev 36: 36.0cm³/rev 46: 46.0cm³/rev 70: 70.0cm³/rev 100: 100.0cm³/rev
03	控制方式 (详情查看B01~B16) Control option (Details are shown on page B01~B16) A: 压力补偿控制型 A: Pressure Compensator Type B: 遥控压力补偿控制型 B: Remote pressure control BH: 遥控+高压保护控制型 BH: Remote Pressure Control + High Pressure Protection D: 电磁低压卸载+压力补偿控制型 D: Low tension unloading + Pressure control E: 电控两段压力控制型 E: Electric 2-stage pressure control HL: 负载敏感控制型 HL: Load-sensing Control
04	压力调节范围 Pressure Adjusting Range 0: 15~45bar 1: 20~75bar 2: 25~145bar 3: 30~215bar
05	轴伸型式 Shaft type K: 平键轴 K: Key S: 花键轴 S: Splind shaft

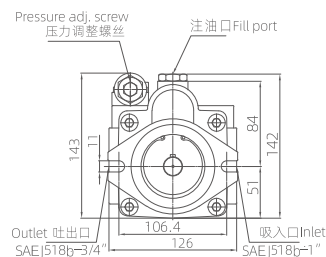
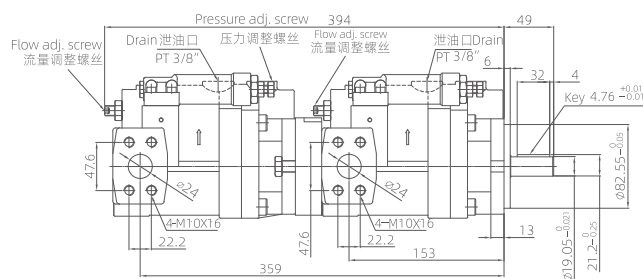
*1 压力调整范围
Pressure Adjusting Range
*2 更多参数请查阅A01页
For more parameters, please refer to page A01

安装尺寸 Dimension

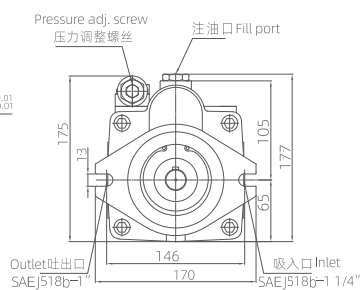
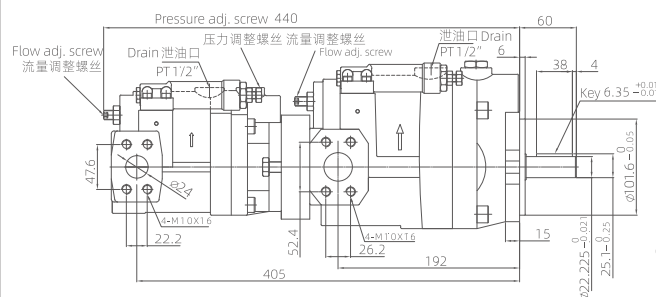
● PP16/PP22-A*-F-R-2A+P08-A*-S双联变量柱塞泵 Double Variable volume piston pump



● PP16/PP22-A*-F-R-2A+P16/P22-A*-S双联变量柱塞泵 Double Variable volume piston pump

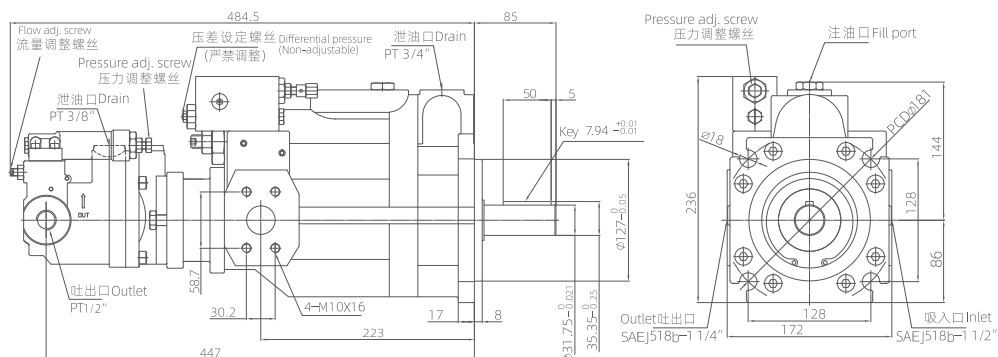


● PP36/PP46-A*-F-R-2A+P16/P22-A*-S双联变量柱塞泵 Double Variable volume piston pump

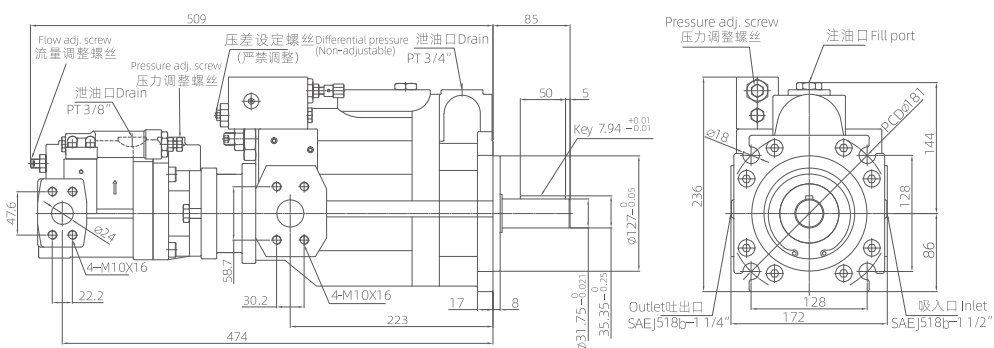


安装尺寸 Dimension

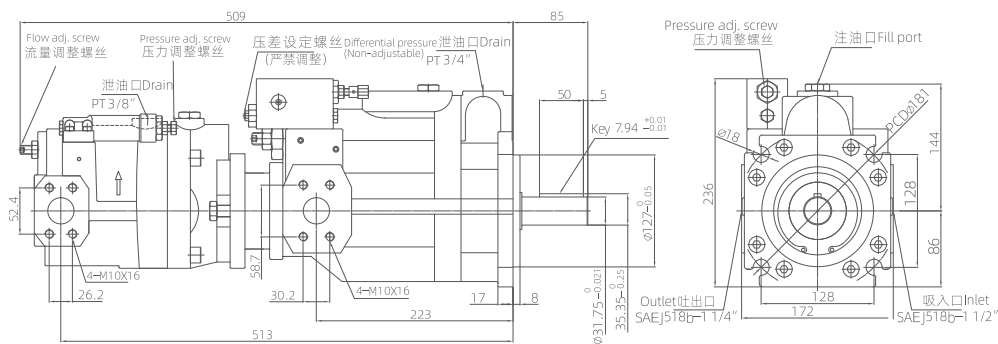
● PP70-A*-F-R-2A+P08-A*-S双联变量柱塞泵 Double Variable volume piston pump



● PP70-A*-F-R-2A+P16/P22-A*-S双联变量柱塞泵 Double Variable volume piston pump

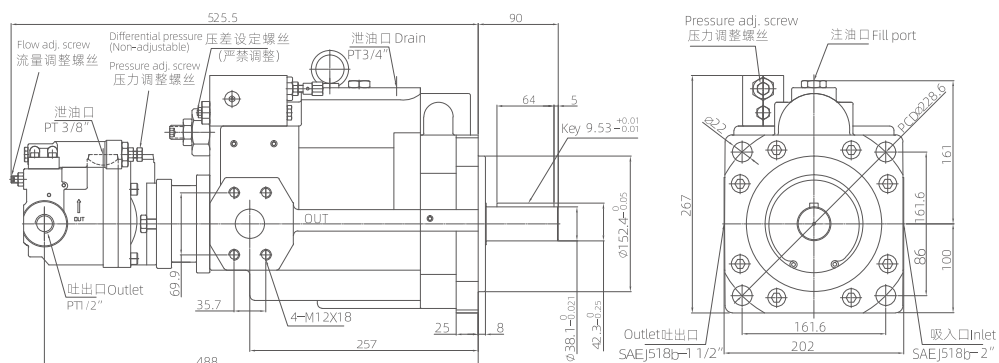


● PP70-A*-F-R-2A+P36/P46-A*-S双联变量柱塞泵 Double Variable volume piston pump

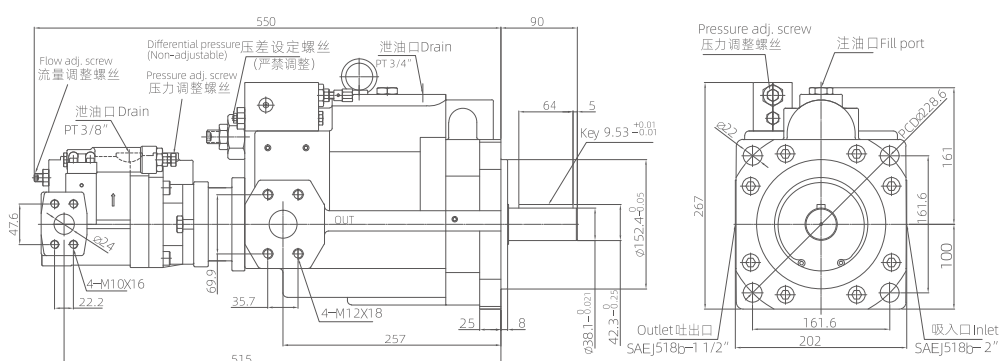


Dimension

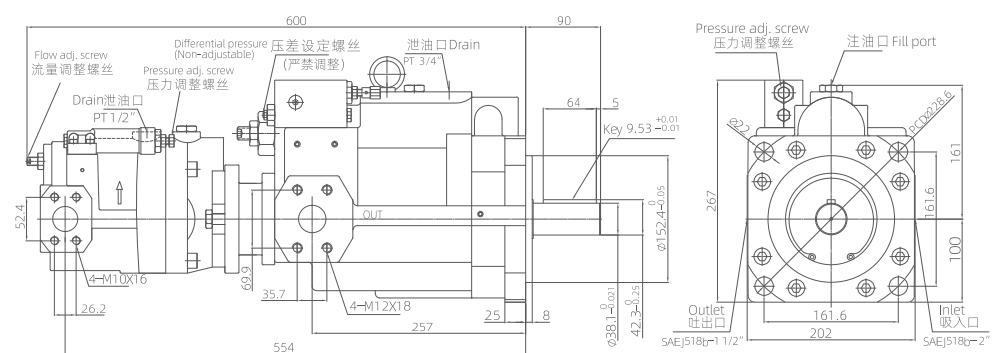
- PP100-A*-F-R-2A+P08-A*-S双联变量柱塞泵
Double Variable volume piston pump



- PP100-A*-F-R-2A+P16/P22-A*-S双联变量柱塞泵
Double Variable volume piston pump



- PP100-A*-F-R-2A+P36/P46-A*-S双联变量柱塞泵
Double Variable volume piston pump



V-series



V系列变量柱塞泵 V-series piston pump

- 斜盘式轴向柱塞泵，容积效率高，快速截流，减少输入功率；经济高效，压力、流量大小控制灵敏度高，稳定可靠；发热少噪音低，功率损失小，油液温升慢，可使用较小的油箱；扩展性超强，较丰富的控制方式和组合，有效简化油路设计。
- Swash plate axial piston pumps with high volumetric efficiency, quick cut-off and reduced power input; Economical and efficient, high sensitivity of pressure and flow control, stable and reliable; Low heat generation, low noise, minimal power loss, slow oil temperature rise, smaller tanks can be used; Superb extensibility, various control methods and combinations, effectively simplify the design of the oil circuit.

-
- 排量：15cm³/rev~69.7cm³/rev
压力：额定压力21MPa，最高压力28MPa
转速：最高1800r/min
 - Displacement: 15.8cm³/rev~22.2cm³/rev
Pressure: Rated up to 21Mpa, Max 28Mpa
Speed: Maximum up to 1800r/min

G01

V 订货型号
V-Product Series

V	15	A	3	R				10	X	
01	02	03	04	05	06	07	08	09	10	11
01	V系列变量柱塞泵 V-series piston pump									
02	规格排量 Displacement									
	15: 15cm³/rev									
	18: 18cm³/rev									
	23: 23.0cm³/rev									
	25: 25.0cm³/rev									
	38: 37.8cm³/rev									
	42: 42.0cm³/rev									
	50: 51.5cm³/rev									
	70: 69.7cm³/rev									
03	控制方式 (详情查看B01~B36) Control option (Details are shown on page B01~B36)									
	A: 压力补偿控制型 A: Pressure Compensator Type									
	G: 遥控压力补偿控制型 G: Remote pressure control									
	感应压力 Pressure									
	A: 低压: 7kg A: Low: 7kg									
	B: 中压: 14kg B: Mid: 14kg									
	C: 高压: 21kg C: High: 21kg									
	HL: 负载敏感控制型 HL: Load-Sensing									
	B: 无极变速, 外接油缸, 任意流量控制型 B: Multi-stage flow & Single-stage pressure control (with cylinder)									
	C: 两段压力两段流量控制型 C: 2-stage pressure & Flow control									
	CG: 遥控两段压力两段流量控制型 CG: 2-stage pressure & Flow control + Remote									
	CR: 低压卸载+两段压力两段流量控制型 CR: 2-stage pressure & Flow control + Low tension unloading									
	D: 电磁低压卸载+压力补偿控制型 D: Low tension unloading + Pressure control									
	DG: 电磁低压卸载+遥控压力补偿控制型 DG: Low tension unloading + Pressure control + Remote									
	E: 电控两段压力控制型 E: Electric 2-stage pressure control									
	EG: 电控两段压力+遥控压力补偿控制型 EG: Electric 2-stage pressure control + Remote									
	F: 电控两段压力两段流量控制型 F: Electric 2-stage pressure control & Flow control									
	FG: 电控两段压力两段流量+遥控压力控制型 FG: Electric 2-stage pressure control & Flow control + Remote									
	GM: 遥控型调节器 (含NG6接口) GM: Remote pressure compensator with NG6 interface									
	GJ: 遥控型调节器+比例压力控制型 GJ: Remote pressure compensator + Proportional pressure valve									
	GR: 遥控型调节器+电控卸载控制型 GR: Remote pressure compensator + Electrical unloading									
	GB: 遥控型调节器+电控两段压力控制型 GB: Remote pressure compensator + 2-stage pressure control									
	GC: 遥控型调节器+电控卸载+两段压力型 GC: Remote + Electrical unloading + 2-stage pressure control									
04	压力调节范围 Pressure Adjusting Range									
	1: 8~70bar									
	2: 15~140bar									
	3: 20~210bar									
	4: 20~250bar									
05	旋转方向 Rotation direction (View from the shaft end)									
	R: 顺时针 R: Clockwise									
	L: 逆时针 L: Counter clockwise									
06	油口方向 Port position									
	无: 两侧油口 None: Side port									
	B: 后方油口 (法兰型) B: Side port									
07	轴伸型式 Shaft Extension									
	无: 平键轴 None: Key									
	S: 花键轴 S: Splind shaft									
08	电压 Voltage									
	无: 无电压 None: None									
	A: AC100V (50/60HZ)									
	B: AC110V (60HZ)									
	C: AC220V (50/60HZ)									
	D: AC220V (60HZ)									
	E: DC 12V									
09	配管牙型 Piping Tooth Type									
	10: PT (RC)									
10	规格代号 Specification code									
	X: 标准品 X: Standard									
11	密封圈 Seals									
	无: 丁腈橡胶 None: NBR									
	V: 氟橡胶 V: VITON									

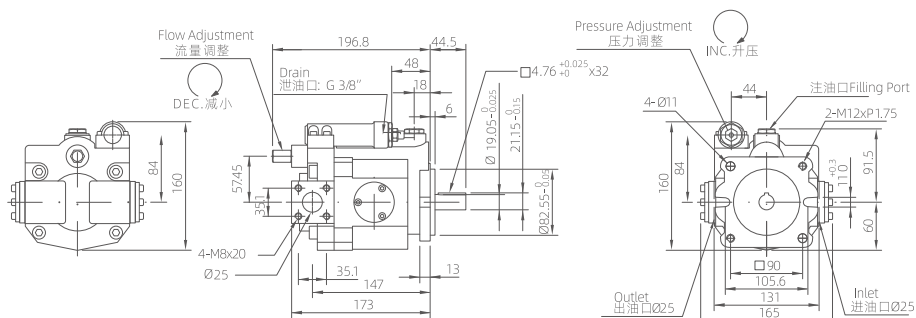
*更多参数请查阅A01页
For more parameters, please refer to page A01

安装尺寸

Dimension

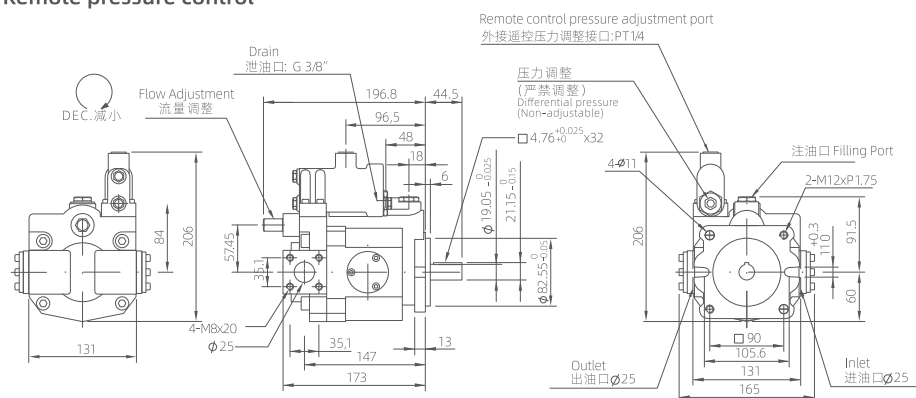
● V15A/V18A压力补偿控制型

Pressure Compensator Type



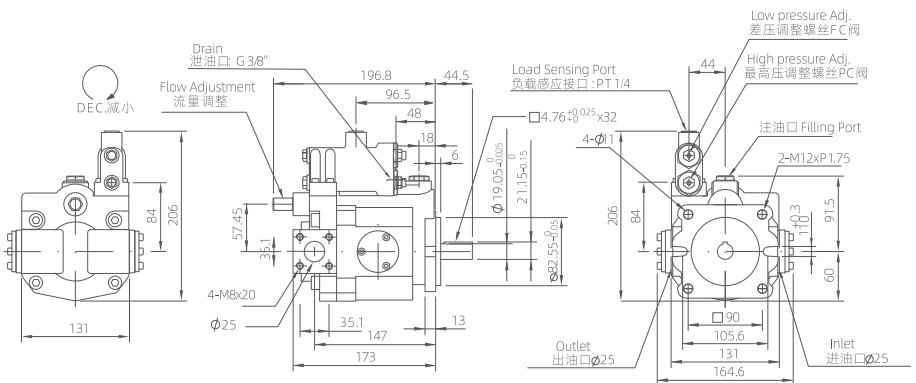
● V15G/V18G遥控压力补偿控制型

Remote pressure control



● V15HL/V18HL负载敏感控制型

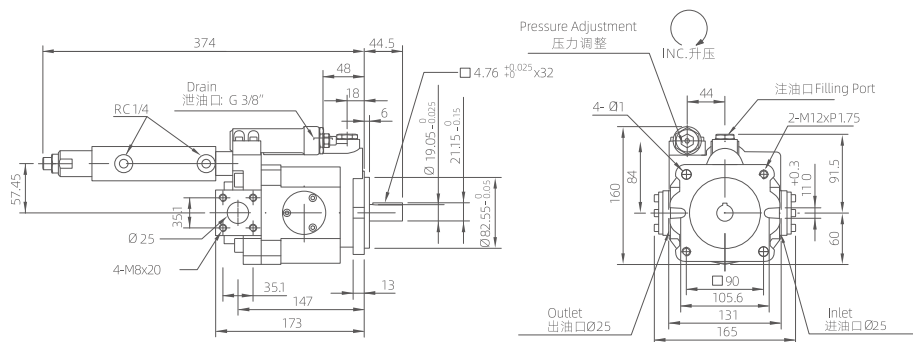
Load-Sensing



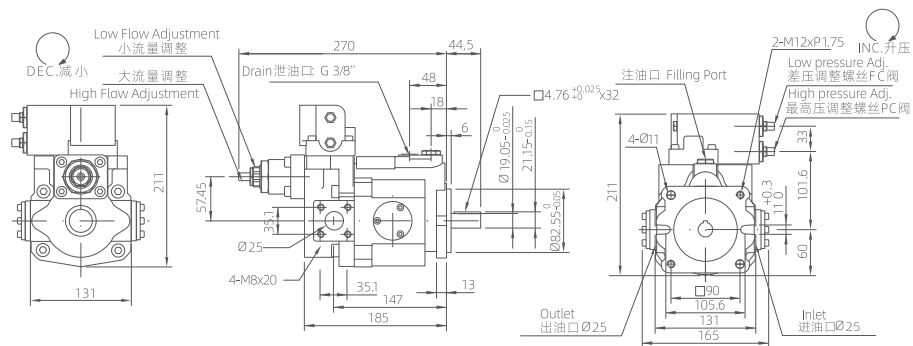
安装尺寸

Dimension

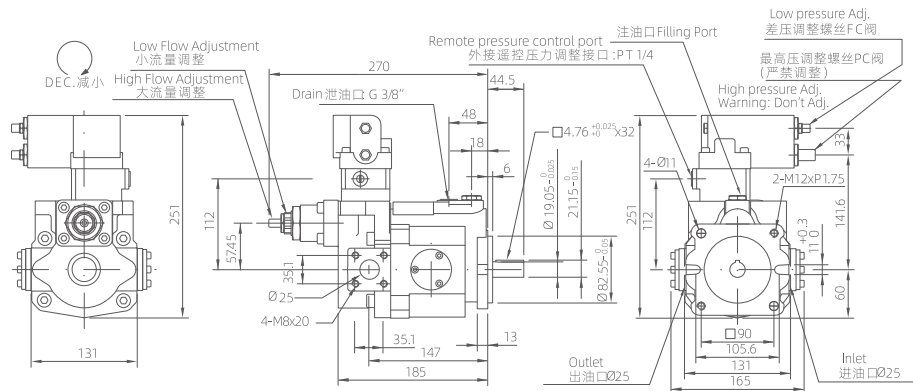
● V15B/V18B无级变速控制型 Muti-stage flow & Singe-stage pressure control (with cylinder)



● V15C/V18C两段压力两段流量控制型 2-stage pressure & Flow control



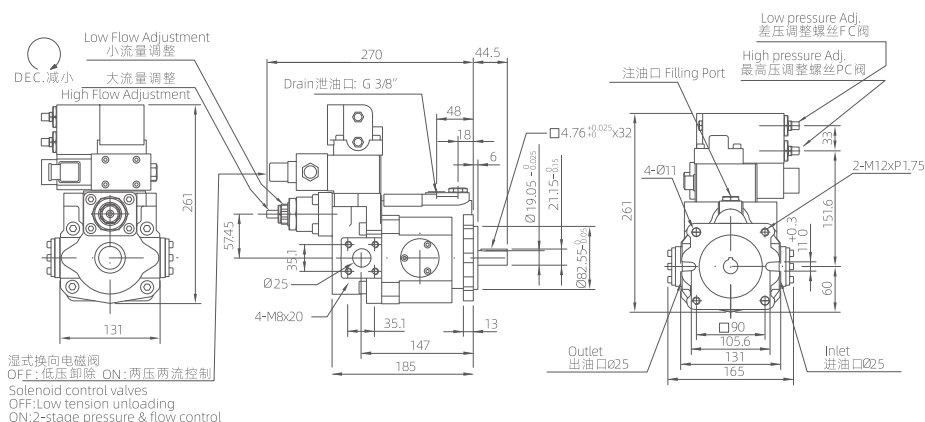
● V15CG/V18CG遥控两段压力两段流量控制型 Low tension unloading + Pressure control + Remote



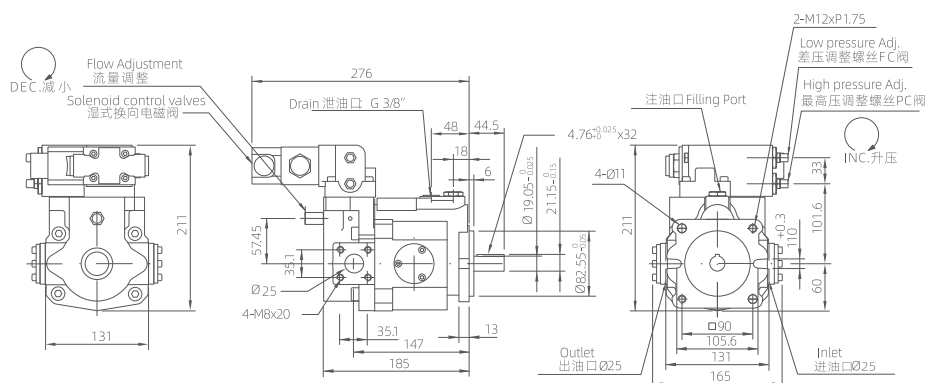
安装尺寸

Dimension

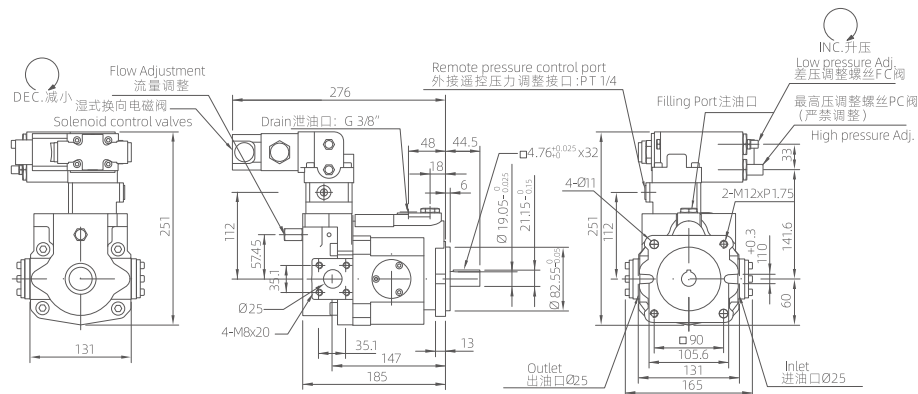
● V15CR/V18CR低压卸载+两段压力两段流量控制型 2-stage pressure & Flow control + Low tension unloading



● V15D/V18D电磁低压卸载+压力补偿控制型 Low tension unloading + Pressure control



● V15DG/V18DG电磁低压卸载+遥控压力补偿控制型 Low tension unloading + Pressure control + Remote

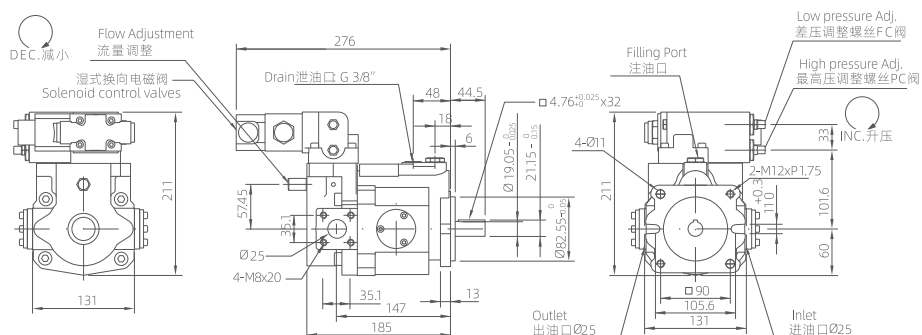


安装尺寸

Dimension

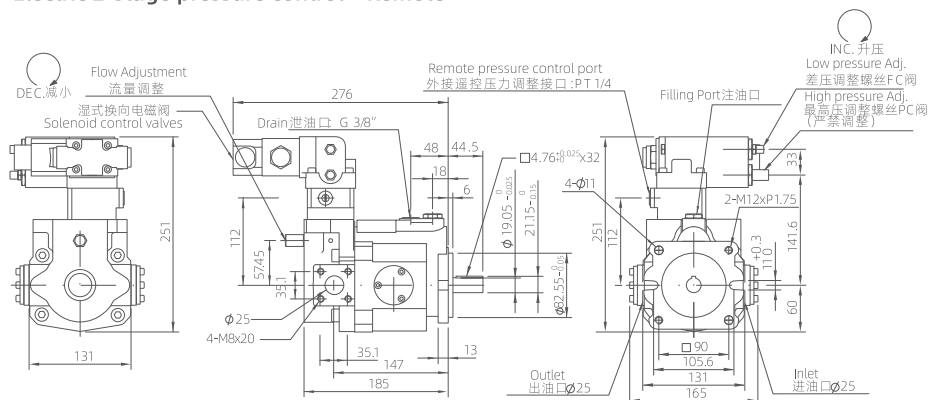
● V15E/V18E电控两段压力控制型

Electric 2-stage pressure control



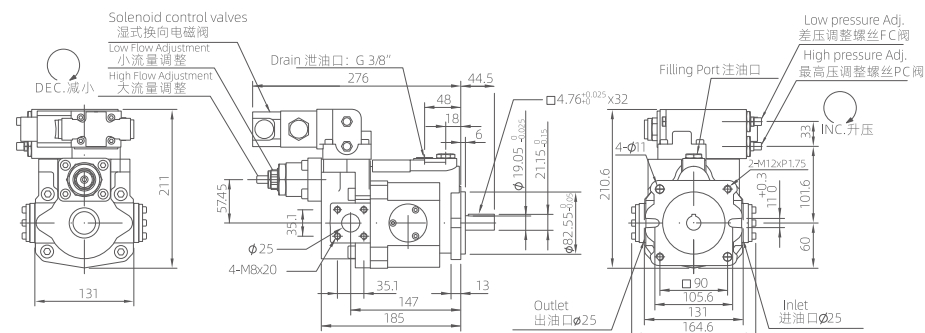
● V15EG/V18EG电控两段压力+遥控压力补偿控制型

Electric 2-stage pressure control + Remote



● V15F/V18F电控两段压力两段流量控制型

Electric 2-stage pressure control & Flow control

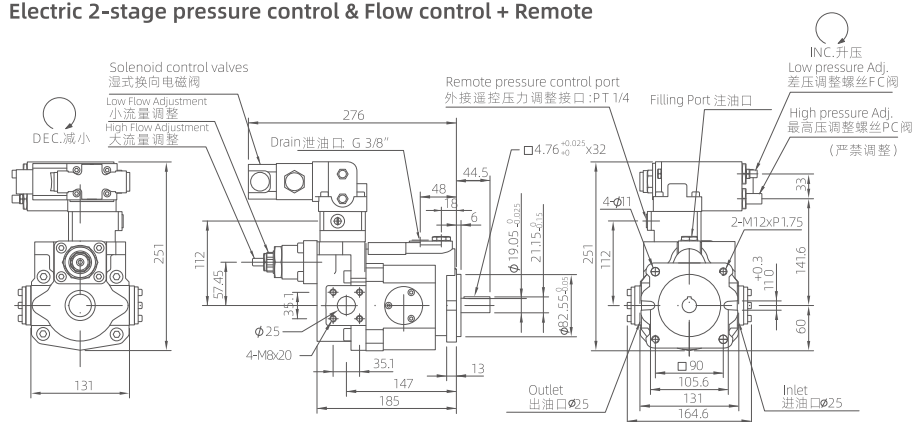


安装尺寸

Dimension

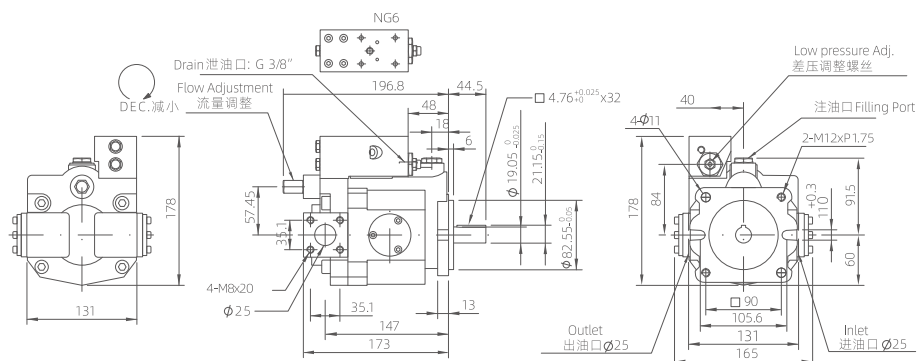
● V15FG/V18FG电控两段压力两段流量+遥控压力补偿控制型

Electric 2-stage pressure control & Flow control + Remote



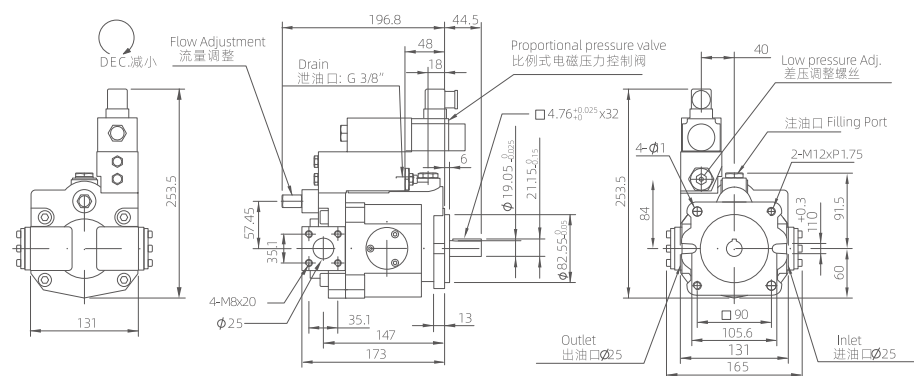
● V15GM/V18GM遥控型调节器 (含NG6接口)

Remote pressure compensator with NG6 interface



● V15GJ/V18GJ遥控型调节器+比例压力控制型

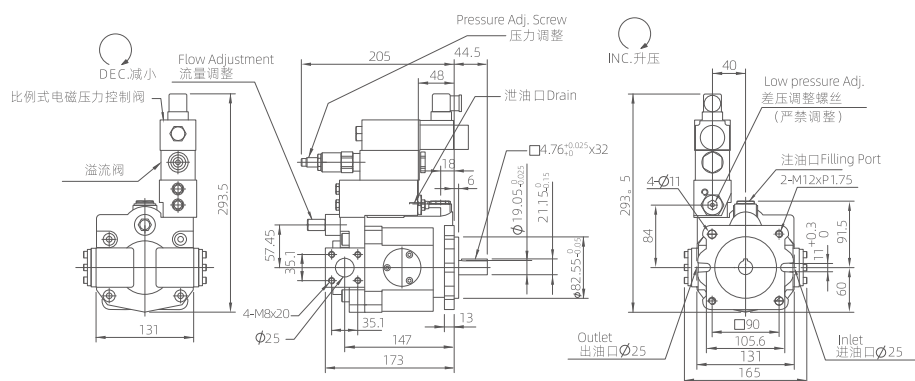
Remote pressure compensator + Proportional pressure valve



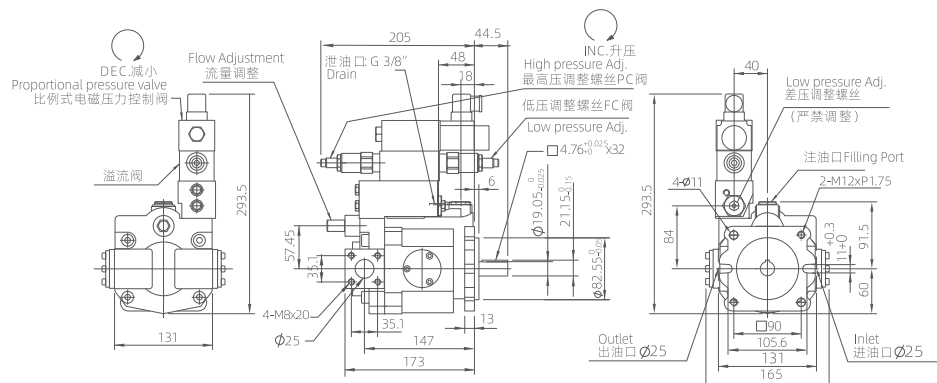
安装尺寸

Dimension

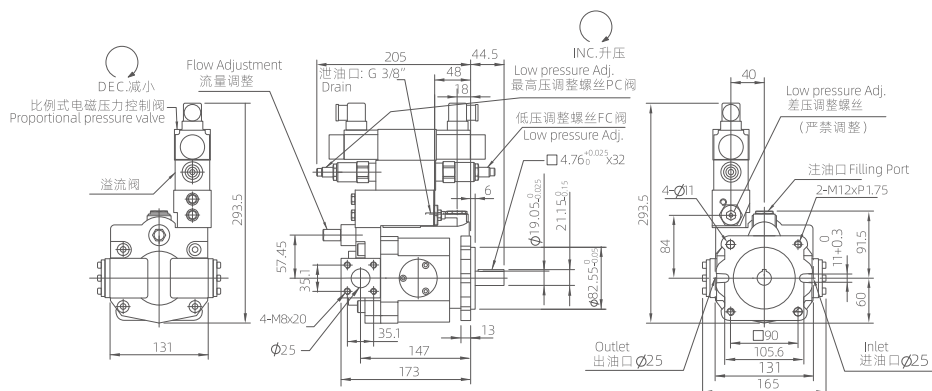
● V15GR/V18GR遥控调节器+电控卸载控制型 Remote pressure compensator + Electrical unloading



● V15GB/V18GB遥控调节器+电控两段压力控制型 Remote pressure compensator + 2-stage pressure control



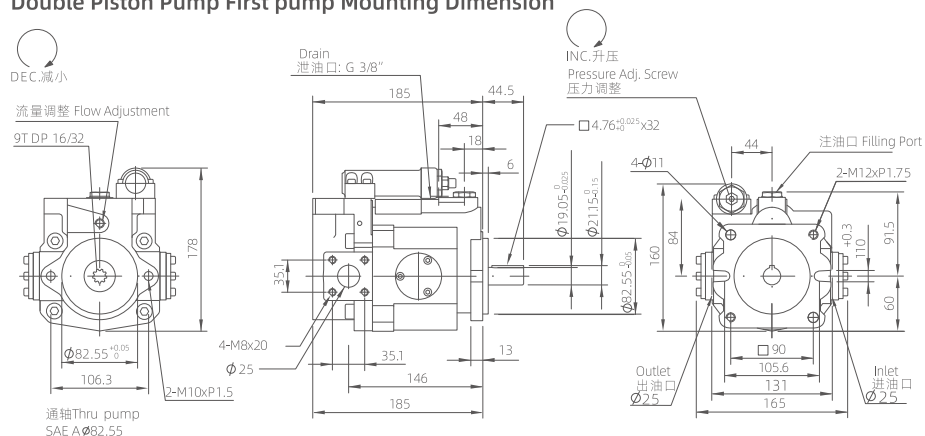
● V15GC/V18GC遥控调节器+电控卸载+两段压力控制型 Remote + Electrical unloading + 2-stage pressure control



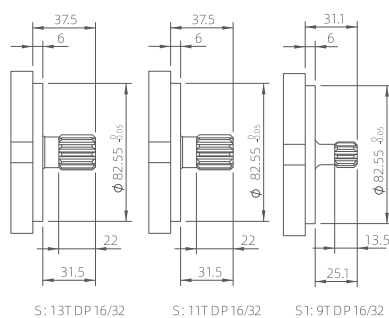
安装尺寸

Dimension

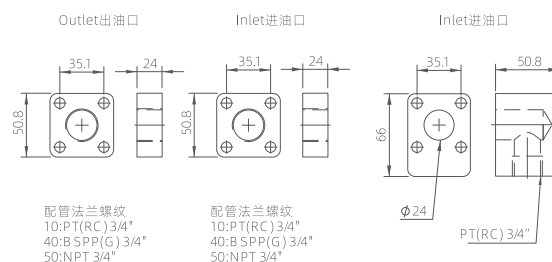
● V15/V18双联柱塞泵前泵安装尺寸
Double Piston Pump First pump Mounting Dimension



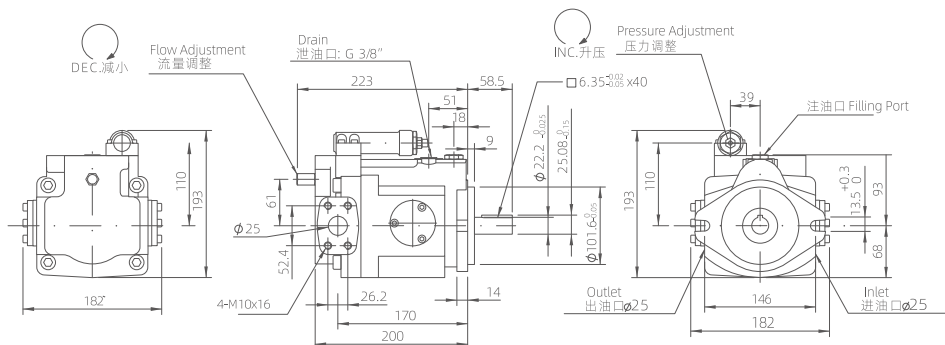
- V15/V18 梅花轴心型式
Splined shaft type



- V15/V18 进出油法兰
Inlet/Outlet port flange



- V23A/V25A压力补偿控制型
Pressure Compensator Type

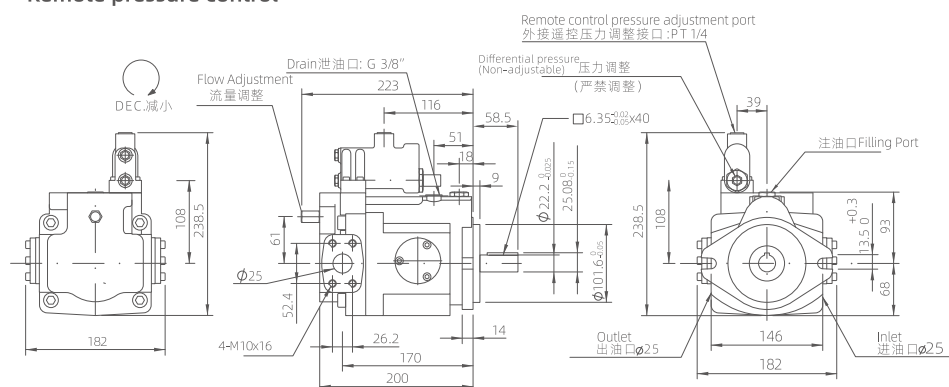


安装尺寸

Dimension

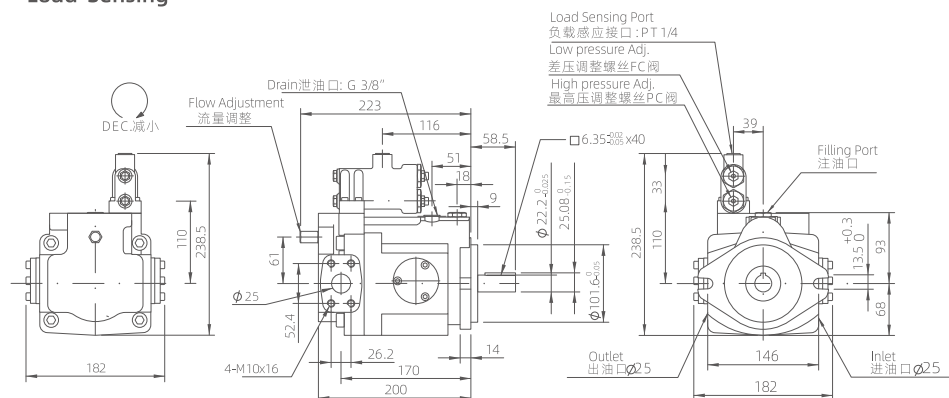
● V23G/V25G遥控压力补偿控制型

Remote pressure control



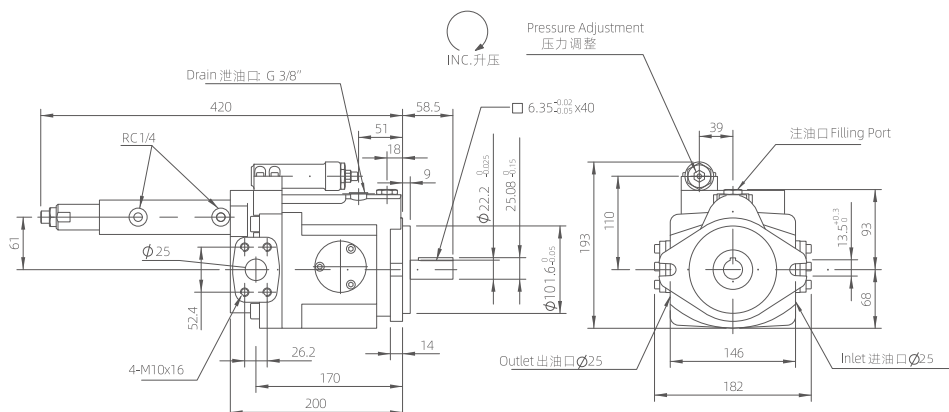
● V23HL/V25HL负载敏感控制型

Load-Sensing



● V23B/V25B无级变速控制型

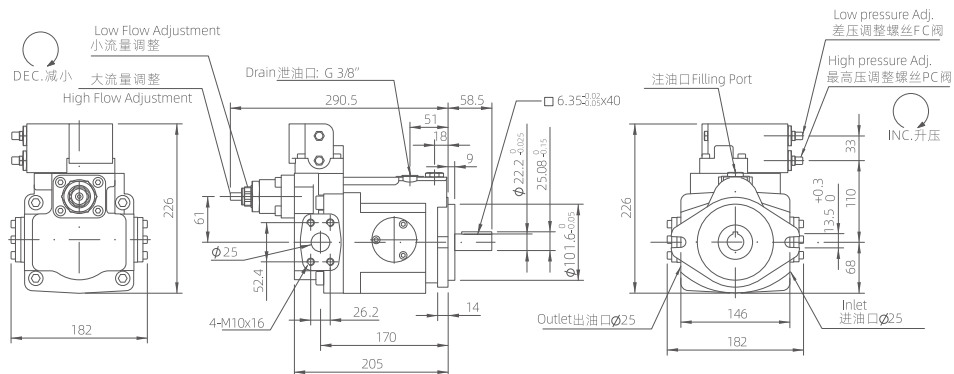
Muti-stage flow & Singe-stage pressure control (with cylinder)



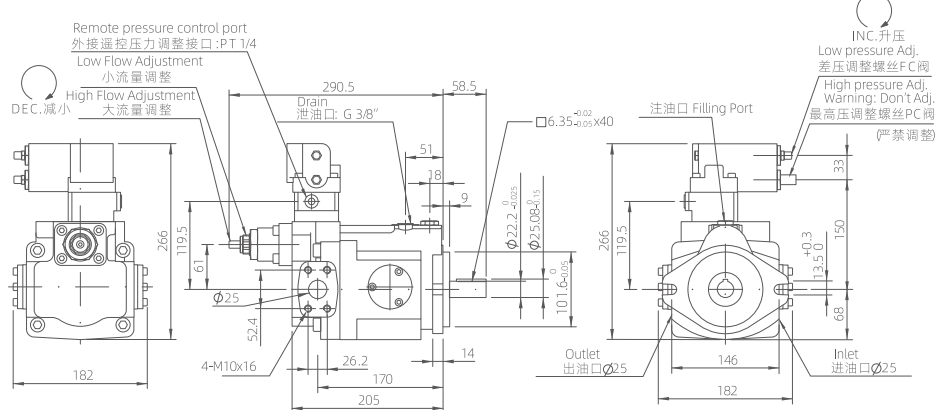
安装尺寸

Dimension

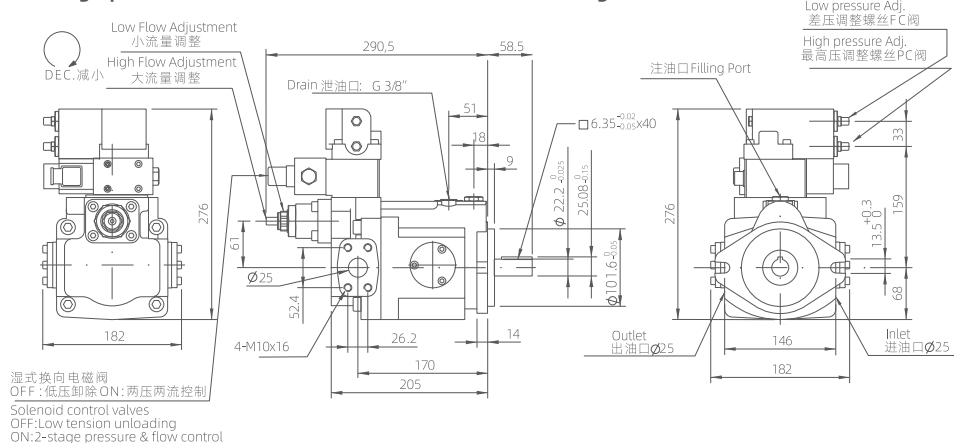
● V23C/V25C两段压力两段流量控制型 2-stage pressure & Flow control



● V23CG/V25CG遥控两段压力两段流量控制型 Low tension unloading + Pressure control + Remote



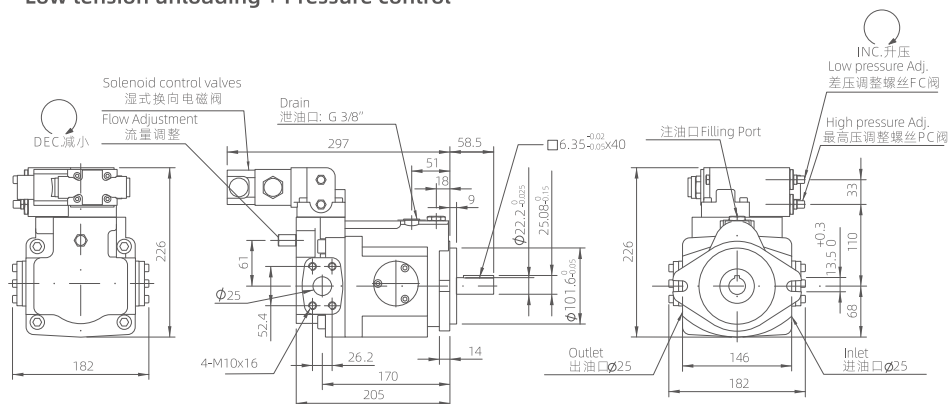
● V23CR/V25CR低压卸载+两段压力两段流量控制型 2-stage pressure & Flow control + Low tension unloading



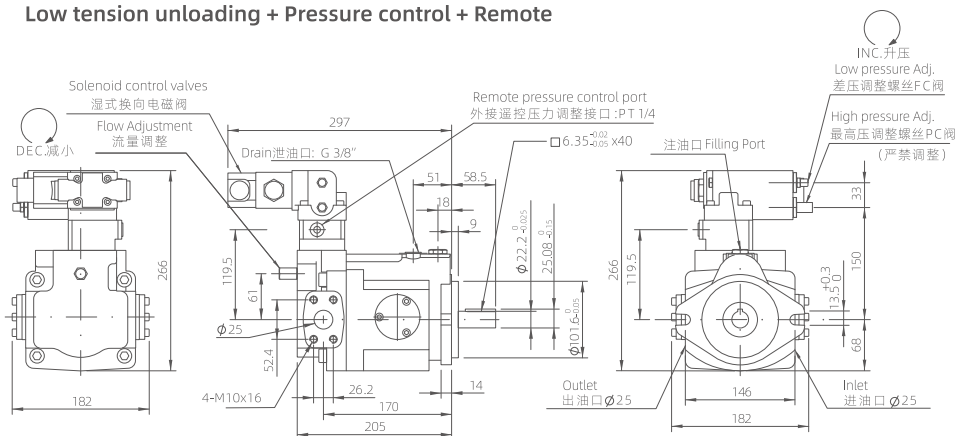
安装尺寸

Dimension

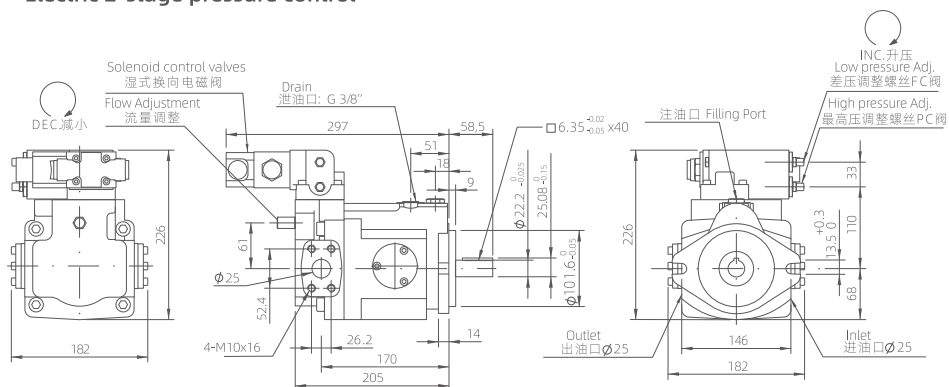
● V23D/V25D电磁低压卸载+压力补偿控制型 Low tension unloading + Pressure control



● V23DG/V25DG电磁低压卸载+遥控压力补偿控制型 Low tension unloading + Pressure control + Remote



● V23E/V25E电控两段压力控制型 Electric 2-stage pressure control

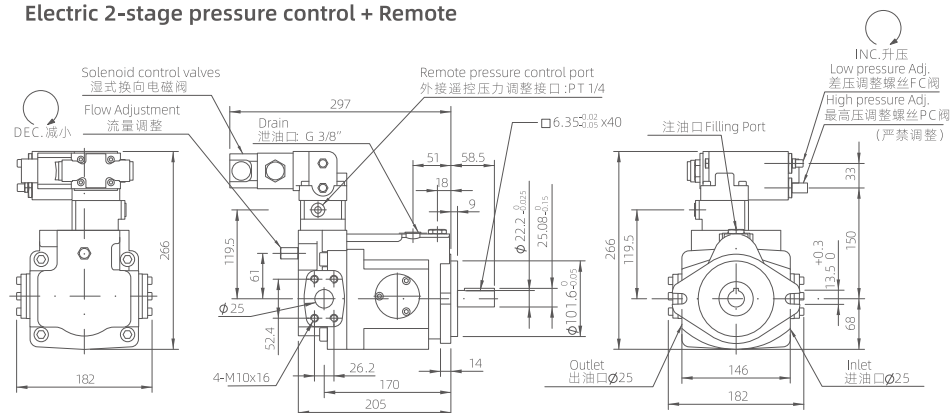


安装尺寸

Dimension

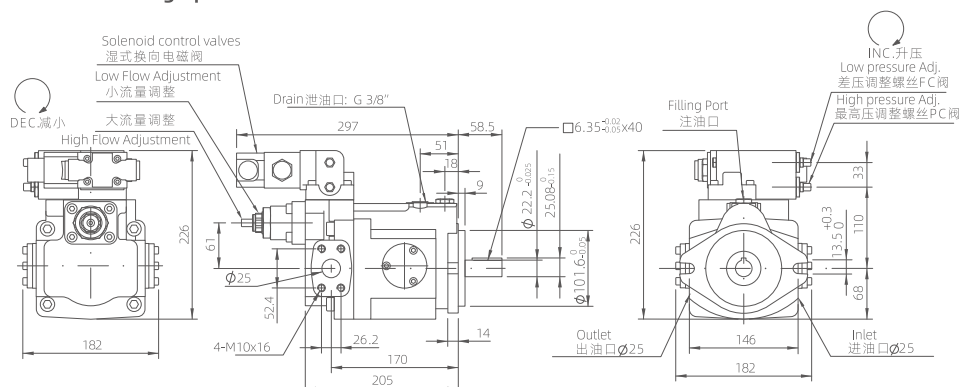
● V23EG/V25EG电控两段压力+遥控压力补偿控制型

Electric 2-stage pressure control + Remote



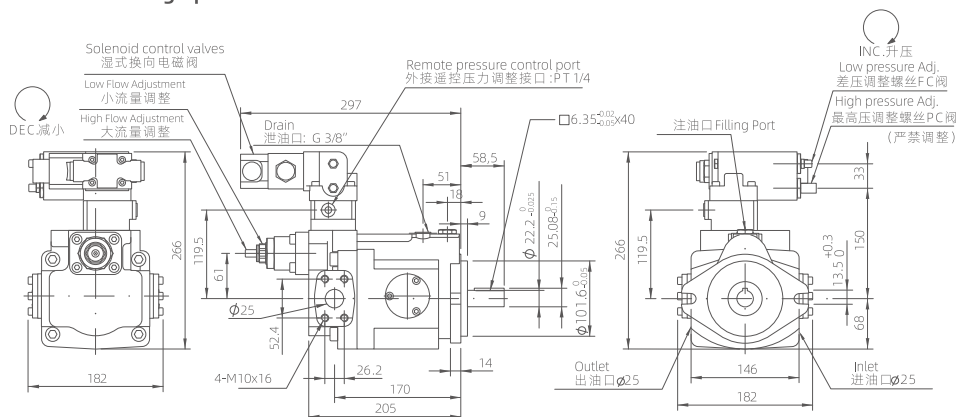
● V23F/V25F电控两段压力两段流量控制型

Electric 2-stage pressure control & Flow control



● V23FG/V25FG电控两段压力两段流量+遥控压力补偿控制型

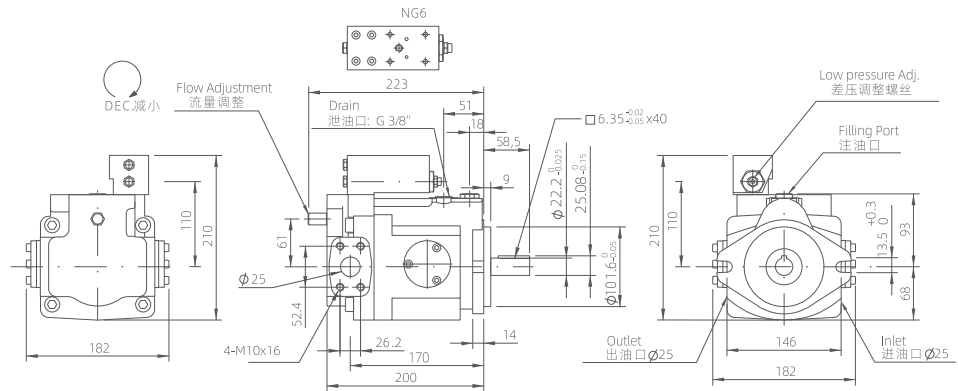
Electric 2-stage pressure control & Flow control + Remote



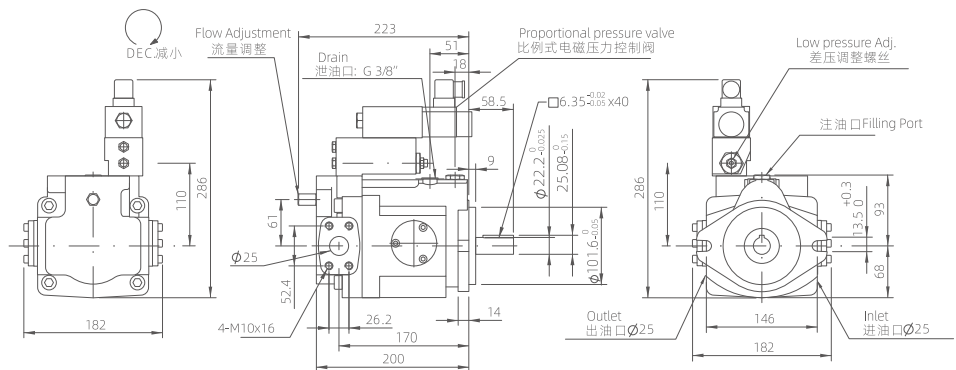
安装尺寸

Dimension

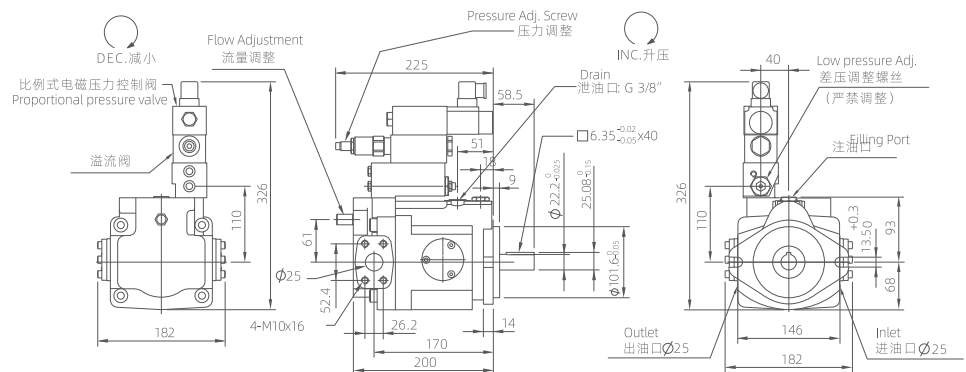
- V23GM/V25GM遥控调节器 (含NG6接口)
Remote pressure compensator with NG6 interface



- V23GJ/V25GJ遥控型调节器+比例压力控制型
Remote pressure compensator + Proportional pressure valve



- V23GR/V25GR遥控调节器+电控卸载控制型
Remote pressure compensator + Electrical unloading

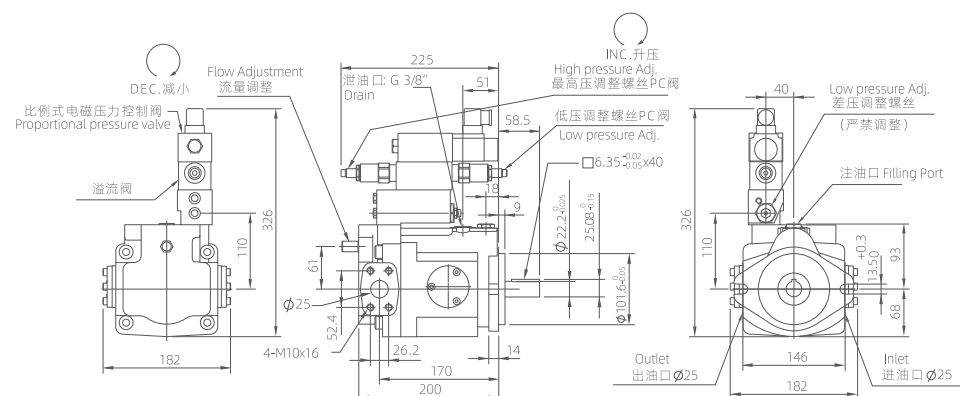


安装尺寸

Dimension

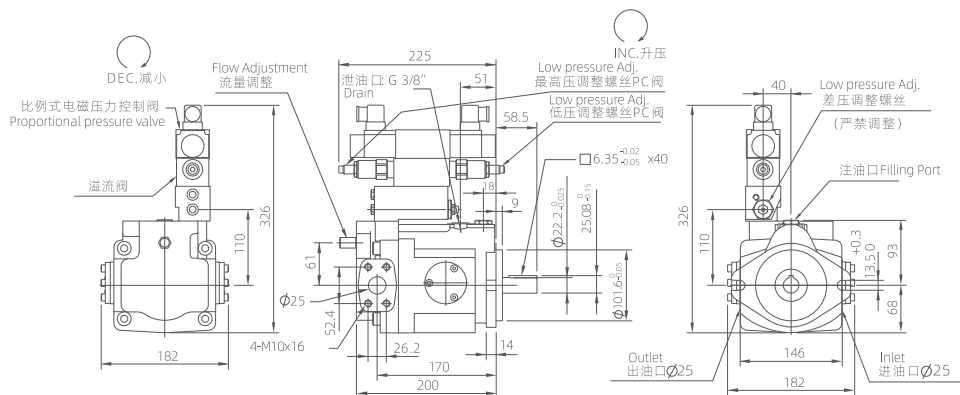
● V23GB/V25GB遥控调节器+电控两段压力控制型

Remote pressure compensator + 2-stage pressure control



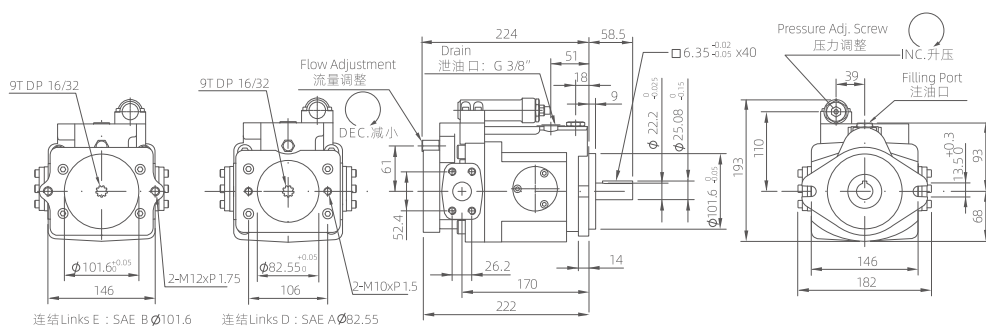
● V23GC/V25GC遥控调节器+电控卸载+两段压力控制型

Remote + Electrical unloading + 2-stage pressure control



● V23/V25双联柱塞泵前泵

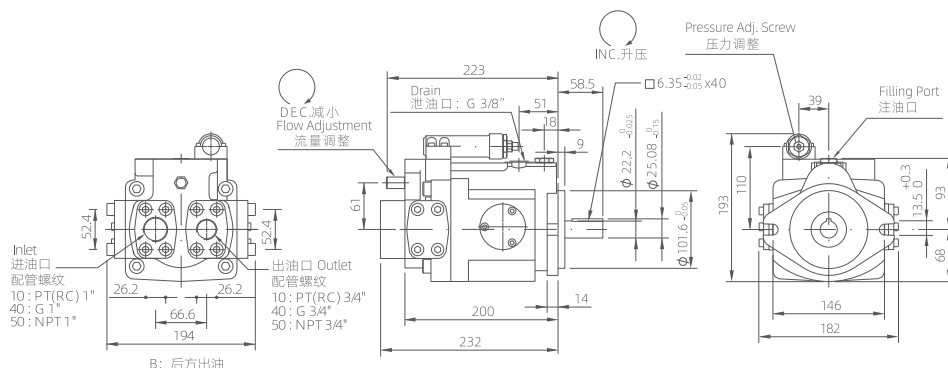
Double Piston Pump First pump Mounting Dimension



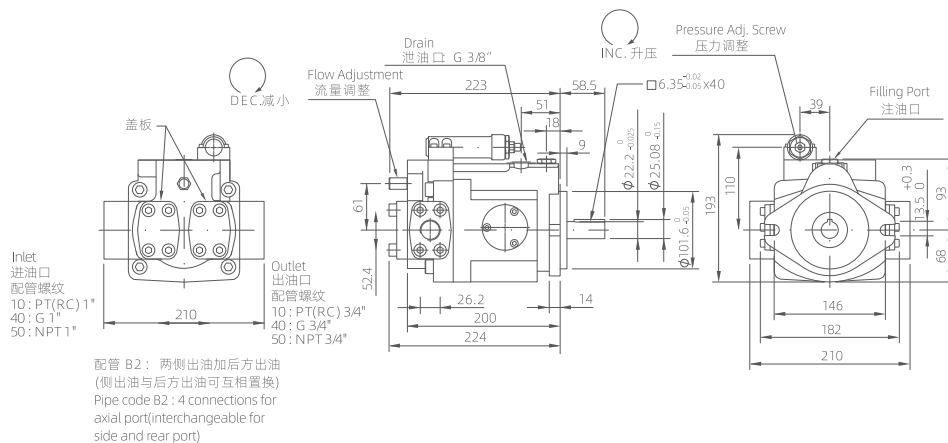
安装尺寸

Dimension

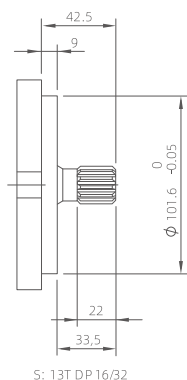
● V23/V25后方出油 Rear port



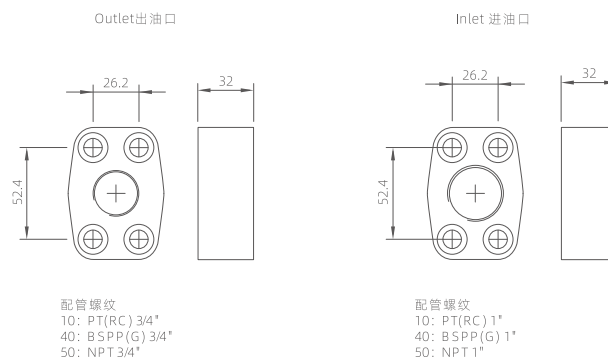
● V23/V25两侧出油+后方出油 4 Connections for rear port



● V23/V25梅花式轴心 Splined shaft type

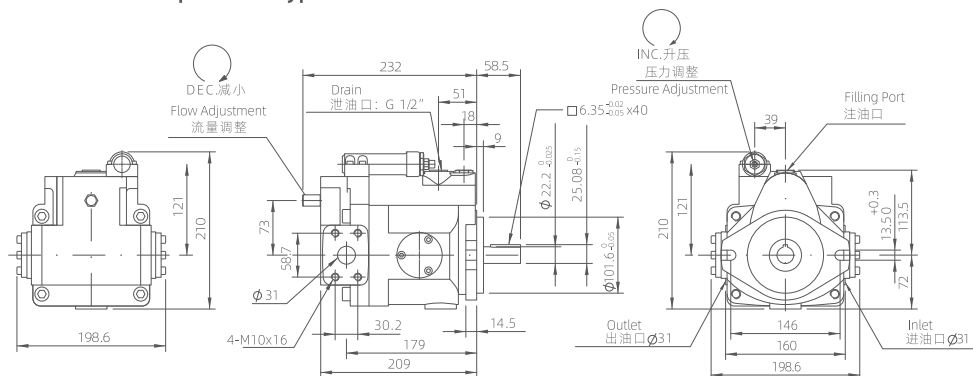


● V23/V25进出口法兰 Inlet/Outlet port flange

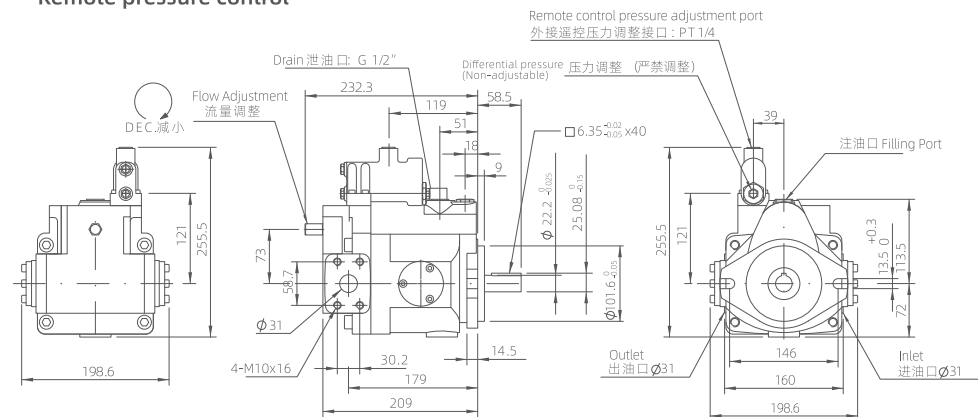


安装尺寸 Dimension

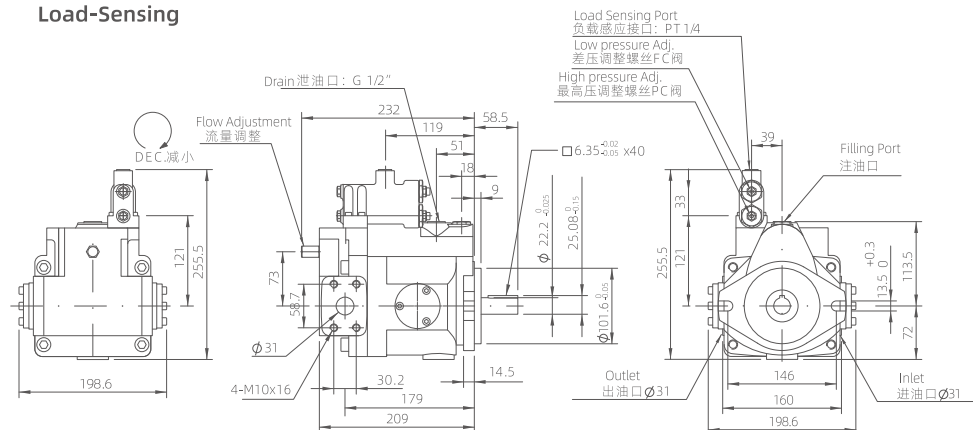
● V38A/V42A压力补偿控制型 Pressure Compensator Type



● V38G/V42G遥控压力补偿控制型 Remote pressure control



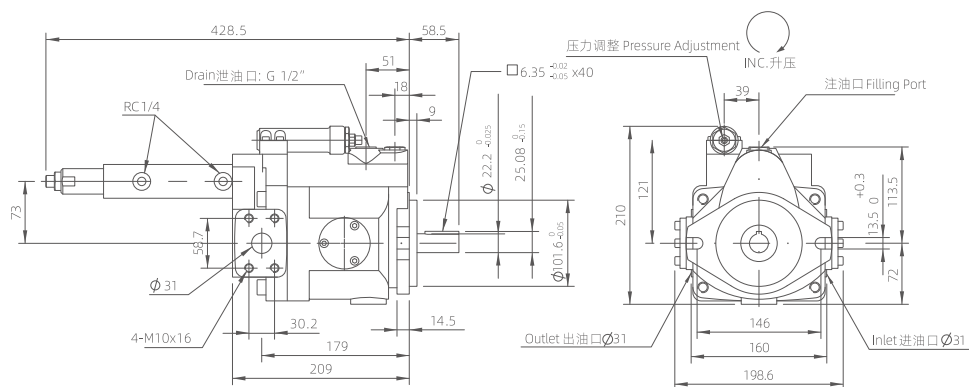
● V38HL/V42HL负载敏感控制型 Load-Sensing



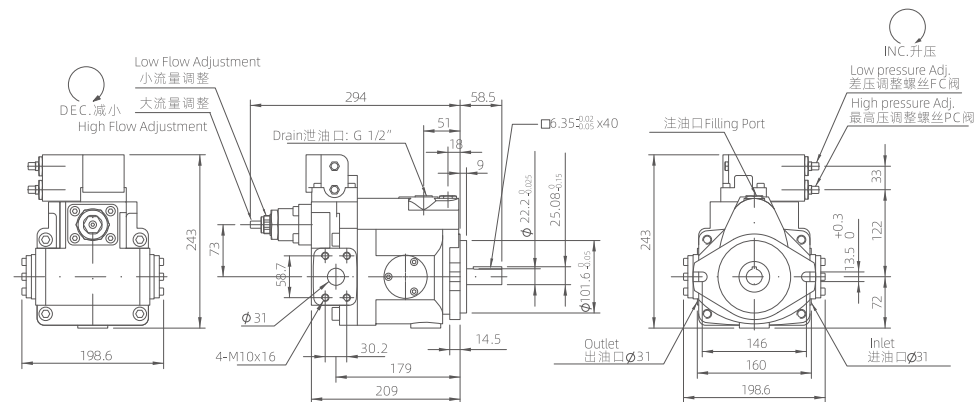
安装尺寸

Dimension

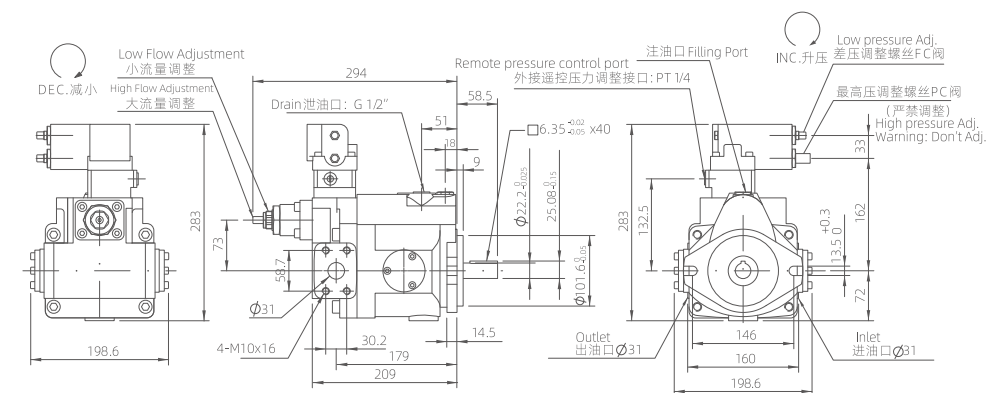
● V38B/V42B无级变速控制型 Multi-stage flow & Single-stage pressure control (with cylinder)



● V38C/V42C两段压力两段流量控制型 2-stage pressure & Flow control



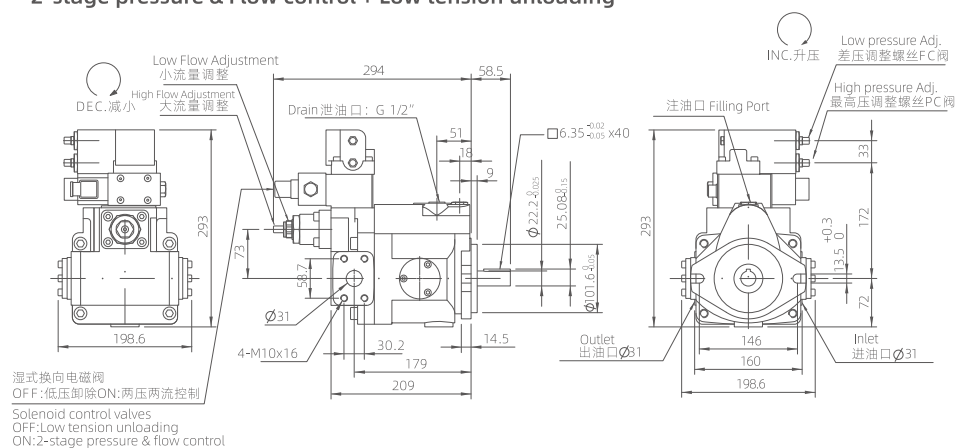
● V38CG/V42CG遥控两段压力两段流量控制型 Low tension unloading + Pressure control + Remote



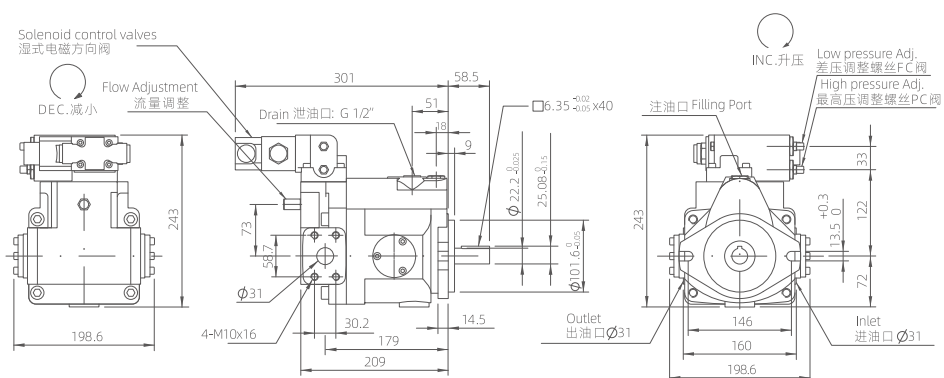
安装尺寸

Dimension

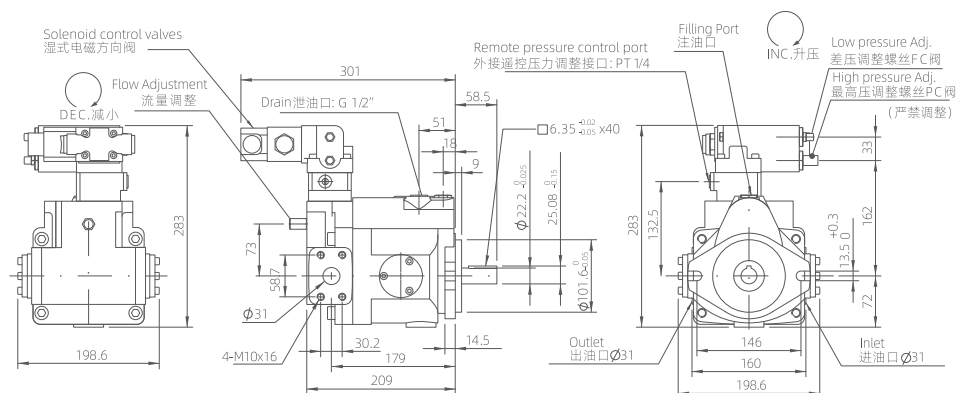
- **V38CR/V42CR低压卸载+两段压力两段流量控制型**
2-stage pressure & Flow control + Low tension unloading



- **V38D/V42D电磁低压卸载+压力补偿控制型**
Low tension unloading + Pressure control



- V38DG/V42DG电磁低压卸载+遥控压力补偿控制型
Low tension unloading + Pressure control + Remote

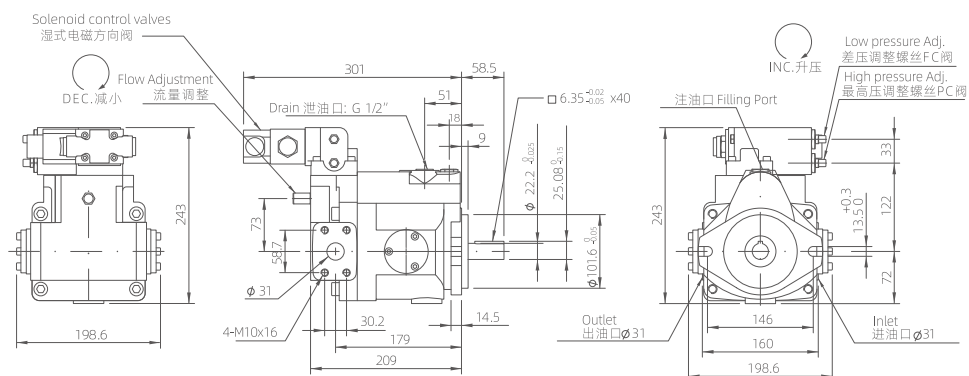


安装尺寸

Dimension

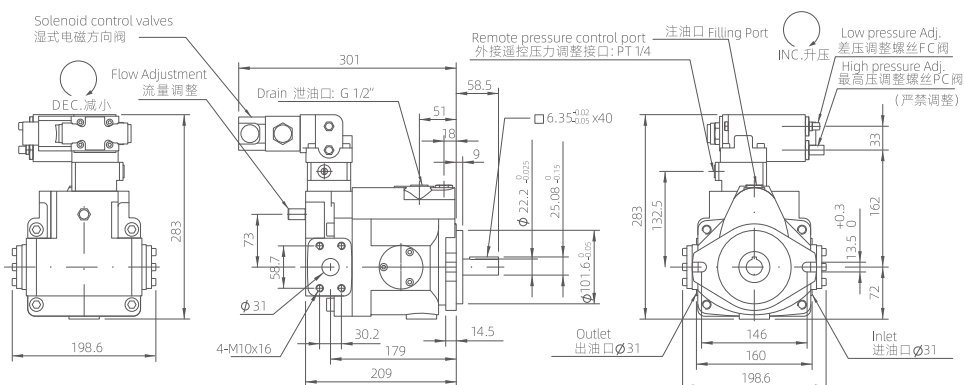
● V38E/V42E电控两段压力控制型

Electric 2-stage pressure control



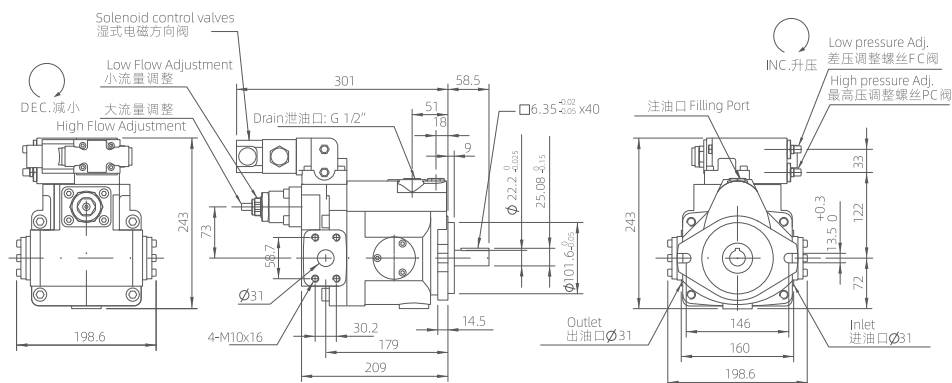
● V38EG/V42EG电控两段压力+遥控压力补偿控制型

Electric 2-stage pressure control + Remote



● V38F/V42F电控两段压力两段流量控制型

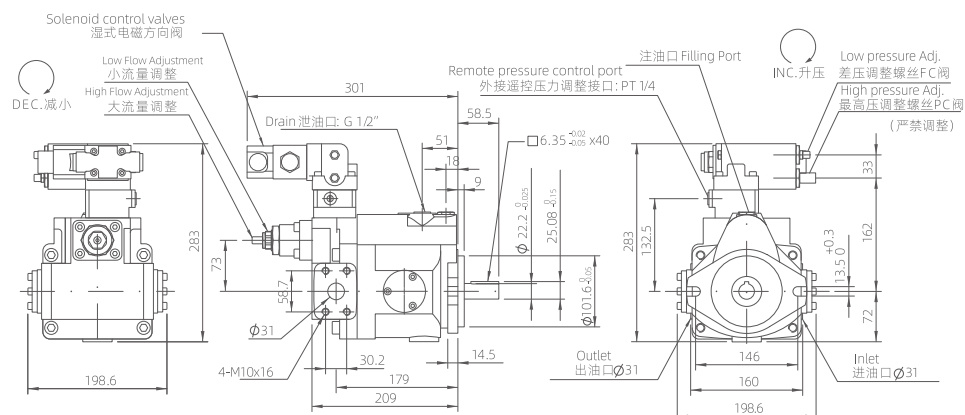
Electric 2-stage pressure control & Flow control



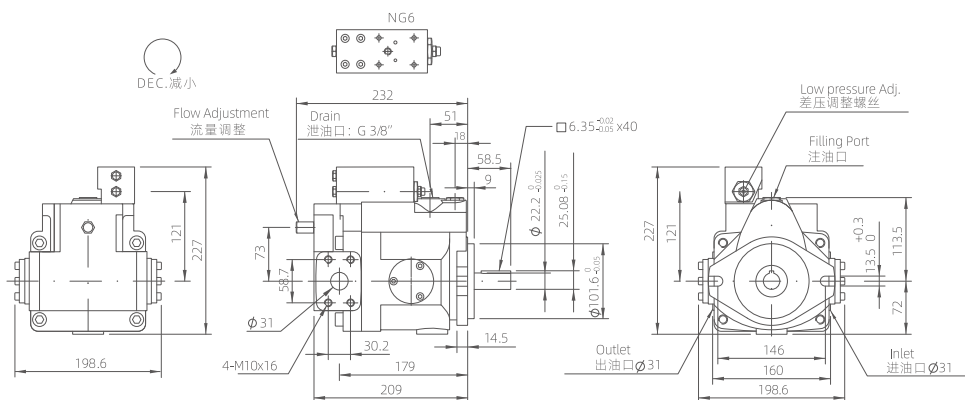
安装尺寸

Dimension

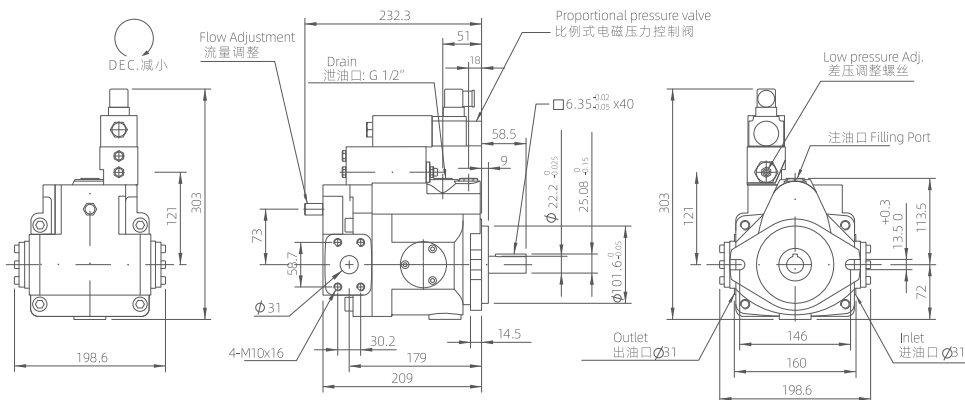
● V38FG/V42FG电控两段压力两段流量+遥控压力补偿控制型 Electric 2-stage pressure control & Flow control + Remote



● V38GM/V42GM遥控调节器 (带NG6接口) Remote pressure compensator with NG6 interface



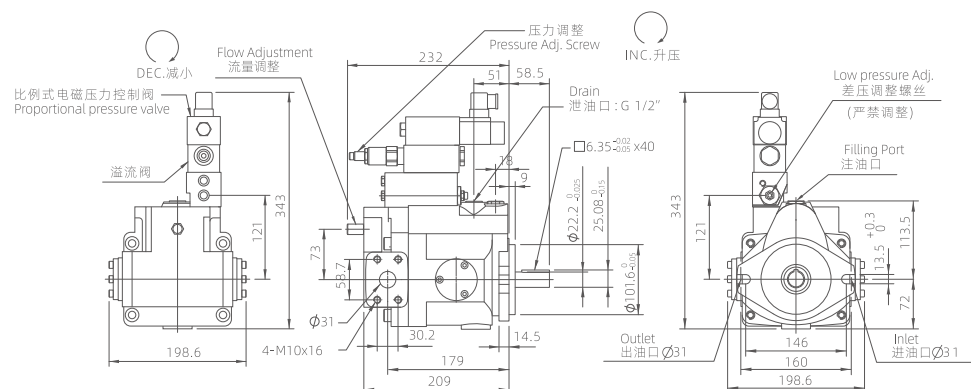
● V38GJ/V42GJ遥控型调节器+比例压力控制型 Remote pressure compensator + Proportional pressure valve



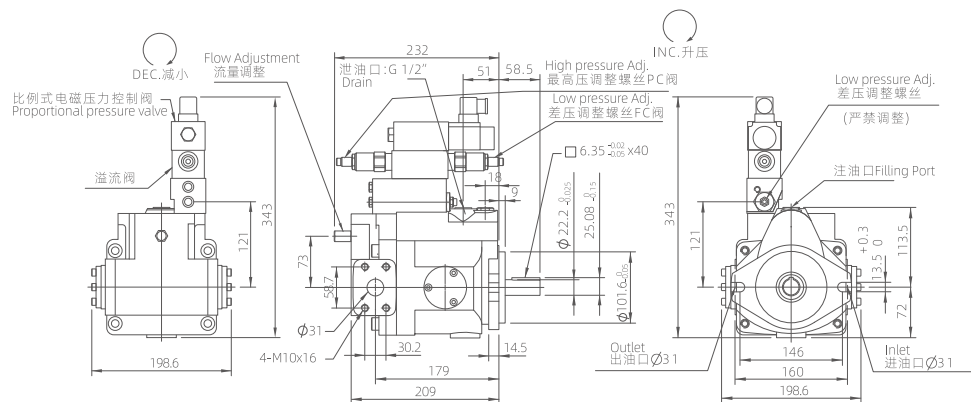
安装尺寸

Dimension

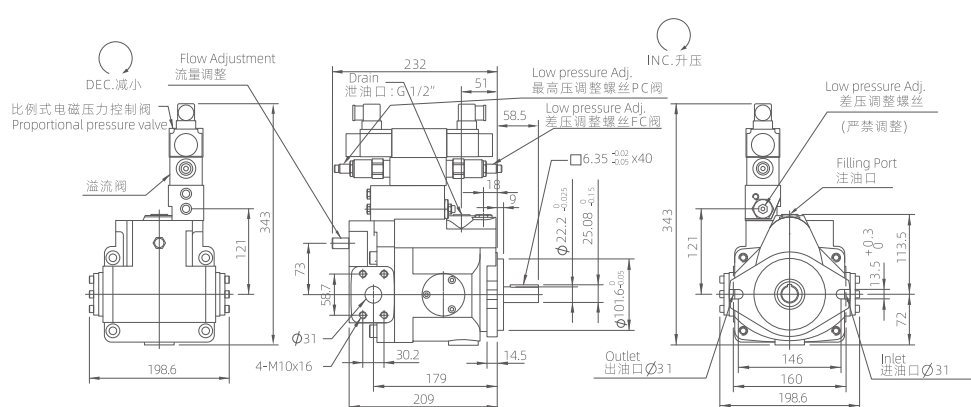
● V38GR/V42GR遥控调节器+电控卸载控制型 Remote pressure compensator + Electrical unloading



● V38GB/V42GB遥控调节器+电控两段压力控制型 Remote pressure compensator + 2-stage pressure control



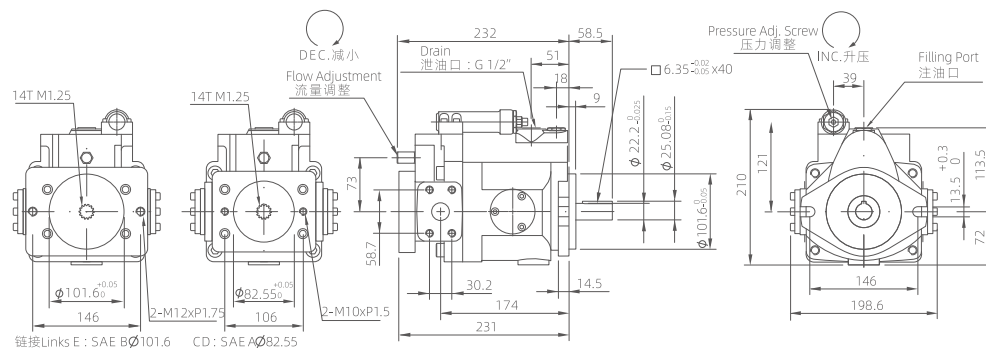
● V38GC/V42GC遥控调节器+电控卸载+两段压力控制型 Remote + Electrical unloading + 2-stage pressure control



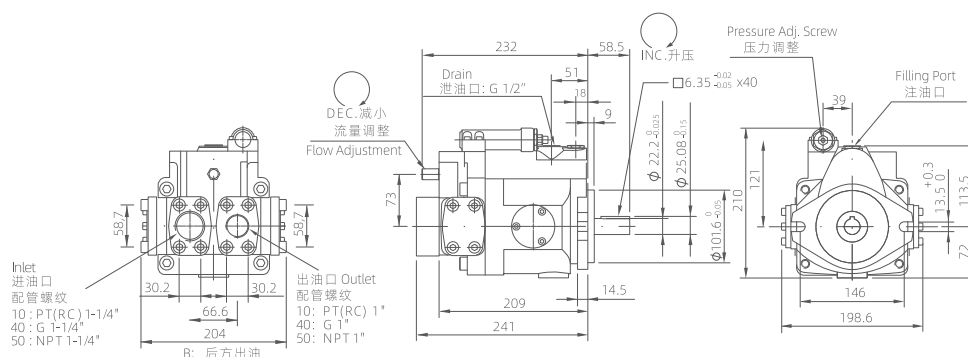
安装尺寸

Dimension

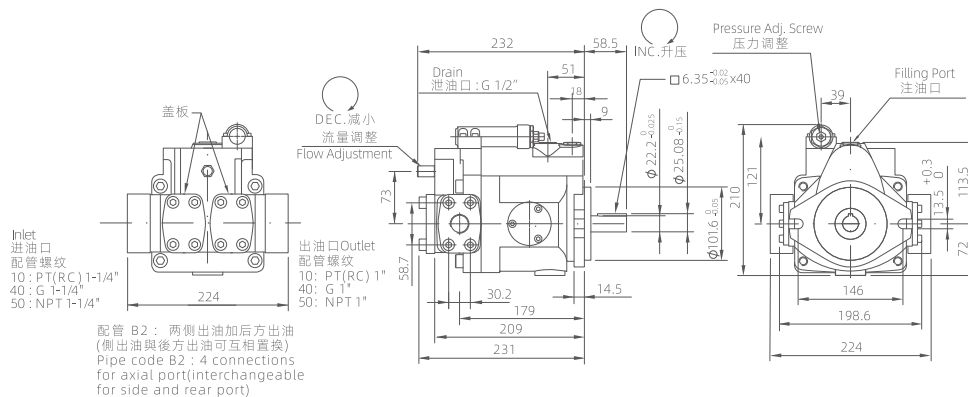
● V38/V42双联泵前泵 Double Piston Pump First pump Mounting Dimension



● V38/V42后方出油Rear port



● V38/V42两侧出油+后方出油 4 Connections for rear port

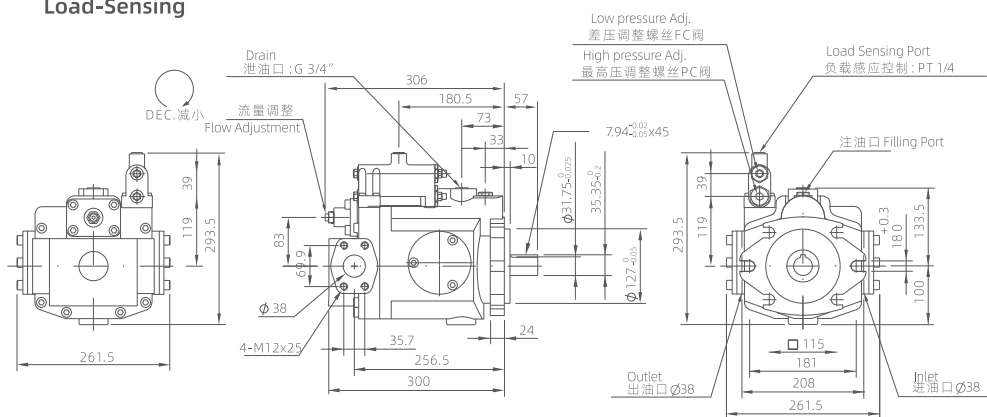


Dimension

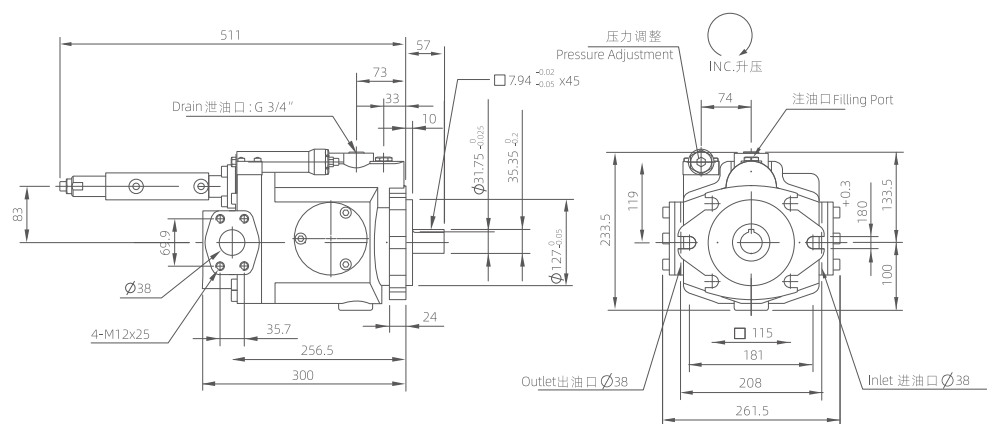
安装尺寸

Dimension

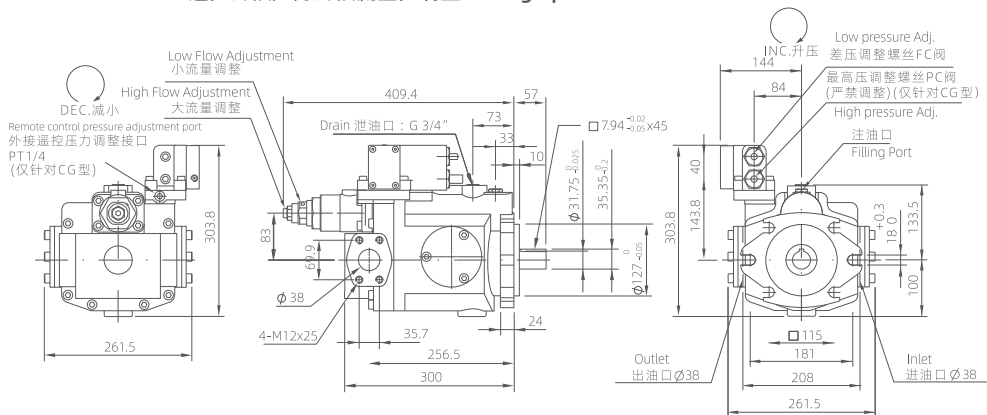
● V50HL/V70HL负载敏感控制型 Load-Sensing



● V50B/V70B无级变速控制型 Multi-stage flow & Single-stage pressure control (with cylinder)



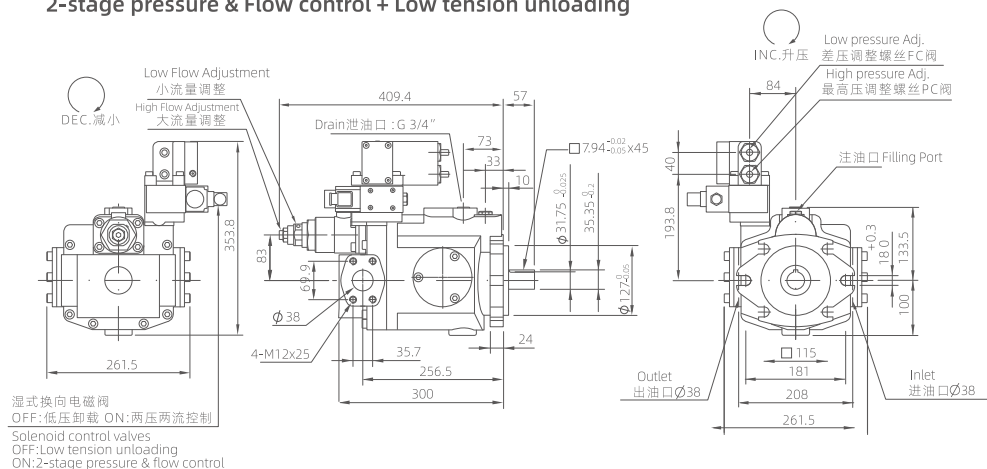
● V50C/V70C两段压力两段流量控制型 2-stage pressure & Flow control V50CG/V70CG遥控两段压力两段流量控制型 2-stage pressure & Flow control + Remote



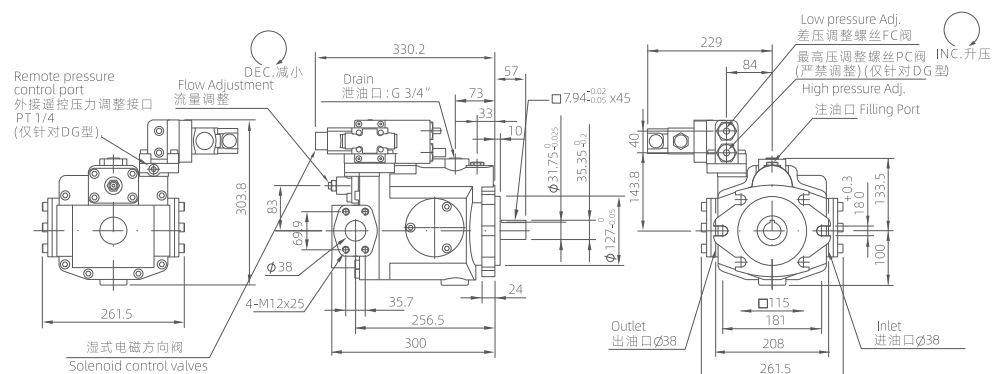
安装尺寸

Dimension

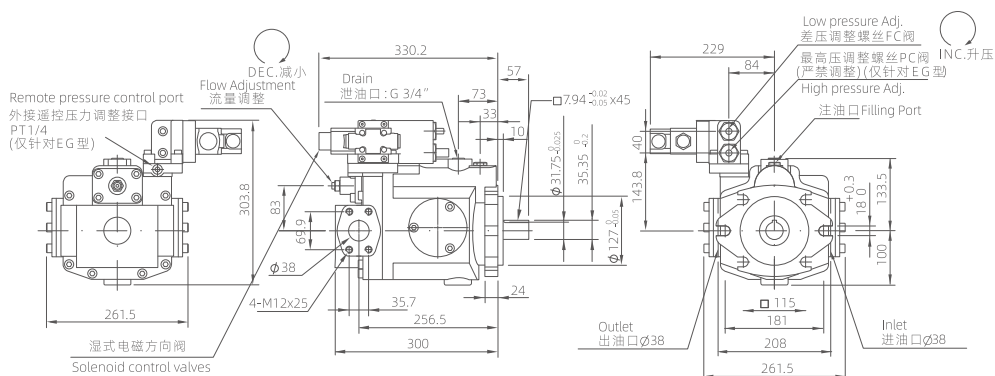
● V50CR/V70CR低压卸载+两段压力两段流量控制型 2-stage pressure & Flow control + Low tension unloading



● V50D/V70D电磁低压卸载+压力补偿控制型 Low tension unloading + Pressure control V50DG/V70DG电磁低压卸载+遥控控制型 Low tension unloading + Pressure control + Remote



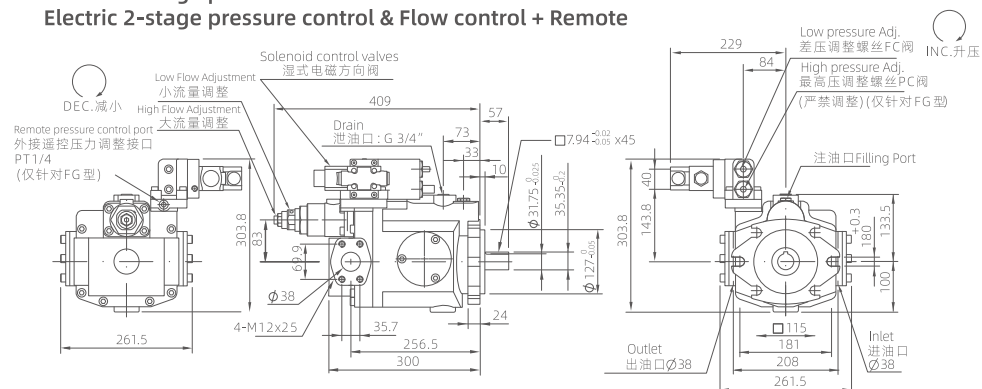
● V50E/V70E电控两段压力控制型 Electric 2-stage pressure control V50EG/V70EG电控两段压力+遥控压力补偿控制型 Electric 2-stage pressure control + Remote



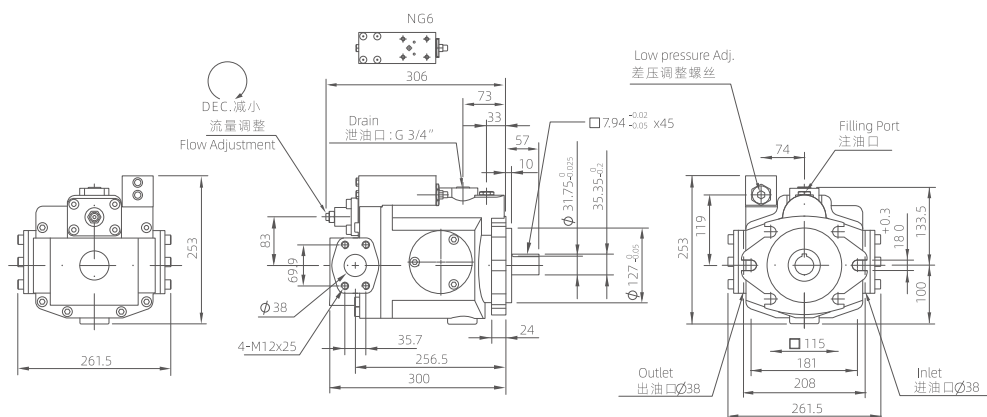
安装尺寸

Dimension

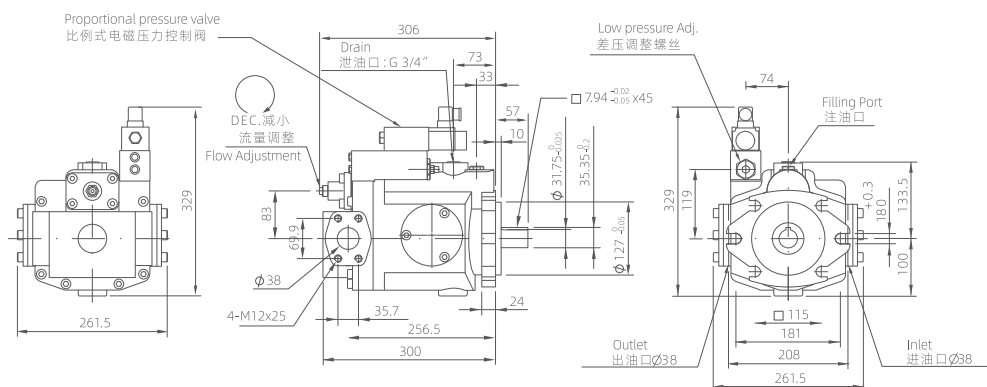
- V50F/V70F电控两段压力两段流量控制型
V50FG/V70FG电控两段压力两段流量+遥控压力补偿控制型
Electric 2-stage pressure control & Flow control
Electric 2-stage pressure control & Flow control + Remote



- V50GM/V70GM遥控调节器 (含NG6接口)
Remote pressure compensator with NG6 interface



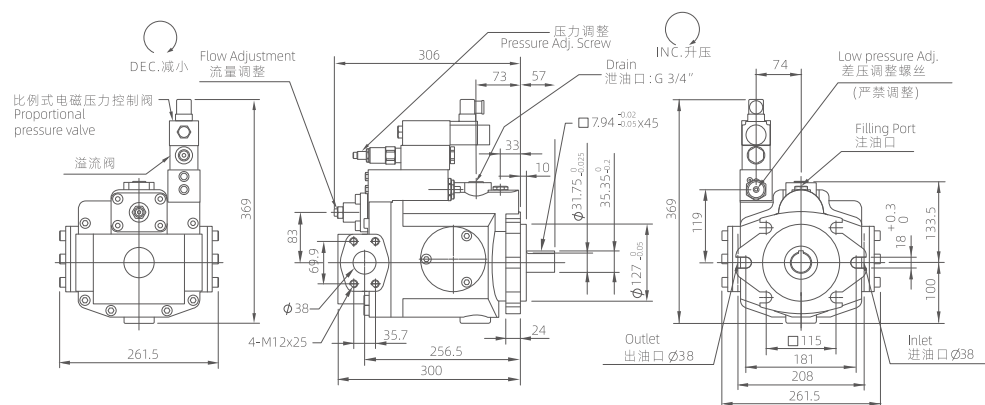
- V50GJ/V70GJ遥控型调节器+比例压力控制型
Remote pressure compensator + Proportional pressure valve



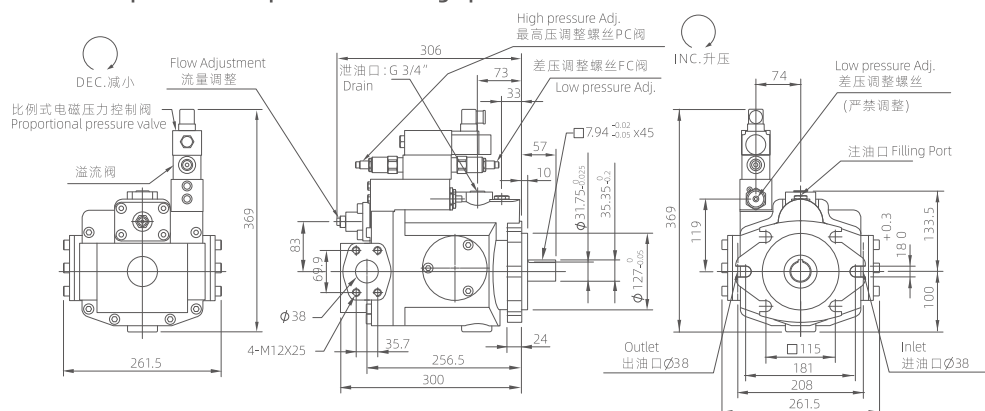
安装尺寸

Dimension

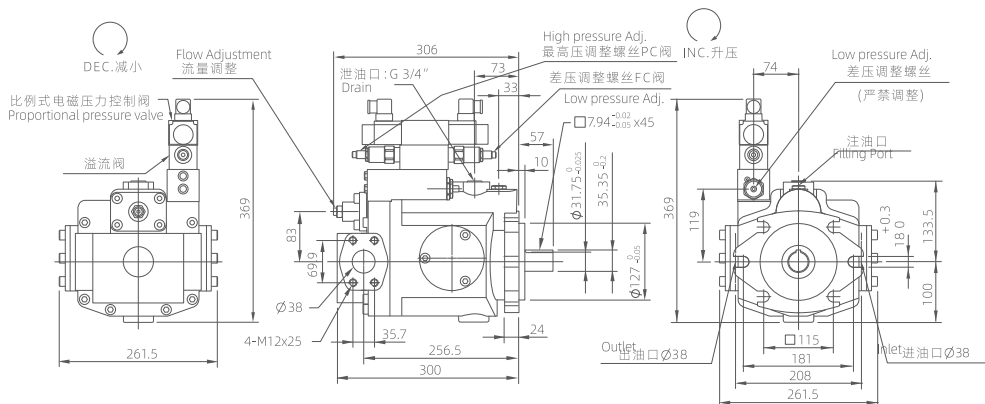
● V50GR/V70GR遥控调节器+电控卸载控制型 Remote pressure compensator + Electrical unloading



● V50GB/V70GB遥控调节器+电控两段压力控制型 Remote pressure compensator + 2-stage pressure control



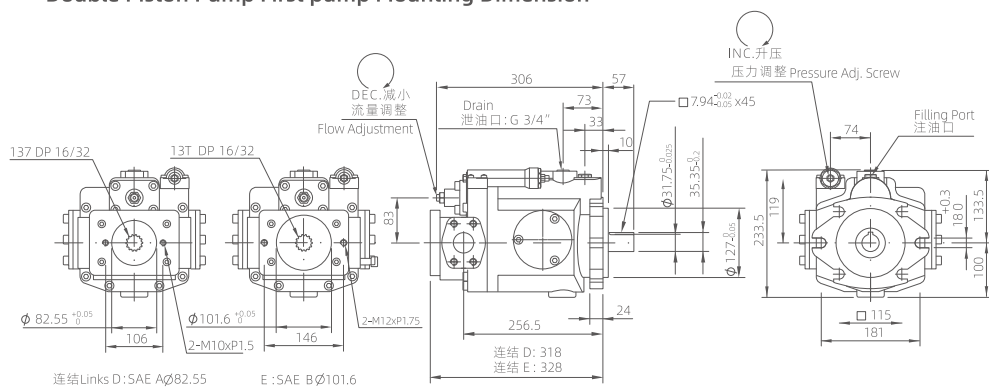
● V50GC/V70GC遥控调节器+电控卸载+两段压力控制型 Remote + Electrical unloading + 2-stage pressure control



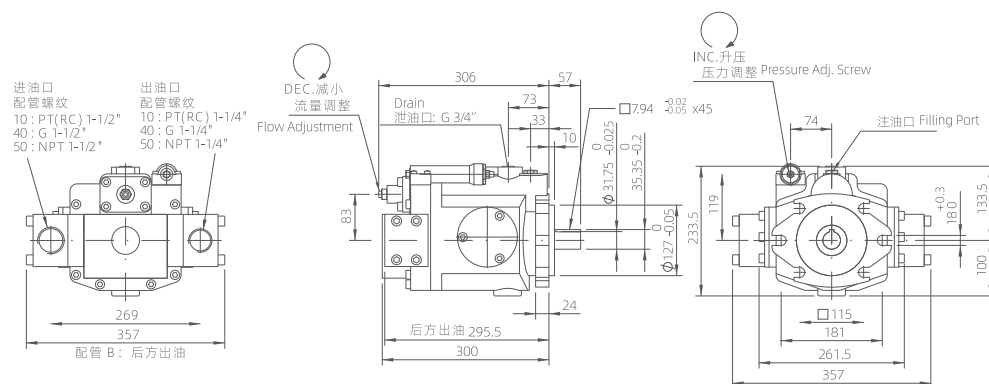
安装尺寸

Dimension

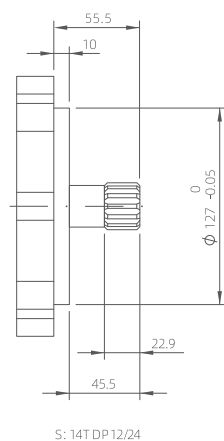
- V50/V70双联泵前泵
Double Piston Pump First pump Mounting Dimension



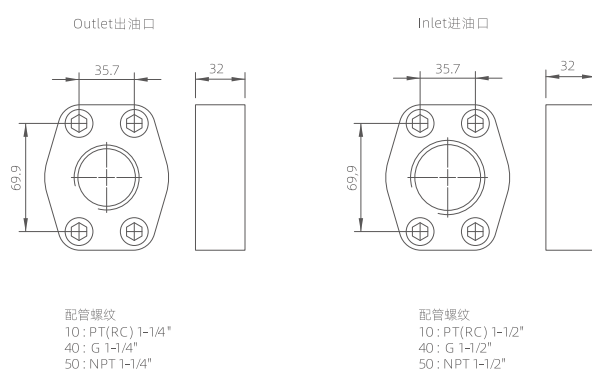
- V50/V70后方油口Rear port



- V50/V70梅花式轴心
Splined shaft type



- V50/V70进出油口法兰
Inlet/Outlet port flange



VR series



VR系列变量柱塞泵

VR-series piston pump

- 斜盘式轴向柱塞泵，高容积，快速截流，减少输入功率；
压力、流量控制灵敏，稳定可靠，结构简单，装机更加轻量化；
发热少噪音低，功率损失小，油液温升慢，可使用较小的油箱；
扩展性强，有丰富的控制方式及组合，有效简化油路设计。
- Swash plate axial piston pumps with high volumetric efficiency, quick cut-off and reduced power input;
Sensitivity in pressure and flow control, stable and reliable, with a simple structure for lightweight installation;
Low heat generation, low noise, minimal power loss, slow oil temperature rise, smaller tanks can be used;
Superb extensibility, various control methods and combinations, effectively simplify the design of the oil circuit.

-
- 排量：8.0cm³/rev~69.8cm³/rev
压力：额定压力21MPa，最高压力28MPa
转速：最高1800r/min
 - Displacement: 8.0cm³/rev~69.8cm³/rev
Pressure: Rated up to 21MPa, Maximum up to 28MPa
Speed: Maximum up to 1800r/min

H01

VR系列订货型号

VR-Product Series

VR	15	A	3				R			X	-95	RC
01	02	03	04	05	06	07	08	09	10	11	12	13

01	VR系列变量柱塞泵 VR-series piston pump
----	------------------------------------

02	规格排量 Displacement
	8: 8.0cm ³ /rev
	15: 15.0cm ³ /rev
	18: 18.0cm ³ /rev
	23: 23.0cm ³ /rev
	38: 37.8cm ³ /rev
	50: 51.5cm ³ /rev
	70: 69.7cm ³ /rev

03	控制方式 I (详情查看B01~B36) Control option I (Details are shown on page B01~B36)
	A: 压力补偿控制型 A: Pressure Compensator Type
	C**H: 两段压力两段流量控制型 C**H: 2-stage pressure & Flow control
	C**J*: 电控两段压力两段流量控制型 C**J*: Electric 2-stage pressure control & Flow control
	D: 电控两段压力控制型 D: Electric 2-stage pressure control
	SA: 负载敏感控制型 SA: Load-Sensing
	SAJS: 电-液比例负载敏感控制型 SAJS: Electro-Hydraulic Proportional Load-Sensitive Control

04	压力调节范围 I Pressure Adjusting Range I
	1: 8~70bar
	2: 15~140bar
	3: 20~210bar
	4: 20~250bar

05	两段压力时低压调节范围 Low Pressure Adjustment Range
	1: 15~70bar
	2: 15~140bar

06	两段压力时高压调节范围 High Pressure Adjustment Range
	1: 15~70bar
	2: 15~140bar
	3: 20~210bar
	4: 20~250bar

07	流量控制阀压差 FC valve differential pressure
	A: 7bar
	B: 14bar
	C: 21bar

08	旋转方向 Rotation direction (View from the shaft end)
	R: 顺时针 R: Clockwise
	L: 逆时针 L: Counter clockwise

09	控制方式 II (详情查看B01~B36) Control option II (Details are shown on page B01~B36)
	H: 自调压式 H: Pressure feedback method
	J: 电磁阀式 J: Solenoid operated method

10	电磁阀电压 Voltage code for the solenoid valve
	无: 无电压 Non: No voltage
	A: AC100V (50/60HZ), AC110V (60HZ)
	B: AC200V (50/60HZ), AC220V (60HZ)
	N: DC 12V
	P: DC 24V

11	油口方向 Oil Port
	无: 后方油口 Non: Axial port
	X: 两侧油口 X: Side Port
	B: 后方油口 (横向调压阀型) B: Axial port(Lateral pressure regulator type)

12	设计代号 Design Number
	20: V8、V50
	95: V15、V38
	30: V23
	60: V70

13	控制方式 III (详情查看B01~B36) Control option III (Details are shown on page B01~B36)
	无: 无遥控控制 Non: Without Remote Control System
	RC: 带遥控控制 RC: With Remote Control System

*更多参数请查阅A01页
For more parameters, please refer to page A01

Technical drawing of the 3000 series hydraulic pump, showing three views: front view (left), side view (middle), and top view (right). The drawing includes dimensions in millimeters and specific labels for various components.

Front View (Left):

- Dimensions: 132 (width), 66 (height), 43 (height from base to inlet/outlet center).
- Labels: 进油口 Inlet G^{3/4} (Inlet Port G^{3/4}), 出油口 Outlet G^{3/4} (Outlet Port G^{3/4}), 流量调节阀 Flow Adjustment (Flow Adjustment Valve), 压力控制阀 Pressure Adjustment (Pressure Adjustment Valve), 进油口 Drain Port Rc^{3/8} (Inlet Port Drain Port Rc^{3/8}).
- Notes: (右旋流量减少) (Right turn flow decreases), (内六角扳手孔: 3) (Hex key hole: 3), (锁紧螺母六角平头: 10) (Locking nut hex flat head: 10).
- Other labels: 粘结密封 (Adhesive seal).

Side View (Middle):

- Dimensions: 164 (total width), 48 (width from inlet to pressure adjustment), 39 (width from pressure adjustment to outlet), 10 (height from base to pressure adjustment), 7 (height from base to outlet), 41 (height from base to inlet), 18 (diameter of inlet/outlet), 9 (height from base to inlet/outlet).
- Labels: 进油口 Drain Port Rc^{3/8} (Inlet Port Drain Port Rc^{3/8}), 压力调节阀 Pressure Adjustment (Pressure Adjustment Valve).
- Notes: (右旋压力上升) (Right turn pressure increases), (内六角扳手孔: 6.5) (Hex key hole: 6.5), (锁紧螺母六角平头: 27) (Locking nut hex flat head: 27).

Top View (Right):

- Dimensions: 100 (width), 143 (width), 9 (height from base to inlet/outlet), 66 (height from base to pressure adjustment), 50 (height from base to inlet/outlet), 70 (height from base to inlet/outlet), 125 (diameter of inlet/outlet), 100 (diameter of pressure adjustment), 6.5 (height from base to pressure adjustment), 48 (width from inlet to pressure adjustment), 6.5 (width from pressure adjustment to outlet), 9+0.5 (height from base to inlet/outlet).
- Labels: 机体注油口 Filling Port (Body Filling Port), 压力调节阀 Pressure Adjustment (Pressure Adjustment Valve).
- Notes: (右旋流量减少) (Right turn flow decreases), (内六角扳手孔: 3) (Hex key hole: 3), (锁紧螺母六角平头: 10) (Locking nut hex flat head: 10).

Technical drawing of the 3000 series hydraulic pump, showing three views: front, side, and rear. The drawing includes detailed dimensions and labels for various components.

Labels and Dimensions:

- Pressure Adjustment (压力控制阀):** Indicated on the front and rear views.
- Flow Adjustment (流量调节螺钉):** Indicated on the front view.
- Inlet (进口):** G1, O形圈凸缘 (O-ring flange).
- Outlet (出口):** G1, O形圈凸缘 (O-ring flange).
- 机体注油口 Filling Port (机体注油口):** Indicated on the side view.
- 泄油口 Drain Rc 3/8 (泄油口):** Indicated on the side view.
- Pressure Adjustment (压力调节螺钉):** Indicated on the rear view.
- Dimensions:**
 - Front View: 144, 168, 147, 11.7, 207, 57.0, 12.7, 48, 44.5, 34 最小, 4.76 $\begin{smallmatrix} +0.025 \\ 0 \end{smallmatrix}$ x32, 21.15 $\begin{smallmatrix} 0 \\ -0.15 \end{smallmatrix}$, 19.05 $\begin{smallmatrix} 0 \\ -0.025 \end{smallmatrix}$.
 - Side View: 102, 31.2, 6.5, 39, 11 $\begin{smallmatrix} +1.3 \\ -0 \end{smallmatrix}$, 84, 66, 105.6, R47.5, $\phi 130$.
 - Rear View: 144, 168, 147, 11.7, 207, 57.0, 12.7, 48, 44.5, 34 最小, 4.76 $\begin{smallmatrix} +0.025 \\ 0 \end{smallmatrix}$ x32, 21.15 $\begin{smallmatrix} 0 \\ -0.15 \end{smallmatrix}$, 19.05 $\begin{smallmatrix} 0 \\ -0.025 \end{smallmatrix}$.

Technical drawing of the 3D-100 hydraulic pump, showing three views: Front View, Side View, and Rear View. The drawing includes dimensions and labels for various components.

Labels and Dimensions:

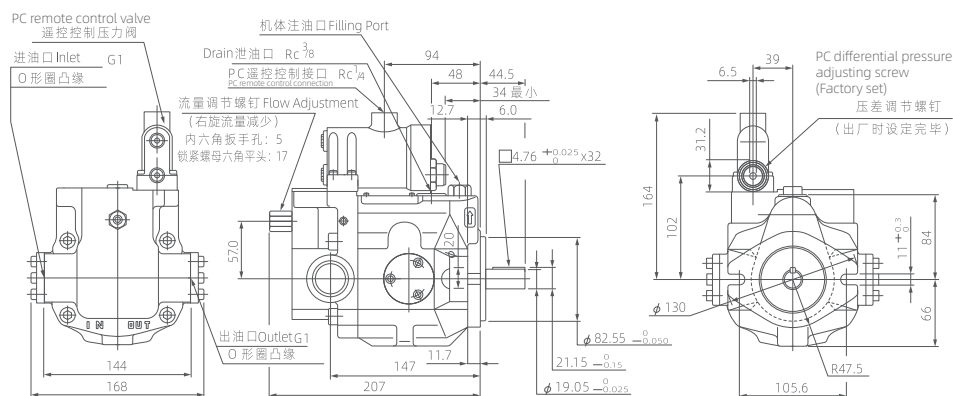
- Front View:**
 - Inlet Inlet G1
 - O 形圈凸缘
 - Pressure Adjustment 压力控制阀
 - Flow Adjustment 流量调节螺钉 (右旋流量减少)
 - 内六角扳手孔: 5
 - 锁紧螺母六角平头: 17
 - Outlet 出口 G1
 - O 形圈凸缘
 - Dimensions: 57.2, 168, 57.0
- Side View:**
 - Filling Port 机体注油口
 - Drain 泄油口 Rc 3/8
 - Dimensions: 48, 44.5, 34最小, 12.7, 6.0, 169.5, 11.7, 191
 - 4.76 $\pm 0.025 \times 32$
 - 21.15 ± 0.15
 - 19.05 ± 0.025
 - 82.55 ± 0.025
- Rear View:**
 - Pressure Adjustment 压力调节螺钉 (右旋压力上升)
 - 内六角扳手孔: 6.5
 - 锁紧螺母六角平头: 27
 - Dimensions: 40, 6.5, 31.2, 80.5, 130, 105.6, 84, 66, 11 ± 0.3 , R47.5

安装尺寸

Dimension

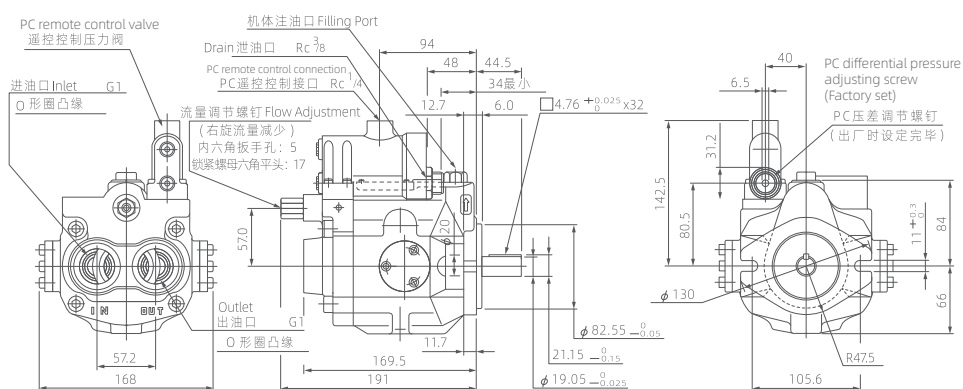
● VR15/VR18A*RX-95RC两侧油口遥控压力补偿控制型

Remote pressure compensation control type of oil ports on both sides



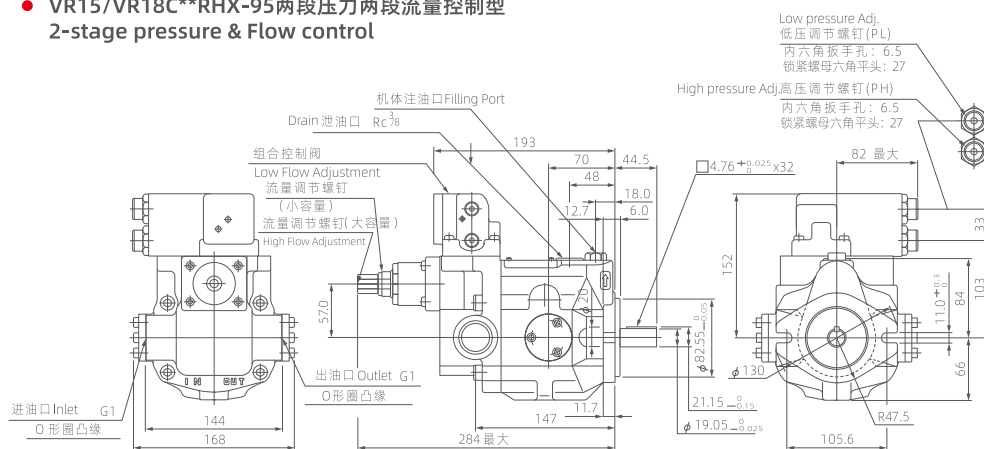
● VR15/VR18A*R-95RC后方油口遥控压力补偿控制型

Rear port pressure compensation control type



● VR15/VR18C**RHX-95两段压力两段流量控制型

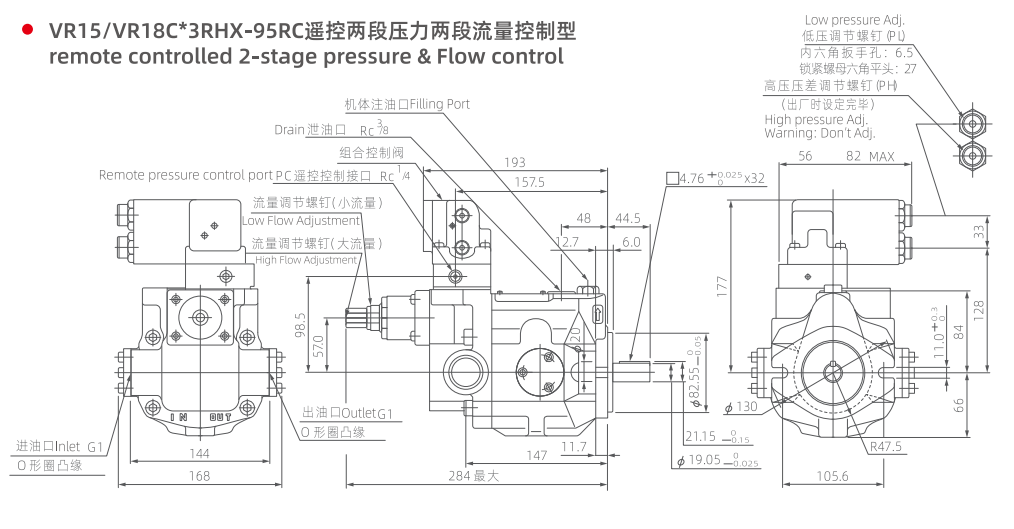
2-stage pressure & Flow control



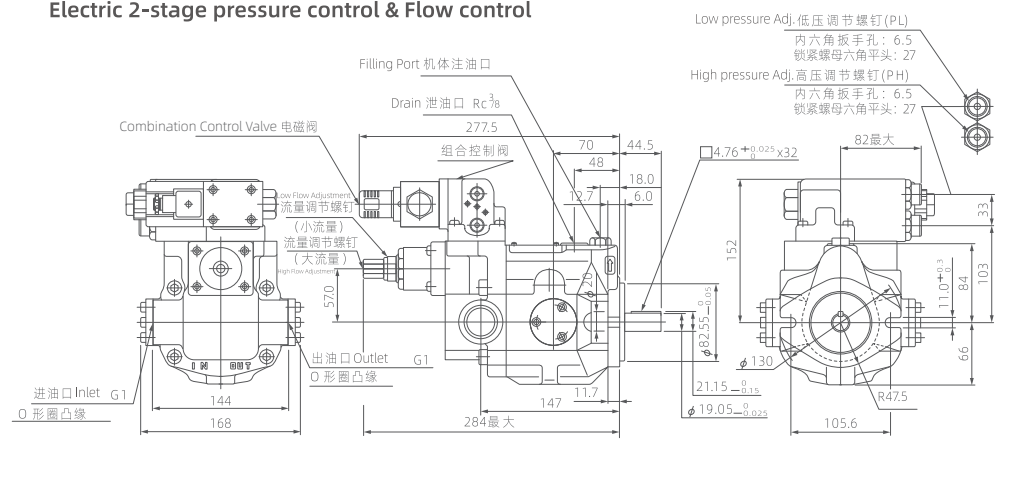
安装尺寸

Dimension

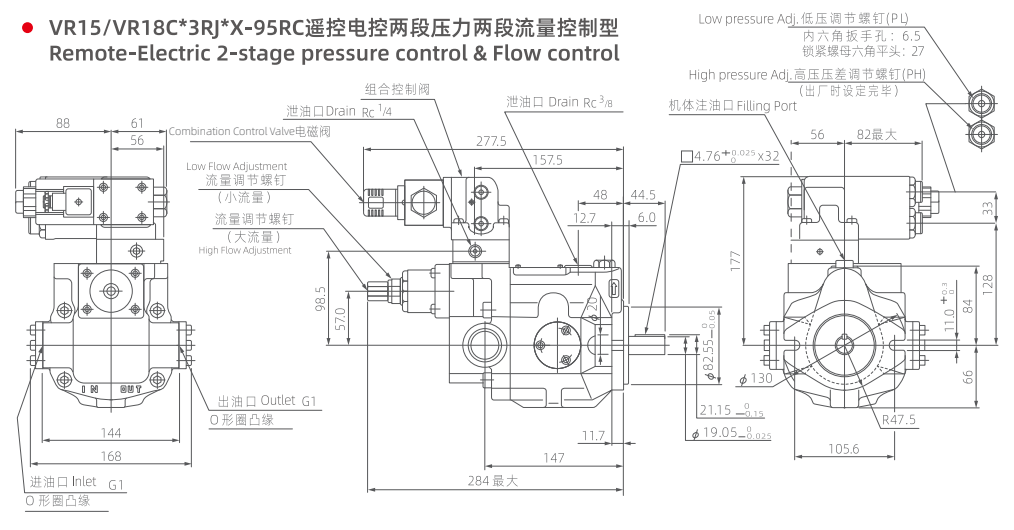
VR15/VR18C*3RHX-95RC遥控两段压力两段流量控制型 remote controlled 2-stage pressure & Flow control



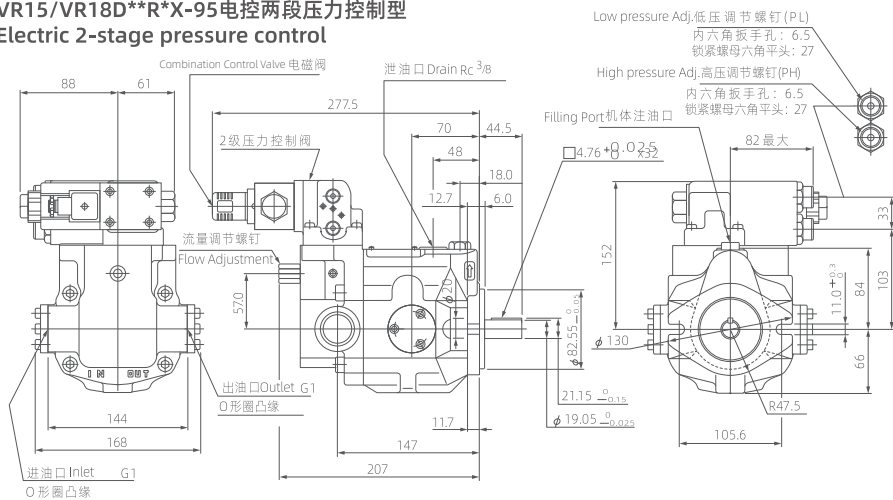
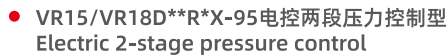
VR15/VR18C**RJ*X-95电控两段压力两段流量控制型 Electric 2-stage pressure control & Flow control



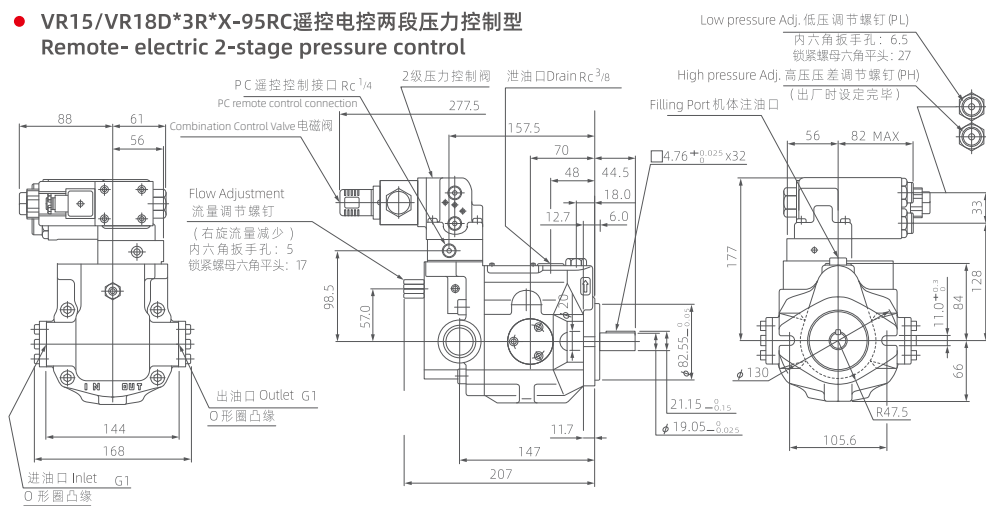
VR15/VR18C*3RJ*X-95RC遥控电控两段压力两段流量控制型 Remote-Electric 2-stage pressure control & Flow control



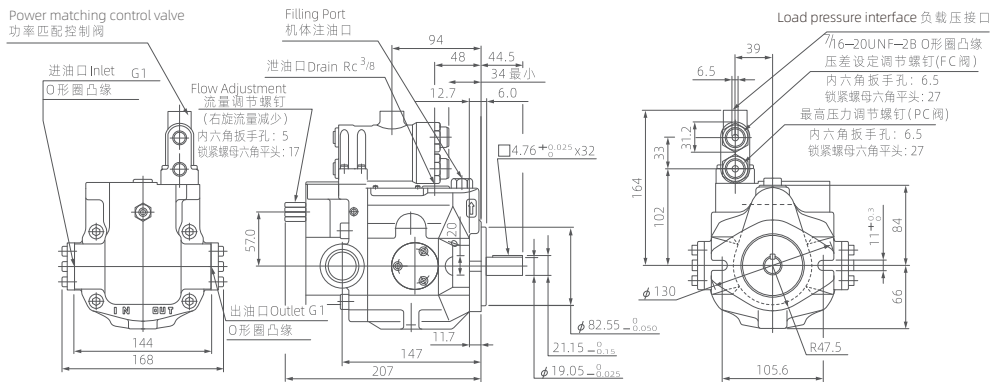
Dimension



- **VR15/VR18D*3R*X-95RC遥控电控两段压力控制型**
Remote- electric 2-stage pressure control

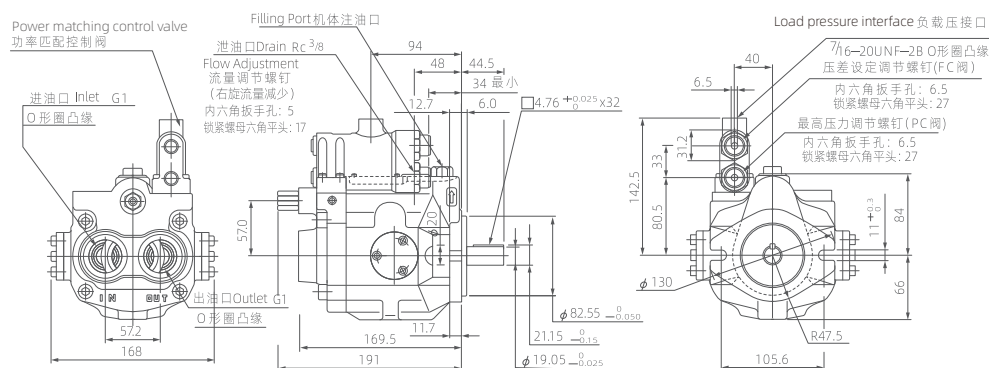


- VR15/VR18SA**RX-95两侧油口负载敏感控制型
Load sensing control type of oil ports on both sides

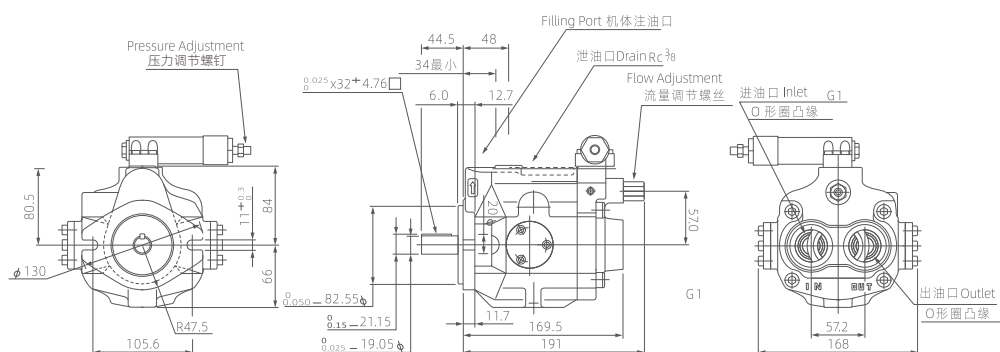


安装尺寸 Dimension

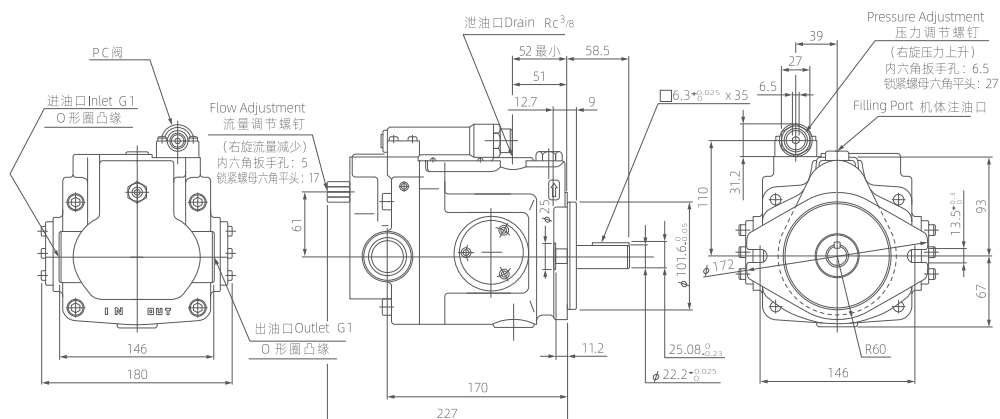
● VR15/VR18SA**R-95后方油口负载敏感控制型 Load sending control type of rear port



● VR15/VR18A*B-95后油口横阀压力补偿控制型 Rear port Lateral pressure regulator pressure compensation control type



● VR23A*RX-30两侧油口压力补偿控制型 Pressure compensation control type of oil ports on both sides

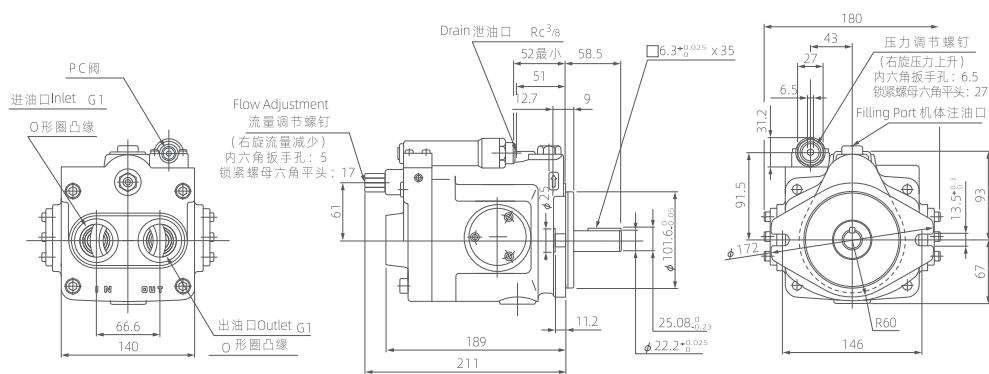


安装尺寸

Dimension

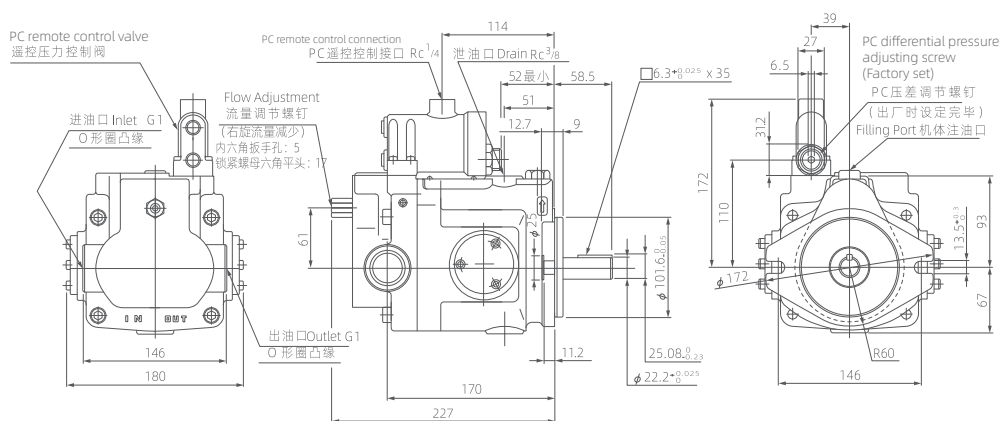
● VR23A*R-30后方油口压力补偿控制型

Rear port pressure compensation control type



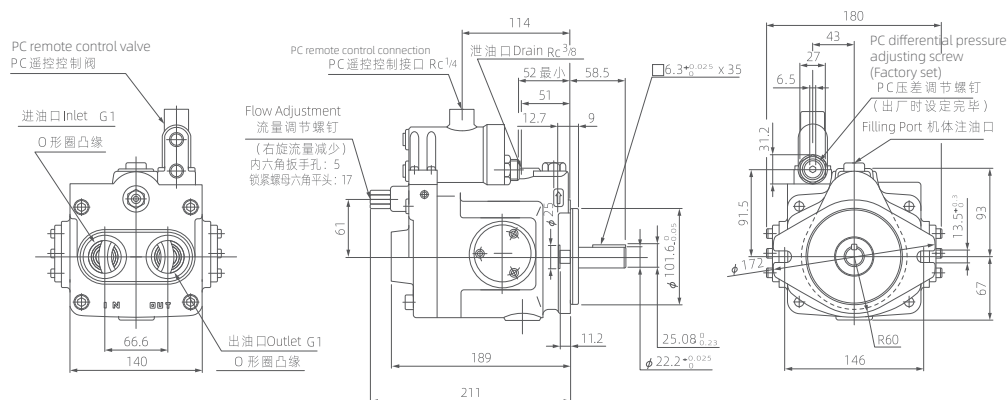
● VR23A4RX-30RC两侧油口遥控压力补偿控制型

Pressure compensation control type of oil ports on both sides



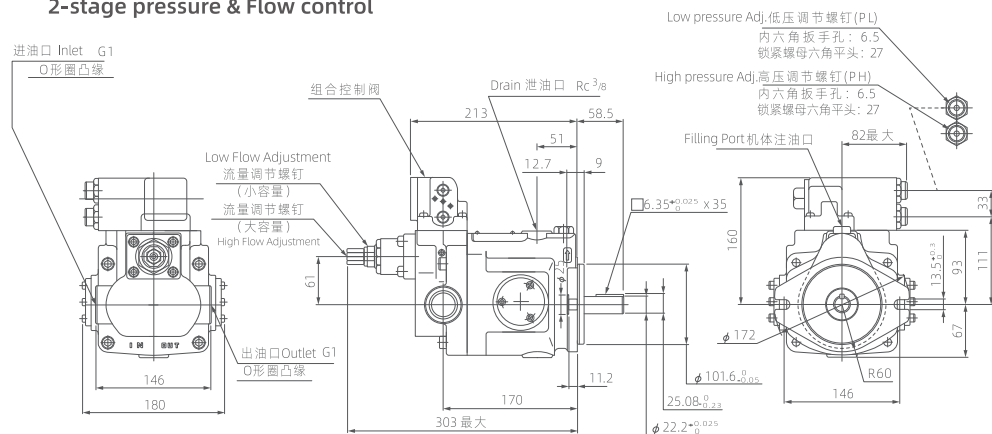
● VR23A4R-30RC后方油口遥控压力补偿控制型

Remote rear port pressure compensation control type

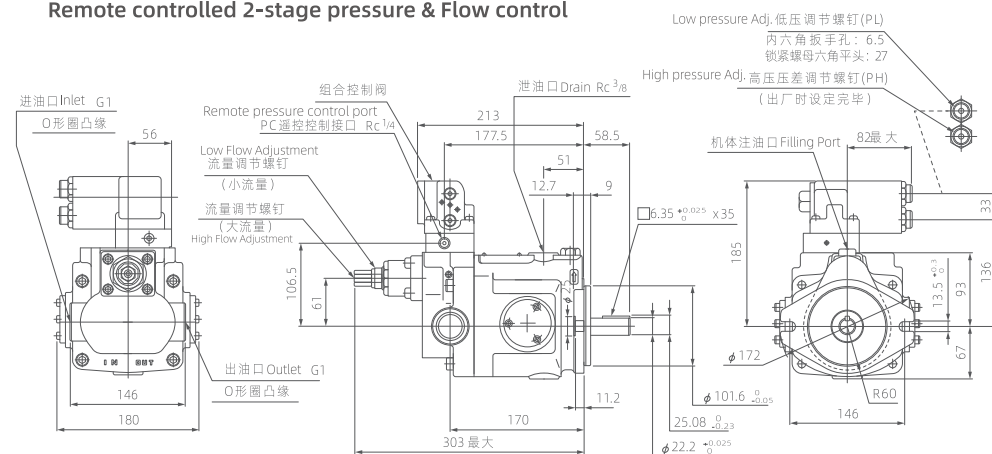


安装尺寸 Dimension

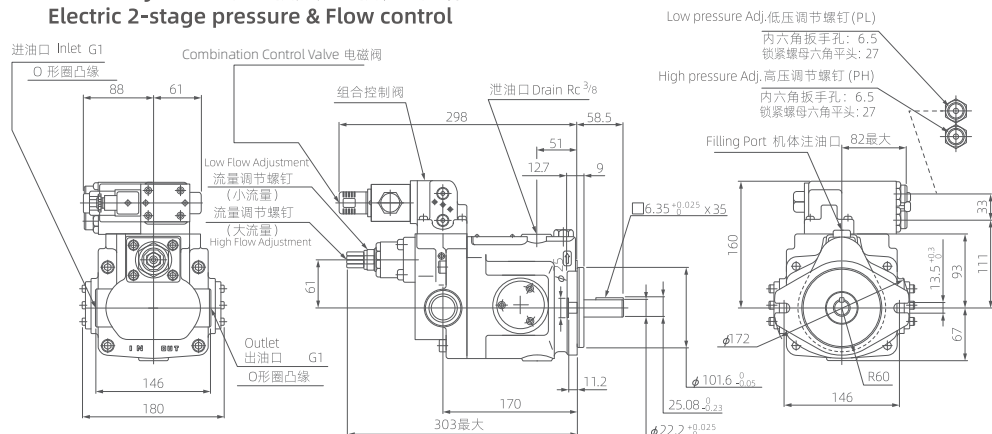
● VR23C**RHX-30两段压力两段流量控制型 2-stage pressure & Flow control



● VR23C*4RHX-30RC遥控两段压力两段流量控制型 Remote controlled 2-stage pressure & Flow control

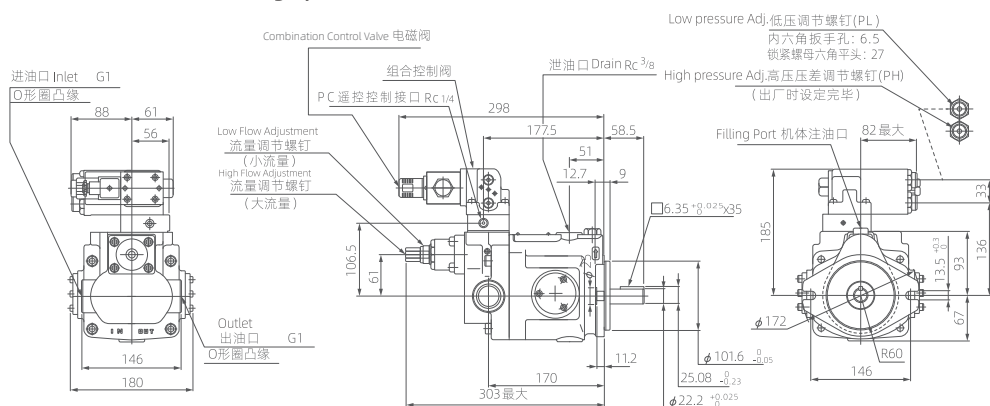


● VR23C**RJ*X-35电控两段压力两段流量控制型 Electric 2-stage pressure & Flow control

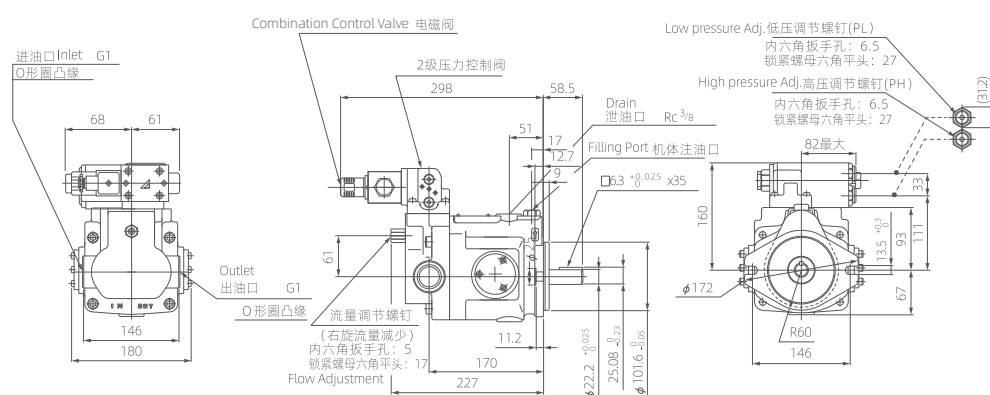


安装尺寸 Dimension

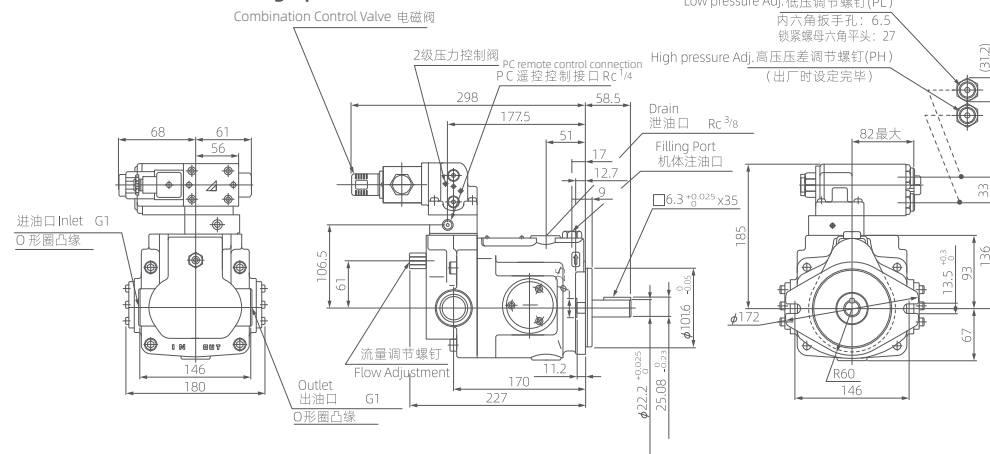
● VR23C*4RJ*X-35RC遥控电控两段压力两段流量控制型 Remote- Electric 2-stage pressure control



● VR23D**R*X-35电控两段压力控制型 Electric 2-stage pressure control

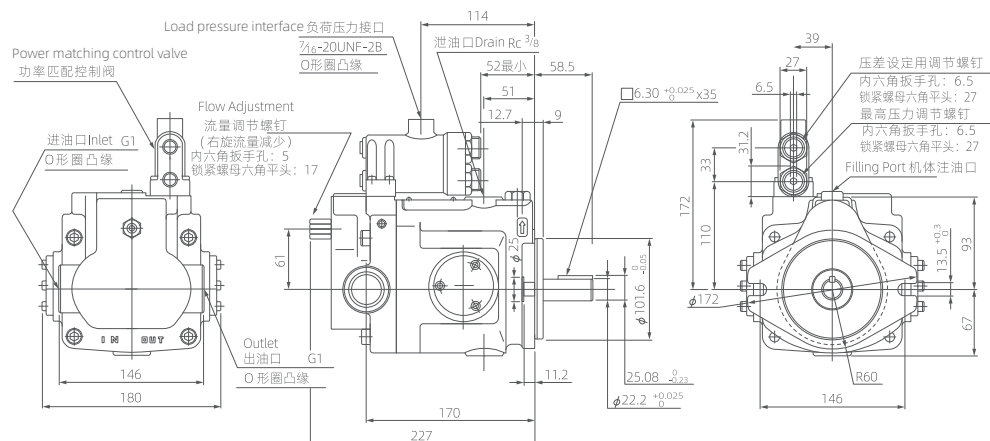


● VR23D*4R*X-35RC遥控电控两段压力控制型 Remote- Electric 2-stage pressure control

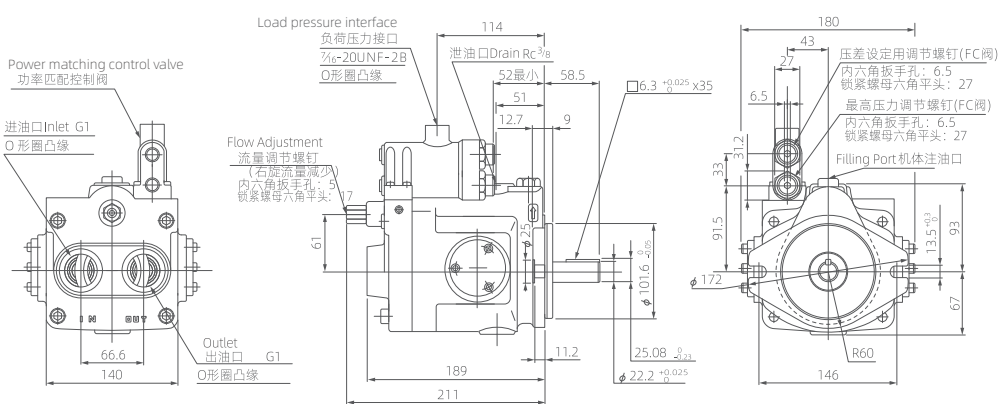


安装尺寸 Dimension

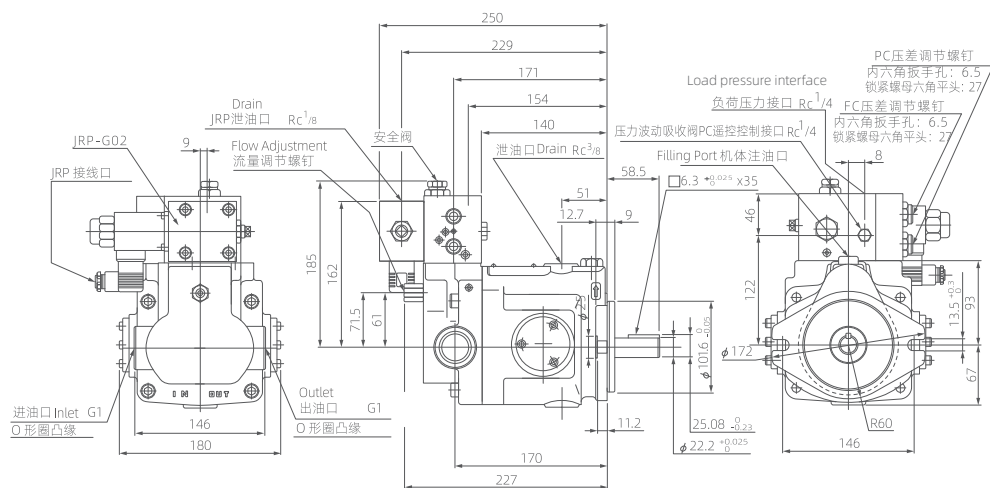
● VR23SA**RX-30两侧油口负载敏感控制型 Load sensing control type of oil ports on both sides



● VR23SA**R-30后方油口负载敏感控制型 Rear port load sensing control type

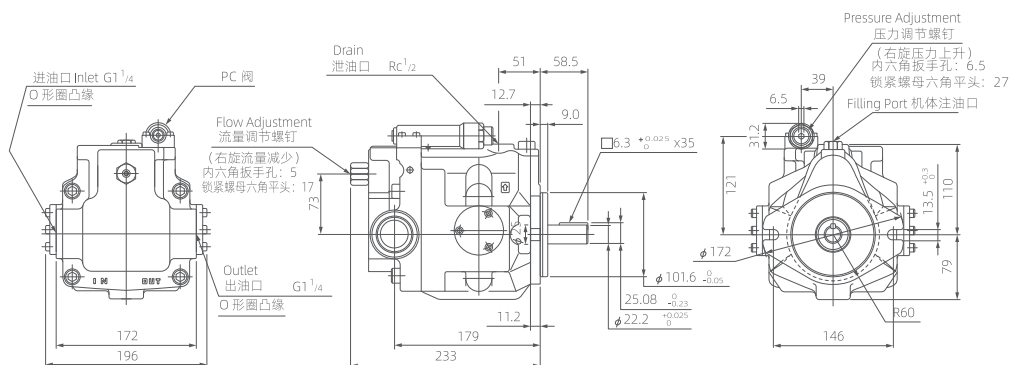


● VR23SAJS-*RX-30电-液比例负载敏感控制型 Electro-hydraulic proportional load sensing control type

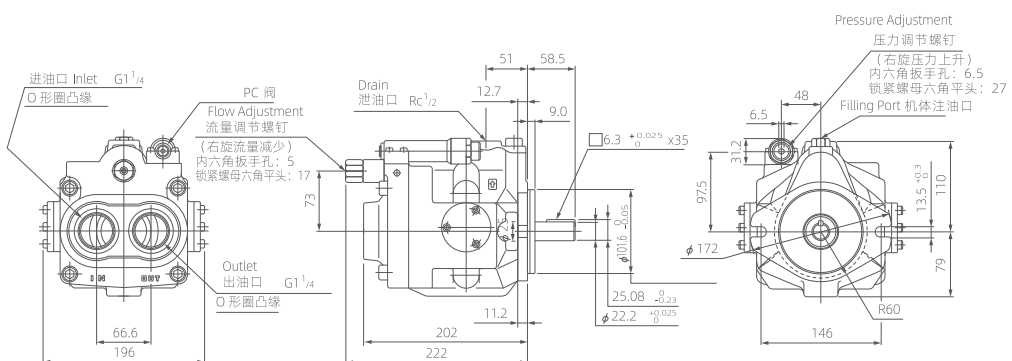


Dimension

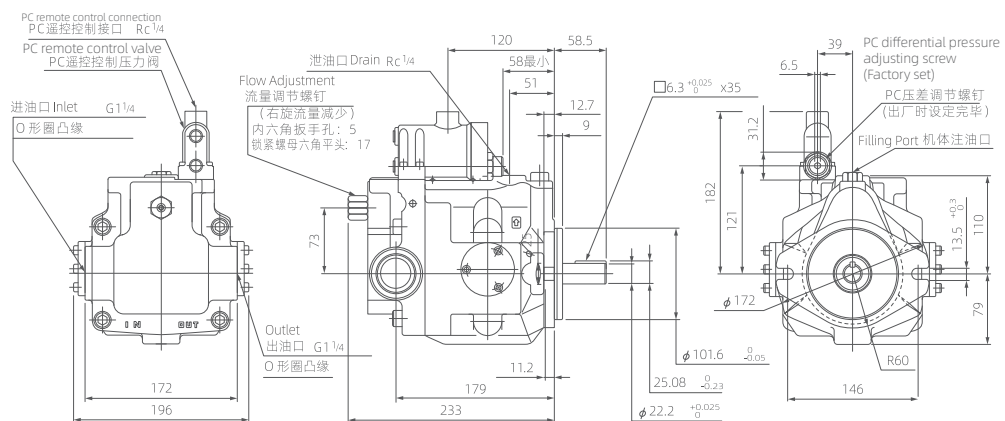
- VR38A*RX-95两侧油口压力补偿控制型
Pressure compensation control type of oil ports on both sides



- VR38A*RX-95后方油口压力补偿控制型
Pressure compensation control type of rear pump



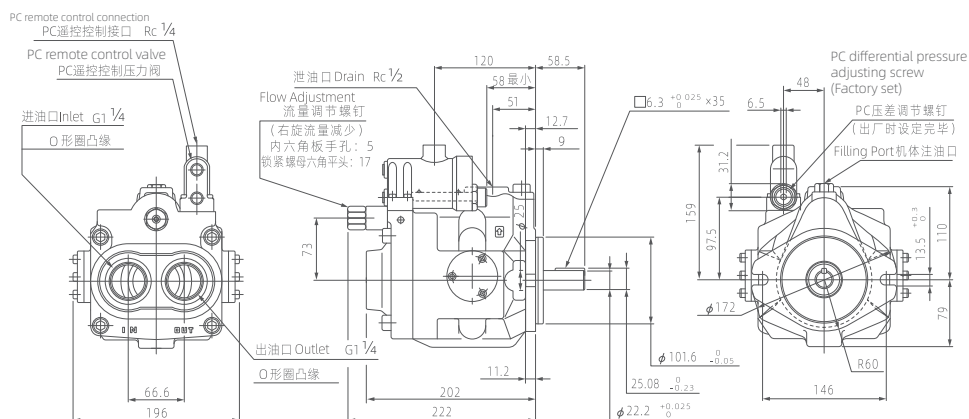
- VR38A4RX-95RC两侧油口遥控压力补偿控制型
Remote pressure compensation control type of oil ports on both sides



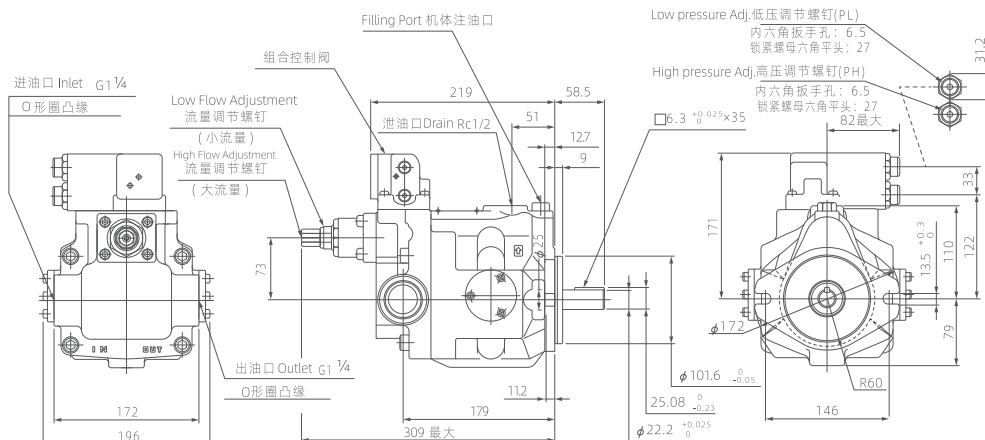
安装尺寸

Dimension

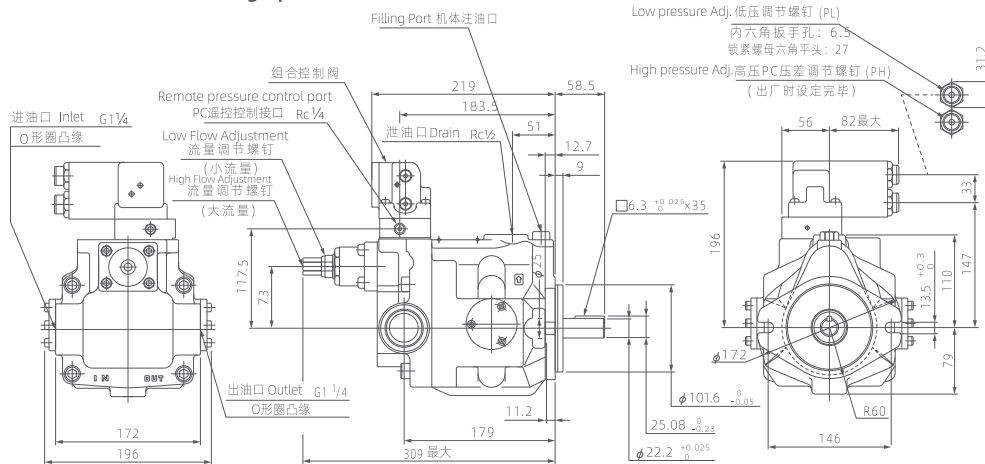
● VR38A4R-95RC后方油口遥控压力补偿控制型 Rear oil port remote pressure compensation control type



● VR38C**RHX-95两段压力两段流量控制型 2-stage pressure & Flow control

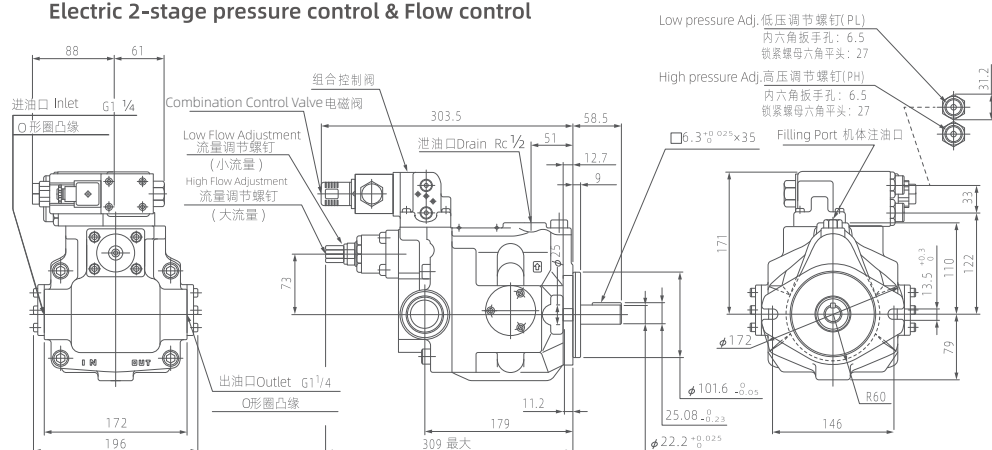


● VR38C*4RHX-95RC遥控两段压力两段流量控制型 remote control 2-stage pressure & Flow control

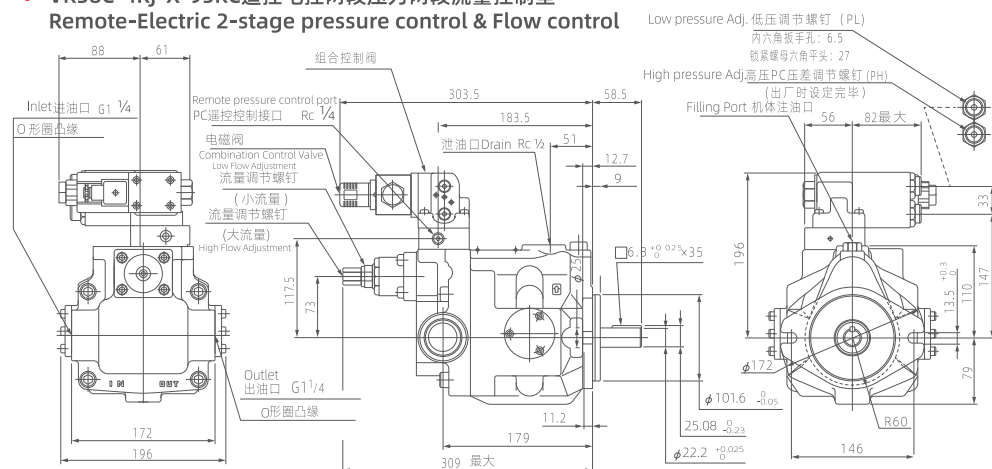


安装尺寸 Dimension

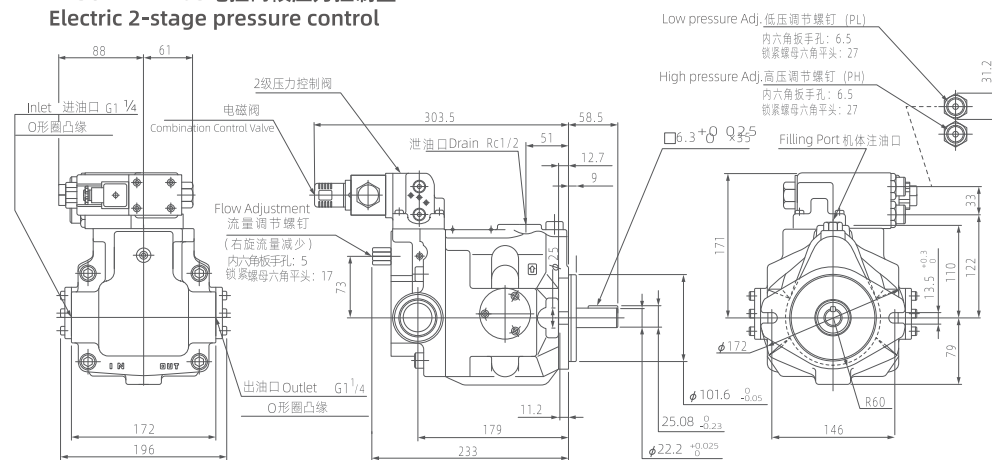
● VR38C**RJ*X-95电控两段压力两段流量控制型 Electric 2-stage pressure control & Flow control



● VR38C*4RJ*X-95RC遥控电控两段压力两段流量控制型 Remote-Electric 2-stage pressure control & Flow control



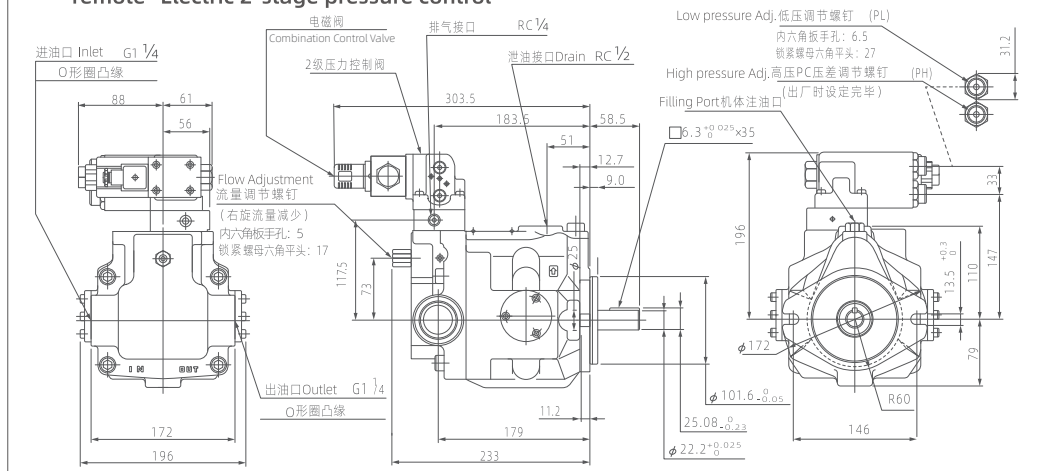
● VR38D**R*X-95电控两段压力控制型 Electric 2-stage pressure control



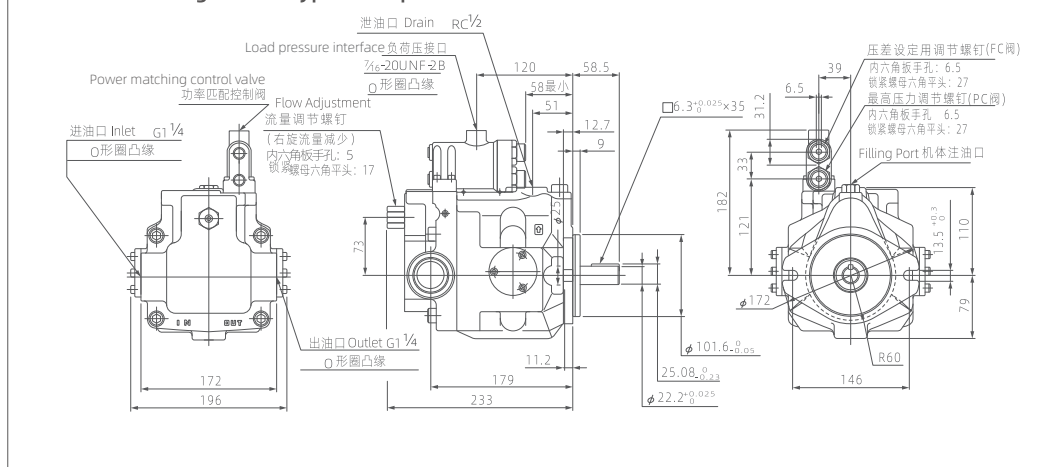
安装尺寸

Dimension

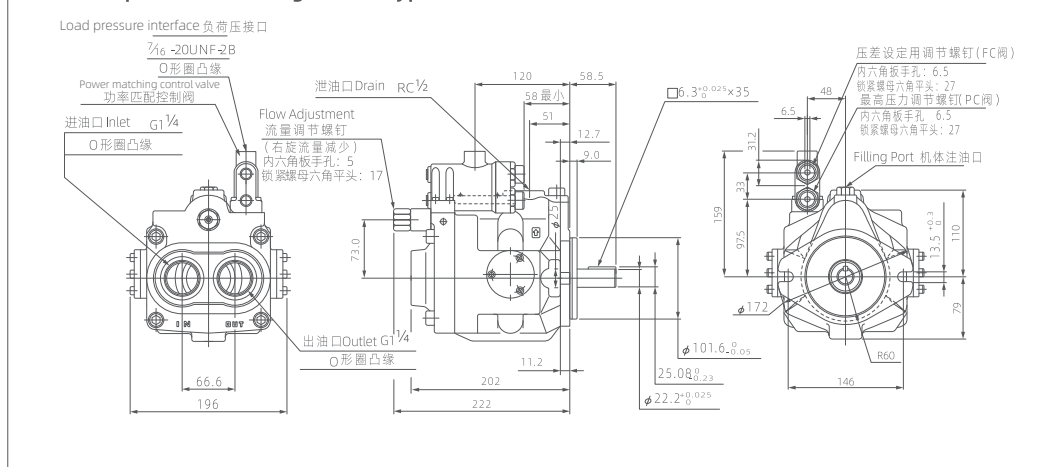
● VR38D**R*X-95RC遥控电控两段压力控制型 remote- Electric 2-stage pressure control



● VR38SA**RX-95两侧油口负载敏感控制型 Load sensing control type of oil ports on both sides

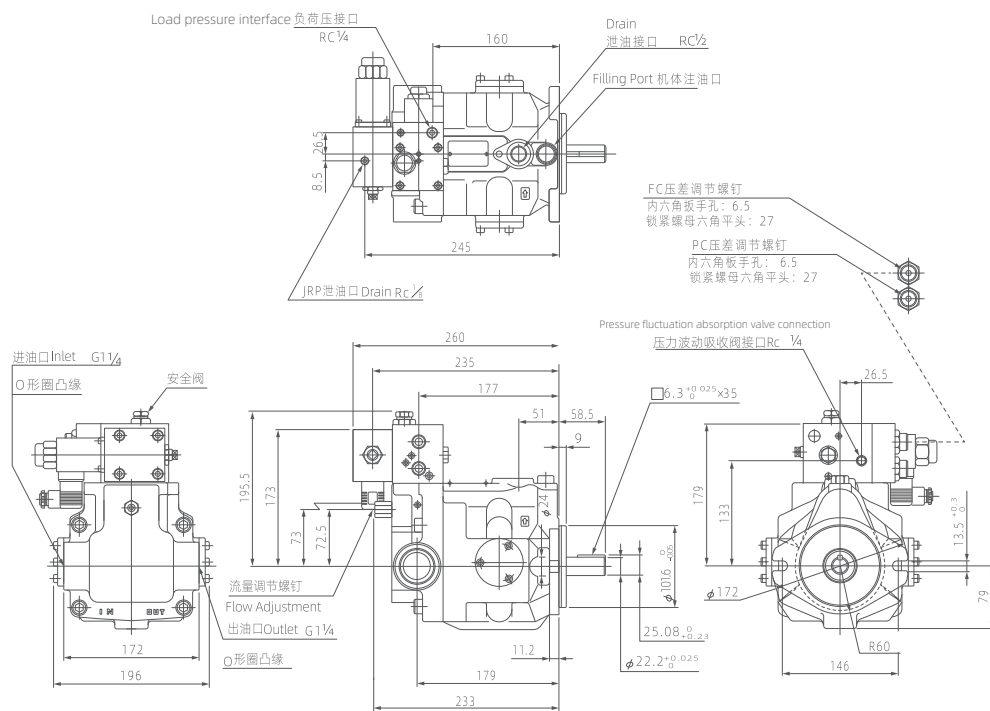


● VR38SA**R-95后方油口负载敏感控制型 Rear port load sensing control type



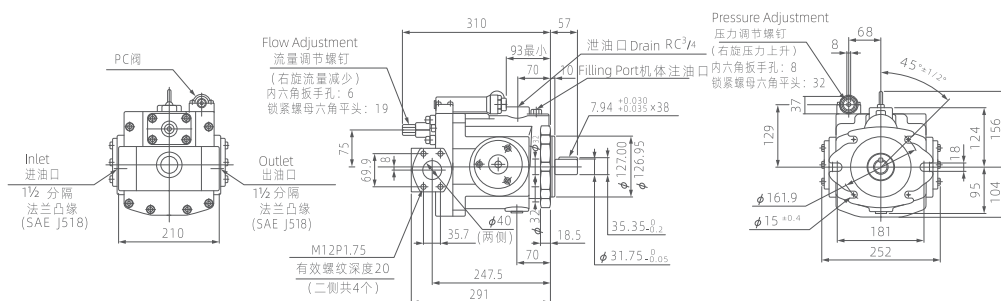
安装尺寸 Dimension

● VR38SAJS-*RX-95电-液比例负载敏感控制型 Electro-hydraulic proportional load sensing control type

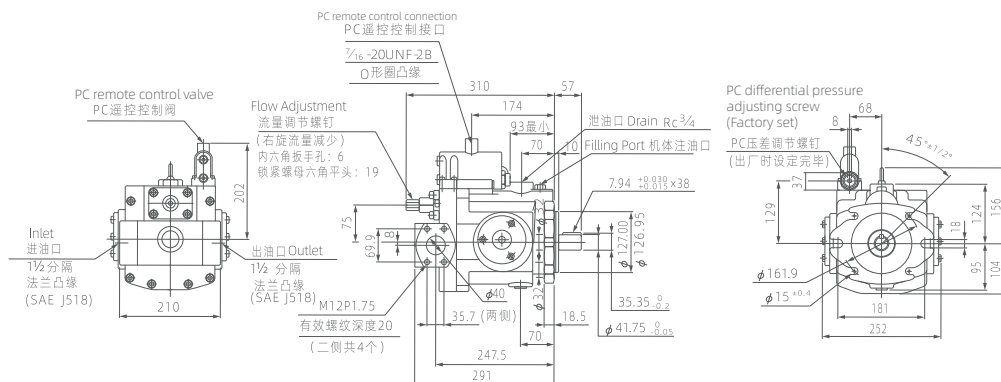


安装尺寸 Dimension

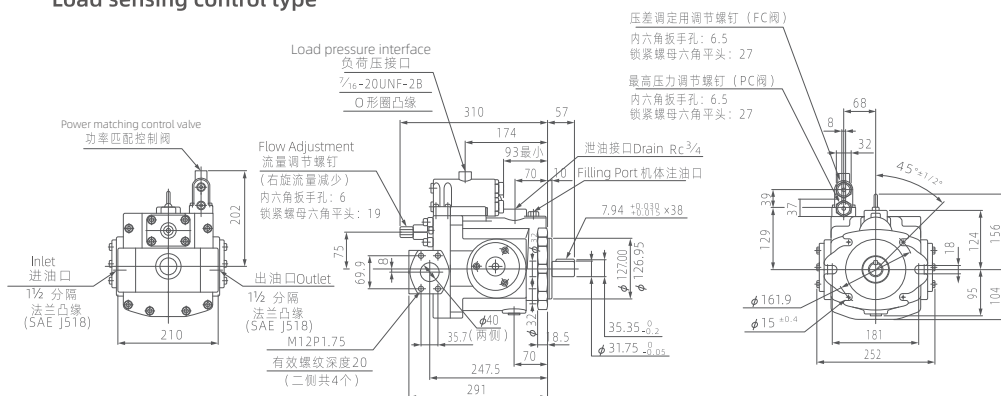
- VR50A*RX-20压力补偿控制型
Pressure compensation control type



- VR50A3RX-20RC遙控壓力補償控制型
Remote pressure compensation control type

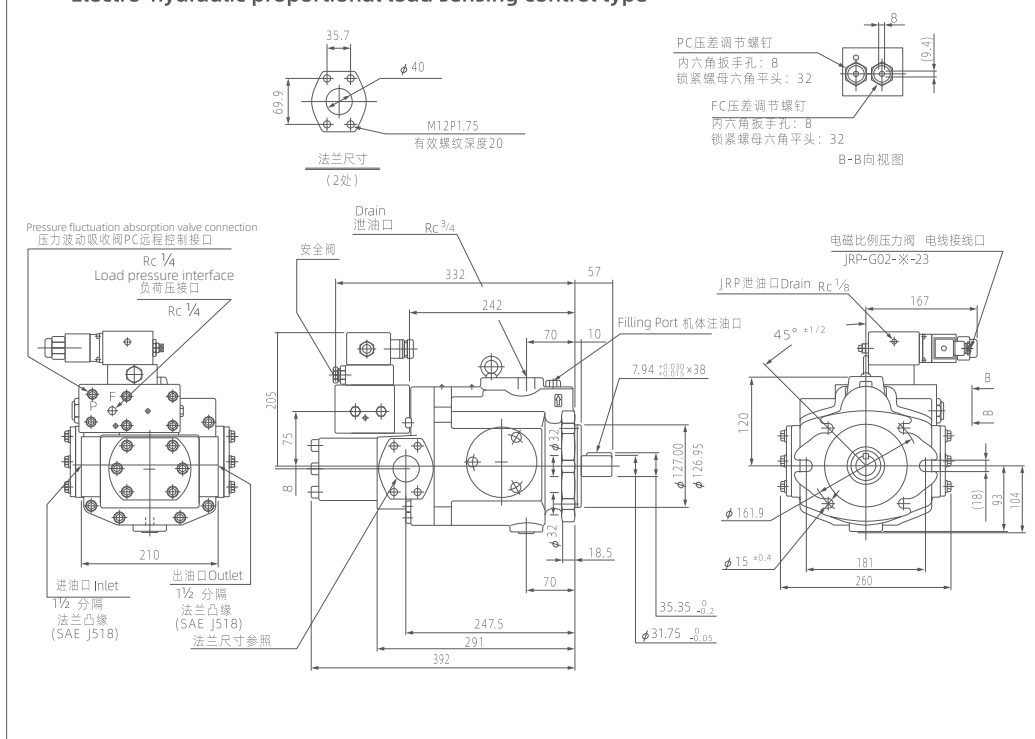


- VR50SA**RX-20负载敏感控制型
Load sensing control type



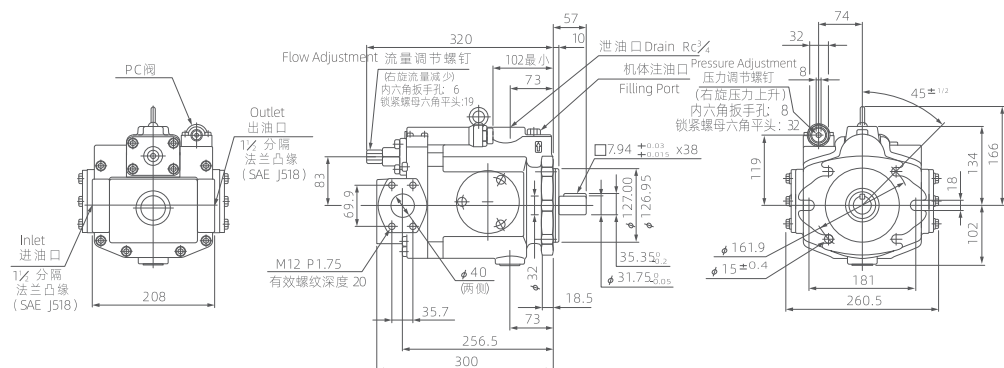
安装尺寸 Dimension

● VR50SAJS-*RX-20电-液比例负载敏感控制型 Electro-hydraulic proportional load sensing control type

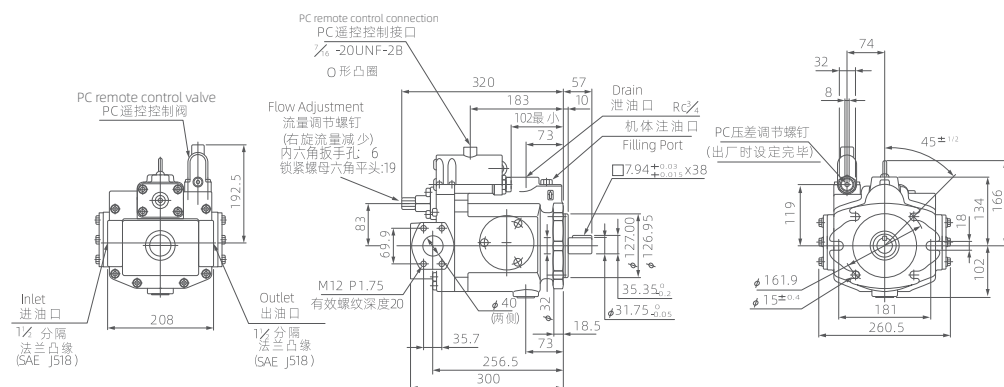


安装尺寸 Dimension

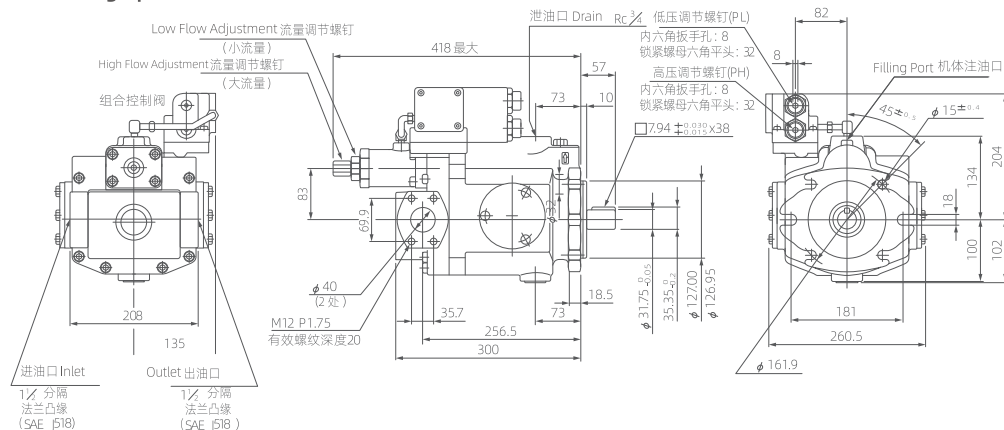
● VR70A*RX-60压力补偿控制型 Pressure compensation



● VR70A3RX-60RC遥控压力补偿控制型 remote pressure compensation control type



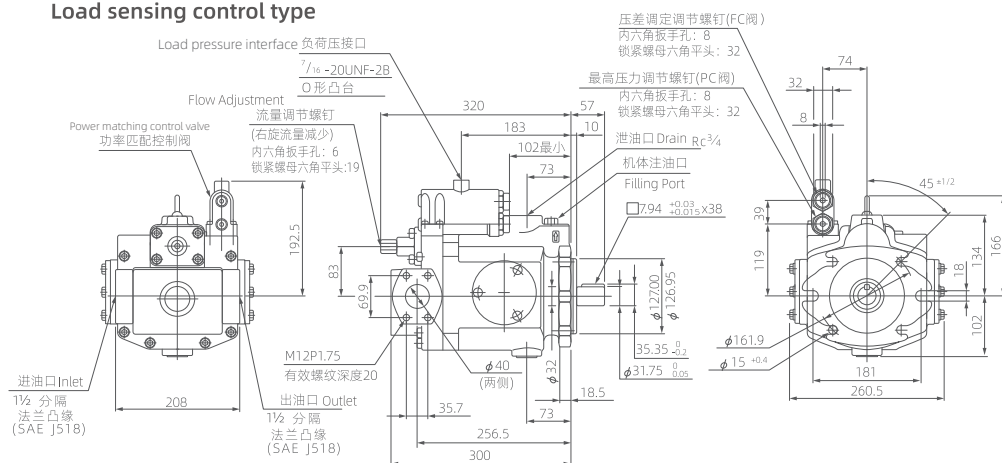
● VR70C**RHX-60两段压力两段流量控制型 2-stage pressure & Flow control



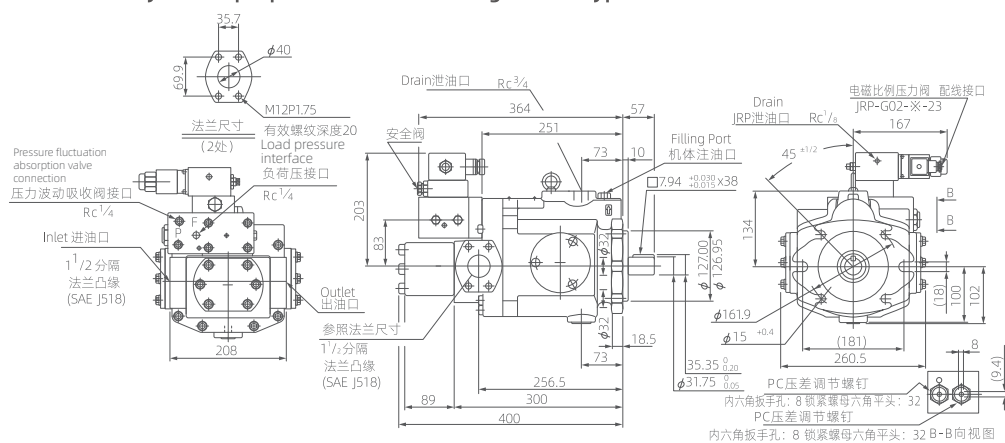
安装尺寸

Dimension

- VR70SA**RX-60负载敏感控制型
Load sensing control type



- VR70SAJS-*RX-60电-液比例负载敏感控制型
Electro-hydraulic proportional load sensing control type



PVB series



PVB系列变量柱塞泵 PVB-series piston pump

- 斜盘式轴向柱塞泵，容积效率高，快速截流，节省输入功率；
压力、流量大小控制灵敏，稳定可靠，使用寿命长；
噪音低，功率损失小，油液温升慢，使用消音结构；
使用螺纹油口，装机更加轻量化。
- Swash plate axial piston pumps with high volumetric efficiency,
quick cut-off and input power-saving;
Sensitive pressure and flow control, working in stability and
reliability, with a long service life;
Low noise, minimal power loss, slow oil temperature rise, and
equipped with a silencing structure;
Utilizes threaded oil ports, making the installation more
lightweight.

-
- 排量：10.5cm³/rev~32.9cm³/rev
压力：工作压力达21MPa
转速：最高1800r/min
 - Displacement: 10.5cm³/rev~32.9cm³/rev
Pressure: Work up to 21MPa
Speed: Maximum up to 1800r/min

K01

PVB系列订货型号

PVB-Product Series



PVB	5		R	S	Y	20	C	C	G	11
01	02	03	04	05	06	07	08	09	10	11

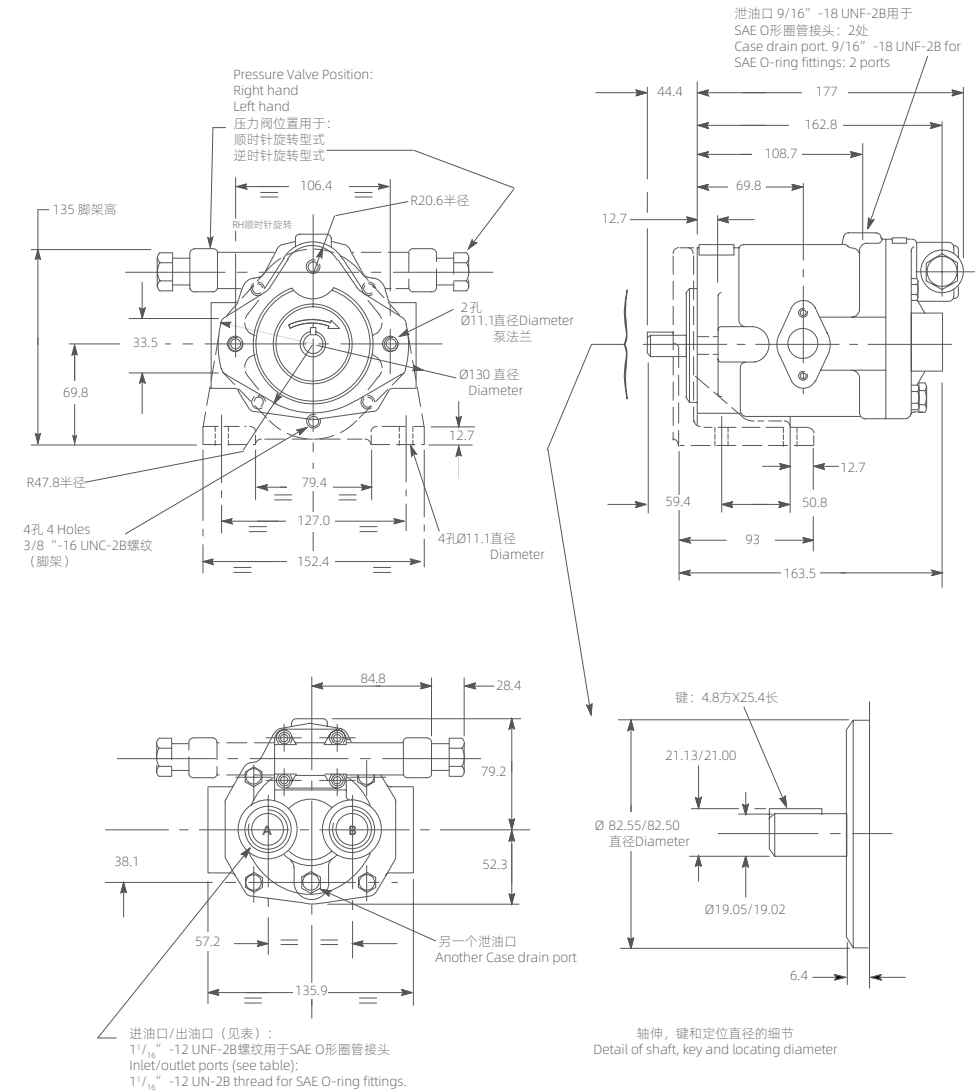
01	PVB系列变量柱塞泵 PVB-series piston pump
02	规格排量 Displacement 5: 10.55cm³/rev 6: 13.81cm³/rev 10: 21.10cm³/rev 15: 33.00cm³/rev
03	安装方式 Mounting 无: 法兰安装 None: Flange Mounting F: 脚架安装 F: Foot stand Mounting
04	旋转方向 Rotation direction (View from the shaft end) R: 顺时针 R: Clockwise L: 逆时针 L: Counter clockwise
05	油口方向 Port position S: 后油口 S: Rear port D: 两侧油口 D: Side port with thread type
06	轴伸型式 Shaft Extension N: 公制 N: Metric Y: SAE型 Y: SAE
07	设计代号 Design Number 31: 仅PVB10和PVB15 31: Only PVB10 and PVB15 20: 所有型号 20: All of Model
08	控制方式 I (详情查看B01~B36) Control Method I (Details in B01-B36) C: 压力补偿控制 17~210bar C: Standard Pressure Compensator 17-210bar CM: 压力补偿控制 17~100bar CM: Standard Pressure Compensator 17-100bar CVP: 负载敏感+压力限制控制 CVP: Load sensing with pressure limiter.
09	最大排量调整 Maximum Displacement Adjustment 无: 不需要 Non: Unnecessary C: 最大排量限制 C: Maximum Displacement Limit
10	控制方式 II (详情查看B01~B16) Control Method II (Details in B01-B16) 无: 不需要 Non: Unnecessary G: 远程控制 G: remote Control

11	控制设计号 Control Design Number 11: C、CM 12: CVP 20: CG
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*更多参数请查阅A01页
For more parameters, please refer to page A01

安装尺寸
Dimension

● PVB5/6 SAE 法兰安装Flange Mounting(mm)



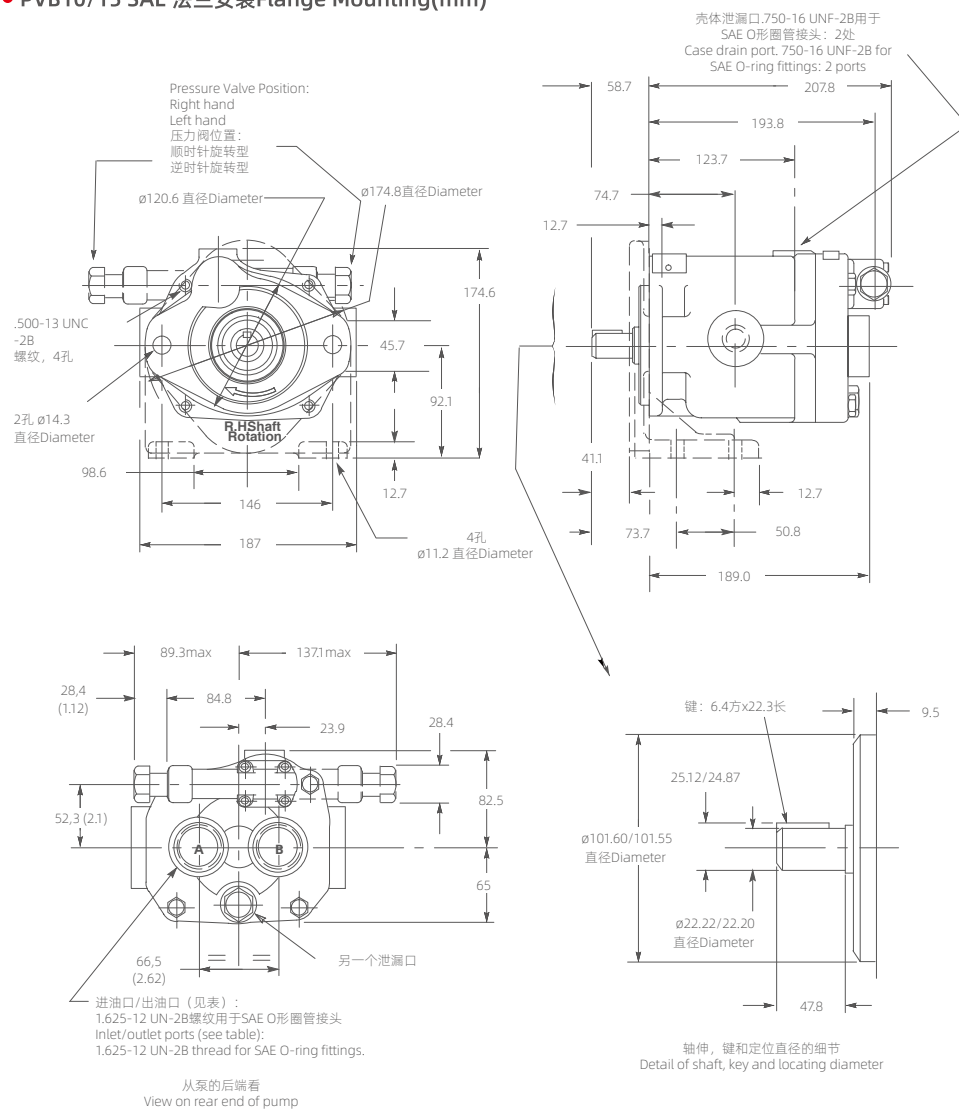
从泵的后端看
View on rear end of pump

旋转方向 Shaft Rotation	进油口 Inlet Port	出油口 Outlet Port
顺指针 RH	A	B
逆指针 LH	B	A

安装尺寸

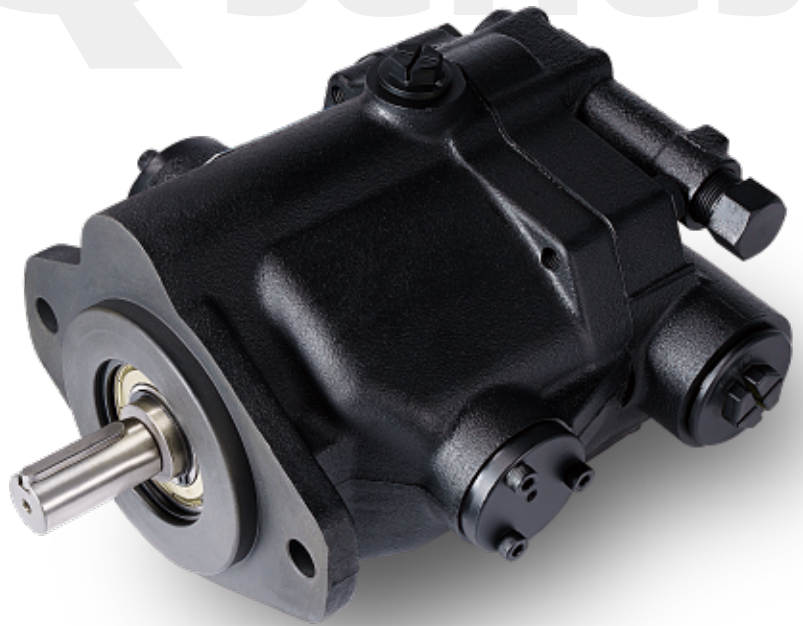
Dimension

● PVB10/15 SAE 法兰安装 Flange Mounting (mm)



旋转方向 Shaft Rotation	进油口 Inlet Port	出油口 Outlet Port
顺指针 RH	A	B
逆指针 LH	B	A

PVQ series



PVQ系列变量柱塞泵 PVQ-series piston pump

- 斜盘式轴向柱塞泵，容积效率高，快速截流，节省输入功率；
压力、流量大小控制灵敏，稳定可靠，使用寿命长；
噪音低，功率损失小，油液温升慢，使用消音结构；
使用螺纹油口，装机更加轻量化。
 - Swash plate axial piston pumps with high volumetric efficiency,
quick cut-off and input power-saving;
Sensitive pressure and flow control, working in stability and
reliability, with a long service life;
Low noise, minimal power loss, slow oil temperature rise, and
equipped with a silencing structure;
Utilizes threaded oil ports, making the installation more
lightweight.
-
- 排量：10.5cm³/rev~32.9cm³/rev
压力：工作压力达21MPa
转速：最高1800r/min
 - Displacement: 10.5cm³/rev~32.9cm³/rev
Pressure: Work up to 21MPa
Speed: Maximum up to 1800r/min

L01

PVQ系列订货型号

PVQ-Product Series



PVQ	10	A2	R	SE	1	S	20	C	21	D	12
01	02	03	04	05	06	07	08	09	10	11	12

01	PVQ系列变量柱塞泵 PVQ-series piston pump										
02	规格排量 Displacement										
	10: 10.5cm³/rev										
	13: 13.8cm³/rev										
	20: 21.1cm³/rev										
	32: 32.9cm³/rev										
03	安装方式 Mounting										
	A2: 法兰SAEA (仅限PVQ10及PVQ13) A2: Flange SAE5(Only PVQ10, PVQ13)										
	B2: 法兰SAEB (仅限PVQ20及PVQ32) B2: Flange SAE6(Only PVQ20, PVQ32)										
04	旋转方向 Rotation direction (View from the shaft end)										
	R: 顺时针 R: Clockwise										
	L: 逆时针 L: Counter clockwise										
05	油口方向 Port position										
	SE: 后油口 SE: Rear port										
	SS: 两侧油口 SS: Side port with thread type										
06	轴伸型式 Shaft Extension										
	1: 平键轴 1: Straight Keyed Shaft										
	S: 花键轴 (9齿 16/32) S: Splined Shaft (9T 16/32)										
07	密封件 Seal Kit										
	S: 丁腈橡胶 S: NBR										
	F: 氟橡胶 F: FKM										
08	设计代号: 20 Design Number: 20										
09	控制方式 (详情查看B01~B36) Control Method I (Details in B01-B36)										
	C: 标准压力补偿控制 17~210bar C: Standard Pressure Compensator 17-210bar										
	CM: 标准压力补偿控制 17~100bar CM: Standard Pressure Compensator 17-100bar										
	CG: 遥控压力控制 CG: Pressure compensator modified for hydraulic remote control										
10	压力调节范围 Pressure Adjustment Range										
	21: 210bar										
	14: 140bar										
11	最大排量调整 Maximum Displacement Adjustment										
	无: 不需要 Non: Unnecessary										
	D: 最大排量限制 D: Maximum Displacement Limit										

12	控制设计号 Control Design Number
	12: O-形圈密封设计 12: O-ring Seal Design

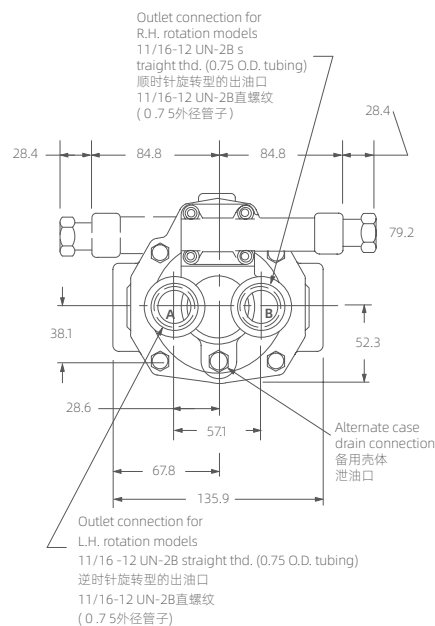
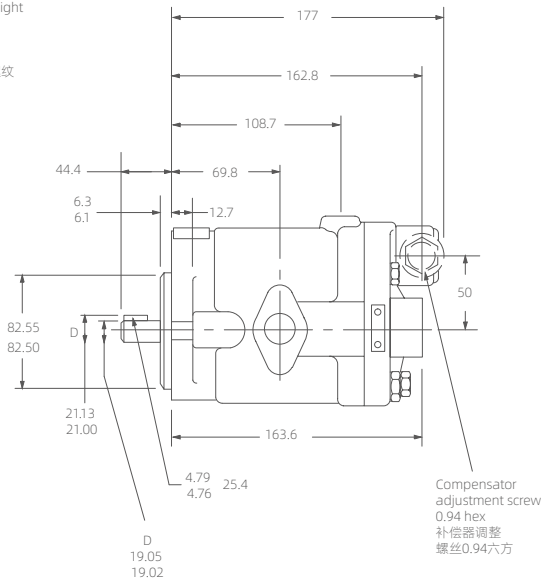
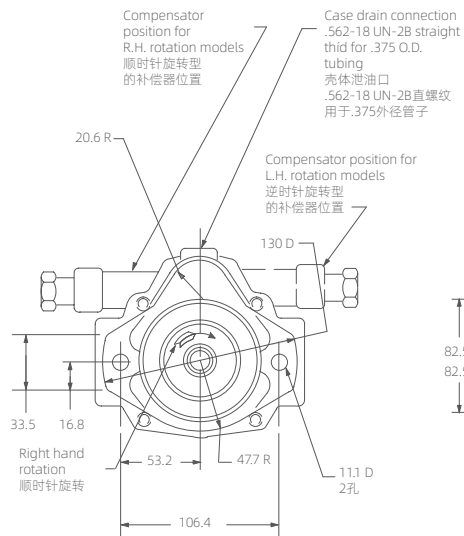
*更多参数请查阅A01页

For more parameters, please refer to page A01

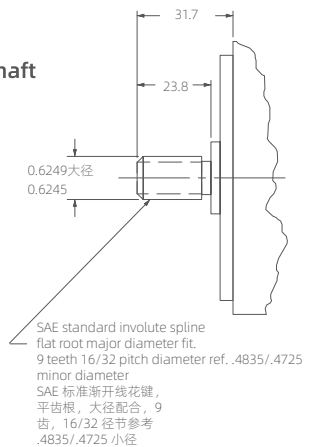
*更多参数请查阅A01页
For more parameters, please refer to page A01

安装尺寸 Dimension

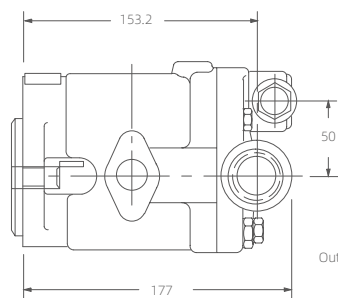
● PVQ10/13 后油口Rear Port (mm)



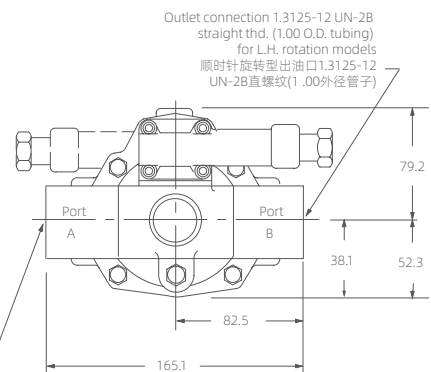
● S花键轴 Splined Shaft



● PVQ10/13 侧油口Side Port (mm)



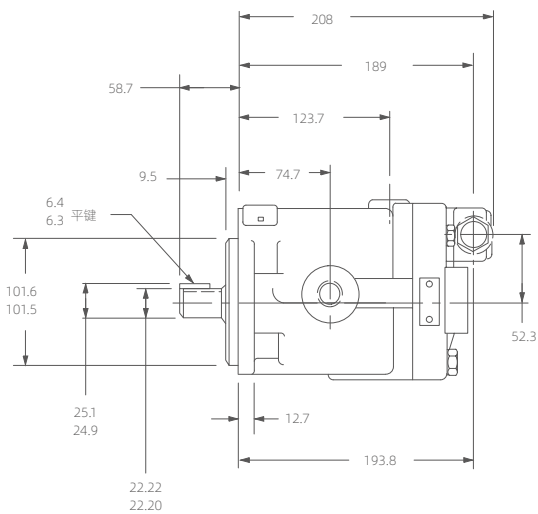
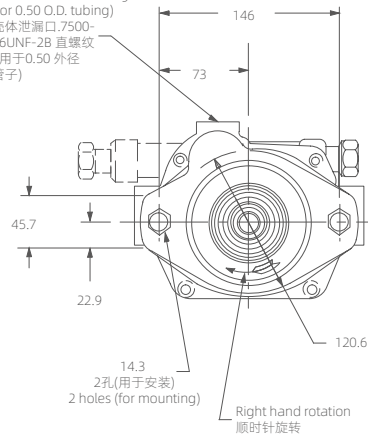
Outlet connection 1.3125-12 UN-2B
straight thd. (1.00 O.D. tubing)
for R.H. rotation models
逆时针旋转型的出油口
1.3125-12 UN-2B直
螺纹(1.00 外径管子)



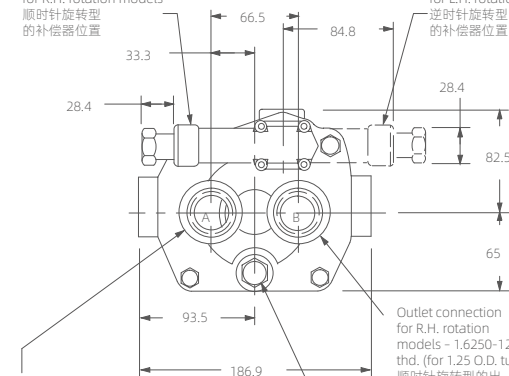
安装尺寸
Dimension

● PVQ20/32 后油口Rear Port (mm)

Case drain connection
.7500-16 UNF-2B straight thd.
(for 0.50 O.D. tubing)
壳体泄漏口.7500-
16UNF-2B 直螺纹
(用于0.50 外径
管子)



Compensator position
for R.H. rotation models
顺时针旋转型
的补偿器位置

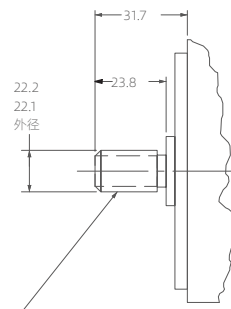


Compensator position
for L.H. rotation models
逆时针旋转型
的补偿器位置

Outlet connection
for R.H. rotation models
逆时针旋转型的出油口
-1.6250-12 UN-2B
螺纹(用于1.25 外径
管子)

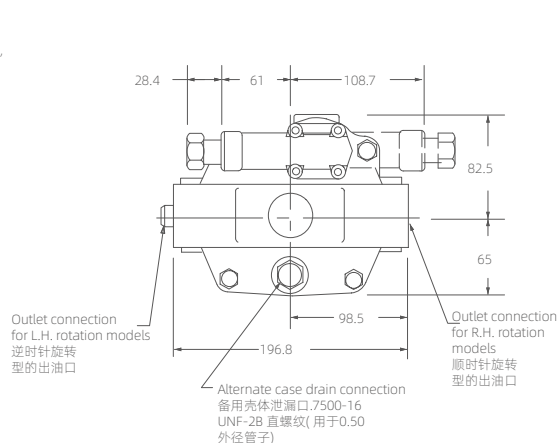
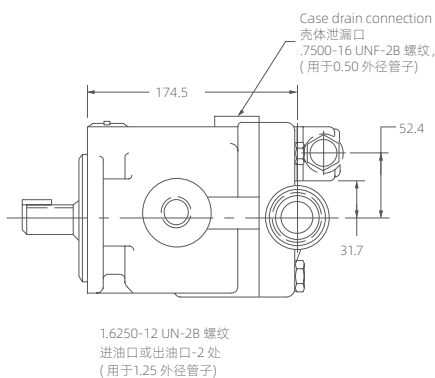
Alternate case
drain connection
备用壳体泄漏口
.7500-16UNF-2B
螺纹(用于0.50 外
径管子)

Outlet connection
for R.H. rotation
models - 1.6250-12
UN-2B thd. (for 1.25 O.D. tubing)
顺时针旋转型的
出油口 - 1.6250-12
UN-2B 螺纹(用于
1.25 外径管子)

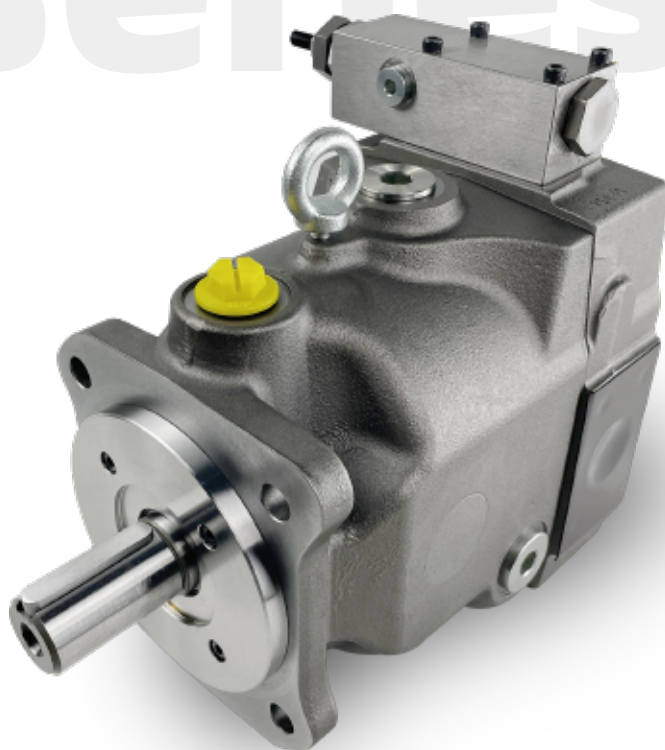
● S花键轴
Splined Shaft

SAE standard involute spline flat root major
diameter fit. 13 teeth 16/32 pitch 0.8125 pitch
diameter (ref.) 0.7335/0.7225 minor diameter
SAE 标准渐开线花键, 平齿根, 大径
配合, 13 齿, 16/32 径节, 0.8125 节圆
直径(参考) 0.7335/0.7225 小径。

● PVQ20/32 侧油口Side Port (mm)



PVseries



PV系列变量柱塞泵 PV-series piston pump

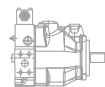
- 斜盘式轴向柱塞泵，容积效率高，有快速截流特性，节省功率；刚性结构和高转速低摩擦构造，噪音低，使油泵寿命更长；发热少，功率损失小，油液温升慢，使用消音结构；使用模块化设计，使控制方式更加多元化，有效简化油路设计；具备通轴能力，可组合双联、多联泵或者与其他种类油泵连接。
- Swash plate axial piston pumps with high volumetric efficiency, quick cut-off and input power-saving; Rigid structure and low-friction design at high speeds for reduced noise and extended pump life; Low noise, minimal power loss, slow oil temperature rise, and equipped with a silencing structure; Modular design enhances various control methods and combinations, effectively simplify the design of the oil circuit; With thru-drive characteristic, it could be connected with multi-stage pumps.

-
- 排量：16cm³/rev~65cm³/rev
压力：常用压力35MPa，最高压力42MPa
转速：最高2750r/min
 - Displacement: 16cm³/rev~65cm³/rev
Pressure: Rated up to 35MPa, Maximum up to 42MPa
Speed: Maximum up to 2750r/min

M01

PV系列订货型号

PV-Product Series



PV	063	GA	1	R	M	1	A	0	N	
01	02	03	04	05	06	07	08	09	10	11

01	系列: PV PV-series piston pump
----	---------------------------------

02	规格排量 Displacement
	016: 16cm ³ /rev
	020: 20cm ³ /rev
	023: 23cm ³ /rev
	028: 28cm ³ /rev
	032: 32cm ³ /rev
	040: 40cm ³ /rev
	046: 46cm ³ /rev
	056: 56cm ³ /rev
	065: 65cm ³ /rev

03	控制方式 (详情查看B01~B23) Control option (Details can be found on page B01~B36)
	A0: 压力补偿控制型 A0: Standard pressure control
	LN: 无调节器 (定量泵) LN: None pressure compensator
	LS: 定量电控两段流量控制型 LN: None pressure compensator
	LC: 定量自压两段流量控制型 LC: Fixed displacement 2-stage flow compensator
	GM: 遥控型调节器 (含NG6) GM: Remote pressure compensator with NG6 interface
	GA: 遥控型调节器+溢流阀 GA: Remote pressure compensator + Relief valve
	GJ: 遥控型调节器+比例压力 GJ: Remote pressure compensator + Proportional pressure valve
	GR: 遥控型调节器+电控卸载 GR: Remote pressure compensator + Electrical unloading
	GB: 遥控型调节器+电控两段压力 GB: Remote pressure compensator + 2-stage pressure control
	GC: 遥控型调节器+电控卸载+两段压力 GC: Remote + Electrical unloading + 2-stage pressure control
	HM: 负载敏感型调节器 (含NG6界面) HM: Load-sensing compensator (with NG6 interface)
	HA: 负载敏感型调节器+溢流阀 HA: Load-sensing compensator + Relief valve
	HJ: 负载敏感型调节器+比例压力 HJ: Load-sensing compensator + Proportional pressure valve
	HR: 负载敏感型调节器+电控卸载 HR: Load-sensing compensator + Electrical unloading
	HB: 负载敏感型调节器+电控两段压力 HB: Load-sensing compensator + 2-stage pressure control
	HC: 负载敏感型调节器+电控卸载+两段压力 HC: Load-sensing + Electrical unloading + 2-stage pressure control
	HQ: 负载敏感型调节器+比例流量+溢流阀 HQ: Load-sensing + Proportional flow valve + Relief valve
	HK: 负载敏感型调节器+比例压力+比例流量 HK: Load-sensing + Proportional pressure valve + flow valve
	BQ: 无级变速控制 (油缸控制) BQ: Infinitely variable speed control (cylinder control)

04	压力调节范围 Pressure Adjustment Range
	2: 10 ~ 140bar
	3: 35 ~ 250bar
	4: 40 ~ 280bar
	5: 50 ~ 315bar
	6: 50 ~ 315bar

05	旋转方向 Direction of Rotation
	R: 顺时针 R: Right Hand
	L: 逆时针 L: Left Hand

06	连接型式 Mounting	
	公制 Mounting	平键: M/R Parallel keyed: M/R
		花键: K/S/P Splined Shaft: K/S/P
	英制 Imperial	平键: N/J Parallel keyed: N/J
		花键: D/U/G Splined Shaft: D/U/G

07	螺纹 Thread
	1: BSPP (G)
	2: PT (RC)
	3: UNF (SAE)
	7: ISO 6149 (M)

08	通轴装配 Thru drive	
	A: 单泵 A: Single Pump	
	B: 单泵、带通轴孔 B: Single Pump, Prepared for thru drive	
	单泵 (带通轴孔、连接附件) Single Pump(Prepared for thru drive, Connect accessories)	
		C: ø50.8mm
	英制 Imperial	D: ø82.55mm
		E: ø101.6mm
		F: ø127mm
		I: ø63mm
	公制 Metric	J: ø80mm
		K: ø100mm
		L: ø125mm

09	电压 Metric
	0: 无电压 0: No voltage
	A: AC100V (50/60HZ)
	B: AC110V (60HZ)
	C: AC200V (50/60HZ)
	D: AC220V (60HZ)
	E: DC 12V
F: DC 24V	

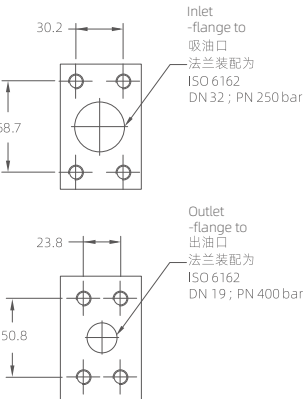
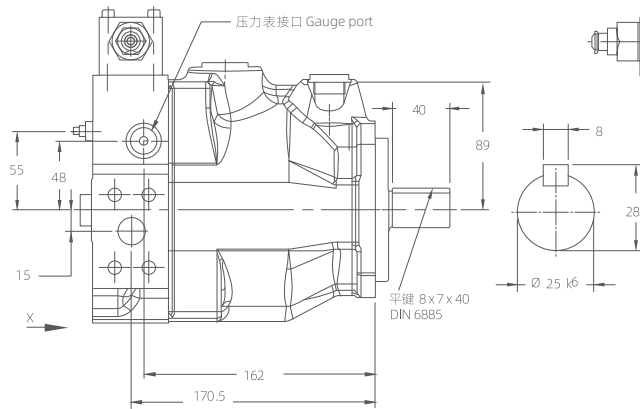
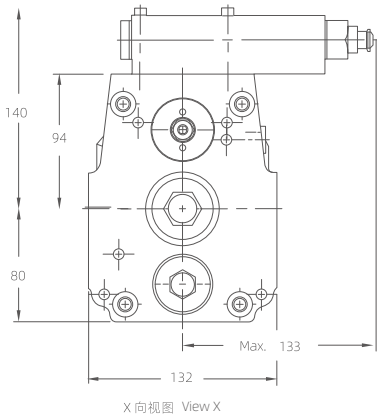
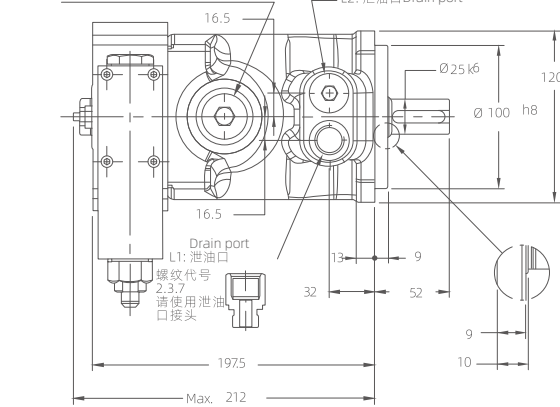
10	油封 Oil Seal
	N: 丁腈橡胶 N: NBR
	V: 氟橡胶 V: FKM

*更多参数请查阅A01页
More specification in A01

安装尺寸
Dimension

● PV016~PV028
公制连接 (止口Ø100)
Metric version (Motor Mounting Ø100)

Mounting hole for horse power compensator
pilot or displacement feedback LVDT
用於功率调节器或排量反馈的LVDT



油口说明 Oil Ports

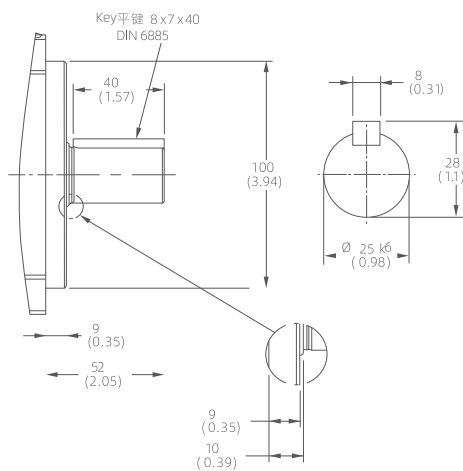
螺纹代码 Thread Code	1	2	3	7
吸油口 Inlet Port	BSP(P)(G) Ø32 M10*P1.5 18 deep	PT(RC) Ø32 M10*P1.5 18 deep	UNF(SAE) Ø32 7/16"-14 UNC 18 deep	ISO 6149(M) Ø32 M10*P1.5 18 deep
出油口 Outlet Port	Ø19 M10*P1.5 18 deep	Ø19 M10*P1.5 18 deep	Ø19 7/16"-14 UNC 18 deep	Ø19 M10*P1.5 18 deep
泄油口 Drain Port (L1/L2)	G 1/2" -14	PT 1/2" -14	7/8" -14 UNF	M22*P1.5
压力表接口 Gauge	G 1/4" -19	PT 1/4" -19	7/16" -20 UNF	M12*P1.5

安装尺寸

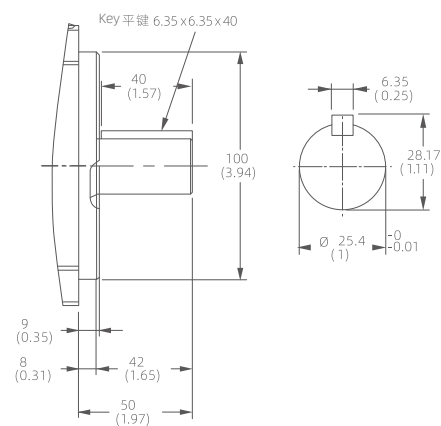
Dimension

- PV016~PV028
公制连接 (止口 $\varnothing 100$) Metric version (Motor Mounting $\varnothing 100$)
可选择的轴端型式 Shaft Type

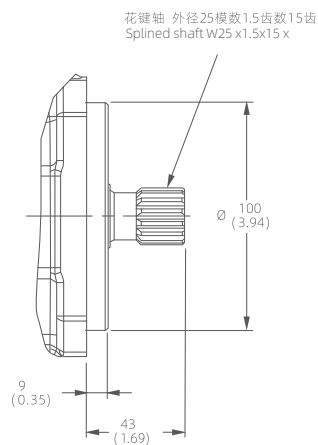
连结代码: **M**



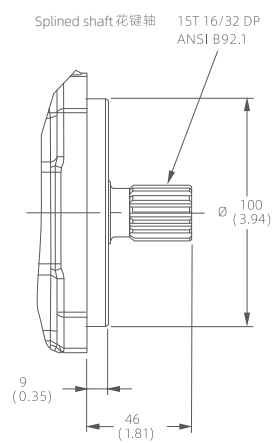
连结代码: **R**



连结代码: **K**

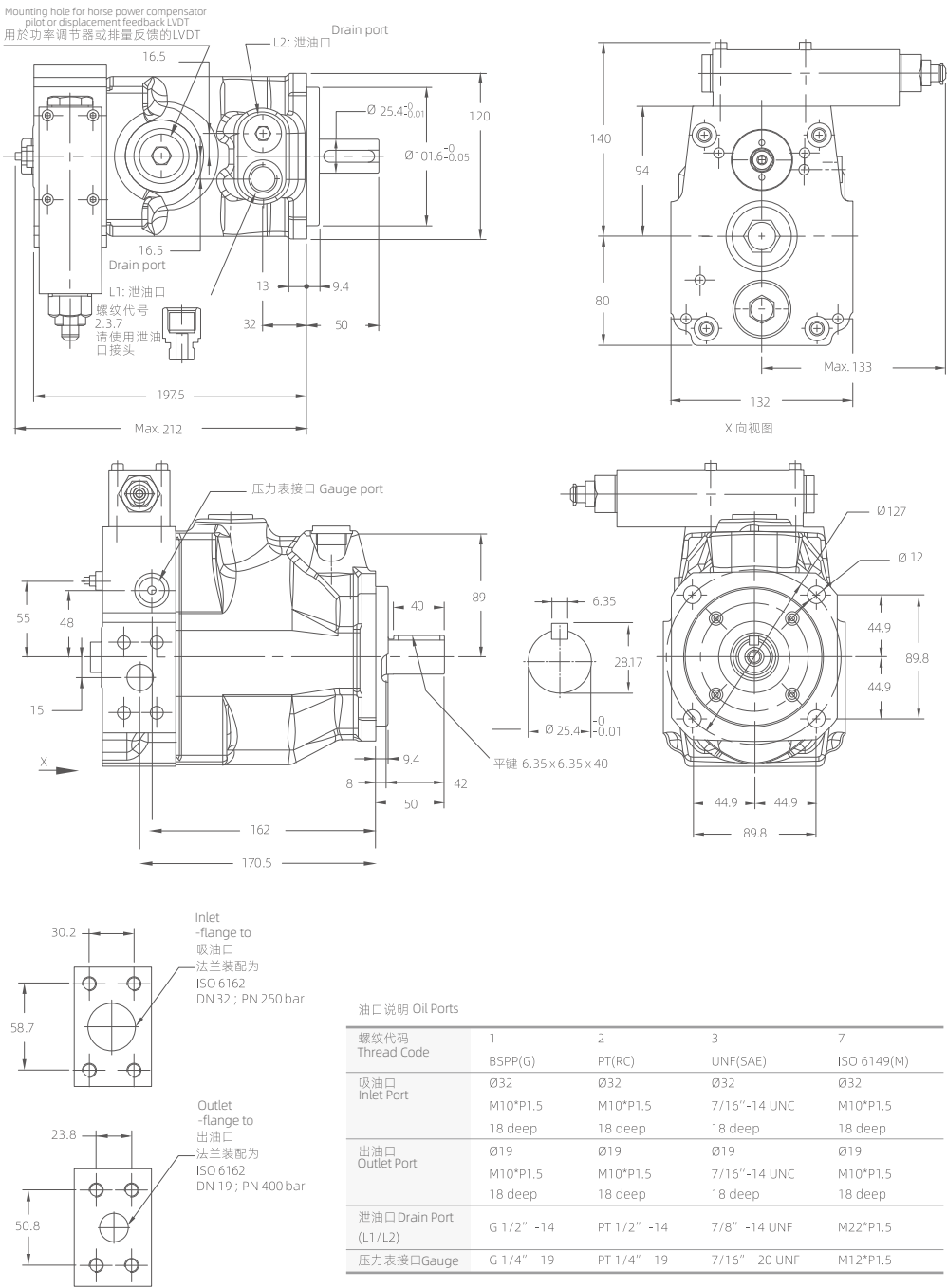


连结代码: **S**



安装尺寸
Dimension

● PV016~PV028
SAE连接 (止口Ø101.6)
SAE version(motor mounting Ø101.6)



安装尺寸

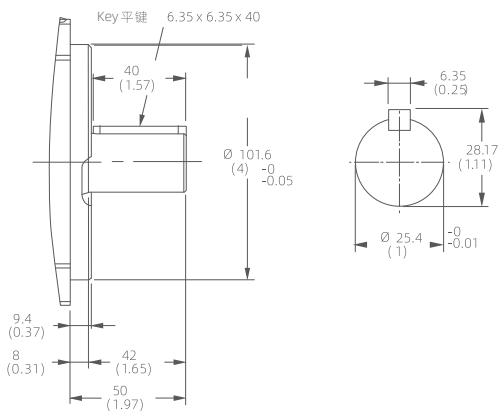
Dimension

● PV016~PV028

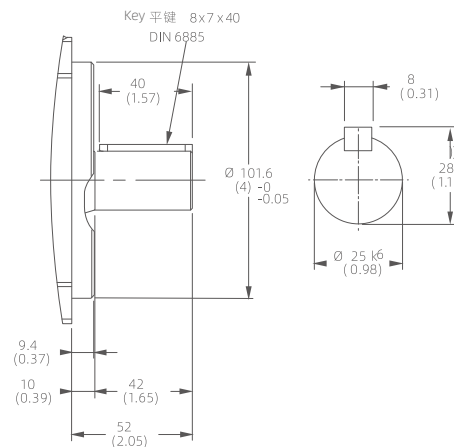
SAE连接 (止口 $\varnothing 101.6$) SAE version (motor mounting $\varnothing 101.6$)

可选择的轴端型式 Shaft Type

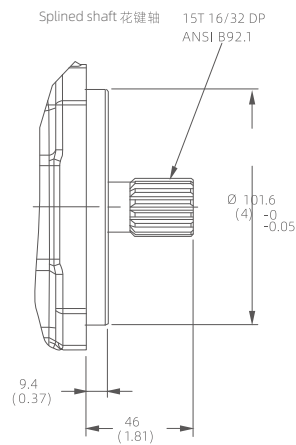
连结代码: **N**



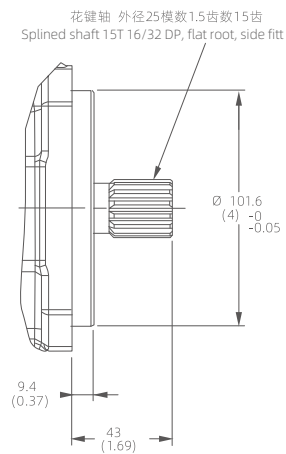
连结代码: **J**



连结代码: **D**



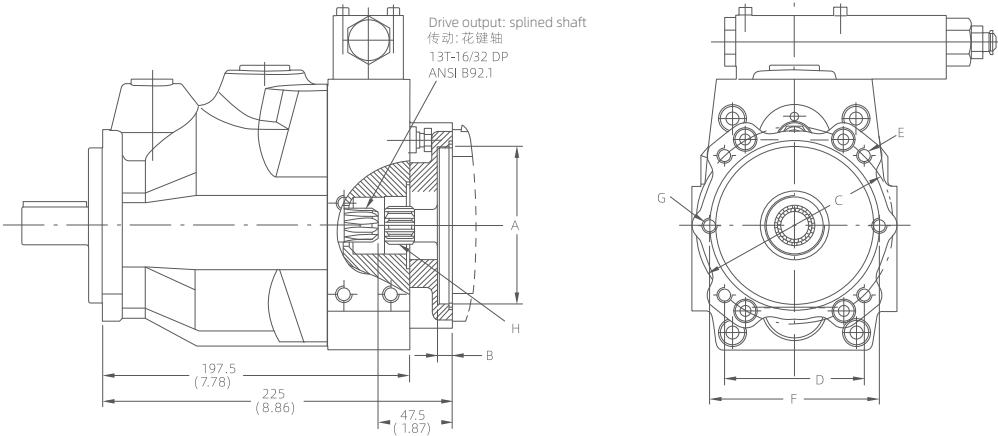
连结代码: **U**



安装尺寸

Dimension

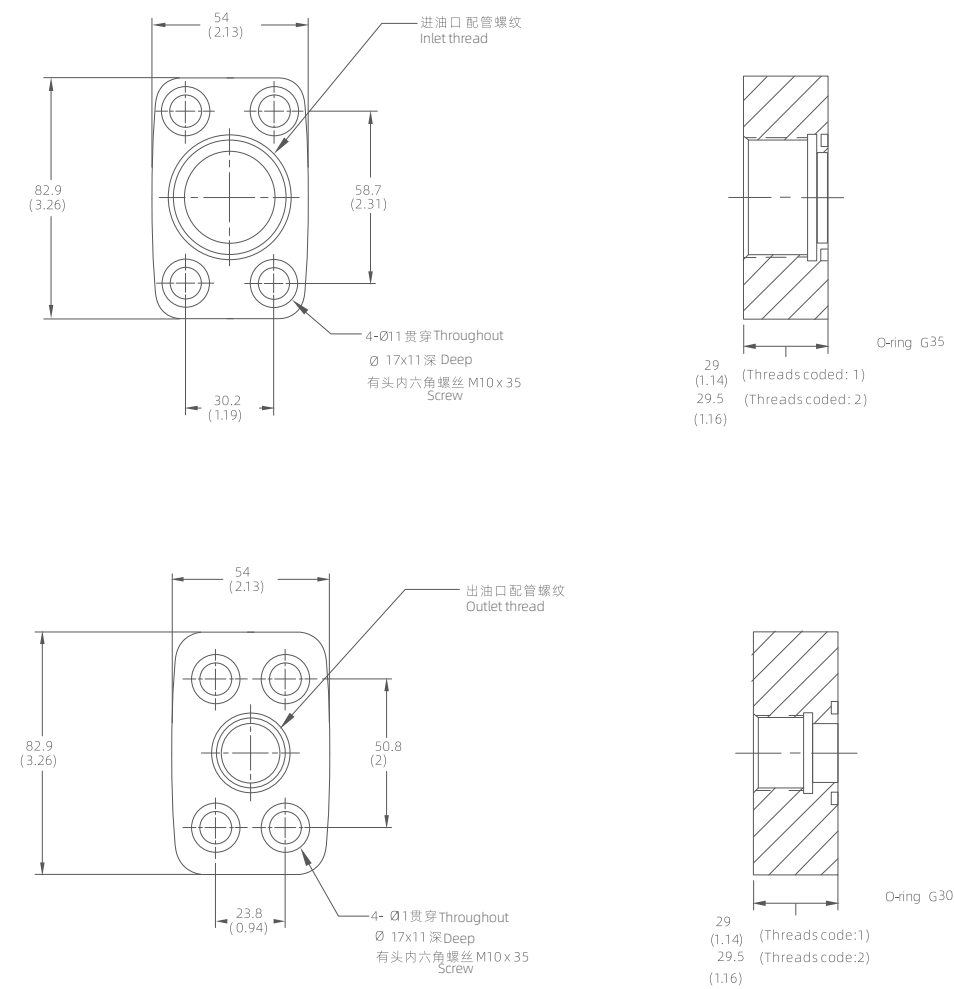
- PV016~PV028通轴结构 Thru Drive
通轴结构代码Thru Code: C、D、E、I、J、K



通轴转接件可按照下列连接尺寸供货 Thru shaft adaptors are available with the following dimensions							
通轴代码 Thru Code	A	B	C	D	E	F	G
I	63	10	85	-	M8	100	M8
J	80	10	103	-	M8	109	M10
K	100	10.5	125	-	M10	n.avail.	n.avail.
C	50.8	10	-	-	-	82	M8
D	82.55	10	-	-	-	106	M10
E	101.6	10.5	-	89.8	M10	n.avail.	n.avail.

安装尺寸
Dimension

● PV016~PV028进油口法兰Inlet / Outlet Flange



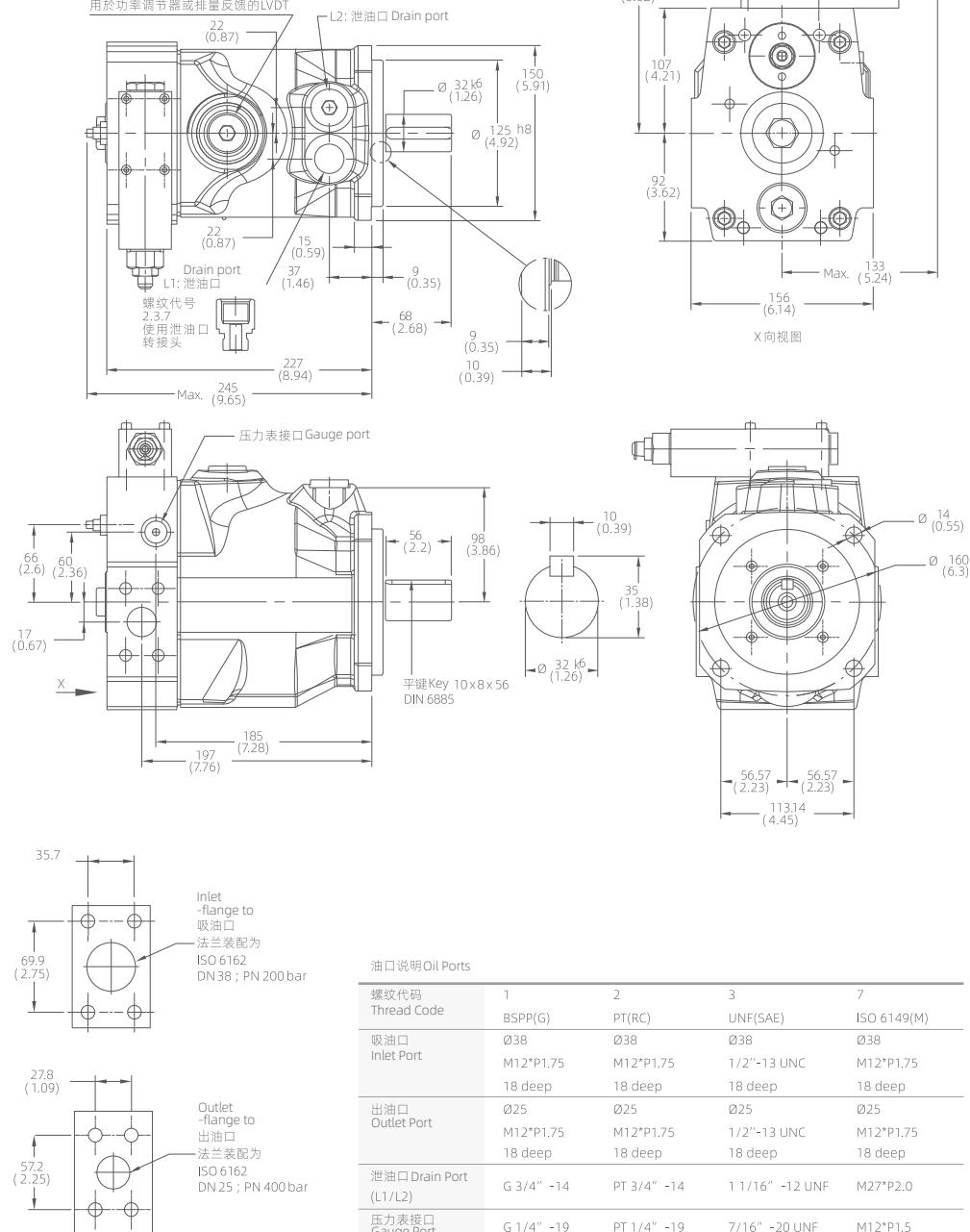
油口说明 Oil Ports

螺纹代码	1	2	3	7
吸油口	B5PP(G)	PT(RC)	UNF(SAE)	ISO 6149(M)
出油口	G 1 1/4" -11	PT 1 1/4" -11	1 5/8"-12 UN	M42*P2.0
出油口	G 3/4" -14	PT 3/4" -14	1 1/16"-12 UN	M27*P2.0

安装尺寸 Dimension

● PV032~PV046、PV056、PV065 公制连接 (止口Ø125) Metric version (motor mounting Ø125)

Mounting hole for horse power compensator
pilot or displacement feedback LVDT
用於功率调节器或排量反馈的LVDT

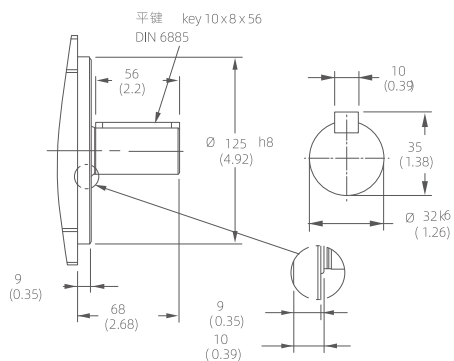


安装尺寸

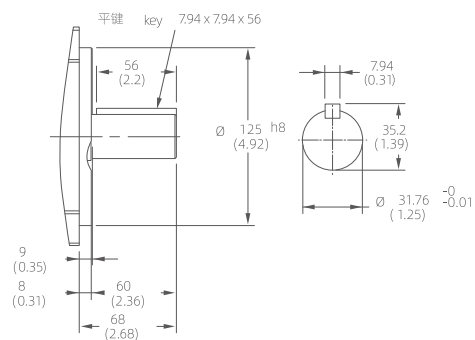
Dimension

- PV032~PV046、PV056、PV065
公制连接（止口 $\varnothing 125$ ）Metric version (motor mounting $\varnothing 125$)
可选择的轴端型式 Shaft type

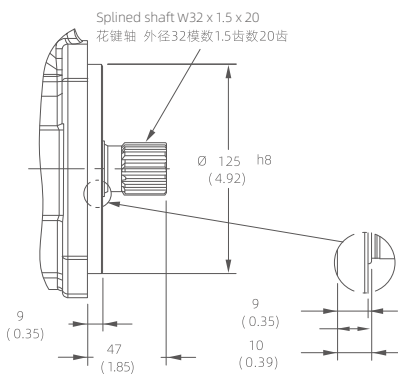
连结代码: **M**



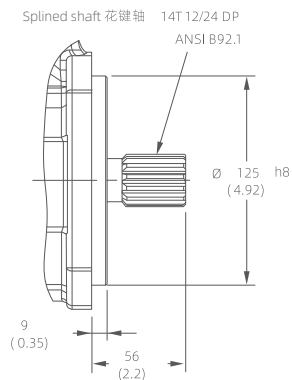
连结代码: **R**



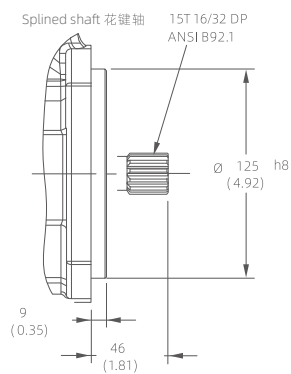
连结代码: **K**



连结代码: **S**

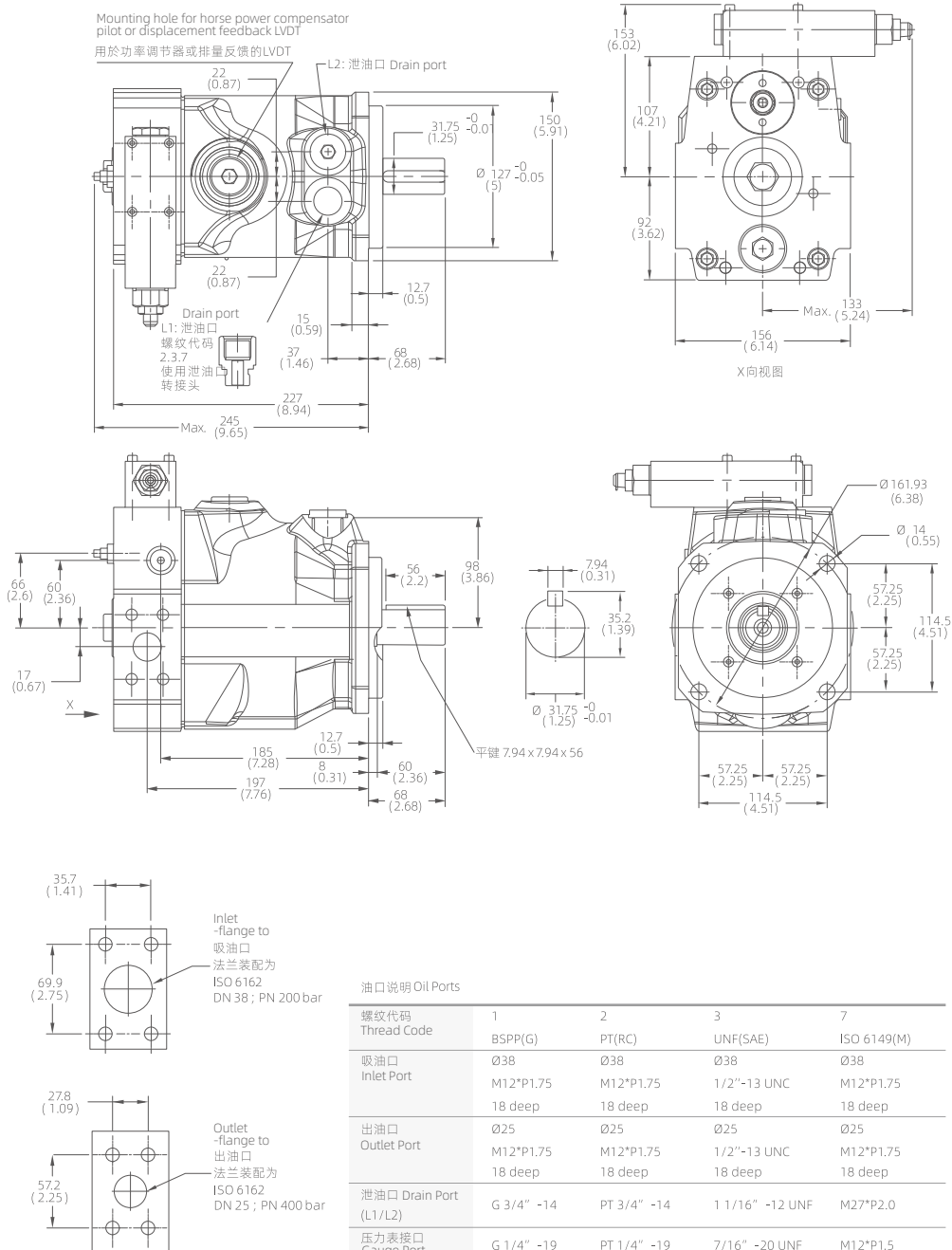


连结代码: **P**



安装尺寸 Dimension

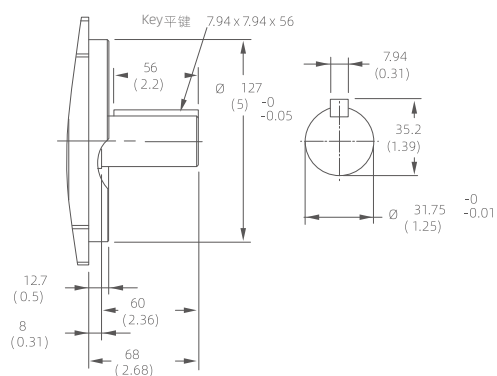
● PV032~PV046、PV056、PV065 SAE连接 (止口Ø127) SAE version (motor mounting Ø127)



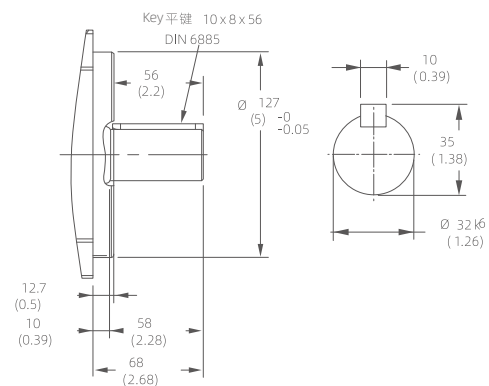
安装尺寸 Dimension

- PV032~PV046、PV056、PV065
SAE连接（止口 $\varnothing 127$ ） SAE version(motor mounting $\varnothing 127$)
可选择的轴端型式 Shaft type

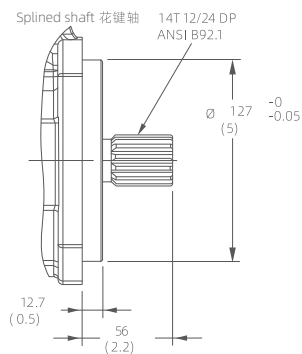
连结代码: **N**



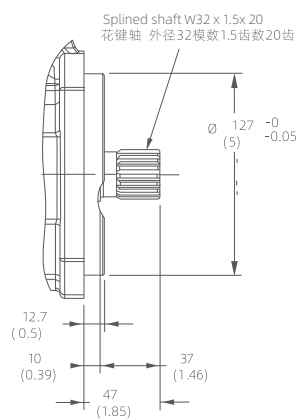
连结代码: **J**



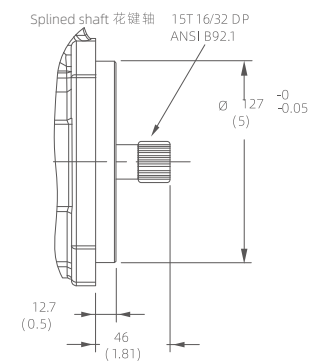
连结代码: **D**



连结代码: **U**



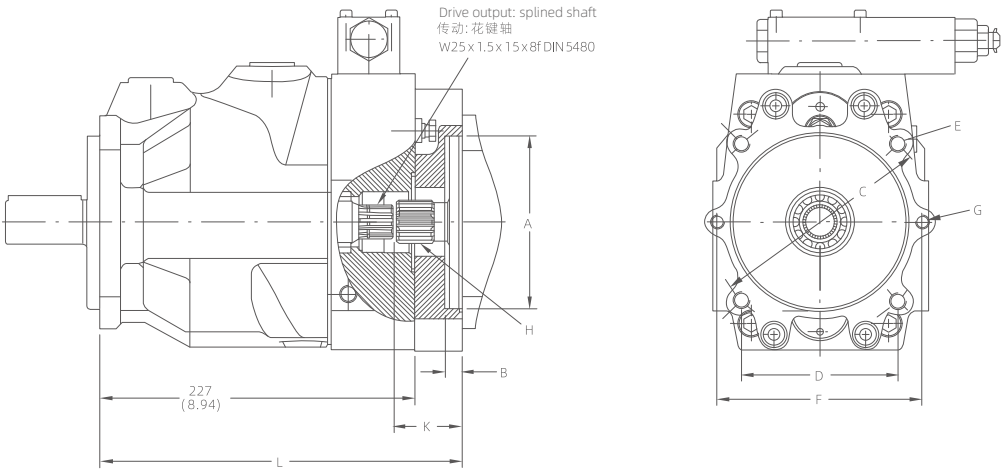
连结代码: **G**



安装尺寸

Dimension

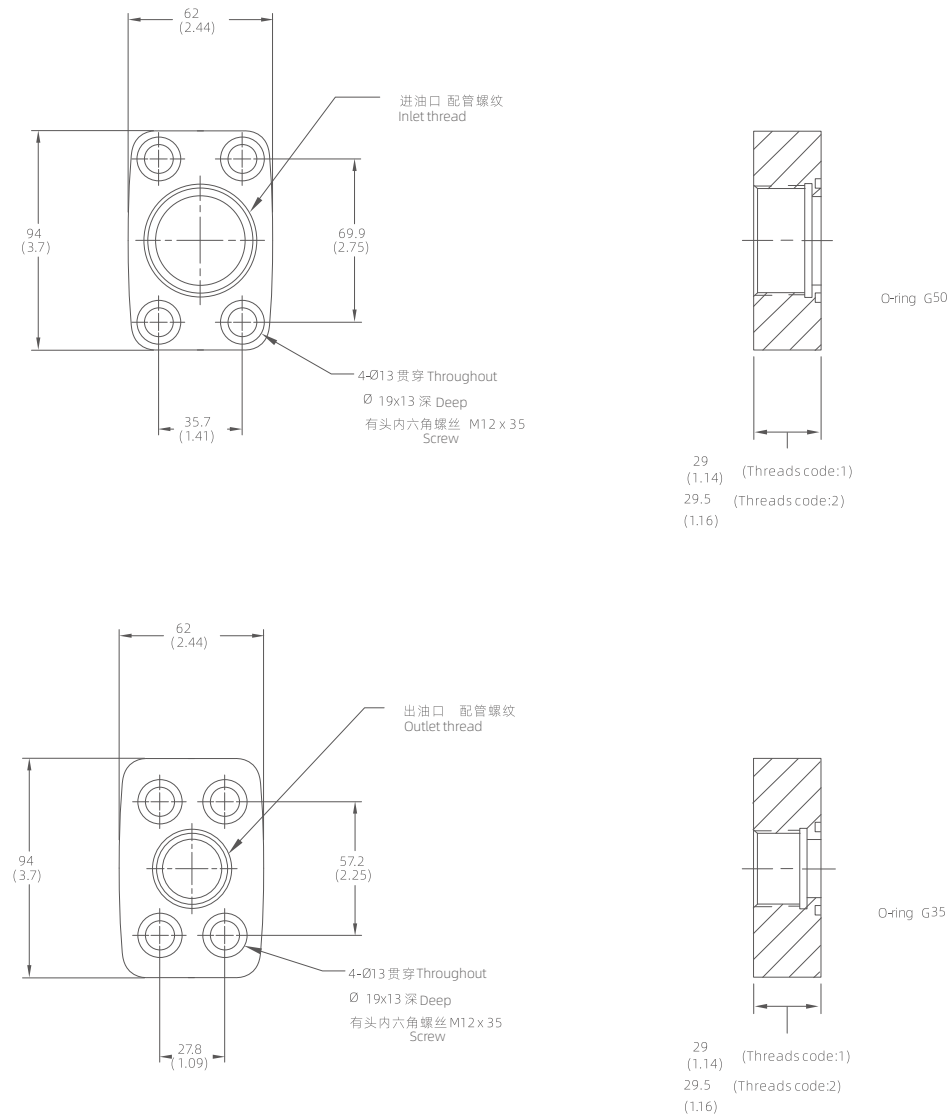
- PV032~PV046、PV056、PV065
- 通轴结构代码Thru Code: D、E、I、J、K、L



通轴转接件可按照下列连接尺寸供货 Thru shaft adaptors are available with the following dimensions									
通轴代码 Thru Code	A	B	C	D	E	F	G	K	L
I	63	8.5	85	-	M8	100	M8	49	261
J	80	8.5	103	-	M8	109	M10	49	261
K	100	10.5	125	-	M10	140	M12	49	261
L	125	12	160	-	M12	n.avail.	n.avail.	49	261
D	82.55	8	-	-	-	106	M10	49	261
E	101.6	11	-	89.8	M10	146	M12	49	261
F	127	13.5	-	114.5	M12	n.avail.	n.avail.	64	276

安装尺寸
Dimension

● PV032~PV046、PV056、PV065进出油口法兰 Inlet / Outlet Flange



油口说明 Oil Ports				
螺纹代码 Thread Code	1	2	3	7
吸油口 Inlet Port	BSPP(G)	PT(RC)	UNF(SAE)	ISO 6149(M)
出油口 Outlet Port	G 1 1/2" -11	PT 1 1/2" -11	1 7/8"-12 UN	M48*P2.0
出油口 Outlet Port	G 1" -11	PT 1" -11	1 5/16"-12 UN	M33*P2.0

