GRH Category

EXTERNAL GEAR PUMPS

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公司简介 Company Introduction

持续的改进和对液压领域的专注，超过三十年的设计及制造经验，GRH从1986年至今取得了引人注目的成功。

产品的研发和技术创新是GRH前进的动力

TS16949和IS014000的标准是GRH遵守的程序化准则

员工的能力和创造性是GRH不同于竞争对手的主要因素

GRH设计并生产：液压齿轮泵／片式多路阀／整体多路阀／比例多路阀（带负载敏感及压力补偿）／液压齿轮马达／液压分流马达；这些零部件主要应用于工业机械、物料搬运、工程机械、农业和工业领域。GRH充分意识到客户在设计阶段作出的贡献及其产品设计输入的重要性。除了供应GRH目录上的产品，GRH还与客户密切协作提供液压技术的系统解决方案。客户可以依靠GRH在液压元件及系统设计方面的经验及GRH技术专家去实现他们的设想。GRH已关注到电子控制与液压系统集成的重要性，为了优化设计及节约能源，GRH在系统的电子控制及集成化方面正在做出自己的努力。

国瑞液压（上海）– GRH的海外营销中心

国瑞液压（江苏）– GRH的生产制造基地和国内营销中心

GRH专业提供液压元件及液压技术的系统解决方案

GRH愿意与合作伙伴一起，为液压技术的创新提供动力

在液压领域，超过三十年的设计及制造经验

COMPANY INTRODUCTION

GRH is specialized in providing hydraulic components and solutions for hydraulic systems.

With continuous improvement and enthusiasm over the past 30 years, GRH has developed into an emerging power in the fluid power industry since it was established in 1986.

Research and development are the driving force that facilitates GRH's ability to create new products. Standards of TS16949 and ISO14000 are our guiding principles. Employees' capabilities and creativity are major factors that differentiate GRH from our competitors.

GRH designs and produces Hydraulic Gear Pumps & Motors, Monoblock Valves, Sectional Stack Valves, Proportional Valves and Flow Dividers. These products are used on industrial machinery, construction equipment, agricultural equipment and material handling applications. GRH is also willing to work with our customers to develop specialized products for their special needs. Our customers can count on GRH's extensive system design and application experience when they are designing their hydraulic systems.

GRH has designed and developed a series of load sensing proportional stackable valves which provides an improvement in valve operating performance and system efficiency.

GRH (Shanghai) - International Sales Office

GRH (Jiangsu) - Manufacturing Facility & Domestic Sales Office

GRH will work together with the customers to create a better future.

Over 30 years in the design and manufacture of hydraulic equipment

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GEAR PUMP USER GUIDE - 齿轮泵使用指南

Introduction of GRH Gear Pump – GRH 齿轮泵简介

Gear pumps from GRH Hydraulic have a floating bushing feature with automatic axial clearance compensation. The bushings are made with special abrasion resistant material providing improved service life. Precisely machined gears ensure our units provide excellent low noise characteristics. Our cold extrusion motor bodies can endure pressures above 30Mpa. High strength cast iron front & rear covers also enhance our reliability. Our units are widely used in the industrial, mobile, marine and aerospace industries.

齿轮泵是液压系统中的常用动力元件，它的特点是抗液压系统污染能力强，结构简单，可靠性高。GRH的液压齿轮泵均具有轴向间隙自动补偿功能，轴套独特的耐磨损配方，提供了长期的使用寿命，精心加工的齿轮保证了在低噪音条件下的使用。可广泛用于工业液压系统、行走机械液压系统、航空航天液压系统、船舶液压系统、海洋工程液压系统。

GRH Gear Pump Characteristics – GRH 齿轮泵特性

GRH gear pumps are produced in 9 different versions (0P、1P、1.5P、2P、 2.5P、 2.8P、 3P、 3.5P、 4P)and in each group different displacements are obtained by changing the gears width, refer to performance curves on page 5 to page 8.

Pressure: GRH offers two pressure ratings, F and G, please refer to charts:

Efficiencies: volumetric efficiency up to 98%, mechanical efficiency up to 93%.

Mountings: flanges, shaft ends and ports.

Seals: Viton,Buna and EPR seals is available.

Integrate: all pumps can be ordered with relief valve and check valve.

GRH现有九组齿轮泵系列：0P、1P、1.5P、2P、 2.5P、 2.8P、 3P、 3.5P、 4P每组泵通过改变齿轮的宽度可得到不同的排量。目前以上九组泵的排量范围为：0.16cc/r-199cc/r，具体请参照性能曲线，第5页到第8页。

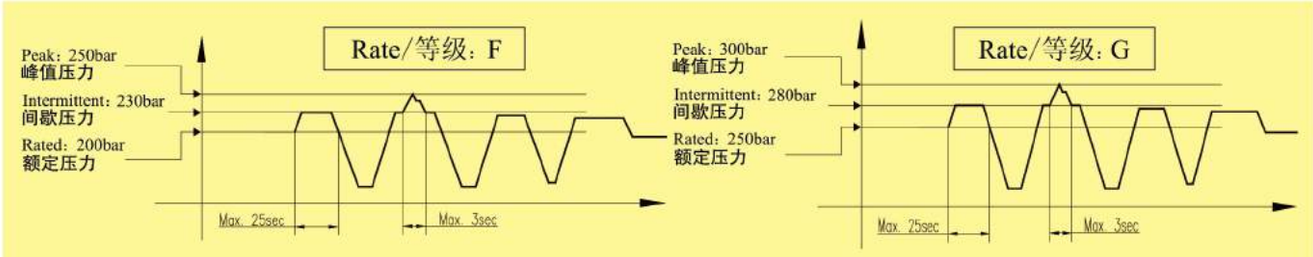
压力：GRH可以提供两个压力等级的齿轮泵F,G，请参照以下压力波形图。

效率：容积效率最高可达到98%，机械效率最高可达93%。

安装：多种安装轴伸与法兰、进出油口组合，满足了市场的需求，特别是欧洲及美国市场的要求。

油封：可提供氟橡胶，丁腈橡胶，乙丙橡胶。

集成：可根据客户要求集成溢流阀、单向阀。



General – 概述

To achieve the performance it necessary not only to meet the catalogue but also to take real care of the design of the hydraulic as a whole, in particular:

The design of the hydraulic circle, especially the suction line, dimension and position of the valves, the filters, the reservoirs and the heat exchangers.

Ensure correct and frequent cleaning and maintenance of the circle and of the hydraulic fluid.

Equip the circuit with suitable alarm and safety devices.

Avoid possible starting under load at lower temperature.

Avoid high pressure at low speed.

In reason choice oil is major factor.

General – 概述

为保证齿轮泵的使用性能，不仅要认真阅读样本了解性能参数，还要合理设计液压系统，应特别注意下面几点：

液压循环的设计、吸油管路、阀的规格及位置，过滤器的精度及冷却器。

保证定期维护保养系统及过滤装置。

过滤系统应装有报警装置。

避免在以下情况下工作：带压启动、低温状态。

尽量避免高压低速工作。

合理选择油液。

保证齿轮泵与驱动机的正确安装。

Hydraulic Fluid – 液压油液

Fluid must be specifically for hydraulic equipment, it must be nonfoaming, antioxidant, noncorrosive and have good lubricating features meeting the following requirements:

应使用专用液压油. 油液具有如下特性:无泡沫、抗氧化性、抗腐蚀性、良好的润滑性能，并达到以下标准：

Recommended use - 推荐使用：GB11118-94:：L-HM46 or equate NFE-603/DIN51524 II -85

Minimum Working Speed – 最低工作转速

We recommend a minmum working speed for every pump group as follows:

不同组的泵有不同的最低工作转速，我们推荐如下：

0P：800RPM

1P：600RPM

1P～2.5P：500RPM

3P：400RPM

Hydraulic Circuit – 对液压回路的要求

Avoid shard restrictions and small radius bends.

Place safety relief valve set at correct pressure and with good dynamic characteristic.

Recommended fluid speed in the inlet line:1. 6～5ft/s(0.5～1.5m/s).

Recommended fluid speed in the delivery line:6.5～20ft/s(2～6m/s).

Recommended fluid speed in the return line:5～10ft/s(1.5～3m/s).

Reservoir should have a capacity about twice as much as the volume of delivered by the pump in one minute.

The return and inlet pipe must be separated as far as possible and under the minmum level of the oil.

Install pump in a well cleaned environment and make sure prior starting the system that all pipe and reservoir are perfectly clean.

It is recommended to filter the new oil at 8-10um befor filling the reservoir.

Fill the pump with fluid befo installing and check the direction of rotation.

For the first run of the pump it is advisable to disconnection the pump diacharge in order to purge the air from the system.

避免管路局部过小或小半径的弯曲。

将安全阀设定在正确的压力下，并保证阀有一个好的动态特性。

进油口推荐流速：1.6～5ft/s(0.5～1.5m/s)

出油口推荐流速：6.5～20ft/s(2～6m/s)

回油口推荐流速：5～10ft/s(1.5～3m/s)

GEAR PUMP USER GUIDE - 齿轮泵使用指南

Hydraulic Circuit – 对液压回路的要求

油量应是泵每分钟排出体积的2倍。

回油管和进油管必须分离，同时分布尽可能远。

我们推荐泵的安装最好在最小油液面以下。

泵在安装时要在一个清洁的环境下. 确保系统管路和油液完全清洁. 新的油液在注入油箱前，应进行过滤，过滤精度为8～10um。

泵在安装前应检查旋向，并将一些干净的油液注入泵的进油口内。

泵在第一次运转时，要排除系统中的空气。

GRH Gear Pump Characteristics – GRH齿轮泵特性

By far largest number of premature failures of gear pumps are due to contamination; filtering with clogging indicating and alarms is recommended.

The initial contamination of the fluid must not exceed class 10 NAS 1638. Pass experience has shown that even brand new fluid often exceed this value. In this case it is recommended below 60μm inlet side, and in the return side.

齿轮泵的早期损坏大多与油液的污染有关。因此我们推荐使用带报警器的过滤器。

原始油液的污染等级不能超过 NAS 1638 10级。我们的经验告诉我们即使一些好的油液也超过了这个级别，在这个情况下，我们推荐进油使用60μm的过滤器，回油管路使用如下的过滤器：

Recommended Fluid Cleanliness – 推荐油液清洁度

	P<2000Psi(14MPa)	2000PSI(14MPa)<P<3050Psi(21MPa)	P>3050Psi(21MPa)
NAS1638	10	9	8
ISO4406	19/16	18/15	17/14
FILTER	25μm	20μm	10μm

Driving Arrangements – 驱动布置

The pump must be in line with the P.T.O.

Make sure that the absorbed torque does not exceed the maximum torque allowed for the shaft.

Belt and gear drives are not recommended because they apply axial and radial loads on the bearing.

泵轴中心线必须与驱动轴中心线在一个轴心线上，偏差<0.1mm。

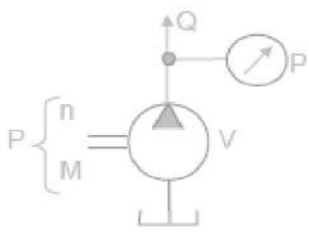
泵轴不能施加轴向和径向负荷，我们推荐使用柔性或三片式联轴器。

保证输入扭矩不超过主动齿轮轴(特别是多联泵)所能承受的最大扭矩。

不推荐使用皮带和齿轮传动，因为此种情况会对轴端产生径向力。

Calculated Formula – 计算公式

Displacement 排量	Flow 流量	Pressure 压力	Speed 转速	Power 功率	Torque 扭矩
(cm^3/r)	(l/min)	(bar)	(r/min)	(kW)	(Nm)
V	Q	p	n	P	M



$$Q = V \cdot n \,.\, \eta v \cdot 10\text{-}3$$

$$M = p \cdot V \,/\, 62.83 \cdot \eta m$$

$$P = p \,.\, V \,.\, n \,/\, 6\,00 \cdot 1000 \,.\, \eta t$$

General Notes – 注意事项

Deliveries are carried out under the conditions of GRH.

This catalogue is issued to provide outline information only. We reserve the right to change without any notice the design, features.

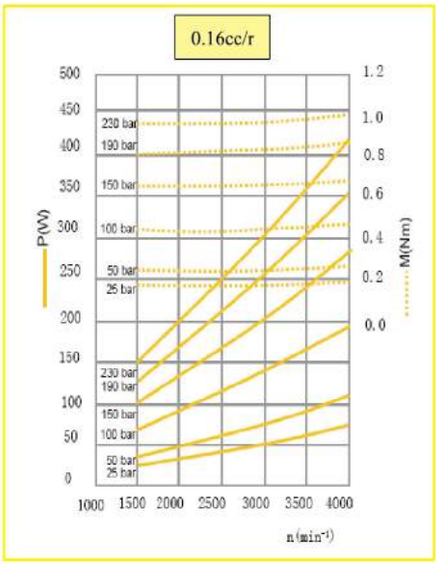
Please contact us if you have special request.

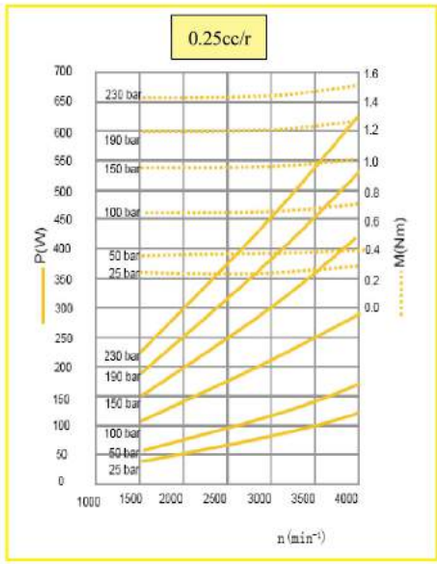
泵的运输与交付按照国瑞液压有限公司标准进行。

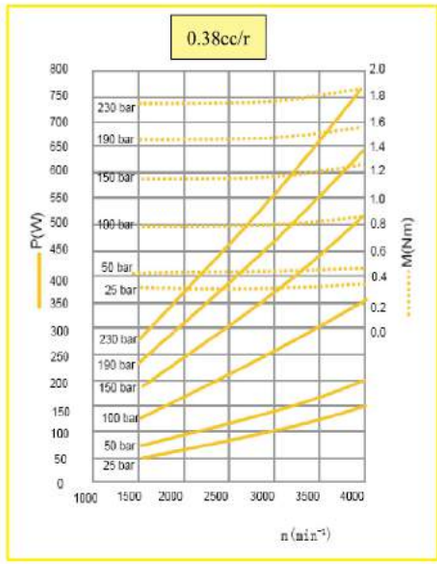
本说明书, 仅提供了外联接尺寸。我们保留更改设计、特性等方面的权力。

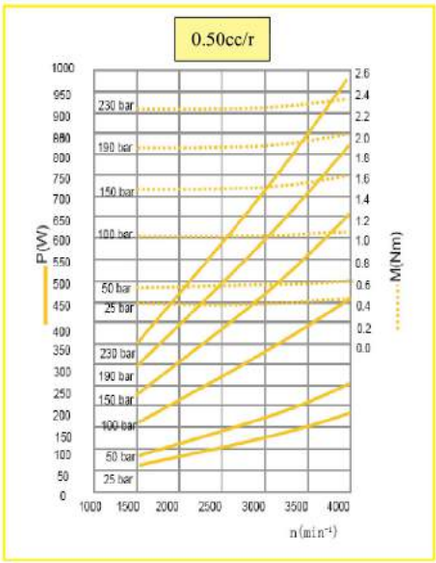
如有特殊要求请联系我们。

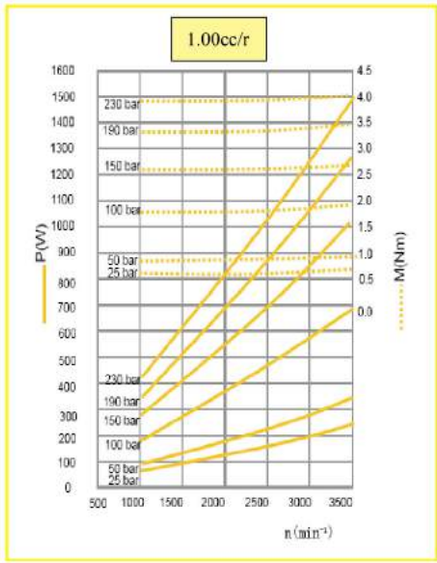
GEAR PUMP PERFORMANCE CURVES - 齿轮泵性能曲线

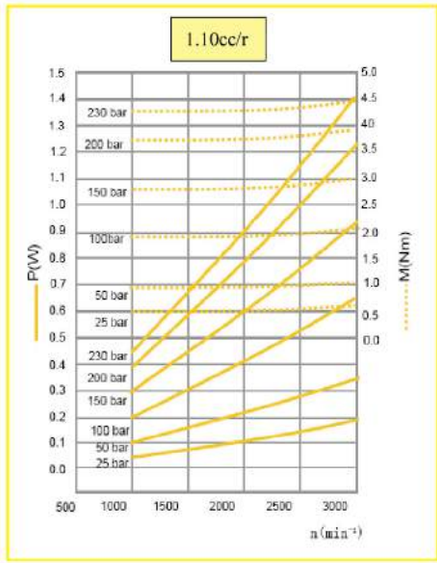


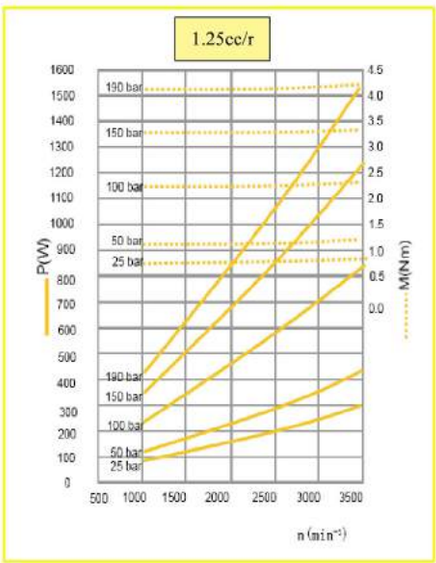


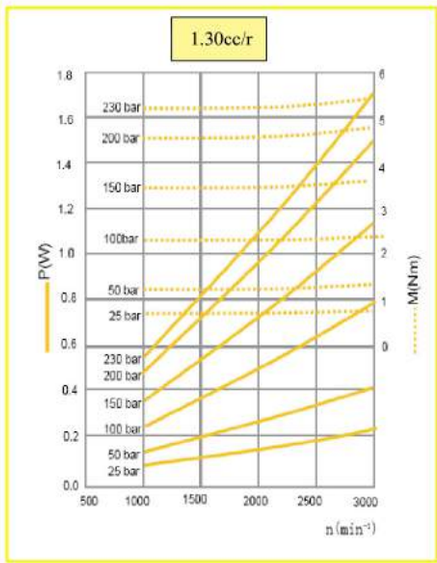


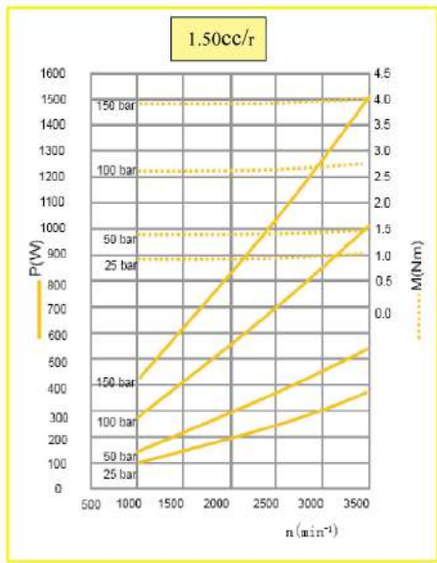












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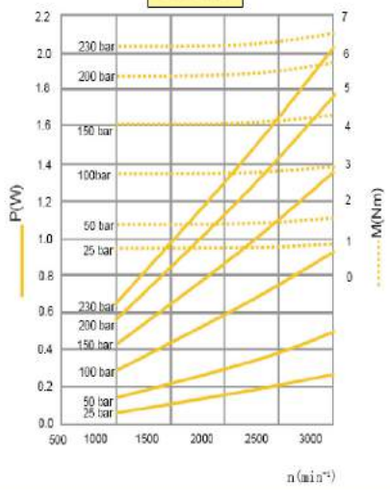

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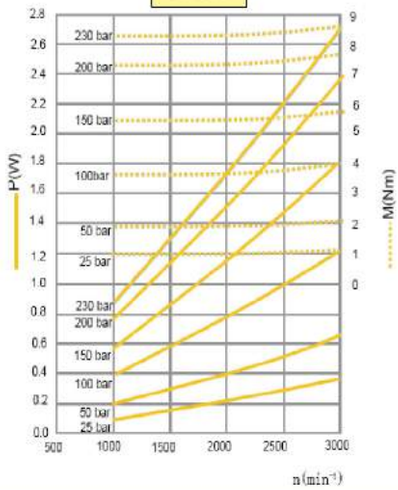

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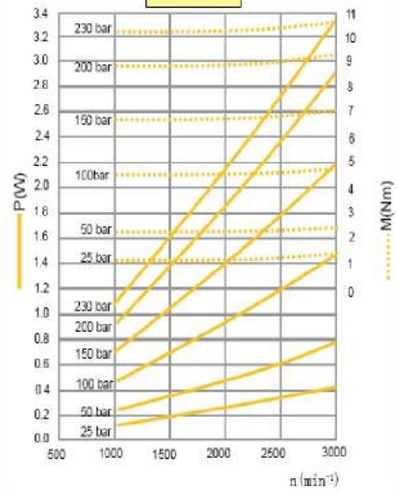

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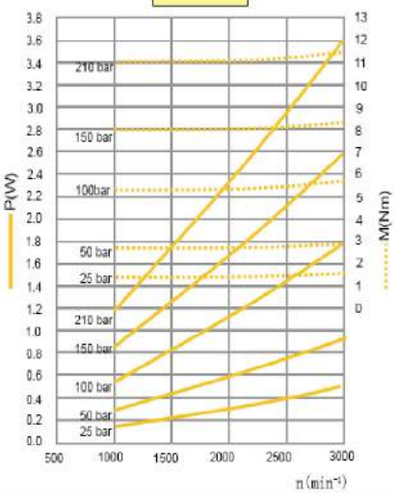

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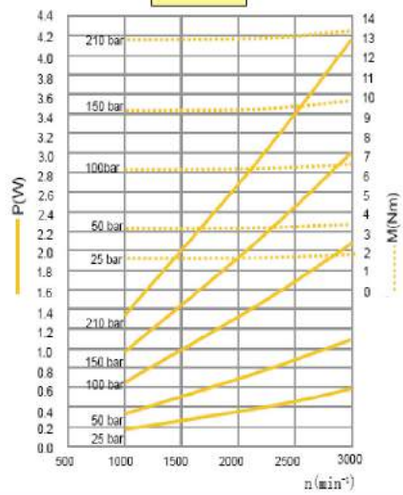

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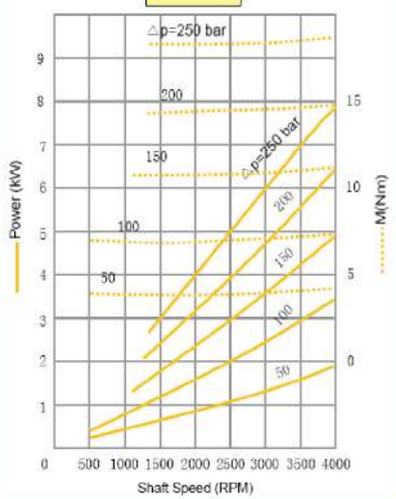

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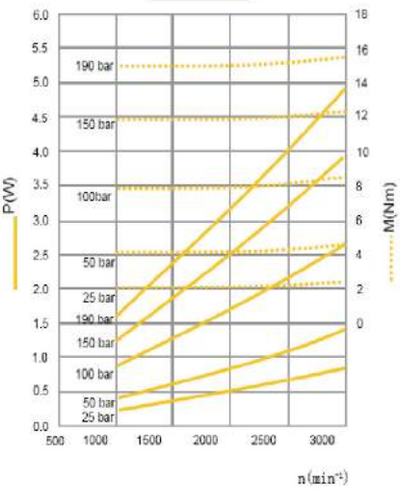

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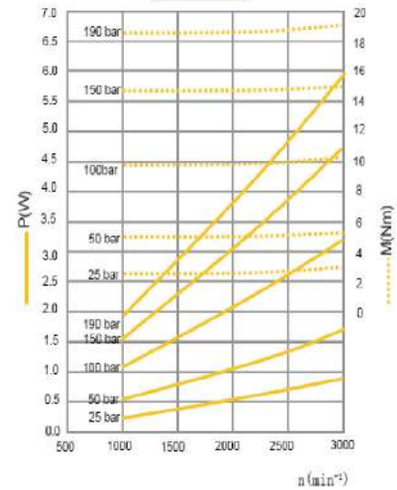

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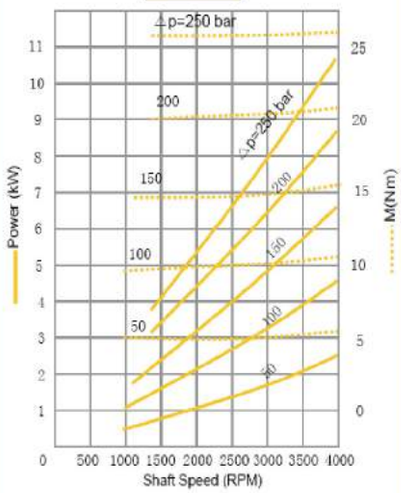
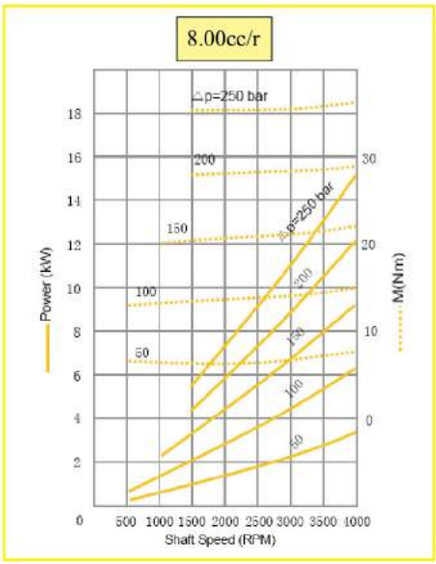
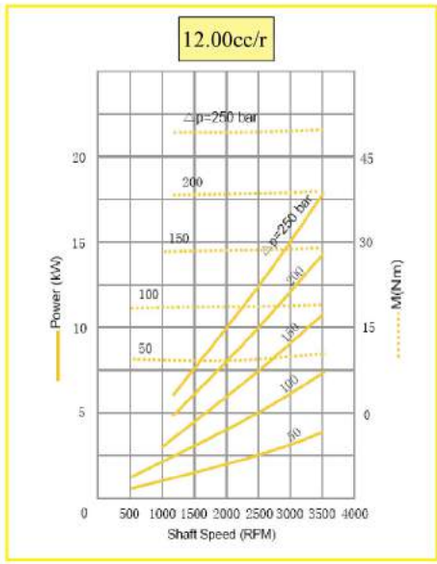
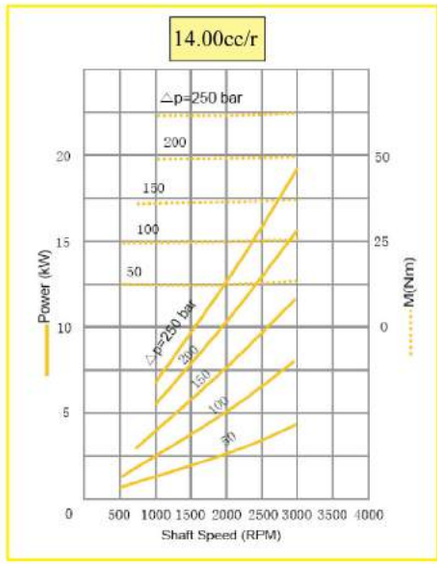
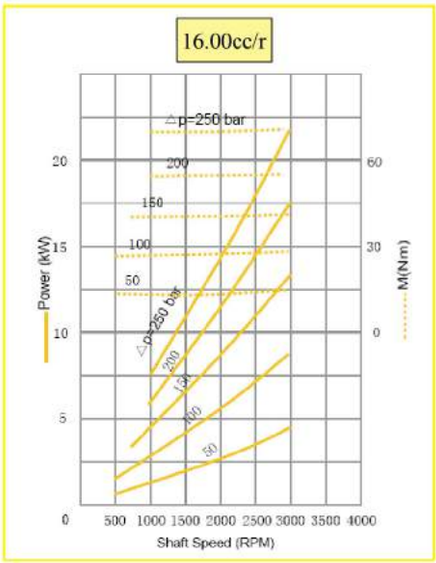


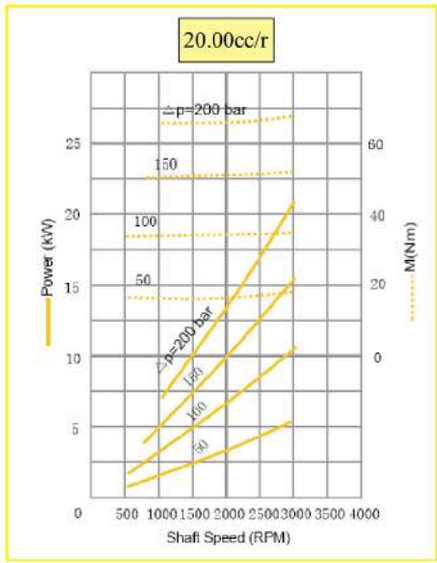
GEAR PUMP PERFORMANCE CURVES - 齿轮泵性能曲线

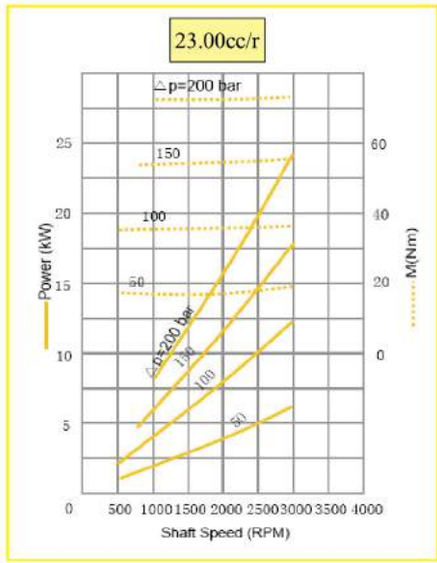


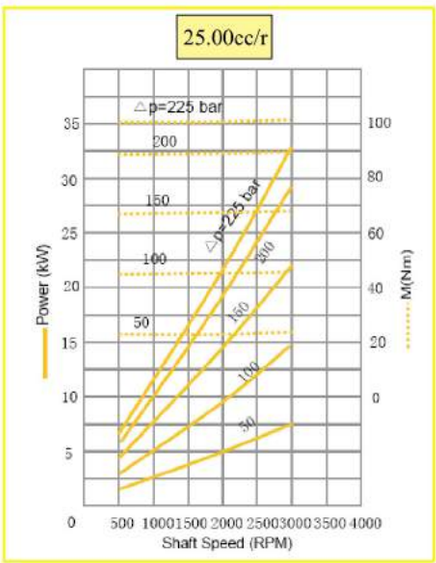


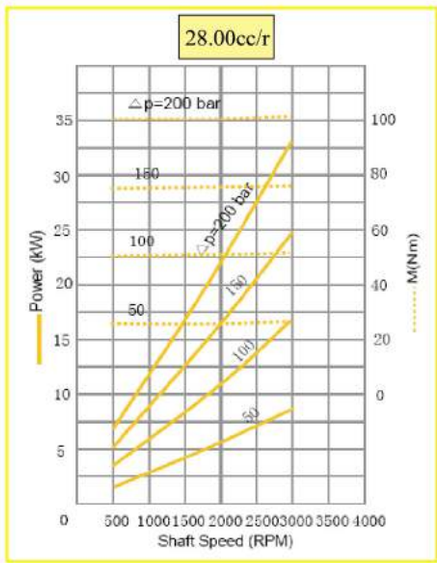


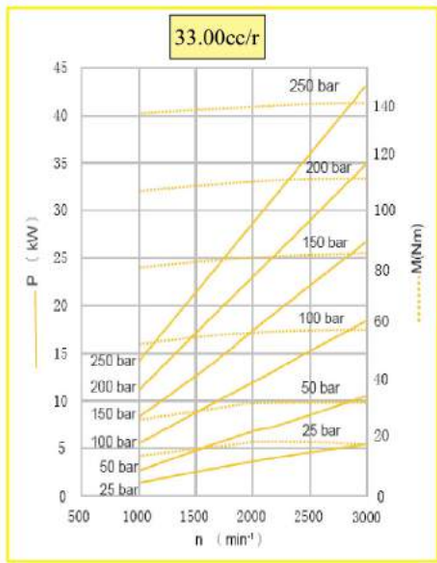












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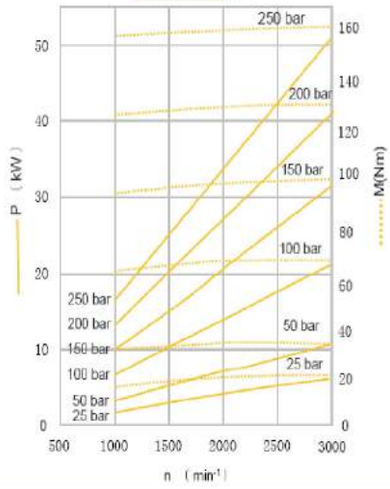
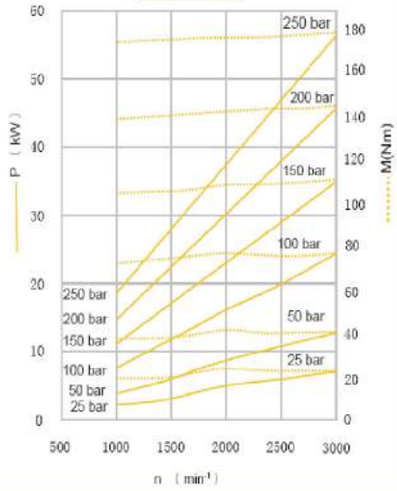
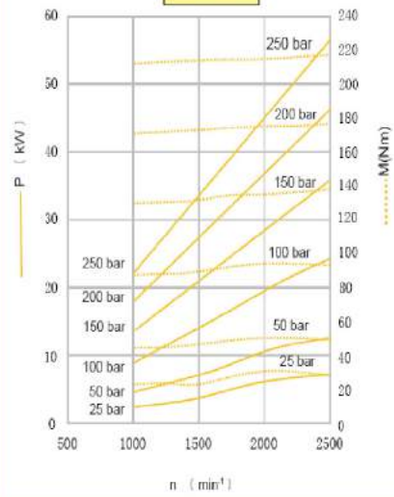


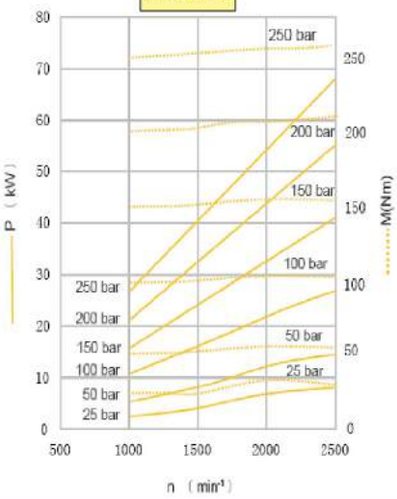
44.00cc/r



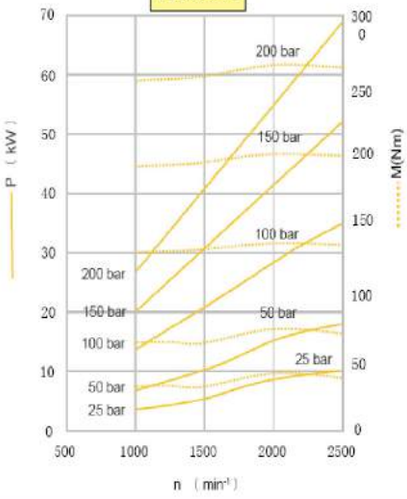
52.00cc/r



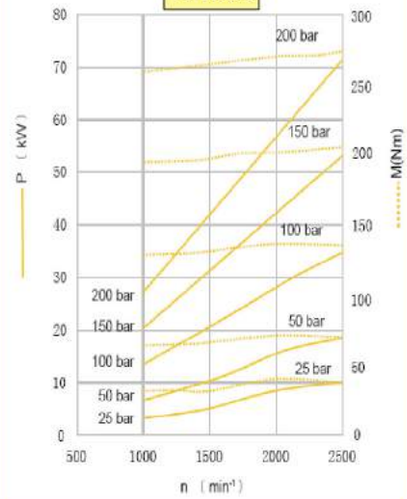
61.00cc/r



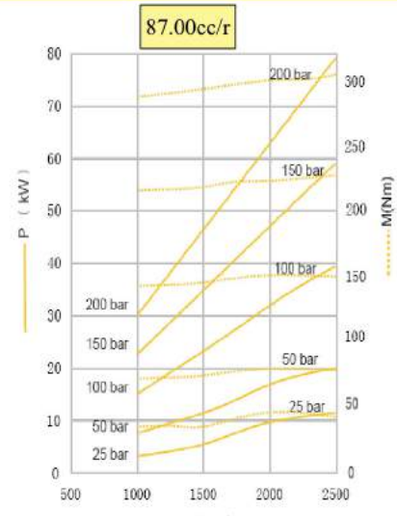
71.00cc/r



78.00cc/r



87.00cc/r



0PF**L**B01***

Ordering Code - 订单编码

0	P	F/G	**	L07	B01	*	SS	*
Group 0 0组	Gear pump 齿轮泵	Pressure 压力(bar)	Displacement 排量(ml/r)	Ports combination 油口组合	Shaft and flange 轴伸和法兰	Rotation 旋向	Ports position 油口位置	Options 可选项

F	200	0.16	Accessory 1	附录1	Accessory 2	附录2	L	逆时针	BF	后进前出	Y	溢流阀
G	250	0.25					R	顺时针	BB	后进后出	D	单向阀
		0.38							BS	后进侧出	/	不带阀
		0.50							SB	侧进后出		
		0.75							SF	侧进前出		
		1.00							SS	侧进侧出		
		1.25										
		1.50										
		1.75										
		2.00										

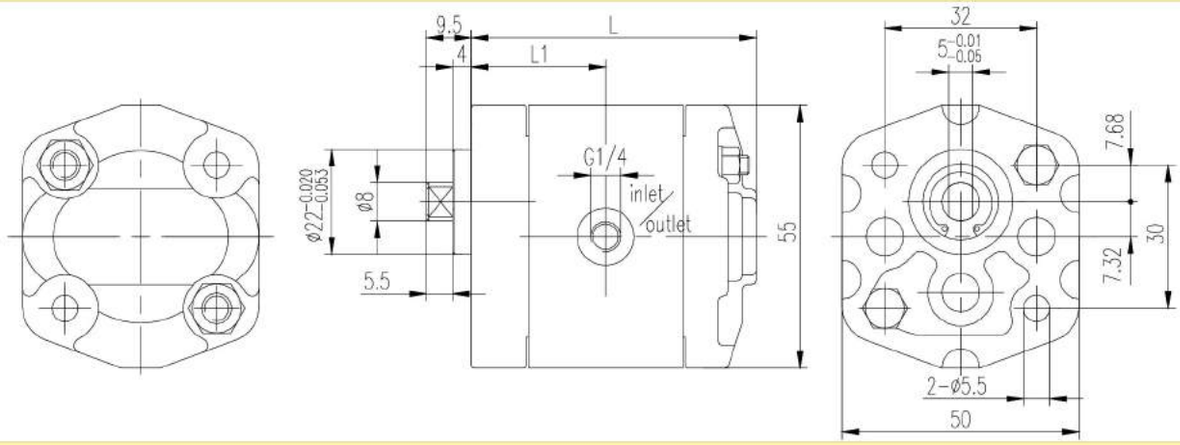
Rotation/旋向			Ports position/油口位置			Options/可选项		
L	CCW	逆时针	BF	Back inlet and front outlet	后进前出	Y	Relief valve	溢流阀
R	CW	顺时针	BB	Back inlet and back outlet	后进后出	D	Check valve	单向阀
			BS	Back inlet and side outlet	后进侧出	/	Omit	不带阀
			SB	Side inlet and back outlet	侧进后出			
			SF	Side inlet and front outlet	侧进前出			
			SS	Side inlet and side outlet	侧进侧出			

Specifications - 性能参数

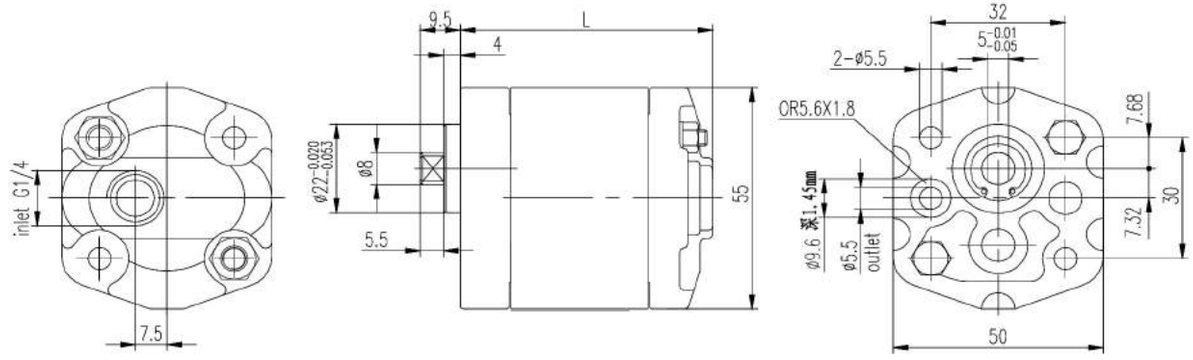
Model 型号	Displacement 排量 (ml/r)	Pressure 压力 (bar)		Speed 转速 (r/min)			L (mm)	SS 侧进侧出	Inlet 进油口 (mm)
		Rated 额定	Peak 最高	Rated 额定	Max 最高	Min 最低		L1(mm)	
0PF0.16L07B01***	0.16	200	250	2000	6000	800	58.2	30.8	G1/4
0PF0.25L07B01***	0.25	200	250	2000	6000	800	59	31.3	
0PF0.38L07B01***	0.38	200	250	2000	6000	800	60.3	31.9	
0PF0.50L07B01***	0.50	200	250	2000	6000	800	61	32.3	
0PF0.75L07B01***	0.75	200	250	2000	6000	800	63.5	33.5	
0PF1.00L07B01***	1.00	200	250	2000	6000	800	66	34.8	
0PF1.25L07B01***	1.25	200	250	2000	5000	800	68.5	36	
0PF1.50L07B01***	1.50	200	250	2000	4500	800	70	37	
0PF1.75L07B01***	1.75	200	250	2000	4000	800	73	38.3	
0PF2.00L07B01***	2.00	160	200	2000	3500	800	75.5	39.5	

Dimension - 外形尺寸

0PF**L06B01LSS



0PF**L07B01LBF



1PF**L**B02***

Ordering Code - 订单编码

1	P	F/G	**	L**	B02	B	BB	–	F	*
Group 1 1组	Gear pump 齿轮泵	Pressure 压力(bar)	Displacement 排量(ml/r)	Ports combination 油口组合	Shaft and flange 轴伸和法兰	Rotation 旋向	Ports position 油口位置		Seal 密封	Options 可选项

F	200	1.1	Accessory 1	附录1	Accessory 2	附录2	B	双向	BF	后进前出	F	氟橡胶	Y	溢流阀
G	250	1.3					L	逆时针	BB	后进后出	/	丁腈橡胶	D	单向阀
		1.6					R	顺时针	BS	后进侧出			/	不带阀
		1.8							SB	侧进后出				
		2.1							SF	侧进前出				
		2.7							SS	侧进侧出				
		3.2												
		3.7												
		4.2												
		4.8												
		5.8												
		8.0												

Rotation/旋向

B	Bi-direction	双向
L	CCW	逆时针
R	CW	顺时针

Ports position/油口位置

BF	Back inlet and front outlet	后进前出
BB	Back inlet and back outlet	后进后出
BS	Back inlet and side outlet	后进侧出
SB	Side inlet and back outlet	侧进后出
SF	Side inlet and front outlet	侧进前出
SS	Side inlet and side outlet	侧进侧出

F Seal/密封

F	FPM seal	氟橡胶
Omit	NBR seal	丁腈橡胶

*** Options/可选项**

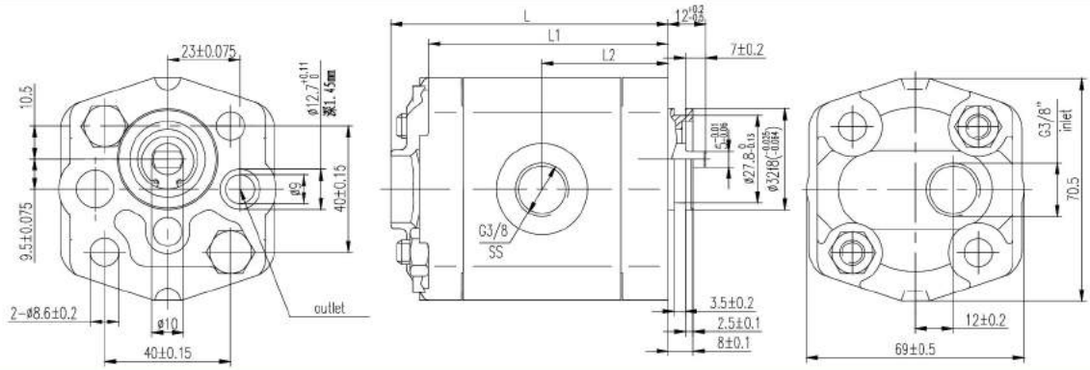
Y	Relief valve	溢流阀
D	Check valve	单向阀
/	Omit	不带阀

Specifications - 性能参数

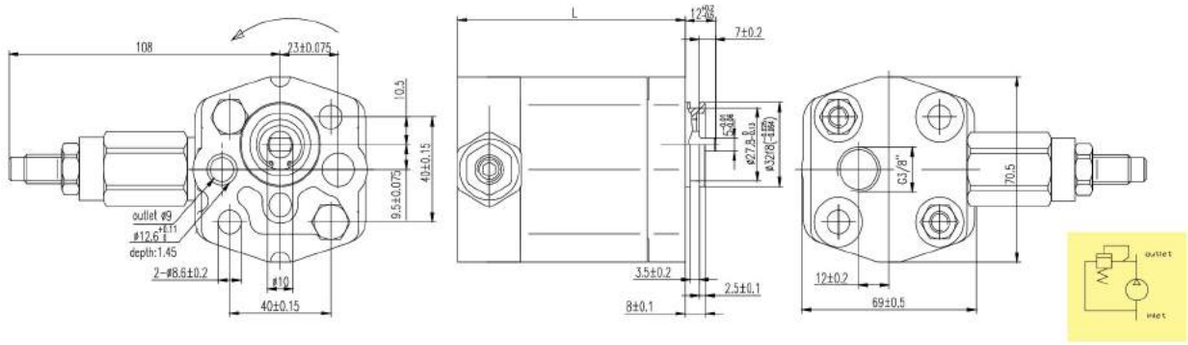
Model 型号	Displace-ment 排量(ml/r)	Pressure 压力(bar)		Speed 转速(r/min)			L (mm)	L1 (mm)	SS 侧进侧出	Inlet 进油口 (mm)
		Rated 额定	Peak 最高	Rated 额定	Max 最高	Min 最低			L2 (mm)	
1PF1.1L01B02***	1.1	200	250	2000	6000	600	74	63	33	G3/8
1PF1.3L01B02***	1.3	200	250	2000	6000	600	75	64	33.5	
1PF1.6L01B02***	1.6	200	250	2000	6000	600	76	65	34	
1PF1.8L01B02***	1.8	200	250	2000	6000	600	77	66	34.5	
1PF2.1L01B02***	2.1	200	250	2000	6000	600	78	67	35	
1PF2.7L01B02***	2.7	200	250	2000	6000	600	80	69	36	
1PF3.2L01B02***	3.2	200	250	2000	5000	600	82	71	37	
1PF3.7L01B02***	3.7	200	250	2000	4500	600	84	73	38	
1PF4.2L01B02***	4.2	200	250	2000	4000	600	86	75	39	
1PF4.8L01B02***	4.8	160	200	2000	3500	600	88	77	40	
1PF5.8L01B02***	5.8	160	200	2000	2900	600	92	81	42	
1PF8.0L01B02***	8.0	160	200	2000	2100	600	100	89	46	

Dimension - 外形尺寸

1PF***L01B02 With Relief Valves - 1PF***L01B02-Y 带溢流阀



Adjusted Pressure of Relief Valves - 溢流阀调整压力 50 Bar To 250 Bar



1PF******Z02

Ordering Code - 订单编码

1	P (DP)		F/G		** (**/**)	DF02		Z02		R		–	F	
Group 1 1组	Function Code 功能代码		Pressure 压力(bar)		Displacement 排量(ml/r)	Ports combination 油口组合		Shaft and flange 轴伸和法兰		Rotation 旋向			Seal 密封	
	P	单泵	F	200	1.1	Accessory 1	附录1	Accessory 2	附录2	L	逆时针		F	氟橡胶
	DP	双泵	G	250	1.3					R	顺时针		/	丁腈橡胶
					1.8									
					2.1									
					2.7									
					3.2									
					3.7									
					4.2									
					4.8									
					5.8									
					8.0									

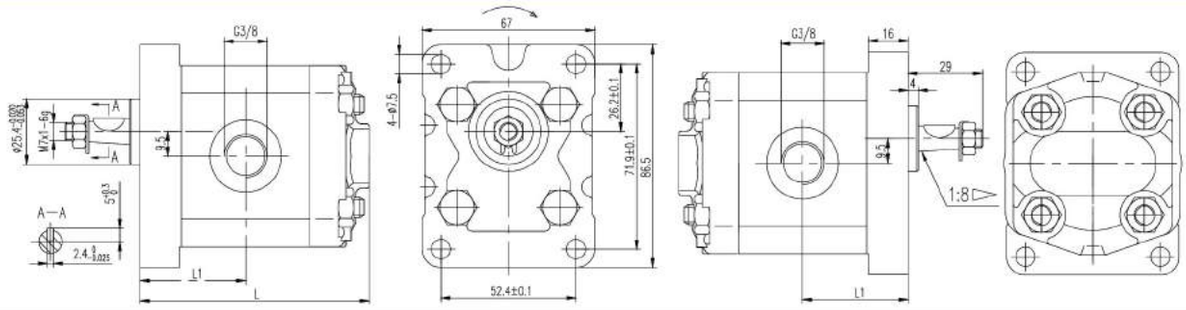
Function Code/功能代码			Rotation/旋向			F Seal/密封			* Options/可选项		
P	Single Pump	单泵	L	CCW	逆时针	F	FPM seal	氟橡胶	Y	Relief valve	溢流阀
DP	Double Pump	双联泵	R	CW	顺时针	Omit	NBR seal	丁腈橡胶	D	Check valve	单向阀
									/	Omit	不带阀

Specifications - 性能参数

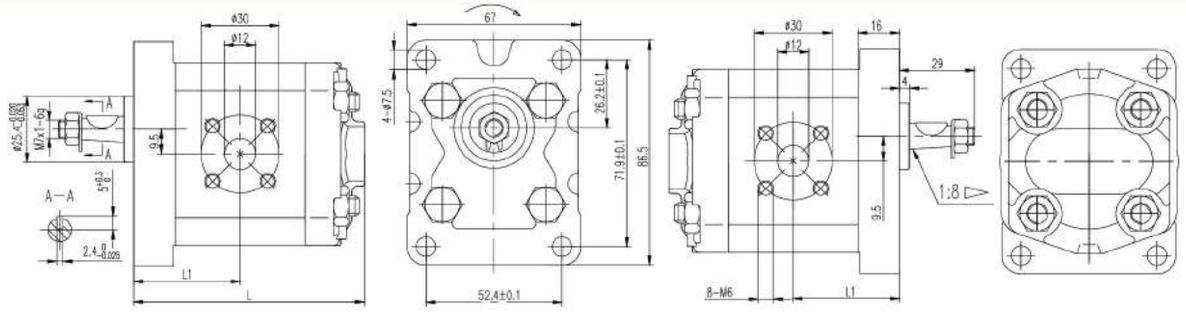
Model 型号	Displacement 排量 (ml/r)	Pressure 压力 (bar)		Speed 转速 (r/min)			L (mm)	L1 (mm)
		Rated 额定	Peak 最高	Rated 额定	Max 最高	Min 最低		
1PF1.1******Z02**	1.1	200	250	2000	6000	600	75	33
1PF1.3******Z02**	1.3	200	250	2000	6000	600	76	34
1PF1.6******Z02**	1.6	200	250	2000	6000	600	78	35
1PF1.8******Z02**	1.8	200	250	2000	6000	600	78.5	35.5
1PF2.1******Z02**	2.1	200	250	2000	6000	600	79	36
1PF2.7******Z02**	2.7	200	250	2000	6000	600	81	37
1PF3.2******Z02**	3.2	200	250	2000	5000	600	83	38
1PF3.7******Z02**	3.7	200	250	2000	4500	600	85	39
1PF4.2******Z02**	4.2	200	250	2000	4000	600	87	40
1PF4.8******Z02**	4.8	160	200	2000	3500	600	89	41
1PF5.8******Z02**	5.8	160	200	2000	2900	600	93	43
1PF8.0******Z02**	8.0	160	200	2000	2100	600	101	47

Dimension - 外形尺寸

1PF***L46Z02SS



1PF***F01Z02SS



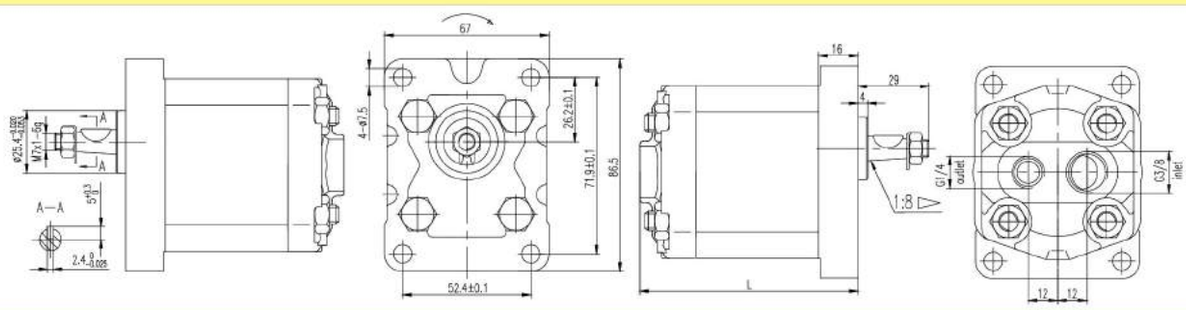
1PF******Z02/1DPF******Z02

Specifications - 性能参数

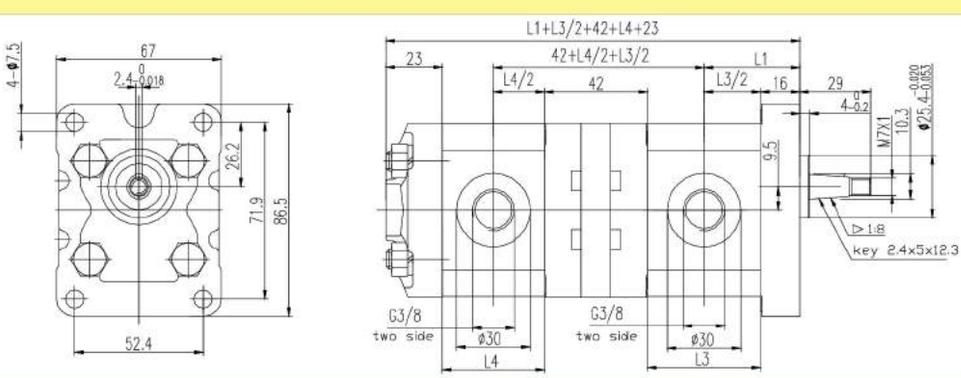
Model 型号	Displacement 排量(ml/r)	Pressure 压力(bar)		Speed 转速(r/min)			L (mm)	L1 (mm)
		Rated 额定	Peak 最高	Rated 额定	Max 最高	Min 最低		
1PF1.1******Z02**	1.1	200	250	2000	6000	600	75	33
1PF1.3******Z02**	1.3	200	250	2000	6000	600	76	34
1PF1.6******Z02**	1.6	200	250	2000	6000	600	78	35
1PF1.8******Z02**	1.8	200	250	2000	6000	600	78.5	35.5
1PF2.1******Z02**	2.1	200	250	2000	6000	600	79	36
1PF2.7******Z02**	2.7	200	250	2000	6000	600	81	37
1PF3.2******Z02**	3.2	200	250	2000	5000	600	83	38
1PF3.7******Z02**	3.7	200	250	2000	4500	600	85	39
1PF4.2******Z02**	4.2	200	250	2000	4000	600	87	40
1PF4.8******Z02**	4.8	160	200	2000	3500	600	89	41
1PF5.8******Z02**	5.8	160	200	2000	2900	600	93	43
1PF8.0******Z02**	8.0	160	200	2000	2100	600	101	47

Dimension - 外形尺寸

1PF***L44Z02BB



1DPF**/**DL**Z02* Double Pumps - 1DPF**/**DL**Z02* 双联泵

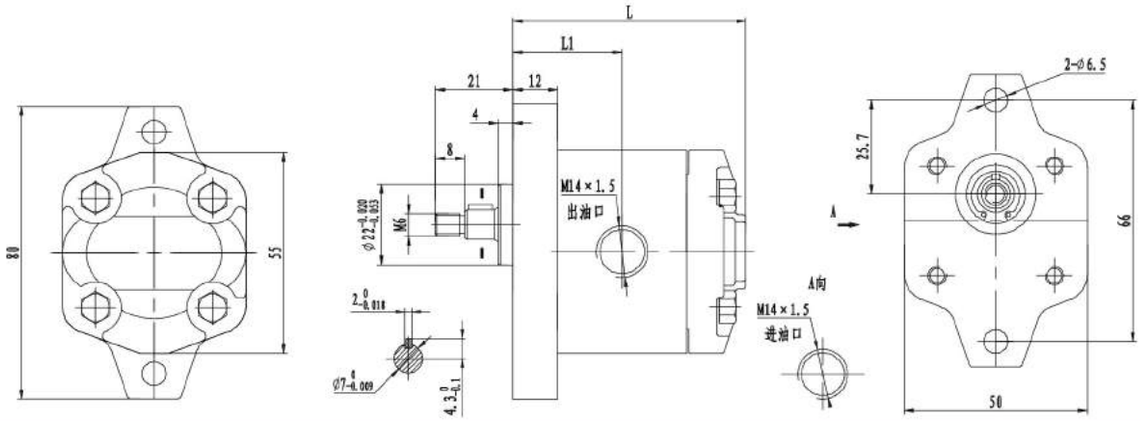


Pump Displacement - 前泵排量(ml/r)	1.1	1.3	1.6	2.1	2.7	3.2	3.7	4.2	4.8	5.8	8.0
L3(Front Pump)/L4(Rear Pump)	36	37	38	40	42	44	46	48	50	54	62

Specifications - 性能参数

Model 型号	Displacement 排量 (ml/r)	Pressure 压力 (bar)		Speed 转速 (r/min)			L (mm)	L1 (mm)
		Rated 额定	Peak 最高	Rated 额定	Max 最高	Min 最低		
0APF0.16L61P122*	0.16	200	250	2000	4000	800	57.7	26.9
0APF0.25L61P122*	0.25	200	250	2000	4000	800	58.5	27.3
0APF0.38L61P122*	0.38	200	250	2000	4000	800	59.8	27.9
0APF0.50L61P122*	0.50	200	250	2000	4000	800	60.5	28.3
0APF0.63L61P122*	0.63	200	250	2000	4000	800	62	29
0APF0.75L61P122*	0.75	200	250	2000	4000	800	63	29.5
0APF1.00L61P122*	1.00	200	250	2000	4000	800	65.5	30.8
0APF1.25L61P122*	1.25	200	250	2000	4000	800	68	32
0APF1.50L61P122*	1.50	200	250	2000	4000	800	70	33
0APF1.75L61P122*	1.75	200	250	2000	4000	800	72.5	34.3
0APF2.00L61P122*	2.00	180	220	2000	4000	800	75	35.5

Dimension - 外形尺寸



0APF**L**P122*

1APF***L**P01*

Ordering Code - 订单编码

1	A*	P (DP)	F/G	** (**/**)	DL**	P01	B	BB	–	F	*
Group 1 1组	Improve number 改进号	Function 功能代码	Pressure 压力(bar)	Size 排量(ml/r)	Ports combination 油口组合	Shaft and flange 轴伸和法兰	Rotation 旋向	Ports position 油口位置		Seal 密封	Options 可选项

	AT	铸铁	P	单泵	F	200	1.3	Accessory 1	附录1	Accessory 2	附录2	B	双向	BS	后进侧出	F	氟橡胶	Y	溢流阀
	AB	双向铸铝	DP	双泵	G	250	2.0					L	逆时针	SB	侧进后出	/	丁腈橡胶	D	单向阀
	A	铝制					2.7					R	顺时针	SS	侧进侧出			/	不带阀
							3.4												
							4.1												
							5.1												
							6.1												

Improve number/改进号

- AT Cast iron covers 铸铁前后盖
- AB Rotaion could be changed 可换旋向铝前后盖
- A Aluminum covers and body, bushing 铝前后盖

Function Code/功能代码

- P Single Pump 单泵
- DP Double Pump 双联齿轮泵

Rotation/旋向

- B Bi-direction 双向
- L CCW 逆时针
- R CW 顺时针

Ports position/油口位置

- BS Back inlet and side outlet 后进侧出
- SB Side inlet and back outlet 侧进后出
- SS Side inlet and side outlet 侧进侧出

F Seal/密封

- F FPM seal 氟橡胶
- Omit NBR seal 丁腈橡胶

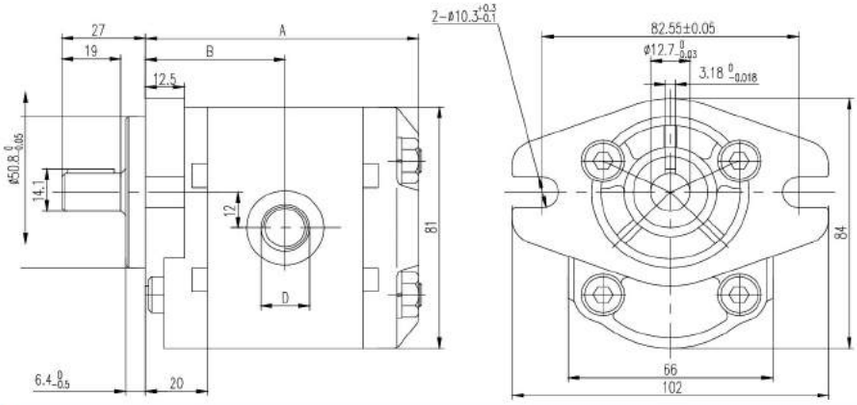
*** Options/可选项**

- Y Relief valve 溢流阀
- D Check valve 单向阀
- / Omit 不带阀

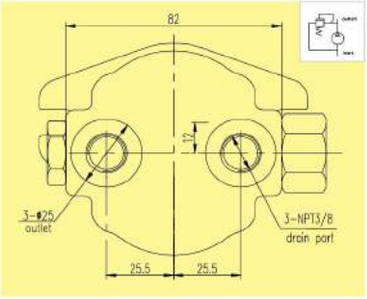
Specifications - 性能参数

Model 型号	Displacement 排量(ml/r)	Pressure 压力(bar)		Speed 转速(r/min)			A (mm)	B (mm)	D (mm)	
		Rated 额定	Peak 最高	Rated 额定	Max 最高	Min 最低			Inlet 进油口	Outlet 出油口
1APF1.3L05P01*	1.3	200	250	2000	4500	500	82	42	G 1/2	G 3/8
1APF2.0L05P01*	2.0	200	250	2000	4500	500	84	43		
1APF2.7L05P01*	2.7	200	250	2000	4500	500	86	44		
1APF3.4L05P01*	3.4	200	250	2000	4500	500	88	45		
1APF4.1L05P01*	4.1	200	250	2000	4000	500	90	46		
1APF5.1L05P01*	5.1	200	250	2000	3200	500	93	47.5		
1APF6.1L05P01*	6.1	200	250	2000	3200	500	96	49		

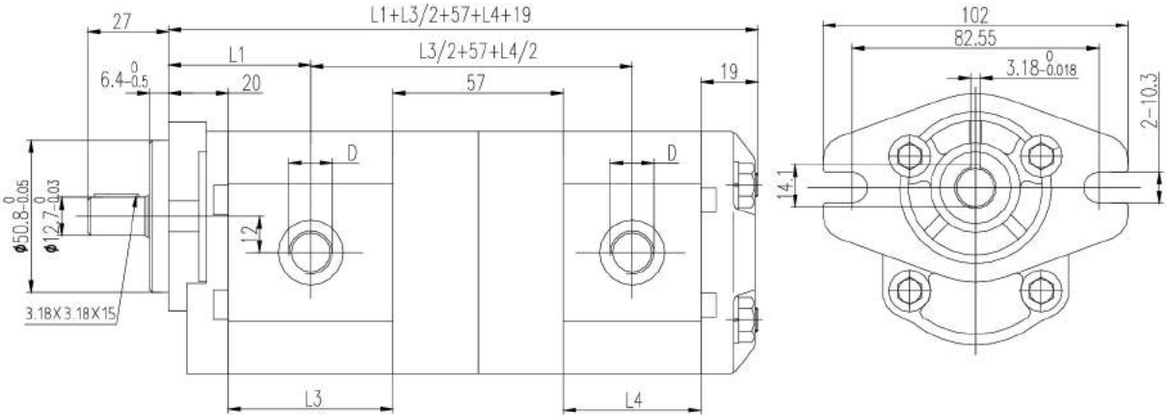
Dimension - 外形尺寸



Option: 1APF with relief valve
选项：1APF带溢流阀



1ADPF**/**DL**P01* Double Pumps - 1ADPF**/**DL**P01* 双联泵



Displacement - 排量(ml/r)	1.3	2.0	2.7	3.4	4.1	5.1	6.1
L3(Front Pump)/L4(Rear Pump)	44	46	48	50	52	55	58

1.5PF**F50P04*

Ordering Code - 订单编码

1.5	P (DP)	F/G	** (**/**)	DL**	P04	L	–	F	*
Group 1.5 1.5组	Function Code 功能代码	Pressure 压力(bar)	Displacement 排量(ml/r)	Ports combination 油口组合	Shaft and flange 轴伸和法兰	Rotation 旋向		Seal 密封	Options 可选项

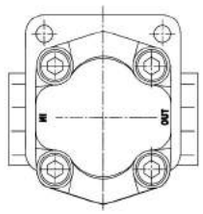
	P	单泵	F	200	Front/Rear 前/后泵	Accessory 1	附录1	Accessory 2	附录2	B	双向		F	氟橡胶	Y	溢流阀
	DP	双泵	G	250	2					L	逆时针		/	丁腈橡胶	D	单向阀
					3					R	顺时针				/	不带阀
					4											
					5											
					6											
					8											
					9											
					11											
					12											

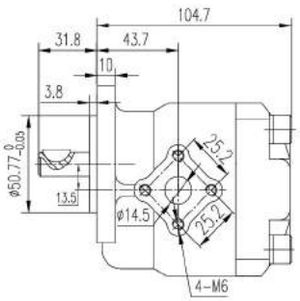
Function Code/功能代码			Rotation/旋向			F Seal/密封			* Options/可选项		
P	Single Pump	单泵	B	Bi-direction	双向	F	FPM seal	氟橡胶	Y	Relief valve	溢流阀
DP	Double Pump	双联齿轮泵	L	CCW	逆时针	Omit	NBR seal	丁腈橡胶	D	Check valve	单向阀
			R	CW	顺时针				/	Omit	不带阀

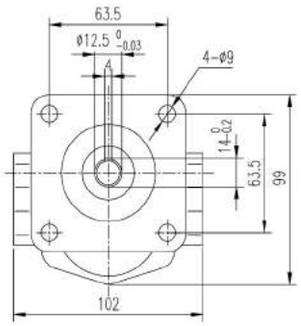
Specifications - 性能参数

Model 型号	Displacement 排量 (ml/r)	Pressure 压力 (bar)		Speed 转速 (r/min)		
		Rated 额定	Peak 最高	Rated 额定	Max 最高	Min 最低
1.5PF2F50P04*	2	210	250	3500	3500	500
1.5PF3F50P04*	3	210	250	3500	3500	500
1.5PF4F50P04*	4	210	250	3500	3500	500
1.5PF5F50P04*	5	210	250	3500	3500	500
1.5PF6F50P04*	6	210	250	3500	3500	500
1.5PF8F50P04*	8	210	250	3500	3500	500
1.5PF9F50P04*	9	175	210	1500	2000	500
1.5PF11F50P04*	11	175	210	1500	2000	500
1.5PF12F50P04*	12	175	210	1500	2000	500

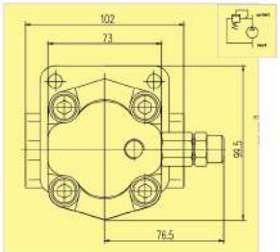
Dimension - 外形尺寸



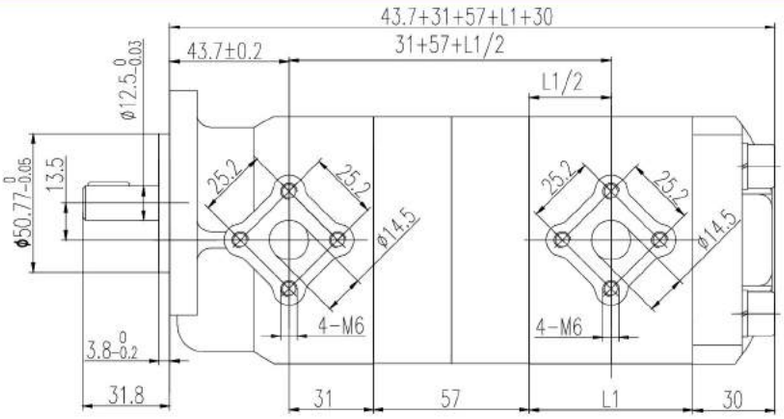


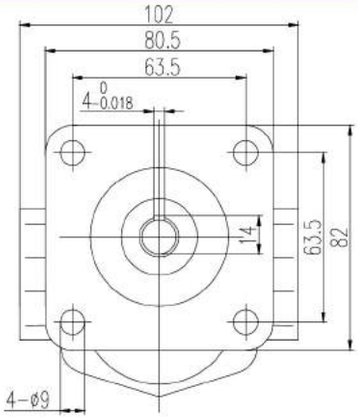


Option: 1.5PF with relief valves
选项：1.5PF带溢流阀



1.5DPF**/**F50P04* Double Pumps - 1.5DPF**/**F50P04* 双联泵





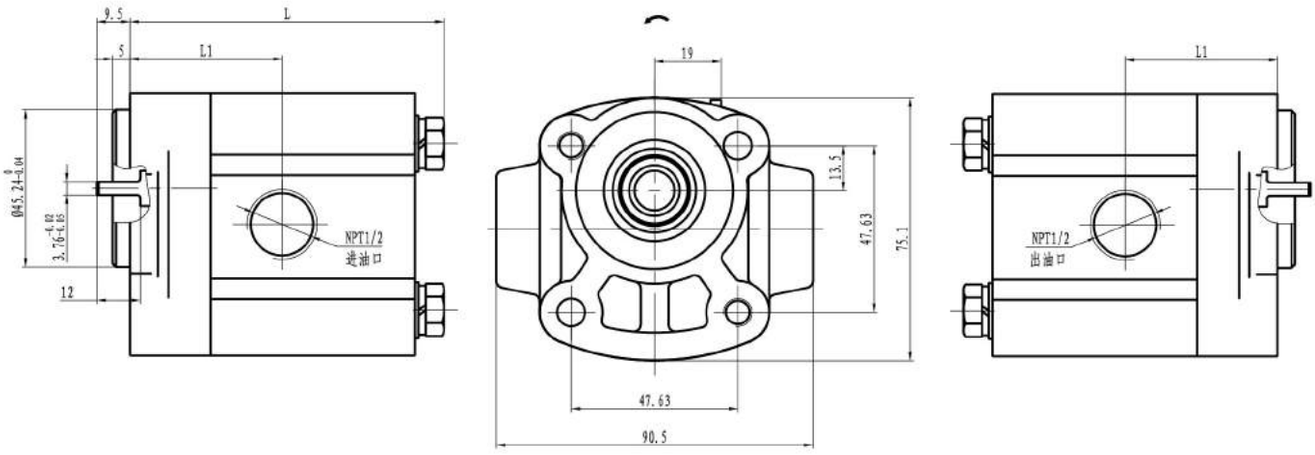
Displacement - 排量(ml/r)	2	3	4	5	6	7	8	9	10	11	12
L1 (mm)	42	44	46	48	50	52	54	56	58	60	62

1QPF**L**B27*

Specifications - 性能参数

Model 型号	Displacement 排量 (ml/r)	Pressure 压力 (bar)		Speed 转速 (r/min)			L (mm)	L1 (mm)
		Rated 额定	Peak 最高	Rated 额定	Max 最高	Min 最低		
1QPF0.8L29B27*	0.8	200	250	2000	4000	500	80.3	40.8
1QPF1.1L29B27*	1.1	200	250	2000	4000	500	80.8	41
1QPF1.6L29B27*	1.6	200	250	2000	4000	500	82.8	42
1QPF2.5L29B27*	2.5	200	250	2000	4000	500	86.3	43.8
1QPF3.2L29B27*	3.2	200	250	2000	4000	500	88.8	45

Dimension - 外形尺寸

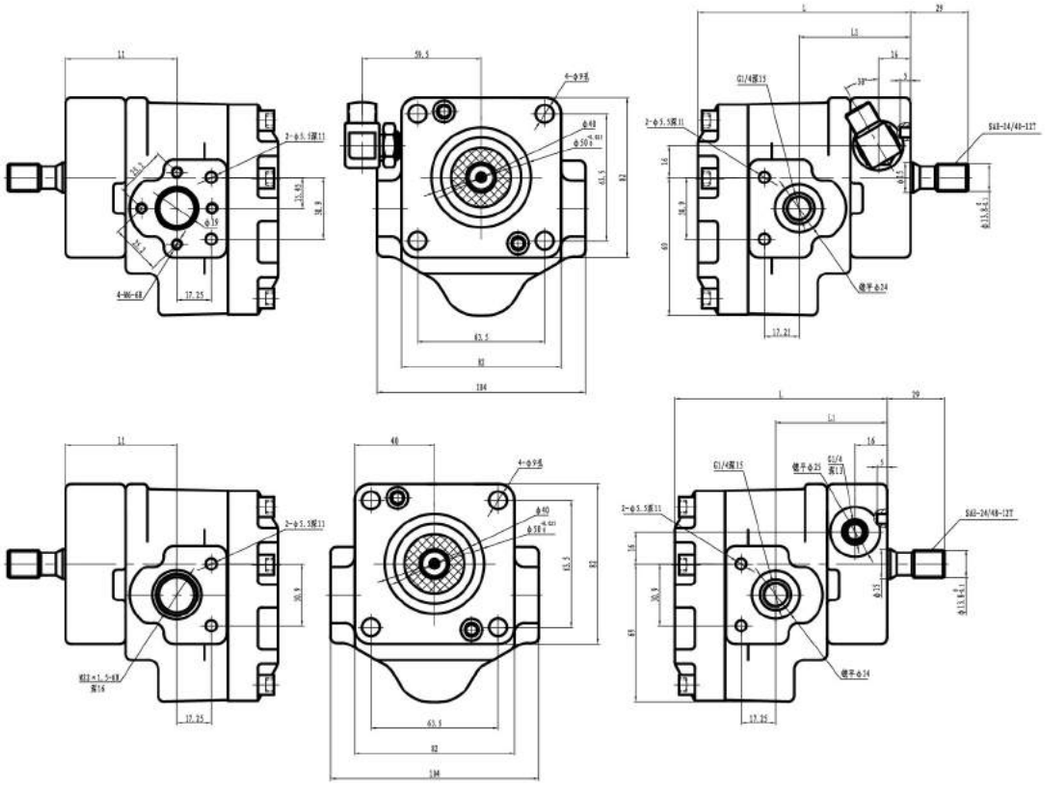


1QPF**L**B27*

Specifications - 性能参数

Model 型号	Displacement 排量 (ml/r)		Pressure 压力 (bar)				Speed 转速 (r/min)			L (mm)	L1 (mm)
			Front Pump 前泵		Rear Pump 后泵						
	Front Pump 前泵	Rear Pump 后泵	Rated 额定	Peak 最高	Rated 额定	Max 最高	Rated 额定	Max 最高	Min 最低		
1.5BDPF3/3DFL17S44L	3	3	4	10	140	200	1500	3200	800	106.2	56
1.5BDPF4/4DL20S44L	4	4	4	10	140	200	1500	3200	800	106.2	56

Dimension - 外形尺寸



1.5BDPF**DL**S44L

2PF**L**P02*

Ordering Code - 订单编码

2	A	P (DP)	F/G	** (**/**/**)	DF02(TF02)	Z03	L	BS	- O - F Y
Group 2 2组	Improve number 改进号	Function 功能代码	Pressure 压力(bar)	Displacement 排量(ml/r)	Ports combination 油口组合	Shaft and flange 轴伸和法兰	Rotation 旋向	Ports position 油口位置	

A	铸铁盖	P	单泵	F	200	Front/Middle/Rear 前/中/后泵	Accessory 1	附录1	Accessory 2	附录2	L	逆时针	BB 后进后出
B	低噪音	DP	双泵	G	250						R	顺时针	BS 后进侧出
L	螺旋泵	TP	三联齿轮泵			4							SB 侧进后出
/	铝制					6							SS 侧进侧出
						8							
						10							
						12							
						14							
						16							
						18							
						20							
						23							
						25							
						28							
						30							

Improve number/改进号		Function Code/功能代码			Rotation/旋向			Ports position/油口位置		
A	Cast iron covers 铸铁前后盖	P	Single Pump	单泵	L	CCW	逆时针	BB	Back inlet and back outlet	后进后出
B	Low noise gear pump 低噪音齿轮泵	DP	Double Pump	双联齿轮泵	R	CW	顺时针	BS	Back inlet and side outlet	后进侧出
L	Helical gear pump 螺旋齿轮泵	TP	Triple Pump	三联齿轮泵				SB	Side inlet and back outlet	侧进后出
Omit	Aluminum covers 铝前后盖							SS	Side inlet and side outlet	侧进侧出

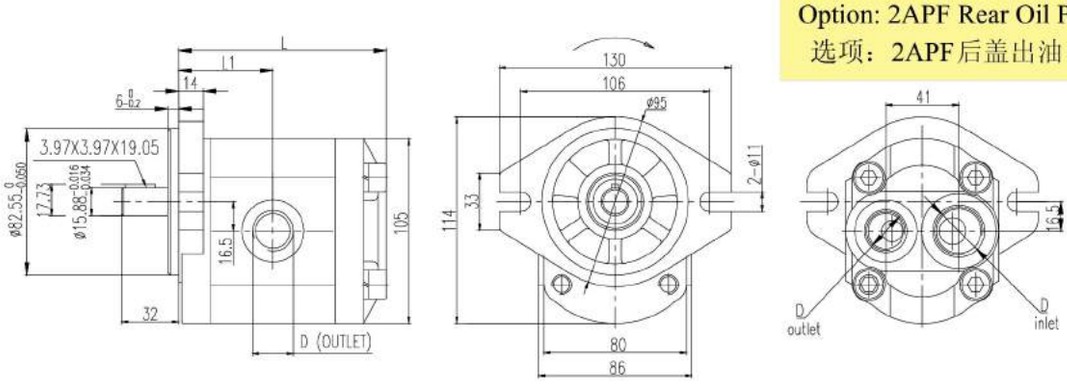
O Bearing/支撑			F Seal/密封			* Options/可选项		
O	Outboard bearing	带外支撑	F	FPM seal	氟橡胶	Y	Relief valve	溢流阀
Omit	No outboard bearing	无外支撑	Omit	NBR seal	丁腈橡胶	D	Check valve	单向阀
						/	Omit	不带阀

Specifications - 性能参数

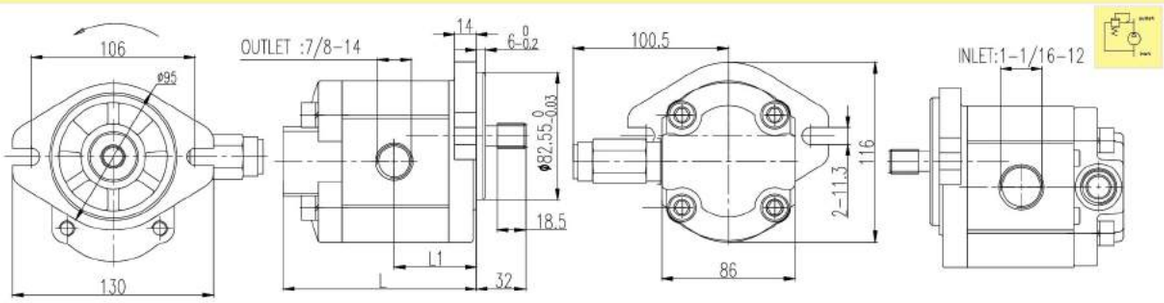
Model 型号	Displacement 排量 (ml/r)	Pressure 压力 (bar)		Speed 转速 (r/min)			L (mm)	L1 (mm)	D (mm)	
		Rated 额定	Peak 最高	Rated 额定	Max 最高	Min 最低			Inlet 进油口	Outlet 出油口
2PF4L09P02*	4	200(250)	250(300)	2000	3500	500	96	43.3	PT 1/2	PT 1/2
2PF6L09P02*	6	200(250)	250(300)	2000	3500	500	98	45		
2PF8L09P02*	8	200(250)	250(300)	2000	3500	500	102	46.5		
2PF10L09P02*	10	200(250)	250(300)	2000	3500	500	104	48		
2PF12L10P02*	12	200(250)	250(300)	2000	3500	500	108	50	PT 3/4	PT 1/2
2PF14L10P02*	14	200(250)	250(300)	2000	3500	500	110	51		
2PF16L10P02*	16	200(250)	250(280)	2000	3500	500	114	53		
2PF18L10P02*	18	200(250)	250(280)	2000	3500	500	117	55		
2PF20L10P02*	20	200(250)	250(280)	2000	3500	500	120	56		
2PF23L10P02*	23	200	250	2000	3000	500	123	58		
2PF25L10P02*	25	200	250	2000	3000	500	128	60		
2PF28L10P02*	28	160	200	2000	3000	500	133	63		
2PF30L10P02*	30	160	200	2000	3000	500	136	64		

Dimension - 外形尺寸

Option: 2APF Rear Oil Port
选项：2APF后盖出油口



2PF**L**S03-Y With Relief Valves - 2PF**L**S03-Y带溢流阀



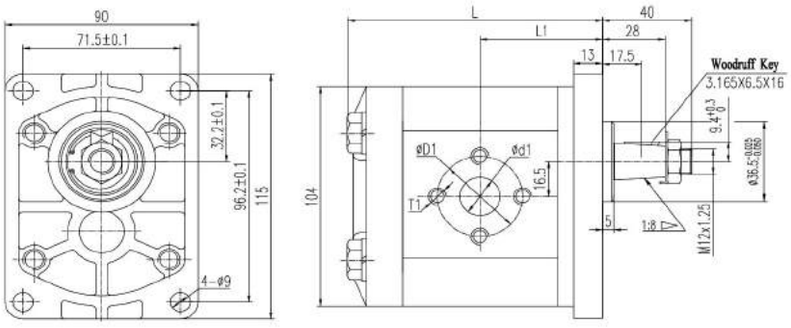
Adjusted Pressure of Relief Valves - 溢流阀调整压力 50 Bar to 250 Bar

2PF**F**Z03*/2ADPF**DF02Z03

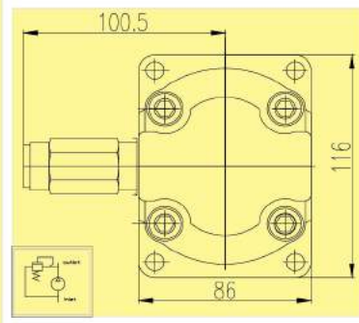
Specifications - 性能参数

Model 型号	Displacement 排量 (ml/r)	Pressure 压力 (bar)		Speed 转速 (r/min)			L (mm)	L1 (mm)	Inlet 进油口 (mm)			Outlet 出油口 (mm)		
		Rated 额定	Peak 最高	Rated 额定	Max 最高	Min 最低			¢D1	¢d1	T1	¢D2	¢d2	T2
2PF4F02Z03*	4	200(250)	250(300)	2000	3500	500	95.5	43.3	30	13	M6	30	13	M6
2PF6F02Z03*	6	200(250)	250(300)	2000	3500	500	99	45						
2PF8F02Z03*	8	200(250)	250(300)	2000	3500	500	102	46.5						
2PF10F06Z03*	10	200(250)	250(300)	2000	3500	500	105	48	40	20	M8			
2PF12F06Z03*	12	200(250)	250(300)	2000	3500	500	108	49.5						
2PF14F06Z03*	14	200(250)	250(300)	2000	3500	500	111	51						
2PF16F06Z03*	16	200(250)	250(280)	2000	3500	500	114	52.5						
2PF18F06Z03*	18	200(250)	250(280)	2000	3500	500	117.5	54.3						
2PF20F06Z03*	20	200(250)	250(280)	2000	3500	500	121	56						
2PF23F06Z03*	23	200	250	2000	3000	500	125.5	58.3						
2PF25F06Z03*	25	200	250	2000	3000	500	128	59.5						
2PF28F06Z03*	28	160	200	2000	3000	500	133	62						
2PF30F06Z03*	30	160	200	2000	3000	500	136	63.5						

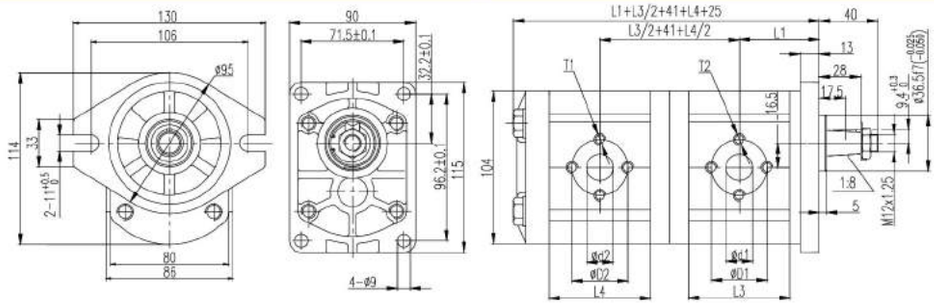
Dimension - 外形尺寸



Option: 2PF**F**Z03-Y With Relief Valves
选项：2PF**F**Z03-Y带溢流阀



2ADPF**/**DF02Z03* Double Pumps - 2ADPF**/**DF02Z03* 双联泵

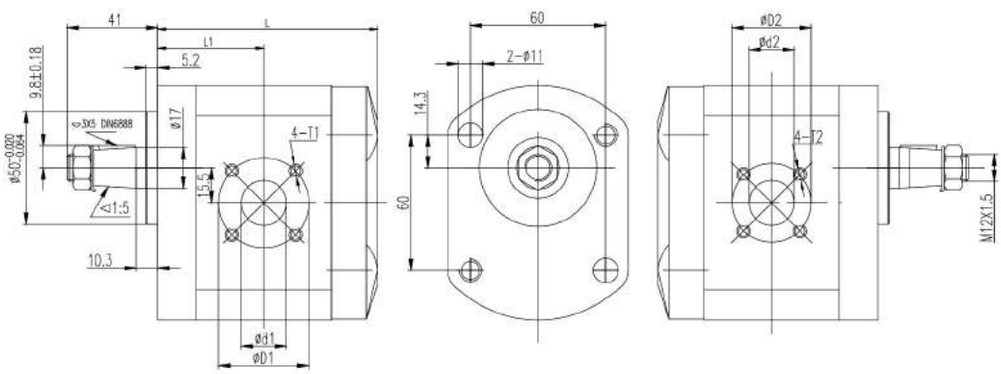


Displacement - 排量(ml/r)	4	6	8	10	12	14	16	18	20	23	25	28	30
L3(Front Pump)/L4(Rear Pump)	50.5	54	57	60	63	66	69	72.5	76	80.5	83	88	91

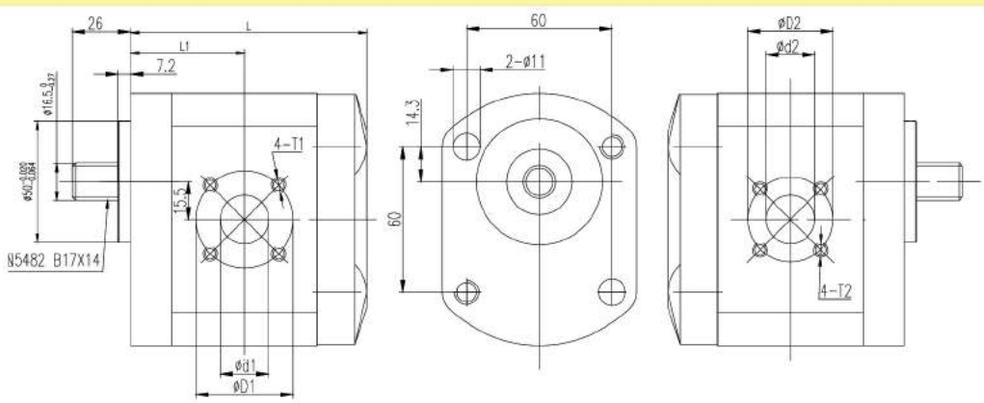
Specifications - 性能参数

Model 型号	Displacement 排量 (ml/r)	Pressure 压力 (bar)		Speed 转速 (r/min)			L (mm)	L1 (mm)	Inlet 进油口 (mm)			Outlet 出油口 (mm)		
		Rated 额定	Peak 最高	Rated 额定	Max 最高	Min 最低			¢D1	¢d1	T1	¢D2	¢d2	T2
2APF4F60Z11*	4	200(250)	250(300)	2000	3500	500	95.5	43.3	40	15	M6	35	15	M6
2APF6F60Z11*	6	200(250)	250(300)	2000	3500	500	99	45						
2APF8F52Z11*	8	200(250)	250(300)	2000	3500	500	102	46.5						
2APF10F52Z11*	10	200(250)	250(300)	2000	3500	500	105	48	40	20	M6			
2APF12F52Z11*	12	200(250)	250(300)	2000	3500	500	108	49.5						
2APF14F52Z11*	14	200(250)	250(300)	2000	3500	500	111	51						
2APF16F52Z11*	16	200(250)	250(280)	2000	3500	500	114	52.5						
2APF18F52Z11*	18	200(250)	250(280)	2000	3500	500	117.5	54.3						
2APF20F52Z11*	20	200(250)	250(280)	2000	3500	500	121	56						
2APF23F52Z11*	23	200	250	2000	3000	500	125.5	58.3						
2APF25F52Z11*	25	200	250	2000	3000	500	128	59.5						
2APF28F52Z11*	28	160	200	2000	3000	500	133	62						
2APF30F52Z11*	30	160	200	2000	3000	500	136	63.5						

Dimension - 外形尺寸



2ADPF**F52D01* Gear Pumps - 2ADPF**F52D01* 齿轮泵

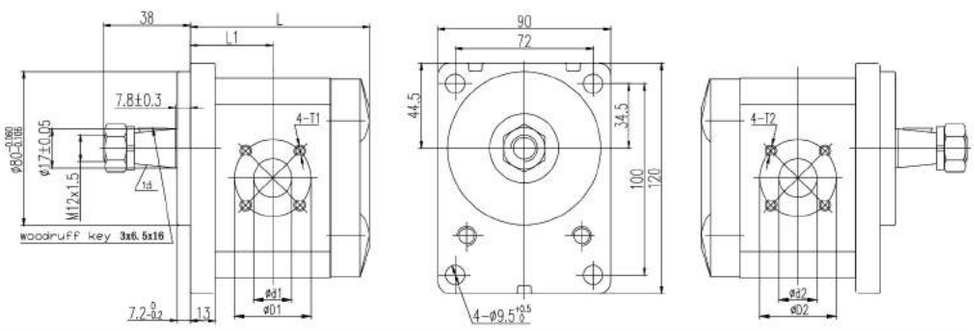


2APF**F**Z17*/2ADPF**DF05Z17*

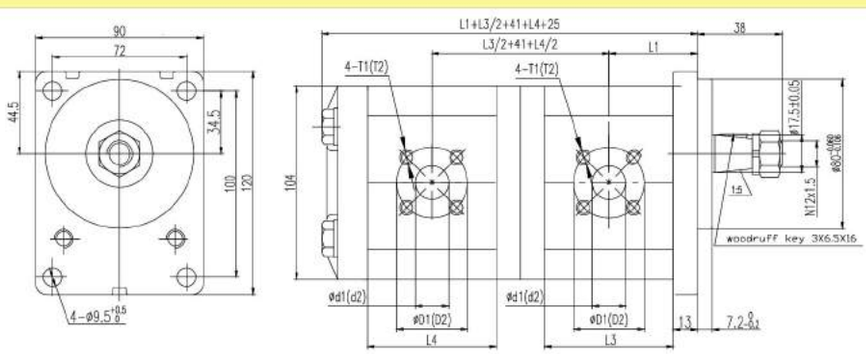
Specifications - 性能参数

Model 型号	Displacement 排量 (ml/r)	Pressure 压力 (bar)		Speed 转速 (r/min)			L (mm)	L1 (mm)	Inlet 进油口 (mm)			Outlet 出油口 (mm)		
		Rated 额定	Peak 最高	Rated 额定	Max 最高	Min 最低			¢D1	¢d1	T1	¢D2	¢d2	T2
2APF4F60Z17*	4	200(250)	250(300)	2000	3500	500	95.5	43.3	40	15	M6	35	15	M6
2APF6F60Z17*	6	200(250)	250(300)	2000	3500	500	99	45						
2APF8F52Z17*	8	200(250)	250(300)	2000	3500	500	102	46.5						
2APF10F52Z17*	10	200(250)	250(300)	2000	3500	500	105	48	40	20	M6			
2APF12F52Z17*	12	200(250)	250(300)	2000	3500	500	108	49.5						
2APF14F52Z17*	14	200(250)	250(300)	2000	3500	500	111	51						
2APF16F52Z17*	16	200(250)	250(280)	2000	3500	500	114	52.5						
2APF18F52Z17*	18	200(250)	250(280)	2000	3500	500	117.5	54.3						
2APF20F52Z17*	20	200(250)	250(280)	2000	3500	500	121	56						
2APF23F52Z17*	23	200	250	2000	3000	500	125.5	58.3						
2APF25F52Z17*	25	200	250	2000	3000	500	128	59.5						
2APF28F52Z17*	28	160	200	2000	3000	500	133	62						
2APF30F52Z17*	30	160	200	2000	3000	500	136	63.5						

Dimension - 外形尺寸



2ADPF**/**DF05Z17* Double Pumps - 2ADPF**/**DF05Z17* 双联泵



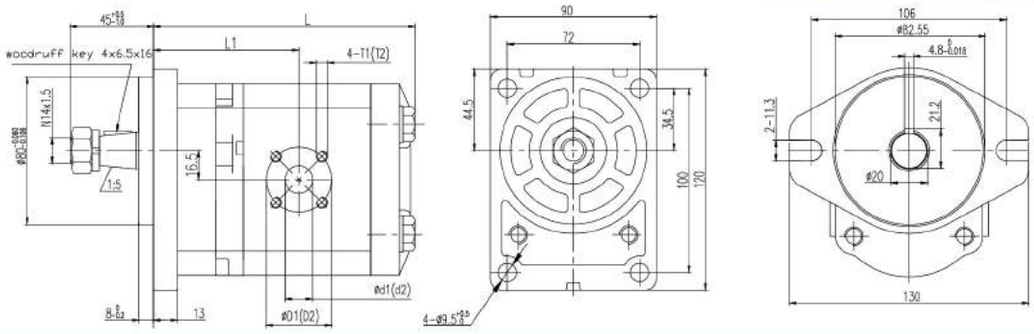
Displacement - 排量(ml/r)	4	6	8	10	12	14	16	18	20	23	25	28	30
L3(Front Pump)/L4(Rear Pump)	50.5	54	57	60	63	66	69	72.5	76	80.5	83	88	91

Specifications - 性能参数

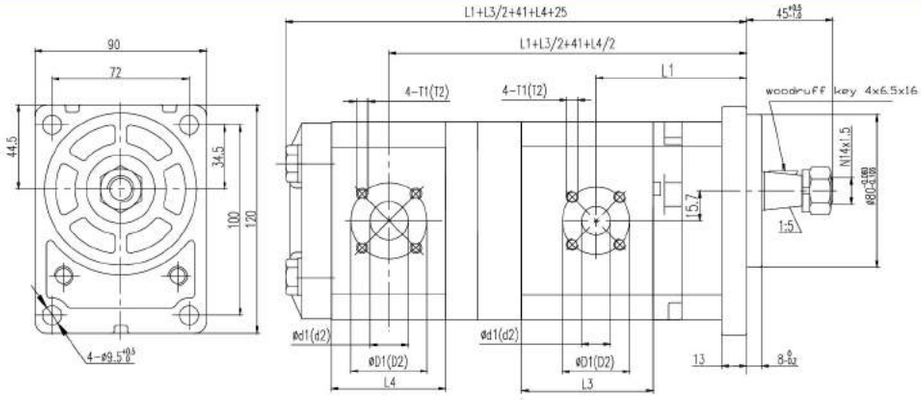
Model 型号	Displacement 排量 (ml/r)	Pressure 压力 (bar)		Speed 转速 (r/min)			L (mm)	L1 (mm)	Inlet 进油口 (mm)			Outlet 出油口 (mm)		
		Rated 额定	Peak 最高	Rated 额定	Max 最高	Min 最低			¢D1	¢d1	T1	¢D2	¢d2	T2
2PF4F60Z18*-O	4	200(250)	250(300)	2000	3500	500	123	73	40	15	M6	35	15	M6
2PF6F60Z18*-O	6	200(250)	250(300)	2000	3500	500	124	74						
2PF8F52Z18*-O	8	200(250)	250(300)	2000	3500	500	127	75	40	20	M6			
2PF10F52Z18*-O	10	200(250)	250(300)	2000	3500	500	130	77						
2PF12F52Z18*-O	12	200(250)	250(300)	2000	3500	500	133	79						
2PF14F52Z18*-O	14	200(250)	250(300)	2000	3500	500	137	80						
2PF16F52Z18*-O	16	200(250)	250(280)	2000	3500	500	141	82						
2PF18F52Z18*-O	18	200(250)	250(280)	2000	3500	500	143	83						
2PF20F52Z18*-O	20	200(250)	250(280)	2000	3500	500	147	86						
2PF23F52Z18*-O	23	200	250	2000	3000	500	153	89						
2PF25F52Z18*-O	25	200	250	2000	3000	500	157	92						

Dimension - 外形尺寸

Option: 2PF**F**P21*-O



2ADPF**/**DF05Z18* Double Pumps - 2ADPF**/**DF05Z18* 双联泵



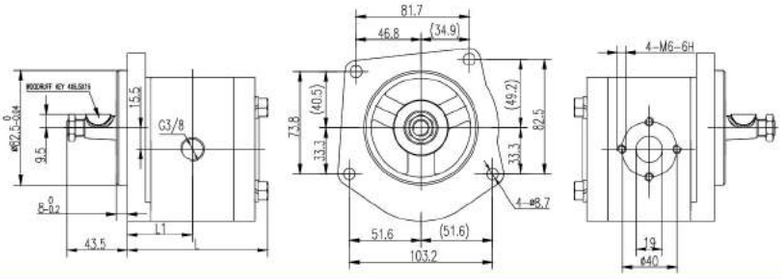
Displacement - 排量(ml/r)	4	6	8	10	12	14	16	18	20	23	25	28	30
L3(Front Pump)/L4(Rear Pump)	50.5	54	57	60	63	66	69	72.5	76	80.5	83	88	91

2PF**F**Z12*/2ADPF**DL**Z12*

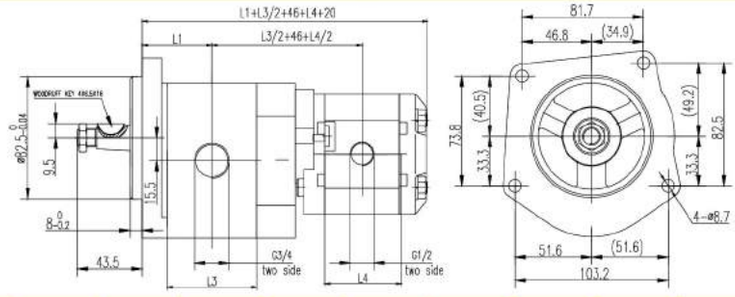
Specifications - 性能参数

Model 型号	Displacement 排量 (ml/r)	Pressure 压力 (bar)		Speed 转速 (r/min)			L (mm)	L1 (mm)	Inlet 进油口 (mm)			Outlet 出油口 (mm)
		Rated 额定	Peak 最高	Rated 额定	Max 最高	Min 最低			¢D1	¢d1	T1	
2PF4LF5Z12*	4	200(250)	250(300)	2000	3500	500	91.5	42.3	40	19	M6	G3/8
2PF6LF5Z12*	6	200(250)	250(300)	2000	3500	500	95	44				
2PF8LF5Z12*	8	200(250)	250(300)	2000	3500	500	98	45.5				
2PF10LF5Z12*	10	200(250)	250(300)	2000	3500	500	101	47				
2PF12LF5Z12*	12	200(250)	250(300)	2000	3500	500	104.5	48.8				
2PF14LF5Z12*	14	200(250)	250(300)	2000	3500	500	107.5	50				
2PF16LF5Z12*	16	200(250)	250(280)	2000	3500	500	111	52				
2PF18LF5Z12*	18	200(250)	250(280)	2000	3500	500	114	54				
2PF20LF5Z12*	20	200(250)	250(280)	2000	3500	500	118	55				
2PF23LF5Z12*	23	200	250	2000	3500	500	122	58				
2PF25LF5Z12*	25	200	250	2000	3500	500	125	59				
2PF28LF5Z12*	28	160	200	2000	3500	500	130	61				
2PF30LF5Z12*	30	160	200	2000	3500	500	133	63				

Dimension - 外形尺寸

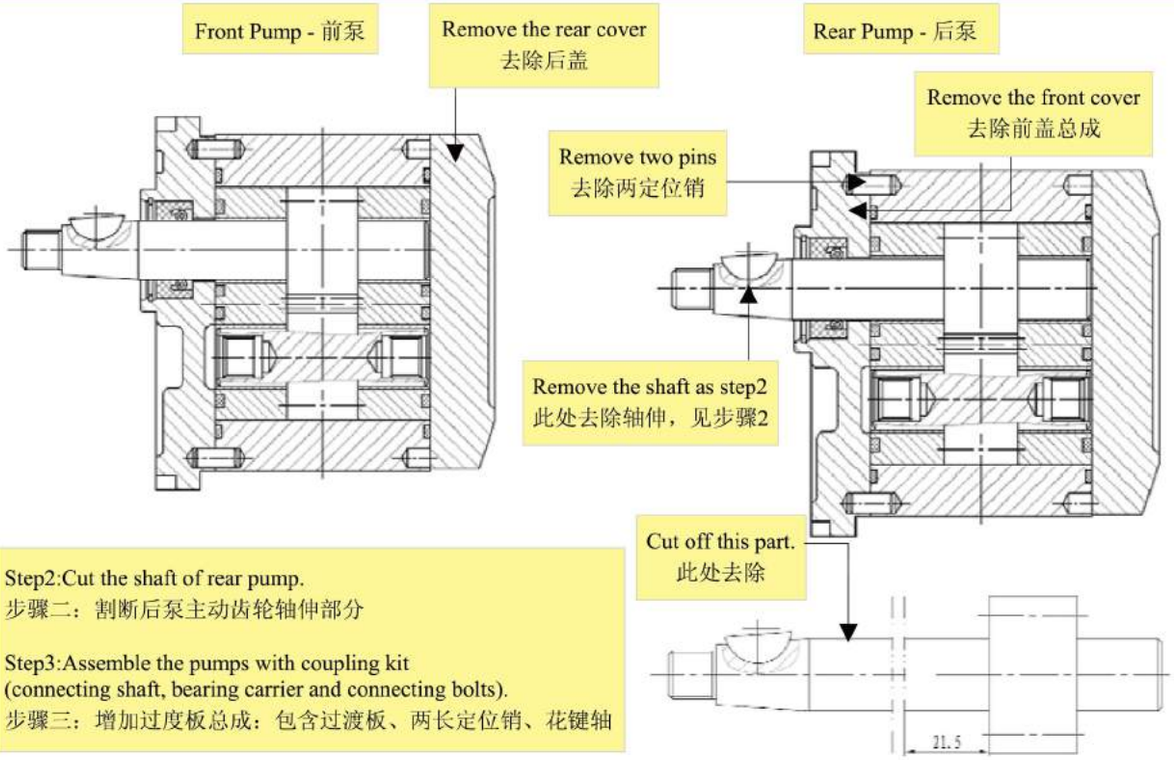


2ADPF**/**DL**Z12* Double Pumps - 2ADPF**/**DL**Z12* 双联泵



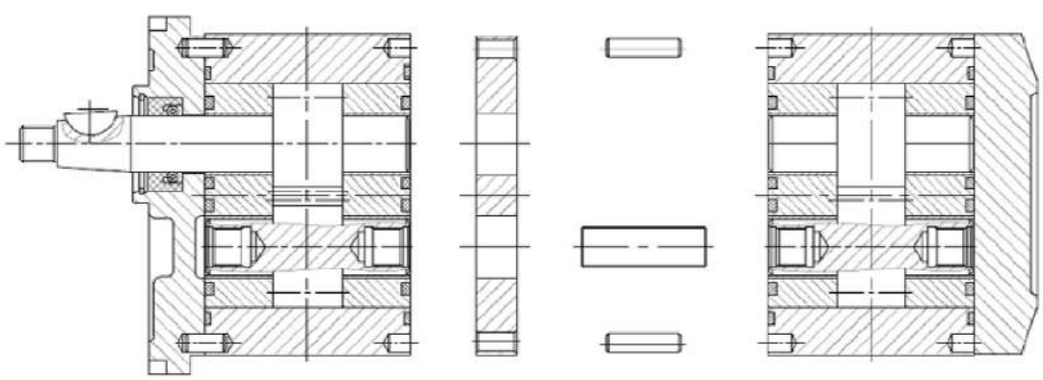
Front Pump Displacement 前泵排量(ml/r)	4	6	8	10	12	14	16	18	20	23	25	28	30
L3(Front Pump)	50.5	54	57	60	63	66	69	72.5	76	80.5	83	88	91
Rear Pump Displacement 后泵排量(ml/r)	1.3	2.0	2.7	3.4	4.1	5.1	6.1	/	/	/	/	/	/
L4(Rear Pump)	44	46	48	50	52	55	58	/	/	/	/	/	/

Step1:Remove rear cover from the front pump. Also remove front cover and pins from the rear pump.
步骤1：去除前泵后盖、后泵前盖总成、两定位销

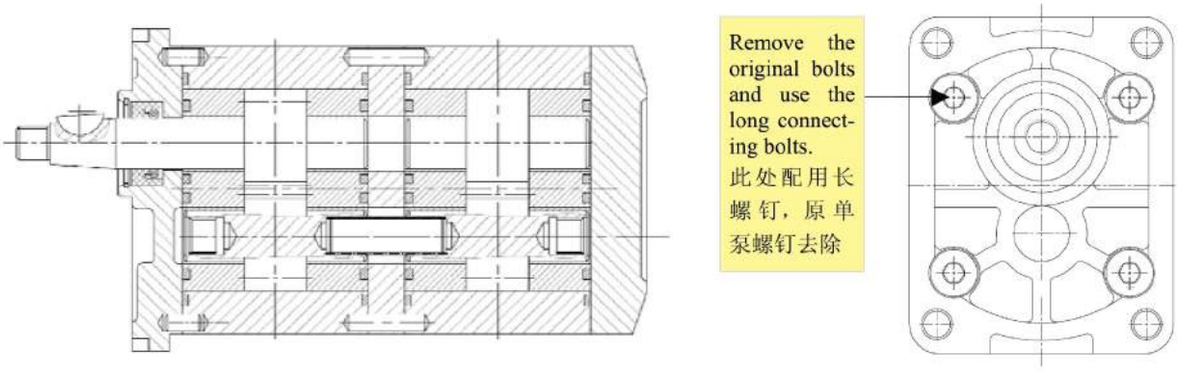


Step2:Cut the shaft of rear pump.
步骤二：割断后泵主动齿轮轴伸部分

Step3:Assemble the pumps with coupling kit
(connecting shaft, bearing carrier and connecting bolts).
步骤三：增加过度板总成：包含过渡板、两长定位销、花键轴



Step: Screw 4 pcs of long connecting bolts.
步骤四：拧紧四根长螺钉，成品如图所示



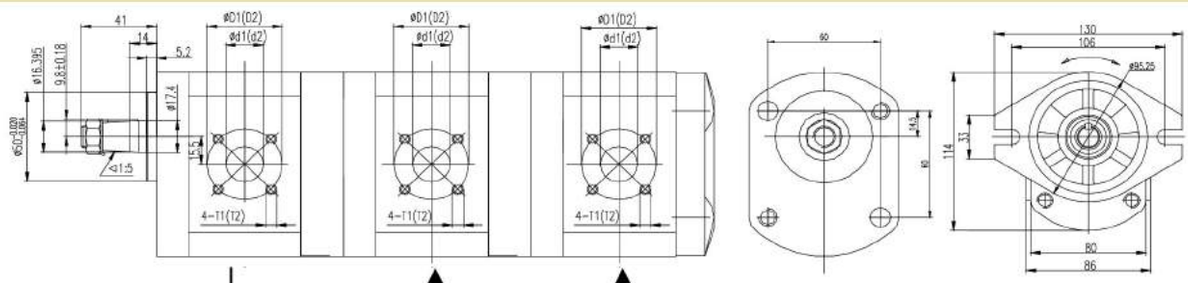
2(A)D(T)PF**/**

Specifications - 性能参数

Model 型号	Displacement 排量 (ml/r)	Pressure 压力 (bar)		Speed 转速 (r/min)			L (mm)	L1 (mm)	Inlet 进油口 (mm)			Outlet 出油口 (mm)		
		Rated 额定	Peak 最高	Rated 额定	Max 最高	Min 最低			¢D1	¢d1	T1	¢D2	¢d2	T2
2APF04F60*	4	200(250)	250(300)	2000	3000	500	87.9	42.2	40	15	M6	35	15	M6
2APF06F60*	6	200(250)	250(300)	2000	3000	500	91.1	43.8						
2APF08F52*	8	200(250)	250(300)	2000	3000	500	94.3	45.4	40	20	M6			
2APF10F52*	10	200(250)	250(300)	2000	3000	500	97.5	47.0						
2APF12F52*	12	200(250)	250(300)	2000	3000	500	110.7	48.6						
2APF14F52*	14	200(250)	250(300)	2000	3000	500	114.0	50.2						
2APF16F52*	16	200(250)	250(280)	2000	3000	500	109.5	51.2						
2APF18F52*	18	200(250)	250(280)	2000	3000	500	113.0	52.8						
2APF20F52*	20	200(250)	250(280)	2000	3000	500	116.5	55.3						
2APF23F52*	23	200	250	2000	3000	500	121.5	56.9						
2APF25F52*	25	200	250	2000	3000	500	124.7	58.5						

2TPF**/**/**TF02Z11*

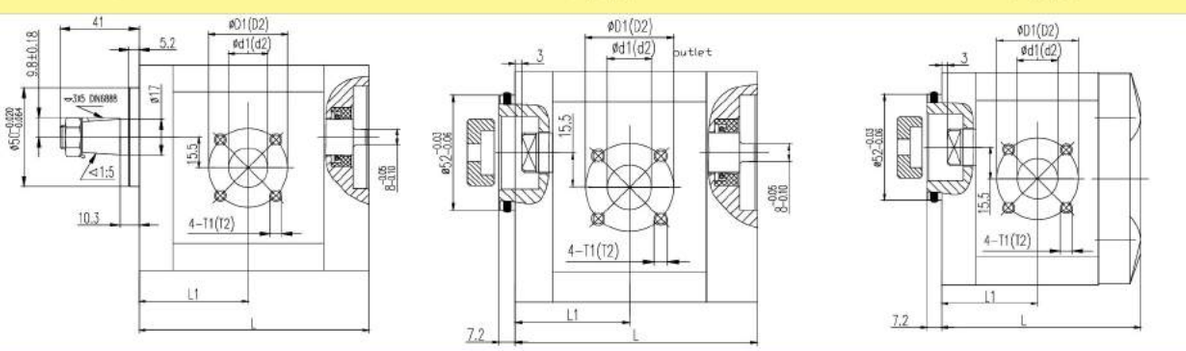
Option - 选项: 2TPF**/**/**TF02P21*



Order code - 订单编码: 2APF**F52Z11*-A

Order code - 订单编码: 2APF**F52*-M

Order code - 订单编码: 2APF**F52*-B

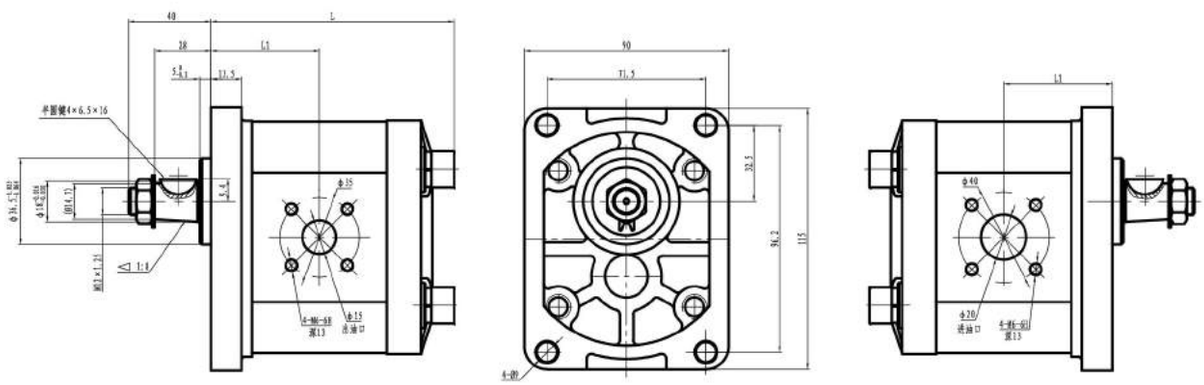


F52: combination of inlet and outlet, refer to accessory 1, Z11:combination of shaft and flange, refer to accessory 2.
-A: front pump, -M: middle pump, -B: back pump.
F52：进出油口组合，详见附录1；Z11：轴伸和法兰组合，详见附录2。-A: 前泵，-M: 中泵，-B: 后泵。

Specifications - 性能参数

Model 型号	Displacement 排量 (ml/r)	Pressure 压力 (bar)		Speed 转速 (r/min)			L (mm)	L1 (mm)
		Rated 额定	Peak 最高	Rated 额定	Max 最高	Min 最低		
2LPF04F52Z08*	04	200	230	1500	1800	1000	95.5	42
2LPF06F52Z08*	06	200	230	1500	1800	1000	99	43.8
2LPF08F52Z08*	08	200	230	1500	1800	1000	103	45.8
2LPF10F52Z08*	10	200	230	1500	1800	1000	107	47.8
2LPF12F52Z08*	12	200	230	1500	1800	1000	111	49.8
2LPF14F52Z08*	14	200	230	1500	1800	1000	115	51.8
2LPF16F52Z08*	16	200	230	1500	1800	1000	118.5	53.5
2LPF18F52Z08*	18	200	230	1500	1800	1000	122.5	55.5
2LPF19F52Z08*	19	180	210	1500	1800	1000	124.5	56.5
2LPF20F52Z08*	20	180	210	1500	1800	1000	126.5	57.5
2LPF23F52Z08*	23	180	210	1500	1800	1000	132.5	60.5
2LPF25F52Z08*	25	160	180	1500	1800	1000	136	62.3
2LPF28F52Z08*	28	160	180	1500	1800	1000	142	65.3
2LPF30F52Z08*	30	160	180	1500	1800	1000	146	67.3

Dimension - 外形尺寸



2LPF**F**Z08*

2LF螺旋齿轮为低噪音泵，它的排量为7-35cm3/rev；它的最大工作压力可以达到250bar。螺旋形的齿轮在齿数较少的情况下仍可保证泵运行的连贯性。连续运动和较少的齿数可以降低泵运行噪音的基本频率，使泵运行的声音更柔和悦耳。特殊设计的齿形大大降低了由泵产生的压力波动和振荡，并且不容易传递给液压系统中的其他部件，这样可以降低整个液压系统的噪音水平。

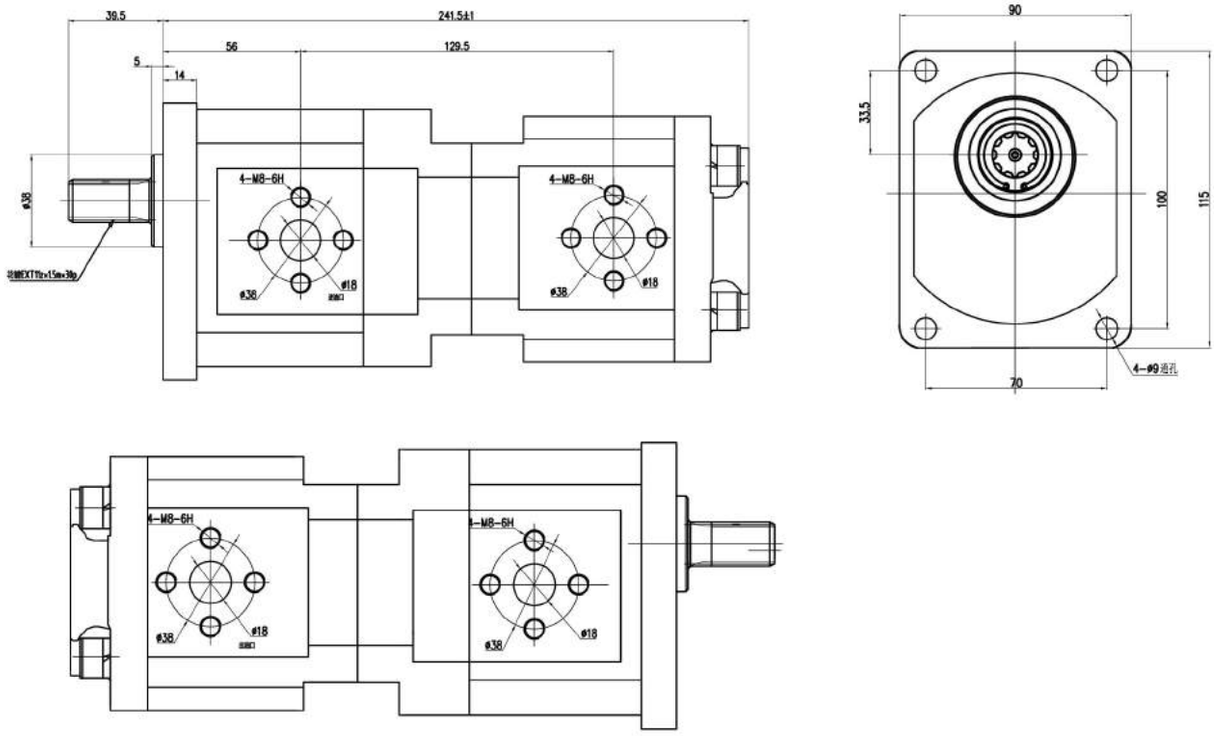
2LPF helical pumps is low noise type with displacements from 7 to 35cm3/rev; The maximum operating pressures are 250 bar. The helical gears ensure the continuity of the motion despite the low number of teeth. Continuous motion and the low number of teeth reduces the fundamental frequencies of the pump noise, give out a more pleasant sound. The particular designed shape of the profile reduces pressure oscillations and vibrations produced by the pump and transmitted to the other components, reducing the noise level of the hydraulic system.

2YBDPF**DF**J08*

Specifications - 性能参数

Model 型号	Displacement 排量 (ml/r)		Pressure 压力 (bar)				Speed 转速 (r/min)		
			Front Pump 前泵		Rear Pump 后泵				
	Front Pump 前泵	Rear Pump 后泵	Rated 额定	Peak 最高	Rated 额定	Max 最高	Rated 额定	Max 最高	Min 最低
2YBDPF20/10DF54J08*	20	10	200/250	250/300	200/250	250/300	2500	3000	800

Dimension - 外形尺寸



2YBDPF**DF**J08*

Ordering Code - 订单编码

2.5	A	P	F	**	F**	S02	*	BB	–	O	–	F	Y
Group 2.5 2.5 组	Covers 前后盖	Gear pump 齿轮泵	Pressure 压力(bar)	Displacement 排量(ml/r)	Ports combination 油口组合	Shaft and flange 轴伸和法兰	Rotation 旋向	Ports position 油口位置					

A	铸铁	F	200	20	Accessory 1	附录1	Accessory 2	附录2	B	双向	BB	后进后出
C	铝制	G	250	25					L	逆时针	BS	后进侧出
/	铝制			27					R	顺时针	SB	侧进后出
				30							SS	侧进侧出
				32								
				36								
				40								

Covers/前后盖

- A — Cast iron covers / 铸铁前后盖
- C — Aluminum covers, cast iron body,side plate structure / 铝前后盖，铸铁泵体，侧板式结构
- Omit — Aluminum alloy covers and body, bushing / 铝前后盖和铝合金挤压型材泵体，轴套式结构

Rotation/旋向

- B — Bi-direction 双向
- L — CCW 逆时针
- R — CW 顺时针

Ports position/油口位置

- BB — Back inlet and back outlet 后进后出
- BS — Back inlet and side outlet 后进侧出
- SB — Side inlet and back outlet 侧进后出
- SS — Side inlet and side outlet 侧进侧出

O Bearing/支撑

- O — Outboard bearing 带外支撑
- Omit — No outboard bearing 无外支撑

F Seal/密封件

- F — FPM seal 氟橡胶
- Omit — NBR seal 丁腈橡胶

Y Options/可选项

- Y — Relief valve 溢流阀
- D — Check valve 单向阀
- / — Omit 不带阀

2.5APF**F77S02*

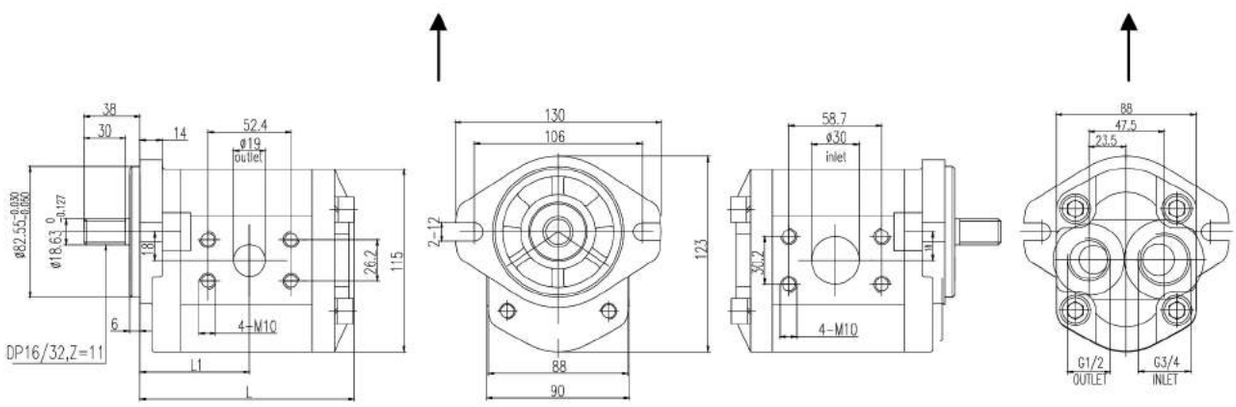
Specifications - 性能参数

Model 型号	Displacement 排量 (ml/r)	Pressure 压力 (bar)		Speed 转速 (r/min)			L (mm)	L1 (mm)	Inlet 进油 (mm)	Outlet 出油 (mm)
		Rated 额定	Peak 最高	Rated 额定	Max 最高	Min 最低				
2.5APF20F77S02*	20	200	250	2500	3000	500	124.5	61.5	Φ25	Φ19
2.5APF25F77S02*	25	200	250	2500	3000	500	130.5	64.5		
2.5APF27F77S02*	27	200	250	2500	3000	500	133	65.8		
2.5APF30F77S02*	30	200	250	2500	3000	500	136.5	67.5		
2.5APF32F77S02*	32	200	230	2500	3000	500	139	68.8		
2.5APF36F77S02*	36	200	230	2500	3000	500	143.5	71		
2.5APF40F77S02*	40	160	200	2500	3000	500	148.5	73.5		

Dimension - 外形尺寸

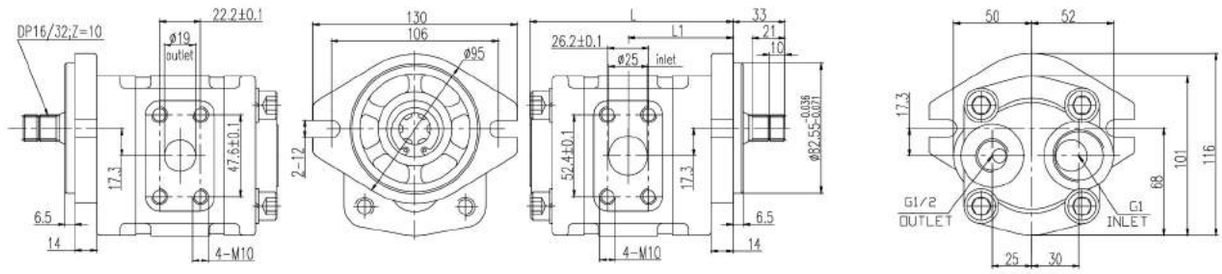
2.5APF**F77S02

Option - 选项:
2.5APF**LJ02S02*BB



Option: 2.5CPF**F30S24*

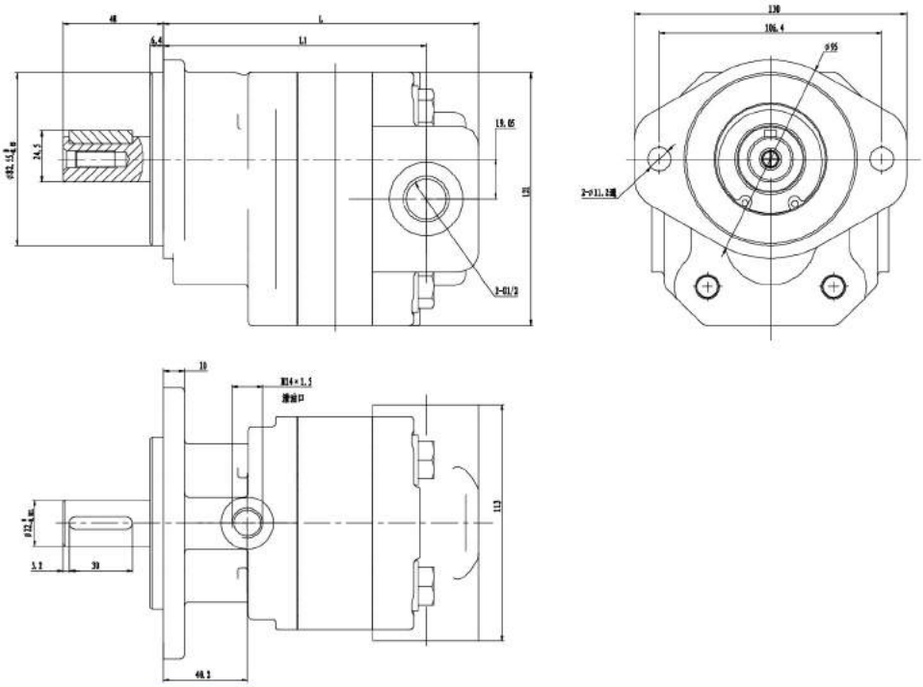
Option: 2.5CPF**LJ02S24*BB



Specifications - 性能参数

Model 型号	Displacement 排量(ml/r)	Pressure 压力(bar)		Speed 转速(r/min)			L (mm)	L1 (mm)
		Rated 额定	Peak 最高	Rated 额定	Max 最高	Min 最低		
2.5EPF10.16L04PB143-0	10.16	210	250	2000	3000	600	137	112
2.5EPF15.23L04PB143-0	15.23	210	250	2000	3000	600	143.5	118.5
2.5EPF20.31L04PB143-0	20.31	210	250	2000	3000	600	150	125
2.5EPF25.39L04PB143-0	25.39	210	250	2000	3000	600	156.5	131.5
2.5EPF30.47L04PB143-0	30.47	210	250	2000	3000	600	163	138
2.5EPF35.54L04PB143-0	35.54	180	210	2000	3000	600	169.5	144.5
2.5EPF40.62L04PB143-0	40.62	180	210	2000	3000	600	176	151

Dimension - 外形尺寸



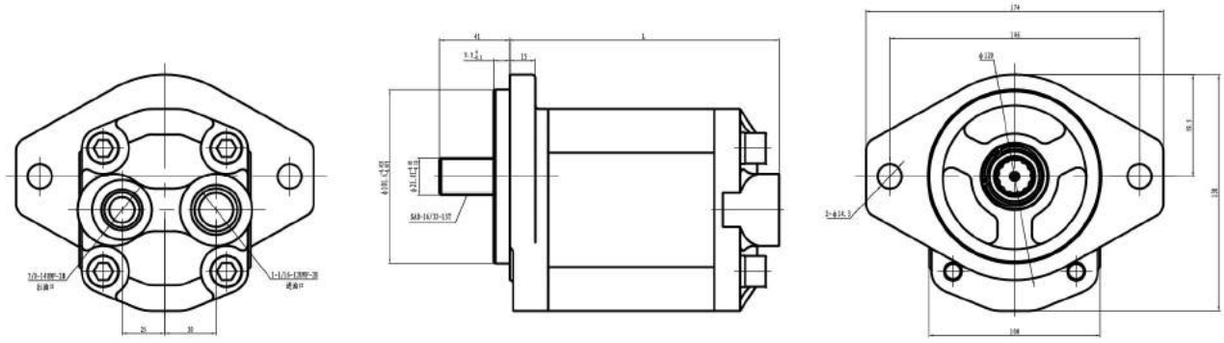
2.5EPF**L**PB143-0

2.8PF**LJ**S95BB*

Specifications - 性能参数

Model 型号	Displacement 排量 (ml/r)	Pressure 压力 (bar)		Speed 转速 (r/min)			L (mm)
		Rated 额定	Peak 最高	Rated 额定	Max 最高	Min 最低	
2.8PF06LJ39S95BB*	06	250	280	2000	4000	800	115
2.8PF08LJ39S95BB*	08	250	280	2000	4000	800	117
2.8PF10LJ39S95BB*	10	250	280	2000	4000	700	119
2.8PF12LJ39S95BB*	12	250	280	2000	3500	700	121.5
2.8PF14LJ39S95BB*	14	250	280	2000	3500	600	123.5
2.8PF16LJ39S95BB*	16	250	280	2000	3500	600	125.5
2.8PF19LJ39S95BB*	19	250	280	2000	3000	500	128.5
2.8PF22LJ39S95BB*	22	250	280	2000	3000	500	132
2.8PF25LJ39S95BB*	25	250	280	2000	3000	500	135
2.8PF28LJ39S95BB*	28	250	280	2000	3000	500	138.5
2.8PF30LJ39S95BB*	30	230	250	2000	3000	500	140.5
2.8PF32LJ39S95BB*	32	230	250	2000	3000	400	142.5
2.8PF36LJ39S95BB*	36	200	230	1500	2750	400	147
2.8PF40LJ39S95BB*	40	200	230	1500	2750	400	151.5
2.8PF43LJ39S95BB*	43	170	190	1500	2500	400	154.5
2.8PF45LJ39S95BB*	45	170	190	1500	2500	400	156.5

Dimension - 外形尺寸



2.8PF**LJ**S95BB*

Ordering Code - 订单编码

3	A	P	F	**	F**	Z05	*	BB	–	O	–	F	Y	K
Group 3 3组	Covers 前后盖	Gear pump 齿轮泵	Pressure 压力(bar)	Displacement 排量(ml/r)	Ports combination 油口组合	Shaft and flange 轴伸和法兰	Rotation 旋向	Ports position 油口位置						
	A 铸铁	P 齿轮泵	F 200	22	Accessory 1 附录1	Accessory 2 附录2	B 双向	BB 后进后出						
	B 侧板	DP 双联齿轮泵		26			L 逆时针	BS 后进侧出						
	E 铸铁侧板			34			R 顺时针	SB 侧进后出						
				39				SS 侧进侧出						
				43										
				51										
				60										
				70										
				78										
				89										

Covers/前后盖

- A Cast iron covers 铸铁前后盖
- B Side plate structure 侧板式结构
- E Cast iron covers with side plate structure 铸铁前后盖侧板式结构

Gear pump/齿轮泵

- P Gear Pump 齿轮泵
- DP Double Pump 双联齿轮泵

Rotation/旋向

- B Bi-direction 双向
- L CCW 逆时针
- R CW 顺时针

Ports position/油口位置

- BB Back inlet and back outlet 后进后出
- BS Back inlet and side outlet 后进侧出
- SB Side inlet and back outlet 侧进后出
- SS Side inlet and side outlet 侧进侧出

O Bearing/支撑

- O Outboard bearing 带外支撑
- Omit No outboard bearing 无外支撑

F Seal/密封件

- F FPM seal 氟橡胶
- Omit NBR seal 丁腈橡胶

Y Options/可选项

- Y Relief valve 溢流阀
- D Check valve 单向阀
- / Omit 不带阀

K Multiple Pump/可组合泵

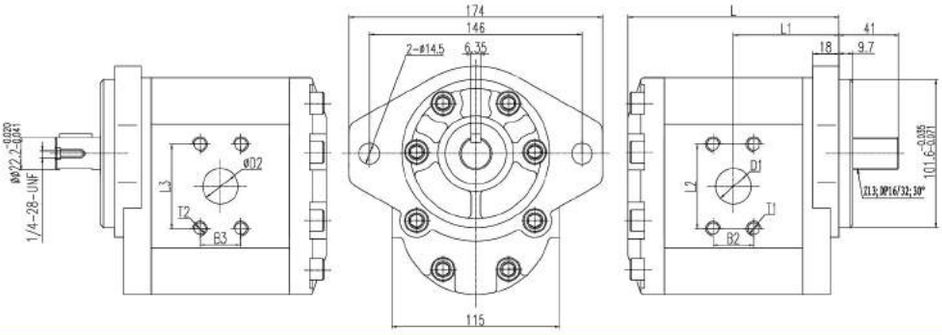
K Multiple pumps can be used as single pumps,they can also be combined into tandem pumps.Please refer to page 30 for more details.
可组合泵，也可作为单泵使用，也可两个泵组合成双联泵，详见P30。

3APF**

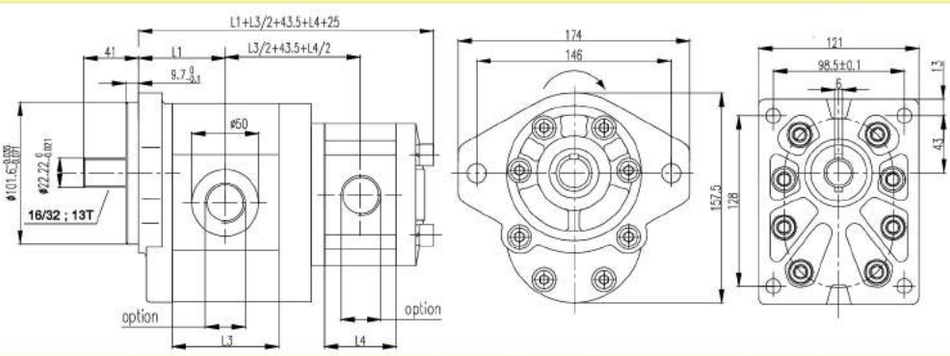
Specifications - 性能参数

Model 型号	Displacement 排量 (ml/r)	Pressure 压力 (bar) Rated 额定	Pressure Peak 最高	Speed 转速 (r/min) Rated 额定	Speed Max 最高	Speed Min 最低	L (mm)	L1 (mm)	L2 (mm)	B2 (mm)	¢D1 (mm)	T1 (mm)	L3 (mm)	B3 (mm)	¢D2 (mm)	T2 (mm)
3APF22F32	22	200 (250)	250 (300)	2000	3000	400	130.3	65.3	52. 4	26.2	27	3/8-16UN C-2B	26.2	47.6	19	3/8-16UN C-2B
3APF26F32	26	200 (250)	250 (300)	2000	3000	400	133.3	66.8								
3APF34F32	34	200 (250)	250 (300)	2000	3000	400	138.8	69.6								
3APF39F32	39	200 (250)	250 (300)	2000	3000	400	142.8	71.6								
3APF43F32	43	200 (250)	250 (300)	2000	2800	400	145.3	72.8								
3APF51F32	51	200 (250)	250 (300)	2000	2400	400	151.3	75.8								
3APF60F36	60	180 (200)	230 (250)	1500	2800	400	157.8	79.1	58. 7	28.4	33	7/16-14UN C-2B	26.2	52.4	27	
3APF70F36	70	180 (200)	200 (230)	1500	2500	400	164.8	82.5								
3APF78F36	78	160 (200)	200 (230)	1500	2300	400	171	85								
3APF89F36	89	140 (180)	180 (200)	1500	2000	400	176	88								

Dimension - 外形尺寸



3/2APF**/**DL**Z05(S05)* DOUBLE PUMPS - 3/2APF**/**DL**Z05(S05)* 双联泵



Front Pump Displacement 前泵排量(ml/r)	22	26	34	39	43	51	60	70	/	/	/	/	/
L3(Front Pump)	80	83	88.5	92.5	95	101	107.5	114.5	/	/	/	/	/
Rear Pump Displacement 后泵排量(ml/r)	4	6	8	10	12	14	16	18	20	23	25	28	30
L4(Rear Pump)	50.5	54	57	60	63	66	69	72.5	76	80.5	83	88	91

Ordering Code - 订单编码

3	E	P	F	**/**	F**	S69	*	BB	-	O	-	F	Y	K
Group 3 3组	Covers 前后盖	Gear pump 齿轮泵	Pressure 压力(bar)	Displacement 排量(ml/r)	Ports combination 油口组合	Shaft and flange 轴伸和法兰	Rotation 旋向	Ports position 油口位置						

	E	铸铁	DP	齿轮泵	F	200	Front/Rear 前/后泵	Accessory 1	附录1	Accessory 2	附录2	B	双向	BB	后进后出
			TP	三联 齿轮泵								L	逆时针	BS	后进侧出
							22/**					R	顺时针	SB	侧进后出
							26/**							SS	侧进侧出
							34/**								
							39/**								
							43/**								
							51/**								
							60/**								
							70/**								
							78/**								
							89/**								

Covers/前后盖

E Cast iron covers with side plate structure
铸铁前后盖侧板式结构

Gear pump/齿轮泵

DP Double Pump 双联齿轮泵
TP Triple Pump 三联齿轮泵

Rotation/旋向

B Bi-direction 双向
L CCW 逆时针
R CW 顺时针

Ports position/油口位置

BB Back inlet and back outlet 后进后出
BS Back inlet and side outlet 后进侧出
SB Side inlet and back outlet 侧进后出
SS Side inlet and side outlet 侧进侧出

O Bearing/支撑

O Outboard bearing 带外支撑
Omit No outboard bearing 无外支撑

F Seal/密封件

F FPM seal 氟橡胶
Omit NBR seal 丁腈橡胶

Y Options/可选项

Y Relief valve 溢流阀
D Check valve 单向阀
/ Omit 不带阀

K Multiple Pump/可组合泵

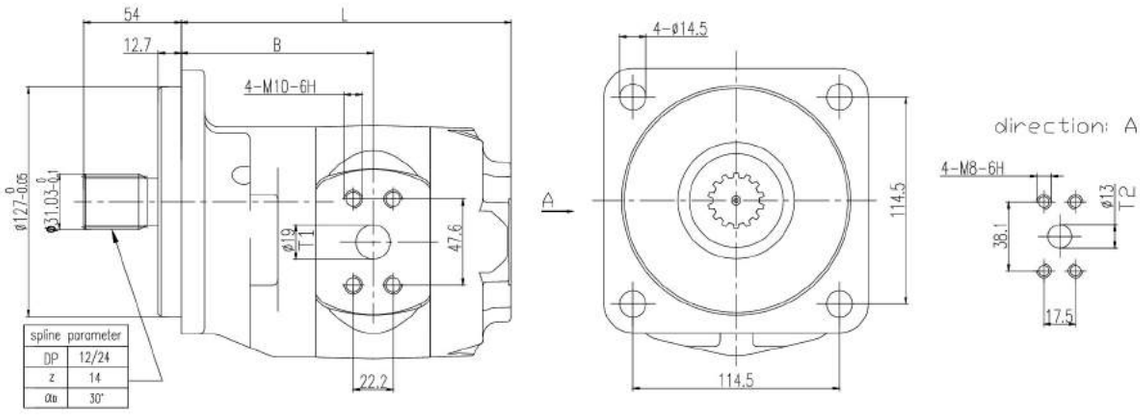
K Multiple pumps can be used as single pumps,they can also be combined into tandem pumps.Please refer to page 30 for more details.
可组合泵，也可作为单泵使用，也可两个泵组合成双联泵，详见P30。

3EPF**F**S69*

Specifications - 性能参数

Model 型号	Displacement 排量 (ml/r)	Pressure 压力 (bar)		Speed 转速 (r/min)		L (mm)	B (mm)	T1 (mm)	T2 (mm)
		Rated 额定	Peak 最高	Max 最高	Min 最低				
3EPF16.4	16.4	218	250	2400	600	151	90.6		
3EPF24.6	24.6	218	250	2400	600	157.4	93.8		
3EPF32.8	32.8	218	250	2400	600	163.7	97		
3EPF41	41	218	250	2400	600	170	100	¢19	¢13
3EPF49.2	49.2	218	250	2400	600	176.4	103.3		
3EPF57.3	57.3	180	210	2400	600	182.8	106.5		
3EPF65.5	65.5	180	210	2400	600	189	109.7		

Dimension - 外形尺寸



Ordering Code							
3	E	P	F	* *	F22	S69	/L
Group Number	Structure Improve Number	Function Code	Pressure Level Code	Displacement	Inlet/Outlet Combination	Shaft Extension Combination	Rotation
3 Group	Second Improve	Gear Pump	18-25 MPa	Refer to Above Table	LJ53, etc Refer to Accessory1	P16, S05,etc Refer to accessory 2	L-left Omit-Right
型号说明							
3	E	P	F	* *	F22	S69	/L
组别	改进代码	功能代码	压力等级代码	排量	进出油口组合形式	轴伸组合形式	旋向
3组	第二次改进	齿轮泵	18-25 MPa	参见上表	LJ53等等 参见附录1	P16, S05等等 参见附录2	L-左旋 不标注-右旋

Ordering Code - 订单编码

3	A	DP	F/G	**/**	DL**	Z05	L	BS	–	O	F
Group 3 3组	Covers 前后盖	Gear pump 齿轮泵	Pressure 压力(bar)	Displacement 排量(ml/r)	Ports combination 油口组合	Shaft and flange 轴伸和法兰	Rotation 旋向	Ports position 油口位置		Bearing 支承	Seal 密封

A	铸铁	DP	双联齿轮泵	F	200	Front/Rear 前/后泵	L	逆时针	BS	后进侧出	0	带外支承	F	氟橡胶
B	铸铝	TP	三联齿轮泵	G	250	22	R	顺时针	SB	侧进后出	/	无外支承	/	丁腈橡胶
/	铝制					26			SS	侧进侧出				
E	铸铁侧板					34							
						39							
						43							
						51							
						60							
						70							
						78							
						89							

Covers/前后盖

- A Cast iron covers 铸铁前后盖
- B Side plate structure 侧板式结构
- Omit Aluminum covers and body, bushing 铝前后盖
- E Cast iron covers with side plate structure 铸铁前后盖侧板式结构

Gear pump/齿轮泵

- DP Double Pump 双联齿轮泵
- TP Triple Pump 三联齿轮泵

Rotation/旋向

- L CCW 逆时针
- R CW 顺时针

Ports position/油口位置

- BS Back inlet and side outlet 后进侧出
- SB Side inlet and back outlet 侧进后出
- SS Side inlet and side outlet 侧进侧出

O Bearing/支撑

- O Outboard bearing 带外支撑
- Omit No outboard bearing 无外支撑

F Seal/密封件

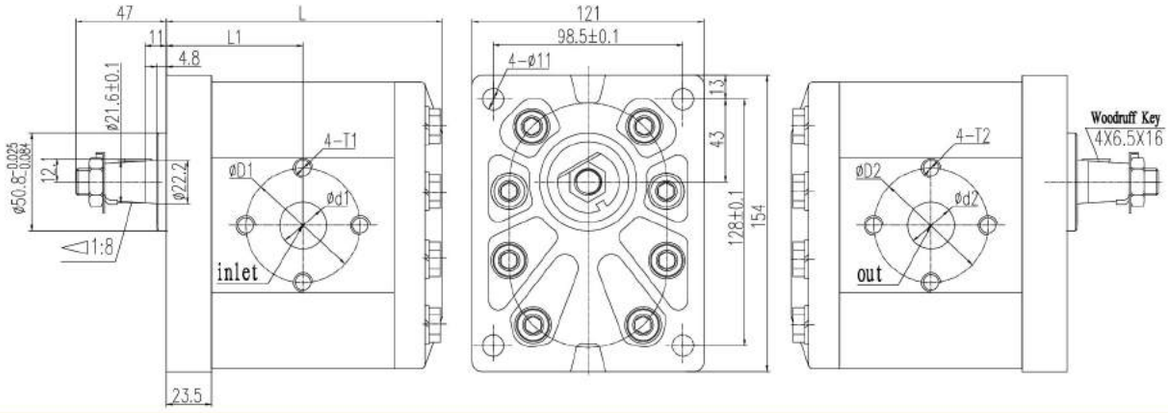
- F FPM seal 氟橡胶
- Omit NBR seal 丁腈橡胶

3APF**F**Z05*

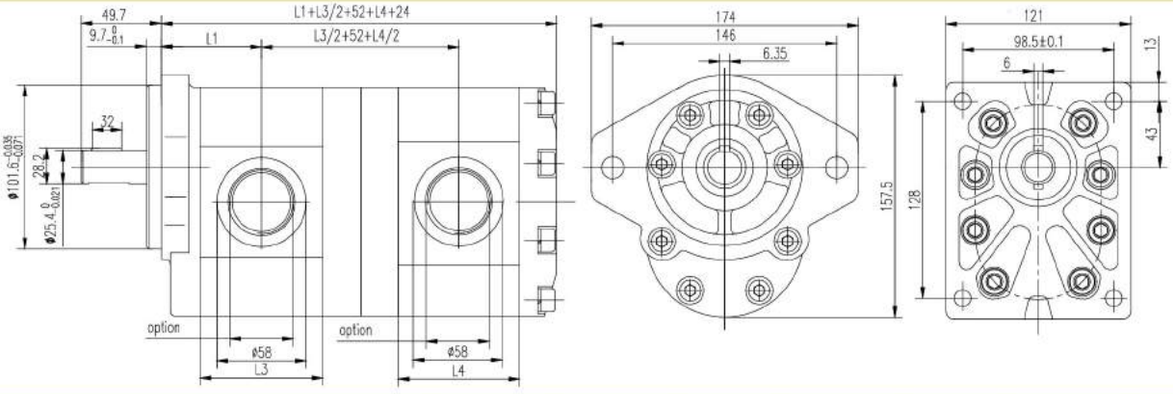
Specifications - 性能参数

Model 型号	Displacement 排量 (ml/r)	Pressure 压力 (bar)		Speed 转速 (r/min)			L (mm)	L1 (mm)	¢D1 (mm)	¢d1 (mm)	T1 (mm)	¢D2 (mm)	¢d2 (mm)	T2 (mm)
		Rated 额定	Peak 最高	Rated 额定	Max 最高	Min 最低								
3APF22F10	22	200(250)	250(300)	2000	3000	400	128.5	65.5	56	27	M10	56	19	M10
3APF26F10	26	200(250)	250(300)	2000	3000	400	131.5	67						
3APF34F10	34	200(250)	250(300)	2000	3000	400	137	69.8						
3APF39F10	39	200(250)	250(300)	2000	3000	400	141	71.8						
3APF43F09	43	200(250)	250(300)	2000	2800	400	143.5	73	51	27		51	27	
3APF51F11	51	200(250)	250(300)	2000	2400	400	149.5	76	56	27		56	27	
3APF60F12	60	180(200)	230(250)	1500	2800	400	156	79.3	62	33		51	27	
3APF70F12	70	180(200)	200(230)	1500	2500	400	163	82.8						
3APF78F12	78	160(200)	200(230)	1500	2300	400								
3APF89F12	89	140(180)	180(200)	1500	2000	400								

Dimension - 外形尺寸



3APF**/**DL**P88* DOUBLE PUMPS - 3APF**/**DL**Z05(S05)* 双联泵

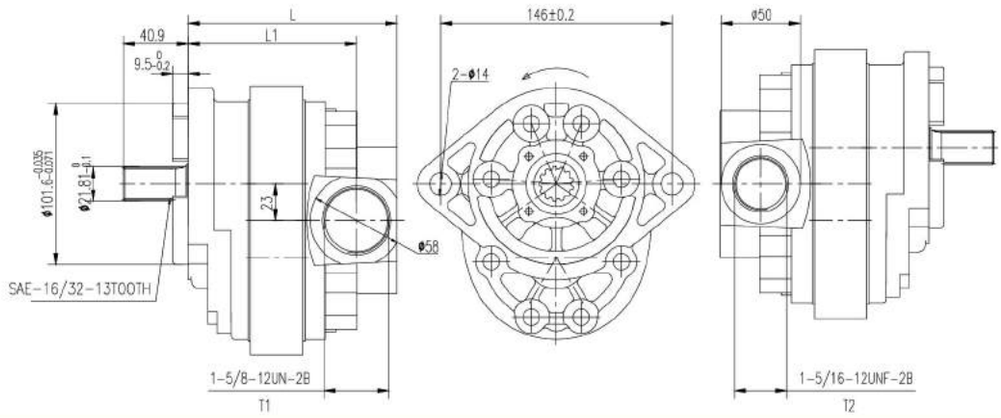


Displacement -排量(ml/r)	22	26	34	39	43	51	60	70
L3(Front Pump)/L4(Rear Pump)	80	83	88.5	92.5	95	101	107.5	114.5

Specifications - 性能参数

Model 型号	Displacement 排量 (ml/r)	Pressure 压力 (bar)		Speed 转速 (r/min)			L (mm)	L1 (mm)	T1 (mm)	T2 (mm)
		Rated 额定	Peak 最高	Rated 额定	Max 最高	Min 最低				
3BPF22LJ53S05*	22	200	250	2000	3000	400	111.6	85.6	1-5/8-12UNC-2B	1-5/16-12UNC-2B
3BPF26LJ53S05*	26	200	250	2000	3000	400	114.5	88.5		
3BPF34LJ53S05*	34	200	250	2000	3000	400	120.2	94.2		
3BPF39LJ53S05*	39	200	250	2000	3000	400	123.8	97.8		
3BPF43LJ53S05*	43	200	250	2000	2800	400	126.5	100.5		
3BPF50LJ53S05*	50	200	250	2000	2400	400	131.5	105.5		
3BPF60LJ53S05*	60	180	230	1500	2800	400	138.5	112.5		
3BPF63LJ53S05*	63	180	200	1500	2500	400	140.8	114.8		

Dimension - 外形尺寸



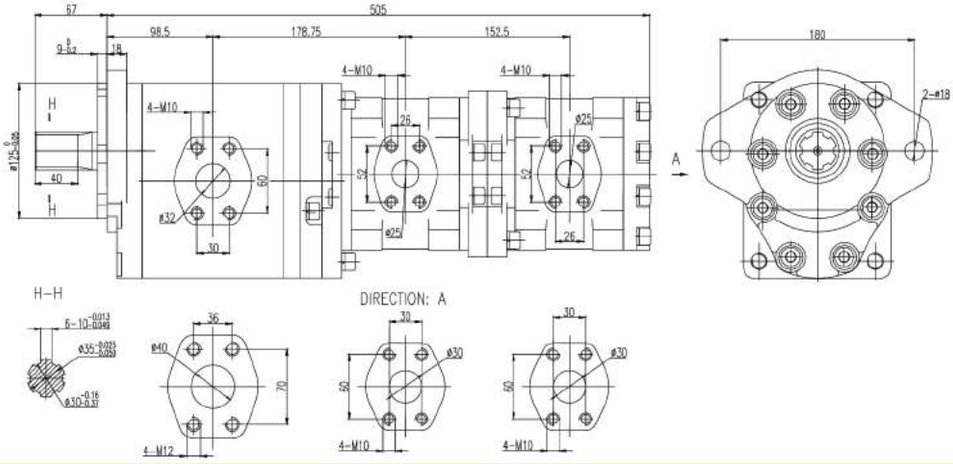
Ordering Code							
3	B	P	F	* *	LJ53	S05	/L
Group Number	Structure Improve Number	Function Code	Pressure Level Code	Displacement	Inlet/Outlet Combination	Shaft Extension Combination	Rotation
3 Group	Second Improve	Gear Pump	F:18-25 MPa	Refer to Above Table	LJ53, etc Refer to Accessory1	P16, S05,etc Refer to accessory 2	L-left Omit-Right
型号说明							
3	B	P	F	* *	LJ53	S05	/L
组别	结构改进编号	功能编号	压力等级编码	排量	进出油口组合形式	轴伸组合形式	旋项
3组	第二次改进	齿轮泵	F:16-25 MPa	参见上表	如LJ53等等, 见附录1	如P16、S05等等，见附录2	L-左旋 不标注-右旋

3CBY3100/Y240/Y240/TF03H18 TRIPLE GEAR PUMP - 三联齿轮泵

Specifications - 性能参数

Front Pump Displacement 前泵排量(cc/r)	Middle Pump Displacement 中泵排量(cc/r)	Rear Pump Displacement 后泵排量(cc/r)	Pressure 压力(bar)		Speed 转速(r/min)			Rotation 旋向
			Rated 额定	Peak 最高	Rated 额定	Max 最高	Min 最低	
100	40	40	200	250	2000	3000	600	Clockwise 右旋

Dimension - 外形尺寸

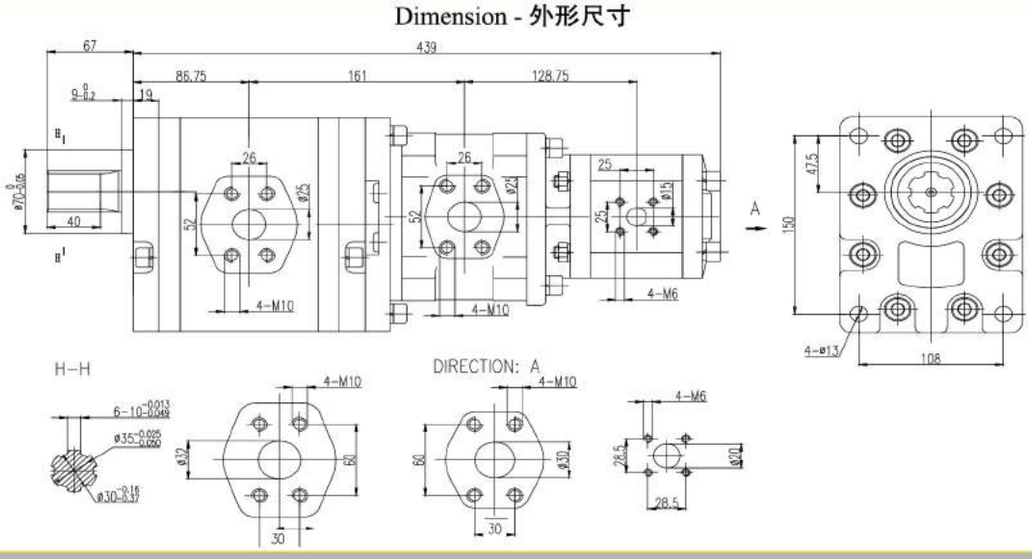


3CBY350/Y232/2PF16TF04H19 TRIPLE GEAR PUMP - 三联齿轮泵

Specifications - 性能参数

Front Pump Displacement 前泵排量(cc/r)	Middle Pump Displacement 中泵排量(cc/r)	Rear Pump Displacement 后泵排量(cc/r)	Pressure 压力(bar)		Speed 转速(r/min)			Rotation 旋向
			Rated 额定	Peak 最高	Rated 额定	Max 最高	Min 最低	
50	32	16	200	250	2000	3000	600	Clockwise 右旋

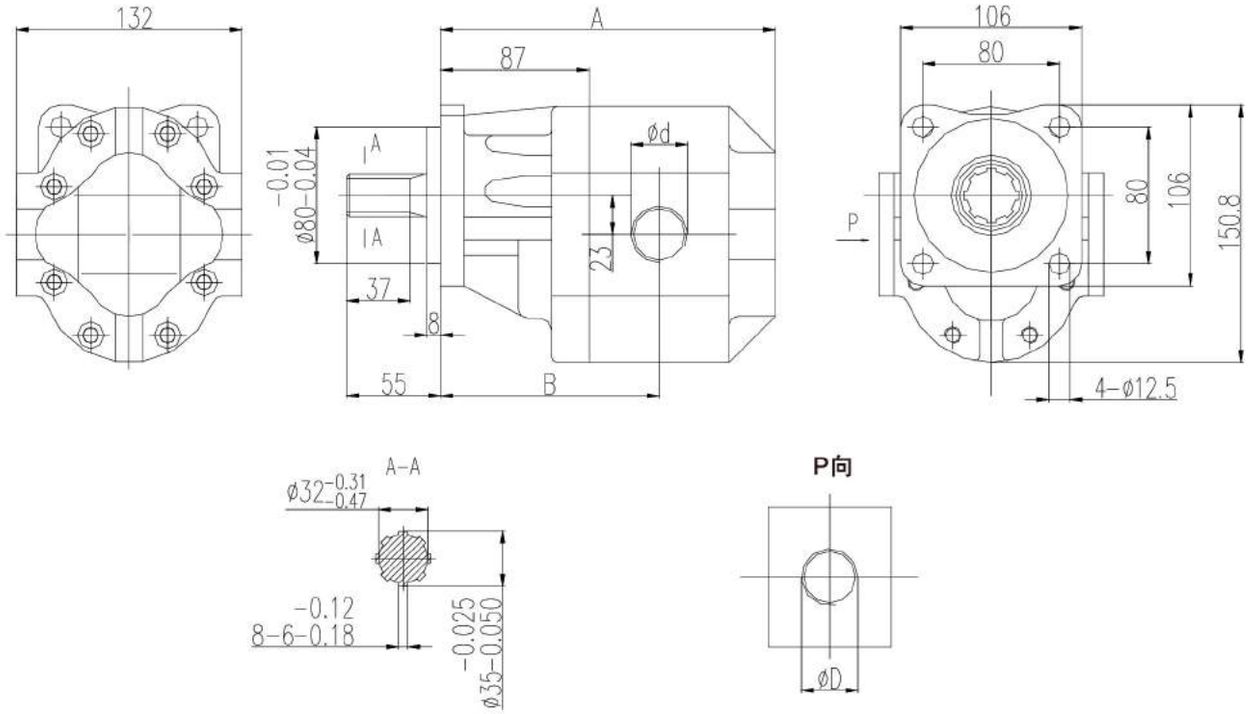
Dimension - 外形尺寸



Specifications - 性能参数

Model 型号	Displacement 排量(ml/r)	Pressure 压力(bar)		Speed 转速(r/min)			A (mm)	B (mm)	D (mm)	d (mm)	重量 (kg)
		Rated 额定	Peak 最高	Rated 额定	Max 最高	Min 最低					
3CPF43L03H27	43	210	300	2000	3000	300	171	115.5	G1	G3/4	12.8
3CPF51L00H27	51	210	300	2000	3000	300	177	118.5	G1	G1	13.2
3CPF61L00H27	61	210	300	2000	3000	300	183.6	121.8	G1	G1	13.6
3CPF82L11H27	82	210	300	2000	3000	300	196	128	G1-1/4	G1	14.1

Dimension - 外形尺寸



3CPF**L**H27*

3.5APF**L**S12B**-O

Ordering Code - 订单编码

3.5	A	P	F	**	L**	S12	B	BB	–	O	–	F	Y
Group 3.5 3.5组	Covers 前后盖	Gear pump 齿轮泵	Pressure 压力(bar)	Displacement 排量(ml/r)	Ports combination 油口组合	Shaft and flange 轴伸和法兰	Rotation 旋向	Ports position 油口位置					
	E 铸铁	P 齿轮泵	F 200	52	Accessory 1 附录1	Accessory 2 附录2	B 双向	BB 后进后出					
	B 侧板	DP 双联		63			L 逆时针	BS 后进侧出					
	/ 铝制	TP 三联		73			R 顺时针	SB 侧进后出					
		M 马达		85				SS 侧进侧出					
				93									
				104									
				115									

Covers/前后盖

- A Cast iron covers 铸铁前后盖
- B Side plate structure 侧板式结构
- Omit Aluminum covers 铝前后盖

Gear pump/齿轮泵

- P Gear Pump 齿轮泵
- DP Double Pump 双联齿轮泵
- TP Triple pump 三联齿轮泵
- M Motor 马达

Rotation/旋向

- B Bi-direction 双向
- L CCW 逆时针
- R CW 顺时针

Ports position/油口位置

- BB Back inlet and back outlet 后进后出
- BS Back inlet and side outlet 后进侧出
- SB Side inlet and back outlet 侧进后出
- SS Side inlet and side outlet 侧进侧出

O Bearing/支撑

- O Outboard bearing 带外支撑
- Omit No outboard bearing 无外支撑

F Seal/密封件

- F FPM seal 氟橡胶
- Omit NBR seal 丁腈橡胶

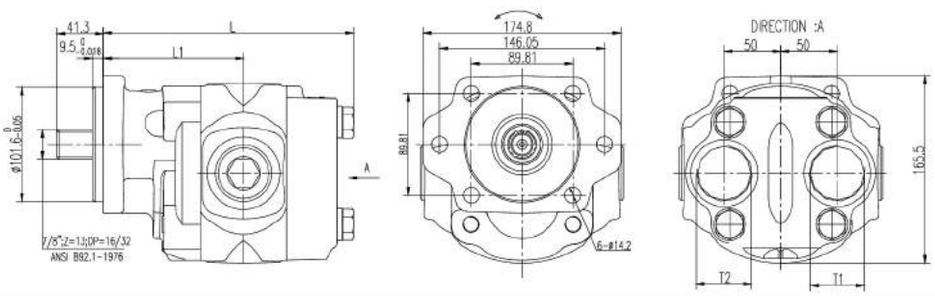
Y Options/可选项

- Y Relief valve 溢流阀
- D Check valve 单向阀
- / Omit 不带阀

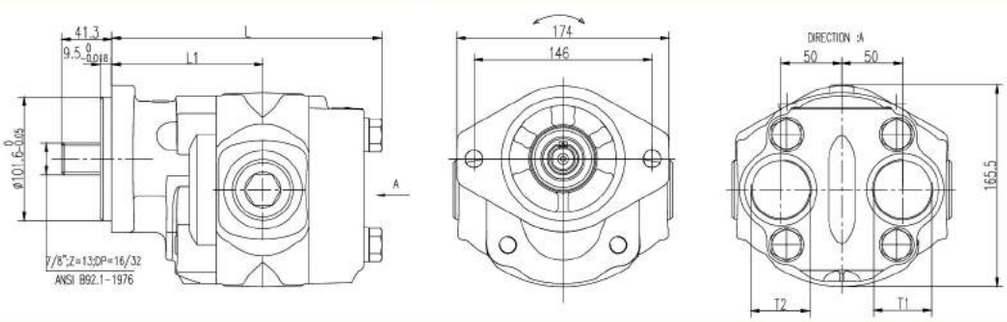
Specifications - 性能参数

Model 型号	Displacement 排量 (ml/r)	Pressure 压力 (bar)		Speed 转速 (r/min)			L (mm)	L1 (mm)	T1 (mm)	T2 (mm)
		Rated 额定	Peak 最高	Rated 额定	Max 最高	Min 最低				
3.5APF52	52	170	210	1500	3600	600	181.0	206.5	1″	1-1/4″
3.5APF63	63	170	210	1500	3600	600	187.5	216.0	1″	1-1/4″
3.5APF73	73	170	210	1500	3600	600	193.5	225.3	1-1/4″	1-1/4″
3.5APF85	85	150	180	1500	3600	600	200.5	235.5	1-1/4″	1-1/4″
3.5APF93	93	150	180	1500	3600	600	206.5	244.5	1-1/2″	1-1/4″
3.5APF104	104	150	180	1500	3600	600	213.0	254.5	1-1/2″	1-1/4″
3.5APF115	115	120	140	1500	3600	600	219.0	263.5	1-1/2″	1-1/4″

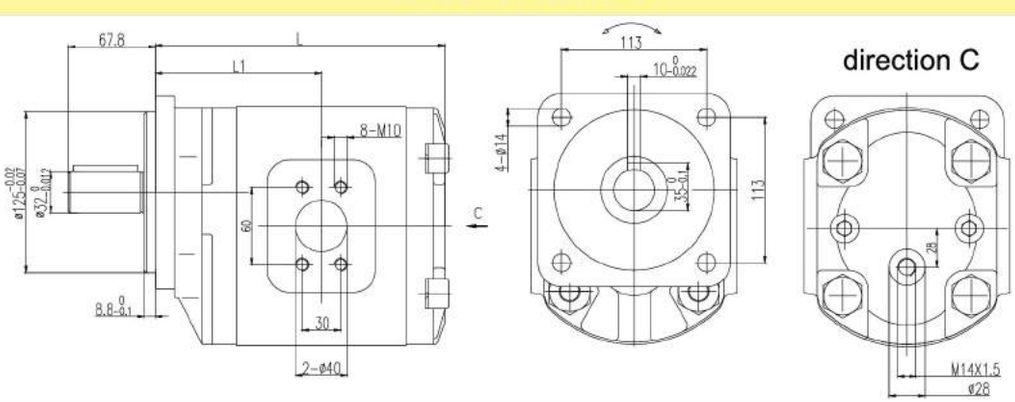
Dimension - 外形尺寸



3.5APF**L**S05B-O



3.5BPF**F108P64B-O

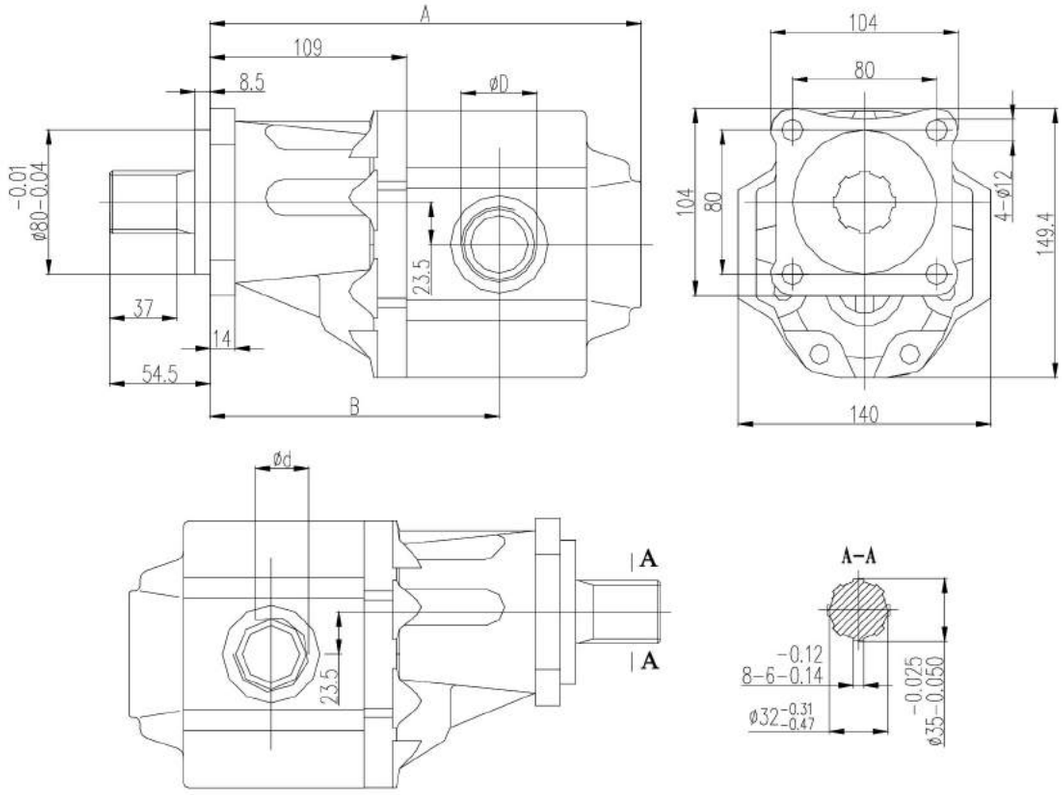


3.5EPF**L**H27B

Specifications - 性能参数

Model 型号	Displacement 排量 (ml/r)	Pressure 压力 (bar)		Speed 转速 (r/min)			A (mm)	B (mm)	D (mm)	d (mm)
		Rated 额定	Peak 最高	Rated 额定	Max 最高	Min 最低				
3.5EPF82L00H27B	82	210	300	2000	3000	300	233	157.5	G1	G1
3.5EPF95L99H27B	95	210	300	2000	3000	300	239	160.5	G1-1/4	G1-1/4

Dimension - 外形尺寸

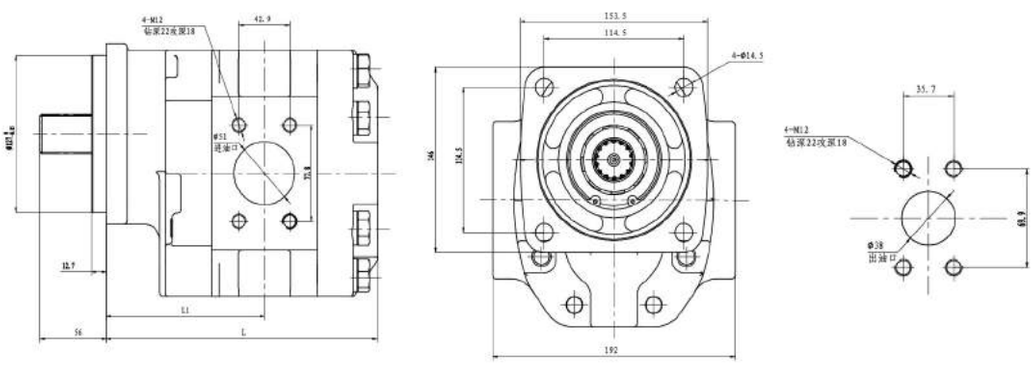


3.5EPF**L**H27B

Specifications - 性能参数

Model 型号	Displacement 排量 (ml/r)	Pressure 压力 (bar)		Speed 转速 (r/min)			L (mm)	L1 (mm)
		Rated 额定	Peak 最高	Rated 额定	Max 最高	Min 最低		
4PF66F161S68L	66	210	250	1800	2200	600	197.3	121
4PF83F161S68L	83	210	250	1800	2200	600	203.5	124.1
4PF91F161S68L	91	210	250	1800	2200	600	207.3	126
4PF99F161S68L	99	210	250	1800	2200	600	209.8	127.2
4PF116F161S68L	116	210	250	1800	2200	600	217.3	130.9
4PF132F161S68L	132	210	250	1800	2200	600	222.6	133.5
4PF145F161S68L	145	210	250	1800	2200	600	227.8	136.1
4PF149F161S68L	149	210	250	1800	2200	600	229.3	136.8
4PF166F161S68L	166	210	250	1800	2200	600	235.3	139.8
4PF182F161S68L	182	180	210	1800	2200	600	241.3	142.8
4PF199F161S68L	199	180	210	1800	2200	600	248.3	146.3

Dimension - 外形尺寸



4PF**F**S68L

2[C]P18 CONSTANT FLOW GEAR PUMP - 恒流齿轮泵

2	CP	18	16/14		L17		J07		L		SS	
Group 2 2组	Constant flow pump 恒流泵	Displacement 排量(ml/r)	Constant flow/Pressure 恒流量和压力		Ports combination 油口组合		Shaft and flange 轴伸和法兰		Rotation 旋向		Ports position 油口位置	
		6	16(L/min)	14(Mpa)	Accessory 1	附录1	Accessory 2	附录2	L	逆时针	BB	后进后出
		10							R	顺时针	BS	后进侧出
		14									SB	侧进后出
		18									SS	侧进侧出

Constant flow/Pressure/恒流量和压力	Rotation/旋向	Ports position/油口位置
16 Constant flow 恒流量	L CCW 逆时针	BB Back inlet and back outlet 后进后出
14 Safety valve pressure 安全阀压力	R CW 顺时针	BS Back inlet and side outlet 后进侧出
		SB Side inlet and back outlet 侧进后出
		SS Side inlet and side outlet 侧进侧出

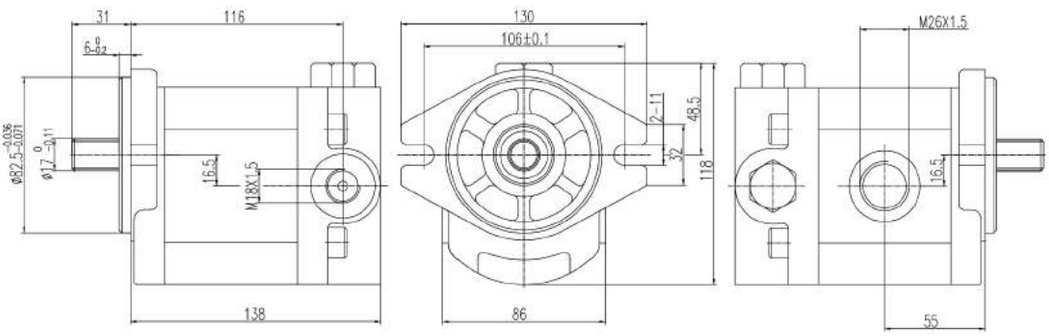
Specifications - 性能参数

Model 型号	Displacement 排量 (ml/r)	Constant flow 恒流量 (L/min)	Max Pressure 最大压力 (bar)	Speed 转速 (r/min)
2CP18 16/14L17J07SS	18	16	140	500 -3200

Involute Spline Parameter - 渐开线花键参数

M 模数	Z 齿数	Pressure Angle 压力角	Precision 精度
1	16	30°	5h

Dimension - 外形尺寸



Ordering Code							
2	[C]P	18	16 / 14	L17	J07	/ L	SS
Number	Function Code	Displacement	Constant Flow Safety Valve Pressure	Inlet/Outlet Combination	Shaft Extension Combination	Rotate Direction	Inlet/Out Position Combination
2group	Constant Flow Gear Pump	18ml/r	Constant flow:16L/min Safety Valve Pressure:14MPa	L17, etc Refer to Accessory 1	J07,etc Refer to Accessory 2	L-left Omit -Right	SS, etc Reference Below Table
型号说明							
2	[C]P	18	16 / 14	L17	J07	/ L	SS
组号	功能代码	排量	恒流量 安全阀压力	进出油口组合 形式	轴伸组合形式	旋向	进出油口位置组合
2组	恒流泵	18ml/r	恒流量:16L/min 安全阀压力 :14MPa	L17, etc 参见附录 1	J07,etc 参见附录 2	L-左旋 省略-右旋	SS, etc 参见下表
Inlet/Out Position Combination - 进出油口位置组合							

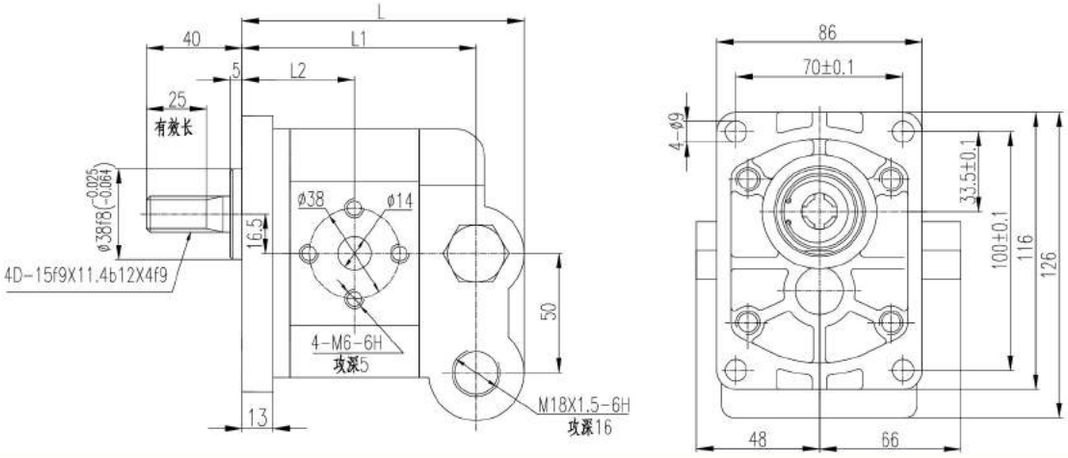
BB: Back Inlet and Back Outlet - 后进后出
BS: Back Inlet and Side Outlet - 后进侧出
SB: Bide Inlet and Back Outlet - 侧进后出
SS: Side inlet and side outlet - 侧进侧出

We can offer different constant flow options than the 2P type. Call your sales representation for more information.
在实际应用中，2P泵与后阀体可组合成多种排量、多种控制流量、多种安全阀压力、多种进出油口形式的恒流齿轮泵。用户可根据实际需要提出要求，我们可根据情况进行设计，满足您的要求。

2[C]P18 CONSTANT FLOW GEAR PUMP - 恒流齿轮泵

Specifications - 性能参数

Model 型号	Displacement 排量 (ml/r)	Constant Flow 恒流量 (L/min)	Max Pressure 最大压力 (bar)	Speed 转速 (r/min)	L	L1	L2
2[C]P6 6/12.5LF01H16LSS	6	6	125	500 -3200	47	98	120
2[C]P10 6/12.5LF01H16LSS	10	6	125	500 -3200	49.75	103.5	125.5
2[C]P14 10/12.5LF01H16LSS	14	10	125	500 -3200	52.85	109.5	131.7



Ordering Code							
2	[C]P	*	*/12.5	LF01	H16	/L	SS
Number	Function Code	Displacement(ml/r)	Constant Flow Safety Valve Pressure	Inlet /Outlet Combination	Shaft Extension Combination	Rotate Direction	Inlet /Out Position Combination
2group	Constant Flow Gear Pump	6/10/14 ml/r	Constant flow: 6-10 L/min Safety Valve Pressure: 14 MPa	LF1 , etc Refer to Accessory1	H16,etc Refer to Accessory2	L-left Omit -Right	SS , etc Reference Below Table
型号说明							
2	[C]P	*	*/12.5	LF01	H16	/L	SS
组号	功能代码	排量(ml/r)	控制流量 安全阀压力	进出油口 组合形式	轴伸组合形式	旋向	进出油口位置组合
2组	恒流泵	6/10/14 ml/r	控制流量：6-10 L/min 安全阀压力:12.5MPa	LF1 等等 参见附录 1	H16 等等 参见附录 2	L-左旋 省略 -右旋	SS 等等 参见下表
Inlet/Out Position Combination - 进出油口位置组合							

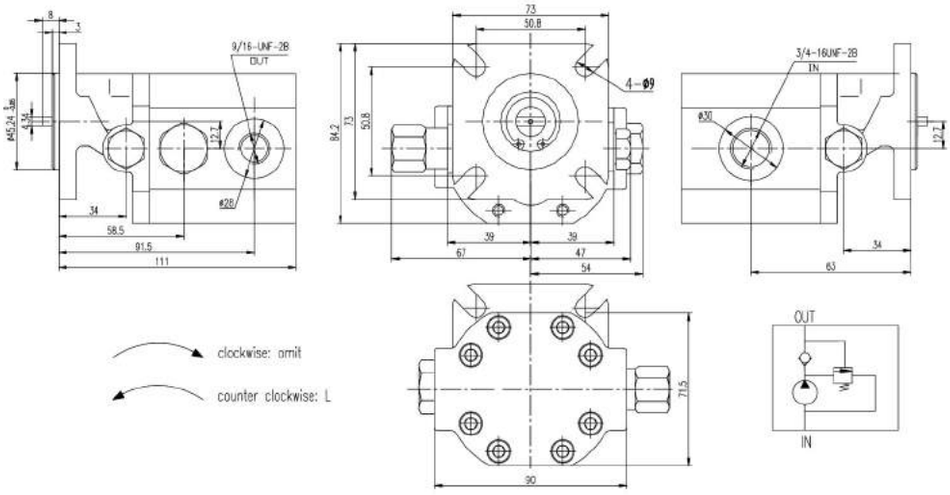
BB: Back Inlet and Back Outlet - 后进后出
BS: Back Inlet and Side Outlet - 后进侧出
SB: Bide Inlet and Back Outlet - 侧进后出
SS: Side inlet and side outlet - 侧进侧出

We can offer different constant flow options than the 2P type. Call your sales representation for more information.
在实际应用中，2P泵与后阀体可组合成多种排量、多种控制流量、多种安全阀压力、多种进出油口形式的恒流齿轮泵。用户可根据实际需要提出要求，我们可根据情况进行设计，满足您的要求。

Specifications - 性能参数

Model 型号	Displacement 排量 (cc/r)	Pressure 压力 (bar)		Speed 转速 (r/min)			Port 油口	
		Rated 额定	Peak 最高	Rated 额定	Max 最高	Min 最低	Inlet 进油口	Outlet 出油口
1EPF1.6L35B06SS -YD	1.6	160	200	2000	4500	500	3/4 -16UNF -2B	9/16 -18UNF -2B
1EPF2.7L35B06SS -YD	2.7	160	200	2000	4500	500		
1EPF4.1L35B06SS -YD	4.1	160	200	2000	4500	500		
1EPF6.1L35B06SS -YD	6.1	160	200	2000	4500	500		

Dimension - 外形尺寸



Ordering Code							
1	EP	F	* *	L35	B06	/L	YD
Group Number	Function Code	Pressure Level Code	Displacement	Inlet / Outlet Combination	Shaft Extension Combination	Rotate Direction	Valves 0ption
1group	Gear Pump	16 ~ 25 MPa	Refer to Above Table	L35 , etc Refer to Accessory1	B06,etc Refer to Accessory2	L-left Omit -Rotate	Y: Relief Valve D: Check Valve Omit : No Valve
型号说明							
1	EP	F	* *	L35	B06	/L	YD
组号	元件功能代号	压力级别代码	排量值	进出油口组合形式	轴伸组合形式	旋向	阀选项
1组	齿轮泵	16 ~ 25 MPa	参见上表	L35 等等 参见附录 1	B06 等等 参见附录 2	L-左旋 省略 -右旋	Y: 溢流阀 D: 单向阀 省略: 不带阀

Inlet/Out Position Combination - 进出油口位置组合

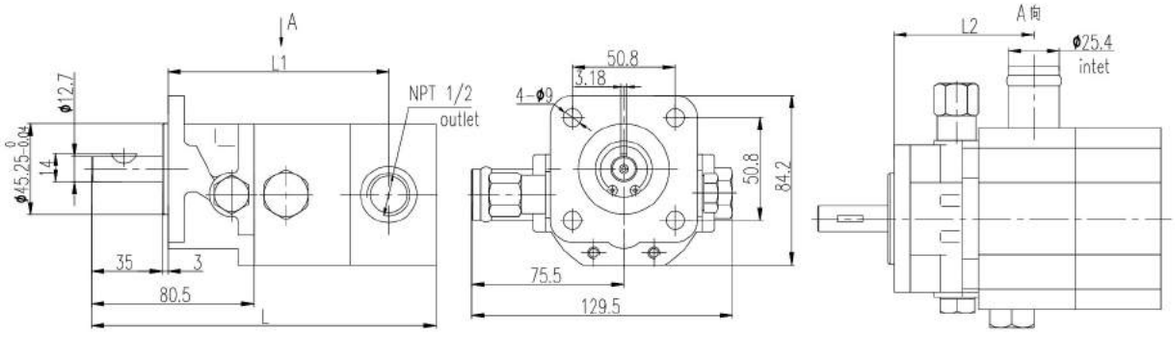
BF: Back Inlet and Front Outlet - 后进前出
BB: Back Inlet and Back Outlet - 后进后出
BS: Back Inlet and Side Outlet - 后进侧出
SB: Side Inlet and Back Outlet - 侧进后出
SF: Side Inlet and Front Outlet - 侧进前出
SS: Side Inlet and Side Outlet - 侧进侧出
FB: Front Inlet and Back Outlet - 前进后出
FS: Front Inlet and Side Outlet - 前进侧出

CBT-**/**HI/LO GEAR PUMP - 劈柴机泵

Specifications - 性能参数

Model 型号	Flow (gpm) 流量 (加仑) 3600r/min	Pressure 压力 (Psi)		Displacement 排量 (Cu.in/r)		Speed 转速 (rpm)	D (mm)	
		Lo 低	Hi 高	Lo 低	Hi 高		Inlet 进油口	Outlet 出油口
CBT -6.3/2.1	8	400 / 900	3000	0.385	0.13	3600	1 IN PIPE	1/2 NPT
CBT -6.3/3.0	8.5	400 / 900	3000	0.385	0.183			
CBT -6.3/3.6	9	400 / 900	3000	0.385	0.220			
CBT -8.8/2.1	10	400 / 900	3000	0.537	0.13			
CBT -8.8/3.0	10.5	400 / 900	3000	0.537	0.183			
CBT -8.8/3.6	11	400 / 900	3000	0.537	0.220			
CBT -8.8/4.2	11.5	400 / 900	3000	0.537	0.256			
CBT -10.9/2.1	12	400 / 900	3000	0.665	0.13			
CBT -10.9/3.0	12.5	400 / 900	3000	0.665	0.183			
CBT -10.9/3.6	13	400 / 900	3000	0.665	0.220			
CBT -10.9/4.2	13.5	400 / 900	3000	0.665	0.256			
CBT -13.0/4.2	16	400 / 900	3000	0.793	0.265			

Dimension - 外形尺寸

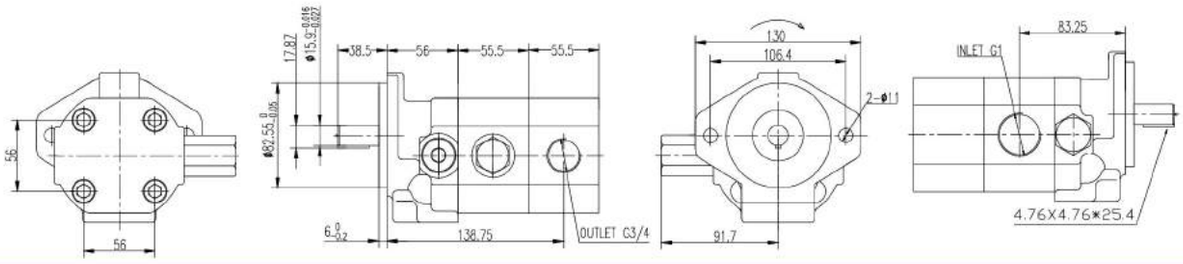


Model 型号	Dimension 尺寸 (inches)			Model 型号	Dimension 尺寸 (inches)			Model 型号	Dimension 尺寸 (inches)		
	L	L1	L2		L	L1	L2		L	L1	L2
CBT -6.3/2.1	6.07	3.74	2.41	CBT -8.8/3.0	6.54	4.08	2.74	CBT -10.9/3.0	6.90	4.53	3. 04
CBT -6.3/3.0	6.21	3.90	2.41	CBT -8.8/3.6	6.61	4.24	2.74	CBT -10.9/3.6			
CBT -6.3/3.6	6.28	3.90	2.74	CBT -8.8/4.2	6.70	4.24	2.74	CBT -10.9/4.2			
CBT -8.8/2.1	6.41	4.08	2.74	CBT -10.9/2.1	6.70	4.37	3.04	CBT -13.0/4.2			

Specifications - 性能参数

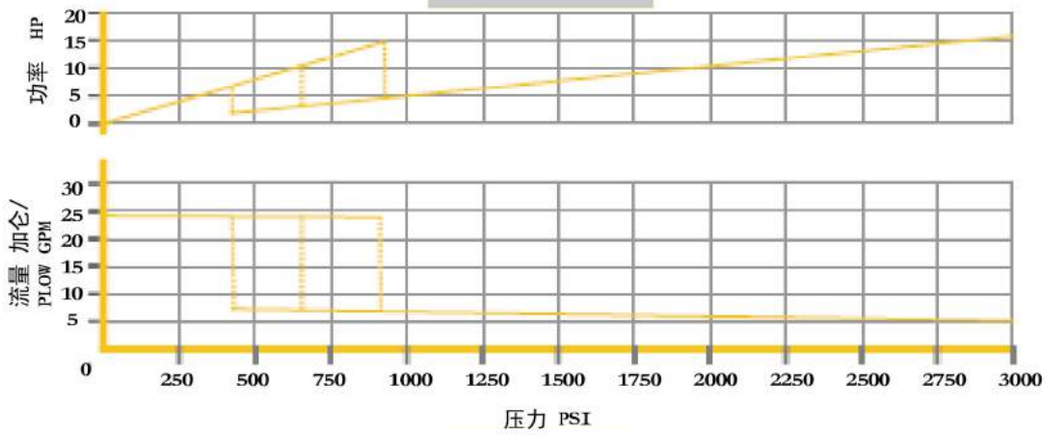
Model 型号	Flow (gpm) 流量(加仑) 3600r/min	Pressure 压力(Psi)		Displacement 排量(Cu.in/r)		Speed 转速(rpm)	D (mm)	
		Lo 低	Hi 高	Lo 低	Hi 高		Inlet 进油口	Outlet 出油口
CBT-15.2/7.6	22	400/900	3000	0.93	0.465	3600	NPTF 1 G1	NPTF3/4 G3/4
CBT-22.9/7.6	28	400/900	3000	1.395	0.465			

Dimension - 外形尺寸

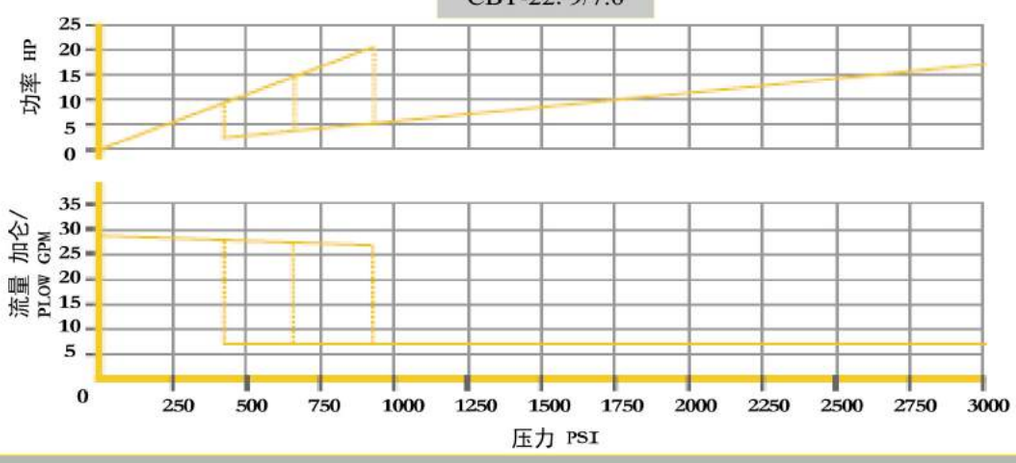


Performance Curves - 性能曲线

CBT-15.2/7.6



CBT-22. 9/7.6



CAT PUMPS - 卡特泵

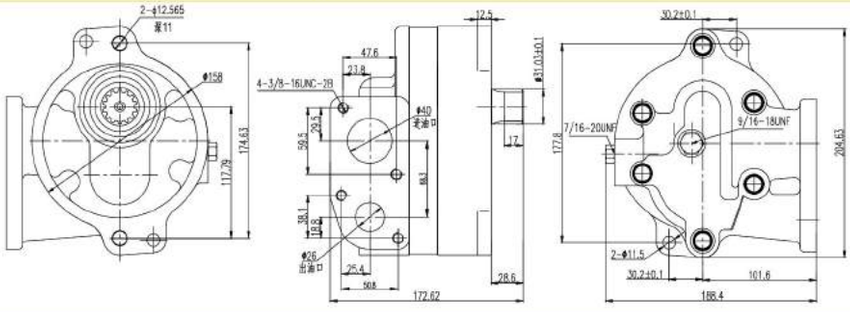
These pumps can be used in the hydraulic systems of bulldozer, loader, crane and other construction machineries.

这几种齿轮泵主要应用于推土机、装载机、起重机等其它工程机械。

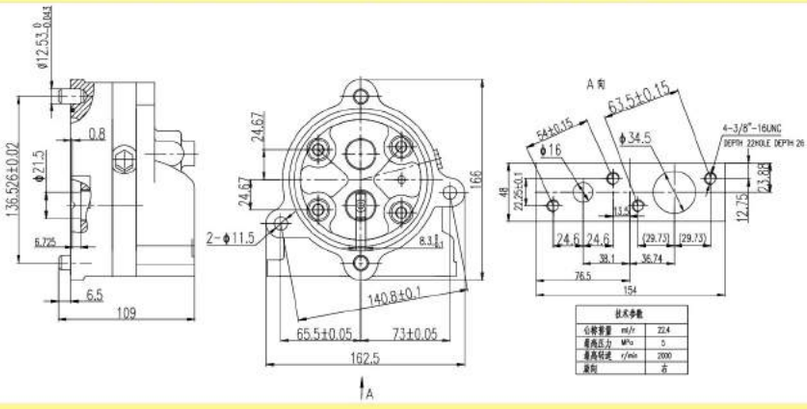
Specifications - 性能参数

Model 型号	Displacement 排量 (ml/r)	Pressure 压力 (bar)		Speed 转速 (r/min)			Min flow at rated pressure and speed 在额定压力及额定转速下的最小流量 (L/min)	Rotation 旋向	Weight 重量(Kg)
		Rated 额定	Peak 最高	Rated 额定	Max 最高	Min 最低			
3P4002	71	3	4	2000	2500	500	174	CW	15.5
3S4386	22	2.5	3.15	1500	2000	500	30	CW	19.4
7S4629	40	2.5	3.15	2000	2500	500	18	CCW	18.4

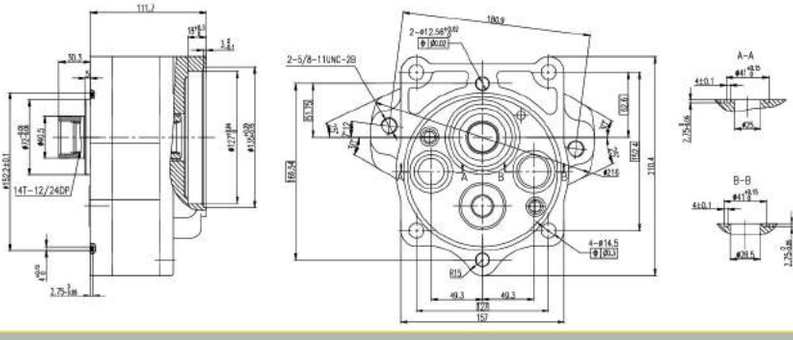
3P4002 Installation Dimensions - 3P4002齿轮泵外型图



3S4386 Installation Dimensions - 3S4386 齿轮泵外型图



7S4629 Installation dimensions - 7S4629 齿轮泵外型图



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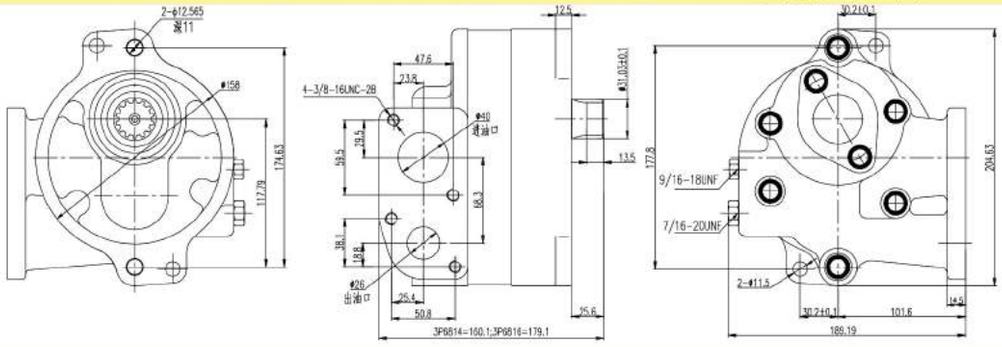
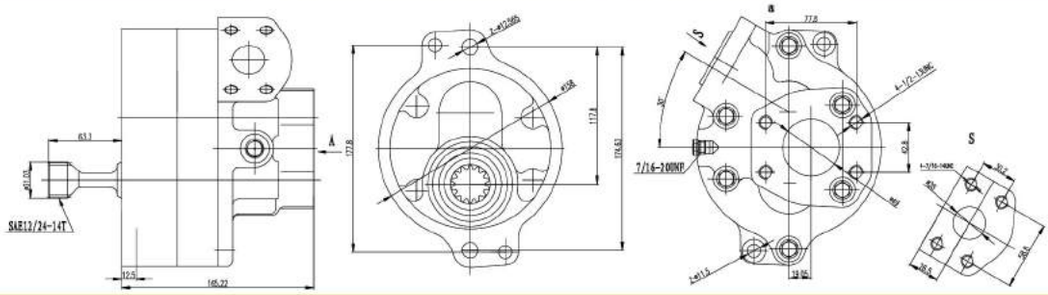
Specifications - 性能参数

Model 型号	Displacement 排量 (ml/r)	Pressure 压力 (bar)		Speed 转速 (r/min)			Min flow at rated pressure and speed 在额定压力及额定转速下的最小流量 (L/min)	Rotation 旋向	Weight 重量(Kg)
		Rated 额定	Peak 最高	Rated 额定	Max 最高	Min 最低			
3P6816/3P0380	71	2. 5	3.15	1800	2500	500	115	CW	19.4
3P6814	32	2. 5	3.15	1800	2500	500	45	CW	18.4
2P9239	73.3	2. 5	3.15	1800	2500	500	122	CW	15.5

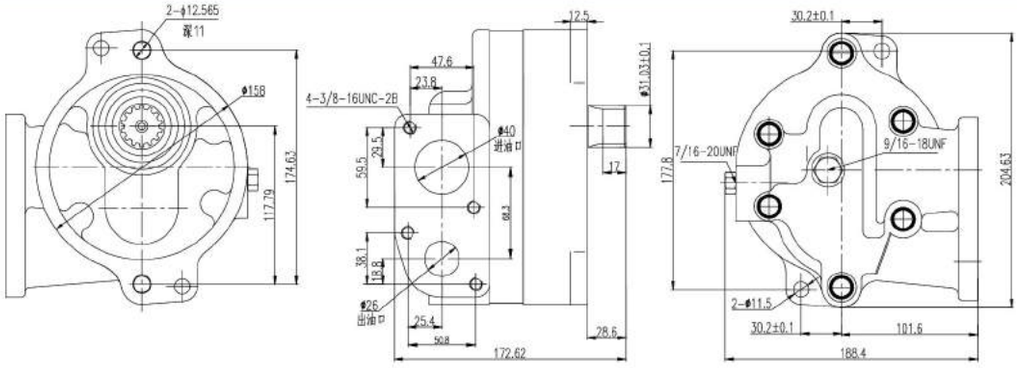
3P6816 / 3P6814 Installation Dimensions - 3P6816 / 3P6814齿轮泵外型图



3P0380 Installation Dimensions - 3P0380 齿轮泵外型图



2P9239 Installation Dimensions - 2P9239 齿轮泵外型图



CAT PUMPS - 卡特泵

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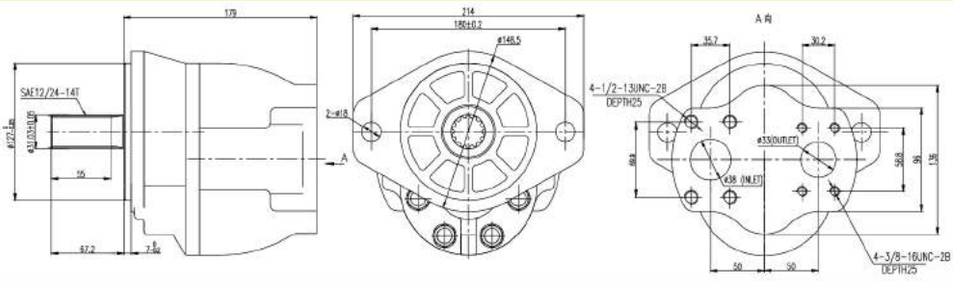
这几种齿轮泵主要应用于推土机、装载机、起重机等其它工程机械。

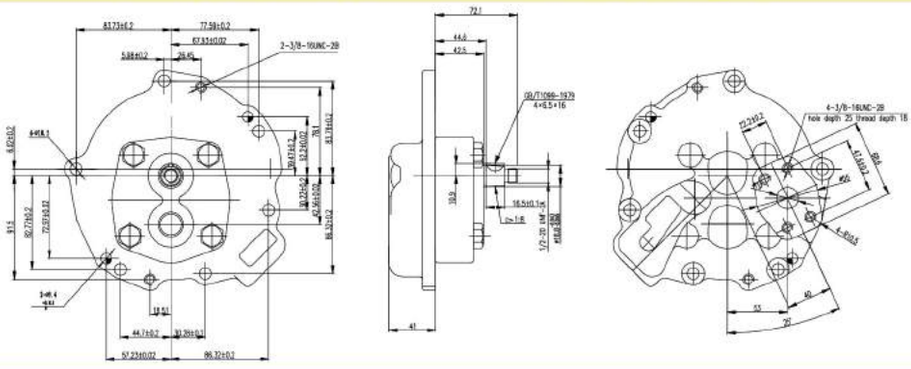
Specifications - 性能参数

Model 型号	Displacement 排量 (ml/r)	Pressure 压力 (bar)		Speed 转速 (r/min)			Min flow at rated pressure and speed 在额定压力及额定转速下的最小流量 (L/min)	Rotation 旋向	Weight 重量(Kg)
		Rated 额定	Peak 最高	Rated 额定	Max 最高	Min 最低			
3G4768	90	16	20	2000	2500	500	180	CCW	19.4
5M7864	28	2.5	3.15	2000	2500	500	45.6		18.4
5H1719	12	0.8	2	1500	2000	500	15		15.0

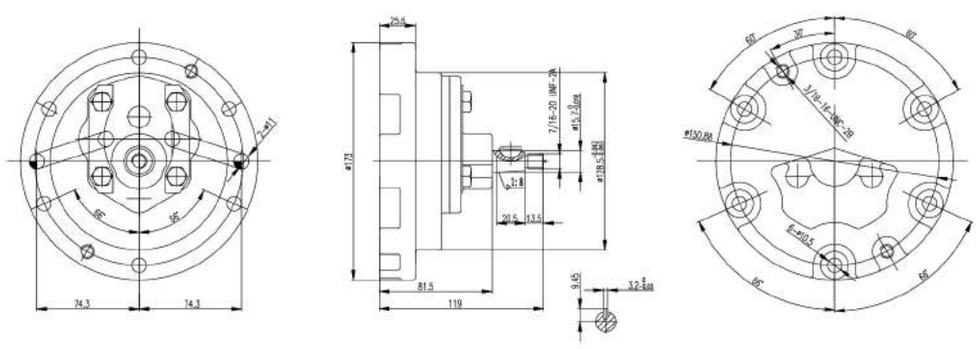
3G4768 Installation Dimensions - 3G4768齿轮泵外型图



5M7864 Installation Dimensions - 5M7864 齿轮泵外型图



5H1719 Installation Dimensions - 5H1719 齿轮泵外型图



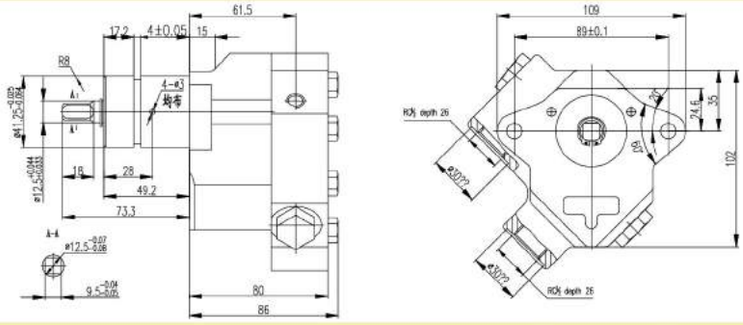
These pumps can be used in the hydraulic systems of bulldozer, loader, crane and other construction machineries.

这几种齿轮泵主要应用于推土机、装载机、起重机等其它工程机械。

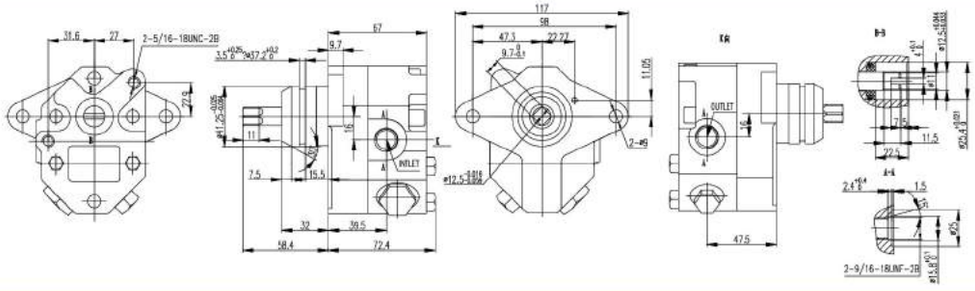
Specifications - 性能参数

Model 型号	Displacement 排量 (ml/r)	Pressure 压力 (bar)		Speed 转速 (r/min)			Min flow at rated pressure and speed 在额定压力及额定转速下的最小流量 (L/min)	Rotation 旋向	Weight 重量 (Kg)
		Rated 额定	Peak 最高	Rated 额定	Max 最高	Min 最低			
3N2078	16	2	3	1500	2000	500	19	CCW	19.4
4W5479	8	0.25	0.35	1500	2000	500	10.8	CCW	18.4
4W2448	Front: 62	2	3	1500	2000	500	109	CW	25
4W2448	Rear: 48	2	3	1500	2000	500	82		25

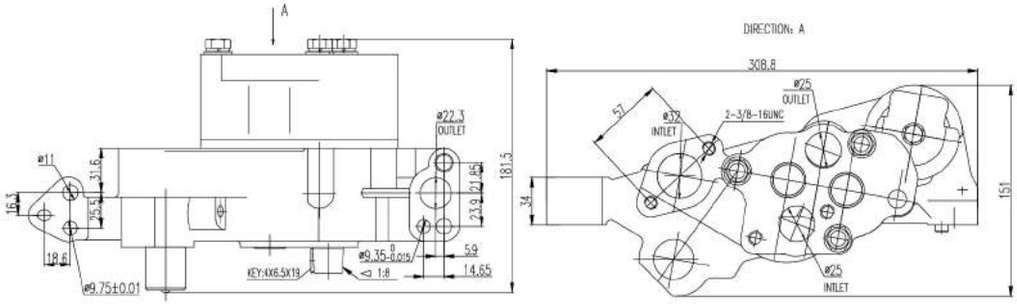
3N2078 Installation Dimensions - 3N2078 齿轮泵外型图



4W5479 Installation Dimensions - 4W5479 齿轮泵外型图



4W2448 Installation Dimensions - 4W2448 齿轮泵外型图



PTO GEAR PUMPS - PTO齿轮泵

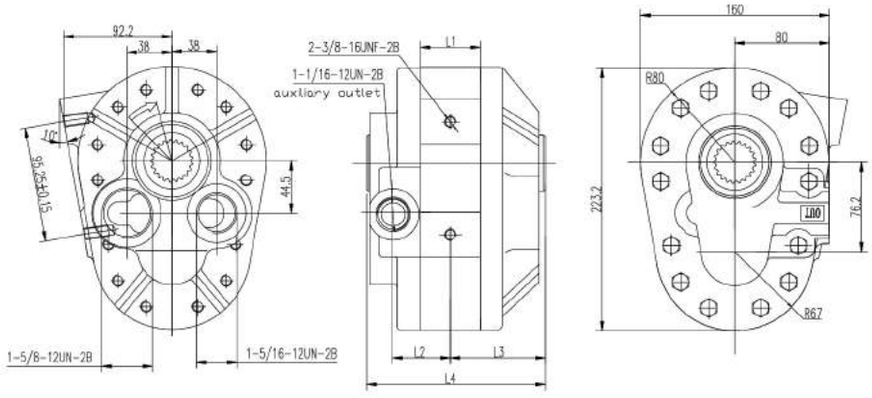
PTO pumps can be used in the hydraulic systems of agriculture tractors PTO

泵主要用在农用拖拉机的液压系统

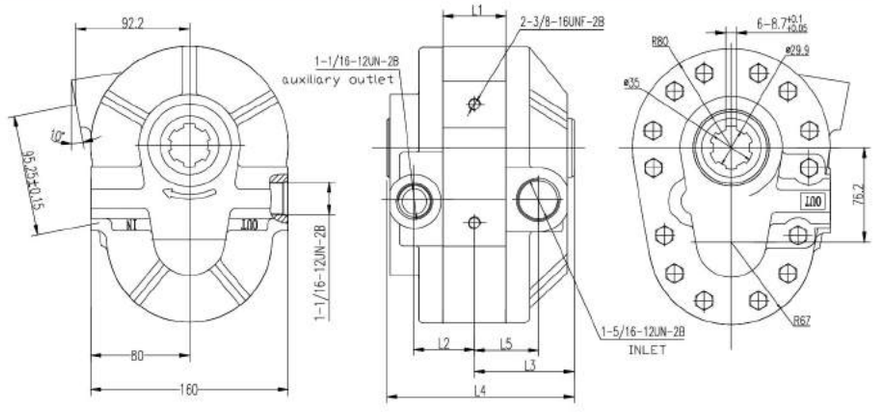
Specifications - 性能参数

Model 型号	Displacement 排量 (ml/r)	Pressure 压力 (bar) Peak 最高	Speed 转速 (Rpm) Rated 额定	L1 (mm)	L2 (mm)	L3 (mm)	L4 (mm)	L5 (mm)
CB -P160LJ53S33BB	160	60(2250 psi)	1000	60.2	53	86	161	/
CB -P125LJ53S33BB	125			50.8	50.8	81	151	/
CB -P90LJ53S33BB	90			41.5	44	76	142	/
CB -P56LJ53S33BB	56			32	39	71	133	/
CB -P160LJ42H21SS	160		540	60.2	53	86	161	61
CB -P125LJ42H21SS	125			50.8	48	81	151	52
CB -P90LJ42H21SS	90			41.5	44	76	142	47.5
CB -P56LJ42H21SS	56			32	39	71	133	42.5

CB-P***LJ53S33BB Installation Dimensions - CB-P***LJ53S33BB 齿轮泵外型图



CB-P***LJ42H21SS Installation Dimensions - CB-P***LJ42H21SS 齿轮泵外型图



Inlet/Outlet Thread Combination - 进出油口螺纹连接

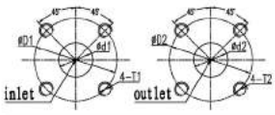
Inlet/Outlet Thread Code 油口螺纹组合代号	Inlet - 进油口 T1	Outlet - 出油口 T2	Note - 备注
L00	G1	G1	ISO7-1：1994 Thread angle 牙型角 55° Taper 锥度 0°
L01	G3/8	Φ9×Φ12.7×1.45 Hole with seal groove 直孔(带密封台阶)	
L02	G1	G1/2	
L03	G1	G3/4	
L04	G1/2	G1/2	
L05	G1/2	G3/8	
L06	G1/4	G1/4	
L07	G1/4	Φ5.5×Φ9.6×1.45 Hole with seal groove 直孔(带密封台阶)	
L08	G3/4	G1/2	
L11	G1-1/4	G1	
L44	G3/8	G1/4	
L46	G3/8	G3/8	
L60	G1-1/2	G1-1/4	
L65	G1-1/2	G1	
L69	G3/4	G3/4	
L74	G3/8	PT1/4	
L75	G1	G1/2	
L79	G3/8	Φ5.5×Φ9.6×1.45 Hole with seal groove 直孔(带密封台阶)	
L91	G3/8	M18×1.5 Hole with seal groove 直孔(带密封台阶)	
L98	G1	G1/4	
L99	G1-1/4	G1-1/4	
L105	G3/4	G3/8	
L109	G1-1/4	G3/4	
L116	G1/2	G1/4	
L118	G1-1/2	G1/2	
L12	M10×1	M10×1	ISO68-1：1998 ISO261：1998 ISO724：1993 ISO965-1：1998 Thread angle 牙型角 60° Taper 锥度 0°
L13	M18×1.5	M14×1.5	
L14	M18×1.5	M18×1.5	
L15	M22×1.5	M18×1.5	
L16	M24×1.5	M24×1.5	
L17	M26×1.5	M18×1.5	
L18	M27×1.5	M18×1.5	
L19	M27×1.5	M22×1.5	
L20	M27×2	M22×1.5	
L21	M30×1.5	M22×1.5	
L22	M33×1.5	M27×1.5	
L23	M32×2	M18×1.5	
L24	M30×2	M22×1.5	
L25	M33×2	M27×2	
L26	M33×2	NPT3/4	
L38	M33×2	G1/2	
L49	M24×1.5	M20×1.5	

Inlet/Outlet Thread Combination - 进出油口螺纹连接

Inlet/Outlet Thread Code 油口螺纹组合代号	Inlet - 进油口 T1	Outlet - 出油口 T2	Note - 备注
L50	M20×1.5	M18×1.5	ISO68-1：1998 ISO261：1998 ISO724：1993 ISO965-1：1998 Thread angle 牙型角 60° Taper 锥度 0°
L54	M42×2	M33×2	
L56	M20×1.5	RC3/8	
L59	M26×2	M18×1.5	
L61	M14×1.5(Facing 锪平)	M14×1.5(Facing 锪平)	
L62	M20×1.5(Facing 锪平Φ36)	M18×1.5(Facing 锪平Φ30)	
L63	M20×1.5	M20×1.5	
L67	M33×1.5	M24×1.5	
L71	M33×2	M33×2	
L72	M27×2	M27×2	
L77	M33×2	M22×1.5	
L88	M22×1.5	M22×1.5	
L89	M27×2	M27×1.5	
L92	M18×1.5	M14×1.5 Hole with seal groove 直孔(带密封台阶)	
L100	M22×1.5	G1/4	
L101	M22×1.5	M20×1.5	
L102	M18×1.5	M16×1.5	
L104	M27×2	M18×1.5	
L107	M24×1.5	M22×1.5	
L108	M22×1.5	M14×1.5	
L27	NPT1-1/4	NPT3/4	ASME B1.20.1-1983 Thread angle 牙型角 60° Taper 锥度 0°
L28	NPT1	NPT3/4	
L29	NPT1/2	NPT1/2	
L30	NPT1/2	NPT3/8	
L31	NPT1/4	Φ5.5×Φ9.6×1.45 Hole with seal groove 直孔(带密封台阶)	
L32	NPT3/4	NPT1/2	
L33	NPT3/8	Φ9×Φ12.7×1.45 Hole with seal groove 直孔(带密封台阶)	
L34	NPT3/8	NPT3/8	
L68	NPT3/8	NPT1/4	
L70	NPT1	NPT1/2	
L80	NPT1-1/4	NPT1	
L81	NPT1-1/2	NPT1	
L82	NPT1-1/2	NPT1-1/2	
L83	NPT1	NPT1	
L84	NPT1-1/4	NPT1-1/4	
L93	NPT3/4	NPT3/4	
L97	NPT1/4	NPT1/4	
L115	NPT3/8	Φ5.5×Φ9.6×1.45 Hole with seal groove 直孔(带密封台阶)	

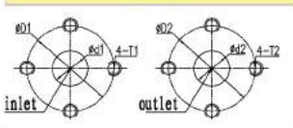
Inlet/Outlet Thread Combination - 进出油口螺纹连接

Inlet/Outlet Thread Code	Inlet - 进油口	Outlet - 出油口	Note - 备注
油口螺纹组合代号	T1	T2	
LJ35	3/4-16UNF-2B	9/16-18UNF-2B	ASME B1.1：2003 Thread angle 牙型角 60° Taper 锥度 0°
LJ36	7/8-14UNF-2B	7/8-14UNF-2B	
LJ37	7/8-14UNF-2B	3/4-16UNF-2B	
LJ39	1-1/16-12UN-2B	7/8-14UNF-2B	
LJ40	1-1/16-12UN-2B	1-1/16-12UN-2B	
LJ41	1-5/16-12UN-2B	7/8-14UNF-2B	
LJ42	1-5/16-12UN-2B	1-1/16-12UN-2B	
LJ51	1-5/8-12UN-2B	1-1/16-12UN-2B	
LJ52	1-1/16-12UN-2B	3/4-16UNF-2B	
LJ53	1-5/8-12UN-2B	1-5/16-12UN-2B	
LJ55	1-5/16-12UN-2B	1-3/16-12UN-2B	
LJ57	1-5/16-12UN-2B	1-5/16-12UN-2B	
LJ66	9/16-18UNF-2B	9/16-18UNF-2B	
LJ76	1-5/8-12UN-2B	7/8-14UNF-2B	
LJ86	3/4-16UNF-2B	3/4-16UNF-2B	
LJ87	7/8-14UNF-2B	9/16-18UNF-2B	
LJ90	1-5/16-12UN-2B	3/4-16UNF-2B	
LJ106	1-7/8-12UN-2B	1-5/16-12UN-2B	
LJ110	1-5/16-12UN-2B	1-5/16-12UN-2B	
LJ114	3/4-16UNF-2B	7/16-20UNF-2B	
L09	PT1/2	PT1/2	ISO7-1：1994 Thread angle 牙型角 55° Taper 锥度 0°
L10	PT3/4	PT1/2	
L43	PT1	PT3/4	
L45	PT1/2	PT3/8	
L47	PT3/8	Φ9×Φ12.7×1.45 Hole with seal groove 直孔(带密封台阶)	
L48	PT3/8	PT3/8	
L58	PT3/4	G1/2	
L64	RC3/8	M20×1.5	
L94	PT1-1/4	PT3/4	
L96	PT3/4	PT3/4	
L103	PT1	PT1/2	
L112	PT3/4	PT3/8	
L113	PT1	PT1	



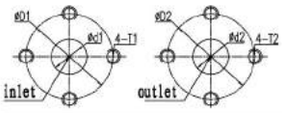
Inlet/Outlet Flange Combination - 进出油口法兰连接（X型 □）

Inlet/Outlet Flange Code	Inlet - 进油口			Outlet - 出油口		
油口法兰组合代号	ΦD1	T1	Φd1	ΦD2	T2	Φd2
F01	Φ30	M6	Φ12	Φ30	M6	Φ12
F19	Φ50	M8	Φ22	Φ50	M8	Φ18
F49	Φ56	M10	Φ27	Φ56	M10	Φ27
F52	Φ40	M6	Φ20	Φ35	M6	Φ15
F55	Φ65	M8	Φ20	Φ65	M8	Φ18
F56	Φ65	M8	Φ26	Φ65	M8	Φ20
F57	Φ65	M10	Φ26	Φ65	M10	Φ20
F58	Φ76	M10	Φ30	Φ76	M10	Φ26
F59	Φ76	M10	Φ32	Φ76	M10	Φ30
F60	Φ40	M6	Φ15	Φ35	M6	Φ15
F78	Φ40	M6	Φ14	Φ35	M6	Φ10
F79	Φ40	M6	Φ15	Φ35	M6	Φ10
F85	Φ35	M6	Φ15	Φ35	M6	Φ15
F88	Φ65	M10	Φ25	Φ65	M10	Φ20
F89	Φ76	M10	Φ35	Φ65	M10	Φ25
F90	Φ40	M6	Φ15	Φ35	M6	Φ15
F101	Φ76	M10	Φ35	Φ76	M10	Φ25
F102	Φ65	M10	Φ30	Φ65	M10	Φ20
F109	Φ40	M6	Φ20	Φ40	M6	Φ20
F111	Φ40	M6	Φ20	Φ35	M6	Φ18
F112	Φ40	M6	Φ18	Φ35	M6	Φ14
F117	Φ55	M8	Φ26	Φ55	M8	Φ18
F128	Φ65	M8	Φ24	Φ65	M8	Φ20
F140	Φ30	M6	Φ10	Φ30	M6	Φ8
F147	Φ35	M6	Φ15	Φ30	M6	Φ12
F155	Φ35	M6	Φ15	Φ40	M6	Φ10
F156	Φ35	M6	Φ18	Φ40	M6	Φ15
F159	Φ76	M10	Φ35	Φ76	M10	Φ20
F164	Φ55	M8	Φ26	Φ40	M6	Φ20
F174	Φ55	M8	Φ26	Φ55	M8	Φ18
F185	Φ55	M8	Φ26	Φ40	M6	Φ15
F186	Φ38	M8	Φ18	Φ38	M8	Φ14
F187	Φ45	M8	Φ18	Φ45	M8	Φ15
F193	Φ51	M10	Φ27	Φ40	M8	Φ20



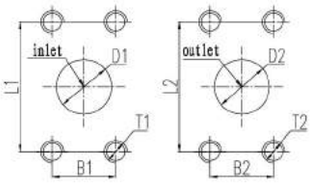
Inlet/Outlet Flange Combination - 进出油口法兰连接（十型◇）

Inlet/Outlet Flange Code	Inlet - 进油口			Outlet - 出油口		
油口法兰组合代号	ΦD1	T1	Φd1	ΦD2	T2	Φd2
F02	Φ30	M6	Φ13	Φ30	M6	Φ13
F03	Φ38	M8	Φ18	Φ38	M8	Φ15
F04	Φ40	M6	Φ20	Φ35	M6	Φ15



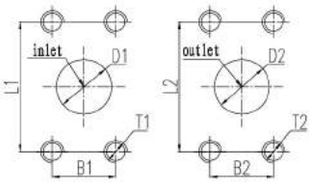
Inlet/Outlet Flange Combination - 进出油口法兰连接（十型◇）

Inlet/Outlet Flange Code	Inlet - 进油口			Outlet - 出油口		
油口法兰组合代号	ΦD1	T1	Φd1	ΦD2	T2	Φd2
F05	Φ40	M8	Φ20	Φ35	M8	Φ15
F06	Φ40	M8	Φ20	Φ30	M6	Φ13
F07	Φ50	M8	Φ20	Φ50	M8	Φ20
F08	Φ50	M8	Φ22	Φ50	M8	Φ18
F09	Φ51	M10	Φ27	Φ51	M10	Φ27
F10	Φ56	M10	Φ27	Φ56	M10	Φ19
F11	Φ56	M10	Φ27	Φ56	M10	Φ27
F12	Φ62	M10	Φ33	Φ51	M10	Φ27
F13	Φ65	M8	Φ24	Φ65	M8	Φ20
F14	Φ65	M8	Φ24	Φ65	M8	Φ18
F15	Φ65	M8	Φ30	Φ65	M8	Φ24
F16	Φ65	M10	Φ30	Φ65	M10	Φ24
F17	Φ76	M8	Φ30	Φ76	M8	Φ24
F18	Φ76	M10	Φ30	Φ76	M10	Φ24
F47	Φ40	M8	Φ20	Φ40	M8	Φ20
F48	Φ40	M8	Φ20	Φ30	M6	Φ15
F50	25.2×25.2	M6	Φ14.5	25.2×25.2	M6	Φ14.5
F51	Φ51	M10	Φ27	Φ40	M8	Φ20
F53	Φ40	M6	Φ20	Φ30	M6	Φ15
F61	Φ26	M5	Φ10	Φ26	M5	Φ10
F66	Φ40	M6	Φ20	Φ30	M6	Φ13
F67	Φ39.7	M8	Φ20	Φ30.2	M6	Φ13.5
F69	Φ38	M8	Φ14	Φ38	M8	Φ10
F70	Φ38	M8	Φ18	Φ38	M8	Φ14
F72	Φ39.5	M8	Φ20	Φ30	M6	Φ12
F74	Φ56	M10	Φ27	Φ51	M10	Φ27
F75	Φ50	M10	Φ23	Φ40	M10	Φ20
F76	Φ50	M10	Φ25	Φ39.5	M8	Φ20
F84	Φ56	M10	Φ27	Φ40	M8	Φ20
F105	Φ51	M10	Φ27	Φ40	M8	Φ19
F114	Φ40	M6	Φ20	Φ40	M6	Φ20
F118	Φ26	M5	Φ10	Φ26	M5	Φ10
F123	Φ40	M8	Φ19	Φ30	M6	Φ14
F135	Φ51	M10	Φ27	Φ40	M6	Φ20
F141	Φ40	M8	Φ22	Φ40	M8	Φ20
F148	Φ50.8	3/8-16	Φ28	Φ40	5/16-18	Φ20
F149	25.2×25.2	M6	Φ16	25.2×25.2	M6	Φ16
F154	Φ40	M6	Φ19	Φ43	M6	Φ14
F163	Φ40	M8	Φ20	Φ40	M8	Φ13
F167	Φ30	M6	Φ15	Φ30	M6	Φ15
F168	Φ62	M12	Φ33	Φ51	M10	Φ20
F169	Φ35	M6	Φ13	Φ35	M6	Φ13
F172	Φ30	M6	Φ13	Φ30	M6	Φ13
F173	Φ40	2-5/16-18unc	Φ19	Φ30	2-1/4-20unc	Φ13.5
F176	Φ35.6	M6	Φ16	Φ35.6	M6	Φ16
F182	Φ26	M5	Φ12	Φ26	M5	Φ12
F191	Φ40	M8	Φ20	Φ40	M8	Φ15
F192	Φ30	M6	Φ12	Φ30	M6	Φ12



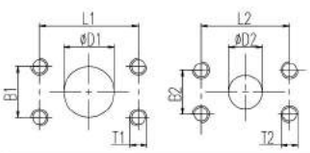
Inlet/Outlet Flange Combination - 进出油口法兰连接（#型▮）

Inlet/Outlet Flange Code	Inlet - 进油口			Outlet - 出油口		
油口法兰组合代号	L1xB1	T1	Φd1	L1xB2	T2	Φd2
F20	35×35	M8	Φ18	35×35	M8	Φ15
F22	47.6×22.2	M10	Φ19	17.5×38.1	M8	Φ13
F23	48×22	M10	Φ19	48×22	M8	Φ17
F24	48×22	M10	Φ20	48×22	M8	Φ18
F25	52×26	M10	Φ25	48×22	M8	Φ20
F26	52×26	M10	Φ30	52×26	M10	Φ25
F27	52.4×26.2	3/8-16UNC	Φ25	47.6×22.2	3/8-16UNC	Φ19
F28	52.4×26.2	3/8	Φ27	47.6×22.2	3/8	Φ19
F29	52.4×26.2	M10	Φ20	47.6×22.2	M10	Φ15
F30	52.4×26.2	M10	Φ25	47.6×22.2	M10	Φ19
F31	52.4×26.2	M10×1.25	Φ26	47.6×22.2	M10×1.25	Φ19
F33	57.2×26	M10	Φ24	57.2×26	M10	Φ20
F34	57.2×26	M10	Φ30	57.2×26	M10	Φ20
F35	57.2×26	M10	Φ30	57.2×26	M10	Φ24
F36	58.7×28.4	7/16-14UNC	Φ33	52.4×26.2	3/8-16UNC	Φ27
F37	58.7×30.2	M10	Φ32	47.6×22.2	M10	Φ19
F38	58.7×30.2	M10	Φ32	52.4×26.2	M10	Φ25
F39	58.7×30.2	7/16-14UN	Φ33	52.4×26.2	3/8-16UNC	Φ27
F40	60×30	M10	Φ32	52×26	M10	Φ25
F41	69.9×35.7	M12	Φ38	52.4×26.2	M10	Φ25
F42	70×36	M10	Φ35	60×30	M10	Φ32
F43	70×36	M12	Φ35	60×30	M10	Φ32
F44	70×36	M12	Φ40	60×30	M10	Φ32
F45	77.8×42.9	M12	Φ51	58.7×30.2	M10	Φ32
F46	78.8×42.8	M12	Φ50	58.7×30.2	M10	Φ30
F62	47.6×22.4	M6	Φ26	38×17.4	M6	Φ15
F64	38.1×17.5	M8	Φ13	38.1×17.5	M8	Φ13
F65	47.6×22.4	M6	Φ26	17.4×38	M6	Φ15
F81	52.4×26.2	M10	Φ25	47.6×22.2	M10	Φ18
F86	58.7×30.2	M10	Φ32	47.6×22.2	M8	Φ19
F87	58.7×30.2	M10	Φ31	58.7×30.2	M10	Φ31
F107	58.7×30.2	7/16-14UNC	Φ32	58.7×30.2	7/16-14UNC	Φ32
F110	47.6×22.2	M8	Φ18	17.5×38.1	M8	Φ13
F116	52.4×26.2	M8	Φ27	52.4×26.2	M8	Φ24
F131	28.4×28.2	M6	Φ14.5	25.4×25.2	M6	Φ14.5
F132	52.4×26.2	M10	Φ25	47.6×22.2	M8	Φ19
F144	52.4×26.2	M10×1.25	Φ25	47.6×22.2	M10×1.25	Φ20
F145	77.7×42.8	1/2-13UN	Φ51	69.8×35.7	1/2-13UN	Φ38
F146	69.9×35.7	M12	Φ38	47.6×22.2	M8	Φ19
F157	52×26	M10	Φ25	48×22	M8	Φ18
F160	36×60	M10	Φ40	36×60	M10	Φ32



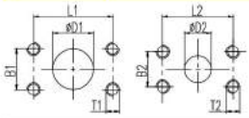
Inlet/Outlet Flange Combination - 进出油口法兰连接（#型▮）

Inlet/Outlet Flange Code	Inlet - 进油口			Outlet - 出油口		
油口法兰组合代号	L1xB1	T1	Φd1	L1xB2	T2	Φd2
F161	77.8×42.9	M12	Φ51	69.9×35.7	M12	Φ38
F162	52.4×26.2	3/8	Φ27	52.4×26.2	3/8	Φ19
F170	70×36	M12	Φ40	48×22	M8	Φ20
F171	52×26	M10	Φ25	52×26	M10	Φ19
F178	78×43	M10	Φ50	48×22	M8	Φ20
F180	60×30	M10	Φ35	48×22	M8	Φ20
F183	58.7×30.2	3/8-16UNC-2B	Φ32	52.4×26.2	3/8-16UNC-2B	Φ25



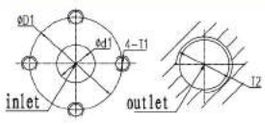
Inlet/Outlet Flange Combination - 进出油口法兰连接（#型▬▬）

Inlet/Outlet Flange Code	Inlet - 进油口			Outlet - 出油口		
油口法兰组合代号	L1xB1	T1	Φd1	L1xB2	T2	Φd2
F54	52.4×26.2	3/8-16	Φ25	47.6×22.2	3/8-16	Φ19
F63	26.2×52.4	3/8-16UNC	Φ27	22.2×47.6	3/8-16UNC	Φ19
F68	17.5×38.1	M8	Φ13	17.5×38.1	M8	Φ13
F71	69.9×35.7	1/2-13	Φ38	58.7×30.2	7/16-14	Φ32
F73	58.7×30.2	M10	Φ31	47.6×22.2	M10	Φ18
F77	30.2×58.7	M10	Φ25	26.2×52.4	M10	Φ19
F95	37×32	M8	Φ20	38×17.5	M8	Φ13
F96	69.9×35.7	M12	Φ39	58.7×30.2	M10	Φ25
F97	52.4×26.2	M10	Φ25	47.6×22.2	M10	Φ19
F98	69.9×35.7	M12	Φ38	58.7×30.2	M10	Φ32
F99	69.9×35.7	M12	Φ38	58.7×30.2	7/16-14	Φ32
F103	58.7×30.2	M10	Φ32	47.6×22.2	M10	Φ19
F104	52.4×26.2	M10	Φ25	52.4×26.2	M10	Φ25
F106	47.6×22.2	M10	Φ19	47.6×22.2	M10	Φ14
F115	57.2×26	M10	Φ35	57.2×26	M10	Φ25
F120	50.8×30.2	M10	Φ32	50.8×30.2	M10	Φ32
F121	57.2×26	M10	Φ35	57.2×26	M10	Φ20
F122	57.2×26	M10	Φ30	57.2×26	M10	Φ20
F124	58.7×30.2	M10	Φ32	58.7×30.2	M10	Φ32
F125	52.4×26.2	M8	Φ26	47.6×26.2	M8	Φ20
F126	60×30	M10	Φ30	52×26	M10	Φ25
F127	52×26	M10	Φ25	52×26	M10	Φ25
F133	47.6×22.2	M6	Φ20	17.5×38.1	M6	Φ15
F138	47.6×22.2	M10	Φ22	47.6×22.2	M10	Φ19
F139	47.6×22.2	M10	Φ23	47.6×22.2	M10	Φ20



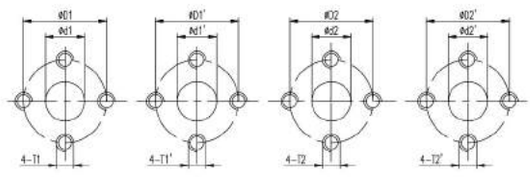
Inlet/Outlet Flange Combination - 进出油口法兰连接（#型■■）

Inlet/Outlet Flange Code	Inlet - 进油口			Outlet - 出油口		
油口法兰组合代号	L1xB1	T1	Φd1	L1xB2	T2	Φd2
F142	47.6×22.2	M10×1.25	Φ23	47.6×22.2	M10×1.25	Φ20
F143	47.6×22.2	M10×1.25	Φ19	47.6×22.2	M10×1.25	Φ19
F151	58.7×30.2	M10	Φ35	52.4×26.2	M10	Φ20
F152	47.6×22.2	M10×1.25	Φ26	47.6×22.2	M10×1.25	Φ20
F158	57.2×26	M10	Φ25	57.2×26	M10	Φ20
F179	52.4×26.2	M10×1.25	Φ26	47.6×22.2	M10×1.25	Φ20
F190	52.4×26.2	M8	Φ27	52.4×26.2	M8	Φ27



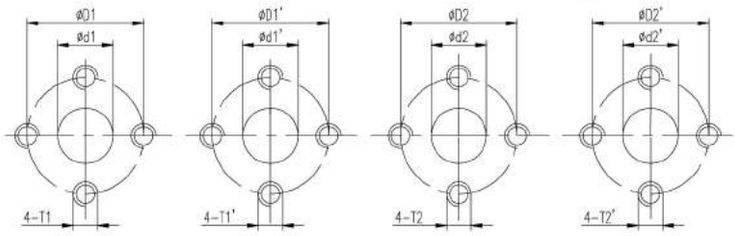
Inlet/Outlet Thread and Flange Combination - 进出油口螺纹与法兰连接（#型■■）

Inlet/Outlet Thread and Flange Code	Inlet - 进油口			Outlet - 出油口
油口螺纹和法兰组合代号	L1xB1	T1	Φd1	ΦD2
LF1	Φ38	4-M8	Φ18	M18×1.5



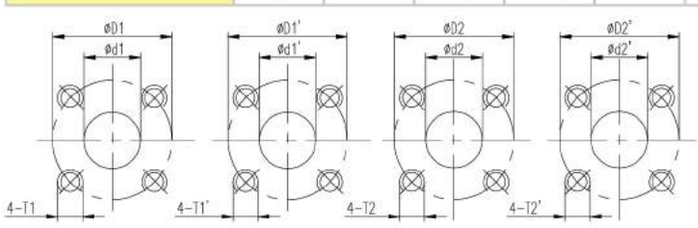
Double Pump Inlet/Outlet Flange Combination
双联泵油口法兰组合

Inlet/Outlet Flange Code	Front Pump - 前泵						Back Pump - 后泵					
	Inlet - 进油口			Outlet - 出油口			Inlet - 进油口			Outlet - 出油口		
油口法兰组合代号	ΦD1	T1	Φd1	ΦD1'	T1'	Φd1'	ΦD2	T2	Φd2	ΦD2'	T2'	Φd2'
DF02	Φ40	4-M8	Φ20	Φ30	4-M6	Φ13	Φ40	4-M8	Φ20	Φ30	4-M6	Φ13
DF04	Φ40	4-M6	Φ20	Φ35	4-M6	Φ15	Φ40	4-M6	Φ20	Φ35	4-M6	Φ15
DF07	Φ56	4-M10	Φ27	Φ56	4-M10	Φ19	Φ38	4-M8	Φ18	Φ38	4-M8	Φ15
DF08	Φ56	4-M10	Φ27	Φ56	4-M10	Φ27	Φ38	4-M8	Φ18	Φ38	4-M8	Φ15
DF09	Φ38	4-M8	Φ18	Φ38	4-M8	Φ15	Φ38	4-M8	Φ14	Φ38	4-M8	Φ10
DF13	Φ38	4-M8	Φ18	Φ38	4-M8	Φ15	Φ38	4-M8	Φ18	Φ38	4-M8	Φ15
DF16	Φ56	4-M10	Φ27	Φ56	4-M10	Φ19	Φ30	4-M6	Φ13	Φ30	4-M6	Φ13
DF17	Φ39.7	4-M8	Φ20	Φ30.2	4-M6	Φ13.5	Φ39.7	4-M8	Φ20	Φ30.2	4-M6	Φ13.5



Double Pump Inlet/Outlet Flange Combination
双联泵油口法兰组合

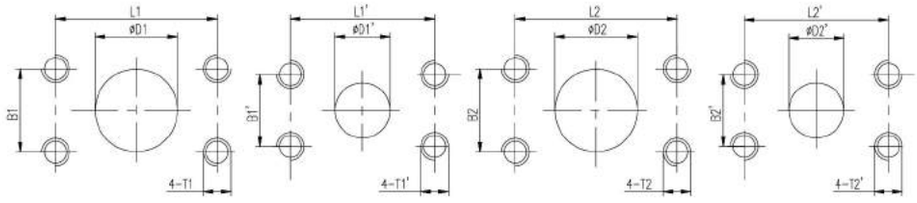
Inlet/Outlet Flange Code	Front Pump - 前泵						Rear Pump - 后泵					
	Inlet - 进油口			Outlet - 出油口			Inlet - 进油口			Outlet - 出油口		
油口法兰组合代号	ΦD1	T1	Φd1	ΦD1'	T1'	Φd1'	ΦD2	T2	Φd2	ΦD2'	T2'	Φd2'
DF19	Φ56	4-M10	Φ27	Φ56	4-M10	Φ19	Φ40	4-M8	Φ20	Φ30	4-M6	Φ13
DF20	Φ38	4-M8	Φ18	Φ38	4-M8	Φ15	N/A/ 无			Φ38	4-M8	Φ15
DF21	Φ56	4-M10	Φ27	Φ40	4-M8	Φ20	Φ40	4-M8	Φ20	Φ30	4-M6	Φ13
DF22	Φ40	4-M6	Φ20	Φ35	4-M6	Φ15	N/A/ 无			Φ35	4-M6	Φ15
DF26	Φ50	4-M10	Φ25	Φ39.5	4-M8	Φ20	Φ39.5	4-M8	Φ20	Φ30	4-M6	Φ12
DF50	25.2×25.2	4-M6	Φ14.5	25.2×25.2	4-M6	Φ14.5	25.2×25.2	4-M6	Φ14.5	25.2×25.2	4-M6	Φ14.5
DF62	Φ40	4-M8	Φ20	Φ30	4-M6	Φ13	Φ30	4-M6	Φ13	Φ30	4-M6	Φ13
DF65	Φ39.5	4-M8	Φ20	Φ30	4-M6	Φ12	Φ39.5	4-M8	Φ20	Φ30	4-M6	Φ12
DF72	Φ76	4-M10	Φ35	Φ65	4-M10	Φ25	Φ65	4-M10	Φ25	Φ65	4-M10	Φ20
DF80	Φ51	4-M10	Φ27	Φ51	4-M10	Φ27	Φ30	4-M6	Φ13	Φ30	4-M6	Φ13
DF81	Φ51	4-M10	Φ27	Φ40	4-M8	Φ19	Φ51	4-M10	Φ27	Φ40	4-M8	Φ19
DF82	Φ51	4-M10	Φ27	Φ40	4-M8	Φ19	Φ30	4-M6	Φ13	Φ30	4-M6	Φ13
DF88	Φ39.5	4-M8	Φ20	Φ30	4-M6	Φ12	Φ30	4-M6	Φ12	Φ30	4-M6	Φ12
DF93	Φ50	4-M8	Φ25	Φ40	4-M6	Φ20	Φ40	4-M6	Φ20	Φ30	4-M6	Φ13



Double Pump Inlet/Outlet Flange Combination
双联泵油口法兰组合

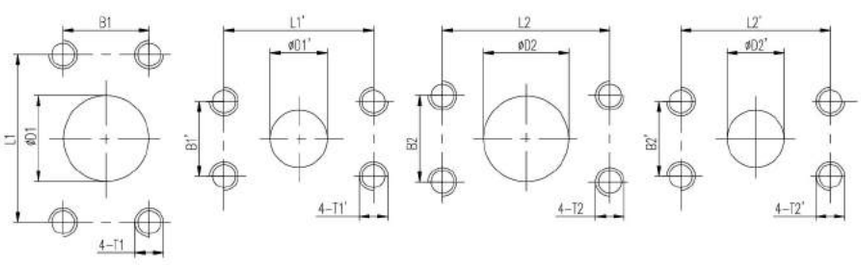
Inlet/Outlet Flange Code	Front Pump - 前泵						Rear Pump - 后泵					
	Inlet - 进油口			Outlet - 出油口			Inlet - 进油口			Outlet - 出油口		
油口法兰组合代号	ΦD1	T1	Φd1	ΦD1'	T1'	Φd1'	ΦD2	T2	Φd2	ΦD2'	T2'	Φd2'
DF01	Φ30	4-M6	Φ12	Φ30	4-M6	Φ12	Φ30	4-M6	Φ12	Φ30	4-M6	Φ12
DF05	Φ40	4-M6	Φ20	Φ35	4-M6	Φ15	Φ40	4-M6	Φ20	Φ35	4-M6	Φ15
DF06	Φ40	4-M6	Φ20	Φ35	4-M6	Φ15	Φ40	4-M6	Φ15	Φ35	4-M6	Φ15
DF10	Φ55	4-M8	Φ26	Φ55	4-M8	Φ18	Φ55	4-M8	Φ26	Φ55	4-M8	Φ18
DF24	40×40	4-M8	Φ25	25×25	4-M8	Φ15	N/A/ 无			25×25	4-M8	Φ15
DF87	Φ40	4-M6	Φ20	Φ35	4-M6	Φ18	Φ40	4-M6	Φ18	Φ35	4-M6	Φ14

Double Pump Inlet/Outlet Flange Combination
双联泵油口法兰组合

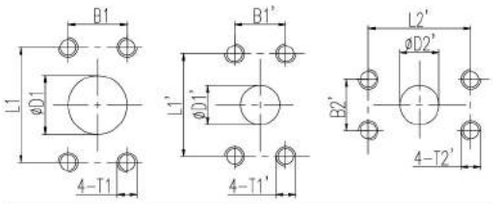


Inlet/Outlet Flange Code	Front Pump - 前泵						Rear Pump - 后泵					
	Inlet - 进油口			Outlet - 出油口			Inlet - 进油口			Outlet - 出油口		
油口法兰组合代号	L1×B1	T1	ΦD1	L1'×B1'	T1'	ΦD1'	L2×B2	T2	ΦD2	L2'×B2'	T2'	ΦD2'
DF11	52.4×26.2	M10	Φ25	47.6×22.2	M10	Φ19	52.4×26.2	M10	Φ25	47.6×22.2	M10	Φ19
DF14	47.6×22.2	M10	Φ19	47.6×22.2	M10	Φ19	47.6×22.2	M10	Φ22	47.6×22.2	M10	Φ19
DF25	57.2×26	M10	Φ35	57.2×26	M10	Φ25	52.4×26.2	3/8	Φ25	47.6×22.2	3/8	Φ19
DF27	57.2×26	M10	Φ35	57.2×26	M10	Φ20	57.2×26	M10	Φ30	57.2×26	M10	Φ20
DF29	57.4×26.2	M10	Φ25	47.6×22.2	M10	Φ19	52.4×26.2	M10	Φ25	47.6×22.2	M10	Φ19
DF30	60×30	M10	Φ30	52×26	M10	Φ25	52×26	M10	Φ25	52×26	M10	Φ25
DF31	57.2×26	M10	Φ35	57.2×26	M10	Φ25	52.4×26.2	M10×1.25	Φ25	47.6×22.2	M10×1.25	Φ19
DF32	78×43	M10	Φ30	52×26	M10	Φ25	52×26	M10	Φ25	52×26	M10	Φ25
DF33	58.7×30.2	7/16-14	Φ33	47.6×22.2	3/8-16	Φ27	58.7×30.2	7/16-14	Φ33	47.6×22.2	3/8-16	Φ27
DF37	58.7×30.2	M10	Φ32	47.6×22.2	M10	Φ19	N/A/无			47.6×22.2	M10	Φ19
DF38	58.7×30.2	M10	Φ32	47.6×22.2	M10	Φ19	N/A/无			38.1×17.5	M8	Φ14
DF39	52.4×26.2	M10	Φ25	52.4×26.2	M10	Φ25	52.4×26.2	M10	Φ25	52.4×26.2	M10	Φ25
DF70	58.7×30.2	M10	Φ31	47.6×22.2	M10	Φ18	N/A/无			47.6×22.2	M10	Φ18
DF84	69.9×35.7	M12	Φ38	52.4×26.2	M10	Φ25	N/A/无			52.4×26.2	M10	Φ25
DF89	52.4×26.2	M10	Φ25	47.6×22.2	M10	Φ19	47.6×22.2	M10	Φ19	47.6×22.2	M10	Φ19
DF95	58.7×30.2	M10	Φ32	58.7×30.2	M10	Φ32	58.7×30.2	M10	Φ32	58.7×30.2	M10	Φ32
DF92	58.7×30.2	M10	Φ31	47.6×22.2	M10	Φ18	58.7×30.2	M10	Φ31	47.6×22.2	M10	Φ18

Double Pump Inlet/Outlet Flange Combination
双联泵油口法兰组合

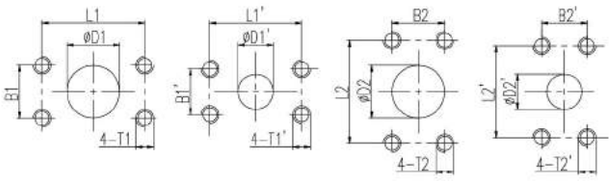


Inlet/Outlet Flange Code	Front Pump - 前泵						Rear Pump - 后泵					
	Inlet - 进油口			Outlet - 出油口			Inlet - 进油口			Outlet - 出油口		
油口法兰组合代号	L1×B1	T1	ΦD1	L1'×B1'	T1'	ΦD1'	L2×B2	T2	ΦD2	L2'×B2'	T2'	ΦD2'
DF35	52.4×26.2	M10×1.25	Φ26	47.6×22.2	M10×1.25	Φ20	47.6×22.2	M10×1.25	Φ23	47.6×22.2	M10×1.25	Φ20



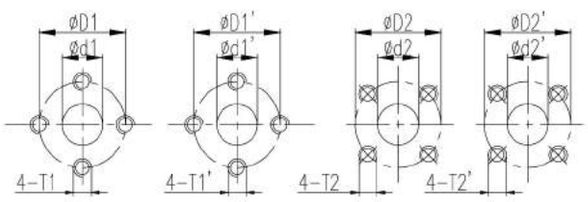
Double Pump Inlet/Outlet Flange Combination
双联泵油口法兰组合

Inlet/Outlet Flange Code	Front Pump - 前泵						Rear Pump - 后泵					
	Inlet - 进油口			Outlet - 出油口			Inlet - 进油口			Outlet - 出油口		
油口法兰组合代号	L1×B1	T1	ΦD1	L1'×B1'	T1'	ΦD1'	L2×B2	T2	ΦD2	L2'×B2'	T2'	ΦD2'
DF96	70×36	M12	Φ35	60×30	M10	Φ32	N/A/ 无			48×22	M8	Φ20



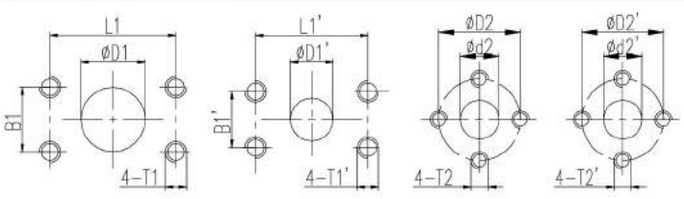
Double Pump Inlet/Outlet Flange Combination
双联泵油口法兰组合

Inlet/Outlet Flange Code	Front Pump - 前泵						Rear Pump - 后泵					
	Inlet - 进油口			Outlet - 出油口			Inlet - 进油口			Outlet - 出油口		
油口法兰组合代号	L1×B1	T1	ΦD1	L1'×B1'	T1'	ΦD1'	L2×B2	T2	ΦD2	L2'×B2'	T2'	ΦD2'
DF71	69.9×35.7	M12	Φ38	58.7×30.2	M10	Φ32	58.7×30.2	M10	Φ32	52.4×26.2	M10	Φ25



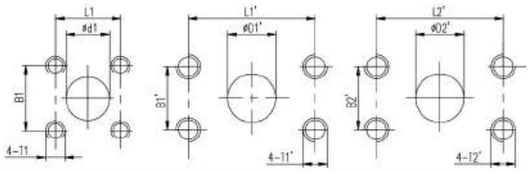
Double Pump Inlet/Outlet Flange Combination
双联泵油口法兰组合

Inlet/Outlet Flange Code	Front Pump - 前泵						Rear Pump - 后泵					
	Inlet - 进油口			Outlet - 出油口			Inlet - 进油口			Outlet - 出油口		
油口法兰组合代号	ΦD1	T1	Φd1	ΦD1'	T1'	Φd1'	ΦD2	T2	Φd2	ΦD2'	T2'	Φd2'
DF15	Φ40	M6	Φ20	Φ30	M6	Φ13	Φ30	M6	Φ12	Φ30	M6	Φ12
DF86	Φ40	M8	Φ20	Φ40	M8	Φ20	Φ30	M6	Φ13	Φ30	M6	Φ13



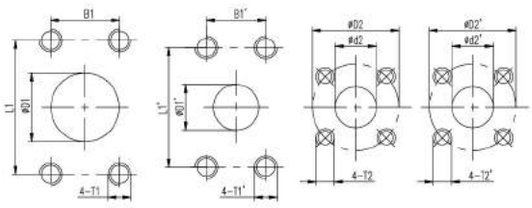
Double Pump Inlet/Outlet Flange Combination
双联泵油口法兰组合

Inlet/Outlet Flange Code	Front Pump - 前泵						Rear Pump - 后泵					
	Inlet - 进油口			Outlet - 出油口			Inlet - 进油口			Outlet - 出油口		
油口法兰组合代号	L1×B1	T1	ΦD1	L1'×B1'	T1'	ΦD1'	ΦD2	T2	Φd2	ΦD2'	T2'	Φd2'
DF18	52.4×26.2	M10	Φ25	47.6×22.2	M10	Φ18	Φ40	M6	Φ20	Φ35	M6	Φ15



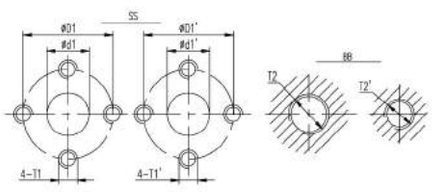
Double Pump Inlet/Outlet Flange Combination
双联泵油口法兰组合

Inlet/Outlet Flange Code	Front Pump - 前泵						Rear Pump - 后泵					
	Inlet - 进油口			Outlet - 出油口			Inlet - 进油口			Outlet - 出油口		
油口法兰组合代号	L1×B1	T1	ΦD1	L1'×B1'	T1'	ΦD1'	L2×B2	T2	ΦD2	L2'×B2'	T2'	ΦD2'
DF12	58×58	M10	Φ45	47.6×22.2	M10	Φ19	N/A/无			47.6×22.2	M10	Φ19



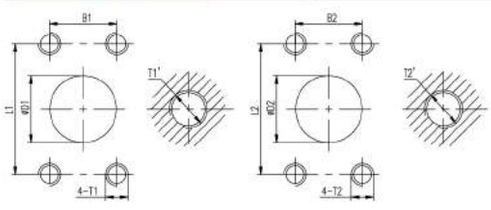
Double Pump Inlet/Outlet Flange Combination
双联泵油口法兰组合

Inlet/Outlet Flange Code	Front Pump - 前泵						Rear Pump - 后泵					
	Inlet - 进油口			Outlet - 出油口			Inlet - 进油口			Outlet - 出油口		
油口法兰组合代号	L1×B1	T1	ΦD1	L1'×B1'	T1'	ΦD1'	ΦD2	T2	Φd2	ΦD2'	T2'	Φd2'
DF23	52.4×26.2	M10	Φ25	47.6×22.2	M10	Φ19	Φ40	M6	Φ20	Φ35	M6	Φ15



Double Pump Inlet/Outlet Flange Combination
双联泵油口法兰组合

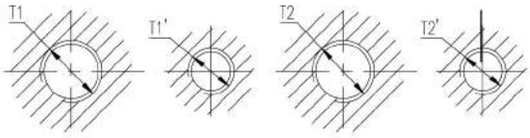
Inlet/Outlet Flange Code	Front Pump - 前泵						Rear Pump - 后泵	
	Inlet - 进油口			Outlet - 出油口			Inlet - 进油口	Outlet - 出油口
油口法兰组合代号	ΦD1	T1	Φd1	ΦD1'	T1'	Φd1'	T2	T2'
DF94	Φ55	M8	Φ26	Φ55	M8	Φ18	G3/4	G1/2



Double Pump Inlet/Outlet Flange Combination
双联泵油口法兰组合

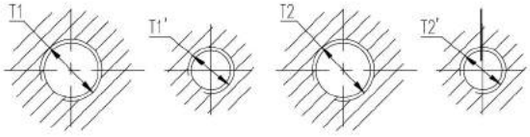
Inlet/Outlet Flange Code	Front Pump - 前泵				Rear Pump - 后泵			
	Inlet - 进油口			Outlet - 出油口	Inlet - 进油口			Outlet - 出油口
油口法兰组合代号	L1×B1	T1	ΦD1	T1'	L2×B2	T2	Φd2	T2'
DF83	58.7×30.2	M10	Φ32	1-1/16-12UNC	52.4×26.2	M10	Φ32	7/8-14UNF

Inlet/Outlet Flange Code	Front Pump - 前泵						Rear Pump - 后泵					
	Inlet - 进油口			Outlet - 出油口			Inlet - 进油口			Outlet - 出油口		
油口法兰组合代号	ΦD1	T1	Φd1	ΦD1'	T1'	Φd1'	ΦD2	T2	Φd2	ΦD2'	T2'	Φd2'
DF03	Φ40	2-35°.M8	Φ20	Φ40	2-35°.M8	Φ15	Φ40	2-35°.M8	Φ20	N/A/无		
DF34	Φ40	2-35°.M8	Φ20	Φ40	2-35°.M8	Φ15	Φ40	2-35°.M8	Φ20	Φ40	2-35°.M8	Φ15



Double Pump Inlet/Outlet Flange Combination
双联泵油口法兰组合

Inlet/Outlet Flange Code	Front Pump - 前泵		Rear Pump - 后泵	
	Inlet - 进油口	Outlet - 出油口	Inlet - 进油口	Outlet - 出油口
油口法兰组合代号	T1	T1'	T2	T2'
DL02	G1	G1/2	G1	G1/2
DL03	G1	G3/4	G1	G3/4
DL04	1-5/8-12UN-2B	1-5/16-12UN-2B	1-5/16-12UN-2B	1-3/16-12UN-2B
DL05	G1	G3/4	N/A/无	G3/4
DL06	G1	G3/4	G1/2	G3/8
DL07	G3/4	G1/2	G1/2	G1/2
DL08	G3/4	G1/2	G3/4	G1/2
DL09	M18×1.5	M14×1.5	M26×2	M18×1.5
DL10	PT3/4	PT1/2	PT3/4	PT1/2
DL11	G1-1/4	G1	G1-1/4	G1
DL12	G1-1/4	G1	G1	G1/2
DL13	M18×1.5	M14×1.5	N/A/无	M14×1.5
DL14	G1/2	G1/2	G1/2	G3/8
DL15	M22×1.5	M18×1.5	M22×1.5	M18×1.5
DL16	G3/4	G1/2	N/A/无	G3/8
DL17	G1	G3/4	G3/4	G1/2
DL24	M30×2	M22×1.5	M30×2	M22×1.5
DL34	NPT3/8	NPT3/8	NPT3/8	NPT3/8
DL39	1-1/16-12UN-2B	7/8-14UNF-2B	1-1/16-12UN-2B	7/8-14UNF-2B
DL40	G3/8	G3/8	G3/8	G3/8
DL42	G1-1/2	G1	G1-1/2	G1
DL62	M20×1.5 (Facing - 锪平 Φ36)	M18×1.5 (Facing - 锪平 Φ30)	M20×1.5 (Facing - 锪平 Φ36)	M18×1.5 (Facing - 锪平 Φ30)
DL66	N/A/无	M22×1.5	M27×2	M22×1.5
DL80	G1/2	G1/2	G3/8	G3/8
DL81	1-5/8-12UN-2B	1-5/16-12UN-2B	N/A/无	7/8-14UNF-2B
DL82	G1	G3/4	G1/2	G1/2
DL83	M27×2	M22×1.5	M27×2	M22×1.5
DL84	1-5/8-12UN-2B	G1	N/A/无	G1/2
DL85	G1-1/2	G1	G3/4	G1/2
DL86	PT1/2	PT1/2	PT1/2	PT1/2
DL87	PT1-1/4	PT3/4	PT1-1/4	PT3/4
DL88	G1	G1/2	N/A/无	G1/2
DL89	Φ50/M8/Φ22（□形）	M22×1.5	N/A/无	M22×1.5
DL90	G3/4	G3/4	G3/4	G1/2
DL91	M27×2	M22×1.5	M27×2	M22×1.5
DL92	G1/2	G1/2	G1/2	G1/2
DL94	PT1-1/4	PT3/4	PT1-1/4	PT3/4
DL95	PT1	PT3/4	PT1	PT3/4



Double Pump Inlet/Outlet Flange Combination
双联泵油口法兰组合

Inlet/Outlet Flange Code	Front Pump - 前泵		Rear Pump - 后泵	
	Inlet - 进油口	Outlet - 出油口	Inlet - 进油口	Outlet - 出油口
油口法兰组合代号	T1	T1'	T2	T2'
DLJ03	1-5/16-12UN-2B	7/8-14UNF-2B	1-5/16-12UN-2B	7/8-14UNF-2B
DLJ04	1-5/16-12UN-2B	1-3/16-12UN-2B	1-5/16-12UN-2B	1-3/16-12UN-2B
DLJ05	1-5/8-12UN-2B	1-5/16-12UN-2B	1-5/16-12UN-2B	1-3/16-12UN-2B
DLJ06	G1	G3/4	G3/4	G1/2
DLJ07	1-1/16-12UN-2B	7/8-14UNF-2B	N/A/无	7/8-14UNF-2B
DLJ08	1-5/16-12UN-2B	1-1/16-12UN-2B	N/A/无	1-1/16-12UN-2B
DLJ09	N/A/无	3/4-16UNF-2B	1-1/16-12UN-2B	3/4-16UNF-2B
DLJ10	1-5/16-12UN-2B	7/8-14UNF-2B	1-5/16-12UN-2B	7/8-14UNF-2B
DLJ11	1-5/8-12UN-2B	7/8-14UN-2B	N/A/无	9/16-18UN-2B
DLJ14	1-5/8-12UN-2B	1-1/16-12UN-2B	N/A/无	1-1/16-12UN-2B
DLJ15	1-5/16-12UN-2B	1-5/16-12UN-2B	1-5/16-12UN-2B	1-5/16-12UN-2B
DLJ37	7/8-14UNF-2B	3/4-16UNF-2B	7/8-14UNF-2B	3/4-16UNF-2B
DLJ39	1-1/16-12UN-2B	7/8-14UNF-2B	1-1/16-12UN-2B	7/8-14UNF-2B
DLJ40	1-5/16-12UN-2B	1-1/16-12UN-2B	N/A/无	3/4-16UNF-2B
DLJ41	1-1/16-12UN-2B	3/4-16UNF-2B	N/A/无	3/4-16UNF-2B
DLJ72	1-5/16-12UN-2B	7/8-14UNF-2B	1-5/16-12UN-2B	M16×1.5(15°)
DLJ76	1-5/8-12UN-2B	1-5/16-12UN-2B	N/A/无	3/4-16UNF-2B
DLJ77	1-5/8-12UN-2B	1-5/16-12UN-2B	3/4-16UNF-2B	3/4-16UNF-2B
DLJ78	1-5/16-12UN-2B	7/8-14UNF-2B	N/A/无	7/8-14UNF-2B
DLJ90	1-5/16-12UN-2B	1-1/16-12UN-2B	1-1/16-12UN-2B	7/8-14UNF-2B
DLJ98	1-1/16-12UN-2B	7/8-14UNF-2B	3/4-16UNF-2B	9/16-18UNF-2B
DLJ99	1-5/8-12UN-2B	1-5/16-12UN-2B	1-5/16-12UN-2B	1-1/16-12UN-2B
DFL01	72×M8/ φ24	M18×1.5	72×M8/ φ16.5	M14×1.5
DFL02	φ51\4-M10\φ26(□)	φ40\4-M8\G1/2(◇)	φ51\4-M10\φ26(◇)	φ40\4-M8\G1/2(◇)
DFL03	40×40\4-M8\φ25(□)	G1/2	N/A/无	G1/2
DFL04	40×40\4-M8\φ25(□)	G1/2	N/A/无	25×25\4-M8\φ15(□)
DFL05	φ50\M8\ φ22(□)	M22×1.5	N/A/无	M22×1.5
DFL06	70×36\M10\ φ35(▮)	60×30\M10\ φ32(▮)	M30*1.5	M24*1.5
DFL07	F52		L13	
DFL08	58.7×30.2\M10\ φ32(▮)	52.4×26.2\M10\ φ25(▮)	N/A/无	M24*1.5
DFL09	58.7×30.2\M10\ φ32(▮)	1-1/16-12UN-2B	N/A/无	1-1/16-12UN-2B
DFL10	φ40\4-M8\G1/2(◇)	φ30\4-M6\G3/8(◇)	φ40\4-M8\G1/2(◇)	φ30\4-M6\G3/8(◇)
DFL11	F83		LJ39	

Double Pump Inlet/Outlet Flange Combination
双联泵油口法兰组合

Inlet/Outlet Flange Code	Front Pump - 前泵		Rear Pump - 后泵	
	Inlet - 进油口	Outlet - 出油口	Inlet - 进油口	Outlet - 出油口
油口法兰组合代号	T1	T1'	T2	T2'
DFL12	φ40\4-M6\G3/4(□)	φ35\4-M6\G1/2(□)	φ40\4-M6\G3/4(□)	φ35\4-M6\G1/2(□)
DFL13	58.7×30.2\7/16-14UNC\φ33(▮)	52.4×26.2\3/8-16UNC\φ27(▮)	1-1/16-12UN-2B	7/8-14UNF-2B
DFL15	φ40\M6\φ20(◇)	φ40\M6\φ20(□)	G3/8	PT1/4
DFL16	58.7×30.2\M10\φ32(▮)	52.4×26.2\M10\φ25(▮)	M33*1.5	M24*1.5
DLF06	1-5/16-12	47.6×22.2/4-M8×1.25/φ19	1-5/16-12	47.6×22.2/4-M8×1.25/φ19
DLF07	M18×1.5	M18×1.5	φ39.7\2-M8\φ20	M18*1.5

Triple Pump Inlet/Outlet Flange Combination
三联泵油口法兰组合

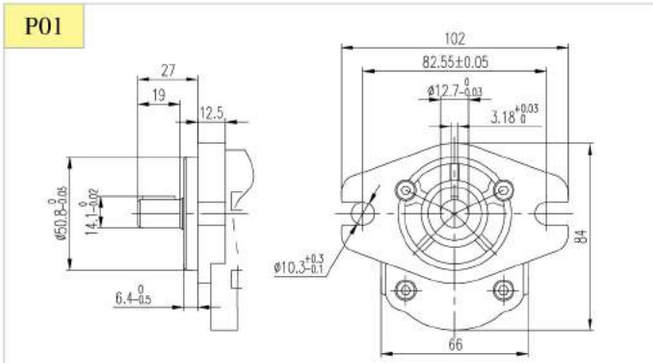
Inlet/Outlet Flange Code	Front Pump - 前泵		Middle Pump - 中泵		Rear Pump - 后泵	
油口法兰组合代号	Inlet - 进油口	Outlet - 出油口	Inlet - 进油口	Outlet - 出油口	Inlet - 进油口	Outlet - 出油口
TL01	N/A/无	7/8-14UNF-2B	1-5/16-12UN-2B	7/8-14UNF-2B	N/A/无	3/4-16UNF-2B
TL02	1-5/8-12UN-2B	3/4-16UNF	1-5/8-12UN-2B	3/4-16UNF	N/A/无	3/4-16UNF
TL03	N/A/无	7/8-14UNF-2B	1-5/16-12UN-2B	7/8-14UNF-2B	N/A/无	7/8-14UNF-2B
TL05	M33×2	M27×2	M33×2	M27×2	M22×1.5	M18×1.5
TL06	G1	G3/4	G3/4	G1/2	G3/4	G1/2
TL07	G1/2	G1/2	G1/2	G1/2	G1/2	G1/2
TL10	G1-1/4	G1	G3/4	G1/2	G3/8	G3/8
TL16	G3/4	G1/2	G1/2	G1/2	G3/8	G3/8
TL18	G3/4	G1/2	G3/4	G1/2	G3/4	G1/2
TLJ11	1-5/16-12	1-1/16	1-5/16-12	1-1/16	1-5/16-12	1-1/16
TLJ12	1-5/16-12	1-5/16	1-5/16-12	1-5/16	1-5/16-12	1-5/16
TLJ08	1-5/8	1-1/16	1-5/8	7/8	N/A/无	7/8
TF01	φ40\M6\φ20(□)	φ35\M6\φ15(□)	φ40\M6\φ20(□)	φ35\M6\φ15(□)	φ40\M6\φ20(□)	φ35\M6\φ15(□)
TF02	φ40\M6\φ20(□)	φ35\M6\φ15(□)	φ40\M6\φ15(□)	φ35\M6\φ15(□)	φ40\M6\φ15(□)	φ35\M6\φ15(□)
TF03	36×70/4-M12/φ40	30×60/4-M10/φ32	30×60/4-M10/φ30	26×52/4-M10/φ25		
TF04	30×60/4-M10/φ32	26×52/4-M10/φ25	30×60/4-M10/φ30	26×52/4-M10/φ25	28.5×28.5/4-M6/φ20	25×25/4-M6/φ15
TF05	φ40\M6\φ14(□)	φ35\M6\φ10(□)	φ40\M6\φ14(□)	φ35\M6\φ10(□)	φ40\M6\φ10(□)	φ35\M6\φ10(□)
TF06	φ55\M8\φ26(□)	φ55\M8\φ18(□)	φ55\M8\φ26(□)	φ55\M8\φ18(□)	φ40\M6\φ20(□)	φ35\M6\φ15(□)
TF07	58.7×30.2\M10\φ25(▬)	52.4×26.2\M10\φ19(▬)	58.7×30.2\M10\φ25(▬)	52.4×26.2\M10\φ19(▬)	φ40\M6\φ20(□)	φ35\M6\φ15(□)

Triple Pump Inlet/Outlet Flange Combination
三联泵油口法兰组合

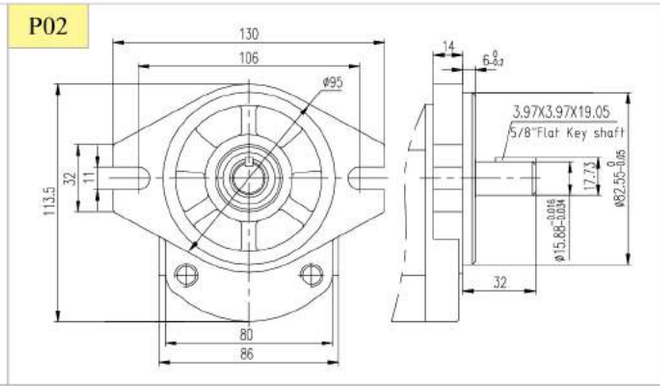
Inlet/Outlet Flange Code	Front Pump - 前泵		Middle Pump - 中泵		Rear Pump - 后泵	
油口法兰组合代号	Inlet - 进油口	Outlet - 出油口	Inlet - 进油口	Outlet - 出油口	Inlet - 进油口	Outlet - 出油口
TF08	52.4×26.2\M10 \φ25(▬▬)	47.6×22.2\M10 \φ19(▬▬)	52.4×26.2\M10 \φ25(▬▬)	47.6×22.2\M10 \φ19(▬▬)	φ40\M6\φ20(□)	φ35\M6\φ15(□)
TF09	φ55\M8\φ26(□)	φ55\M8\φ18(□)	φ40\M6\φ20(□)	φ35\M6\φ15(□)	φ40\M6\φ20(□)	φ35\M6\φ15(□)
TF10	φ40\M6\φ20(□)	φ35\M6\φ15(□)	φ40\M6\φ20(□)	φ35\M6\φ15(□)	φ40\M6\φ15(□)	φ35\M6\φ10(□)
TF11	58.7×30.2\M10 \φ25(▬▬)	52.4×26.2\M10 \φ19(▬▬)	φ40\M6\φ20(□)	φ35\M6\φ15(□)	φ40\M6\φ20(□)	φ35\M6\φ15(□)
TLF11	1-5/16	38.1×17.5/4 - M8×1.25/ φ13	1-5/16	38.1×17.5/4 - M8×1.25/ φ13	1-5/16	38.1×17.5/4 - M8×1.25/ φ13
TLF14	1-5/16	38.1×17.5/4 - M8×1.25/M20×1.5	1-5/16	38.1×17.5/4 - M8×1.25/M20×1.5	1-5/16	38.1×17.5/4 - M8×1.25/M20×1.5
TLF16	1-5/16-12	47.6×22.2/4 - M8××1.25/ φ19	1-5/16-12	47.6×22.2/4 - M8×1.25/ φ19	1-5/16-12	47.6×22.2/4 - M8×1.25/ φ19
TLF18	G3/4	38.1×17.5/4 - M8×1.25/M20×1.5	G3/4	38.1×17.5/4 - M8×1.25/M20×1.5	G3/4	38.1×17.5/4 - M8×1.25/M20×1.5
TF12	47.6×22.2\M8 \φ18(▮)	17.5×38.1\M8 \φ13(▮)	47.6×22.2\M8 \φ18(▮)	17.5×38.1\M8\ φ13 (▮)	47.6×22.2\M8 \φ18(▮)	17.5×38.1\M8\ φ13 (▮)
TF16	φ40\M8\φ20(◇)	φ30\M6\φ13 (◇)	φ40\M8\φ20(◇)	φ30\M6\φ13(◇)	φ30\M6\φ13(◇)	φ30\M6\φ13(◇)
TFL01	58.7×30.2\M10 \φ32(▬▬)	G3/4	52.2×26.2\M10 \φ25(▬▬)	G1/2	无 / N/A	G1/2
TFL02	47.6×22.2\M8 \φ18(▮)	17.5×38.1\M8	47.6×22.2\M8 \φ18(▮)	17.5×38.1\M8 \M20*1.5(▮)	47.6×22.2\M8 \φ18(▮)	17.5×38.1\M8 \M20*1.5(▮)
TFL03	φ40\4-M6\φ20(□)	φ35\4-M6\φ15(□)	φ40\4-M6\φ20(□)	φ35\4-M6\φ15(□)	M18×1.5	M14×1.5

Flat Key Shaft Extension - P型（平键轴伸）

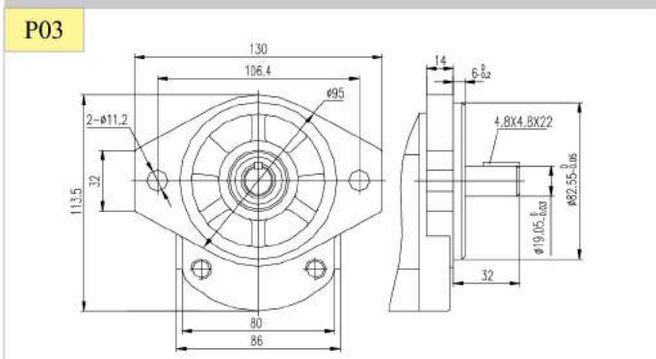
P01



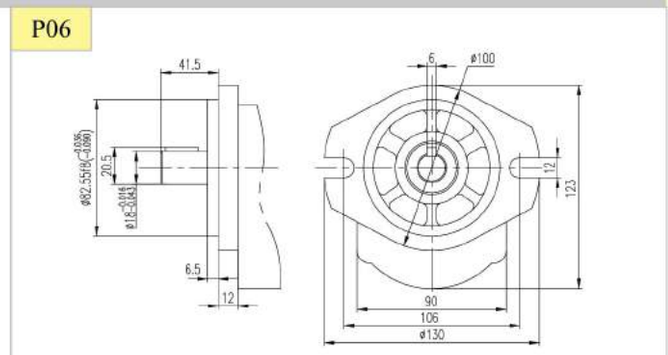
P02



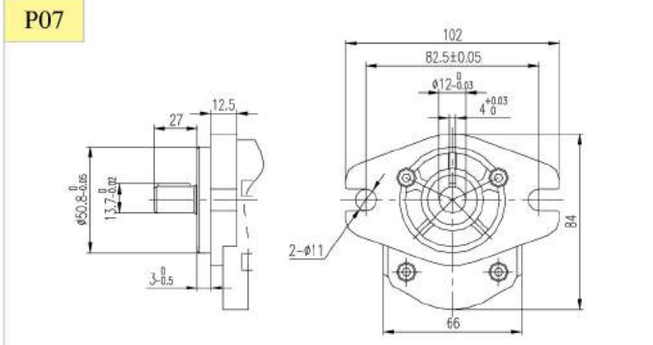
P03



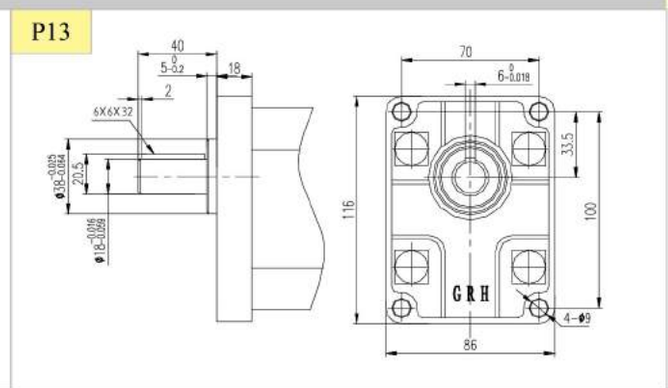
P06



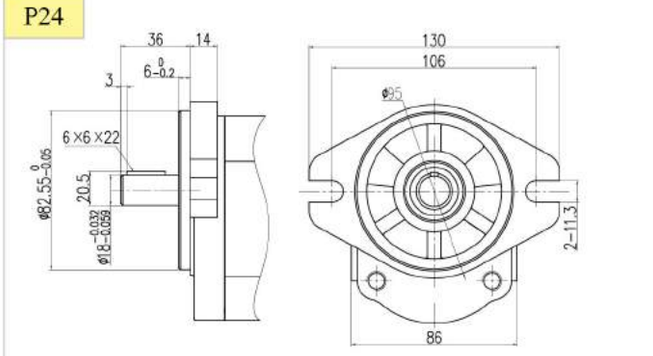
P07



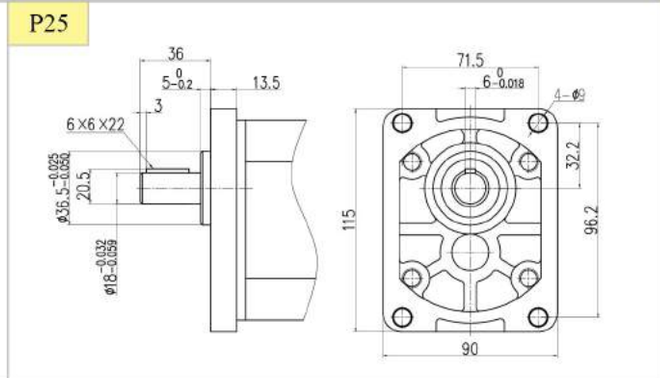
P13



P24

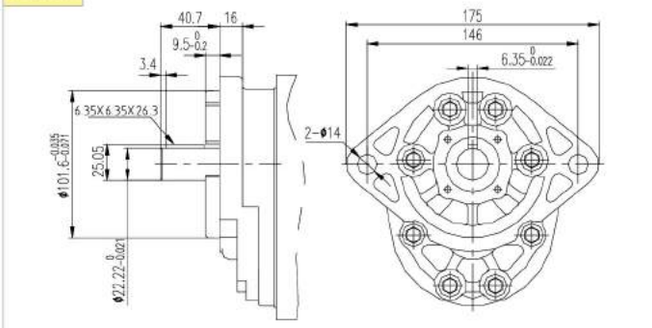


P25

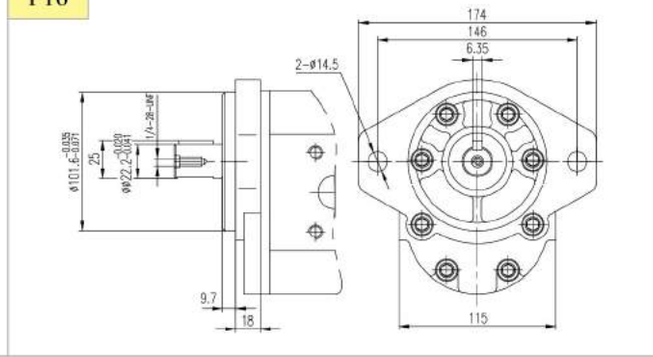


Flat Key Shaft Extension - P型（平键轴伸）

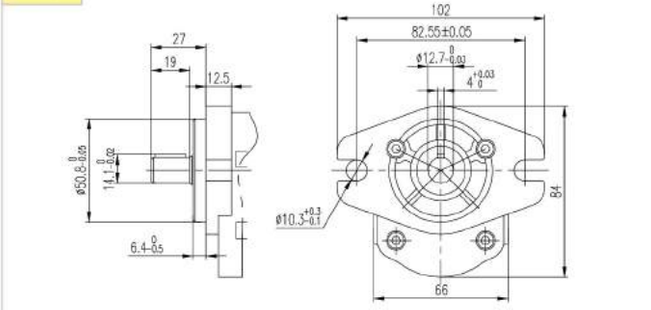
P16A



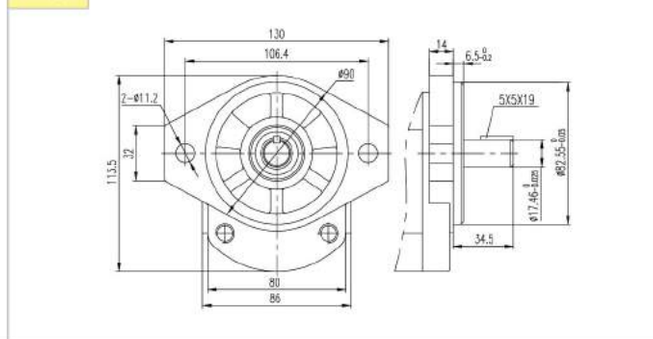
P16



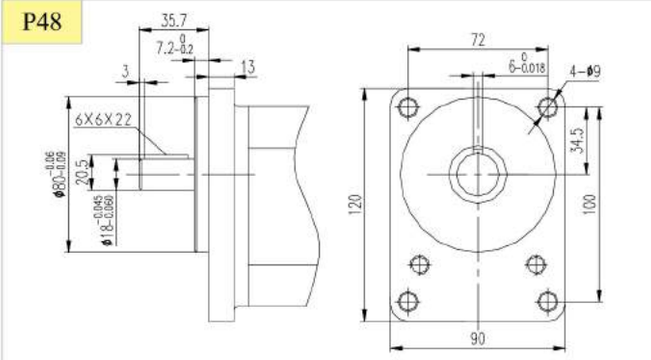
P18



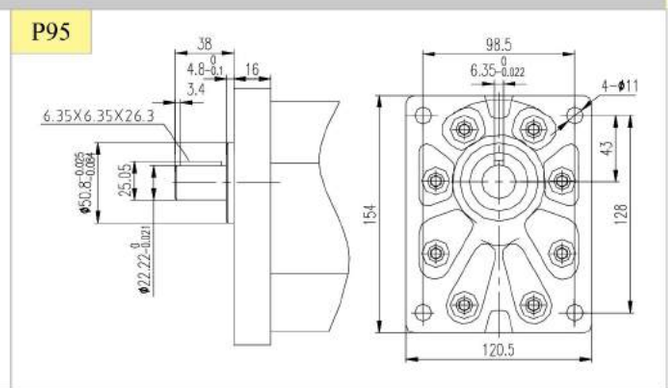
P19



P48

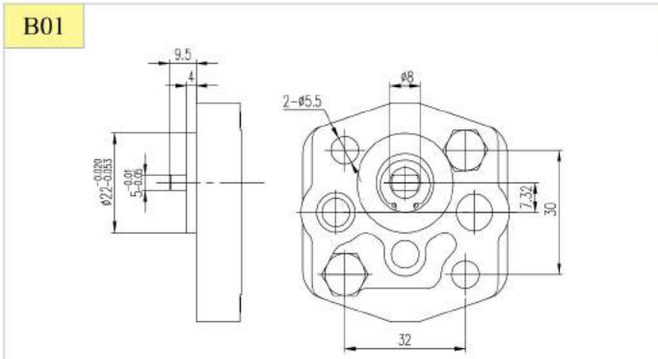


P95

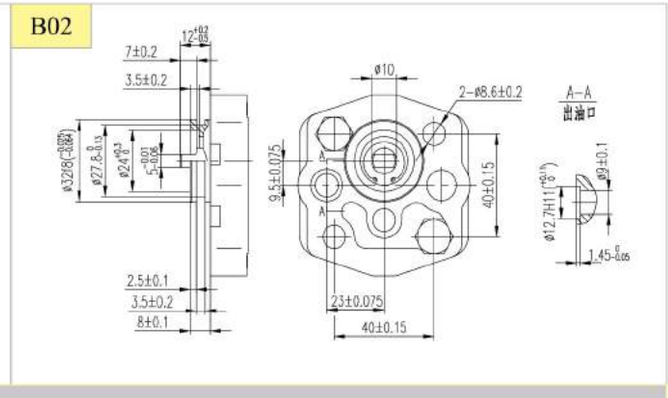


Tang Shaft - B型（扁键轴伸）

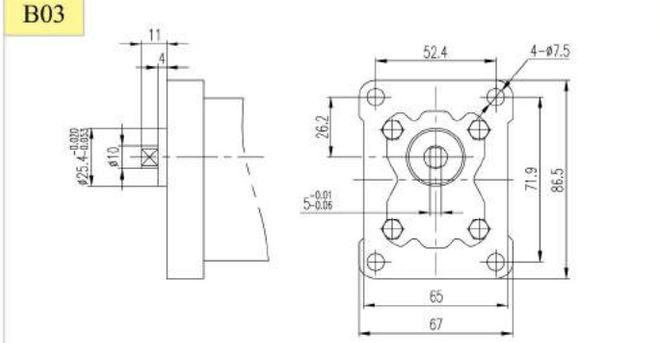
B01



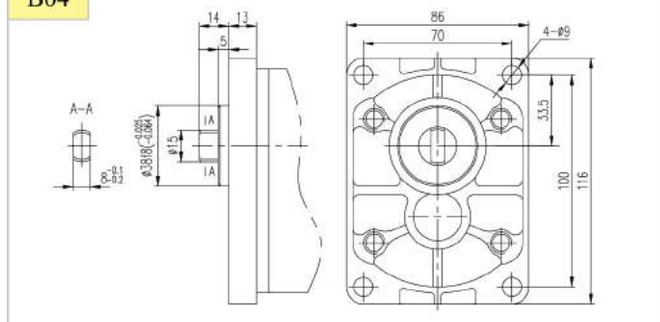
B02



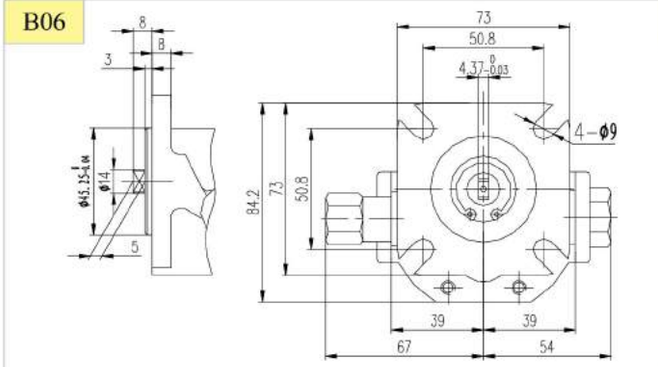
B03



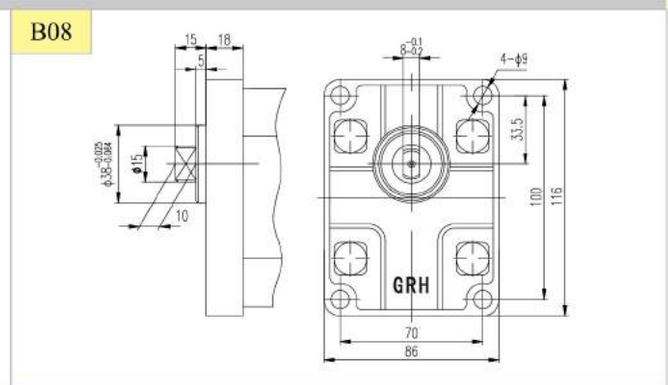
B04



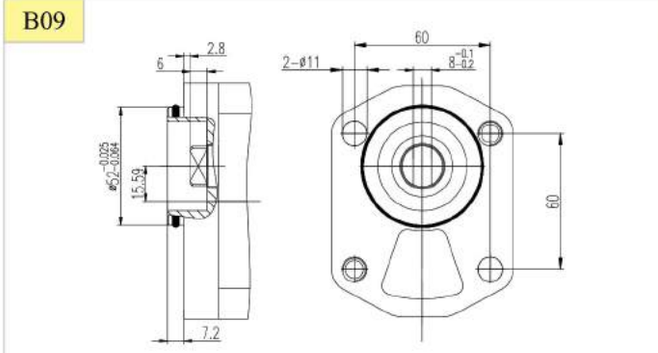
B06



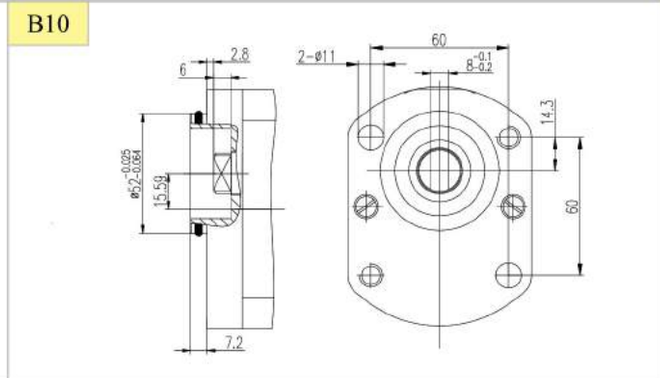
B08



B09

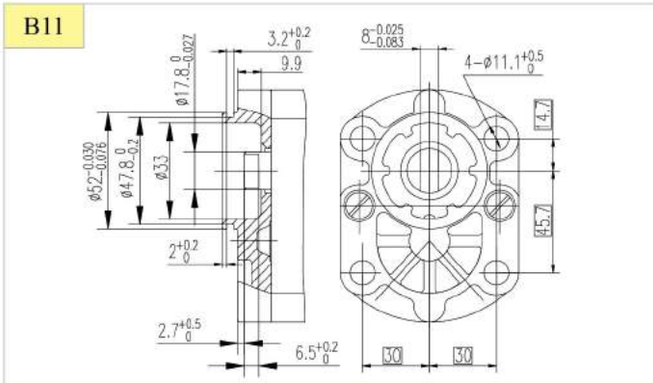


B10

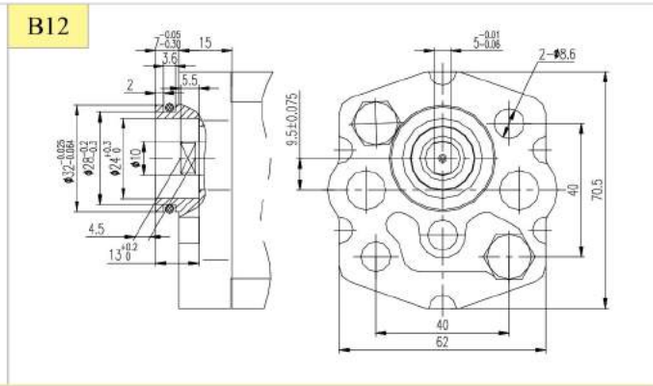


Tang Shaft - B型（扁键轴伸）

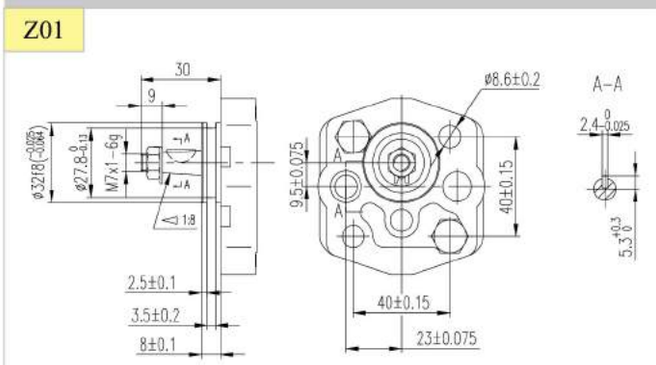
B11



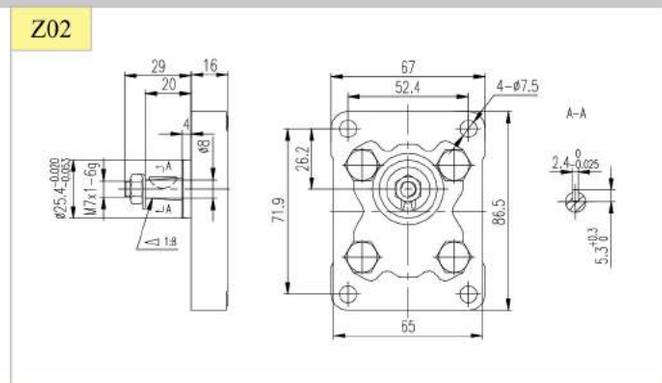
B12



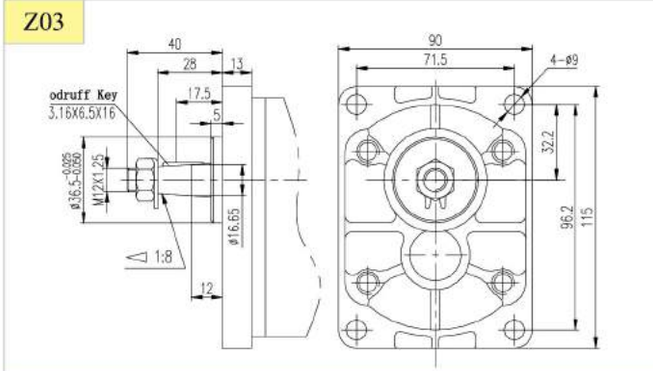
Z01



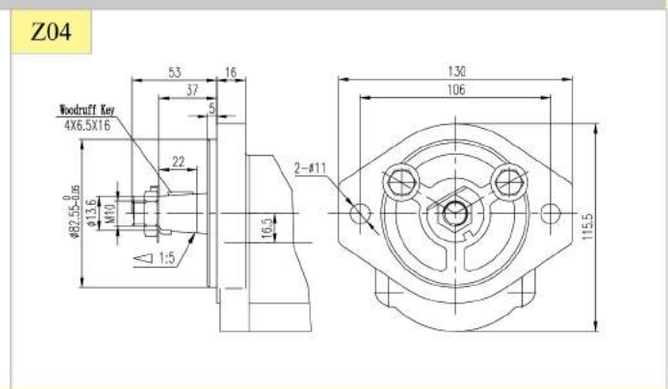
Z02



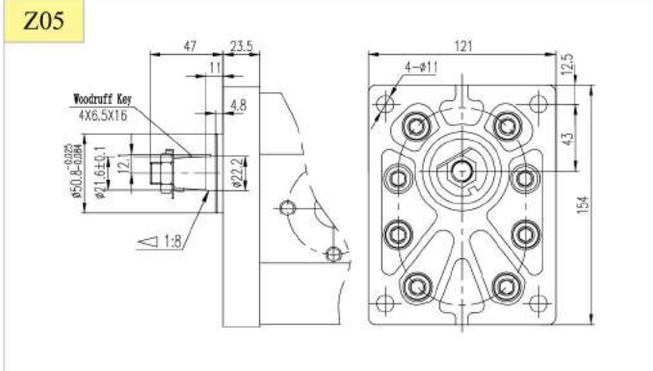
Z03



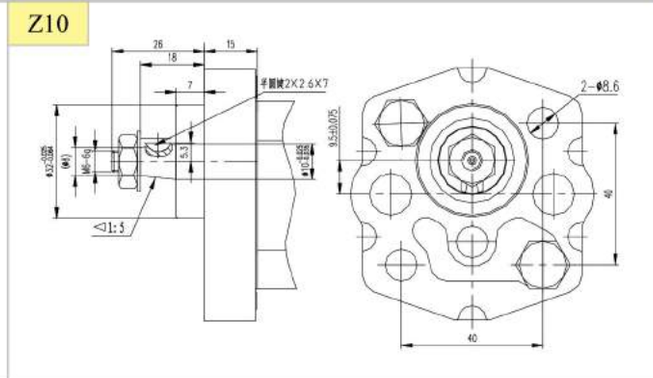
Z04



Z05

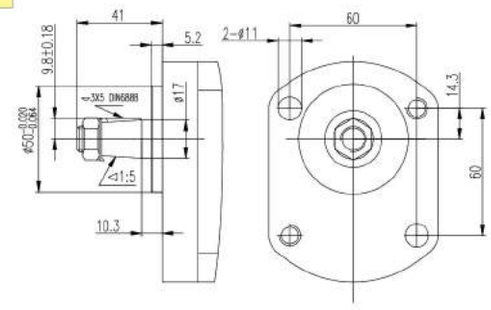


Z10

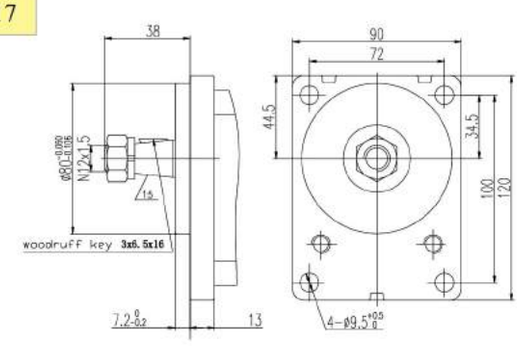


Taper Shaft - Z型（锥健轴伸）

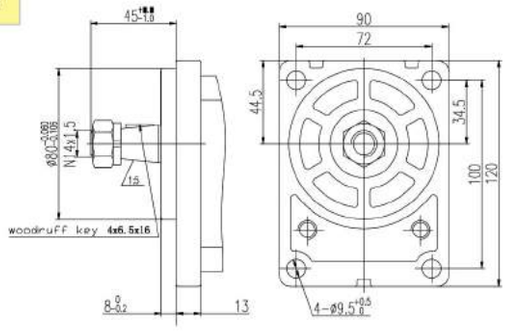
Z11



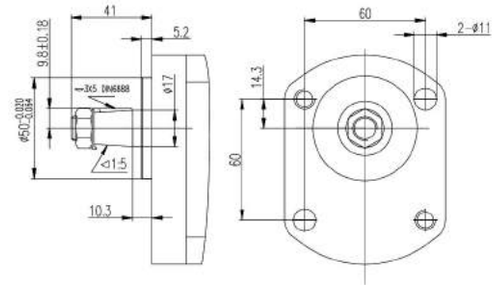
Z17



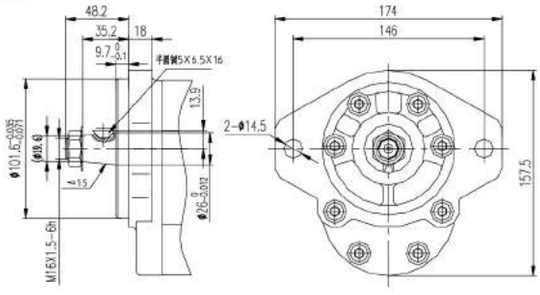
Z18



Z22

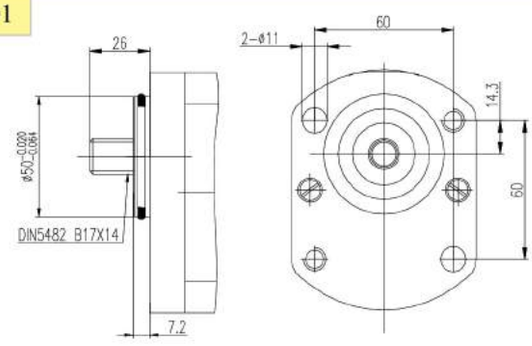


Z29

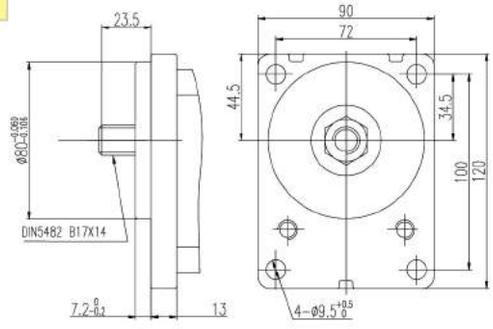


DIN involute spline shaft extension - D型（DIN渐开线花键）

D01

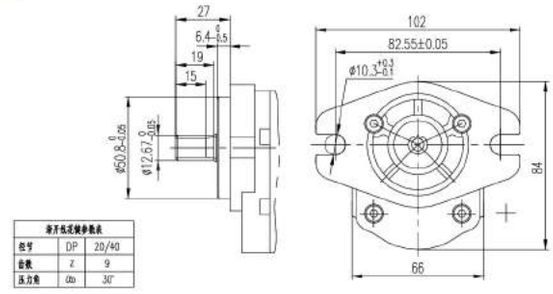


D03



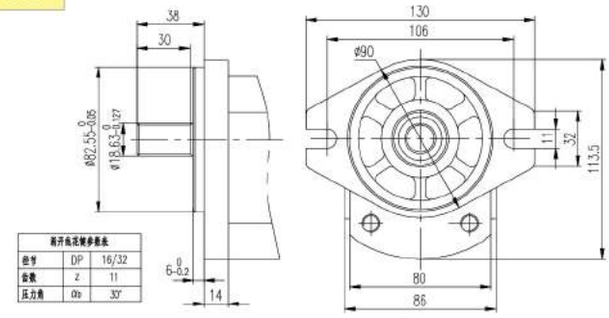
SAE Spline Shaft Extension - S型（SAE 花键）

S01



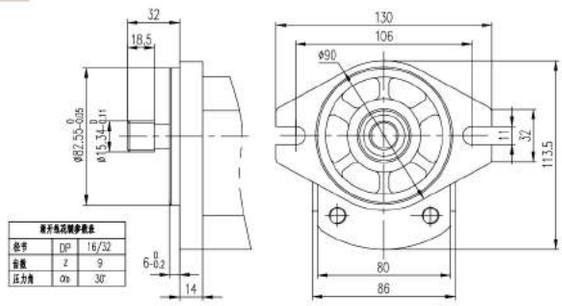
渐开线花键参数表		
径节	DP	20/40
齿数	Z	9
压力角	α0	30°

S02



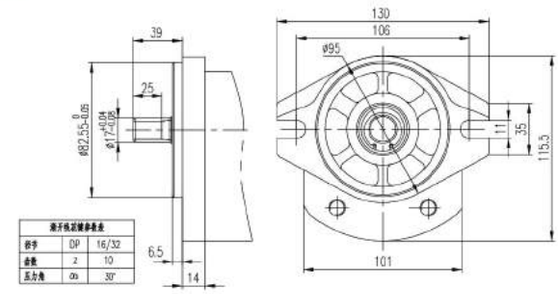
渐开线花键参数表		
径节	DP	16/32
齿数	Z	11
压力角	α0	30°

S03



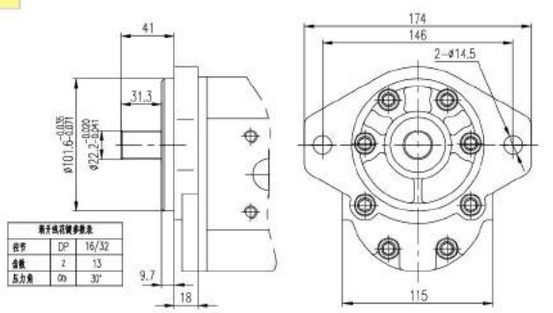
渐开线花键参数表		
径节	DP	16/32
齿数	Z	9
压力角	α0	30°

S04



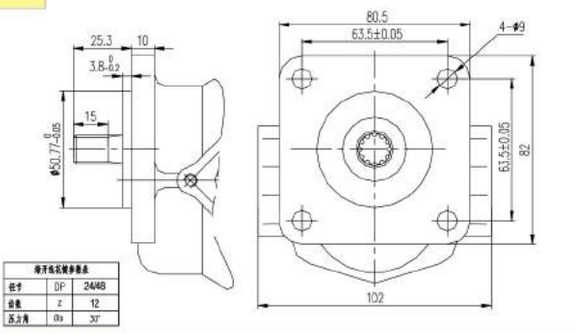
渐开线花键参数表		
径节	DP	16/32
齿数	Z	10
压力角	α0	30°

S05



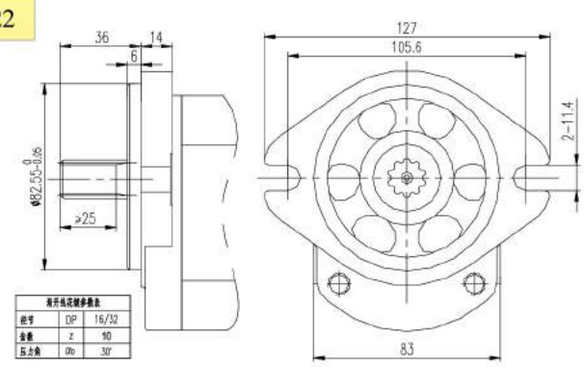
渐开线花键参数表		
径节	DP	16/32
齿数	Z	13
压力角	α0	30°

S08



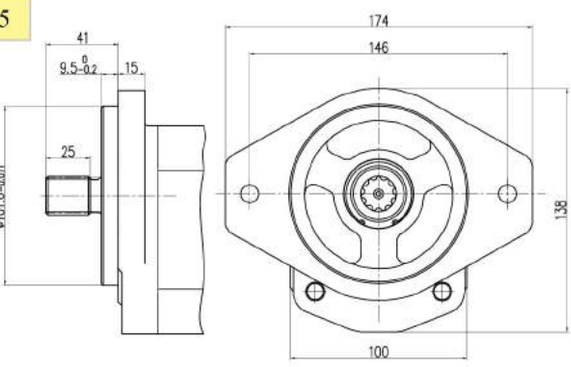
渐开线花键参数表		
径节	DP	24/48
齿数	Z	12
压力角	α0	30°

S22



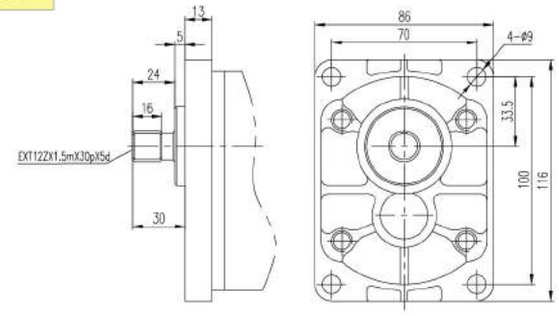
渐开线花键参数表		
径节	DP	16/32
齿数	Z	10
压力角	α0	30°

S95

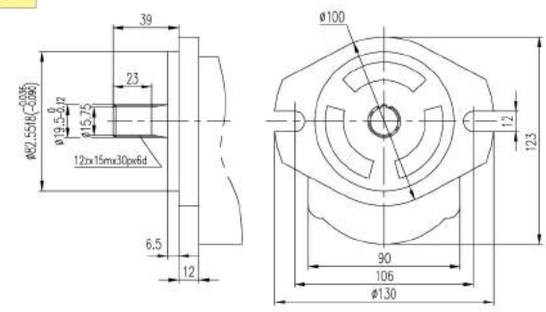


Metric Involute Spline Shaft Extension - J型（渐开线花键）

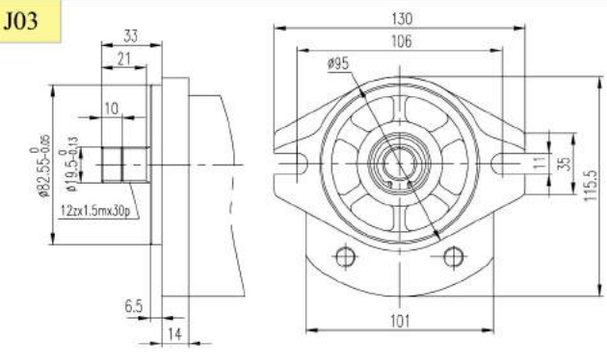
J01



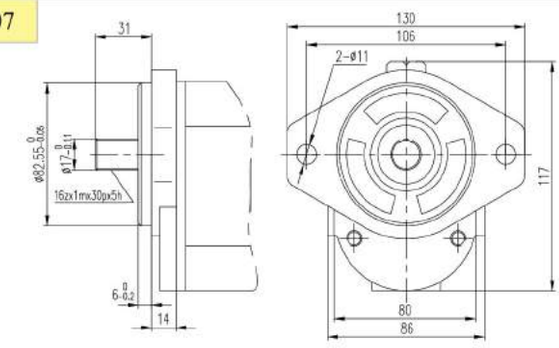
J02



J03

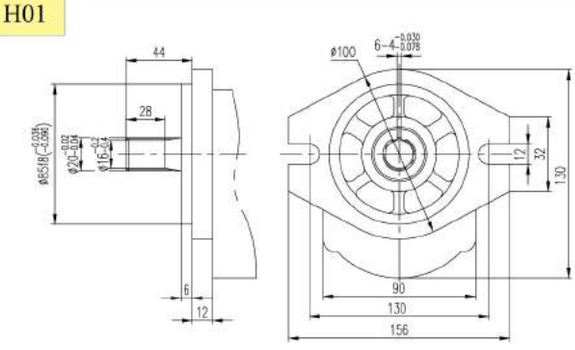


J07

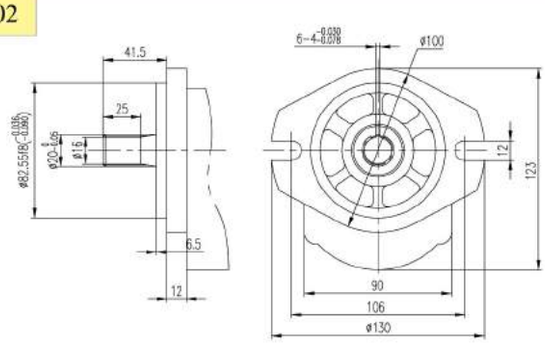


Rectangle spline shaft extension - H型（矩形花键）

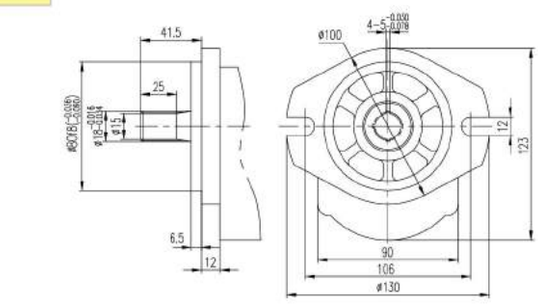
H01



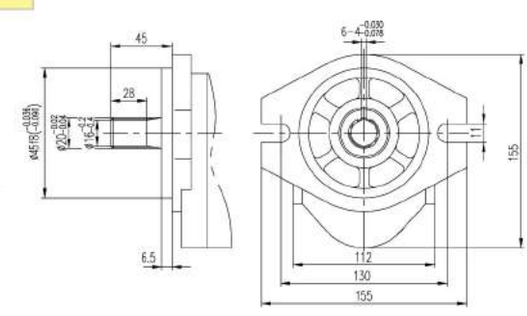
H02



H03

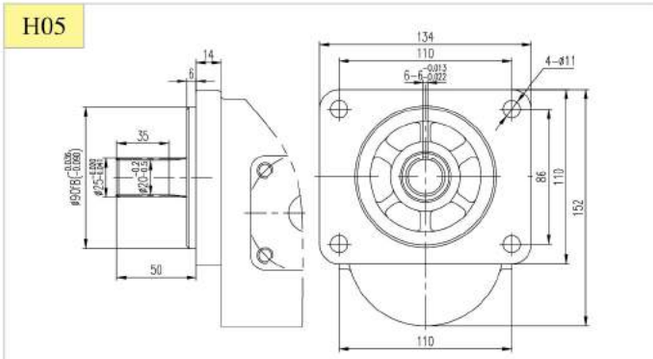


H04

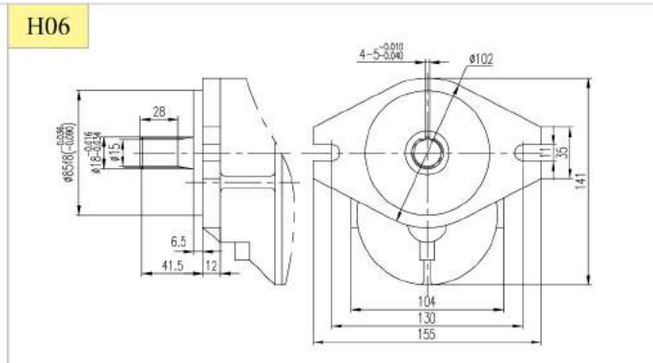


Rectangle Spline Shaft Extension - H型（矩形花键）

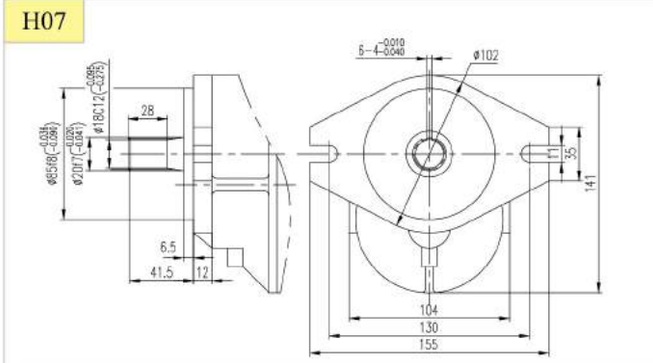
H05



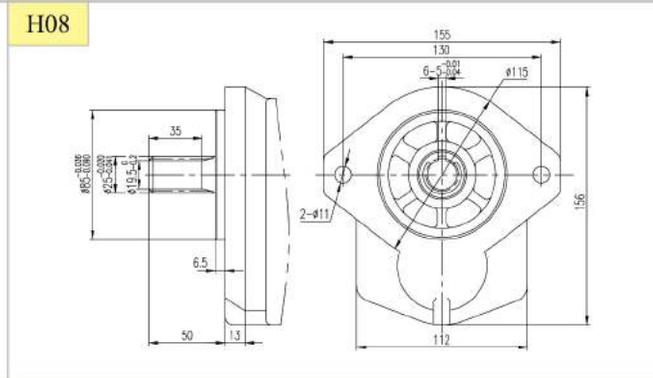
H06



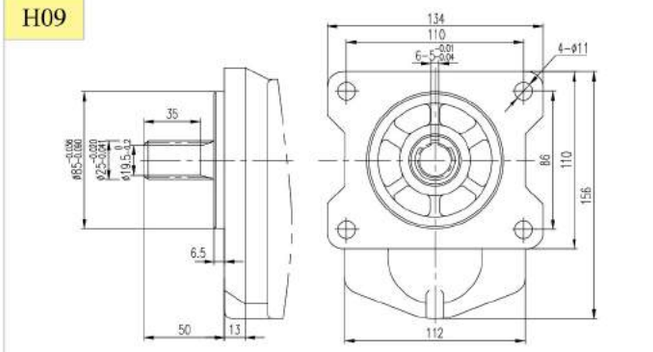
H07



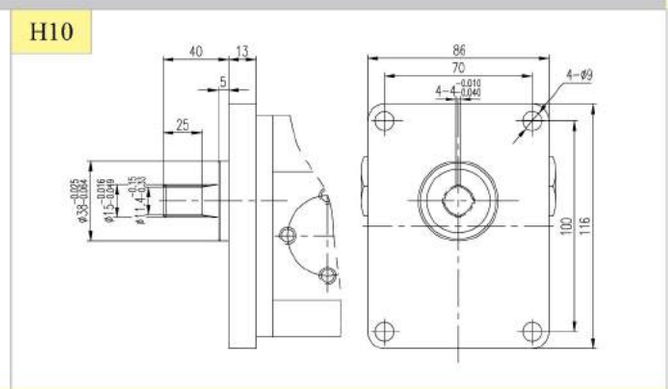
H08



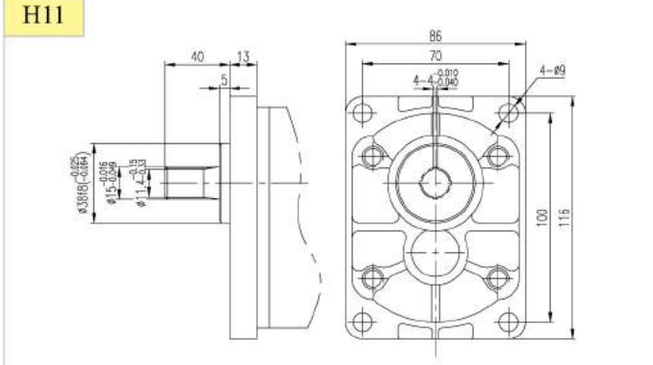
H09



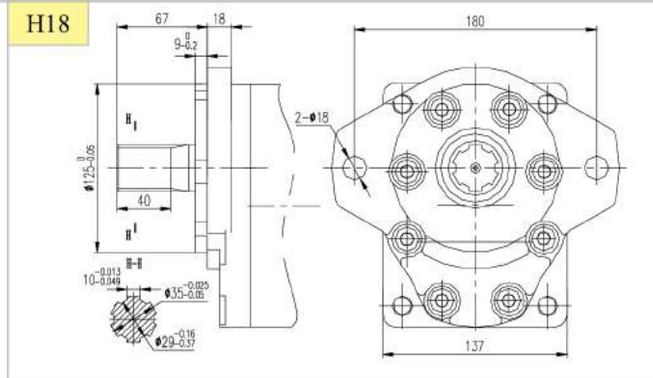
H10



H11

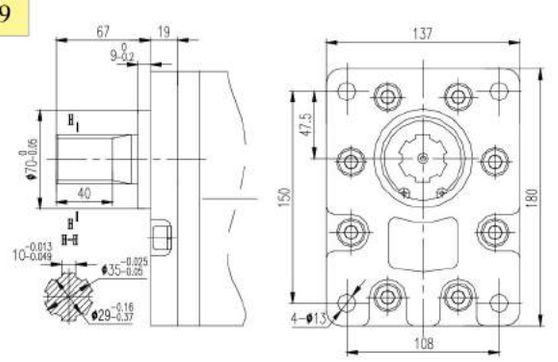


H18

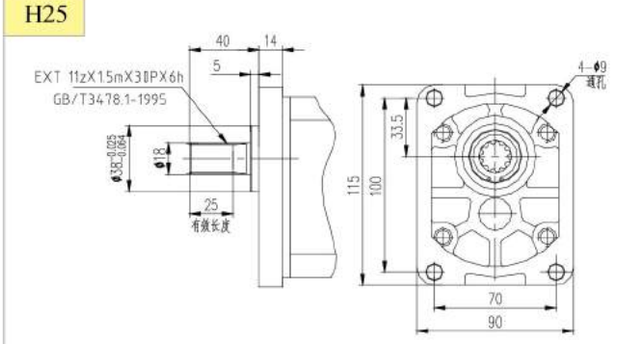


Rectangle Spline Shaft Extension - H型（矩形花键）

H19



H25



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