

● HTP 系列简介 Brief introduction of HTP series

HTP 系列高压齿轮泵是我公司研制的一种新型高压齿轮泵，此产品获得国家发明专利，其最高工作压力可达 31.5MPa，具有高效率，抗冲击性能好，噪声低，抗油污能力强，体积小，重量轻，使用寿命长等特点。适用于工程机械，煤矿机械，钻探机械，石油机械等设备液压系统。

HTP series high-pressure gear pump is a new type of high-pressure gear pump developed by our company, this product has obtained the national invention patent, its highest working pressure can reach 31.5 MPa, has the high efficiency, the impact resistance performance is good, the noise is low, oil resistance, small size, light weight, long service life and so on. Apply to engineering machinery, coal mining machinery, drilling machinery, petroleum machinery and other equipment hydraulic system.

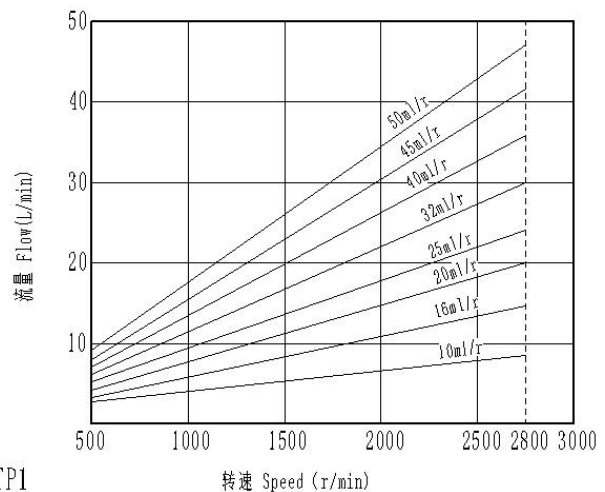
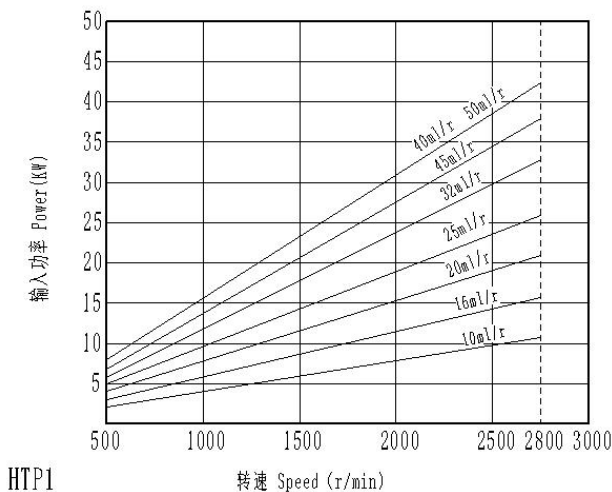
● 性能参数 Specifications

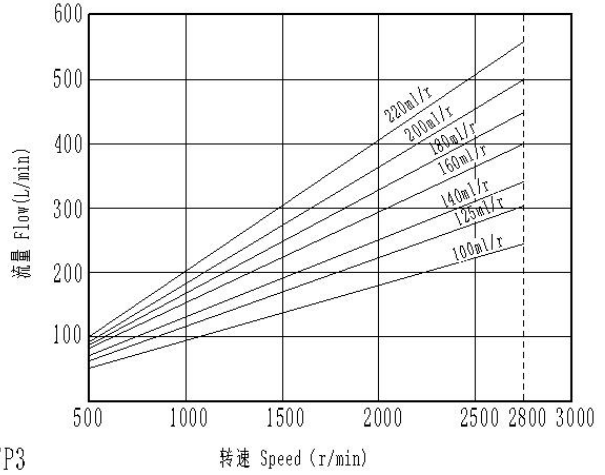
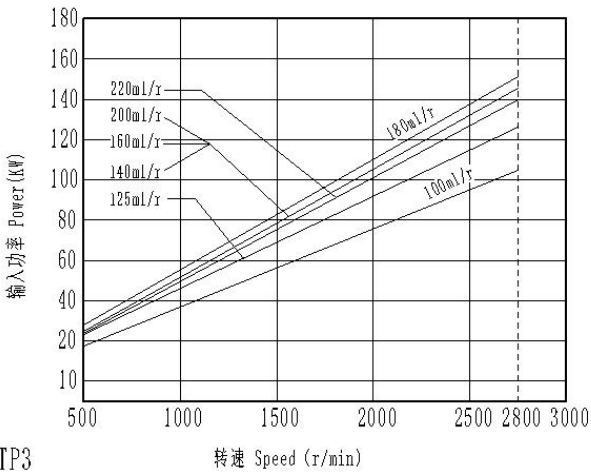
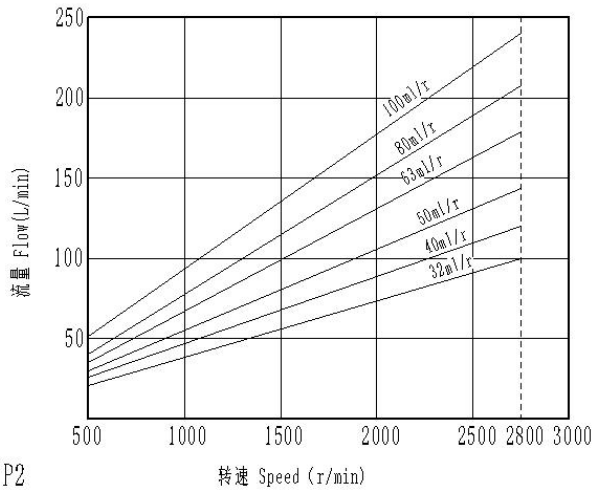
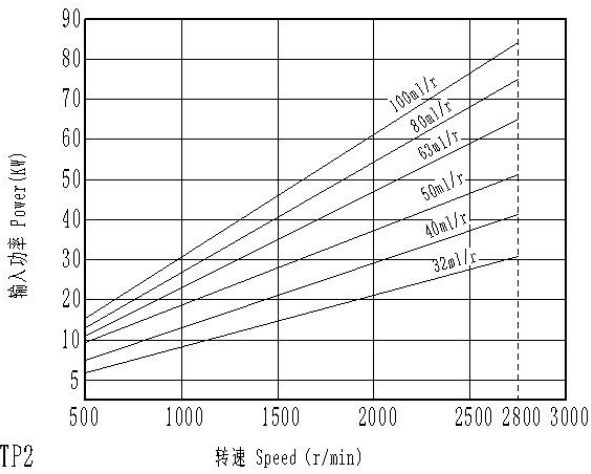
系列 Series	公称排量 Nominal Displacement (ml/r)	中泵壳体 E Intermediate Shell (mm)	后泵壳体 D Rear Housing (mm)	压力 Pressure (MPa)		转速 Speed (r/min)		输入功率 Input Power (KW)	容积效率 Volumetric Efficiency (≥%)	总效率 Total Efficiency (≥%)	重量 Weight (kg)
				额定 Rated	最高 Max	额定 Rated	最高 Max				
HTP1	10	105	83	23	31.5	2500	2800	9.26	91	83	12.1
	16	112	90					14.81			12.5
	20	117	95					18.52			12.8
	25	119	99	23.15	13.1						
	32	122	102	29.63	13.7						
	40	125	104	37.04	14.2						
	45	130	108	33.33	14.6						
HTP2	50	136	114	16	20	37.04	14.8	92	83	83	20.2
	32	78	113	23	31.5	26.07	20.6				
	40	81	118			32.59	21.2				
	50	84	122			40.74	22.0				
	63	89	126	23	28	51.33	23.0				
	80	95	138	20	25	65.19	24.1				
	100	111	173	20	25	65.19	29.5				
HTP3	63	138	99	23	28	2250	2800	52.50	92	83	31.2
	100	155	116					83.33			32.5
	125	160	121					104.17			33.6
	140	166	127	116.67	34.4						
	160	172	133	133.33	35.4						
	180	179	140	120.00	36.3						
	200	188	149	20	25			116.67			37.3
220	197	158	20	25	114.58	37.3					

注：本表仅列出了单泵的性能参数，对于双联泵、三联泵等多联泵，其性能参数除输入功率为各单泵输入功率之和外，其余参数与单泵相同。

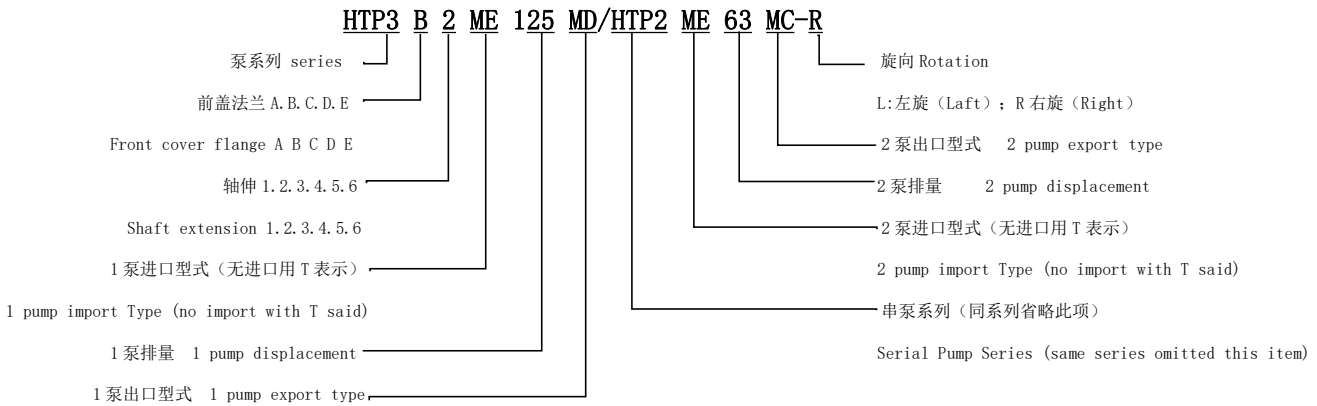
Notes: The upper table lists specification of single pump, the specification of double pump of multiple pump is the same as that of single pump except input power is sum of that of single pump.

● 性能曲线 Performance curve



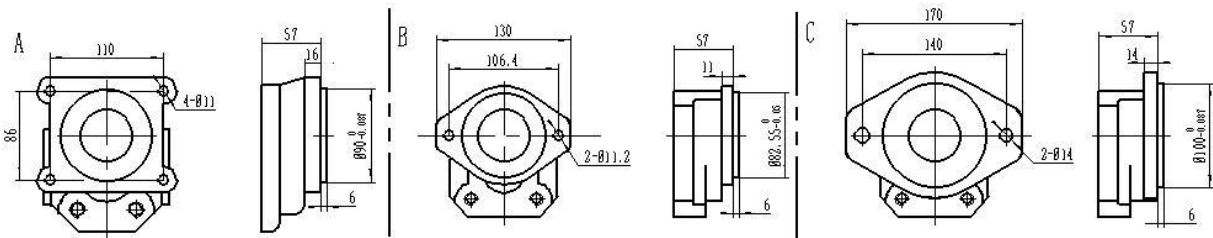


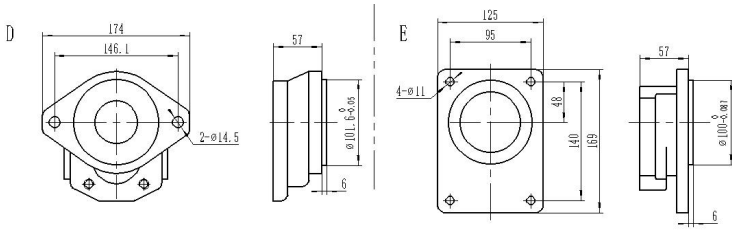
●型号说明 Model coding



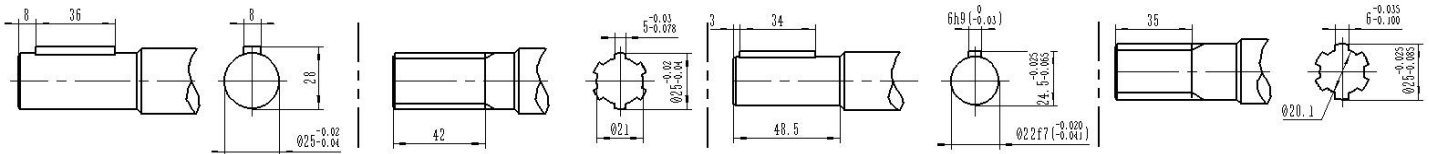
●HTP1 尺寸数据 (mm/in) HTP1 size data(mm/in)

●前盖法兰 Front cover flange





●轴伸 Drive shafts



轴伸形式 1

DRIVE SHAFT 1

轴伸形式 2

DRIVE SHAFT 2

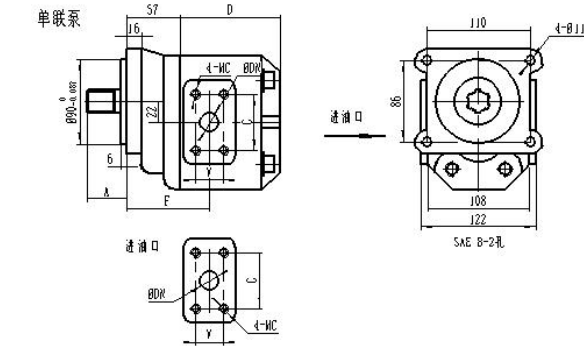
轴伸形式 3

DRIVE SHAFT 3

轴伸形式 4

DRIVE SHAFT 4

●外形安装联接尺寸 Outline Dimensions (注: 图示为右旋。 Note: The picture is right-handed.)



A. Axis 2 shown, other shafts available.

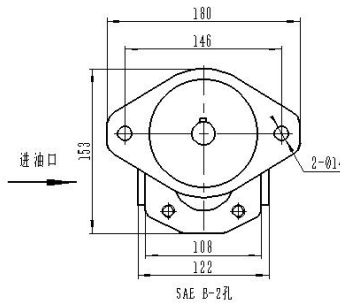
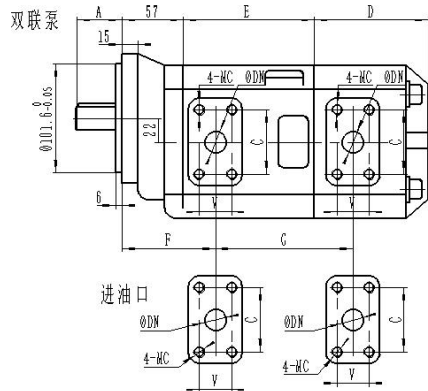
图示为 2 号轴伸, 轴伸形式有多种选择。

D. Width of the shell

壳体宽度

F. Shell width minus 6

壳体宽度-6



A. Axis 2 shown, other shafts available.

图示为 2 号轴伸, 轴伸形式有多种选择。

D. Width of rear housing

后泵壳体宽度

E. Width of intermediate shell

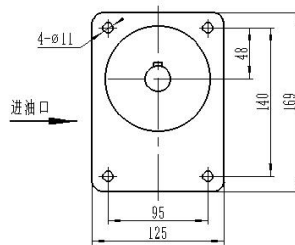
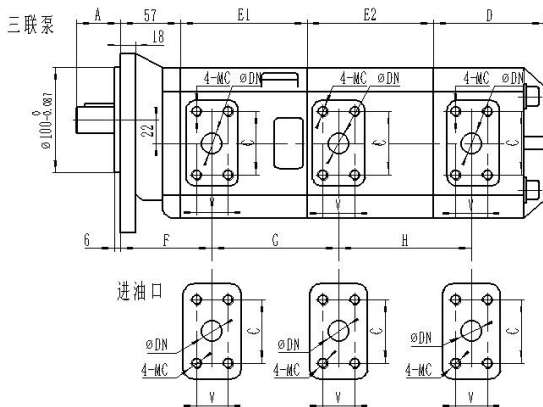
中泵壳体宽度

F. Subtract 25 from the width of the intermediate shell

中泵壳体宽度-25

G. 17 plus width of intermediate shell

17+中泵壳体宽度



A. Axis 2 shown, other shafts available.

图示为 2 号轴伸, 轴伸形式有多种选择。

D. Width of rear housing

后泵壳体宽度

E1.E2: Width of intermediate shell 1.2

中泵壳体 1.2 宽度

F. Subtract 25 from the width of the intermediate shell 1

中泵壳体 1 宽度-25

G. 30 plus width of intermediate shell 1

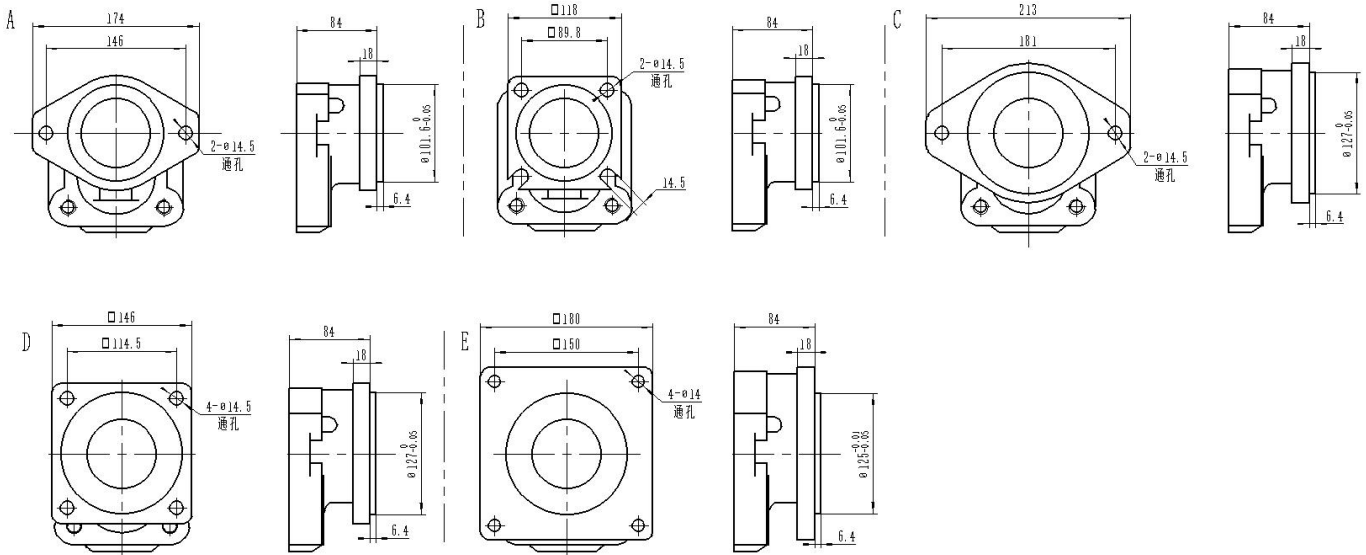
30+中泵壳体 1 宽度

H. 17 plus width of intermediate shell 2

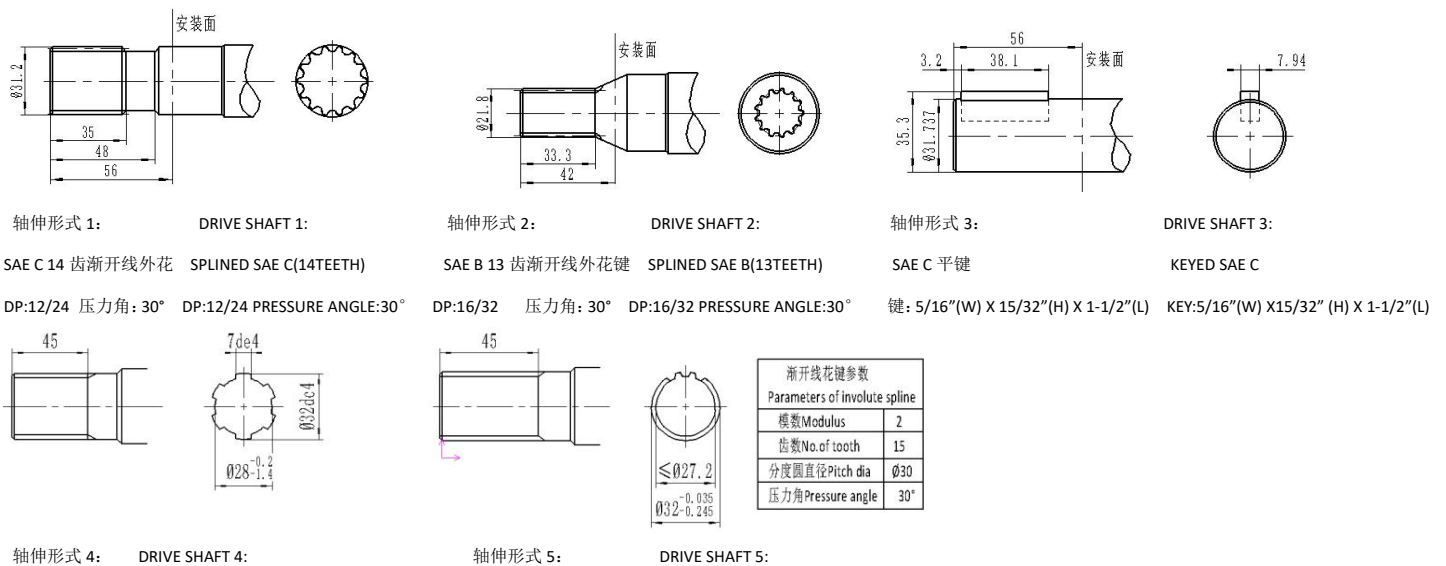
17+中泵壳体 2 宽度

● HTP2 尺寸数据 (mm/in) HTP2 size data(mm/in)

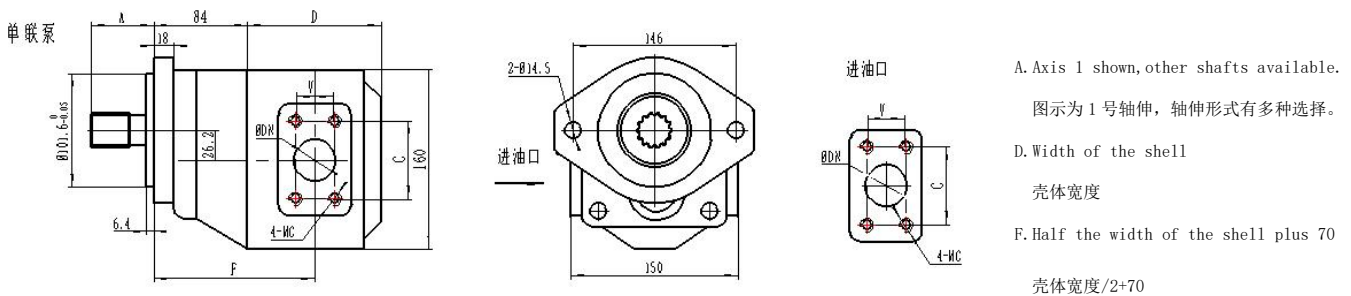
● 前盖法兰 Front cover flange



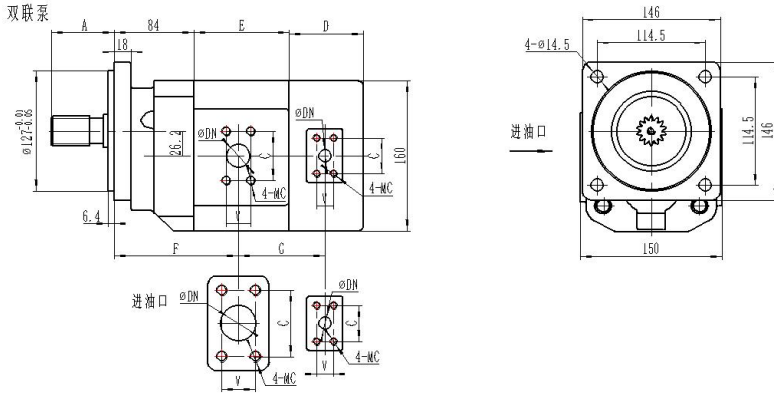
● 轴伸 Drive shafts



● 外形安装联接尺寸 Outline Dimensions (注: 图示为右旋。 Note: The picture is right-handed.)



双联泵



A. Axis 1 shown, other shafts available.

图示为 1 号轴伸, 轴伸形式有多种选择。

D. Width of rear housing

后泵壳体宽度

E. Width of intermediate shell

中泵壳体宽度

F. Half the width of the middle shell plus 70

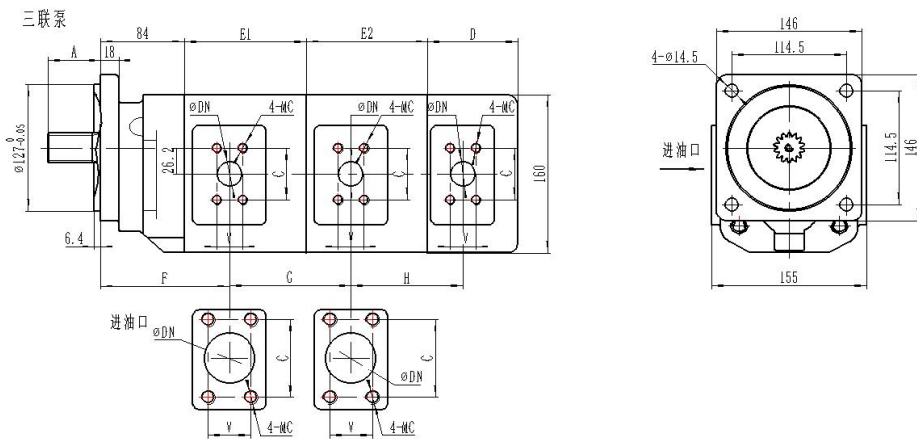
中泵壳体宽度/2+70

G. Half the width of the middle shell plus half the

width of the rear shell minus 3.5

中泵壳体宽度/2+后泵壳体宽度/2-3.5

三联泵



A. Axis 5 shown, other shafts available.

图示为 5 号轴伸, 轴伸形式有多种选择。

D. Width of rear housing

后泵壳体宽度

E1.E2: Middle shell width

中泵 1.2 壳体宽度

F. Half the width of the middle shell 1 plus 70

中泵 1 壳体宽度/2+70

G. Half the width of the middle shell 1 plus half

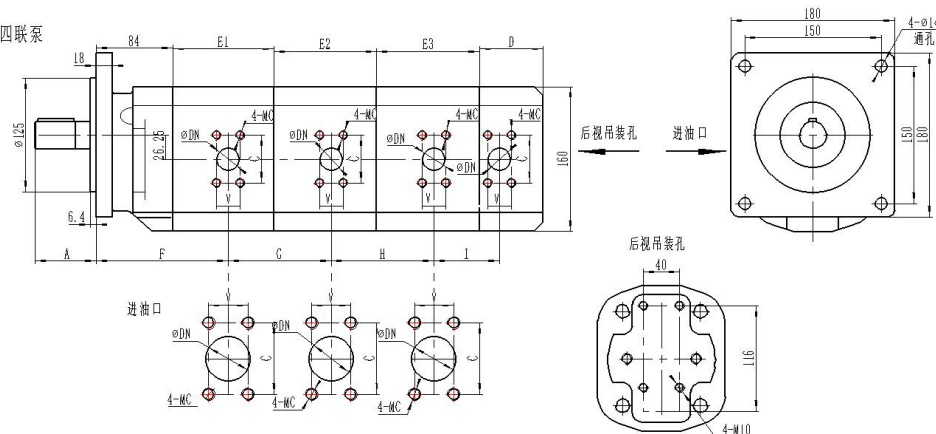
the width of the middle shell 2 plus 14.5

中泵 1 壳体宽度/2+中泵 2 壳体宽度/2+14.5

H. Add half the width of the middle shell 2 plus half the width of the rear shell minus 3.5

中泵 2 壳体宽度/2+后泵壳体宽度/2-3.5

四联泵



A. Axis 3 shown, other shafts available.

图示为 3 号轴伸, 轴伸形式有多种选择。

D. Width of rear housing

后泵壳体宽度

E1.E2.E3: Width of intermediate shell 1.2.3

中泵 1.2.3 壳体宽度

F. Half the width of intermediate shell 1 plus 70

中泵 1 壳体宽度/2+70

G. Half the width of intermediate shell 1 plus half

the width of intermediate shell 2 plus 14.5

中泵 1 壳体宽度/2+中泵 2 壳体宽度/2+14.5

H. Half the width of intermediate shell 2 plus half the width of intermediate shell 3 plus 14.5

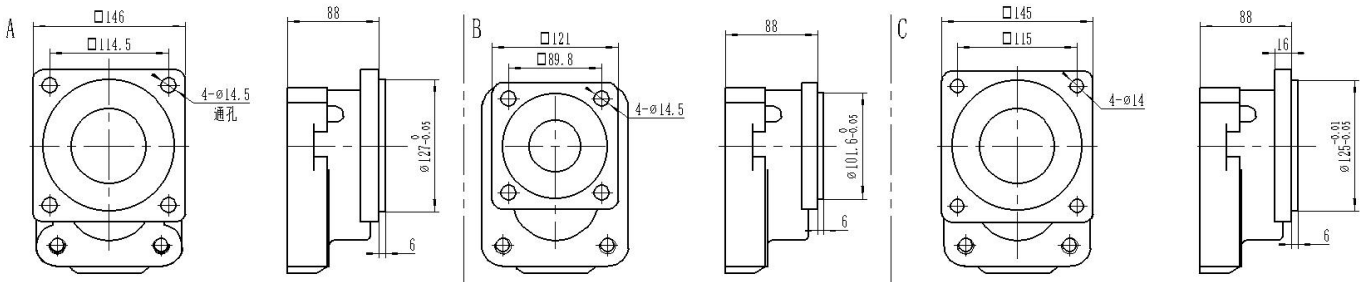
中泵 2 壳体宽度/2+中泵 3 壳体宽度/2+14.5

I. Add half the width of intermediate shell 3 plus half the width of the rear shell minus 3.5

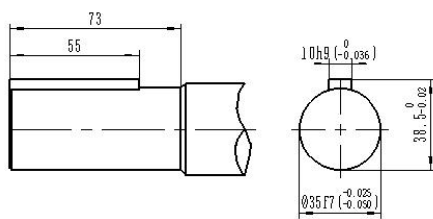
中泵 3 壳体宽度/2+后泵壳体宽度/2-3.5

● HTP3 尺寸数据 (mm/in) HTP3 size data(mm/in)

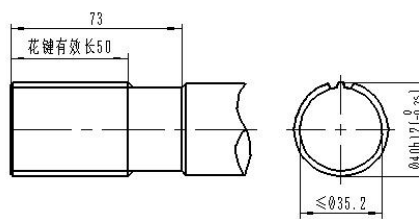
● 前盖法兰 Front cover flange



● 轴伸 Drive shafts

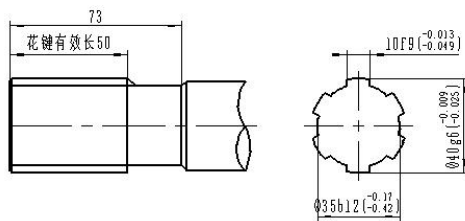


轴伸形式 1: DRIVE SHAFT 1

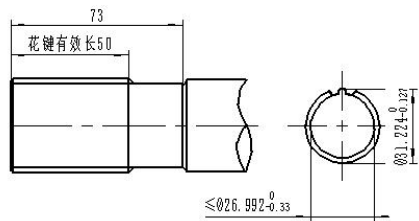


轴伸形式 2: DRIVE SHAFT 2

渐开线花键参数 Parameters of involute spline	
模数 Modulus	2
齿数 No. of tooth	19
压力角 Pressure angle	30°
分度圆直径 Pitch dia	φ38
精度等级 Accuracy grade	6f



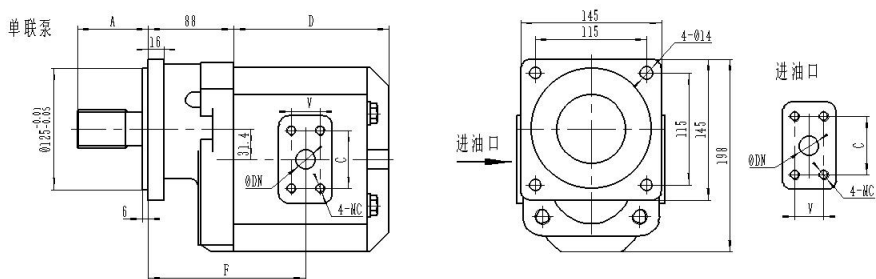
轴伸形式 3: DRIVE SHAFT 3



轴伸形式 4: DRIVE SHAFT 4

SAE 渐开线花键参数 Parameters of SAE involute spline	
径节 D.P	12/24
齿数 No. of tooth	14
压力角 Pressure angle	30°
精度等级 Accuracy grade	II

● 外形安装联接尺寸 Outline Dimensions (注: 图示为右旋。 Note: The picture is right-handed.)



A. Axis 4 shown, other shafts available.

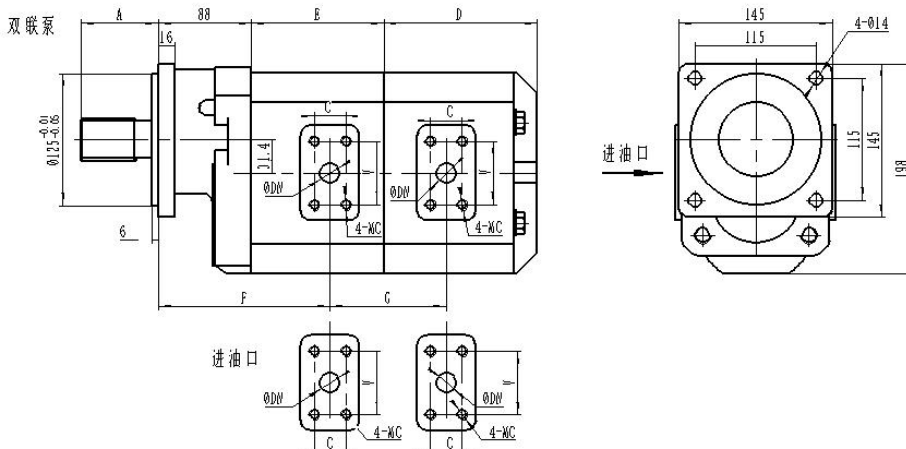
图示为轴 4, 轴伸形式有多种选择。

D. width of the shell

壳体宽度

F. 115 plus half of the displacement

115+排量/2



A. Axis 4 shown, other shafts available.

图示为轴 4, 轴伸形式有多种选择。

D. Width of rear housing

后泵壳体宽度

E. Width of intermediate shell

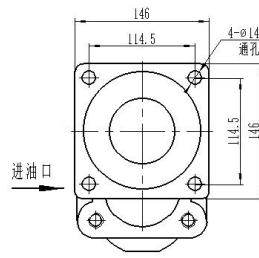
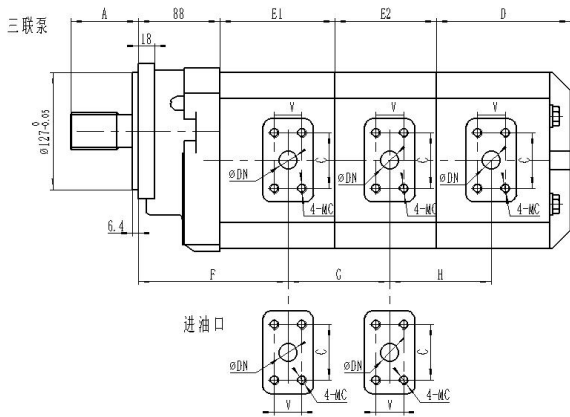
中泵壳体宽度

F. 115 plus half of the displacement

115+排量/2

G. Half the width of the rear housing plus 88

88+后泵壳体宽度



A. Axis 4 shaft shown, other shafts available.

图示为轴4，轴伸形式有多种选择。

D. Width of rear housing

后泵壳体宽度

E1.E2:Width of intermediate shell 1.2

中泵壳体 1.2 宽度

F. 115 plus half of the displacement

115+排量/2

G. Half the width of intermediate shell 1 plus half the

width of intermediate shell 2 plus 66.7

66.7+中泵壳体 1 宽度/2+中泵壳体 2 宽度/2

H. Half the width of the rear housing plus 88

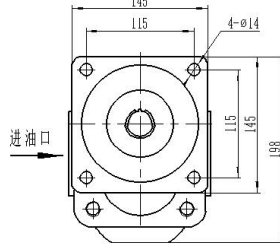
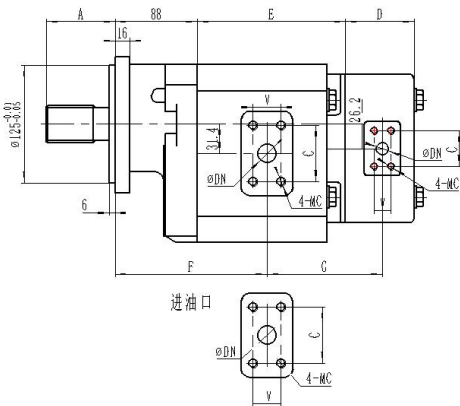
88+后泵壳体宽度

●HTP3/HTP2 外形安装联接尺寸 (注: 图示为右旋。前轴前法兰都参照前泵的前轴前法兰。

HTP3 / HTP2 outline dimensions (Note: The picture is right-handed. Both the front axle and front flange refer to the front axle and front flange of the front

gear pump)

HTP3/HTP2双联泵



A. The figure shows axis 4 of HTP3, other shafts available.

图示为 HTP3 轴 4，轴伸形式有多种选择。

D. Rear housing width of HTP2

HTP2 后泵壳体宽度

E. The width of the middle shell of HTP3 plus 38

HTP3 中泵壳体宽度+38

F. Half the displacement of HTP3 plus 115

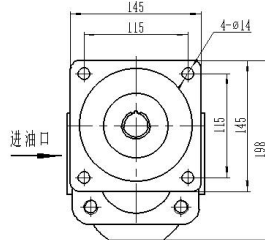
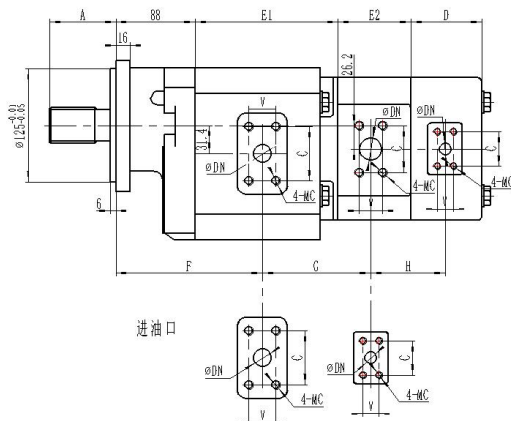
HTP3 排量/2+115

G. Half the width of the middle shell of HTP2 plus half the displacement

of HTP3 plus 52

HTP3 排量/2+HTP2 中泵壳体宽度/2+52

HTP3/HTP2/2三联泵



A. The figure shows axis 4 of HTP3, other shafts available.

图示为 HTP3 轴 4，轴伸形式有多种选择。

D. Rear housing width of HTP2

HTP2 后泵壳体宽度

E1. The width of the middle shell of HTP3 plus 38

HTP3 中泵壳体宽度+38

E2. The width of the middle shell of HTP2

HTP2 中泵壳体宽度

F. Half the displacement of HTP3 plus 115

HTP3 排量/2+115

G. Half the width of the middle shell of HTP2 plus half the

displacement of HTP3 plus 52

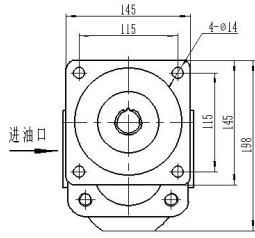
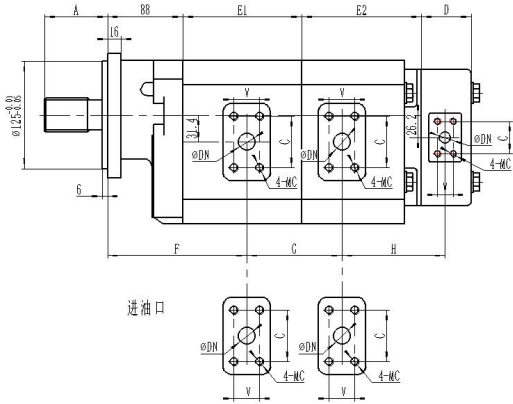
HTP3 排量/2+HTP2 中泵壳体宽度/2+52

H. Half the width of the middle shell of HTP2 plus half the width

of the rear shell minus 3.5

HTP2 中泵壳体宽度/2+后泵壳体宽度/2-3.5

HTP3/3/HTP2三联轴



A. The figure shows axis 4 of HTP3, other shafts available.

图示为 HTP3 轴 4，轴伸形式有多种选择。

D. Rear housing width of HTP2

HTP2 后泵壳体宽度

E1. The width of the middle shell of HTP3

HTP3 中泵壳体宽度

E2. The width of the rear housing of HTP3 plus 38

HTP3 后泵壳体宽度 +38

F. Half the displacement of HTP3 plus 115

HTP3 排量/2+115

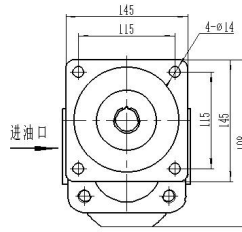
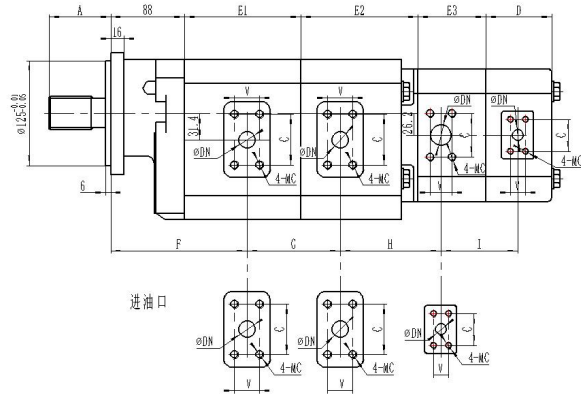
G. Half the width of the middle shell of HTP3 plus half the width of the rear shell of HTP3 plus 66.7

HTP3 中泵壳体宽度/2+HTP3 后泵壳体宽度/2+66.7

H. Half the width of the middle shell of HTP2 plus half the displacement of HTP3 plus 52

HTP2 中泵壳体宽度/2+HTP3 排量/2+52

HTP3/3/HTP2/2四联轴



A. The figure shows axis 4 of HTP3, other shafts available.

图示为 HTP3 轴 4，轴伸形式有多种选择。

D. Rear housing width of HTP2

HTP2 后泵壳体宽度

E1. The width of the middle shell of HTP3

HTP3 中泵壳体宽度

E2. The width of the rear housing of HTP3 plus 38

HTP3 后泵壳体宽度 +38

E3. The width of the middle shell of HTP2

HTP2 中泵壳体宽度

F. Half the displacement of HTP3 plus 115

HTP3 排量/2+115

G. Half the width of the middle shell of HTP3 plus half the width of the rear shell of HTP3 plus 66.7

HTP3 中泵壳体宽度/2+HTP3 后泵壳体宽度/2+66.7

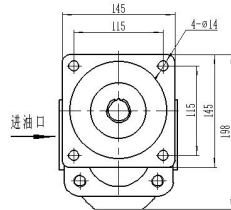
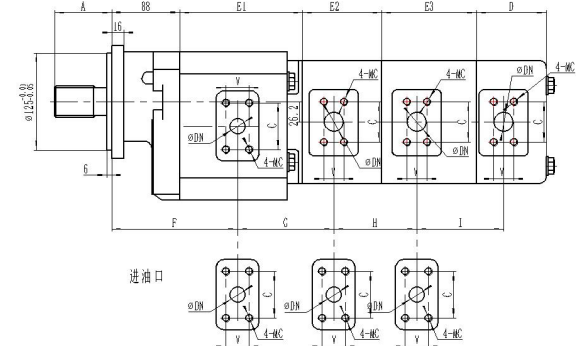
H. Half the width of the middle shell of HTP2 plus half the displacement of HTP3 plus 52

HTP2 中泵壳体宽度/2+HTP3 排量/2+52

I. Half the width of the middle shell of HTP2 plus half the width of the rear shell minus 3.5

HTP2 中泵壳体宽度/2+后泵壳体宽度/2-3.5

HTP3/HTP2/2/2四联轴



A. The figure shows axis 4 of HTP3, other shafts available.

图示为 HTP3 轴 4，轴伸形式有多种选择。

D. Rear housing width of HTP2

HTP2 后泵壳体宽度

E1. The width of the rear housing of HTP3 plus 38

HTP3 后泵壳体宽度+38

E2. E3: The width of the middle shell of HTP2

HTP2 中泵壳体宽度

F. Half the displacement of HTP3 plus 115

HTP3 排量/2+115

G. Half the width of the middle shell of HTP2 plus half the displacement of HTP3 plus 52

HTP2 中泵壳体宽度/2+HTP3 排量/2+52

H. Add 14.5 to half of the sum of the two intermediate shells of HTP2

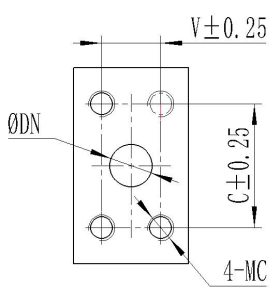
HTP2 两个中泵壳体的和/2+14.5

I. Half the width of the middle shell of HTP2 plus half the width of the rear shell minus 3.5

HTP2 中泵壳体宽度/2+后泵壳体宽度/2-3.5

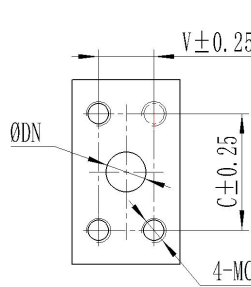
●油口尺寸 Oil Port Type

油口 1. 公制法兰油口 METRIC SPLIT FLANGE PORT (ISO6162)



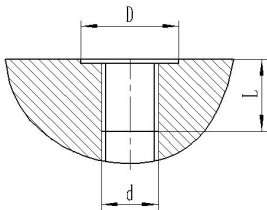
DN	C	V	MC	ET
13	38	18	M8	MA
20	48	22	M10	MB
25	52	26	M10	MC
32	60	30	M10	MD
40	70	36	M12	ME
50	78	43	M12	MF
55	89	51	M12	MG

油口 2. 英制法兰油口 SPLIT FLANGE PORT (ISO6162)



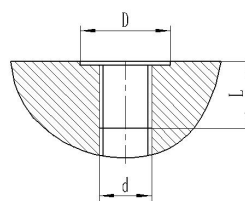
DN	C	V	MC	ET
1/2"	38.1	17.5	5/16-18UNC	SA
3/4"	47.6	22.3	3/8-16UNC	SB
1"	52.4	26.2	3/8-16UNC	SC
1-1/4"	58.7	30.2	7/16-14UNC	SD
1-1/2"	69.9	35.7	1/2-13UNC	SE
2"	77.8	42.9	1/2-13UNC	SF
2-1/4"	88.9	50.8	1/2-13UNC	SG

油口 3. 英制管螺纹油口 BSPP PORT (GB/T7306)



d	D	L	ET
G1/4"	Φ26	12	BA
G3/8"	Φ30	12	BB
G1/2"	Φ35	14	BC
G3/4"	Φ42	16	BD
G7/8"	Φ44	19	BE
G1"	Φ50	18	BF
G1-1/4"	Φ58	20	BG
G1-1/2"	Φ64	22	BH
G2"	Φ78	24	BK

油口 4. 公制管螺纹油口 METRIC THREAD PORT (GB/T7306)



d	D	L	ET
M14X1.5	Φ26	14	WA
M16X1.5	Φ28	14	WB
M18X1.5	Φ28	16	WC
M22X1.5	Φ30	18	WD
M27X2	Φ42	22	WE
M33X2	Φ44	25	WF
M36X2	Φ50	25	WG
M39X2	Φ58	28	WH
M42X2	Φ64	28	WK

注:

1. 油液最高污染等级: 按 GB/T14039 之 19/16.
2. 非额定工况下 (压力、转速) 的容积效率值参见工作性能曲线.
3. 串联泵如需要各联泵之间互不串油可与公司联系.
4. 除安装连接尺寸外, 其余外形尺寸以实物为准.

Notes:

1. Max. permissible degree of contamination of the oil is according to GB/T14039-19/16 .
2. For the volumetric efficiency under non-nominal working condition (pressure and speed), refer to the working performance curves.
3. If do not need oil transfer between each of pumps in series, contact to our company .
4. In addition to the size of the installation of connections, the other dimensions in order to prevail in kind.