新产品

3TPW
铸铁齿轮泵

Galtech

titan
POWER

沃而福 walvoil
FLUID POWER E|MOTION

A member of
INTERPUMP GROUP

3TPW
铸铁齿轮泵

沃而福开发了新系列的铸铁齿轮泵 – 3TPW系列
这些泵特别适用于那些超过了传统铝体齿轮泵工作性能限制的应用。 例如，在工程机械上重载和工作循环次数多的应用场合，这些场合工作压力和机械应力都较高。
双片式的结构使得在宽的排量范围(23.9 ~ 79.8 cm³/rev)实现压力等级提升到300 bar
新的3TPW齿轮泵完善了沃而福的铸铁齿轮泵系列范围。 由于可以集成各种功能阀，此系列齿轮泵非常适合农业机械、建筑机械等移动机械应用（如滑移装载机、伸缩式叉装车和两头忙等）

- ☐ 工作寿命长
- ☐ 高效
- ☐ 压力等级高
- ☐ 零件数量减少
- ☐ 整体尺寸减小

通用工作条件		
排量		23.9 ~ 79.8 cm³/rev
最大持续工作压力	可达到	300 bar
工作流体		矿物型液压油
油液温度范围	丁晴橡胶密封	-20 to ~ 80 °C
粘度	推荐	15 ~ 92 mm²/s (cSt)
	起动时允许	2000 mm²/s (cSt)
最高的油液污染度等级	推荐值，工作压力 > 150 bar	20/18/15 ISO 4406 *9 级 (NAS 1638)*
	推荐值，工作压力 < 150 bar	21/19/16 ISO 4406 *10 级 (NAS 1638)*

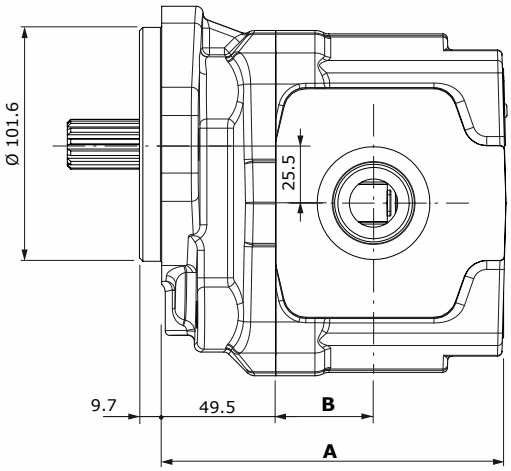
备注：关于马达配置，请联系我们销售部门

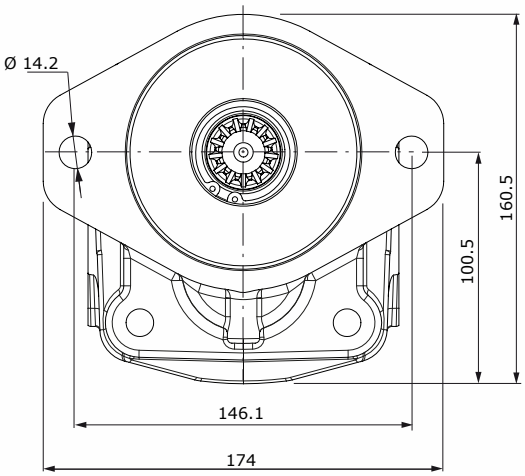
技术参数

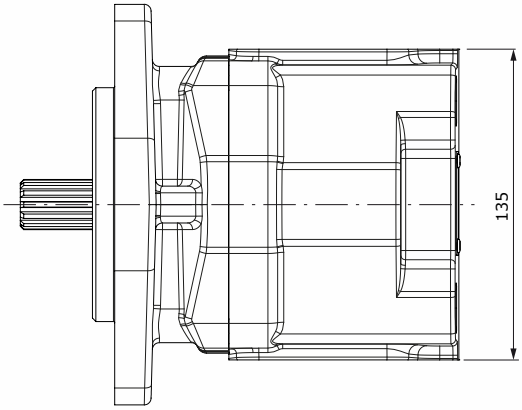
3TPW 系列	排量	最大连续工作压力	最大瞬时工作压力	最大峰值压力	最高转速
	cm³/rev	bar	bar	bar	rpm
3TPW 230	23.9	300	320	330	3000
3TPW 280	28	300	320	330	3000
3TPW 320	32.2	300	320	330	3000
3TPW 390	39.7	300	320	330	3000
3TPW 430	43.8	300	320	330	3000
3TPW 470	47.9	290	310	320	3000
3TPW 520	52.0	290	310	320	2800
3TPW 560	56.8	290	310	320	2500
3TPW 600	60.9	270	290	300	2500
3TPW 650	65-0	250	270	280	2500
3TPW 710	71.6	230	250	260	2500
3TPW 790	79.8	210	230	240	2500

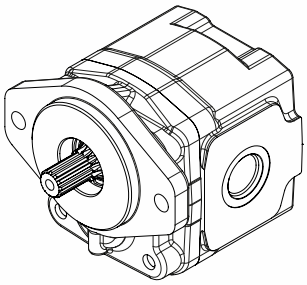
尺寸

外形图展示的是SAE B法兰(其他规格法兰请见下一页)







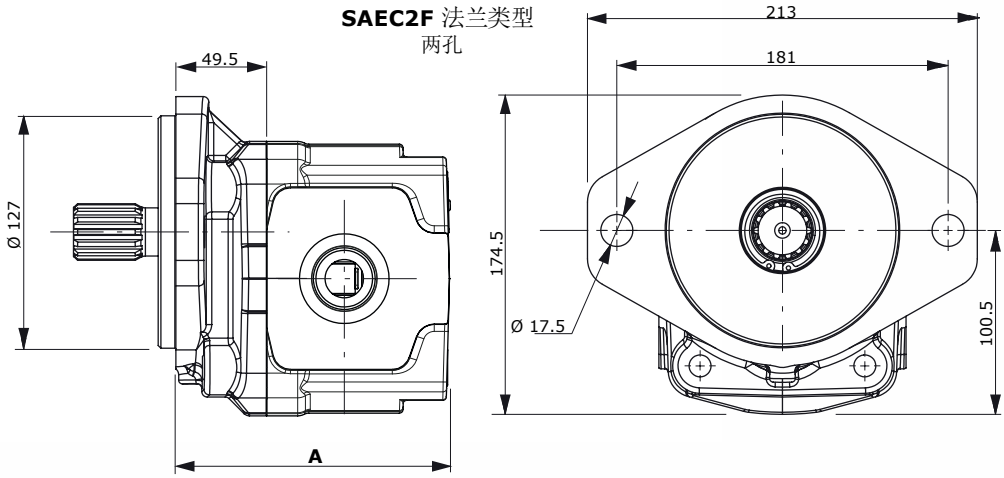


3TPW 系列	尺寸 **A** mm	尺寸 **B** 油口类型 **G** (BSP) **W** (UN-UNF) **F** (SAE) mm	**N** (EUROPEAN) mm	**T** (GERMAN) mm
3TPW 230	125.5	27	35	33
3TPW 280	128.5	30	35	33
3TPW 320	131.5	32	36	34
3TPW 390	137	36	37	36
3TPW 430	140	38.5	38	38.5
3TPW 470	143	41	39	41
3TPW 520	146	41	40	41
3TPW 560	149.5	42.5	40	42.5
3TPW 600	152.5	43.5	40	43.5
3TPW 650	155.5	44.5	44	44.5
3TPW 710	160.5	46	49	46
3TPW 790	166.5	52	55	52

3TPW
铸铁齿轮泵

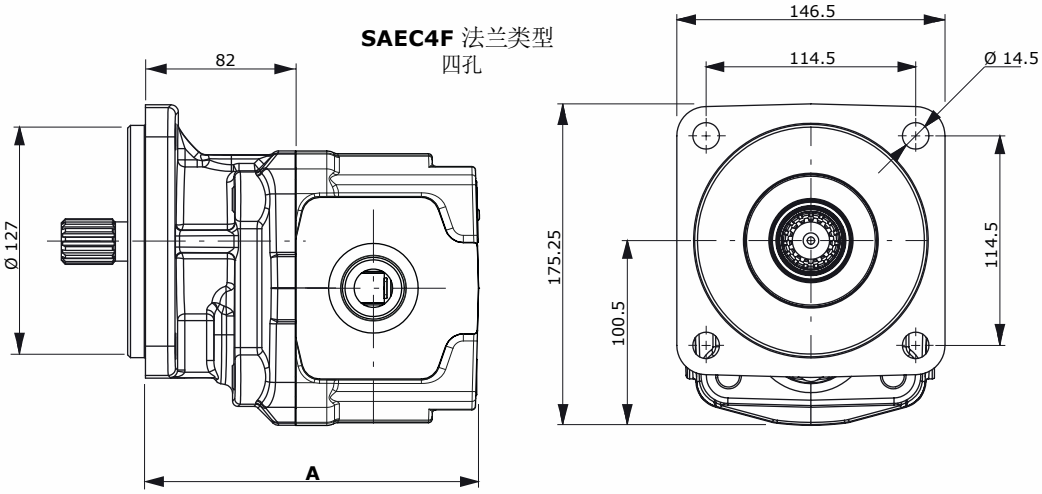
尺寸

SAEC2F 法兰类型
两孔



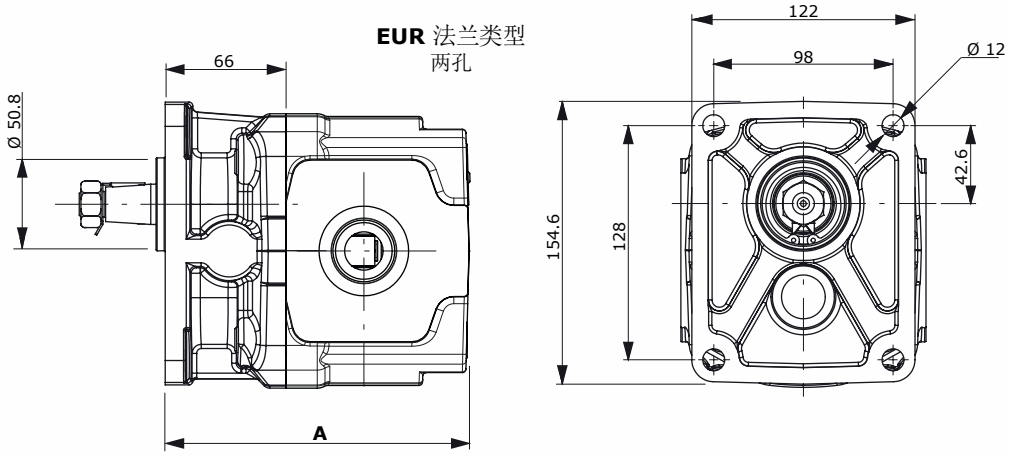
3TPW 系列	A mm
3TPW 230	125.5
3TPW 280	128.5
3TPW 320	131.5
3TPW 390	137
3TPW 430	140
3TPW 470	143
3TPW 520	146
3TPW 560	149.5
3TPW 600	152.5
3TPW 650	155.5
3TPW 710	160.5
3TPW 790	166.5

SAEC4F 法兰类型
四孔



3TPW 系列	A mm
3TPW 230	158
3TPW 280	161
3TPW 320	164
3TPW 390	169.5
3TPW 430	172.5
3TPW 470	175.5
3TPW 520	178.5
3TPW 560	182
3TPW 600	185
3TPW 650	188
3TPW 710	193
3TPW 790	199

EUR 法兰类型
两孔



3TPW 系列	A mm
3TPW 230	142
3TPW 280	145
3TPW 320	148
3TPW 390	153.5
3TPW 430	156.5
3TPW 470	159.5
3TPW 520	162.5
3TPW 560	166
3TPW 600	169
3TPW 650	172
3TPW 710	177
3TPW 790	183

新产品

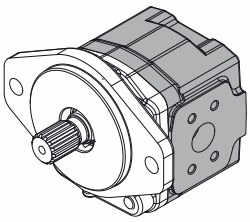
壳体选项

G0 壳体:
单级.

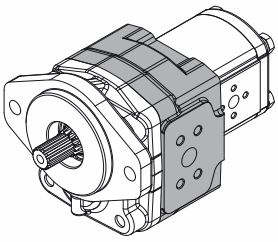
G2 壳体:
G2泵. 连接

G3 壳体:
G3泵. 需要法兰组件实现连接3TPW+3TPW

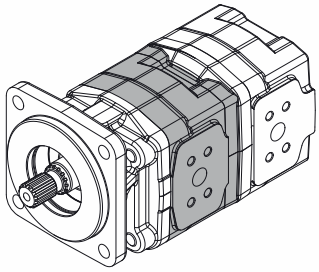
GV 壳体:
辅助阀



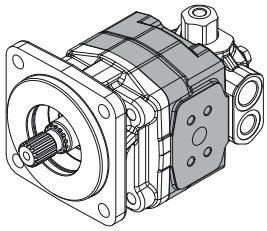
3TPW
示例



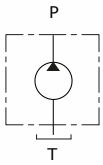
3TPW + 2SP
示例

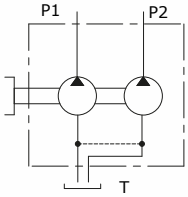


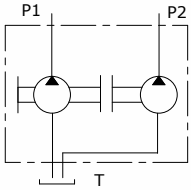
3TPW + 3TPW
示例

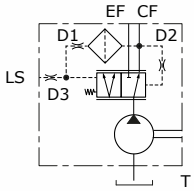


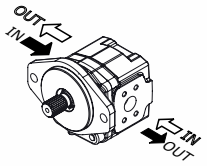
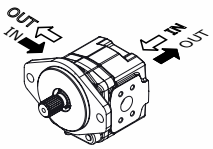
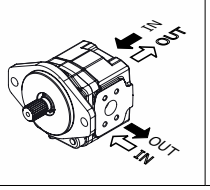
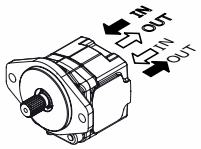
3TPW + AUX
示例









油口位置			
0	**1**	**3**	**4**
			

顺时针 - ***D***

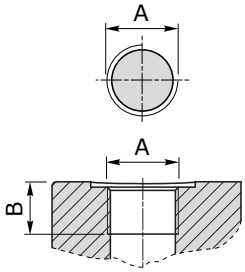
逆时针 - ***S***

GV壳体的辅助阀	
VLPI	溢流阀(内泄)
VLPE	溢流阀(外泄)
VRF	调速阀
VRFVLP	集成溢流阀的稳流阀
UNLD	卸荷阀
CP	优先阀
VA	防吸空阀
VMA	带防吸空及防过载阀

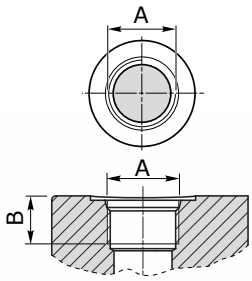
3TPW
铸铁齿轮泵

油口和连接

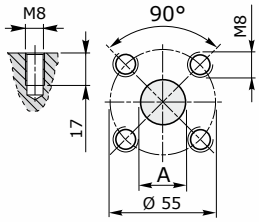
G: BSP



W: UN-UNF

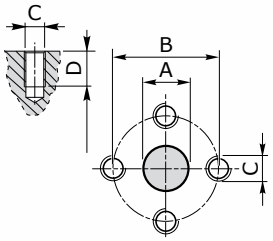


T: German 法兰



3TPW 系列	油口螺纹类型								
	G (BSP)				**W** (UN-UNF)			**T** (GERMAN)	
	A		**B**		**A**		**B**	**A**	
	进油	出油	进油 mm	出油 mm	进油	出油	进油-出油 mm	Ø 进油 mm	Ø 出油 mm
3TPW 230	G1	G3/4	20	18	SAE16	SAE12	20.5	27	19
3TPW 280	G1	G3/4	20	18	SAE16	SAE12	20.5	27	19
3TPW 320	G1 1/4	G1	20	18	SAE20	SAE16	20.5	27	19
3TPW 390	G1 1/4	G1	20	18	SAE20	SAE16	20.5	27	19
3TPW 430	G1 1/4	G1	20	18	SAE20	SAE16	20.5	27	19
3TPW 470	G1 1/4	G1	20	18	SAE20	SAE16	20.5	27	19
3TPW 520	G1 1/4	G1	20	18	SAE20	SAE16	20.5	27	19
3TPW 560	G1 1/4	G1	20	18	SAE20	SAE16	20.5	27	19
3TPW 600	G1 1/4	G1	20	18	SAE20	SAE16	20.5	27	19
3TPW 650	G1 1/4	G1	20	18	SAE20	SAE16	20.5	27	19
3TPW 710	G1 1/4	G1	20	18	SAE20	SAE16	20.5	27	19
3TPW 790	G1 1/4	G1	20	18	SAE20	SAE16	20.5	27	19

N: European 法兰

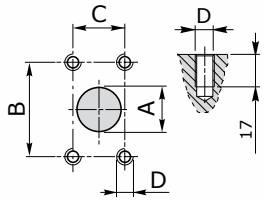


3TPW 系列	油口螺纹类型							
	N (EUROPEAN)							
	A		**B**		**C**		**D**	
	Ø 进油 mm	Ø 出油 mm	Ø 进油 mm	Ø 出油 mm	Ø 进油	Ø 出油	进油 mm	出油 mm
3TPW 230	27	19	51	40	M10	M8	17	15
3TPW 280	27	19	51	40	M10	M8	17	15
3TPW 320	27	19	51	40	M10	M8	17	15
3TPW 390	27	19	51	40	M10	M8	17	15
3TPW 430	27	19	51	40	M10	M8	17	15
3TPW 470	27	19	51	40	M10	M8	17	15
3TPW 520	27	19	51	40	M10	M8	17	15
3TPW 560	27	19	51	40	M10	M8	17	15
3TPW 600	27	19	51	40	M10	M8	17	15
3TPW 650	33	19	62	40	M12	M8	17	15
3TPW 710	33	27	62	51	M12	M10	17	15
3TPW 790	33	27	62	51	M12	M10	17	15

新产品

油口和连接

F: SAE J518-1
法兰



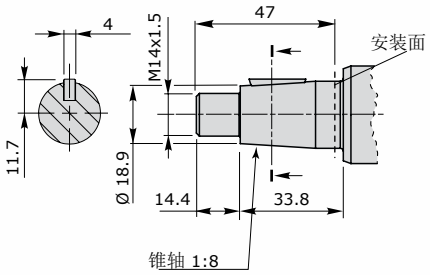
3TPW 系列	油口螺纹类型 F (SAE J518-1 法兰)							
	A		B		C		D	
	Ø 进油 mm	Ø 出油 mm	Ø 进油 mm	Ø 出油 mm	Ø 进油 mm	Ø 出油 mm	Ø 进油	Ø 出油
3TPW 230	25	19	52.4	47.6	26.2	22.2	M10	M10
3TPW 280	25	19	52.4	47.6	26.2	22.2	M10	M10
3TPW 320	32	19	58.7	47.6	30.2	22.2	M10	M10
3TPW 390	32	19	58.7	47.6	30.2	22.2	M10	M10
3TPW 430	32	25	58.7	52.4	30.2	26.2	M10	M10
3TPW 470	39	25	69.8	52.4	35.7	26.2	M12	M10
3TPW 520	39	25	69.8	52.4	35.7	26.2	M12	M10
3TPW 560	39	32	69.8	58.7	35.7	30.2	M12	M10
3TPW 600	39	32	69.8	58.7	35.7	30.2	M12	M10
3TPW 650	39	32	69.8	58.7	35.7	30.2	M12	M10
3TPW 710	39	32	69.8	58.7	35.7	30.2	M12	M10
3TPW 790	39	32	69.8	58.7	35.7	30.2	M12	M10

油口和连接		油口类型				
		G	W	T	N	F
油口选项	0	●	●	●	●	●
	1	●	●	-	-	-
	3	●	●	-	-	-
	4	●*	●*	-	-	-

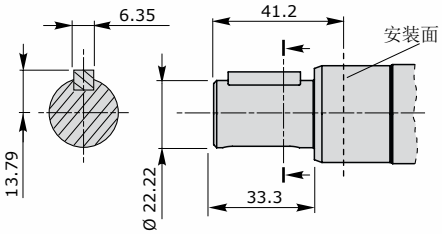
(*) 只对于 G0 壳体

轴伸

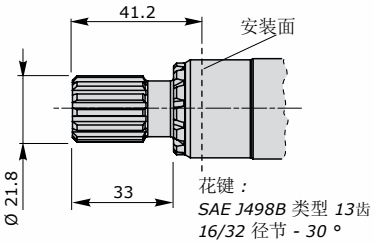
10
扭矩 240 Nm



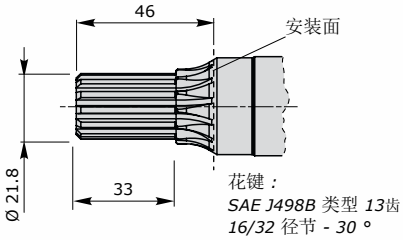
13
扭矩 200 Nm



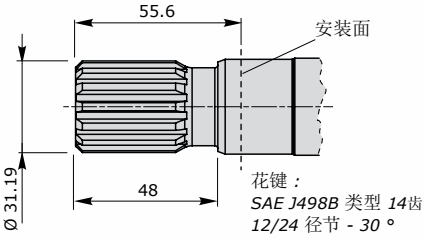
S13
扭矩 280 Nm



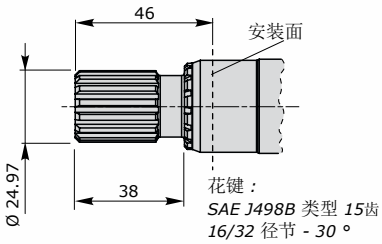
S13N
扭矩 300 Nm



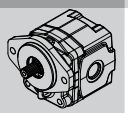
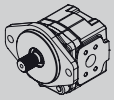
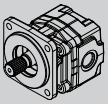
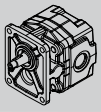
S14 - S14L
扭矩 900 Nm



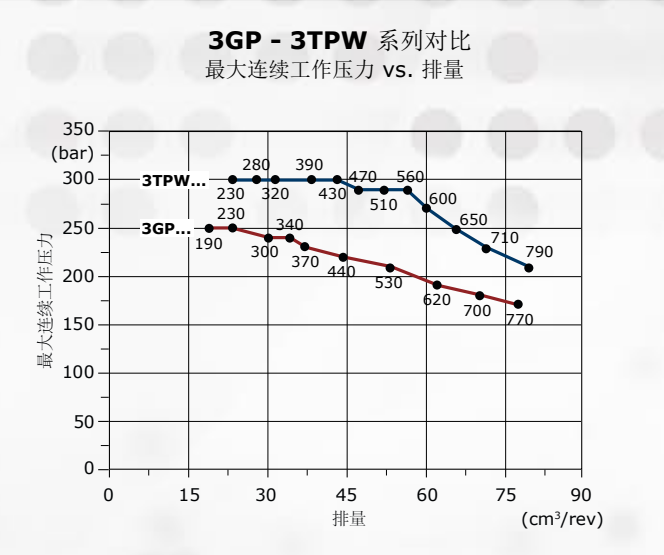
S15 - S15L
扭矩 400 Nm



法兰组合 **3GP - 3TPW** 对比

3TPW 系列		轴伸类型							
		10 Conic 1:8	**13** SAE B 7/8"	**S13** SAE B 13齿	**S13N** SAE B 13齿 NS	**S14** SAE C 14齿	**S14L** SAE C 14齿 L	**S15** SAE B 15齿	**S15L** SAE B 15齿 L
SAEB		-	◇	◇	◇	◇	-	◇	-
SAEC2F		-	◇	◇	◇	◇	-	◇	-
SAEC4F		-	-	-	-	-	◇	-	◇
EUR		◇	-	-	-	-	-	-	-

◇ = 标准组合



描述组成

3TPW - G0 - 600 - D - SAEB2F - B - N - S13 - 0 - F

1 2 3 4 5 6 7 8 9 10

参考	类型
1	泵类型
2	壳体类型
3	排量
4	旋向
5	法兰类型
6	轴封 耐压 3 bar
7	密封类型 丁晴橡胶
8	轴伸类型
9	P 侧油口
10	油口类型

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