



PIONEER FLUID POWER

# KZP4系列齿轮泵 KZP4 series gear pump

KZP4系列齿轮油泵壳体采用高强度铝合金材料，内部结构使用了轴向间隙浮动补偿，径向平衡，DU自润滑，齿轮采用双压力角等多项先进技术，它具有容积效率高，压力高，噪声低，抗震性强，寿命长等特点，广泛应用于丰田，小松叉车，装载机，挖掘机，起重机，压路机等工程机械以及矿山，轻工，环卫，农机等行业。

KZP4 series gear oil pumps adopt the material of high strength aluminum alloy and advanced technologies of axial clearance floating automatic compensation, radial balance, DU self-lubrication and gear with double pressure angles, making the pumps with the features of high volumetric efficiency, high pressure, lower noise, strong shock resistance, long lifetime, etc. The pumps are widely used in the industries of mining machinery, light industry machinery, environmental sanitation machinery, agricultural machinery and the engineering machinery of forklift, loader, excavator, road roller, crane, etc.



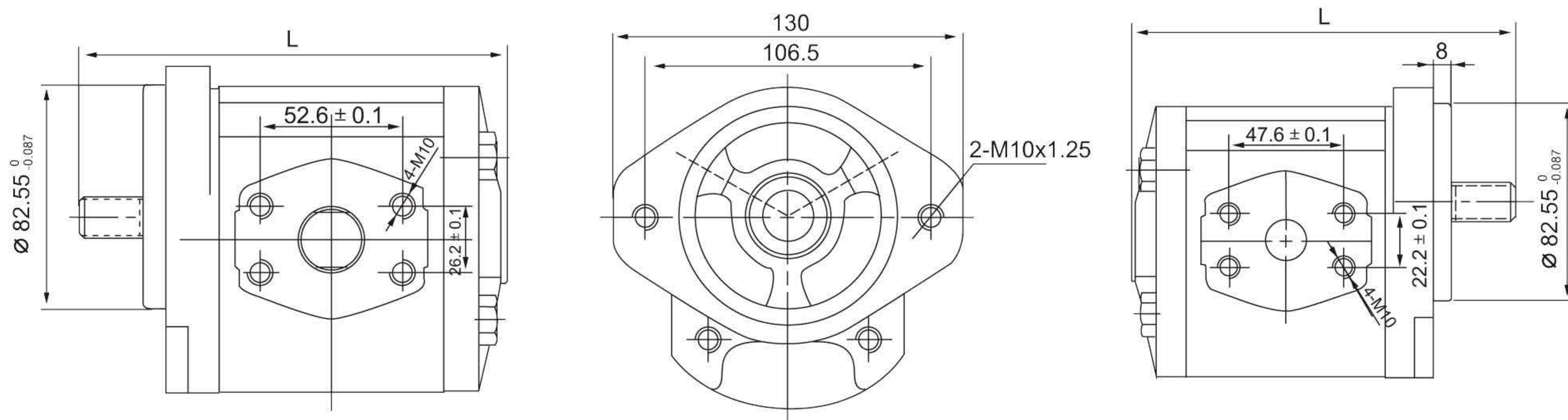
## 型号说明 Model descriptions

KZP4— \*\* — \* \* \* \*

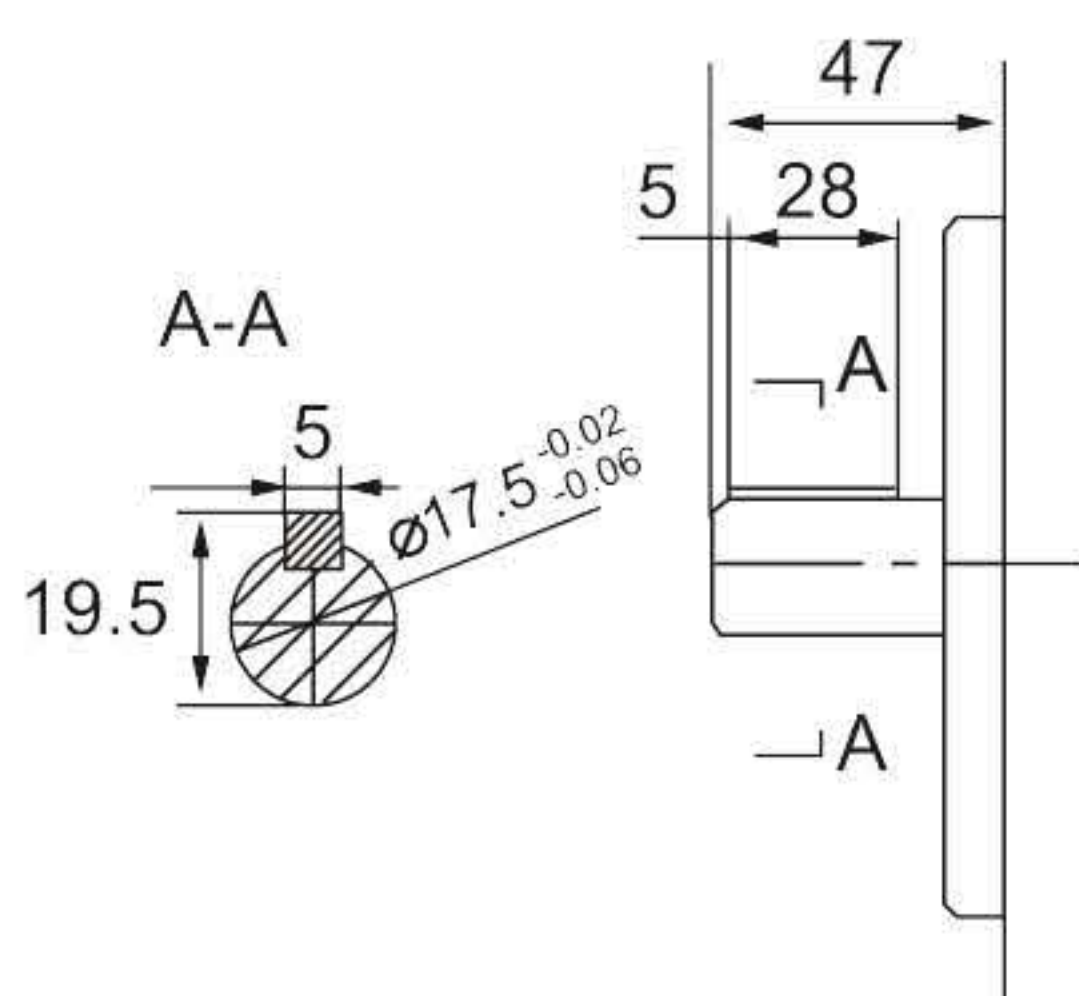
①      ②      ③④⑤⑥

- ①产品代号 Product code
- ②公称排量 Nominal displacement(mL/r)
- ③安装形式 Installation type  
A:菱形法兰 Rhombic flange
- ④油口形式 Pump port  
L:螺纹联接 inch threaded connection  
F:法兰油口联接 Flange pump port connection
- ⑤轴伸形式 Shaft type  
P:平键 straight key X:渐开线花键 involute spline  
S:SAE 花键 SAE Spline
- ⑥旋 向 Direction of rotation  
L:左旋 Left rotation (逆时针 counterclockwise)  
R:右旋 Right rotation (顺时针 clockwise)

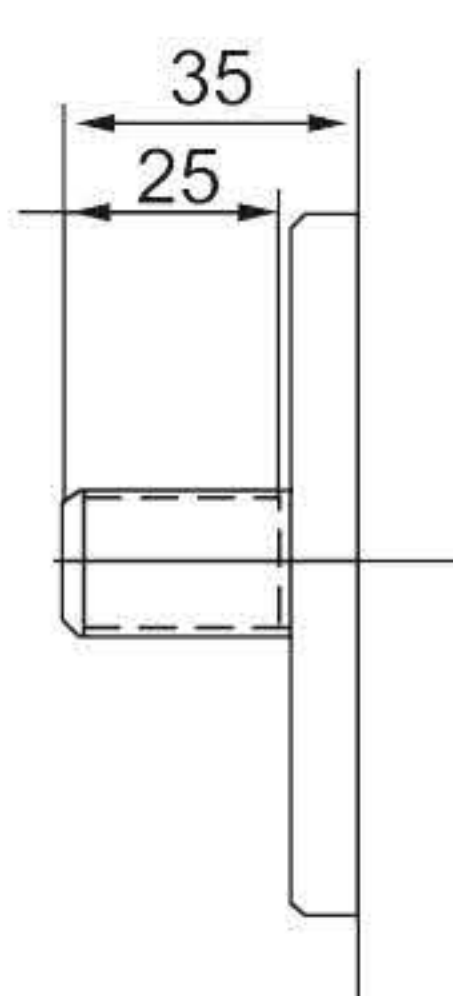
## 外形图 Layout



平键 Plain key

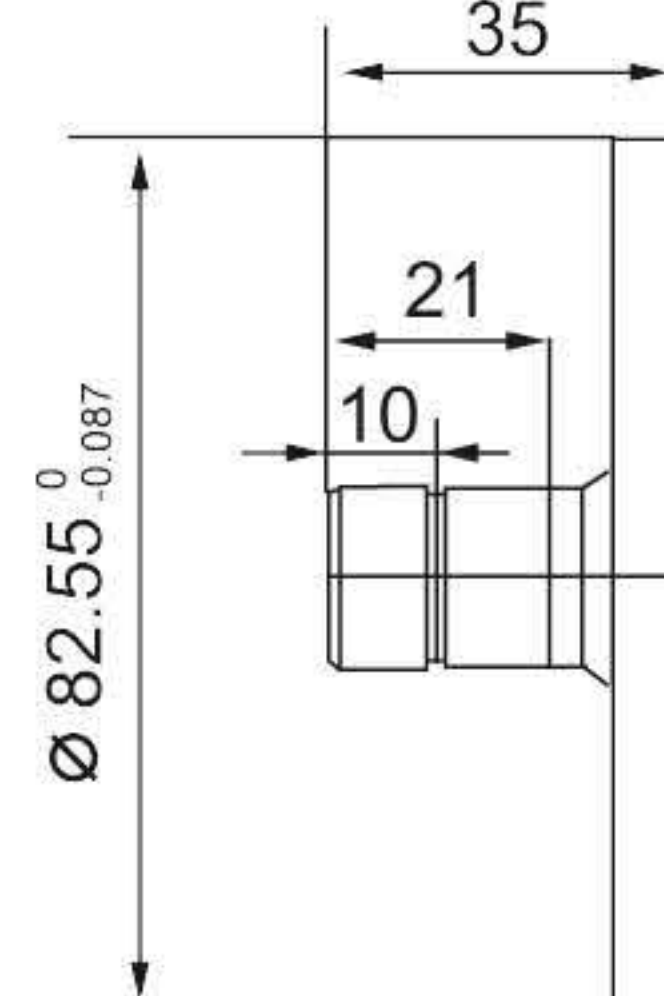


渐开线花键 Involute spline



渐开线花键 Involute spline	
齿数 Teeth No.	13
径节 D.P	16/32
压力角 Pressure angle	30°
大径 Major diameter	$\phi 17^{0}_{-0.13}$
小径 Minor diameter	$\phi 13.5^{0}_{-0.1}$

SAE花键 SAE spline



渐开线花键 Involute spline	
齿数 Teeth No.	10
模数 Modulus	1.5
压力角 Pressure angle	30°
大径 Major diameter	$\phi 17^{0}_{-0.08}$
小径 Minor diameter	$\phi 13.9^{0}_{-0.1}$

## 性能参数 Performance parameters

型号 Models	公称排量 Nominal displacement (mL/r)	压力 Pressure (Mpa)		转速 Rotation speed (r/min)		容积效率 Volumetric efficiency (≥%)	L (mm)	重量 Weight (kg)
		额定 Rated	最高 Max	最低 Min	最高 Max			
KZP4-17-****	17	17.5	20	600	1800	>92	152	2.5
KZP4-19-****	19						154	2.8
KZP4-23-****	23						160	3.1
KZP4-27-****	27						165	3.5
KZP4-31.5-****	31.5						171	4.1