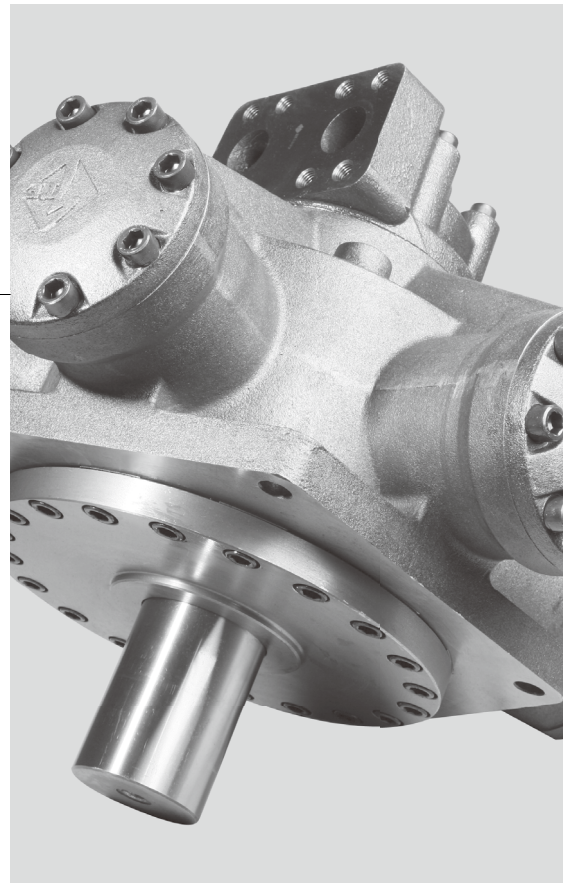


ITMS 目录 / Contents



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产品特点 / Product Feature

ITMS系列液压马达是在原有ITM系列和STF系列基础上，综合其两款的优势而开发出来具有较高综合性能的新型液压马达。

其主要性能特点如下：

- 采用STF形式的柱塞体与壳体缸孔运动副，具有较高的功率质量比，并有效的提高马达的综合性能等级；
- 柱塞球窝与连杆球头采用线接触式静压油膜支承形式，有效提高接触比压及减小摩擦力，提高马达的整体工作压力和机械效率；
- 马达采用加强型满装滚子轴承，有效提高了马达的承载能力，并增强了马达抗冲击能力；
- 马达的主要传动件采用特殊材料和先进的热处理工艺，提高了整体使用寿命；
- 该系列马达的安装尺寸与ITM系列保持一致，是ITM系列马达往高压、高端发展具有高功率质量比，高性价比的一款极具吸引力的产品。

ITMS series' hydraulic motor integrates the advantage of ITM and STF series'motor. It is a new concept hydraulic motors with higher comprehensive performance;

Main characteristics:

- Same structure as STF series as removed piston sleeve, integrated body case and piston cylinder hole; featured with high power-mass ratio and technical performance;
- Applied hydrostatic oil-film modality between ball-socket of piston and ball head of con-rod to heighten its contact pressure ratio, working pressure and mechanical efficiency;
- Higher anti-impact and load performance due to its enhanced roller bearing;
- Longer service life due to special materials and advanced heat treatment in main transmitting parts;
- Same installation data as ITM series; an ideal replacement of ITM series in higher pressure & performance application.

计算公式 / Calculation

1、液压马达的理论输出扭矩（Theoretical output torque）： $M=0.159 (P_1-P_2) q (N \cdot M)$

液压马达的实际输出扭矩（Practical output torque）： $M_A=0.159 (P_1-P_2) q \cdot \eta_m (N \cdot M)$

式中（Where）： P_1 、 P_2 —— 分别为液压马达的入口和出口压力（MPa）inlet and outlet pressure of motors(MPa)

q —— 液压马达的排量 displacement(mL/r)

η_m —— 液压马达的机械效率 mechanical efficiency(%)

2、液压马达的理论转速（Theoretical speed）： $n=\frac{Q}{q} (r/min)$

液压马达的实际转速（Practical speed）： $n_A=\frac{Q}{q} \cdot \eta_v (r/min)$

3、液压马达的理论输出功率（Theoretical output power）： $N=\frac{M \times n}{9550} (kw)$

液压马达的实际输出功率（Practical output power）： $N_A=\frac{Q(P_1-P_2)}{60000} \eta_m \cdot \eta_v (kw)$

式中（Where）： n —— 液压马达的转速 motor speed(r/min)

Q —— 输入液压马达的流量 input flow rate(mL/min)

η_v —— 液压马达的容积效率 volumetric efficiency(%)

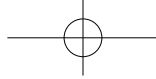
产品标识说明 / Ordering Code

****-**-****-***-**-**-**
1 2 3 4 5 6 7

- 1、马达系列代号 / Model-ITMS
- 2、系列 / Series
- 3、名义排量 / Displacement (ml/r)
- 4、输出轴形式 / Output shaft
- (1) 无字母表示标准矩形花键轴(以外径定心)
No symbol--standard rectangle spline shaft(the center is up to outside diameter)
- (2) B表示平键轴：注脚数字表示同型号摆线液压马达或其他品牌对应型号安装尺寸相同(带过渡法兰板)
B--Key shaft;footnote number means the installation dimension same as BM series motor or other bands(with flange)
- (3) D安装联接尺寸与昆山液压件厂1JMD型同排量液压马达相同
D--installation dimension same as 1 JMD series motor(KunSan HYD element plant)
- (4) I表示内花键(以内径定心)：注脚数字表示与宁波液压马达厂生产的QJM系列安装尺寸相同(带过渡法兰板)
I--female spline(the center is up to inner diamenter); footnote number means the installation dimension same as QJM series motor(with flange which produced by Ningbo hydraulic motor factory)
- (5) GM, SL表示安装联接尺寸与意大利SAI公司生产的M系列, L系列, 液压马达相同, 注脚数字表示不同种类安装尺寸
GM, SL--the installation dimension same as M series, L series of SAI ITALY, footnote number means different kinds of installation dimension.
- 5、通油盘种类/Distributors
订货时若不注明, 则按标准配置(见各系列马达外形尺寸图)。如有特殊需要, 请参考A-21页, 并在订货中注明。
If you have special request of dimensions, please state it in order, or we will treat it as our standard. (distributor options, refer to Page A-21)
- 6、进油口螺纹/ I / O port thread
标准螺纹可不标。如有特殊需要请参考A-21页, 并在订货中说明。
For special thread, please state in your order, or we will treat it as our standard. (thread options, refer to Page A-21)
- 7、进油口方向/ I / O port direction
未写明表示与马达外形图一致, 因马达安装孔按72° 等分变化, 而进油口方向按90° , 180° 位置变化, 具体要求可按油口方向图确定;请参考A-21页。
For I/O port direction, please refer to Page A-21.

技术参数/ Technical Specification

型号 TYPE	理论排量 Theory Displacement	压力/Pressure		扭矩/Torque		最高转速 Max.Speed	额定功率 Rated Power	重量 Weight
		额定压力 Rated Pressure	最高压力 Max. Pressure	额定扭矩 Rated Torque	单位扭矩 Unit Torque			
		MPa	MPa	N.m	N.m/MPa			
ITMS09-630	630	22	27.5	1983	90	280	41	95
ITMS09-800	779	22	27.5	2452	111	280	50	
ITMS09-900	904	20	25	2587	129	250	47	
ITMS09-1000	1038	18	22	2674	149	250	45	
ITMS09-1250	1240	16	20	2839	177	200	39	
ITMS18-1250	1248	22	27.5	3929	179	300	86	160
ITMS18-1400	1418	22	27.5	4464	203	280	92	
ITMS18-1600	1616	22	27.5	5087	231	250	93	
ITMS18-1800	1815	22	27.5	5714	260	220	92	
ITMS18-2000	2035	20	25	5824	291	200	85	
ITMS18-2400	2267	20	25	6488	324	180	86	
ITMS18-2500	2512	18	22	6470	359	165	73	
ITMS18-3000	2822	16	20	6461	404	150	66	
ITMS30-2000	2041	22	27.5	6425	292	200	114	210
ITMS30-2200	2237	22	27.5	7043	320	200	125	
ITMS30-2500	2551	22	27.5	8031	365	200	143	
ITMS30-2800	2813	20	25	8051	403	200	143	
ITMS30-3000	3029	20	25	8669	433	160	123	
ITMS30-3150	3159	20	25	9041	452	160	129	
ITMS30-3500	3467	18	22	8930	496	160	127	



ITMS09 外形及安装尺寸/ ITMS09 Installation Dimensions

ITM

ITMS

STFC

STFD

CRM-HA

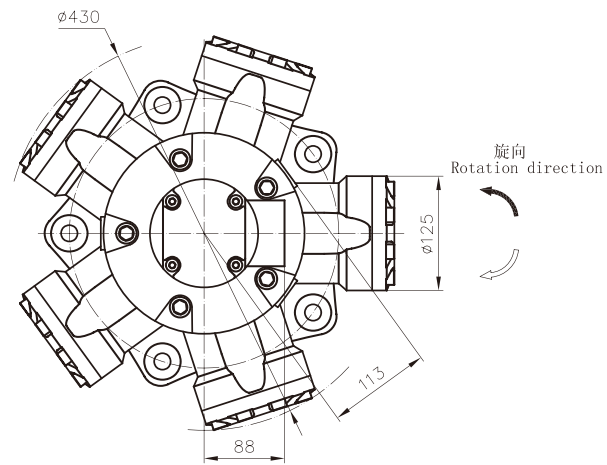
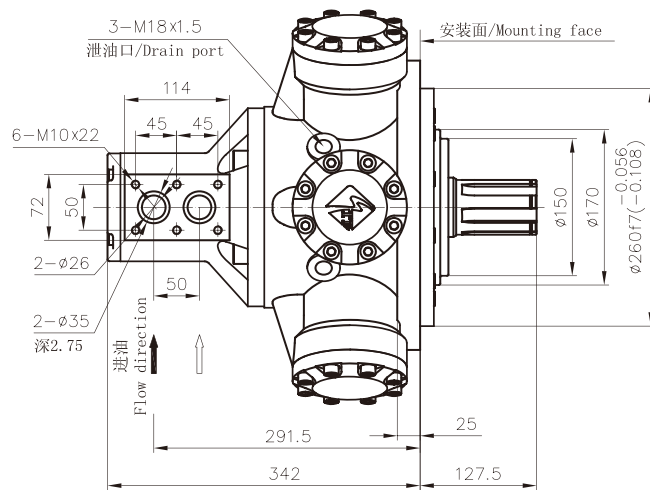
CRM-HB

CRM-PS

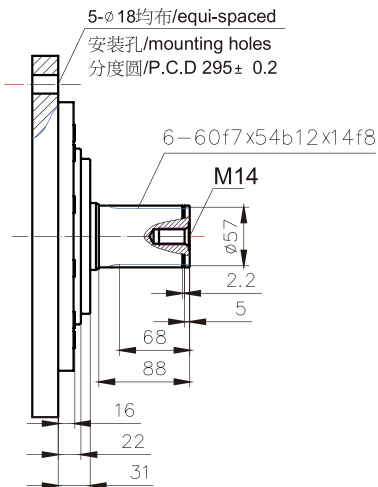
SMA6V

SMA2F

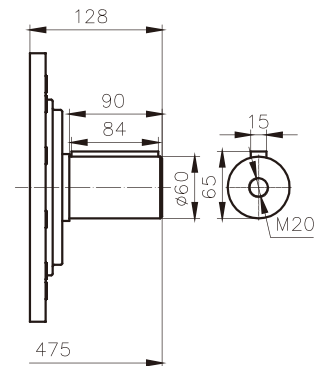
OMZ



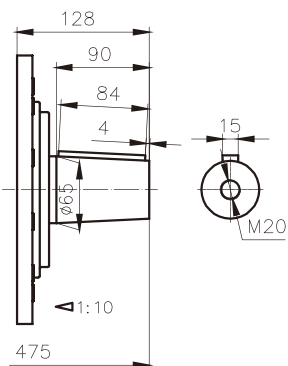
标准外花键 : ITMS09-**
Standard Involute Spline



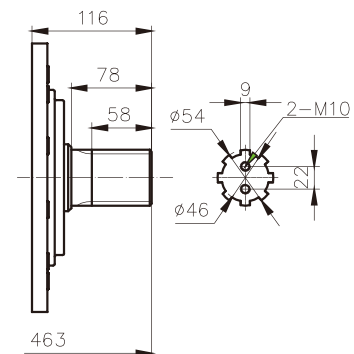
ITMS09-**JB

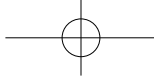


ITMS09-**JT



ITMS09-**JS

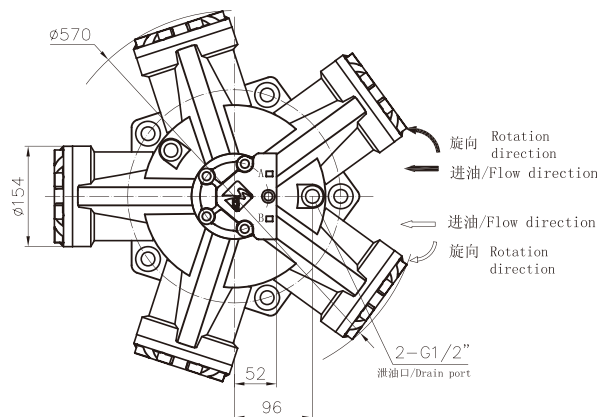
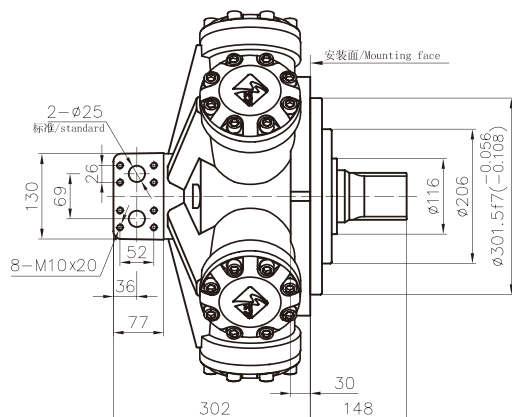




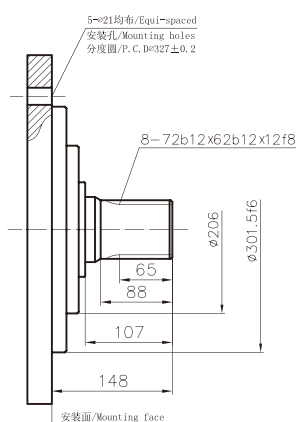
ITMS18 系列/ ITMS18 Serie

STF
HYDRAULIC TRANSMISSIONS

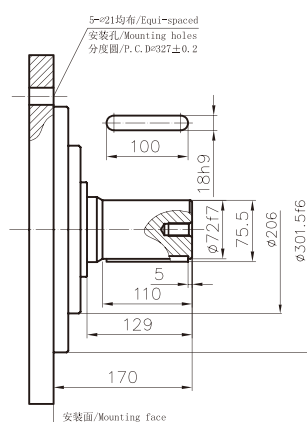
ITMS18 外形及安装尺寸/ ITMS18 Installation Dimensions



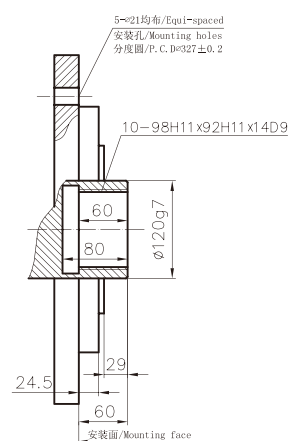
标准外花键 : ITMS18--**
Standard Involute Spline



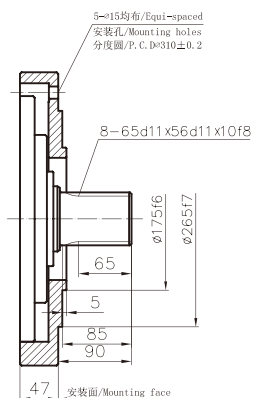
标准平键 : ITMS18--**B
Standard Parallel Key



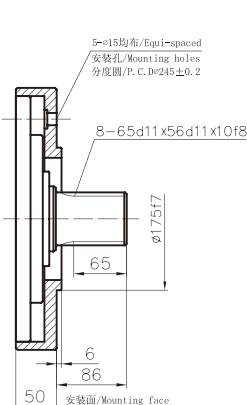
标准内花键 : ITMS18--**I
Standard Female Spline



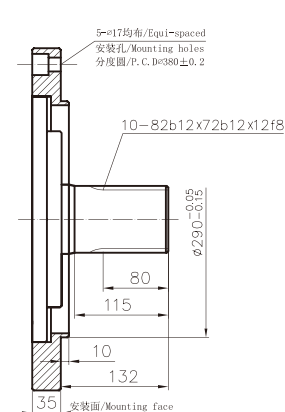
ITMS18--**SL₅



ITMS18--**SM₄



ITMS18--**N



www.stfgroup.com.cn

B-05

ITM

ITMS

STFC

STFD

CRM-HA

CRM-HB

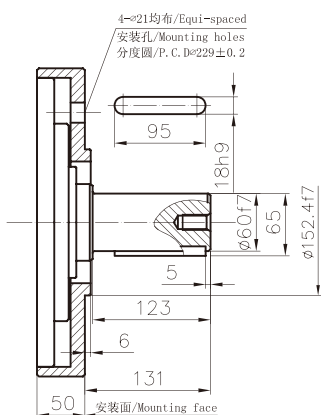
CRM-PS

SMA6V

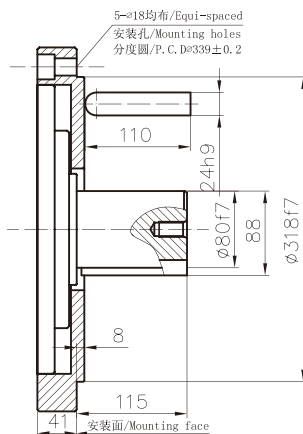
SMA2F

OMZ

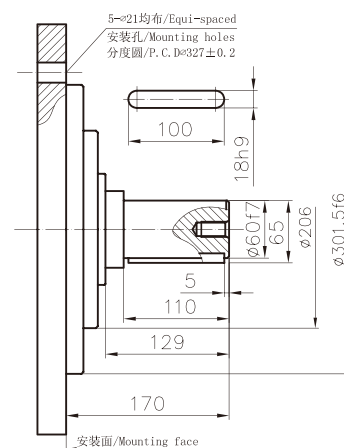
ITMS18--**B₆



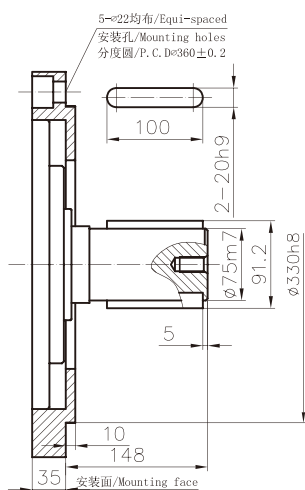
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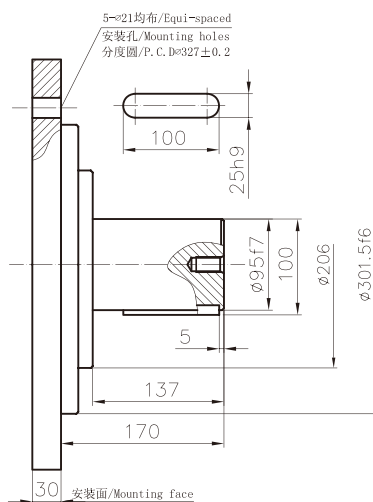
ITMS18--**B₁₉



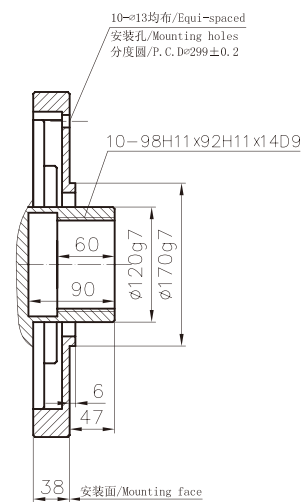
ITMS18--**D



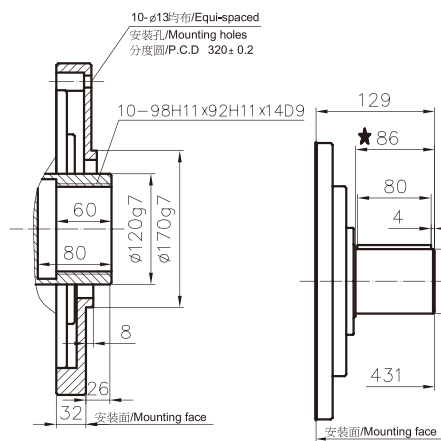
ITMS18--**B₃₀



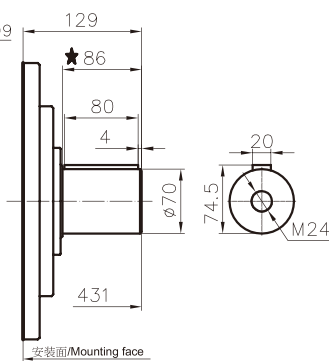
ITMS18--**I₃₂



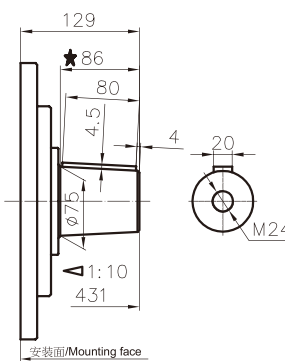
ITMS18--**I₄₂



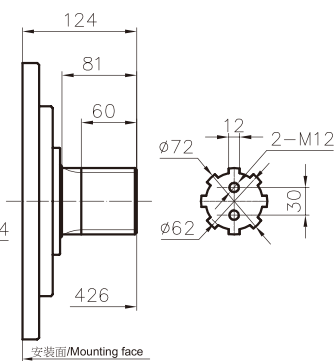
ITMS09--**JB

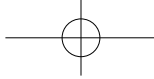


ITMS09--**JT



ITMS09--**JS



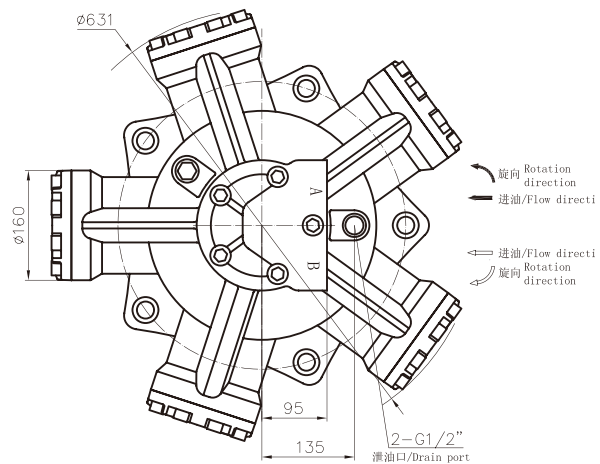
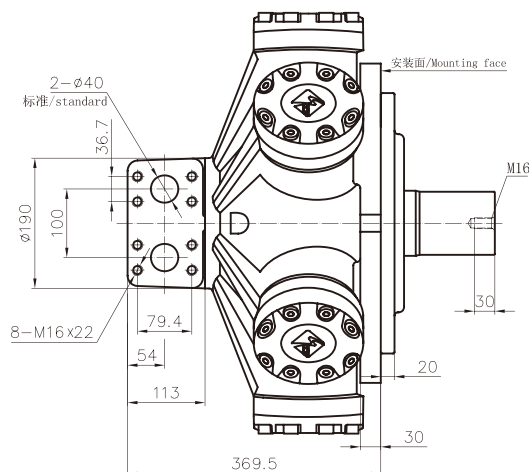


ITMS30 系列/ ITMS30 Serie

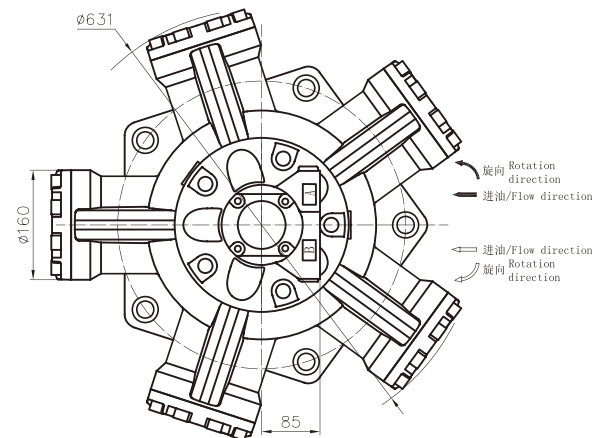
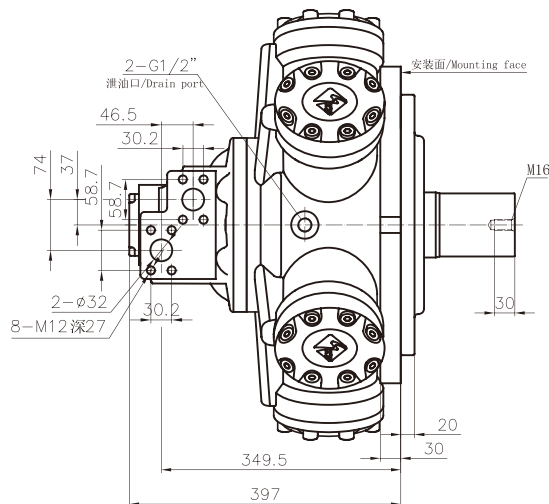
STF
HYDRAULIC TRANSMISSIONS

ITMS30 外形及安装尺寸/ ITMS30 Installation Dimensions

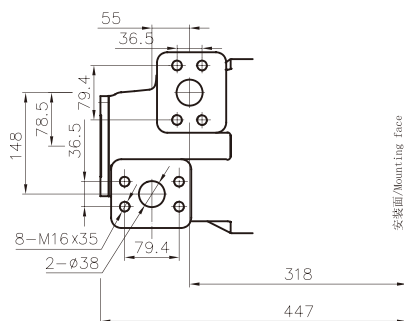
进油口为D90的安装尺寸/With D90 distributor



进油口为F01的安装尺寸/With F01 distributor



进油口为F02的安装尺寸/With F02 distributor



ITM

ITMS

STFC

STFD

CRM-HA

CRM-HB

CRM-PS

SMA6V

SMA2F

OMZ

ITM

ITMS

STFC

STFD

CRM-HA

CRM-HB

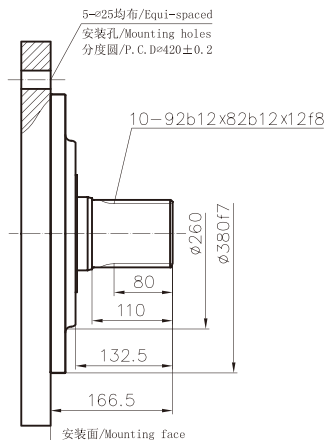
CRM-PS

SMA6V

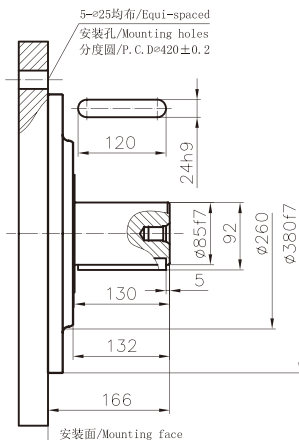
SMA2F

OMZ

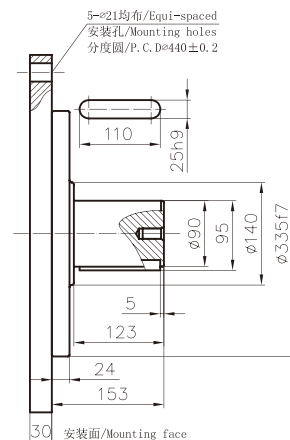
标准外花键 : ITMS30--**
Standard Involute Spline



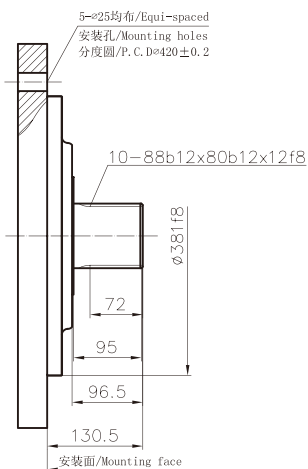
标准平键 : ITM30--**B
Standard Parallel Key



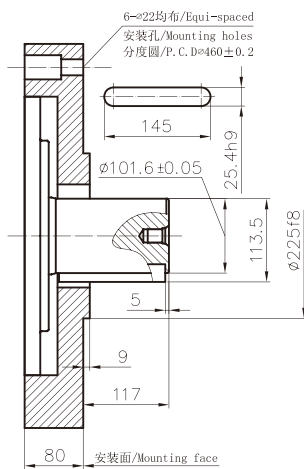
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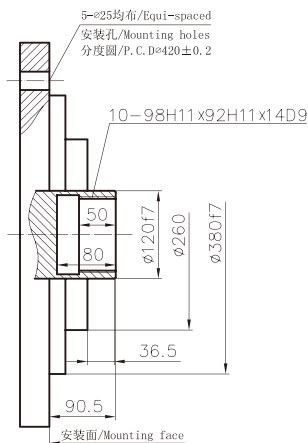
ITMS30--**SL₇



ITMS30--**B₈



标准内花键 : ITMS30--**I
Standard Female Spline



ITMS30--**I₅₃₂

