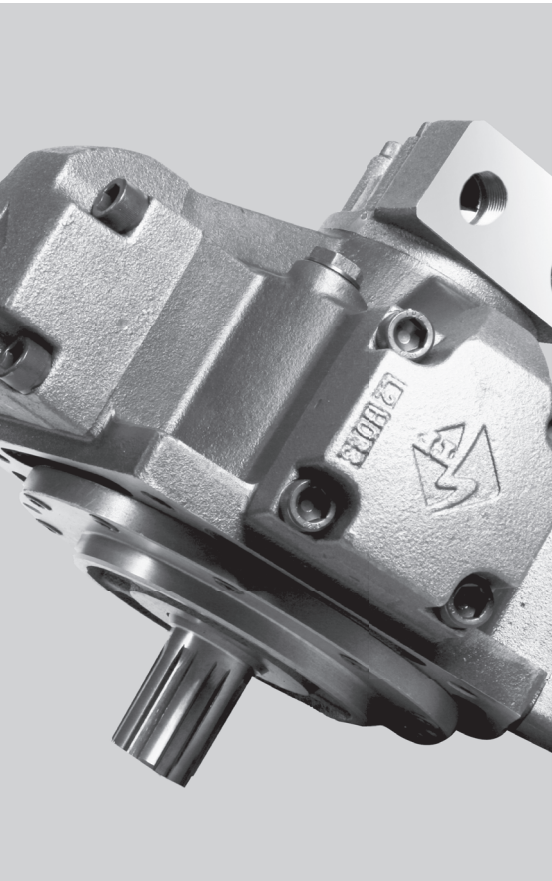




目录 / Contents



1、产品特点 / Product Feature	A-02
2、计算公式 / Calculation	A-02
3、产品标识说明 / Ordering Code	A-03
4、技术参数 / Technical Specification	A-04
5、安装联接尺寸 / Installation Dimensions	
ITM01 系列 / ITM01 Serie	A-05
ITM02 系列 / ITM02 Serie	A-06
ITM03 系列 / ITM03 Serie	A-07
ITM06 系列 / ITM06 Serie	A-08
ITM08 系列 / ITM08 Serie	A-10
ITM11 系列 / ITM11 Serie	A-11
ITM16 系列 / ITM16 Serie	A-13
ITM31 系列 / ITM31 Serie	A-15
6、通油盘种类 / Distributor	A-17
7、进出油口与泄漏油口的相对位置 / Port Direction	A-17

产品特点 / Product Feature

ITM系列液压马达是我司依据意大利型滚柱传力式径向柱塞液压马达的结构、性能特点，通过我司高标准的技术要求、高性能的生产设备及先进的生产工艺来保证，严格从细节方面控制，在综合性能特点方面完全超越意大利原厂的一款低速大扭矩液压马达。

其主要性能特点如下：

- 采用曲轴连杆结构及较低激振频率的五缸五柱塞或七缸七柱塞机构，保持原有的低噪音特点；
- 启动扭矩大，具有良好的低速稳定性，能在很低的速度下平稳运转；
- 采用平面可补偿式配油结构，可靠性好，泄漏少，维修方便；
- 旋转方向可逆，输出轴允许承受一定的径向和轴向外力。

ITM series'hydraulic motor is a traditional radial piston motor what we produce for mid–pressure application. With advanced processing center, inspection machines and assembly technology, it has unimpeachable performance in domestic motors of same kind.

Main characteristics:

- Low noise due to its crankshaft & con–rod structure and cylinder & piston framework of low vibration frequency;
- Steady performance at low speed; high starting torque;
- Good reliability and less leakage due to the flat compensation distributor;
- Enable reversible rotation and certain external radial & axial force on output shaft.

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 ）： P₁、P₂ —— 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 output 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 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–ITM

- 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 B—Parallel key shaft
(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) l表示内花键(以内径定心) l—female spline
(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.

- 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、进出油口螺纹/ 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、进出油口方向/ I /O port direction

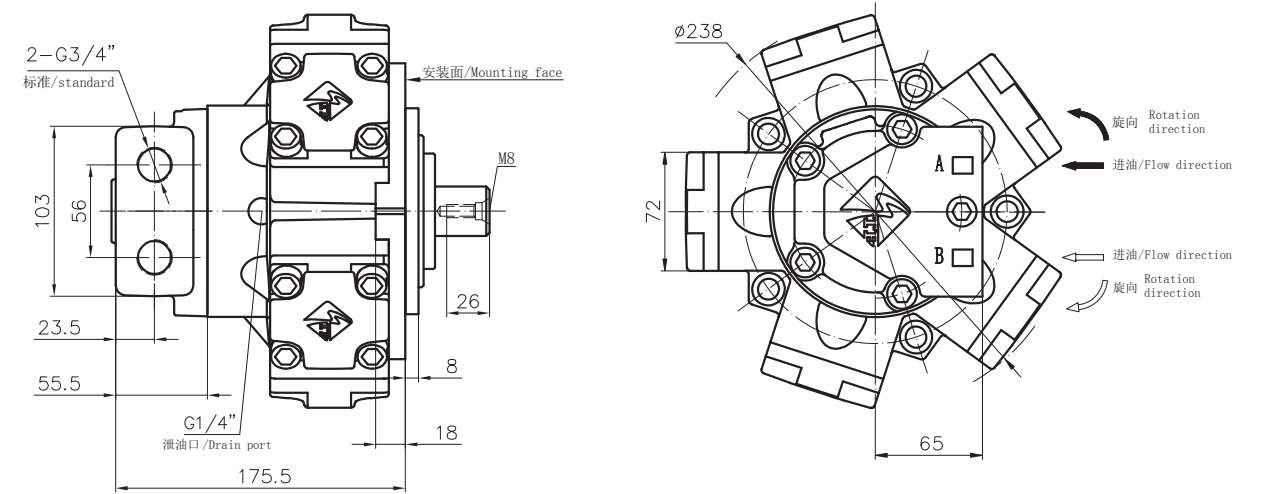
未写明表示与马达外形图一致，因马达安装孔按72° 等分变化，而进出油口方向按90° ， 180° 位置变化，具体要求可按油口方向图确定,请参考A–21页。
For I/O port direction, please refer to Page A–21.



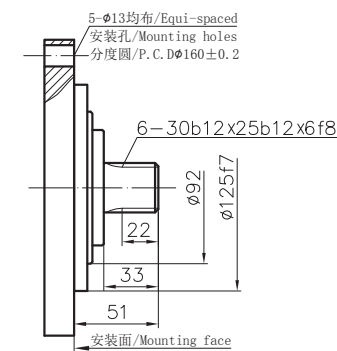
型号 TYPE	理论排量	压力/Pressure		扭矩/Torque		最高转速 Max.Speed	额定功率 Rated Power	重量 Weight
	Theory Displacement	额定压力 Rated Pressure	最高压力 Max. Pressure	额定扭矩 Rated Torque	单位扭矩 Unit Torque			
	ml/r	MPa	MPa	N.m	N.m/MPa			
ITM01-63	64	16	22	150	9	450	6	21
ITM01-80	78	16	20	183	11	420	6	
ITM01-100	96	16	20	225	14	350	7	
ITM01-125	126	16	20	295	18	320	8	
ITM01-160	159	14	20	326	23	280	8	
ITM02-100	113	16	22	264	17	350	8	28
ITM02-150	159	16	20	372	23	320	11	
ITM02-175	180	16	20	421	26	320	12	
ITM02-200	206	16	20	482	30	300	13	
ITM02-250	235	14	20	481	34	300	13	
ITM02-280	276	12	18	484	40	280	12	36
ITM03-175	181	16	22	424	26	350	13	
ITM03-200	201	16	20	470	29	320	13	
ITM03-250	254	16	20	594	37	300	16	
ITM03-300	289	14	20	592	42	280	15	
ITM03-350	340	12	18	597	50	250	13	58
ITM03-400	380	12	18	667	56	250	15	
ITM06-400	397	16	22	939	59	320	27	
ITM06-450	452	16	22	1069	67	320	30	
ITM06-500	491	16	22	1162	73	300	31	
ITM06-600	594	16	20	1405	88	280	35	72
ITM06-700	683	16	20	1616	101	250	36	
ITM06-750	754	14	18	1561	111	220	31	
ITM08-600	617	16	20	1444	90	280	36	
ITM08-700	710	16	20	1662	104	260	38	
ITM08-800	810	14	20	1659	118	260	38	95
ITM08-900	889	14	20	1821	130	220	36	
ITM08-1000	1000	12	18	1755	146	200	31	
ITM11-700	682	16	22	1596	101	280	40	
ITM11-800	782	16	22	1830	116	280	46	
ITM11-900	894	16	22	2092	132	280	52	170
ITM11-1000	981	16	20	2296	145	250	51	
ITM11-1100	1104	16	20	2584	163	250	57	
ITM11-1200	1234	14	20	2527	182	220	49	
ITM11-1300	1301	14	18	2664	192	200	47	
ITM16-1400	1413	16	22	3343	209	250	74	298
ITM16-1600	1648	16	22	3899	244	250	87	
ITM16-1800	1814	16	22	4292	268	220	84	
ITM16-2000	2034	14	20	4211	301	200	75	
ITM16-2400	2267	14	18	4693	335	180	75	
ITM31-2500	2553	18	25	6722	373	200	120	298
ITM31-2800	2683	18	25	7064	392	200	126	
ITM31-3000	3063	16	25	7169	448	180	115	
ITM31-3150	3218	16	25	7532	471	180	121	
ITM31-3500	3462	16	22	8103	506	160	115	
ITM31-4000	4152	16	20	9718	607	160	138	
ITM31-4500	4522	16	20	10584	661	160	151	
ITM31-5000	4828	14	20	9887	706	160	141	

郑重声明：以上数据为实测所得，保证使用性能不低于同类系列产品！版权所有

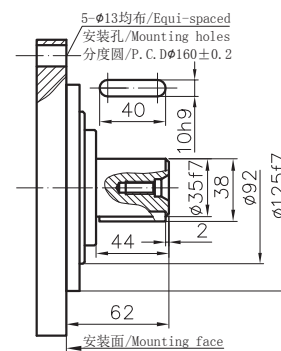
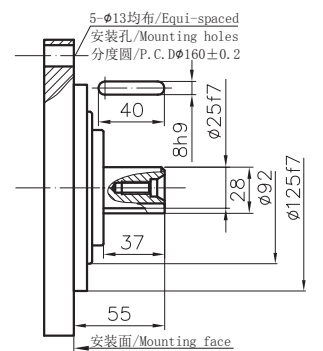
ITM01 外形及安装尺寸/ ITM01 Installation Dimensions



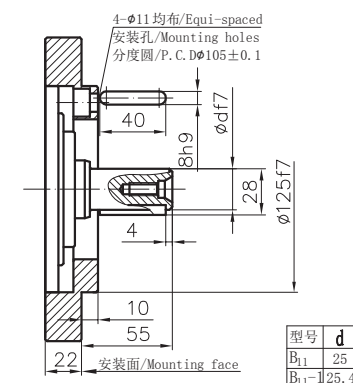
标准外花键 : ITM01-**
Standard Involute Spline



标准平键 : ITM01-**B
Standard Parallel Key

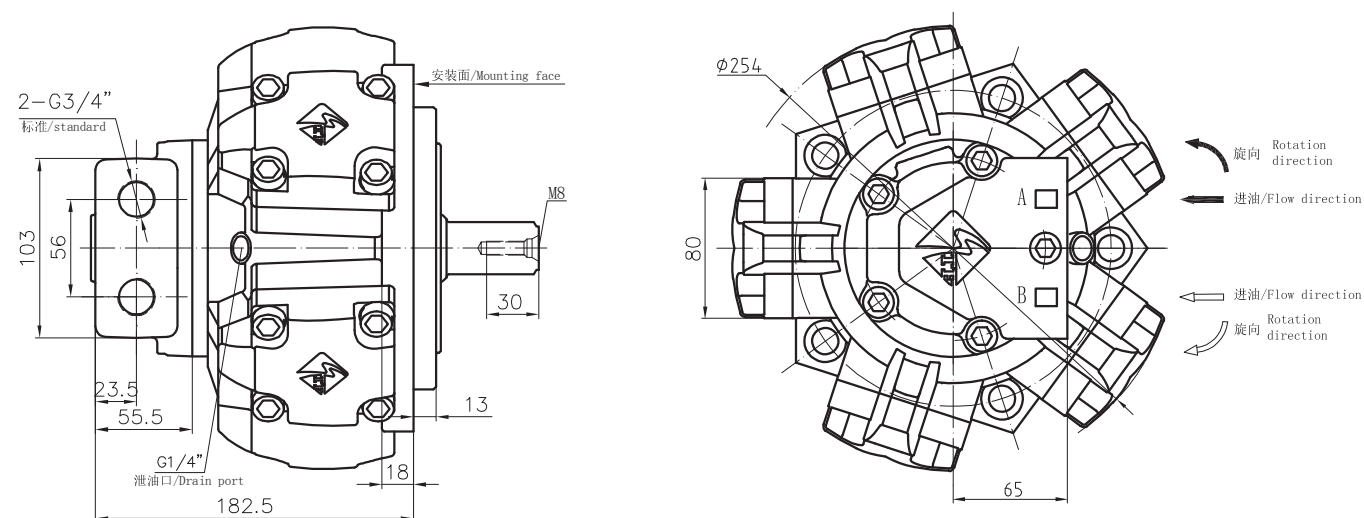
ITM01-**B₂₈

ITM01-**B₁₁, B₁₁-1



型号	d
B ₁₁	25
B ₁₁ -1	25.4

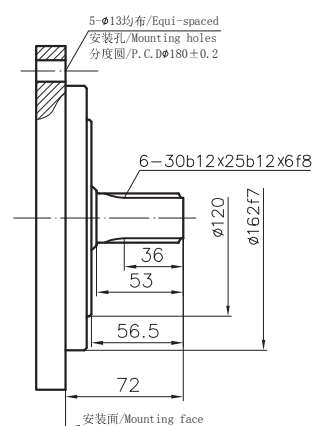
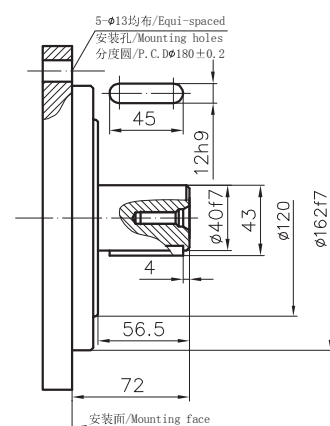
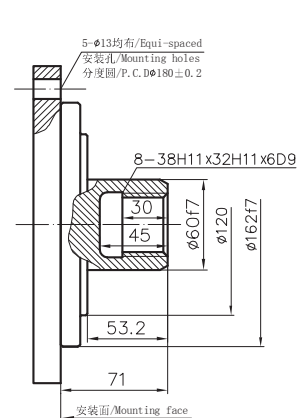
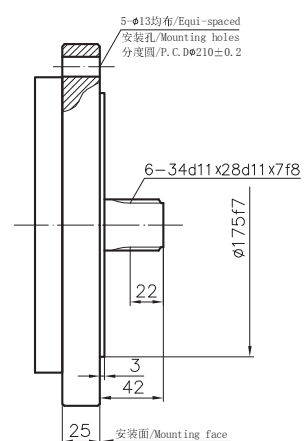
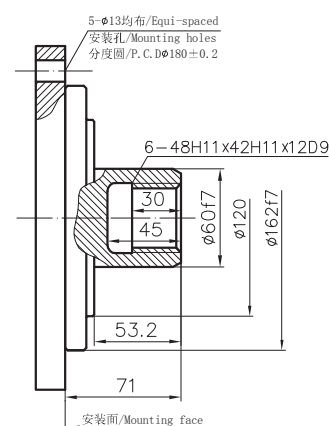
ITM02 外形及安装尺寸/ ITM02 Installation Dimensions



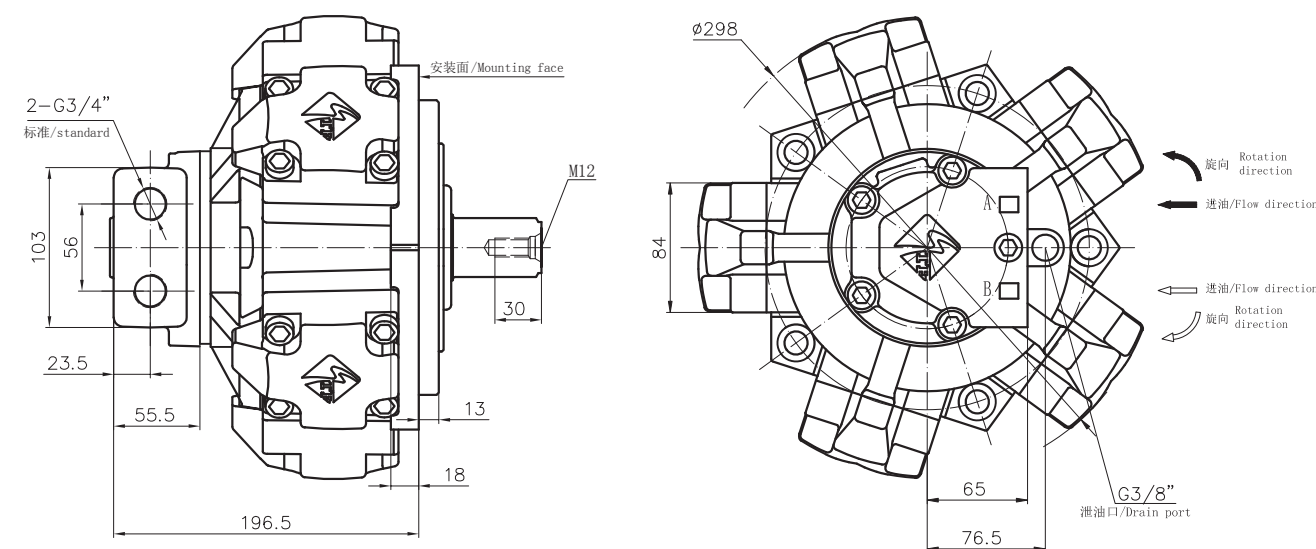
标准外花键 : ITM02-**
Standard Involute Spline

Standard 标准平键 : ITM02-**B

标准内花键 : ITM02-***
Standard Female Spline

ITM02-**SL₁ITM02-**I₀₃

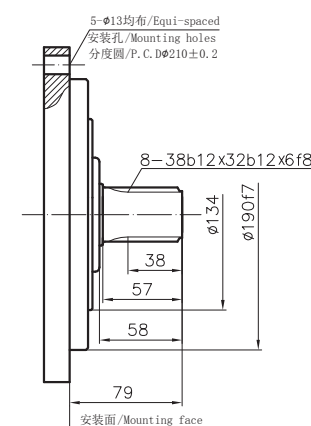
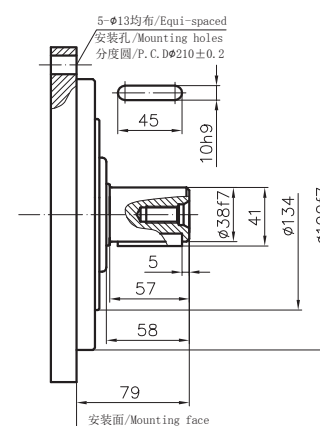
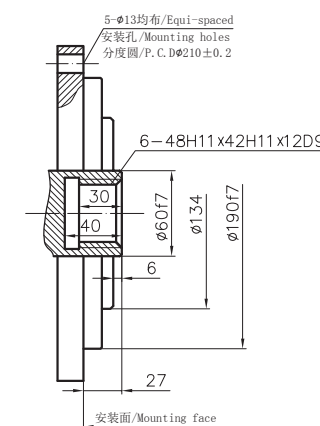
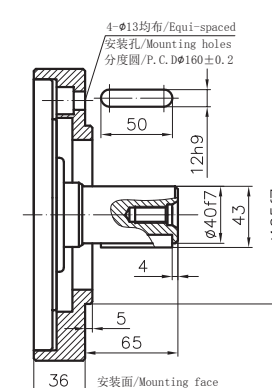
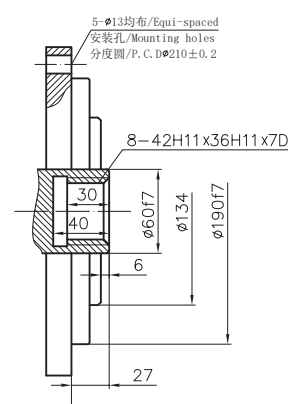
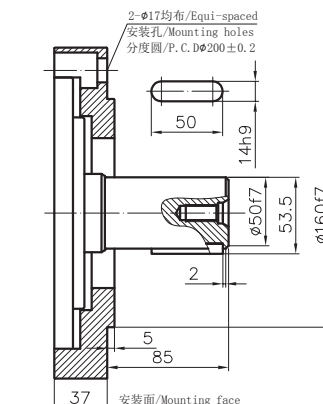
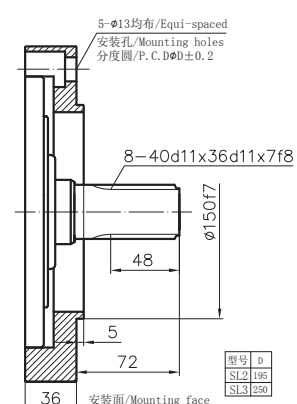
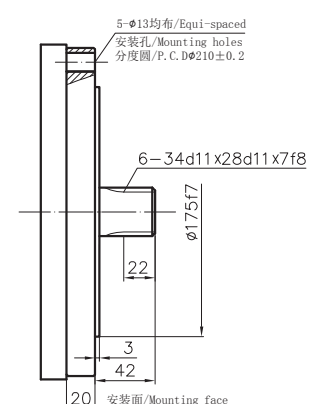
ITM03 外形及安装尺寸/ ITM03 Installation Dimensions



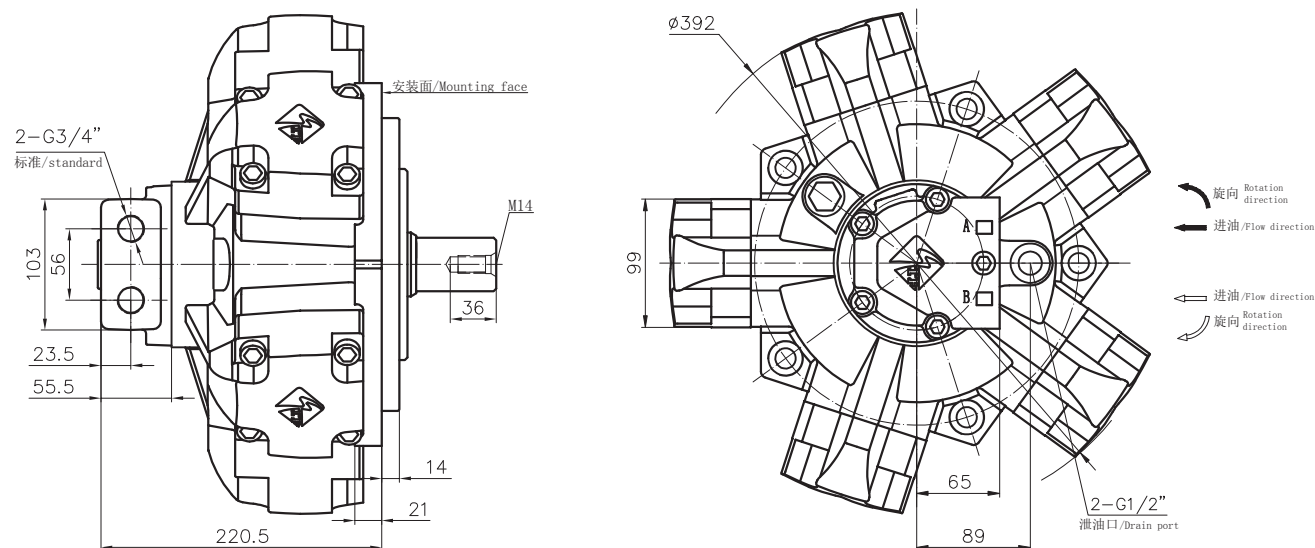
标准外花键 : ITM03-**
Standard Involute Spline

标准平键 : ITM03-**B
Standard Parallel Key

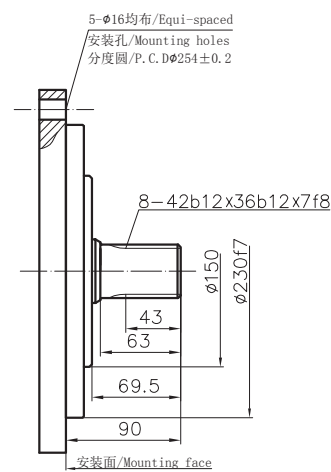
标准内花键 : ITM03-***
Standard Female Spline

ITM03-**B₀₁ITM03- **SL₁ITM03-**SL₂、SL₃ITM03- **B₀₂ITM03-**I₄₂

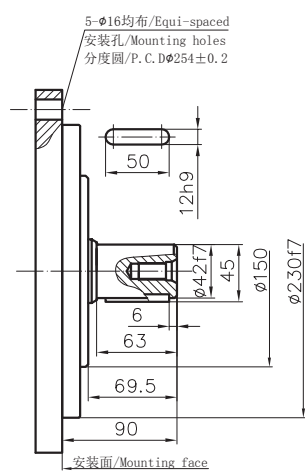
ITM06 外形及安装尺寸/ ITM06 Installation Dimensions



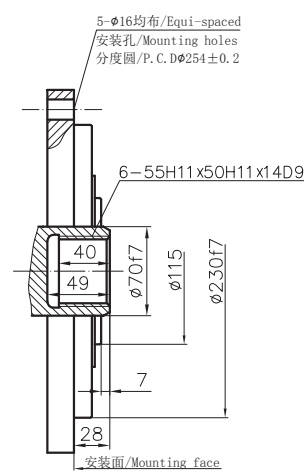
标准外花键 : ITM06--
Standard Involute Spline



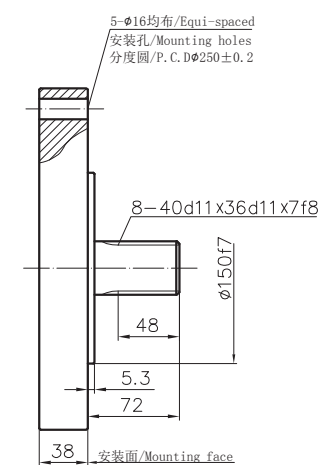
标准平键 : ITM06--B
Standard Parallel Key



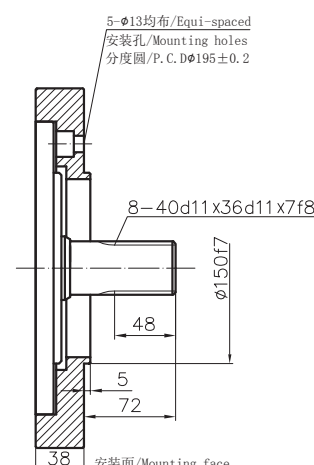
标准内花键 : ITM06--+I
Standard Female Spline



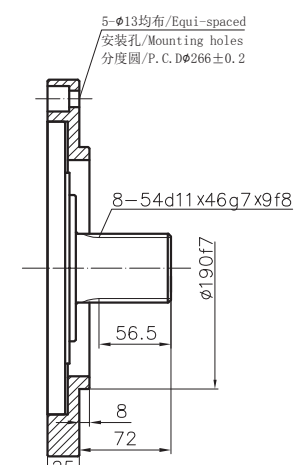
ITM06--SL₃



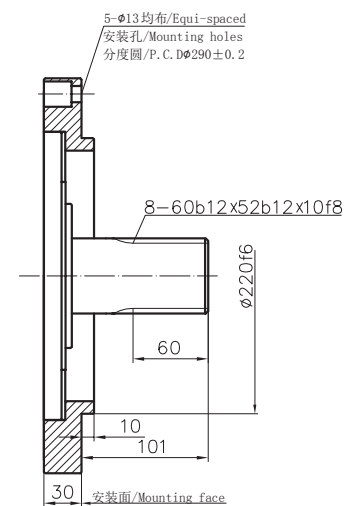
ITM06--SL₂



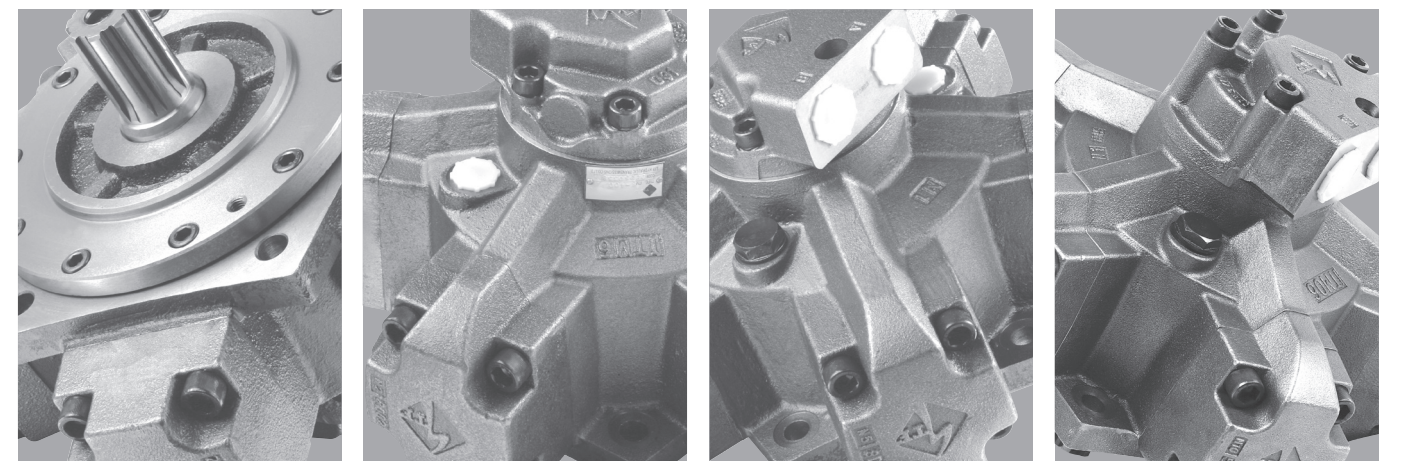
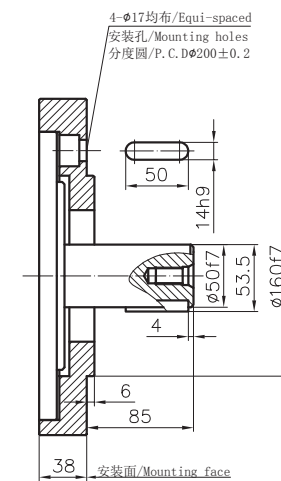
ITM06--N



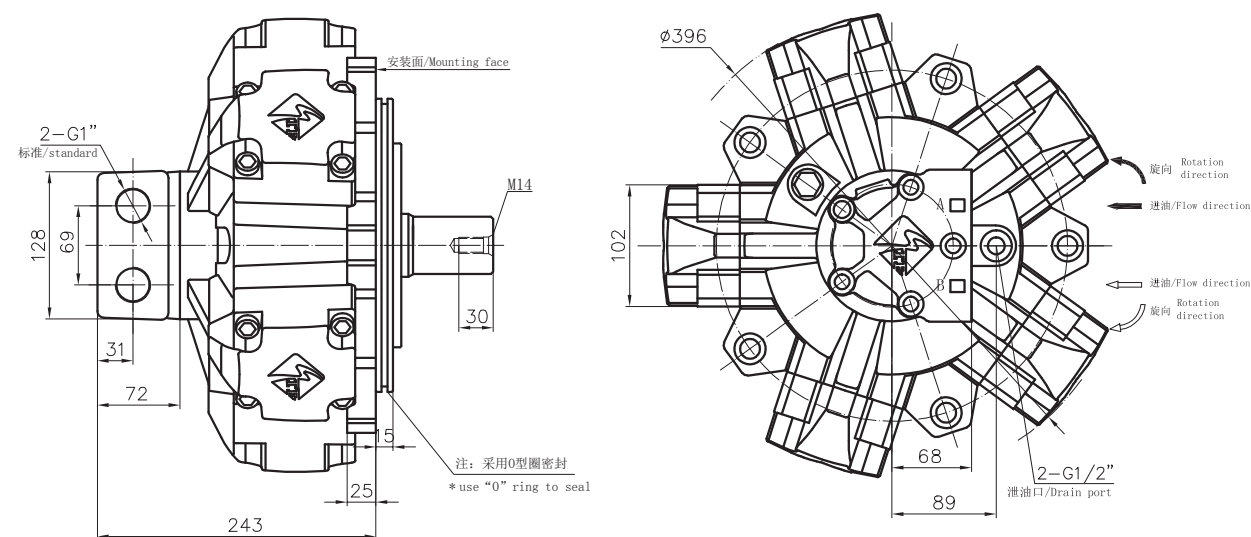
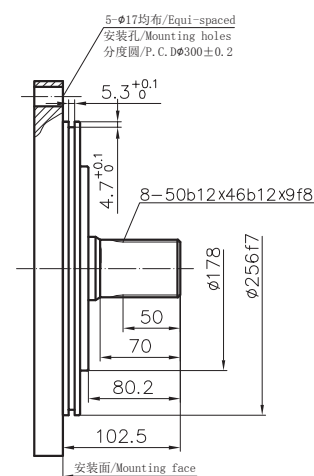
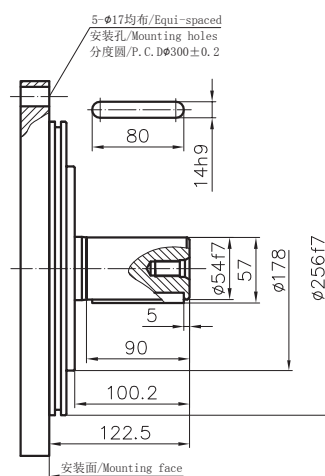
ITM06--N₀₁



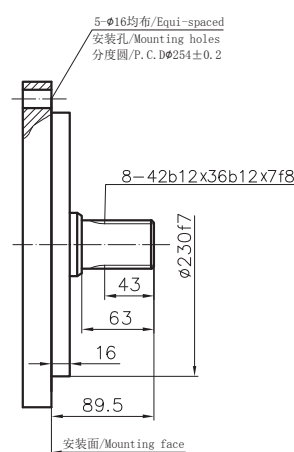
ITM06--B₀₂



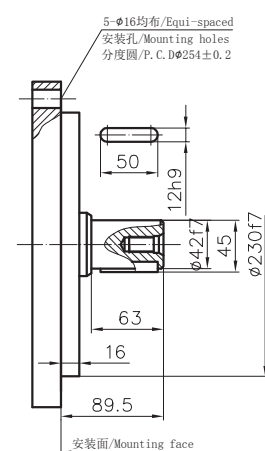
ITM08 外形及安装尺寸/ ITM08 Installation Dimensions

标准外花键 : ITM08-**
Standard Involute Spline标准平键 : ITM08-**B
Standard Parallel Key

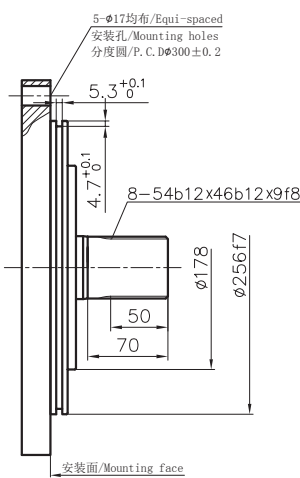
ITM08-**6M



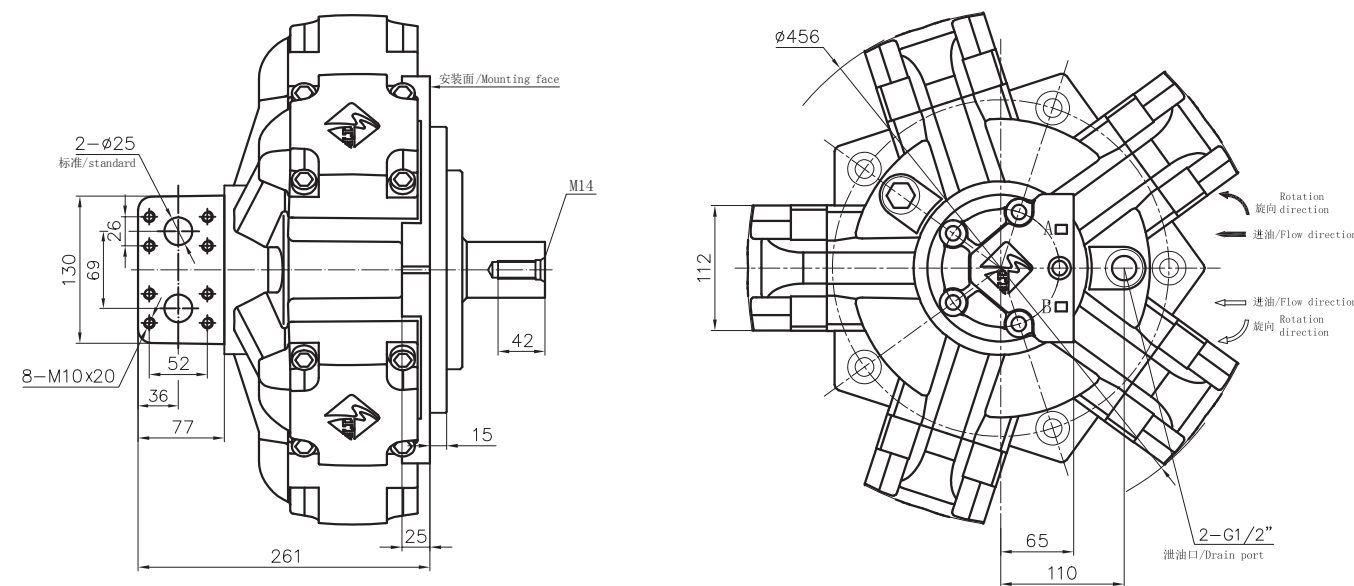
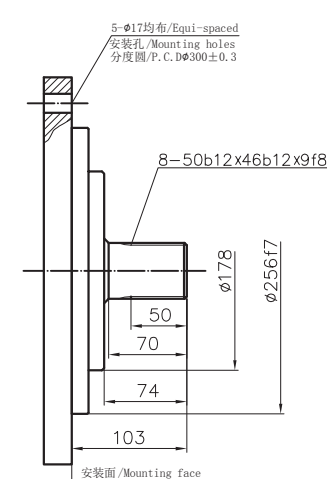
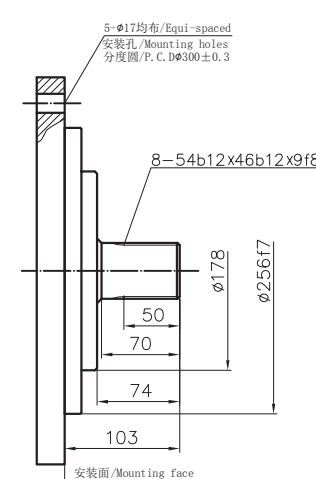
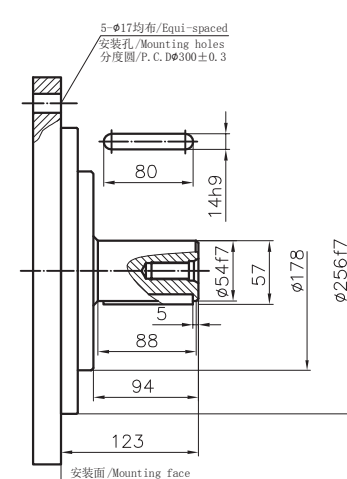
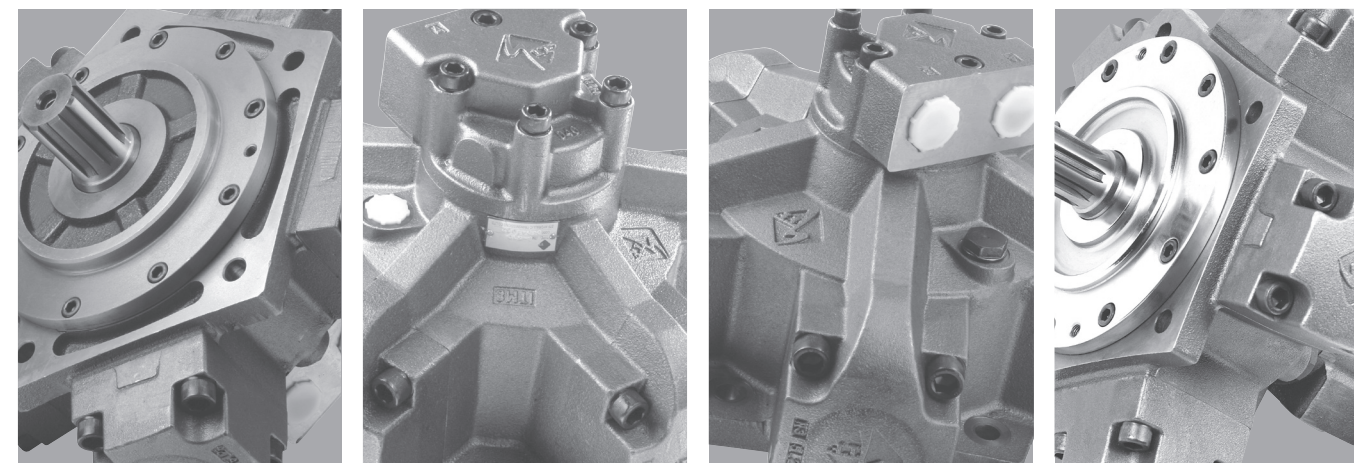
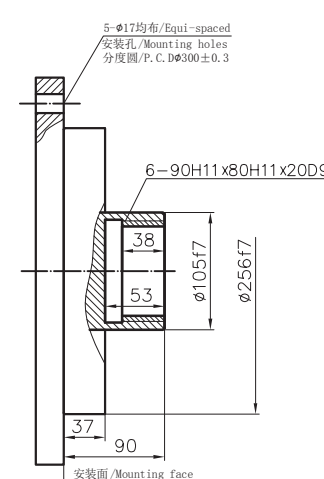
ITM08-**6MB

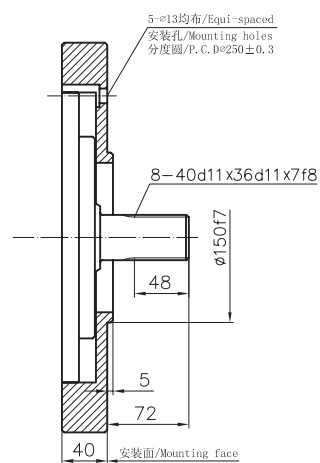
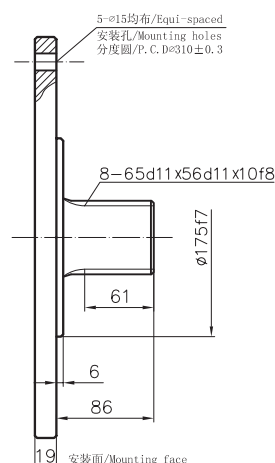
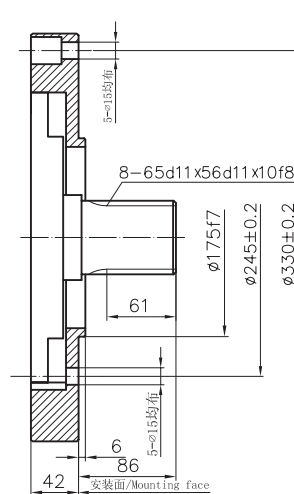
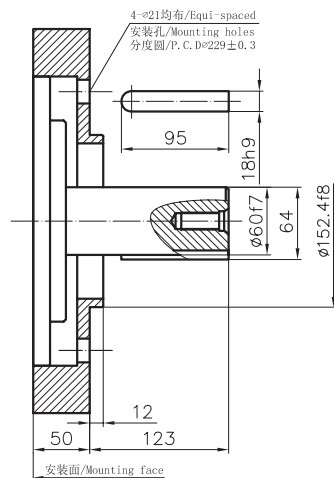
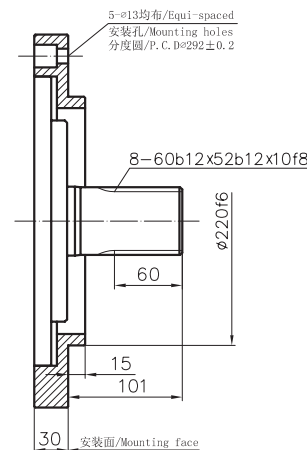
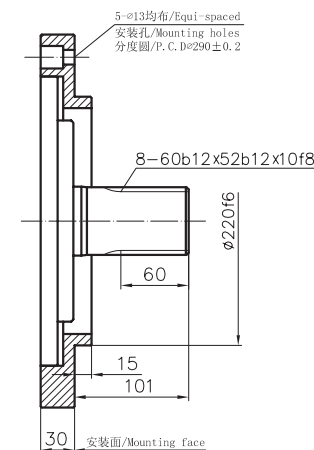
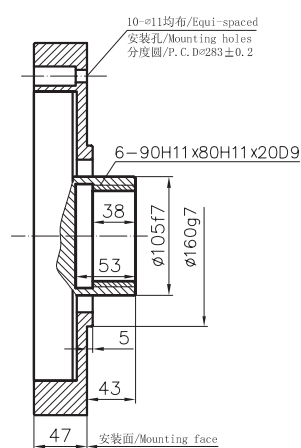
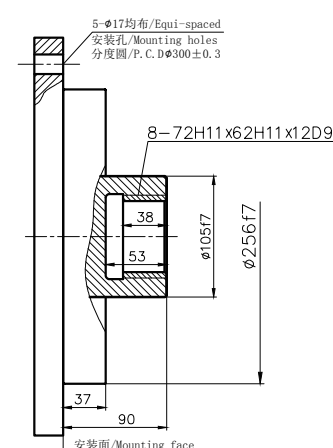
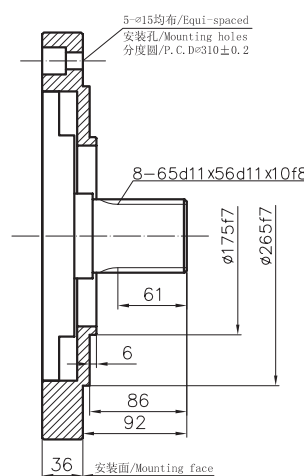


ITM08-**H54

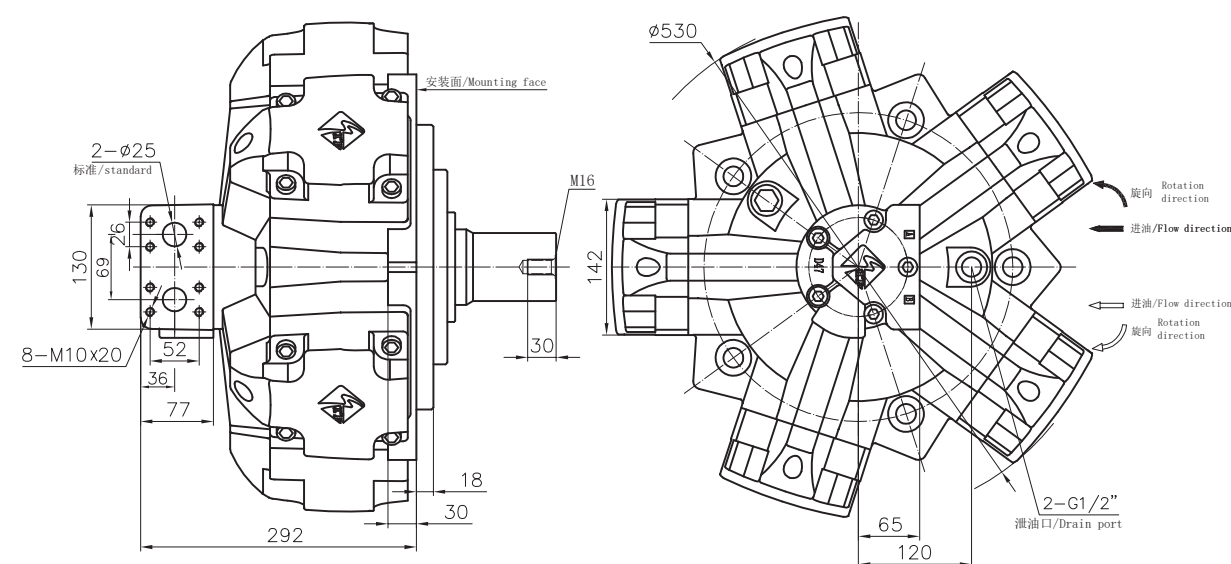
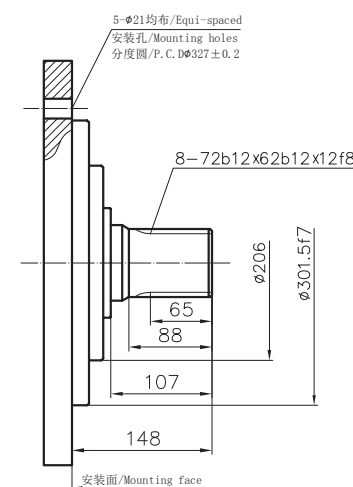
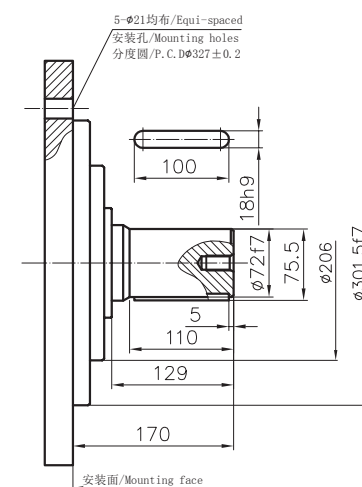
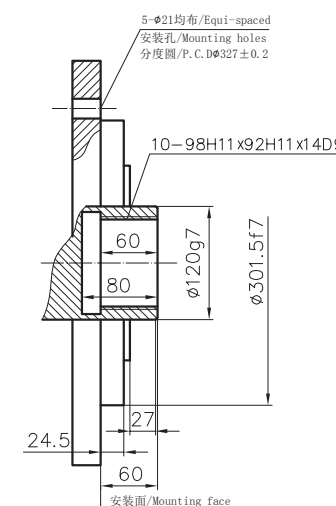
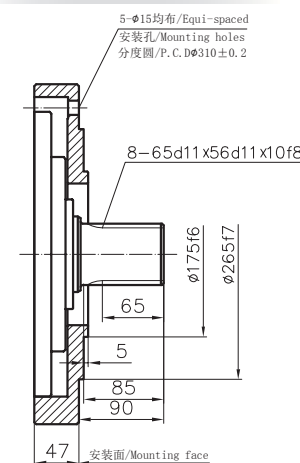


ITM11 外形及安装尺寸/ ITM11 Installation Dimensions

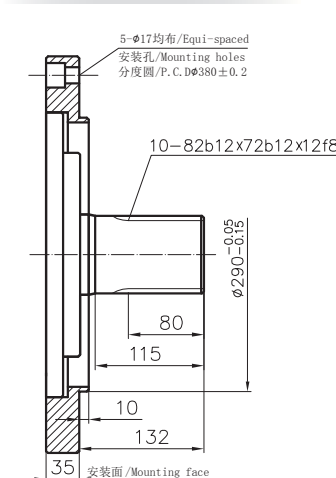
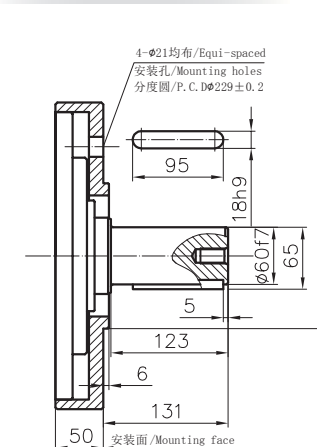
标准外花键 : ITM11-**
Standard Involute Spline标准外花键 : ITM11-H54
Standard Involute Spline标准平键 : ITM11-**B
Standard Parallel Key标准内花键 : ITM11-**I
Standard Female Spline

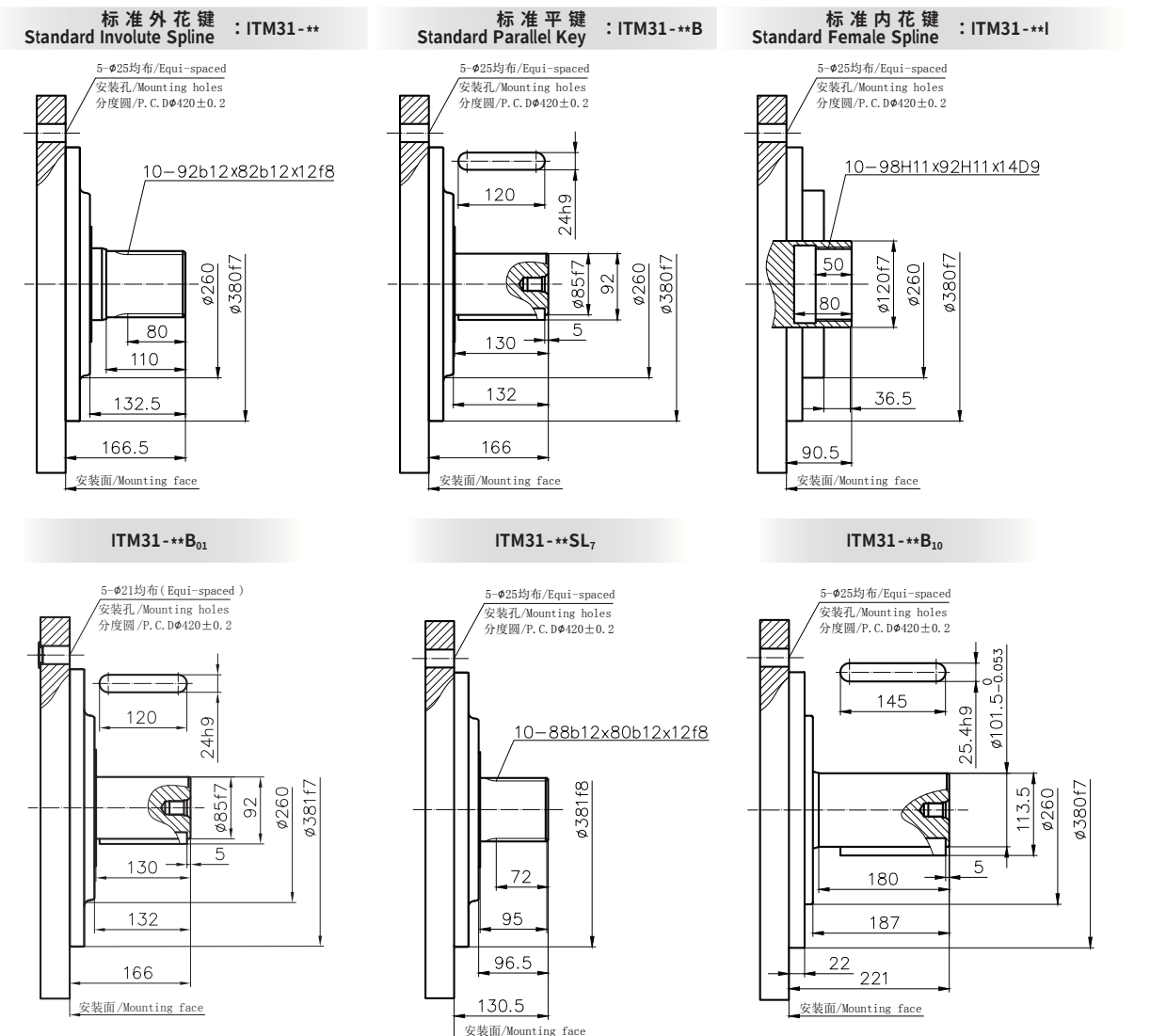
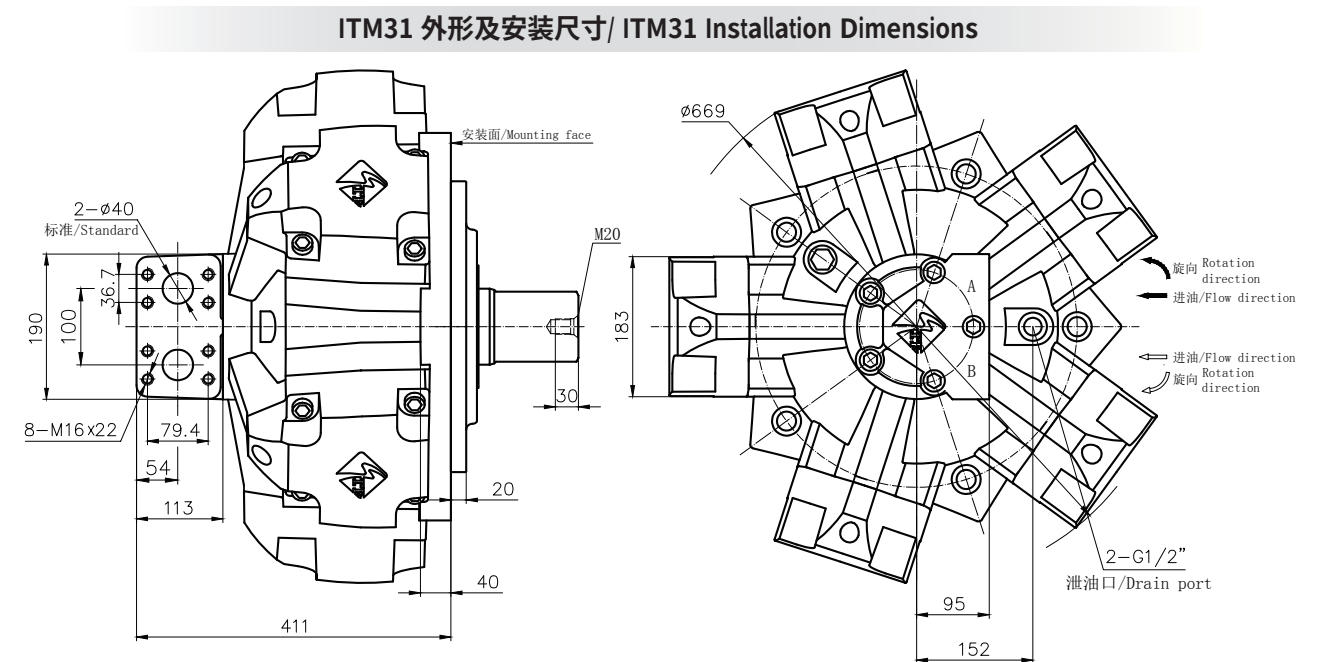
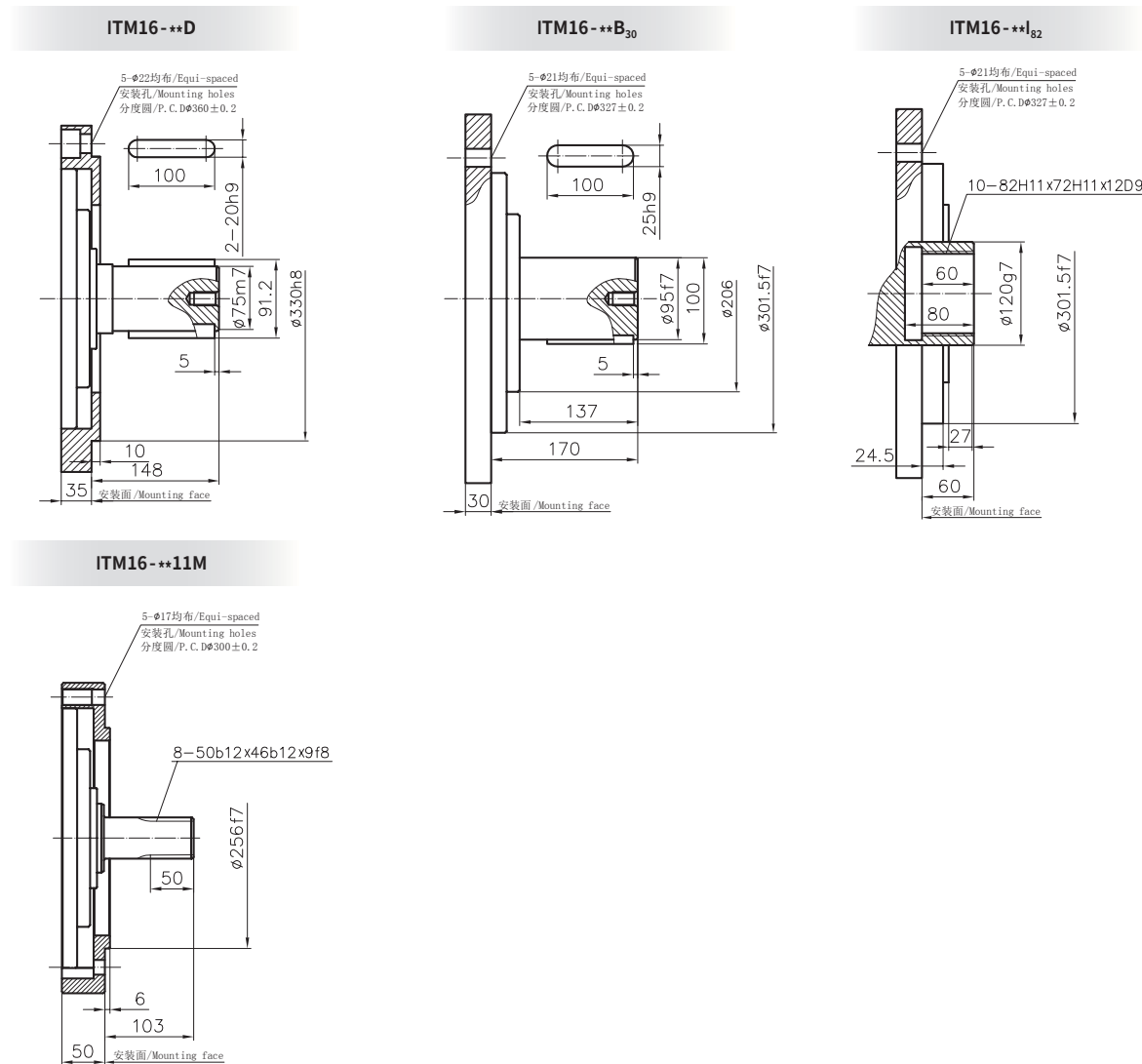
ITM11-**-SL₃ITM11-**-SL₄ITM11-**-SM₄ITM11-**-B₀₆ITM11-**-N₀₁ITM11-**-N₀₂ITM11-**-I₂₁ITM11-**-I₁₂ITM11-**-SL₅

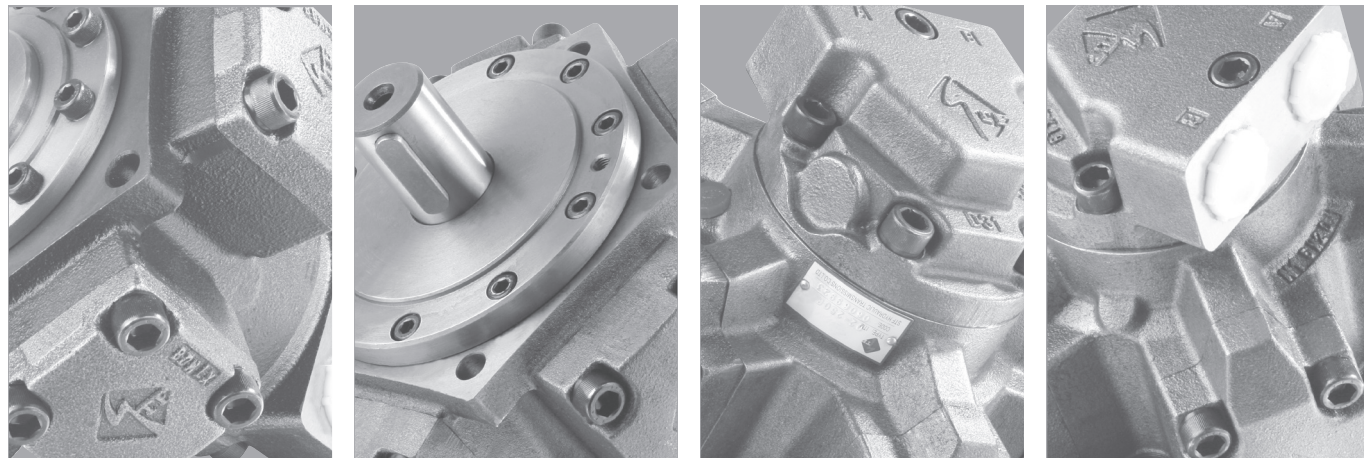
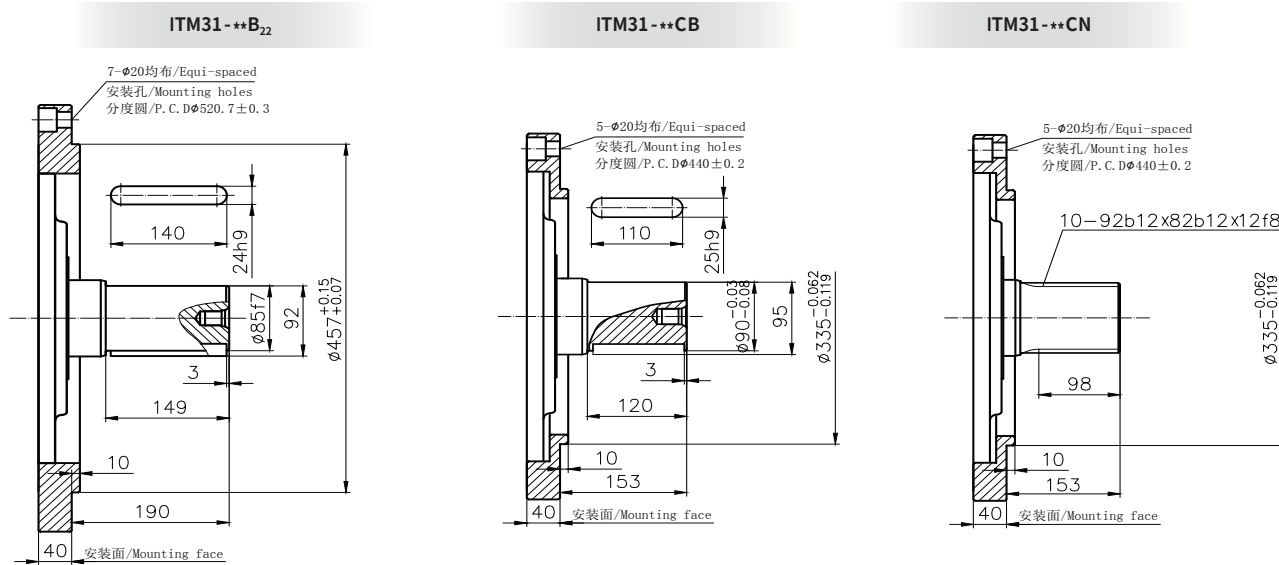
ITM16 外形及安装尺寸/ ITM16 Installation Dimensions

标准外花键 : ITM16-**-
Standard Involute Spline标准平键 : ITM16-**-B
Standard Parallel Key标准内花键 : ITM16-**-I
Standard Female SplineITM16-**-SL₅

ITM16-**-N

ITM16-**-B₀₆





通油盘种类/ Distributor

型号 Type	标准螺纹 Standard Thread	可选用螺纹 Thread Options	适用产品 Product	尺寸 Dimensions
D31	G3/4"	G1" Z3/4" Z1" ZG3/4" ZG1" M27x2 M33x2	ITM01 ITM02 ITM03 ITM06	
D40	G1"	G3/4" Z3/4" Z1" ZG3/4" ZG1" M27x2 M33x2	ITM08 ITM11	
D47	Ø 25	加连接块后螺纹 Thread With Spacer Z3/4" ZG3/4" G3/4" G1" Z1" ZG1" M27x2 M33x2	ITM11 ITM16 ITMS18	
D90	Ø 40	加连接块后螺纹 Thread With Spacer M33x2 M42x2 G1" ZG1" Z1" Ø 30以上Ø 60以下的管插孔	ITM16 ITM31 ITMS30	

进出油口与泄漏油口的相对位置/ Port Direction

1、正常0°/Normal 0° 2、转角72°/Rotation72° 3、转角144°/Rotation144° 4、转角126°/Rotation126° 5、转角162°/Rotation162° 6、转角90°/Rotation90°

