P系列行星齿轮减速机

动力传动专业制造商

PROFESSIONAL MANUFACTURER OF POWER TRANSMISSION

设计理念: 遵循规律，总是超越

DESIGN PHILOSOPHY: To follow the law, but always beyond.

经营理念: 为客户需求而设计，为客户满意而执着

BUSINESS PHILOSOPHY: Design for customer demand , dedication for customer satisfaction

P系列工业齿轮箱概述：

- 采用模块化设计，可根据客户要求进行变化组合。
- 箱体采用球墨铸铁，大大提高了箱体的刚性及抗震性。
- 箱体内的太阳轮、行星轮、内齿圈及螺旋锥齿轮均采用可控气氛渗碳淬火处理，得到高硬耐磨表面，热处理后全部磨齿，降低了噪音，提高了整机的效率及使用寿命。
- 输入方式：同心轴输入，斜齿轮输入，锥齿轮－斜齿轮输入，锥齿轮输入。
- 输出方式：内花键式，空心轴收缩盘式，外花键式，实心轴平键。
- 安装形式：水平安装，垂直安装，扭力臂安装。
- P系列产品有9-34型规格，行星传动级数有2级和3级。速比为25-4000，和R、K系列组合可得到更大速比。

P series gear units overview:

- Modular design realizes variable combination.
- Housing is made of cast iron, which improve its rigidity and anti-vibration.
- Sun and planet gears are processed by cementite and hardening, gears are processed by grinding, which improve the efficiency and lifetime of gear units.
- Input mode: coaxial input, helical gear input, bevel-helical gear input.
- Out put mode: internal involute spline, hollow shaft with shrink disk, external involute spline, solid shaft with flat key.
- Mounting mode: horizontal vertical, torque-arm.
- P series sizes 9-34, transmission stage: 2, 3, ratio: 25-4000, ratio will be larger in combination with R, K series.

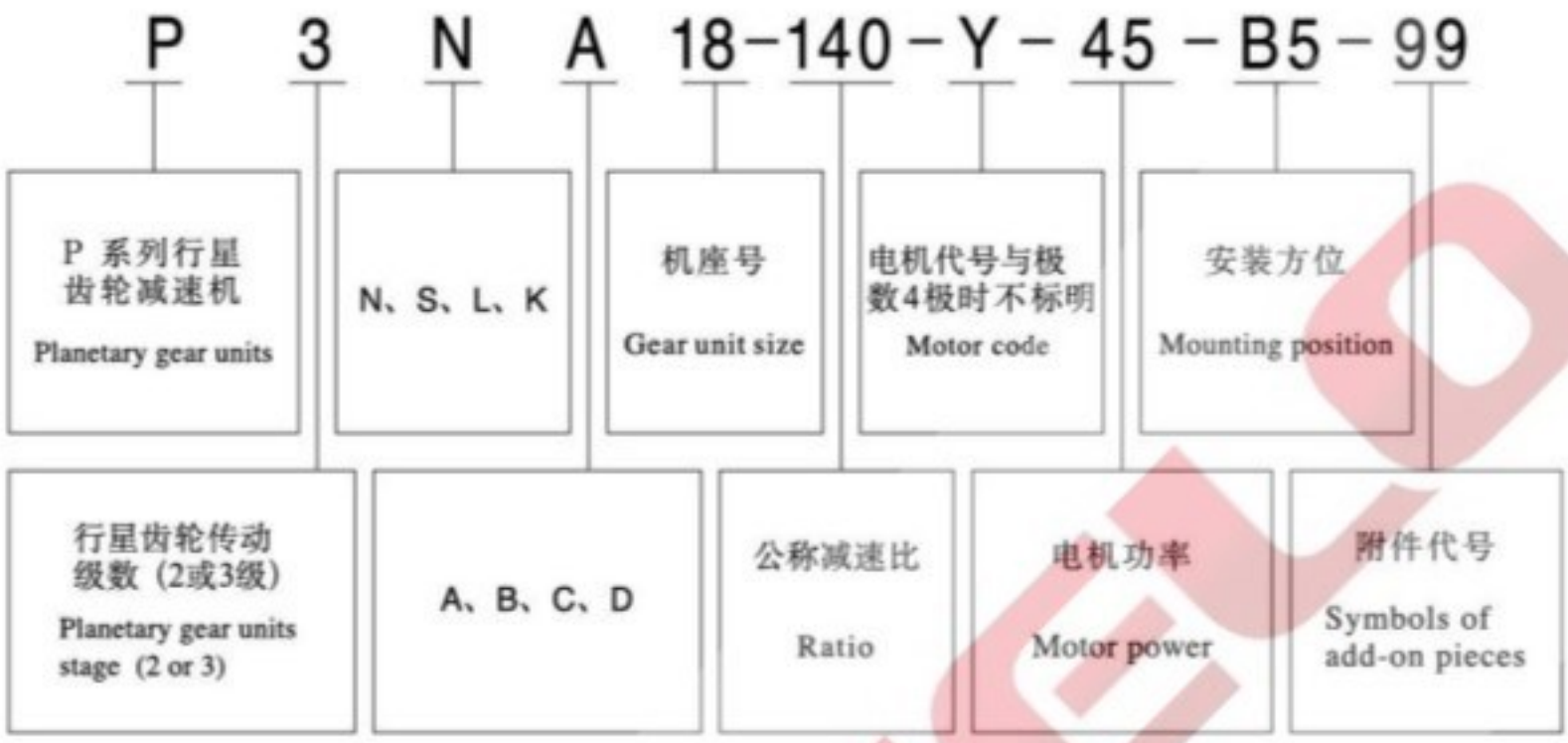
P系列型号规格表示方法举例：

基本型号规格表示方法举例:

Basic type illustration:

电机直联表示方法举例：

Compact motor mode illustration:



输入法兰联接表示方法举例：

Motor-flange mode illustration:

P

P系列选型及举例： P series type selection example:

<table>
<tr><th>序号
Steps</th><th>说 明
Specification</th><th>代号
Symbol</th><th>参 数 计 算
Calculate parameter</th></tr>
<tr><td>1</td><td>被驱动设备系数
Driven machine factor</td><td>f1</td><td>查317页f1表
See P317 f1 table</td></tr>
<tr><td>2</td><td>原动机系数
Factor for prime mover</td><td>f2</td><td>
<table>
<tr><th>原动机系数
Factor for prime mover</th><th>f2</th></tr>
<tr><td>电机、液压马达、汽轮机
Electric motors, hydraulic motors, turbines</td><td>1.0</td></tr>
<tr><td>4-6缸活塞发动机，周期变化1：100至1：200
Piston engines 4 - 6 cylinders cyclic variation 1 : 100 to 1 : 200</td><td>1.25</td></tr>
<tr><td>1-3缸活塞发动机，周期变化1：100
Piston engines 1 - 3 cylinders cyclic variation up to 1 : 100</td><td>1.5</td></tr>
</table>
</td></tr>
<tr><td>3</td><td>齿轮箱许用输入转速
Permissible input speed</td><td>n1</td><td>≤1500</td></tr>
<tr><td>4</td><td>确定减速比
Determine ratio</td><td>i</td><td>i=n1/n2</td></tr>
<tr><td>5</td><td>确定齿轮箱类型
选择传动效率
Efficiency</td><td>η</td><td>
<table>
<tr><th>Type</th><th>η</th><th>Type</th><th>η</th></tr>
<tr><td>P2N</td><td>94%</td><td>P3N</td><td>92%</td></tr>
<tr><td>P2L</td><td>93%</td><td>P3S</td><td>91%</td></tr>
<tr><td>P2S</td><td>93%</td><td>P3K</td><td>89%</td></tr>
<tr><td>P2K</td><td>91%</td><td></td><td></td></tr>
</table>
</td></tr>
<tr><td>6</td><td>以被驱动设备所需的扭矩或功率，确定齿轮箱的输入功率
Determine input power</td><td>P1</td><td>P1=T2 · n1/(9550 · i · η) 或 or P1=P2/η</td></tr>
<tr><td>7</td><td>根据计算，查传动能力表，确定齿轮箱规格
By calculation, defermine type in reference to transmission table</td><td>T2N
P1N</td><td>T2N ＞T2 · f1 · f2 或 or P1N＞P1 · f1 · f2
如果不满足条件： 3.33 · P1＞P1N ，请向我们咨询。
If not meet: 3.33 · P1＞P1N please consult us.</td></tr>
<tr><td>8</td><td>峰值扭矩校核 *
Check for maximum torque</td><td>TA</td><td>P1N＞TA · n1 · f3/9550
<table>
<tr><th>f3</th><th>每小时峰值负荷次数
Load peaks per hour
1-5</th><th>6-30</th><th>31-100</th><th>＞100</th></tr>
<tr><td>单向载荷
Steady direction of load</td><td>0.5</td><td>0.65</td><td>0.7</td><td>0.85</td></tr>
<tr><td>交变载荷
Alternating direction of load</td><td>0.7</td><td>0.95</td><td>1.10</td><td>1.25</td></tr>
</table>
</td></tr>
<tr><td>9</td><td>输出轴的径向力、轴向力校核
Verify axial and radial forces</td><td>Fr、Fa</td><td>查316页P系列Fr表
See page 316, P series Fr table</td></tr>
<tr><td>10</td><td>计算功率利用率确定其系数
Determine power utilization factor</td><td>f14</td><td>功率利用率 Utilization = P1/P1N · 100%
确定其系数f14.
Determine f14.
<table>
<tr><th>功率利用率
Utilization</th><th>30%</th><th>40%</th><th>50%</th><th>60%</th><th>70%</th><th>80%</th><th>90%</th><th>100%</th></tr>
<tr><td>f14</td><td>0.66</td><td>0.77</td><td>0.83</td><td>0.90</td><td>0.90</td><td>0.95</td><td>1.0</td><td>1.0</td></tr>
</table>
</td></tr>
<tr><td>11</td><td>热容量校核
Verify thermal capacity</td><td>PG</td><td>P1≤PG=PG1 · f4 · f14
若不能满足上式，则齿轮箱需外加辅助冷却装置(根据工况要求，可采用冷却水，冷却油，风冷等形式)
If P1＞PG, auxilliary cooling system shoulld be installed.
<table>
<tr><th colspan="6">环境温度系数 Ambient temperature factor f4</th></tr>
<tr><th>环境温度
Ambient Temperature</th><th colspan="5">每小时工作周期 (ED) 百分比%
Operating cycle per hour (ED) in %</th></tr>
<tr><td></td><td>100</td><td>80</td><td>60</td><td>40</td><td>20</td></tr>
<tr><td>10 ° C</td><td>1.14</td><td>1.20</td><td>1.32</td><td>1.54</td><td>2.04</td></tr>
<tr><td>20 ° C</td><td>1.00</td><td>1.06</td><td>1.16</td><td>1.35</td><td>1.79</td></tr>
<tr><td>30 ° C</td><td>0.87</td><td>0.93</td><td>1.00</td><td>1.18</td><td>1.56</td></tr>
<tr><td>40 ° C</td><td>0.71</td><td>0.75</td><td>0.82</td><td>0.96</td><td>1.27</td></tr>
<tr><td>50 ° C</td><td>0.55</td><td>0.58</td><td>0.64</td><td>0.74</td><td>0.98</td></tr>
</table>
</td></tr>
<tr><td>12</td><td>确定润滑方式
Verify lubrication method</td><td></td><td>V1、V3、V11、V31安装方位为浸油润滑；B51强制润滑；
其它安装方位为飞溅润滑或油泵。
V1、V3、V11、V31: Dip lubrication; B51:Pump lubrication;
others: splash lubrication.</td></tr>
<tr><td>13</td><td colspan="3">根据输入，输出方式，安装方位等确定具体型号及所需附件
Determine type according to the above.</td></tr>
</table>

* 峰值扭矩：最大负载扭矩，是指启动、制动或最大脉动载荷所引起的最大扭矩。（一般工况条件下峰值扭矩为启动或制动时的最大扭矩）
Peak torque: Maximum torque is maximum starting torque, maximum braking torque.

选 型 举 例
Selection example

输送设备,输入转速为1000r/min,
最大起动扭矩为2000N · m,输出转速为12.5r/min,
输出扭矩为68000N · m,每天工作12h。
负载持续率为60%,环境温度为0～20℃,大车间安装,风速约为5m/s,海拔高度为1000m以下,水平式法兰安装,偏心平行轴输入,输出,双轴型,实心轴普通平键输出。

解答:

f1=1.5

f2=1

n1=1000

i=1000/12.5=80

根据速比及输入输出轴要求可选P2S型

η=0.93

P1=T2 · n1/(9550 · i · η)

=68000 × 1000/(9550 × 80 × 0.93)=95.7kW

T2N≥T2 × f1 × f2=68000N · m × 1.5 × 1=102kN · m

P1N≥P1 × f1 × f2=95.7 × 1.5 × 1=143.55kW

初选P2SB14-80-B5-99

其P1N=153kW PG1=94kW iex=78.827

校核: 3.33 × P1≥P1 N

3.33 × 95.7 = 318.681 kW > P1N 满足要求。

峰值扭矩校核:

P1N=153kW≥T_A · n1 · f3/9550

=2000 × 1000 ×0.5/9550=104.71kW 满足要求。

热容量校核:

公称功率利用率=P1/P1N=95.7/153=0.625=62.5%

查P系列选型表得 f14=0.9 f4=1.16

PG1 × f4 × f14=94 × 1.16 × 0.9=100.32kW > P1

因此无须外加辅助冷却装置就可满足设备要求。

根据设备要求,安装方位为B5

润滑方式:飞溅润滑

选定型号为: **P2SB14-80-B5-99**

Conveyer, input speed 1000r/min,
Max starting torque 2000N · m, output speed 12.5r/min,
Output torque 68000N · m, service time 12h/day.
Dnration of load 60% of workin circle, ambient temperature 0～20℃, wind velocity 5m/s, large workshops, altitude below 1000m,
horizontal flange-mounted with solid output shaft.

f_1=1.5

f_2=1

n1=1000

i=1000/12.5=80

Choose P2S according to the above data.

η=0.93

P1=T2 · n1/(9550 · i · η)

=68000 × 1000/(9550 × 80 × 0.93)=95.7kW

T2N≥T2 × f1 × f2=68000N · m × 1.5 × 1=102kN · m

P1N≥P1 × f1 × f2=95.7 × 1.5 × 1=143.55kW

Refer to transmission capacity table,

choose P2SB14-80-B5-99,

P1N=153kW PG1=94kW iex=78.827

Check: 3.33 × P1≥P1N

3.33 × 95.7 = 318.681 kW > P_{1N}

Check verify peak torque:

P1N=153kW≥T_A · n1 · f3/9550

=2000 × 1000 ×0.5/9550=104.71kW

Check thermal capacities:

Utilization =P1/1PN=95.7/153=0.625=62.5%

So f14=1 Get f4=1.16, according to working conditions.

PG1 × f4 × f14=94 × 1.16 × 0.9=100.32kW > P1

No attached cooling devices can meet requirement.

Mounting position B5

Lubrication method: splash

TYPE: **P2SB14-80-B5-99**

P

符号说明：

ED= 每小时工作周期，以百分比表示，如ED=60%/h

f1=被驱动设备系数

f2=原动机系数

f3=峰值扭矩系数

f4=环境温度系数

f14=设备功率利用率

PG1=不带辅助冷却装置的齿轮箱热容量

Fr2=允许径向力

P1N=减速机额定许用输入功率

TA=峰值扭矩，或者启动、制动时最大扭矩

Symbol description:

ED =operating cycle per hour, express as percent, for example ED=60%/h

f1=Factor for driven machine

f2=Factor for prime mover

f3=Peak torquq factor

f4 =Ambient temperature factor

f14 = Utilization factor

PG1=Thermal capacity for gear units without auxiliary cooling.

Fr2= Permissible radial forces

P_{N1}= Required power rating

T_A =Tax. torque occurring on input shaft,e.g. peak operating, starting- or braking torque

P系列Fr2(N)表：

P series Fr(N) table:

n1 (r/min)	n2N	iN	Fr2 (N)													
			9	10	11	12	13	14	16	17	18	19-20	21-22	23-24	25-26	27-28
1450	58.0	25	9538	23353	32518	42407	34737	41183	72297	64454	69713	70477	99136	99347	123583	126071
	51.8	28	9905	24252	33770	44039	36057	42768	75080	66935	72396	73190	102952	103171	128341	130925
	46.0	31.5	10302	25223	35122	45803	37519	44481	78066	69616	75295	76121	107075	107302	133480	136167
	40.8	35.5	10720	26249	36550	47665	39044	46289	81261	72446	78356	79215	111428	111665	138907	141703
	36.3	40	11155	27314	38033	49599	40629	48167	84559	75386	81536	82430	115950	116196	144544	147454
	32.2	45	11602	28408	39556	51585	42256	50096	87945	78404	84801	85731	120593	120849	150332	153358
	29.0	50	12017	29423	40970	53429	43766	51887	91088	81207	87832	88795	124903	125169	155705	158840
	25.9	56	12479	30556	42547	55486	45451	53884	94595	84333	91214	92214	129712	129988	161700	164955
	23.0	63	12979	31779	44251	57708	47271	56042	98383	87710	94866	95906	134906	135193	168175	171560
	20.4	71	13507	33071	46050	60054	49193	58320	102382	91276	98723	99805	140390	140689	175011	178534
	18.1	80	14055	34413	47919	62491	51189	60687	106537	94980	102729	103856	146088	146398	182114	185780
	16.1	90	14618	35791	49838	64993	53239	63117	110803	98783	106843	108014	151937	152260	189406	193219
	14.5	100	15140	37071	51619	67316	55142	65373	114764	102314	110662	111875	157368	157703	196176	200125
	12.9	112	15723	38498	53606	69908	57265	67890	119182	106253	114922	116182	163427	163774	203729	207830
	11.6	125	16309	39933	55605	72514	59400	70421	123626	110215	119207	120514	169520	169880	211325	215578
	10.4	140	16937	41471	57746	75306	61687	73132	128385	114458	123796	125153	176046	176420	219460	223878

备注：各规格更低的输出转速按以上最大的Fr2值。 Note: If there is lower output speed, please choose the maximum Fr2 in above table.

被驱动设备系数 f1 Service Factors

被驱动设备系数 Factor for driven machine					f1
工作机 Driven machines		日常载运行时间（小时） Effective daily operating period under load in hours			
		0.5	>0.5-10	>10	
污水处理	**Waste water treatment**				
浓缩器（中心传动）	Thickeners (central drive)	–	–	1.2	
压滤器	Filter presses	1.0	1.3	1.5	
絮凝器	Flocculation apparata	0.8	1.0	1.3	
曝气机	Aerators	–	1.8	2.0	
搜集设备	Raking equipment	1.0	1.2	1.3	
纵向、回转组合式搜集装置	Combined longitudinal and rotary rakes	1.0	1.3	1.5	
浓缩器	Pre-thickeners	–	1.1	1.3	
螺杆泵	Screw pumps	–	1.3	1.5	
水轮机	Water turbines	–	–	2.0	
泵	Pumps				
离心泵	Centrifugal pumps	1.0	1.2	1.3	
容积式泵	Positive-displacement pumps				
1个活塞	1 piston	1.3	1.4	1.8	
>1个活塞	> 1piston	1.2	1.4	1.5	
挖泥机	**Dredgers**				
斗式运输机	Bucket conveyors	–	1.6	1.6	
倾卸装置	Dumping devices	–	1.3	1.5	
Carterpillar行走机构	Carterpillar travelling gears	1.2	1.6	1.8	
斗式挖掘机	Bucket wheel excavators				
用于捡拾	as pick-up	–	1.7	1.7	
用于粗料	for primitive material	–	2.2	2.2	
切碎机	Cutter heads	–	2.2	2.2	
行走机构 *	Traversing gears	–	1.4	1.8	
弯板机	**Plate bending machines**	–	1.0	1.0	
化学工业	**Chemical industry**				
挤压机	Extruders	–	–	1.6	
调浆机	Dough mills	–	1.8	1.8	
橡胶砑光机	Rubber calenders	–	1.5	1.5	
冷却圆筒	Cooling drums	–	1.3	1.4	
混料机，用于	Mixers for				
均匀介质	uniform media	1.0	1.3	1.4	
非均匀介质	non-uniform media	1.4	1.6	1.7	
搅拌机，用于	Agitators for media with				
密度均匀介质	uniform density	1.0	1.3	1.5	
不均匀介质	non-uniform density	1.2	1.4	1.6	
不均匀气体吸收	non-uniform gas absorption	1.4	1.6	1.8	
烘炉	Toasters	1.0	1.3	1.5	
离心机	Centrifuges	1.0	1.2	1.3	
金属加工设备	**Metal working mills**				
翻板机	Plate tilters	1.0	1.0	1.2	
推钢机	Ingot pushers	1.0	1.2	1.2	
绕线机	Winding machines	–	1.6	1.6	
冷床横移架	Cooling bed transfer frames	–	1.5	1.5	
辊式矫直机	Roller straighteners	–	1.6	1.6	
辊道	Roller tables				
连续式	continuous	–	1.5	1.5	
间歇式	intermittent	–	2.0	2.0	
可逆式轧管机	Reversing tube mills	–	1.8	1.8	
剪切机	Shears				
连续式 *	continuous	–	1.5	1.5	
曲柄式 *	crank type	1.0	1.0	1.0	
连铸机驱动装置	Continuous casting drivers	–	1.4	1.4	
轧机	Rolls				
可逆式开坯机	Reversing blooming mills	–	2.5	2.5	
可逆式板坯轧机	Reversing slabbing mills	–	2.5	2.5	
可逆式线材轧机	Reversing wire mills	–	1.8	1.8	
可逆式薄板轧机	Reversing sheet mills	–	2.0	2.0	
可逆式中厚板轧机	Reversing plate mills	–	1.8	1.8	
辊缝调节驱动装置	Roll adjustment drives	0.9	1.0	–	

工作机 Driven machines		日常载运行时间（小时） Effective daily operating period under load in hours		
		0.5	>0.5-10	>10
输送机械	**Conveyors**			
斗式输送机	Bucket conveyors	–	1.4	1.5
绞车	Hauling winches	1.4	1.6	1.6
卷扬机	Hoists	–	1.5	1.8
皮带输送机≤150kW	Belt conveyors ≤ 150 kW	1.0	1.2	1.3
皮带输送机>150kW	Belt conveyors > 150 kW	1.1	1.3	1.4
货用电梯 *	Goods lifts	–	1.2	1.5
客用电梯 *	Passenger lifts	–	1.5	1.8
刮板式输送机	Apron conveyors	–	1.2	1.5
自动扶梯	Escalators	1.0	1.2	1.4
轨道行走机构	Rail travelling gears	–	1.5	–
变频装置	**Frequency converters**	–	1.8	2.0
往复式压缩机	**Reciprocating compressors**	–	1.8	1.9
起重机械 **	**Cranes**			
回转机构 *	Slewing gears	1.0	1.4	1.8
俯仰机构	Luffing gears	1.0	1.1	1.4
行走机构	Travelling gears	1.1	1.6	2.0
提升机构	Hoisting gears	1.0	1.1	1.4
转臂式起重机	Derricking jib cranes	1.0	1.2	1.6
冷却塔	**Cooling towers**			
冷却塔风扇	Cooling tower fans	–	–	2.0
风机（轴流和离心式）	Blowers (axial and radial)	–	1.4	1.5
食品工业	**Food industry**			
蔗糖生产	Cane sugar production			
甘蔗切碎机 *	Cane knives	–	–	1.7
甘蔗碾磨机	Cane mills	–	–	1.7
甜菜糖生产	Beet sugar production			
甜菜铰碎机	Beet cossettes macerators,	–	–	1.2
榨取机，机械致冷机、蒸煮机	Extraction plants, Mechanical refrigerators, Juice boilers,	–	–	1.4
甜菜清洗机	Sugar beet washing machines,			
甜菜切碎机	Sugar beet cutters	–	–	1.5
造纸机械	**Paper machines**			
各种类型 ***	of all-kind	–	1.8	2.0
碎浆机驱动装置	Pulper drives	根据客户要求供货 On request		
离心式压缩机	**Centrifugal compressors**	–	1.4	1.5
索道缆车	**Cableways**			
运货索道	Material ropeways	–	1.3	1.4
往返系统空中索道	To- and fro system aerial ropeways	–	1.6	1.8
T型杆升降机	T-bar lifts	–	1.3	1.4
连续索道	Continuous ropeways	–	1.4	1.6
水泥工业	**Cement industry**			
混凝土搅拌器	Concrete mixers	–	1.5	1.5
破碎机 *	Breakers	–	1.2	1.4
回转窑	Rotary kilns	–	–	2.0
管式磨机	Tube mills	–	–	2.0
选粉机	Separators	–	1.6	1.6
辊压机	Roll crushers	–	–	2.0

1. 工作机额定功率P2的确定：
   *）按最大的扭矩确定额定功率。
   **）可交载荷准确地分类。
   ***）检验热容量是绝对必要的。
2. 所列各项系数均为经验值。使用这些系数的前提条件是，所述机械设备应符合通常的设计规范和载荷条件。如遇特殊情况，请及时与我们取得联系。
3. 对于那些未列入此表的工作机械，请与我们联系。

1. Design for power rating of driven machine P2
   *) Designed power corresponding to max. torque
   **) Load can be exactly classified, for Instance.
   ***) A check for thermal capacity is absolutely essential.
2. The listed factors are empirical values. Prerequisite for their application is that the machinery and equipment mentioned correspond to generally accepted design and load specifications. In case of deviations from standard conditions, please refer to us.
3. For driven machines which are not listed in this table,please refer to us.

P系列传动能力表 P SERISE TRANSMISSION CAPACITY TABLE

P2N和P2S传动能力表：（i=25~125）

P2N & P2S transmission capacity table: (i=25~125)

n_1 (r/min)	n_{2N} (r/min)	i_N	P2-9			P2-10			P2-11			P2-12			P2-13			P2-14		
			T_{2N} (kN·m)	iex	P_{1N} (kW)	T_{2N} (kN·m)	iex	P_{1N} (kW)	T_{2N} (kN·m)	iex	P_{1N} (kW)	T_{2N} (kN·m)	iex	P_{1N} (kW)	T_{2N} (kN·m)	iex	P_{1N} (kW)	T_{2N} (kN·m)	iex	P_{1N} (kW)
1500	60	25	22	25.634	137	31	25.634	193	42	25.875	261	60	24.983	373	83	24.958	516	117	24.958	728
1000	40				91			129			174			249			344			485
750	30				68			96			131			187			258			364
1500	54	28	22	28.058	123	31	28.058	173	42	28.233	235	60	27.26	336	83	27.318	465	117	27.318	655
1000	36				82			116			157			224			310			437
750	27				62			87			118			168			232			327
1500	48	31.5	22	31.142	109	31	31.142	154	42	31.207	209	60	30.13	298	83	30.321	413	117	30.321	582
1000	32				73			103			139			199			275			388
750	24				55			77			104			149			206			291
1500	42	35.5	22	35.201	96	31	35.201	135	42	35.072	183	60	33.863	261	83	34.272	361	117	34.272	509
1000	28				64			90			122			174			241			340
750	21				48			67			91			131			181			255
1500	38	40	22	40.781	87	31	40.781	122	42	40.302	165	60	38.912	236	83	39.706	327	117	39.706	461
1000	25				57			80			109			155			215			303
750	19				43			61			83			118			163			230
1500	33.3	45	22	45.601	77	31	45.601	108	42	43.209	147	60	41.719	209	83	43.797	290	117	43.797	408
1000	22.2				51			72			98			140			193			272
750	16.7				38			54			73			105			145			204
1500	30.0	50	22	51.544	69	31	51.544	97	42	48.561	132	60	46.887	188	83	49.505	261	117	49.505	368
1000	20.0				46			65			88			126			174			245
750	15.0				35			49			66			94			130			184
1500	26.8	56	22	59.715	62	31	59.715	87	42	55.802	118	60	53.878	168	83	57.353	233	117	57.353	328
1000	17.9				41			58			79			112			155			219
750	13.4				31			43			59			84			116			164
1500	23.8	63	22	61.953	55	31	61.953	77	42	63.399	105	60	61.213	150	83	59.977	207	117	59.977	292
1000	15.9				37			52			70			100			138			194
750	11.9				27			39			52			75			103			146
1500	21.1	71	22	71.775	49	31	71.775	69	42	72.853	93	60	70.34	133	83	69.485	184	117	69.485	259
1000	14.1				32			46			62			88			122			173
750	10.6				24			34			46			66			92			129
1500	18.8	80	22	78.782	43	31	78.782	61	42	81.303	82	60	78.499	118	83	78.827	163	117	78.827	230
1000	12.5				29			41			50			79			109			153
750	9.4				22			30			41			59			81			115
1500	16.7	90	22	91.272	38	31	91.272	54	42	93.426	73	60	90.205	105	83	91.324	145	117	91.324	204
1000	11.1				26			36			49			70			97			136
750	8.3				19			27			37			52			72			102
1500	15.0	100	22	99.735	35	31	99.735	49	42	99.678	66	60	96.241	94	83	95.963	130	117	95.963	184
1000	10.0				23			32			44			63			87			123
750	7.5				17			24			33			47			65			92
1500	13.4	112	22	115.55	31	31	115.55	43	42	114.54	59	60	110.59	84	83	111.18	116	117	111.18	164
1000	8.9				21			29			39			56			78			109
750	6.7				15			22			29			42			58			82
1500	12.0	125	22	124.74	28	31	124.74	39	42	123.14	53	60	118.9	75	83	119.12	104	117	119.12	147
1000	8.0				18			26			35			50			70			98
750	6.0				14			19			26			38			52			74

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P系列传动能力表 P SERISE TRANSMISSION CAPACITY TABLE

P2-16			P2-17			P2-18			P2-19			P2-20			P2-21			i_N	n_{2N} (r/min)	n_1 (r/min)
T_{2N} (kN·m)	iex	P_{1N} (kW)	T_{2N} (kN·m)	iex	P_{1N} (kW)	T_{2N} (kN·m)	iex	P_{1N} (kW)	T_{2N} (kN·m)	iex	P_{1N} (kW)	T_{2N} (kN·m)	iex	P_{1N} (kW)	T_{2N} (kN·m)	iex	P_{1N} (kW)			
160	24.75	995	202	24.75	1256	244	24.958	1517	295	26.622	1834	354	26.622	2201	392	26.622	▮	25	60	1500
		663			837			1012			1223			1468			1625		40	1000
		497			628			759			917			1101			1219		30	750
160	27.09	895	202	27.09	1131	244	27.318	1366	295	29.139	1651	354	29.139	1981	392	29.139	▮	28	54	1500
		597			754			910			1101			1321			1463		36	1000
		448			565			683			825			991			1097		27	750
160	30.068	796	202	30.068	1005	244	30.321	1214	295	32.342	1468	354	32.342	1761	392	32.342	1950	31.5	48	1500
		531			670			809			978			1174			1300		32	1000
		398			502			607			734			881			975		24	750
160	33.987	696	202	33.987	879	244	34.272	1062	295	36.557	1284	354	36.557	1541	392	36.557	1706	35.5	42	1500
		464			586			708			856			1027			1138		28	1000
		348			440			531			642			770			853		21	750
160	39.375	630	202	39.375	796	244	39.706	961	295	42.353	1162	354	42.353	1394	392	42.353	1544	40	38	1500
		415			523			632			764			917			1016		25	1000
		315			398			480			581			697			772		19	750
160	42.318	558	202	42.318	705	244	42.867	852	295	45.725	1030	354	45.725	1236	392	46.357	1368	45	33.3	1500
		372			470			568			686			824			912		22.2	1000
		279			353			426			515			618			684		16.7	750
160	47.833	503	202	47.833	635	244	48.454	766	295	51.684	927	354	51.684	1112	392	52.399	1231	50	30.0	1500
		335			423			511			618			741			821		20.0	1000
		251			317			383			463			556			616		15.0	750
160	55.417	449	202	55.417	567	244	56.136	684	295	59.878	827	354	59.878	993	392	60.706	1099	56	26.8	1500
		299			378			456			552			662			733		17.9	1000
		224			283			342			414			496			550		13.4	750
160	61.438	399	202	61.438	504	244	60.32	608	295	64.341	735	354	64.341	883	392	66.084	977	63	23.8	1500
		266			336			406			490			588			651		15.9	1000
		199			252			304			368			441			489		11.9	750
160	71.178	354	202	71.178	447	244	69.882	540	295	74.541	653	354	74.541	783	392	76.561	867	71	21.1	1500
		236			298			360			435			522			578		14.1	1000
		177			223			270			326			392			434		10.6	750
160	78.788	314	202	78.788	397	244	78.976	479	295	84.841	579	354	84.841	695	392	84.746	770	80	18.8	1500
		209			264			319			386			463			513		12.5	1000
		157			198			240			290			347			385		9.4	750
160	91.278	279	202	91.278	353	244	91.496	426	295	97.596	515	354	97.596	618	392	98.182	684	90	16.7	1500
		186			235			284			343			412			456		11.1	1000
		140			176			213			257			309			342		8.3	750
160	96.594	251	202	96.594	317	244	95.963	383	295	102.36	463	354	102.36	556	392	103.9	616	100	15.0	1500
		168			212			255			309			371			410		10.0	1000
		126			159			192			232			278			308		7.5	750
160	111.91	224	202	111.91	283	244	111.18	342	295	118.59	414	354	118.59	496	392	120.37	550	112	13.4	1500
		150			189			228			276			331			366		8.9	1000
		112			142			171			207			248			275		6.7	750
160	120.59	201	202	120.59	254	244	119.12	307	295	127.06	371	354	127.06	445	392	129.41	493	125	12.0	1500
		134			169			204			247			297			328		8.0	1000
		101			127			153			185			222			246		6.0	750

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P系列传动能力表 P SERISE TRANSMISSION CAPACITY TABLE

P2N和P2S传动能力表：（i=25～125） P2N & P2S transmission capacity table：(i=25～125)

n_1 (r/min)	n_{2N} (r/min)	i_N	P2-22			P2-23			P2-24			P2-25			P2-26			P2-27		
			T_{2N} (kN·m)	iex	P_{1N} (kW)	T_{2N} (kN·m)	iex	P_{1N} (kW)	T_{2N} (kN·m)	iex	P_{1N} (kW)	T_{2N} (kN·m)	iex	P_{1N} (kW)	T_{2N} (kN·m)	iex	P_{1N} (kW)	T_{2N} (kN·m)	iex	P_{1N} (kW)
1500	60				▮			▮			▮			▮			▮			▮
1000	40	25	450	26.622	1866	531	26.872	2172	592	26.872	2454	684	26.872	2863	763	26.872	3163	852	26.622	3532
750	30				1399			1595			1841			2127			2372			2649
1500	54				▮			▮			▮			▮			▮			▮
1000	36	28	450	29.139	1679	531	29.321	1914	592	29.321	2209	684	29.321	2552	763	29.321	2847	852	29.139	3179
750	27				1259			1436			1657			1914			2135			2384
1500	48				2239			2552			2945			3403			3796			4238
1000	32	31.5	450	32.342	1492	531	32.409	1701	592	32.409	1963	684	32.409	2268	763	32.409	2350	852	32.342	2826
750	24				1119			1276			1472			1701			1898			2129
1500	42				1959			2233			2577			2977			3321			3709
1000	28	35.5	450	36.557	1306	531	36.424	1489	592	36.424	1718	684	36.424	1985	763	36.424	2214	852	36.557	2472
750	21				979			1117			1288			1489			1661			1854
1500	38				1772			2020			2331			2694			3005			3355
1000	25	40	450	42.353	1166	531	41.855	1329	592	41.855	1534	684	41.855	1772	763	41.855	1977	852	42.353	2208
750	19				886			1010			1166			1347			1502			1678
1500	33.3				1571			1790			2066			2387			2663			▮
1000	22.2	45	450	46.357	1047	531	45.373	1194	592	45.373	1377	684	45.373	1592	763	45.373	1775	852	46.948	1982
750	16.7				785			895			1033			1194			1332			1487
1500	30.0				1414			1611			1860			2149			2397			▮
1000	20.0	50	450	52.399	942	531	50.993	1074	592	50.993	1240	684	50.993	1432	763	50.993	1598	852	53.067	1784
750	15.0				707			806			930			1074			1198			1338
1500	26.8				1262			1439			1660			1918			2140			▮
1000	17.9	56	450	60.706	841	531	58.597	959	592	58.597	1107	684	58.597	1279	763	58.597	1427	852	61.48	1593
750	13.4				631			719			830			959			1070			1195
1500	23.8				1122			1279			1476			1705			1902			▮
1000	15.9	63	450	66.084	748	531	64.442	853	592	64.442	984	684	64.442	1137	763	64.442	1268	852	66.345	1416
750	11.9				561			639			738			853			951			1062
1500	21.1				995			1135			1310			1513			1688			▮
1000	14.1	71	450	76.561	664	531	74.051	757	592	74.051	873	684	74.051	1009	763	74.051	1125	852	76.863	1256
750	10.6				498			567			655			757			844			942
1500	18.8				883			1007			1162			1343			1498			▮
1000	12.5	80	450	84.746	589	531	82.781	671	592	82.781	775	684	82.781	895	763	82.781	999	852	84.241	1115
750	9.4				442			504			581			671			749			836
1500	16.7				785			895			1033			1194			1332			▮
1000	11.1	90	450	98.182	524	531	95.124	597	592	95.124	689	684	95.124	796	763	95.124	888	852	97.596	991
750	8.3				393			448			517			597			666			743
1500	15.0				707			806			930			1074			1198			▮
1000	10.0	100	450	103.9	471	531	101.6	537	592	101.6	620	684	101.6	716	763	101.6	799	852	102.36	892
750	7.5				353			403			465			537			599			669
1500	13.4				631			719			830			959			1070			▮
1000	8.9	112	450	120.37	421	531	116.75	480	592	116.75	553	684	116.75	639	763	116.75	713	852	118.59	797
750	6.7				316			360			415			480			535			597
1500	12.0				565			645			744			859			959			▮
1000	8.0	125	450	129.41	377	531	125.56	430	592	125.56	496	684	125.56	573	763	125.56	639	852	127.06	714
750	6.0				283			322			372			430			479			535

P系列传动能力表 P SERISE TRANSMISSION CAPACITY TABLE

P2-28			P2-29			P2-30			P2-31			P2-32			P2-33			P2-34			i_N	n_{2N} (r/min)	n_1 (r/min)
T_{2N} (kN·m)	iex	P_{1N} (kW)	T_{2N} (kN·m)	iex	P_{1N} (kW)	T_{2N} (kN·m)	iex	P_{1N} (kW)	T_{2N} (kN·m)	iex	P_{1N} (kW)	T_{2N} (kN·m)	iex	P_{1N} (kW)	T_{2N} (kN·m)	iex	P_{1N} (kW)	T_{2N} (kN·m)	iex	P_{1N} (kW)			
		▮			▮			▮			▮			▮			▮			▮		60	1500
950	26.622	3938	1060	26.622	4394	1200	26.622	4975	1330	26.872	5514	1500	26.872	6218	1680	26.622	6965	1920	26.622	7960	25	40	1000
		2954			3296			3731			4135			4664			5223			5970		30	750
		▮			▮			▮			▮			▮			▮			▮		54	1500
950	29.139	3544	1060	29.139	3955	1200	29.139	4477	1330	29.321	4962	1500	29.321	5597	1680	29.139	6268	1920	29.139	7164	28	36	1000
		2658			2966			3358			3722			4197			4701			5373		27	750
		4726			5273			5970			6616			7462			8358			9551		48	1500
950	32.342	3151	1060	32.342	3515	1200	32.342	3980	1330	32.409	4411	1500	32.409	4975	1680	32.342	5572	1920	32.342	6368	31.5	32	1000
		2363			2637			2985			3308			3731			4179			4776		24	750
		4135			4614			5223			5789			6529			7313			8358		42	1500
950	36.557	2757	1060	36.557	3076	1200	36.557	3482	1330	36.424	3860	1500	36.424	4353	1680	36.557	4875	1920	36.557	5572	35.5	28	1000
		2068			2307			2612			2895			3265			3656			4179		21	750
		3741			4175			4726			5238			5907			6616			7562		38	1500
950	42.353	2461	1060	42.353	2746	1200	42.353	3109	1330	41.855	3446	1500	41.855	3886	1680	42.353	4353	1920	42.353	4975	40	25	1000
		1871			2087			2363			2619			2954			3308			3781		19	750
		▮			▮			▮			▮			▮			▮			▮		33.3	1500
950	46.948	2210	1060	46.948	2466	1200	46.948	2792	1330	45.575	3095	1500	45.575	3490	1680	45.481	3909	1920	45.481	4467	45	22.2	1000
		1658			1850			2094			2321			2618			2932			3351		16.7	750
		▮			▮			▮			▮			▮			▮			▮		30.0	1500
950	53.067	1989	1060	53.067	2220	1200	53.067	2513	1330	51.221	2785	1500	51.221	3141	1680	51.409	3518	1920	51.409	4021	50	20.0	1000
		1492			1665			1885			2089			2356			2639			3016		15.0	750
		▮			▮			▮			▮			▮			▮			▮		26.8	1500
950	61.48	1776	1060	61.48	1982	1200	61.48	2244	1330	58.858	2487	1500	58.858	2805	1680	59.559	3141	1920	59.559	3590	56	17.9	1000
		1332			1486			1683			1865			2103			2356			2692		13.4	750
		▮			▮			▮			▮			▮			▮			▮		23.8	1500
950	66.345	1579	1060	66.345	1762	1200	66.345	1994	1330	66.102	2210	1500	66.102	2493	1680	66.345	2792	1920	66.345	3191	63	15.9	1000
		1184			1321			1496			1658			1870			2094			2393		11.9	750
		▮			▮			▮			▮			▮			▮			▮		21.1	1500
950	76.863	1401	1060	76.863	1563	1200	76.863	1770	1330	75.958	1961	1500	75.958	2212	1680	76.863	2478	1920	76.863	2831	71	14.1	1000
		1051			1172			1327			1471			1659			1858			2124		10.6	750
		▮			▮			▮			▮			▮			▮			▮		18.8	1500
950	84.241	1243	1060	84.241	1387	1200	84.241	1571	1330	83.932	1741	1500	83.932	1963	1680	84.241	2199	1920	84.241	2513	80	12.5	1000
		933			1041			1178			1306			1472			1649			1885		9.4	750
		▮			▮			▮			▮			▮			▮			▮		16.7	1500
950	97.596	1105	1060	97.596	1233	1200	97.596	1396	1330	96.448	1547	1500	96.448	1745	1680	97.596	1954	1920	97.596	2234	90	11.1	1000
		829			925			1047			1160			1309			1466			1675		8.3	750
		▮			▮			▮			▮			▮			▮			▮		15.0	1500
950	102.36	995	1060	102.36	1110	1200	102.36	1256	1330	104.3	1393	1500	104.3	1571	1680	104.69	1759	1920	104.69	2010	100	10.0	1000
		746			832			942			1044			1178			1319			1508		7.5	750
		▮			▮			▮			▮			▮			▮			▮		13.4	1500
950	118.59	888	1060	118.59	991	1200	118.59	1122	1330	119.96	1243	1500	119.96	1402	1680	121.28	1571	1920	121.28	1795	112	8.9	1000
		666			743			841			933			1052			1178			1346		6.7	750
		▮			▮			▮			▮			▮			▮			▮		12.0	1500
950	127.06	796	1060	127.06	888	1200	127.06	1005	1330	127.56	1114	1500	127.56	1256	1680	129.08	1407	1920	129.08	1608	125	8.0	1000
		597			666			754			836			942			1055			1206		6.0	750

P

P系列传动能力表 P SERISE TRANSMISSION CAPACITY TABLE

P3N和P3S传动能力表：（i=140~900）

P3N & P3S transmission capacity table: (i=140~900)

n_1 (r/min)	n_{2N} (r/min)	i_N	P3-9			P3-10			P3-11			P3-12			P3-13			P3-14		
			T_{2N} (kN·m)	iex	P_{1N} (kW)	T_{2N} (kN·m)	iex	P_{1N} (kW)	T_{2N} (kN·m)	iex	P_{1N} (kW)	T_{2N} (kN·m)	iex	P_{1N} (kW)	T_{2N} (kN·m)	iex	P_{1N} (kW)	T_{2N} (kN·m)	iex	P_{1N} (kW)
1500	10.7				24.8			34.9			47.3			68			94			132
1000	7.1	140	22	146.81	16.5	31	146.81	23.3	42	147.12	31.5	60	142.04	45	83	142.94	62	117	142.94	88
750	5.4				12.4			17.5			23.7			34			47			66
1500	9.4				21.7			30.6			41.4			59			82			115
1000	6.3	160	22	165.95	14.5	31	165.95	20.4	42	165.34	27.6	60	159.64	39	83	161.57	55	117	161.57	77
750	4.7				10.8			15.3			20.7			30			41			58
1500	8.3				19.3			27.2			36.8			53			73			103
1000	5.6	180	22	192.25	12.9	31	192.25	18.1	42	189.99	24.5	60	183.44	35	83	187.19	48	117	187.19	68
750	4.2				9.6			13.6			18.4			26			36			51
1500	7.5				17.3			24.4			33.1			47			65			92
1000	5.0	200	22	210.43	11.6	31	210.43	16.3	42	207.96	22.1	60	200.79	32	83	204.88	44	117	204.88	62
750	3.8				8.7			12.2			16.6			24			33			46
1500	6.7				15.4			21.7			29.4			42			58			82
1000	4.4	225	22	233.57	10.3	31	233.57	14.5	42	230.82	19.6	60	222.86	28	83	227.41	39	117	227.41	55
750	3.3				7.7			10.9			14.7			21			29			41
1500	6.0				13.9			19.6			26.5			38			52			74
1000	4.0	250	22	264.01	9.3	31	364.01	13.0	42	260.9	17.7	60	251.90	25	83	257.04	35	117	257.04	49
750	3.0				6.9			9.8			13.2			19			26			37
1500	5.4				12.4			17.5			23.7			34			47			66
1000	3.6	280	22	305.86	8.3	31	305.86	11.6	42	302.26	15.8	60	291.84	23	83	297.79	31	117	297.79	44
750	2.7				6.2			8.7			11.8			17			23			33
1500	5.4				13.5			17.6			24			34			47			67
1000	3.6	280	22	295.21	8.3	31	295.21	12	42	295.82	16	60	285.62	23	83	287.42	31	117	287.42	44
750	2.7				6.3			8.8			12			17			24			33
1500	4.8				11			16			21			30			42			59
1000	3.2	315	22	333.68	7.4	31	333.68	10.5	42	332.46	14	60	320.99	20	83	324.88	28	117	324.88	39
750	2.4				5.6			7.8			11			15			21			30
1500	4.2				10			14			19			27			37			53
1000	2.8	355	22	386.58	6.7	31	386.58	9.3	42	382.03	13	60	368.86	18	83	376.39	25	117	376.39	35
750	2.1				5			7			9			13			19			26
1500	3.8				8.8			12.4			17			24			33			47
1000	2.5	400	22	401.07	5.8	31	401.07	8.2	42	399.60	11	60	385.82	16	83	390.49	22	117	390.49	31
750	1.9				4.4			6.2			8			12			17			23
1500	3.3				7.8			11			15			21			29			41
1000	2.2	450	22	464.65	5.2	31	464.65	7.3	42	459.18	10	60	443.35	14	83	452.4	20	117	452.4	28
750	1.7				3.4			5.5			7.4			11			15			21
1500	3.0				7			10			13.4			19			26			37
1000	2.0	500	22	510.01	4.7	31	510.01	6.6	42	508.15	8.9	60	490.62	13	83	496.56	18	117	496.56	25
750	1.5				3.5			5			6.7			10			13			19
1500	2.7				6.3			8.8			12			17			24			33
1000	1.8	560	22	590.87	4.2	31	590.87	6	42	583.92	8	60	563.78	11	83	575.29	16	117	575.29	22
750	1.3				3.1			4.4			6			9			12			17
1500	2.4				5.6			7.8			10.6			15			21			30
1000	1.6	630	22	645.65	3.7	31	645.65	5.2	42	643.29	7	60	621.11	10	83	628.63	14	117	628.63	20
750	1.2				2.8			3.9			5.3			8			10			15
1500	2.1				4.5			7			9.4			13			19			26
1000	1.4	710	22	748.01	3.3	31	748.01	4.5	42	739.21	6.3	60	713.72	9	83	728.29	12	117	728.29	18
750	1.1				2.5			3.5			4.7			7			9			13
1500	1.9				4.4			6.2			8.4			12			17			23
1000	1.3	800	22	807.55	2.9	31	807.55	4.1	42	798.04	5.6	60	770.53	8	83	786.25	11	117	786.25	16
750	0.9				2.2			3.1			4.2			6			8			12
1500	1.7				3.4			5.5			7.4			11			15			21
1000	1.1	900	22	935.57	2.6	31	935.57	3.7	42	924.56	5	60	892.68	7	83	910.90	10	117	910.90	14
750	0.8				1.9			2.7			3.7			5			7			10

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P系列传动能力表 P SERISE TRANSMISSION CAPACITY TABLE

P3-16			P3-17			P3-18			P3-19			P3-20			P3-21			i_N	n_{2N} (r/min)	n_1 (r/min)
T_{2N} (kN·m)	iex	P_{1N} (kW)	T_{2N} (kN·m)	iex	P_{1N} (kW)	T_{2N} (kN·m)	iex	P_{1N} (kW)	T_{2N} (kN·m)	iex	P_{1N} (kW)	T_{2N} (kN·m)	iex	P_{1N} (kW)	T_{2N} (kN·m)	iex	P_{1N} (kW)			
		180			228			275			332			399			442		10.7	1500
160	143.08	120	202	143.08	152	244	142.94	183	295	152.47	222	354	152.47	266	392	152.17	294	140	7.1	1000
		90			114			137			166			199			221		5.4	750
		158			199			241			291			349			386		9.4	1500
160	161.73	105	202	161.73	133	244	161.57	160	295	172.34	194	354	172.34	233	392	172.34	258	160	6.3	1000
		79			100			120			145			174			193		4.7	750
		140			177			214			258			310			343		8.3	1500
160	187.37	93	202	187.37	118	244	187.19	143	295	199.66	172	354	199.66	207	392	199.66	229	180	5.6	1000
		70			88			107			129			155			172		4.2	750
		126			159			192			233			279			309		7.5	1500
160	204.45	84	202	204.45	106	244	204.88	128	295	218.54	155	354	218.54	186	392	218.54	206	200	5.0	1000
		63			80			96			116			140			155		3.8	750
		112			142			171			207			248			275		6.7	1500
160	225.98	75	202	225.98	94	244	227.41	114	295	242.57	138	354	242.57	165	392	242.57	183	225	4.4	1000
		56			71			86			103			124			137		3.3	750
		101			127			154			186			223			247		6.0	1500
160	253.97	67	202	253.97	85	244	257.04	103	295	274.18	124	354	274.18	149	392	274.18	165	250	4.0	1000
		50			64			77			93			112			124		3.0	750
		90			114			137			166			199			221		5.4	1500
160	291.84	60	202	291.84	76	244	297.79	92	295	317.65	111	354	317.65	133	392	317.65	147	280	3.6	1000
		45			57			69			83			100			110		2.7	750
		91			115			139			168			202			223		5.4	1500
160	268.53	61	202	268.53	77	244	283.53	93	295	302.43	112	354	302.43	134	392	302.43	149	280	3.6	1000
		46			57			69			84			101			112		2.7	750
		81			102			123			149			179			198		4.8	1500
160	303.53	54	202	303.53	68	244	320.48	82	295	341.48	100	354	341.48	119	392	341.48	132	315	3.2	1000
		40			51			62			75			90			99		2.4	750
		72			91			110			132			159			176		4.2	1500
160	351.65	48	202	351.65	60	244	371.29	73	295	396.04	88	354	396.04	106	392	396.04	117	355	2.8	1000
		36			45			55			66			79			88		2.1	750
		64			80			97			118			141			156		3.8	1500
160	396.27	43	202	396.27	54	244	388.27	65	295	414.16	78	354	414.16	94	392	414.16	104	400	2.5	1000
		32			40			49			59			71			78		1.9	750
		57			72			86			104			125			139		3.3	1500
160	459.1	38	202	459.1	48	244	449.83	58	295	479.82	70	354	479.82	84	392	479.82	93	450	2.2	1000
		28			36			43			52			63			69		1.7	750
		51			64			78			94			113			125		3.0	1500
160	508.18	34	202	508.18	43	244	510.30	52	295	544.32	63	354	544.32	75	392	544.32	83	500	2.0	1000
		26			32			39			47			56			62		1.5	750
		46			57			69			84			101			112		2.7	1500
160	588.75	30	202	588.75	38	244	591.20	46	295	630.61	56	354	630.61	67	392	630.61	74	560	1.8	1000
		23			29			35			42			50			56		1.3	750
		40			51			62			75			90			99		2.4	1500
160	623.03	27	202	623.03	34	244	621.23	41	295	662.65	50	354	662.65	60	392	662.65	66	630	1.6	1000
		20			26			31			37			45			50		1.2	750
		36			45			55			66			79			88		2.1	1500
160	721.81	24	202	721.81	30	244	719.72	37	295	767.70	44	354	767.70	53	392	767.70	59	710	1.4	1000
		18			23			27			33			40			44		1.1	750
		32			40			49			59			71			78		1.9	1500
160	776.02	21	202	776.02	27	244	771.13	32	295	822.54	39	354	822.54	47	392	822.54	52	800	1.3	1000
		16			20			24			29			35			39		0.9	750
		28			36			43			52			63			69		1.7	1500
160	891.73	19	202	891.73	24	244	893.38	29	295	952.94	35	354	952.94	42	392	952.94	46	900	1.1	1000
		14			18			22			26			31			35		0.8	750

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P系列传动能力表 P SERISE TRANSMISSION CAPACITY TABLE

P3N和P3S传动能力表：（i=140～900）

P3N&P3S transmission capacity table:（i=140~900）

n_1 (r/min)	n_{2N} (r/min)	i_N	P3-22			P3-23			P3-24			P3-25			P3-26			P3-27		
			T_{2N} (kN·m)	iex	P_{1N} (kW)	T_{2N} (kN·m)	iex	P_{1N} (kW)	T_{2N} (kN·m)	iex	P_{1N} (kW)	T_{2N} (kN·m)	iex	P_{1N} (kW)	T_{2N} (kN·m)	iex	P_{1N} (kW)	T_{2N} (kN·m)	iex	P_{1N} (kW)
1500	10.7				507			578			667			711			860			▮
1000	7.1	140	450	152.17	338	513	152.79	385	592	152.79	445	684	152.79	514	763	152.79	573	852	152.47	640
750	5.4				253			289			333			385			430			480
1500	9.4				444			506			584			674			752			▮
1000	6.3	160	450	172.34	296	513	171.71	337	592	171.71	389	684	171.71	450	763	171.71	501	852	172.34	560
750	4.7				222			253			292			337			376			420
1500	8.3				394			450			519			599			669			▮
1000	5.6	180	450	199.66	263	513	187.32	300	592	187.32	346	684	197.32	400	763	197.32	446	852	199.66	498
750	4.2				197			225			259			300			334			373
1500	7.5				355			405			467			539			602			▮
1000	5.0	200	450	218.54	237	513	215.97	270	592	215.97	311	684	215.97	360	763	215.97	401	852	218.54	448
750	3.8				177			202			233			270			301			336
1500	6.7				315			360			415			479			535			597
1000	4.4	225	460	242.57	210	513	239.71	240	592	239.71	277	684	239.71	320	763	239.71	357	82	242.57	398
750	3.3				158			180			207			240			267			299
1500	6.0				284			324			373			432			481			538
1000	4.0	250	450	274.18	189	513	270.95	216	592	270.95	249	684	270.95	288	763	270.95	321	852	274.18	358
750	3.0				142			162			187			216			241			269
1500	5.4				253			289			333			385			430			480
1000	3.6	280	450	317.65	169	513	313.91	193	592	313.91	222	684	313.91	257	763	313.91	287	852	317.65	320
750	2.7				127			144			167			193			215			240
1500	5.4				256			292			337			389			434			485
1000	3.6	280	450	302.43	171	513	295.28	195	592	295.28	225	684	295.28	260	763	295.28	290	852	296.01	323
750	2.7				128			146			168			195			217			242
1500	4.8				228			260			300			346			386			431
1000	3.2	315	450	341.48	152	513	331.86	173	592	331.86	200	684	331.86	231	763	331.86	257	852	334.59	287
750	2.4				114			130			150			173			193			216
1500	4.2				202			230			266			307			343			383
1000	2.8	355	450	396.04	135	513	381.34	154	592	381.34	177	684	381.34	205	763	381.34	228	852	387.63	255
750	2.1				101			115			133			154			171			191
1500	3.8				179			204			236			273			304			339
1000	2.5	400	450	414.16	120	513	426.24	136	592	426.24	157	684	426.24	182	763	426.24	203	852	416.52	226
750	1.9				90			102			118			136			152			170
1500	3.3				159			182			210			242			270			302
1000	2.2	450	450	479.82	106	513	489.8	121	592	489.8	140	684	489.8	162	763	489.8	180	852	482.56	201
750	1.7				80			91			105			121			135			151
1500	3.0				143			164			189			218			243			272
1000	2.0	500	450	544.32	96	513	546.62	109	592	546.62	126	684	546.6	145	763	546.6	162	852	545.35	181
750	1.5				72			82			94			109			122			136
1500	2.7				128			146			168			195			217			242
1000	1.8	560	450	630.61	85	513	628.12	97	592	628.12	112	684	628.12	130	763	628.12	145	852	631.81	162
750	1.3				64			73			84			97			109			121
1500	2.4				114			130			150			173			193			216
1000	1.6	630	450	662.65	76	513	670.15	87	592	670.15	100	684	670.15	115	763	670.15	129	852	662.65	144
750	1.2				57			65			75			87			97			108
1500	2.1				101			115			133			154			171			191
1000	1.4	710	450	767.70	67	513	770.08	77	592	770.08	89	684	770.08	102	763	770.08	114	852	767.70	128
750	1.1				51			58			66			77			86			96
1500	1.9				90			102			118			136			152			170
1000	1.3	800	450	822.54	60	513	829.8	68	592	829.8	79	684	829.8	91	763	829.8	110	852	822.54	113
750	0.9				45			51			59			68			76			85
1500	1.7				80			91			105			121			135			151
1000	1.1	900	450	952.94	53	513	961.35	61	592	961.35	70	684	961.35	81	763	961.35	90	852	952.94	101
750	0.8				40			45			52			61			68			75

P

P系列传动能力表 P SERISE TRANSMISSION CAPACITY TABLE

P3-28			P3-29			P3-30			P3-31			P3-32			P3-33			P3-34			i_N	n_{2N} (r/min)	n_1 (r/min)
T_{2N} (N·m)	iex	P_{1N} (kW)	T_{2N} (N·m)	iex	P_{1N} (kW)	T_{2N} (N·m)	iex	P_{1N} (kW)	T_{2N} (N·m)	iex	P_{1N} (kW)	T_{2N} (N·m)	iex	P_{1N} (kW)	T_{2N} (N·m)	iex	P_{1N} (kW)	T_{2N} (N·m)	iex	P_{1N} (kW)			
		▮			▮			▮			▮			▮			▮			▮		10.7	1500
950	152.47	714	1060	152.47	796	1200	152.47	901	1330	152.79	999	1500	152.79	1127	1680	153.90	1262	1920	153.90	1442	140	7.1	1000
		535			597			676			749			845			946			1082		5.4	750
		▮			▮			▮			▮			▮			▮			▮		9.4	1500
950	172.34	624	1060	172.34	697	1200	172.34	789	1330	171.71	874	1500	171.71	986	1680	173.96	1104	1920	173.96	1262	160	6.3	1000
		468			522			591			656			739			828			946		4.7	750
		▮			▮			▮			▮			▮			▮			▮		8.3	1500
950	199.66	555	1060	199.66	619	1200	199.66	701	1330	197.32	777	1500	197.32	876	1680	201.54	981	1920	201.54	1122	180	5.6	1000
		416			464			526			583			657			736			841		4.2	750
		▮			▮			▮			▮			▮			▮			▮		7.5	1500
950	218.54	499	1060	218.54	557	1200	218.54	631	1330	215.97	699	1500	215.97	789	1680	219.91	883	1920	219.91	1009	200	5.0	1000
		375			418			473			524			591			662			757		3.8	750
		666			743			841			932			1051			1178			1346		6.7	1500
950	242.57	444	1060	242.57	495	1200	242.57	561	1330	239.71	622	1500	239.71	701	1680	243.07	785	1920	243.07	897	225	4.4	1000
		333			372			421			466			526			589			673		3.3	750
		599			669			757			839			946			1060			1211		6.0	1500
950	274.18	400	1060	274.18	446	1200	274.18	505	1330	270.95	559	1500	270.95	631	1680	273.18	707	1920	273.18	808	250	4.0	1000
		300			334			379			420			473			530			606		3.0	750
		535			597			676			749			845			946			1082		5.4	1500
950	317.65	357	1060	317.65	398	1200	317.65	451	1330	313.91	499	1500	313.91	563	1680	313.91	631	1920	313.91	721	280	3.6	1000
		268			299			338			375			422			473			541		2.7	750
		541			603			683			757			854			956			1093		5.4	1500
950	296.01	361	1060	296.01	402	1200	296.01	455	1330	300.72	505	1500	300.72	569	1680	292.05	638	1920	292.05	729	280	3.6	1000
		270			302			342			379			427			478			546		2.7	750
		481			536			607			673			759			850			971		4.8	1500
950	334.59	320	1060	334.59	358	1200	334.59	405	1330	337.97	449	1500	337.97	506	1680	330.11	567	1920	330.11	648	315	3.2	1000
		240			268			304			336			379			425			486		2.4	750
		427			476			539			597			673			754			862		4.2	1500
950	387.63	284	1060	387.63	317	1200	387.63	359	1330	388.37	398	1500	388.37	449	1680	382.45	503	1920	382.45	575	355	2.8	1000
		213			238			269			299			337			377			431		2.1	750
		379			422			478			530			598			669			765		3.8	1500
950	416.52	252	1060	416.52	282	1200	416.52	319	1330	426.24	353	1500	426.24	398	1680	417.18	446	1920	417.18	510	400	2.5	1000
		189			211			239			265			299			335			383		1.9	750
		336			375			425			471			531			595			680		3.3	1500
950	482.56	224	1060	482.56	250	1200	482.56	283	1330	489.80	314	1500	489.80	354	1680	483.31	397	1920	483.31	453	450	2.2	1000
		168			188			213			236			266			298			340		1.7	750
		303			338			383			424			478			536			612		3.0	1500
950	545.35	202	1060	545.35	225	1200	545.35	255	1330	546.60	283	1500	546.60	319	1680	535.90	357	1920	535.90	408	500	2.0	1000
		151			169			191			212			239			268			306		1.5	750
		270			302			342			379			427			478			546		2.7	1500
950	631.81	160	1060	631.81	201	1200	631.81	228	1330	628.12	252	1500	628.12	285	1680	620.86	319	1920	620.86	364	560	1.8	1000
		135			151			171			189			213			239			273		1.3	750
		240			268			304			336			379			425			486		2.4	1500
950	662.65	160	1060	662.65	179	1200	662.65	202	1330	670.15	224	1500	670.15	253	1680	657.74	283	1920	657.74	324	630	1.6	1000
		120			134			152			168			190			213			243		1.2	750
		213			238			269			299			337			377			431		2.1	1500
950	767.70	142	1060	767.70	159	1200	767.70	180	1330	770.08	199	1500	770.08	226	1680	762.02	251	1920	762.02	287	710	1.4	1000
		107			119			135			149			168			189			215		1.1	750
		189			211			239			265			299			335			383		1.9	1500
950	822.54	126	1060	822.54	141	1200	822.54	159	1330	827.92	177	1500	827.92	199	1680	819.53	223	1920	819.53	255	800	1.3	1000
		95			106			120			132			149			167			191		0.9	750
		168			188			213			236			266			298			340		1.7	1500
950	952.94	112	1060	952.94	125	1200	952.94	142	1330	959.17	157	1500	959.17	177	1680	941.73	198	1920	941.73	227	900	1.1	1000
		84			94			106			118			133			149			170		0.8	750

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P系列传动能力表 P SERISE TRANSMISSION CAPACITY TABLE

P2L传动能力表：（i=31.5～100） P2L transmission capacity table: (i=31.5～100)

n_1 (r/min)	n_{2N} (r/min)	i_N	P2-9			P2-10			P2-11			P2-12			P2-13		
			T_{2N} (kN·m)	iex	P_{1N} (kW)	T_{2N} (kN·m)	iex	P_{1N} (kW)	T_{2N} (kN·m)	iex	P_{1N} (kW)	T_{2N} (kN·m)	iex	P_{1N} (kW)	T_{2N} (kN·m)	iex	P_{1N} (kW)
1500	47.6	31.5	22	32.5353	111	31	32.5353	156	42	32.8413	212	60	31.7089	302	83	31.6775	418
1000	31.7				74			104			141			202			279
750	23.8				55			78			106			151			209
1500	42.3	35.5	22	35.6114	98	31	35.6114	139	42	35.8344	188	60	34.5987	268	83	34.6723	345
1000	28.2				66			92			125			179			247
750	21.1				49			69			94			134			173
1500	37.5	40	22	39.5264	87	31	39.5264	123	42	39.6083	167	60	38.2424	238	83	38.4842	306
1000	25.0				58			82			111			159			204
750	18.8				44			62			83			119			153
1500	33.3	45	22	43.882	78	31	43.882	109	42	43.4177	148	60	41.9206	212	83	42.1856	293
1000	22.2				52			73			99			141			195
750	16.7				39			55			74			106			146
1500	30.0	50	22	50.4204	70	31	50.4204	98	42	50.5248	133	60	48.7826	191	83	49.0910	264
1000	20.0				47			66			89			127			176
750	15.0				35			49			67			95			132
1500	26.8	56	22	55.7278	62	31	55.7278	88	42	55.8432	119	60	53.9176	170	83	54.2585	235
1000	17.9				42			59			79			113			157
750	13.4				31			44			60			85			118
1500	23.8	63	22	60.4521	55	31	60.4521	78	42	60.5773	106	60	58.4884	151	83	62.3263	209
1000	15.9				37			52			71			101			139
750	11.9				28			39			53			76			105
1500	21.1	71	22	69.6115	49	31	69.6115	69	42	69.7557	94	60	67.3503	134	83	67.7761	186
1000	14.1				33			46			63			89			124
750	10.6				25			35			47			67			93
1500	18.8	80	22	79.0528	44	31	79.0528	62	42	79.9667	83	60	77.2092	119	83	77.6973	165
1000	12.5				29			41			56			79			110
750	9.4				22			31			42			60			82
1500	16.7	90	22	86.2394	39	31	86.2394	55	42	86.418	74	60	83.438	106	83	83.9656	146
1000	11.1				26			36			49			71			98
750	8.3				19			27			37			53			73
1500	15.0	100	22	98.2172	35	31	98.2172	49	42	98.4205	67	60	95.0266	95	83	95.6275	132
1000	10.0				23			33			44			64			88
750	7.5				17			25			33			48			66

P系列传动能力表 P SERISE TRANSMISSION CAPACITY TABLE

P2-14			P2-16			P2-17			P2-18			P2-19			i_N	n_{2N} (r/min)	n_1 (r/min)
T_{2N} (kN·m)	iex	P_{1N} (kW)	T_{2N} (kN·m)	iex	P_{1N} (kW)	T_{2N} (kN·m)	iex	P_{1N} (kW)	T_{2N} (kN·m)	iex	P_{1N} (kW)	T_{2N} (kN·m)	iex	P_{1N} (kW)			
		510			806			865			1230			1487		47.6	1500
117	31.6775	340	160	31.4135	538	202	31.4135	577	244	31.4286	820	295	33.5237	991	31.5	31.7	1000
		255			403			433			615			743		23.8	750
		487			716			858			1091			1319		42.3	1500
117	34.6723	324	160	34.3835	477	202	34.3835	572	244	34.3999	728	295	36.6933	880	35.5	28.2	1000
		243			358			429			546			660		21.1	750
		432			635			802			969			1171		37.5	1500
117	38.4842	288	160	38.1635	423	202	38.1635	535	244	38.1819	646	295	40.7272	781	40	25.0	1000
		216			318			401			484			585		18.8	750
		413			565			713			861			1041		33.3	1500
117	42.1856	275	160	41.834	376	202	41.834	475	244	43.149	574	295	46.0254	694	45	22.2	1000
		206			282			356			430			520		16.7	750
		372			508			641			775			937		30.0	1500
117	49.091	248	160	48.6818	339	202	48.6818	428	244	49.091	517	295	52.3636	625	50	20.0	1000
		186			254			321			387			468		15.0	750
		332			454			573			692			836		26.8	1500
117	54.2585	221	160	53.8063	302	202	53.8063	382	244	54.8664	461	295	58.524	558	56	17.9	1000
		166			227			286			346			418		13.4	750
		295			403			509			615			743		23.8	1500
117	62.3263	197	160	61.8069	269	202	61.8069	339	244	62.3263	410	295	66.4812	496	63	15.9	1000
		147			202			255			307			372		11.9	750
		262			358			452			546			660		21.1	1500
117	67.7761	174	160	67.2113	239	202	67.2113	301	244	67.7761	364	295	72.2943	440	71	14.1	1000
		131			179			226			273			330		10.6	750
		232			318			401			484			585		18.8	1500
117	77.6973	155	160	77.0498	212	202	77.0498	267	244	77.6973	323	295	82.8769	390	80	12.5	1000
		116			159			200			242			293		9.4	750
		206			282			356			430			520		16.7	1500
117	83.9656	138	160	83.2658	188	202	83.2658	238	244	83.9656	287	295	89.563	347	90	11.1	1000
		103			141			178			215			260		8.3	750
		186			254			321			387			468		15.0	1500
117	95.6275	124	160	94.8305	169	202	94.8305	214	244	95.6275	258	295	102.0023	312	100	10.0	1000
		93			127			160			194			234		7.5	750

注: 必需采用强制润滑。

Note: Forced lubrication required.

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P系列传动能力表 P SERISE TRANSMISSION CAPACITY TABLE

P2L传动能力表：（i=31.5～100）　P2L transmission capacity table:（i=31.5～100）

n_1 (r/min)	n_{2N} (r/min)	i_N	P2-20			P2-21			P2-22			P2-23			P2-24			P2-25		
			T_{2N} (kN·m)	iex	P_{1N} (kW)	T_{2N} (kN·m)	iex	P_{1N} (kW)	T_{2N} (kN·m)	iex	P_{1N} (kW)	T_{2N} (kN·m)	iex	P_{1N} (kW)	T_{2N} (kN·m)	iex	P_{1N} (kW)	T_{2N} (kN·m)	iex	P_{1N} (kW)
1500	47.6				1517			1976			2268									
1000	31.7	31.5	354	33.5237	1011	392	33.5237	1317	450	33.5237	1512	513	33.8391	1724	592	33.8391	1989	684	33.8391	2298
750	23.8				758			988			1134			1293			1492			1724
1500	42.3				1504			1753			2013									
1000	28.2	35.5	354	36.6933	1003	392	36.6933	1169	450	36.6933	1342	513	36.9231	1530	592	36.9231	1712	684	36.9231	2040
750	21.1				752			877			1006			1147			1284			1530
1500	37.5				1405			1556			1786									
1000	25.0	40	354	40.7272	937	392	40.7272	1037	450	40.7272	1191	513	40.8116	1358	592	40.8116	1567	684	40.8116	1810
750	18.8				703			778			883			1018			1175			1358
1500	33.3				1249			1383			1588			1810			2089			
1000	22.2	45	354	46.0254	833	392	46.0254	922	450	46.0254	1059	513	46.1208	1207	592	46.1208	1393	684	46.1208	1609
750	16.7				625			692			794			905			1044			1207
1500	30.0				1124			1245			1429			1629			1880			
1000	20.0	50	354	52.3636	749	392	52.3636	830	450	52.3636	953	513	52.472	1086	592	52.472	1253	684	52.1365	1448
750	15.0				562			622			714			815			940			1086
1500	26.8				1004			1111			1276			1455			1678			
1000	17.9	56	354	58.524	669	392	58.524	741	450	58.524	851	513	58.6452	970	592	58.6452	1119	684	58.6452	1293
750	13.4				502			556			636			727			839			970
1500	23.8				892			988			1134			1293			1492			1724
1000	15.9	63	354	66.4812	595	392	66.4812	659	450	66.4812	756	513	66.6189	862	592	66.6189	995	684	66.6189	1149
750	11.9				446			494			567			646			746			862
1500	21.1				792			877			1006			1147			1324			1530
1000	14.1	71	354	72.2943	526	392	72.2943	584	450	72.2943	671	513	72.4441	765	592	72.4441	883	684	72.4441	1020
750	10.6				396			438			503			574			662			765
1500	18.8				703			778			893			1018			1175			1358
1000	12.5	80	354	82.8769	468	392	82.8769	519	450	82.8769	595	513	83.0486	679	592	83.0486	783	684	83.0486	905
750	9.4				351			389			447			509			587			679
1500	16.7				625			692			794			905			1044			1207
1000	11.1	90	354	89.563	416	392	89.563	461	450	89.563	529	513	89.7486	603	592	89.7486	696	684	89.7486	804
750	8.3				312			346			397			453			522			603
1500	15.0				562			622			714			815			940			1086
1000	10.0	100	354	102.0023	375	392	102.0023	415	450	102.0023	476	513	102.2136	543	592	102.2136	627	684	102.2136	724
750	7.5				281			311			357			407			470			543

注：□必需采用强制润滑。　Note: □ Forced lubrication required.

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P系列传动能力表 P SERISE TRANSMISSION CAPACITY TABLE

P2-26			P2-27			P2-28			P2-29			P2-30			P2-31 ~ P2-34			i_N	n_{2N} (r/min)	n_1 (r/min)
T_{2N} (kN·m)	iex	P_{1N} (kW)	T_{2N} (kN·m)	iex	P_{1N} (kW)	T_{2N} (kN·m)	iex	P_{1N} (kW)	T_{2N} (kN·m)	iex	P_{1N} (kW)	T_{2N} (kN·m)	iex	P_{1N} (kW)	T_{2N} (kN·m)	iex	P_{1N} (kW)			
																			47.6	1500
763	33.8391	2564	852	33.5237	2863	950	33.5237	2937	1060	33.5237		1200	33.5237					31.5	31.7	1000
		1923			2147			2203											23.8	750
																			42.3	1500
763	36.9231	2275	852	36.6933	2540	950	36.6933	2833	1060	36.6933		1200	36.6933					35.5	28.2	1000
		1706			1905			2124											21.1	750
																			37.5	1500
763	40.8116	2019	852	40.7272	2255	950	40.7272	2514	1060	40.7272		1200	40.7272					40	25.0	1000
		1514			1691			1885											18.8	750
																			33.3	1500
763	46.1208	1795	852	46.0254	2004	950	46.0254	2235	1060	46.0254		1200	46.0254					45	22.2	1000
		1346			1503			1676			1870			2117					16.7	750
															按客户				30.0	1500
763	52.1365	1615	852	52.0288	1804	950	52.0288	2011	1060	52.0288		1200	52.0288		要求供货			50	20.0	1000
		1211			1353			1508			1683			1905	On request.				15.0	750
																			26.8	1500
763	58.6452	1442	852	58.524	1610	950	58.524	1796	1060	58.524	2004	1200	58.524	2268				56	17.9	1000
		1082			1208			1347			1503			1701					13.4	750
		1923			2147			2394											23.8	1500
763	66.6189	1282	852	66.4812	1432	950	66.4812	1596	1060	66.4812	1781	1200	66.4812	2016				63	15.9	1000
		961			1074			1197			1336			1512					11.9	750
		1706			1905			2124											21.1	1500
763	72.4441	1138	852	72.2943	1270	950	72.2943	1416	1060	72.2943	1580	1200	72.2943	1789				71	14.1	1000
		853			953			1062			1185			1342					10.6	750
		1514			1691			1885											18.8	1500
763	83.0486	1010	852	82.8769	1127	950	82.8769	1257	1060	82.8769	1403	1200	82.8769	1588				80	12.5	1000
		757			845			943			1052			1191					9.4	750
		1346			1503			1676			1870			2117					16.7	1500
763	89.7486	897	852	89.563	1002	950	89.563	1117	1060	89.563	1247	1200	89.563	1411				90	11.1	1000
		673			752			838			935			1059					8.3	750
		1211			1353			1508			1683			1905					15.0	1500
763	102.2136	808	852	102.0023	902	950	102.0023	1006	1060	102.0023	1122	1200	102.0023	1270				100	10.0	1000
		606			676			754			842			953					7.5	750

注：□必需采用强制润滑。 Note: □ Forced lubrication required.

P

P系列传动能力表 P SERISE TRANSMISSION CAPACITY TABLE

P2K传动能力表：（i=112~560） **P2K transmission capacity table: (i=112~560)**

n_1 (r/min)	n_{2N} (r/min)	i_N	P2-9			P2-10			P2-11			P2-12			P2-13			P2-14		
			T_{2N} (kN·m)	iex	P_{1N} (kW)	T_{2N} (kN·m)	iex	P_{1N} (kW)	T_{2N} (kN·m)	iex	P_{1N} (kW)	T_{2N} (kN·m)	iex	P_{1N} (kW)	T_{2N} (kN·m)	iex	P_{1N} (kW)	T_{2N} (kN·m)	iex	P_{1N} (kW)
1500	13.4	112	22	111.25	30.9	31	111.25	43.6	42	111.83	59.0	60	107.97	84	83	107.97	117	117	107.76	164
1000	8.9				20.6			29.0			39.4			56			78			110
750	6.7				15.5			21.8			29.5			42			58			82
1500	12.0	125	22	125.75	27.7	31	125.75	39.0	42	125.68	52.9	60	121.35	76	83	121.8	105	117	121.8	147
1000	8.0				18.5			26.0			35.3			50			70			98
750	6.0				13.9			19.5			26.4			38			52			74
1500	10.7	140	22	145.69	24.7	31	145.69	34.9	42	144.42	47.2	60	139.44	67	83	141.11	93	117	141.11	132
1000	7.1				16.5			23.2			31.5			45			62			88
750	5.4				12.4			17.4			23.6			34			47			66
1500	9.4	160	22	157.28	21.6	31	157.28	30.5	42	155.27	41.3	60	149.91	59	83	151.19	82	117	151.19	115
1000	6.3				14.4			20.3			27.5			39			54			77
750	4.7				10.8			15.3			20.7			30			41			58
1500	8.3	180	22	175.77	19.2	31	175.77	27.1	42	173.52	36.7	60	167.54	52	83	167.85	73	117	167.85	102
1000	5.6				12.8			18.1			24.5			35			48			68
750	4.2				9.6			13.6			18.4			26			36			51
1500	7.5	200	22	203.53	17.3	31	203.53	24.4	42	200.92	33.1	60	193.99	47	83	192.86	65	117	192.86	92
1000	5.0				11.5			16.3			22.0			31			44			61
750	3.8				8.7			12.2			16.5			24			33			46
1500	6.7	225	22	223.22	15.4	31	223.22	21.7	42	220.36	29.4	60	212.76	42	83	213.16	58	117	213.16	82
1000	4.4				10.3			14.5			19.6			28			39			55
750	3.3				7.7			10.8			14.7			21			29			41
1500	6.0	250	22	242.15	13.9	31	242.15	19.5	42	239.04	26.4	60	230.8	38	83	231.23	52	117	231.23	74
1000	4.0				9.2			13.0			17.6			25			35			49
750	3.0				6.9			9.8			13.2			19			26			37
1500	5.4	280	22	278.84	12.4	31	278.84	17.4	42	275.26	23.6	60	265.77	34	83	266.26	47	117	266.26	66
1000	3.6				8.2			11.6			15.7			22			31			44
750	2.7				6.2			8.7			11.8			17			23			33
1500	4.7	320	22	316.65	10.8	31	316.65	15.3	42	312.6	20.7	60	301.82	30	83	302.38	41	117	302.38	58
1000	3.1				7.2			10.2			13.8			20			76			38
750	2.3				5.4			7.6			10.3			15			20			29
1500	4.2	360	22	345.44	9.6	31	345.44	13.6	42	341.01	18.4	60	329.25	26	83	329.86	36	117	329.86	51
1000	2.8				6.4			9.0			12.2			17			24			34
750	2.1				4.8			6.8			9.2			13			18			26
1500	3.8	400	22	393.42	8.7	31	393.42	12.2	42	388.38	16.5	60	374.98	24	83	375.68	33	117	375.68	46
1000	2.5				5.8			8.1			11.0			16			22			31
750	1.9				4.3			6.1			8.3			12			16			23
1500	3.3	450	22	442.27	7.7	31	442.27	10.8	42	436.6	14.7	60	421.54	21	83	422.33	29	117	422.33	41
1000	2.2				5.1			7.2			9.8			14			19			27
750	1.7				3.8			5.4			7.3			10			15			20
1500	3.0	500	22	487.63	6.9	31	487.63	9.8	42	481.38	13.2	60	464.78	19	83	465.64	26	117	465.64	37
1000	2.0				4.6			6.5			8.8			13			17			25
750	1.5				3.5			4.9			6.6			9			13			18
1500	2.7	560	按客户要求供货 On request																	
1000	1.8																			
750	1.3																			

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P系列传动能力表 P SERISE TRANSMISSION CAPACITY TABLE

P2-16			P2-17			P2-18			P2-19			P2-20			i_N	n_{2N} (r/min)	n_1 (r/min)
T_{2N} (kN·m)	iex	P_{1N} (kW)	T_{2N} (kN·m)	iex	P_{1N} (kW)	T_{2N} (kN·m)	iex	P_{1N} (kW)	T_{2N} (kN·m)	iex	P_{1N} (kW)	T_{2N} (kN·m)	iex	P_{1N} (kW)			
160	108.47	225	202	108.47	284	244	107.76	343	295	114.94	415	354	114.94	498	112	13.4	1500
		150			189			229			276			332		8.9	1000
		112			142			171			207			249		6.7	750
160	122.6	201	202	122.6	254	244	121.8	307	295	129.92	372	354	129.92	446	125	12.0	1500
		134			170			205			248			297		8.0	1000
		101			127			154			186			223		6.0	750
160	142.04	180	202	1442.04	227	244	141.11	274	295	150.52	332	354	150.52	398	140	10.7	1500
		120			151			183			221			265		7.1	1000
		90			114			137			166			199		5.4	750
160	153.05	157	202	153.05	199	244	151.19	240	295	161.27	290	354	161.27	348	160	9.4	1500
		105			132			160			193			232		6.3	1000
		79			99			120			145			174		4.7	750
160	167.77	140	202	167.77	177	244	165.73	213	295	176.78	258	354	176.78	310	180	8.3	1500
		93			118			142			172			206		5.6	1000
		70			88			107			129			155		4.2	750
160	195.23	126	202	195.23	159	244	192.86	192	295	205.71	232	354	205.71	279	200	7.5	1500
		84			106			128			155			186		5.0	1000
		63			79			96			116			139		3.8	750
160	215.79	112	202	215.79	141	244	213.16	171	295	227.37	206	354	227.37	248	225	6.7	1500
		75			94			114			138			165		4.4	1000
		56			71			85			103			124		3.3	750
160	234.08	101	202	234.08	127	244	244.85	154	295	261.18	186	354	261.18	223	250	6.0	1500
		67			85			102			124			149		4.0	1000
		50			64			77			93			111		3.0	750
160	269.55	90	202	269.55	114	244	266.26	137	295	284.01	166	354	284.01	199	280	5.4	1500
		60			76			91			111			133		3.6	1000
		45			57			69			83			100		2.7	750
160	309	79	202	309	99	244	305.24	120	295	325.59	145	354	325.59	174	320	4.7	1500
		52			66			80			97			116		3.1	1000
		39			50			60			73			87		2.3	750
160	333.93	70	202	333.93	88	244	329.86	107	295	351.86	129	354	351.86	155	360	4.2	1500
		47			59			71			86			103		2.8	1000
		35			44			53			64			77		2.1	750
160	380.31	63	202	380.31	79	244	375.68	96	295	400.72	116	354	400.72	139	400	3.8	1500
		42			53			64			77			93		2.5	1000
		31			40			48			58			70		1.9	750
160	427.53	56	202	427.53	71	244	422.33	85	295	450.48	103	354	450.48	124	450	3.3	1500
		37			47			57			69			83		2.2	1000
		28			35			43			52			62		1.7	750
160	471.38	50	202	471.38	64	244	465.64	77	295	496.68	93	354	496.68	111	500	3.0	1500
		34			42			51			62			74		2.0	1000
		25			32			38			46			56		1.5	750
按客户要求供货 On request															560	2.7	1500
																1.8	1000
																1.3	750

P

P系列传动能力表 P SERISE TRANSMISSION CAPACITY TABLE

P3K传动能力表：（i=560～4000）

P3K transmission capacity table: (i=560～4000)

n_1 (r/min)	n_{2N} (r/min)	i_N	P3-9			P3-10			P3-11			P3-12			P3-13		
			T_{2N} (kN·m)	iex	P_{1N} (kW)	T_{2N} (kN·m)	iex	P_{1N} (kW)	T_{2N} (kN·m)	iex	P_{1N} (kW)	T_{2N} (kN·m)	iex	P_{1N} (kW)	T_{2N} (kN·m)	iex	P_{1N} (kW)
1500	2.68	560	22	566.22	6.3	31	566.22	9	42	567.4	12	60	547.83	17	83	551.29	24
1000	1.79				4.2			6			8			11			16
750	1.34				3.1			4.4			6			9			12
1500	2.38	630	22	640.02	5.6	31	640.02	7.8	42	637.68	11	60	615.69	15	83	623.14	21
1000	1.59				3.7			5.2			7			10			14
750	1.19				2.8			3.9			5			8			11
1500	2.11	710	22	700.53	5.0	31	700.53	7	42	697.96	9	60	673.9	14	83	682.06	19
1000	1.41				3.3			4.5			6			9			12
750	1.06				2.5			3.5			5			7			9
1500	1.88	800	22	777.54	4.4	31	777.54	6	42	774.7	8	60	747.98	12	83	757.04	17
1000	1.25				2.9			4			6			8			11
750	0.94				2.2			3			4			6			8
1500	1.67	900	22	878.88	3.9	31	878.88	5.5	42	875.66	7.5	60	845.46	11	83	855.70	15
1000	1.11				2.6			3.7			5			7			10
750	0.83				2.0			2.7			3.7			5			7
1500	1.50	1000	22	982.19	3.5	31	982.19	5	42	978.6	6.7	60	944.85	10	83	956.3	13
1000	1.00				2.3			3.3			4.5			6			9
750	0.75				1.8			2.5			3.4			5			7
1500	1.34	1120	22	1137.3	3.1	31	1137.3	4.4	42	1133.1	6	60	1094	9	83	1107.3	12
1000	0.89				2.1			2.9			4			6			8
750	0.67				1.6			2.2			3			4.5			6
1500	1.20	1250	22	1247.3	2.8	31	1247.3	4.0	42	1242.8	5.4	60	1199.9	8	83	1214.4	11
1000	0.80				1.9			2.6			3.6			5			7
750	0.60				1.4			2.0			2.7			4			5
1500	1.07	1400	22	1351.1	2.5	31	1351.1	3.5	42	1348.1	4.8	60	1301.6	7	83	1317.4	4.9
1000	0.71				1.7			2.4			3.2			5			6
750	0.54				1.3			1.8			2.4			3.5			4.5
1500	0.94	1600	22	1558.1	2.2	31	1558.1	3.1	42	1552.4	4.2	60	1498.9	6	83	1517	8
1000	0.63				1.5			2.1			2.8			4			6
750	0.47				1.1			1.5			2.1			3			4
1500	0.83	1800	22	1769.4	2.0	31	1769.4	2.8	42	1762.9	3.7	60	1702.1	5	83	1722.8	7
1000	0.56				1.3			1.8			2.5			4			5
750	0.42				1.0			1.4			1.9			2.7			3.7
1500	0.75	2000	22	1930.3	1.8	31	1930.3	2.5	42	1923.2	3.4	60	1856.9	4.8	83	1879.4	6.6
1000	0.50				1.2			1.7			2.2			3.2			4.4
750	0.38				0.9			1.2			1.7			2.4			3.3
1500	0.67	2240	22	2198.4	1.6	31	2198.4	2.2	42	2190.3	3.0	60	2114.8	4.3	83	2140.4	5.9
1000	0.45				1.0			1.5			2.0			2.9			3.9
750	0.33				0.8			1.1			1.5			2.1			3.0
1500	0.60	2500	22	2471.3	1.4	31	2471.3	2.0	42	2462.3	2.7	60	2377.4	3.8	83	2406.1	5.3
1000	0.40				0.9			1.3			1.8			2.6			3.5
750	0.30				0.7			1.0			1.3			1.9			2.7
1500	0.54	2800	22	2724.8	1.3	31	2724.8	1.8	42	2714.8	2.4	60	2621.2	3.4	83	2652.9	4.7
1000	0.36				0.8			1.2			1.6			2.3			3.2
750	0.27				0.6			0.9			1.2			1.7			2.4
1500	0.48	3150	22	3105	1.1	31	3104.9	1.6	42	3093.6	2.1	60	2986.9	3.0	83	3023.1	4.2
1000	0.32				0.7			1.0			1.4			2.0			2.8
750	0.24				0.6			0.8			1.1			1.5			2.1
1500	0.42	3550	22	3597.2	1.0	31	3597.2	1.4	42	3584.1	1.9	60	3460.5	2.7	83	3502.4	3.7
1000	0.28				0.7			0.9			1.3			1.8			2.5
750	0.21				0.5			0.7			0.9			1.4			1.9
1500	0.38	4000	22	4167.5	0.9	31	4167.5	1.2	42	4118.5	1.7	60	3976.5	2.4	83	4057.6	3.3
1000	0.25				0.6			0.8			1.1			1.6			4.2
750	0.19				0.4			0.6			0.8			1.2			1.7

P系列传动能力表 P SERISE TRANSMISSION CAPACITY TABLE

P3-14			P3-16			P3-17			P3-18			P3-19			i_N	n_{2N} (r/min)	n_1 (r/min)
T_{2N} (kN·m)	iex	P_{1N} (kW)	T_{2N} (kN·m)	iex	P_{1N} (kW)	T_{2N} (kN·m)	iex	P_{1N} (kW)	T_{2N} (kN·m)	iex	P_{1N} (kW)	T_{2N} (kN·m)	iex	P_{1N} (kW)			
		33			46			58			70			84		2.68	1500
117	551.29	22	160	551.25	30	202	551.25	38	244	544.28	46	295	580.56	56	560	1.79	1000
		17			23			29			35			42		1.34	750
		30			41			51			62			75		2.38	1500
117	623.14	20	160	623.09	27	202	623.09	34	244	615.21	41	295	656.22	50	630	1.59	1000
		15			20			26			31			37		1.19	750
		26			36			45			55			66		2.11	1500
117	682.06	18	160	679.88	24	202	679.88	30	244	673.37	37	295	718.27	44	710	1.41	1000
		13			18			23			27			33		1.06	750
		23			32			40			49			59		1.88	1500
117	757.04	16	160	751.48	21	202	751.48	27	244	747.4	32	295	797.23	39	800	1.25	1000
		12			16			20			24			29		0.94	750
		21			28			36			43			52		1.67	1500
117	855.70	14	160	844.56	19	202	844.56	24	244	844.81	29	295	901.13	35	900	1.11	1000
		10			14			18			22			26		0.83	750
		19			26			32			39			47		1.50	1500
117	956.3	12	160	943.84	17	202	943.84	22	244	937.9	26	295	1000.4	31	1000	1.00	1000
		9			13			16			19			24		0.75	750
		17			23			29			35			42		1.34	1500
117	1107.3	11	160	1092.4	15	202	1092.9	19	244	1077.6	23	295	1149.5	28	1120	0.89	1000
		8			11			14			17			21		0.67	750
		15			20			26			31			38		1.20	1500
117	1214.4	10	160	1198.6	14	202	1198.6	17	244	1191.1	21	295	1270.5	25	1250	0.80	1000
		7			10			13			16			19		0.60	750
		13			18			23			28			34		1.07	1500
117	1317.4	9	160	1300.2	12	202	1300.2	15	244	1292.1	19	295	1378.2	22	1400	0.71	1000
		7			9			12			14			17		0.54	750
		12			16			20			24			29		0.94	1500
117	1517	8	160	1497.3	11	202	1497.3	13	244	1487.8	16	295	1587	20	1600	0.63	1000
		6			8			10			12			15		0.47	750
		10			14			18			22			26		0.83	1500
117	1722.8	7	160	1700.3	9	202	1700.3	12	244	1689.6	14	295	1802.3	17	1800	0.56	1000
		5.2			7.1			9			11			13		0.42	750
		9.4			12.8			16			19			24		0.75	1500
117	1879.4	6.2	160	1854.9	8.5	202	1854.9	11	244	1843.2	13	295	1966.1	16	2000	0.50	1000
		4.7			6.4			8			10			12		0.38	750
		8.3			11.4			14			17			21		0.67	1500
117	2140.4	5.6	160	2112.5	7.6	202	2112.5	10	244	2099.2	12	295	2239.2	14	2240	0.45	1000
		4.2			5.7			7.2			8.7			10.5		0.33	750
		7.5			10.2			12.9			16			19		0.60	1500
117	2406.1	5.0	160	2374.8	6.8	202	2374.8	8.6	244	2359.9	10.4	295	2517.2	12.6	2500	0.40	1000
		3.7			5.1			6.5			7.8			9.4		0.30	750
		6.7			9.1			12			14			17		0.54	1500
117	2652.9	4.5	160	2618.4	6.1	202	2618.4	7.7	244	2601.9	9.3	295	2775.4	11.2	2800	0.36	1000
		3.3			4.6			5.8			7.0			8.4		0.27	750
		5.9			8.1			10.2			12			15		0.48	1500
117	3023.1	4.0	160	2983.8	5.4	202	2983.8	6.8	244	2965	8.3	295	3162.6	10	3150	0.32	1000
		3.0			4.1			5.1			6.2			7.5		0.24	750
		5.3			7.2			9.1			11			13		0.42	1500
117	3502.4	3.5	160	3428.7	4.8	202	3428.7	6.1	244	3435	7.3	295	3664	8.9	3550	0.28	1000
		2.6			3.6			4.5			5.5			6.6		0.21	750
		4.7			6.4			8.1			9.7			12		0.38	1500
117	4057.6	3.1	160	3972.2	4.3	202	3972.2	5.4	244	3979.6	6.5	295	4244.9	7.9	4000	0.25	1000
		2.3			3.2			4.0			4.9			5.9		0.19	750

P系列传动能力表 P SERISE TRANSMISSION CAPACITY TABLE

P3K传动能力表：（i=560～4000）

P3K transmission capacity table: (i=560～4000)

n_1 (r/min)	n_{2N} (r/min)	i_N	P3-20			P3-21			P3-22			P3-23			P3-24			P3-25		
			T_{2N} (kN·m)	iex	P_{1N} (kW)	T_{2N} (kN·m)	iex	P_{1N} (kW)	T_{2N} (kN·m)	iex	P_{1N} (kW)	T_{2N} (kN·m)	iex	P_{1N} (kW)	T_{2N} (kN·m)	iex	P_{1N} (kW)	T_{2N} (kN·m)	iex	P_{1N} (kW)
1500	2.68				101			112			128			146			169			195
1000	1.79	560	354	580.56	67	392	580.56	75	450	580.56	86	513	593.88	98	592	593.88	113	684	593.88	130
750	1.34				51			56			64			73			84			98
1500	2.38				90			99			114			130			150			174
1000	1.59	630	354	656.22	60	392	656.22	66	450	656.22	76	513	667.44	87	592	667.44	100	684	667.44	116
750	1.19				45			50			57			65			75			87
1500	2.11				80			88			101			115			133			154
1000	1.41	710	354	718.27	53	392	718.27	59	450	718.27	68	513	730.55	77	592	730.55	89	684	730.55	103
750	1.06				40			44			51			58			67			77
1500	1.88				71			78			90			102			118			137
1000	1.25	800	354	797.23	47	392	797.23	52	450	797.23	60	513	810.87	68	592	810.87	79	684	810.87	91
750	0.94				35			39			45			51			59			68
1500	1.67				63			70			80			91			105			121
1000	1.11	900	354	901.13	42	392	901.13	46	450	901.13	53	513	916.54	61	592	916.54	70	684	916.54	81
750	0.83				31			35			40			46			53			61
1500	1.50				57			63			72			82			95			109
1000	1.00	1000	354	1000.4	38	392	1000.4	42	450	1000.4	48	513	1004.7	55	592	1004.7	63	684	1004.7	73
750	0.75				28			31			36			41			47			55
1500	1.34				51			56			64			73			84			98
1000	0.89	1120	354	1149.5	34	392	1149.5	37	450	1149.5	43	513	1169.1	49	592	1169.1	56	684	1169.1	65
750	0.67				25			28			32			37			42			49
1500	1.20				45			50			58			66			76			87
1000	0.80	1250	354	1270.5	30	392	1270.5	33	450	1270.5	38	513	1292.2	44	592	1292.2	50	684	1992.2	58
750	0.60				23			25			29			33			38			44
1500	1.07				40			45			51			59			68			78
1000	0.71	1400	354	1378.2	27	392	1378.2	30	450	1378.2	34	513	1401.8	39	592	1401.8	45	684	1401.8	52
750	0.54				20			22			26			29			34			39
1500	0.94				35			39			45			51			59			68
1000	0.63	1600	354	1587	24	392	1587	26	450	1587	30	513	1614.2	34	592	1614.2	39	684	1614.2	46
750	0.47				18			20			22			26			30			34
1500	0.83				31			35			40			46			53			61
1000	0.56	1800	354	1802.3	21	392	1802.3	23	450	1802.3	27	513	1850.4	30	592	1850.4	35	684	1850.4	40
750	0.42				16			17			20			23			26			30
1500	0.75				28			31			36			41			47			55
1000	0.50	2000	354	1966.1	19	392	1966.1	21	450	1966.1	24	513	1999.7	27	592	1999.7	32	684	1999.7	36
750	0.38				14			16			18			20			24			27
1500	0.67				25			28			32			37			42			49
1000	0.45	2240	354	2239.2	17	392	2239.2	19	450	2239.2	21	513	2277.5	24	592	2277.5	28	684	2277.5	33
750	0.33				12.6			14			16			18			21			24
1500	0.60				23			25			29			33			38			44
1000	0.40	2500	354	2517.2	15.1	392	2517.2	17	450	2517.2	19	513	2560.2	22	592	2560.2	25	684	2560.2	29
750	0.30				11.3			13			14			16			19			22
1500	0.54				20			22			26			29			34			39
1000	0.36	2800	354	2775.4	13.5	392	2775.4	15	450	2775.4	17	513	2822.8	20	592	2822.8	23	684	2822.8	26
750	0.27				10.1			11.2			13			15			17			20
1500	0.48				18			20			23			26			30			35
1000	0.32	3150	354	3162.6	12	392	3162.6	13.3	450	3162.6	15	513	3216.7	17	592	3216.7	20	684	3216.7	23
750	0.24				9			9.9			11			13			15			17
1500	0.42				16			18			20			23			27			31
1000	0.28	3550	354	3664	10.6	392	3664	11.8	450	3664	14	513	3726.7	15	592	3726.7	18	684	3726.7	21
750	0.21				8			8.8			10			12			13			15
1500	0.38				14			16			18			20			24			27
1000	0.25	4000	354	4244.9	9.4	392	4244.9	10.4	450	4244.9	12	513	4282.4	14	592	4282.4	16	684	4282.4	18
750	0.19				7.1			7.8			9			10			12			14

P

P系列传动能力表 P SERISE TRANSMISSION CAPACITY TABLE

P3-26			P3-27			P3-28			P3-29			P3-30			P3-31~P3-34			i_N	n_{2N} (r/min)	n_1 (r/min)
T_{2N} (kN·m)	iex	P_{1N} (kW)	T_{2N} (kN·m)	iex	P_{1N} (kW)	T_{2N} (kN·m)	iex	P_{1N} (kW)	T_{2N} (kN·m)	iex	P_{1N} (kW)	T_{2N} (kN·m)	iex	P_{1N} (kW)	T_{2N} (kN·m)	iex	P_{1N} (kW)			
		218			243			271			303			342					2.68	1500
763	593.88	145	852	580.56	162	950	580.56	181	1060	580.56	202	1200	580.56	228				560	1.79	1000
		109			122			136			151			171					1.34	750
		194			216			241			269			304					2.38	1500
763	667.44	129	852	656.22	144	950	656.22	161	1060	656.22	179	1200	656.22	203				630	1.59	1000
		97			108			121			134			152					1.19	750
		172			192			214			239			270					2.11	1500
763	730.55	115	852	718.27	128	950	718.27	143	1060	718.27	159	1200	718.27	180				710	1.41	1000
		86			96			107			119			135					1.06	750
		152			170			190			212			240					1.88	1500
763	810.87	102	852	797.23	113	950	797.23	127	1060	797.23	141	1200	797.23	160				800	1.25	1000
		76			85			95			106			120					0.94	750
		136			151			169			188			213					1.67	1500
763	916.54	90	852	901.13	101	950	901.13	112	1060	901.13	125	1200	901.13	142				900	1.11	1000
		68			76			84			94			107					0.83	750
		122			136			152			169			192					1.50	1500
763	1004.7	81	852	987.8	91	950	987.8	101	1060	987.8	113	1200	987.8	128				1000	1.00	1000
		61			68			76			85			95					0.75	750
		109			122			136			151			171					1.34	1500
763	1169.1	73	852	1149.5	81	950	1149.5	90	1060	1149.5	101	1200	1149.5	114				1120	0.89	1000
		54			61			68			76			86					0.67	750
		98			109			121			136			153					1.20	1500
763	1992.2	65	852	1270.5	73	950	1270.5	81	1060	1270.5	90	1200	1270.5	103				1250	0.80	1000
		49			54			61			68			77					0.60	750
		87			97			108			121			137	按客户				1.07	1500
763	1401.8	58	852	1459.4	65	950	1459.4	72	1060	1459.4	81	1200	1459.4	91	要求供货			1400	0.71	1000
		44			49			54			61			68					0.54	750
		76			85			95			106			120	On request.				0.94	1500
763	1614.2	51	852	1587	57	950	1587	63	1060	1587	71	1200	1587	80				1600	0.63	1000
		38			43			47			53			60					0.47	750
		68			76			84			94			107					0.83	1500
763	1850.4	45	852	1819.3	50	950	1819.3	56	1060	1819.3	63	1200	1819.3	71				1800	0.56	1000
		34			38			42			47			53					0.42	750
		61			68			76			85			96					0.75	1500
763	1999.7	41	852	1966.1	45	950	1966.1	51	1060	1966.1	56	1200	1966.1	64				2000	0.50	1000
		30			34			38			42			48					0.38	750
		54			61			68			76			86					0.67	1500
763	2277.5	36	852	2239.2	41	950	2239.2	45	1060	2239.2	50	1200	2239.2	57				2240	0.45	1000
		27			30			34			38			43					0.33	750
		49			54			61			68			77					0.60	1500
763	2560.2	33	852	2517.2	36	950	2517.2	40	1060	2517.2	45	1200	2517.2	51				2500	0.40	1000
		24			27			30			34			38					0.30	750
		44			49			54			61			68					0.54	1500
763	2822.8	29	852	2775.4	32	950	2775.4	36	1060	2775.4	40	1200	2775.4	46				2800	0.36	1000
		22			24			27			30			34					0.27	750
		39			43			48			54			61					0.48	1500
763	3216.7	26	852	3162.6	29	950	3162.6	32	1060	3162.6	36	1200	3162.6	41				3150	0.32	1000
		19			22			24			27			30					0.24	750
		34			38			43			48			54					0.42	1500
763	3726.7	23	852	3664	26	950	3664	29	1060	3664	32	1200	3664	36				3550	0.28	1000
		17			19			21			24			27					0.21	750
		30			34			38			42			48					0.38	1500
763	4282.4	20	852	4244.9	23	950	4244.9	25	1060	4244.9	28	1200	4244.9	32				4000	0.25	1000
		15			17			19			21			24					0.19	750

P

P系列额定热容量 P SERLES THERMAL CAPACITLES

P2N.热容量(卧式安装): P2N. Thermal capacities (Horizontal mounting position):

机座号 Type / 风速 Wind velocity / PG1	9	10	11	12	13	14	16	17	18	19/20	21/22	23/24	25/26	27/28	29/30	31/32	33/34
狭小空间安装风速>0.5m/s Small confined spaces Wind velocity > 0.5 m/s	21	26	32	42	49	65	75	92	100	119	142	174	201	242	287	326	366
大厅或大车间安装 风速>1.4m/s Large halls, workshops Wind velocity > 1.4m/s	29	37	45	60	69	92	106	130	147	169	201	246	285	343	406	462	519
室外安装 风速>3.7m/s In the open Wind velocity > 3.7m/s	39	50	60	80	93	125	143	175	191	228	272	333	386	464	505	626	702

P2S.热容量(卧式安装): P2S. Thermal capacities (Horizontal mounting position):

机座号 Type / 风速 Wind velocity / PG1	9	10	11	12	13	14	16	17	18	19/20	21/22	23/24	25/26	27/28	29/30	31/32	33/34
狭小空间安装风速>0.5m/s Small confined spaces Wind velocity > 0.5 m/s	15	20	24	32	36	49	56	69	75	89	106	130	151	182	215	245	275
大厅或大车间安装 风速>1.4m/s Large halls, workshops Wind velocity > 1.4m/s	22	28	34	45	52	69	79	97	106	127	151	185	214	257	305	347	389
室外安装 风速>3.7m/s In the open Wind velocity > 3.7m/s	29	38	45	60	70	94	107	132	143	171	204	250	289	348	412	469	527

P3N.热容量(卧式安装): P3N. Thermal capacities (Horizontal mounting position):

机座号 Type / 风速 Wind velocity / PG1	9	10	11	12	13	14	16	17	18	19/20	21/22	23/24	25/26	27/28	29/30	31/32	33/34
狭小空间安装风速>0.5m/s Small confined spaces Wind velocity > 0.5 m/s	14	18	22	29	34	46	52	64	70	83	99	121	141	169	200	228	256
大厅或大车间安装 风速>1.4m/s Large halls, workshops Wind velocity > 1.4m/s	20	26	31	41	48	64	74	91	99	118	140	172	199	240	284	323	362
室外安装 风速>3.7m/s In the open Wind velocity > 3.7m/s	28	35	42	56	65	87	100	123	133	159	190	233	269	324	384	437	490

P3S.热容量(卧式安装): P3S. Thermal capacities (Horizontal mounting position):

机座号 Type / 风速 Wind velocity / PG1	9	10	11	12	13	14	16	17	18	19/20	21/22	23/24	25/26	27/28	29/30	31/32	33/34
狭小空间安装风速>0.5m/s Small confined spaces Wind velocity > 0.5 m/s	12	15	18	24	28	40	43	53	57	69	82	100	116	139	165	188	211
大厅或大车间安装 风速>1.4m/s Large halls, workshops Wind velocity > 1.4m/s	17	21	26	34	40	53	61	75	81	97	116	142	164	197	234	266	298
室外安装 风速>3.7m/s In the open Wind velocity > 3.7m/s	23	29	35	46	54	72	82	101	110	131	156	192	222	267	316	360	404

注：以上表格数据均为卧式热容量，其它安装形式请来电咨询。
Note: Values apply to horizontal mounting position. For other mounting positions please refer to us.

P

P系列额定热容量 P SERLES THERMAL CAPACITLES

P2L.热容量(卧式安装): **P2L. Thermal capacities (Horizontal mounting position):**

机座号 Type / 风速 Wind velocity / PG1	9	10	11	12	13	14	16	17	18	19/20	21/22	23/24	25/26	27/28	29/30	31~34
狭小空间安装风速>0.5m/s Small confined spaces Wind velocity > 0.5 m/s	14	18	22	29	34	46	52	64	70	83	99	121	141	169	200	按客户要求供货 On request.
大厅或大车间安装 风速>1.4m/s Large halls, workshops Wind velocity > 1.4m/s	20	26	31	41	48	64	74	91	99	118	140	172	199	240	284	
室外安装 风速>3.7m/s In the open Wind velocity > 3.7m/s	28	35	42	56	65	87	100	123	133	159	190	233	269	324	384	

P2K.热容量(卧式安装): **P2K. Thermal capacities (Horizontal mounting position):**

机座号 Type / 风速 Wind velocity / PG1	9	10	11	12	13	14	16	17	18	19/20
狭小空间安装风速>0.5m/s Small confined spaces Wind velocity > 0.5 m/s	12	15	18	24	28	38	44	53	58	69
大厅或大车间安装 风速>1.4m/s Large halls, workshops Wind velocity > 1.4m/s	17	22	26	35	40	54	62	76	82	98
室外安装 风速>3.7m/s In the open Wind velocity > 3.7m/s	23	29	35	47	54	73	83	102	111	133

P3K.热容量(卧式安装): **P3K. Thermal capacities (Horizontal mounting position):**

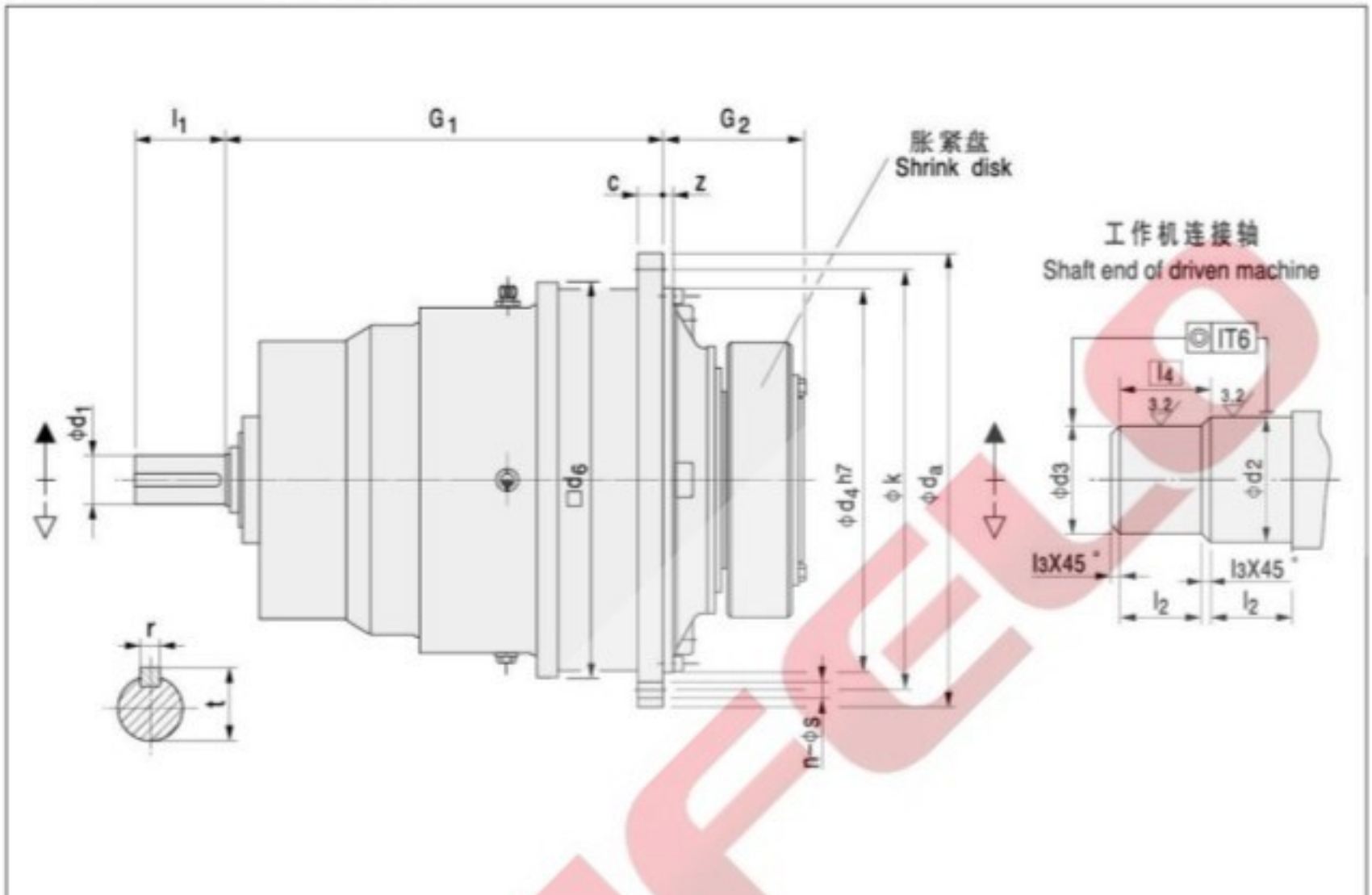
机座号 Type / 风速 Wind velocity / PG1	9	10	11	12	13	14	16	17	18	19/20	21/22	23/24	25/26	27/28	29/30	31~34
狭小空间安装风速>0.5m/s Small confined spaces Wind velocity > 0.5 m/s	10	12	15	20	23	31	35	43	47	56	67	82	95	109	125	按客户要求供货 On request.
大厅或大车间安装 风速>1.4m/s Large halls, workshops Wind velocity > 1.4m/s	14	17	21	28	33	44	50	61	66	79	95	116	106	125	144	
室外安装 风速>3.7m/s In the open Wind velocity > 3.7m/s	19	24	28	38	44	59	67	83	90	107	128	157	166	195	225	

注：以上表格数据均为卧式热容量，其它安装形式请来电咨询。

Note: **Values apply to horizontal mounting position. For other mounting positions please refer to us.**

P

P2NA　　iN = 25 ... 40

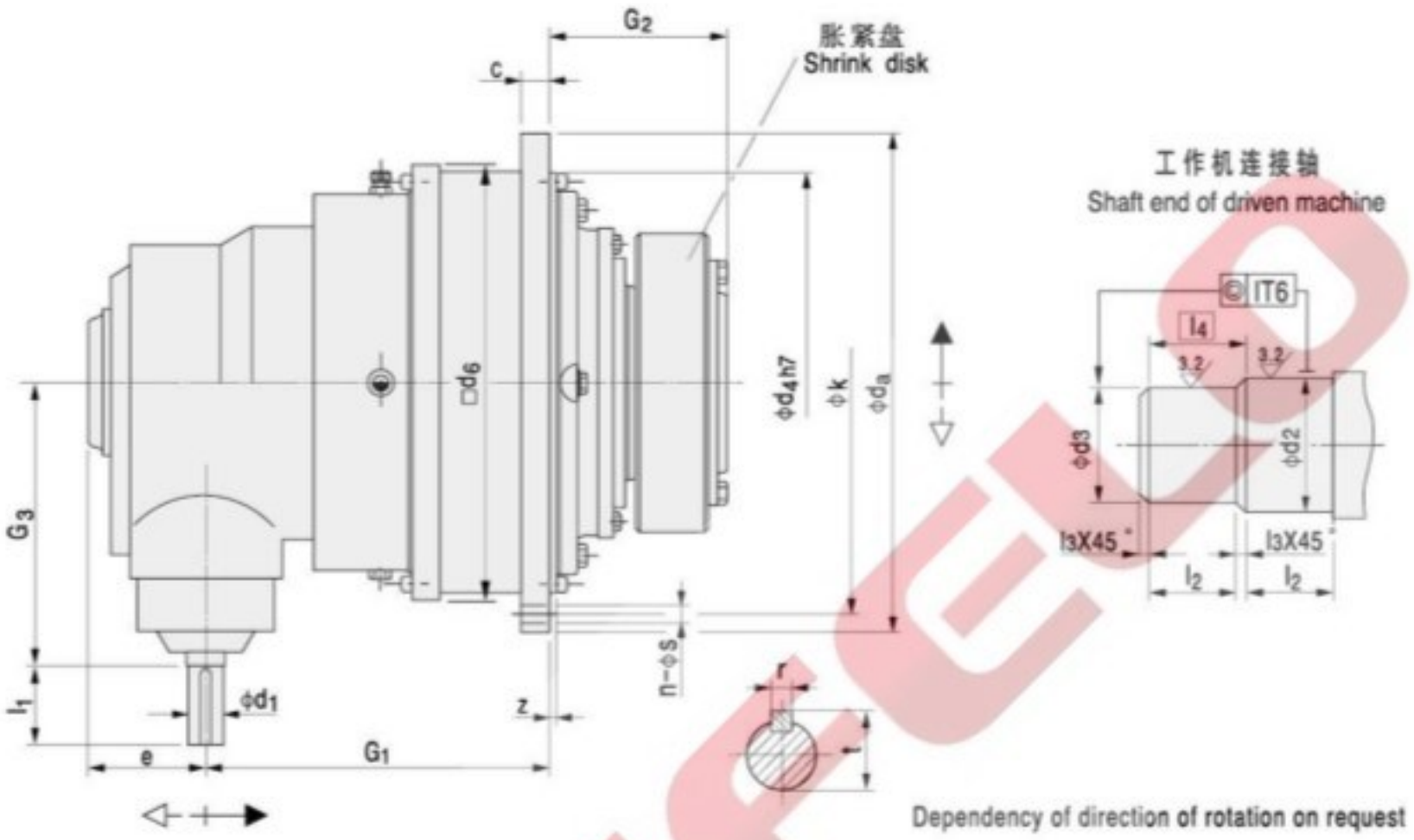


P2NA 机座号 Type	额定输出扭矩 Nominal output torque T2N (N·m)	输入轴尺寸 Shaft end input side d1	l1	r	t	d2	d3	l2	l3	l4	c	da	d4	d6	G1	G2	k	z	法兰孔尺寸 Flange bolts s	n	重量 Weight (kg)	油量 Oil quantity (l)
9	22 000	55	90	16	59	120	115	65	2.5	67.5	24	428	350	356	469	165	388	$6^{\pm1.5}$	18	24	145	6
10	31 000	55	90	16	59	130	125	70	2.5	72.5	28	472	394	400	489	174	436	$8^{\pm1.5}$	18	28	195	8
11	42 000	70	120	20	74.5	140	135	82.5	2.5	85.0	32	525	425	436	579	204	485	$8^{\pm1.5}$	22	20	280	12
12	60 000	70	120	20	74.5	160	155	90	2.5	92.5	34	605	495	510	593	224	555	$9^{\pm1.5}$	26	20	425	16
13	83 000	80	140	25	85	180	175	95	2.5	97.5	39	645	535	554	714	241	595	$11^{\pm1.5}$	26	24	540	20
14	117 000	80	140	25	85	210	205	105	2.5	107.5	42	720	610	629	737	278	665	9	26	32	805	32
16	160 000	95	160	25	100	230	225	110	2.5	112.5	44	770	660	680	851	285	715	10	26	36	1 030	40
17	202 000	95	160	25	100	250	245	120	2.5	122.5	50	895	750	775	877	294	830	10	33	24	1 500	56
18	244 000	110	180	28	116	260	255	120	2.5	122.5	50	930	785	815	1006	303	865	10	33	32	1 900	66
19	295 000	110	180	28	116	280	275	135	2.5	137.5	56	980	840	870	1029.5	327.5	915	12	33	36	2 000	82
20	354 000	110	180	28	116	300	295	135	2.5	137.5	56	980	840	870	1029.5	327.5	915	12	33	36	2 100	75
21	392 000	120	210	32	127	310	305	152	2.5	154.5	62	1115	935	960	1046	354	1025	24	39	32	2 650	110
22	450 000	120	210	32	127	330	325	152	2.5	154.5	62	1115	935	960	1046	354	1025	24	39	32	2 800	95
23	513 000	130	210	32	137	350	345	164	2.5	166.5	68	1210	1025	1056	1150	380	1120	28	39	36	3 450	150
24	592 000	130	210	32	137	360	355	164	2.5	166.5	68	1210	1025	1056	1150	380	1120	28	39	36	3 900	125
25	684 000	140	240	36	148	380	375	180	2.5	182.5	74	1320	1115	1150	1241	407	1220	29	45	36	4 750	190
26	763 000	140	240	36	148	400	395	180	2.5	182.5	74	1320	1115	1150	1241	407	1220	29	45	36	5 150	160
27	852 000	150	240	36	158	430	425	191	2.5	193.5	81	1460	1215	1248	1379	453	1345	31	52	32	6 100	245
28	950 000	150	240	36	158	450	445	191	2.5	193.5	81	1460	1215	1248	1379	453	1345	31	52	32	6 550	205
29	1 060 000	160	270	40	169	460	450	197.5	5	202.5	87	1565	1320	1355	1457	483	1450	34	52	36	7 800	305
30	1 200 000	160	270	40	169	480	470	197.5	5	202.5	87	1565	1320	1355	1457	483	1450	34	52	36	8 300	255
31	1 330 000	170	270	40	179	480	470	232	5	237.0	94	1665	1400	1443	1607	538	1545	36	62	32	10 200	380
32	1 500 000	170	270	40	179	510	500	232	5	237.0	94	1665	1400	1443	1607	538	1545	36	62	32	10 700	315
33	1 680 000	180	310	40	179	530	520	242	5	247.0	100	1755	1495	1536	1683	573	1635	36	62	36	12 350	460
34	1 920 000	180	310	45	190	570	560	242	5	247.0	100	1755	1495	1536	1683	573	1635	36	62	36	13 150	380

注：1　当d1≤100时公差为m6,当d1>100时公差为n6;
2　当尺寸d2或d3≤160时，公差为h6;
当尺寸d2或d3>160时，公差为g6;
3　重量不包括胀紧盘和润滑油。

Note: 1 When shaft diameter d1 ≤ 100, tolerance is m6,
When shaft diameter d1 >100, tolerance is n6;
2 When shaft diameter d2 or d3 ≤160, tolerance h6;
When shaft diameter d2 or d3 >160, tolerance g6;
3 Weight without shrink disk and oil.

P2LA i_N = 31.5 ... 100



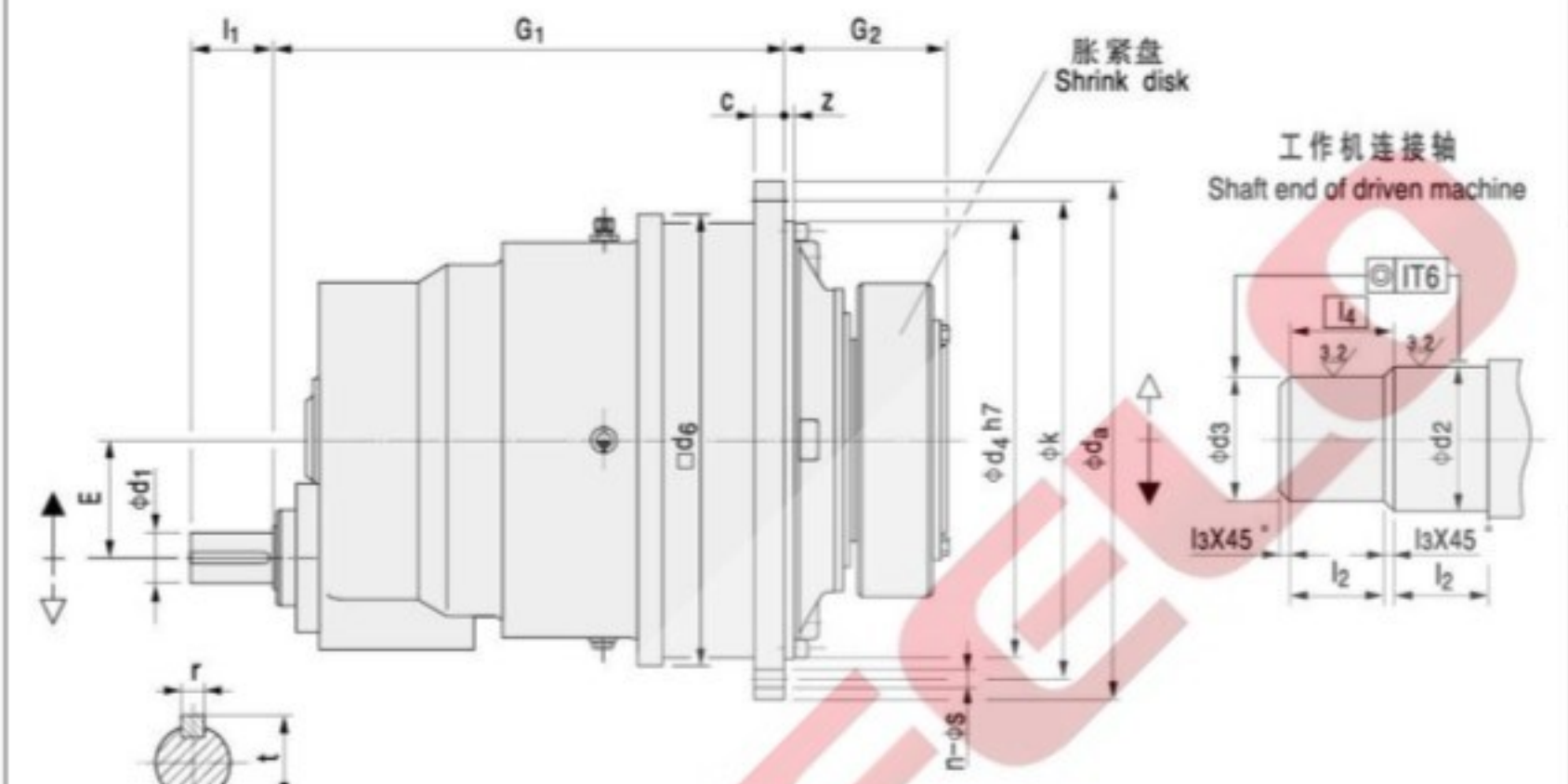
P2LA 机座号 Type	额定输出扭矩 Nominal output torque T_{2N} (N·m)	输入轴尺寸 Shaft end input side i_N<90 d_1	l_1	r	t	i_N>100 d_1	l_1	r	t	d_2	d_3	l_2	l_3	l_4	c	d_a	d_4	d_5	e	G_1	G_2	G_3	k	z	法兰孔尺寸 Flange holes s	n	重量 Weight (kg)	油量 Oil quantity (l)
9	22 000	50	100	14	53.5	40	80	12	43	120	115	65	2.5	67.5	24	428	350	356	185	425	165	305	388	6±1.5	18	24	159	6
10	31 000	50	100	14	53.5	40	80	12	43	130	125	70	2.5	72.5	28	472	394	400	185	445	174	305	436	8±1.5	18	28	215	8
11	42 000	60	110	18	64	50	100	14	53.5	140	135	82.5	2.5	85.0	32	525	425	436	210	501	204	350	485	8±1.5	22	20	310	12
12	60 000	60	110	18	64	50	100	14	53.5	160	155	90	2.5	92.5	34	605	495	510	210	515	224	350	555	9±1.5	26	20	470	16
13	83 000	75	135	20	79.5	60	110	18	64	180	175	95	2.5	97.5	39	645	535	554	250	619	241	415	595	11±1.5	26	24	595	20
14	117 000	75	135	20	79.5	60	110	18	64	210	205	105	2.5	107.5	42	720	610	629	250	642	278	415	665	9	26	32	890	32
16	160 000	85	165	22	90	70	140	20	74.5	230	225	110	2.5	112.5	44	770	660	680	295	705	285	490	715	10	26	36	1 137	40
17	202 000	85	165	22	90	70	140	20	74.5	250	245	120	2.5	122.5	50	895	750	775	295	731	294	490	830	10	33	24	1 660	56
18	244 000	95	165	25	100	75	140	20	79.5	260	255	120	2.5	122.5	50	930	785	815	350	882	303	605	865	10	33	32	2 100	66
19	295 000	95	165	25	100	75	140	20	79.5	280	275	135	2.5	137.5	56	980	840	870	350	905.5	327.5	605	915	12	33	36	2 200	82
20	354 000	95	165	25	100	75	140	20	79.5	300	295	135	2.5	137.5	56	980	840	870	350	905.5	327.5	605	915	12	33	36	2 300	75
21	392 000	115	205	32	122	90	170	25	95	310	305	152	2.5	154.5	62	1115	935	960	400	996	354	700	1025	24	39	32	2 930	110
22	450 000	115	205	32	122	90	170	25	95	330	325	152	2.5	154.5	62	1115	935	960	400	996	354	700	1025	24	39	32	3 100	95
23	513 000	115	205	32	122	90	170	25	95	350	345	164	2.5	166.5	68	1210	1025	1056	400	1055	380	700	1120	28	39	36	3 800	150
24	592 000	115	205	32	122	90	170	25	95	360	355	164	2.5	166.5	68	1210	1025	1056	400	1055	380	700	1120	28	39	36	4 300	125
25	684 000	140	245	36	148	110	210	28	116	380	375	180	2.5	182.5	74	1320	1115	1150	475	1138	407	835	1220	29	45	36	5 250	190
26	763 000	140	245	36	148	110	210	28	116	400	395	180	2.5	182.5	74	1320	1115	1150	475	1138	407	835	1220	29	45	36	5 660	160
27	852 000	140	245	36	148	110	210	28	116	430	425	191	2.5	193.5	81	1460	1215	1248	475	1272	453	835	1345	31	52	32	6 680	245
28	950 000	140	245	36	148	110	210	28	116	450	445	191	2.5	193.5	81	1460	1215	1248	475	1272	453	835	1345	31	52	32	7 180	205
29	1 060 000	150	245	40	169	115	210	32	122	460	450	197.5	5	202.5	87	1565	1320	1355	530	1367	483	945	1450	34	52	36	8 500	305
30	1 200 000	150	245	40	169	115	210	32	122	480	470	197.5	5	202.5	87	1565	1320	1355	530	1367	483	945	1450	34	52	36	9 070	255
31 – 34	On request 按客户要求供货																											

注：1 当d1≤100时公差为m6,当d1>100时公差为n6;
2 当尺寸d2或d3≤160时，公差为h6;
当尺寸d2或d3>160时，公差为g6;
3 重量不包括胀紧盘和润滑油。

Note: 1 When shaft diameter d1 ≤ 100, tolerance is m6,
When shaft diameter d1 >100, tolerance is n6;
2 When shaft diameter d2 or d3 ≤160, tolerance h6;
When shaft diameter d2 or d3 >160, tolerance g6;
3 Weight without shrink disk and oil.

P

P2SA i_N = 45 ... 125

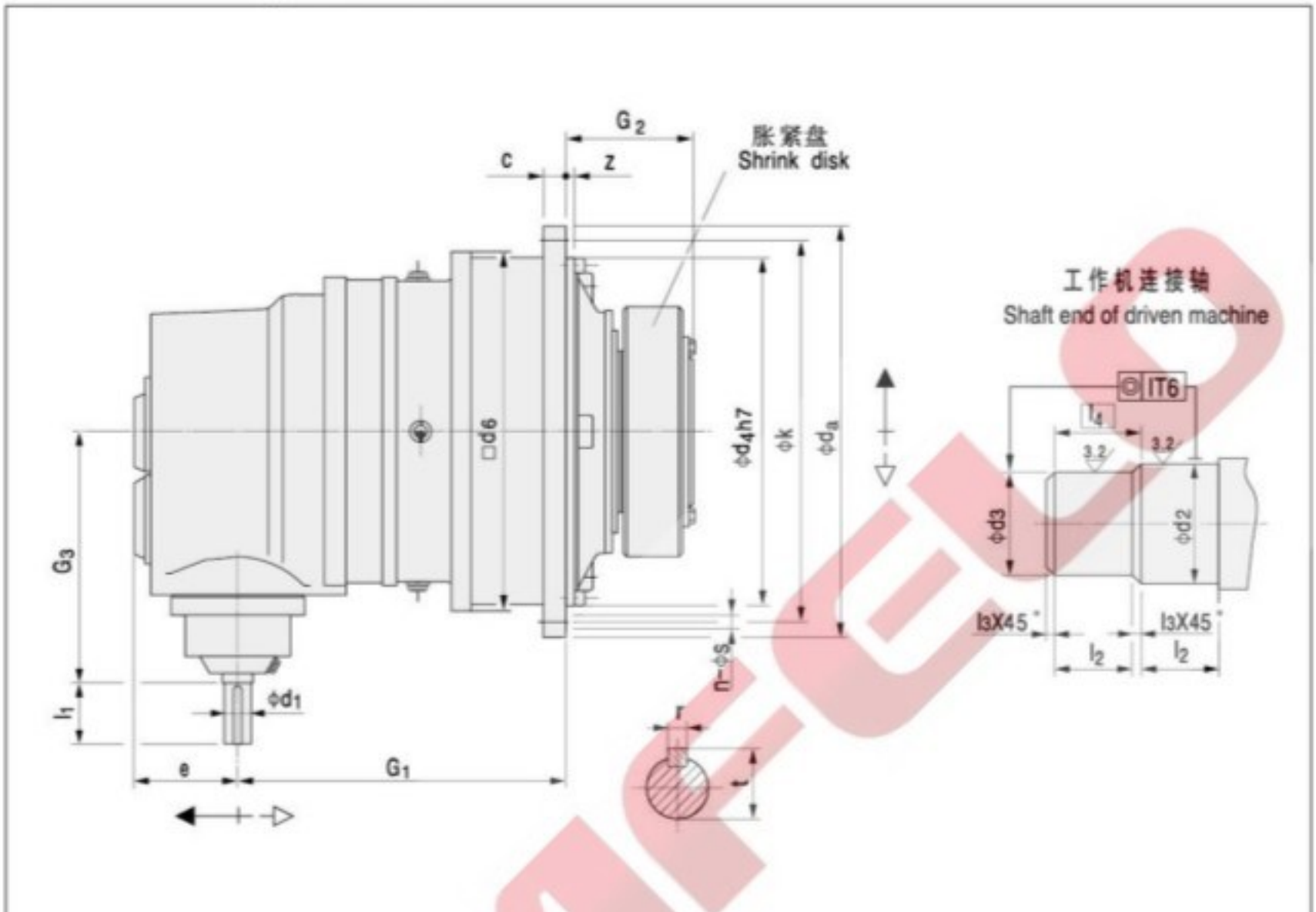


P2SA 机座号 Type	额定输出扭矩 Nominal output torque T2N (N·m)	输入轴尺寸 Shaft end input side d1	l1	r	t	d2	d3	l2	l3	l4	c	da	d4	d6	E	G1	G2	k	z	法兰孔尺寸 Flange bolts s	n	重量 Weight (kg)	油量 Oil quantity (l)
9	22 000	38	60	10	41	120	115	65	2.5	67.5	24	428	350	356	90	469	165	388	6±1.5	18	24	160	6
10	31 000	38	60	10	41	130	125	70	2.5	72.5	28	472	394	400	90	489	174	436	8±1.5	18	28	220	8
11	42 000	55	90	16	59	140	135	82.5	2.5	85.0	32	525	425	436	115	579	204	485	8±1.5	22	20	310	12
12	60 000	55	90	16	59	160	155	90	2.5	92.5	34	605	495	510	115	593	224	555	9±1.5	26	20	470	16
13	83 000	70	120	20	74.5	180	175	95	2.5	97.5	39	645	535	554	140	714	241	595	11±1.5	26	24	600	20
14	117 000	70	120	20	74.5	210	205	105	2.5	107.5	42	720	610	629	140	737	278	665	9	26	32	900	32
16	160 000	80	140	25	85	230	225	110	2.5	112.5	44	770	660	680	170	851	285	715	10	26	36	1 150	40
17	202 000	80	140	25	85	250	245	120	2.5	122.5	50	895	750	775	170	877	294	830	10	33	24	1 650	56
18	244 000	90	160	25	95	260	255	120	2.5	122.5	50	930	785	815	200	1006	303	865	10	33	32	1 950	66
19	295 000	90	160	25	95	280	275	135	2.5	137.5	56	980	840	870	200	1029.5	327.5	915	12	33	36	2400	82
20	354 000	90	160	25	95	300	295	135	2.5	137.5	56	980	840	870	200	1029.5	327.5	915	12	33	36	2 500	75
21	392 000	100	180	28	106	310	305	152	2.5	154.5	62	1115	935	960	230	1076	354	1025	24	39	32	2 900	110
22	450 000	100	180	28	106	330	325	152	2.5	154.5	62	1115	935	960	230	1076	354	1025	24	39	32	3 100	95
23	513 000	120	210	32	127	350	345	164	2.5	166.5	68	1210	1025	1056	265	1175	380	1120	28	39	36	3 800	150
24	592 000	120	210	32	127	360	355	164	2.5	166.5	68	1210	1025	1056	265	1175	380	1120	28	39	36	4 100	125
25	684 000	130	210	32	137	380	375	180	2.5	182.5	74	1320	1115	1150	300	1291	407	1220	29	45	36	4 950	190
26	763 000	130	210	32	137	400	395	180	2.5	182.5	74	1320	1115	1150	300	1291	407	1220	29	45	36	5 350	160
27	852 000	140	240	36	148	430	425	191	2.5	193.5	81	1460	1215	1248	320	1429	453	1345	31	52	32	6 800	245
28	950 000	140	240	36	148	450	445	191	2.5	193.5	81	1460	1215	1248	320	1429	453	1345	31	52	32	7 200	205
29	1 060 000	150	240	36	158	460	450	197.5	5	202.5	87	1565	1320	1355	360	1507	483	1450	34	52	36	8 500	305
30	1 200 000	150	240	36	158	480	470	197.5	5	202.5	87	1565	1320	1355	360	1507	483	1450	34	52	36	9 000	255
31	1 330 000	160	270	40	169	480	470	232	5	237.0	94	1665	1400	1443	400	1662	538	1545	36	62	32	10 500	380
32	1 500 000	160	270	40	169	510	500	232	5	237.0	94	1665	1400	1443	400	1662	538	1545	36	62	32	11 200	315
33	1 680 000	170	270	40	179	530	520	242	5	247.0	100	1755	1495	1536	400	1743	573	1635	36	62	36	12 700	460
34	1 920 000	170	270	40	179	570	560	242	5	247.0	100	1755	1495	1536	400	1743	573	1635	36	62	36	13 500	380

注：1 当d1≤100时公差为m6,当d1>100时公差为n6;
2 当尺寸d2或d3≤160时，公差为h6;
当尺寸d2或d3>160时，公差为g6;
3 重量不包括胀紧盘和润滑油。

Note: 1 When shaft diameter d1≤100, tolerance is m6,
When shaft diameter d1 >100, tolerance is n6;
2 When shaft diameter d2 or d3 ≤160, tolerance h6;
When shaft diameter d2 or d3 >160, tolerance g6;
3 Weight without shrink disk and oil.

P2KA i_N = 112 ...500

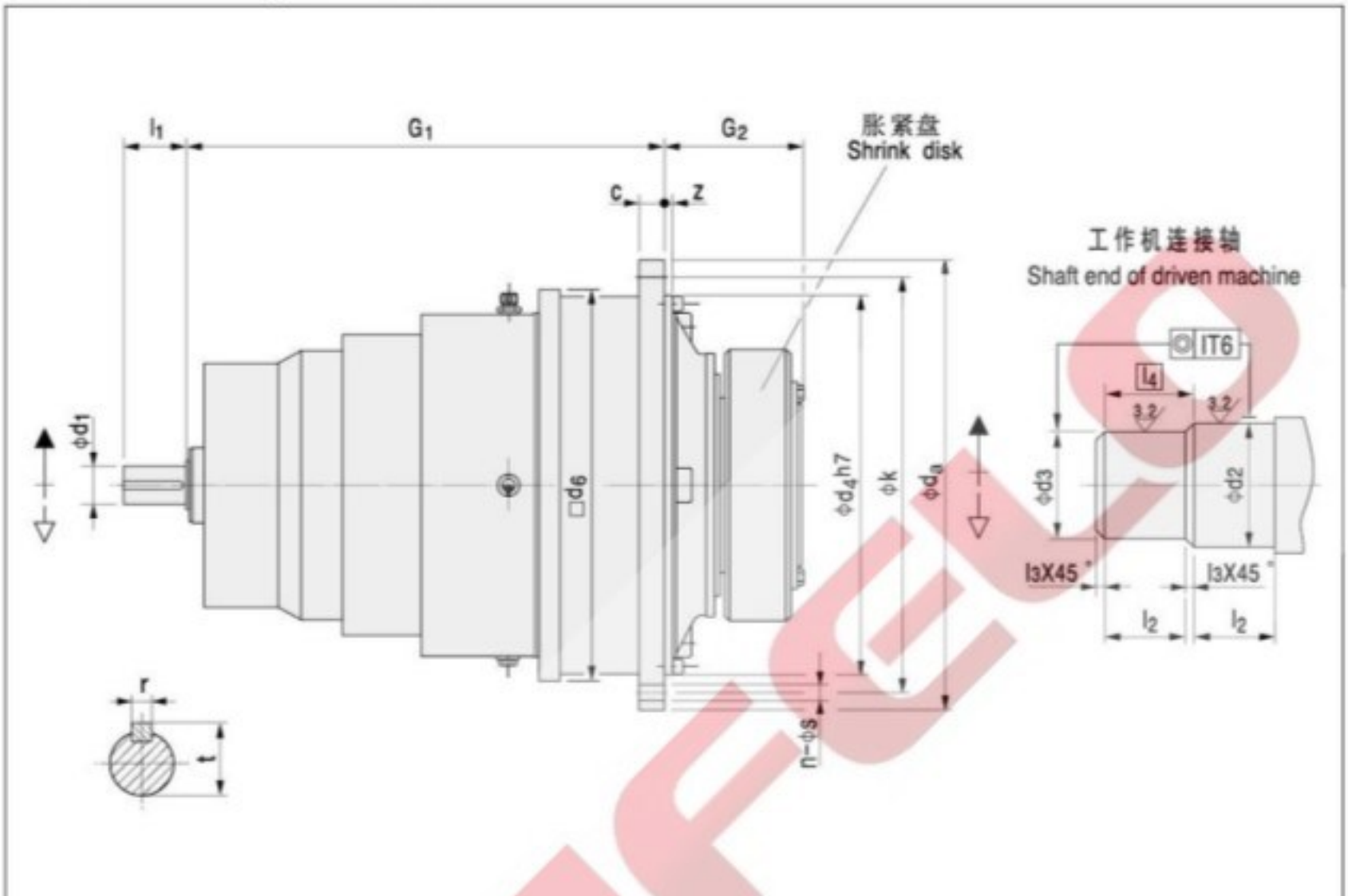


P2KA 机座号 Type	额定输出扭矩 Nominal output torque T2N (N·m)	输入轴尺寸 Shaft end input side i_N<360 d1	l1	r	t	i_N>400 d1	l1	r	t	d2	d3	l2	l3	l4	c	da	d4	d6	e	G1	G2	G3	k	z	法兰孔尺寸 Flange holes s	n	重量 Weight (kg)	油量 Oil quantity (l)
9	22 000	35	70	10	38	30	60	8	33	120	115	65	2.5	67.5	24	428	350	356	119	339	165	320	388	6±1.5	18	24	165	6
10	31 000	35	70	10	38	30	60	8	33	130	125	70	2.5	72.5	28	472	394	400	119	359	174	320	436	8±1.5	18	28	227	8
11	42 000	45	80	14	48.5	35	60	10	38	140	135	82.5	2.5	85	32	525	425	436	137	419	204	375	485	8±1.5	22	20	320	12
12	60 000	45	80	14	48.5	35	60	10	38	160	155	90	2.5	92.5	34	605	495	510	137	433	224	375	555	9±1.5	26	20	484	16
13	83 000	50	100	14	53.5	40	80	12	43	180	175	95	2.5	97.5	39	645	535	554	172	518.5	241	445	595	11±1.5	26	24	818	20
14	117 000	50	100	14	53.5	40	80	12	43	210	205	105	2.5	107.5	42	720	610	629	172	541.5	278	445	665	9	26	32	927	32
16	160 000	60	110	18	64	50	100	14	53.5	230	225	110	2.5	112.5	44	770	660	680	194	632	285	520	715	10	26	36	1 184	40
17	202 000	60	110	18	64	50	100	14	53.5	250	245	120	2.5	122.5	50	895	750	775	194	658	294	520	830	10	33	24	1 700	56
18	244 000	75	135	20	79.5	60	110	18	64	260	255	120	2.5	122.5	50	930	785	815	240	741.5	303	615	865	10	33	32	2 010	73
19	295 000	75	135	20	79.5	60	110	18	64	280	275	135	2.5	137.5	56	980	840	870	240	764.5	327.5	615	915	12	33	36	2 470	82
20	354 000	75	135	20	79.5	60	110	18	64	300	295	135	2.5	137.5	56	980	840	870	240	764.5	327.5	615	915	12	33	36	2 550	75
21 – 26	On request																											

注：1 当d1≤100时公差为m6,当d1>100时公差为n6;
2 当尺寸d2或d3≤160时，公差为h6;
当尺寸d2或d3>160时，公差为g6;
3 重量不包括胀紧盘和润滑油。

Note: 1 When shaft diameter d1≤100, tolerance is m6,
When shaft diameter d1 >100, tolerance is n6;
2 When shaft diameter d2 or d3 ≤160, tolerance h6;
When shaft diameter d2 or d3 >160, tolerance g6;
3 Weight without shrink disk and oil.

P3NA i_N = 140 ...280

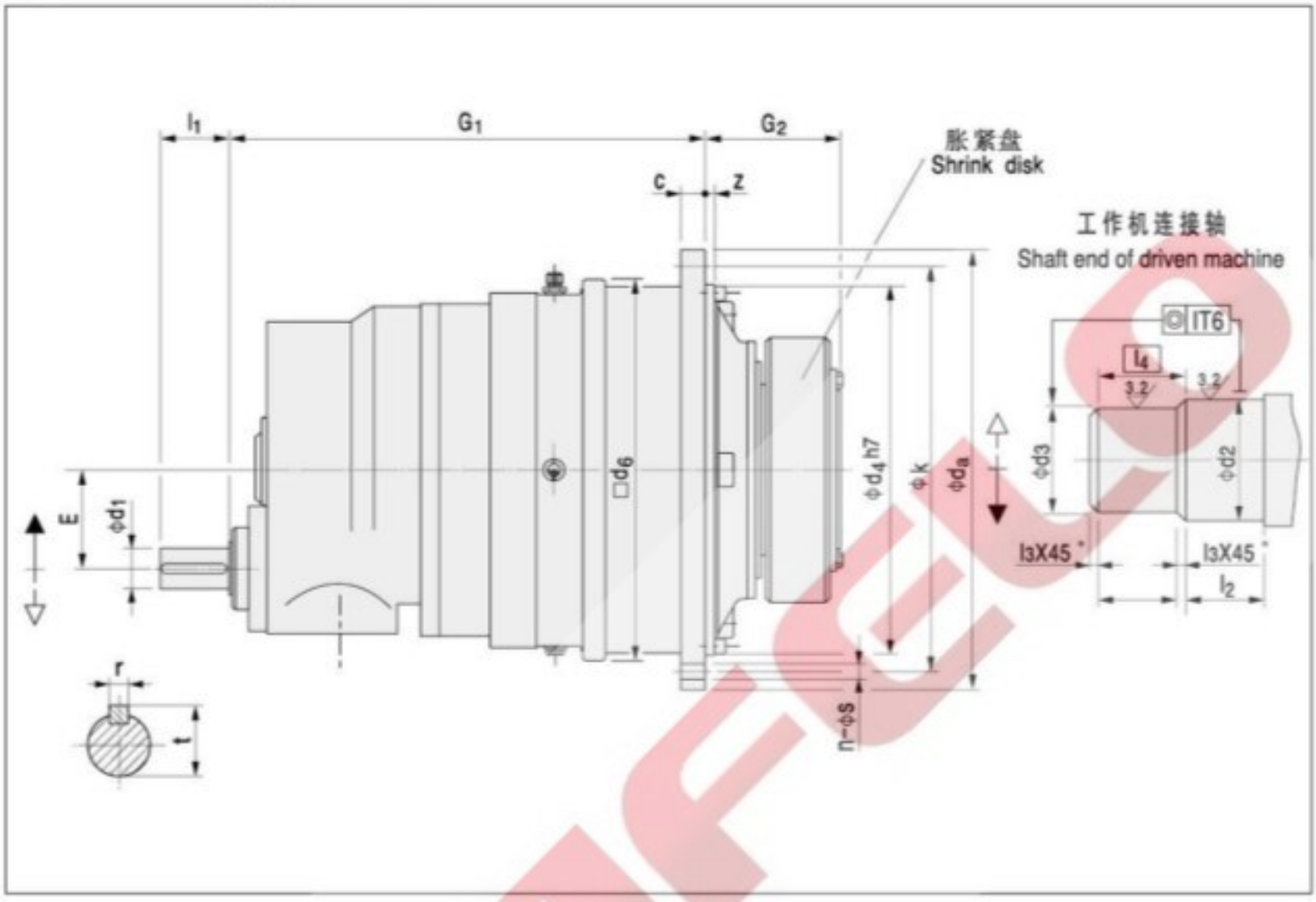


P3NA 机座号 Type	额定输出扭矩 Nominal output torque T2N (N · m)	输入轴尺寸 Shaft end input side d1	l1	r	t	d2	d3	l2	l3	l4	c	da	d4	d6	G1	G2	k	z	法兰孔尺寸 Flange bolts s	n	重量 Weight (kg)	油量 Oil quantity (l)
9	22 000	55	90	16	59	120	115	65	2.5	67.5	24	428	350	356	565	165	388	6±1.5	18	24	152	7
10	31 000	55	90	16	59	130	125	70	2.5	72.5	28	472	394	400	585	174	436	6±1.5	18	28	205	9
11	42 000	55	90	16	59	140	135	82.5	2.5	85.0	32	525	425	436	616	204	485	8±1.5	22	20	295	13
12	60 000	55	90	16	59	160	155	90	2.5	92.5	34	605	495	510	630	224	555	9±1.5	26	20	447	17
13	83 000	55	90	16	59	180	175	95	2.5	97.5	39	645	535	554	688	241	595	11±1.5	26	24	567	21
14	117 000	55	90	16	59	210	205	105	2.5	107.5	42	720	610	629	711	278	665	9	26	32	850	33
16	160 000	70	120	20	74.5	230	225	110	2.5	112.5	44	770	660	680	853	285	715	10	26	36	1 085	42
17	202 000	70	120	20	74.5	250	245	120	2.5	122.5	50	895	750	775	879	294	830	10	33	24	1 580	60
18	244 000	80	140	25	85	260	255	120	2.5	122.5	50	930	785	815	1013.5	303	865	10	33	32	2 000	70
19	295 000	80	140	25	85	280	275	135	2.5	137.5	56	980	840	870	1036.5	327.5	915	12	33	36	2 100	85
20	354 000	80	140	25	85	300	295	135	2.5	137.5	56	980	840	870	1036.5	327.5	915	12	33	36	2 200	75
21	392 000	80	140	25	85	310	305	152	2.5	154.5	62	1115	935	960	1093	354	1025	24	39	32	2 785	115
22	450 000	80	140	25	85	330	325	152	2.5	154.5	62	1115	935	960	1093	354	1025	24	39	32	2 950	105
23	513 000	95	160	25	100	350	345	164	2.5	166.5	68	1210	1025	1056	1222	380	1120	28	39	36	3 625	155
24	592 000	95	160	25	100	360	355	164	2.5	166.5	68	1210	1025	1056	1222	380	1120	28	39	36	4 100	135
25	684 000	95	160	25	100	380	375	180	2.5	182.5	74	1320	1115	1150	1284.5	407	1220	29	45	36	5 000	195
26	763 000	95	160	25	100	400	395	180	2.5	182.5	74	1320	1115	1150	1284.5	407	1220	29	45	36	5 400	170
27	852 000	110	180	28	116	430	425	191	2.5	193.5	81	1460	1215	1248	1470	453	1345	31	52	32	6 400	250
28	950 000	110	180	28	116	450	445	191	2.5	193.5	81	1460	1215	1248	1470	453	1345	31	52	32	6 875	220
29	1 060 000	110	180	28	116	460	450	197.5	5	202.5	87	1565	1320	1355	1517	483	1450	34	52	36	8 190	310
30	1 200 000	110	180	28	116	480	470	197.5	5	202.5	87	1565	1320	1355	1517	483	1450	34	52	36	8 715	280
31	1 330 000	120	210	32	127	480	470	232	5	237.0	94	1665	1400	1443	1585	540	1545	36	62	32	10 700	390
32	1 500 000	120	210	32	127	510	500	232	5	237.0	94	1665	1400	1443	1585	540	1545	36	62	32	11 200	360
33	1 680 000	130	210	32	137	530	520	242	5	247.0	100	1755	1495	1536	1710	573	1635	36	62	36	12 950	470
34	1 920 000	130	210	32	137	570	560	242	5	247.0	100	1755	1495	1536	1710	573	1635	36	62	36	13 800	430

注：1 当d1≤100时公差为m6,当d1>100时公差为n6;
2 当尺寸d2或d3≤160时，公差为h6;
当尺寸d2或d3>160时，公差为g6;
3 重量不包括胀紧盘和润滑油。

Note: 1 When shaft diameter d1 ≤ 100, tolerance is m6,
When shaft diameter d1 >100, tolerance is n6;
2 When shaft diameter d2 or d3 ≤160, tolerance h6;
When shaft diameter d2 or d3 >160, tolerance g6;
3 Weight without shrink disk and oil.

P3SA i_N = 280 ... 900

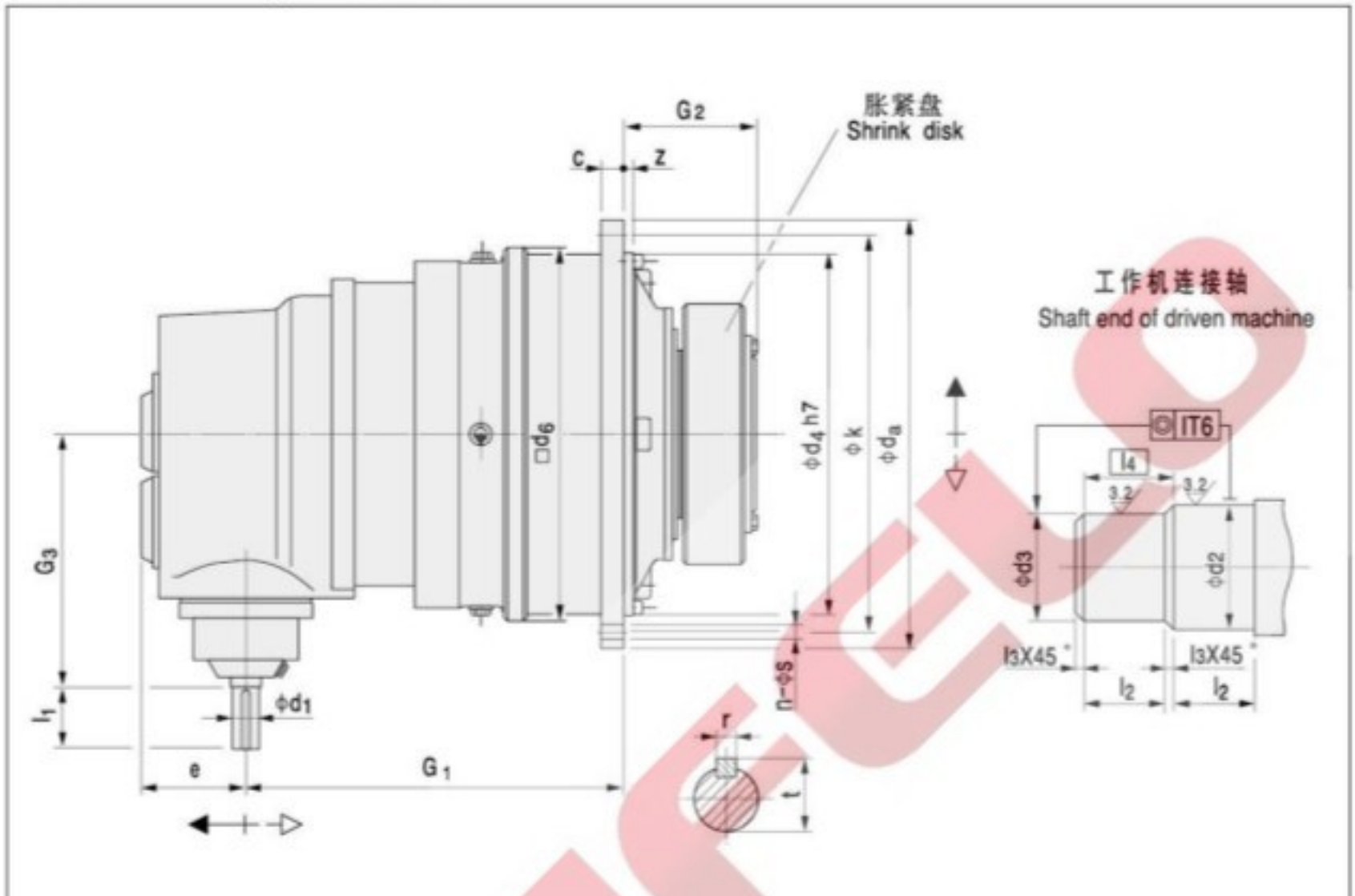


P3SA 机座号 Type	额定输出扭矩 Nominal output toaque T_{2N} (N · m)	输入轴尺寸 Shaft end input side d_1	l_1	r	t	d_2	d_3	l_2	l_3	l_4	c	d_a	d_4	d_6	E	G_1	G_2	k	z	注三孔尺寸 Flange bolts s	n	重量 Weight (kg)	油量 Oil quantity (l)
9	22 000	38	60	10	41	120	115	65	2.5	67.5	24	428	350	356	90	565	165	388	$6^{\pm1.5}$	18	24	170	7
10	31 000	38	60	10	41	130	125	70	2.5	72.5	28	472	394	400	90	585	174	436	$8^{\pm1.5}$	18	28	230	9
11	42 000	38	60	10	41	140	135	82.5	2.5	85.0	32	525	425	436	90	616	204	485	$8^{\pm1.5}$	22	20	310	13
12	60 000	38	60	10	41	160	155	90	2.5	92.5	34	605	495	510	90	630	224	555	$9^{\pm1.5}$	26	20	460	17
13	83 000	38	60	10	41	180	175	95	2.5	97.5	39	645	535	554	90	688	241	595	$11^{\pm1.5}$	26	24	584	21
14	117 000	38	60	10	41	210	205	105	2.5	107.5	42	720	610	629	90	711	278	665	9	26	32	875	33
16	160 000	55	90	16	59	230	225	110	2.5	112.5	44	770	660	680	115	853	285	715	10	26	36	1 115	42
17	202 000	55	90	16	59	250	245	120	2.5	122.5	50	895	750	775	115	879	294	830	10	33	24	1 625	60
18	244 000	70	120	20	74.5	260	255	120	2.5	122.5	50	930	785	815	140	1013.5	303	865	10	33	32	2 060	70
19	295 000	70	120	20	74.5	280	275	135	2.5	137.5	56	980	840	870	140	1036.5	327.5	915	12	33	36	2 160	85
20	354 000	70	120	20	74.5	300	295	135	2.5	137.5	56	980	840	870	140	1036.5	327.5	915	12	33	36	2 260	75
21	392 000	70	120	20	74.5	310	305	152	2.5	154.5	62	1115	935	960	140	1093	354	1025	24	39	32	2 870	115
22	450 000	70	120	20	74.5	330	325	152	2.5	154.5	62	1115	935	960	140	1093	354	1025	24	39	32	3 040	105
23	513 000	80	140	25	85	350	345	164	2.5	166.5	68	1210	1025	1056	170	1222	380	1120	28	39	36	3 730	155
24	592 000	80	140	25	85	360	355	164	2.5	166.5	68	1210	1025	1056	170	1222	380	1120	28	39	36	4 220	135
25	684 000	80	140	25	85	380	375	180	2.5	182.5	74	1320	1115	1150	170	1284	407	1220	29	45	36	5 150	195
26	763 000	80	140	25	85	400	395	180	2.5	182.5	74	1320	1115	1150	170	1284	407	1220	29	45	36	5 560	170
27	852 000	90	160	25	95	430	425	191	2.5	193.5	81	1460	1215	1248	200	1470	453	1345	31	52	32	6 580	250
28	950 000	90	160	25	95	450	445	191	2.5	193.5	81	1460	1215	1248	200	1470	453	1345	31	52	32	7 080	220
29	1 060 000	90	160	25	95	460	450	197.5	5	202.5	87	1565	1320	1355	200	1517	483	1450	34	52	36	8 400	310
30	1 200 000	90	160	25	95	480	470	197.5	5	202.5	87	1565	1320	1355	200	1517	483	1450	34	52	36	8 970	280
31	1 330 000	100	180	28	106	480	470	232	5	237.0	94	1665	1400	1443	230	1617	538	1545	36	62	32	11 000	390
32	1 500 000	100	180	28	106	510	500	232	5	237.0	94	1665	1400	1443	230	1617	538	1545	36	62	32	11 500	360
33	1 680 000	120	210	32	127	530	520	242	5	247.0	100	1755	1495	1536	265	1735	573	1635	36	62	36	13 300	470
34	1 920 000	120	210	32	127	570	560	242	5	247.0	100	1755	1495	1536	265	1735	573	1635	36	62	36	14 200	430

注：1 当d1≤100时公差为m6,当d1>100时公差为n6;
2 当尺寸d2或d3≤160时，公差为h6;
当尺寸d2或d3>160时，公差为g6;
3 重量不包括胀紧盘和润滑油。

Note: 1 When shaft diameter d1≤100, tolerance is m6,
When shaft diameter d1 >100, tolerance is n6;
2 When shaft diameter d2 or d3 ≤160, tolerance h6;
When shaft diameter d2 or d3 >160, tolerance g6;
3 Weight without shrink disk and oil.

P3KA i_N = 560 ... 4000

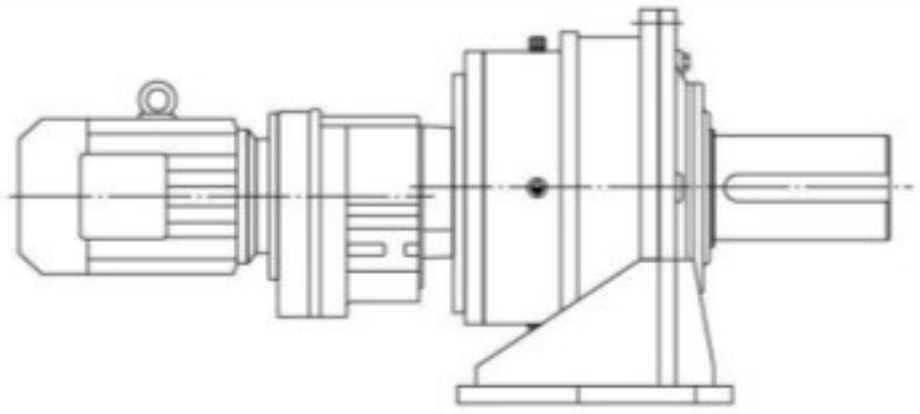


P3KA 机座号 Type	额定输出扭矩 Nominal output torque T_{2N} (N · m)	输入轴尺寸 Shaft end input side i_N < 2000				i_N > 2240				d_2	d_3	l_2	l_3	l_4	c	d_a	d_4	d_6	e	G_1	G_2	G_3	k	z	法兰孔尺寸 Flange bolts s	法兰孔尺寸 Flange bolts n	重量 Weight (kg)	油量 Oil quantity (l)
		d_1	l_1	r	t	d_1	l_1	r	t																			
9	22 000	35	70	10	38	30	60	8	33	120	115	65	2.5	67.5	24	428	350	356	119	435	165	320	388	$6^{\pm 1.5}$	18	24	180	7
10	31 000	35	70	10	38	30	60	8	33	130	125	70	2.5	72.5	28	472	394	400	119	455	174	320	436	$8^{\pm 1.5}$	18	28	240	9
11	42 000	35	70	10	38	30	60	8	33	140	135	82.5	2.5	85	32	525	425	436	119	486	204	320	485	$8^{\pm 1.5}$	22	20	315	15
12	60 000	35	70	10	38	30	60	8	33	160	155	90	2.5	92.5	34	605	495	510	119	500	224	320	555	$9^{\pm 1.5}$	26	20	470	20
13	83 000	35	70	10	38	30	60	8	33	180	175	95	2.5	97.5	39	645	535	554	119	558	241	320	595	$11^{\pm 1.5}$	26	24	595	21
14	117 000	35	70	10	38	30	60	8	33	210	205	105	2.5	107.5	42	720	610	629	119	581	278	320	665	9	26	32	890	33
16	160 000	45	80	14	48.5	35	60	10	38	230	225	110	2.5	112.5	44	770	660	680	137	693	285	375	715	10	26	36	1 137	42
17	202 000	45	80	14	48.5	35	60	10	38	250	245	120	2.5	122.5	50	895	750	775	137	719	294	375	830	10	33	24	1 660	60
18	244 000	50	100	14	53.5	40	80	12	43	260	255	120	2.5	122.5	50	930	785	815	172	818	303	445	865	10	33	32	2 100	70
19	295 000	50	100	14	53.5	40	80	12	43	280	275	135	2.5	137.5	56	980	840	870	172	841	327.5	445	915	12	33	36	2 200	85
20	354 000	50	100	14	53.5	40	80	12	43	300	295	135	2.5	137.5	56	980	840	870	172	841	327.5	445	915	12	33	36	2 300	75
21	392 000	50	100	14	53.5	40	80	12	43	310	305	152	2.5	154.5	62	1115	935	960	172	897.5	354	445	1025	24	39	32	2 930	115
22	450 000	50	100	14	53.5	40	80	12	43	330	325	152	2.5	154.5	62	1115	935	960	172	897.5	354	445	1025	24	39	32	3 100	105
23	513 000	60	110	18	64	50	100	14	53.5	350	345	164	2.5	166.5	68	1210	1025	1056	194	1003	380	520	1120	28	39	36	3 800	155
24	592 000	60	110	18	64	50	100	14	53.5	360	355	164	2.5	166.5	68	1210	1025	1056	194	1003	380	520	1120	28	39	36	4 300	135
25	684 000	60	110	18	64	50	100	14	53.5	380	375	180	2.5	182.5	74	1320	1115	1150	194	1065	407	520	1220	29	45	36	5 250	195
26	763 000	60	110	18	64	50	100	14	53.5	400	395	180	2.5	182.5	74	1320	1115	1150	194	1065	407	520	1220	29	45	36	5 660	170
27	852 000	75	135	20	79.5	60	110	18	64	430	425	191	2.5	193.5	81	1460	1215	1248	240	1205.5	453	615	1345	31	52	32	6 680	250
28	950 000	75	135	20	79.5	60	110	18	64	450	445	191	2.5	193.5	81	1460	1215	1248	240	1205.5	453	615	1345	31	52	32	7 180	220
29	1 060 000	75	135	20	79.5	60	110	18	64	460	450	197.5	5	202.5	87	1565	1320	1355	240	1252.5	483	615	1450	34	52	36	8 500	310
30	1 200 000	75	135	20	79.5	60	110	18	64	480	470	197.5	5	202.5	87	1565	1320	1355	240	1252.5	483	615	1450	34	52	36	9 070	280

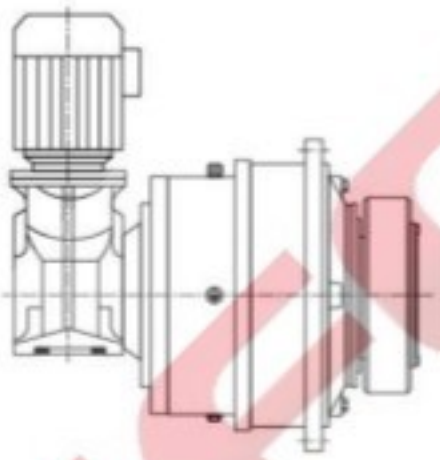
注：1 当d1≤100时公差为m6,当d1>100时公差为n6;
2 当尺寸d2或d3≤160时，公差为h6;
当尺寸d2或d3>160时，公差为g6;
3 重量不包括胀紧盘和润滑油。

Note: 1 When shaft diameter d1≤100, tolerance is m6,
When shaft diameter d1 >100, tolerance is n6;
2 When shaft diameter d2 or d3 ≤160, tolerance h6;
When shaft diameter d2 or d3 >160, tolerance g6;
3 Weight without shrink disk and oil.

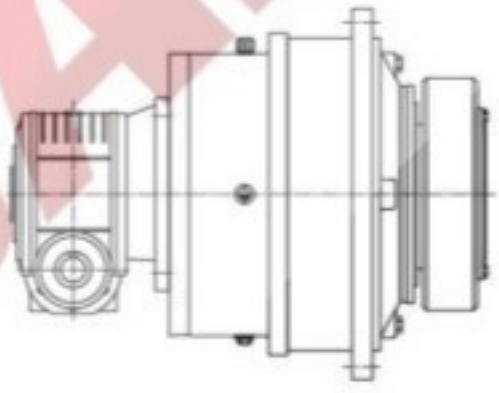
P系列组合型： P series combination:



P../R系列组合，详情来电咨询。 P../R combination please consult us.



P../K系列组合，详情来电咨询。 P../K combination please consult us.

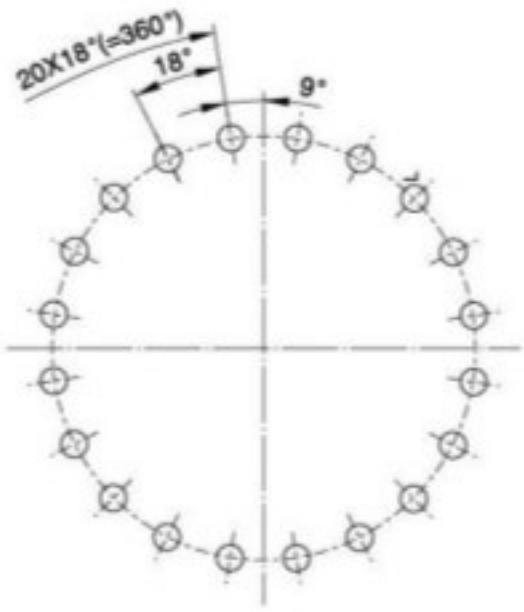


P../RV(160-250) 组合，详情来电咨询。 P../RV(160-250) combination please consult us.

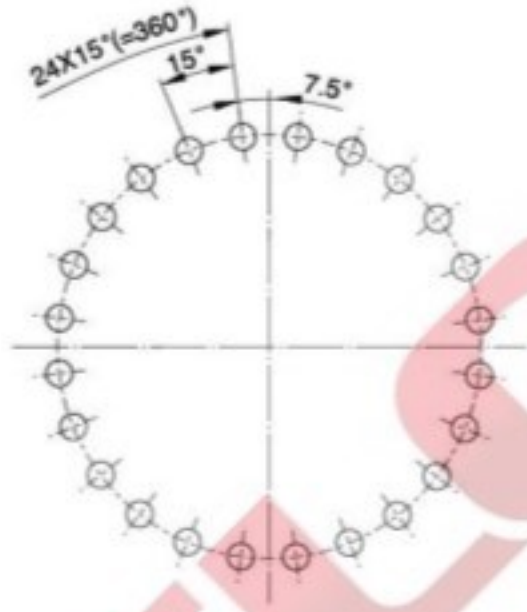
P../TR回转机构，详情来电咨询。 P../TR revering design, please consult us.

输出法兰孔布置图：

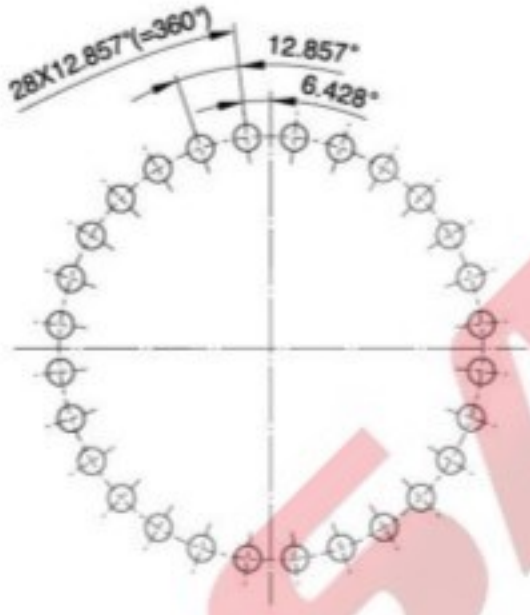
Hole patterns on output flanges:



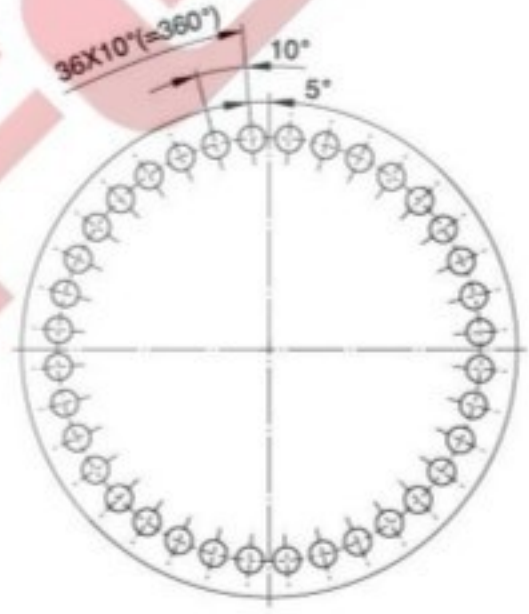
P...11, 12



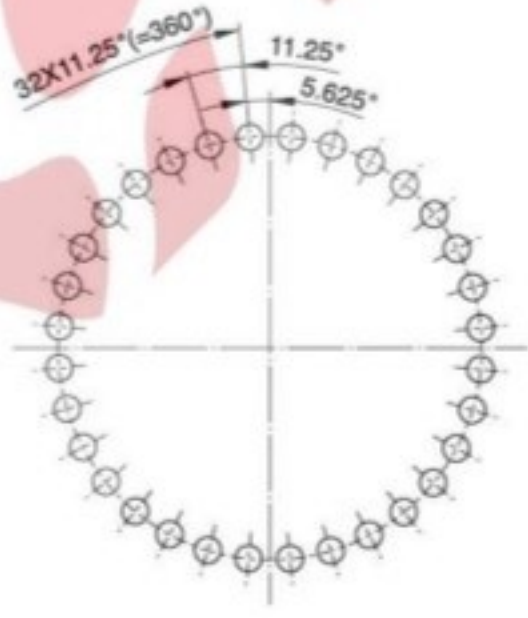
P...9, 13, 17



P...10



P...16, 19, 20, 23, 24, 25, 26, 29, 30, 33, 34



P...14, 18, 21, 22, 27, 28, 31, 32

P

P系列齿轮箱输出轴：

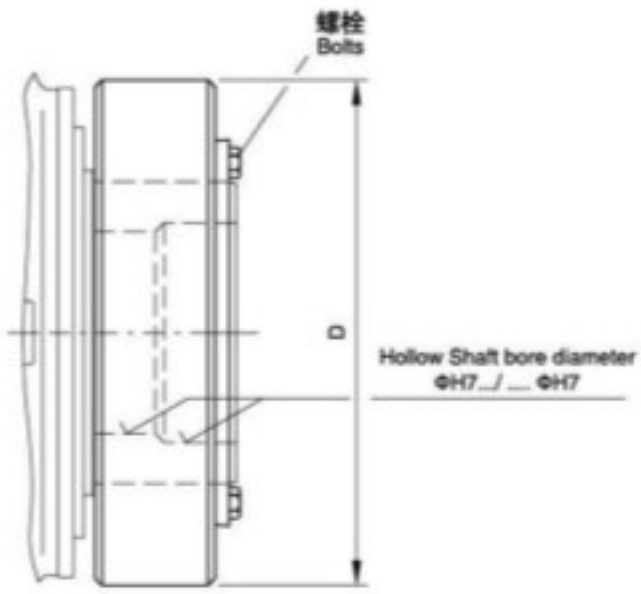
P series gear units output shaft:

空心轴：

Hollow shaft:

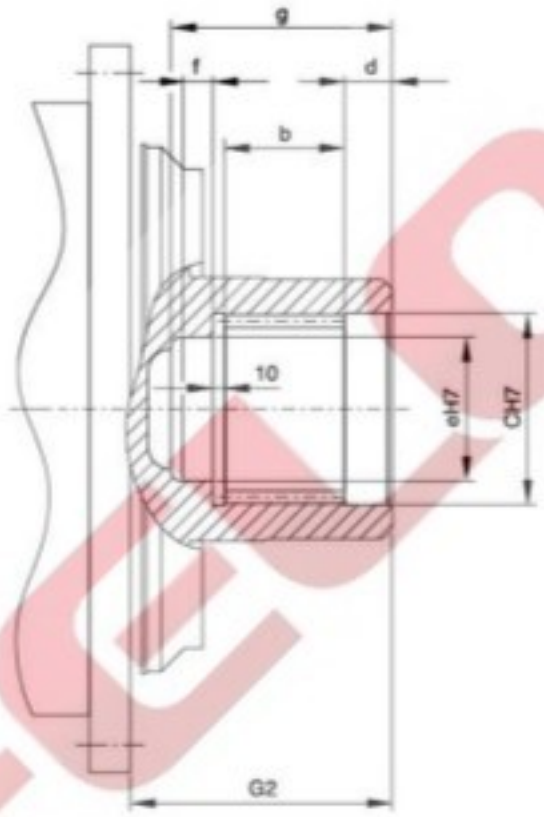
带胀紧盘的空心输出轴

Hollow Shaft for Shrink Disk



渐开线花键空心输出轴

Hollow Shaft with Involute Splines



花键齿形按 DIN 5480

Hollow shaft with involute splines acc. to DIN 5480.

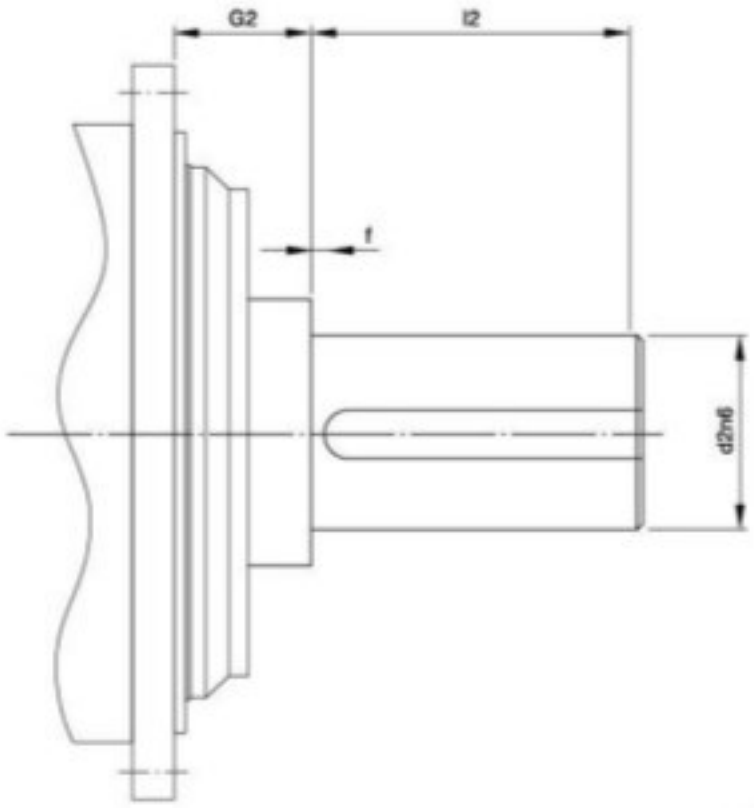
机座号 Type	许用扭矩 Nominal torque T2N (N · m)	胀紧盘 Hollow Shaft for Shrink Disk				空心花键输出轴 Hollow Shaft with Involute Splines							
		型号 Size	D	螺栓 Bolts	重量 Weigth (kg)	内花键规格 Type of involute splines	b	c	d	e	f	G2	g
9	22000	155	263	M14	15.2	120X5X30X22X9H	70	122	40	107	20	165	150
10	31000	165	290	M16	21.5	130X5X30X24X9H	80	132	40	117	20	174	160
11	42000	185	320	M16	32.7	140X5X30X26X9H	90	142	45	125	25	204	180
12	60000	220	370	M20	53	160X5X30X30X9H	100	162	45	145	25	223	190
13	83000	240	405	M20	66	180X5X30X34X9H	110	182	45	165	25	237	200
14	117000	280	460	M20	103	210X5X30X40X9H	125	212	45	195	25	264	215
16	160000	300	485	M24	120	240X8X30X28X9H	140	242	50	220	25	285	235
17	202000	320	520	M24	138	250X8X30X30X9H	150	252	50	230	30	290	250
18	244000	340	570	M24	189	260X8X30X31X9H	160	262	50	240	30	303	260
19	295000	360	590	M24	207	280X8X30X34X9H	170	282	50	260	30	327.5	270
20	354000	380	640	M27	244	300X8X30X36X9H	180	302	50	280	30	327.5	280
21	392000	390	650	M27	249	310X8X30X37X9H	190	312	60	290	40	354	310
22	450000	420	670	M27	285	330X8X30X40X9H	200	332	60	310	40	354	320
23	513000	440	720	M27	357	340X8X30X41X9H	200	342	60	320	40	348	320
24	592000	460	770	M27	419	360X8X30X44X9H	220	362	60	340	40	368	340
25	684000	480	800	M30	492	380X8X30X46X9H	230	382	60	360	40	372	350
26	763000	500	850	M30	567	400X8X30X48X9H	240	402	60	380	40	382	360
27	852000	530	910	M30	744	440X8X30X54X9H	250	442	60	420	40	423	370
28	950000	560	940	M30	776	450X8X30X55X9H	260	452	65	430	40	428	385
29	1060000	560	940	M30	836	460X8X30X56X9H	270	462	65	440	45	433	400
30	1200000	590	960	M30	845	480X8X30X58X9H	285	482	65	460	45	448	415
31	1330000	590	960	M30	935								
32	1500000	620	1020	M30	1064								
33	1680000	660	1070	M33	1178								
34	1920000	700	1140	M33	1345								

实心轴：

Solid shaft:

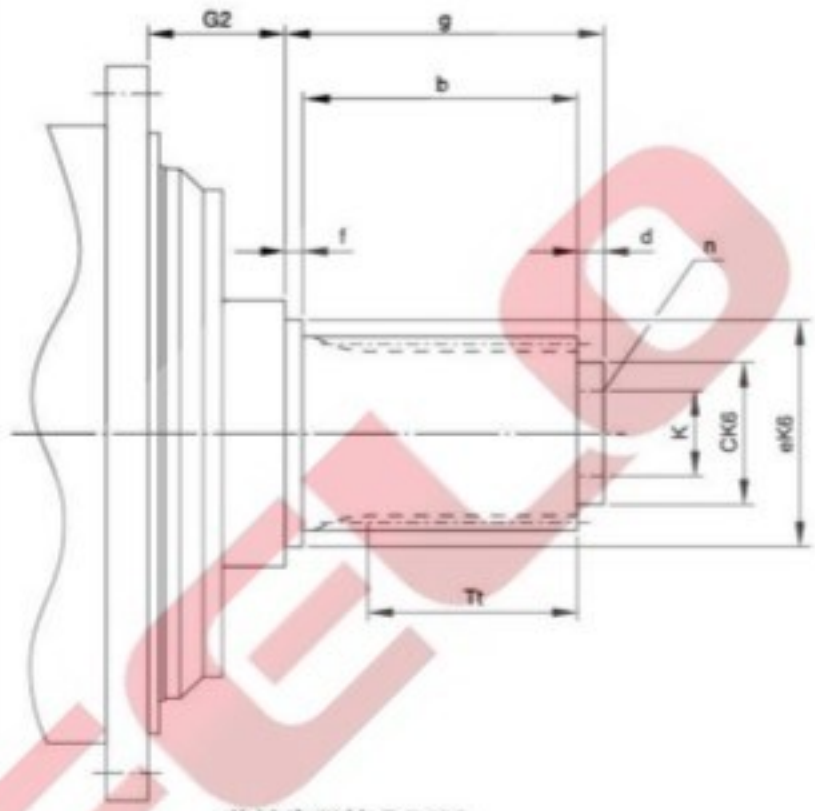
带平键的实心输出轴

Solid Shaft with flat Key



渐开线花键实心输出轴

Solid Shaft with Involute Splines



花键齿形按 D5480

Hollow shaft with involute splines acc. to DIN 5480.

机座号 Type	许用扭矩 Nominal torque T2N (N·m)	带平键实心轴 Solid shaft with Parallel Key			实心花键输出轴 Hollow Shaft with Involute Splines										
		d2	l2	G2	外花键规格 Type of involute splines	Tt	b	c	d	e	f	g	k	n	G2
9	22000	120	210	95	130X5X30X24X8m	70	80	110	20	132	20	120	80	3XM16X24	95
10	31000	130	210	95	140X5X30X26X8m	80	90	120	20	142	20	130	90	3XM16X24	95
11	42000	150	240	109	160X5X30X30X8m	90	100	140	25	162	25	150	110	3XM16X24	109
12	60000	160	270	106	180X5X30X34X8m	100	110	90	25	182	25	160	130	3XM16X24	106
13	83000	180	310	118	200X5X30X38X8m	110	120	100	30	202	25	175	140	3XM16X24	118
14	117000	210	350	139	220X5X30X42X8m	125	135	120	30	222	30	195	160	3XM16X24	139
16	160000	230	350	142	250X8X30X30X8m	140	155	140	35	252	30	220	185	3XM20X30	142
17	202000	250	400	139	260X8X30X31X8m	150	165	155	40	262	35	240	200	3XM20X30	139
18	244000	260	400	134	280X8X30X34X8m	160	175	170	40	282	35	250	215	3XM20X30	134
19	295000	280	450	148.5	300X8X30X36X8m	170	185	180	40	302	35	260	225	3XM20X30	148.5
20	354000	300	500	148.5	310X8X30X37X8m	180	195	190	40	312	35	270	235	6XM20X30	148.5
21	392000	310	500	158	320X8X30X38X8m	190	205	200	40	322	35	280	250	6XM20X30	158
22	450000	330	500	158	340X8X30X41X8m	200	215	210	40	342	35	290	265	6XM20X30	158
23	513000	350	550	175	360X8X30X44X8m	200	215	230	40	362	35	290	275	6XM20X30	175
24	592000	360	590	175	380X8X30X46X8m	220	235	245	40	382	35	310	290	6XM20X30	175
25	684000	380	590	182	400X8X30X48X8m	230	245	260	40	402	35	320	310	6XM24X36	182
26	763000	400	650	182	420X8X30X51X8m	240	255	280	40	422	35	330	330	6XM24X36	182
27	852000	430	690	196.5	440X8X30X54X8m	250	265	310	40	442	35	340	370	6XM24X36	196.5
28	950000	450	750	196.5	450X8X30X55X8m	260	275	330	45	452	40	360	380	6XM24X36	196.5
29	1060000	460	750	209	460X8X30X56X8m	270	285	340	45	462	40	370	390	6XM24X36	209
30	1200000	480	790	209	480X8X30X58X8m	285	300	360	45	482	40	385	410	6XM24X36	209
31	1330000	500	790	232											
32	1500000	510	850	232											
33	1690000	530	900	251											
34	1920000	570	950	251											

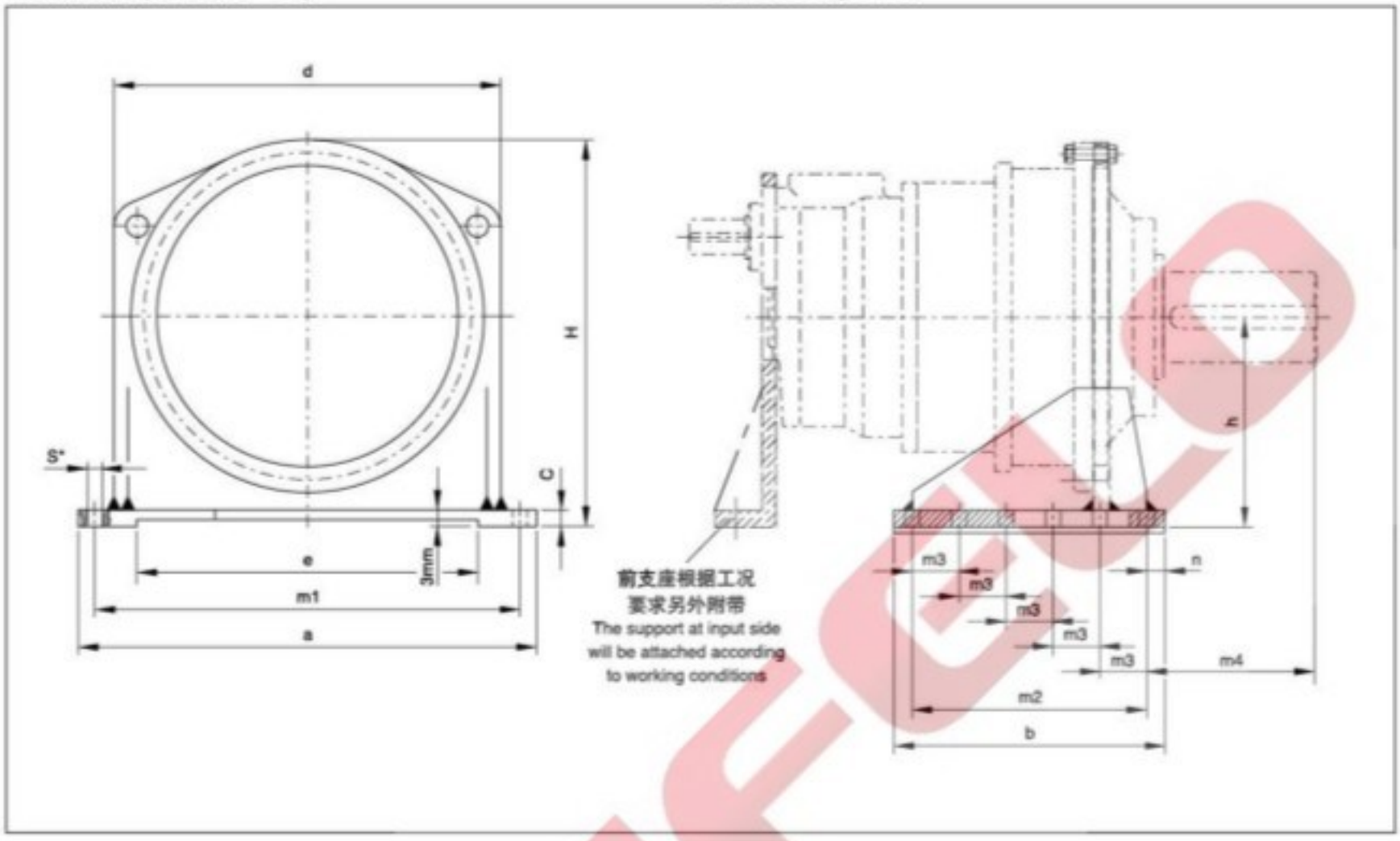
P

附件：

齿轮箱机座(附件代号-96):

Attachments:

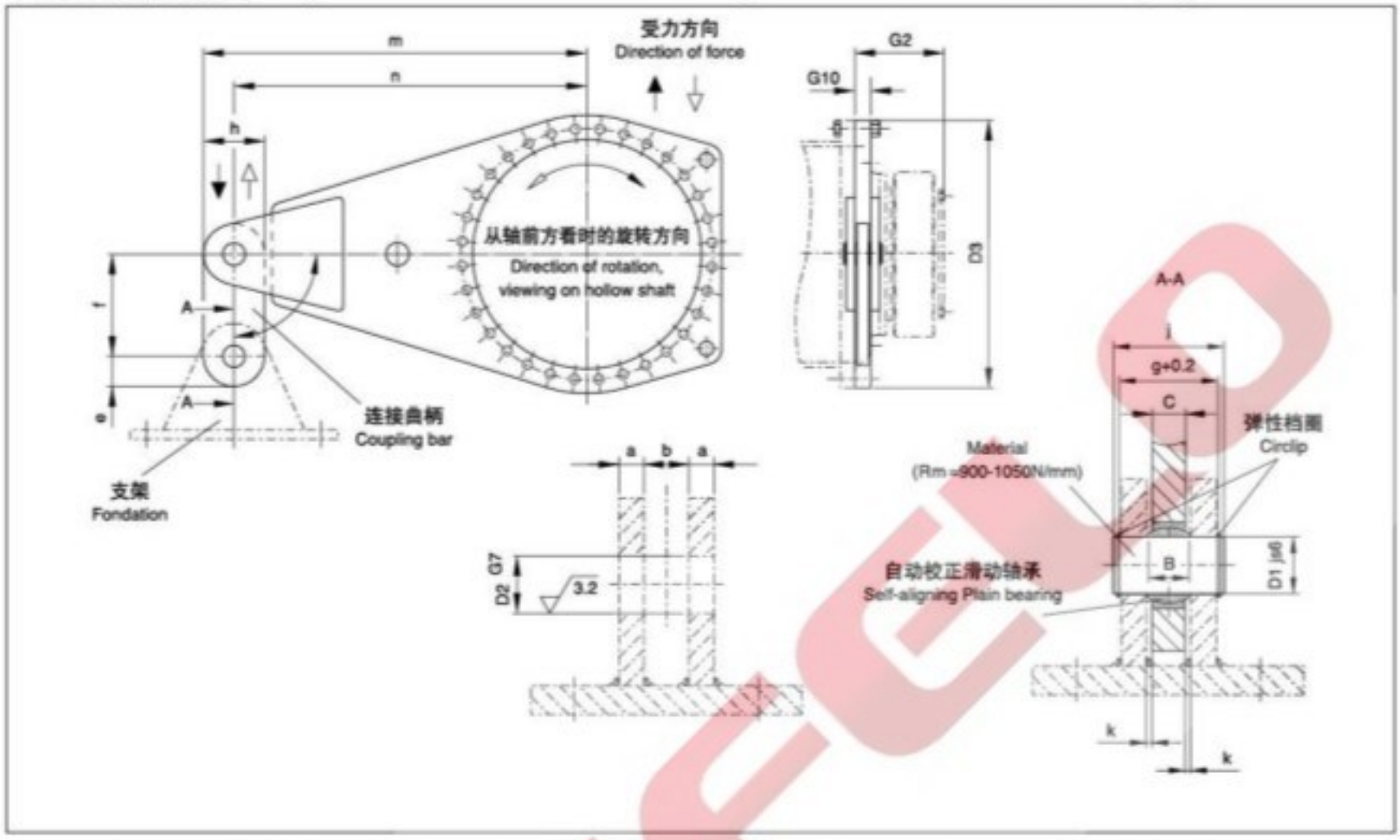
Gear Housing Base:



Size	a	b	c	d	e	h	H	m1	m2	m3	m4	n	螺栓孔 Bolt		重量 Weight (kg)
													s*	数量 No.	
9	580	330	20	450	380	260	480	520	260	130	240	35	26	2X3	56
10	630	360	25	500	430	280	525	570	290	145	240	35	26	2X3	82
11	680	400	30	550	480	315	585	620	330	110	274	35	26	2X4	122
12	760	450	30	630	560	360	670	700	380	95	292	35	26	2X5	157
13	820	490	35	680	610	390	720	750	420	105	334	35	26	2X5	213
14	920	560	35	760	680	430	800	840	480	120	380	40	33	2X5	270
16	980	580	40	820	700	470	865	900	500	125	374	40	33	2X5	350
17	1130	670	45	940	810	540	998	1040	580	145	405	45	39	2X5	520
18	1180	720	45	960	830	560	1035	1080	620	155	385	50	39	2X5	580
19	1260	760	50	1050	880	590	1090	1160	640	160	450	60	45	2X5	720
20	1260	760	50	1050	880	590	1090	1160	640	160	500	60	45	2X5	720
21	1440	840	55	1170	1020	660	1228	1320	700	175	513	70	52	2X5	940
22	1440	840	55	1170	1020	660	1228	1320	700	175	513	70	52	2X5	940
23	1540	910	60	1270	1100	730	1345	1420	750	150	567	80	52	2X6	1275
24	1540	910	60	1270	1100	730	1345	1420	750	150	607	80	52	2X6	1275
25	1700	1000	65	1400	1240	795	1465	1550	860	215	574	70	62	2X5	1670
26	1700	1000	65	1400	1240	795	1465	1550	860	215	634	70	62	2X5	1670
27	1850	1100	70	1550	1370	870	1610	1700	950	190	664	75	62	2X6	2170
28	1850	1100	70	1550	1370	870	1610	1700	950	190	724	75	62	2X6	2170
29	1980	1180	75	1640	1460	925	1715	1820	1000	250	731	90	70	2X5	2650
30	1980	1180	75	1640	1460	925	1715	1820	1000	250	771	90	70	2X5	2650
31	2150	1300	75	1750	1570	1000	1845	1950	1100	220	773	100	70	2X6	3100
32	2150	1300	75	1750	1570	1000	1845	1950	1100	220	833	100	70	2X6	3100
33	2230	1350	85	1850	1630	1050	1940	2050	1150	230	883	100	78	2X6	3850
34	2230	1350	85	1850	1630	1050	1940	2050	1150	230	933	100	78	2X6	3850

单向扭力臂(附件代号-75)：

Torque Reaction Arm on one Side for coupling Bar:



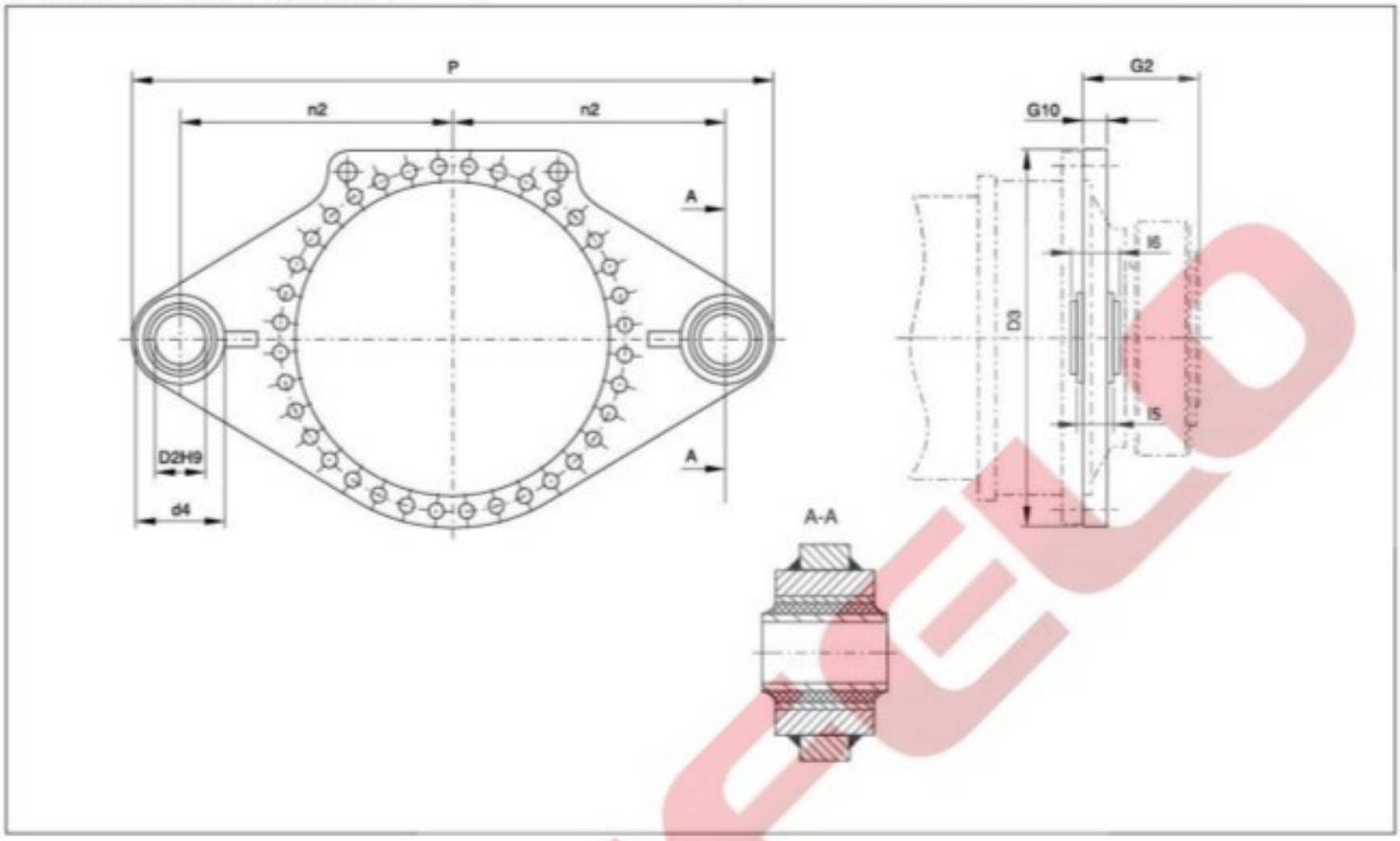
Size	T2N (N · m)	D1	D2	D3	G2	G10	a min.	b	B*	c	e	f	g +0.2	h	j	k	m	n	滑动轴承 Plain bearing	Weight (kg)
9	22000	30		440	165	25	15	25	22	18	50	140	59.5	100	70	3.5	605	555	30	38
10	31000	35		485	174	30	15	30	25	20	52.5	140	64.5	105	75	5	667.5	615	35	51
11	42000	40		540	204	30	18	30	28	22	65	160	70.5	130	85	4	750	685	40	82
12	60000	40		620	224	30	18	30	28	22	65	160	70.5	130	85	4	850	785	40	85
13	83000	45		665	241	35	20	35	32	25	72.5	180	79.5	145	95	5	912.5	840	45	113
14	117000	50		740	278	40	20	40	35	30	72.5	200	85	145	100	5	1012.5	940	50	145
16	160000	60		790	285	50	25	50	44	35	77.5	240	105	155	120	7.5	1077.5	1000	60	206
17	202000	60		915	294	50	25	50	44	35	85	240	105	170	120	7.5	1250	1165	60	274
18	244000	70		955	303	55	30	55	49	40	105	280	120	210	135	7.5	1315	1210	70	365
19	295000	80		1005	327.5	60	30	60	55	45	105	320	125	210	145	7.5	1405	1300	80	423
20	354000	80		1005	327.5	60	30	60	55	45	105	320	125	210	145	7.5	1405	1300	80	423
21	392000	80		1140	354	60	30	60	55	45	113	320	125	225	145	7.5	1562.5	1450	80	530
22	450000	80		1140	354	60	30	60	55	45	113	320	125	225	145	7.5	1562.5	1450	80	530
23	513000	90		1235	380	65	30	65	60	50	125	360	130	250	150	7.5	1700	1575	90	665
24	592000	90		1235	380	65	30	65	60	50	125	360	130	250	150	7.5	1700	1575	90	665
25	684000	100		1350	407	75	35	75	70	55	138	400	150	275	170	10	1857.5	1720	100	940
26	763000	100		1350	407	75	35	75	70	55	138	400	150	275	170	10	1857.5	1720	100	940
27	852000	110		1490	453	75	35	75	70	55	150	440	150	300	175	10	2050	1900	110	1120
28	950000	110		1490	453	75	35	75	70	55	150	440	150	300	175	10	2050	1900	110	1120
29	1060000	110		1600	483	75	35	75	70	55	158	440	150	315	175	10	2192.5	2035	110	1260
30	1200000	110		1600	483	75	35	75	70	55	158	440	150	315	175	10	2192.5	2035	110	1260
31-34	On request																			

•) B=22-35，公差为-0.12
B=44-55，公差为-0.15
B=60-70，公差为-0.20

•) Nominal size B=22-35, tolerance-0.12
Nominal size B=44-55, tolerance-0.15
Nominal size B=60-70, tolerance-0.20

P

带橡胶衬套的双向扭力臂(附件代号-76)： **Torque Reaction Arm on Two Sides with Rubber Bushes:**

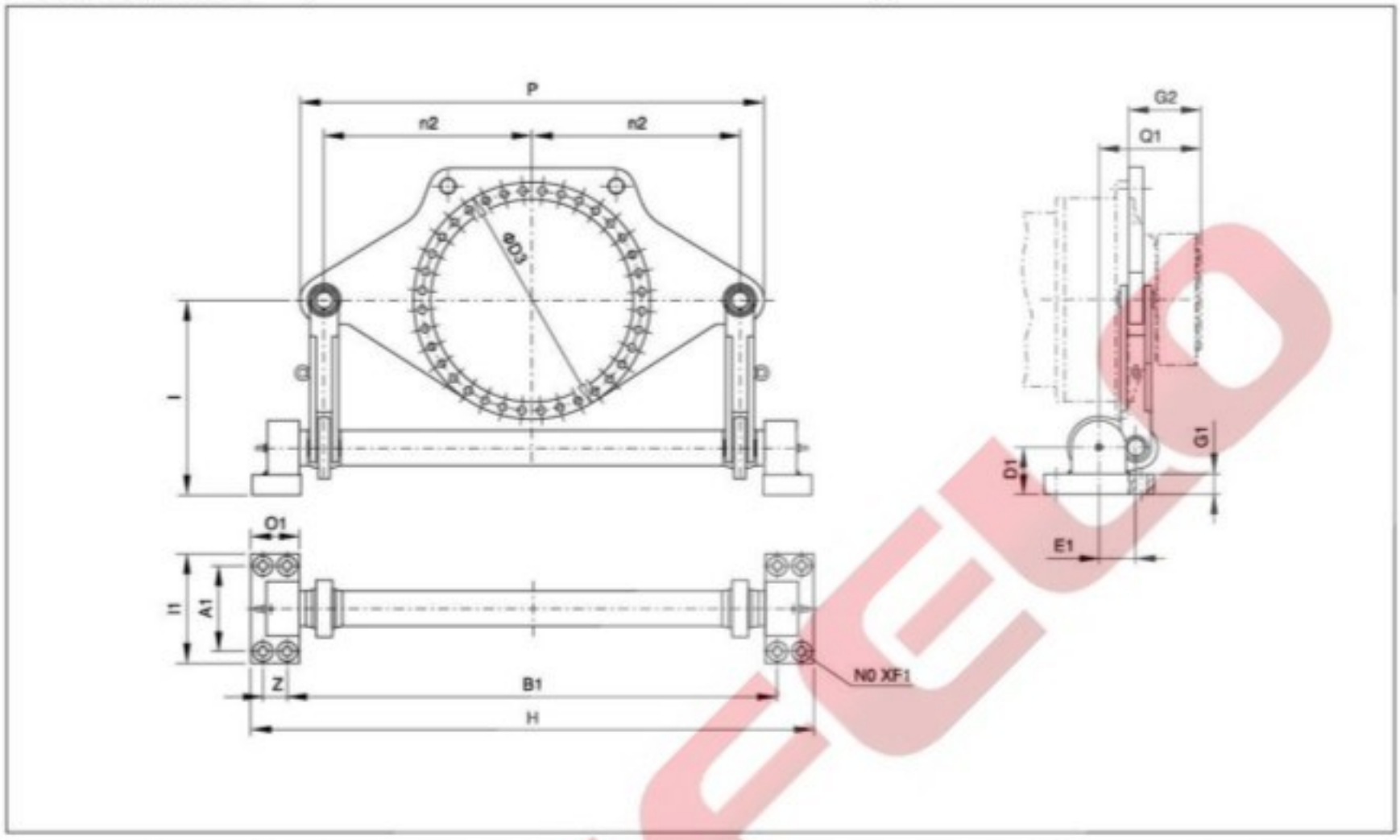


Size	TzN (N · m)	D2*	D3	d4	G2	G10	l5	l6	n2	P	衬套 Bush	质量 Weight (kg)
9	22000	50	440	115	165	30	100	110	500	1140	0118095	58
10	31000	50	485	115	174	30	100	110	500	1240	0118095	72
11	42000	100	540	180	204	30	110	120	575	1355	0118772	95
12	60000	100	620	180	224	35	110	120	625	1455	0118772	120
13	83000	110	665	210	241	35	170	180	600	1435	0118802	145
14	117000	110	740	210	278	40	170	180	650	1535	0118802	170
16	160000	124	790	240	285	40	220	230	700	1670	0118805	230
17	202000	124	915	240	288	40	220	230	750	1770	0118805	300
18	244000	124	955	240	303	50	220	230	900	2070	0118805	400

- 销轴 Pin: Φh8

扭转轴支架(附件代号-77):

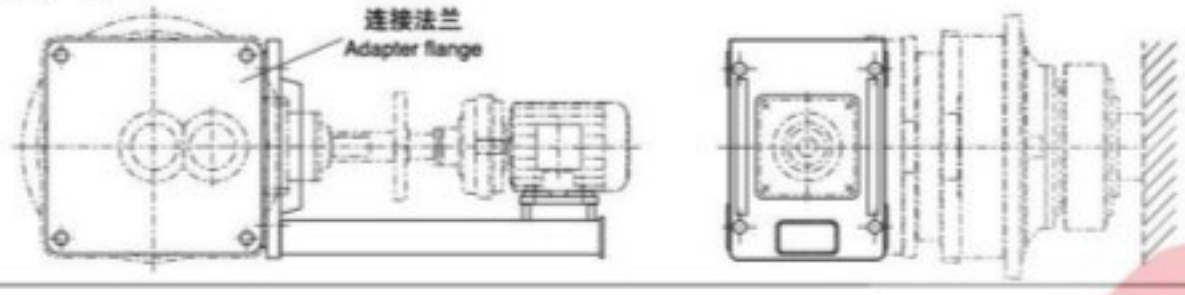
Torsion Shaft Support:



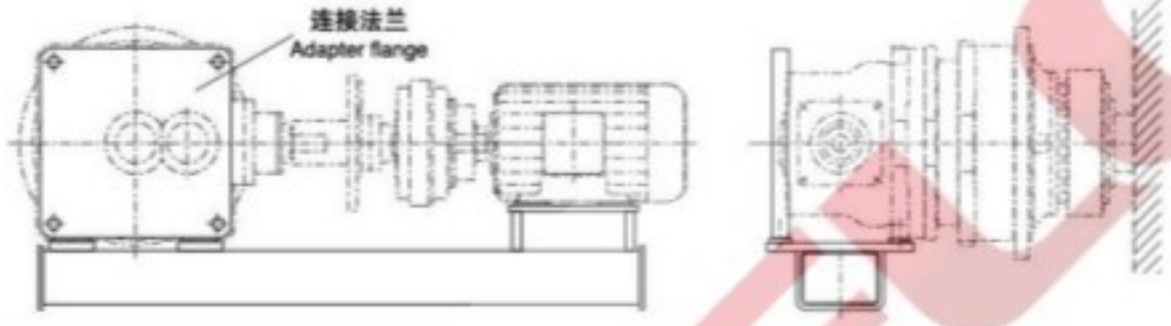
Size	T2N (N·m)	A1	B1	D3	D1	E1	F1	G1	G2	H	I	I1	n2	N0	O1	P	Q1	Z	重量 Weight (kg)
9	22000	250	1414	610	120	105	33	48.5	165	1619	560	330	550	8	140	1230	247.5	65	300
10	31000	250	1414	610	120	105	33	48.5	174	1619	560	330	550	8	140	1230	256.5	65	300
11	42000	250	1414	610	120	105	33	48.5	204	1619	560	330	550	8	140	1230	286.5	65	300
12	60000	250	1414	610	120	105	33	48.5	224	1619	560	330	550	8	140	1230	306.5	65	300
13	83000	280	1604	775	155	145	39	68.5	241	1837	620	380	650	8	158	1450	358.5	75	600
14	117000	280	1604	775	155	145	39	68.5	278	1837	620	380	650	8	158	1450	395.5	75	600
16	160000	280	1604	775	155	145	39	68.5	285	1837	620	380	650	8	158	1450	402.5	75	600
17	202000	315	1777	955	170	165	39	73.5	294	2041	700	400	750	8	180	1680	431.5	84	900
18	244000	315	1777	955	170	165	39	73.5	303	2041	700	400	750	8	180	1680	440.5	84	900
19	295000	350	2000	985	195	175	45	83.5	328	2300	860	450	850	8	200	1900	470.5	100	1400
20	354000	350	2000	985	195	175	45	83.5	328	2300	860	450	850	8	200	1900	470.5	100	1400
21	392000	400	2254	1120	210	190	45	88.5	354	2591	900	530	950	8	225	2110	506.5	113	1700
22	450000	400	2254	1120	210	190	45	88.5	354	2591	900	530	950	8	225	2110	506.5	113	1700
23	513000	450	2496	1215	235	220	45	98.5	380	2871	1060	590	1063	8	250	2385	562.5	125	2150
24	592000	450	2496	1215	235	220	45	98.5	380	2871	1060	590	1063	8	250	2385	562.5	125	2150
25	684000	500	2816	1350	275	245	52	118.5	407	3236	1200	650	1150	8	280	2600	614.5	140	2700
26	763000	500	2816	1350	275	245	52	118.5	407	3236	1200	650	1150	8	280	2600	614.5	140	2700
27	852000	530	2887	1490	300	255	52	128.5	453	3327	1250	700	1250	8	290	2820	670.5	150	3400
28	950000	530	2887	1490	300	255	52	128.5	453	3327	1250	700	1250	8	290	2820	670.5	150	3400
29	1060000	560	3200	1565	300	280	62	128.5	483	3673	1350	750	1360	8	315	3080	718	158	4350
30	1200000	560	3200	1565	300	280	62	128.5	483	3673	1350	750	1360	8	315	3080	718	158	4350
31	1330000	590	3408	1695	340	300	70	148.5	538	3906	1400	790	1450	8	330	3260	788	168	5500
32	1500000	590	3408	1695	340	300	70	148.5	538	3906	1400	790	1450	8	330	3260	788	168	5500
33	1680000	620	3588	1785	375	320	70	158.5	573	4116	1500	840	1550	8	350	3520	840.5	178	7000
34	1920000	620	3588	1785	375	320	70	158.5	573	4116	1500	840	1500	8	350	3520	840.5	178	7000

电机安装支架: Motor Bracket:

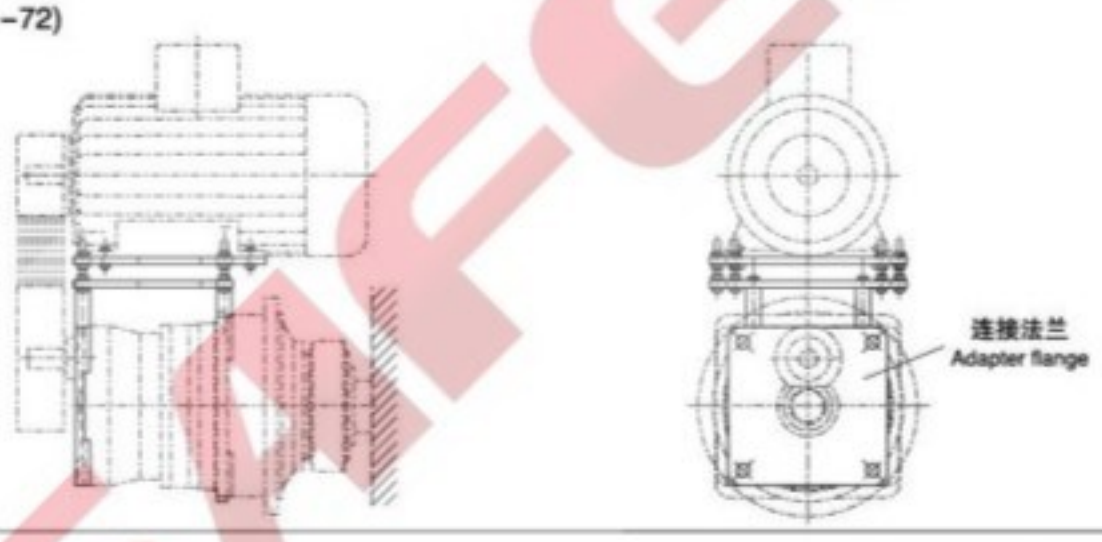
电机安装支架(附件代号-71)
Motor bracket



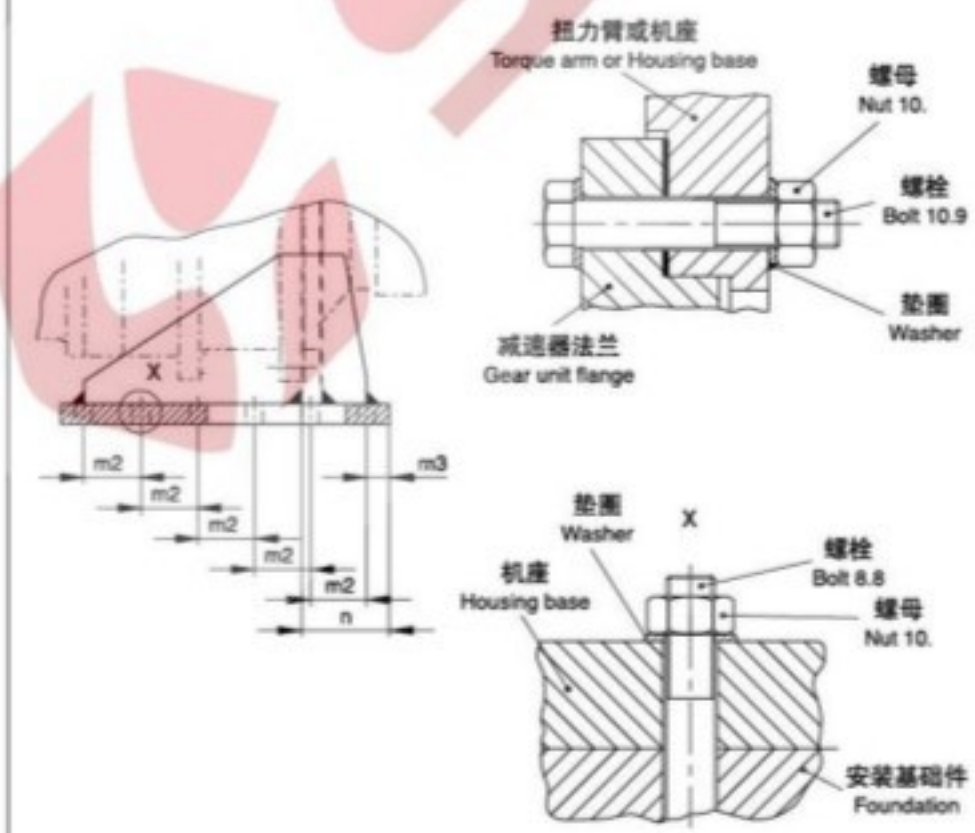
电机安装支架(附件代号-71)
Motor bracket



卧式电机安装支架(附件代号-72)
Motor bracket



法兰联接及底座安装时螺母的预紧扭矩: Tightening Torques for Flange Connections and Foot-mounted Design:



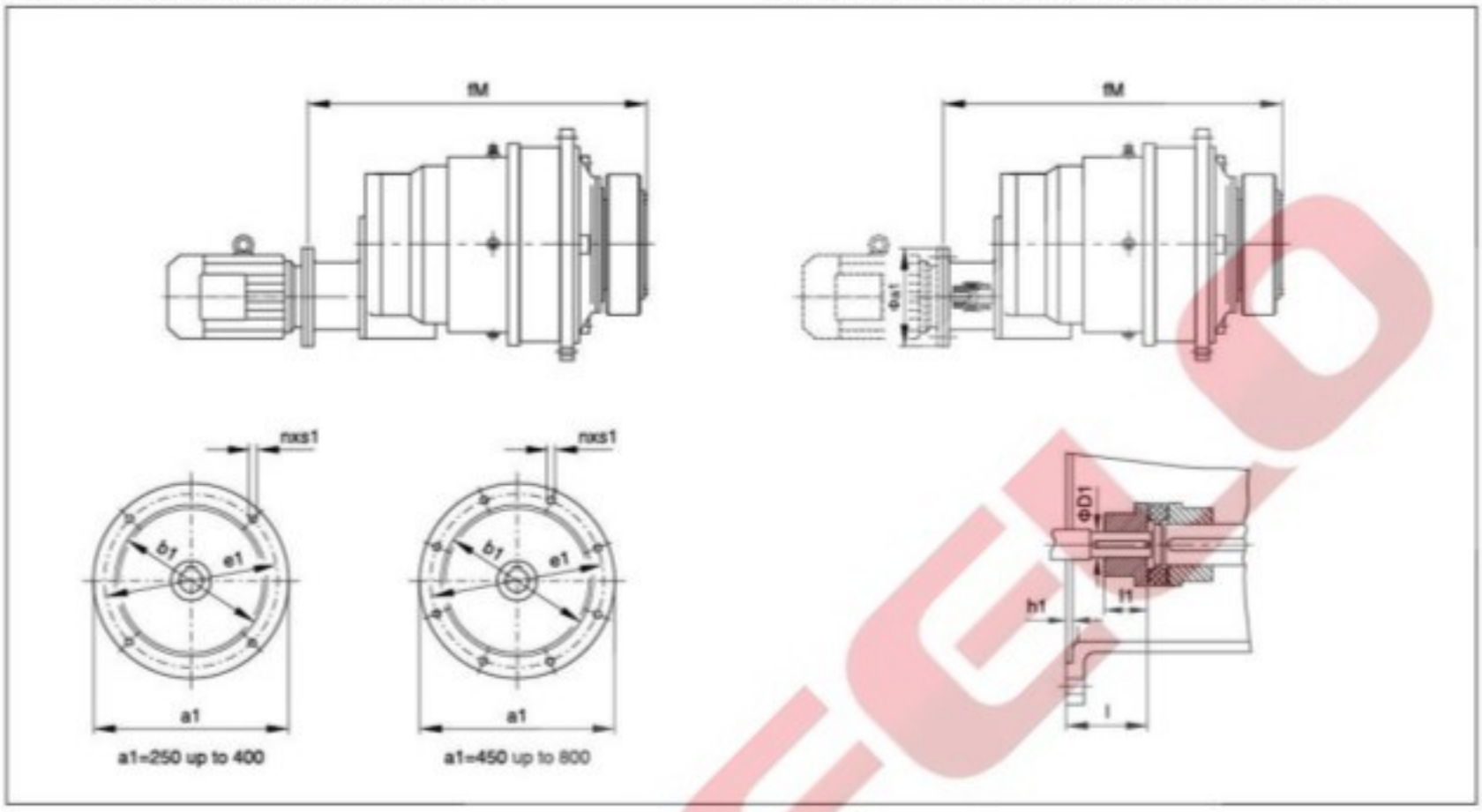
Size	Flange attachment		Base attachment	
	螺栓 Thread (10.9)	预紧扭矩 Tightening torque (N · m)	螺栓 Thread (8.5)	预紧扭矩 Tightening torque (N · m)
9	M16	295	M24	710
10	M16	295	M24	710
11	M20	580	M24	710
12	M24	1000	M24	710
13	M24	1000	M24	710
14	M24	1000	M30	1450
16	M24	1000	M30	1450
17	M30	2000	M36	2530
18	M30	2000	M36	2530
19/20	M30	2000	M42	4070
21/22	M36	3560	M48	6140
23/24	M36	3560	M48	6140
25/26	M42	5720	M56	9840
27/28	M48	8640	M56	9840
29/30	M48	8640	M64	14300
31/32	M56	13850	M64	14300
33/34	M56	13850	M64	14300

P系列减速机带电机法兰输入：

Planetary gear units with motor flange and coupling:

P2S. 带电机、输入法兰及联轴器尺寸:

Type P2S. With Motor Bell Housing and Coupling:



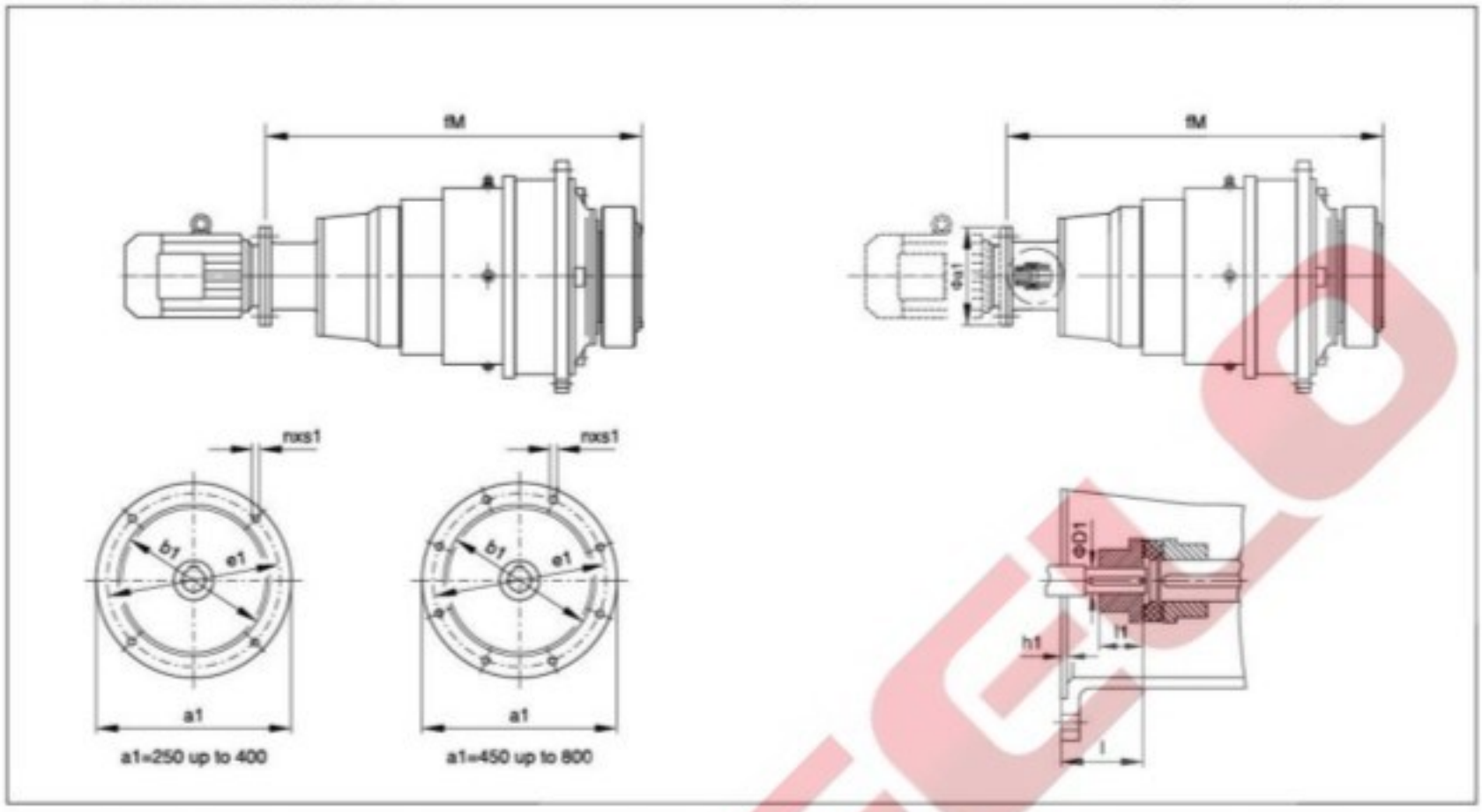
P2S.	电机 Motor (Y)*	法兰 Flange (F)**	a1	b1(h7)	D1	e1	fM	h1	l1	l	n	s1
9	160		350	250	42	300	832	6	75	110	4	M16
	180		350	250	48	300	832	6	75	110	4	M16
10	160		350	250	42	300	861	6	75	110	4	M16
	180		350	250	48	300	861	6	75	110	4	M16
11	160		350	250	42	300	1010	6	75	110	4	M16
	180		350	250	48	300	1010	6	75	110	4	M16
	200		400	300	55	350	1010	7	75	110	4	M16
12	160		350	250	42	300	1044	6	75	110	4	M16
	180		350	250	48	300	1044	6	75	110	4	M16
	200		400	300	55	350	1044	7	75	110	4	M16
13	225		450	350	60	400	1247	7	90	140	8	M16
	250		550	450	65	500	1247	8	90	140	8	M16
14	225		450	350	60	400	1307	7	90	140	8	M16
	250		550	450	65	500	1307	8	90	140	8	M16
16	250		550	450	65	500	1452	7	100	140	8	M16
	280		550	450	75	500	1452	8	100	140	8	M16
17	250		550	450	65	500	1487	7	100	140	8	M16
	280		550	450	75	500	1487	8	100	140	8	M16
18	315		660	550	80	600	1680	11	110	140	8	M20
19,20	315		660	550	80	600	1728	11	110	140	8	M20

注：(1) "*" 所选直联电机机座号所对应的功率应满足传动能力表；
"**" 表格中所示的法兰为标准型号的法兰，如有异同请另咨询。
(2)侧面扭力臂组合，请咨询。

Note: (1) "*" Power of selected motor must meet transmission table.
"**" Indicate standard flange, if special dimension is needed, please consult us.
(2) For combinations with torque arm on one side, please refer to us.

P3N. 带电机法兰及联轴器尺寸:

Type P3N. With Motor Bell Housing and Coupling:



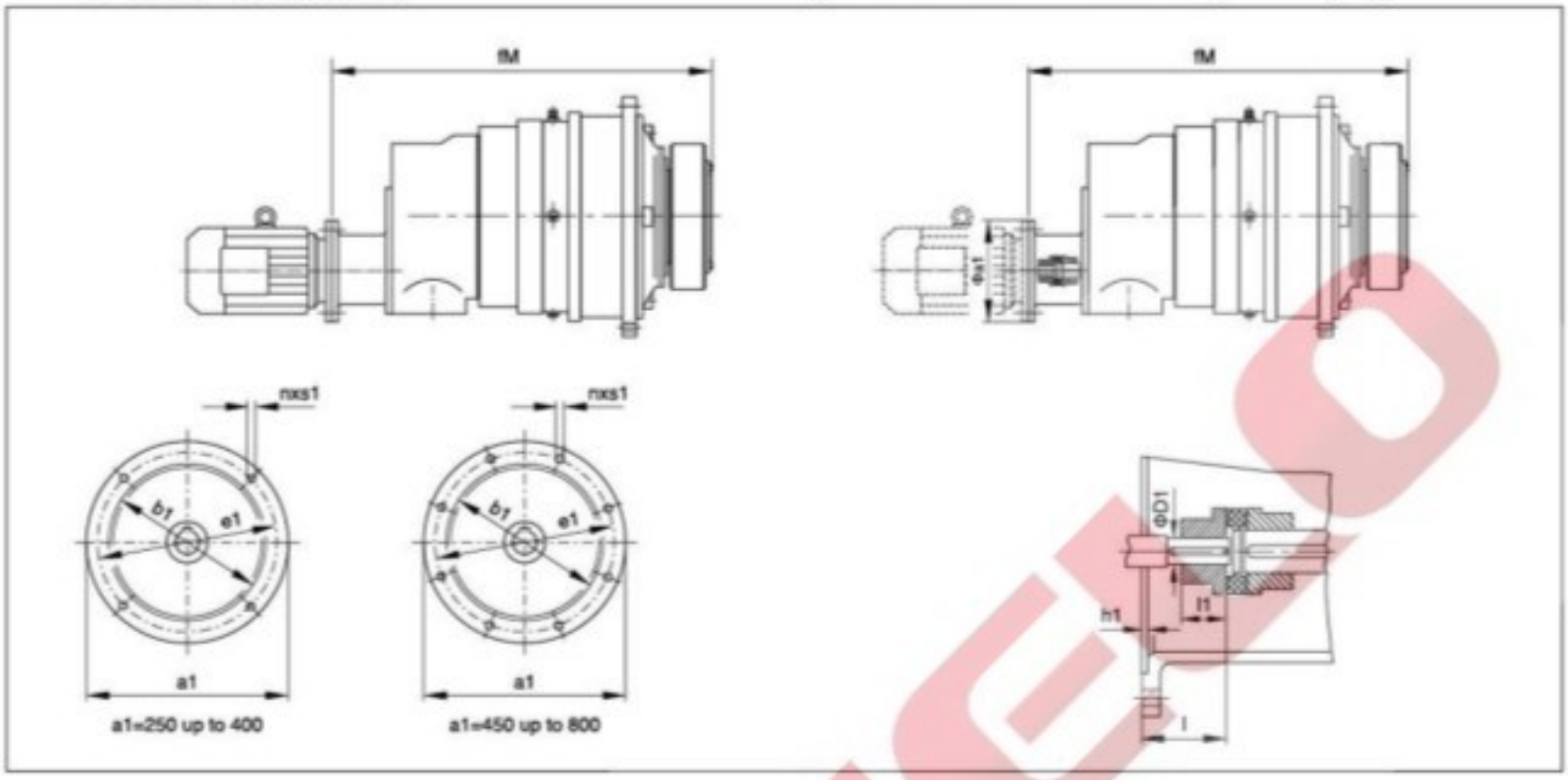
P3N.	电机 Motor (Y)*	法兰 Flange (F)**	a1	b1(h7)	D1	e1	fM	h1	l1	l	n	s1
9	132		300	230	38	265	912	5	56	80	4	M12
	160		350	250	42	300	960	6	80	110	4	M16
	180		350	250	48	300	960	6	80	110	4	M16
10	132		300	230	38	265	941	5	56	80	4	M12
	160		350	250	42	300	989	6	80	110	4	M16
	180		350	250	48	300	989	6	80	110	4	M16
11	132		300	230	38	265	1002	5	56	80	4	M12
	160		350	250	42	300	1050	6	80	110	4	M16
	180		350	250	48	300	1050	6	80	110	4	M16
12	132		300	230	38	265	1036	5	56	80	4	M12
	160		350	250	42	300	1084	6	80	110	4	M16
	180		350	250	48	300	1084	6	80	110	4	M16
13	160		350	250	42	300	1159	6	80	110	4	M16
	180		350	250	48	300	1159	6	80	110	4	M16
	200		400	300	55	350	1159	7	80	110	4	M16
14	160		350	250	42	300	1219	6	80	110	4	M16
	180		350	250	48	300	1219	6	80	110	4	M16
	200		400	300	55	350	1219	7	80	110	4	M16
16	200		400	300	55	350	1400	7	90	110	4	M16
	225		450	350	60	400	1430	7	90	140	8	M16
17	200		400	300	55	350	1435	7	90	110	4	M16
	225		450	350	60	400	1465	7	90	140	8	M16
18	250		550	450	65	500	1636.5	7	100	140	8	M16
	280		550	450	75	500	1636.5	8	100	140	8	M16
19,20	250		550	450	65	500	1685	7	100	140	8	M16
	280		550	450	75	500	1685	8	100	140	8	M16

注：(1) "*" 所选直联电机机座号所对应的功率应满足传动能力表；
"**" 表格中所示的法兰为标准型号的法兰，如有异同请另咨询。
(2)侧面扭力臂组合，请咨询。

Note: (1) "*" Power of selected motor must meet transmission table.
"**" Indicate standard flange, if special dimension is needed, please consult us.
(2) For combinations with torque arm on one side, please refer to us.

P3S. 带电机法兰及联轴器尺寸:

Type P3S. With Motor Bell Housing and Coupling:



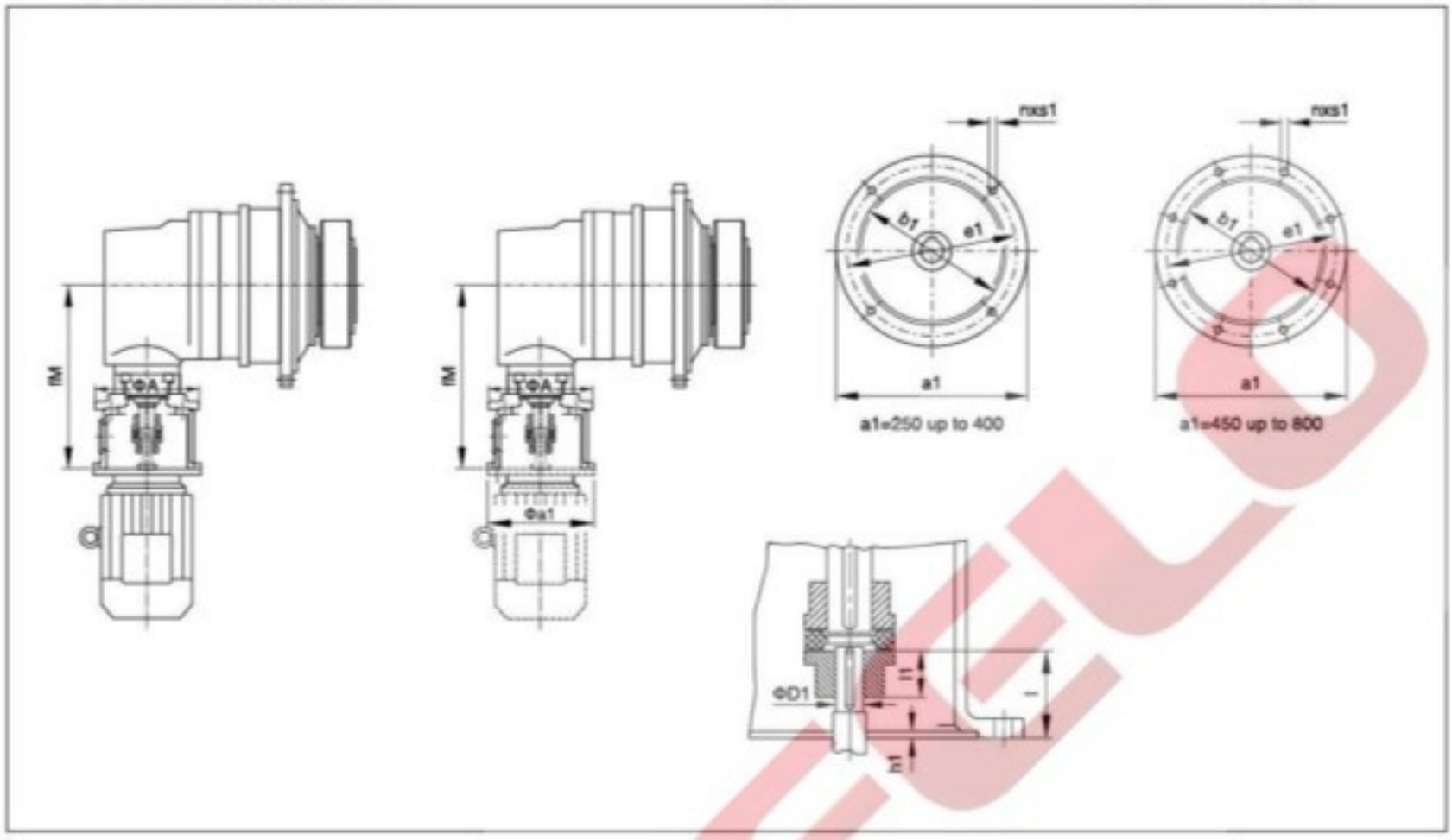
P3S.	电机 Motor (Y)*	法兰 Flange (F)**	a1	b1	D1	e1	lM	h1	l1	l	n	s1
9	100		250	180	28	215	865	5	45	60	4	M12
	112		250	180	28	215	865	5	45	60	4	M12
	132		300	230	38	265	896	5	70	80	4	M12
	160		350	250	42	300	931	6	75	110	4	M16
10	100		250	180	28	215	894	5	45	60	4	M12
	112		250	180	28	215	894	5	45	60	4	M12
	132		300	230	38	265	925	5	70	80	4	M12
	160		350	250	42	300	957	6	75	110	4	M16
11	112		250	180	28	215	955	5	45	60	4	M12
	132		300	230	38	265	986	5	70	80	4	M12
	160		350	250	42	300	1018	6	75	110	4	M16
	180		350	250	48	300	1018	6	75	110	4	M16
12	112		250	180	28	215	989	5	45	60	4	M12
	132		300	230	38	265	1020	5	70	80	4	M12
	160		350	250	42	300	1052	6	75	110	4	M16
	180		350	250	48	300	1052	6	75	110	4	M16
13	132		300	230	38	265	1095	5	70	80	4	M12
	160		350	250	42	300	1127	6	75	110	4	M16
	180		350	250	48	300	1127	6	75	110	4	M16
14	132		300	230	38	265	1155	5	70	80	4	M12
	160		350	250	42	300	1187	6	75	110	4	M16
	180		350	250	48	300	1187	6	75	110	4	M16
16	160		350	250	42	300	1365	6	75	110	4	M16
	180		350	250	48	300	1365	6	75	110	4	M16
	200		400	300	55	350	1365	7	75	110	4	M16
17	160		350	250	42	300	1390	6	75	110	4	M16
	180		350	250	48	300	1390	6	75	110	4	M16
	200		400	300	55	350	1400	7	75	110	4	M16
18	180		350	250	48	300	1558.5	6	90	110	4	M16
	200		400	300	55	350	1570.5	6	90	110	4	M16
	225		450	350	60	400	1608.5	7	90	110	8	M16
	250		550	450	65	500	1608.5	7	90	110	8	M16
19,20	180		350	250	48	300	1606	6	90	110	4	M16
	200		400	300	55	350	1618	6	90	110	4	M16
	225		450	350	60	400	1656	7	90	110	8	M16
	250		550	450	65	500	1656	7	90	110	8	M16

注：(1) "*" 所选直联电机机座号所对应的功率应满足传动能力表；
"**" 表格中所示的法兰为标准型号的法兰，如有异同请另咨询。
(2)侧面扭力臂组合，请咨询。

Note: (1) "*" Power of selected motor must meet transmission table.
"**" Indicate standard flange, if special dimension is needed, please consult us.
(2) For combinations with torque arm on one side, please refer to us.

P2K. 带电机法兰及联轴器尺寸:

Type P2K. With Motor Bell Housing and Coupling:



P2K.	电机 Motor (Y)*	法兰 Flange (F)**	a1	A	b1	D1	e1	fM	h1	l	l1	n	s1
9,10	132		300	250	230	38	265	486	5	80	70	4	M12
	160		350	250	250	42	300	528	6	110	75	4	M16
11,12	160		350	300	250	42	300	593	6	110	75	4	M16
	180		350	350	250	48	300	593	6	110	75	4	M16
	200		400	350	300	55	350	593	7	110	75	4	M16
13,14	160		350	440	250	42	300	663	6	110	75	4	M16
	180		350	440	250	48	300	663	6	110	75	4	M16
	200		400	440	300	55	350	663	7	110	75	4	M16
	225		450	440	350	60	400	695	7	140	80	8	M16
	250		550	440	450	65	500	707	8	140	85	8	M16
16,17	200		400	440	300	55	350	770	7	110	80	4	M16
	225		425	440	350	60	400	800	7	140	80	8	M16
	250		550	440	450	65	500	812	8	140	85	8	M16
	280		550	440	450	75	500	812	8	140	85	8	M16
18,19,20	225		450	440	350	60	400	932	7	140	80	8	M16
	250		550	440	450	65	500	932	8	140	85	8	M16
	280		550	440	450	75	500	932	8	140	85	8	M16
	315*		660	440	550	80	600	967	11	170	100	8	M20

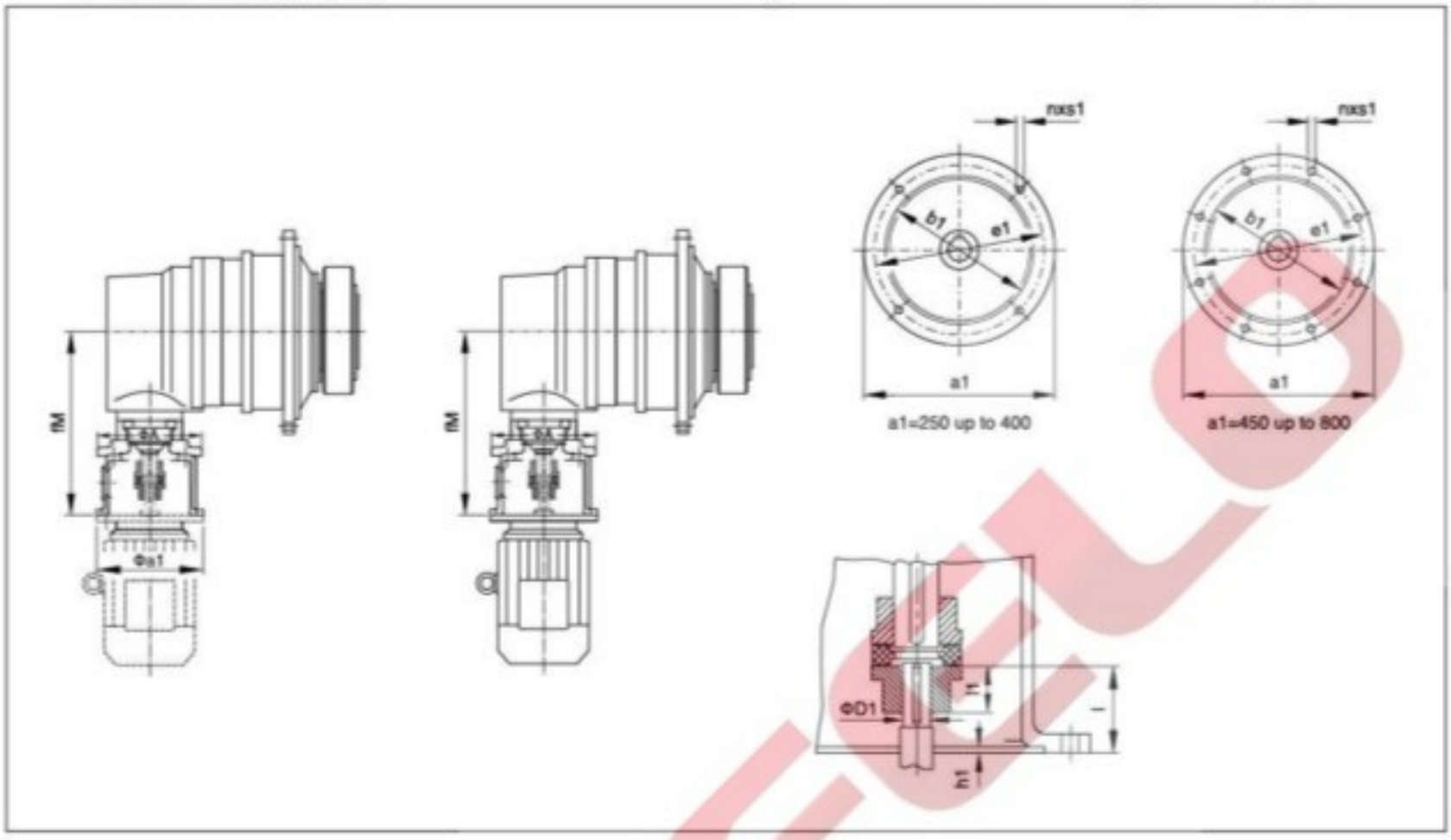
注：(1) "*" 所选直联电机机座号所对应的功率应满足传动能力表；
"**" 表格中所示的法兰为标准型号的法兰，如有异同请另咨询。
(2)侧面扭力臂组合，请咨询。

Note: (1) "*" Power of selected motor must meet transmission table.
"**" Indicate standard flange, if special dimension is needed, please consult us.
(2) For combinations with torque arm on one side, please refer to us.

P

P2L. 带电机法兰及联轴器尺寸:

Type P2L. With Motor Bell Housing and Coupling:



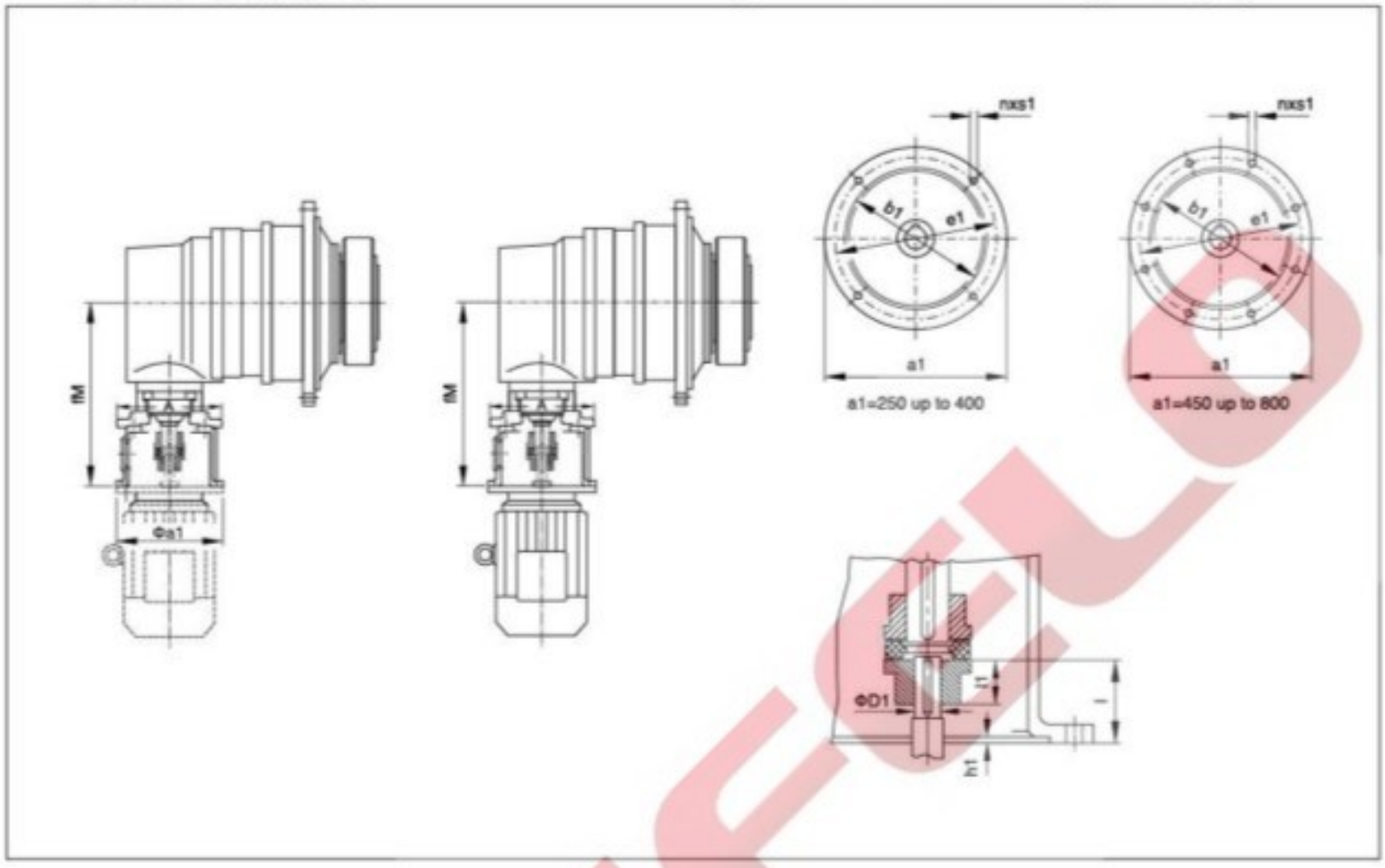
P2L.	电机 Motor (Y)*	法兰 Flange (F)**	a1	A	b1	D1	e1	fM	h1	l	l1	n	s1
9,10	160		350	440	250	42	300	543	6	110	75	4	M16
	180		350	440	250	48	300	543	6	110	75	4	M16
	200		400	440	300	55	350	543	7	110	75	4	M16
	225		450	440	350	60	400	575	7	140	80	8	M16
11,12	200		400	440	300	55	350	600	7	110	75	4	M16
	225		450	440	350	60	400	630	7	140	80	8	M16
	250		550	440	450	65	500	642	8	140	85	8	M16
13,14	225		450	440	350	60	400	732	7	140	85	8	M16
	250		550	440	450	65	500	732	8	140	85	8	M16
	280		550	440	450	75	500	732	8	140	85	8	M16
16,17	280		550	600	450	75	500	842	8	140	100	8	M16
	315*		660	650	550	80	600	872	11	170	100	8	M20
	315MC		660	650	550	80	600	872	11	170	100	8	M20
	315MD		660	650	550	80	600	872	11	170	100	8	M20
	315LB		660	650	550	80	600	987	11	170	100	8	M20
18,19,20	315*		660	650	550	80	600	987	11	170	100	8	M20
	315MC		660	650	550	80	600	987	11	170	100	8	M20
	315MD		660	650	550	80	600	987	11	170	100	8	M20
	315LB		660	650	550	80	600	1122	11	170	100	8	M20
21,22,23,24	315MC		660	650	550	80	600	1122	11	170	125	8	M20
	315MD		660	650	550	80	600	1122	11	170	125	8	M20
	315LB		660	650	550	80	600	1122	11	170	125	8	M20
	355MB		800	650	680	95	740	1122	11	170	125	8	M20
	355LB		800	650	680	95	740	1122	11	170	125	8	M20

注：(1) "*" 所选直联电机机座号所对应的功率应满足传动能力表；
"**" 表格中所示的法兰为标准型号的法兰，如有异同请另咨询。
(2)侧面扭力臂组合，请咨询。

Note: (1) "*" Power of selected motor must meet transmission table.
"**" Indicate standard flange, if special dimension is needed, please consult us.
(2) For combinations with torque arm on one side, please refer to us.

P3K. 带电机法兰及联轴器尺寸:

Type P3K. With Motor Bell Housing and Coupling:



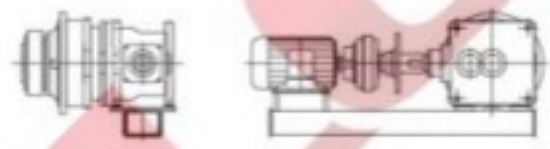
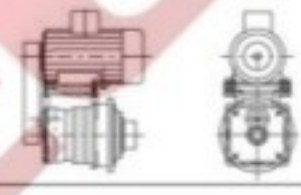
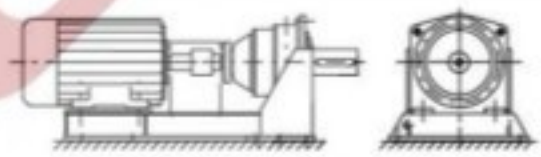
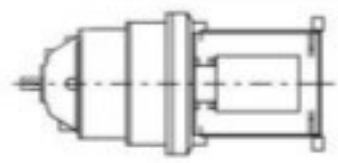
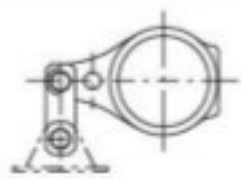
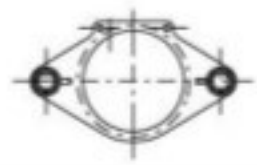
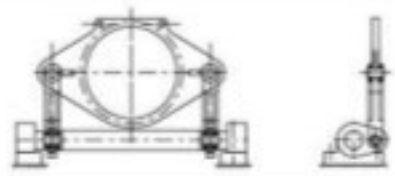
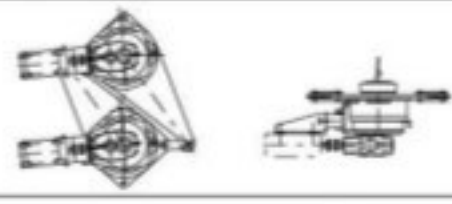
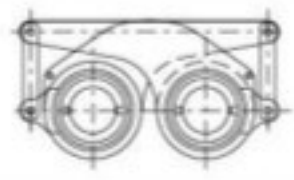
P3K.	电机 Motor (Y)*	法兰 Flange (F)**	a1	A	b1	D1	e1	fM	h1	l	l1	n	s1
9,10,11 12,13,14	132		300	250	230	38	265	486	5	80	70	4	M12
	160		350	250	250	42	300	528	6	110	75	4	M16
	180		350	250	250	48	300	528	6	110	75	4	M16
16,17	160		350	350	250	42	300	593	6	110	75	4	M16
	180		350	350	250	40	300	593	6	110	75	4	M16
	200		400	350	300	55	350	593	7	110	75	4	M16
18,19,20 21,22	160		350	440	250	42	300	663	6	110	75	4	M16
	180		350	440	250	48	300	663	6	110	75	4	M16
	200		400	440	300	35	350	663	7	110	75	4	M16
	225		450	440	350	60	400	695	7	140	80	8	M16
	250		550	440	450	65	500	707	8	140	85	8	M16
23,24 25,26	200		400	440	300	55	350	770	6	110	80	4	M16
	225		450	440	350	60	400	800	7	140	80	8	M16
	250		550	440	450	62	500	812	7	140	85	8	M16
	280		550	440	450	75	500	812	8	140	85	8	M16
27,28 29,30	225		450	440	350	60	400	932	7	140	85	8	M16
	250		550	440	450	65	500	932	7	140	85	8	M16
	280		550	440	450	75	500	932	8	140	85	8	M16
	315*		660	440	550	80	600	967	11	170	100	8	M20

注：(1) "•" 所选直联电机机座号所对应的功率应满足传动能力表；
"••" 表格中所示的法兰为标准型号的法兰，如有异同请另咨询。
(2)侧面扭力臂组合，请咨询。

Note: (1) "•" Power of selected motor must meet transmission table.
"••" Indicate standard flange, if special dimension is needed, please consult us.
(2) For combinations with torque arm on one side, please refer to us.

P

附件代号： **Symbol of Add-on Pieces:**

代 号 Symbol	附 件 Add-on piece	示 例 Representation
99	不带附件 Without add-on piece	
96	带机座 Gear housing base	
71	电机机架 (电机、联轴器) Motor bracket (motor,coupling)	
72	电机机架 Motor bracket	
73	电机移动机座 (电机、联轴器、齿轮箱) Motor swing-base (motor,coupling,gear unit)	
74•	钟型罩式法兰 (输出) Bell housing (output)	
75	扭力臂 (单向) Torque reaction arm (on one side)	
76	扭力臂 (双向) Torque reaction arm (on both sides)	
77	扭转轴支架 Torsion shaft support	
80	支架 I Support I	
81	支架 II Support II	
	特殊设计按客户要求供货。 Special design on request	

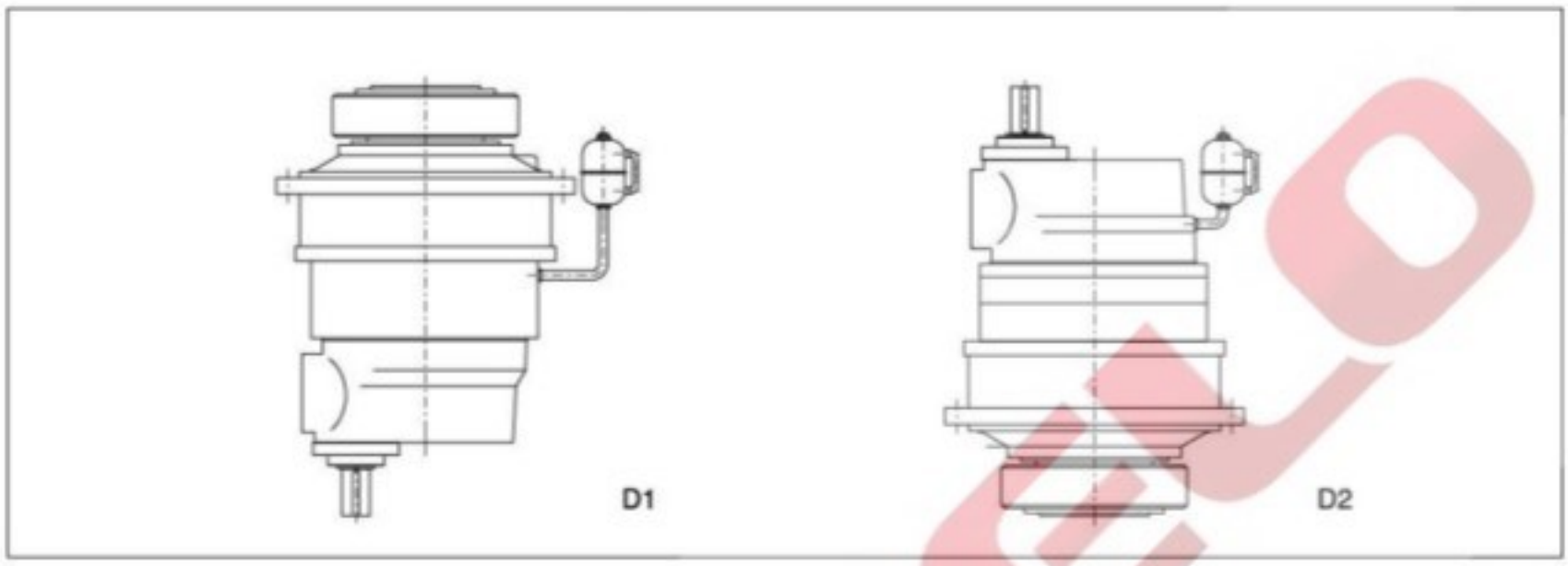
• 非刚性联接 • Not for rigid couplings

P系列行星齿轮箱垂直安装时润滑油补偿油箱

Planetary Gear Units Oil Compensating Tank for Vertical Mounting Position

安装方位为V1、V3、V11、V31时采用润滑油补偿油箱：

Oil supply by compensating tank for vertical mounting position V1,V3,V11and V31

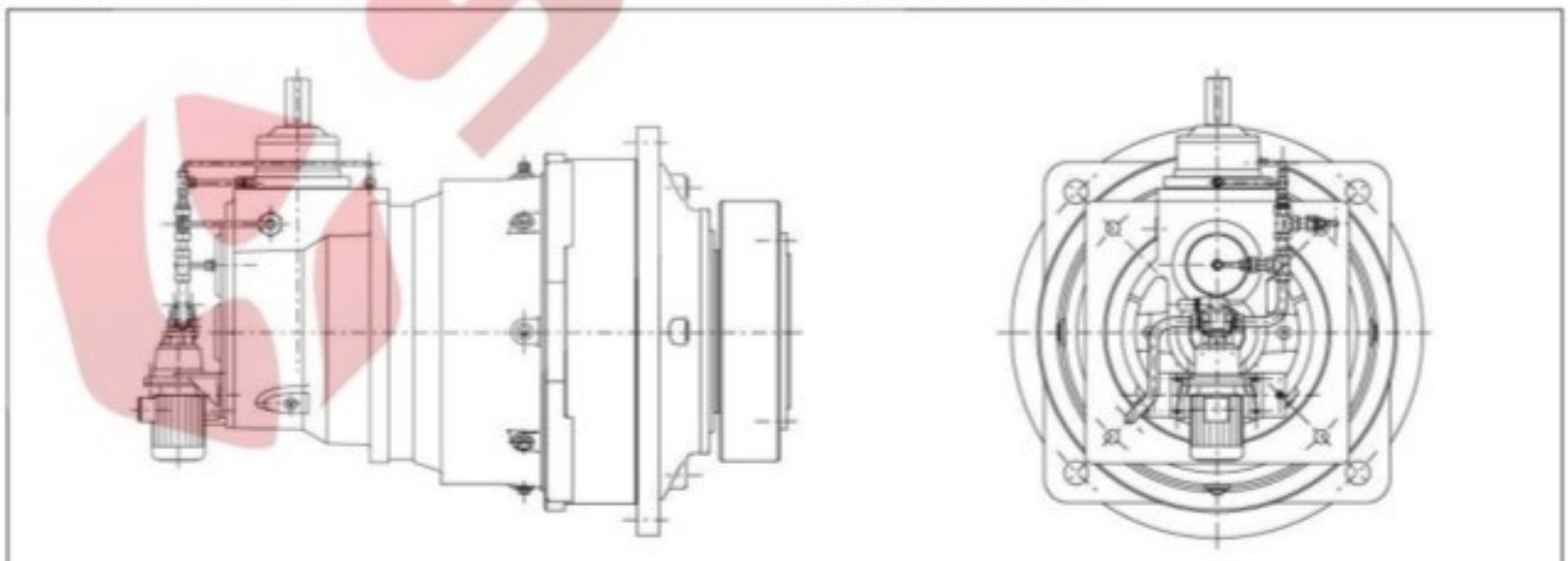


在垂直安装条件下，正常的润滑方式很难给予顶端轴承提供润滑油，为了确保润滑油的供应，齿轮箱内的油量必须加高，如上图（D1、D2）所示，通过补偿油箱加高油位，补偿油箱上装有通气帽通气。油箱可被安装在齿轮箱上，也可以安装在客户的机架上，实际尺寸和最终位置在订货时商定。

In case of vertical mounting, in order to guarantee the oil supply to upper bearing, allxilliary oil tank (as D1, D2) should be installed to make oil level higher. It can installed on either gear units or brackets,it is exact dimension will be determined when placingan order.

水平安装时，油泵供油如下：

Oil supply by motor pumps for horizontal mounting position and drive from adove:



B51安装方位时，需配备电动泵强制循环润滑
[PK、PL为B51安装方位时所有规格(即9-34型)，PS的20型以上所有规格(即21-34型)]
Mounting position is B51, pump lubrication is necessary. (PK..,PL.. 9-34; PS21-34)

注：轴布置形式，请参阅P362。

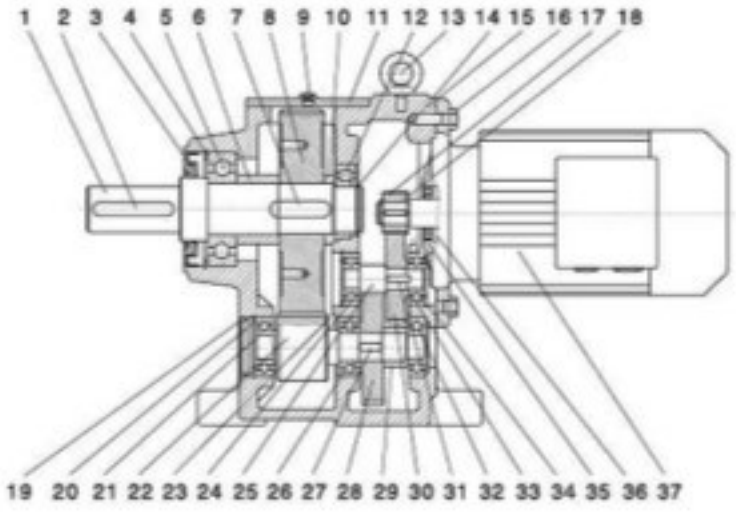
Note: For shaft arrangement, see P362.

安装方位

Identifications of shaft arrangements:

		水平安装 Horizontal gear unit position		垂直安装 Vertical geat nuit postition	
Coaxial planetary gear units 同轴式齿轮箱	0	P.N. B5		V1	V3
Combined helical gear planetary gear units 斜齿-行星齿轮箱	1	P.S.	*) B51	V11	V31
			B52		
			B53		
			B54		
Combined bevel-helical gear planetary gear units 伞齿-斜齿-行星齿轮箱	2	P.K.	*) B51	V11	V31
			B52		
			B53		
			B54		
Combined bevel-gear planetary gear units 伞齿-行星齿轮箱	3	P.L.	*) B51	V11	V31
			B52		
			B53		
			B54		
Torque reaction arm 扭力臂安装	5	A51	A52	*) 对于B51、V1、V3、V11、V31安装方位时，需考虑齿轮箱的润滑，请与我司联系。 *) Lubricant supply must be checked, please consult us.	
		A53	A54		
		A55	A56		

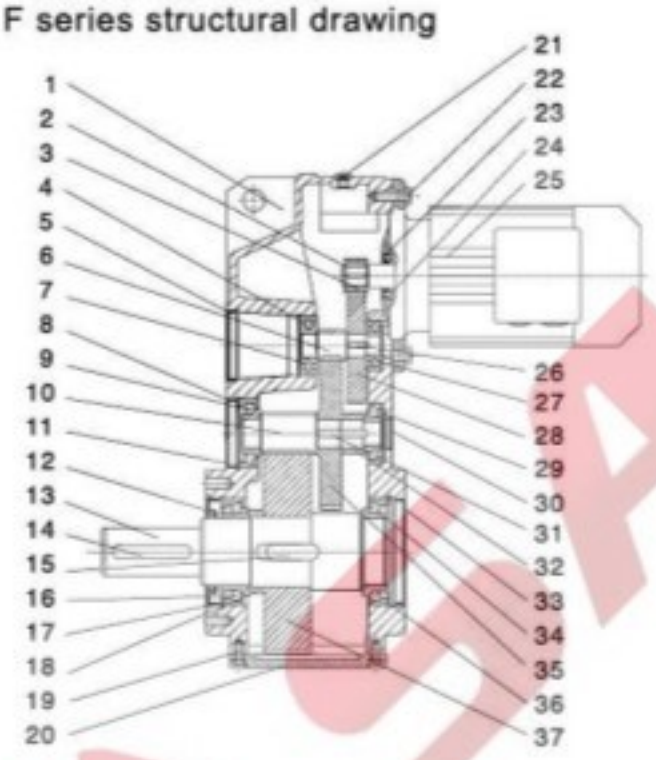
一. R系列结构图
R series structural drawing



1.输出轴 10.轴套II 19.封盖 28.齿轮II
2.平键I 11. 盖 20.孔用挡圈II 29.轴套III
3.输出轴油封 12.轴承II 21.轴承III 30.齿轮I
4.孔用挡圈I 13.吊环 22.齿轮轴III 31.平键IV
5.轴承I 14.轴用挡圈I 23.孔用挡圈III 32.轴承VI
6.轴套I 15.箱体 24.轴承IV 33.轴承VII
7.平键II 16.螺栓 25.齿轮轴II 34.孔用挡圈IV
8.齿轮III 17.轴用挡圈II 26.轴承V 35.电机油封
9.通气帽 18.输入齿轮 27.平键III 36.电机轴承
37.电机

1.Output shaft 13.Hoisting ring 25.Gear shaft II
2.Parallel key 14.Circlip II 26.Bearing V
3.Output shaft seal 15.Housing 27.Parallel key III
4.Circlip I 16.Bolts 28.Gear II
5.Bearing I 17.Circlip II 29.Bush III
6.Bush I 18.Input gear 30.Gear I
7.Parallel key II 19.Cover 31.Parallel key IV
8.Gear III 20.Circlip II 32.Bearing VI
9.Breather valve 21.Bearing III 33.Bearing VIII
10.Bush II 22.Gear shaft III 34.Circlip IV
11.Cover 23.Circlip III 35.Motor seal
12.Bearing II 24.Bearing IV 36.Motor bearing
37.Motor

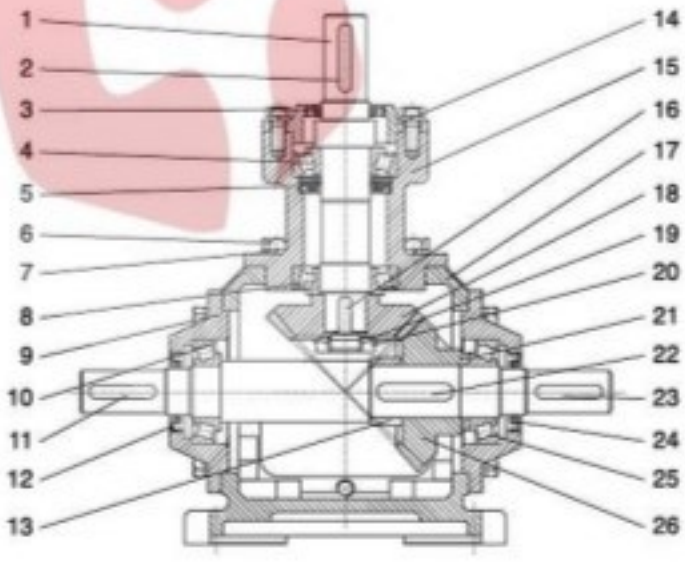
二. F系列结构图
F series structural drawing



1.箱体 10.齿轮轴III 19.螺栓 28.齿轮I
2.轴用挡圈I 11.孔用挡圈II 20. 盖 29.轴承V
3.输入齿轮 12.输出轴油封 21.通气帽 30.封盖III
4.孔用挡圈I 13.输出轴 22.螺栓 31.平键IV
5.封盖I 14.平键I 23.电机油封 32.轴套II
6.齿轮轴II 15.平键II 24.电机轴承 33.封盖IV
7.轴承I 16.轴承III 25.电机 34.轴承VI
8.封盖II 17.孔用挡圈III 26.平键III 35.齿轮II
9.轴承II 18.轴套III 27.轴承IV 36.孔用挡圈IV
37.齿轮III

1.Housing 13.Output shaft 25.Motor
2.Circlip I 14.Parallel key I 26.Parallel key III
3.Output gear 15.Parallel key II 27.Bearing IV
4.Circlip I 16.Bearing III 28.Gear I
5.Cover 17.Circlip III 29.Bearing V
6.Gear shaft II 18.Bush III 30.Cover III
7.Bearing I 19.Bolts 31.Parallel key IV
8.Cover II 20.Cover 32.Bush II
9.Bearing II 21.Breather valve 33.Cover IV
10.Gear shaft III 22.Bolts 34.Bearing VI
11.Circlip II 23.Motor seal 35.Gear II
12.Output shaft seal 24.Motor bearing 36.Circlip IV
37.Gear III

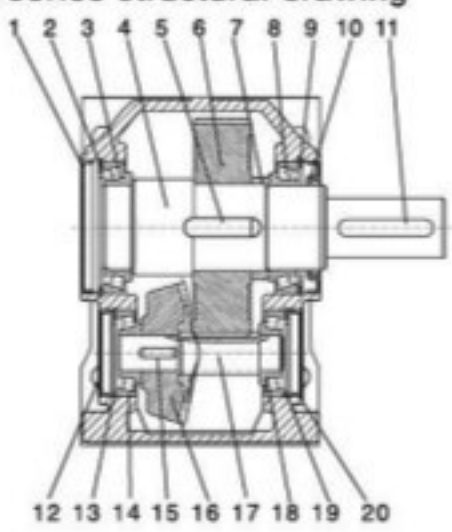
三. T系列结构图
T series structural drawing

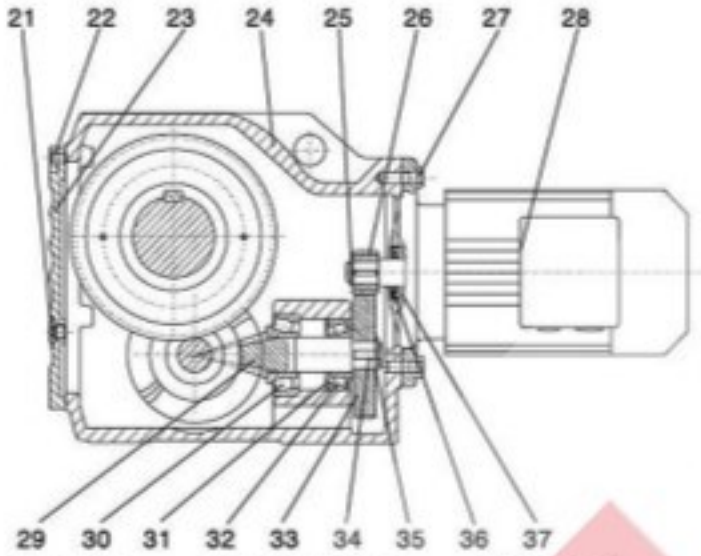


1.输入轴 10.轴承III 19.止动垫圈
2.平键I 11.平键II 20.圆螺母
3.输入轴油封 12.输出轴油封I 21.调整垫I
4.轴承I 13.调整垫II 22.平键IV
5.输入轴油封 14.输入法兰盖 23.平键V
6.螺栓 15.输入法兰 24.输出轴油封II
7.弹簧垫圈 16.平键III 25.轴承IV
8.轴承II 17.箱体 26.输出弧齿锥齿轮
9.输出法兰 18.输入弧齿锥齿轮

1.Input shaft 10.Bearing III 19.Washer
2.Parallel key I 11.Parallel key II 20.Round screw nut
3.Input shaft seal 12.Output shaft seal I 21.Ring I
4.Bearing I 13.Ring II 22.Parallel key IV
5.Input shaft seal 14.Input flange cover 23.Parallel key V
6.Bolts 15.Input flange 24.Output shaft seal II
7.Washer 16.Parallel key III 25.Bearing IV
8.Bearing II 17.Housing 26.Output helical
9.Output flange 18.Input helical -bevel gear
-bevel gear

四. K系列结构图
K series structural drawing

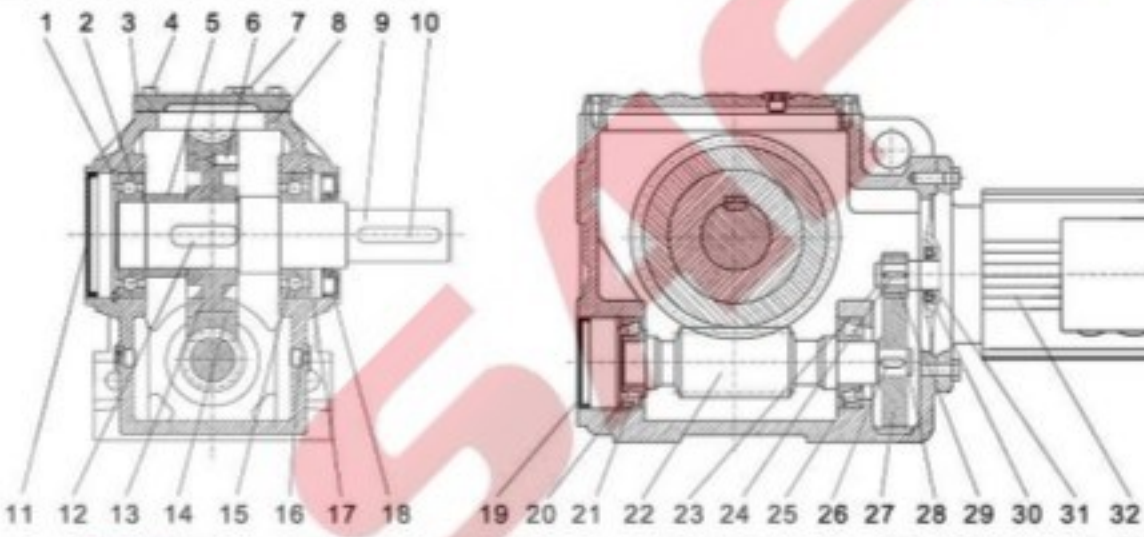




1.封盖 I
2.孔用挡圈 I
3.轴承 I
4.输出轴
5.平键 I
6.齿轮 III
7.轴套 III
8.轴承 II
9.孔用挡圈 II
10.输出轴油封
11.平键 II
12.封盖 II
13.孔用挡圈 III
14.轴承 III
15.平键 III
16.弧齿锥齿轮
17.齿轮轴 III
18.轴承 IV
19.孔用挡圈 IV
20.封盖 III
21.通气帽
22.螺栓 I
23.端盖
24.箱体
25.轴用挡圈 I
26.输入齿轮
27.螺栓 II
28.电机
29.弧齿锥齿轮轴
30.轴承 V
31.孔用挡圈 V
32.轴承 VI
33.齿轮 I
34.平键 IV
35.轴用挡圈 II
36.电机油封
37.电机轴承

1.Cover I
2.Circlip I
3.Bearing I
4.Output shaft
5.Parallel key I
6.Gear III
7.Bush III
8.Bearing II
9.Circlip II
10.Output shaft seal
11.Parallel key II
12.Cover II
13.Circlip III
14.Bearing III
15.Parallel key III
16.Helical-bevel gear
17.Gear shaft III
18.Bearing IV
19.Circlip IV
20.Cover III
21.Breather valve
22.Bolts II
23.Cover
24.Housing
25.Circlip I
26.Input gear
27.Bolts II
28.Motor
29.Helical-bevel gear shaft
30.Bearing V
31.Circlip V
32.Bearing VI
33.Gear I
34.Parallel key IV
35.Circlip II
36.Motor seal
37.Motor bearing

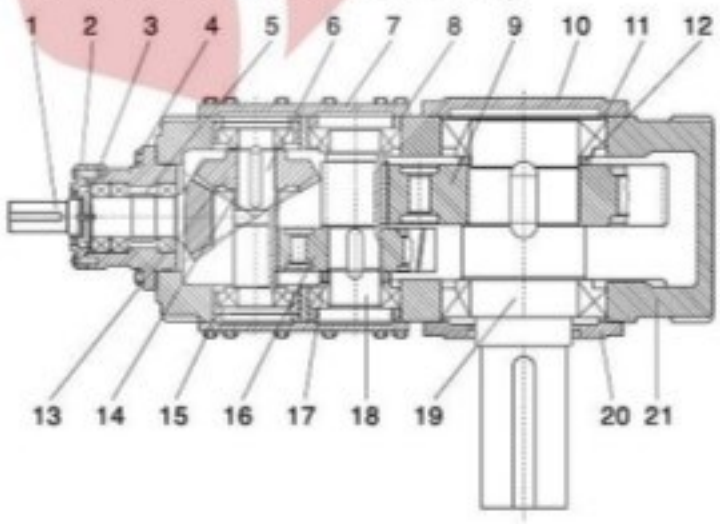
五. S系列结构图
S series structural drawing



1.孔用挡圈 I
2.轴承 I
3. 盖
4.螺栓 II
5.轴套 III
6.螺钉
7.通气帽
8.箱体
9.输出轴
10.平键 I
11.封盖 I
12.平键 II
13.蜗轮芯
14.蜗轮轮缘
15.轴承 II
16.油镜
17.孔用挡圈 II
18.输出轴油封
19.封盖 II
20.孔用挡圈 III
21.轴承 III
22.蜗杆
23.轴用挡圈 I
24.平键 III
25.轴承 IV
26.平键 IV
27.齿轮 I
28.轴用挡圈 II
29.输入齿轮
30.电机油封
31.电机轴承
32.电机

1.Circlip I
2.Bearing I
3.Cover
4.Bolts II
5.Bush III
6.Screws
7.Breather valve
8.Housing
9.Output shaft
10.Parallel key I
11.Cover I
12.Parallel key II
13.Worm wheel core
14.Worm wheel edge
15.Bearing II
16.Oil sight glass
17.Circlip II
18.Output shaft seal
19.Cover II
20.Circlip III
21.Bearing III
22.Worm
23.Circlip I
24.Parallel key III
25.Bearing IV
26.Parallel key IV
27.Gear I
28.Circlip II
29.Input gear
30.Motor seal
31.Motor bearing
32.Motor

六. H、B系列结构图
H、B series structural drawing



1.弧齿锥齿轮轴
2.通盖 I
3.调整环 I
4.轴承座
5.定距环 I
6.齿轮轴 I
7.止盖 I
8.调整环 III
9.齿轮 III
10.止盖 II
11.调整环 IV
12.定距环 IV
13.弧齿锥齿轮
14.定距环 II
15.调整环 II
16.齿轮 II
17.定距环 III
18.齿轮轴 II
19.输出轴
20.通盖 II
21.机体

1.Helical-bevel gear shaft
2.Cover I
3.Ring I
4.Bearing seat
5.Ring I
6.Gear shaft I
7.Cover I
8.Ring III
9.Gear III
10.Cover II
11.Ring IV
12.Ring IV
13.Helical-bevel gear
14.Ring II
15.Ring II
16.Gear II
17.Ring III
18.Gear shaft II
19.Output shaft
20.Cover II
21.Housing

电 机

电机按标准供货，若指定或高于此标准必须说明。

Y普通三相异步电动机：

电压380V，频率50Hz（其它电压、频率需注明）

防护等级：IP44或IP54（指定IP54、IP55、IP56、IP65等需注明 ）

绝缘等级：B或F(指定F等需注明)

制动电机的制动器电压：380V或220V（指定电压或其它电压需注明）

防爆电机防爆等级：dⅡBT4(其它等级需注明)

变频电机频率范围：0-50Hz(0-60Hz、0-120Hz或指定的范围需提出)

电机的噪声、电流、效率、功率因素、额定转矩等项目按国家标准。

以下要求及附件需另行说明：

*制动电机配手释放装置

*电机的热传感器

*不带风冷或强制风冷

*配旋转编码器

*防水、防潮、防尘的要求

MOTOR

Motors comply with National standard, please state if specification of other standards needed.

Y general tri-phase asynchronous motor data:
380V, 50Hz (other voltage &frequency should be stated)

Index of performance:
IP44or IP54(specification of IP54,IP55,IP56,IP65 should me stated)

Insulation class:
B & F(using F should be stated)

Braking voltage of braking motor:
380V or 220V(other voltages should be stated)

Explosion-proof class:
dⅡBT4(other classes should be stated)

Frequency range:
0~50Hz (0~60Hz, 0~120Hz or other range will be stated)

Noise, current, efficiency, power factor, nominal torque all comply with national standard.

The following will be specified by customers:

*Brake motor equipped with manual brake release

*Thermal sensor

*No air cooling or forced air cooling

*Installation of rotation encoder

*Water proof, damp proof, dust proof

电机代号

四极三相异步电动机代号－Y(六极代号-Y6、八极代号-Y8、二级代号-Y2，下同)

制动电机代号－YEJ

防爆电机代号－YB

变频电机代号－YVP

多速电机代号－YD

变频制动代号－YPEJ

其它电机代号另咨询。

Motor code:

Y — 4-pole tri-phase asynchronous motor
(Y2 — 2-pole, Y6 — 6-pole, Y8 — 8-pole)

YEJ — Brake motor

YB — Explosion-proof motor

YVP — Frequency conversion motor

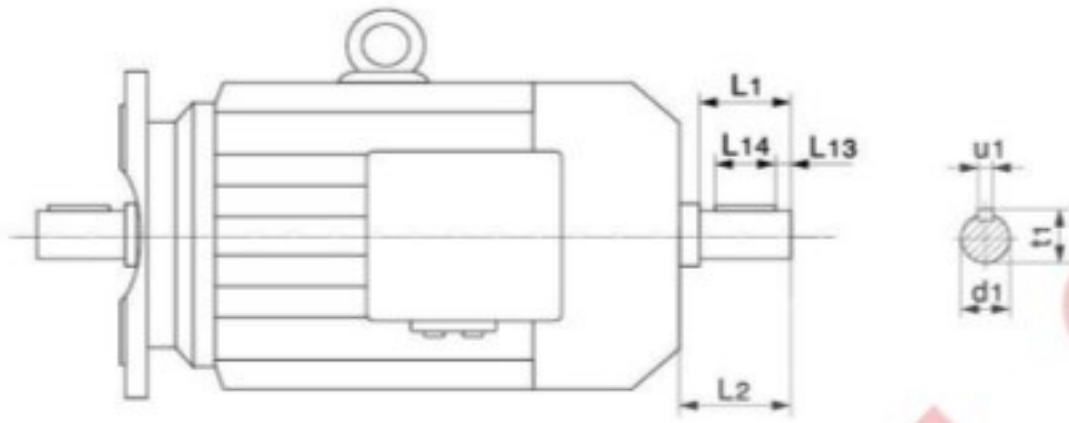
YD — Multi-speed motor

YPEJ — Frequency-conversion brake motor

Other codes are available on request.

电机双出轴：

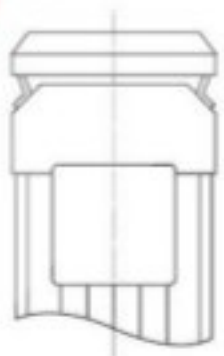
Double extended shaft motor:



	63	71	80	90/100	112	132S	132M	160L	180	200-225
d1	11	11	14	19	24	28	38	42	48	55
L1	23	23	30	40	50	60	80	110	110	110
L2	27	25	31	42	55	65	85	115	115	115
L13	3.5	1	4	4	5	5	5	10	10	10
L14	16	20	22	32	40	50	70	70	80	90
t1	12.5	12.5	16	21.5	27	31	41	45	51.5	59
u1	4	4	5	6	8	8	10	12	14	16

电机配室外防护罩：

Motor equipped with shield:



电机接线盒未注明位置一般以0° 供货。

In general, position of terminal box is at angular 0° without specification.

以下只对Y、Y2的额定转速、外形长度尺寸提供一般说明。由于购买厂家不同，和配齿轮箱时法兰缩小，有时尺寸会有些变化，此处不标，其它例如直流、伺服、起重冶金高转差率电机及其它特种电机另行咨询。

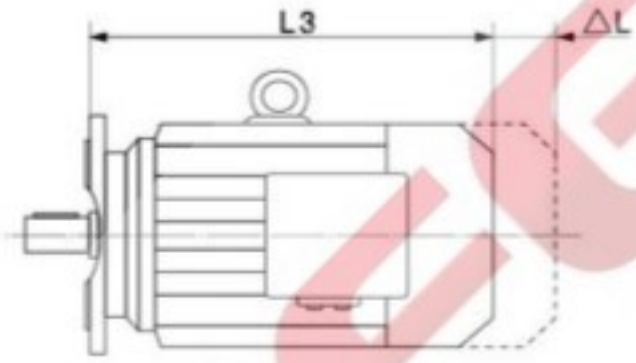
We only provide general data of Y&Y2as example as follows. For the data of DC motor, servo-motor, and other special motors, please consult us.

一般情况下Y132以下机座的普通三相异步电机以Y2系列提供，Y132以上以Y系列提供，以实际供货为准。

General 3-phase asynchronous motor belowsize 132 are provided as Y2 series, Type of motors above size 132 willbe provided as Y series.

电机功率和转速、长度尺寸表：

Table of Power, speed and length dimension:



	2极 (2electrodes)		4极 (4electrodes)		6极 (6electrodes)		8极 (8electrodes)		m (kg)					配H. B. P. T. RV. JW L3 (mm)				配R. S. K. F另加 △L
	Pm(kW)	nm(r.p.m)	Pm(kW)	nm(r.p.m)	Pm(kW)	nm(r.p.m)	Pm(kW)	nm(r.p.m)	(铝壳)	Y	YB	YEJ	YVP	Y	YB	YEJ	YVP	
63	0.18	2720	0.12	1310					5.5				11	197	270	328		40
	0.25	2720	0.18	1310					6		15		12					
71	0.37	2740	0.25	1330	0.18	850			6.5	10	16	12	14	235	285	330		30
	0.55	2740	0.37	1330	0.25	850			7.5	10.50	16	13	15					
80	0.75	2845	0.55	1390	0.37	885	0.18	645	10	15	31	20	16	255	290	350	330	40
	1.1	2845	0.75	1390	0.55	885	0.25	645	11	16	32	21	17					
90s	1.5	2840	1.1	1390	0.75	910	0.37	670	16	20	35	27	23	270	310	370	330	50
90l	2.2	2840	1.5	1390	1.1	910	0.55	670	20	23	39	31	28	295	335	395	360	50
100	3	2860	2.2	1410	1.5	920	0.75	680		32	49	41	35	325	370	420	405	60
			3	1410			1.1	680		35	53	44	36					
112M	4	2880	4	1440	2.2	935	1.5	690		46	67	60	43	340	400	450	420	60
132S	5.5	2900	5.5	1440	3	960	2.2	705		60	93	85	63	395	430	505	450	60
	7.5	2900																
132M			7.5	1440	4	960	3	705		73	105	98	75	435	470	545	490	75
					5.5	965												
160M			11	1460	7.5	970	4	720		115	150	143	116	495	545	610	550	90
							5.5	720										
160L			15	1460	11	970	7.5	720		135	169	165	136	560	585	655	605	90
180M			18.5	1470						172	205	203	169	590	620	715	605	110
180L			22	1470	15	970	11	730		185	222	216	183	630	640	765	705	110
200			30	1470	18.5	970	15	730		253	300	296	236	665	695	790	740	110
					22	970												
225S			37	1480			18.5	730		300	360	370	291	680	705	860	730	130
225M			45	1480	30	980	22	730		335	390	405	327	705	730	890	770	135
250			55	1480	37	980	30	730		420	530	498	393	795	795		860	115
280S			75	1480	45	980	37	740		560	660	633	520	860	870		930	125
280M			90	1480	55	980	45	740		670	785	723	610	920	920		980	125
315S			110	1480	75	980				920	1000	1150	950	1010	1100		1285	
315M			132	1480	90	980				1050	1100	1230	1030	1180	1180		1380	
315L			160	1480	110	980				1160	1100	1320	1100	1200	1270		1450	
			200	1480	132	980				1240	1600	1420	1200					

减速机的选型所需的参数

减速机的选择用户应提供以下尽量详细的技术要求、载荷周期和运行条件，瑞德森公司将可为客户完成最后的选择，保证减速机的质量、经济和可靠性。

为了确保承诺的有效性，主要承包商对传动系统的坚固性负责，通过影响因素进行控制，连接传动部分必须协调。用户需在规定的范围内安装、润滑、使用、运行、维护，不受极限速度、扭矩、振动的影响。

被动设备

- 名称和种类
- 负载性质（使用冲击系数或惯量）
- 运行负载
- 输出功率
- 输出转速 n2(rpm):
- 输出扭矩 T2(N · m):
- 连续使用时间　　小时/天　　小时/月　小时/年
- 起动力矩和频率
- 制动力矩和频率
- 冲击负载、峰值负载和频率
- 正反运转和频率
- 径向、轴向负载

原动机(或电动机是否正反转及其频率，输出轴径向和轴向负载)

- 型号和种类
- 额定功率和转速
- 最大扭矩
- 起动转矩
- 转动惯量直连电动机时，参照电动机的说明
- 代号及附件
- 电机接线盒位置是否指定

减速器（ 所选减速器必须能经受起动、制动、冲击力矩等影响）

- 要求的型号
- 安装形式
- 安装方位
- 输出形式
- 电源
- 润滑　（ 飞溅润滑、强制润滑）
- 冷却：不附加冷却装置（ 即风冷）
  强制风冷
  强制水、油冷却
- 噪声：要求声压值≤
- 其它附件

Required parameter for motor selection

Reducer users should offer below detailed technical requirements, REDSUN would accomplish final selection for client and assure reducer's quality, economy, reliability. To ensure validity for promise.

To ensure validity for promise, main contractor should take charge of system ruggedness and transmission factor controlling, connecting pieces must harmonize with transmission components. User must use reducer, operate reducer and maintain reducer properly in the stated tang, and reducer is not influenced by limited speed, torque, vibration.

Passive equipment

- Name and variety
- Load character (use shock factor or inertia)
- Running load
- Output power(kW)
- Output speed(rpm)
- Output torque(N · m)
- Time of woking continuously(hour per day)
- Starting moment and frequency
- Brake momet and frequency
- Shock load,peak load and frequency
- Rotate in both directions and frequency
- Radial and axial load

Impelling force(or motor,if rotate in both direction and frequency of that, output shaft radial and axial load)

- Mode and variety
- Power rating and speed
- Maximal torque
- Starting torque
- Connect with motor directly, rotational inertia refer to specification of motor
- Code and appurtenances
- If position of the terminal box is special requirement.

Reducer (Selected reducer can stand up to influence of starting and brake and shock moment)

- Requied model
- Mounting mode
- Mounting position
- Output mode
- Electrical source
- Lubrication(splash lubrication or forced lubrication)
- Cooling method: No cooling device(air blast)
- Cooling by fan
- Cooling by water or oil
- Noise(dB):required sound pressure value ≤
- Other appurtenances

联接：

— 被驱动设备和减速器联接；
— 减速机和电动机或其它原动机联接；
* 当用皮带、链条或开式齿轮联接时，必须告知装在轴端的皮带、链条或齿轮的直径，以及中心距和负载方向。
* 如果使用刚性联轴器，必须告知作用在轴上的轴向和径向负载。

环境条件：

— 周围温度、 空旷场地、狭小场地、通风条件；

— 特殊条件：高温、低温、灰尘、化学作用、直接日照、冰等

特殊要求：

— 例如：外伸中间轴（S、R、K、F、RV、H、B、P都有可能）
— 制动停机（例倾斜输送机）
— 特殊密封（灰尘、严格要求的食品、化学原料等）
— 速度监测、保护、逆止器等

其它要求：

Connection:

Driven equipment is connected with gear unit
Gear unit is connected with motor or other drives.

* When gear unit is connected with belt, chain or gear, user must tell REDSUN their diameter, centre distance and load direction.
* If gear unit is connected with rigid coupling, user must tell REDSUN radial and axial load applied on shaft.

Ambient condition:

Ambient temperature, open field, narrow field, ventilation condition:

Special condition: high temperature, low temperature, dust, chemistry, direct sun, ice etc:

Special requirement:

Example: Extend intermediate shaft (it is possible for S、R、K、F、RV、H、B、P)
Braking and stopping(Such as inclined conveyer)
Special seal(dust, food and chemical material with special requirements.
Speed monitor, protection, backstop.

Other requirement:

安装、使用、润滑说明

一般说明

减速机的安装、操作、维护保养和修理人员均需阅读和理解本说明并遵守其中的规定。若因违反本说明的规定而造成的任何损伤和停机，本公司概不负责。

注意事项

■一定不能用高压清理设备清洁减速机。

■对减速机所进行检修、保养、维护、安装都必须在减速机不工作的情况下进行。

■在减速机上不得进行焊接工作，也不得用作焊接工作的接地点。焊接会造成精密轮齿和轴承的不可修复的损坏。

■如果在减速机的运行过程中发现了任何异常现象（例如过热或者不正常的噪声等），应该立即停机检查。

■凡是旋转的零部件必须配备合适的防护罩以防止人员的意外接触，例如联轴器，液力偶合器，齿轮，驱动皮带轮等。

■一定要遵守减速机上所附加的说明，例如铭牌、指示方向的箭头等。这些铭牌和标记上面不得有灰尘和油漆。

■在组装或者解体工作中损坏了的螺栓一定要用同等强度和类型的新螺栓更换。

■安装升降机时，台架面上的孔，在满足丝杆能方便通过的前提下，应尽可能小。

■根据减速机的操作条件，减速机的表面、润滑油和零部件可能会达到相当高的温度，小心烫伤!

■当更换润滑油的时候，要谨慎小心不要被热油烫伤。

■减速机应该放置在无振动的干燥木制基座上并遮盖好。当储存减速机和任何单独的零部件的时候一定要做好防锈措施，以免生锈，储存时不得将减速机叠放在一起。

■除订货合同中另外有所规定，否则减速机不得储存在或工作在强酸、强碱、低温、高温和重度的空气污染、潮湿，具有化学物品的场所。

■在搬运减速机时，一定要特别小心，应防止撞击轴端，因为这样将有可能造成减速机的损坏，在吊运减速机时，不得将吊环螺钉挂在轴端处的螺纹上。

■除订货合同中另外有所规定，减速机和无级变速机工作环境温度不超过40摄氏度，温升低于40摄氏度。

■MB无级变速机出厂时，调速限位螺钉已经调整在极限位置,不得任意调整，以免损坏零件。

■MB无级变速机必须在开机情况下方可调速，否则会损坏零件。

Installation、usage、lubrication

General

It must be read and understood by operators、maintenance and repair persons. And they must comply with all regulations in this manual. Any damages and stop of machine caused by wrong operation will be buyer's responsibility.

Notes

■ Gear units can not be cleaned by high-pressure cleaning machine.

■ Repair、 maintenance、installation must be made with gear unit powered off.

■ No welding can be made on gear units, and it cannot be a welding ground point. Welding will cause irreparability of precision gears and shafts.

■ During running, gear units must be stopped immediately for check once any problem (such as over heated and high noise) occurs.

■ Any rotating parts will be equipped with appropriate shields in order to keep it from accidental touch. Such as couplings、hydraulic couplings、gears、driving belt wheels.

■ Please note the instructions attached on gear units, such as label、arrow indicating direction. And they will be kept clean without dust and oil.

■ The bolts damaged in installation or dismantlement should be replaced with new one of the same tension and type.

■ When installing screw jacks, the screw holes in mounting plate should be as small as possible up to bolts' diameter.

■ When gear units running, its temperature may get up to a high point, please take care, there is a danger of scald.

■ When changing lubrication, please be careful not to be scalded by hot oil.

■ Gear units should be put on dry wooden non-vibration base and be covered. When storing gear units and their components, we should take rust-proof measures, and we cannot pile up gear units.

■ Unless there are special requirements in contracts, gear units cannot be stored or work in places with acid、alkali、low temperature、high temperature、heavy air pollution、damp、chemical products.

■ When removing gear units, please be careful to avoid knocking shaft end and damaging; when swinging them, bolts of swinging rings cannot put in screw holes in the shaft ends.

■ Unless there are special requirements in contracts, ambient temperature of gear units and variable speed drives is below 40℃, and temperature rise should lower 40℃.

■ Before delivery of MB series, speed-limiting screw has been adjusted to an extreme point to protect spare parts. And speed adjustment must be done after the drives start up, or the drives will damage.

■ 减速机、无级变速机应在许用转矩范围内使用，超扭矩使用应在输出轴上装安全装置，以免减速机损坏。

■ 各种减速机、无级变速机适用于连续运转，并允许正反两向运转。（配逆止器时除外）

■ 若出现安装方位变动，一般情况下调换油镜、油塞、通气帽即可。

■ 备件一定要从瑞德森机械有限公司购买。

■ Gear units and MB should run under permissible torque, safety devices should be equipped to avoid damage if load is larger permissible torque.

■ Gear units and MB can run continuously and are permitted to rotate in both directions.

■ If mounting position changes, the positions of breather screw、oil level、oil drain plug will be change with each other as usual.

■ Spare parts must be purchased from REDSUN.

安装与拆卸

关于安装的综合信息：在户外安装时应该避免阳光的直射，一定要避免热力集中影响减速机的正常性能。

整机安装

1）准备刚性好的基础或牢固的台架来安装传动设备，同时也需充分考虑即使加上最大载荷也不至于改变装配好后各部件的位置。

2）底座式安装应校准中心高，联轴器联接时应校准两轴的同轴度；柔性联轴器时浮动量不超过联轴器的允许范围，刚性连接时保证各安装联接的形位公差；长轴联接还要考虑轴的足够刚度。

3）法兰式安装，凸肩（或凹肩）应配合良好，以免错位。法兰式安装并配空心轴联接时，特别应保证联接处的形位公差。

4）扭力臂安装，空心轴与工作轴应配合良好，工作轴的浮动或设备振动应小于弹性块允许的范围，力臂应固定并锁紧。

5）在减速机上安装驱动零件时（如联轴器、齿轮、链轮等），如果需要预加热，则必须保护好轴上的油封，要用防热屏减少热辐射。

6）输出轴加装联轴器、皮带轮、齿轮、链轮等时，请勿重击，应用输出轴外端螺孔，压入连接件。皮带轮、链轮、搅拌式还需考虑径向力。

Installation and dismantlement

Installing gear units should avoid direct sunshine and heat concentration to guarantee smooth running.

Installation of whole units

1) Please choose foundation with good rigidity or stable plat form to install transmission devices. In the meantime, also should take full consideration that the positions of all parts will not change even if maximum torque is loaded on units.

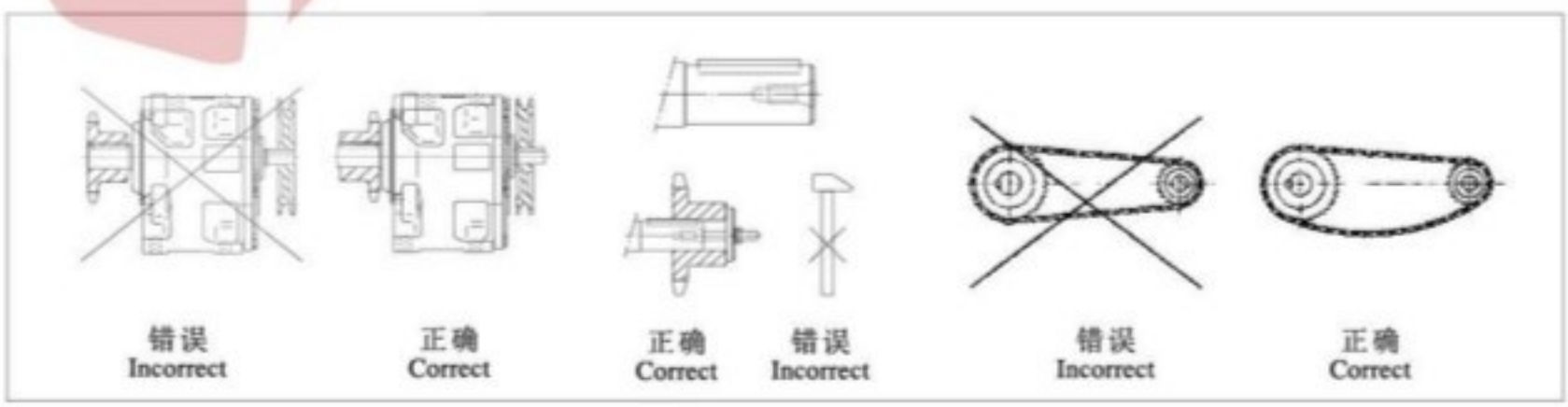
2) Choosing foot-mount, the height of centre line should be calibrated; Choosing coupling-connect, coaxiality should be calibrated; Choosing flexible coupling, run-out should keep within permissible values; Choosing rigid coupling, contour and position tolerance should be guaranteed; Choosing long coupling, rigidity of shaft should be enough.

3) Flange-mount, protruding or concave steps should inosculate with housings; using hollow shaft, contour and position tolerance at connection parts should be guaranteed.

4) Torque-arm-mount, hollow shafts should be fit with working shafts; run-out of working shafts and vibration of units should be within range of vibration values, torque arm should be fixed and locked.

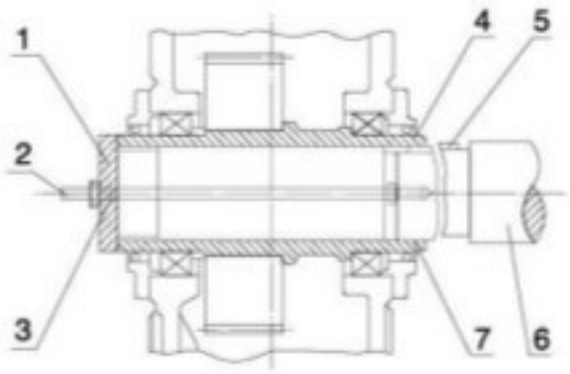
5) Mounting driving parts such as couplings、gears、gear chains, if pre-heat is necessary, seal should be protected by using heat-proof shelter to diminish heat radiation.

6) Installing couplings、belt wheels、gears、chain gears on output shafts, please use screw hole in shaft end to press them in the correct position (see following pictures). And radial force should be considered in case of Belt wheel、chain gears and agitation mode.



7）空心轴与实心轴连接时，应清理干净并涂防锈油(空心轴一定要精密对中)。除了在图中所示的螺母和螺杆以外，还可以使用其它类型的装置例(如液压提升装置)。

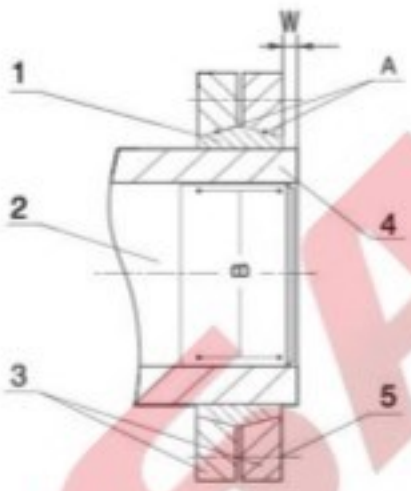
7) When connecting hollow shaft and solid shaft, please clean the surface and put anti-corrosive oil on it. When connecting, besides nuts and threads illustrated in the drawing below, other installing tools such as oil hydraulic devices can be used.



1 端板 Pressure plate
2 螺母 Nut
3 螺杆 Thread
4 空心轴 Hollow shaft
5 平键 Key
6 机器轴 Shaft
7 螺母 Nut

8）当空心轴配置收缩盘时，为了安全起见在收缩盘上应加防护罩；空心轴的孔和工作轴在收缩盘的区域里面一定不能有润滑脂。在安装机器的轴之前不要拧紧紧固螺栓。

8) When hollow shaft equipped with shrink disk, protect shield should be installed on shrink disk for safety. Connecting area (equipped shrink disk) of hollow shaft and solid shaft must not be put lubrication cream. Before installing solid shaft, not tighten binding bolts.



1 内 环 Inner ring
2 机器轴 Solid shaft
3 外环 Outer ring
4 空心轴 Hollow shaft
5 紧固螺栓 Binding bolt
A 有润滑脂的部位 Lubrication area
B 绝对不能有润滑脂的部位 Non lubrication area
W 安装高度 Installation height

9）安装螺栓一般情况下采用 8.8 级，如果有高温或者振动冲击等情况，请在螺纹连接处作好防松措施。各个紧固螺栓的拧紧扭矩见下表：

9) Generally fixing bolts adopt GBT8.8. In case of high temperature and vibration, please take anti-loose measures. The tightening torques of binding bolts as follows

螺栓大小（mm） Diameter of bolt	预紧力矩（N·m） Pre-binding-torque	螺栓大小（mm） Length of bolt	预紧力矩（N·m） Pre-binding torque
M6	15	M30	2000
M8	36	M36	3560
M10	72	M42	5720
M12	123	M48	8640
M16	295	M56	13850
M20	580	M64	14300
M24	1000	M72	20800

拆卸

1）空心轴的拆卸

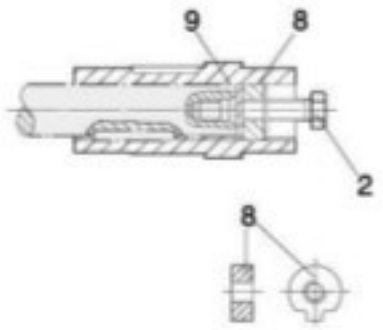
根据现场实际可使用的设备，可以用端板上的螺杆（参见下图）、中心螺杆或者液压提升装置将减速机从机器轴上脱下来。空心轴的每个端面都配备了 2 个螺丝孔可以拧入固定端板的螺栓。

Dismantlement

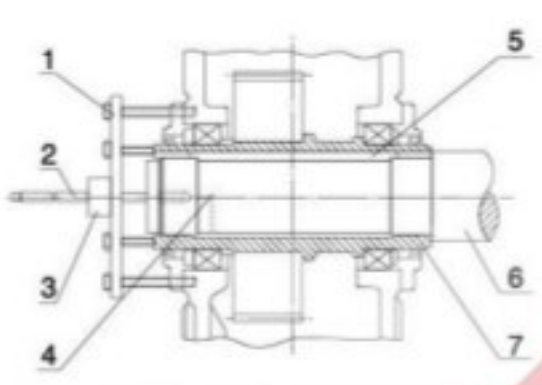
1)Dismantle hollow shaft

According to tools available on the spot, Bolts on pressure plate、center bolt、oil hydraulic device are available to dismantle gear units from driven solid shaft. There are two screw holes in the end surface of hollow shaft for tightening bolts fixing pressure plate.

F、K、S、R、RV



H、B、P



1 拆下减速机用的板 Pressure plate
2 螺杆 Bolt
3 液压提升装置 Hydraulic lift device
4 加入除锈剂的孔 Hole with rust-remover
5 平键 Flat key
6 机器轴 Driven shaft
7 空心轴 Hollow shaft
8 螺母 Locknut for removal
9 垫圈 Removal washer

注：端板和辅助板不在供货范围内。（空心轴端螺纹孔的分布和大小请参照本公司技术图纸）。

Note: Pressure plate and attached plate are not included in shipment. (Serew holes on hollow shaft end refer to drawings)

2）当空心轴配置收缩盘时，在首次受力之前一定不能拆下来。拆卸时严禁按照相邻的顺序松开螺栓。

2) When hollow shaft equipped with shrink disk, it is prohibited to loosen bolts one by one in a round way.

润滑与冷却

润滑

1）润滑油的选择：

Lubrication and cooling

Lubrication

1) Choosing lubrication oil, as following table:

系列 Series of raducer	环境温度 Ambient temperature -50 0℃ +50 +100	ISO粘度与NLGI相应 Adhesiveness of ISO and NLGI sustive	Esso	Mobil	Shell	GB牌号 L-CK
R.F.K.T.H. B.P	-25 +50	VG220		Mobil Glygoyle 30	Shell Tivela OIL/9	N220
	0 +40	VG220	SPARTAN EP 220	Mobilgear 630	Shell Omala Oil220	N220
	-15 +25	VG150 VG100	SPARTAN EP 150	Mobilgear 629	Shell Omala Oil 100	N150
	-30 +10	VG68-46 VG32	ESSOATF D-21611	Mobil D.T.E. 15W	Shell Tellus Oil T 32	N68
	-20	VG22 VG15	UNIVIS J 13	Mobil D.T.E. 11W	Shell Tellus Oil T 15	N22
	-45 0 +60	VG680		Mobil Glygoyle HE 680		N680
R.V. S	0 +40	VG680	SPARTAN EP 680	Mobilgear 636	Shell Omala Oil 680	N680
	-15 +25	VG220	SPARTAN EP 220	Mobilgear 630	Shell Omala Oil 220	N220
	-20 +10	VG150 VG100	SPARTAN EP 150	Mobil D.T.E. 18W	Shell Omala Oil 100	N150
	-25 +10	VG220		Mobil Glygoyle 30		N220
	-45-20	VG22 VG15	UNIVIS J 13	Mobil D.T.E. 11W	Shell Tellus Oil T 15	N22、N15
JW	升降机的润滑油选择：JW010-JW200，选000#钙基润滑脂；JW300-JW1000，选VG150齿轮润滑油。 Lubrication oil: JW010-JW200, 000# calcium grease; JW300-JW1000, VG150 gear lubrication.					

2）润滑油的更换

要用和原来的润滑油同一牌号、同一厂家的润滑油。更换润滑油品种时，要用润滑油将减速机箱体里面的沉积物、金属颗粒和残留的润滑油都冲洗干净。

对于升降机在其正常工作前，都必须对丝杆表面涂抹润滑油脂，将丝杆升到最大行程，然后在丝杆表面涂抹润滑油脂。

3）润滑方式：

A．油池润滑：一般情况下减速机都采用油池飞溅润滑；

B．浸油润滑：所有的齿轮和轴承都浸没在润滑油里面；

C．强制润滑：是靠辅助设备将润滑油强制压入齿轮箱内对轴承和齿轮进行润滑的。

D．稀油站集中润滑：客户可以根据实际情况自配润滑系统。

2) Change of lubrication oil

Changing lubrication oil, it must be the same type and produced by the same factory. If type is different, must completely remove deposits、metal grains、residues of the old oil in housing with new lubrication oil.

Before screw jacks running, must lubricate screw threads with lubrication cream. Let threads get up to highest point and lubricate threads.

3) Lubrication methods

A. Splash lubrication: generally gear units adopt or splash lubrication.

B. Oil-bath lubrication: all gears and bearings must immerse in oil.

C. Forced lubrication: attached devices press oil into housing to lubricate gears and bearings.

D. Oil tank lubrication: Customers can equip lubrication system accordingly.

冷却

根据要求，有些减速机可配备风扇、冷却螺旋管、水冷或者空冷的润滑油冷却系统或者单独的供油系统。在单独的供油系统的情况下，一定要遵守有关这些装置的规定。

1）风扇：

带有风扇的减速机，在安装联轴器或其它零部件的安全防护罩的时一定要留出足够的空间让空气进入。所留出空间的正确尺寸请参照我公司技术图纸。一定要将风扇罩固定好并防止外界的损坏而且不能和风扇叶接触。

2）冷却螺旋管：

冷却水要由用户自行提供。自来水、海水还是半咸水都可以进行冷却，在连接冷却水的螺旋管之前要先将堵头从冷却水盘管的连接衬套上取下来并倒底冲洗螺旋管将脏物清理干净。（冷却水的流量请参照我公司技术图纸。）

注：冷却水可以任意方向流过减速机。冷却水的压力不得超过8巴。为了避免过高的压力，冷却水的入口必须要配备一个流量控制装置，例如减压阀或者截止阀。

起动

要遵守“安全说明”中的规定。

添加润滑油：

本公司产品一般都未带润滑油出厂，在设备运行前请先加入润滑油。

核查设备：

1）检查油面高度，润滑油冷却或者供油系统管路的密封性。
2）检查冷却装置，截止阀的开启状态
3）配备了止回装置的减速机，检查电机接线是否正确。
4）检查轴封是否有效。
5）检查旋转的零部件是否与其它零件接触。

配置了电动油泵的减速机应当保证在启动设备前首先开启油泵电机。

故障、原因和措施

维修工作一定要由经过培训的素质合格的人员谨慎地进行。

Cooling

For different requirements, gear units can be equipped with cooling fans、cooling coils、water or air cooling systems、separate oil supply systems. Under condition of separate oil supply system, please comply with its operation regulations.

1)Cooling fan:

When gear units with cooling fans are installed safety shield of couplings or other spare parts, enough space should be left to let air get into. The dimension of the space refers to our technical drawings. The fan shield should be fastened and protected against damage, and cannot touch the leaves of fan.

2)Cooling coil:

Cooling water is supplied by customers. Tap water、seawater、half salt water can applied to cooling. Before installing cooling coils, please get the plug off the coil clean it. (water flux refer to our technical drawings)

Note: Cooling water can flow through gear units in all directions. The pressure of cooling water cannot exceed 8 bar. To avoid higher pressure, a flux controller should be installed at the entrance of cooling coil such as decompression valve or cut-off.

Start up

Please comply with the regulations in safety instructions

Add lubrication oil:

Generally there is no lubrication oil in our products. Please add oil before machines begin running.

Verify machines:

1)Check oil level、air-proof of cooling system or oil supply system.
2)Check the open-and-close state of cooling devices and cut-off.
3)Check the position of input wires when gear units are equipped with anti-counter-rotation devices.
4)Check validity of seals.
5)Check ifthe rotating components touch other ones.

Make sure that electric oil pump should stat up before the start-up of gear units.

Malfunction、cause and measure

Maintenance should be made by qualified workers .

故障 Malfunction	原因 Causes	措施 Measures
在减速机的紧固件处有大的噪声 High noise at tightening parts	紧固件松动了 Loose of tightening parts	将螺栓/螺母拧紧到规定的扭矩。 更换损坏了的螺栓/螺母。 Tighten nut bolt to correct state Replace damaged nut/bolt
减速机的噪声变化 Changing noise	齿轮的轮齿发生了损坏 Teeth of gears get damaged	和客户服务部联系。 检查所有零件上的齿，更换损坏了的零件。 Consult after-sales department Check teeth of gears and replace damaged one.
	轴承间隙过大 Clearance of bearings too big	和售后服务部联系。 调整轴承的间隙。 Consult after-sales department Adjust the clearance of bearings
	轴承损坏 Bearings get damaged	和客户服务部联系。 更换损坏的轴承。 Consult after-sales department Replace damaged bearings

故障 Malfunction	原因 Causes	措施 Measures
轴承温度升高 Bearing temperature rise	箱体里面的油面过高或过低 Oil level is too high or low	在室温下检查油面的高度并按需加油。 Check oil level at room temperature and add on reduce oil
	油过于陈旧 Oil is used too long	和售后服务部联系。 —检查上次换油的时间。 Consult after-sales department. Check the date that oil be replaced last time.
	油泵的机械故障 Malfunction of oil pump	和售后服务部联系。 检查油泵的工作是否正常，修理或换新的油泵。 Consult after-sales department. Check if pump works normally, repair or replace it.
	轴承损坏 Bearing damage	和售后服务部联系。 —查阅操作人员在振动测量中所获得的数据。 —检查并按需更换轴承。 Consult after-sales department. —Look up the date about vibration. —Check and replace it on request.
工作温度过高 working temperature too high	箱体里面的油面过高 Oil level is too high	检查油面的高度，如果有必要的话，调整。 Check oil level, and adjust if necessary.
	油过于陈旧 Oil is used too long	和售后服务部联系。 检查上一次换油的时间，如果有必要的话就更换。 Consult after-sales department. Check the date that oil was replaced last time, replace it if necessary.
	油受到严重污染 Oil is polluted seriously	和售后服务部联系。 —换油。 Consult after-sales department. —Replace oil.
	在配备了润滑油冷却系统的减速机上，冷却剂的流量过低或者过高 Flux of cooling material is too high or low	全面调节进口和出口管道的阀门。 检查水冷装置的自由流量。 Adjust entrance and exit valves. Check the flux of water cooling devices.
	通过水冷装置的油流过低，其原因是：滤油器严重堵塞 Oil flux through water cooling devices is too low	清理滤油器。 Clean oil filter.
	油泵的机械故障 油泵损坏 Malfunction of oil pump oil pump damage	和售后服务部联系。 —检查油泵的功能是否正常。 —修理或者换新。 Consult after-sales department. —Check of oil pump works normally. —Repair or replace it.
	在配备了风扇的减速机上：风扇罩的空气入口和/或箱体严重污染 Entrance of fan shield and housing polluted seriously	清理风扇罩和箱体。 Cleanse fan shield and housing.
	配备了冷却螺旋管的减速机：冷却螺旋管里面结垢 Residues in cooling coil	和售后服务部联系。 —清理或者更换螺旋管。 Consult after-sales department. —Clean or replace cooling coil.

故障 Malfunction	原因 Causes	措施 Measures
轴承处的 振幅升高 Swing at bearing higher	轴承损坏 Bearing is damaged	和售后服务部联系。 —检查并按需更换轴承。 Consult after-sales department. —Check and replace bearing.
	齿轮损坏 Gear is damaged	和售后服务部联系。 —检查并按需更换齿轮。 Consult after-sales department. —Check and replaces gears.
止回装置的温度过高 止回功能的失效 Temperature of anti-backstop too high and it becomes malfunction	止回装置损坏 Anti-backstop becomes malfunction	和售后服务部联系。 —检查并按需更换止回装置。 Consult after-sales department. —Replace anti-backstop
减速机漏油 Oil-leak of gear unit	箱体盖或者联接 处的密封不良 Sealing at cover and connection notin good state	检查密封和连接处，如果必要的话， 更换新的，将连接处密封好。 Check air-proof and connection part, replace them if necessary, and seal up connection part.
	径向轴封环失效 Shaft seal is malfunction	和售后服务部联系。 —换新的径向密封环。 Consult after-sales department. —Replace it.
油中有水 Water in oil	油中有杂物 Mixer in oil	用试管检查油的状态是否有水分存在。 实验室分析油。 Classify if there is water in oil by using tube. Analyse oil in laboratory.
	润滑油冷却器或者 冷却螺旋管失效 Cooling coil is of mal-fanction	和售后服务部联系。 —找出并修理泄漏之处。 —更换冷却器或者螺旋管。 Consult after-sales department. —Find out and repair leakage place. —replace cooling coil
	减速机受到机器间通风过 来的凉空气而产生凝露 Cool air will cause water drop in gear unit.	用合适的保温材料将减速机保护起来。 关闭空气的出口或者在结构上改变其方向。 Shelter gear units with proper

注：对于客户自己无法排除的故障请和我公司售后服务部联系。

Note: Please consult after-sales department, if malfunction can not be removed by consumer s tehmselves.

保养

用户要定期对减速机进行维护和保养，要定期检查润滑油的使用状态，定期清理通气帽、风扇、冷凝管和减速机表面的灰尘和异物，保持减速机清洁，保证减速机的正常运行。

Maintenance

Users must maintain gear units periodically check oil state periodically clean breather screw, fan, cooling coil and surface of gear units periodically.Keep gear units clean and assure that gear units work smoothly.

措施期限备注: Maintenance periods:

检查油温 Check oil temperature	每日 Everyday
检查减速机的不正常的噪声 Check abnormal noise of gear units	每日 Everyday
检查油面高度 Check oil level	每月 Every month
检查减速机的漏油 Check leakage	每月 Every month
检验油中的水分 Analyse water	400工作小时后，至少每年一次 Every 400 working hours. At least 1 years.
在起动之后的首次换油 Replace oil first time after start up	在400工作小时后 Every 400 working hours.
其后的换油 Afterward oil replacement	每18个月或者5000工作小时 Every 18 months or 5000 working hours
清理滤油器 Clean oil filter	每3个月 Every 3 months
清理通气帽 Clean breathe screw	每3个月 Every 3 months
清理风扇、风扇罩和减速机箱体 Clean fan, fan shield and housing	和换油同时进行 At the same time as replacing oil
检查冷却螺旋管的沉积物 Check residues in cooling coil.	大约每2 年，和换油同时进行 Every 2 years and the same time as replacing oil
检查润滑油空气冷却器 Check air-cooling devices	和换油同时进行 At the same time as replacing oil
检查润滑油水冷却器 Check water-cooling devices	和换油同时进行 At the same time as replacing oil
检查紧固螺栓的紧固程度 Check tightening bolt	第一次换油后，其后每隔一次换油 After first replacing oil, every 2times of replacing oil
对于减速机的全面检查 Make an over all check	大约每2 年和换油同时进行 Every 2 years and coincide with replacing oil

售后服务 After-sale service

各种传动设备，客户发现有质量问题时，不要先拆卸零件，应说明以下情况然后与本公司售后服务部联系，说明现象后确认问题所在，再采用较理想的方法处理。

When customers find some quality problem, please not dismantle the gear units and fill in the following form and contact out after-sales department. We will offer reasonable methods to resolve the problem.

型号规格 Model:

出厂日期 Date:

编 号 Number:

已使用时间 Use time:

使用场合或主机名称 Ambience or main machine:

主机生产单位 Company that main machine was made in:

质量问题 Problem:

用户单位 (Name):

地　　址 (Add):

电　　话 (Tel):

传　　真 (Fax):

邮　　编 (Post):

联 系 人 (Link man):

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