

减速机选型样本

GEAR UNITS MODEL SELECTION SAMPLE



国家高新技术企业

省级隐形冠军企业 PROVINCIAL HIDDEN-CHAMPION

省级企业研究院 PROVINCIAL RESEARCH INSTITUTE

入选《机械设计手册》选型标准 (化工工业出版社/机械工业出版社)

Listed in 《 Handbook of mechanical design 》 as guideness of gearbox selection





ITR系列斜齿轮硬齿面减速机

TR series Rigid Tooth Flank Helical Gear Reducer



ITK系列螺旋锥齿轮减速机

TK series Helical-bevel Gear Reducer



ISJ系列涡轮丝杆升降机

SJ series Worm Screw elevators



ITS系列斜齿-蜗轮蜗杆减速机

TS series Helical-worm Gear Reducer



ITH系列硬齿面齿轮减速机

TH series Rigid Tooth Flank Gearbox



I Z系列螺旋锥齿减速机

Z series Spiral Bevel Gear Reducer



ITF系列平行轴斜齿轮减速机

TF series Parallel Shaft Helical Gear Reducer



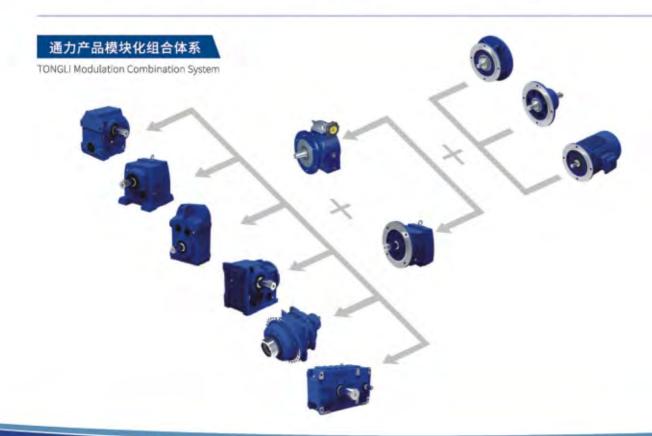
| TB系列硬齿面齿轮减速机

TB series Rigid Tooth Flank Gearbox



I TP系列行星齿轮减速机

TP series Planetary Gear Units





粗轧卷取机用减速机

Uncoiler Specialized Gearbox



1 粗轧机用主减速机

Rolling Mill Specialized Gearbox



| 刮板输送机用减速机

Scraper Conveyor Specialized Gearbox



| 开收卷机用减速机

Uncoiler Specialized Gearbox



| 棕榈油专用减速机

Palm Oil Specialized Gearbox



| 干燥窑用减速机

Dry Kiln Specialized Gearbox



| 精轧卷取机用减速机

Precision Uncoiler Specialized Gearbox



| 颗粒机专用减速机

Granulator Specialized Gearbox



| 启闭机用减速机

Hoist Specialized Gearbox

ENTERPRISE PROFILE

公司简介

浙江通力传动科技股份有限公司(原浙江通力重型齿轮股份有限公司)创建于2008年,是一家专业从事减速机研发、生产、销售及服务的国家高新技术企业,下辖通用减速机、工业齿轮箱二大生产基地。经过十余年的稳健发展和技术积累,公司现已成为中国减速机行业的知名企业之一,在技术、装备、产品性能等方面均处于国内先进水平。近年来,通力作为起草单位参与制定了4项减速机国家标准与行业标准;拥有多项核心技术专利,自主研发多个系列减速机(齿轮箱)产品,其中部分产品被列为国家重点新产品和国家火炬计划项目。

通力主导产品通用减速机、工业齿轮箱广泛应用于冶金、化工、环保、能源、制药、起重、输送、建材、粮油等国民经济的支柱产业领域。先后为中国一重、中国二重、中国中冶、中粮集团、青山控股、齐鲁制药、宁德时代、中央电视台春晚舞台、北京冬奥会等国内大型工业企业及国家重点工程项目提供高性能的配套减速机,并出口东南亚、南美、中东等国家和地区,获得国内外众多客户的首肯和赞许。

Zhejiang TONGLI Transmission Technology Co., Ltd. (Originally known as Zhejiang TONGLI Heavy Gear Co., Ltd.) established in 2008 and is a National High-tech Enterprise which engaged in Gearbox R & D, manufacturing, sales and service. After years of steady development and technical accumulation, TONGLI has been grown to become one of the well-known recognized enterprises in China gear industry. At the same time, the technology, equipment, product performance and other aspects of TONGLI are in the domestic advanced level.

Universal gear reducer and Industrial gearbox are TONGLI's leading products and widely used in Metallurgy, Chemical, Environmental protection, Energy, Pharmaceutical, Hoist, Transportation and other pillar industries of the national economy. Successively provide high performance matching gearbox for CFHI, CNEG, MCC Group, COFCO, Tsingshan Holding, QILU Pharmaceutical, CATL, the CCTV Spring Festival GALA stage equipment and other large domestic industrial enterprises & national key projects. TONGLI gearbox exported to Southeast Asia, South America, the Middle East and other countries and regions, and obtained many approvals and praises from home and abroad customers.



轴端螺纹孔,配合公差,平键和键槽

Centre Holes in Shaft Ends, Fit tolerance and Parallel Key and Keyway

轴 端 螺 纹 孔			Centre holes in shaft end					m m		
轴径Φd Diameter	≥16-21	>21-24	>24-30	>30-38	>38-50	>50-85	>85-130	>130 -225	>225 -320	>320 -500
螺孔尺寸 Screw	M 6 X 12	M8X16	M10X20	M12X20	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	M20X35	M 2 4 X 4 0		M36X60	M 4 2 X 7 0

	配合公差Se	election of ISO Fits		
	径 d/mm	轴径公差 Shaft tolerance	孔公差 Bore tolerance	
	≤25	k6	Н7	
>25	≤100	т6	Н7	
>100		n6	H7	

平鍵和鍵槽	Parallel key	and ke	yway		m m
P 鐵紧固采用无锥度联接。 P 键和键槽根据GB/T1095-1979标准确定	直径 Diameter d	宽度 Width b	高度 Height h	轴键槽深度 Depth of keyway in shaft t 1	轮毂键槽深度 Depth of keyway in hub d+t2
Drive type fastening without taper action.	>8-10	3	3	1.8	d+1.4
Parallel key and keyway acc. to GB/T 1095–1979	>10-12	4	4	2.5	d+1.8
araner key and keyway acc. to db/ 1 1085-1878	>12-17	5	5	3	d+2.3
b	>17-22	6	6	3.5	d+2.8
	>22-30	8	7	4	d+3.3
	>30-38	10	8	5	d+3.3
	>38-44	12	8	5	d+3.3
21 + 000	>44-50	14	9	5.5	d+3.8
9	>50-58	16	10	6	d+4.3
	>58-65	18	11	7	d+4.4
IIIIIIII A	>65-75	20	12	7.5	d+4.9
	>75-85	22	14	9	d+5.4
	>85-95	25	14	9	d+5.4
	>95-110	28	16	10	d+6.4
	>110-130	32	18	11	d+7.4
	>130-150	36	20	12	d+8.4
	>150-170	40	22	13	d+9.4
	>170-200	45	25	15	d+10.4
	>200-230	50	28	17	d+11.4
	>230-260	56	32	20	d+12.4
	>260-290	63	32	20	d+12.4
	>290-330	7.0	36	22	d+14.4
	>330-380	80	40	25	d+15.4
	>380-440	90	45	28	d+17.4
	>440-500	100	50	31	d+19.4

注:配合公差仅为推荐值



实际传动比 The actual transmission ratio

TS38	TS48	TS58	TS68	TS78	TS88	TS98
165.71	244.74	196.21	227.20	241.09	329.81	283.04
152.00	228.75	180.40	205.11	206.04	292.50	254.80
129.41	197.73	154.35	180.46	188.89	289.22	230.48
111.58	168.00	133.79	170.40	165.75	256.50	207.48
104.00	150.00	125.05	144.00	157.08	245.87	187.89
90.91	146.84	108.09	130.00	137.48	215.61	166.62
85.22	137.25	91.84	114.38	123.86	198.00	150.64
75.20	118.64	82.00	108.00	108.65	166.43	127.68
66.67	100.80	70.04	91.96	95.88	152.95	111.52
56.67	90.00	66.89	83.57	92.18	135.83	93.27
52.80	76.88	65.60	72.39	85.00	121.44	83.31
52.00	72.00	62.53	65.00	78.78	109.19	80.75
45.45	68.63	54.05	63.00	72.22	94.77	75.32
42.61	60.65	45.92	57.19	63.38	84.86	63.84
37.60	59.32	41.00	54.00	60.06	75.63	55.76
33.33	50.40	35.02	45.98	52.57	70.40	46.64
28.33	45.00	32.80	41.79	47.36	67.62	40.38
26.40	38.44	30.12	36.20	41.54	60.80	36.39
23.46	36.00	26.11	31.50	36.66	52.77	32.76
20.22	30.33	24.40	26.40	32.50	47.25	29.67
18.85	27.74	21.09	23.83	27.75	42.47	26.31
16.48	25.93	17.92	20.97	25.79	39.20	23.79
15.45	22.41	16.00	19.80	22.75	38.25	20.16
13.63	19.04	13.67	16.86	21.56	34.09	17.61
12.08	17.00	12.80	15.32	18.87	32.15	14.73
10.27	14.52	10.78	13.27	17.00	29.55	12.75
9.57	13.60		11.55	14.91	26.24	
	11.46			13.16	23.46	
				11.67	21.09	
				9.96	18.31	
				, Literature and the second	16.39	
					13.60	

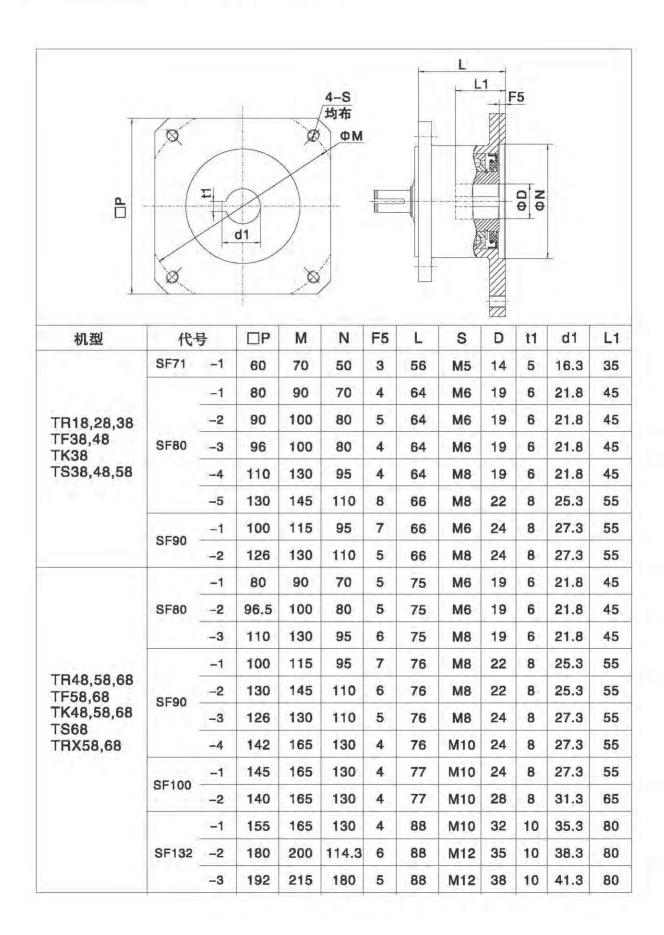


实际传动比 The actual transmission ratio

174				TSTR	…系列实际	传动比	
163	TS38TR18	TS48TR18	TS58TR18	TS68TR38	TS78TR38	TS88TR58	TS98TR58
144 295 431 807 1794 4571 6710 128 256 390 716 1730 3874 5767 109 229 332 616 1609 3483 4964 203 288 541 1412 2928 4433 183 268 467 1224 2556 4018 162 231 423 1098 2369 3479 202 387 957 2078 3107 189 319 840 1852 2642 167 281 711 1657 2331 134 247 641 1322 2082 222 576 1179 1827 199 505 1022 1586 169 430 919 1399 388 852 1231 327 713 1072 290 607 943 248 552 824 216 479 702 433 827 373 534 327 485 267 372 222 322 207 28	174	391	577	1043	3107	5874	8606
144 295 431 807 1794 4571 6710 128 256 390 716 1730 3874 5767 109 229 332 616 1609 3483 4964 203 288 541 1412 2928 4433 183 268 467 1224 2556 4018 162 231 423 1098 2369 3479 202 387 957 2078 3107 189 319 840 1852 2642 167 281 711 1657 2331 134 247 641 1322 2082 222 576 1179 1827 199 505 1022 1566 169 430 919 1399 388 852 1231 327 713 1072 290 607 943 248 552 824 216 479 702 433 627 373 534 327 485 267 372 222 322 207 28		The second second		17.56	2075	4	
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162		203	288	541	1412	2928	4433
202 367 957 2078 3107 189 319 840 1852 2642 167 281 711 1657 2331 134 247 641 1322 2082 222 576 1179 1827 199 505 1022 1566 169 430 919 1399 388 852 1231 327 713 1072 290 607 943 246 552 824 216 479 702 433 627 373 534 327 485 276 420 257 372 222 322 207 281		183	268	467	1224	2556	4018
189 319 840 1852 2642 167 281 711 1657 2331 134 247 641 1322 2082 222 576 1179 1827 199 505 1022 1566 169 430 919 1399 388 852 1231 327 713 1072 290 607 943 246 552 824 216 479 702 433 627 373 534 327 485 276 420 257 372 222 322 207 281 245		162	231	423	1098	2369	3479
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199			134	247	641	1322	2082
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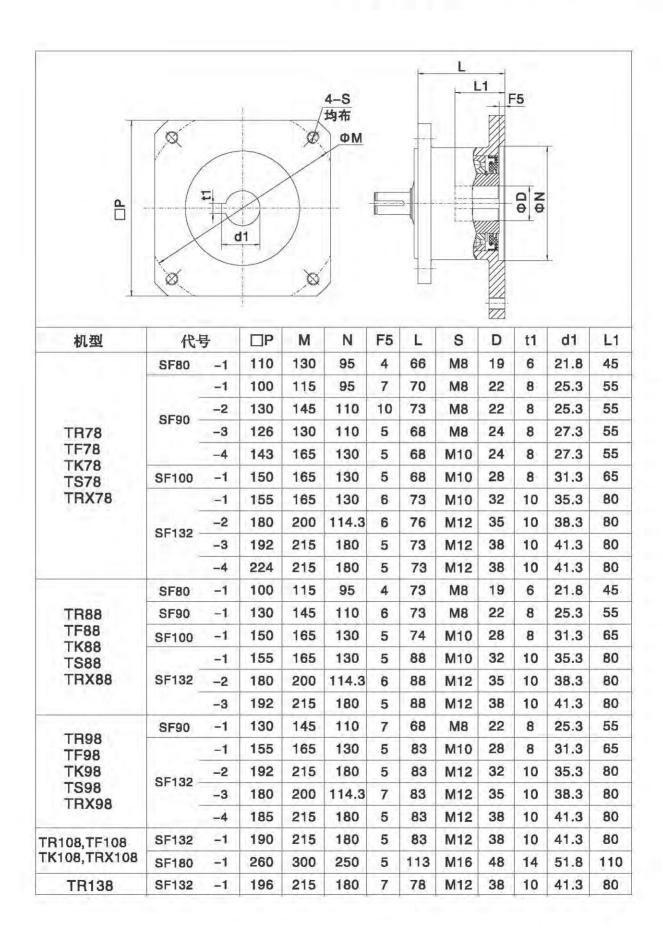


伺服电机联接法兰



TONGLI通力

伺服电机联接法兰





性能特点 Performance characteristics

- TR系列斜齿轮硬齿面减速机、TK系列螺旋锥齿轮减速机、TF系列平行轴斜齿轮减速机、TS系列斜齿 -蜗轮蜗杆减速机,Z系列螺旋锥齿轮减速机、具有 体积小,传递扭矩大的特点。
- 在模块组合体系基础上设计制造,有极多的电机 组合、安装型式和结构方案,传动比分级细密, 满足不同的使用工况,实现机电一体化。
- TR、TK、TF、TS四大系列减速机采用单元结构 模块化设计原理,大量减少了零部件种类和库存 量,也大大的缩短了交货周期。
- 传动效率高, 耗能低, 性能优越。
- 帯筋的高刚性铸铁箱体;硬齿面齿轮采用优质 合金钢,表面经渗碳淬火硬化处理,磨齿精细加工, 传动平稳、噪声低、承载能力大,温升低、寿命长。

- TR series rigid tooth flank helical gear units, TK series helical-bevel gear units, TF series parallel shaft helical gear units, TS series helical-worm gear units, Z series spiral bevel gear units, have such outstanding characters as small size and large transmission torque.
- Designed and manufactured on the basis of modular porfolio system, the gear units have abundant combinations with motors, numbers of mounting positions and structure schemes, and a finer grade of transmission ratio, which meet the requirements of various working conditions and realize mechatronics.
- TR, TK, TF, TS four main series gear units adopt the modular cell structure design, which greatly reduced the classification and inventory of parts, and thus the delivery cycle is signifi cantly shortened.
- High efficiency transmission, low energy consumption and superior performance.
- High rigid cast iron housing with ribs. The rigid tooth flank gear adopts high-quality alloy steel, and is hardened with carburizing and quenching treatment and refined by grinding. Smooth drive, low noise, large load capacity and long service life.

选型方法

■ 减速机是按载荷平稳,每天工作时间一定和少量 起停次数的情况设计的,而在实际使用中往往不 是处于此种理想状况,因此必须按照实际情况的 载荷类型、运行时间、起动频率来确定工作机系数 f1、减速器安全系数f2、起动系数f3。使其小于或 等于选型表中的服务系数f8,即

f1×f2×f3≤fB

式中

f1 - 工作机系数 (见表1)

f2 - 减速器安全系数 (见表2)

f3 一起动系数 (见表3)

- TK系列和Z系列螺旋锥齿轮减速机如果只承受单向 载荷则最好注明旋转方向(从输出端方向看),这样 有利于改善螺旋锥齿轮的受力状况。
- 輸入、輸出轴配帶轮、链轮、齿轮或会产生其他附加载荷等情况,请与我公司联系
- 我公司可承接特殊规格产品的订货,并可为客户 提供专用设计服务。
- 本样本中如有改进之处,不另作通知 ,请谅解。
- 四大系列减速机98机座以下在出厂前已加润滑油,108机座以上出厂前不加润滑油。

Type selection method

■ Gear units are designed under the circumstance of steady load, stated operating time per day and a few sarting times.but the practical condition will be not as perfect as the designed circumstance.so we must confirm driven machine factor f1, gear units safety factor f2, starting factor f3 according to actual load type, operating time, starting frequency.let it less than or equale to the service factor f3 of selection table, viz

f1×f2×f3≤fB

In the formula

f1 - driven machine factor(see table 1)

f2 - gear units safety factor(see table 2)

fs — starting factor(see table 3)

- If the TK series and Z series spiral bevel gear units can only bear single direction load, please indicate the rotating direction (see from output side), which is good for improving the pressing state of the spiral bevel gear.
- Input, output shaft equipped with wheel, sprocket, gear or can generate additional load and so on, please contact our company.
- We accept the orders of products of special specification, and provide our customer with exclusive design service.
- Design and specifications are subject to change without notice.
 Please forgive
- The four series gearbox under 98's have added lubricating oil before leave the factroy, but 108's and above didn't add lubricating oil.



选型指南 Guidelines for the selection

减速器服务系数

表1				工作	机系数				f1
	- II- In	H:	I 作小!	対数		- //- 17	日工作小品		寸数
	工作机	≤0.5h	0.5-10h	>10h		工作机	≤0.5h 0.5-10h		>10
	浓缩器(中心传动)	11.30	-	1.2		可逆式板坯轧机	-	2.5	2.5
1.0	压滤器	1.0	1.3	1.5	金属	可逆式线材轧机		1.8	1.8
1	景凝器	0.8	1.0	1.3	加工	可逆式薄板轧机	1	2.0	2.0
1	曝气机	-	1.8	2.0	设备	可逆式中厚板轧机	1	1.8	1.8
2 .	接集设备	1.0	1.2	1.3	1.839.54	報鐘调节驱动装置	0.9	1.0	-
污水	纵向、回转组合接集装置	1.0	1,3	1.5		斗式输送机	-	1.2	1.5
A1 100	预浓缩器) = 1	1.1	1.3		綾 车	1.4	1.6	1.0
处理	螺杆泵	347	1.3	1.5		卷扬机		1.5	1.0
	水轮机	7-	- 9	2.0	144 144	皮带输送机<150kw	1.0	1.2	1.3
	离心泵	1.0	1.2	1.3	輸送	皮带输送机≥150kw	1.1	1.3	1.3
	1个活塞容积式泵	1.3	1.4	1.8	机械	货用电梯*		1.2	1.
	>1个活塞容积式泵	1.2	1.4	1,5		客用电梯*		1.5	1.
	斗式运输机	18	1.6	1.6		刮板式输送机	-	1.2	1.
	傾卸装置		1.3	1.5		自动扶梯		1.2	11.
	Carteypillar行走机构	1.2	1.6	1.8		轨道行走机构		1.5	-
空泥机	斗轮式挖捆机(用于捡拾)	-	1.7	1.7		变频装置		1.8	2.
	斗轮式挖捆机(用于粗料)	100	2.2	2.2		往复式压缩机		1.8	1.
	切碎机	-1-02	2.2	2.2		回转机构 *	1	1.4	1.
	行走机构*		1.4	1.8	如果	管仰机构	1	1.25	1.
- 2	弯板机*	-	1.0	1.0	起重	行走机构	1.5	1.75	2
1 1	挤压机	2	-	1.6	机械	提升机构 *	1	1.25	1.
	调浆机	-	1.8	1.8		转臂式起重机 *	1	1.25	11.
	橡胶砑光机	-	1.5	1.5	all des Mile	冷却塔风扇	-	-	2.
	冷却圆筒	19.4	1.3	1.4	冷却塔	风机(轴流和离心式)	T Trian	1.4	1.
化学	混料机,用于均匀介质	1.0	1.3	1.4	蔗糖	甘蔗切碎机*	T con	- 90	1.
10 1	混料机,用于非均匀介质	1.4	1.6	1.7	生产	甘蔗碾磨机		14	1.
工业	搅拌机,用于密度均匀介质	1.0	1.3	1.5		甜菜绞碎机		19	14.3
	搅拌机,用于非均匀介质	1.2	1.4	1.6	甜菜糖	棒取机,机械致冷机,蒸煮机		100	11.
	搅拌机,用于不均匀气体吸收	1.4	1.6	1.8	生产	甜菜清洗机	0-0		13
	供炉	1.0	1.3	1.5	Ξ/	甜菜切碎机		340	12
- 1	离心机	1.0	1.2	1.3	造纸	各种类型**		1.8	2.
	翻板机	1.0	1.0	1.2	机械	碎浆机驱动装置	2.0	2.0	2.
	推钢机	1.0	1.2	1.2	# * ***	离心式压缩机	I -	1.4	1:
	続 銭 机	15-1	1.6	1.6	100.00	运货索道	1	1.3	1.
	冷床横落架	-	1.5	1.5	索道	往返系统空中震道	-	1,6	1.
金属	親式矫直机	154.7	1.6	1.6	缴车	T型杆升降机	_	1.3	1.
	楊道(连续式)	-	1.5	1.5	200 -	连续索道	-	1.4	1.
加工	報道(问歇式)	1.70	2.0	2.0		混凝土搅拌器	-	1.5	1.
设备	可逆式轧管机	Total -	1.8	1.8	1 5 2 =	破碎机*		1.2	1.
- M	剪切机(连续式)*	-	1.5	1.5	水泥	回转窑		-	2.
	剪切机(曲柄式)*	1.0	1.0	1.0	工业	管式廣机		-	2.1
	连铸机驱动装置	-	1.4	1.4	1 12	选扮机	-	1.6	1.0
	可遂式开坯机		2.5	2.5		報压机	1 000	-	2.1

工作机额定功率P2的确定 *)按最大扭矩确定额定功率. **)检验热功率是绝对必要的.

表 2	減	f 2		
重要性 与安全 要求	一般设备,减速 器失效仅引起 单机停产且易 更换备件	重要设备,减速器失效引起机组、生产线或全厂停产.	高度安全要求, 減速器失效引 起设备、人身 事故	
f 2	1~1.2	1.2~1.4	1,4~1.6	

表 3	起动	fa		
f3 每小时超勒次數	1	1.25 -1.75	2- 2.75	≥3
≤ 5	1	1	1	1
6-25	1.2	1.12	1.06	1
26-60	1.3	1.2	1.12	1.06
61-180	1.5	1.3	1.2	1.12
>180	1.7	1.5	1.3	1.2



选型指南 Guidelines for the selection

Gear Units Service Factor

Table 1	P	Fac	tor for	driver	n machine				fı
	Driven machines	period	ve dally op under load	in hours		Driven machines	period u	e dally op inder load	In hou
		≤0.5h	0.5-10h	C AAA			≤0.5h	0.5-10h	>10
	Thickeners(central drive)	(3)	-	1.2	d d	Reversing slabbing mills	- 52	2.5	2.5
	Filter presses	1.0	1.3	1.5	Metal	Reversing wire mills	-	1.8	1.8
1	Flocculation apparata	0.8	1.0	1.3	working	Reversing sheet mills	-	2.0	2.0
	Aerators		1.8	2.0	milis	Reversing plate mills	-	1.8	1.8
	Raking equipment	1.0	1.2	1.3		Roll adjustment drives	0.9	1.0	-
Waste	Combined longitudinal and rotary rakes	1.0	1.3	1.5		Bucket conveyors	-	1.2	1.5
water	Pre-thickeners		1.1	1.3		Hauling winches	1.4	1.6	1.6
treatment	Screw pumps		1.3	1.5		Hoists		1.5	1.8
	Water turbines	- (Ar)	-	2.0	1	Belt conveyors <150 kw	1.0	1.2	1.3
	Centrifugal pumps	1.0	1.2	1.3		Belt conveyors ≥150 kw	1.1	1.3	1.5
	1 piston positive-displacement	1.3	1.4	1.8	Conveyors	Goods lifts *	1151	1.2	1.5
-	>1 piston positive- displacement pumps	1.2	1.4	1.5		Passenger lifts *	17.3	1.5	1.8
	Bucket conveyors		1.6	1.6		Apron conveyors	12-	1.2	1.5
10	Dumping devices	(2 51)	1.3	1.5		Escalators		1.2	1.4
h	Carterpillar travelling gears	1.2	1.6	1.8		Rail travelling gears	-	1.5	-
	Bucket wheel excavators	100	1.7	1.7	Eroni	ency converters		1.8	2.0
Dredgers	as pick-up Bucket wheel excavators for		2.2	2.2		rocating compressors	-	1.8	1.8
-	primitive material Cutter heads		2.2	2.2		Slewing gears *	1	1.4	1.8
-	Traversing gears *	-	1.4	1.8	1-	Luffing gears	1	1.25	1.5
	Plate bending machines	100	1.0	1.0	Cranes	Travelling gears	1.5	1.75	2
	Extruders	-	-	1.6	Granos	Hoisting gears *	1	1.25	1.5
11	Dough mills	1	1.8	1.8		Derricking jib cranes *	1	1.25	1.6
1	Rubber calenders		1.5	1.5	Cooling	Cooling tower fans	1	-	2.0
	Cooling drums	-	1.3	1.4	towers	Blowers(axial and radial)	17.2	1.4	1.6
1	Mixers for uniform media	1.0	1.3	1.4	Cane	Cane knives *	112	- VAX	1.7
Chemical	Mixers for non-uniform media	1.4	1.6	1.7	sugar production	Cane mills	0.25	12	1.7
industry	Agitators for media with	1.0	1.3	1.5	production	Beet cossettes macerators	-	1	1.2
	uniform density Agitators for media with non- uniform density	1.2	1.4	1.6	Beet sugar	Extraction plants, Mechanical refrigerators, Juice boilers,	13-0	Te*	1.4
	Agitators for media with non- uniform gas absorption	1.4	1.6	1.8	production	Sugar beet washing machines	1.2	746	1.3
	Toasters	1.0	1.3	1.5		Sugar beet cutters	0.30	3-	1.5
	Centrifuges	1.0	1.2	1.3	Paper	Of all-kind **	. Je.	1.8	2.0
	Plate tilters	1.0	1.0	1.2	machines	Pulper drives	2.0	2.0	2.0
	Ingot pushers	1.0	1.2	1.2		Centrifugal compressors		1.4	1.5
	Winding machines		1.6	1.6		Material ropeways	[3 -]	1.3	1.4
	Cooling bed transfer frames	14	1.5	1.5	Cableways	To-and fro system aerial ropeways	150	1.6	1.8
Metal	Roller straighteners	14-1	1.6	1.6		T-bar lifts	040	1.3	1.4
working	Roller tables continuous	-	1.5	1.5		Continuous ropeways	1.91	1.4	1.6
mills	Roller tables intermittent	l lea	2.0	2.0		Concrete mixers	1925	1.5	1.5
	Roller tables Reversing tube mills		1.8	1.8	200	Breakers *		1.2	1.4
	Shears continuous *	-	1.5	1.5	Cement	Rotary klins		-	2.0
	Shears crank type *	1.0	1.0	1.0	industry	Tube mills	Tex-	1.00	2.0
	Continuous casting drivers	- 4	1.4	1.4		Separators	-	1.6	1.6
	Reversing blooming mills	11160	2.5	2.5		Roll crushers	0.0	-	2.0

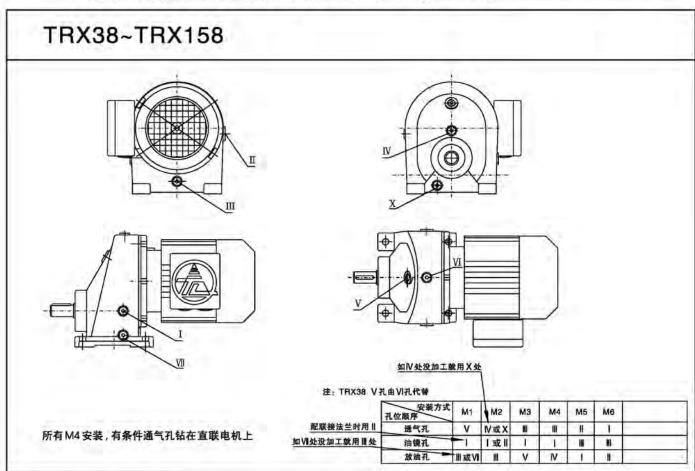
Design for power rating of driven machine P2 *)Designed power corresponding to max.torque.

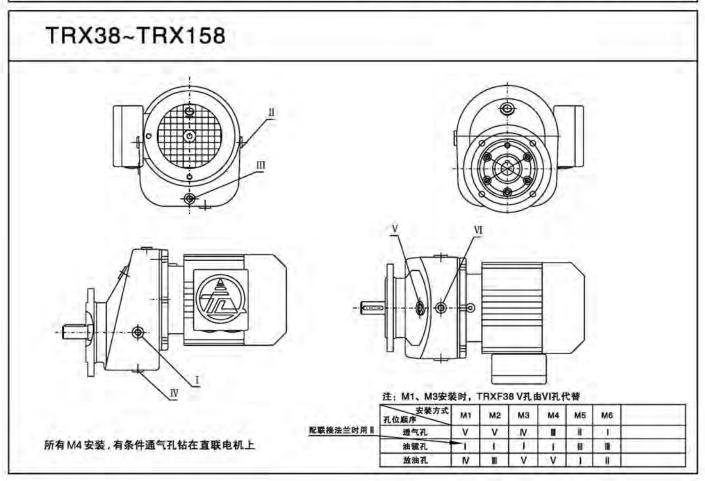
^{**)} A check for thermal capacity is absolutely essential.

Table	² Table 2	Safety factor	f2 f2
Importance and safety request		Important equipment, malfunction cause the accident of assembling unit,production—line or whole factory.	Safety request highly, malfunction cause the accident of equipment and personal injury.
f2	1~1.2	1.2~1.4	1.4~1.6

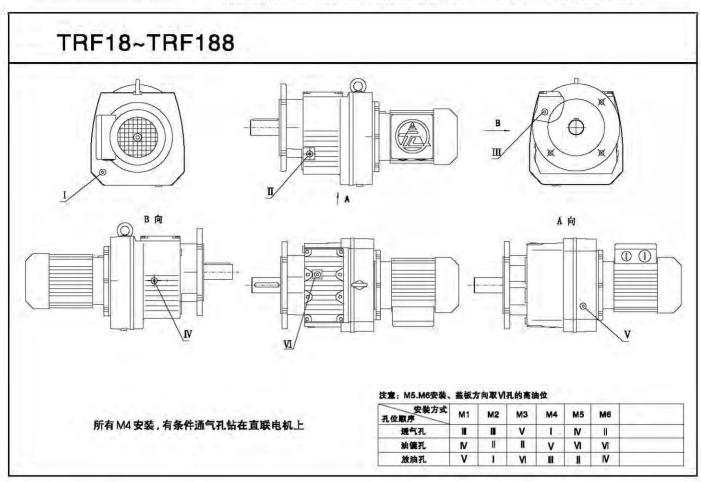
Table 3	Start factor					
f 3 f 1 Starts per hour	1	1.25 -1.75	2- 2.75	≥3		
≤ 5	1	1	10	1		
6-25	1.2	1.12	1.06	1		
26-60	1.3	1.2	1.12	1.06		
61-180	1.5	1.3	1.2	1.12		
>180	1.7	1.5	1.3	1.2		

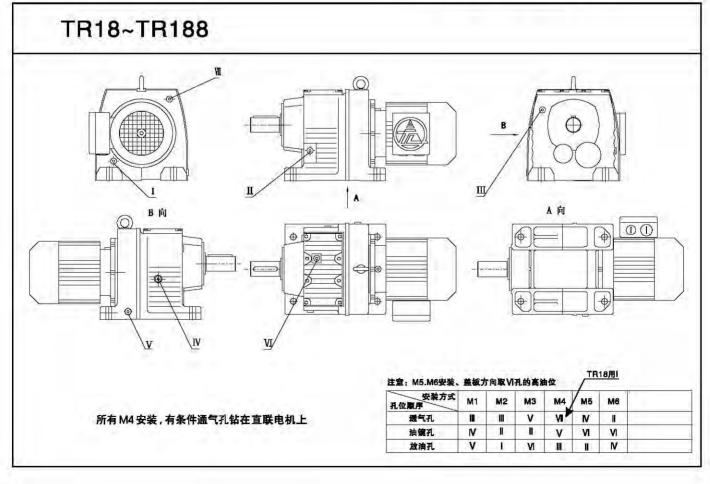






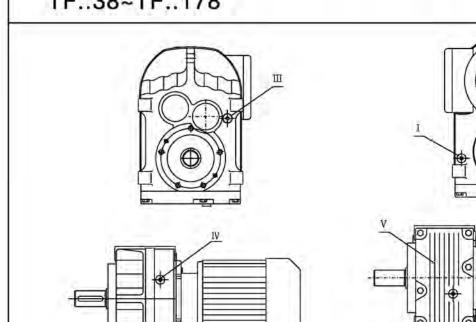






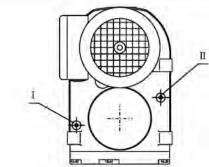


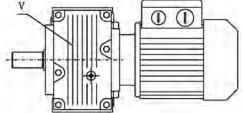
TF..38~TF..178



注:M2安装时盖板方向取高油位,

TF68以下 M5、M6安装时盖板方向取低油位 TF78以上 M5、M6安装时盖板方向取高油位 M1、M3、M4安装时盖板方向按图

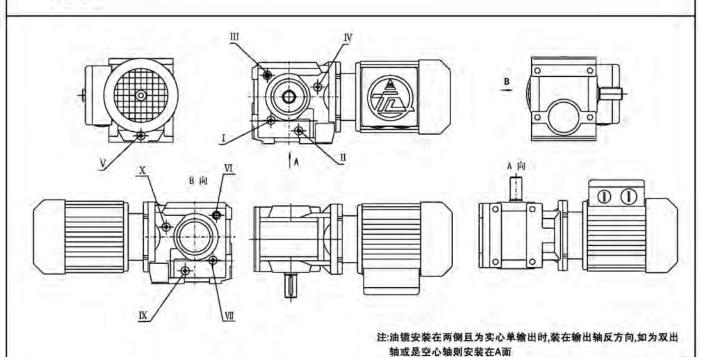




所有 M4 安装, 有条件通气孔钻在直联电机上

安装方式 孔位顺序	M1	M2	мз	M4	M5	M6	
通气孔	IV	111	٧	1	1	1	
油鏡孔	- III -	٧	40	N	٧	V	
放油孔	٧	1.	IV	- 111	1.	11:	

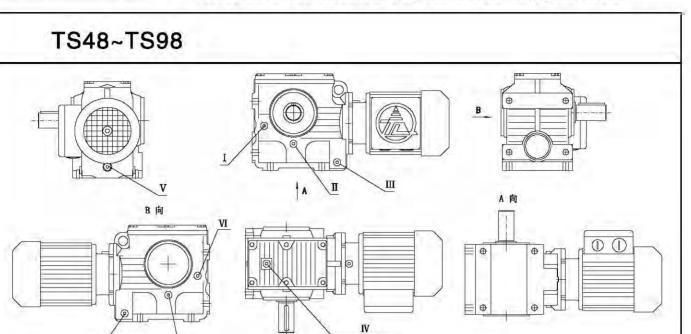
TS38



所有 M4 安装, 有条件通气孔钻在直联电机上

安装方式 孔位顺序	M1	M2	МЗ	M4	M5	M6	
通气孔		- 11	٧	٧	VI	10	
油鏡孔	1/VI	II/IX	I/VI	IV/X	V	٧	
放油孔	V	٧	n i	- H	0	VI	



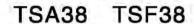


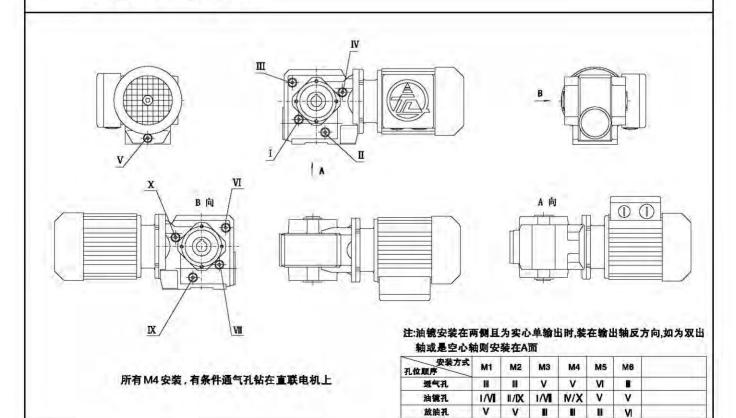
TS48.58 在中间

注意: M2.M5.M6安装、盖板方向取IV孔的高油位 油镀安装在两侧且为实心单锗出时,装在输出轴反方向,如为双出 轴或是空心轴则安装在A面

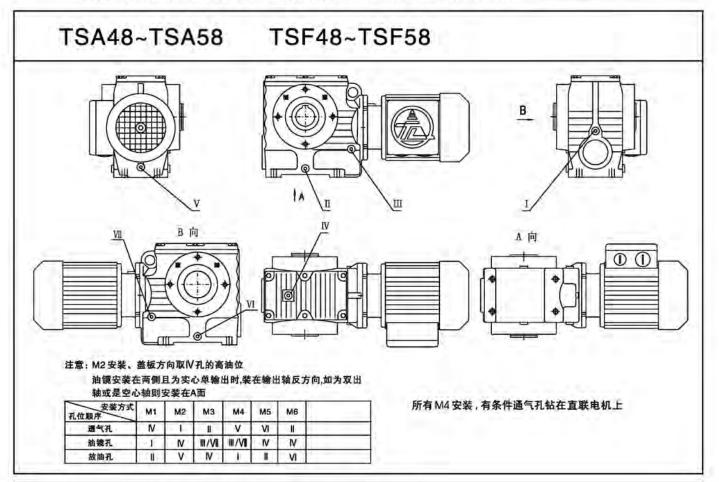
-		7100		12.7		1 1 To	
安裝方式 孔位順序	M1	M2	МЗ	M4	M5	M6	
进气孔	N	1		٧	VI.	1.30	
油鐵孔	I/VI	N	IM	II/IX	IV	IV	
放油孔		٧	IV		. 10	X	

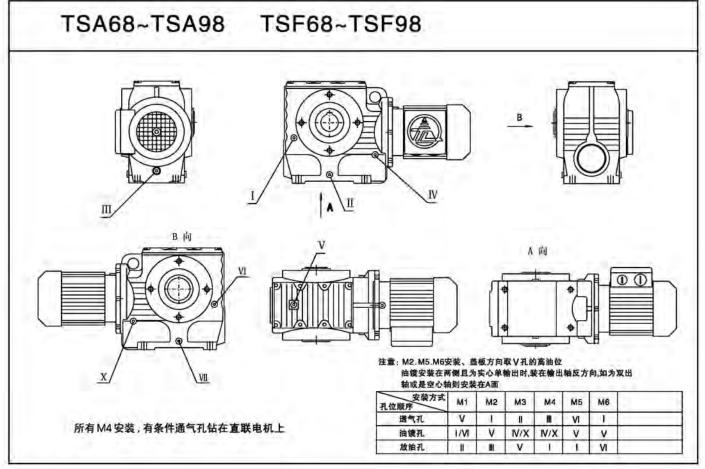
所有 M4 安装, 有条件通气孔钻在直联电机上



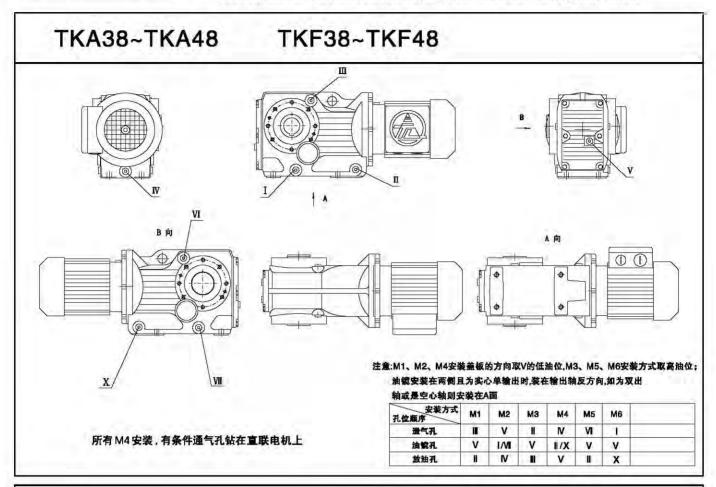


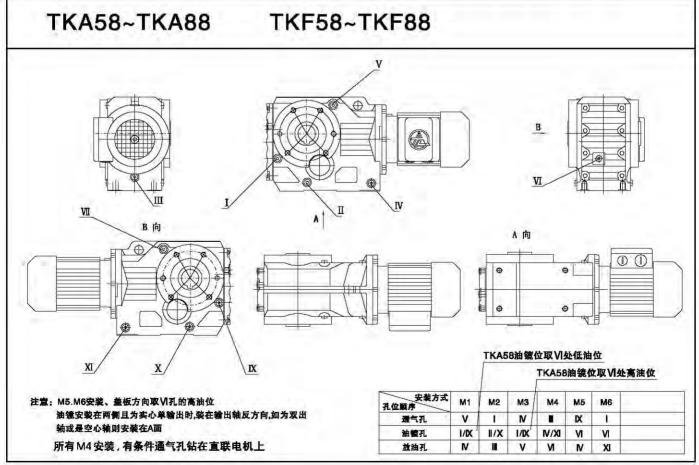






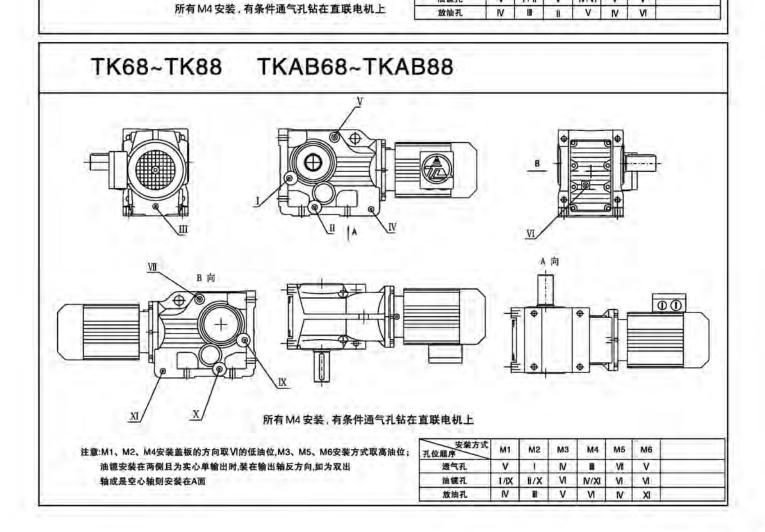




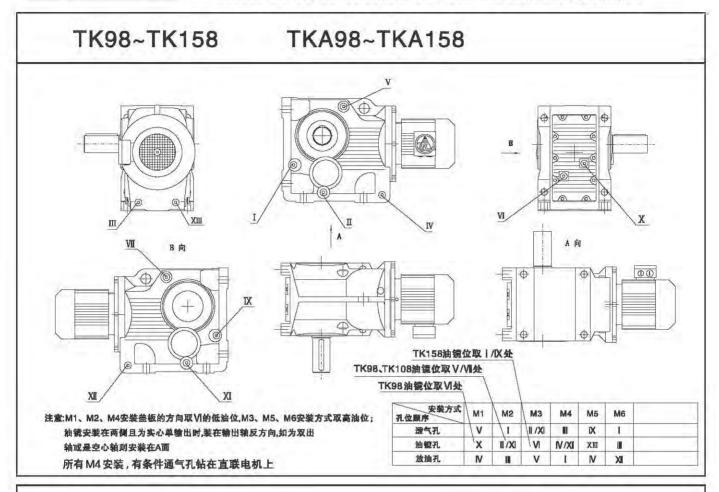


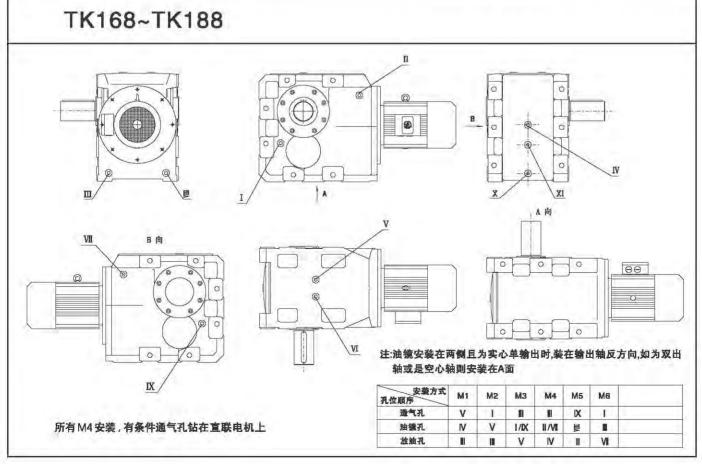


TKAB38~TKAB58 TK38~TK58 注意:M1、M2、M4安装盖板的方向取V的低油位,M3、M5、M6安装方式取高油位; B向 油镜安装在两侧且为实心单输出时,装在输出轴反方向,如为双出 轴或是空心轴则安装在A面 TK48-M6安装时油镜位取VI TK58-M5安装时油镜位取Ⅵ M2 МЗ M5 MB M4 透气孔 ٧ N III) H 1711 ٧ 油鏡孔 V N/VI ٧ ٧









TQ

01

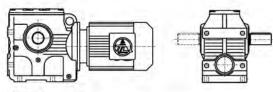
...

TS系列斜齿-蜗轮蜗杆减速机 TS Helical-worm gear units



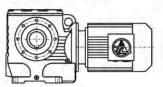
TS系列减速机有以下设计方案:

TS series gear units are available in the following designs:



TS .. Y ...

底脚轴伸式安装斜齿-蜗轮蜗杆减速机 Foot-mounted helical-worm gear units with solid shaft

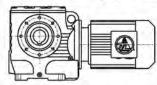




TSA...Y..

空心轴安装斜齿-蜗轮蜗杆减速机

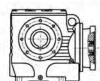
Helical-worm gear units with hollow shaft





TSAZ...Y...

小法兰空心轴安装斜齿-蜗轮蜗杆减速机 Short-flange mounted helical-worm gear units

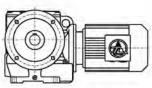


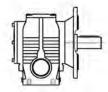
with hollow shaft



TSA(TS、TSF、TSAF、TSAZ)...Y... 电机用户自配或配特殊电机时需加联接法兰

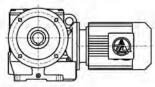
When equipping the user's motor or the special one, the flange is required to be connected





TSF...Y..

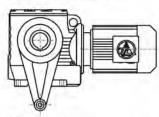
法兰轴伸式安装斜齿-蜗轮蜗杆减速机 Flange-mounted helical-worm gear units with solid shaft

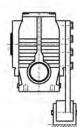




TSAF Y

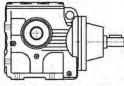
法兰空心轴安装斜齿-蜗轮蜗杆减速机 Flange-mounted helical-worm gear units with hollow shaft

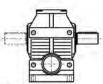




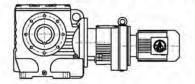
TSAT ... Y ...

带防转臂空心轴安装斜齿-蜗轮蜗杆减速机 Torque-arm-mounted helical-worm gear units with hollow shaft



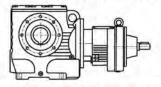


TS (TSF、TSA、TSAF、TSAZ) S... 轴输入的斜齿-蜗轮蜗杆减速机 Shaft input helical-worm gear units





TSA (TS、TSF、TSAF、TSAZ)...TR...Y... 组合式斜齿-蜗轮蜗杆减速机 Combinatorial helical-worm gear units





TSA (TS、TSF、TSAF、TSAZ)...TRS ... 轴输入的组合式斜齿-蜗轮蜗杆减速机 Shaft input combinatorial helical-worm gear units

选型指南 Guidelines for the selection

型号与标记 / Type Designations

TS 48-Y 0.55-4P-32.40-M1-I-A-E-Ф25-G

Gear units type **赌资机选**物 结构形式 Structure 規格 Size Motor code 电机代号 Motor power - pole 电机功率、极数 Ratio 传动比 Mounting position 安装形式 Position of the motor terminal box 电机接线盒位置 输出轴、或法兰方向 Position of output shaft, or flange 鎌麗森方向 The locking disk direction 输出轴孔径 Output shaft aperture 联接法兰 Coupling flange 减速机类型: Gear units type: Helical-worm gear units 斜齿-蜗轮蜗杆减速机 Structure:

结构形式: 普通轴伸式(省略)

轴装式 轴伸法兰式 F 轴装法兰式 AF 轴装小法兰式 AZ 轴装带防转臂 AT 普通轴伸式,轴输入 S 普通轴装式,轴输入 AS

轴伸法兰式,轴输入 FS 轴装法兰式, 轴输入 AFS

Y(Y2)

带锁紧盘式 H..(H, HF, HZ, HT) Flange-mounted hollow shaft output AF Short-flange-mounted hollow shaft output AZ Torque-arm-mounted hollow shaft output AT Foot-mounted solid shaft output, shaft input S Hollow shaft output, shaft input AS Flange-mounted solid shaft output, shaft input

(-)

A

F

Foot-mounted solid shaft output

Flange-mounted solid shaft output

TS 48-Y 0.55-4P-32.40-M1-I-A -E -Ф25 -G

Flange-mounted hollow shaft output, shaft input AFS Hollow shaft output with shrink disk H..(H, HF, HZ, HT)

Y(Y2)

В

Z

E

D

٧

F

VE

G

ZP

规格:

(见选型参数表)

Size:

Motor code:

Brake

(see selection table)

Ordinary(renew)

Variable frequency

Ampere -increased

Hoisting in metallurgy

Variable frequency and brake

Electromagnetism speed modulation C

Flame-proof

Multi-speed

Power-divided

Direct current

Hollow shaft output

电机代号:

防 B Z 动 E D 速 V F 分 马 カ A

R

٧E 自配电机

> Motor power, pole: (see selection table)

Roller tables

With built-in motor

(见选型参数表)

传动比: (见选型参数表) Ratio:

(see selection table)

安装形式:

M1、M2、M3、M4、M5、M6 (见第TS-03页)

Mounting position:

M1 . M2 . M3 . M4 . M5 . M6(see page TS-03)

电机接线盒位置:

电机功率、极数:

I、II、III、IV、V、VI、VII、VII(见第TS-03页)

Position of the motor terminal box:

I . II . III . IV . V . VI . VII (see pageTS-03)

Position of output shaft or flange (The locking disk):

viewing on motor end:left side -A,

right side-B, both sides-A+B(see

输出轴或法兰方向(锁紧盘):

从电机尾部看左边为 A (E)

从电机尾部看右边为 B(F) (见安装形式) 从电机尾部看左右边为 A+B

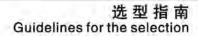
mounting position)

输出轴孔径:

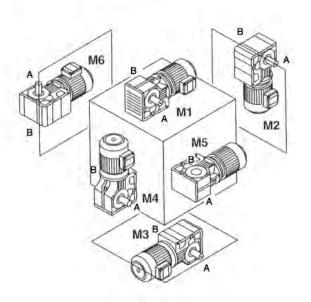
(见安装尺寸图)带实心轴输出时省略 联接法兰: 配标准电机时用, 直联电机省略 Output shaft aperture:

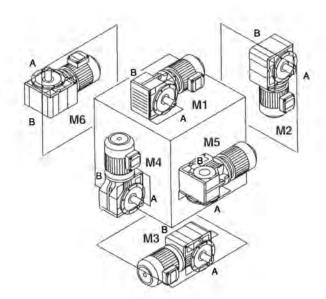
(see the chart of mouting dimension) It will be omitted when solid output shaft

03

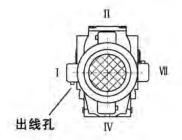


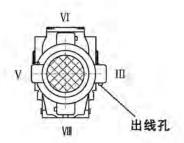
安装形式 Mounting position





电机接线盒位置 (M1安装时, 从电机尾部看) Position of the motor terminal box





输入功率及最大转矩:

Input power rating and maximum torque

规格 Size	38	48	58	68	78	88	98
结构形式 Structure		TS	TSA TSF	TSAF TS	AT TSAZ		
输入功率(kW) Input power rating	0.18~0.75	0.18~1.5	0.18~3	0.25~5.5	0.55~7.5	0.75~15	1.5~22
传动比 Ratio	10.27~152	11.46~244.74	10.78~196.21	11.55~227.20	9.96~241.09	11.83~222	12.75~230.48
最大转矩*(N.m) Maximum torque		170	295	520	1270	2280	4000

^{*)} 最大转矩系指该规格不同传动比对应的最大转矩中的最大值.

^{*)} Maximum torque means the biggest one of the maximum torque related to the different ratio for the specified size.

选型指南 Guidelines for the selection

减速机重量

Gear unit weight

规格 Size	38	48	58	68	78	88	98
重量 (kg) Weight	9.5	15.5	16	33.5	53	100	170

所注重量为平均值, 仅供参考

The weights are mean values, only for reference.

润滑油量表

Lubrication table

TS ...:

润滑油量(升) 规格 M1 M2 M3 1) M5 M6 **TS38** 0.5 0.6 0.6 0.8 0.6 0.6 **TS48** 0.6 1.1 1.1 1.1 0.9 0.9 **TS58** 1 1.3 1.3 1.6 1.3 1.3 **TS68** 1.7 3 2.7/3.3 2.8 2.6 2.6 **TS78** 3.2 4.8 4.8 6.2 4.8 4.8 **TS88** 7.1 10 10 11.6 10 10 **TS98** 13.2 18.4 17.6/21.5 22.8 17.6 17.6

TSF...:

+同 +&	润滑油量(升)										
规格	M1	M2	M3 ^{1)}	M4	M5	M6					
TS38	0.5	0.6	0.6	0.8	0.6	0.6					
TS48	0.6	1.1	1.1	1.1	0.9	0.9					
TS58	1	1.3	1.3	1.6	1.3	1.3					
TS68	1.7	3	2.7/3.3	2.8	2.6	2.6					
TS78	3.2	4.8	4.8	6.2	4.8	4.8					
TS88	7.1	10	10	11.6	10	10					
TS98	13.2	18.4	17.6/21.5	22.8	17.6	17.6					

TSA..., TSAF..., TSAZ...:

461 446	润滑油量(升)										
规格	M1	M2	M3 ^{1)}	M4	M5	М6					
TS38	0.5	0.6	0.6	0.8	0.6	0.6					
TS48	0.7	1.1	1.2	1.2	0.9	0.9					
TS58	11	1.3	1.3	1.6	1.4	1.4					
TS68	1.7	3	2.7/3.3	2.8	2.6	2.6					
TS78	3.2	4.8	4.8	6.2	4.8	4.8					
TS88	7.1	10	10	11.6	10	10					
TS98	13.2	18.5	17.8/22.2	22.8	17.6	17.6					

注:1) 表示减速机为组合型时低速级所加油量为大值。

Notes: 1) The large gear unit of multi-stage gear units must be filled with the larger oil volume.

TS

05

TS

LEL	TTAL	-	40.2	-	
17	型	炁	25(1	未	
726	王	3	333	AX.	
0-1	2.44		T-	414	
Sel	ect	ıon	Ιa	DIE:	

物出转速 Output	输出扭矩 Output	传动比	服务系数		极数	输出转速 Output	输出扭矩 Output		服务系数	机型号	极
speed	torque	Ratio	Service factor	Туре	Pole	speed	torque	Ratio	Service factor	Type	Pol
r/min	Nm	- 1	f _B	Туре	р	r/min	Nm	į.	f _e	Туре	p
0.18k	W				7.11	0.18k	W				
0.40	2838	3483	0.76			15	67	90.00	2.19	TO 10	- 5
0.47	2385	2928	0.90	TS 88TR58		18	57	76.88	2.78	TS 48 TSF 48	2
0.59	1688	2369	1.28	TSF 88TR58		19	53	72.00	2.77	TSA 48	- 2
0.67	1481	2078	1.46	TSA 88TR58		20	59	68.63	2.65	TSAF48	- 2
0.75	1320 1350	1852 1657	1.64	TSAF88TR58	4	23	45	60.65	3.27		
						11	96	129.41	0.89		
0.98	1174	1412	1.00		100	12	83	111.58	1.00		
1.1	1018	1224	1.15	and the same lands	1.00	13	77	104.00	1.07		
1.3	782	1098	1.50	TS 78TR38		15 16	67 63	90.91 85.22	1.21		
1.5	796 698	957 840	1.47 1.68	TSF 78TR38 TSA 78TR38		18	56	75.20	1.42		
1.7	591	711	1.99	TSAF78TR38		21	49	66.67	1.58		
2.2	533	641	2.21	. Orti / Ortioo		25	42	56.67	1.83		
2.4	479	576	2.45		7.41	26	39	52.80	1.94		
						27	45	52.00	1.71		
1.9	595	716	0.83			31	39	45.45	1.97	23.75	
2.3	512	616	0.96	TS 68TR38		33	37	42.61	2.02	TS 38	
2.6	450	541	1.09	TSF 68TR38		37	33	37.60	2.24	TSF 38	70
3.0	333	467	1.48	TSA 68TR38		42	29	33.33	2.48	TSA 38	15
3.3	301	423	1.64	TSAF68TR38	4	49	25	28.33	2.85	TSAF38	
3.8	305	367	1.61		2 11	53	23	26.40	3.05		
3.2	307	431	0.91			59	23	23.46	3.01		
3.6	324	390	0.86			69	20	20.22	2.47		
4.2	276	332	1.01	TS 58TR18	4	74	19	18.85	3.55		
4.8	239	288	1.17	TSF 58TR18		84	16	16.48	3.08		
5.2	191	268	1.46	TSA 58TR18		90	15	15.45	3.16		
6.0	192	231	1.45	TSAF58TR18	4	102	13	13.63	3.58		
6.9	168	202	1.66		0.00	115	12	12.08	3.80		
7.4	157	189	1.78			135	10	10.27	4.56		
4.7	210	295	0.76	TS 48TR18	4	145	9	9.57	4.96		
5.4	213	256	0.75	TSF 48TR18							
6.1	190	229	0.85	TSA 48TR18	4	0.25k	W				
6.8	169	203	0.95	TSAF48TR18	4	O.BOIL					
3.7	230	227.20	2.14	TS 68	6	0.59	2345	2369	0.92		
4.1	207	205.11	2.38	TSF 68	6	0.67	2057	2078	1.05	TS 88TR5	8 .
4.7	182	180.46	2.71	TSA 68	6	0.75	1833	1852	1.18	TSF 88TR5	
5.0	172	170.40	2.87	TSAF68	6	0.84	1875	1657	1.15	TSA 88TR5	В
4.3	238	196.21	1.17	TS 58	6	1.1	1308	1322	1.65	TSAF88TR5	8
4.7	219	180.40	1.27	TSF 58	6	1.4	1011	1022	2.14		
5.5	187	154.35	1.49	TSA 58	6			957			
6.4	162	133.79	1.72	TSAF58	6	1.5	1105		1.06	IL STAIT	
						1.7	970	840	1.21	TS 78TR3	
7.1	146 134	196.21	1.91	TS 58	4	2	821	711	1,43	TSF 78TR3	
9.0	115	154.35	2.09	TSF 58 TSA 58	4	2.2	740	641	1.59	TSAF78TR3	
10	99	133.79	2.83	TSAF58	4	2.4	665	576	1.77	I OUL LO I US	
						2.8	583	505	2.02		
5.1	170	168.00	0.93	TS 48	6	2.6	625	541	0.79		
5.7	152	150.00	1.05	TSF 48	6	3	462	467	1.06	TS 68TR3	
5.8	178	146.84	0.89	TSA 48	6	3.3	419	423	1.17	TSF 68TR3	
6.2 7.2	167 144	137.25 118.64	1.10	TSAF48	6	3.8	424	367	1.16	TSA 68TR3	
		-CVAP - 3.1				4.4	316	319	1,56	TSAF68TR3	8
5.7	151	244.74	1.06			4.9	324	281	1.52		
6.1	141	228.75	1.14			4.8	333	288	0.84		
7.0	122	197,73	1.32	TS 48	4	5.2	265	268	1.05		
8.3	104	168.00	1.53	TSF 48	4	6	267	231	1.04	TS 58TR1	8
9.3		150.00	1.71	TSA 48	4	6.9	233	202		TSF 58TR18	3
9.5	109	146.84	1.46	TSAF48	4				1.20	TSA 58TR18	
10	102	137.25	1.56			7.4	218	189	1.28	TSAF58TR18	3 '
12	88	118.64	1.80			8.3	193	167	1.45		
14	75	100.80	2.11			10	155	134	1.80		



选型参数表 Selection Table

输出转速	输出扭矩	传动比	服务系数	机型号	极数	输出转速	输出扭矩	传动比	服务系数	机型号	极数						
Output speed	Output torque	Ratio	Service factor	Туре	Pole	Output speed	Output torque	Ratio	Service factor	Туре	Pole						
r/min	Nm	I	f _B	Туре	р	r/min	Nm	i	f _B	Туре	р						
0.25k	w					0.25k	W										
2.8	420	227.20	1.17	Do No	1.3	53	32	26.40	2.19								
3.1	380	205.11	1.30	TS 68	8 8 8 8	59	32	23.46	2.16								
3.6	334	180.46	1.47	TSF 68	8	69	28	20.22	1.76								
3.8	315	170.40	1.56	TSA 68 TSAF68	8	74	26	18.85	2.59	TS 38	4						
4.5	320	144.00	1.54	I SAI 00		84	23	16.48	2.14	TSF 38	4						
3.7	319	227.20	1.54	- 67 - etc 1	4.5	90	21	15.45	2.26	TSA 38	4						
4.1	288	205.11	1.71	TS 68	6	102	19	13.63	2.45	TSAF38	4						
4.7	253	180.46	1.95	TSF 68	6	115	17	12.08	2.68								
5	239	170.40	2.06	TSA 68	6	135	14	10.27	3.25								
5.9	243	144.00	2.03	TSAF68	6	145	13	9.57	3.43								
6.1	195	227.20	2.53			0.37k	w										
6.8	176	205.11	2.80					5000	(0.4.5)								
7.7	155	180.46	3.18	TS 68	4	0.75	2713	1852	0.79	TS 88TR5	8 4						
8.2	146	170.40	3.38	TSF 68	4	0.84	2775	1657	0.78	TSF 88TR5							
9.7	148	144.00	3.33	TSA 68	4	1.1	1936	1322	1.11	TSA 88TR5	8 4						
11	134	130.00	3.68	TSAF68	4	1.4	1497	1022	1.44	TSAF88TR5	8 4						
12	118	114.38	4.18			1.6	1456	852	1.48								
13	111	108.00	4.45			2	1215	711	0.96								
4.3	331	196.21	0.84	7.7		2.2	1095	641	1.07	TS 78TR3							
4.7	304	180.40	0.92	TS 58	6	2.4	984	576	1.19	TSF 78TR3							
5.5	260	154.35	1.07	TSA 58	6	2.8	863	505	1.36	TSA 78TR3							
6.4	225	133.79	1.24		6	3.2	630	430	1.86	TSAF78TR3	18 4						
6.8	211	125.05	1.32	TSAF58	6	3.6	568	388	2.07								
7.1	202	196.21	1.38			3.8	627	367	0.78	TS 68TR3							
7.7	186	180.40	1.50			4.4	467	319	1.05	TSF 68TR3							
9	159	154.35	1.76	TS 58	4	4.9	480	281	1.02	TSA 68TR3							
10	138	133.79	2.03	TSF 58	4	5.6	422	247	1.17	TSAF68TR3	18 4						
11	129	125.05	2.17	TSA 58	4	2	870	329.81	2.48								
13	111	108.09	2.52		TSAF58							4	2.3	771	292.50	2.80	
15	95	91.84	2.95			2.3	839	289.22	2.58	TS 88	8						
17	84	82.00	3.33			2.6	744	256.50	2.88	TSF 88	8						
						2.7	648	245.87	3.23	TSA 88	8						
7	170	197.73	0.95			3.1	625	215.61	3.26	TSAF88	8						
8.3	144	168.00	1.10			3.4	626	198.00	3.18								
9.3	129	150.00	1.23			4	527	166.43	3.71								
9.5	151	146.84	1.05				700	044.00	4.50								
10	141	137.25	1.13			2.8	763	241.09		TS 78	8						
12	122	118.64	1.30	TS 48	4	3.3 3.5	652 598	206.04 188.89		TSF 78	8						
14	104	100.80	1.52	TSF 48	4	4	524	165.75		TSA 78	8						
15	93 79	90.00	1.58	TSA 48	4	4.3	497	157.08		TSAF78	8						
18 19	79	76.88 72.00	2.00 1.98	TSAF48	4		Jun A										
20	83	68.63	1.88			3.9	454	227.20		TS 68	6						
23	62	60.65	2.37			4.3	409	205.11	1.20	TSF 68	6						
23	71	59.32	2.07			4.9	360	180.46	1.37	TSA 68	6						
28	61	50.40	2.41			5.2	340	170.40		TSAF68	6						
31	54	45.00	2.72			6.1	345	144.00	1.43	Now, test and							
		73.77				6.1	289	227.20	1.70								
15 16	94 88	90.91 85.22	0.86 0.91			6.8	261	205.11	1.89	TS 68	4						
18	77	75.20	1.03		Δ.	7.7	229	180.46		TSF 68	4						
21	69	66.67	1.12			8.2	217	170.40		TSA 68	4						
25	58	56.67	1.32	TO 00		9.7	220	144.00		TSAF68	4						
26	54	52.80	1.40	TS 38	4	-11	198	130.00									
27	63	52.00	1.22	TSF 38 TSA 38	4	12	174	114.38	2.83								
31	55	45.45	1.39	TSAF38	4	6.6	320	133.79	0.87								
	51	42.61	1.47	02130	16.50	7.1	300	125.05		TS 58	6						
33					7 8					TSF 58	6						
33 37	45	37.60	7 64						H 9	254	1000	4334					
33 37 42	45 40	37.60 33.33	1.64 1.80			8.2 9.6	259 220	108.09 91.84	1.08 1.27	TSA 58 TSAF58	6						

TS

TS



选型	参	数	表
Select	ion	Ta	ble

	輸出扭矩	传功比	服务系数		极数		输出扭矩	传动比		机型号	极
Output	Output torque	Ratio	Service factor	Туре	Pole	Output speed	Output torque	Ratio	Service factor	Type	Pol
r/min	Nm	t	·f _B	Туре	р	r/min	Nm -	4	f _B	Туре	p
0.37k	W					0.55k	W				
7.1	299	196.21	0.93			2.8	1283	505	0.91		
7.7	275	180.40	1.01			3.2	936	430	1.25	TS 78TR38	3 4
9	235	154.35	1.19		0.0	3.6	845	388	1.39	TSF 78TR38	
10	204	133.79	1.37			4.3	712	327	1.65	TSA 78TR38	
11	191	125.05	1.46	TS 58	4	4.8	631	290	1.86	TSAF78TR38	3 4
13	165	108.09		TSF 58	4	5.7	625	246	1.88		
15	140	91.84	2.00	TSA 58	4	5.6	627	247	0.78	TS 68TR38	4
17	125	82.00	2.24	TSAF58	4	6.3	564	222	0.87	TSF 68TR38	
20	107	70.04	2.57			7	505	199	0.97	TSA 68TR38	3 4
21	119	66.89	1.95			8.2	429	169	1.15	TSAF68TR38	3 4
21	100	65.60	2.70			2	1293	329.81	1.67		
22	111	62.53	2.09			2.3	1146	292.50			
12	181	118.64	0.87			2.3	1247	289.22		TC 00	
14	154	100.80	1.03			2.6	1106	256.50		TS 88 TSF 88	8
15	137	90.00	1.07			2.7	964	245.87		TSA 88	8
18	117	76.88	1.35			3.1	930	215.61	2.19	TSAF88	8
19	110	72.00	1.33			3.4	931	198.00		(0/1/00	
20	122	68.63	1.28			4	783	166.43			
23	92	60.65	1.60			2.7	979	329.81	2.21		
23	106	59.32	1.38	TS 48	4	3	868	292.50			
28	90	50.40	1.63	TSF 48	4	3.1	944	289.22			
31	80	45.00	1.84	TSA 48	4	3.5	837	256.50		TS 88	6
36	68	38.44	2.16	TSAF48	4	3.6	730	245.87	2.87	TSF 88 TSA 88	6
39	64	36.00	2.30	1000		4.1	704	215.61	2.90	TSAF88	6
46	54	30.33	2.72			4.5	705	198.00		TOAL OU	
50	56	27.74	2.57			5.3	593	166.43			
54	53	25.93	1.97		1						
62	46	22.41	2.97			3.3	969	206.04	1.24	TS 78	8
73	39	19.04	2.67			3.5	888	188.89	1.35	TSF 78	8
82	35	17.00	2.98			4.3	780 739	165.75 157.08	1.54	TSA 78 TSAF78	8
25	86	-	0.89				1817-15.3			10AF70	
26	81	56.67	0.93			3.7	858	241.09	1.40	TS 78	6
27		52.80				4.3	734	206.04		TSF 78	6
31	93 81	52.00 45.45	0.82			4.7	673 590	188.89	1.79	TSA 78	6
						5.3		165.75		TSAF78	6
33	76 67	42.61 37.60	0.98		-	5.6	559	157.08	2.14	TC 70	-
37 42	59	33.33	1.10			5.8	547	241.09		TS 78 TSF 78	4
49	50	28.33	1.42	22. 23.		6.7	467	206.04		TSA 78	4
53	47	26.40	1.49	TS 38	4	7.4	428	188.89	2.81	TSAF78	4
59	48	23.46	1.49	TSF 38	4	6.1	429	227.20	1,15		
69	41	20.22	1.20	TSA 38 TSAF38	4	6.8	387	205.11	1.27		
74	38	18.85	1.77	ISAFSE	4	7.7	341	180.46			
84	34	16.48	1.45			8.2	322	170.40			
90	31	15.45	1.53			9.7	326	144.00		TS 68	4
102	28	13.63	1.66			11	295	130.00	1.67	TSF 68	- 4
115	25	12.08	1.82			12	259	114.38		TSA 68	4
135	21	10.27	2.17			13	245	108.00		TSAF68	- 4
145	19	9.57	2.17			15	208	91.96	2.37		
143	1.9	9.5/	2.35			17	189	83.57	2.61		
المتات الم						19	164	72.39	2.78		
0.55k	W					21	172	65.00	2.87		
			3.20			9.6	327	91.84	0.85		
1.1	2878	1322	0.75			11	292	82.00	0.95		
1.2	2567	1179	0.84			12.5	249	70.04	1.10		
1.4	2225	1022	0.97	TS 88TR58	3 4	13	278	66.89	0.83	TS 58	6
1.5	2288	919	0.94	TSF 88TR58	3 4	13.5	234	65.60	1.15	TSF 58	6
1.6	2164	852	1.00	TSA 88TR58	3 4	14	260	62.53	0.89	TSA 58	6
1.9	1552	713	1.39	TSAF88TR58		16	225	54.05	1.11	TSAF58	. 6
2.3	1322	607	1.63			19	191	45.92	1.21		
2.5	1202	552	1.80			22 25	170	41.00 35.02	1.36		
3.2	4400	433	1.96				145	05 00	4 00		

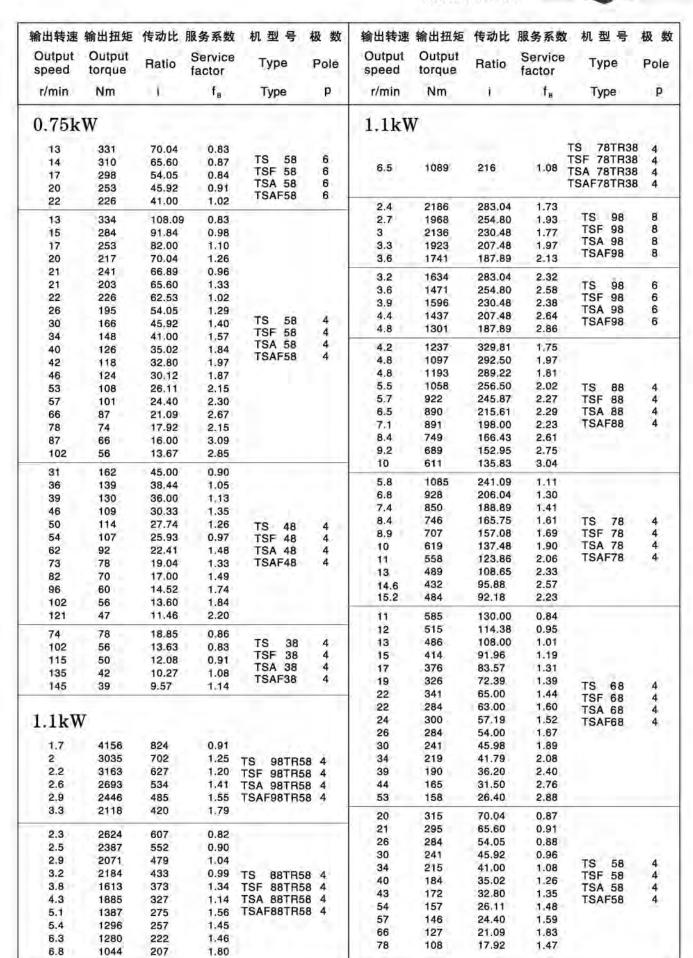


选型参数表 Selection Table

Output speed r/min	Output torque	Ratio	Service	Туре	Pole	Output	Output	Ratio	Service	Туре															
r/min			factor	73.6-	1 010	speed	torque	natio	factor	Type	Pol														
	Nm	ı	fB	Туре	р	r/min	Nm	i	f _B	Туре	р														
0.55k	w					0.75k	W																		
9	350	154.35	0.80			1.9	2117	713	1.02																
10	303	133.79	0.92			2.3	1802	607	1.20	TS 88TF															
11	283	125.05	0.99			2.5	1639	552	1.32	TSF 88TF															
13	245	108.09	1.14			3.2	1500	433	1.44	TSA 88TF															
15	208	91.84	1.34			4.3	1294	327	1.67	TSAF88TF	158														
17	186	82.00	1.50		- 15				1.07																
20	159	70.04	1.73			4.3	971	327	1.21	TS 78TF	138														
21	177	66.89	1.31	Cal Pet	222	4.8	861	290	1.36	TSF 78TF															
21	149	65.60	1.81	TS 58	4	5.7	852	246	1.38	TSA 78TF															
22	165	62.53	1.41	TSF 58	4	6.4	748	216	1.57	TSAF78TF	138														
26	143	54.05	1.76	TSA 58	4		4400	200.04	n ee																
30	121	45.92	1.92	TSAF58	4	2.4	1490	283.04	2.55	TS 98	8														
34	108	41.00	2.15			2.7	1342	254.80	2.83	TSF 98	8														
40	93	35.02	2.50			3	1456	230.48	2.60	TSA 98	8														
42	87	32.80	2.67			3.3	1311	207.48	2.89	TSAF98	8														
46	91	30.12	2.55			3.6	1187	187.89	3.13	.4-30 22															
53	79	26.11	2.94		1	2.8	1298	329.81	1.66																
57	74	24.40	3.14			3.1	1151	292.50	1.88																
66	64	21.09	3.63				1252	289.22	1.73	-535 - 345															
					-	3.1				TS 88	6														
18	174	76.88	0.91			3.5	1110	256.50	1.93	TSF 88	6														
19	163	72.00	0.90			3.7	968	245.87	2.16	TSA 88	6														
20	182	68.63	0.86			4.2	933	215.61	2.18	TSAF88	6														
23	137	60.65	1.07			4.6	935	198.00	2.13																
23	157	59.32	0.93			5.5	786	166.43	2.48																
28	133	50.40	1.10			4.2	850	329.81	2.54																
31	119	45.00	1.23																						
36	102	38.44		TS 48	4	4.8	754	292.50	2.87																
39	95	36.00		TSF 48	4	4.8	820	289.22	2.64	TS 88	4														
46	80	30.33	1.55 1.84 1.71 1.33 2.01	1.84	1.55 1.84	1.55 1.84 1.71 1.33		1.55									1.84 1.71	TSA 48	4	5.4	727	256.50	2.95	TSF 88	4
50	84	27.74					TSAF48	4	5.7	633	245.87	3.31	TSA 88	4											
54	78	25.93		TOATTO		6.4	611	215.61	3.34	TSAF88	4														
62	68	22.41																		7	612	198.00	3.25		
73	58	19.04	1.80										8.4	515	166.43	3.80									
82	51								5.4		1200100		A. T. Anna T.												
		17.00	2.04					3.8	1138	241.09	1.06	TS 78	6												
96	44	14.52	2.37							4.4	973	206.04	1.23	TSF 78	6										
102	41	13.60	2.52					4.8	892	188.89	1.35	TSA 78	6												
121	35	11.46	2.95			5.5	783	165.75	1.54	TSAF78	6														
42	88	33.33	0.82			5.8	745	241.09	1.61																
49	75	28.33	0.95				637																		
53	70	26.40	1.00			6.7		206.04	1.89		1.0														
59	71	23.46	0.97			7.4	584	188.89	2.06	TS 78	4														
69	61	20.22	0.80	70		8.4	512	165.75	2.35	TSF 78	4														
74	57	18.85	1.18	TS 38	4	8.8	486	157.08	2.46	TSA 78	4														
84	50	16.48	0.98	TSF 38 TSA 38	4	10	425	137.48	2.77	TSAF78	4														
90	47	15.45	1.01	TSAF38	4	31	383	123.86	3.00																
				DATO	100	13	336	108.65	3.39																
102	41	13.63	1.13		1.1	6.8	528	205.11	0.93																
115	37	12.08	1.23			7.7	465	180.46	1.06																
135	31	10.27	1.47			8.2	439																		
145	29	9.57	1.53					170.40	1.12																
2 223						9.7	445	144.00	1.11																
0.75k	W					11	402	130.00	1.22																
						12	354	114.38	1.39	TS 68	4														
1.1	4264	1231	0.89			13	334	108.00	1.47	TSF 68	4														
1.3	3713	1072	1.02			15	284	91.96	1.73	TSA 68	4														
1.5	3266	943	1.16	TS 98TR5	8 4	17	258	83.57	1.91	TSAF68	4														
1.7	2854	824	1.33	TSF 98TR5	8 4	19	224	72.39	2.03																
	2084	702	1.82			21	234	65.00	2.11																
2				TSA 98TR58 4																					
2.2	2172	627	7.74		4 TSAF98TR58	74 TSAF98TR58 4	8 4	24	206	3/.19	2.21														
2 2.2 2.6	2172 1850	627 534	1.74 2.05	ISAF98THS	8 4	24 26	206 195	57.19 54.00	2.21 2.43																

TS

选型参数表 Selection Table





选型参数表 Selection Table

输出转速	输出扭矩	传动比	服务系数	机型号	极数	输出转速	输出扭矩	传动比	服务系数	机型号	极数
Output speed	Output torque	Ratio	Service factor	Туре	Pole	Output speed	Output torque	Ratio	Service factor	Туре	Pole
r/min	Nm	į	f	Туре	р	r/min	Nm	ì	f	Туре	P
1.1kV	V					1.5kW	7				
88	96	16.00	2.12	TS 58	4	7.1	1215	198.00	1.64		
102	82	13.67	1.94	TSF 58	4	8.4	1022	166.43	1.91	TO 00	
109	77	12.80	2.07	TSA 58	4	9.2	939	152.95	2.02	TS 88 TSF 88	4
130	65	10.78	2.47	TSAF58	4	10	834	135.83	2.23	TSA 88	4
46	159	30.33	0.92			12	745	121.44	1.92	TSAF88	4
50	167	27.74	0.86			13	670	109.19	2.66	IGALOD	- 3
62	135	22.41	1.01	TS 48	4	15	582	94.77	2.61		
74	114	19.04	0.91	TSF 48	4	7.4	1160	188.89	1.04		
82	102	17.00	1.02	TSA 48	4	8.4	1017	165.75	1.18		
96	87	14.52	1.20	TSAF48	4	8.9	964	157.08	1.24		
103	82	13.60	1.26	10711-10		10	844	137.48	1.39		
122	69	11.46	1.50			11	760	123.86	1.51		
ILL	05	(1,40	1.50			13	667	108.65	1.70		
عدا دد اد						14.6	589	95.88	1.88	TO 70	
1.5k V	V					15.2	660	92.18	1.64	TS 78	4
						16				TSF 78	4
2	4139	702	0.91			18	522	85.00	2.00	TSA 78	4
2.2	4313	627	0.88	TO OUTDE	6 4	19	564	78.78	1.80	TSAF78	4
2.6	3673	534	1.03	TS 98TR5		22	517	72.22	2.02		
2.9	3336	485	1.13	TSA 98TR5			454	63.38	2.30		
3.3	2889	420	1.31	TSAF98TR5		23	430	60.06	2.29		
3.8	2559	372	1.48	ISAFSOINS	0 4	27	376	52.57	2.77		
4.3	2215	322	1.71			30	339	47.36	2.77		
2.9	2824	479	0.76			34	297	41.54	3.51		
3.8		373	0.76		200	17	513	83.57	0.96		
	2199			TS 88TR5		19	444	72.39	1.02		
4.3	2570	327	0.84	TSF 88TR5	8 4	21.5	466	65.00	1.06		
5.1	1891	275	1.14	TSA 88TR5		22.2	387	63.00	1.17		
5.4	1768	257	1.06	TSAF88TR5	8 4	24	410	57.19	1.11		
6.3	1745	222	1.07			26	387	54.00	1.22		
6.8	1424	207	1.32			30	329	45.98	1.38		
2.4	2938	283.04	1.29			34	299	41.79	1.52	TS 68	4
2.7	2645	254.80	1.43	TS 98	8	39	259	36.20	1.76	TSF 68	4
3	2871	230.48	1.32	TSF 98	8	44	226	31.50	2.01	TSA 68	4
3.3	2584	207.48	1.47	TSA 98	8	53	216	26.40	2.11	TSAF68	4
3.7	2340	187.89		TSAF98	В	59	195	23.83	2.33	150, 55	
4.1	2075	166.62		1,500		67	172	20.97	2.65		
2.0	2203	000.04	4.70			71	162	19.80	1.99		
3.3	1983	283.04 254.80		TO 00	-60	83	138	16.86	3.30		
	2153	230.48		TS 98	6	91	125	15.32	2.58		
4.4	1938	207.48		TSF 98 TSA 98	6 6	106	109	13.27	2.96		
						121	95	11.55	4.25		
4.9 5.5	1755 1556	187.89 166.62		TSAF98	6						
						43	235	32.80	0.99		
4.9	1448	283.04		TC 00	Sec.	54	214	26.11	1.08		
5.5	1303	254.80		TS 98	4	57	200	24.40	1.16	TS 58	4
6.1	1415	230.48		TSF 98	4	66	173	21.09	1.34	TSF 58	4
6.7	1274	207.48		TSA 98 TSAF98	4	78	147	17.92	1.08	TSA 58	4
7.5	1153	187.89	3.22	ISAFBO	77	88	131	16.00	1.55	TSAF58	4
2.8	2567	329.81	0.84			102	112	13.67	1.42		
3.1	2277	292.50				109	105	12.80	1.52		
3.2	2477	289.22				130	88	10.78	1.82		
3.6	2196	256.50		TS 88	6	88	446	44.50	0.07	TS 48	4
3.7	1914	245.87		TSF 88	6	96	119	14.52	0.87	TSF 48	4
4.3	1846	215.61	1.10	TSA 88	6	103	111	13.60	0.93	TSA 48	4
4.6	1850	198.00		TSAF88	6	122	94	11.46	1.10	TSAF48	4
5.5	1555	166.43									79.0
6	1429	152.95				0.01-11	17				
						2.2kV	V				
4.2	1687	329.81	1.28	122	-	2.3	3. 2. 2	Dall I	12.22		
4.8	1496	292.50		TS 88	4	3.4	4177	420	0.90	TS 98TR58	3 4
4.8	1627	289.22		TSF 88	4	3.8	3700	372	1.02	TSF 98TR58	
C C	1443	256.50		TSA 88	4	4.4	3203	322	1.18	TSA 98TR58	
5.5			4 66	TOAFOO		La Partir I	0705	281			
5.7	1258	245.87	1.66	TSAF88	4	5.1	2795	201	1.33	TSAF98TR58	3 4

TS

TS



輸出转速	输出扭矩	传动比	服务系数	机型号	极 数	輸出转速	输出扭矩	传动比	服务系数	机型号	极数
Output speed	Output torque	Ratio	Service factor	Type	Pole	Output speed	Output torque	Ratio	Service factor	Туре	Pole
r/min	Nm	£	f _B	Type	р	r/min	Nm	3	f _B	Type	þ
2.2kV	V					2.2kV	V				T
3.3	3163	283.04	1.20		100	84	200	16.86	2.28	TS 68	4
3.7	2847	254.80	1.33	TS 98	6	93	181	15.32	1.78	TSF 68	4
4.1	3091	230.48	1.22	TSF 98	6	107	157	13.27	2.05	TSA 68	4
4.5	2782	207.48	1.36	TSA 98 TSAF98	6	123	137	11.55	2.94	TSAF68	4
5	2519	187.89	1.47	TOAT 90		89	189	16.00	1.08	TS 58	4
5	2094	283.04	1.81			104	162	13.67	0.98	TSF 58	4
5.6	1885	254.80	2.01			111	151	12.80	1.05	TSA 58	4
6.2	2046	230.48	1.85	32, 162		132	128	10.78	1.25	TSAF58	4
6.8	1842	207.48	2.06	TS 98	4						
7.6	1668	187.89	2.23	TSF 98 TSA 98	4	3kW					
8.5	1479	166.62	2.46	TSAF98	4	OKI					
9.4	1337	150.64	2.65	10/11/00	-,					TS 98TR58	4
11	1133	127.68	3.06		44	.24	0044	004	0.00	TSF 98TR58	
17	863	83.31	3.56			5.1	3811	281	0.99	TSA 98TR58	4
4.3	2440	329.81	0.88							TSAF98TR58	4
4.9	2164	292.50	1.00			5	2855	283.04	1.33		
4.9	2353	289.22	0.92			5.6	2570	254.80			
5.5	2087	256.50	1.02			6.2	2790	230.48			
5.8	1819	245.87	1.15			6.8	2511	207.48		TS 98	4
6.6	1754	215.61	1.16			7.6	2274	187.89		TSF 98	4
7.2	1758	198.00	1.13			8.5	2017	166.62		TSA 98	4
8.5	1477	166.43	1.32	320 00	Ov.	9.4	1823	150.64		TSAF98	4
9.3	1358	152,95	1,39	TS 88	4	11	1545	127.68			
10	1206	135.83	1.54	TSF 88 TSA 88	4	17	1176	83.31	2.61		
12	1078	121.44	1.33	TSAF88	4	8.5	2015	166.43	0.97		
13	969	109.19	1.84	TUATOU	7	9.3	1851	152.95			
15	841	94.77	1.80			10	1644	135.83			
17	753	84.86	2.29			12	1470	121.44			
19	783	75.63	1.94			13	1322	109.19			
20	625	70.40	2.43			15	1147	94.77	1.32		
21	700	67.62	2.30			17	1027	84.86	1,68	TS 88	4
23	630	60.80	2.41		4	19	1068	75.63	1,42	TSF 88	4
27	546	52.77	2.78			20	852	70.40	1.78	TSA 88	4
40	4000	1701	0.00			21	955	67.62	1.69	TSAFBB	4
10	1220	137.48	0.96			23	859	60.80	1.76	0.41.11.24	
11	1099	123.86	1.04			27	745	52.77	2.04		
13	964	108.65				30	667	47.25	2.27		
15	851	95.88	1.30			33	600	42.47	2,53		
15	955 755	92.18 85.00	1.13			36	554	39.20	2.74		
18	816	78.78	1.24			37	617	38.25	2.46		
20	748	72.22	1.39			15	1302	92.18	0.83		
22	656	63.38	1,59	TS 78	4	17	1029	85.00	1.01		
24	622	60.06	1.58	TSF 78	4	18	1113	78.78	0.91		
27	544	52.57	1.92	TSA 78	4	20	1020	72.22	1,02		
30	490	47.36	1.91	TSAF78	4	22	895	63.38	1,16		
34	430	41.54	2.43			24	848	60.06	1,16		
39	380	36.66	2.75			27	742	52.57	1.40		
44	337	32.50	3.10			30	669	47.36	1.40		
51	287	27.75	3.64			34	587	41.54	1.78	TS 78	4
55	267	25.79	3.91			39	518	36.66	2.01	TSF 78	4
62	269	22.75	3.84			44	459	32.50	2.27	TSA 78	4
66	255	21.56	3.91			51	392	27.75	2.66	TSAF78	4
						55	364	25.79	2.87		
31	476	45.98	0.95			62	367	22.75	2.82		
34	433	41.79	1.05			66	348	21.56	2.86		
39	375	36.20	1.21	TS 68	4	75	305	18.87	3.17		
45	326	31.50	1.39	TSF 68	4	84	274	17.00	2.44		
54	312	26.40	1.46	TSA 68	4	95	241	14.91	3.86		
	282	23.83	1,61	TSAF68	4	108	212	13.16	3.15		
60											
60 68 72	248 234	20.97 19.80	1.83			122 143	188	11.67 9.96	4.69 4.15		



选型参数表 Selection Table

輸出转速	输出扭矩	传动比	服务系数	机型号	极数	输出转速	输出扭矩	传动比	服务系数	机型号	极参
Output speed	Output torque	Ratio	Service factor	Туре	Pole	Output speed	Output torque	Ratio	Service factor	Туре	Pole
r/min	Nm	1)	f _B	Туре	p	r/min	Nm	i	f _B	Туре	р
3kW						5.5kV	7				
39	511	36.20	0.89			8.6	3646	166.62	1.00		
45	445	31.50	1.02			9.6	3296	150.64	1.07		
54	426	26.40	1.07			11	2794	127.68	1.24		
60	385	23.83	1.18	TS 68	4	13	2440	111.52	1,36		
68	338	20.97	1.34	TSF 68	4	15	2041	93.27	1,60	TS 98	4
72	320	19.80	1.00	TSA 68	4	17	2127	83.31	1.44	TSF 98	4
84	272	16.86	1.67	TSAF68	4	18	1767	80.75	1.73	TSA 98	4
93	247	15.32	1.30			19	1923	75.32	1.52	TSAF98	4
107	214	13.27	1.50			23	1630	63.84	1.92	1210.25	
123	186	11.55	2.17			26	1424	55.76	1.93		
				TO 50		31	1191	46.64	2.63		
				TS 58	4	36	1031	40.38	3.04		
132	174	10.78	0.92	TSF 58 TSA 58	4				1 00 000		
				TSAF58	4	17	1857	84.86	0.93		
				IOAFOO		20	1541	70.40	0.98		
2 22					4	21	1726	67.62	0.93		
4kW						24	1552	60.80	0.97		
						27	1347	52.77	1.12		
6.2	3668	230.48	1.03			30	1206	47.25	1.26		
6.9	3302	207.48	1.15			34	1084	42.47	1.40		
7.7	2990	187.89	1.24	TS 98		37	1001	39.20	1.51	TS 88	4
8.6	2652	166.62		TS 98 TSF 98	4	38	1116	38.25	1.36	TSF 88	4
9.6	2397	150.64		TSA 98	4	42	870	34.09	1.74	TSA 88	4
11	2032	127.68		TSAF98	4	45	938	32.15	1.62	TSAF88	4
17	1547	83.31	1.98	I DAI 90	7	49	862	29.55	1.76		
19	1399	75.32	2.09			55	766	26.24	1.53		
23	1185	63.84	2.64			61	685	23.46	2.21		
13	1738	109.19	1.02			68	615	21.09	1.91		
15	1508	94.77	1.00			79	534	18.31	2.84		
17	1351	84.86	1.27			88	478	16.39	2.46		
19	1404	75.63	1.08			106	397	13.60	2.96		
20	1120	70.40	1.35			122	345	11.83	3.41		
21	1256	67.62	1.28			35	1061	41.54	0.98		
24	1129	60.80	1.34	TS 88	4	39	936	36.66	1.11		
27	980	52.77	1.55	TSF 88	4	44	830	32.50	1.25		
30	877	47.25	1.73	TSA 88	4	52	708	27.75	1.47		
34	789	42.47	1.92	TSAF88	4	56	658	25.79	1.58	120 120	1.2
37	728	39.20	2.08			63	664	22.75	1.55	TS 78	4
38	812	38.25	1.87			67	629	21.56	1.58	TSF 78	4
45	682	32.15	2.22			76	551	18.87	1.75	TSA 78	4
49	627	29.55	2.42			85	496	17.00	1.35	TSAF78	4
55	557	26.24	2.11			97	435	14.91	2.14		
61	498	23.46	3.05			109	384	13.16	1.74		
24	1115	60.06	0.88		-	123	341	11.67	2.59		
27	976	52.57	1.07			145	291	9.96	2.30		
30	879	47.36	1.06						=:	-600	3
35	771	41.54	1.35			22			1.14	TS 68	4
39	681	36.66	1.53			109	387	13.27	0.83	TSF 68	4
44	603	32.50	1.73			125	337	11.55	1.19	TSA 68	4
52	515	27.75	2.02	TS 78	4			777		TSAF68	4
56	479	25.79	2.18	TSF 78	4	To all the					
63	483	22.75	2.14	TSA 78	4	7.5kV	I				
67	458	21.56	2.17	TSAF78	4						
76	400	18.87	2.42		V 4.5	13	3282	111.52	1.01		
85	361	17.00	1.85			16	2745	93.27	1.19		
97	316	14.91	2.94			18	2861	83.31	1.07		
109	279	13.16	2.40			18	2377	80.75	1.29	TS 98	4
123	248	11.67	3.56			19	2586	75.32	1.13	TSF 98	4
145	211	9.96	3.17			23	2192	63.84	1.43	TSA 98	4
7.7		N. A. W.	74.77	TO 00		26	1915	55.76	1.43	TSAF98	4
85 94	358 325	16.86	1.27	TS 68	4	31	1601	46.64	1.43		
	282	15.32 13.27	0.99 1.14	TSF 68 TSA 68	4	36	1387	40.38	2.26		
100	1011	13.21	1,14	IOA DO	1.00	30					
109 125	245	11.55	1.64	TSAF68	4	40	1428	36.39	2,19		

TS

TS

选型参数表 Selection Table	

输出转速	输出扭矩	传动比	服务系数	机型号	极 数	输出转速	输出扭矩	传动比	服务系数	机型号	极数
Output speed	Output torque	Ratio	Service factor	Type	Pole	Output speed	Output torque	Ratio	Service factor	Туре	Pole
r/min	Nm	1	fe	Type	р	r/min	Nm	f	fa	Туре	р
7.5kV	V					15kW					
45	1286	32.76	2.43			55	2065	26.31	1.51		
49	1164	29.67	2.69	TS 98	4	61	1867	23.79	1,62	TS 98	4
55	1032	26.31	3.03	TSF 98	4	72	1582	20.16	1.80	TSF 98	4
61	934	23.79	3.25	TSA 98	4	83	1382	17.61	1.78	TSA 98	4
72	791	20.16	3.61	TSAF98	4	99	1156	14.73	2.35	TSAF98	4
_		7.5				115	1001	12.75	2.46		
31	1622 1458	47.25	0.93 1.04							S22 121	1.2
						89	1286	16.39	0.91	TS 88	4
37	1346	39.20	1.12			107	1067	13.60	1.10	TSF 88	4
38	1501	38.25	1.01			123	928	11.83	1.26	TSA 88	4
43	1171	34.09	1.29	100		3.87	3.44		40.47	TSAF88	4
45	1262	32.15	1.20	TS 88	4	مالم فعالوا	210-				
49	1160	29.55	1.31	TSF 88	4	18.5k	W				
56	1030	26.24	1.14	TSA 88	4						
62	921	23.46	1.65	TSAF88	4	45	3150	32.76	0.99		
69	828	21.09	1.42			50	2852	29.67	1.09		
80	719	18,31	2.11			56	2529	26.31	1.23	TS 98	4
89	643	16.39	1.83			62	2287	23.79	1.32	TSF 98	4
107	534	13.60	2.20			73	1938	20.16	1.47	TSA 98	4
123	464	11.83	2.53			83	1693		1.45	TSAF98	4
	0.00			_				17.61		10/11/00	W
53	953	27.75	1.09			100	1416	14.73	1.92		
57	886	25.79	1.17			115	1226	12.75	2.01		
64	893	22.75	1.15		2001						
68	846	21.56	1.17	TS 78	4	22kW	T.				
77	741	18.87	1.30	TSF 78	4						
86	667	17.00	1.00	TSA 78	4	56	3008	26.31	1.04		
98	585	14.91	1.59	TSAF78	4	62	2720	23.79	1.11	TS 98	4
111	516	13.16	1.29			73	2305	20.16	1.24	TSF 98	4
125	458	11.67	1.92			83	2013	17.61	1.22	TSA 98	4
147	391	9.96	1.71			100	1684	14.73	1.61	TSAF98	4
111 11						115	1458	12.75	1.69	.,,,	
11kW											
26	2808	55.76	0.98								
31	2349	46.64	1.33								
36	2034	40.38	1.54								
40	2094	36.39	1.49								
45	1886	32.76	1.66	TS 98	4						
49	1708	29.67	1.83	TS 98 TSF 98	4						
55	1514	26.31	2.07	TSA 98	4						
61	1369	23.79	2.22	TSAF98	4						
72	1160	20.16	2.46	. ani au							
83	1014										
99	848	17.61	2.43								
		14.73	3.21								
445	734	12.75	3.36								
115	1350	23.46	1.12								
115 62		21.09	0.97	TS 88	4						
	1214		1.44	TSF 88	4						
62		18.31			4						
62 69	1214	18.31	1.24	TSA 88							
62 69 80	1214 1054		1.24	TSAF88	4						
62 69 80 89	1214 1054 943	16.39			4						
62 69 80 89 107 123	1214 1054 943 783 681	16.39 13.60	1.24		4						
62 69 80 89 107 123	1214 1054 943 783 681	16.39 13.60 11.83	1.24 1.50 1.72		4						
62 69 80 89 107 123	1214 1054 943 783 681	16.39 13.60 11.83	1.24 1.50 1.72	TSAF88							
62 69 80 89 107 123	1214 1054 943 783 681	16.39 13.60 11.83	1.24 1.50 1.72	TSAF88	4						
62 69 80 89 107 123 15kW	1214 1054 943 783 681	16.39 13.60 11.83	1.24 1.50 1.72	TSAF88 TS 98 TSF 98	4 4						
62 69 80 89 107 123 15kW	1214 1054 943 783 681 3203 2773	16.39 13.60 11.83 46.64 40.38	1.24 1.50 1.72 0.97 1.13	TSAF88	4						



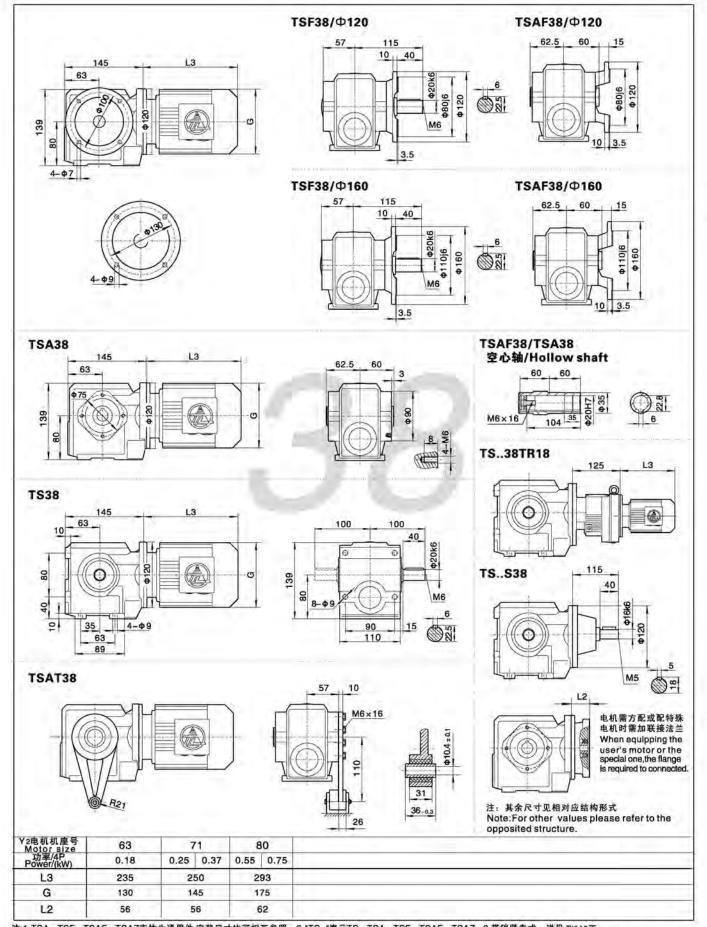
选型参数表 Selection Table

Mamax Permissible	输出转速 Output	传动比	机型号	功率	Mamax Permissible	输出转速 Output	传动比	机 型 号	功率
torque	speed	Ratio	Туре	Power	torque	speed	Ratio	Туре	Powe
Nm	r/min	j	Туре	kW/4p	Nm	r/min	f	Туре	kW/4
90	8.0 8.5 9.7 11	174 163 144 128	TS 38TR18 TSF 38TR18 TSA 38TR18	0.18		0.24 0.27 0.30	5874 5236 4571		0.18
	13	109	TSAF38TR18	0.25	1	0.36 0.40	3874 3483		0.25
170	3.6 4.1 4.7	391 342 295	a Nata	0.18		0.47 0.59 0.67	2928 2369 2078		0.37
	5.4 6.1 6.8 7.6	256 229 203 183	TS 48TR18 TSF 48TR18 TSA 48TR18 TSAF48TR18	0.25	2280	0.75 0.84 1.1 1.2	1852 1657 1322 1179	TS 88TR58 TSF 88TR58 TSA 88TR58	0.55
295	8.6 2.4 2.8	162 577 504		0.18		1.4 1.5 1.6	1022 919 852	TSAF88TR58	0.75
	3.2 3.6 4.2	431 390 332				2.0 2.3 2.5	713 607 552		1.1
	4.8 5.2 6.0	288 268 231	TS 58TR18 TSF 58TR18 TSA 58TR18	0.25		2.9 3.2 3.8	479 433 373		1.5
	6.9 7.4	202 189	TSAF58TR18	0.37		4.3 5.2	327 275		2.2
	8.3 10 1.3	167 134 1043		0.55		0.16 0.19 0.21	8606 7513 6710		0.18
	1.5 1.7 1.9	912 807 716		0.18		0.24 0.28	5767 4964		0.10
	2.3 2.6	616 541	TO COTION	0.25		0.31 0.35 0.40	4433 4018 3479		0.25
520	3.0 3.3 3.8	467 423 367	TS 68TR38 TSF 68TR38 TSA 68TR38 TSAF68TR38	0.37	4000	0.45 0.53 0.60	3107 2642 2331	TS 98TR58 TSF 98TR58 TSA 98TR58 TSAF98TR58	0.37
	4.4 4.9 5.6	319 281 247		0.55		0.67 0.76 0.89	2082 1827 1566		0.55
	6.3 7.0	222 199		0.75		0.99 1.1	1.1 1231		0.75
	0.45 0.67 0.77	3107 2075 1794		0.18		1.3 1.5 1.7	1072 943 824		1,1
	0.80 0.86 0.98	1730 1609 1412		De-spinion-	-	2.0 2.2 2.6	702 627 534		1.5
	1.1 1.3	1224 1098		0.25		2.9 3.4	485 420	-	2.2
1240	1.5 1.7 2.0	957 840 711	TS 78TR38 TSF 78TR38 TSA 78TR38	0.37	3.8 4.4 5.1	372 322 281	-	3	
	2.2 2.4 2.8	641 576 505	TSAF78TR38	0.55		5.9 7.0	245 205		4
	3.2 3.6	430 388		0.75					
	4.3 4.8 5.7 6.5	327 290 246 216		1.1					

TS

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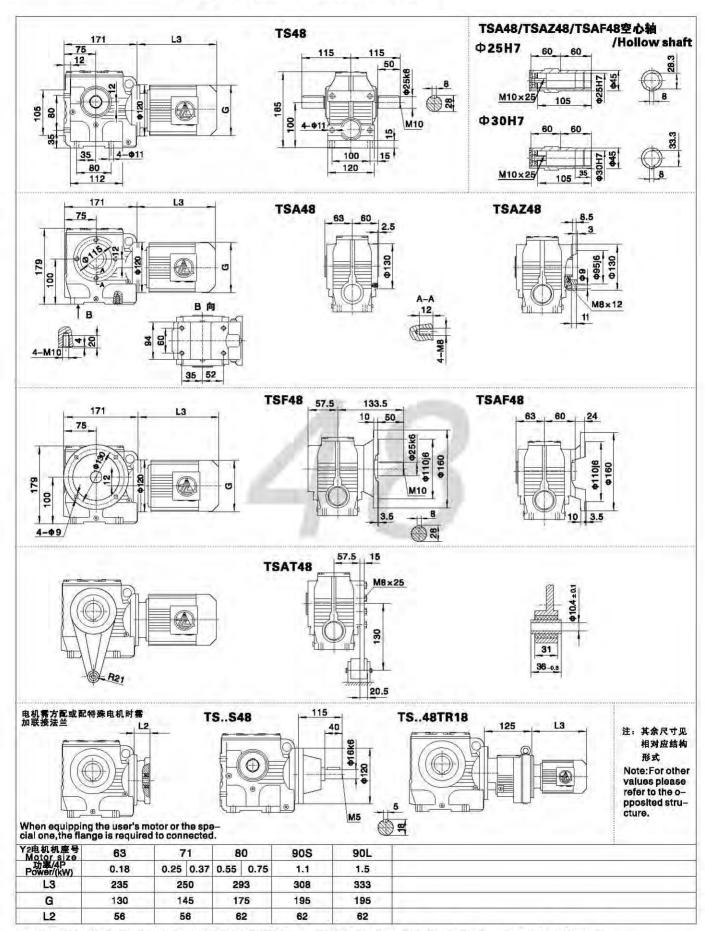
外形安装尺寸 Mounting Dimension Sheets-overview



注:1.TSA、TSF、TSAF、TSAZ壳体为通用件,安装尺寸均可相互参照. 2."TS.."表示TS、TSA、TSF、TSAF、TSAZ 3.带锁紧盘式,详见 TK40页 Note:1.The housings of TSA、TSF、TSAF、TSAZ are common parts. The mounting dimensions may consult each other, 2."TS.."mean TS、TSA、TSF、TSAF、TSAZ 3.Hollow shaft output with shrink disk, see P Tk40 for detail.



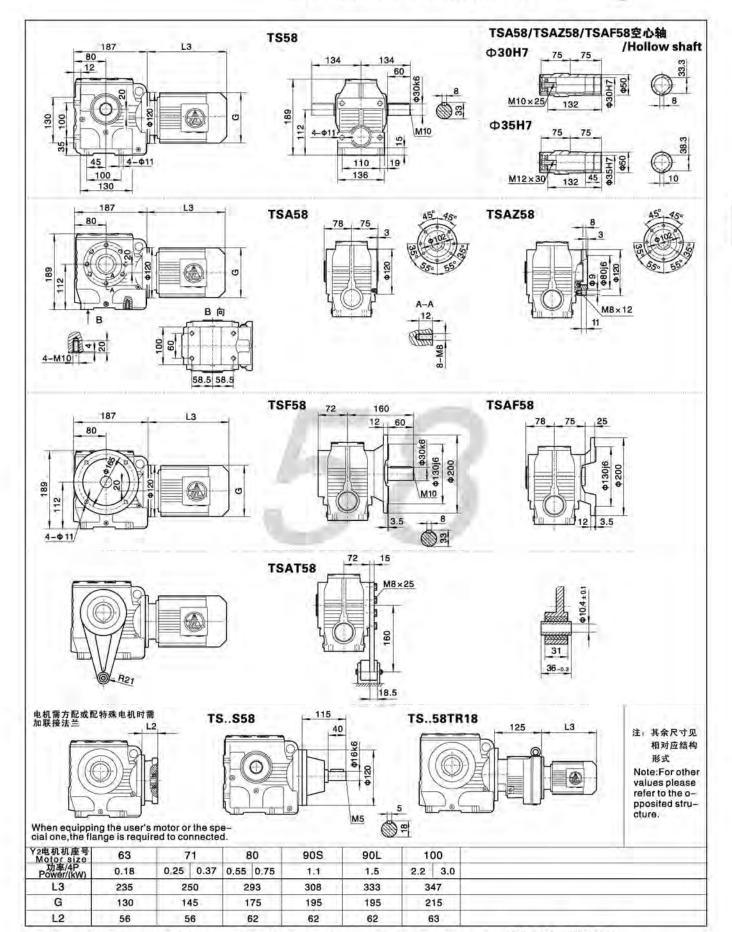
外形安装尺寸 Mounting Dimension Sheets-overview



注:1.TSA、TSF、TSAF、TSAZ克体为通用件,安装尺寸均可相互参照。 2."TS.."裳示TS、TSA、TSF、TSAF、TSAZ 3.帶额緊盡式,详见TK40页

Note: 1. The housings of TSA, TSF, TSAF, T



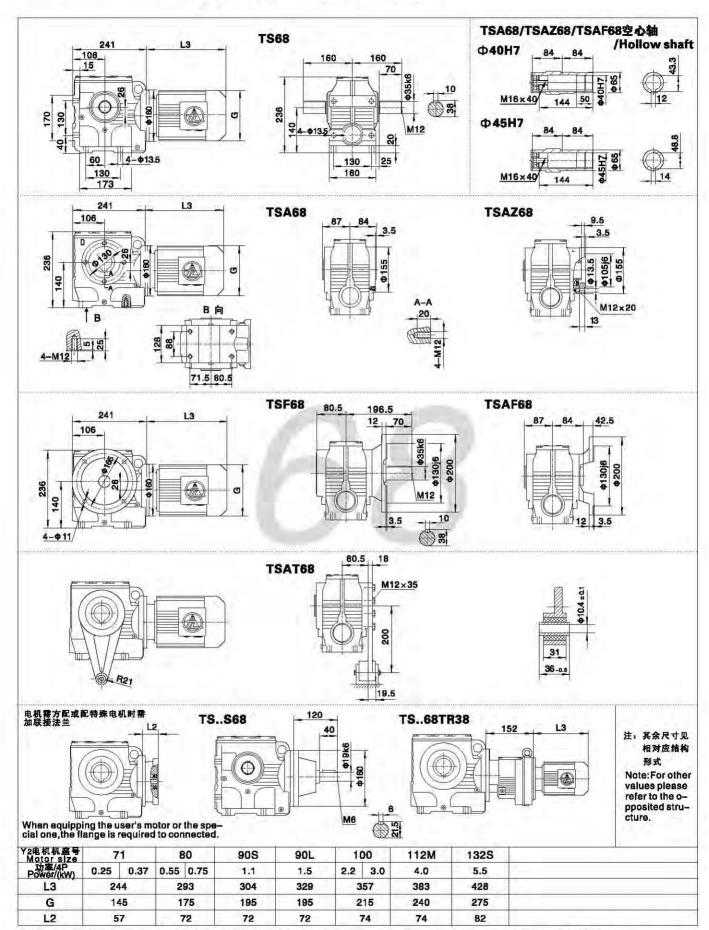


注:1.TSA、TSF、TSAF、TSAZ完体为通用件,安装尺寸均可相互参照. 2."TS.."表示TS、TSA、TSF、TSAF、TSAZ 3.带锁紧盘式,详见TK40页

Note: 1. The housings of TSA, TSF, TSAF, TSAZ are common parts. The mounting dimensions may consult each other. 2. "TS.. "mean TS, TSA, TSF, TSAF, TSAZ 3. Hollow shaft output with shrink disk, see PTK40 for detail.



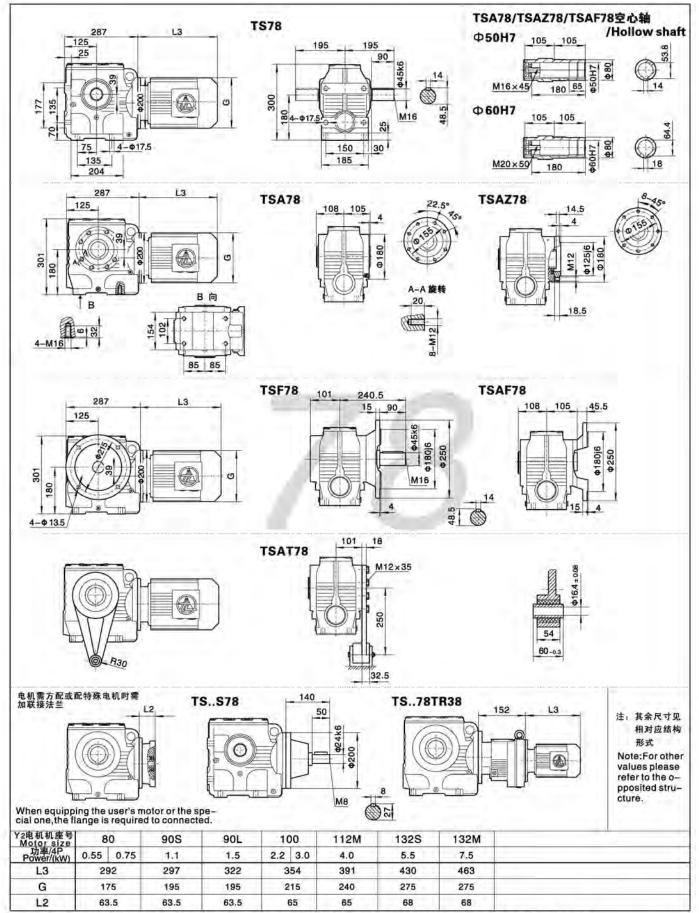
外形安装尺寸 Mounting Dimension Sheets-overview



注:1.TSA、TSF、TSAF、TSAZ完体为通用件、安装尺寸均可相互参照. 2.*TS..*表示TS、TSA、TSF、TSAF、TSAZ 3.带锁紧盘式,详见TK40页

外形安装尺寸 Mounting Dimension Sheets-overview



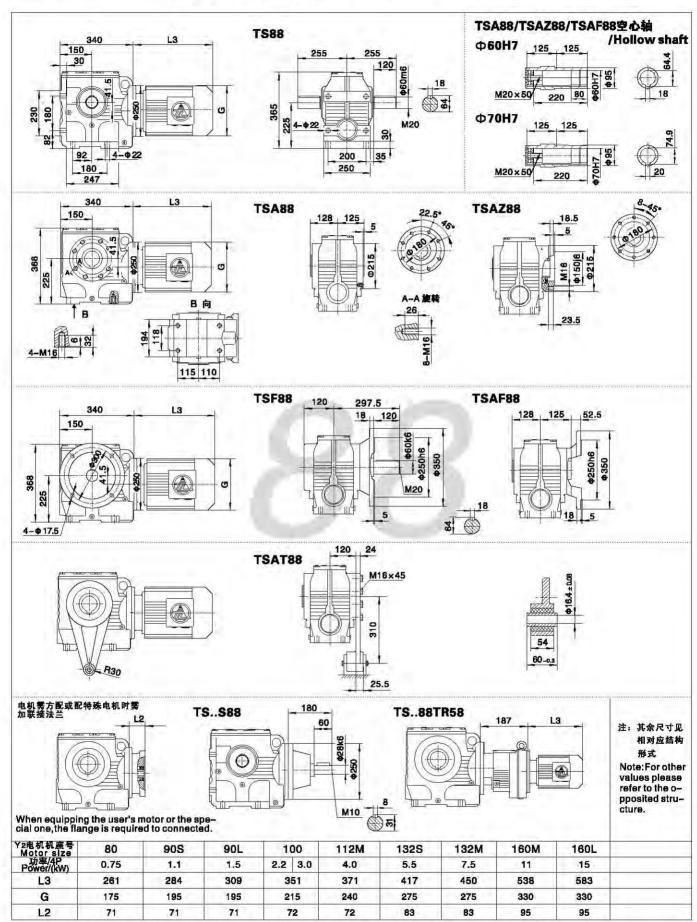


注:1.TSA、TSF、TSAF、TSAZ壳体为通用件,安装尺寸均可相互参照. 2."TS.."表示TS、TSA、TSF、TSAF、TSAZ 3.带锁紧盘式,详见TK40页



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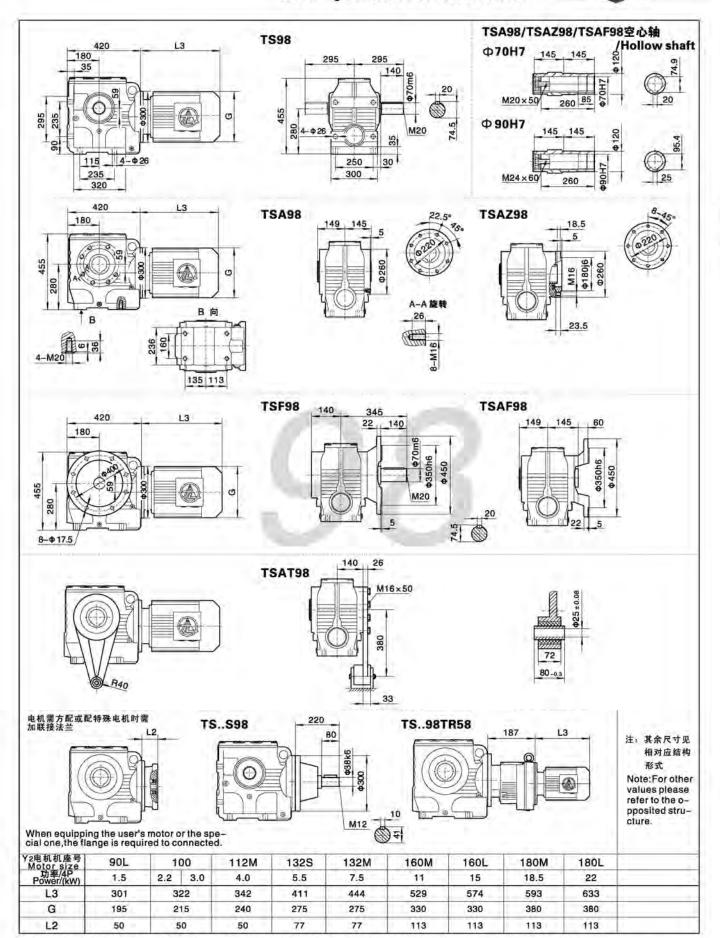
外形安装尺寸 Mounting Dimension Sheets-overview



注:1.TSA、TSF、TSAF、TSAZ壳体为通用件。安装尺寸均可相互参照. 2."TS.."衰示TS、TSA、TSF、TSAF、TSAZ 3.带锁紧盘式, 详见TK40页

Note: 1. The housings of TSA、TSF、TSAF、TSAF are common parts. The mounting dimensions may consult each other. 2. "TS..." mean TS、TSA、TSF、TSAF、TSAF、TSAZ 3. Hollow shaft output with shrink disk, see P TK40 for detail.

外形安装尺寸 Mounting Dimension Sheets-overview



注:1.TSA、TSF、TSAF、TSAZ完体为通用件,安装尺寸均可相互参照. 2.*TS..*表示TS、TSA、TSF、TSAF、TSAZ 3.带锁紧盘式,详见TK40页

Note:1.The housings of TSA、TSF、TSAF、TSAZ are common parts. The mounting dimensions may consult each other. 2. "TS.. "mean TS、TSA、TSF、TSAF、TSAZ 3. Hollow shaft output with shrink disk, see P TK40 for detail.



减速器润滑

润滑油种类选择

减速器使用工况	润滑油种类
冶金轧钢、井下采掘、 高温有冲击、含水等	L-CKD重载荷工业齿轮油 (GB5903-1995)
其余工况	L-CKC中载荷工业齿轮油 (GB5903-1995)

注:若选用合成齿轮油则更具有良好的抗老化性能, 可有效地提高减速器的机械效率。

润滑油粘度

条件	润滑油粘度等级 40°C温度下的ISO-VG 粘度mm/s²(cst)
高速级圆周速度v<2.5m/s,或环境温度在35-50°C之间	VG320(或VG460)
高速级齿轮圆周速度v>2.5m/s, 或环境温度在35°C以下, 或采用循环油润滑	V G 2 2 0

浸油润滑润滑油的工作温度

润滑油种类	工作温度/°C
中載荷工业齿轮油 L-CKC	-8°C至+90°C(瞬时可达100°C)
重载荷工业齿轮油L-CKD	-5°C至+100°C(瞬时可达110°C)
蜗轮蜗杆油L-CKE/P	-5 C至+100 C(瞬时可达110 C)

注意:如果滅速器的工作温度高于或低于表中规定极限值则应 重新确定合适的润滑油。

当环境温度低于0°C时启动前油温需加热到0 C以上。

强制润滑润滑油允许的极限温度

40°C温度下的 ISO-VG粘度 mm'/s(cst) VG220 VG320	强制润滑允许的极限温度/°C							
	矿物油	合成油						
VG220	10-80	0-90						
VG320	15-90	5-100						
VG460	20-95	10-105						

注意:当油温低于表中所列数值时,必须提供浸油润滑方式,或对润滑油加热。

Gear Units Lubrication

Lubricant selection

Operating conditions of gear units	Lubricant specification
Steel rolling, excavating, high temperature with shock, moisture, etc.	L-CKD heavy load industrial gear oil(GB5903-1995)
Others	L-CKC moderate load industrial gear oil(GB5903-1995)

Note: It adopts the synthetic oil which has the better performance of anti-ageing so that improves the mechanical efficiency effectively.

Lubricant viscosity

Conditions	Lubricant viscosity classification Viscosity ISO-VG at 40 °C in mm²/s(cst)
Rotation velocity of high speed stage v<2.5m/s, or ambient temperature between 35~50℃	VG320(or VG460)
Rotation velocity of high speed stage v>2.5m/s, or ambient temperature at 35°C, or lubrication with circulating oil	VG220

Working temperature for dip feed lubrication

Lubricant specification	Working temperature/℃
L-CKC moderate load industrial gear oil	From -8°C to +90°C(up to 100°C at moment)
L-CKD heavy load industrial gear oil	From −5℃ to +100℃(up to 110℃ at moment)

Notes:If the temperatures of gear units are above or below the values as listed in table ,it determines the proper oil again. If the ambient temperatures are below 0℃, the oil has to be heated above 0℃.

Permissible temperature limit for forced feed lubrication

Viscosity ISO-VG at 40 °C in mm2/s(cst)	Permissible temperature limit for forced feed lubrication/°C								
40 ℃ in mm2/s(cst)	Mineral oil	Synthetic oil							
VG220	10-80	0-90							
VG320	15-90	5-100							
VG460	20-95	10-105							

Notes: If the temperatures are below the values as listed in table, dip lubrication has to be provided or the oil must be heated.

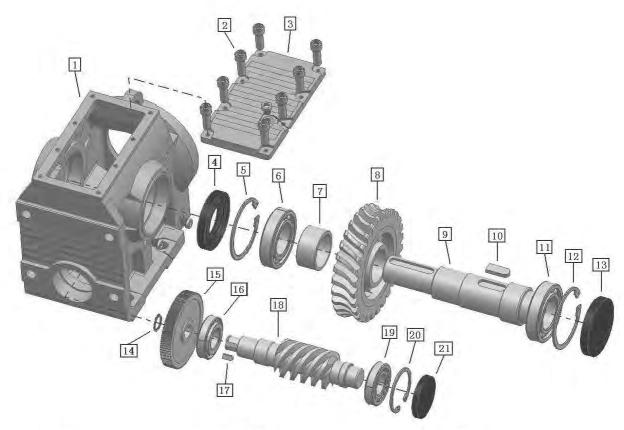


结 构 图 Structural Drawing

四、TS系列爆炸图 TS series exploded view

3.Cover

4.Seal 5.Circlip 6.Bearing 7.Bush

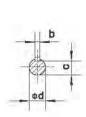


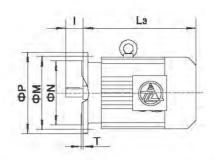
8.蜗轮	15.齿轮
9.输出轴	16.轴承Ⅲ
10.平键	17.平键
11.轴承	18.蜗杆
12.孔用挡圈	19.轴承Ⅳ
13.封盖 I	20.孔用挡圈 Ⅲ
14.轴用挡圈	21.封盖
8.Worm wheel	15.Gear
9.Output shaft	16.Bearing
	9.輸出轴 10.平键 11.轴承 12.孔用挡圈 13.封盖 14.轴用挡圈

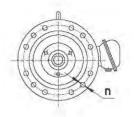
o. Output silait	i o. Doaring
10.Parallel key	17.Parallel key
11.Bearing	18.Worm
12.Circlip	19.Bearing
13.Cover	20.Circlip
14.Circlip	21.Cover



标准普通电机和特殊电机的参数及安装尺寸 Standard and ordinary motor or special motor parameter and mounting dimension







电机		极 Pole	A har har	极 Pole		极 ole		L3				安 装 尺 寸 Mounting dimensions									M(kg)													
Motor Size	P1 (kW)	nı (r/min)	P1 (kW)	n1 (r/min)	P ₁ (kW)	n 1 (r/min)	Y ₂	В	E	v	M	N	P	n	Т	d	1	b	c	Y (铝克) (Aluminium housing)	Y ₂	В	E	v										
63M1	0.12	1390					000	070	200		446	OFIC	440			1110				5.5	13			11										
63M2	0.18	1390					202	270	328		115	95j6	140	4×Ф10	3	11j6	23	4	8.5	6	13.5	15		12										
71M1	0.25	1390	0.18	850	5	= -1	75 N		Dy.		152		<u>Z</u>	6.72.2	20.00	1 1/2	51	Q	1.50	6.5	14	16	12	14										
71M2	0.37	1390	0.25	850	-		225	285	345		130	30 110j6	6 160	60 4×Φ10	3.5	14j8	30	5	11	7.5	14.5	16	13	15										
80M1	0.55	1390	0.37	885	0.18	645	T.									4.420	V. S	5		10	15	31	20	16										
80M2	0.75	1390	0.55	885	0.25	645	255	290	350	310	165	130j6	200	4×Ф12	3.5	19j6	40	6	15.5	11	16	32	21	17										
90S	1.1	1400	0.75	910	0.37	670	270	310	370	320	165	130j6	200	4×Φ12	3.5	24j6	50	8	20	16	23	35	27	23										
90L	1.5	1400	1.1	910	0.55	670	295	335	395	345	165	130j6	200	4×Ф12	3.5	24j6	50	8	20	20	25	39	31	28										
100L1	2.2	1420	45	100	0.75	680	325		H							337			0.7		33	49	41	35										
00L2	3	1420	1.5	920	1.1	680		325	370	420	370	215	180j6	250	4×Ф15	4	28j6	60	8	24		35	53	44	36									
112M	4	1440	2.2	940	1.5	690	340	400	450	390	215	180]6	250	4×Φ15	4	28 6	60	8	24		41	67	60	43										
132S	5.5	1440	3	960	2.2	710	390	430	505	450	265	230j6	300	4×Φ15	4	38k6	80	10	33		65	93	85	63										
132M	7.5	1460	4	960	3 710 4													Į.																
			5.5	960		710	430	470	545	490	265	230j6	300	4×Ф15	4	38k6	80	10	33		76	105	98	75										
1					4	720		1.1								1						9.7												
160M	11	1460	7.5	960	5.5	720	505	545	610	550	300	250h6	350	4хФ19	5	42k6	110	12	37		118	150	143	116										
160L	15	1460	11	960	7.5	720	560	585	655	595	300	250h6	350	4хФ19	5	42k6	110	12	37		132	169	165	136										
180M	18.5	1470	1	/	/	/	590	620	715	740	300	250h6	350	4хФ19	5	48k6	110	14	42.5		164	205	203	169										
180L	22	1470	15	970	11	730	630	640	765	790	300	250h6	350	4×Φ19	5	48k6	110	14	42.5		182	222	216	183										
			18.5	970																														
200L	30	1470	22	970	15	730	660	695	790	850	350	300h6	400	4хФ19	5	55k6	110	16	49		245	300	296	236										
225S	37	1480	/	/	18.5	730	675	705	860	910	400	350h6	450	8×Ф19	5	60m6	140	18	53		258	360	370	291										
225M	45	1480	30	980	22	730	705	730	890	940	400	350h6	450	8×Ф19	5	60m6	140	18	53		290	390	405	327										
250M	55	1480	37	980	30	730	770	795		1060	500	450h6	550	8×Ф19	5	65m6	140	18	58		388	530	498	393										
280S	75	1480	45	980	37	730	845	870		1160	500	450h6	550	8×Ф19	5	75m6	140	20	67.5		510	660	633	520										
280M	90	1485	55	980	45	740	895	920		1260	500	450h6	550	8хФ19	5	75m6	140	20	67.5		606	785	723	610										
315S	110	1485	75	980	55	UT AV	1100	in the second				550h6	200	8×Ф24	6	80m6	41-04	100	71		20.0		1150	1000										
315M	132	1485	90	985	75		1180	00 32		1380	600	550h6	-	8×Ф24	6	80m6	A.T. C		71			7 See 17	1230											
	160	1485	110	985	90	740	UEU			1.0				1 1000									1320	0.00										
315L	200	1485	132	985	110	1-0-0	1270	1270		1450	600	550h6	660	8 xФ24	6	80m6	170	22	71		7 7	5 A 17	1420	5										

注:由于结构需要及生产厂家不同,有时参数会有所变化,此象仅供参考,准确尺寸请来电垂询。

Note: Sometimes the parameters may be changed with the different structures and manufacturers, this table is only for reference, please refer to us for the exact dimensions.

应用领域



































橡胶塑料 Rubber plastic



石油化工 Petrochemical



环保生态 Environmental Protection



电力设备 Power equipment



建材机械 Building materials machinery



港口机械 Port machinery



煤矿机械 Coal mining machinery



工程机械 Construction machinery



此里区和 Lifting and transportation

TESTING EQUIPMENT 加工和检测设备















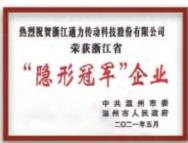






公司荣誉

























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