SUDA

Explorers reach the goal

求索者必达

镇江索达联轴器有限公司

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SINCE 1996

Disc couplings

膜片联轴器

SUODA COUPLING

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Explorers reach the goal

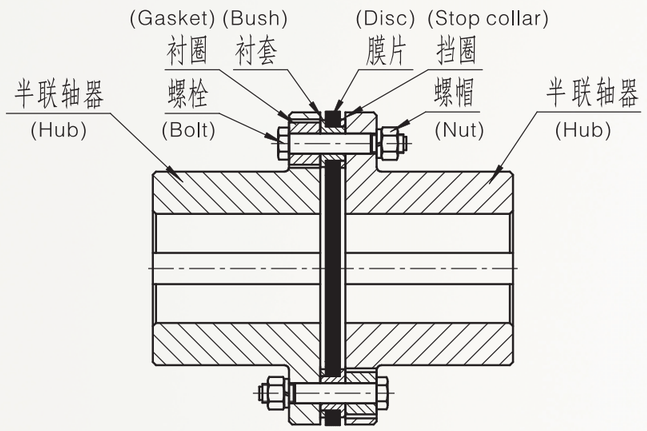
膜片联轴器的结构特点及应用
The structural features and application of the disc couplings

膜片联轴器主要依靠金属弹性膜片来联接主、从动端以实现传递动力和运动，具有减振、无噪音和不需润滑等优点，通过中间弹性元件变形以实现轴向、径向、角向偏差补偿。膜片联轴器具有以下特点：

Disc couplings mainly rely on metal flexible disc to connect the main end and driven end in order to realize the transmission power and movement, with vibration, no noise and without lubrication, etc. Through intermediate components elastic deformation in order to realize the axial, radial and angular deviation compensation. Disc coupling has the following characteristics:

- ◆ 能缓冲、吸震、无噪音；
- ◆ 不需润滑、不需密封，对环境适应能力强，能在–80℃ ~ +300℃的温度条件下安全工作；
- ◆ 能补偿两轴相对偏移；
- ◆ 结构简单，重量轻，使用和维护方便；
- ◆ 易平衡，适合用于高速传动轴系；
- ◆ 无转速差，适合于精密传递；

- ◆ Buffering, shock absorption and no noise.
- ◆ Without lubrication, no need to seal, strong ability to adapt to the environment, safety work under–80 ℃~ +300 ℃ temperature the condition.
- ◆ Can compensate two axes relative offset.
- ◆ Simple structure, light weight, use and maintenance convenient.
- ◆ Easy to balance, suitable for high speed transmission shafting.
- ◆ No speed difference, suitable for precision transmission.



膜片挠性联轴器广泛应用于冶金、矿山、石油、电力、船舶、起重机械、水泵、造纸业、轻工、印刷、化工等行业的机械设备中传递动力。

Disc flexible couplings is widely used in metallurgy, mining, petroleum, electric power, shipbuilding, lifting machinery, water pumps, the paper industry, light industry, printing, chemical and other industries of machinery equipment to transfer power.

膜片联轴器的结构特点及应用
The structural features and application of the disc couplings

弹性元件是膜片联轴器的核心部件，它决定了联轴器性能的优劣，我公司生产的膜片联轴器之膜片应用有限元法进行强度设计，并利用计算机技术对膜片的形状、柔度进行优化设计，膜片加工采用优质的不锈钢弹簧钢板制作而成。整体联轴器具有以下优势：

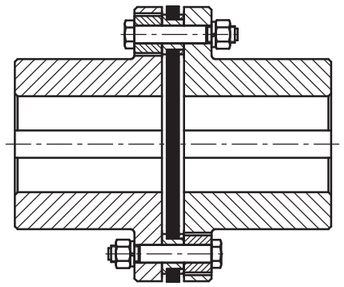
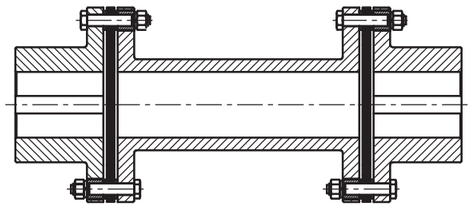
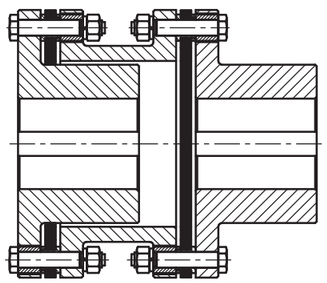
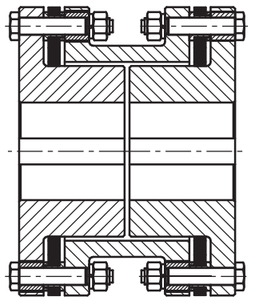
Elastic component is the core component of disc couplings, it determines the couplings performance of the advantage of disadvantage. Our company produces the diaphragm apply finite element method was used to strength design, and by using computer technology to optimize the design for diaphragm shape and flexibility. Diaphragm processing is made of using high quality stainless steel spring plate. Overall couplings has the following advantages:

- ◆ 膜片材料为不锈钢弹簧钢板，其强度高、耐热、抗腐性能好；
- ◆ 膜片制作使用复合模冷冲压一次成型，尺寸精度高、一致性好；
- ◆ 两端轴套与膜片联接孔采用CNC加工完成，以保证互换性；
- ◆ 经表面处理的高强度联接螺栓保证了联接的高可靠性和防腐性。

- ◆ Diaphragm material is stainless spring steel, high strength, heat resistance, good corrosion resistance performance;
- ◆ The production of diaphragm use compound die cold stamping once molding, high dimensional accuracy and good consistency;
- ◆ Both ends of the shaft sleeves and the diaphragm couplings hole adopt CNC machining to ensure interchangeability;
- ◆ After the surface high strength bolts ensure the high reliability and anti–corrosive properties.

膜片联轴器结构型式
The structural style of the disc couplings

表格 / Table

	DB 基本型膜片联轴器： 适用于仅有角向和轴向偏差的场合。 扭矩范围40–315000N·m DB The basic type Disc couplings: Applicable only angular and axial deviation of the occasion. Torque range: 40–315000N·m
	DT 带接管型膜片联轴器： 接管长度可以定制以满足长轴端间隙场合要求。 扭矩范围：63–2000000N·m DT The disc couplings with joint pipe type: Joint pipe can be customized to meet the long shaft end clearance requirements. Torque range: 63–2000000N·m
	DX单半联反装型膜片联轴器： 半联的反装使得联轴器可以适应不同轴端间隙场合。 扭矩范围：6.3–16N·m DX The disc couplings of one hubs reversed type: This makes couplings can adapt to different shaft end clearance occasion. Torque range : 6.3–16N·m
	DXT双半联反装型膜片联轴器： 半联的反装使得联轴器可以适应不同轴端间隙场合。 扭矩范围：6.3–16N·m DXT The disc couplings of two hubs reversed type: This makes couplings can adapt to different shaft end clearance occasion. Torque range : 6.3–16N·m

膜片联轴器的选用
The selection of the disc couplings

● 选用联轴器按以下步骤进行
Use the following steps to select couplings

1.1 选用基本信息 / The selection of the basic information

驱动机名称、驱动机数量、输入功率、工作转速、工作机名称、载荷类别、工作环境、工作性质、是否频繁启动、是否正反转、输入输出轴直径及长度。

Drive machine names, drive machine quantity, input power, working speed, work machine name, load type, working environment, nature of work, whether frequent start, whether positive & negative, input and output shaft diameter and length.

基本信息见附表1

Basic information see table 1.

1.2 选用计算 / The selection & use and calculation

联轴器的主参数是公称转矩Tn，选用时各转矩间应符合以下关系：

The main parameter of the couplings is the nominal torque Tn, among various torque when selection should accord with the following relationship:

$T < Tc \leqslant Tn \leqslant [T] < [Tmax] < Tmax$

式中：
T—理论转矩，N·m
Tc—计算转矩，N·m
Tn—公称转矩，N·m
[T]—许用转矩，N·m
[Tmax]—许用最大转矩，N·m
Tmax—最大转矩，N·m

In the formula:
T — theory of torque, N·m
Tc — computed torque, N·m
Tn — nominal torque, N·m
[T] — allowable torque, N·m
[Tmax] — allowable maximum torque, N·m
Tmax — maximum torque, N·m

1.2.1 联轴器的理论转矩计算 / The theory torque calculation of the couplings

$T=9550Pw/n$

式中:
Pw—驱动功率，Kw
n—工作转速，r/min

T= 9550Pw/n
In the formula:
Pw— driving power, Kw
n— working speed, r/min

1.2.2 联轴器的计算转矩计算 / The couplings torque calculation

计算公式 $Tc=T\cdot Kw\cdot K\cdot Kz$

式中：
Kw—动力机系数（见 表1）
K—工况系数 （见 表1）
Kz—启动系数 （见 表1）

Calculation formula $Tc=T\cdot Kw\cdot K\cdot Kz$
In the formula:
Kw— coefficient of engine (see table 1)
K— working condition coefficient (see table 1)
Kz— start coefficient (see table 1)

膜片联轴器的选用
The selection of the disc couplings

表1 / Table 1

动力机系数Kw Coefficient of engine	动力机名称 Engine name	启动系数Kz Start coefficient	启动次数 Number of starts	工况系数K Working condition coefficient	载荷分类 Load type	工作机名称举例 Work machine names example
1.0	电动机、透平机 The motor and turbine	1.0	≤120	1	均匀载荷 Even load	鼓风机、泵、压缩机、液体搅拌设备、机纺织机械（印花机、浆纱机）、造纸设备、(漂白机、校平机)、均匀加载运输机 Blower, pump, compressor, liquid mixing equipment, textile machinery(printing machine, sizing machine), papermaking equipment, bleaching machine, leveling machine, uniform loading conveyor
1.2	四缸及四缸以上内燃机 Four and more than four cylinder internal combustion engine	1.3	>120 ~240	1.5	轻冲击载荷 Light impact load	机纺织机械（压榨机、卷取机）、造纸设备(卷取机)、不均匀加载运输机、给料机、印刷机械 Textile machinery (squeezing machine, recoiling machine), papermaking equipment (recoiling machine), non–uniform loading conveyor, feeding machine, printing machine
1.4	两缸内燃机 Two cylinder internal combustion engine	由制造厂确定 Determined by the manufacturer	>240	2	中等冲击载荷 Medium impact load	提升机械、起重机和卷扬机、旋转式粉碎机、轧制设备、石油机械、造纸设备（搅拌器和破碎机 卷筒装置、切断机） Lifting machinery, crane and windlass, rotary crusher, rolling equipment, oil machinery, papermaking equipment (agitator and crusher, cutter)
1.6	单缸内燃机 Single cylinder internal combustion engine			2.5	重冲击载荷 Heavy impact load	摆动运输机、碎矿机、碎石机、往复式给料机、橡胶机械 Swinging conveyor, crusher, stone crusher, reciprocating feeding machine, rubber machinery
				3	特重冲击载荷 Extra heavy load	可逆输送辊道、初轧机、中厚板轧机、机架辊、剪切机、冲压机 Blooming mills、Roughing breakdown、Traction drive

1.2.3 当存在下列情况时，应按以下方法计算选型 / When the presence of the following situation, it should be calculated and selection by the following method

①高峰值载荷
②刹车制动（制动轮或制动盘为联轴器的一部分）
③高频率轴向窜动

①High peak loads
②Brake (brake wheel or brake disc is part of the couplings)
③High frequency axial channeling move

峰值载荷：

当电机功率大、有冲击载荷、频繁启动和制动、有间歇性运转等系统存在反复性峰值载荷时，联轴器额定转矩等于或大于根据下式计算出的选型转矩。

膜片联轴器的选用
The selection of the disc couplings

Peak load:
When the big motor power, impact load, frequent starting and braking, intermittent operation and etc system exists repetitive peak load, the couplings rating torque is equal to or greater than the calculated according to the following formula to calculate the model selection and torque.

◆ a. 无反向峰值载荷 / No reverse peak load

选型转矩（N·m）=系统峰值转矩
选型转矩（N·m）=系统峰值功率（Kw）x9550/转速（rpm）

Selection torque (N·m) = system peak torque
Selection torque (N·m) = system peak power (Kw) ×9550 / rotate speed (rpm)

◆ b. 有反向峰值载荷 / Have reverse peak load

选型转矩（N·m）=1.5x系统峰值转矩
选型转矩（N·m）=1.5x系统峰值功率（Kw）x9550/转速（rpm）

Selection torque(N·m) = 1.5 × system peak torque
Selection torque(N·m) = 1.5 × system peak power(Kw) ×9550 / rotate speed(rpm)

◆ c. 偶然峰值载荷（无反向）/ Occasional peak load(no reverse)

在联轴器的预期寿命期间，如果系统峰值载荷出现次数少于1000次，使用下面公式：
选型转矩（N·m）=0.5x系统峰值转矩
选型转矩（N·m）=0.5x系统峰值功率（Kw）x9550/转速（rpm）
对于反向情况，选用步骤b.

During the couplings of the expectation life, if the system peak load appeared a number less than 1000 times, using the following formula:
Selection torque (N·m) = 0.5 × system peak torque
Selection torque (N·m) = 0.5 × system peak power (Kw) × 9550 / rotate speed (rpm)
For reverse situation, selects the step b.

制动 / Brake

如果制动力矩超过电机转矩，根据下式计算选型转矩：
选型转矩（N·m）=制动力矩x工况系数

If the braking torque exceed the motor torque, according to following formula to select model and torque:
Selection torque (N·m) = brake torque × application factor

高频率轴向窜动 / High frequency axial channeling shif

如果轴向窜动超过每小时5次，那么工况系数需增加0.25.
选型转矩（N·m）=功率（Kw）x9550 x(工况系数+0.25) /转速（rpm）

If the axial channeling move exceed more than 5 times per hour, so the working condition coefficient should be increased by 0.25.
Selection torque (N·m) = power (Kw) × 9550 × (application factor+0.25) / rotate speed(rpm)

膜片联轴器的选用
The selection of the disc couplings

1.3 初选联轴器型号规格 / The preliminary selection of the couplings model specifications

1.4 选型验证 / Selection of validation

1.5 确定联轴器型号规格 / To determine the couplings model specifications

1.6 产品标记 / Product mark

● 选型示例 Selection example

2.1 基本信息 / General information

电机额定功率：2500Kw	Motor rated power: 2500Kw
输出转速：995rpm	Output speed: 995rpm
输入、输出端距离：1168mm	Input and output end distance: 1168mm
输入轴径d1：220 mm	Input shaft diameter d1: 220 mm
输出轴径d2：190mm	Output shaft diameter d2: 190mm
联轴器类型：膜片联轴器	Couplings type: disc couplings
载荷性质：重冲击	Load properties: Heavy impact
周围环境：有灰尘等	Surrounding environment: such as dust etc
工作性质：连续	Nature of work: continuous

2.2 选用计算 / Selection & use and calculation

根据基本信息，本项目选用膜片联轴器。	According to the general information, this project
选型计算	Choose the disc couplings.
理论转矩计算	Selection & calculation
T=9550Pw/n=9550*2500/995=23994（N·m）	Theoretical toque calculation
计算转矩计算	T = 9550Pw/n = 9550* 2500/ 995= 23994（N·m）
计算公式 Tc=T·Kw·K·Kz	Calculated torque
式中：	Computational formula Tc= T·Kw·K·Kz
Kw取1 / K取2.5 / Kz取1	In this formula:
Tc=23994*1*2.5*1=59985（N·m）	Kw choose 1 / K choose 2.5 / Kz choose 1
	Tc = 23994*1*2.5*1= 59985（N·m）

2.3 初选联轴器型号规格 / The preliminary selection of the couplings model specifications

DT22 带接管型膜片联轴器 公称转矩 64000N·m
满足转矩要求 初选DT22带接管型膜片联轴器

DT22 disc couplings with type of joint pipe Nominal torque 64000N·m
Meet the torque requirement, preliminary select the DT22, the disc couplings with joint pipe.

2.4 验证 / Verification

①孔径
满足要求
②回转空间（与现场条件比较）

膜片联轴器的选用
The selection of the disc couplings

现场对联轴器最大外径没有限制 此项视同满足要求
③许用转速
联轴器实际输出转速较低 995rpm,
满足许用转速。

① Hole diameter
Meet the requirement
② Rotary space(compared with on site conditions)
There is no restriction to the on site couplings of the max diameter, this shall be regarded as meet the requirements.
③ Allowable speed
The actual output speed of couplings is relatively lower 995rpm, meet the allowable speed.

2.5 选定联轴器型号规格/ Selected couplings model specifications

选定联轴器型号规格DT22 220*L/190*L L1=1168 加接管

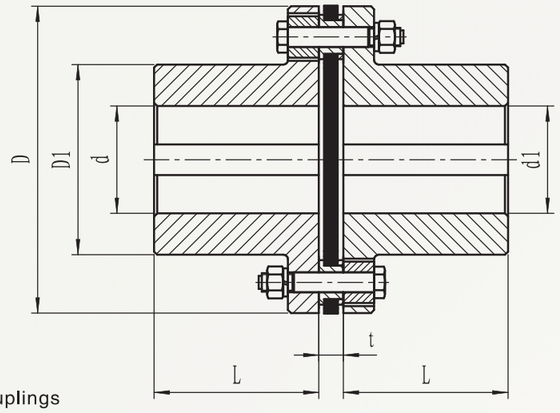
Determination of the couplings model specifications DT22 220*L /190*L L1 =1168 with joint pipe

2.6 标记示例 / Marking sample

DT22 带接管型膜片联轴器
DT22 220*L/190*L L1=1168 加接管

DT22 Disc couplings with type of joint pipe
DT22 220*L /190*L L1= 1168 with joint pipe

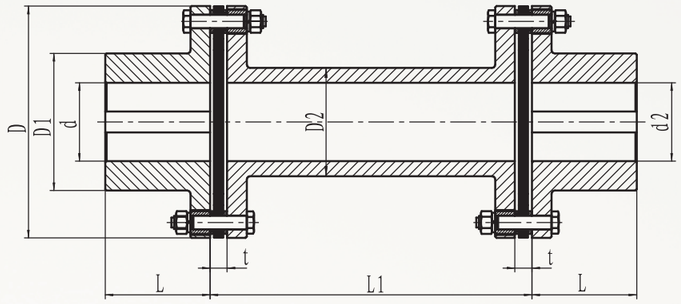
膜片联轴器结构型式、基本参数和主要尺寸
The structural style, basic parameters and main dimensions of the disc couplings



基本型膜片联轴器
DB The basic type of disc couplings

型号 Size	公称转矩 Nominal torque N·m	许用转速 Allowable speed r/min	轴孔直径 Shaft hole diameter mm d、d1	轴孔长度 Shaft hole length mm	主要尺寸 Main Dimension mm D	D1	t	扭转刚度 Kt X10^6 N·m/rad	转动惯量 Rotational Innertia Kg·m^2	重量 Wt Kg
Db1	40	10700	14–28	27–62	80	39	8±0.2	0.37	0.0024	1.37
DB2	63	9300	20–38	38–82	92	53	8±0.2	0.45	0.006	2.65
DB3	100	8400	25–45	44–112	102	63	8±0.2	0.56	0.012	4.8
DB4	250	6700	30–55	60–112	128	77	11±0.3	0.81	0.037	7.64
DB5	500	5900	35–65	60–142	145	91	11±0.3	1.2	0.055	9.4
DB6	800	5100	40–75	84–142	168	105	14±0.3	1.42	0.16	17.15
DB7	1000	4750	45–80	84–172	180	112	15±0.4	1.9	0.225	24.5
DB8	1600	4300	50–85	84–172	200	120	15±0.4	2.35	0.33	29.4
DB9	2000	4200	55–90	84–172	205	120	20±0.4	2.7	0.35	30.38
DB10	2500	4000	55–90	84–172	215	128	20±0.4	3.02	0.43	33.9
DB11	3150	3650	60–95	107–172	235	132	23±0.5	3.46	0.65	40.18
DB12	4000	3400	60–100	107–212	250	145	23±0.5	3.67	0.94	55.86
DB13	6300	3200	63–110	107–212	270	155	23±0.5	5.2	1.35	63
DB14	12500	2850	65–120	107–212	300	162	27±0.6	7.8	1.79	87
DB15	16000	2700	70–125	107–212	320	176	27±0.6	8.43	2.37	87
DB16	20000	2450	75–130	107–252	350	186	32±0.7	10.23	3.84	124
DB17	25000	2300	80–150	132–252	370	203	32±0.7	10.97	5.35	144
DB18	31500	2150	90–160	132–302	400	230	32±0.7	13.07	9.78	202
DB19	40000	1950	100–180	167–302	440	245	38±0.9	14.26	14.15	248
DB20	45000	1850	110–190	167–352	460	260	38±0.9	22.13	19.62	307
DB21	50000	1800	120–200	167–352	480	280	38±0.9	23.7	24.61	348
DB22	56000	1700	130–220	202–352	500	295	38±0.9	24.6	29.54	382
DB23	63000	1600	140–220	202–352	540	310	44±1	29.71	39.92	451
DB24	80000	1450	150–240	202–410	600	335	50±1.2	32.64	67.54	631
DB25	100000	1400	160–250	242–410	620	350	50±1.2	37.69	78.315	679
DB26	125000	1300	180–280	242–470	660	385	50±1.2	50.43	117.25	889
DB27	160000	1200	190–300	282–470	720	410	60±1.4	71.51	166.60	1063
DB28	200000	1150	220–300	282–470	740	420	60±1.4	93.37	184.66	1114
DB29	250000	1100	240–320	330–470	770	450	60±1.4	114.53	227.78	1248
DB30	315000	1050	250–340	330–550	820	490	60±1.4	130.76	344.43	1655

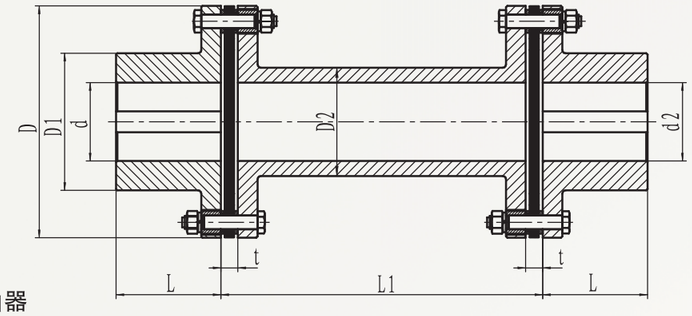
膜片联轴器结构型式、基本参数和主要尺寸
The structural style, basic parameters and main dimensions of the disc couplings



带接管型膜片联轴器
DT The disc couplings with joint pipe type

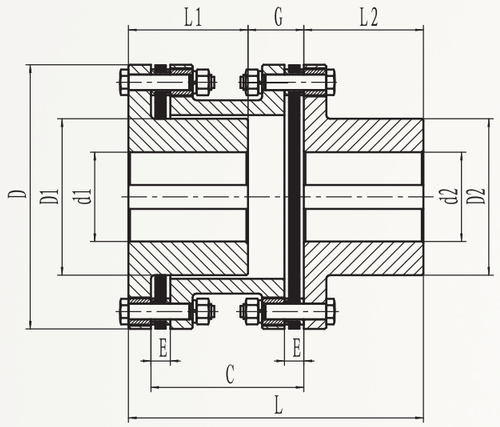
型号 Size	公称转矩 Nominal torque N·m	许用转速 Allowable speed r/min	轴孔直径 Shaft hole diameter mm d、d1	轴孔长度 Shaft hole length mm	主要尺寸 Main Dimension mm D	D1	D2	L1 Min.	t	转动惯量 Rotational Innertia Kg·m^2	重量Wt Kg L1 Min. 重量Wt Kg	重量Wt Kg 每增加1m的重量 Every 1m/Wt
Dt1	63	9300	20–38	38–82	92	53	60	44	8±0.2	0.010	3.7	22.79
DT2	100	8400	25–45	44–112	102	63	72	49	8±0.2	0.018	6.3	32
DT3	250	6700	30–55	60–112	128	77	87	60	11±0.3	0.056	9.14	46
DT4	500	5900	35–65	60–142	145	91	102	70	11±0.3	0.095	13.63	64
DT5	800	5100	40–75	84–142	168	105	117	83	14±0.3	0.219	23.35	84
DT6	1000	4750	45–80	84–172	180	112	124	86	15±0.4	0.35	32.28	94
DT7	1600	4300	50–85	84–172	200	120	134	86	15±0.4	0.51	39.07	110
DT8	2000	4200	55–85	84–172	205	120	135	91	20±0.4	0.53	39.86	112
DT9	2500	4000	55–90	84–172	215	128	145	101	20±0.4	0.68	45.78	129
DT10	3150	3650	60–95	107–172	235	132	151	109	23±0.5	0.97	56.13	140
DT11	4000	3400	60–100	107–212	250	145	164	109	23±0.5	1.48	74.09	165
DT12	6300	3200	60–110	107–212	270	155	184	119	23±0.5	2.13	87.65	207
DT13	12500	2850	65–120	107–212	300	162	194	128	27±0.6	2.93	106.23	231
DT14	16000	2700	70–125	107–212	320	176	213	138	27±0.6	3.98	125.23	278
DT15	20000	2450	75–130	107–252	350	186	215	153	32±0.7	6.44	173.52	283
DT16	25000	2300	80–150	132–252	370	203	235	158	32±0.7	8.48	200.88	338
DT17	31500	2150	90–160	132–302	400	230	266	178	32±0.7	14.2	279.61	433
DT18	40000	1950	100–180	167–302	440	245	280	190	38±0.9	20.73	345.53	480
DT19	45000	1850	100–190	167–352	460	260	300	200	38±0.9	28.56	421	551
DT20	50000	1800	120–200	167–352	480	280	320	215	38±0.9	35.52	482.6	628
DT21	56000	1700	120–220	167–352	500	295	336	225	38±0.9	43.05	536	692
DT22	63000	1600	140–220	202–352	540	310	360	236	44±1	58.99	641	794
DT23	80000	1450	140–240	202–410	600	335	385	257	50±1.2	98.45	880	908
DT24	100000	1400	160–250	242–410	620	350	408	272	50±1.2	116.15	964	1020
DT25	125000	1300	180–280	242–470	660	385	445	292	50±1.2	163.85	1204	1251
DT26	160000	1200	180–300	242–470	720	410	485	317	60±1.4	245.9	1507	1441
DT27	200000	1150	220–300	282–470	740	420	503	322	60±1.4	275.08	1594	1550
DT28	250000	1100	240–300	330–470	770	450	530	342	60±1.4	342.37	1807	1721
DT29	315000	1050	250–340	330–550	820	490	559	372	60±1.4	514.91	2358	2025
DT30	500000	760	280–360	380–550	875	520	575	419	50±1.6	628.63	2507	1915

膜片联轴器结构型式、基本参数和主要尺寸
The structural style, basic parameters and main dimensions of the disc couplings



带接管型膜片联轴器
DT The disc couplings with joint pipe type

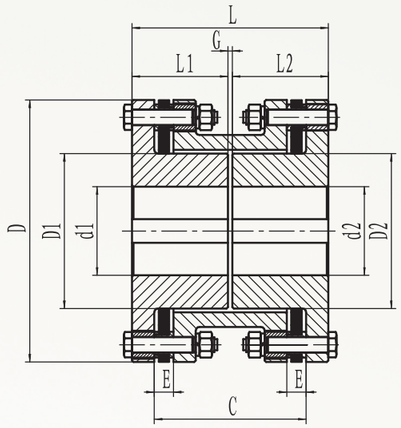
型号 Size	公称转矩 Nominal torque N·m	许用转速 Allowable speed r/min	轴孔直径 Shaft hole diameter mm d、d1	轴孔长度 Shaft hole length mm	主要尺寸 Main Dimension mm D	D1	D2	L1 Min.	t	转动惯量 Rotational Innertia Kg·m²	重量Wt Kg L1 Min. 重量Wt Kg	每增加1m的重量 Every 1m/Wt
DT31	630000	715	300–400	380–650	935	560	610	464	60±1.9	980.83	3391	2280
DT32	800000	650	320–420	380–650	1030	600	622	494	60±1.9	1368	3697	2370
DT33	1000000	620	360–460	450–650	1080	660	660	510	66±2.2	1689	4450	2669
DT34	1250000	576	400–500	540–650	1160	710	750	565	70±2.3	2645	5877	3446
DT35	1600000	520	440–560	540–800	1290	820	820	620	82±2.6	4775	8550	4120
DT36	2000000	475	480–600	540–800	1410	900	900	685	92±2.8	7620	11211	4962



单半联反装型膜片联轴器
DX The disc couplings of one hubs reversed type

型号 Size	公称转矩 Nominal torque N·m	许用转速 Allowable speed r/min	轴孔直径 Shaft hole diameter mm d1/d2	轴孔长度 Shaft hole length mm L1/L2	主要尺寸 Main Dimension mm D	L	D1	D2	C	E	G	转动惯量 Rotational Innertia Kg·m²	许用径向位移 Radial misalignment mm	许用角向位移 Angular misalignment mm
DX1	6.3	5000	14/10	27/23	50	75	24	20	44	4	25	0.4	0.2	1°
DX2	10	4500	20/14	30/27	58	85	32	24	50	5	38	1	0.2	1°
DX3	16	4000	26/20	33/30	64	94	40	32	56	5	31	1.8	0.2	1°

膜片联轴器结构型式、基本参数和主要尺寸
The structural style, basic parameters and main dimensions of the disc couplings



双半联反装型膜片联轴器
DXT The disc couplings of two hubs reversed type

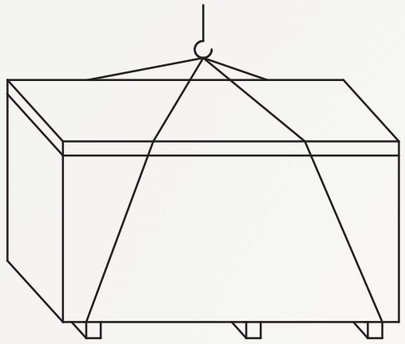
型号 Size	公称转矩 Nominal torque N·m	许用转速 Allowable speed r/min	轴孔直径 Shaft hole diameter d1/d2	轴孔长度 Shaft hole length L1/L2	主要尺寸 Main Dimension mm D	L	D1	D2	C	E	G	转动惯量 Rotational Innertia Kg·m²	许用径向位移 Radial misalignment mm	许用角向位移 Angular misalignment mm
DXT1	6.3	5000	10	23	50	52	20	20	44	4	6	0.4	0.2	1°
DXT2	10	4500	14	27	58	60	24	24	50	5	6	1	0.2	1°
DXT3	16	4000	20	30	64	66	32	32	56	5	6	1.8	0.2	1°

运输及搬运
Shipping and carrying

● 搬运 Carrying

木箱包装的产品需用叉车或其它现场搬运设备搬运到指定地点。同时注意搬运设备的承载能力应满足实际搬运重量的要求。

Products by wooden box packaging need use forklift or other on– site carrying equipment to the at the designated place. At the same time pay attention to the bearing capacity of the handling equipment shall meet the requirement of the actual payload.



吊装图
Lifting figure

● 开箱 Unpacking

开箱后按照装箱单检查产品及零件是否齐全，外观是否完好。如有情况及时与我公司联系。

When unpacking the case according to the packing list to check whether the products and parts are complete, appearance is intact. If there is any problem, timely contact with my company.

● 贮存 Storage

◆ 联轴器应存放在清洁、干燥、通风良好，避免日晒、雨淋的环境中。
◆ 联轴器出厂油封保养有效期为产品出厂后六个月。如产品需长期存放，须定期检查并采取有效的防护措施。

◆ Couplings should be stored in clean, dry, well ventilated, avoid the sun and rain environment.
◆ Couplings of the oil seal of the exworks maintains is valid for six months after product exworks. If the product requires long–term storage, to be checked regularly and to take effective protective measures.

膜片联轴器安装、调整
The installation and adjustment of the disc couplings

联轴器所连两轴的对中，也称找正。轴的准确对中，可使整个传动系统运行平稳，不会产生异常振动、噪音和异常磨损，也不会产生不正常的附加载荷，这对确保系统安全可靠运行，尤其是对高速回转轴系，具有十分重要的意义。但实际安装时总存在一定的误差，因此安装时应精心调整、控制径向及角向安装偏差，从而确保运行时两轴对中良好并安全运行。

The centring of two shafts connecting with couplings, also called alignment. Accurate shaft alignment can make the whole transmission system is running smooth and steady, won't produce abnormal vibration, noise and abnormal wear, also won't produce the abnormal additional load. This is of great significance for ensuring safe and reliable operation of the system, especially for high–speed rotary axis system. But there is always a certain amount of error when during the actual installation, therefore when installation should be carefully adjusted, control the radial and angular deviation installation, thereby ensuring that the two shafts is good and safe during the runtime.

◆ 初步找正
利用刀形尺和塞尺测量联轴器的不同心和利用楔形间隙轨或塞尺测量联轴器端面的不平行度，这种方法适用于初步找正或低转速、精度要求不高的弹性联轴器。
◆ 百分表找正
利用百分表或专用找正工具测量两半联轴器的不同心及不平行情况，至少要取四点作为检测基点，并且两半联轴器要互为检测。这种方法适用于转速较高、刚性联接和精度要求高的转动设备。
◆ 注意：
①在用塞尺和刀形尺找正时，联轴器径向端面的表面都应该平整、光滑、无锈、无毛刺。
②为了看清刀形尺的光线，最好使用手电筒。
③对于最终测量值，电机的地脚螺栓应是完全紧固的。
④用专用工具找正时，作好同一记号，为避免测量数据误差加大，并应把联轴器法兰均分为4–8个点，以便取到精确的数据。
⑤作好找正记录及相关标记。

◆ Initial alignment
Use the knife ruler and feeler gauge to measure the couplings that are not aligned and use wedge gap or feeler gauge to measure the end of couplings that is not parallel, this method is suitable for the initial alignment or low speed, the accuracy is not high elastic couplings.
◆ Dial indicator alignment
Using the dial indicator or special alignment tool to measure the two coupling halves which are not aligned and the situation of without parallel, at least choose four points as a test basis points, and the two coupling halves to mutual detection. This method is suitable for high speed, rigid connection and high precision rotating equipment.
◆ Attention:
①When using feeler gauge and Knife ruler for alignment, couplings end of the radial surface should level off, smooth, no rust, no burr.
②In order to see the light ray of knife ruler clearly, it is best to use a flashlight.
③For the final measurements, the foundation bolt of the motor should be fully tightened.
④When using special tool to align, should do the same symbol. In order to avoid increased measurement errors, the couplings flange should be divided into 4 to 8 points, in order to get the accurate data.
⑤Make a good record of alignment and relevant marks.

膜片联轴器使用、维护、保养
The use, maintenance, preservation of the disc couplings

● 定期检查 Regular inspection

膜片联轴器正常运行不需润滑，然而定期检查是必要的，建议每半年进行一次下列检查，主要检查内容如下:

Disc couplings run normally without lubrication, however, regular inspection is necessary, we suggest that every six months make a following check, main inspection contents as follows:

- ◆ 联接螺栓、螺母是否松动，必要时按安装要求再次拧紧。
- ◆ 观察膜片组件外层表面是否有碰伤、裂纹、过度的永久变形等缺陷，如有问题应立即更换。
- ◆ 传递扭矩的螺栓配合段表面是否有明显擦伤。
- ◆ 检查机组轴对中是否已变化，如已超过规定，应重新进行对中调整。

- ◆ Whether the connecting bolt and nut is loose or not, if necessary, in accordance with the requirements of installation to tighten again.
- ◆ Observe outer surface of the diaphragm assembly whether is a bruise, crack, the excessive permanent deformation and other defects, should be replaced immediately if have any questions.
- ◆ Whether the bolt torque transmission matching section surface has an obvious scratch.
- ◆ Check the axis units alignment whether has changes, such as more than provision, should be adjusted and aligned again.

● 监测 Monitoring

必要时可在机组运转过程中测量机组的振动值，如已超过振动烈度范围，应停机检查原因，并加以排除。

If necessary, to measure the unit vibration value during the unit operation process, If more than the vibration intensity range, should stop to check the cause and to be eliminated.

● 联轴器的拆卸 Disassemble couplings

拆卸时应注意保护好膜片的表面，以防碰伤。

When dismantle, hould pay attention to protect the surface of the diaphragm, in case of collision.

● 更换配件 Replace the accessories

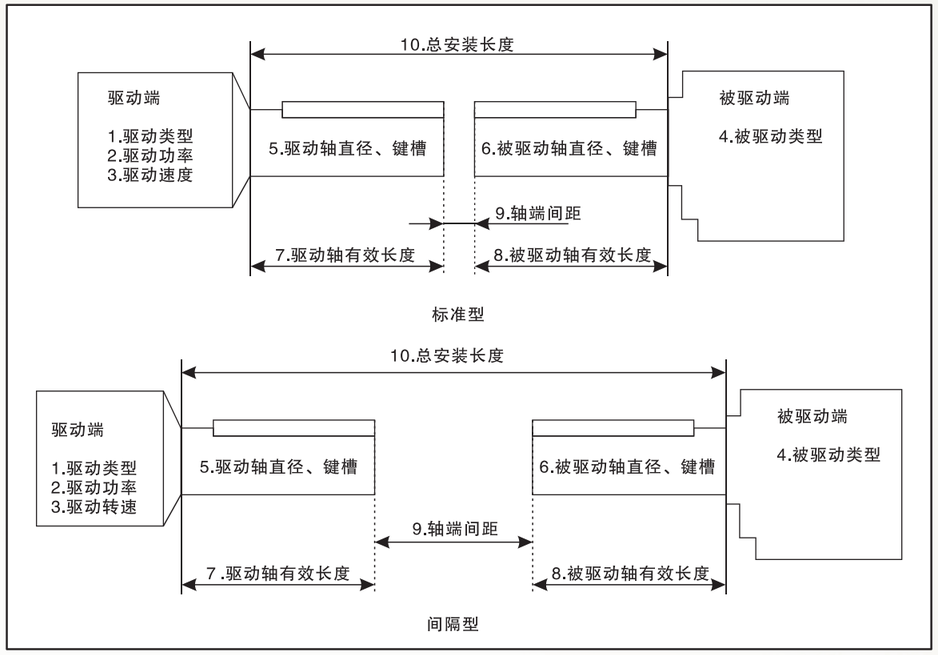
发现膜片组件或紧固件有损伤时应及时更换配件。

Found diaphragm components or fasteners are damaged, accessories should be replaced timely.

附表
Attached list

● 附表1 Attached list 1

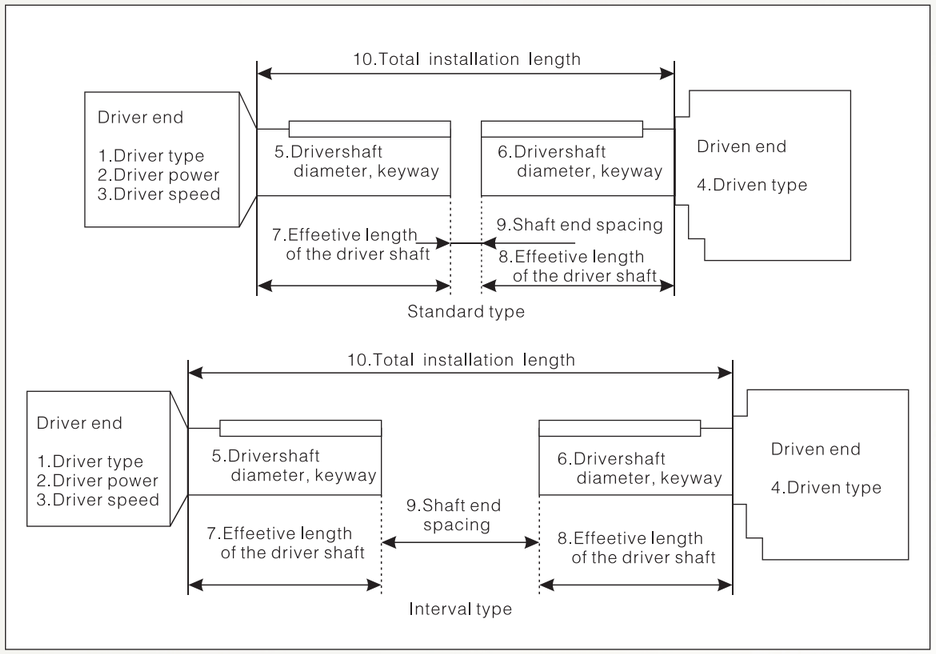
索达公司选型基本信息表
Suoda basic selection information form



1. 驱动类型: □电动机 □透平机 □内燃机—内燃机汽缸数: _____
   载荷类别: □均匀 □轻冲击 □中冲击 □重冲击 □特重冲击
   启动频率(次数): _____
2. 驱动功率(Kw): _____ 3. 驱动转速(rpm): _____
4. 被驱动设备类型: _____
5. 驱动轴直径(mm): _____ 键槽(mm): _____
6. 被驱动直径(mm): _____ 键槽(mm): _____
7. 驱动轴有效长度(mm): _____
8. 被驱动轴有效长度(mm): _____
9. 轴间距(mm): _____ 10.总安装长度(mm): _____
11.轴向补偿(mm): _____ 12.径向补偿(mm): _____
13.角向补偿(°): _____
14.工作环境: □室内 □室外 □灰尘 □水 □油 □ 腐蚀 □其他 _____
15.工作温度(℃): _____
16.允许回转空间(mm): _____
17.其他: _____

附表
Attached list

索达公司选型基本信息表
Suoda basic selection information form



1. Driver Type: ☐Electric motor ☐Turbine ☐ Internal combustion engines,
   internal combustion engine cylinder number: _____
   Load Type: ☐Uniform ☐Light impact ☐Medium impact ☐Heavy impact ☐Extra heavy impact
   Start frequency : _____
2. Driving power (Kw):_____3. Motor speed (rpm):_____
4. Driven device type:_____
5. Driver shaft diameter(mm):_____Keyway size (mm):_____
6. Driven shaft diameter (mm):_____Keyway size(mm):_____
7. Effective length of the drive shaft (mm): _____
8. Effective length of the driven shaft (mm):_____
9. Axle Base (mm):_____10.The total length of installation(mm): _____
11.Axial compensation (mm):_____12.12.Radial compensation (mm):_____
13.Angular compensation(°):_____
14.Working environment: ☐Indoor ☐Outdoor ☐Dusty ☐Water ☐Oil ☐Corrosion ☐Other
   _____
15.Working temperature (℃): _____
16.Allows rotary space(mm): _____
17.Other: _____

附表
Attached list

● 附表2 Attached list 1

螺栓拧紧扭矩表
Bolt tightening torque table

性能等级10.9级 螺栓拧紧力矩 Performance level:10.9 grade Bolt tightening torque								
螺栓公称直径(mm) Nominal Dia.(mm)	M6	M8	M10	M12	M14	M16	M18	M20
拧紧力矩(N·m) Torque(N·m)	13–16	30–36	65–78	110–130	180–201	280–330	380–450	540–650
螺栓公称直径(mm) Nominal Dia.(mm)	M22	M24	M27	M30	M33	M36	M39	
拧紧力矩(N·m) Torque(N·m)	740–880	940–1120	1400–1650	1700–2000	2473–3298	2800–3350	4111–5481	

质量为本　敏捷为机
创新为力　客户有利

Quality Oriented　Innovation Powers
Agility Opportunity　Customers benefit

SUODA COUPLING