



FLM系列 弹性滚柱联轴器 安装使用说明书

FLM Type Elastic Roller Coupling
Installation Manual



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一、FLM型弹性柱联轴器的结构、主要特点和适用范围

1、结构：

- 1, 10—挡板螺栓
- 2, 9—防松垫圈
- 3—内挡板
- 7—弹性柱
- 4—主动端半联轴节
- 5—螺栓
- 6—从动端半联轴节
- 8—外挡板

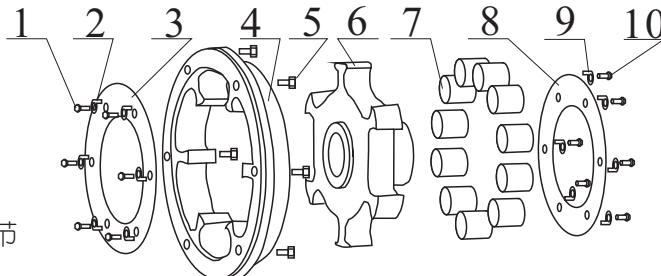


图1 联轴器结构分布示意图

Figure 1 Configuration of FLM coupling

2、FLM型弹性柱联轴器的主要特点是：

①结构简单、零件数量少；安装容易、外形尺寸小；工作可靠、不需润滑；具有一定的轴向、径向和角向补偿能力。弹性柱以聚氨酯为主，不但具有较高的弹性和耐磨性，而且耐冲击，并有耐油性等优点。

②FLM型弹性柱联轴器主要适用于启动频繁、正反转、中高速、中等扭矩和要求高可靠的场合，弹性柱工作温度-35℃~+80℃。

③FLM型弹性柱联轴器不得安装在封闭、发热的环境中，必须要有充足的散热条件，以保证弹性柱的正常使用条件，如工作温度过高会降低弹性柱的使用寿命，严重的会早期失效！

二、联轴器的安装和调整

安装前准备

①在装配前，必须将联轴器的各零部件清洗干净。

②安装时检查半联轴器联接工作表面不得有磕碰、划痕等缺陷。

安装与调整

为确保联轴器的工作性能和安全使用，请按以下步骤进行安装找正：

①分别将主动端半联轴器和从动端半联轴器连接或套装在轴上(一般采用热装法)。主动端半联轴器4在与机器连接前应先将内挡板装上，联接螺栓要做好防松处理。

②安装主动端半联轴器时，务必在联接螺栓的螺纹上涂厌氧防松胶，并用力矩扳手拧到表2规定的螺栓预紧力矩。螺栓务必做好防松措施，防止运行过程中，万一螺栓松动飞出，发生事故。

③分别按图2、进行角向、径向和轴向找正，其偏差值应符合表1规定。

I. Configuration, Characteristic, and Application of FLM type coupling.

Configuration:

- 1, 10—bolts for baffle
- 2, 9—washers
- 3, 8—baffle
- 7—elastic element
- 4—active end half couplings
- 5—bolts
- 6—driven end half coupling

The main characteristic of FLM coupling is compact configuration, less parts, easy to installing, small size, working stably, and lubricant free. it also is with axial, radial, and angle compensation. the elastic element is mainly made of polyurethane (fluoroelastomer) , it not only has high performance elastic and wearable, and impact resistance and oil proof.

FLM coupling works at these place: start frequency, rotatory reverse and positive, medium speed, medium torque and high stable. the element's working temperature is -35℃~+80℃.

FLM coupling is must not install at hermetic place. the working place has to have enough thermolysis to make elastic element normally, too high temperature will damage the elastic element!

II. Installation and adjustment

Prepair for install

Clean all parts of FLM coupling before install.

Inspect all fitting faces, and there should no scar, nick, and other defections.

Install and adjusting

In order to keep coupling work normally and safely, please following below steps:

First, install part3 on the part4 by part2 and part1,then install Part4,part5 onto each shaft (normally shrinkage fit),the bolts need to lock to avoid looseness.

The screw of bolts must to smear anaerobic glue, and the tighten torque see table2. the bolts must be locked to prevent bolts from fly out.

Second, align coupling angle and radial see figure2, and the tolerance see table1.

NOVEL COUPLING BRING MORE BENEFITS FOR YOU

④找正合格后拧紧主、从端机座螺柱，然后依次装入弹性柱，装上外挡板并锁紧螺栓做好防松处理。
联轴器在出厂前做过动平衡试验，安装时应按出厂编号成套装配。

Third, after alignment, tighten bolts, install elastic element,install baffle,lock the bolts.
the coupling is dynamic balanced in fixture, and must not change the part with other set.

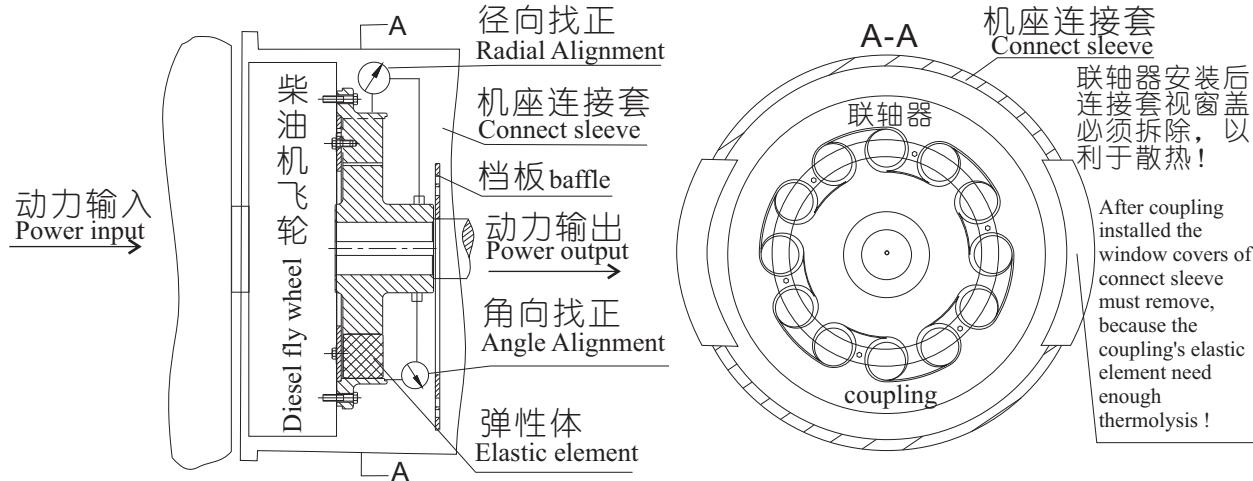


图2 联轴器安装调试示意图
Figure2 Coupling install and adjust sketch map

3、维护与保养

①运行一周后，需停机检查联轴器的工作情况：

●螺栓有否松动、脱落。

●弹性柱是否已见明显磨损。

●如发现联轴器有异响或振动过大的情况，需按图2重新复核联轴器的对中情况，并重新调整至合格。

②定期每三个月作一次检查，若发现弹性柱直径已磨损4~5mm时，即应及时更换。

弹性柱属易损件，其正常工作温度为-35°C~+80°C。在符合安装使用条件下，正常工作寿命一般为二年。届时请用户及时更换。

③有机座连接套的机型，装配后应将视窗盖全部去除，以利于散热。改善联轴器的工作环境。（见图2）

三、联轴器的许用补偿量、螺栓预紧力矩

Maintenance

After one week work, the coupling need inspected as following:

If any bolt is loose or fall?

If the elastic element is worn clearly ?

If there is any noise or librate, the alignment must redo as above steps.

Inspect coupling every 3 months after the first inspection, the elastic element must be replaced if the diameter of element is worn up 4~5mm.

the elastic element is wearing part, and its working temperature is -35°C~+80°C. its normal life is 2 years if the coupling works under the normal conditions, and it must be replaced at time.

For the diesel which has connect sleeve(see fig2), the window covers must to remove away because the coupling's elastic element need enough thermolysis ! (Fig2)

III. Compensation and tighten torque of bolts

表1、FLM型弹性柱联轴器许用补偿量

Table1.Compensation of coupling

型号 SIZE	FLM05、FLM06	FLM15、FLM16
轴向Axial ΔX mm	2.00	2.00
径向Radial ΔY mm	0.20	0.10
角向Angle $\Delta \alpha$ (折算到跳动量convert to jump value)mm	0.60	0.30

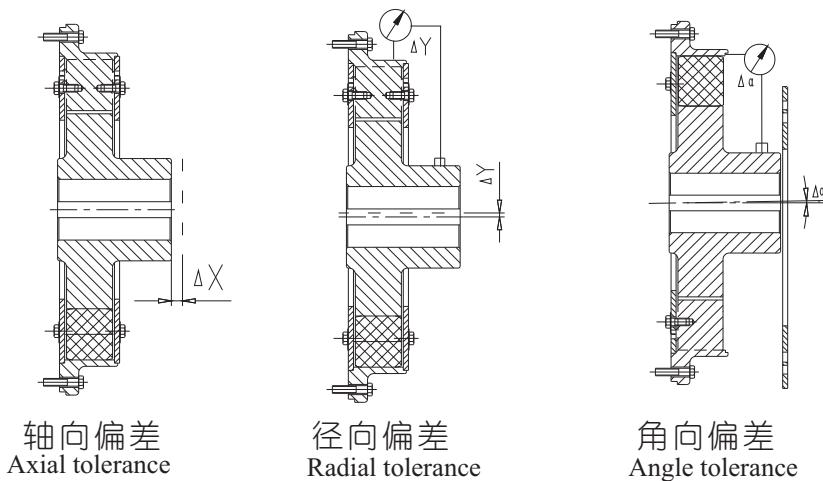


图3 联轴器安装偏移示意图

Figure2 Coupling install tolerance sketch map

表2、FLM型弹性柱联轴器螺栓的预紧力矩 Table2. Tighten torque of bolts

型号 SIZE	FLM05、FLM06	FLM15、FLM16	档板螺栓 Bolt for baffle
螺栓规格 Bolt Inch	5/8' -11 (主动端 Active end)	1/2' -13 (主动端 Active end)	M12 × 30 (通用 Common use)
螺栓预紧力矩 Tighten torque Nm	200	105	
弹性柱规格 Elastic element mm	$\Phi 70 \times 72$	$\Phi 58 \times 72$	

表3、FLM型弹性柱联轴器公称扭矩 Table3. Nominal torque of FLM Coupling

型号 SIZE	FLM05、FLM06	FLM15、FLM16
公称扭矩 Nominal torque Nm	22400	14000

敬告:

如因用户超出产品样本及本使用说明书规定的使用范围和条件，您将不能得到合同所规定的服务内容，我们将对此表示遗憾。

您在使用中的有关技术咨询事宜，请及时与我们取得联系，我们将竭诚为您服务！

NOTE:

If the coupling is not working under the condition stated in coupling catalogue or this manual, you will can not gain the services stipulated in contract free, we will regret for this happen.

If there is any technical problems in using with this product, please link us in time, we will service for you with all we can.

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