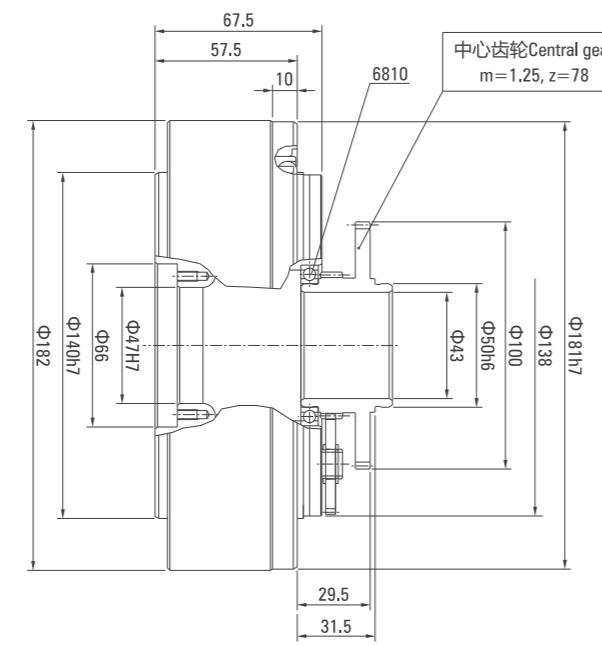
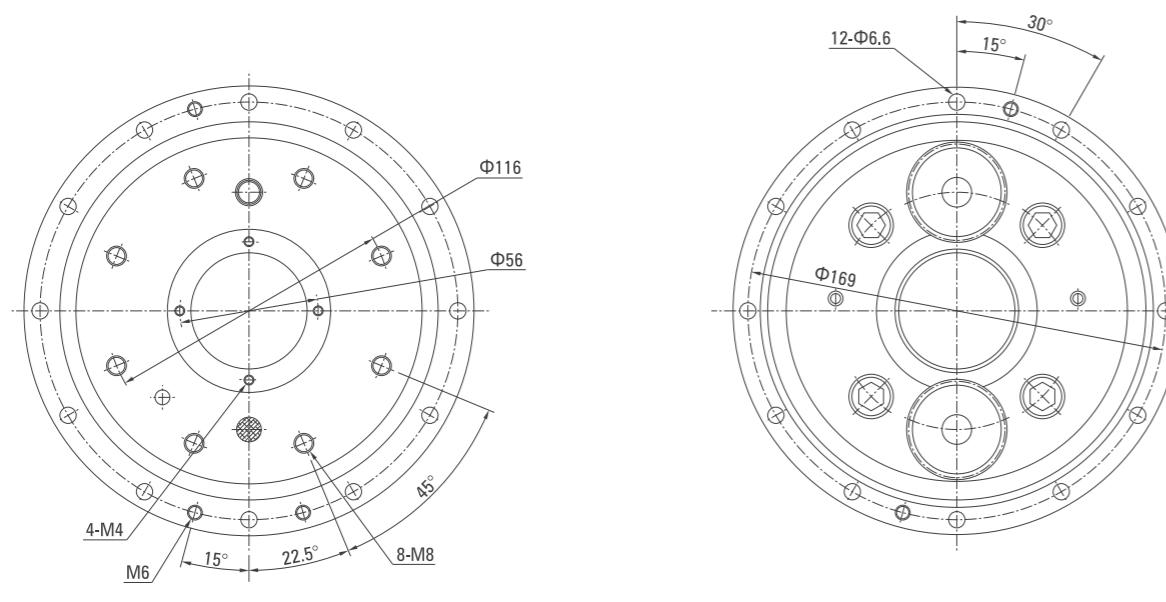
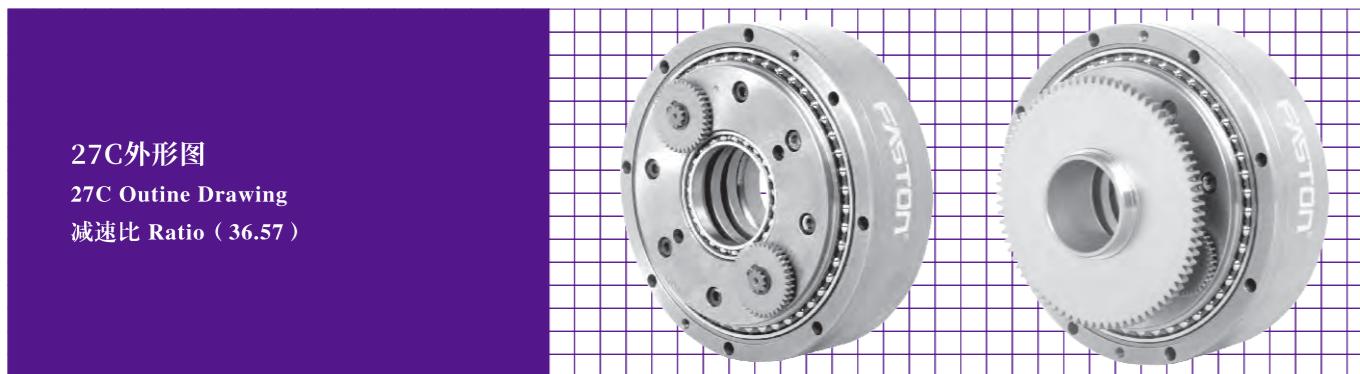
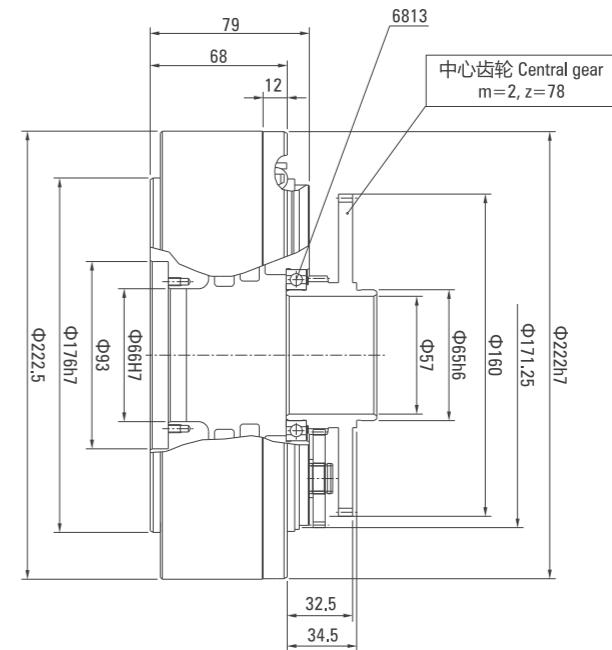
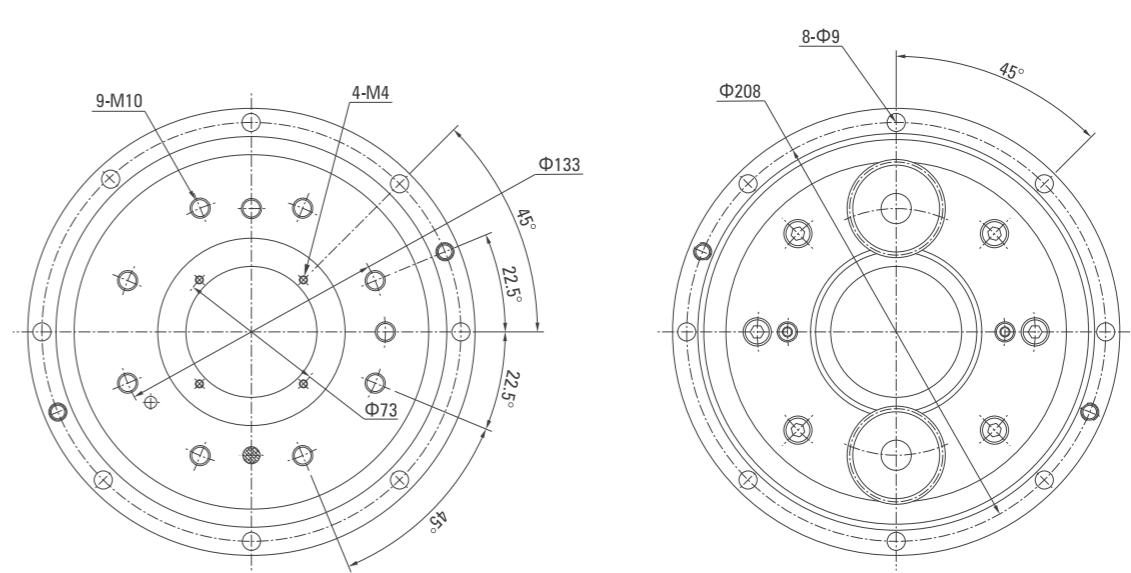
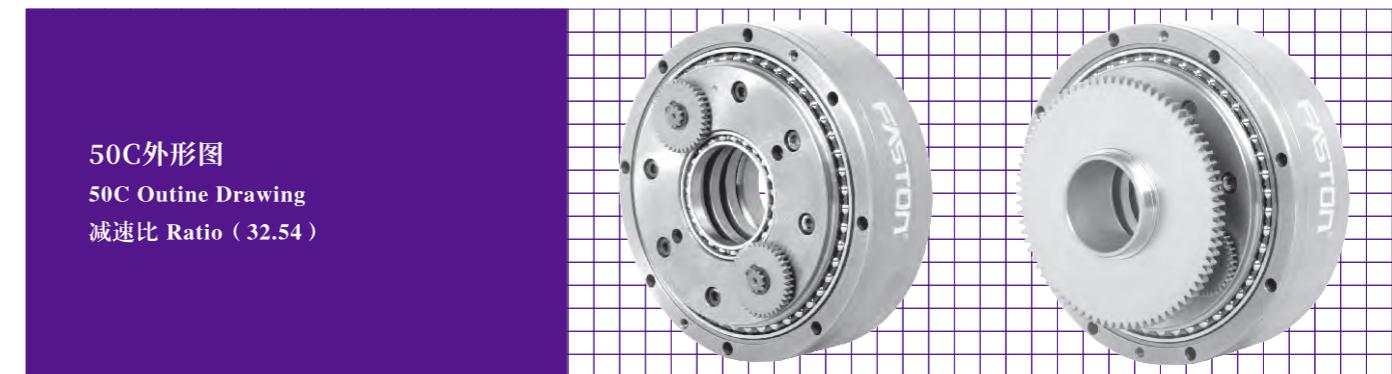


C系列外形尺寸图 C SERIES OUTLINE DIMENSION DRAWING

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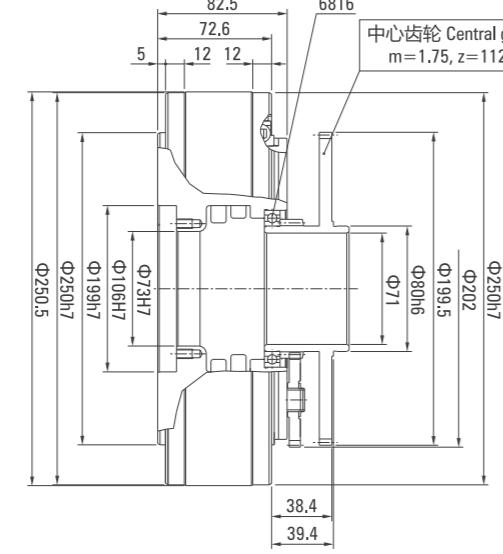
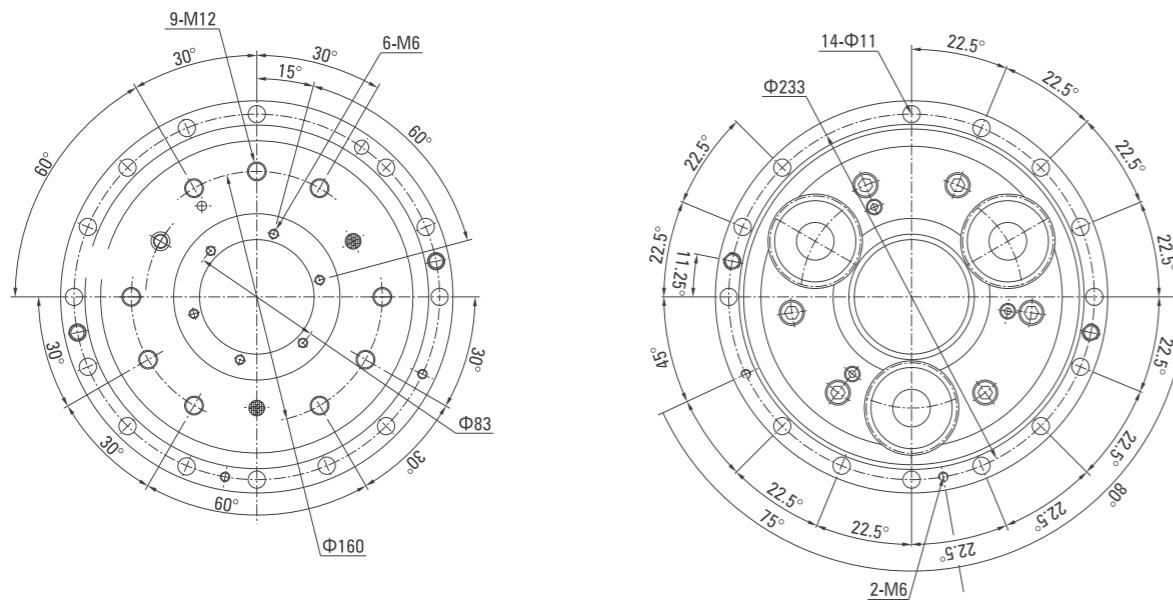
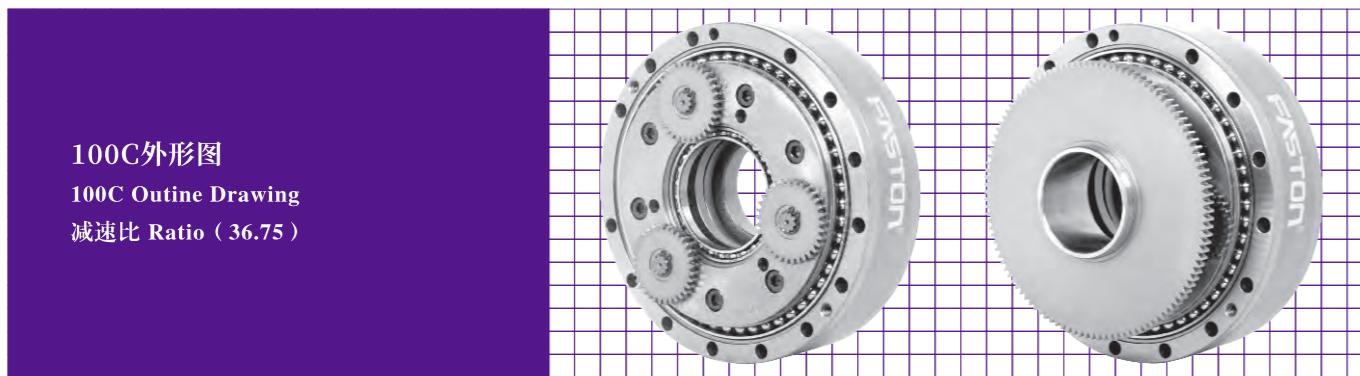


C系列外形尺寸图 C SERIES OUTLINE DIMENSION DRAWING

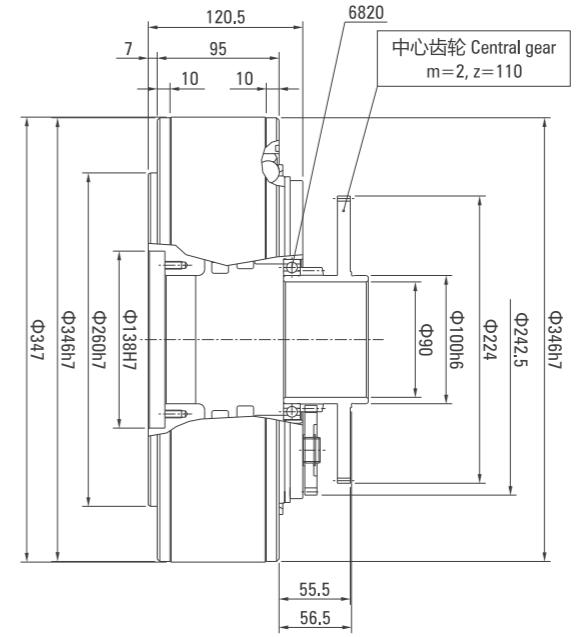
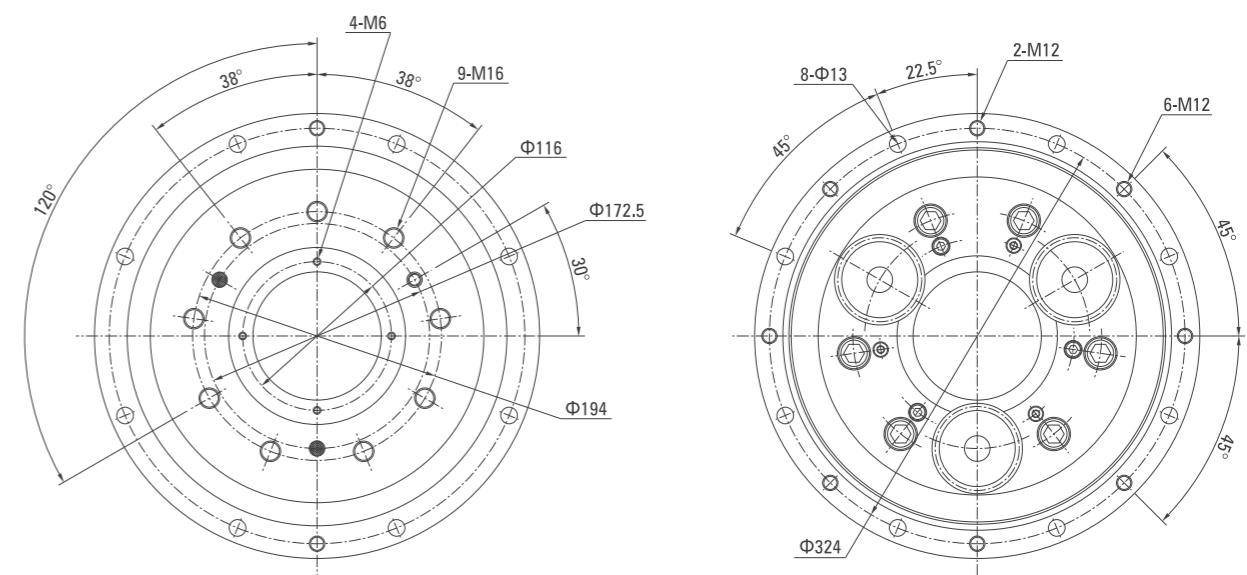
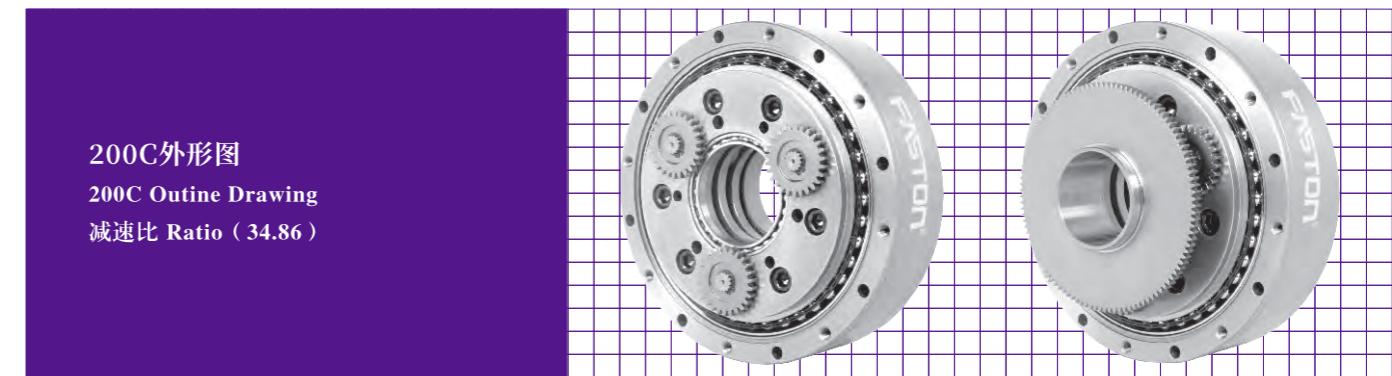


C系列外形尺寸图 C SERIES OUTLINE DIMENSION DRAWING

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C系列外形尺寸图 C SERIES OUTLINE DIMENSION DRAWING



C型减速器安装要领 C TYPE REDUCER INSTALLATION ESSENTIALS

为了充分发挥FVC型减速器的性能,对装配精度、安装方法、润滑以及密封进行最佳设计是十分重要的。

In order to make fully use of FVC type reducer, it is very important to do optimal design of assembly precision, installation method, lubrication.

请认真阅读以下注意事项。Please carefully read the following notes.

装配精度 Assembly Precision

FVC型减速器的安装侧部件请按附图D.1进行设计。如果装配不良会造成振动、噪声、齿隙等问题。

The installation of side components of FVC type reducers shall be designed based on drawing D.1.Poor assembly will cause shaking, noise and tooth gap, etc.

图D.1:FVC系列装配精度

Figure D.1:FVC series assembly precision

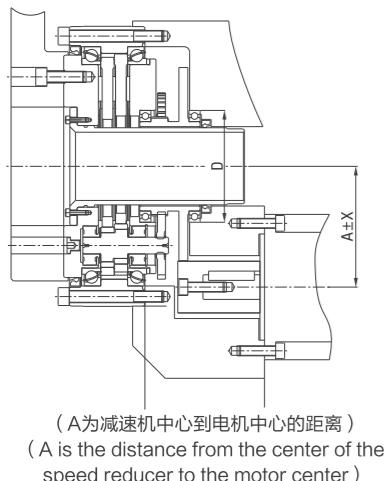
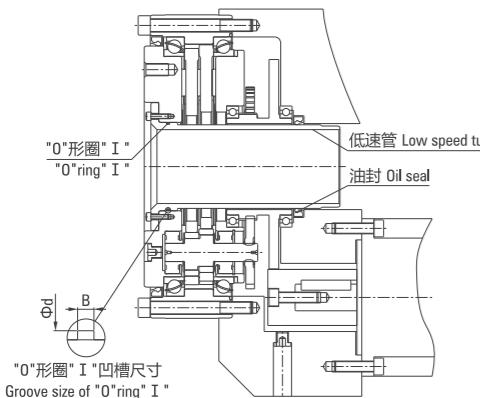
**图D.2:装配示例**

Figure D.2:Assembly example

**装配要领 Assembly Method**

FVC型减速器安装在配套部件时的标准图例参见图D.2。装配时,请务必按指定量注入润滑脂。

FVC type reducer installed on the supporting parts of standard legend for see figure D.2.When assembly, please be sure to inject the specified amount of grease.

图D.2, 图D.3表示了“O”型圈的密封位置,因此请参照进行密封设计。Figure D.2, figure D.3 shows the "O" type of ring seal position, so please refer to the seal design.

结构上不能使用“O”型圈时,请使用表C.3的液体密封等密封剂。

The structure can not be used "O"ring, please use the form C.3 liquid sealing sealant.

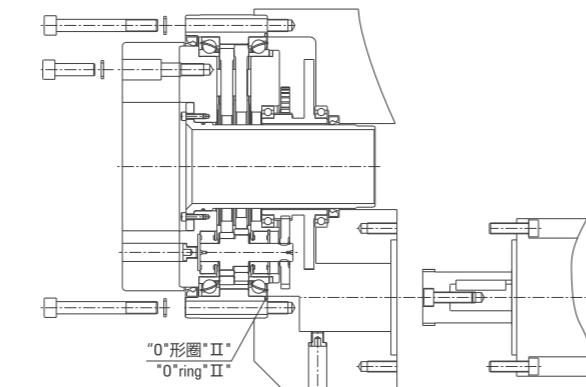
表D.1:FVC系列装配精度尺寸表

Table D.1:FVC series assembly precision size table

型号 Model	项目 Project	中心间距离公差 Center Distance Tolerance X	同心度公差 Concentric Tolerance a	平行度公差 Parallelism Tolerance b
10C-FVC		± 0.03	Max0.03	Max0.03
27C-FVC				
50C-FVC				
100C-FVC				
200C-FVC				
320C-FVC				
500C-FVC				

图D.3:装配示例

Figure D.3:Assembly example

**低速管装配示例 Example Of Low Speed Tube Assembly**

低速管用于保护通过中空部位的电缆以及密封减速器内部的润滑脂。图D.2是低速管的安装参考示例。

Low speed tube for protection through the hollow part of the cable and the lubrication grease inside the seal reducer. Figure D.2 is a reference example for the installation of a low speed tube.

输出轴螺栓紧固装配示例:图D.3

Output Shaft Bolt Fastening Assembly Example:Figure D.3

C型减速器安装要领 C TYPE REDUCER INSTALLATION ESSENTIALS

表D.2:“O”型圈()密封尺寸表(mm)

代号 Code	机型 Model	10C-FVC	27C-FVC	50C-FVC	100C-FVC	200C-FVC	320C-FVC	500C-FVC
O形圈 O ring	公称号码 Nominal number	CO-0625	CO-0634	CO-0643	S70	G95	G135	G145
	线径 Wire diameter	φ 2.40	φ 2.40	φ 3.50	φ 2.00	φ 3.10	φ 3.10	φ 3.10
	内径 Internal diameter	φ 29.7	φ 42.2	φ 59.6	φ 69.5	φ 94.4	φ 134.4	φ 144.4
凹槽尺寸 Groove Size	内径d Internal diameter d	φ 30.2	φ 43.2	φ 60.3	φ 70.0	φ 95.0	φ 135.0	φ 145.0
	宽度B Width B	3.2	3.2	4.7	2.7	4.1	4.1	4.1

表D.3:“O”型圈()

机型 Model	适用“O”型圈 Apply The "O" Shape Ring
10C-FVC	AS568-048
27C-FVC	AS568-163
50C-FVC	AS568-169
100C-FVC	AS568-173
200C-FVC	AS568-277
320C-FVC	AS568-281
500C-FVC	G460、B2401

输出轴通孔螺栓坚固型装配,请询问公司相关技术人员。

Output shaft through hole bolt solid assembly,
please ask the company related technical personnel.

中心齿轮、输入齿轮

Central Gear, Input Gear

中心齿轮、输入齿轮的精度 Center gear, input gear precision

如果中心齿轮、输入齿轮的精度不良,就会产生噪声、齿隙,所以需要按以下精度进行设计。

If the center gear, the input gear's precision is bad, can produce the noise, the tooth gap, therefore needs to carry on the design according to the following precision.

表D.4中心齿轮、输入齿轮的精度

Table D.4 center gear, the accuracy of the input gear.

表D.4:中心齿轮、输入齿轮的精度 Table D.4:Center gear, input gear precision

配合公差 Fit Tolerance X	同心度公差 Concentric Tolerance a	中心齿轮小齿轮 Central Gear Pinion 精度等级 Precision Grade	中心齿轮大齿轮 Central Gear 精度等级 Precision Grade	输入齿轮 Input Gear 精度等级 Precision Grade
h6	Max0.03	GB/T10095 8级 level	GB/T10095 7级 level	GB/T10095 8级 level

表D.5:输入齿轮与中心齿轮大齿轮的齿隙(公法线)

Table D.5:Gear gap of the input gear and the big gear of the central gear(normal line)

机型 Model	齿隙(公法线) Tooth Gap (Common Law) (mm)
10C-FVC	0.035~0.090
27C-FVC	0.040~0.110
50C-FVC	0.050~0.130
100C-FVC	0.060~0.140
200C-FVC	
320C-FVC	0.075~0.180
500C-FVC	

表D.6:中心齿轮小齿轮的齿轮参数

Table D.6:Gear parameters of central gear pinion

机型 Model	齿轮模数 Gear Modulus m	齿轮 Gear z	变位系数 Coefficient Of Variation X
10C-FVC	1.00	48	-0.04
27C-FVC	1.00	57	+0.2
50C-FVC	1.25	61	0
100C-FVC	1.75	48	+0.3
200C-FVC	2.50	43	0
320C-FVC	2.00	78	0
500C-FVC	2.00	83	0

C型减速器安装要领 C TYPE REDUCER INSTALLATION ESSENTIALS

标准中心齿轮 Standard Center Gear

FVC型减速器备有标准中心齿轮。如果需要标准中心齿轮,请在订购时指定。表D.7为标准中心齿轮大齿轮的齿轮参数。
FVC type gear reducer with standard center gear. If you need a standard center gear, please specify when ordering. Table D.7 gear parameters of the standard center gear.

表D.7:标准中心齿轮大齿轮的齿轮参数

Table D.7: Gear parameters of standard center gear

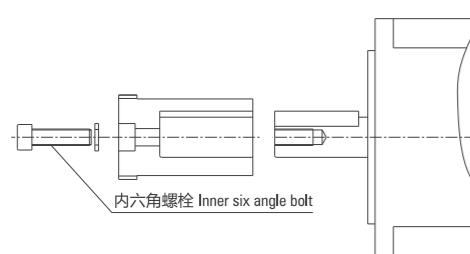
机型 Model	齿轮模数 m	齿轮 z	变位系数 Coefficient Of Variation X
10C-FVC	2.00	57	0
27C-FVC	1.25	78	0
50C-FVC	2.00	78	0
100C-FVC	1.75	112	0
200C-FVC	2.00	110	0
320C-FVC	2.00	125	0
500C-FVC	2.00	150	0

安装输入齿轮

Install Input Gear

图D.5:表示伺服电机轴的形状和输入齿轮的安装示例,请参照此图进行设计。

Figure D.5: indicates the shape of the servo motor shaft and the installation of the input gear sample, please refer to this diagram for design.



电机轴有螺孔 The motor shaft with a screw hole

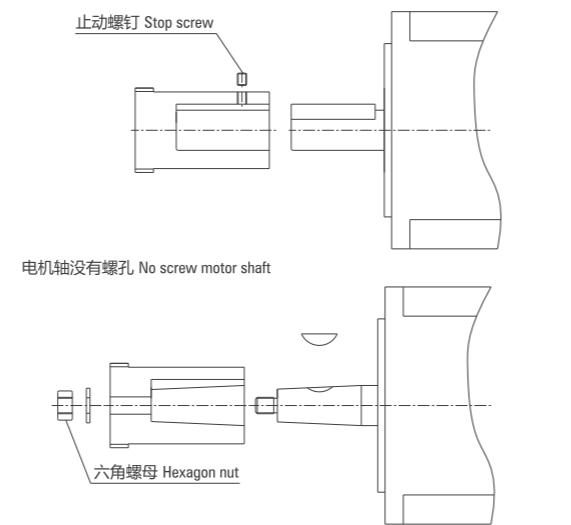
螺栓的紧固转矩 Tightening Torque Of Bolts

FVC型减速器使用内六角螺栓,请按表C.4的紧固转矩进行紧固,螺栓请使用碟形弹簧垫圈,防止螺栓松动及擦伤螺栓座面。

FVC type reducer using the six angle bolt, according to the table C.4 fastening torque for fastening, bolts, please use the disc spring washer, to prevent bolt loose and scratch the bolt seat.

图D.5:输入齿轮装配

Figure D.5:Input gear assembly



电机轴为锥形轴且带螺栓 The motor shaft is a conical shaft and is provided with a bolt

润滑 lubrication

减速器在出厂时未填充润滑脂,因此在安装减速器时,请务必根据所需填充量填充建议的润滑剂。

Reducer in the factory is not filled with grease, so in the installation of the reducer, be sure to fill according to the required amount of filling the recommended lubricant.

减速器的润滑剂填充量一般占内部空间的70-90%,请确保有10%左右的空间未注满。

Reducer lubricant filling amount accounts for the interior space of the 70-90%, please make sure that there are about 10% of the space is not filled up.

减速器安装设计时请注意需要二个注油孔,需要密封及方便加注油脂,排出油脂。

Please note that the design of reducer installation needs two oil filling hole, need to seal and convenient oil filling, discharge of oil.

减速器封入油脂后,一般更换油脂时间为5000小时左右,请定期检查润滑脂的老化、污染情况,并规定更换时间。

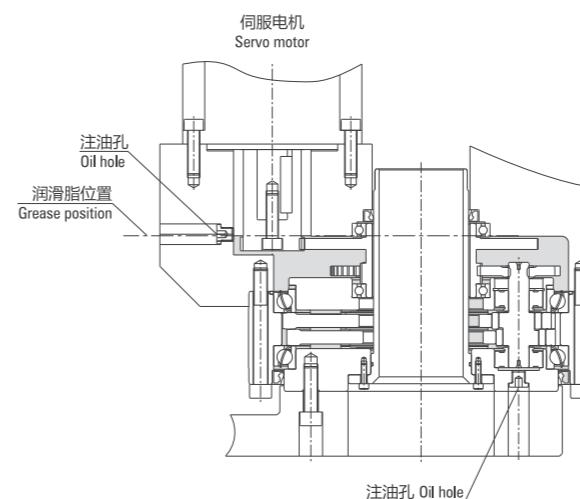
Reducer sealed grease, the general replacement of oil time is about 5000 hours, please regularly check the grease of aging, pollution, and the provisions of replacement time.

C型减速器安装要领 C TYPE REDUCER INSTALLATION ESSENTIALS

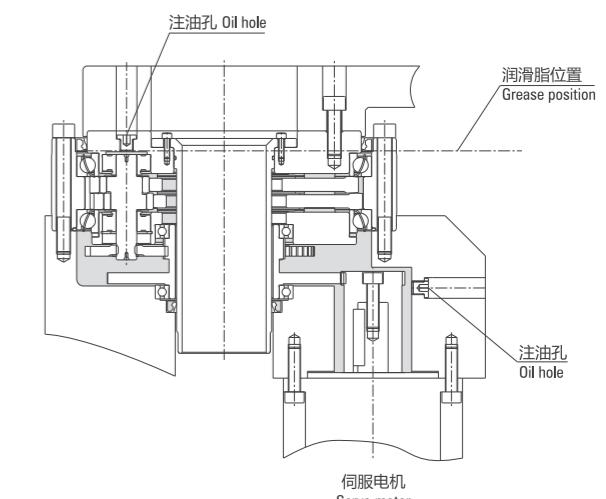
图D.7:润滑油注入位置(垂直)

Figure D.7:Lubricating oil injection position(vertical)

(安装垂直轴-1Install vertical axis-1)



(安装垂直轴-2Install vertical axis-2)



表D.8:润滑脂填充量 Table D.8:Grease filing amount

机型 Model	安装水平轴 (CC) Install Horizontal Axis (CC)	安装垂直轴 (CC) Install Vertical Axis (CC)
10C-FVC	147	167
27C-FVC	266	305
50C-FVC	498	571
100C-FVC	756	857
200C-FVC	1831	2076
320C-FVC	3536	4047
500C-FVC	5934	6900

保修 Guarantee

保修期及保修范围规定如下。

The warranty period and the scope of the warranty provisions are as follows.

保修期 Warranty period

在产品目录中记载的正常组装状态及润滑状态下使用的前提下,保修期为交货后的一年时间或该产品运行时间达到2000小时两者中最先达到的时间。

In the product catalog records of the normal assembly and lubrication under the condition of the use of the premise, the warranty period for the delivery of a year or the product running time of 2000 hours to reach the first time between the two.

保修范围 Warranty coverage

在上述保修期内,因本公司产品缺陷导致故障时,由本公司负责对本产品进行维修或更换。

During the warranty period, the company shall be responsible for the maintenance or replacement of the product as a result of the failure of the company's product defects.

但以下情况不在保修范围内。But the following conditions are not within the scope of the warranty.

因客户不当操作或使用导致故障的
非本公司实施的改造或修理导致故障的
非本产品原因导致故障的
其它天灾等非本公司责任导致故障的

Failure due to improper operation or use of the customer
Non the company's implementation of the transformation or repair
of the failure of the
Non product causes of failure
Other natural disasters and other non liability of the company led to
the failure of

而且,这里所说的保修是指对本产品的保修。

Moreover, the warranty here refers to the warranty for this product.

对于因本产品故障引发的其它损失、与设备上拆装相关的工时、费用等,不在本公司负责范围内。

For other losses caused by the failure of this product, and the equipment on the dismantling of the hours, costs, etc., are not responsible for the company.