

# BONENG



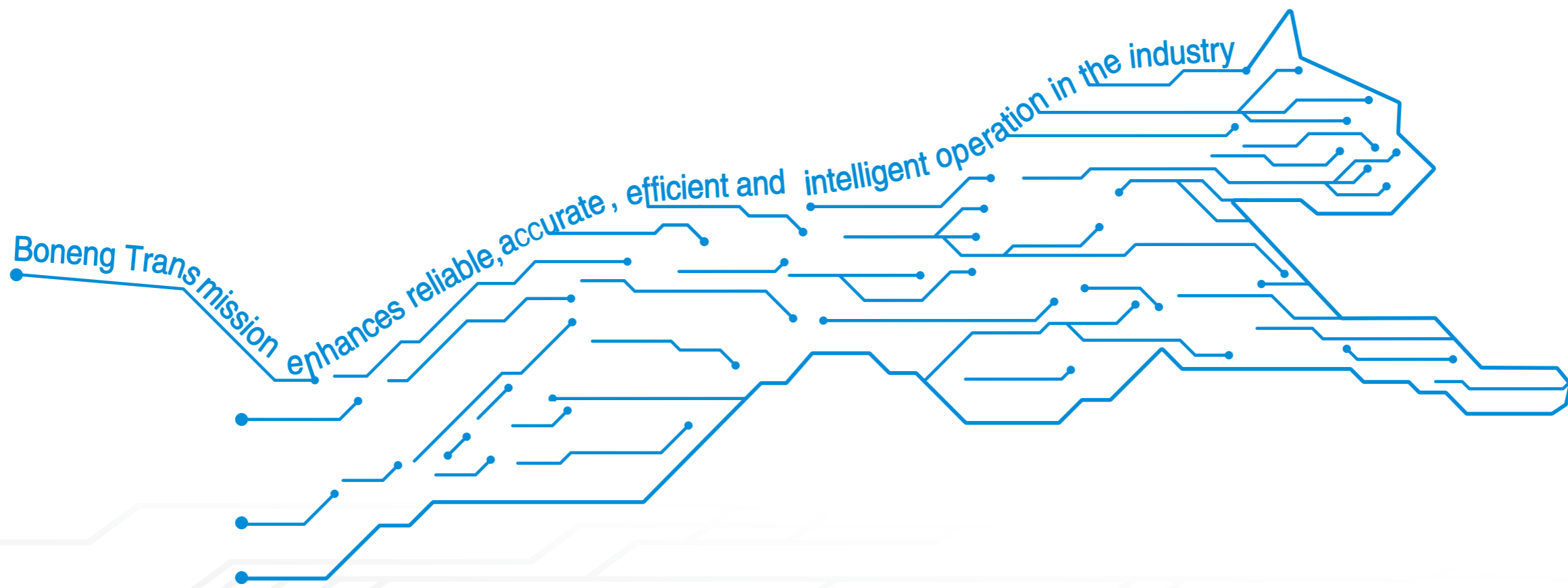
F-MX平行轴斜齿  
伺服马达&AX伺服  
驱动器

F-MX Parallel  
Shaft Servo  
Gearmotor & AX  
Servo Drives

(0.28kW~9.11kW)

Edit date 08/2024  
Selection Catalogue: C05.0044

## Boneng Transmission



控制器/驱动器/马达/  
齿轮马达/齿轮箱

Controller/ Drive/ Motor/  
Gearmotor/ Gearbox

## F-MX平行轴斜齿伺服马达&AX伺服驱动器

- ◆ 高度的模块化设计，拟生态的外观，拥有自主知识产权。
- ◆ 采用整体式铸造箱体，体积小，传动平稳，噪声低。
- ◆ 灵活的安装形式，适用工况更广泛。
- ◆ 承载能力高，运行可靠。
- ◆ 传动效率高，节约能源。
- ◆ 性价比高，维护少。
- ◆ 伺服马达不仅拥有坚固的紧凑结构及高防护等级，而且具有高效率、高过载承载能力等特点；其优良的径向跳动质量和细微的转矩波动，可实现高质量的工件表面加工。
- ◆ 与博能Agile系列驱动器结合使用形成一个强大的伺服系统，可实现无缝集成，完美协同。

## F-MX Parallel-axis Helical Servo Gearmotor &AX Servo Drives

- ◆ High modular design, biomimetic surface with owned intellectual property right.
- ◆ Adopting integral casting box body, small volume, smooth transmission, low noise.
- ◆ Flexible installation form, suitable for a wider range of working conditions.
- ◆ High carrying capacity and reliable operation.
- ◆ High efficiency and save power.
- ◆ Save cost and low maintenance.
- ◆ Servo motor not only has a strong compact structure and high protection grade, but also has high efficiency, high overload bearing capacity and other characteristics; Its excellent radial runout quality and subtle torque fluctuation can realize high quality workpiece surface machining.
- ◆ Combined with boneng Agile series drive to form a powerful servo system, can achieve seamless integration, perfect coordination.



产品广泛应用于自动化设备、印刷机械、包装机械、纺织机械、机器人等各个领域。

博能传动公司总部和各大区域的技术专家以及各区域办事处的应用工程师、售后服务技师竭诚为您提供全面的技术咨询和完善的售后服务。

Products are widely used in Automation equipment industry, Printing machines, Packaging machines, Textile machinery, Manipulator and other fields. Boneng Transmission company headquarters and major regional technical experts and regional offices of the application engineers, after-sales service technicians dedicated to provide you with comprehensive technical advice and perfect service.

## 注意事项

- ◆ 结构示意图、外形图及其他附图只属范例，无严格比例要求。（未注尺寸单位均为mm）。
- ◆ 所注重量仅为平均值，并不具有约束力。
- ◆ 注油只作为参考值，实际注油量应以油镜上的标记为准。

## Note

- ◆ The structure scheme, appearance diagram and other attached diagrams in sample are examples,there is no strict proportion requirement.(The unmarked dimension units are mm).
- ◆ The marked weight is average value,it has no constraint force.
- ◆ The marked oil quantity in sample is only reference value,actual oil filling quantity should be the same with the mark on oil immersion lens.

## ⚠ 使用注意事项

- ◆ 为防止意外事故发生，所有旋转部件均按照使用者所在国家和地区的安全规范由购置方加罩保护。
- ◆ 试车之前必须认真阅读使用说明书。
- ◆ 齿轮马达在供货时已处于准运行状态，运行前需加注润滑油。
- ◆ 齿轮马达应由熟悉相关安全要求的专业人员安装；安装时必须有安全装置以防止事故发生，安装位置必须符合规定。

## ⚠ You must confirm to the following instructions

- ◆ To prevent accidents,all the rotation parts are added with protective covers according to the safety regulations of the nation and region.
- ◆ Before debugging,you should carefully read instruction book.
- ◆ Gearmotor is on running-permission status when delivered,you should add lubrication oil before putting it into running.
- ◆ The gearmotor should be installed by techincal staffs who could be familar with corresponding security requirements. Security device should be required for preventing from accidents while installation position must be satisfied with regulations.

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## 1 型号表示方法

## 1 Type Designation

**系列名**  
**传动级数**  
 2级/3级  
**机座号**  
**安装形式**  
 H=底脚安装  
 F=法兰安装  
 S=小法兰安装  
 A=轴装式安装  
 T=带扭力臂附件安装

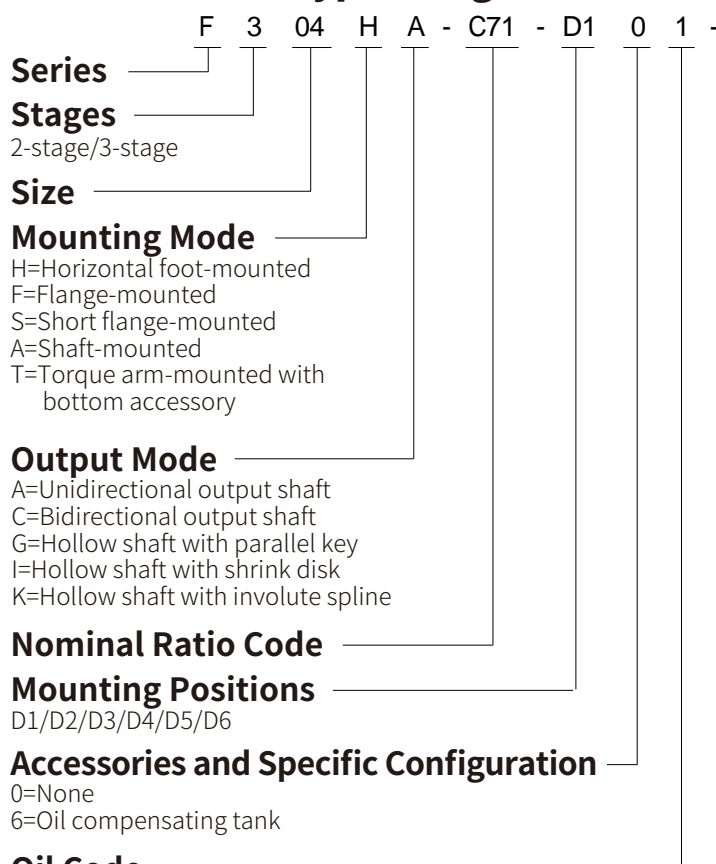
**输出形式**  
 A=单向平键实心轴  
 C=双向平键实心轴  
 G=平键空心轴  
 I=锁紧盘空心轴  
 K=渐开线花键空心轴

**公称减速比代号**

**安装方位**  
 D1/D2/D3/D4/D5/D6

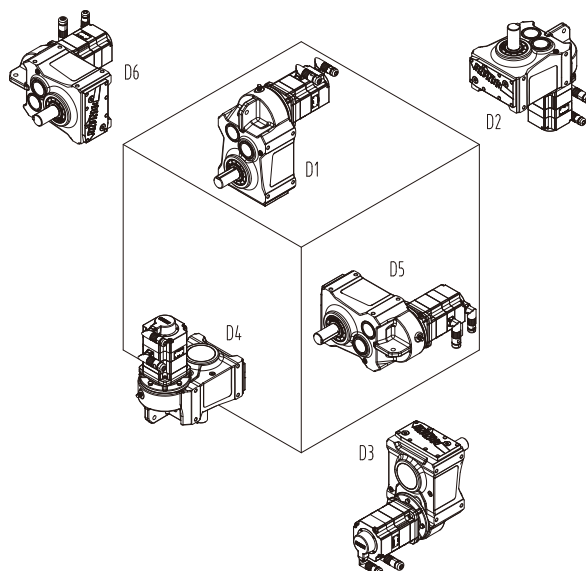
**可选附件和指定配置**  
 0=无  
 6=补偿油箱

**润滑油代号**  
 0=不加润滑油 (不加油出厂时, 请选此项)  
 2=矿物润滑油VG320 (环境温度 $-20^{\circ}\text{C}\sim+40^{\circ}\text{C}$ , 需加油出厂时, 请选此项)



## 2 安装方位

## 2 Mounting Positions



MX 048S 1 E30 F S 0 - N 3 A 0 6-1 1 1

**连接器位置**  
1=可旋转

**连接器类型**  
1=规格1

**连接器方位**  
1/2/3/4

**防护等级**  
6=IP66

**热保护**  
0=无绕组保护

**制动器**  
N=无制动器  
A=永磁制动器

**编码器**  
3=485编码器  
(线缆≤20m)  
4=Biss-C编码器  
(线缆>20m)

**冷却方式**  
N=自然冷却

**轴伸形式S**

**安装形式F**

**额定转速代号**  
E15=1500r/min  
E20=2000r/min  
E30=3000r/min

**结构形式**  
1=紧凑型

**机座号**

**三相交流同步  
伺服马达**

**Connector Location**  
1=Rotational

**Connector Type**  
1=Type 1

**Connector Position**  
1/2/3/4

**Protection Class**  
6=IP66

**Thermal Protection**  
0=Without thermal protection

**Brake**  
N=Without brake  
A=With brake

**Encoder**  
3=485 Encoder  
(Cable length≤20m)  
4=Biss-C Encoder  
(Cable length>20m)

**Cooling Method**  
N=Natural cooling

**Shaft Extension S**

**Installation Form F**

**Rated Speed Code**  
E15=1500r/min  
E20=2000r/min  
E30=3000r/min

**Structure Type**  
1=Compact

**Size**

**Three-phase AC  
Synchronous Servo Motor**

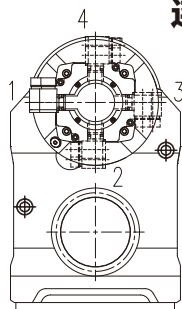
◆ 配AS输入法兰的齿轮箱型号示例：  
F308HA-C32-D100-AS160

整机标配颜色  RAL9006 (白铝灰色)

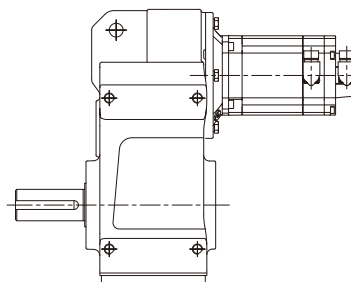
◆ Example of product type with AS  
input flange: F308HA-C32-D100-AS160

The standard color  RAL9006  
of the whole machine (White aluminium)

**连接器方位**



**Connector Position**





### 3 传动能力表和外形尺寸图 3 Transmission Capacity & Dimensions

伺服马达:0.28kW0.9Nm  
0.9A-3000r/min

Servo motor:0.28kW0.9Nm  
0.9A-3000r/min

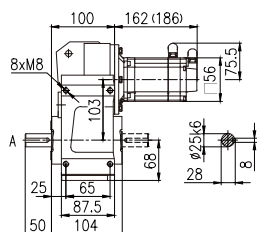
齿轮箱实际输出转速	齿轮箱实际输出扭矩	齿轮箱公称减速比代号	齿轮箱公称减速比	齿轮箱精确减速比	齿轮箱齿数比	齿轮箱额定输出扭矩	齿轮箱转动惯量	齿轮箱背隙	齿轮箱服务系数
Actual Output Speed of Gearbox	Actual Output Torque of Gearbox	Nominal Ratio Code of Gearbox	Nominal Ratio of Gearbox	Exact Ratio of Gearbox	Gear Ratio of Gearbox	Normal Output Torque of Gearbox	Rotational Inertia of Gearbox	Back Lash of Gearbox	Service Coefficient of Gearbox
$n_{2N}$ (r/min)	T2 (N.m)	Code	$i_N$	$i_{ex}$	$i_z$	$T_{2N}$	$J \cdot 10^{-4}$ (kg.m <sup>2</sup> )	$\Phi$ (')	f
759	3.6	B40	4	3.95	585/148	130	1.9	14	36.11
673	4	B45	4.5	4.46	156/35	140	1.5	13	35
591	4.6	B50	5	5.08	325/64	140	1.2	13	30.43
523	5.2	B56	5.6	5.74	689/120	150	1	13	28.85
462	5.9	B63	6.3	6.5	13/2	150	0.82	13	25.42
429	6.3	B71	7.1	7	7/1	150	0.74	13	23.81
385	7	B80	8	7.8	4905/629	150	0.95	9	21.43
341	7.9	B90	9	8.79	5232/595	150	0.76	9	18.99
300	9	C10	10	10	2725/272	150	0.61	9	16.67
265	10	C11	11.2	11.3	5777/510	150	0.49	9	15
234	12	C13	12.5	12.8	218/17	150	0.39	8	12.5
217	12	C14	14	13.8	3052/221	150	0.36	8	12.5
188	14	C16	16	16	817/51	150	1.2	13	10.71
169	16	C18	18	17.7	11115/629	150	1	13	9.38
151	18	C20	20	19.9	11856/595	150	0.89	13	8.33
132	20	C22	22.4	22.7	6175/272	150	0.75	12	7.5
117	23	C25	25	25.7	13091/510	150	0.63	12	6.52
103	26	C28	28	29.1	494/17	150	0.53	12	5.77
95.8	28	C32	31.5	31.3	532/17	150	0.49	12	5.36
86	31	C36	35.5	34.9	372780/10693	150	1	8	4.84
76.3	35	C40	40	39.3	397632/10115	150	0.85	8	4.29
67	40	C45	45	44.8	51775/1156	150	0.72	8	3.75
59.3	46	C50	50	50.6	219526/4335	150	0.61	8	3.26
52.4	52	C56	56	57.3	16568/289	150	0.51	8	2.88
48.6	56	C63	63	61.7	231952/3757	150	0.47	8	2.68
41.5	65	C71	71	72.3	480472/6647	150	0.38	8	2.31
36.6	74	C80	80	81.9	165680/2023	150	0.32	8	2.03
33.2	81	C90	90	90.3	130473/1445	150	0.29	8	1.85
30.4	89	D10	100	98.7	256804/2601	150	0.25	8	1.69
27.8	97	D11	112	107.9	530176/4913	150	0.22	8	1.55
104	26	C28	28	28.9	5396/187	240	0.55	12	9.23
96.5	28	C32	31.5	31.1	75544/2431	240	0.5	12	8.57
86.2	31	C36	35.5	34.8	130720/3757	240	1.2	8	7.74
78.1	35	C40	40	38.4	410400/10693	240	1	8	6.86
69.3	39	C45	45	43.3	87552/2023	240	0.86	8	6.15
60.9	44	C50	50	49.3	14250/289	240	0.72	8	5.45
53.8	50	C56	56	55.8	16112/289	240	0.62	8	4.8
47.5	57	C63	63	63.1	18240/289	240	0.51	8	4.21
44.1	61	C71	71	68	255360/3757	240	0.48	8	3.93
37.7	72	C80	80	79.6	528960/6647	240	0.38	8	3.33
33.3	81	C90	90	90.2	182400/2023	240	0.32	8	2.96
30.2	89	D10	100	99.4	28728/289	240	0.29	8	2.7
27.6	98	D11	112	108.7	94240/867	240	0.25	8	2.45
25.3	107	D13	125	118.8	583680/4913	240	0.22	8	2.24

注:启停次数≤60次/小时,服务系数f推荐1.5;  
启停次数≤120次/小时,服务系数f推荐1.75;  
启停次数>120次/小时,服务系数f推荐2以上;

Attention:Operation frequency≤60 times/h, service coefficient f is recommended as 1.5;  
Operation frequency≤120 times/h, service coefficient f is recommended as 1.75;  
Operation frequency≥120 times/h, service coefficient f is recommended as over 2.

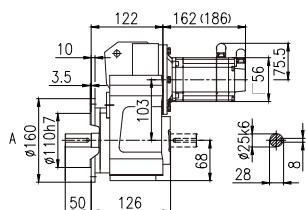
伺服齿轮马达订货号	伺服驱动器订货号			线缆配置订货号		制动电阻订货号
	控制模块	功率模块	操作面板	伺服马达动力线	伺服马达信号线	
Servo Gearmotor Order Number	Servo Drive Order Number			Cable Configuration Order Number		Braking Resistor Order Number
	Control Module	Power Module	Operation Panel	Power Cable of Servo Gearmotor	Signal Cable of Servo Gearmotor	
F202□□-B40-D□□□-MX028S1E30FS0	AX-CM55-□□-PE   PA:PROFINET EA:EtherCAT	AX-PM26-B3A75-□   N:Without filter F:With filter	A1-OP25	A1-H□□-A15-□□□□   18:Without brake 16:With brake  B30=3m B50=5m B70=7m C10=10m C15=15m C20=20m C30=30m C40=40m C50=50m	A1-H17-A□□-□□□□   10:Without battery box 11:With battery box  B30=3m B50=5m B70=7m C10=10m C15=15m C20=20m  A1-H17-A□□-□□□□   12:Without battery box 13:With battery box  C30=30m C40=40m C50=50m	A1-H02-A06-K-D75
F202□□-B45-D□□□-MX028S1E30FS0						
F202□□-B50-D□□□-MX028S1E30FS0						
F202□□-B56-D□□□-MX028S1E30FS0						
F202□□-B63-D□□□-MX028S1E30FS0						
F202□□-B71-D□□□-MX028S1E30FS0						
F202□□-B80-D□□□-MX028S1E30FS0						
F202□□-B90-D□□□-MX028S1E30FS0						
F202□□-C10-D□□□-MX028S1E30FS0						
F202□□-C11-D□□□-MX028S1E30FS0						
F202□□-C13-D□□□-MX028S1E30FS0						
F202□□-C14-D□□□-MX028S1E30FS0						
F302□□-C16-D□□□-MX028S1E30FS0						
F302□□-C18-D□□□-MX028S1E30FS0						
F302□□-C20-D□□□-MX028S1E30FS0						
F302□□-C22-D□□□-MX028S1E30FS0						
F302□□-C25-D□□□-MX028S1E30FS0						
F302□□-C28-D□□□-MX028S1E30FS0						
F302□□-C32-D□□□-MX028S1E30FS0						
F302□□-C36-D□□□-MX028S1E30FS0						
F302□□-C40-D□□□-MX028S1E30FS0						
F302□□-C45-D□□□-MX028S1E30FS0						
F302□□-C50-D□□□-MX028S1E30FS0						
F302□□-C56-D□□□-MX028S1E30FS0						
F302□□-C63-D□□□-MX028S1E30FS0						
F302□□-C71-D□□□-MX028S1E30FS0						
F302□□-C80-D□□□-MX028S1E30FS0						
F302□□-C90-D□□□-MX028S1E30FS0						
F302□□-D10-D□□□-MX028S1E30FS0						
F302□□-D11-D□□□-MX028S1E30FS0						
F303□□-C28-D□□□-MX028S1E30FS0						
F303□□-C32-D□□□-MX028S1E30FS0						
F303□□-C36-D□□□-MX028S1E30FS0						
F303□□-C40-D□□□-MX028S1E30FS0						
F303□□-C45-D□□□-MX028S1E30FS0						
F303□□-C50-D□□□-MX028S1E30FS0						
F303□□-C56-D□□□-MX028S1E30FS0						
F303□□-C63-D□□□-MX028S1E30FS0						
F303□□-C71-D□□□-MX028S1E30FS0						
F303□□-C80-D□□□-MX028S1E30FS0						
F303□□-C90-D□□□-MX028S1E30FS0						
F303□□-D10-D□□□-MX028S1E30FS0						
F303□□-D11-D□□□-MX028S1E30FS0						
F303□□-D13-D□□□-MX028S1E30FS0						

## F202/F302-MX028S1E30FS0 Dimensions (mm)



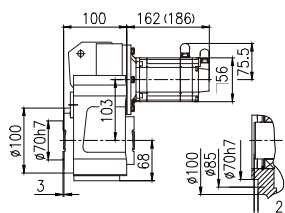
F202HA/F302HA  
F202HC/F302HC

Horizontal foot-mounted(H)

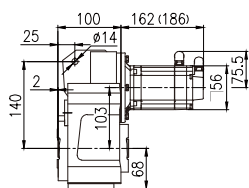


F202FA/F302FA  
F202FC/F302FC

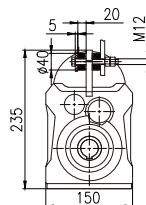
Flange-mounted(F)



Short flange-mounted(S)



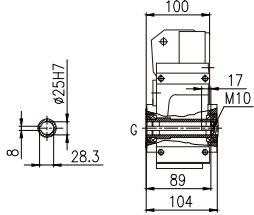
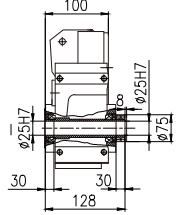
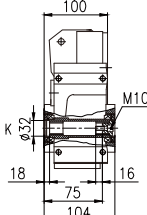
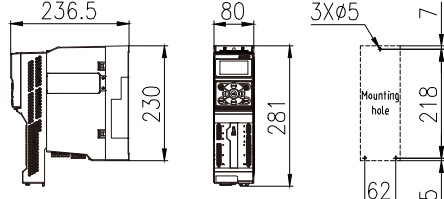
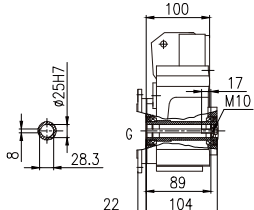
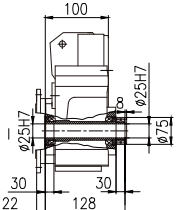
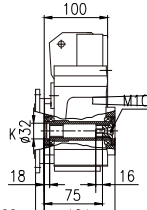
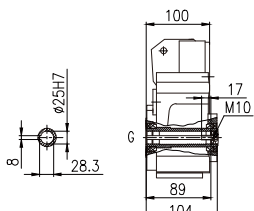
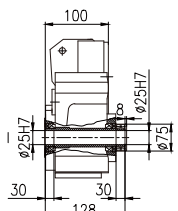
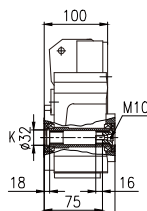
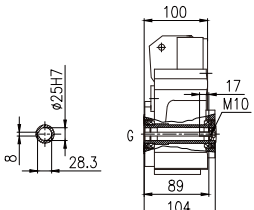
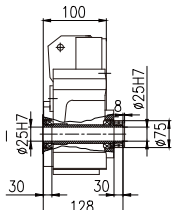
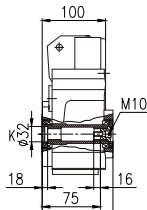
Shaft-mounted(A)



Torque arm-mounted  
with accessory(T)

注:括号内为带制动器的伺服马达长度

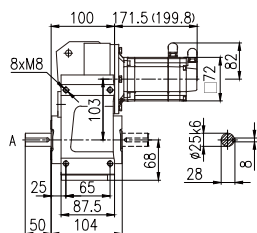
Note: Figures with parentheses are shown for length of servo gearmotor with brake

F202/F302-MX028S1E30FS0 Dimensions (mm)			Corresponding Servo Drive
 <p>F202HG/F302HG</p>	 <p>F202HI/F302HI</p>	 <p>F202HK/F302HK</p>	 <p>Control module: AX-CM55-PA-PE(ProfiNet) or AX-CM55-EA-PE(EtherCAT) Power module: AX-PM26-B3A75-N(without filter) or AX-PM26-B3A75-F(with filter) Operation panel: A1-OP25</p>
 <p>F202FG/F302FG</p>	 <p>F202FI/F302FI</p>	 <p>F202FK/F302FK</p>	
 <p>F202SG/F302SG</p>	 <p>F202SI/F302SI</p>	 <p>F202SK/F302SK</p>	
 <p>F202AG/F302AG F202TG/F302TG</p>	 <p>F202AI/F302AI F202TI/F302TI</p>	 <p>F202AK/F302AK F202TK/F302TK</p>	

注: 渐开线花键空心轴的花键规格DIN5480:  
m1.25×z18×α30×D25×9H

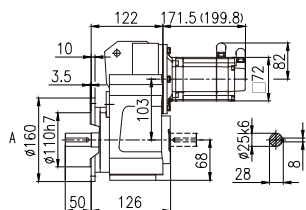
Note: Involute spline size DIN5480:  
m1.25×z18×α30×D25×9H

## F203/F303-MX028S1E30FS0 Dimensions (mm)



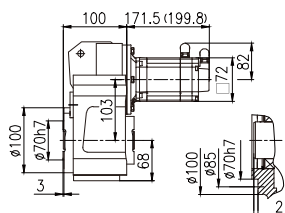
F203HA/F302HA  
F203HC/F302HC

Horizontal foot-mounted(H)

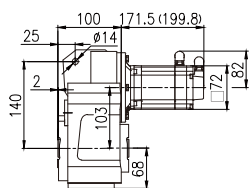


F203FA/F302FA  
F203FC/F302FC

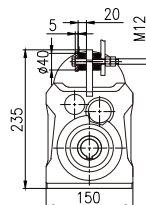
Flange-mounted(F)



Short flange-mounted(S)



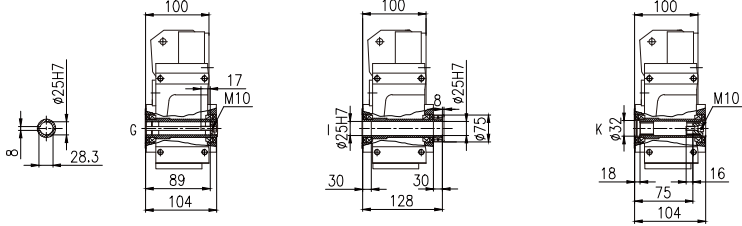
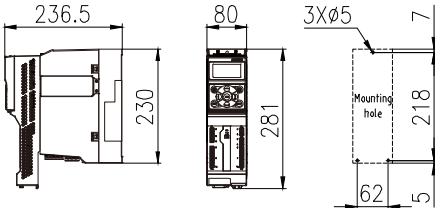
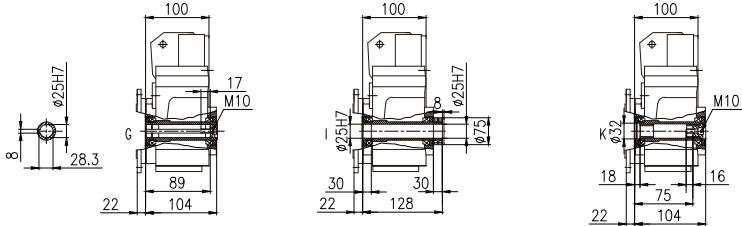
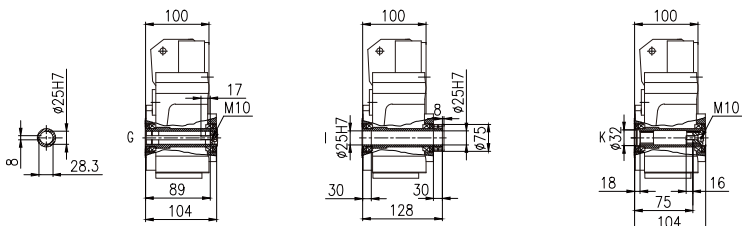
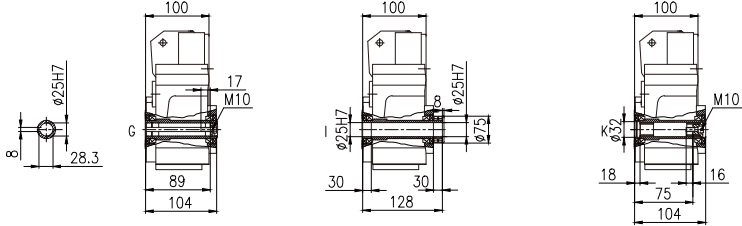
Shaft-mounted(A)



Torque arm-mounted  
with accessory(T)

注:括号内为带制动器的伺服马达长度

Note: Figures with parentheses are shown for length of servo gearmotor with brake

F203/F303-MX028S1E30FS0 Dimensions (mm)	Corresponding Servo Drive
 <p data-bbox="191 659 331 685">F203HG/F303HG</p> <p data-bbox="480 659 604 685">F203HI/F303HI</p> <p data-bbox="747 659 886 685">F203HK/F303HK</p>	 <p data-bbox="1078 1167 1490 1282">Control module: AX-CM55-PA-PE(ProfiNet) or AX-CM55-EA-PE(EtherCAT) Power module: AX-PM26-B3A75-N(without filter) or AX-PM26-B3A75-F(with filter) Operation panel: A1-OP25</p>
 <p data-bbox="191 1101 331 1128">F203FG/F303FG</p> <p data-bbox="480 1101 604 1128">F203FI/F303FI</p> <p data-bbox="747 1101 886 1128">F203FK/F303FK</p>	
 <p data-bbox="191 1543 331 1570">F203SG/F303SG</p> <p data-bbox="480 1543 604 1570">F203SI/F303SI</p> <p data-bbox="747 1543 886 1570">F203SK/F303SK</p>	
 <p data-bbox="178 1942 318 1986">F203AG/F303AG F203TG/F303TG</p> <p data-bbox="480 1942 604 1986">F203AI/F303AI F203TI/F303TI</p> <p data-bbox="747 1942 886 1986">F203AK/F303AK F203TK/F303TK</p>	

注: 渐开线花键空心轴的花键规格DIN5480:  
m1.25×z22×α30×D30×9H

Note: Involute spline size DIN5480:  
m1.25×z22×α30×D30×9H

伺服马达:0.47kW 1.5Nm  
1.15A-3000r/min

Servo motor:0.47kW 1.5Nm  
1.15A-3000r/min

齿轮箱实际 输出转速	齿轮箱实际 输出扭矩	齿轮箱公称 减速比代号	齿轮箱公称 减速比	齿轮箱精确 减速比	齿轮箱 齿数比	齿轮箱额定 输出扭矩	齿轮箱 转动惯量	齿轮箱 背隙	齿轮箱 服务系数
Actual Output Speed of Gearbox	Actual Output Torque of Gearbox	Nominal Ratio Code of Gearbox	Nominal Ratio of Gearbox	Exact Ratio of Gearbox	Gear Ratio of Gearbox	Normal Output Torque of Gearbox	Rotational Inertia of Gearbox	Back Lash of Gearbox	Service Coefficient of Gearbox
$n_{2N}$ (r/min)	T <sub>2</sub> (N·m)	Code	$i_N$	$i_{ex}$	$i_z$	T <sub>2N</sub>	J 10 <sup>-4</sup> (kg·m <sup>2</sup> )	Φ (°)	f
759	5.9	B40	4	3.95	585/148	130	1.9	14	22.03
673	6.7	B45	4.5	4.46	156/35	140	1.5	13	20.9
591	7.6	B50	5	5.08	325/64	140	1.2	13	18.42
523	8.6	B56	5.6	5.74	689/120	150	1	13	17.44
462	9.8	B63	6.3	6.5	13/2	150	0.82	13	15.31
429	11	B71	7.1	7	7/1	150	0.74	13	13.64
385	12	B80	8	7.8	4905/629	150	0.95	9	12.5
341	13	B90	9	8.79	5232/595	150	0.76	9	11.54
300	15	C10	10	10	2725/272	150	0.61	9	10
265	17	C11	11.2	11.3	5777/510	150	0.49	9	8.82
234	19	C13	12.5	12.8	218/17	150	0.39	8	7.89
217	21	C14	14	13.8	3052/221	150	0.36	8	7.14
188	24	C16	16	16	817/51	150	1.2	13	6.25
169	27	C18	18	17.7	11115/629	150	1	13	5.56
151	30	C20	20	19.9	11856/595	150	0.89	13	5
132	34	C22	22.4	22.7	6175/272	150	0.75	12	4.41
117	39	C25	25	25.7	13091/510	150	0.63	12	3.85
103	44	C28	28	29.1	494/17	150	0.53	12	3.41
95.8	47	C32	31.5	31.3	532/17	150	0.49	12	3.19
86	52	C36	35.5	34.9	372780/10693	150	1	8	2.88
76.3	59	C40	40	39.3	397632/10115	150	0.85	8	2.54
67	67	C45	45	44.8	51775/1156	150	0.72	8	2.24
59.3	76	C50	50	50.6	219526/4335	150	0.61	8	1.97
52.4	86	C56	56	57.3	16568/289	150	0.51	8	1.74
48.6	93	C63	63	61.7	231952/3757	150	0.47	8	1.61
188	24	C16	16	16	16/1	240	0.55	7	10
167	27	C18	18	18	920/51	240	0.46	7	8.89
155	29	C20	20	19.3	4260/221	240	0.43	7	8.28
133	34	C22	22.4	22.5	33725/1496	240	0.78	12	7.06
118	38	C25	25	25.5	71497/2805	240	0.66	12	6.32
104	43	C28	28	28.9	5396/187	240	0.55	12	5.58
96.5	47	C32	31.5	31.1	75544/2431	240	0.5	12	5.11
86.2	52	C36	35.5	34.8	130720/3757	240	1.2	8	4.62
78.1	58	C40	40	38.4	410400/10693	240	1	8	4.14
69.3	65	C45	45	43.3	87552/2023	240	0.86	8	3.69
60.9	74	C50	50	49.3	14250/289	240	0.72	8	3.24
53.8	84	C56	56	55.8	16112/289	240	0.62	8	2.86
47.5	95	C63	63	63.1	18240/289	240	0.51	8	2.53
44.1	102	C71	71	68	255360/3757	240	0.48	8	2.35
37.7	119	C80	80	79.6	528960/6647	240	0.38	8	2.02
33.3	135	C90	90	90.2	182400/2023	240	0.32	8	1.78
30.2	149	D10	100	99.4	28728/289	240	0.29	8	1.61
27.6	163	D11	112	108.7	94240/867	240	0.25	8	1.47
54.9	82	C56	56	54.6	76725/1406	420	1.3	7	5.12
49.5	91	C63	63	60.6	9207/152	430	1.2	7	4.73
43.2	104	C71	71	69.4	168795/2432	430	1	7	4.13
39.3	114	C80	80	76.3	5797/76	430	0.86	7	3.77
34.9	129	C90	90	86	39215/456	430	0.73	7	3.33
32.6	138	D10	100	91.9	363165/3952	430	0.68	7	3.12
28.1	160	D11	112	106.8	373395/3496	440	0.55	7	2.75
25	180	D13	125	120.2	127875/1064	440	0.46	7	2.44
20.8	216	D14	140	144	131285/912	440	0.36	7	2.04
19.2	235	D16	160	156.4	404085/2584	440	0.33	7	1.87

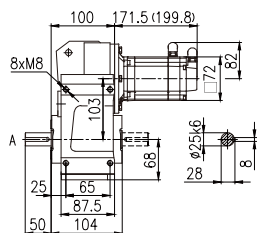
注:启停次数≤60次/小时,服务系数推荐1.5;  
启停次数≤120次/小时,服务系数推荐1.75;  
启停次数>120次/小时,服务系数推荐2以上;

Attention:Operation frequency≤60 times/h,  
service coefficient f is recommended as 1.5;  
Operation frequency≤120 times/h, service  
coefficient f is recommended as 1.75;  
Operation frequency≥120 times/h, service  
coefficient f is recommended as over 2.

伺服齿轮马达订货号	伺服驱动器订货号			线缆配置订货号		制动电阻订货号
	控制模块	功率模块	操作面板	伺服马达动力线	伺服马达信号线	
	Servo Drive Order Number			Cable Configuration Order Number		
	Control Module	Power Module	Operation Panel	Power Cable of Servo Gearmotor	Signal Cable of Servo Gearmotor	
F202□□-B40-D□□□-MX036S1E30FS0	AX-CM55-□□-PE   PA:PROFINET EA:EtherCAT	AX-PM26-B3A75-□   N:Without filter F:With filter	A1-OP25	A1-H□□-A15-□□□   18:Without brake 16:With brake  B30=3m B50=5m B70=7m C10=10m C15=15m C20=20m C30=30m C40=40m C50=50m	A1-H17-A□□-□□□   10:Without battery box 11:With battery box  B30=3m B50=5m B70=7m C10=10m C15=15m C20=20m  A1-H17-A□□-□□□   12:Without battery box 13:With battery box  C30=30m C40=40m C50=50m	A1-H02-A06-K-D75
F202□□-B45-D□□□-MX036S1E30FS0						
F202□□-B50-D□□□-MX036S1E30FS0						
F202□□-B56-D□□□-MX036S1E30FS0						
F202□□-B63-D□□□-MX036S1E30FS0						
F202□□-B71-D□□□-MX036S1E30FS0						
F202□□-B80-D□□□-MX036S1E30FS0						
F202□□-B90-D□□□-MX036S1E30FS0						
F202□□-C10-D□□□-MX036S1E30FS0						
F202□□-C11-D□□□-MX036S1E30FS0						
F202□□-C13-D□□□-MX036S1E30FS0						
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F302□□-C18-D□□□-MX036S1E30FS0						
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F302□□-C22-D□□□-MX036S1E30FS0						
F302□□-C25-D□□□-MX036S1E30FS0						
F302□□-C28-D□□□-MX036S1E30FS0						
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F304□□-D11-D□□□-MX036S1E30FS0						
F304□□-D13-D□□□-MX036S1E30FS0						
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F304□□-D16-D□□□-MX036S1E30FS0						

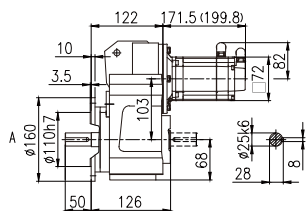


## F202/F302-MX036S1E30FS0 Dimensions (mm)



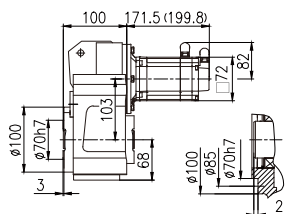
F202HA/F302HA  
F202HC/F302HC

Horizontal foot-mounted(H)

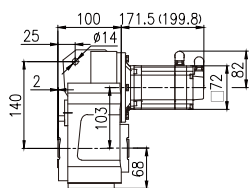


F202FA/F302FA  
F202FC/F302FC

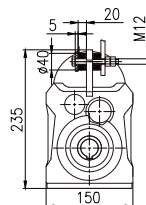
Flange-mounted(F)



Short flange-mounted(S)



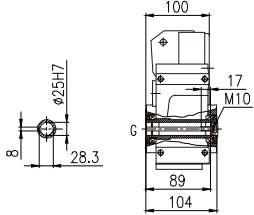
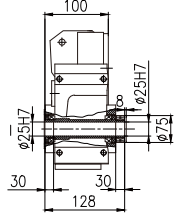
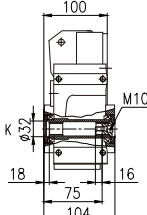
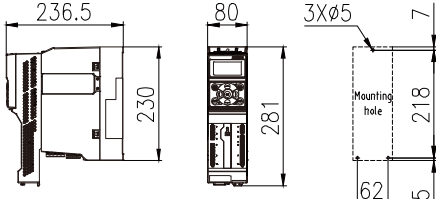
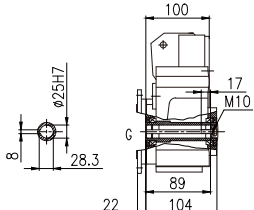
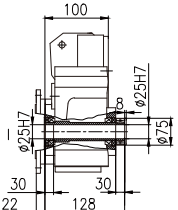
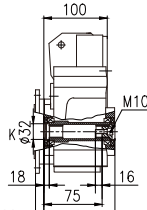
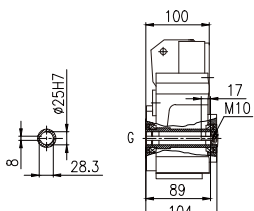
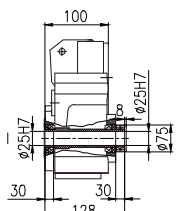
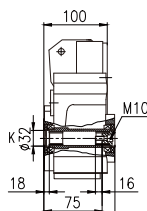
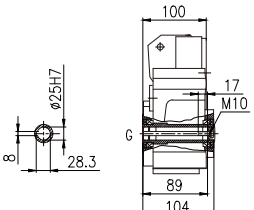
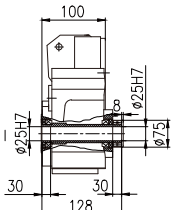
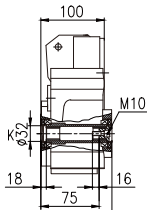
Shaft-mounted(A)



Torque arm-mounted  
with accessory(T)

注:括号内为带制动器的伺服马达长度

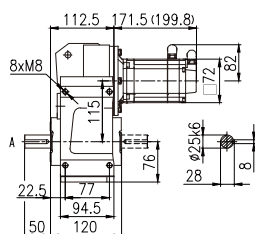
Note: Figures with parentheses are shown for length of servo gearmotor with brake

F202/F302-MX036S1E30FS0 Dimensions (mm)			Corresponding Servo Drive
 <p>F202HG/F302HG</p>	 <p>F202HI/F302HI</p>	 <p>F202HK/F302HK</p>	 <p>Control module: AX-CM55-PA-PE(ProfNet) or AX-CM55-EA-PE(EtherCAT) Power module: AX-PM26-B3A75-N(without filter) or AX-PM26-B3A75-F(with filter) Operation panel: A1-OP25</p>
 <p>F202FG/F302FG</p>	 <p>F202FI/F302FI</p>	 <p>F202FK/F302FK</p>	
 <p>F202SG/F302SG</p>	 <p>F202SI/F302SI</p>	 <p>F202SK/F302SK</p>	
 <p>F202AG/F302AG F202TG/F302TG</p>	 <p>F202AI/F302AI F202TI/F302TI</p>	 <p>F202AK/F302AK F202TK/F302TK</p>	

注: 渐开线花键空心轴的花键规格DIN5480:  
m1.25×z18×α30×D25×9H

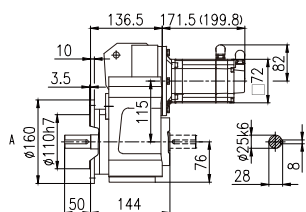
Note: Involute spline size DIN5480:  
m1.25×z18×α30×D25×9H

## F203/F303-MX036S1E30FS0 Dimensions (mm)



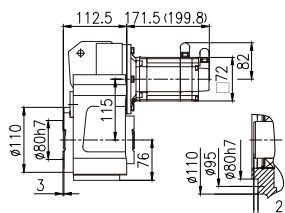
F203HA/F303HA  
F203HC/F303HC

Horizontal foot-mounted(H)

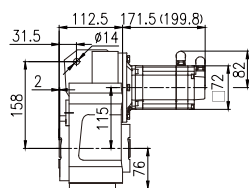


F203FA/F303FA  
F203FC/F303FC

Flange-mounted(F)



Short flange-mounted(S)



Shaft-mounted(A)

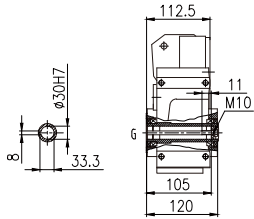
Torque arm-mounted  
with accessory(T)

注:括号内为带制动器的伺服马达长度

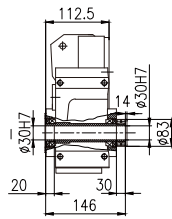
Note: Figures with parentheses are shown for length of servo gearmotor with brake

## F203/F303-MX036S1E30FS0 Dimensions (mm)

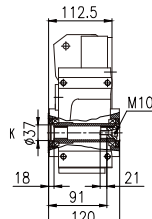
## Corresponding Servo Drive



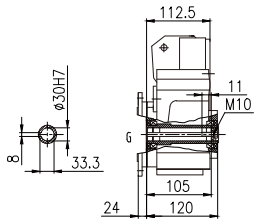
F203HG/F303HG



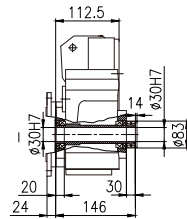
F203HI/F303HI



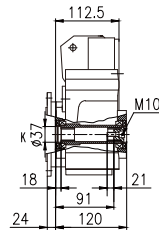
F203HK/F303HK



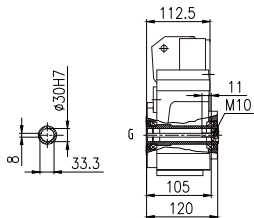
F203FG/F303FG



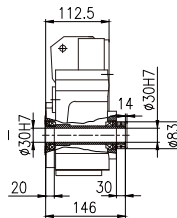
F203FI/F303FI



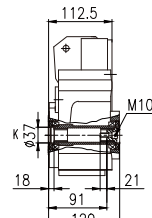
F203FK/F303FK



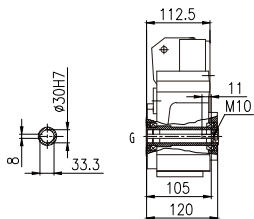
F203SG/F303SG



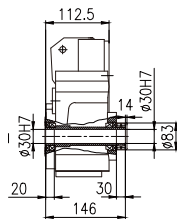
F203SI/F303SI



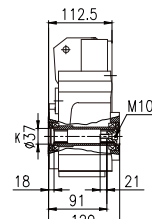
F203SK/F303SK



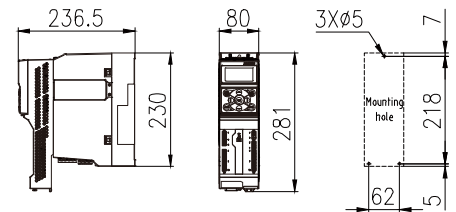
F203AG/F303AG  
F203TG/F303TG



F203AI/F303AI  
F203TI/F303TI



F203AK/F303AK  
F203TK/F303TK

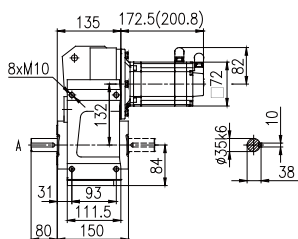


Control module: AX-CM55-PA-PE(ProfNet)  
or AX-CM55-EA-PE(EtherCAT)  
Power module: AX-PM26-B3A75-N(without filter)  
or AX-PM26-B3A75-F(with filter)  
Operation panel: A1-OP25

注:渐开线花键空心轴的花键规格DIN5480:  
m1.25×z22×α30×D30×9H

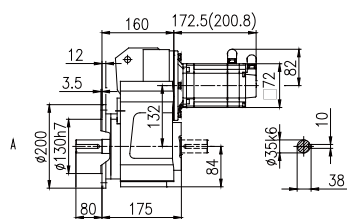
Note: Involute spline size DIN5480:  
m1.25×z22×α30×D30×9H

**F204/F304-MX036S1E30FS0 Dimensions (mm)**



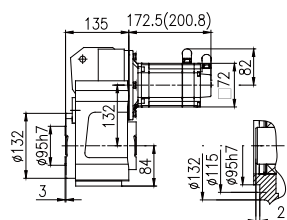
F204HA/F304HA  
F204HC/F304HC

Horizontal foot-mounted(H)

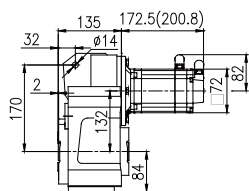


F204FA/F304FA  
F204FC/F304FC

Flange-mounted(F)



Short flange-mounted(S)

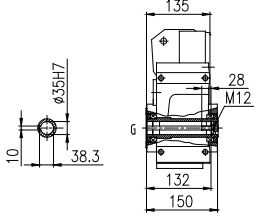
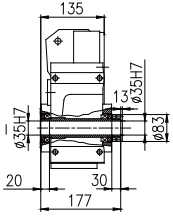
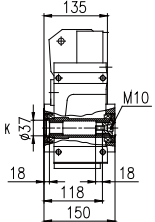
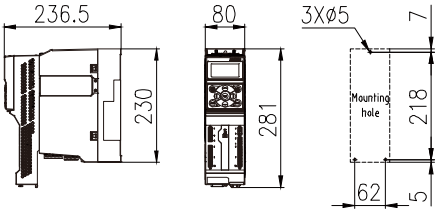
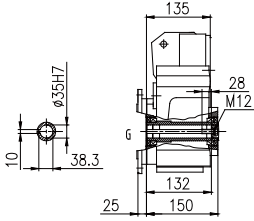
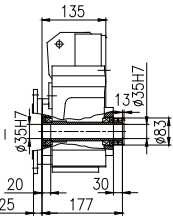
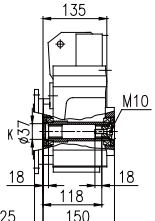
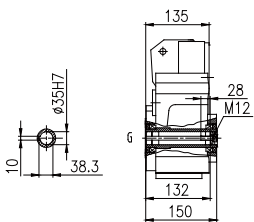
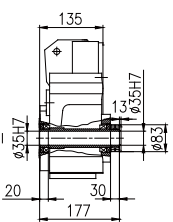
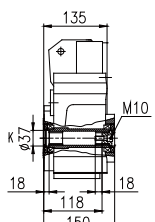
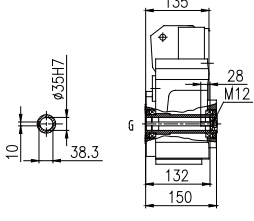
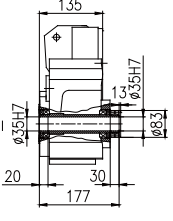
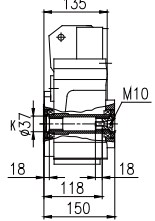


Shaft-mounted(A)

Torque arm-mounted  
with accessory(T)

注:括号内为带制动器的伺服马达长度

Note: Figures with parentheses are shown for length of servo gearmotor with brake

F204/F304-MX036S1E30FS0 Dimensions (mm)			Corresponding Servo Drive
 <p>F204HG/F304HG</p>	 <p>F204HI/F304HI</p>	 <p>F204HK/F304HK</p>	 <p>Control module: AX-CM55-PA-PE(ProfiNet) or AX-CM55-EA-PE(EtherCAT) Power module: AX-PM26-B3A75-N(without filter) or AX-PM26-B3A75-F(with filter) Operation panel: A1-OP25</p>
 <p>F204FG/F304FG</p>	 <p>F204FI/F304FI</p>	 <p>F204FK/F304FK</p>	
 <p>F204SG/F304SG</p>	 <p>F204SI/F304SI</p>	 <p>F204SK/F304SK</p>	
 <p>F204AG/F304AG F204TG/F304TG</p>	 <p>F204AI/F304AI F204TI/F304TI</p>	 <p>F204AK/F304AK F204TK/F304TK</p>	

注:渐开线花键空心轴的花键规格DIN5480:  
m2×z16×α30×D35×9H

Note: Involute spline size DIN5480:  
m2×z16×α30×D35×9H

伺服马达:0.75kW2.4Nm  
1.6A-3000r/min

Servo motor:0.75kW2.4Nm  
1.6A-3000r/min

齿轮箱实际 输出转速	齿轮箱实际 输出扭矩	齿轮箱公称 减速比代号	齿轮箱公称 减速比	齿轮箱精确 减速比	齿轮箱 齿数比	齿轮箱额定 输出扭矩	齿轮箱 转动惯量	齿轮箱 背隙	齿轮箱 服务系数
Actual Output Speed of Gearbox	Actual Output Torque of Gearbox	Nominal Ratio Code of Gearbox	Nominal Ratio of Gearbox	Exact Ratio of Gearbox	Gear Ratio of Gearbox	Normal Output Torque of Gearbox	Rotational Inertia of Gearbox	Back Lash of Gearbox	Service Coefficient of Gearbox
$n_{2N}$ (r/min)	T <sub>2N</sub> (N.m)	Code	$i_N$	$i_{ex}$	$i_z$	T <sub>2N</sub>	J 10 <sup>-4</sup> (kg.m <sup>2</sup> )	Φ (°)	f
759	9.5	B40	4	3.95	585/148	130	1.9	14	13.68
673	11	B45	4.5	4.46	156/35	140	1.5	13	12.73
591	12	B50	5	5.08	325/64	140	1.2	13	11.67
523	14	B56	5.6	5.74	689/120	150	1	13	10.71
462	16	B63	6.3	6.5	13/2	150	0.82	13	9.38
429	17	B71	7.1	7	7/1	150	0.74	13	8.82
385	19	B80	8	7.8	4905/629	150	0.95	9	7.89
341	21	B90	9	8.79	5232/595	150	0.76	9	7.14
300	24	C10	10	10	2725/272	150	0.61	9	6.25
265	27	C11	11.2	11.3	5777/510	150	0.49	9	5.56
234	31	C13	12.5	12.8	218/17	150	0.39	8	4.84
217	33	C14	14	13.8	3052/221	150	0.36	8	4.55
188	38	C16	16	16	817/51	150	1.2	13	3.95
169	42	C18	18	17.7	11115/629	150	1	13	3.57
151	48	C20	20	19.9	11856/595	150	0.89	13	3.13
132	54	C22	22.4	22.7	6175/272	150	0.75	12	2.78
117	62	C25	25	25.7	13091/510	150	0.63	12	2.42
103	70	C28	28	29.1	494/17	150	0.53	12	2.14
95.8	75	C32	31.5	31.3	532/17	150	0.49	12	2
86	84	C36	35.5	34.9	372780/10693	150	1	8	1.79
76.3	94	C40	40	39.3	397632/10115	150	0.85	8	1.6
297	24	C10	10	10.1	2240/221	220	1.1	8	9.17
263	27	C11	11.2	11.4	7200/629	220	0.94	8	8.15
236	30	C13	12.5	12.7	216/17	220	0.78	8	7.33
205	35	C14	14	14.6	495/34	240	0.65	7	6.86
188	38	C16	16	16	16/1	240	0.55	7	6.32
167	43	C18	18	18	920/51	240	0.46	7	5.58
155	46	C20	20	19.3	4260/221	240	0.43	7	5.22
133	54	C22	22.4	22.5	33725/1496	240	0.78	12	4.44
118	61	C25	25	25.5	71497/2805	240	0.66	12	3.93
104	69	C28	28	28.9	5396/187	240	0.55	12	3.48
96.5	75	C32	31.5	31.1	75544/2431	240	0.5	12	3.2
86.2	84	C36	35.5	34.8	130720/3757	240	1.2	8	2.86
78.1	92	C40	40	38.4	410400/10693	240	1	8	2.61
69.3	104	C45	45	43.3	87552/2023	240	0.86	8	2.31
60.9	118	C50	50	49.3	14250/289	240	0.72	8	2.03
53.8	134	C56	56	55.8	16112/289	240	0.62	8	1.79
47.5	151	C63	63	63.1	18240/289	240	0.51	8	1.59
44.1	163	C71	71	68	255360/3757	240	0.48	8	1.47
54.9	131	C56	56	54.6	76725/1406	420	1.3	7	3.21
49.5	145	C63	63	60.6	9207/152	430	1.2	7	2.97
43.2	167	C71	71	69.4	168795/2432	430	1	7	2.57
39.3	183	C80	80	76.3	5797/76	430	0.86	7	2.35
34.9	206	C90	90	86	39215/456	430	0.73	7	2.09
32.6	221	D10	100	91.9	363165/3952	430	0.68	7	1.95
28.1	256	D11	112	106.8	373395/3496	440	0.55	7	1.72
25	288	D13	125	120.2	127875/1064	440	0.46	7	1.53

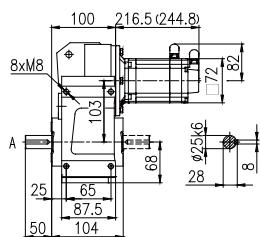
注:启停次数≤60次/小时,服务系数f推荐1.5;  
启停次数≤120次/小时,服务系数f推荐1.75;  
启停次数>120次/小时,服务系数f推荐2以上;

Attention:Operation frequency≤60 times/h,  
service coefficient f is recommended as 1.5;  
Operation frequency≤120 times/h, service  
coefficient f is recommended as 1.75;  
Operation frequency≥120 times/h, service  
coefficient f is recommended as over 2.

伺服齿轮马达订货号	伺服驱动器订货号			线缆配置订货号		制动电阻订货号
	控制模块	功率模块	操作面板	伺服马达动力线	伺服马达信号线	
Servo Gearmotor Order Number	Servo Drive Order Number			Cable Configuration Order Number		Braking Resistor Order Number
	Control Module	Power Module	Operation Panel	Power Cable of Servo Gearmotor	Signal Cable of Servo Gearmotor	
F202□□-B40-D□□□-MX036M1E30FS0	AX-CM55-□□-PE   PA:PROFINET EA:EtherCAT	AX-PM26-B3B15-□   N:Without filter F:With filter	A1-OP25	A1-H□□-A15-□□□   18:Without brake 16:With brake  B30=3m B50=5m B70=7m C10=10m C15=15m C20=20m C30=30m C40=40m C50=50m	A1-H17-A□□-□□□   10:Without battery box 11:With battery box  B30=3m B50=5m B70=7m C10=10m C15=15m C20=20m  A1-H17-A□□-□□□   12:Without battery box 13:With battery box  C30=30m C40=40m C50=50m	A1-H02-A08-K-D39
F202□□-B45-D□□□-MX036M1E30FS0						
F202□□-B50-D□□□-MX036M1E30FS0						
F202□□-B56-D□□□-MX036M1E30FS0						
F202□□-B63-D□□□-MX036M1E30FS0						
F202□□-B71-D□□□-MX036M1E30FS0						
F202□□-B80-D□□□-MX036M1E30FS0						
F202□□-B90-D□□□-MX036M1E30FS0						
F202□□-C10-D□□□-MX036M1E30FS0						
F202□□-C11-D□□□-MX036M1E30FS0						
F202□□-C13-D□□□-MX036M1E30FS0						
F202□□-C14-D□□□-MX036M1E30FS0						
F302□□-C16-D□□□-MX036M1E30FS0						
F302□□-C18-D□□□-MX036M1E30FS0						
F302□□-C20-D□□□-MX036M1E30FS0						
F302□□-C22-D□□□-MX036M1E30FS0						
F302□□-C25-D□□□-MX036M1E30FS0						
F302□□-C28-D□□□-MX036M1E30FS0						
F302□□-C32-D□□□-MX036M1E30FS0						
F302□□-C36-D□□□-MX036M1E30FS0						
F302□□-C40-D□□□-MX036M1E30FS0						
F203□□-C10-D□□□-MX036M1E30FS0						
F203□□-C11-D□□□-MX036M1E30FS0						
F203□□-C13-D□□□-MX036M1E30FS0						
F203□□-C14-D□□□-MX036M1E30FS0						
F203□□-C16-D□□□-MX036M1E30FS0						
F203□□-C18-D□□□-MX036M1E30FS0						
F203□□-C20-D□□□-MX036M1E30FS0						
F303□□-C22-D□□□-MX036M1E30FS0						
F303□□-C25-D□□□-MX036M1E30FS0						
F303□□-C28-D□□□-MX036M1E30FS0						
F303□□-C32-D□□□-MX036M1E30FS0						
F303□□-C36-D□□□-MX036M1E30FS0						
F303□□-C40-D□□□-MX036M1E30FS0						
F303□□-C45-D□□□-MX036M1E30FS0						
F303□□-C50-D□□□-MX036M1E30FS0						
F303□□-C56-D□□□-MX036M1E30FS0						
F303□□-C63-D□□□-MX036M1E30FS0						
F303□□-C71-D□□□-MX036M1E30FS0						
F304□□-C56-D□□□-MX036M1E30FS0						
F304□□-C63-D□□□-MX036M1E30FS0						
F304□□-C71-D□□□-MX036M1E30FS0						
F304□□-C80-D□□□-MX036M1E30FS0						
F304□□-C90-D□□□-MX036M1E30FS0						
F304□□-D10-D□□□-MX036M1E30FS0						
F304□□-D11-D□□□-MX036M1E30FS0						
F304□□-D13-D□□□-MX036M1E30FS0						

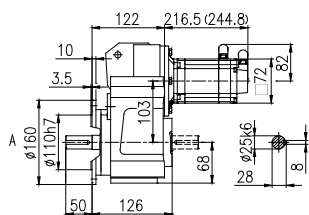


## F202/F302-MX036M1E30FS0 Dimensions (mm)



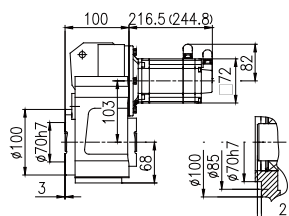
F202HA/F302HA  
F202HC/F302HC

Horizontal foot-mounted(H)

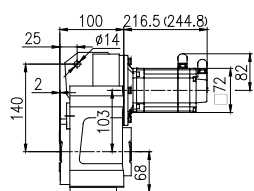


F202FA/F302FA  
F202FC/F302FC

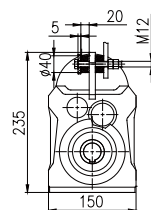
Flange-mounted(F)



Short flange-mounted(S)



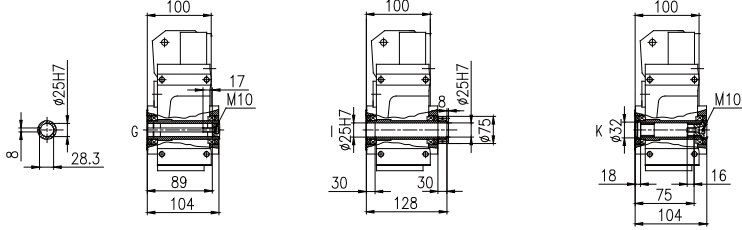
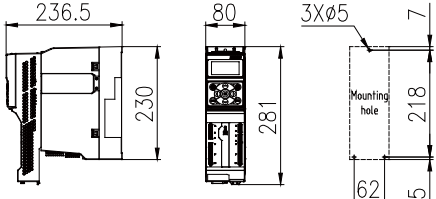
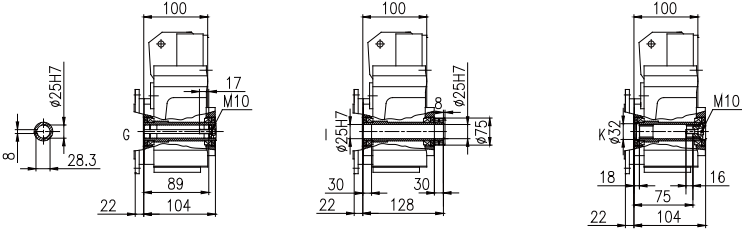
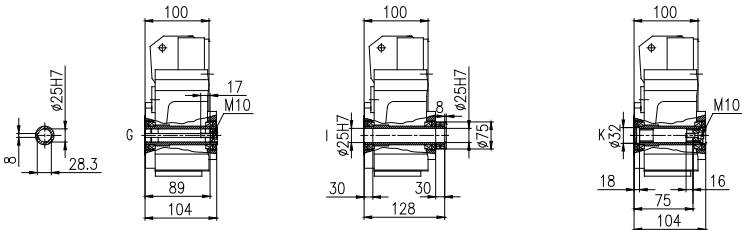
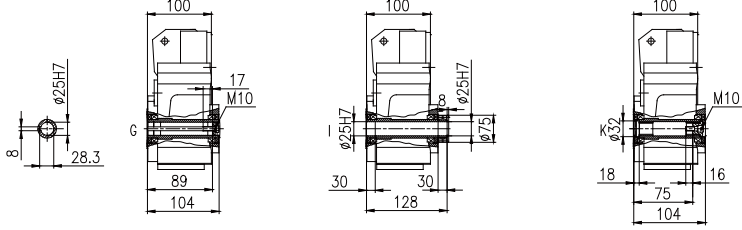
Shaft-mounted(A)



Torque arm-mounted  
with accessory(T)

注:括号内为带制动器的伺服马达长度

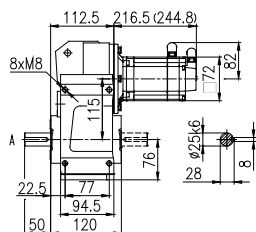
Note: Figures with parentheses are shown for length of servo gearmotor with brake

F202/F302-MX036M1E30FS0 Dimensions (mm)	Corresponding Servo Drive
 <p>F202HG/F302HG      F202HI/F302HI      F202HK/F302HK</p>	 <p>Control module: AX-CM55-PA-PE(ProfiNet) or AX-CM55-EA-PE(EtherCAT) Power module: AX-PM26-B3B15-N(without filter) or AX-PM26-B3B15-F(with filter) Operation panel: A1-OP25</p>
 <p>F202FG/F302FG      F202FI/F302FI      F202FK/F302FK</p>	
 <p>F202SG/F302SG      F202SI/F302SI      F202SK/F302SK</p>	
 <p>F202AG/F302AG      F202AI/F302AI      F202AK/F302AK F202TG/F302TG      F202TI/F302TI      F202TK/F302TK</p>	

注: 渐开线花键空心轴的花键规格DIN5480:  
m1.25×z18×α30×D25×9H

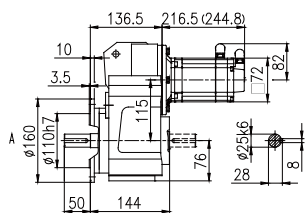
Note: Involute spline size DIN5480:  
m1.25×z18×α30×D25×9H

**F203/F303-MX036M1E30FS0 Dimensions (mm)**



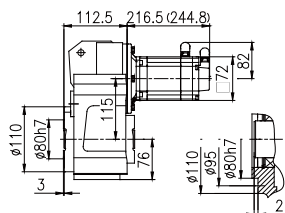
F203HA/F303HA  
F203HC/F303HC

Horizontal foot-mounted(H)

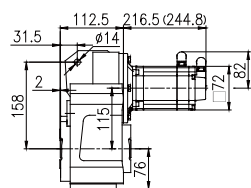


F203FA/F303FA  
F203FC/F303FC

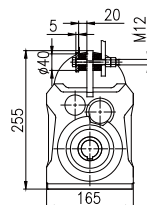
Flange-mounted(F)



Short flange-mounted(S)



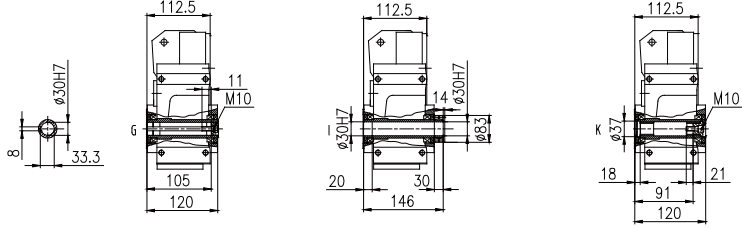
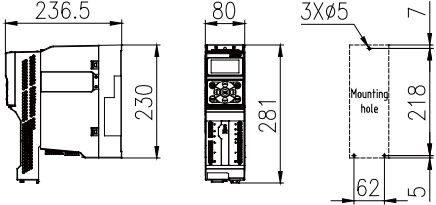
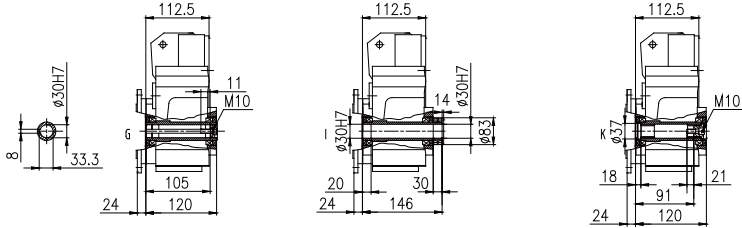
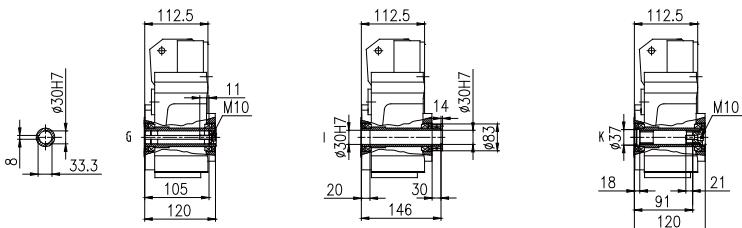
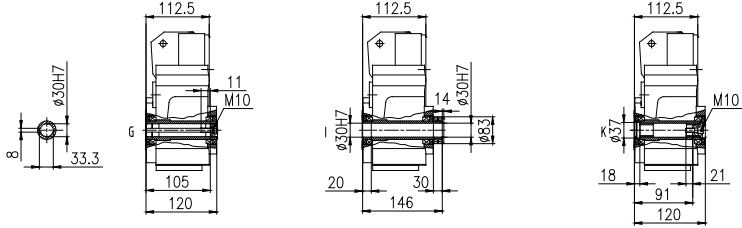
Shaft-mounted(A)



Torque arm-mounted  
with accessory(T)

注:括号内为带制动器的伺服马达长度

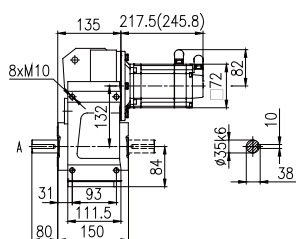
Note: Figures with parentheses are shown for length of servo gearmotor with brake

F203/F303-MX036M1E30FS0 Dimensions (mm)	Corresponding Servo Drive
 <p>F203HG/F303HG      F203HI/F303HI      F203HK/F303HK</p>	 <p>Control module: AX-CM55-PA-PE(ProfNet) or AX-CM55-EA-PE(EtherCAT) Power module: AX-PM26-B3B15-N(without filter) or AX-PM26-B3B15-F(with filter) Operation panel: A1-OP25</p>
 <p>F203FG/F303FG      F203FI/F303FI      F203FK/F303FK</p>	
 <p>F203SG/F303SG      F203SI/F303SI      F203SK/F303SK</p>	
 <p>F203AG/F303AG      F203AI/F303AI      F203AK/F303AK F203TG/F303TG      F203TI/F303TI      F203TK/F303TK</p>	

注:渐开线花键空心轴的花键规格DIN5480:  
m1.25×z22×α30×D30×9H

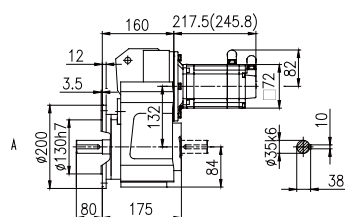
Note: Involute spline size DIN5480:  
m1.25×z22×α30×D30×9H

## F204/F304-MX036M1E30FS0 Dimensions (mm)



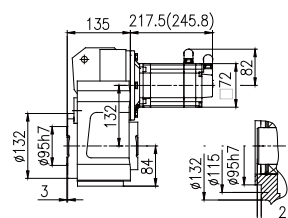
F204HA/F304HA  
F204HC/F304HC

Horizontal foot-mounted(H)

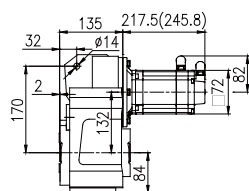


F204FA/F304FA  
F204FC/F304FC

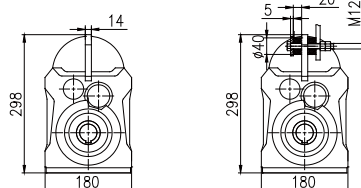
Flange-mounted(F)



Short flange-mounted(S)



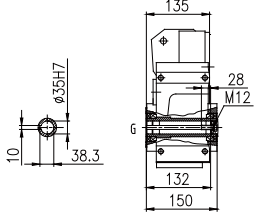
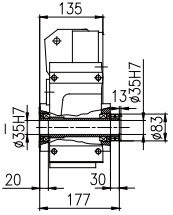
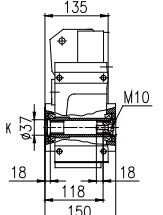
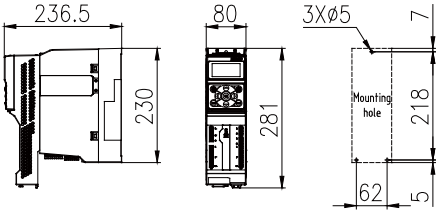
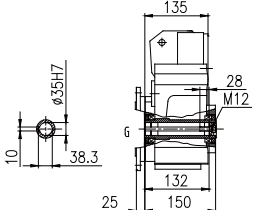
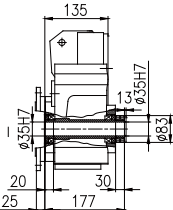
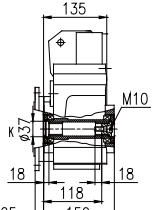
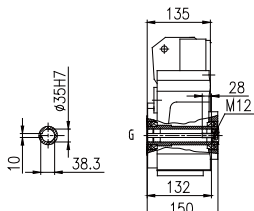
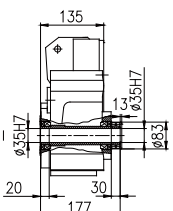
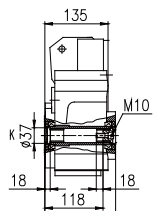
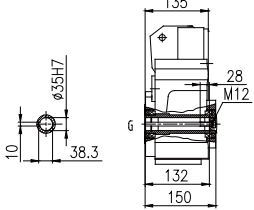
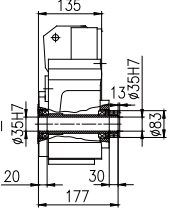
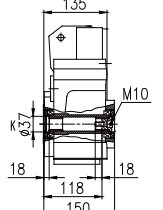
Shaft-mounted(A)



Torque arm-mounted  
with accessory(T)

注:括号内为带制动器的伺服马达长度

Note: Figures with parentheses are shown for length of servo gearmotor with brake

F204/F304-MX036M1E30FS0 Dimensions (mm)			Corresponding Servo Drive
 <p>F204HG/F304HG</p>	 <p>F204HI/F304HI</p>	 <p>F204HK/F304HK</p>	 <p>Control module: AX-CM55-PA-PE(ProfNet) or AX-CM55-EA-PE(EtherCAT) Power module: AX-PM26-B3B15-N(without filter) or AX-PM26-B3B15-F(with filter) Operation panel: A1-OP25</p>
 <p>F204FG/F304FG</p>	 <p>F204FI/F304FI</p>	 <p>F204FK/F304FK</p>	
 <p>F204SG/F304SG</p>	 <p>F204SI/F304SI</p>	 <p>F204SK/F304SK</p>	
 <p>F204AG/F304AG F204TG/F304TG</p>	 <p>F204AI/F304AI F204TI/F304TI</p>	 <p>F204AK/F304AK F204TK/F304TK</p>	

注: 渐开线花键空心轴的花键规格DIN5480:  
m2×z16×α30×D35×9H

Note: Involute spline size DIN5480:  
m2×z16×α30×D35×9H

伺服马达:1kW3.2Nm  
2.2A-3000r/min

Servo motor:1kW3.2Nm  
2.2A-3000r/min

齿轮箱实际 输出转速	齿轮箱实际 输出扭矩	齿轮箱公称 减速比代号	齿轮箱公称 减速比	齿轮箱精确 减速比	齿轮箱 齿数比	齿轮箱额定 输出扭矩	齿轮箱 转动惯量	齿轮箱 背隙	齿轮箱 服务系数
Actual Output Speed of Gearbox	Actual Output Torque of Gearbox	Nominal Ratio Code of Gearbox	Nominal Ratio of Gearbox	Exact Ratio of Gearbox	Gear Ratio of Gearbox	Normal Output Torque of Gearbox	Rotational Inertia of Gearbox	Back Lash of Gearbox	Service Coefficient of Gearbox
$n_{2N}$ (r/min)	T2 (N.m)	Code	$i_N$	$i_{ex}$	$i_z$	$T_{2N}$	$J \cdot 10^{-4}$ (kg.m <sup>2</sup> )	$\Phi$ (°)	f
759	13	B40	4	3.95	585/148	130	1.9	14	10
673	14	B45	4.5	4.46	156/35	140	1.5	13	10
591	16	B50	5	5.08	325/64	140	1.2	13	8.75
523	18	B56	5.6	5.74	689/120	150	1	13	8.33
462	21	B63	6.3	6.5	13/2	150	0.82	13	7.14
429	22	B71	7.1	7	7/1	150	0.74	13	6.82
385	25	B80	8	7.8	4905/629	150	0.95	9	6
341	28	B90	9	8.79	5232/595	150	0.76	9	5.36
300	32	C10	10	10	2725/272	150	0.61	9	4.69
265	36	C11	11.2	11.3	5777/510	150	0.49	9	4.17
234	41	C13	12.5	12.8	218/17	150	0.39	8	3.66
217	44	C14	14	13.8	3052/221	150	0.36	8	3.41
188	51	C16	16	16	817/51	150	1.2	13	2.94
169	57	C18	18	17.7	11115/629	150	1	13	2.63
151	64	C20	20	19.9	11856/595	150	0.89	13	2.34
132	73	C22	22.4	22.7	6175/272	150	0.75	12	2.05
117	82	C25	25	25.7	13091/510	150	0.63	12	1.83
103	93	C28	28	29.1	494/17	150	0.53	12	1.61
95.8	100	C32	31.5	31.3	532/17	150	0.49	12	1.5
410	23	B71	7.1	7.32	1207/165	220	1.3	11	9.57
364	26	B80	8	8.25	1633/198	220	1.1	11	8.46
332	29	B90	9	9.03	6600/731	220	1.5	8	7.59
297	32	C10	10	10.1	2240/221	220	1.1	8	6.88
263	36	C11	11.2	11.4	7200/629	220	0.94	8	6.11
236	41	C13	12.5	12.7	216/17	220	0.78	8	5.37
205	47	C14	14	14.6	495/34	240	0.65	7	5.11
188	51	C16	16	16	16/1	240	0.55	7	4.71
167	58	C18	18	18	920/51	240	0.46	7	4.14
155	62	C20	20	19.3	4260/221	240	0.43	7	3.87
133	72	C22	22.4	22.5	33725/1496	240	0.78	12	3.33
118	82	C25	25	25.5	71497/2805	240	0.66	12	2.93
104	92	C28	28	28.9	5396/187	240	0.55	12	2.61
96.5	100	C32	31.5	31.1	75544/2431	240	0.5	12	2.4
86.2	111	C36	35.5	34.8	130720/3757	240	1.2	8	2.16
78.1	123	C40	40	38.4	410400/10693	240	1	8	1.95
69.3	139	C45	45	43.3	87552/2023	240	0.86	8	1.73
60.9	158	C50	50	49.3	14250/289	240	0.72	8	1.52
69.8	138	C45	45	43	281325/6536	420	1.9	7	3.04
62.1	155	C50	50	48.3	11935/247	420	1.5	7	2.71
54.9	175	C56	56	54.6	76725/1406	420	1.3	7	2.4
49.5	194	C63	63	60.6	9207/152	430	1.2	7	2.22
43.2	222	C71	71	69.4	168795/2432	430	1	7	1.94
39.3	244	C80	80	76.3	5797/76	430	0.86	7	1.76
34.9	275	C90	90	86	39215/456	430	0.73	7	1.56
32.6	294	D10	100	91.9	363165/3952	430	0.68	7	1.46
40.2	239	C80	80	74.7	33015/442	700	0.69	8	2.93
34.6	278	C90	90	86.8	33945/391	700	0.56	8	2.52
30.7	313	D10	100	97.7	11625/119	700	0.47	8	2.24
28.1	341	D11	112	106.7	3627/34	700	0.43	7	2.05
25.6	374	D13	125	117	11935/102	700	0.37	8	1.87
23.6	407	D14	140	127.1	36735/289	700	0.33	7	1.72
22.8	420	D13	125	131.4	462266/3519	900	1	6	2.14
21.6	444	D14	140	138.9	25970/187	900	0.81	6	2.03
19.2	500	D16	160	156.2	119462/765	900	0.6	6	1.8
18.1	532	D18	180	166.2	161014/969	900	0.56	6	1.69
16	601	D20	200	187.7	488236/2601	900	0.52	6	1.5

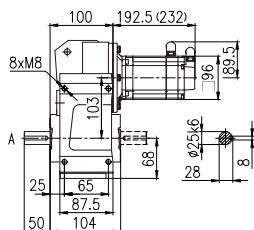
注:启停次数≤60次/小时,服务系数f推荐1.5;  
启停次数≤120次/小时,服务系数f推荐1.75;  
启停次数>120次/小时,服务系数f推荐2以上;

Attention:Operation frequency≤60 times/h,  
service coefficient f is recommended as 1.5;  
Operation frequency≤120 times/h, service  
coefficient f is recommended as 1.75;  
Operation frequency≥120 times/h, service  
coefficient f is recommended as over 2.

伺服齿轮马达订货号	伺服驱动器订货号			线缆配置订货号		制动电阻订货号
	控制模块	功率模块	操作面板	伺服马达动力线	伺服马达信号线	
Servo Gearmotor Order Number	Servo Drive Order Number			Cable Configuration Order Number		Braking Resistor Order Number
	Control Module	Power Module	Operation Panel	Power Cable of Servo Gearmotor	Signal Cable of Servo Gearmotor	
F202□□-B40-D□□□-MX048S1E30FSO	AX-CM55-□□-PE PA:PROFINET EA:EtherCAT	AX-PM26-B3B15-□ N:Without filter F:With filter	A1-OP25	A1-H□□-A15-□□□ 18:Without brake 16:With brake B30=3m B50=5m B70=7m C10=10m C15=15m C20=20m C30=30m C40=40m C50=50m	A1-H17-A□□-□□□ 10:Without battery box 11:With battery box B30=3m B50=5m B70=7m C10=10m C15=15m C20=20m A1-H17-A□□-□□□ 12:Without battery box 13:With battery box C30=30m C40=40m C50=50m	A1-H02-A08-K-D39
F202□□-B45-D□□□-MX048S1E30FSO						
F202□□-B50-D□□□-MX048S1E30FSO						
F202□□-B56-D□□□-MX048S1E30FSO						
F202□□-B63-D□□□-MX048S1E30FSO						
F202□□-B71-D□□□-MX048S1E30FSO						
F202□□-B80-D□□□-MX048S1E30FSO						
F202□□-B90-D□□□-MX048S1E30FSO						
F202□□-C10-D□□□-MX048S1E30FSO						
F202□□-C11-D□□□-MX048S1E30FSO						
F202□□-C13-D□□□-MX048S1E30FSO						
F202□□-C14-D□□□-MX048S1E30FSO						
F302□□-C16-D□□□-MX048S1E30FSO						
F302□□-C18-D□□□-MX048S1E30FSO						
F302□□-C20-D□□□-MX048S1E30FSO						
F302□□-C22-D□□□-MX048S1E30FSO						
F302□□-C25-D□□□-MX048S1E30FSO						
F302□□-C28-D□□□-MX048S1E30FSO						
F302□□-C32-D□□□-MX048S1E30FSO						
F203□□-B71-D□□□-MX048S1E30FSO						
F203□□-B80-D□□□-MX048S1E30FSO						
F203□□-B90-D□□□-MX048S1E30FSO						
F203□□-C10-D□□□-MX048S1E30FSO						
F203□□-C11-D□□□-MX048S1E30FSO						
F203□□-C13-D□□□-MX048S1E30FSO						
F203□□-C14-D□□□-MX048S1E30FSO						
F203□□-C16-D□□□-MX048S1E30FSO						
F203□□-C18-D□□□-MX048S1E30FSO						
F203□□-C20-D□□□-MX048S1E30FSO						
F303□□-C22-D□□□-MX048S1E30FSO						
F303□□-C25-D□□□-MX048S1E30FSO						
F303□□-C28-D□□□-MX048S1E30FSO						
F303□□-C32-D□□□-MX048S1E30FSO						
F303□□-C36-D□□□-MX048S1E30FSO						
F303□□-C40-D□□□-MX048S1E30FSO						
F303□□-C45-D□□□-MX048S1E30FSO						
F303□□-C50-D□□□-MX048S1E30FSO						
F304□□-C45-D□□□-MX048S1E30FSO						
F304□□-C50-D□□□-MX048S1E30FSO						
F304□□-C56-D□□□-MX048S1E30FSO						
F304□□-C63-D□□□-MX048S1E30FSO						
F304□□-C71-D□□□-MX048S1E30FSO						
F304□□-C80-D□□□-MX048S1E30FSO						
F304□□-C90-D□□□-MX048S1E30FSO						
F304□□-D10-D□□□-MX048S1E30FSO						
F305□□-C80-D□□□-MX048S1E30FSO						
F305□□-C90-D□□□-MX048S1E30FSO						
F305□□-D10-D□□□-MX048S1E30FSO						
F305□□-D11-D□□□-MX048S1E30FSO						
F305□□-D13-D□□□-MX048S1E30FSO						
F305□□-D14-D□□□-MX048S1E30FSO						
F306□□-D13-D□□□-MX048S1E30FSO						
F306□□-D14-D□□□-MX048S1E30FSO						
F306□□-D16-D□□□-MX048S1E30FSO						
F306□□-D18-D□□□-MX048S1E30FSO						
F306□□-D20-D□□□-MX048S1E30FSO						

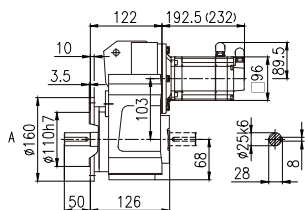


## F202/F302-MX048S1E30FS0 Dimensions (mm)



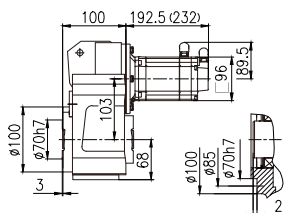
F202HA/F302HA  
F202HC/F302HC

Horizontal foot-mounted(H)

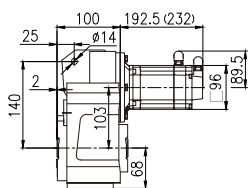


F202FA/F302FA  
F202FC/F302FC

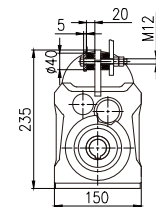
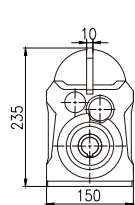
Flange-mounted(F)



Short flange-mounted(S)



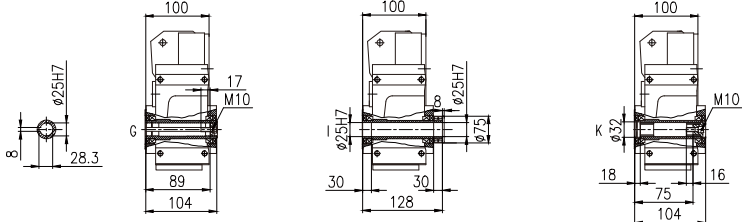
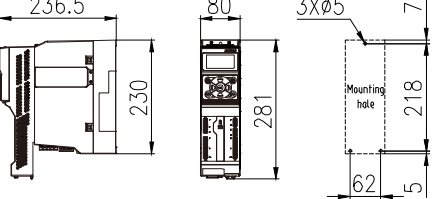
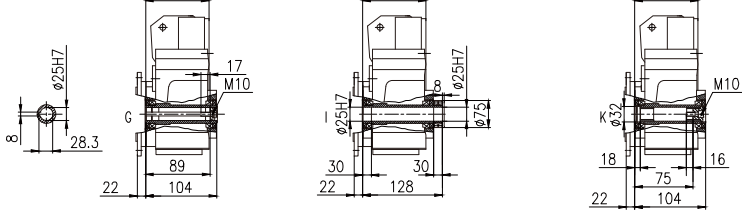
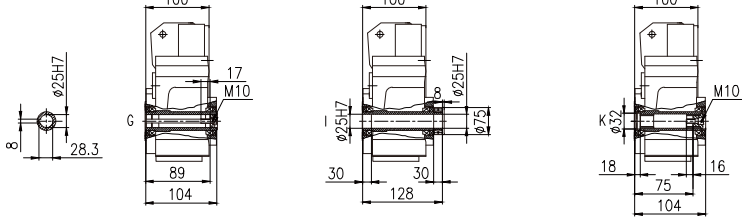
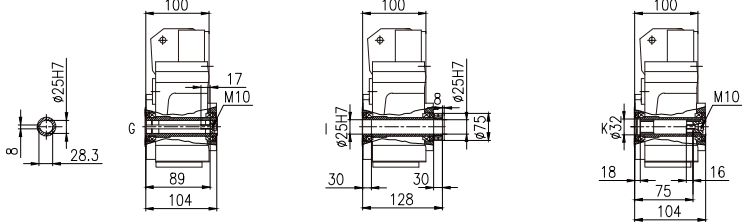
Shaft-mounted(A)



Torque arm-mounted  
with accessory(T)

注:括号内为带制动器的伺服马达长度

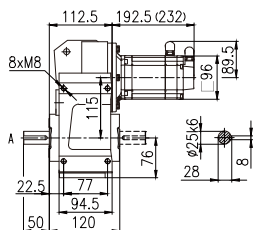
Note: Figures with parentheses are shown for length of servo gearmotor with brake

F202/F302-MX048S1E30FS0 Dimensions (mm)	Corresponding Servo Drive
 <p data-bbox="191 659 337 685">F202HG/F302HG</p> <p data-bbox="483 659 630 685">F202HI/F302HI</p> <p data-bbox="743 659 889 685">F202HK/F302HK</p>	 <p data-bbox="1084 1172 1490 1282">Control module: AX-CM55-PA-PE(ProfNet) or AX-CM55-EA-PE(EtherCAT) Power module: AX-PM26-B3B15-N(without filter) or AX-PM26-B3B15-F(with filter) Operation panel: A1-OP25</p>
 <p data-bbox="191 1101 337 1128">F202FG/F302FG</p> <p data-bbox="483 1101 630 1128">F202FI/F302FI</p> <p data-bbox="743 1101 889 1128">F202FK/F302FK</p>	
 <p data-bbox="191 1543 337 1570">F202SG/F302SG</p> <p data-bbox="483 1543 630 1570">F202SI/F302SI</p> <p data-bbox="743 1543 889 1570">F202SK/F302SK</p>	
 <p data-bbox="191 1942 337 1986">F202AG/F302AG F202TG/F302TG</p> <p data-bbox="483 1942 630 1986">F202AI/F302AI F202TI/F302TI</p> <p data-bbox="743 1942 889 1986">F202AK/F302AK F202TK/F302TK</p>	

注: 渐开线花键空心轴的花键规格DIN5480:  
m1.25×z18×α30×D25×9H

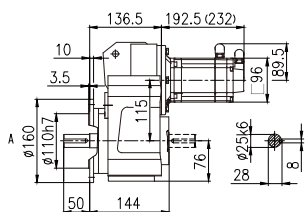
Note: Involute spline size DIN5480:  
m1.25×z18×α30×D25×9H

**F203/F303-MX048S1E30FS0 Dimensions (mm)**



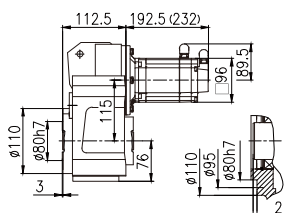
F203HA/F303HA  
F203HC/F303HC

Horizontal foot-mounted(H)

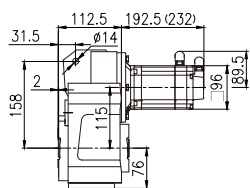


F203FA/F303FA  
F203FC/F303FC

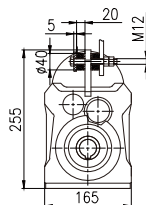
Flange-mounted(F)



Short flange-mounted(S)



Shaft-mounted(A)



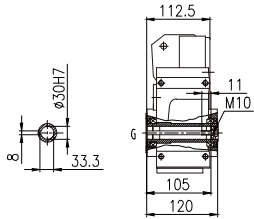
Torque arm-mounted  
with accessory(T)

注:括号内为带制动器的伺服马达长度

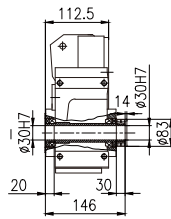
Note: Figures with parentheses are shown for length of servo gearmotor with brake

## F203/F303-MX048S1E30FS0 Dimensions (mm)

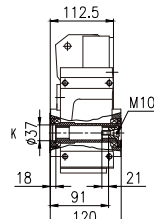
## Corresponding Servo Drive



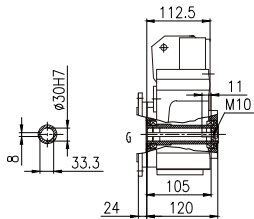
F203HG/F303HG



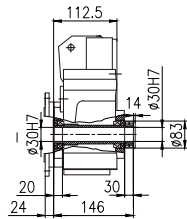
F203HI/F303HI



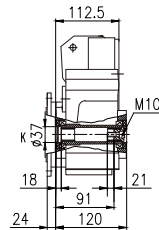
F203HK/F303HK



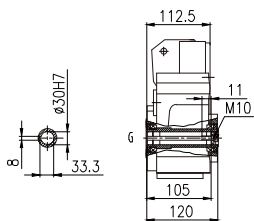
F203FG/F303FG



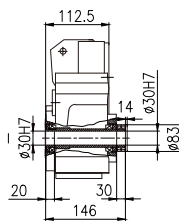
F203FI/F303FI



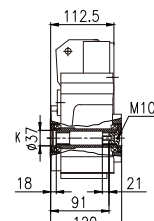
F203FK/F303FK



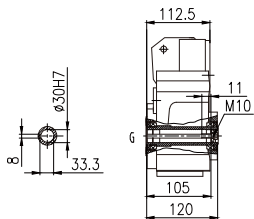
F203SG/F303SG



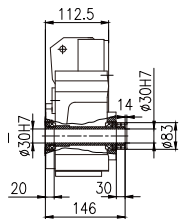
F203SI/F303SI



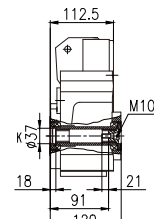
F203SK/F303SK



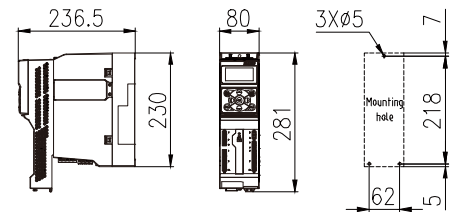
F203AG/F303AG  
F203TG/F303TG



F203AI/F303AI  
F203TI/F303TI



F203AK/F303AK  
F203TK/F303TK

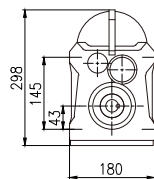
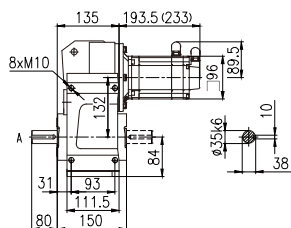


Control module: AX-CM55-PA-PE(ProfNet)  
or AX-CM55-EA-PE(EtherCAT)  
Power module: AX-PM26-B3B15-N(without filter)  
or AX-PM26-B3B15-F(with filter)  
Operation panel: A1-OP25

注:渐开线花键空心轴的花键规格DIN5480:  
m1.25×z22×α30×D30×9H

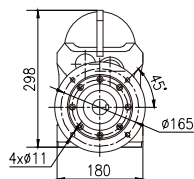
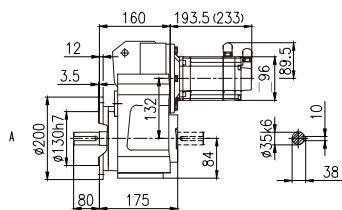
Note: Involute spline size DIN5480:  
m1.25×z22×α30×D30×9H

**F204/F304-MX048S1E30FS0 Dimensions (mm)**



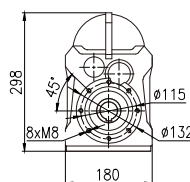
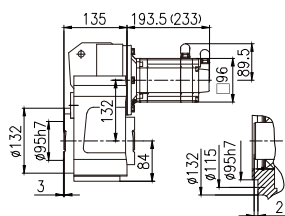
F204HA/F304HA  
F204HC/F304HC

Horizontal foot-mounted(H)

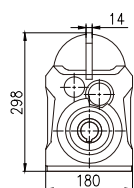
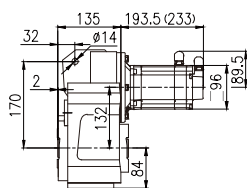


F204FA/F304FA  
F204FC/F304FC

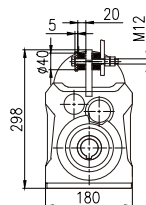
Flange-mounted(F)



Short flange-mounted(S)



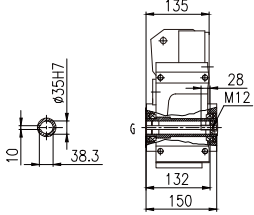
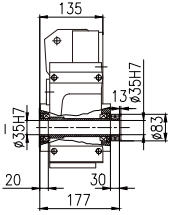
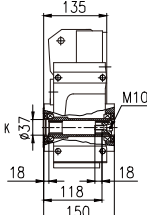
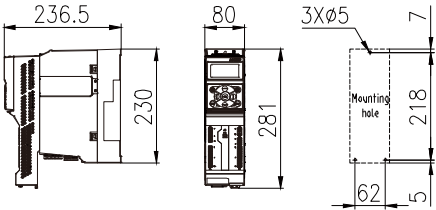
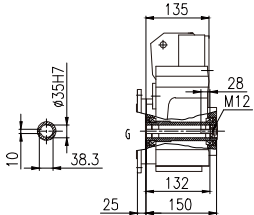
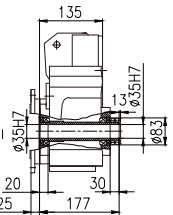
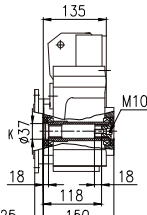
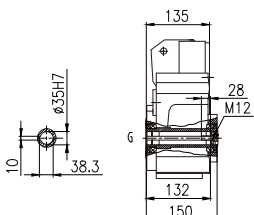
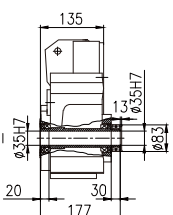
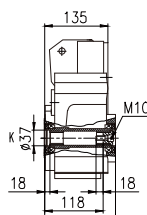
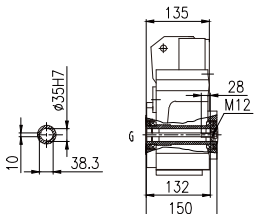
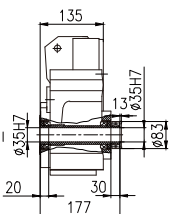
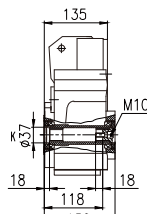
Shaft-mounted(A)



Torque arm-mounted  
with accessory(T)

注:括号内为带制动器的伺服马达长度

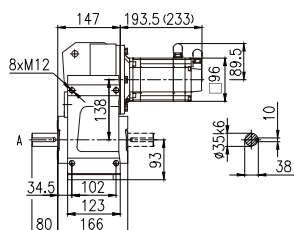
Note: Figures with parentheses are shown for length of servo gearmotor with brake

F204/F304-MX048S1E30FS0 Dimensions (mm)			Corresponding Servo Drive
 <p>F204HG/F304HG</p>	 <p>F204HI/F304HI</p>	 <p>F204HK/F304HK</p>	 <p>Control module: AX-CM55-PA-PE(ProfiNet) or AX-CM55-EA-PE(EtherCAT) Power module: AX-PM26-B3B15-N(without filter) or AX-PM26-B3B15-F(with filter) Operation panel: A1-OP25</p>
 <p>F204FG/F304FG</p>	 <p>F204FI/F304FI</p>	 <p>F204FK/F304FK</p>	
 <p>F204SG/F304SG</p>	 <p>F204SI/F304SI</p>	 <p>F204SK/F304SK</p>	
 <p>F204AG/F304AG F204TG/F304TG</p>	 <p>F204AI/F304AI F204TI/F304TI</p>	 <p>F204AK/F304AK F204TK/F304TK</p>	

注:渐开线花键空心轴的花键规格DIN5480:  
m2×z16×α30×D35×9H

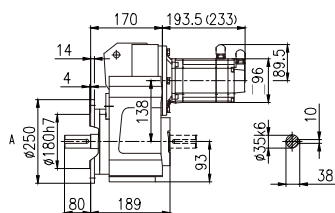
Note: Involute spline size DIN5480:  
m2×z16×α30×D35×9H

## F205/F305-MX048S1E30FS0 Dimensions (mm)



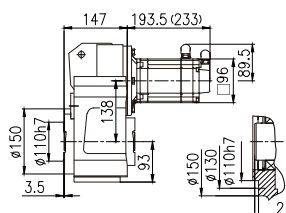
F205HA/F305HA  
F205HC/F305HC

Horizontal foot-mounted(H)

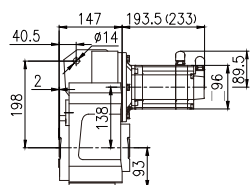


F205FA/F305FA  
F205FC/F305FC

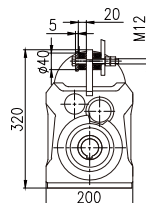
Flange-mounted(F)



Short flange-mounted(S)



Shaft-mounted(A)



Torque arm-mounted  
with accessory(T)

注:括号内为带制动器的伺服马达长度

Note: Figures with parentheses are shown for length of servo gearmotor with brake

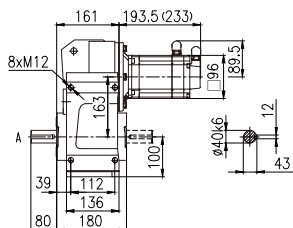
F205/F305-MX048S1E30FS0 Dimensions (mm)			Corresponding Servo Drive
<p>F205HG/F305HG</p>	<p>F205HI/F305HI</p>	<p>F205HK/F305HK</p>	<p>Control module: AX-CM55-PA-PE(ProfiNet) or AX-CM55-EA-PE(EtherCAT) Power module: AX-PM26-B3B15-N(without filter) or AX-PM26-B3B15-F(with filter) Operation panel: A1-OP25</p>
<p>F205FG/F305FG</p>	<p>F205FI/F305FI</p>	<p>F205FK/F305FK</p>	
<p>F205SG/F305SG</p>	<p>F205SI/F305SI</p>	<p>F205SK/F305SK</p>	
<p>F205AG/F305AG F205TG/F305TG</p>	<p>F205AI/F305AI F205TI/F305TI</p>	<p>F205AK/F305AK F205TK/F305TK</p>	

注: 渐开线花键空心轴的花键规格DIN5480:  
m2×z16×α30×D35×9H

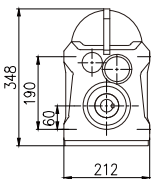
Note: Involute spline size DIN5480:  
m2×z16×α30×D35×9H



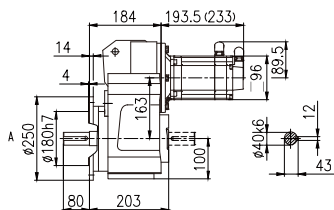
**F206/F306-MX048S1E30FS0 Dimensions (mm)**



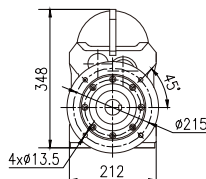
F206HA/F306HA  
F206HC/F306HC



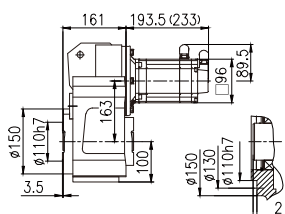
Horizontal foot-mounted(H)



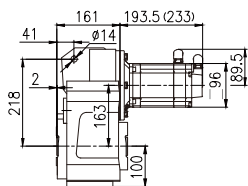
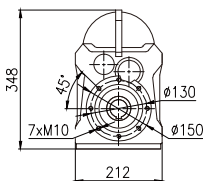
F206FA/F306FA  
F206FC/F306FC



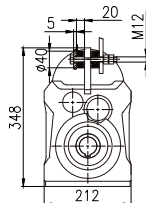
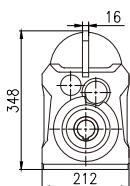
Flange-mounted(F)



Short flange-mounted(S)



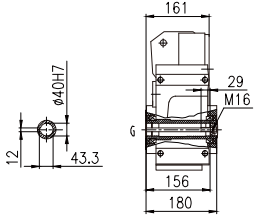
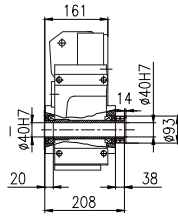
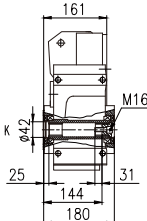
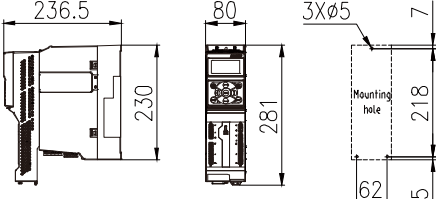
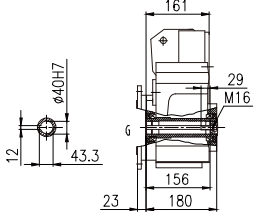
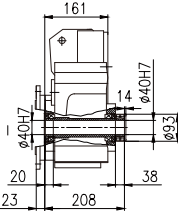
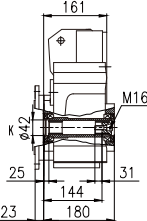
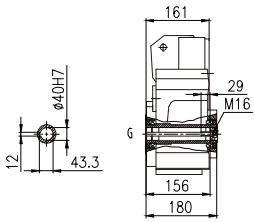
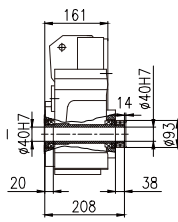
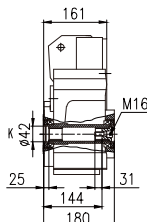
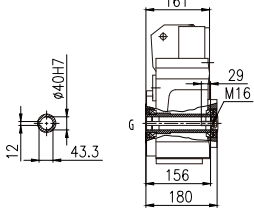
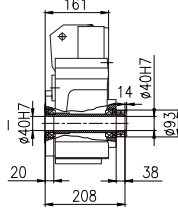
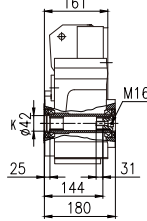
Shaft-mounted(A)



Torque arm-mounted  
with accessory(T)

注:括号内为带制动器的伺服马达长度

Note: Figures with parentheses are shown for length of servo gearmotor with brake

F206/F306-MX048S1E30FS0 Dimensions (mm)			Corresponding Servo Drive
 <p>F206HG/F306HG</p>	 <p>F206HI/F306HI</p>	 <p>F206HK/F306HK</p>	 <p>Control module: AX-CM55-PA-PE(ProfiNet) or AX-CM55-EA-PE(EtherCAT) Power module: AX-PM26-B3B15-N(without filter) or AX-PM26-B3B15-F(with filter) Operation panel: A1-OP25</p>
 <p>F206FG/F306FG</p>	 <p>F206FI/F306FI</p>	 <p>F206FK/F306FK</p>	
 <p>F206SG/F306SG</p>	 <p>F206SI/F306SI</p>	 <p>F206SK/F306SK</p>	
 <p>F206AG/F306AG F206TG/F306TG</p>	 <p>F206AI/F306AI F206TI/F306TI</p>	 <p>F206AK/F306AK F206TK/F306TK</p>	

注:渐开线花键空心轴的花键规格DIN5480:  
m2×z16×α30×D35×9H

Note: Involute spline size DIN5480:  
m2×z16×α30×D35×9H

伺服马达: 1.5kW 4.8Nm  
3A-3000r/min

Servo motor: 1.5kW 4.8Nm  
3A-3000r/min

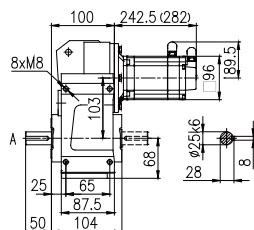
齿轮箱实际 输出转速	齿轮箱实际 输出扭矩	齿轮箱公称 减速比代号	齿轮箱公称 减速比	齿轮箱精确 减速比	齿轮箱 齿数比	齿轮箱额定 输出扭矩	齿轮箱 转动惯量	齿轮箱 背隙	齿轮箱 服务系数
Actual Output Speed of Gearbox	Actual Output Torque of Gearbox	Nominal Ratio Code of Gearbox	Nominal Ratio of Gearbox	Exact Ratio of Gearbox	Gear Ratio of Gearbox	Normal Output Torque of Gearbox	Rotational Inertia of Gearbox	Back Lash of Gearbox	Service Coefficient of Gearbox
$n_{2N}$ (r/min)	T <sub>2</sub> (N.m)	Code	$i_N$	$i_{ex}$	$i_z$	T <sub>2N</sub>	J $10^{-4}$ (kg.m <sup>2</sup> )	Φ (°)	f
759	19	B40	4	3.95	585/148	130	1.9	14	6.84
673	21	B45	4.5	4.46	156/35	140	1.5	13	6.67
591	24	B50	5	5.08	325/64	140	1.2	13	5.83
523	28	B56	5.6	5.74	689/120	150	1	13	5.36
462	31	B63	6.3	6.5	13/2	150	0.82	13	4.84
429	34	B71	7.1	7	7/1	150	0.74	13	4.41
385	37	B80	8	7.8	4905/629	150	0.95	9	4.05
341	42	B90	9	8.79	5232/595	150	0.76	9	3.57
300	48	C10	10	10	2725/272	150	0.61	9	3.13
265	54	C11	11.2	11.3	5777/510	150	0.49	9	2.78
234	61	C13	12.5	12.8	218/17	150	0.39	8	2.46
217	66	C14	14	13.8	3052/221	150	0.36	8	2.27
188	77	C16	16	16	817/51	150	1.2	13	1.95
169	85	C18	18	17.7	11115/629	150	1	13	1.76
151	96	C20	20	19.9	11856/595	150	0.89	13	1.56
726	20	B40	4	4.13	355/86	160	3.1	12	8
648	22	B45	4.5	4.63	1988/429	170	2.5	12	7.73
574	25	B50	5	5.23	2130/407	185	2.1	12	7.4
516	28	B56	5.6	5.81	639/110	220	1.7	12	7.86
450	32	B63	6.3	6.66	213/32	220	1.5	11	6.88
410	35	B71	7.1	7.32	1207/165	220	1.3	11	6.29
364	40	B80	8	8.25	1633/198	220	1.1	11	5.5
332	43	B90	9	9.03	6600/731	220	1.5	8	5.12
297	48	C10	10	10.1	2240/221	220	1.1	8	4.58
263	55	C11	11.2	11.4	7200/629	220	0.94	8	4
236	61	C13	12.5	12.7	216/17	220	0.78	8	3.61
205	70	C14	14	14.6	495/34	240	0.65	7	3.43
188	77	C16	16	16	16/1	240	0.55	7	3.12
167	86	C18	18	18	920/51	240	0.46	7	2.79
155	93	C20	20	19.3	4260/221	240	0.43	7	2.58
133	108	C22	22.4	22.5	33725/1496	240	0.78	12	2.22
118	122	C25	25	25.5	71497/2805	240	0.66	12	1.97
104	139	C28	28	28.9	5396/187	240	0.55	12	1.73
96.5	149	C32	31.5	31.1	75544/2431	240	0.5	12	1.61
110	131	C28	28	27.3	6391/234	480	1.9	8	3.66
97.4	148	C32	31.5	30.8	4565/148	480	1.6	8	3.24
87.7	164	C36	35.5	34.2	2739/80	480	1.4	8	2.93
76.5	188	C40	40	39.2	10043/256	480	1.2	8	2.55
69.8	206	C45	45	43	281325/6536	420	1.9	7	2.04
62.1	232	C50	50	48.3	11935/247	420	1.5	7	1.81
54.9	262	C56	56	54.6	76725/1406	420	1.3	7	1.6
61	236	C50	50	49.2	837/17	700	1.2	8	2.97
53.2	271	C56	56	56.4	15345/272	700	1	8	2.58
48.4	298	C63	63	62	62/1	700	0.88	8	2.35
42.9	336	C71	71	69.9	3565/51	700	0.75	8	2.08
40.2	359	C80	80	74.7	33015/442	700	0.69	8	1.95
34.6	417	C90	90	86.8	33945/391	700	0.56	8	1.68
48.5	297	C63	63	61.8	368774/5967	900	2.2	7	3.03
43.6	330	C71	71	68.8	129850/1887	900	1.9	6	2.73
39.6	363	C80	80	75.7	19292/255	900	1.7	6	2.48
34.9	412	C90	90	85.9	23373/272	900	1.5	6	2.18
31.9	451	D10	100	93.9	215551/2295	900	1.3	6	2
26.4	545	D11	112	113.6	75313/663	900	1.1	6	1.65

注: 启停次数≤60次/小时, 服务系数推荐1.5;  
启停次数≤120次/小时, 服务系数推荐1.75;  
启停次数>120次/小时, 服务系数推荐2以上;

Attention: Operation frequency ≤ 60 times/h, service coefficient f is recommended as 1.5;  
Operation frequency ≤ 120 times/h, service coefficient f is recommended as 1.75;  
Operation frequency ≥ 120 times/h, service coefficient f is recommended as over 2.

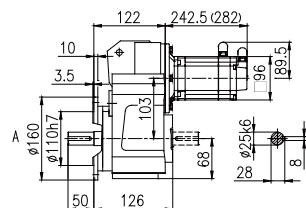
伺服齿轮马达订货号	伺服驱动器订货号			线缆配置订货号		制动电阻订货号
	控制模块	功率模块	操作面板	伺服马达动力线	伺服马达信号线	
Servo Gearmotor Order Number	Servo Drive Order Number			Cable Configuration Order Number		Braking Resistor Order Number
	Control Module	Power Module	Operation Panel	Power Cable of Servo Gearmotor	Signal Cable of Servo Gearmotor	
F202□□-B40-D□□□-MX048M1E30FSO	AX-CM55-□□-PE   PA:PROFINET EA:EtherCAT	AX-PM26-B3B22-□   N:Without filter F:With filter	A1-OP25	A1-H□□-A15-□□□   18:Without brake 16:With brake  B30=3m B50=5m B70=7m C10=10m C15=15m C20=20m C30=30m C40=40m C50=50m	A1-H17-A□□-□□□   10:Without battery box 11:With battery box  B30=3m B50=5m B70=7m C10=10m C15=15m C20=20m  A1-H17-A□□-□□□   12:Without battery box 13:With battery box  C30=30m C40=40m C50=50m	A1-H02-A15-K-D18
F202□□-B45-D□□□-MX048M1E30FSO						
F202□□-B50-D□□□-MX048M1E30FSO						
F202□□-B56-D□□□-MX048M1E30FSO						
F202□□-B63-D□□□-MX048M1E30FSO						
F202□□-B71-D□□□-MX048M1E30FSO						
F202□□-B80-D□□□-MX048M1E30FSO						
F202□□-B90-D□□□-MX048M1E30FSO						
F202□□-C10-D□□□-MX048M1E30FSO						
F202□□-C11-D□□□-MX048M1E30FSO						
F202□□-C13-D□□□-MX048M1E30FSO						
F202□□-C14-D□□□-MX048M1E30FSO						
F302□□-C16-D□□□-MX048M1E30FSO						
F302□□-C18-D□□□-MX048M1E30FSO						
F302□□-C20-D□□□-MX048M1E30FSO						
F203□□-B40-D□□□-MX048M1E30FSO						
F203□□-B45-D□□□-MX048M1E30FSO						
F203□□-B50-D□□□-MX048M1E30FSO						
F203□□-B56-D□□□-MX048M1E30FSO						
F203□□-B63-D□□□-MX048M1E30FSO						
F203□□-B71-D□□□-MX048M1E30FSO						
F203□□-B80-D□□□-MX048M1E30FSO						
F203□□-B90-D□□□-MX048M1E30FSO						
F203□□-C10-D□□□-MX048M1E30FSO						
F203□□-C11-D□□□-MX048M1E30FSO						
F203□□-C13-D□□□-MX048M1E30FSO						
F203□□-C14-D□□□-MX048M1E30FSO						
F203□□-C16-D□□□-MX048M1E30FSO						
F203□□-C18-D□□□-MX048M1E30FSO						
F203□□-C20-D□□□-MX048M1E30FSO						
F303□□-C22-D□□□-MX048M1E30FSO						
F303□□-C25-D□□□-MX048M1E30FSO						
F303□□-C28-D□□□-MX048M1E30FSO						
F303□□-C32-D□□□-MX048M1E30FSO						
F304□□-C28-D□□□-MX048M1E30FSO						
F304□□-C32-D□□□-MX048M1E30FSO						
F304□□-C36-D□□□-MX048M1E30FSO						
F304□□-C40-D□□□-MX048M1E30FSO						
F304□□-C45-D□□□-MX048M1E30FSO						
F304□□-C50-D□□□-MX048M1E30FSO						
F304□□-C56-D□□□-MX048M1E30FSO						
F305□□-C50-D□□□-MX048M1E30FSO						
F305□□-C56-D□□□-MX048M1E30FSO						
F305□□-C63-D□□□-MX048M1E30FSO						
F305□□-C71-D□□□-MX048M1E30FSO						
F305□□-C80-D□□□-MX048M1E30FSO						
F305□□-C90-D□□□-MX048M1E30FSO						
F306□□-C63-D□□□-MX048M1E30FSO						
F306□□-C71-D□□□-MX048M1E30FSO						
F306□□-C80-D□□□-MX048M1E30FSO						
F306□□-C90-D□□□-MX048M1E30FSO						
F306□□-D10-D□□□-MX048M1E30FSO						
F306□□-D11-D□□□-MX048M1E30FSO						

**F202/F302-MX048M1E30FS0 Dimensions (mm)**



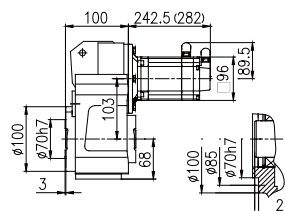
F202HA/F302HA  
F202HC/F302HC

Horizontal foot-mounted(H)

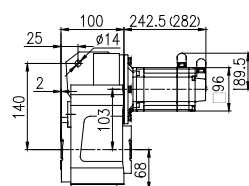


F202FA/F302FA  
F202FC/F302FC

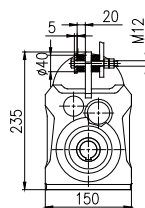
Flange-mounted(F)



Short flange-mounted(S)



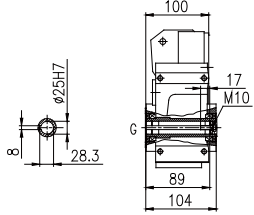
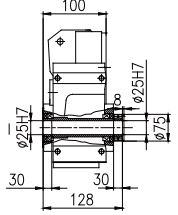
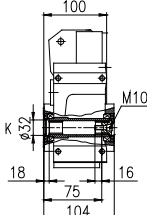
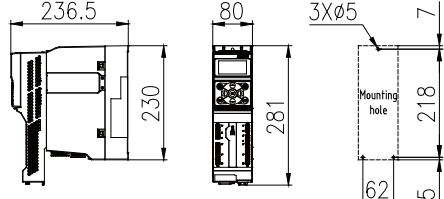
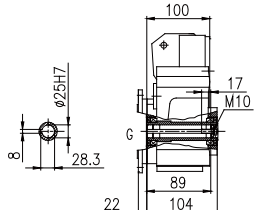
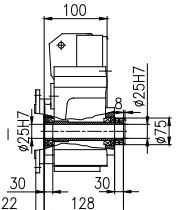
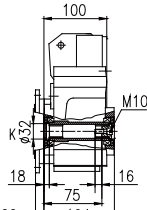
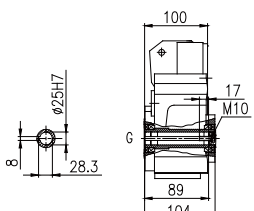
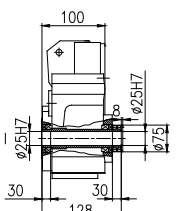
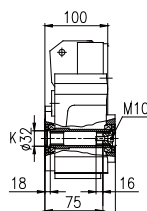
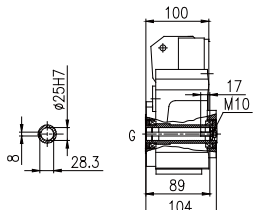
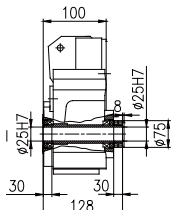
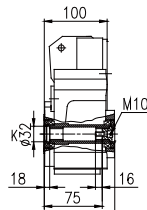
Shaft-mounted(A)



Torque arm-mounted  
with accessory(T)

注:括号内为带制动器的伺服马达长度

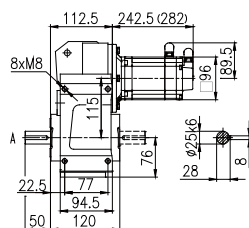
Note: Figures with parentheses are shown for length of servo gearmotor with brake

F202/F302-MX048M1E30FS0 Dimensions (mm)			Corresponding Servo Drive
 <p>F202HG/F302HG</p>	 <p>F202HI/F302HI</p>	 <p>F202HK/F302HK</p>	 <p>Control module: AX-CM55-PA-PE(ProfiNet) or AX-CM55-EA-PE(EtherCAT) Power module: AX-PM26-B3B22-N(without filter) or AX-PM26-B3B22-F(with filter) Operation panel: A1-OP25</p>
 <p>F202FG/F302FG</p>	 <p>F202FI/F302FI</p>	 <p>F202FK/F302FK</p>	
 <p>F202SG/F302SG</p>	 <p>F202SI/F302SI</p>	 <p>F202SK/F302SK</p>	
 <p>F202AG/F302AG F202TG/F302TG</p>	 <p>F202AI/F302AI F202TI/F302TI</p>	 <p>F202AK/F302AK F202TK/F302TK</p>	

注: 渐开线花键空心轴的花键规格DIN5480:  
m1.25×z18×α30×D25×9H

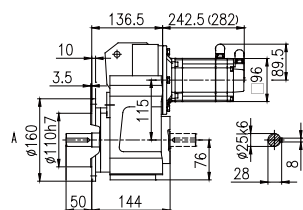
Note: Involute spline size DIN5480:  
m1.25×z18×α30×D25×9H

## F203/F303-MX048M1E30FS0 Dimensions (mm)



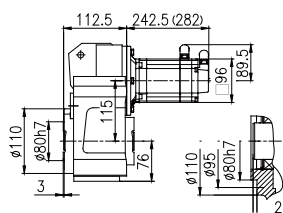
F203HA/F303HA  
F203HC/F303HC

Horizontal foot-mounted(H)

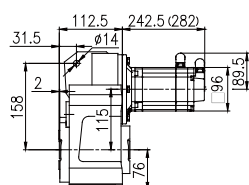


F203FA/F303FA  
F203FC/F303FC

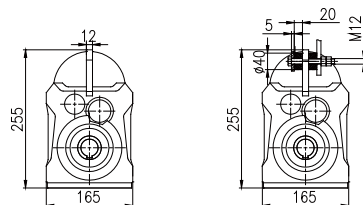
Flange-mounted(F)



Short flange-mounted(S)



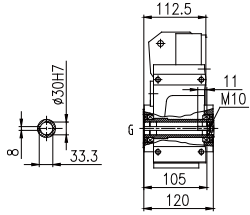
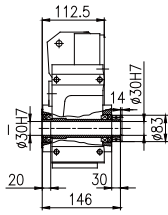
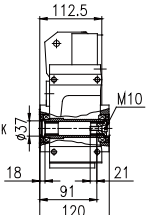
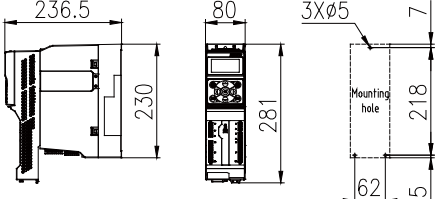
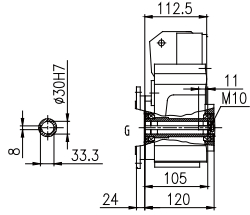
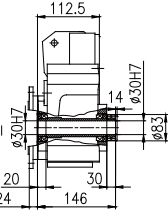
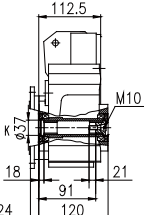
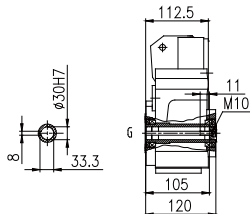
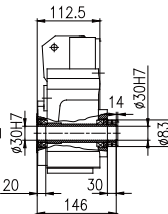
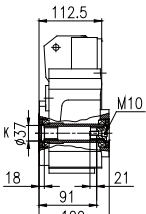
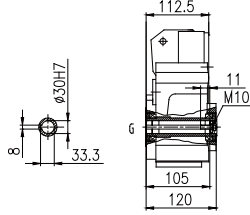
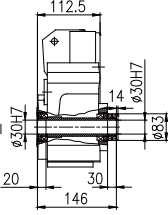
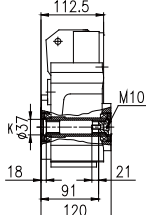
Shaft-mounted(A)



Torque arm-mounted  
with accessory(T)

注:括号内为带制动器的伺服马达长度

Note: Figures with parentheses are shown for length of servo gearmotor with brake

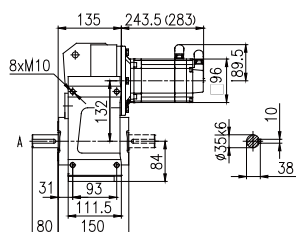
F203/F303-MX048M1E30FS0 Dimensions (mm)			Corresponding Servo Drive
 <p>F203HG/F303HG</p>	 <p>F203HI/F303HI</p>	 <p>F203HK/F303HK</p>	 <p>Control module: AX-CM55-PA-PE(ProfiNet) or AX-CM55-EA-PE(EtherCAT) Power module: AX-PM26-B3B22-N(without filter) or AX-PM26-B3B22-F(with filter) Operation panel: A1-OP25</p>
 <p>F203FG/F303FG</p>	 <p>F203FI/F303FI</p>	 <p>F203FK/F303FK</p>	
 <p>F203SG/F303SG</p>	 <p>F203SI/F303SI</p>	 <p>F203SK/F303SK</p>	
 <p>F203AG/F303AG F203TG/F303TG</p>	 <p>F203AI/F303AI F203TI/F303TI</p>	 <p>F203AK/F303AK F203TK/F303TK</p>	

注:渐开线花键空心轴的花键规格DIN5480:  
m1.25×z22×α30×D30×9H

Note: Involute spline size DIN5480:  
m1.25×z22×α30×D30×9H

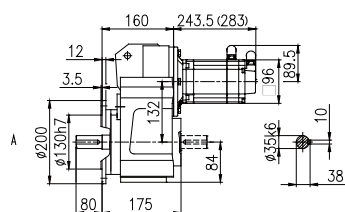


## F204/F304-MX048M1E30FS0 Dimensions (mm)



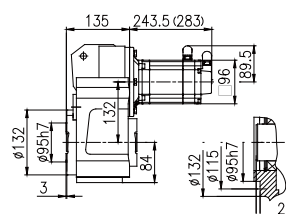
F204HA/F304HA  
F204HC/F304HC

Horizontal foot-mounted(H)

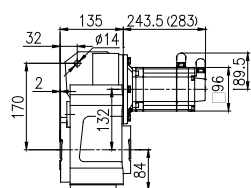


F204FA/F304FA  
F204FC/F304FC

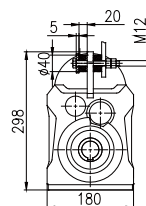
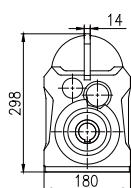
Flange-mounted(F)



Short flange-mounted(S)



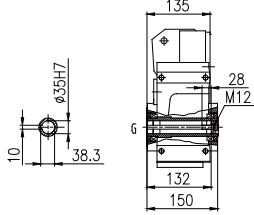
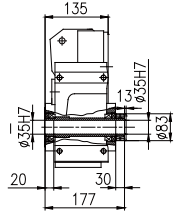
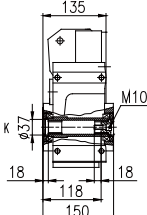
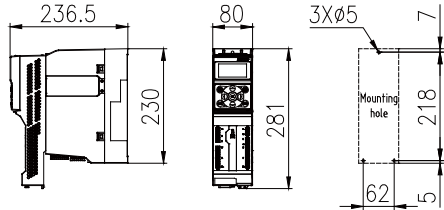
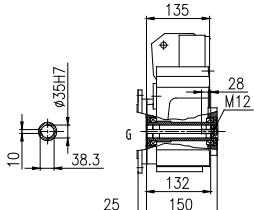
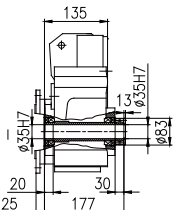
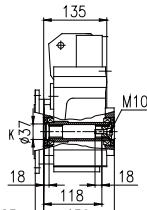
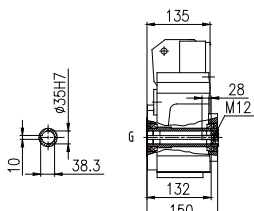
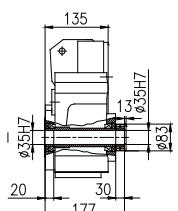
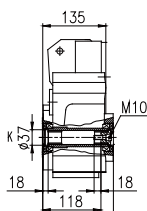
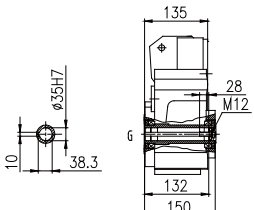
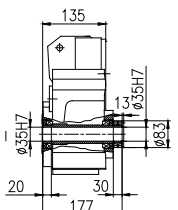
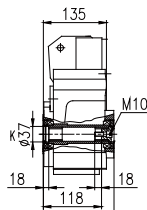
Shaft-mounted(A)



Torque arm-mounted  
with accessory(T)

注:括号内为带制动器的伺服马达长度

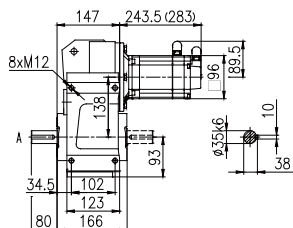
Note: Figures with parentheses are shown for length of servo gearmotor with brake

F204/F304-MX048M1E30FS0 Dimensions (mm)			Corresponding Servo Drive
 <p>F204HG/F304HG</p>	 <p>F204HI/F304HI</p>	 <p>F204HK/F304HK</p>	 <p>Control module: AX-CM55-PA-PE(ProfiNet) or AX-CM55-EA-PE(EtherCAT) Power module: AX-PM26-B3B22-N(without filter) or AX-PM26-B3B22-F(with filter) Operation panel: A1-OP25</p>
 <p>F204FG/F304FG</p>	 <p>F204FI/F304FI</p>	 <p>F204FK/F304FK</p>	
 <p>F204SG/F304SG</p>	 <p>F204SI/F304SI</p>	 <p>F204SK/F304SK</p>	
 <p>F204AG/F304AG F204TG/F304TG</p>	 <p>F204AI/F304AI F204TI/F304TI</p>	 <p>F204AK/F304AK F204TK/F304TK</p>	

注:渐开线花键空心轴的花键规格DIN5480:  
m2×z16×α30×D35×9H

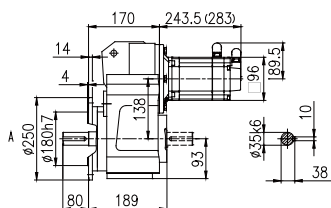
Note: Involute spline size DIN5480:  
m2×z16×α30×D35×9H

## F205/F305-MX048M1E30FS0 Dimensions (mm)



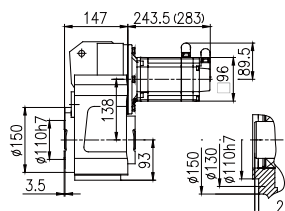
F205HA/F305HA  
F205HC/F305HC

Horizontal foot-mounted(H)

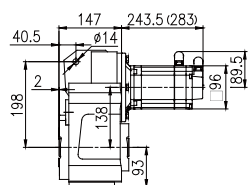


F205FA/F305FA  
F205FC/F305FC

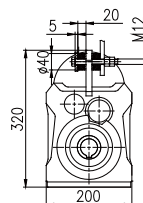
Flange-mounted(F)



Short flange-mounted(S)



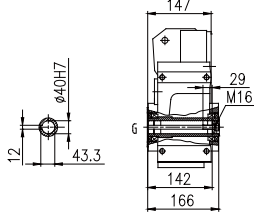
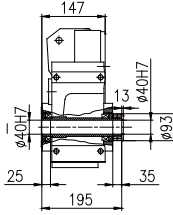
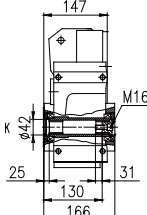
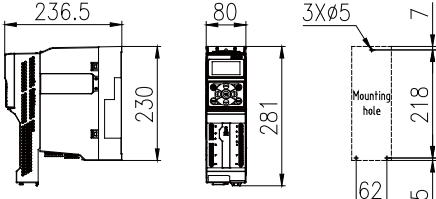
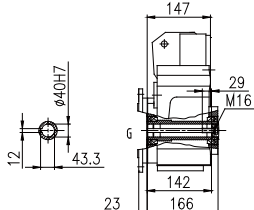
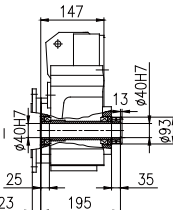
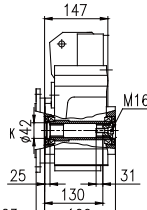
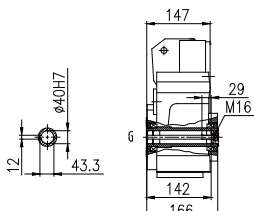
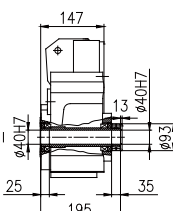
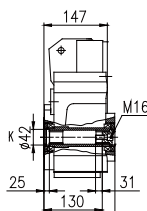
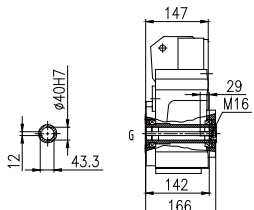
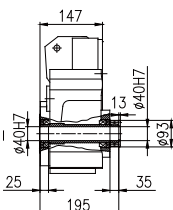
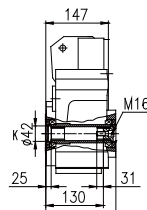
Shaft-mounted(A)



Torque arm-mounted  
with accessory(T)

注:括号内为带制动器的伺服马达长度

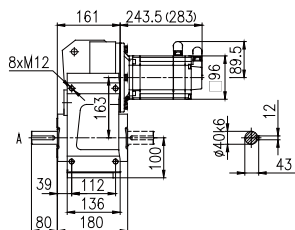
Note: Figures with parentheses are shown for length of servo gearmotor with brake

F205/F305-MX048M1E30FS0 Dimensions (mm)			Corresponding Servo Drive
 <p>F205HG/F305HG</p>	 <p>F205HI/F305HI</p>	 <p>F205HK/F305HK</p>	 <p>Control module: AX-CM55-PA-PE(ProfiNet) or AX-CM55-EA-PE(EtherCAT) Power module: AX-PM26-B3B22-N(without filter) or AX-PM26-B3B22-F(with filter) Operation panel: A1-OP25</p>
 <p>F205FG/F305FG</p>	 <p>F205FI/F305FI</p>	 <p>F205FK/F305FK</p>	
 <p>F205SG/F305SG</p>	 <p>F205SI/F305SI</p>	 <p>F205SK/F305SK</p>	
 <p>F205AG/F305AG F205TG/F305TG</p>	 <p>F205AI/F305AI F205TI/F305TI</p>	 <p>F205AK/F305AK F205TK/F305TK</p>	

注:渐开线花键空心轴的花键规格DIN5480:  
m2×z16×α30×D35×9H

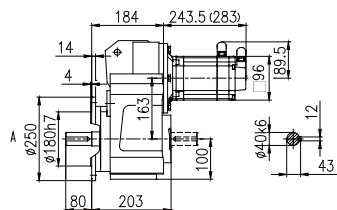
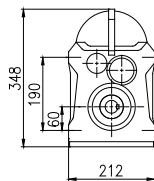
Note: Involute spline size DIN5480:  
m2×z16×α30×D35×9H

**F206/F306-MX048M1E30FS0 Dimensions (mm)**



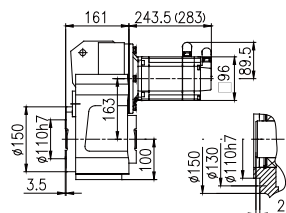
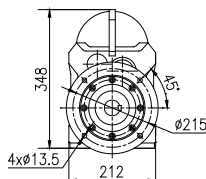
F206HA/F306HA  
F206HC/F306HC

Horizontal foot-mounted(H)

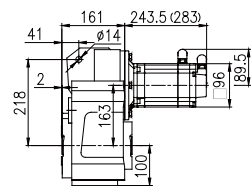
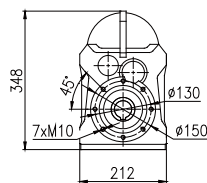


F206FA/F306FA  
F206FC/F306FC

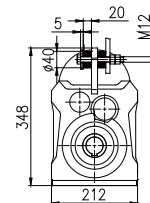
Flange-mounted(F)



Short flange-mounted(S)



Shaft-mounted(A)



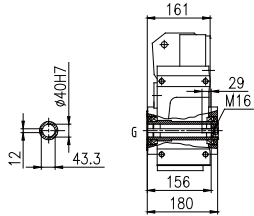
Torque arm-mounted  
with accessory(T)

注:括号内为带制动器的伺服马达长度

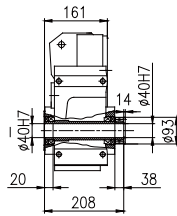
Note: Figures with parentheses are shown for length of servo gearmotor with brake

## F206/F306-MX048M1E30FS0 Dimensions (mm)

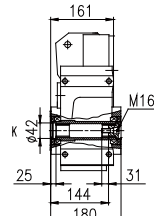
## Corresponding Servo Drive



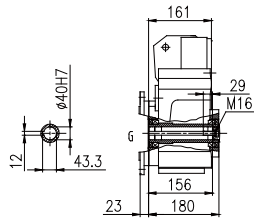
F206HG/F306HG



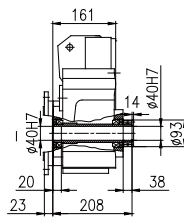
F206HI/F306HI



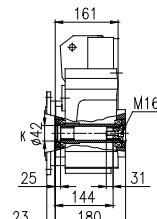
F206HK/F306HK



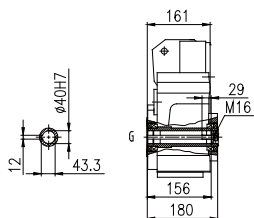
F206FG/F306FG



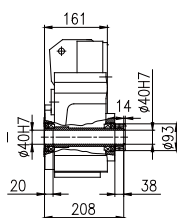
F206FI/F306FI



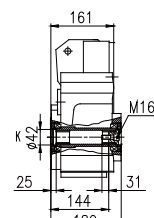
F206FK/F306FK



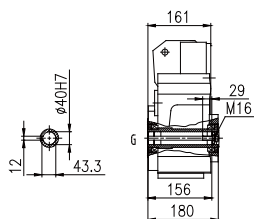
F206SG/F306SG



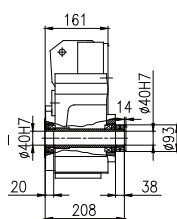
F206SI/F306SI



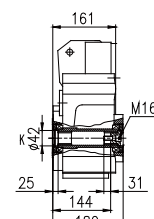
F206SK/F306SK



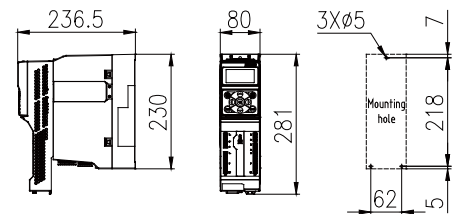
F206AG/F306AG  
F206TG/F306TG



F206AI/F306AI  
F206TI/F306TI



F206AK/F306AK  
F206TK/F306TK



Control module: AX-CM55-PA-PE(ProfiNet)  
or AX-CM55-EA-PE(EtherCAT)  
Power module: AX-PM26-B3B22-N(without filter)  
or AX-PM26-B3B22-F(with filter)  
Operation panel: A1-OP25

注:渐开线花键空心轴的花键规格DIN5480:  
m2×z16×α30×D35×9H

Note: Involute spline size DIN5480:  
m2×z16×α30×D35×9H

伺服马达:2.05kW9.8Nm  
4.6A-2000r/min

Servo motor:2.05kW9.8Nm  
4.6A-2000r/min

齿轮箱实际输出转速	齿轮箱实际输出扭矩	齿轮箱公称减速比代号	齿轮箱公称减速比	齿轮箱精确减速比	齿轮箱齿数比	齿轮箱额定输出扭矩	齿轮箱转动惯量	齿轮箱背隙	齿轮箱服务系数
Actual Output Speed of Gearbox	Actual Output Torque of Gearbox	Nominal Ratio Code of Gearbox	Nominal Ratio of Gearbox	Exact Ratio of Gearbox	Gear Ratio of Gearbox	Normal Output Torque of Gearbox	Rotational Inertia of Gearbox	Back Lash of Gearbox	Service Coefficient of Gearbox
$n_{2N}$ (r/min)	T <sub>2</sub> (N.m)	Code	$i_N$	$i_{ex}$	$i_z$	T <sub>2N</sub>	J 10 <sup>-4</sup> (kg.m <sup>2</sup> )	Φ (°)	f
506	39	B40	4	3.95	585/148	130	2	14	3.33
448	44	B45	4.5	4.46	156/35	140	1.6	13	3.18
394	50	B50	5	5.08	325/64	140	1.3	13	2.8
348	56	B56	5.6	5.74	689/120	150	1.1	13	2.68
308	64	B63	6.3	6.5	13/2	150	0.86	13	2.34
286	69	B71	7.1	7	7/1	150	0.77	13	2.17
256	76	B80	8	7.8	4905/629	150	1.1	9	1.97
228	86	B90	9	8.79	5232/595	150	0.86	9	1.74
200	98	C10	10	10	2725/272	150	0.68	9	1.53
484	40	B40	4	4.13	355/86	160	3.3	12	4
432	45	B45	4.5	4.63	1988/429	170	2.7	12	3.78
382	51	B50	5	5.23	2130/407	185	2.2	12	3.63
344	57	B56	5.6	5.81	639/110	220	1.8	12	3.86
300	65	B63	6.3	6.66	213/32	220	1.5	11	3.38
273	72	B71	7.1	7.32	1207/165	220	1.3	11	3.06
242	81	B80	8	8.25	1633/198	220	1.1	11	2.72
221	88	B90	9	9.03	6600/731	220	1.7	8	2.5
198	99	C10	10	10.1	2240/221	220	1.3	8	2.22
175	112	C11	11.2	11.4	7200/629	220	1.1	8	1.96
157	124	C13	12.5	12.7	216/17	220	0.88	8	1.77
137	143	C14	14	14.6	495/34	240	0.72	7	1.68
125	157	C16	16	16	16/1	240	0.6	7	1.53
160	123	C13	12.5	12.5	3905/312	410	1.7	7	3.33
144	136	C14	14	13.9	4125/296	410	1.4	7	3.01
131	150	C16	16	15.3	429/28	410	1.2	7	2.73
115	171	C18	18	17.4	4455/256	410	1	7	2.4
105	186	C20	20	19	913/48	410	0.86	7	2.2
92.6	212	C22	22.4	21.6	4675/216	440	0.75	7	2.08
82.3	238	C25	25	24.3	50215/2064	440	2.6	8	1.85
73.3	268	C28	28	27.3	6391/234	480	2.1	8	1.79
64.9	302	C32	31.5	30.8	4565/148	480	1.8	8	1.59
71.9	272	C28	28	27.8	4731/170	700	1.6	8	2.57
62.7	313	C32	31.5	31.9	17347/544	700	1.3	8	2.24
57.1	343	C36	35.5	35	1577/45	700	1.1	8	2.04
50.9	385	C40	40	39.3	8680/221	700	1.8	8	1.82
45	435	C45	45	44.4	27900/629	700	1.5	8	1.61
40.7	482	C50	50	49.2	837/17	700	1.3	8	1.45
48.7	403	C40	40	41.1	571340/13889	900	3.2	7	2.23
43.5	451	C45	45	46	579502/12597	900	2.7	7	2
39.1	502	C50	50	51.2	612150/11951	900	2.3	7	1.79
36.2	542	C56	56	55.3	363580/6579	900	2.9	7	1.66
32.4	606	C63	63	61.8	368774/5967	900	2.4	7	1.49
40	490	C50	50	50	83237/1665	1700	7.1	6	3.47
36	545	C56	56	55.6	5170/93	1700	8.6	6	3.12
31.3	625	C63	63	63.8	19129/300	1700	7.3	6	2.72
27.9	703	C71	71	71.7	39809/555	1700	6.2	6	2.42
24.9	786	C80	80	80.2	10340/129	1700	5.3	6	2.16
22.4	875	C90	90	89.3	52217/585	1700	4.6	6	1.94
20.4	958	D10	100	97.8	3619/37	1700	4.1	6	1.77
18.8	1043	D11	112	106.4	18612/175	1700	3.6	6	1.63
16.7	1172	D13	125	119.6	19129/160	1700	3.2	6	1.45
19.7	994	D10	100	101.4	537625/5301	3500	12.2	5	3.52
17.1	1148	D11	112	117.1	6325/54	3500	10	5	3.05
15	1305	D13	125	133.2	2530/19	3500	8.5	5	2.68
13.5	1450	D14	140	148	25300/171	3500	7.4	5	2.41
12	1631	D16	160	166.4	6325/38	3500	6.2	5	2.15
10.9	1794	D18	180	183.1	13915/76	3500	5.5	5	1.95
10	1961	D20	200	200.1	68425/342	3500	4.7	5	1.78

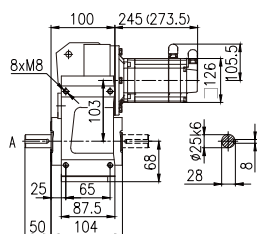
注:启停次数≤60次/小时,服务系数推荐1.5;  
启停次数≤120次/小时,服务系数推荐1.75;  
启停次数>120次/小时,服务系数推荐2以上;

Attention:Operation frequency≤60 times/h, service coefficient f is recommended as 1.5;  
Operation frequency≤120 times/h, service coefficient f is recommended as 1.75;  
Operation frequency≥120 times/h, service coefficient f is recommended as over 2.

伺服齿轮马达订货号	伺服驱动器订货号			线缆配置订货号		制动电阻订货号
	控制模块	功率模块	操作面板	伺服马达动力线	伺服马达信号线	
	Servo Drive Order Number			Cable Configuration Order Number		
Servo Gearmotor Order Number	Control Module	Power Module	Operation Panel	Power Cable of Servo Gearmotor	Signal Cable of Servo Gearmotor	
F202□□-B40-D□□□-MX063M1E20FSO	AX-CM55-□□-PE PA:PROFINET EA:EtherCAT	AX-PM26-B3B40-□ N:Without filter F:With filter	A1-OP25	A1-H□□-A15-□□□ 18:Without brake 16:With brake B30=3m B50=5m B70=7m C10=10m C15=15m C20=20m C30=30m C40=40m C50=50m	A1-H17-A□□-□□□ 10:Without battery box 11:With battery box B30=3m B50=5m B70=7m C10=10m C15=15m C20=20m A1-H17-A□□-□□□ 12:Without battery box 13:With battery box C30=30m C40=40m C50=50m	A1-H02-A30-K-D10
F202□□-B45-D□□□-MX063M1E20FSO						
F202□□-B50-D□□□-MX063M1E20FSO						
F202□□-B56-D□□□-MX063M1E20FSO						
F202□□-B63-D□□□-MX063M1E20FSO						
F202□□-B71-D□□□-MX063M1E20FSO						
F202□□-B80-D□□□-MX063M1E20FSO						
F202□□-B90-D□□□-MX063M1E20FSO						
F202□□-C10-D□□□-MX063M1E20FSO						
F203□□-B40-D□□□-MX063M1E20FSO						
F203□□-B45-D□□□-MX063M1E20FSO						
F203□□-B50-D□□□-MX063M1E20FSO						
F203□□-B56-D□□□-MX063M1E20FSO						
F203□□-B63-D□□□-MX063M1E20FSO						
F203□□-B71-D□□□-MX063M1E20FSO						
F203□□-B80-D□□□-MX063M1E20FSO						
F203□□-B90-D□□□-MX063M1E20FSO						
F203□□-C10-D□□□-MX063M1E20FSO						
F203□□-C11-D□□□-MX063M1E20FSO						
F203□□-C13-D□□□-MX063M1E20FSO						
F203□□-C14-D□□□-MX063M1E20FSO						
F203□□-C16-D□□□-MX063M1E20FSO						
F204□□-C13-D□□□-MX063M1E20FSO						
F204□□-C14-D□□□-MX063M1E20FSO						
F204□□-C16-D□□□-MX063M1E20FSO						
F204□□-C18-D□□□-MX063M1E20FSO						
F204□□-C20-D□□□-MX063M1E20FSO						
F204□□-C22-D□□□-MX063M1E20FSO						
F304□□-C25-D□□□-MX063M1E20FSO						
F304□□-C28-D□□□-MX063M1E20FSO						
F304□□-C32-D□□□-MX063M1E20FSO						
F305□□-C28-D□□□-MX063M1E20FSO						
F305□□-C32-D□□□-MX063M1E20FSO						
F305□□-C36-D□□□-MX063M1E20FSO						
F305□□-C40-D□□□-MX063M1E20FSO						
F305□□-C45-D□□□-MX063M1E20FSO						
F305□□-C50-D□□□-MX063M1E20FSO						
F306□□-C40-D□□□-MX063M1E20FSO						
F306□□-C45-D□□□-MX063M1E20FSO						
F306□□-C50-D□□□-MX063M1E20FSO						
F306□□-C56-D□□□-MX063M1E20FSO						
F306□□-C63-D□□□-MX063M1E20FSO						
F307□□-C50-D□□□-MX063M1E20FSO						
F307□□-C56-D□□□-MX063M1E20FSO						
F307□□-C63-D□□□-MX063M1E20FSO						
F307□□-C71-D□□□-MX063M1E20FSO						
F307□□-C80-D□□□-MX063M1E20FSO						
F307□□-C90-D□□□-MX063M1E20FSO						
F307□□-D10-D□□□-MX063M1E20FSO						
F307□□-D11-D□□□-MX063M1E20FSO						
F307□□-D13-D□□□-MX063M1E20FSO						
F308□□-D10-D□□□-MX063M1E20FSO						
F308□□-D11-D□□□-MX063M1E20FSO						
F308□□-D13-D□□□-MX063M1E20FSO						
F308□□-D14-D□□□-MX063M1E20FSO						
F308□□-D16-D□□□-MX063M1E20FSO						
F308□□-D18-D□□□-MX063M1E20FSO						
F308□□-D20-D□□□-MX063M1E20FSO						

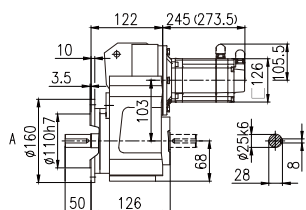


## F202/F302-MX063M1E20FS0 Dimensions (mm)



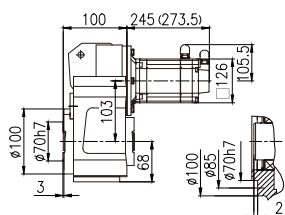
F202HA/F302HA  
F202HC/F302HC

Horizontal foot-mounted(H)

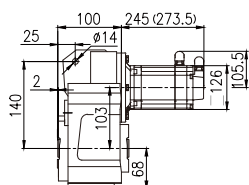


F202FA/F302FA  
F202FC/F302FC

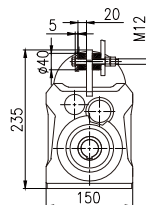
Flange-mounted(F)



Short flange-mounted(S)



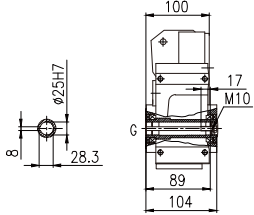
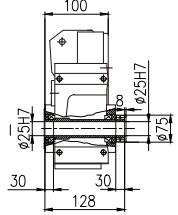
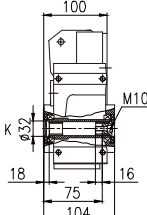
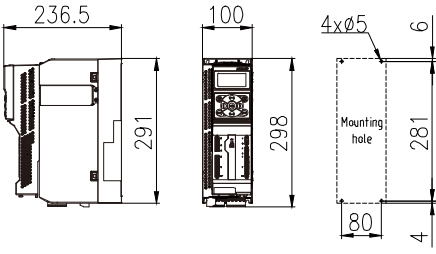
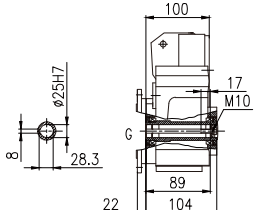
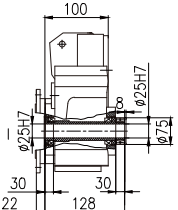
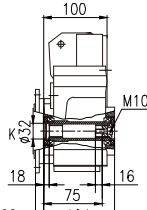
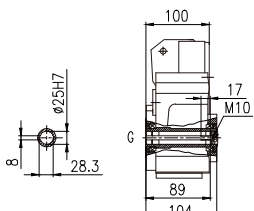
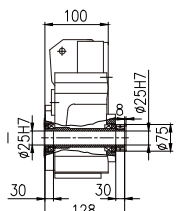
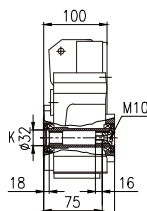
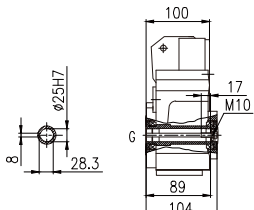
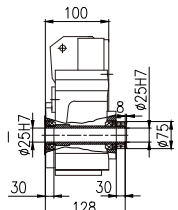
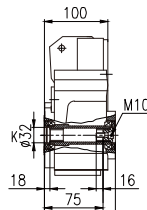
Shaft-mounted(A)



Torque arm-mounted  
with accessory(T)

注:括号内为带制动器的伺服马达长度

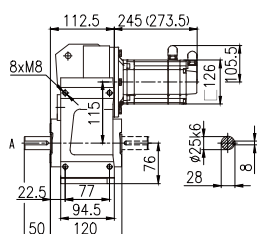
Note: Figures with parentheses are shown for length of servo gearmotor with brake

F202/F302-MX063M1E20FS0 Dimensions (mm)			Corresponding Servo Drive
 <p>F202HG/F302HG</p>	 <p>F202HI/F302HI</p>	 <p>F202HK/F302HK</p>	 <p>Control module: AX-CM55-PA-PE(ProfiNet) or AX-CM55-EA-PE(EtherCAT) Power module: AX-PM26-B3B40-N(without filter) or AX-PM26-B3B40-F(with filter) Operation panel: A1-OP25</p>
 <p>F202FG/F302FG</p>	 <p>F202FI/F302FI</p>	 <p>F202FK/F302FK</p>	
 <p>F202SG/F302SG</p>	 <p>F202SI/F302SI</p>	 <p>F202SK/F302SK</p>	
 <p>F202AG/F302AG F202TG/F302TG</p>	 <p>F202AI/F302AI F202TI/F302TI</p>	 <p>F202AK/F302AK F202TK/F302TK</p>	

注: 渐开线花键空心轴的花键规格DIN5480:  
m1.25×z18×α30×D25×9H

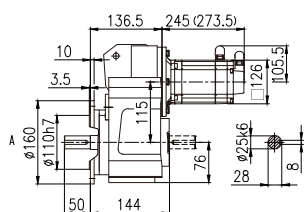
Note: Involute spline size DIN5480:  
m1.25×z18×α30×D25×9H

## F203/F303-MX063M1E20FS0 Dimensions (mm)



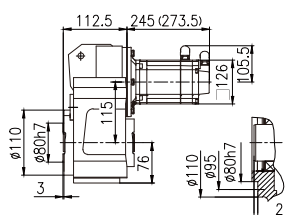
F203HA/F303HA  
F203HC/F303HC

Horizontal foot-mounted(H)

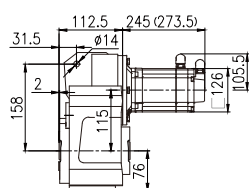


F203FA/F303FA  
F203FC/F303FC

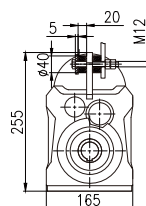
Flange-mounted(F)



Short flange-mounted(S)



Shaft-mounted(A)



Torque arm-mounted  
with accessory(T)

注:括号内为带制动器的伺服马达长度

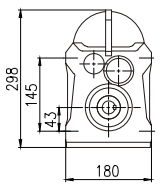
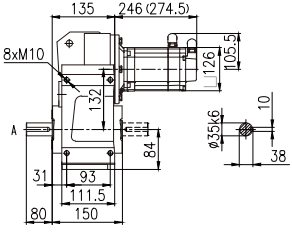
Note: Figures with parentheses are shown for length of servo gearmotor with brake

F203/F303-MX063M1E20FS0 Dimensions (mm)			Corresponding Servo Drive
<p>F203HG/F303HG</p>	<p>F203HI/F303HI</p>	<p>F203HK/F303HK</p>	<p>Control module: AX-CM55-PA-PE(ProfiNet) or AX-CM55-EA-PE(EtherCAT) Power module: AX-PM26-B3B40-N(without filter) or AX-PM26-B3B40-F(with filter) Operation panel: A1-OP25</p>
<p>F203FG/F303FG</p>	<p>F203FI/F303FI</p>	<p>F203FK/F303FK</p>	
<p>F203SG/F303SG</p>	<p>F203SI/F303SI</p>	<p>F203SK/F303SK</p>	
<p>F203AG/F303AG F203TG/F303TG</p>	<p>F203AI/F303AI F203TI/F303TI</p>	<p>F203AK/F303AK F203TK/F303TK</p>	

注:渐开线花键空心轴的花键规格DIN5480:  
m1.25×z22×α30×D30×9H

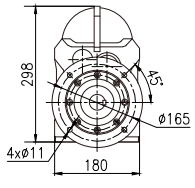
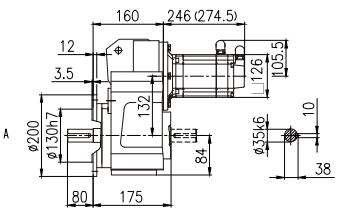
Note: Involute spline size DIN5480:  
m1.25×z22×α30×D30×9H

### F204/F304-MX063M1E20FS0 Dimensions (mm)



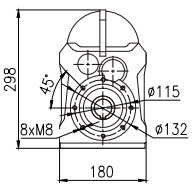
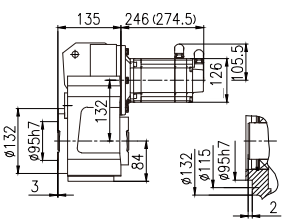
F204HA/F304HA  
F204HC/F304HC

Horizontal foot-mounted(H)

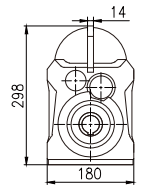
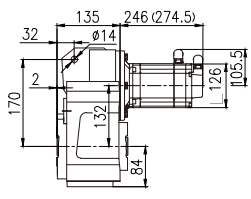


F204FA/F304FA  
F204FC/F304FC

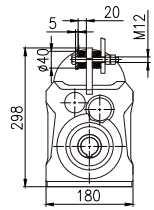
Flange-mounted(F)



Short flange-mounted(S)



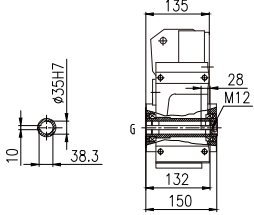
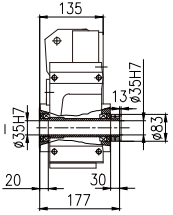
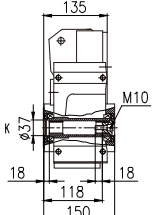
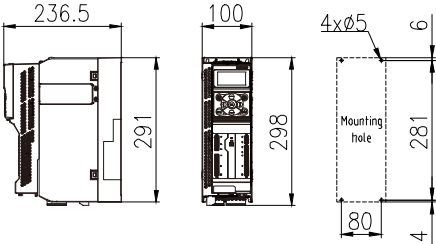
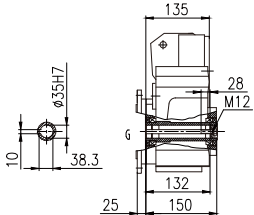
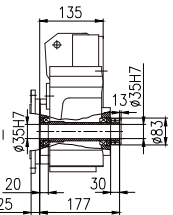
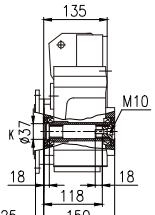
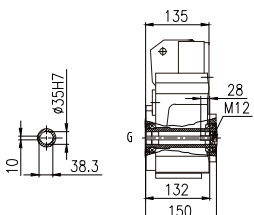
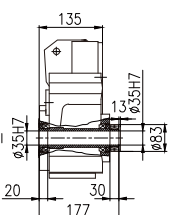
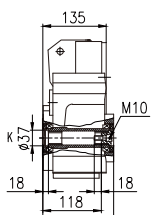
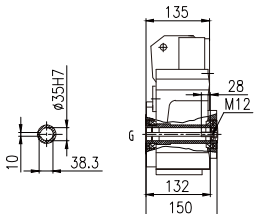
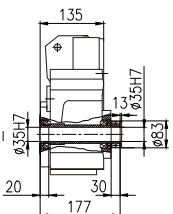
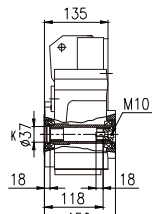
Shaft-mounted(A)



Torque arm-mounted  
with accessory(T)

注:括号内为带制动器的伺服马达长度

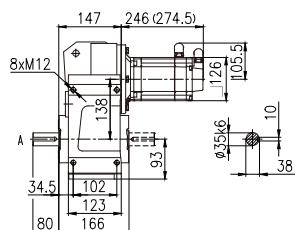
Note: Figures with parentheses are shown for length of servo gearmotor with brake

F204/F304-MX063M1E20FS0 Dimensions (mm)			Corresponding Servo Drive
 <p>F204HG/F304HG</p>	 <p>F204HI/F304HI</p>	 <p>F204HK/F304HK</p>	 <p>Control module: AX-CM55-PA-PE(ProfiNet) or AX-CM55-EA-PE(EtherCAT) Power module: AX-PM26-B3B40-N(without filter) or AX-PM26-B3B40-F(with filter) Operation panel: A1-OP25</p>
 <p>F204FG/F304FG</p>	 <p>F204FI/F304FI</p>	 <p>F204FK/F304FK</p>	
 <p>F204SG/F304SG</p>	 <p>F204SI/F304SI</p>	 <p>F204SK/F304SK</p>	
 <p>F204AG/F304AG F204TG/F304TG</p>	 <p>F204AI/F304AI F204TI/F304TI</p>	 <p>F204AK/F304AK F204TK/F304TK</p>	

注:渐开线花键空心轴的花键规格DIN5480:  
m2×z16×α30×D35×9H

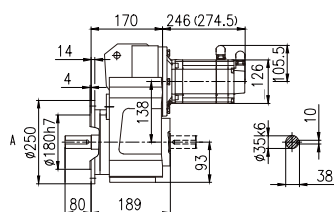
Note: Involute spline size DIN5480:  
m2×z16×α30×D35×9H

## F205/F305-MX063M1E20FS0 Dimensions (mm)



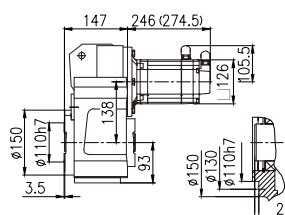
F205HA/F305HA  
F205HC/F305HC

Horizontal foot-mounted(H)

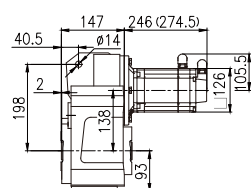


F205FA/F305FA  
F205FC/F305FC

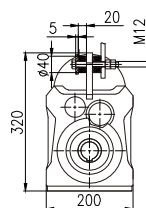
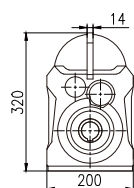
Flange-mounted(F)



Short flange-mounted(S)



Shaft-mounted(A)



Torque arm-mounted  
with accessory(T)

注:括号内为带制动器的伺服马达长度

Note: Figures with parentheses are shown for length of servo gearmotor with brake

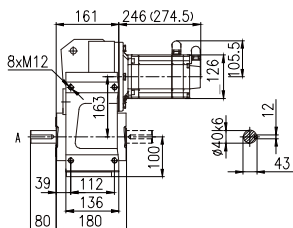
F205/F305-MX063M1E20FS0 Dimensions (mm)			Corresponding Servo Drive
<p>F205HG/F305HG</p>	<p>F205HI/F305HI</p>	<p>F205HK/F305HK</p>	<p>Control module: AX-CM55-PA-PE(ProfiNet) or AX-CM55-EA-PE(EtherCAT) Power module: AX-PM26-B3B40-N(without filter) or AX-PM26-B3B40-F(with filter) Operation panel: A1-OP25</p>
<p>F205FG/F305FG</p>	<p>F205FI/F305FI</p>	<p>F205FK/F305FK</p>	
<p>F205SG/F305SG</p>	<p>F205SI/F305SI</p>	<p>F205SK/F305SK</p>	
<p>F205AG/F305AG F205TG/F305TG</p>	<p>F205AI/F305AI F205TI/F305TI</p>	<p>F205AK/F305AK F205TK/F305TK</p>	

注:渐开线花键空心轴的花键规格DIN5480:  
m2×z16×α30×D35×9H

Note: Involute spline size DIN5480:  
m2×z16×α30×D35×9H

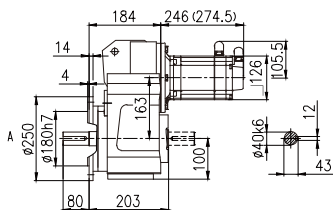


**F206/F306-MX063M1E20FS0 Dimensions (mm)**



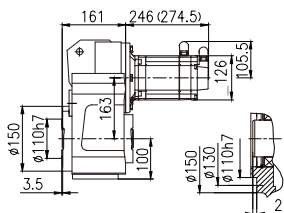
F206HA/F306HA  
F206HC/F306HC

Horizontal foot-mounted(H)

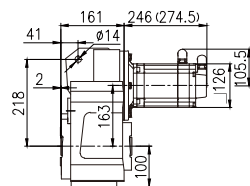


F206FA/F306FA  
F206FC/F306FC

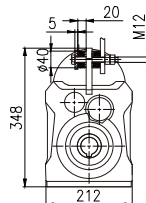
Flange-mounted(F)



Short flange-mounted(S)



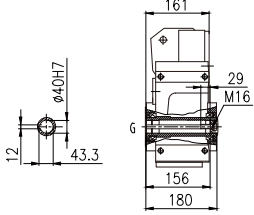
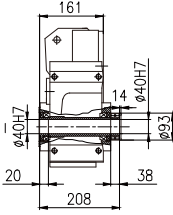
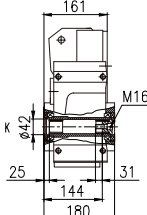
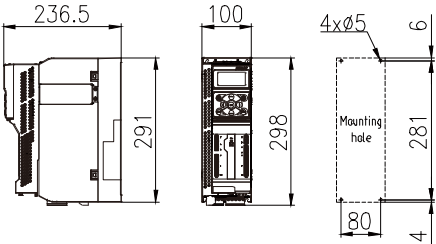
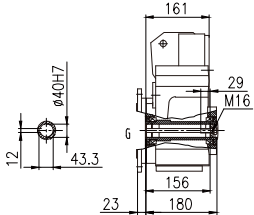
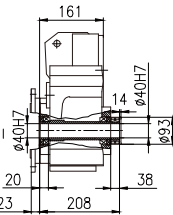
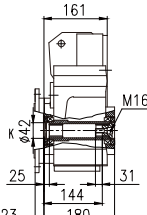
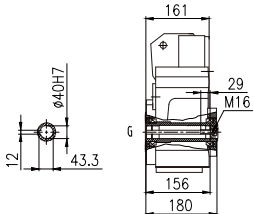
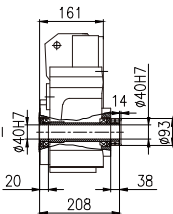
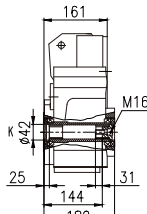
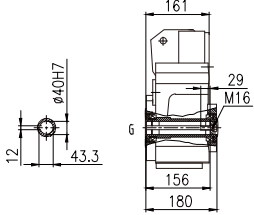
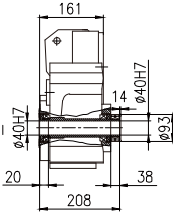
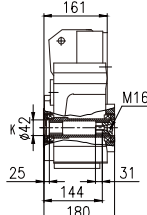
Shaft-mounted(A)



Torque arm-mounted  
with accessory(T)

注:括号内为带制动器的伺服马达长度

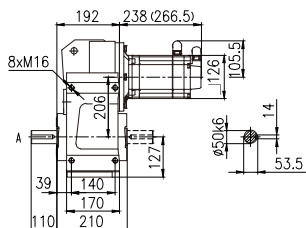
Note: Figures with parentheses are shown for length of servo gearmotor with brake

F206/F306-MX063M1E20FS0 Dimensions (mm)			Corresponding Servo Drive
 <p>F206HG/F306HG</p>	 <p>F206HI/F306HI</p>	 <p>F206HK/F306HK</p>	 <p>Control module: AX-CM55-PA-PE(ProfiNet) or AX-CM55-EA-PE(EtherCAT) Power module: AX-PM26-B3B40-N(without filter) or AX-PM26-B3B40-F(with filter) Operation panel: A1-OP25</p>
 <p>F206FG/F306FG</p>	 <p>F206FI/F306FI</p>	 <p>F206FK/F306FK</p>	
 <p>F206SG/F306SG</p>	 <p>F206SI/F306SI</p>	 <p>F206SK/F306SK</p>	
 <p>F206AG/F306AG F206TG/F306TG</p>	 <p>F206AI/F306AI F206TI/F306TI</p>	 <p>F206AK/F306AK F206TK/F306TK</p>	

注:渐开线花键空心轴的花键规格DIN5480:  
m2×z16×α30×D35×9H

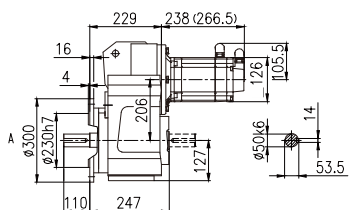
Note: Involute spline size DIN5480:  
m2×z16×α30×D35×9H

**F207/F307-MX063M1E20FS0 Dimensions (mm)**



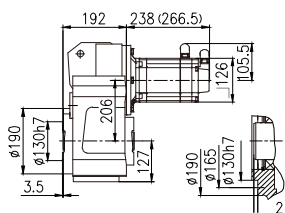
F207HA/F307HA  
F207HC/F307HC

Horizontal foot-mounted(H)

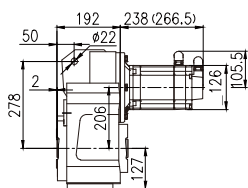


F207FA/F307FA  
F207FC/F307FC

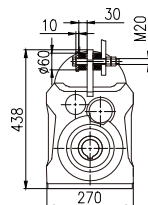
Flange-mounted(F)



Short flange-mounted(S)



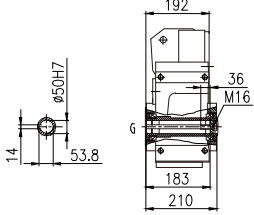
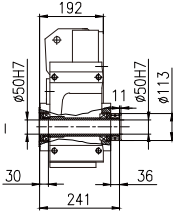
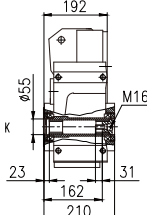
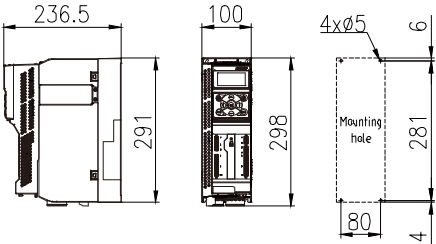
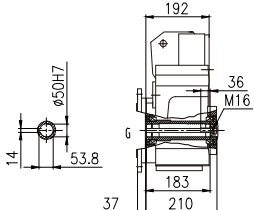
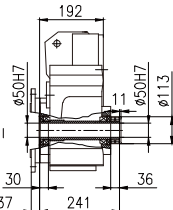
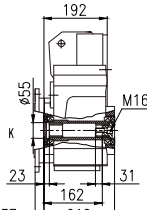
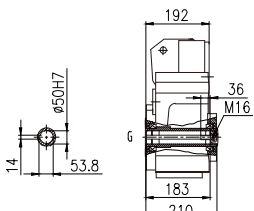
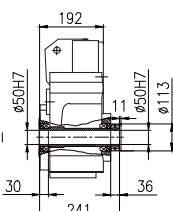
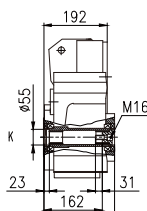
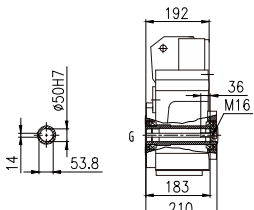
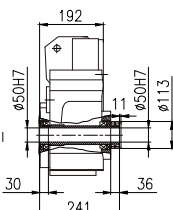
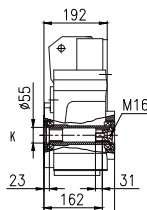
Shaft-mounted(A)



Torque arm-mounted  
with accessory(T)

注:括号内为带制动器的伺服马达长度

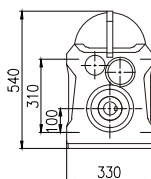
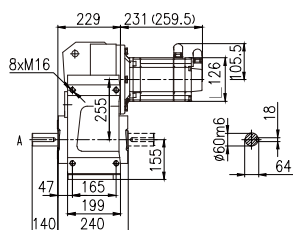
Note: Figures with parentheses are shown for length of servo gearmotor with brake

F207/F307-MX063M1E20FS0 Dimensions (mm)			Corresponding Servo Drive
 <p>F207HG/F307HG</p>	 <p>F207HI/F307HI</p>	 <p>F207HK/F307HK</p>	 <p>Control module: AX-CM55-PA-PE(ProfiNet) or AX-CM55-EA-PE(EtherCAT) Power module: AX-PM26-B3B40-N(without filter) or AX-PM26-B3B40-F(with filter) Operation panel: A1-OP25</p>
 <p>F207FG/F307FG</p>	 <p>F207FI/F307FI</p>	 <p>F207FK/F307FK</p>	
 <p>F207SG/F307SG</p>	 <p>F207SI/F307SI</p>	 <p>F207SK/F307SK</p>	
 <p>F207AG/F307AG F207TG/F307TG</p>	 <p>F207AI/F307AI F207TI/F307TI</p>	 <p>F207AK/F307AK F207TK/F307TK</p>	

注:渐开线花键空心轴的花键规格DIN5480:  
m2×z24×α30×D50×9H

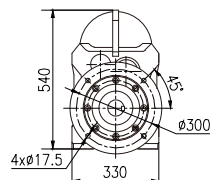
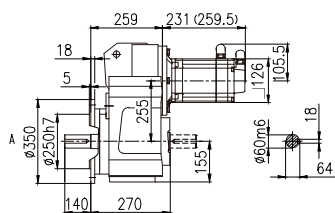
Note: Involute spline size DIN5480:  
m2×z24×α30×D50×9H

## F208/F308-MX063M1E20FS0 Dimensions (mm)



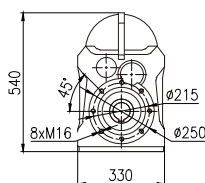
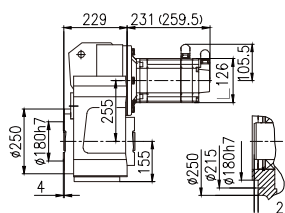
F208HA/F308HA  
F208HC/F308HC

Horizontal foot-mounted(H)

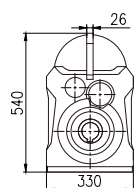
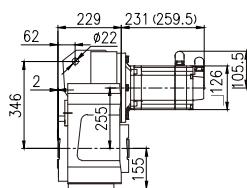


F208FA/F308FA  
F208FC/F308FC

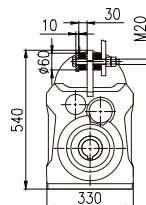
Flange-mounted(F)



Short flange-mounted(S)



Shaft-mounted(A)



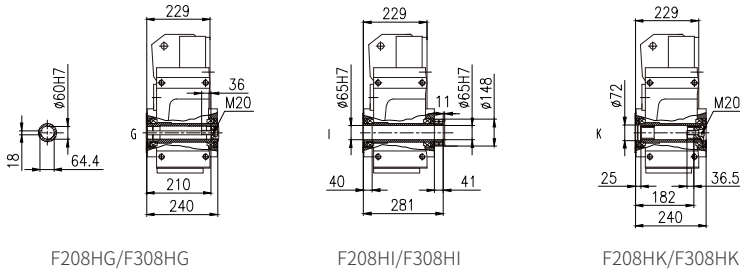
Torque arm-mounted  
with accessory(T)

注:括号内为带制动器的伺服马达长度

Note: Figures with parentheses are shown for length of servo gearmotor with brake

## F208/F308-MX063M1E20FS0 Dimensions (mm)

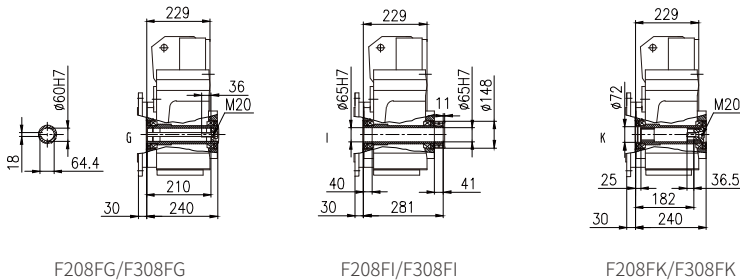
## Corresponding Servo Drive



F208HG/F308HG

F208HI/F308HI

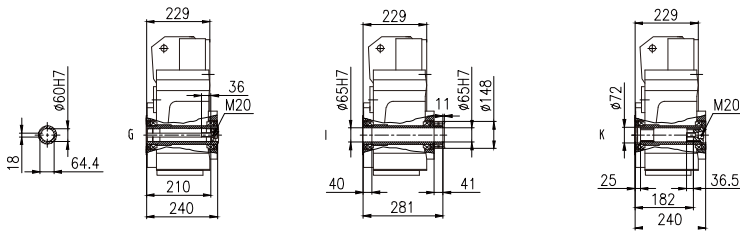
F208HK/F308HK



F208FG/F308FG

F208FI/F308FI

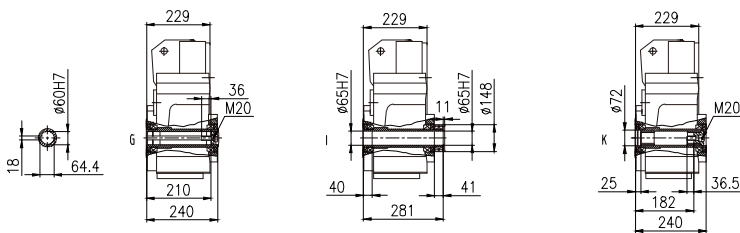
F208FK/F308FK



F208SG/F308SG

F208SI/F308SI

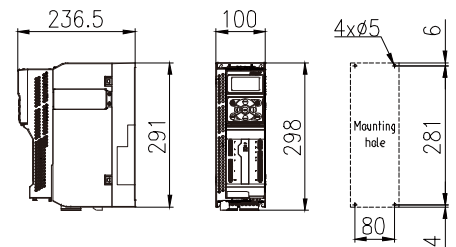
F208SK/F308SK



F208AG/F308AG  
F208TG/F308TG

F208AI/F308AI  
F208TI/F308TI

F208AK/F308AK  
F208TK/F308TK



Control module: AX-CM55-PA-PE(ProfiNet)  
 or AX-CM55-EA-PE(EtherCAT)  
 Power module: AX-PM26-B3B40-N(without filter)  
 or AX-PM26-B3B40-F(with filter)  
 Operation panel: A1-OP25

注:渐开线花键空心轴的花键规格DIN5480:  
 $m2 \times z31 \times \alpha 30 \times D65 \times 9H$

Note: Involute spline size DIN5480:  
 $m2 \times z31 \times \alpha 30 \times D65 \times 9H$

伺服马达:2.76kW 8.8Nm  
6.0A-3000r/min

Servo motor:2.76kW 8.8Nm  
6.0A-3000r/min

齿轮箱实际 输出转速	齿轮箱实际 输出扭矩	齿轮箱公称 减速比代号	齿轮箱公称 减速比	齿轮箱精确 减速比	齿轮箱 齿数比	齿轮箱额定 输出扭矩	齿轮箱 转动惯量	齿轮箱 背隙	齿轮箱 服务系数
Actual Output Speed of Gearbox	Actual Output Torque of Gearbox	Nominal Ratio Code of Gearbox	Nominal Ratio of Gearbox	Exact Ratio of Gearbox	Gear Ratio of Gearbox	Normal Output Torque of Gearbox	Rotational Inertia of Gearbox	Back Lash of Gearbox	Service Coefficient of Gearbox
$n_{2N}$ (r/min)	T <sub>2</sub> (N.m)	Code	$i_N$	$i_{ex}$	$i_z$	T <sub>2N</sub>	J 10 <sup>-4</sup> (kg.m <sup>2</sup> )	Φ (°)	f
759	35	B40	4	3.95	585/148	130	2	14	3.71
673	39	B45	4.5	4.46	156/35	140	1.6	13	3.59
591	45	B50	5	5.08	325/64	140	1.3	13	3.11
523	51	B56	5.6	5.74	689/120	150	1.1	13	2.94
462	57	B63	6.3	6.5	13/2	150	0.86	13	2.63
429	62	B71	7.1	7	7/1	150	0.77	13	2.42
385	69	B80	8	7.8	4905/629	150	1.1	9	2.17
341	77	B90	9	8.79	5232/595	150	0.86	9	1.95
300	88	C10	10	10	2725/272	150	0.68	9	1.7
265	99	C11	11.2	11.3	5777/510	150	0.54	9	1.52
410	64	B71	7.1	7.32	1207/165	220	1.3	11	3.44
364	73	B80	8	8.25	1633/198	220	1.1	11	3.01
332	79	B90	9	9.03	6600/731	220	1.7	8	2.78
297	89	C10	10	10.1	2240/221	220	1.3	8	2.47
263	100	C11	11.2	11.4	7200/629	220	1.1	8	2.2
236	112	C13	12.5	12.7	216/17	220	0.88	8	1.96
205	128	C14	14	14.6	495/34	240	0.72	7	1.88
188	141	C16	16	16	16/1	240	0.6	7	1.7
167	158	C18	18	18	920/51	240	0.5	7	1.52
216	122	C14	14	13.9	4125/296	410	1.4	7	3.36
196	135	C16	16	15.3	429/28	410	1.2	7	3.04
172	153	C18	18	17.4	4455/256	410	1	7	2.68
158	167	C20	20	19	913/48	410	0.86	7	2.46
139	190	C22	22.4	21.6	4675/216	440	0.75	7	2.32
123	214	C25	25	24.3	50215/2064	440	2.6	8	2.06
110	240	C28	28	27.3	6391/234	480	2.1	8	2
97.4	271	C32	31.5	30.8	4565/148	480	1.8	8	1.77
87.7	301	C36	35.5	34.2	2739/80	480	1.5	8	1.59
120	221	C25	25	25.1	15770/629	680	1.9	8	3.08
108	245	C28	28	27.8	4731/170	700	1.6	8	2.86
94	281	C32	31.5	31.9	17347/544	700	1.3	8	2.49
85.7	308	C36	35.5	35	1577/45	700	1.1	8	2.27
76.3	346	C40	40	39.3	8680/221	700	1.8	8	2.02
67.6	391	C45	45	44.4	27900/629	700	1.5	8	1.79
61	433	C50	50	49.2	837/17	700	1.3	8	1.62
112	236	C28	28	26.8	17395/648	900	3.4	9	3.81
94.9	278	C32	31.5	31.6	20405/646	900	4.8	7	3.24
82.9	319	C36	35.5	36.2	432586/11951	900	3.9	7	2.82
73	362	C40	40	41.1	571340/13889	900	3.2	7	2.49
65.2	405	C45	45	46	579502/12597	900	2.7	7	2.22
58.6	451	C50	50	51.2	612150/11951	900	2.3	7	2
54.2	487	C56	56	55.3	363580/6579	900	2.9	7	1.85
48.5	544	C63	63	61.8	368774/5967	900	2.4	7	1.65
60	440	C50	50	50	83237/1665	1700	7.1	6	3.86
54	489	C56	56	55.6	5170/93	1700	8.6	6	3.48
47	561	C63	63	63.8	19129/300	1700	7.3	6	3.03
41.8	631	C71	71	71.7	39809/555	1700	6.2	6	2.69
37.4	706	C80	80	80.2	10340/129	1700	5.3	6	2.41
33.6	786	C90	90	89.3	52217/585	1700	4.6	6	2.16
30.7	861	D10	100	97.8	3619/37	1700	4.1	6	1.97
28.2	936	D11	112	106.4	18612/175	1700	3.6	6	1.82
25.1	1052	D13	125	119.6	19129/160	1700	3.2	6	1.62
29.6	892	D10	100	101.4	537625/5301	3500	12.2	5	3.92
25.6	1030	D11	112	117.1	6325/54	3500	10	5	3.4
22.5	1172	D13	125	133.2	2530/19	3500	8.5	5	2.99
20.3	1302	D14	140	148	25300/171	3500	7.4	5	2.69
18	1464	D16	160	166.4	6325/38	3500	6.2	5	2.39
16.4	1611	D18	180	183.1	13915/76	3500	5.5	5	2.17
15	1761	D20	200	200.1	68425/342	3500	4.7	5	1.99

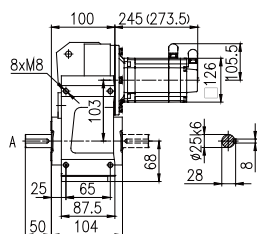
注:启停次数≤60次/小时,服务系数推荐1.5;  
启停次数≤120次/小时,服务系数推荐1.75;  
启停次数>120次/小时,服务系数推荐2以上;

Attention:Operation frequency≤60 times/h,  
service coefficient f is recommended as 1.5;  
Operation frequency≤120 times/h, service  
coefficient f is recommended as 1.75;  
Operation frequency≥120 times/h, service  
coefficient f is recommended as over 2.

伺服齿轮马达订货号	伺服驱动器订货号			线缆配置订货号		制动电阻订货号
	控制模块	功率模块	操作面板	伺服马达动力线	伺服马达信号线	
Servo Gearmotor Order Number	Servo Drive Order Number			Cable Configuration Order Number		Braking Resistor Order Number
	Control Module	Power Module	Operation Panel	Power Cable of Servo Gearmotor	Signal Cable of Servo Gearmotor	
F202□□-B40-D□□□-MX063M1E30FSO	AX-CM55-□□-PE PA:PROFINET EA:EtherCAT	AX-PM26-B3B55-□ N:Without filter F:With filter	A1-OP25	A1-H□□-A15-□□□ 18:Without brake 16:With brake B30=3m B50=5m B70=7m C10=10m C15=15m C20=20m C30=30m C40=40m C50=50m	A1-H17-A□□-□□□ 10:Without battery box 11:With battery box B30=3m B50=5m B70=7m C10=10m C15=15m C20=20m A1-H17-A□□-□□□ 12:Without battery box 13:With battery box C30=30m C40=40m C50=50m	A1-H02-A30-K-D10
F202□□-B45-D□□□-MX063M1E30FSO						
F202□□-B50-D□□□-MX063M1E30FSO						
F202□□-B56-D□□□-MX063M1E30FSO						
F202□□-B63-D□□□-MX063M1E30FSO						
F202□□-B71-D□□□-MX063M1E30FSO						
F202□□-B80-D□□□-MX063M1E30FSO						
F202□□-B90-D□□□-MX063M1E30FSO						
F202□□-C10-D□□□-MX063M1E30FSO						
F202□□-C11-D□□□-MX063M1E30FSO						
F203□□-B71-D□□□-MX063M1E30FSO						
F203□□-B80-D□□□-MX063M1E30FSO						
F203□□-B90-D□□□-MX063M1E30FSO						
F203□□-C10-D□□□-MX063M1E30FSO						
F203□□-C11-D□□□-MX063M1E30FSO						
F203□□-C13-D□□□-MX063M1E30FSO						
F203□□-C14-D□□□-MX063M1E30FSO						
F203□□-C16-D□□□-MX063M1E30FSO						
F203□□-C18-D□□□-MX063M1E30FSO						
F204□□-C14-D□□□-MX063M1E30FSO						
F204□□-C16-D□□□-MX063M1E30FSO						
F204□□-C18-D□□□-MX063M1E30FSO						
F204□□-C20-D□□□-MX063M1E30FSO						
F204□□-C22-D□□□-MX063M1E30FSO						
F304□□-C25-D□□□-MX063M1E30FSO						
F304□□-C28-D□□□-MX063M1E30FSO						
F304□□-C32-D□□□-MX063M1E30FSO						
F304□□-C36-D□□□-MX063M1E30FSO						
F305□□-C25-D□□□-MX063M1E30FSO						
F305□□-C28-D□□□-MX063M1E30FSO						
F305□□-C32-D□□□-MX063M1E30FSO						
F305□□-C36-D□□□-MX063M1E30FSO						
F305□□-C40-D□□□-MX063M1E30FSO						
F305□□-C45-D□□□-MX063M1E30FSO						
F305□□-C50-D□□□-MX063M1E30FSO						
F306□□-C28-D□□□-MX063M1E30FSO						
F306□□-C32-D□□□-MX063M1E30FSO						
F306□□-C36-D□□□-MX063M1E30FSO						
F306□□-C40-D□□□-MX063M1E30FSO						
F306□□-C45-D□□□-MX063M1E30FSO						
F306□□-C50-D□□□-MX063M1E30FSO						
F306□□-C56-D□□□-MX063M1E30FSO						
F306□□-C63-D□□□-MX063M1E30FSO						
F307□□-C50-D□□□-MX063M1E30FSO						
F307□□-C56-D□□□-MX063M1E30FSO						
F307□□-C63-D□□□-MX063M1E30FSO						
F307□□-C71-D□□□-MX063M1E30FSO						
F307□□-C80-D□□□-MX063M1E30FSO						
F307□□-C90-D□□□-MX063M1E30FSO						
F307□□-D10-D□□□-MX063M1E30FSO						
F307□□-D11-D□□□-MX063M1E30FSO						
F307□□-D13-D□□□-MX063M1E30FSO						
F308□□-D10-D□□□-MX063M1E30FSO						
F308□□-D11-D□□□-MX063M1E30FSO						
F308□□-D13-D□□□-MX063M1E30FSO						
F308□□-D14-D□□□-MX063M1E30FSO						
F308□□-D16-D□□□-MX063M1E30FSO						
F308□□-D18-D□□□-MX063M1E30FSO						
F308□□-D20-D□□□-MX063M1E30FSO						

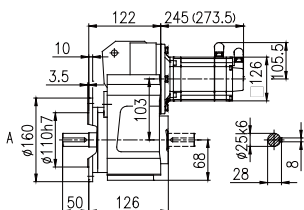


## F202/F302-MX063M1E30FS0 Dimensions (mm)



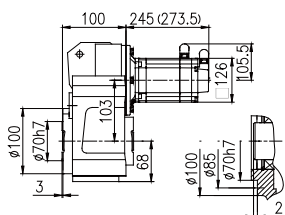
F202HA/F302HA  
F202HC/F302HC

Horizontal foot-mounted(H)

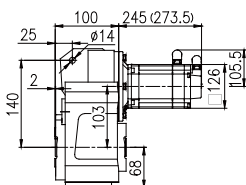


F202FA/F302FA  
F202FC/F302FC

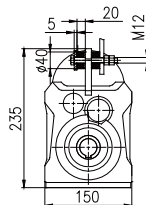
Flange-mounted(F)



Short flange-mounted(S)



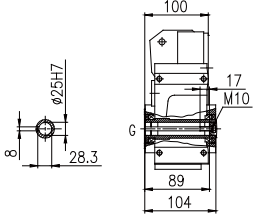
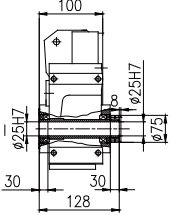
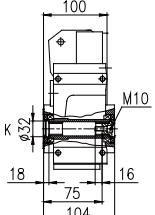
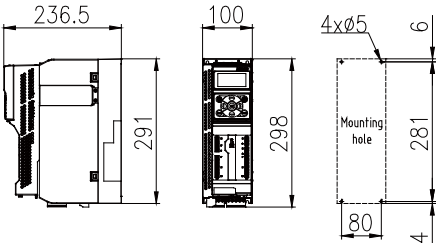
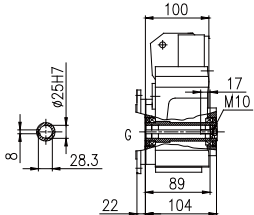
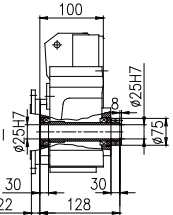
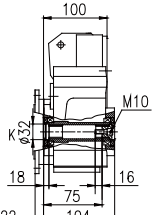
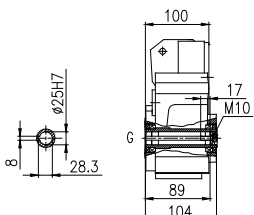
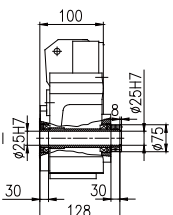
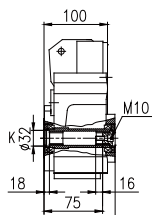
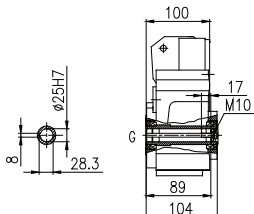
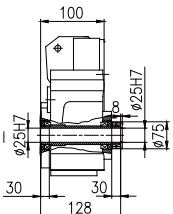
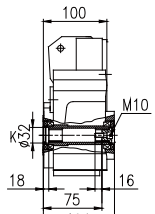
Shaft-mounted(A)



Torque arm-mounted  
with accessory(T)

注:括号内为带制动器的伺服马达长度

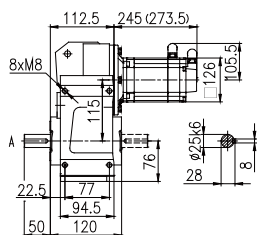
Note: Figures with parentheses are shown for length of servo gearmotor with brake

F202/F302-MX063M1E30FS0 Dimensions (mm)			Corresponding Servo Drive
 <p>F202HG/F302HG</p>	 <p>F202HI/F302HI</p>	 <p>F202HK/F302HK</p>	 <p>Control module: AX-CM55-PA-PE(ProfiNet) or AX-CM55-EA-PE(EtherCAT) Power module: AX-PM26-B3B55-N(without filter) or AX-PM26-B3B55-F(with filter) Operation panel: A1-OP25</p>
 <p>F202FG/F302FG</p>	 <p>F202FI/F302FI</p>	 <p>F202FK/F302FK</p>	
 <p>F202SG/F302SG</p>	 <p>F202SI/F302SI</p>	 <p>F202SK/F302SK</p>	
 <p>F202AG/F302AG F202TG/F302TG</p>	 <p>F202AI/F302AI F202TI/F302TI</p>	 <p>F202AK/F302AK F202TK/F302TK</p>	

注: 渐开线花键空心轴的花键规格DIN5480:  
m1.25×z18×α30×D25×9H

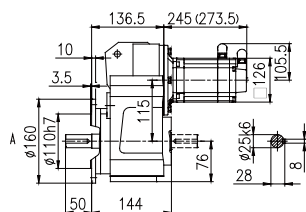
Note: Involute spline size DIN5480:  
m1.25×z18×α30×D25×9H

**F203/F303-MX063M1E30FS0 Dimensions (mm)**



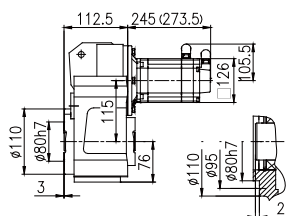
F203HA/F303HA  
F203HC/F303HC

Horizontal foot-mounted(H)

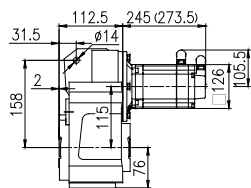


F203FA/F303FA  
F203FC/F303FC

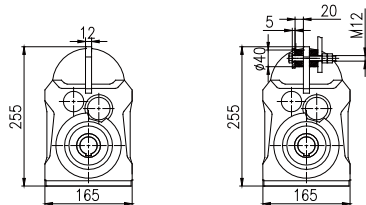
Flange-mounted(F)



Short flange-mounted(S)



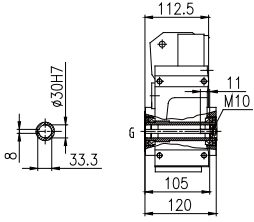
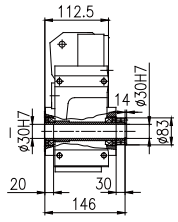
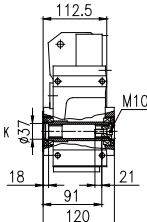
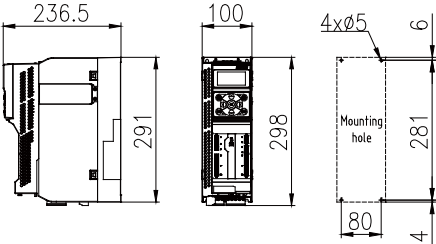
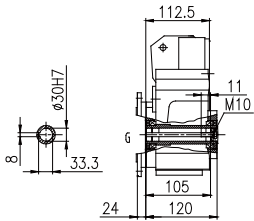
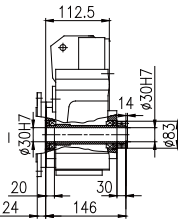
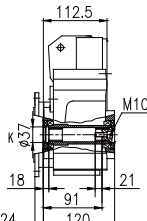
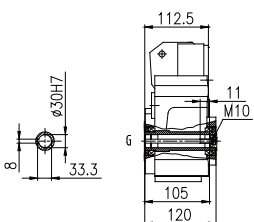
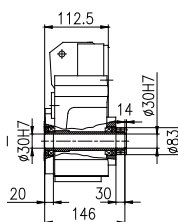
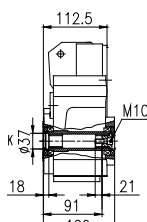
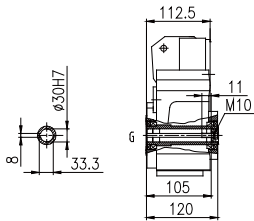
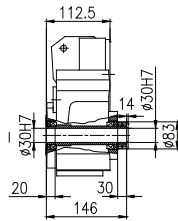
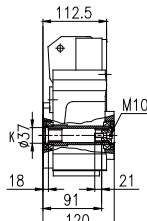
Shaft-mounted(A)



Torque arm-mounted  
with accessory(T)

注:括号内为带制动器的伺服马达长度

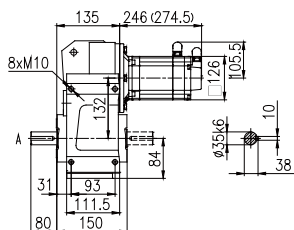
Note: Figures with parentheses are shown for length of servo gearmotor with brake

F203/F303-MX063M1E30FS0 Dimensions (mm)			Corresponding Servo Drive
 <p>F203HG/F303HG</p>	 <p>F203HI/F303HI</p>	 <p>F203HK/F303HK</p>	 <p>Control module: AX-CM55-PA-PE(ProfiNet) or AX-CM55-EA-PE(EtherCAT) Power module: AX-PM26-B3B55-N(without filter) or AX-PM26-B3B55-F(with filter) Operation panel: A1-OP25</p>
 <p>F203FG/F303FG</p>	 <p>F203FI/F303FI</p>	 <p>F203FK/F303FK</p>	
 <p>F203SG/F303SG</p>	 <p>F203SI/F303SI</p>	 <p>F203SK/F303SK</p>	
 <p>F203AG/F303AG F203TG/F303TG</p>	 <p>F203AI/F303AI F203TI/F303TI</p>	 <p>F203AK/F303AK F203TK/F303TK</p>	

注:渐开线花键空心轴的花键规格DIN5480:  
m1.25×z22×α30×D30×9H

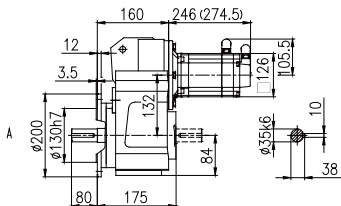
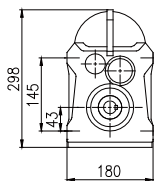
Note: Involute spline size DIN5480:  
m1.25×z22×α30×D30×9H

**F204/F304-MX063M1E30FS0 Dimensions (mm)**



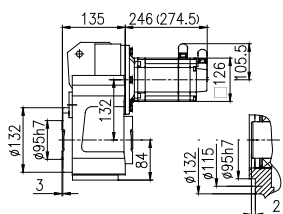
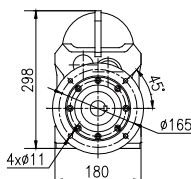
F204HA/F304HA  
F204HC/F304HC

Horizontal foot-mounted(H)

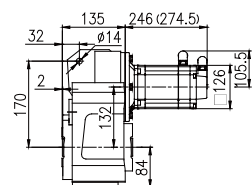
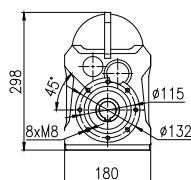


F204FA/F304FA  
F204FC/F304FC

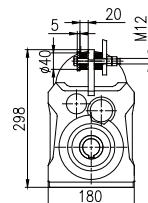
Flange-mounted(F)



Short flange-mounted(S)



Shaft-mounted(A)



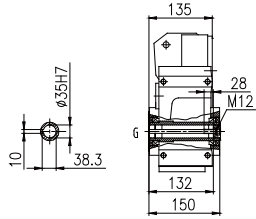
Torque arm-mounted  
with accessory(T)

注:括号内为带制动器的伺服马达长度

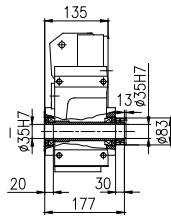
Note: Figures with parentheses are shown for length of servo gearmotor with brake

**F204/F304-MX063M1E30FS0 Dimensions (mm)**

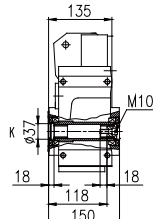
**Corresponding Servo Drive**



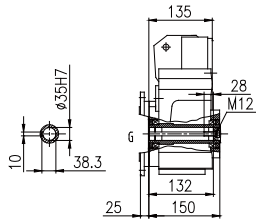
F204HG/F304HG



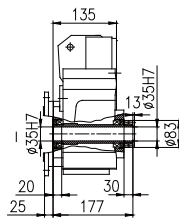
F204HI/F304HI



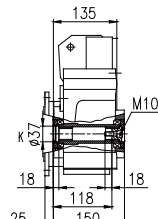
F204HK/F304HK



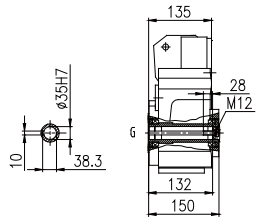
F204FG/F304FG



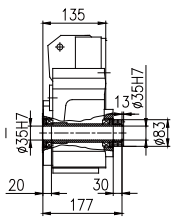
F204FI/F304FI



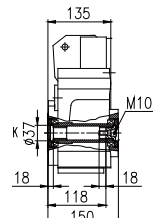
F204FK/F304FK



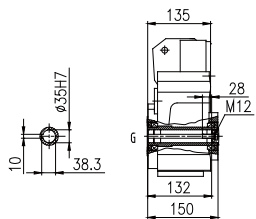
F204SG/F304SG



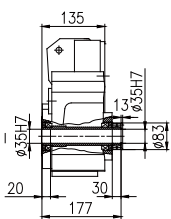
F204SI/F304SI



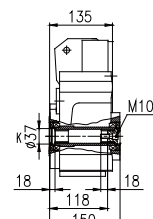
F204SK/F304SK



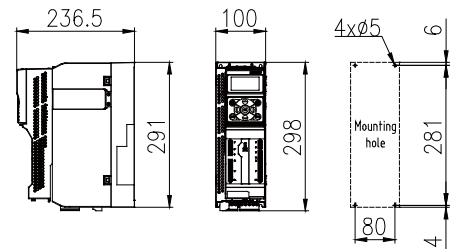
F204AG/F304AG  
F204TG/F304TG



F204AI/F304AI  
F204TI/F304TI



F204AK/F304AK  
F204TK/F304TK

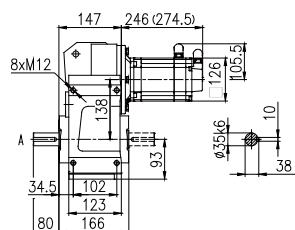


Control module: AX-CM55-PA-PE(ProfiNet)  
or AX-CM55-EA-PE(EtherCAT)  
Power module: AX-PM26-B3B55-N(without filter)  
or AX-PM26-B3B55-F(with filter)  
Operation panel: A1-OP25

注:渐开线花键空心轴的花键规格DIN5480:  
m2×z16×α30×D35×9H

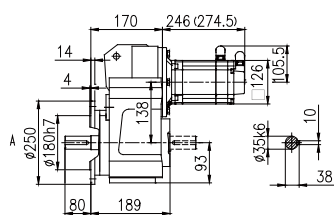
Note: Involute spline size DIN5480:  
m2×z16×α30×D35×9H

## F205/F305-MX063M1E30FS0 Dimensions (mm)



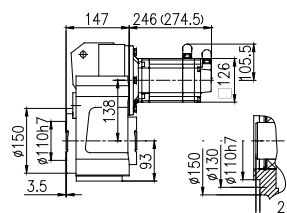
F205HA/F305HA  
F205HC/F305HC

Horizontal foot-mounted(H)

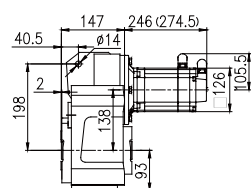


F205FA/F305FA  
F205FC/F305FC

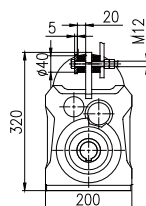
Flange-mounted(F)



Short flange-mounted(S)



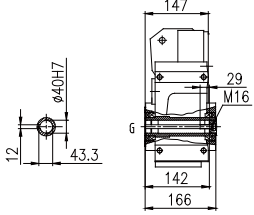
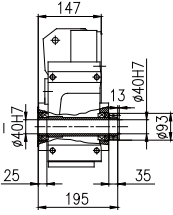
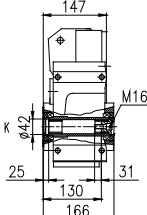
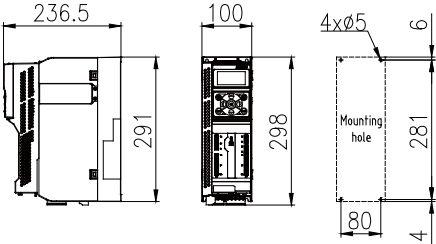
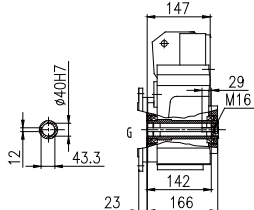
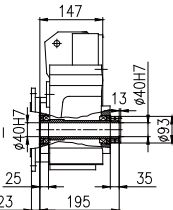
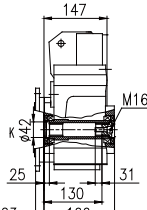
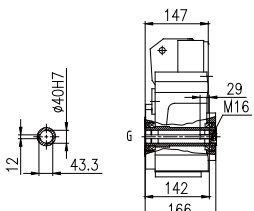
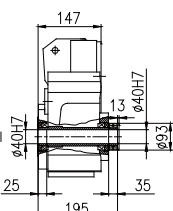
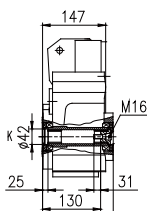
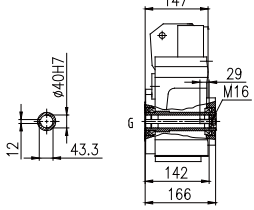
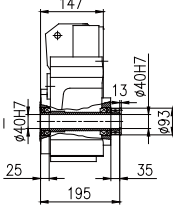
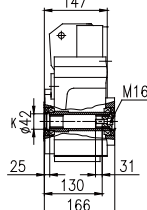
Shaft-mounted(A)



Torque arm-mounted  
with accessory(T)

注:括号内为带制动器的伺服马达长度

Note: Figures with parentheses are shown for length of servo gearmotor with brake

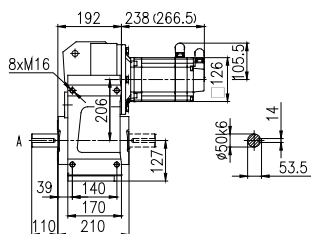
F205/F305-MX063M1E30FS0 Dimensions (mm)			Corresponding Servo Drive
 <p>F205HG/F305HG</p>	 <p>F205HI/F305HI</p>	 <p>F205HK/F305HK</p>	 <p>Control module: AX-CM55-PA-PE(ProfiNet) or AX-CM55-EA-PE(EtherCAT) Power module: AX-PM26-B3B55-N(without filter) or AX-PM26-B3B55-F(with filter) Operation panel: A1-OP25</p>
 <p>F205FG/F305FG</p>	 <p>F205FI/F305FI</p>	 <p>F205FK/F305FK</p>	
 <p>F205SG/F305SG</p>	 <p>F205SI/F305SI</p>	 <p>F205SK/F305SK</p>	
 <p>F205AG/F305AG F205TG/F305TG</p>	 <p>F205AI/F305AI F205TI/F305TI</p>	 <p>F205AK/F305AK F205TK/F305TK</p>	

注: 渐开线花键空心轴的花键规格DIN5480:  
m2×z16×α30×D35×9H

Note: Involute spline size DIN5480:  
m2×z16×α30×D35×9H

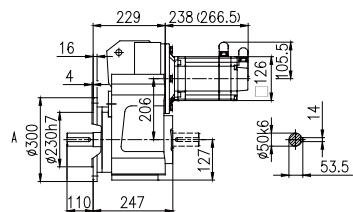


**F206/F306-MX063M1E30FS0 Dimensions (mm)**



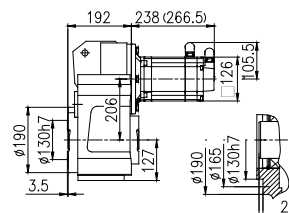
F206HA/F306HA  
F206HC/F306HC

Horizontal foot-mounted(H)

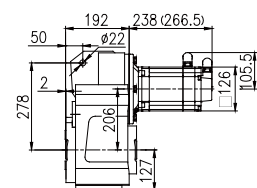


F206FA/F306FA  
F206FC/F306FC

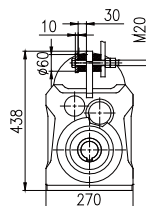
Flange-mounted(F)



Short flange-mounted(S)



Shaft-mounted(A)



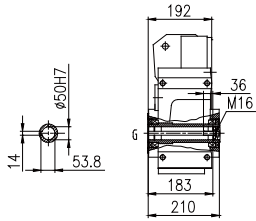
Torque arm-mounted  
with accessory(T)

注:括号内为带制动器的伺服马达长度

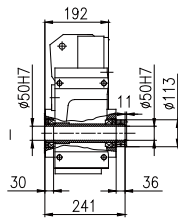
Note: Figures with parentheses are shown for length of servo gearmotor with brake

**F206/F306-MX063M1E30FS0 Dimensions (mm)**

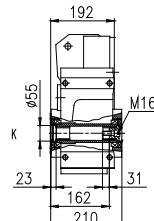
**Corresponding Servo Drive**



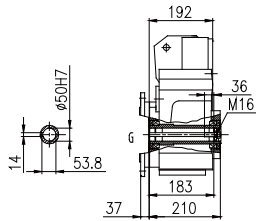
F206HG/F306HG



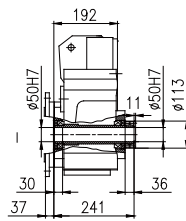
F206HI/F306HI



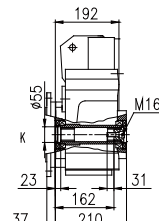
F206HK/F306HK



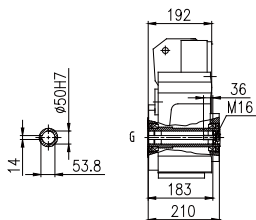
F206FG/F306FG



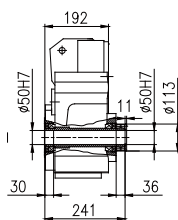
F206FI/F306FI



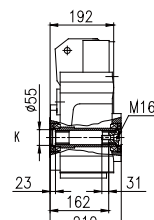
F206FK/F306FK



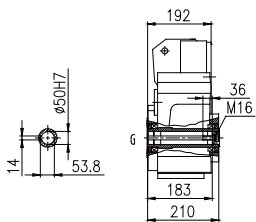
F206SG/F306SG



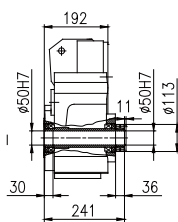
F206SI/F306SI



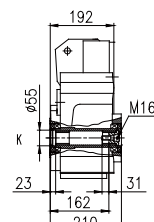
F206SK/F306SK



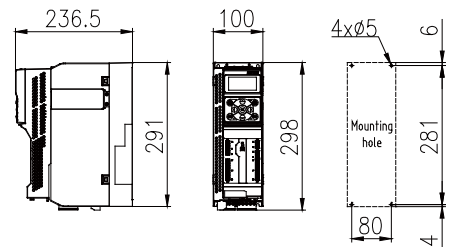
F206AG/F306AG  
F206TG/F306TG



F206AI/F306AI  
F206TI/F306TI



F206AK/F306AK  
F206TK/F306TK

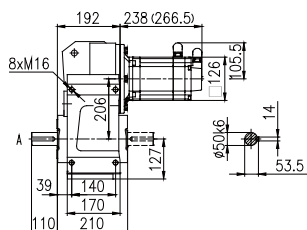


Control module: AX-CM55-PA-PE(ProfNet)  
or AX-CM55-EA-PE(EtherCAT)  
Power module: AX-PM26-B3B55-N(without filter)  
or AX-PM26-B3B55-F(with filter)  
Operation panel: A1-OP25

注:渐开线花键空心轴的花键规格DIN5480:  
m2×z16×α30×D35×9H

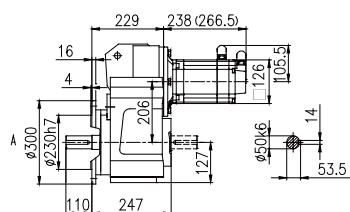
Note: Involute spline size DIN5480:  
m2×z16×α30×D35×9H

## F207/F307-MX063M1E30FS0 Dimensions (mm)



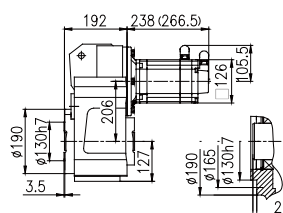
F207HA/F307HA  
F207HC/F307HC

Horizontal foot-mounted(H)

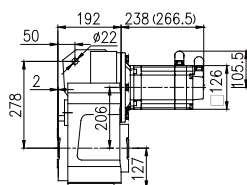


F207FA/F307FA  
F207FC/F307FC

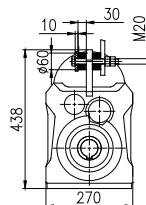
Flange-mounted(F)



Short flange-mounted(S)



Shaft-mounted(A)



Torque arm-mounted  
with accessory(T)

注:括号内为带制动器的伺服马达长度

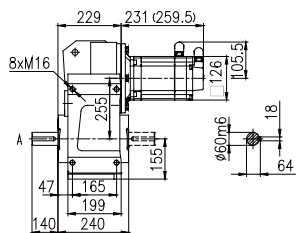
Note: Figures with parentheses are shown for length of servo gearmotor with brake

F207/F307-MX063M1E30FS0 Dimensions (mm)			Corresponding Servo Drive
<p>F207HG/F307HG</p>	<p>F207HI/F307HI</p>	<p>F207HK/F307HK</p>	<p>Control module: AX-CM55-PA-PE(ProfiNet) or AX-CM55-EA-PE(EtherCAT) Power module: AX-PM26-B3B55-N(without filter) or AX-PM26-B3B55-F(with filter) Operation panel: A1-OP25</p>
<p>F207FG/F307FG</p>	<p>F207FI/F307FI</p>	<p>F207FK/F307FK</p>	
<p>F207SG/F307SG</p>	<p>F207SI/F307SI</p>	<p>F207SK/F307SK</p>	
<p>F207AG/F307AG F207TG/F307TG</p>	<p>F207AI/F307AI F207TI/F307TI</p>	<p>F207AK/F307AK F207TK/F307TK</p>	

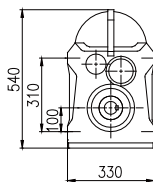
注:渐开线花键空心轴的花键规格DIN5480:  
m2×z24×α30×D50×9H

Note: Involute spline size DIN5480:  
m2×z24×α30×D50×9H

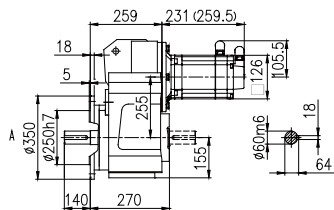
## F208/F308-MX063M1E30FS0 Dimensions (mm)



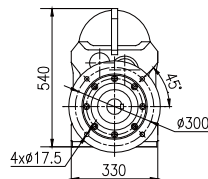
F208HA/F308HA  
F208HC/F308HC



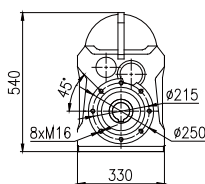
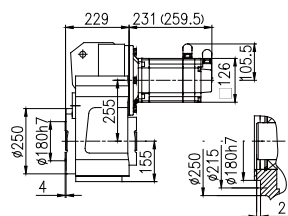
Horizontal foot-mounted(H)



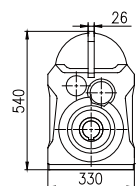
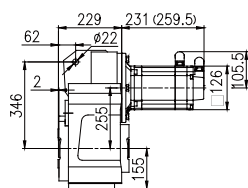
F208FA/F308FA  
F208FC/F308FC



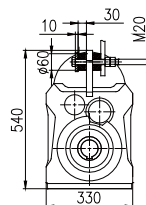
Flange-mounted(F)



Short flange-mounted(S)



Shaft-mounted(A)



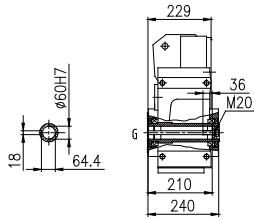
Torque arm-mounted  
with accessory(T)

注:括号内为带制动器的伺服马达长度

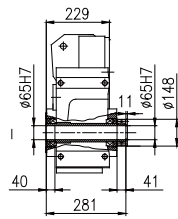
Note: Figures with parentheses are shown for length of servo gearmotor with brake

## F208/F308-MX063M1E30FS0 Dimensions (mm)

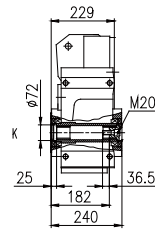
## Corresponding Servo Drive



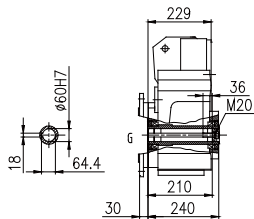
F208HG/F308HG



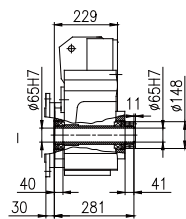
F208HI/F308HI



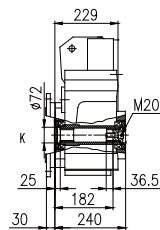
F208HK/F308HK



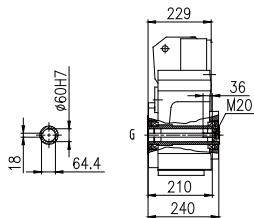
F208FG/F308FG



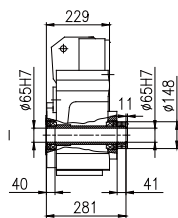
F208FI/F308FI



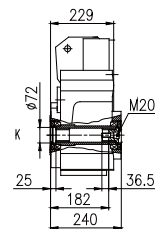
F208FK/F308FK



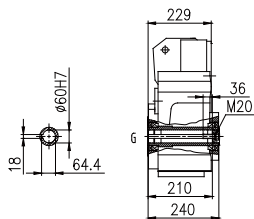
F208SG/F308SG



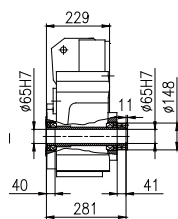
F208SI/F308SI



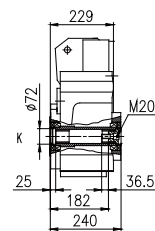
F208SK/F308SK



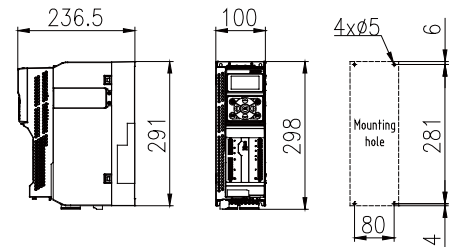
F208AG/F308AG  
F208TG/F308TG



F208AI/F308AI  
F208TI/F308TI



F208AK/F308AK  
F208TK/F308TK



Control module: AX-CM55-PA-PE(ProfNet)  
or AX-CM55-EA-PE(EtherCAT)  
Power module: AX-PM26-B3B55-N(without filter)  
or AX-PM26-B3B55-F(with filter)  
Operation panel: A1-OP25

注:渐开线花键空心轴的花键规格DIN5480:  
m2×z31×α30×D65×9H

Note: Involute spline size DIN5480:  
m2×z31×α30×D65×9H

伺服马达: 3.98kW 19Nm  
8.1A-2000r/min

Servo motor: 3.98kW 19Nm  
8.1A-2000r/min

齿轮箱实际 输出转速	齿轮箱实际 输出扭矩	齿轮箱公称 减速比代号	齿轮箱公称 减速比	齿轮箱精确 减速比	齿轮箱 齿数比	齿轮箱额定 输出扭矩	齿轮箱 转动惯量	齿轮箱 背隙	齿轮箱 服务系数
Actual Output Speed of Gearbox	Actual Output Torque of Gearbox	Nominal Ratio Code of Gearbox	Nominal Ratio of Gearbox	Exact Ratio of Gearbox	Gear Ratio of Gearbox	Normal Output Torque of Gearbox	Rotational Inertia of Gearbox	Back Lash of Gearbox	Service Coefficient of Gearbox
$n_{2N}$ (r/min)	T <sub>2</sub> (N·m)	Code	$i_N$	$i_{ex}$	$i_z$	T <sub>2N</sub>	J 10 <sup>-4</sup> (kg·m <sup>2</sup> )	Φ (°)	f
441	86	B45	4.5	4.54	345/76	280	5.8	11	3.26
385	99	B50	5	5.2	3657/703	300	4.5	10	3.03
338	112	B56	5.6	5.91	4830/817	310	3.6	10	2.77
303	126	B63	6.3	6.61	1633/247	310	3	10	2.46
272	140	B71	7.1	7.36	5175/703	330	2.5	10	2.36
247	154	B80	8	8.09	5382/665	390	2.2	10	2.53
218	175	B90	9	9.19	5589/608	390	1.9	10	2.23
203	187	C10	10	9.85	2915/296	390	2.7	7	2.09
179	213	C11	11.2	11.2	1925/172	410	2.1	7	1.92
160	238	C13	12.5	12.5	3905/312	410	1.7	7	1.72
144	264	C14	14	13.9	4125/296	410	1.4	7	1.55
160	238	C13	12.5	12.5	1482/119	650	1.8	7	2.73
142	268	C14	14	14.1	7695/544	650	1.5	7	2.43
129	295	C16	16	15.5	1577/102	650	1.3	7	2.2
114	334	C18	18	17.6	475/27	660	1.1	7	1.98
101	376	C20	20	19.8	86735/4386	660	2.8	8	1.76
90.1	422	C22	22.4	22.2	44156/1989	680	2.2	8	1.61
100	380	C20	20	20	27335/1368	900	3.9	10	2.37
90.9	418	C22	22.4	22	17395/792	900	4.5	9	2.15
79.4	479	C25	25	25.2	184387/7326	900	3.6	9	1.88
74.6	509	C28	28	26.8	17395/648	900	3.4	9	1.77
63.3	600	C32	31.5	31.6	20405/646	900	4.8	7	1.5
70.7	538	C28	28	28.3	18425/651	1600	9.1	9	2.97
61.5	618	C32	31.5	32.5	27269/840	1600	7.7	9	2.59
54.8	694	C36	35.5	36.5	8107/222	1700	6.5	9	2.45
51.7	735	C40	40	38.7	10810/279	1700	10.1	6	2.31
45	844	C45	45	44.4	39997/900	1700	8.4	6	2.01
40	950	C50	50	50	83237/1665	1700	7.1	6	1.79
36	1056	C56	56	55.6	5170/93	1700	8.6	6	1.61
40.5	939	C50	50	49.4	2420/49	3200	14	8	3.41
35.3	1075	C56	56	56.6	164450/2907	3200	26.5	5	2.98
32.6	1165	C63	63	61.3	335225/5472	3200	23.5	5	2.75
29.9	1269	C71	71	66.8	411125/6156	3200	21.8	5	2.52
24.3	1564	C80	80	82.3	145475/1767	3500	16.4	5	2.24
21	1807	C90	90	95.1	12650/133	3500	13.5	5	1.94
19.7	1927	D10	100	101.4	537625/5301	3500	12.2	5	1.82
17.1	2225	D11	112	117.1	6325/54	3500	10	5	1.57
21.2	1794	D10	100	94.4	248626/2635	4700	32	5	2.62
18.5	2060	D11	112	108.4	14749/136	4700	27	5	2.28
16.4	2318	D13	125	122	259161/2125	4700	23	5	2.03
14.8	2559	D14	140	134.7	52675/391	4700	20	5	1.84
13.2	2879	D16	160	151.5	23177/153	4700	17	5	1.63

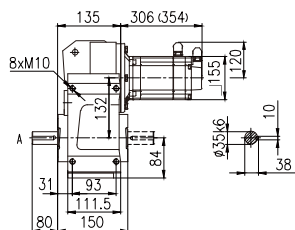
注: 启停次数 ≤ 60次/小时, 服务系数f推荐1.5;  
启停次数 ≤ 120次/小时, 服务系数f推荐1.75;  
启停次数 > 120次/小时, 服务系数f推荐2以上;

Attention: Operation frequency ≤ 60 times/h, service coefficient f is recommended as 1.5;  
Operation frequency ≤ 120 times/h, service coefficient f is recommended as 1.75;  
Operation frequency ≥ 120 times/h, service coefficient f is recommended as over 2.

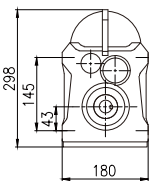
伺服齿轮马达订货号	伺服驱动器订货号			线缆配置订货号		制动电阻订货号
	控制模块	功率模块	操作面板	伺服马达动力线	伺服马达信号线	
Servo Gearmotor Order Number	Servo Drive Order Number			Cable Configuration Order Number		Braking Resistor Order Number
	Control Module	Power Module	Operation Panel	Power Cable of Servo Gearmotor	Signal Cable of Servo Gearmotor	
F204□□-B45-D□□□-MX080M1E20FS0	AX-CM55-□□-PE   PA:PROFINET EA:EtherCAT	AX-PM26-B3B75-□   N:Without filter F:With filter	A1-OP25	A1-H□□-A25-□□□   18:Without brake 16:With brake  B30=3m B50=5m B70=7m C10=10m C15=15m C20=20m C30=30m C40=40m C50=50m	A1-H17-A□□-□□□   10:Without battery box 11:With battery box  B30=3m B50=5m B70=7m C10=10m C15=15m C20=20m  A1-H17-A□□-□□□   12:Without battery box 13:With battery box  C30=30m C40=40m C50=50m	A1-H02-A40-K-C75
F204□□-B50-D□□□-MX080M1E20FS0						
F204□□-B56-D□□□-MX080M1E20FS0						
F204□□-B63-D□□□-MX080M1E20FS0						
F204□□-B71-D□□□-MX080M1E20FS0						
F204□□-B80-D□□□-MX080M1E20FS0						
F204□□-B90-D□□□-MX080M1E20FS0						
F204□□-C10-D□□□-MX080M1E20FS0						
F204□□-C11-D□□□-MX080M1E20FS0						
F204□□-C13-D□□□-MX080M1E20FS0						
F204□□-C14-D□□□-MX080M1E20FS0						
F205□□-C13-D□□□-MX080M1E20FS0						
F205□□-C14-D□□□-MX080M1E20FS0						
F205□□-C16-D□□□-MX080M1E20FS0						
F205□□-C18-D□□□-MX080M1E20FS0						
F305□□-C20-D□□□-MX080M1E20FS0						
F305□□-C22-D□□□-MX080M1E20FS0						
F306□□-C20-D□□□-MX080M1E20FS0						
F306□□-C22-D□□□-MX080M1E20FS0						
F306□□-C25-D□□□-MX080M1E20FS0						
F306□□-C28-D□□□-MX080M1E20FS0						
F306□□-C32-D□□□-MX080M1E20FS0						
F307□□-C28-D□□□-MX080M1E20FS0						
F307□□-C32-D□□□-MX080M1E20FS0						
F307□□-C36-D□□□-MX080M1E20FS0						
F307□□-C40-D□□□-MX080M1E20FS0						
F307□□-C45-D□□□-MX080M1E20FS0						
F307□□-C50-D□□□-MX080M1E20FS0						
F307□□-C56-D□□□-MX080M1E20FS0						
F308□□-C50-D□□□-MX080M1E20FS0						
F308□□-C56-D□□□-MX080M1E20FS0						
F308□□-C63-D□□□-MX080M1E20FS0						
F308□□-C71-D□□□-MX080M1E20FS0						
F308□□-C80-D□□□-MX080M1E20FS0						
F308□□-C90-D□□□-MX080M1E20FS0						
F308□□-D10-D□□□-MX080M1E20FS0						
F308□□-D11-D□□□-MX080M1E20FS0						
F309□□-D10-D□□□-MX080M1E20FS0						
F309□□-D11-D□□□-MX080M1E20FS0						
F309□□-D13-D□□□-MX080M1E20FS0						
F309□□-D14-D□□□-MX080M1E20FS0						
F309□□-D16-D□□□-MX080M1E20FS0						



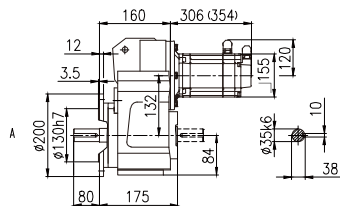
**F204/F304-MX080M1E20FS0 Dimensions (mm)**



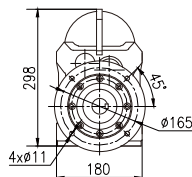
F204HA/F304HA  
F204HC/F304HC



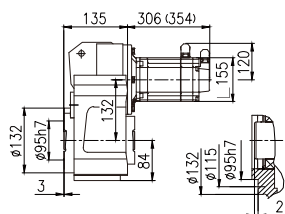
Horizontal foot-mounted(H)



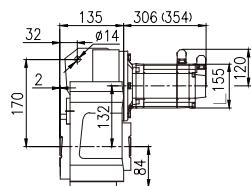
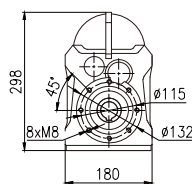
F204FA/F304FA  
F204FC/F304FC



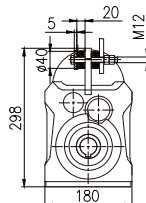
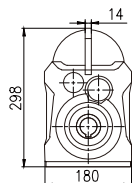
Flange-mounted(F)



Short flange-mounted(S)



Shaft-mounted(A)



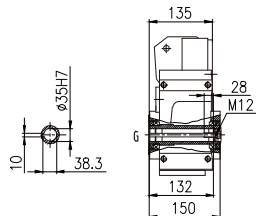
Torque arm-mounted  
with accessory(T)

注:括号内为带制动器的伺服马达长度

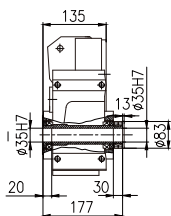
Note: Figures with parentheses are shown for length of servo gearmotor with brake

**F204/F304-MX080M1E20FS0 Dimensions (mm)**

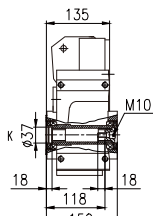
**Corresponding Servo Drive**



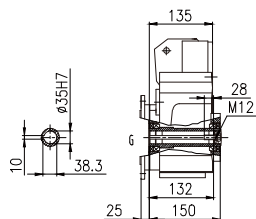
F204HG/F304HG



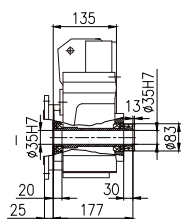
F204HI/F304HI



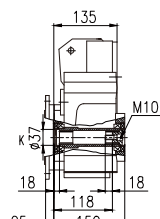
F204HK/F304HK



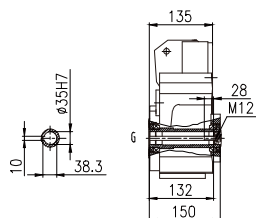
F204FG/F304FG



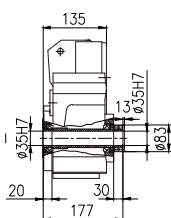
F204FI/F304FI



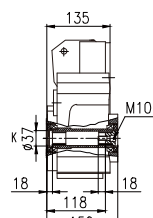
F204FK/F304FK



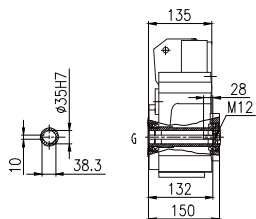
F204SG/F304SG



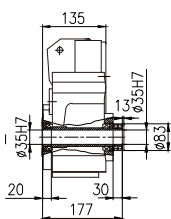
F204SI/F304SI



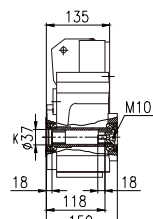
F204SK/F304SK



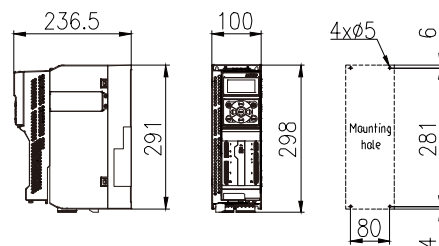
F204AG/F304AG  
F204TG/F304TG



F204AI/F304AI  
F204TI/F304TI



F204AK/F304AK  
F204TK/F304TK

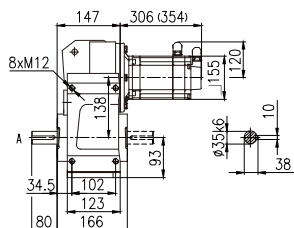


Control module: AX-CM55-PA-PE(ProfNet)  
or AX-CM55-EA-PE(EtherCAT)  
Power module: AX-PM26-B3B75-N(without filter)  
or AX-PM26-B3B75-F(with filter)  
Operation panel: A1-OP25

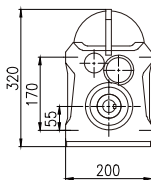
注: 渐开线花键空心轴的花键规格DIN5480:  
m2×z16×α30×D35×9H

Note: Involute spline size DIN5480:  
m2×z16×α30×D35×9H

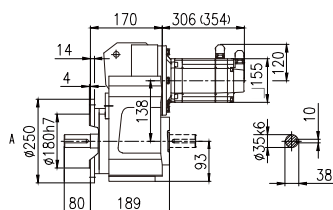
**F205/F305-MX080M1E20FS0 Dimensions (mm)**



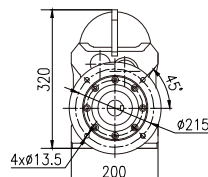
F205HA/F305HA  
F205HC/F305HC



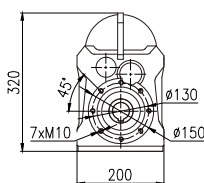
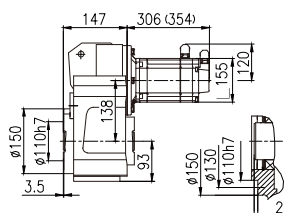
Horizontal foot-mounted(H)



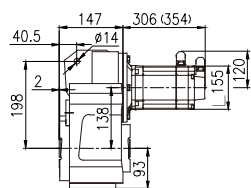
F205FA/F305FA  
F205FC/F305FC



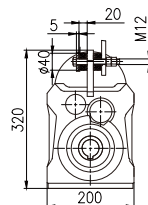
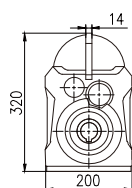
Flange-mounted(F)



Short flange-mounted(S)



Shaft-mounted(A)



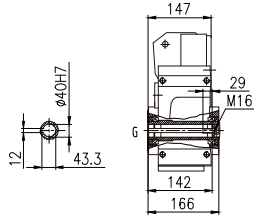
Torque arm-mounted  
with accessory(T)

注:括号内为带制动器的伺服马达长度

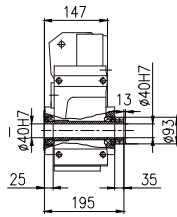
Note: Figures with parentheses are shown for length of servo gearmotor with brake

## F205/F305-MX080M1E20FS0 Dimensions (mm)

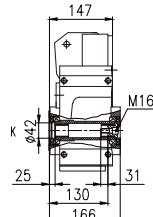
## Corresponding Servo Drive



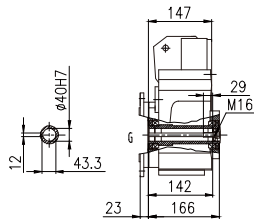
F205HG/F305HG



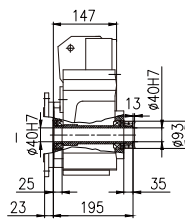
F205HI/F305HI



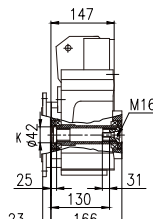
F205HK/F305HK



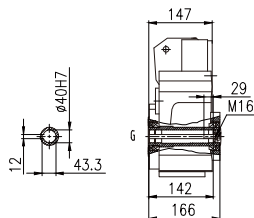
F205FG/F305FG



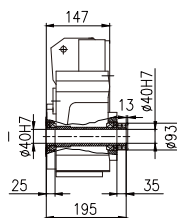
F205FI/F305FI



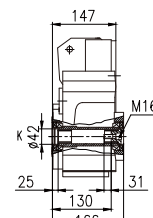
F205FK/F305FK



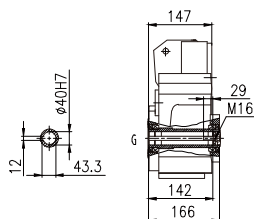
F205SG/F305SG



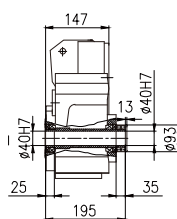
F205SI/F305SI



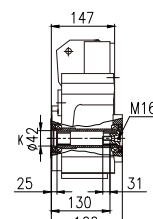
F205SK/F305SK



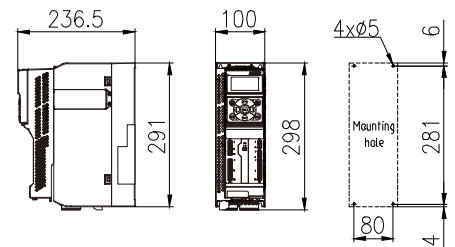
F205AG/F305AG  
F205TG/F305TG



F205AI/F305AI  
F205TI/F305TI



F205AK/F305AK  
F205TK/F305TK

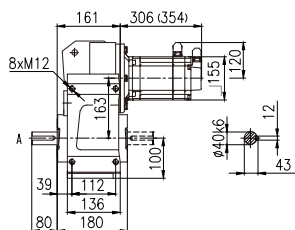


Control module: AX-CM55-PA-PE(ProfNet)  
or AX-CM55-EA-PE(EtherCAT)  
Power module: AX-PM26-B3B75-N(without filter)  
or AX-PM26-B3B75-F(with filter)  
Operation panel: A1-OP25

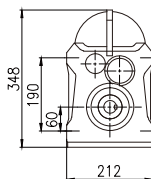
注:渐开线花键空心轴的花键规格DIN5480:  
m2×z16×α30×D35×9H

Note: Involute spline size DIN5480:  
m2×z16×α30×D35×9H

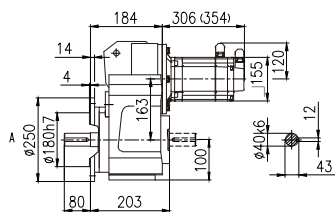
## F206/F306-MX080M1E20FS0 Dimensions (mm)



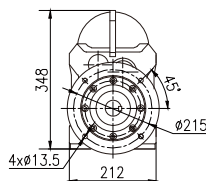
F206HA/F306HA  
F206HC/F306HC



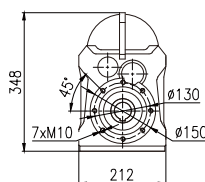
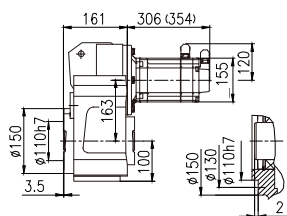
Horizontal foot-mounted(H)



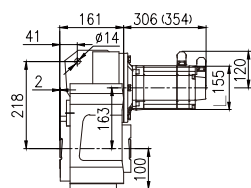
F206FA/F306FA  
F206FC/F306FC



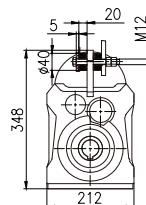
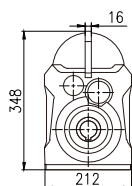
Flange-mounted(F)



Short flange-mounted(S)



Shaft-mounted(A)



Torque arm-mounted  
with accessory(T)

注:括号内为带制动器的伺服马达长度

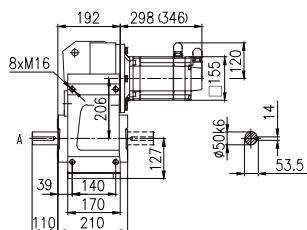
Note: Figures with parentheses are shown for length of servo gearmotor with brake

F206/F306-MX080M1E20FS0 Dimensions (mm)			Corresponding Servo Drive
<p>F206HG/F306HG</p>	<p>F206HI/F306HI</p>	<p>F206HK/F306HK</p>	<p>Control module: AX-CM55-PA-PE(ProfiNet) or AX-CM55-EA-PE(EtherCAT) Power module: AX-PM26-B3B75-N(without filter) or AX-PM26-B3B75-F(with filter) Operation panel: A1-OP25</p>
<p>F206FG/F306FG</p>	<p>F206FI/F306FI</p>	<p>F206FK/F306FK</p>	
<p>F206SG/F306SG</p>	<p>F206SI/F306SI</p>	<p>F206SK/F306SK</p>	
<p>F206AG/F306AG F206TG/F306TG</p>	<p>F206AI/F306AI F206TI/F306TI</p>	<p>F206AK/F306AK F206TK/F306TK</p>	

注:渐开线花键空心轴的花键规格DIN5480:  
m2×z16×α30×D35×9H

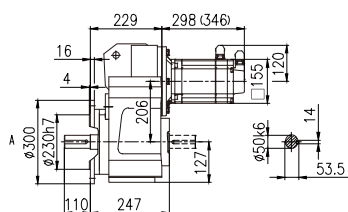
Note: Involute spline size DIN5480:  
m2×z16×α30×D35×9H

## F207/F307-MX080M1E20FS0 Dimensions (mm)



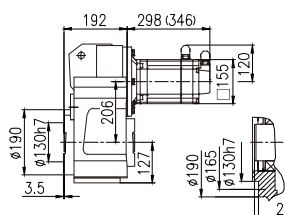
F207HA/F307HA  
F207HC/F307HC

Horizontal foot-mounted(H)

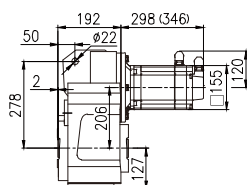


F207FA/F307FA  
F207FC/F307FC

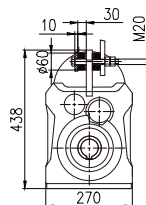
Flange-mounted(F)



Short flange-mounted(S)



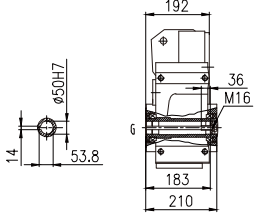
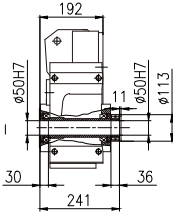
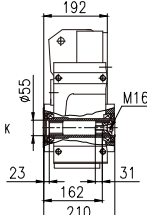
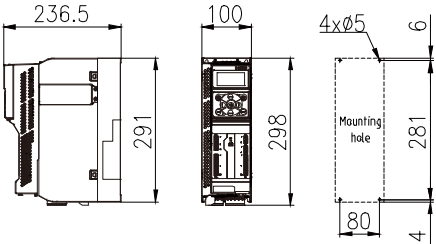
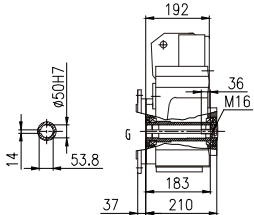
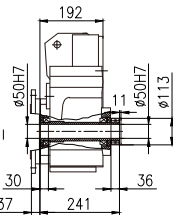
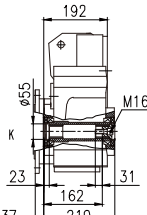
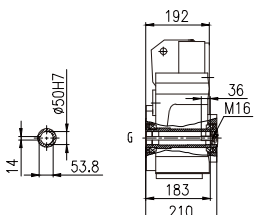
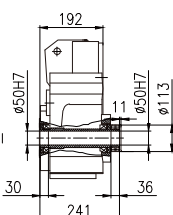
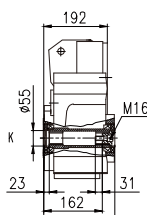
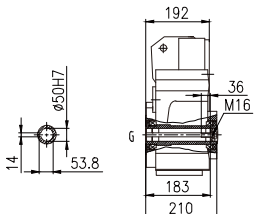
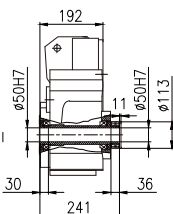
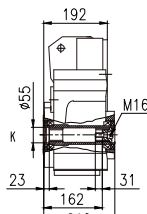
Shaft-mounted(A)



Torque arm-mounted  
with accessory(T)

注:括号内为带制动器的伺服马达长度

Note: Figures with parentheses are shown for length of servo gearmotor with brake

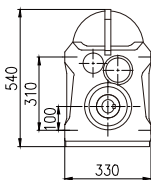
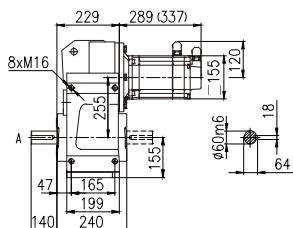
F207/F307-MX080M1E20FS0 Dimensions (mm)			Corresponding Servo Drive
 <p>F207HG/F307HG</p>	 <p>F207HI/F307HI</p>	 <p>F207HK/F307HK</p>	 <p>Control module: AX-CM55-PA-PE(ProfiNet) or AX-CM55-EA-PE(EtherCAT) Power module: AX-PM26-B3B75-N(without filter) or AX-PM26-B3B75-F(with filter) Operation panel: A1-OP25</p>
 <p>F207FG/F307FG</p>	 <p>F207FI/F307FI</p>	 <p>F207FK/F307FK</p>	
 <p>F207SG/F307SG</p>	 <p>F207SI/F307SI</p>	 <p>F207SK/F307SK</p>	
 <p>F207AG/F307AG F207TG/F307TG</p>	 <p>F207AI/F307AI F207TI/F307TI</p>	 <p>F207AK/F307AK F207TK/F307TK</p>	

注:渐开线花键空心轴的花键规格DIN5480:  
m2×z24×α30×D50×9H

Note: Involute spline size DIN5480:  
m2×z24×α30×D50×9H

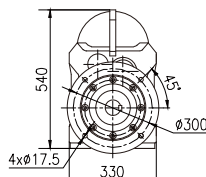
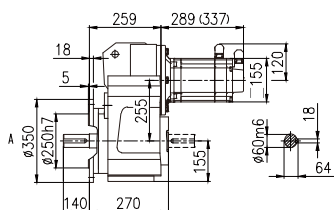


**F208/F308-MX080M1E20FS0 Dimensions (mm)**



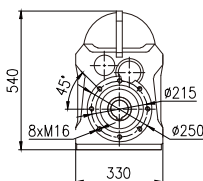
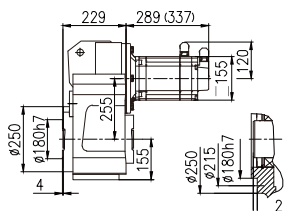
F208HA/F308HA  
F208HC/F308HC

Horizontal foot-mounted(H)

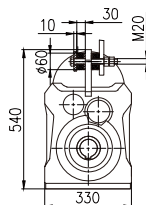
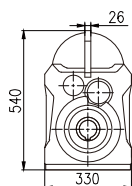
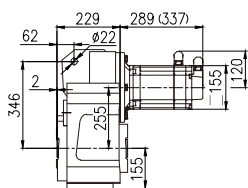


F208FA/F308FA  
F208FC/F308FC

Flange-mounted(F)



Short flange-mounted(S)



Shaft-mounted(A)

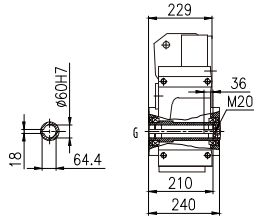
Torque arm-mounted  
with accessory(T)

注:括号内为带制动器的伺服马达长度

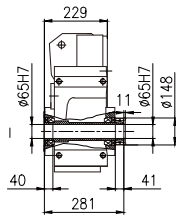
Note: Figures with parentheses are shown for length of servo gearmotor with brake

## F208/F308-MX080M1E20FS0 Dimensions (mm)

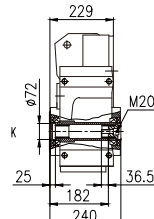
## Corresponding Servo Drive



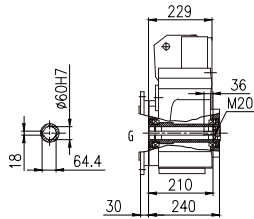
F208HG/F308HG



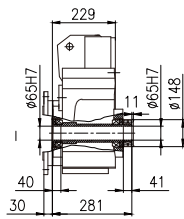
F208HI/F308HI



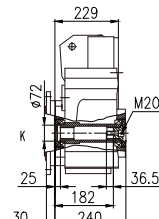
F208HK/F308HK



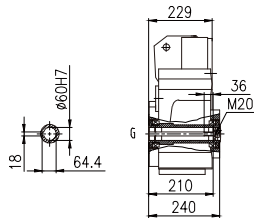
F208FG/F308FG



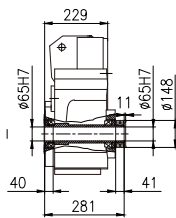
F208FI/F308FI



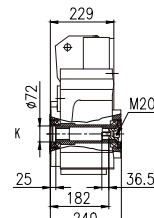
F208FK/F308FK



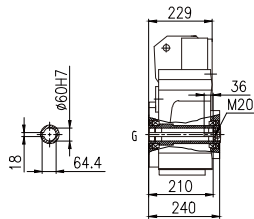
F208SG/F308SG



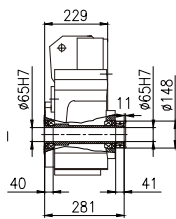
F208SI/F308SI



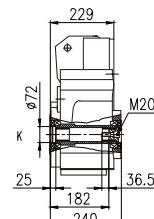
F208SK/F308SK



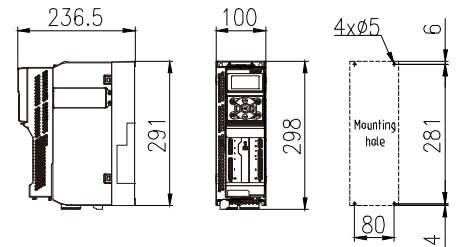
F208AG/F308AG  
F208TG/F308TG



F208AI/F308AI  
F208TI/F308TI



F208AK/F308AK  
F208TK/F308TK

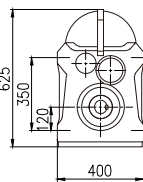
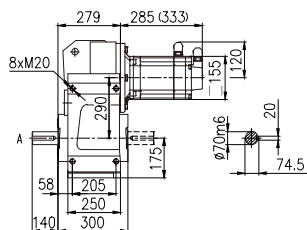


Control module: AX-CM55-PA-PE(ProfNet)  
or AX-CM55-EA-PE(EtherCAT)  
Power module: AX-PM26-B3B75-N(without filter)  
or AX-PM26-B3B75-F(with filter)  
Operation panel: A1-OP25

注:渐开线花键空心轴的花键规格DIN5480:  
m2×z31×α30×D65×9H

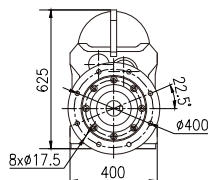
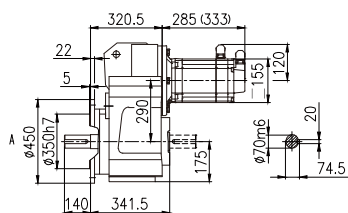
Note: Involute spline size DIN5480:  
m2×z31×α30×D65×9H

## F209/F309-MX080M1E20FS0 Dimensions (mm)



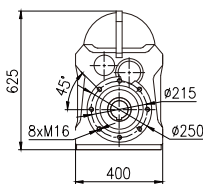
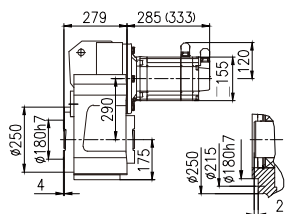
F209HA/F309HA  
F209HC/F309HC

Horizontal foot-mounted(H)

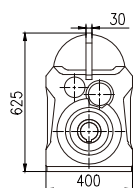
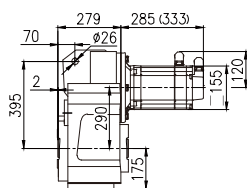


F209FA/F309FA  
F209FC/F309FC

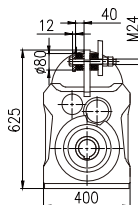
Flange-mounted(F)



Short flange-mounted(S)



Shaft-mounted(A)



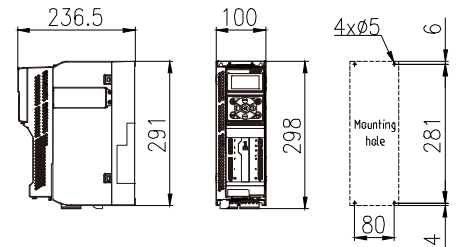
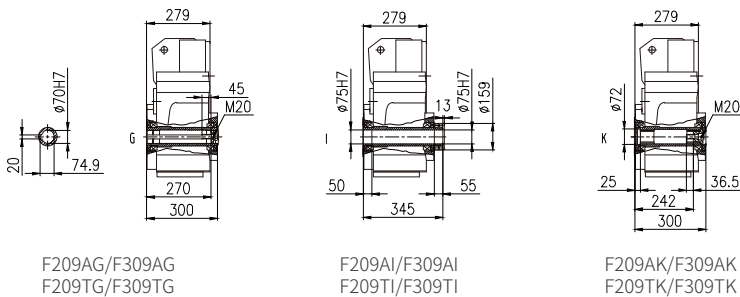
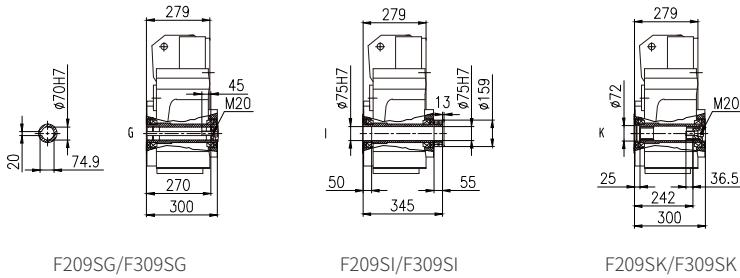
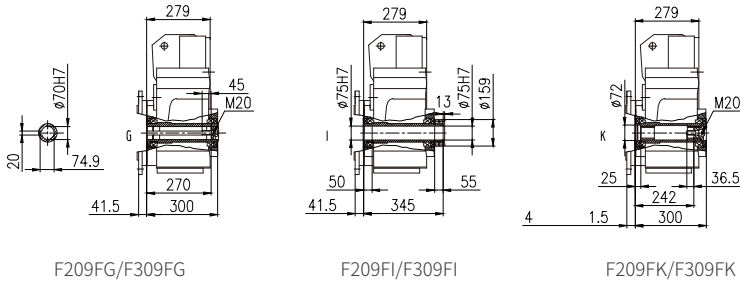
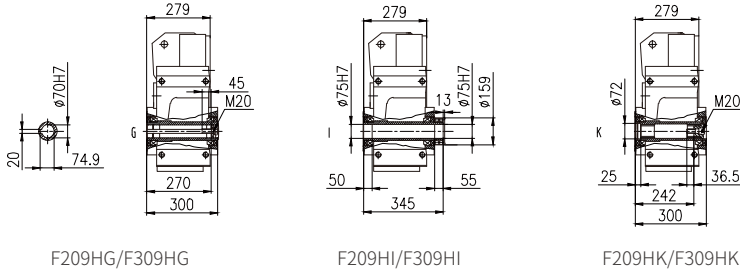
Torque arm-mounted  
with accessory(T)

注:括号内为带制动器的伺服马达长度

Note: Figures with parentheses are shown for length of servo gearmotor with brake

**F209/F309-MX080M1E20FS0 Dimensions (mm)**

**Corresponding Servo Drive**



Control module: AX-CM55-PA-PE(ProfiNet)  
or AX-CM55-EA-PE(EtherCAT)  
Power module: AX-PM26-B3B75-N(without filter)  
or AX-PM26-B3B75-F(with filter)  
Operation panel: A1-OP25

注:渐开线花键空心轴的花键规格DIN5480:  
m2×z34×α30×D70×9H

Note: Involute spline size DIN5480:  
m2×z34×α30×D70×9H

伺服马达:5.03kW 16Nm  
9.6A-3000r/min

Servo motor:5.03kW 16Nm  
9.6A-3000r/min

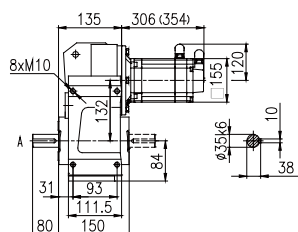
齿轮箱实际 输出转速	齿轮箱实际 输出扭矩	齿轮箱公称 减速比代号	齿轮箱公称 减速比	齿轮箱精确 减速比	齿轮箱 齿数比	齿轮箱额定 输出扭矩	齿轮箱 转动惯量	齿轮箱 背隙	齿轮箱 服务系数
Actual Output Speed of Gearbox	Actual Output Torque of Gearbox	Nominal Ratio Code of Gearbox	Nominal Ratio of Gearbox	Exact Ratio of Gearbox	Gear Ratio of Gearbox	Normal Output Torque of Gearbox	Rotational Inertia of Gearbox	Back Lash of Gearbox	Service Coefficient of Gearbox
$n_{2N}$ (r/min)	T <sub>2</sub> (N.m)	Code	$i_N$	$i_{ex}$	$i_z$	T <sub>2N</sub>	J 10 <sup>-4</sup> (kg.m <sup>2</sup> )	Φ (°)	f
661	73	B45	4.5	4.54	345/76	280	5.8	11	3.84
577	83	B50	5	5.2	3657/703	300	4.5	10	3.61
508	95	B56	5.6	5.91	4830/817	310	3.6	10	3.26
454	106	B63	6.3	6.61	1633/247	310	3	10	2.92
408	118	B71	7.1	7.36	5175/703	330	2.5	10	2.8
371	129	B80	8	8.09	5382/665	390	2.2	10	3.02
326	147	B90	9	9.19	5589/608	390	1.9	10	2.65
305	158	C10	10	9.85	2915/296	390	2.7	7	2.47
268	179	C11	11.2	11.2	1925/172	410	2.1	7	2.29
240	200	C13	12.5	12.5	3905/312	410	1.7	7	2.05
216	222	C14	14	13.9	4125/296	410	1.4	7	1.85
196	245	C16	16	15.3	429/28	410	1.2	7	1.67
213	226	C14	14	14.1	7695/544	650	1.5	7	2.88
194	248	C16	16	15.5	1577/102	650	1.3	7	2.62
170	282	C18	18	17.6	475/27	660	1.1	7	2.34
152	317	C20	20	19.8	86735/4386	660	2.8	8	2.08
135	355	C22	22.4	22.2	44156/1989	680	2.2	8	1.92
120	402	C25	25	25.1	15770/629	680	1.9	8	1.69
108	445	C28	28	27.8	4731/170	700	1.6	8	1.57
119	403	C25	25	25.2	184387/7326	900	3.6	9	2.23
112	429	C28	28	26.8	17395/648	900	3.4	9	2.1
94.9	506	C32	31.5	31.6	20405/646	900	4.8	7	1.78
82.9	579	C36	35.5	36.2	432586/11951	900	3.9	7	1.55
82.2	584	C36	35.5	36.5	8107/222	1700	6.5	9	2.91
77.5	619	C40	40	38.7	10810/279	1700	10.1	6	2.75
67.6	710	C45	45	44.4	39997/900	1700	8.4	6	2.39
60	800	C50	50	50	83237/1665	1700	7.1	6	2.13
54	890	C56	56	55.6	5170/93	1700	8.6	6	1.91
47	1021	C63	63	63.8	19129/300	1700	7.3	6	1.67
53	906	C56	56	56.6	164450/2907	3200	26.5	5	3.53
48.9	981	C63	63	61.3	335225/5472	3200	23.5	5	3.26
44.9	1069	C71	71	66.8	411125/6156	3200	21.8	5	2.99
36.5	1317	C80	80	82.3	145475/1767	3500	16.4	5	2.66
31.5	1522	C90	90	95.1	12650/133	3500	13.5	5	2.3
29.6	1622	D10	100	101.4	537625/5301	3500	12.2	5	2.16
25.6	1874	D11	112	117.1	6325/54	3500	10	5	1.87
22.5	2131	D13	125	133.2	2530/19	3500	8.5	5	1.64
27.7	1734	D11	112	108.4	14749/136	4700	27	5	2.71
24.6	1952	D13	125	122	259161/2125	4700	23	5	2.41
22.3	2155	D14	140	134.7	52675/391	4700	20	5	2.18
19.8	2424	D16	160	151.5	23177/153	4700	17	5	1.94
17.1	2808	D18	180	175.5	596673/3400	4700	22	5	1.67
15.5	3102	D20	200	193.9	606375/3128	4700	19	5	1.52

注:启停次数≤60次/小时,服务系数f推荐1.5;  
启停次数≤120次/小时,服务系数f推荐1.75;  
启停次数>120次/小时,服务系数f推荐2以上;

Attention:Operation frequency≤60 times/h,  
service coefficient f is recommended as 1.5;  
Operation frequency≤120 times/h, service  
coefficient f is recommended as 1.75;  
Operation frequency≥120 times/h, service  
coefficient f is recommended as over 2.

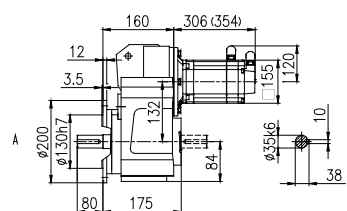
伺服齿轮马达订货号	伺服驱动器订货号			线缆配置订货号		制动电阻订货号
	控制模块	功率模块	操作面板	伺服马达动力线	伺服马达信号线	
Servo Gearmotor Order Number	Servo Drive Order Number			Cable Configuration Order Number		Braking Resistor Order Number
	Control Module	Power Module	Operation Panel	Power Cable of Servo Gearmotor	Signal Cable of Servo Gearmotor	
F204□□-B45-D□□□-MX080M1E30FS0	AX-CM55-□□-PE   PA:PROFINET EA:EtherCAT	AX-PM26-B3B75-□   N:Without filter F:With filter	A1-OP25	A1-H□□-A25-□□□   18:Without brake 16:With brake  B30=3m B50=5m B70=7m C10=10m C15=15m C20=20m C30=30m C40=40m C50=50m	A1-H17-A□□-□□□   10:Without battery box 11:With battery box  B30=3m B50=5m B70=7m C10=10m C15=15m C20=20m  A1-H17-A□□-□□□   12:Without battery box 13:With battery box  C30=30m C40=40m C50=50m	A1-H02-A40-K-C75
F204□□-B50-D□□□-MX080M1E30FS0						
F204□□-B56-D□□□-MX080M1E30FS0						
F204□□-B63-D□□□-MX080M1E30FS0						
F204□□-B71-D□□□-MX080M1E30FS0						
F204□□-B80-D□□□-MX080M1E30FS0						
F204□□-B90-D□□□-MX080M1E30FS0						
F204□□-C10-D□□□-MX080M1E30FS0						
F204□□-C11-D□□□-MX080M1E30FS0						
F204□□-C13-D□□□-MX080M1E30FS0						
F204□□-C14-D□□□-MX080M1E30FS0						
F204□□-C16-D□□□-MX080M1E30FS0						
F205□□-C14-D□□□-MX080M1E30FS0						
F205□□-C16-D□□□-MX080M1E30FS0						
F205□□-C18-D□□□-MX080M1E30FS0						
F305□□-C20-D□□□-MX080M1E30FS0						
F305□□-C22-D□□□-MX080M1E30FS0						
F305□□-C25-D□□□-MX080M1E30FS0						
F305□□-C28-D□□□-MX080M1E30FS0						
F306□□-C25-D□□□-MX080M1E30FS0						
F306□□-C28-D□□□-MX080M1E30FS0						
F306□□-C32-D□□□-MX080M1E30FS0						
F306□□-C36-D□□□-MX080M1E30FS0						
F307□□-C36-D□□□-MX080M1E30FS0						
F307□□-C40-D□□□-MX080M1E30FS0						
F307□□-C45-D□□□-MX080M1E30FS0						
F307□□-C50-D□□□-MX080M1E30FS0						
F307□□-C56-D□□□-MX080M1E30FS0						
F307□□-C63-D□□□-MX080M1E30FS0						
F308□□-C56-D□□□-MX080M1E30FS0						
F308□□-C63-D□□□-MX080M1E30FS0						
F308□□-C71-D□□□-MX080M1E30FS0						
F308□□-C80-D□□□-MX080M1E30FS0						
F308□□-C90-D□□□-MX080M1E30FS0						
F308□□-D10-D□□□-MX080M1E30FS0						
F308□□-D11-D□□□-MX080M1E30FS0						
F308□□-D13-D□□□-MX080M1E30FS0						
F309□□-D11-D□□□-MX080M1E30FS0						
F309□□-D13-D□□□-MX080M1E30FS0						
F309□□-D14-D□□□-MX080M1E30FS0						
F309□□-D16-D□□□-MX080M1E30FS0						
F309□□-D18-D□□□-MX080M1E30FS0						
F309□□-D20-D□□□-MX080M1E30FS0						

## F204/F304-MX080M1E30FS0 Dimensions (mm)



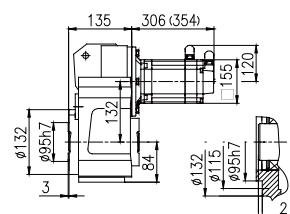
F204HA/F304HA  
F204HC/F304HC

Horizontal foot-mounted(H)

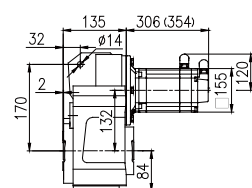


F204FA/F304FA  
F204FC/F304FC

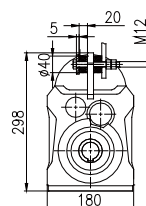
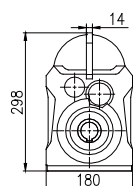
Flange-mounted(F)



Short flange-mounted(S)



Shaft-mounted(A)



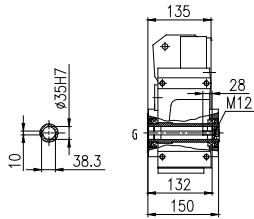
Torque arm-mounted  
with accessory(T)

注:括号内为带制动器的伺服马达长度

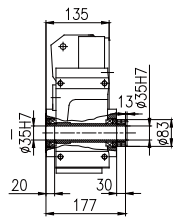
Note: Figures with parentheses are shown for length of servo gearmotor with brake

## F204/F304-MX080M1E30FS0 Dimensions (mm)

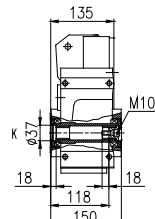
## Corresponding Servo Drive



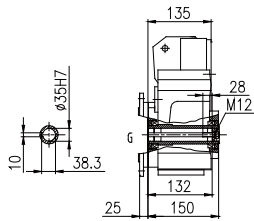
F204HG/F304HG



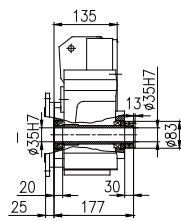
F204HI/F304HI



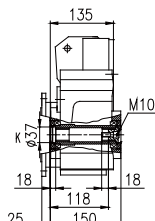
F204HK/F304HK



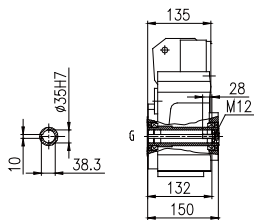
F204FG/F304FG



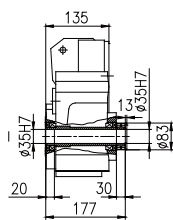
F204FI/F304FI



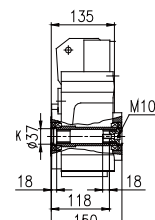
F204FK/F304FK



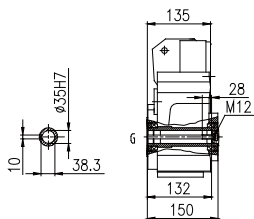
F204SG/F304SG



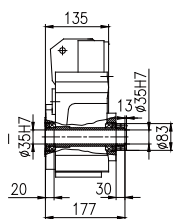
F204SI/F304SI



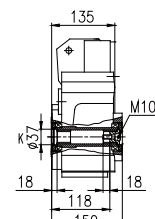
F204SK/F304SK



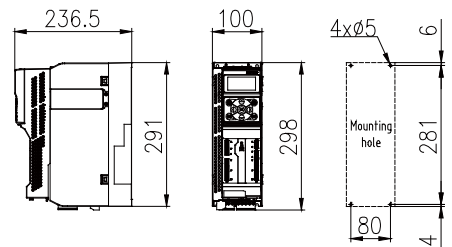
F204AG/F304AG  
F204TG/F304TG



F204AI/F304AI  
F204TI/F304TI



F204AK/F304AK  
F204TK/F304TK



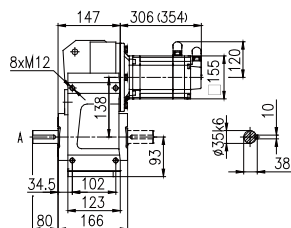
Control module: AX-CM55-PA-PE(ProfiNet)  
or AX-CM55-EA-PE(EtherCAT)  
Power module: AX-PM26-B3B75-N(without filter)  
or AX-PM26-B3B75-F(with filter)  
Operation panel: A1-OP25

注:渐开线花键空心轴的花键规格DIN5480:  
m2×z16×α30×D35×9H

Note: Involute spline size DIN5480:  
m2×z16×α30×D35×9H

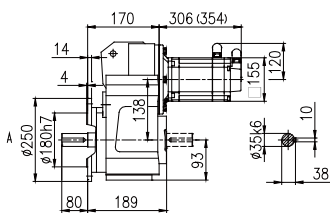


**F205/F305-MX080M1E30FS0 Dimensions (mm)**



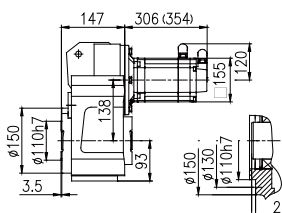
F205HA/F305HA  
F205HC/F305HC

Horizontal foot-mounted(H)

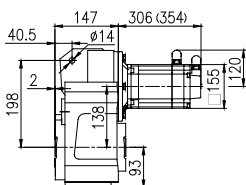


F205FA/F305FA  
F205FC/F305FC

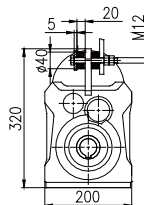
Flange-mounted(F)



Short flange-mounted(S)



Shaft-mounted(A)



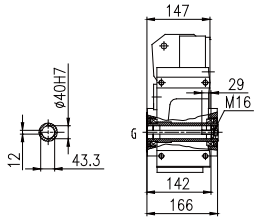
Torque arm-mounted  
with accessory(T)

注:括号内为带制动器的伺服马达长度

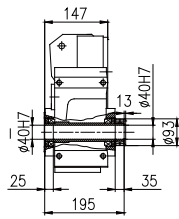
Note: Figures with parentheses are shown for length of servo gearmotor with brake

**F205/F305-MX080M1E30FS0 Dimensions (mm)**

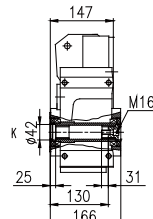
**Corresponding Servo Drive**



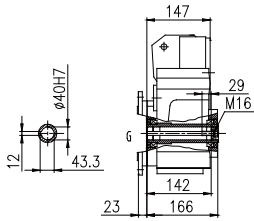
F205HG/F305HG



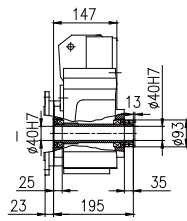
F205HI/F305HI



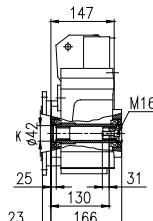
F205HK/F305HK



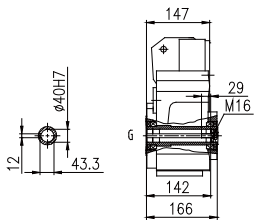
F205FG/F305FG



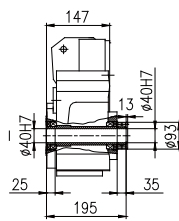
F205FI/F305FI



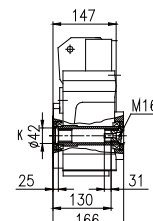
F205FK/F305FK



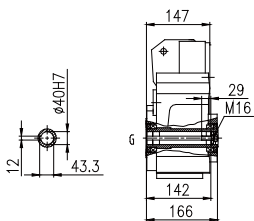
F205SG/F305SG



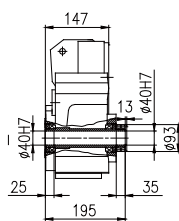
F205SI/F305SI



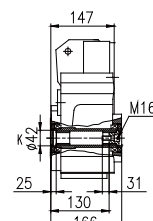
F205SK/F305SK



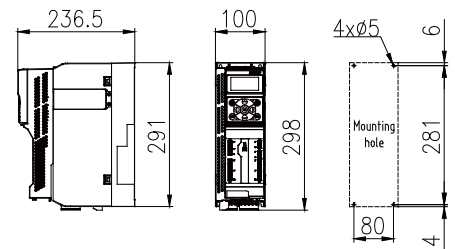
F205AG/F305AG  
F205TG/F305TG



F205AI/F305AI  
F205TI/F305TI



F205AK/F305AK  
F205TK/F305TK

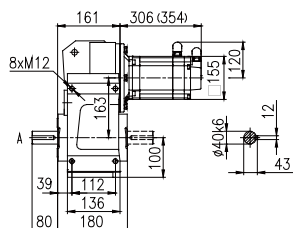


Control module: AX-CM55-PA-PE(ProfNet)  
or AX-CM55-EA-PE(EtherCAT)  
Power module: AX-PM26-B3B75-N(without filter)  
or AX-PM26-B3B75-F(with filter)  
Operation panel: A1-OP25

注:渐开线花键空心轴的花键规格DIN5480:  
m2×z16×α30×D35×9H

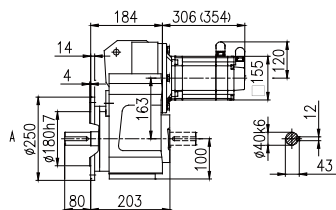
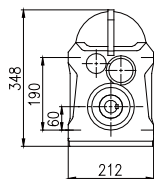
Note: Involute spline size DIN5480:  
m2×z16×α30×D35×9H

## F206/F306-MX080M1E30FS0 Dimensions (mm)



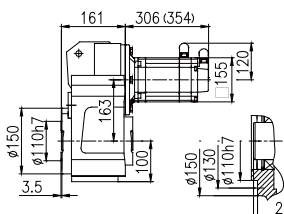
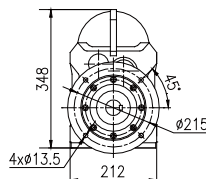
F206HA/F306HA  
F206HC/F306HC

Horizontal foot-mounted(H)

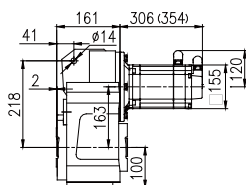
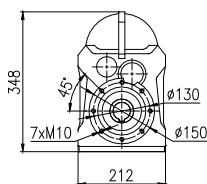


F206FA/F306FA  
F206FC/F306FC

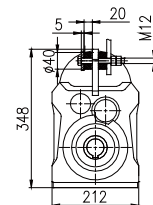
Flange-mounted(F)



Short flange-mounted(S)



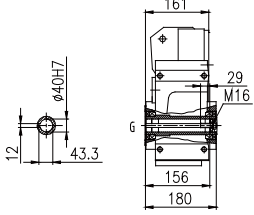
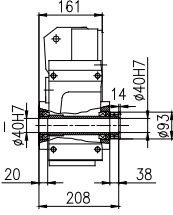
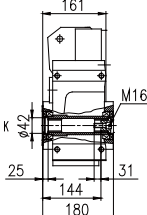
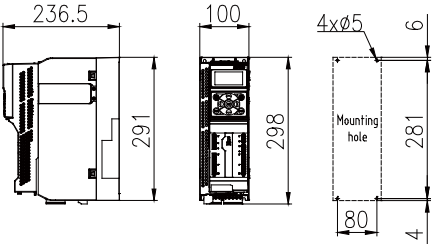
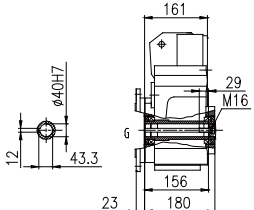
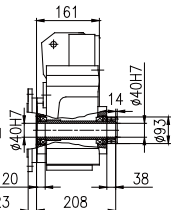
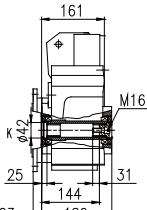
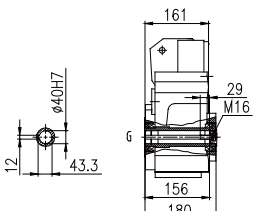
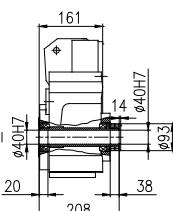
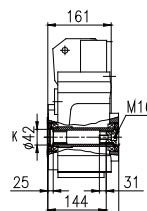
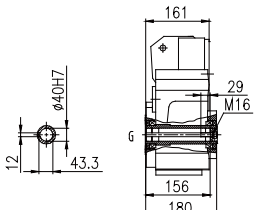
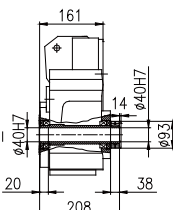
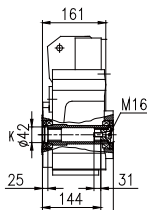
Shaft-mounted(A)



Torque arm-mounted  
with accessory(T)

注:括号内为带制动器的伺服马达长度

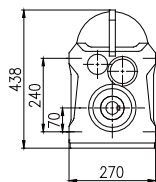
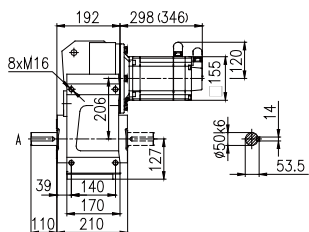
Note: Figures with parentheses are shown for length of servo gearmotor with brake

F206/F306-MX080M1E30FS0 Dimensions (mm)			Corresponding Servo Drive
 <p>F206HG/F306HG</p>	 <p>F206HI/F306HI</p>	 <p>F206HK/F306HK</p>	 <p>Control module: AX-CM55-PA-PE(ProfNet) or AX-CM55-EA-PE(EtherCAT) Power module: AX-PM26-B3B75-N(without filter) or AX-PM26-B3B75-F(with filter) Operation panel: A1-OP25</p>
 <p>F206FG/F306FG</p>	 <p>F206FI/F306FI</p>	 <p>F206FK/F306FK</p>	
 <p>F206SG/F306SG</p>	 <p>F206SI/F306SI</p>	 <p>F206SK/F306SK</p>	
 <p>F206AG/F306AG F206TG/F306TG</p>	 <p>F206AI/F306AI F206TI/F306TI</p>	 <p>F206AK/F306AK F206TK/F306TK</p>	

注:渐开线花键空心轴的花键规格DIN5480:  
m2×z16×α30×D35×9H

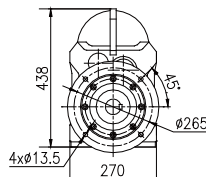
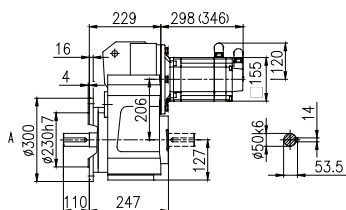
Note: Involute spline size DIN5480:  
m2×z16×α30×D35×9H

**F207/F307-MX080M1E30FS0 Dimensions (mm)**



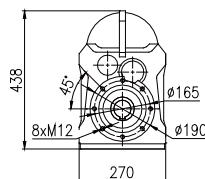
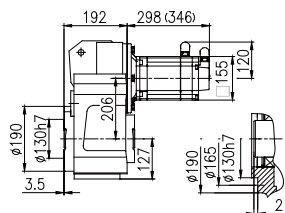
F207HA/F307HA  
F207HC/F307HC

Horizontal foot-mounted(H)

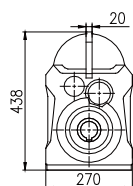
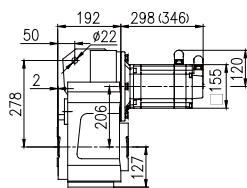


F207FA/F307FA  
F207FC/F307FC

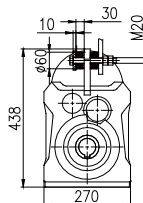
Flange-mounted(F)



Short flange-mounted(S)



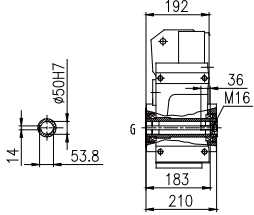
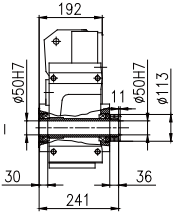
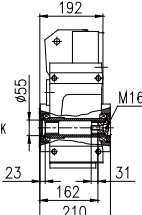
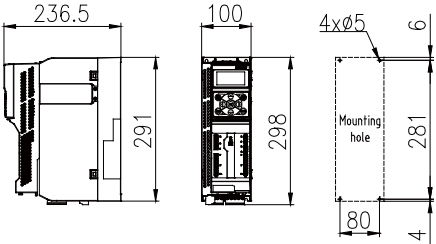
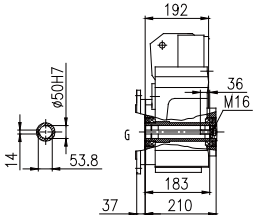
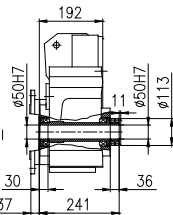
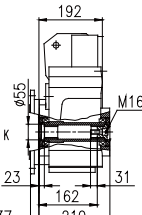
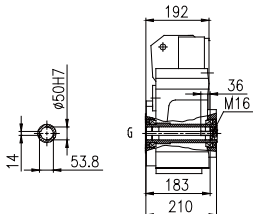
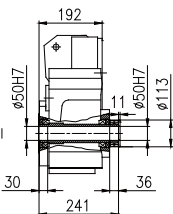
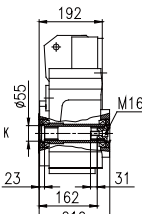
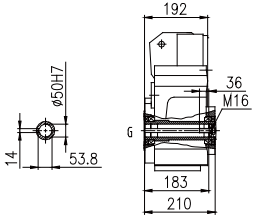
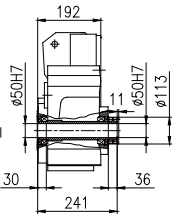
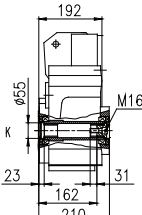
Shaft-mounted(A)



Torque arm-mounted  
with accessory(T)

注:括号内为带制动器的伺服马达长度

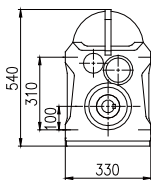
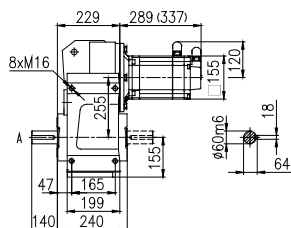
Note: Figures with parentheses are shown for length of servo gearmotor with brake

F207/F307-MX080M1E30FS0 Dimensions (mm)			Corresponding Servo Drive
 <p>F207HG/F307HG</p>	 <p>F207HI/F307HI</p>	 <p>F207HK/F307HK</p>	 <p>Control module: AX-CM55-PA-PE(ProfiNet) or AX-CM55-EA-PE(EtherCAT) Power module: AX-PM26-B3B75-N(without filter) or AX-PM26-B3B75-F(with filter) Operation panel: A1-OP25</p>
 <p>F207FG/F307FG</p>	 <p>F207FI/F307FI</p>	 <p>F207FK/F307FK</p>	
 <p>F207SG/F307SG</p>	 <p>F207SI/F307SI</p>	 <p>F207SK/F307SK</p>	
 <p>F207AG/F307AG F207TG/F307TG</p>	 <p>F207AI/F307AI F207TI/F307TI</p>	 <p>F207AK/F307AK F207TK/F307TK</p>	

注:渐开线花键空心轴的花键规格DIN5480:  
m2×z24×α30×D50×9H

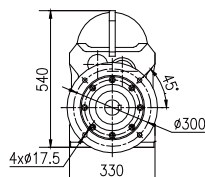
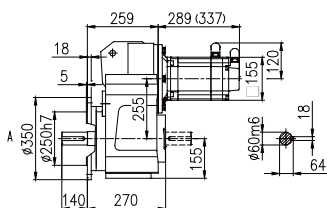
Note: Involute spline size DIN5480:  
m2×z24×α30×D50×9H

**F208/F308-MX080M1E30FS0 Dimensions (mm)**



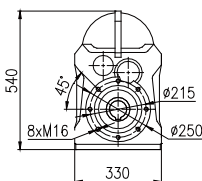
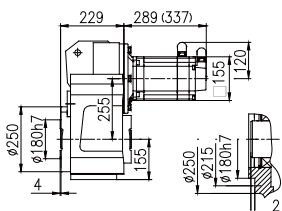
F208HA/F308HA  
F208HC/F308HC

Horizontal foot-mounted(H)

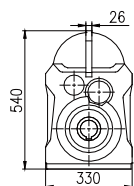
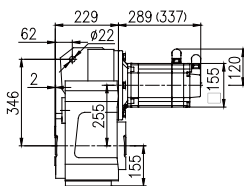


F208FA/F308FA  
F208FC/F308FC

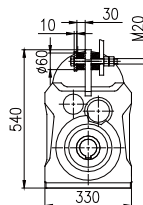
Flange-mounted(F)



Short flange-mounted(S)



Shaft-mounted(A)



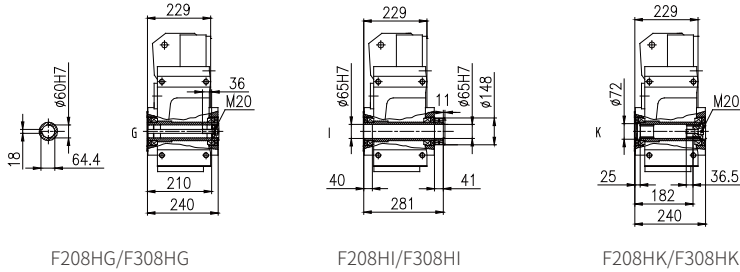
Torque arm-mounted  
with accessory(T)

注:括号内为带制动器的伺服马达长度

Note: Figures with parentheses are shown for length of servo gearmotor with brake

## F208/F308-MX080M1E30FS0 Dimensions (mm)

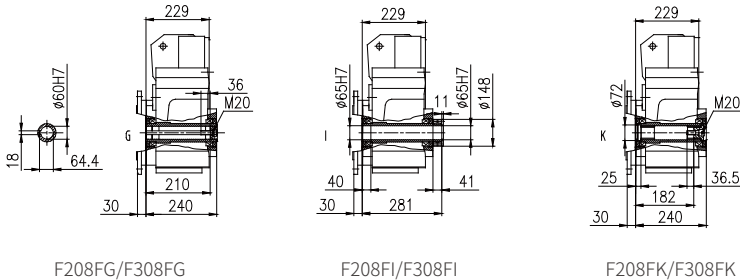
## Corresponding Servo Drive



F208HG/F308HG

F208HI/F308HI

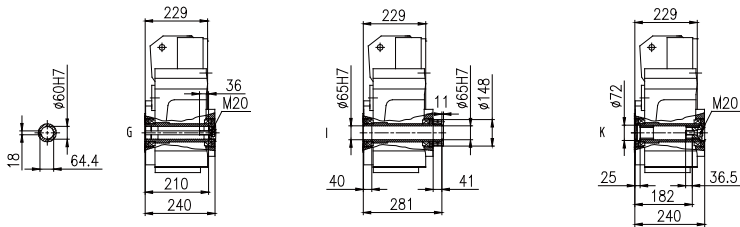
F208HK/F308HK



F208FG/F308FG

F208FI/F308FI

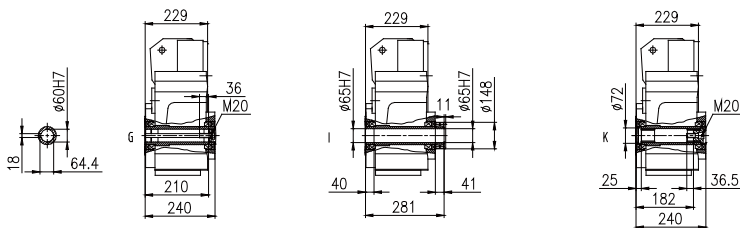
F208FK/F308FK



F208SG/F308SG

F208SI/F308SI

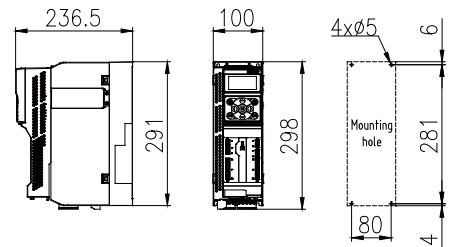
F208SK/F308SK



F208AG/F308AG  
F208TG/F308TG

F208AI/F308AI  
F208TI/F308TI

F208AK/F308AK  
F208TK/F308TK



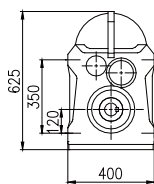
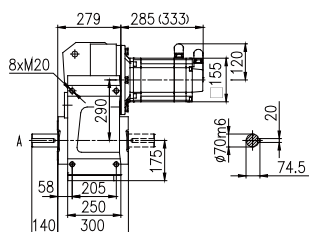
Control module: AX-CM55-PA-PE(ProfiNet)  
or AX-CM55-EA-PE(EtherCAT)  
Power module: AX-PM26-B3B75-N(without filter)  
or AX-PM26-B3B75-F(with filter)  
Operation panel: A1-OP25

注:渐开线花键空心轴的花键规格DIN5480:  
m2×z31×α30×D65×9H

Note: Involute spline size DIN5480:  
m2×z31×α30×D65×9H

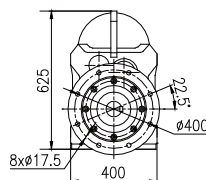
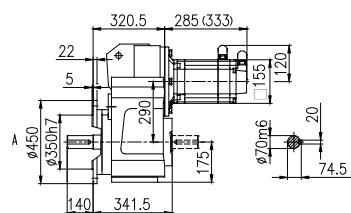


## F209/F309-MX080M1E30FS0 Dimensions (mm)



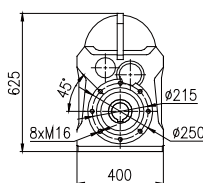
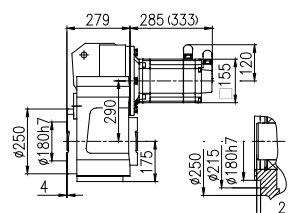
F209HA/F309HA  
F209HC/F309HC

Horizontal foot-mounted(H)

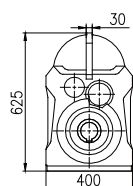
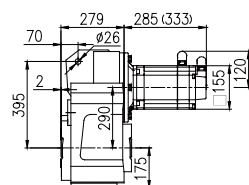


F209FA/F309FA  
F209FC/F309FC

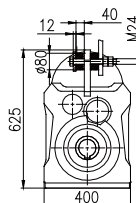
Flange-mounted(F)



Short flange-mounted(S)



Shaft-mounted(A)



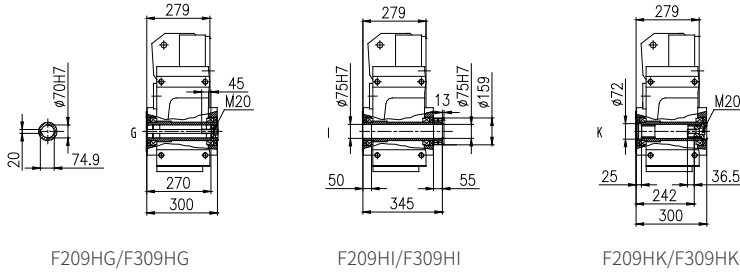
Torque arm-mounted  
with accessory(T)

注:括号内为带制动器的伺服马达长度

Note: Figures with parentheses are shown for length of servo gearmotor with brake

## F209/F309-MX080M1E30FS0 Dimensions (mm)

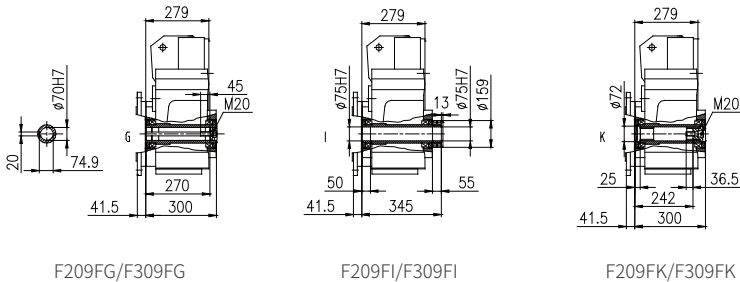
## Corresponding Servo Drive



F209HG/F309HG

F209HI/F309HI

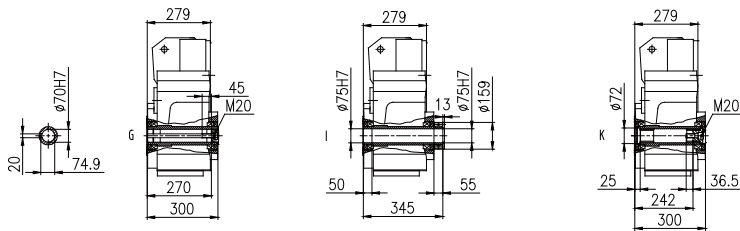
F209HK/F309HK



F209FG/F309FG

F209FI/F309FI

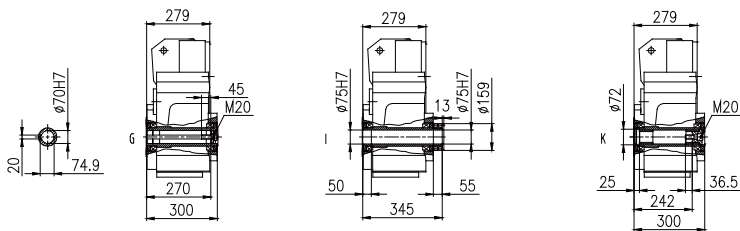
F209FK/F309FK



F209SG/F309SG

F209SI/F309SI

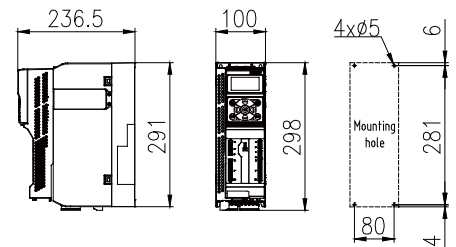
F209SK/F309SK



F209AG/F309AG  
F209TG/F309TG

F209AI/F309AI  
F209TI/F309TI

F209AK/F309AK  
F209TK/F309TK



Control module: AX-CM55-PA-PE(ProfiNet)  
or AX-CM55-EA-PE(EtherCAT)  
Power module: AX-PM26-B3B75-N(without filter)  
or AX-PM26-B3B75-F(with filter)  
Operation panel: A1-OP25

注:渐开线花键空心轴的花键规格DIN5480:  
m2×z34×α30×D70×9H

Note: Involute spline size DIN5480:  
m2×z34×α30×D70×9H

伺服马达:6.6kW 42Nm  
14.5A-1500r/min

Servo motor:6.6kW 42Nm  
14.5A-1500r/min

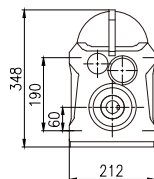
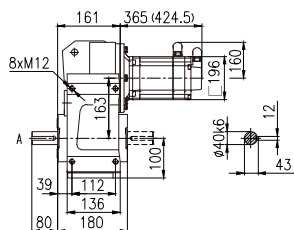
齿轮箱实际 输出转速	齿轮箱实际 输出扭矩	齿轮箱公称 减速比代号	齿轮箱公称 减速比	齿轮箱精确 减速比	齿轮箱 齿数比	齿轮箱额定 输出扭矩	齿轮箱 转动惯量	齿轮箱 背隙	齿轮箱 服务系数
Actual Output Speed of Gearbox	Actual Output Torque of Gearbox	Nominal Ratio Code of Gearbox	Nominal Ratio of Gearbox	Exact Ratio of Gearbox	Gear Ratio of Gearbox	Normal Output Torque of Gearbox	Rotational Inertia of Gearbox	Back Lash of Gearbox	Service Coefficient of Gearbox
$n_{2N}$ (r/min)	T <sub>2</sub> (N·m)	Code	$i_N$	$i_{ex}$	$i_z$	T <sub>2N</sub>	J 10 <sup>-4</sup> (kg·m <sup>2</sup> )	Φ (°)	f
364	173	B40	4	4.12	1633/396	560	17	10	3.24
320	197	B45	4.5	4.69	568/121	580	13	10	2.94
288	219	B50	5	5.21	1775/341	600	11	10	2.74
278	227	B56	5.6	5.4	437/81	600	14	9	2.64
244	258	B63	6.3	6.14	608/99	660	11	9	2.56
220	286	B71	7.1	6.81	1900/279	660	9.1	9	2.31
188	335	B80	8	7.97	1219/153	700	10.2	7	2.09
165	381	B90	9	9.07	1696/187	700	7.9	7	1.84
149	424	C10	10	10.1	5300/527	700	6.6	7	1.65
130	483	C11	11.2	11.5	1961/170	750	5.3	7	1.55
115	546	C13	12.5	13	8162/629	830	4.3	6	1.52
112	563	C14	14	13.4	22365/1672	850	6.4	11	1.51
171	368	B90	9	8.75	5695/651	1000	17	8	2.72
144	437	C10	10	10.4	2491/240	1100	18	6	2.52
133	475	C11	11.2	11.3	611/54	1300	15.7	6	2.74
118	533	C13	12.5	12.7	6298/495	1400	12.9	6	2.63
108	584	C14	14	13.9	2162/155	1400	11.3	6	2.4
93.2	676	C16	16	16.1	564/35	1550	9.2	6	2.29
87.2	722	C18	18	17.2	1598/93	1550	8.4	6	2.15
76.1	827	C20	20	19.7	38525/1953	1600	11.7	9	1.93
66.4	949	C22	22.4	22.6	57017/2520	1600	9.6	9	1.69
58.8	1071	C25	25	25.5	16951/666	1600	8.1	9	1.49
69.4	907	C22	22.4	21.6	2875/133	3200	24	5	3.53
62.2	1012	C25	25	24.1	8470/351	3200	39	8	3.16
54.7	1151	C28	28	27.4	12100/441	3200	32	8	2.78
47.2	1336	C32	31.5	31.8	32065/1008	3200	26	8	2.4
43.2	1457	C36	35.5	34.7	39325/1134	3200	24	8	2.2
38.5	1638	C40	40	39	7370/189	3200	20	8	1.95
35.1	1793	C45	45	42.7	27830/651	3200	18	8	1.78
30.4	2075	C50	50	49.4	2420/49	3200	14.4	8	1.54
33.4	1886	C45	45	44.9	61103/1360	4700	84	6	2.49
31.3	2016	C50	50	48	25284/527	4700	80	6	2.33
27.3	2306	C56	56	54.9	9331/170	4700	65	6	2.04
24.6	2562	C63	63	61	67424/1105	4700	56	6	1.83
21.7	2906	C71	71	69.2	141169/2040	4700	49	6	1.62
23.7	2663	C63	63	63.4	1078/17	8200	126	5	3.08
21.3	2953	C71	71	70.3	5621/80	8200	115	5	2.78
20.1	3129	C80	80	74.5	2310/31	8200	106	5	2.62
17.7	3557	C90	90	84.7	847/10	8200	89	5	2.31
15.8	3982	D10	100	94.8	1232/13	8200	78	5	2.06
14.3	4418	D11	112	105.2	3157/30	8200	68	5	1.86
12.2	5174	D13	125	123.2	616/5	8200	55	5	1.58
11.3	5561	D14	140	132.4	3311/25	8200	52	5	1.47

注:启停次数≤60次/小时,服务系数f推荐1.5;  
启停次数≤120次/小时,服务系数f推荐1.75;  
启停次数>120次/小时,服务系数f推荐2以上;

Attention:Operation frequency≤60 times/h,  
service coefficient f is recommended as 1.5;  
Operation frequency≤120 times/h, service  
coefficient f is recommended as 1.75;  
Operation frequency≥120 times/h, service  
coefficient f is recommended as over 2.

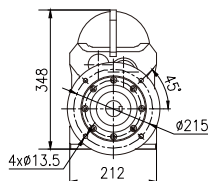
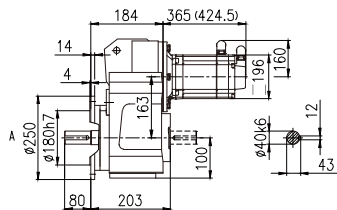
伺服齿轮马达订货号	伺服驱动器订货号			线缆配置订货号		制动电阻订货号
	控制模块	功率模块	操作面板	伺服马达动力线	伺服马达信号线	
Servo Gearmotor Order Number	Servo Drive Order Number			Cable Configuration Order Number		Braking Resistor Order Number
	Control Module	Power Module	Operation Panel	Power Cable of Servo Gearmotor	Signal Cable of Servo Gearmotor	
F206□□-B40-D□□□-MX100M1E15FSO	AX-CM55-□□-PE   PA:PROFINET EA:EtherCAT	AX-PM26-B3C11-□   N:Without filter F:With filter	A1-OP25	A1-H□□-A40-□□□   18:Without brake 16:With brake  B30=3m B50=5m B70=7m C10=10m C15=15m C20=20m C30=30m C40=40m C50=50m	A1-H17-A□□-□□□   10:Without battery box 11:With battery box  B30=3m B50=5m B70=7m C10=10m C15=15m C20=20m  A1-H17-A□□-□□□   12:Without battery box 13:With battery box  C30=30m C40=40m C50=50m	A1-H02-A80-K-C36
F206□□-B45-D□□□-MX100M1E15FSO						
F206□□-B50-D□□□-MX100M1E15FSO						
F206□□-B56-D□□□-MX100M1E15FSO						
F206□□-B63-D□□□-MX100M1E15FSO						
F206□□-B71-D□□□-MX100M1E15FSO						
F206□□-B80-D□□□-MX100M1E15FSO						
F206□□-B90-D□□□-MX100M1E15FSO						
F206□□-C10-D□□□-MX100M1E15FSO						
F206□□-C11-D□□□-MX100M1E15FSO						
F206□□-C13-D□□□-MX100M1E15FSO						
F306□□-C14-D□□□-MX100M1E15FSO						
F207□□-B90-D□□□-MX100M1E15FSO						
F207□□-C10-D□□□-MX100M1E15FSO						
F207□□-C11-D□□□-MX100M1E15FSO						
F207□□-C13-D□□□-MX100M1E15FSO						
F207□□-C14-D□□□-MX100M1E15FSO						
F207□□-C16-D□□□-MX100M1E15FSO						
F207□□-C18-D□□□-MX100M1E15FSO						
F307□□-C20-D□□□-MX100M1E15FSO						
F307□□-C22-D□□□-MX100M1E15FSO						
F307□□-C25-D□□□-MX100M1E15FSO						
F208□□-C22-D□□□-MX100M1E15FSO						
F308□□-C25-D□□□-MX100M1E15FSO						
F308□□-C28-D□□□-MX100M1E15FSO						
F308□□-C32-D□□□-MX100M1E15FSO						
F308□□-C36-D□□□-MX100M1E15FSO						
F308□□-C40-D□□□-MX100M1E15FSO						
F308□□-C45-D□□□-MX100M1E15FSO						
F308□□-C50-D□□□-MX100M1E15FSO						
F309□□-C45-D□□□-MX100M1E15FSO						
F309□□-C50-D□□□-MX100M1E15FSO						
F309□□-C56-D□□□-MX100M1E15FSO						
F309□□-C63-D□□□-MX100M1E15FSO						
F309□□-C71-D□□□-MX100M1E15FSO						
F310□□-C63-D□□□-MX100M1E15FSO						
F310□□-C71-D□□□-MX100M1E15FSO						
F310□□-C80-D□□□-MX100M1E15FSO						
F310□□-C90-D□□□-MX100M1E15FSO						
F310□□-D10-D□□□-MX100M1E15FSO						
F310□□-D11-D□□□-MX100M1E15FSO						
F310□□-D13-D□□□-MX100M1E15FSO						
F310□□-D14-D□□□-MX100M1E15FSO						

**F206/F306-MX100M1E15FS0 Dimensions (mm)**



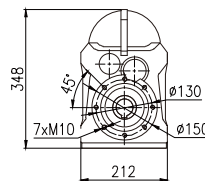
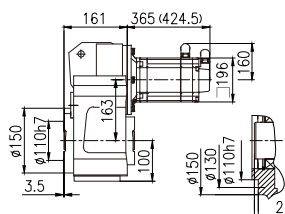
F206HA/F306HA  
F206HC/F306HC

Horizontal foot-mounted(H)

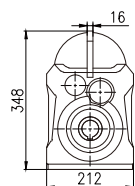
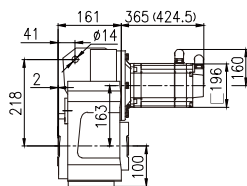


F206FA/F306FA  
F206FC/F306FC

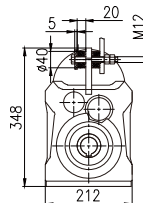
Flange-mounted(F)



Short flange-mounted(S)



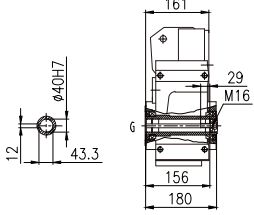
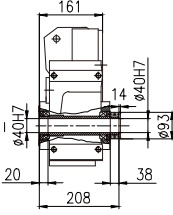
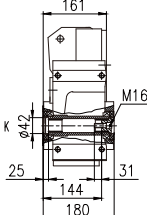
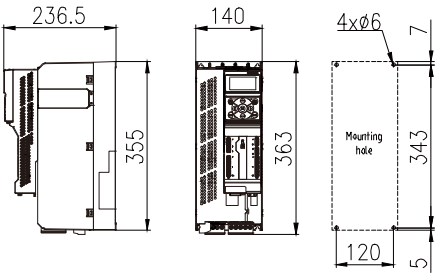
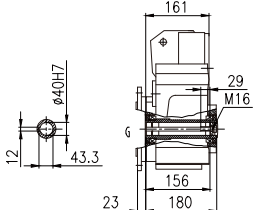
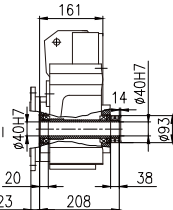
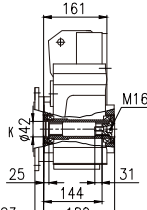
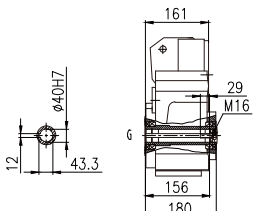
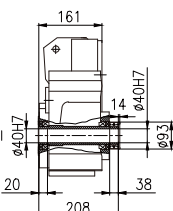
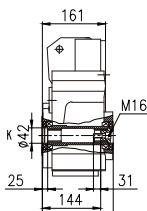
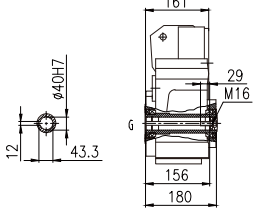
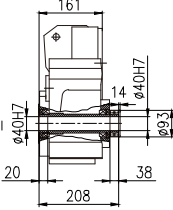
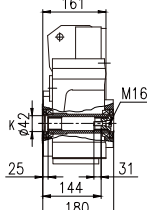
Shaft-mounted(A)



Torque arm-mounted  
with accessory(T)

注:括号内为带制动器的伺服马达长度

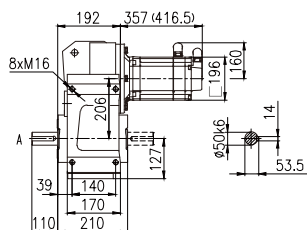
Note: Figures with parentheses are shown for length of servo gearmotor with brake

F206/F306-MX100M1E15FS0 Dimensions (mm)			Corresponding Servo Drive
 <p>F206HG/F306HG</p>	 <p>F206HI/F306HI</p>	 <p>F206HK/F306HK</p>	 <p>Control module: AX-CM55-PA-PE(ProfNet) or AX-CM55-EA-PE(EtherCAT) Power module: AX-PM26-B3C11-N(without filter) or AX-PM26-B3C11-F(with filter) Operation panel: A1-OP25</p>
 <p>F206FG/F306FG</p>	 <p>F206FI/F306FI</p>	 <p>F206FK/F306FK</p>	
 <p>F206SG/F306SG</p>	 <p>F206SI/F306SI</p>	 <p>F206SK/F306SK</p>	
 <p>F206AG/F306AG F206TG/F306TG</p>	 <p>F206AI/F306AI F206TI/F306TI</p>	 <p>F206AK/F306AK F206TK/F306TK</p>	

注:渐开线花键空心轴的花键规格DIN5480:  
m2×z16×α30×D35×9H

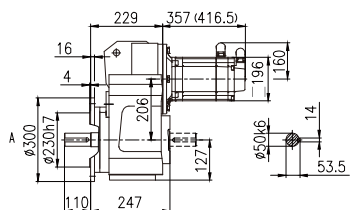
Note: Involute spline size DIN5480:  
m2×z16×α30×D35×9H

**F207/F307-MX100M1E15FS0 Dimensions (mm)**



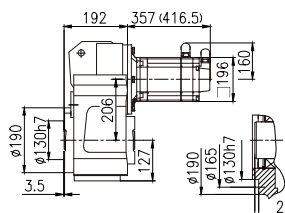
F207HA/F307HA  
F207HC/F307HC

Horizontal foot-mounted(H)

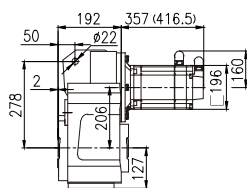


F207FA/F307FA  
F207FC/F307FC

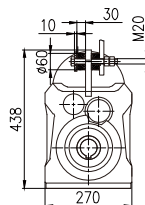
Flange-mounted(F)



Short flange-mounted(S)



Shaft-mounted(A)



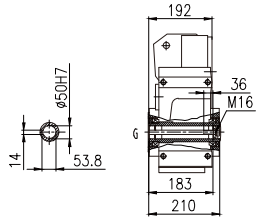
Torque arm-mounted  
with accessory(T)

注:括号内为带制动器的伺服马达长度

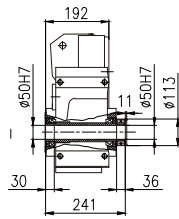
Note: Figures with parentheses are shown for length of servo gearmotor with brake

**F207/F307-MX100M1E15FS0 Dimensions (mm)**

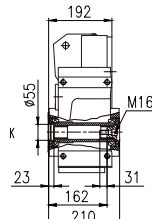
**Corresponding Servo Drive**



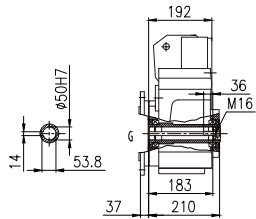
F207HG/F307HG



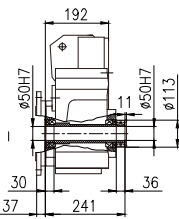
F207HI/F307HI



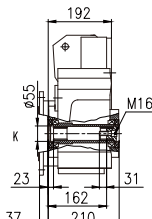
F207HK/F307HK



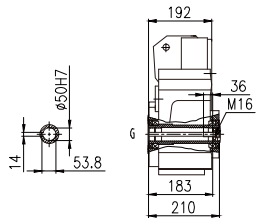
F207FG/F307FG



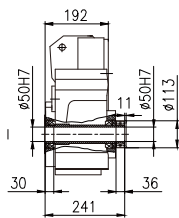
F207FI/F307FI



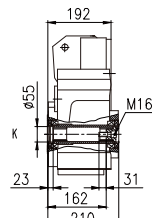
F207FK/F307FK



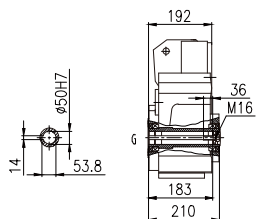
F207SG/F307SG



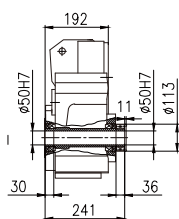
F207SI/F307SI



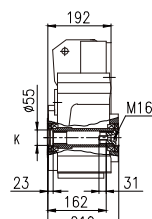
F207SK/F307SK



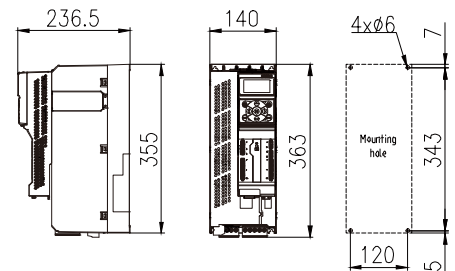
F207AG/F307AG  
F207TG/F307TG



F207AI/F307AI  
F207TI/F307TI



F207AK/F307AK  
F207TK/F307TK



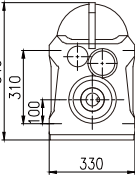
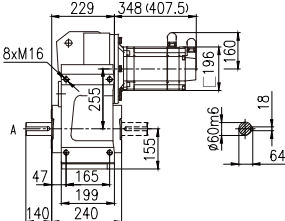
Control module: AX-CM55-PA-PE(ProfNet)  
or AX-CM55-EA-PE(EtherCAT)  
Power module: AX-PM26-B3C11-N(without filter)  
or AX-PM26-B3C11-F(with filter)  
Operation panel: A1-OP25

注:渐开线花键空心轴的花键规格DIN5480:  
m2×z24×α30×D50×9H

Note: Involute spline size DIN5480:  
m2×z24×α30×D50×9H

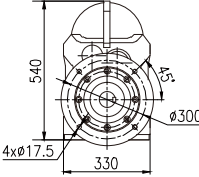
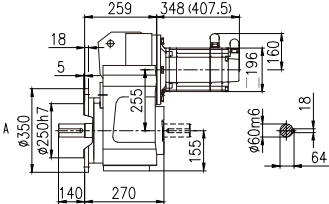


**F208/F308-MX100M1E15FS0 Dimensions (mm)**



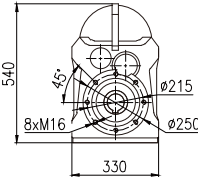
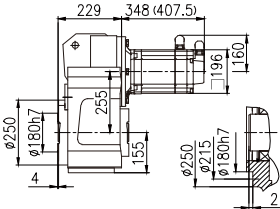
F208HA/F308HA  
F208HC/F308HC

Horizontal foot-mounted(H)

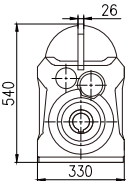
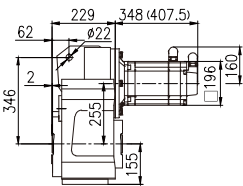


F208FA/F308FA  
F208FC/F308FC

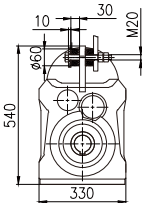
Flange-mounted(F)



Short flange-mounted(S)



Shaft-mounted(A)



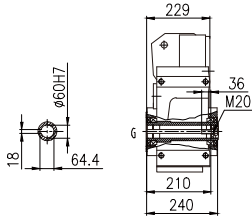
Torque arm-mounted with accessory(T)

注:括号内为带制动器的伺服马达长度

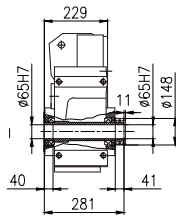
Note: Figures with parentheses are shown for length of servo gearmotor with brake

## F208/F308-MX100M1E15FS0 Dimensions (mm)

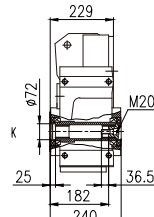
## Corresponding Servo Drive



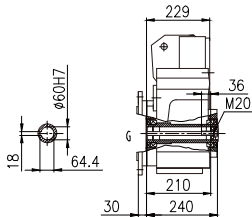
F208HG/F308HG



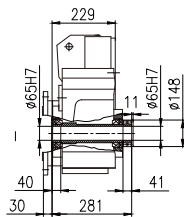
F208HI/F308HI



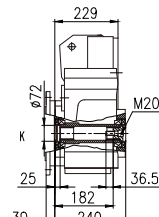
F208HK/F308HK



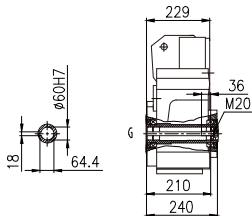
F208FG/F308FG



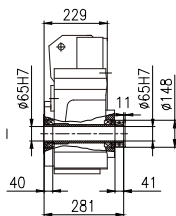
F208FI/F308FI



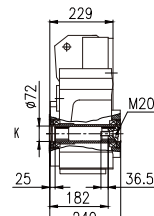
F208FK/F308FK



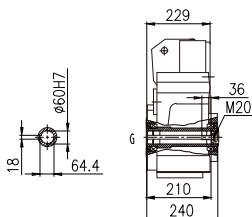
F208SG/F308SG



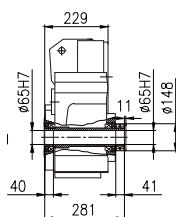
F208SI/F308SI



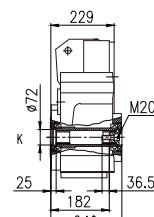
F208SK/F308SK



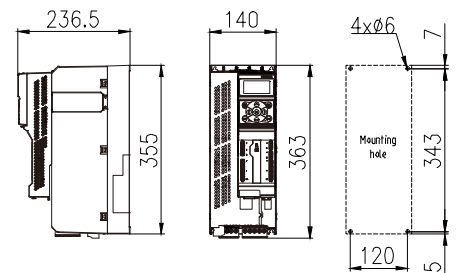
F208AG/F308AG  
F208TG/F308TG



F208AI/F308AI  
F208TI/F308TI



F208AK/F308AK  
F208TK/F308TK

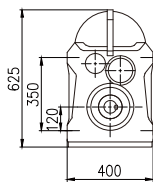
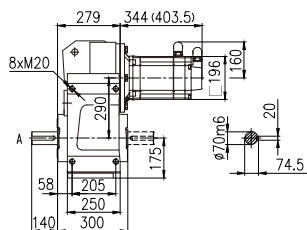


Control module: AX-CM55-PA-PE(ProfNet)  
or AX-CM55-EA-PE(EtherCAT)  
Power module: AX-PM26-B3C11-N(without filter)  
or AX-PM26-B3C11-F(with filter)  
Operation panel: A1-OP25

注:渐开线花键空心轴的花键规格DIN5480:  
m2×z31×α30×D65×9H

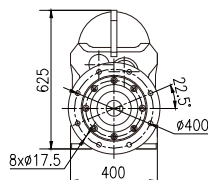
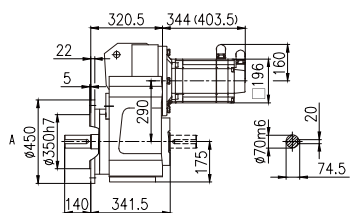
Note: Involute spline size DIN5480:  
m2×z31×α30×D65×9H

**F209/F309-MX100M1E15FS0 Dimensions (mm)**



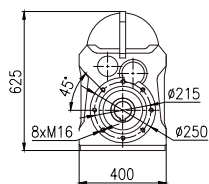
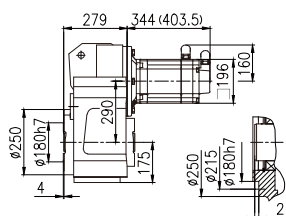
F209HA/F309HA  
F209HC/F309HC

Horizontal foot-mounted(H)

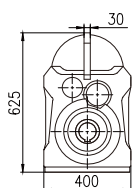
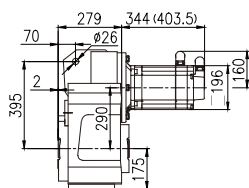


F209FA/F309FA  
F209FC/F309FC

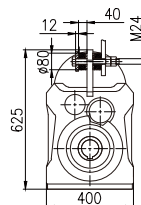
Flange-mounted(F)



Short flange-mounted(S)



Shaft-mounted(A)



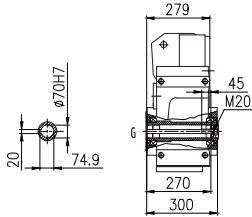
Torque arm-mounted  
with accessory(T)

注:括号内为带制动器的伺服马达长度

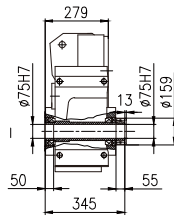
Note: Figures with parentheses are shown for length of servo gearmotor with brake

## F209/F309-MX100M1E15FS0 Dimensions (mm)

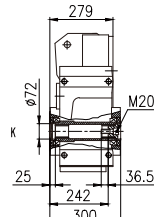
## Corresponding Servo Drive



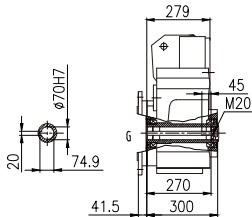
F209HG/F309HG



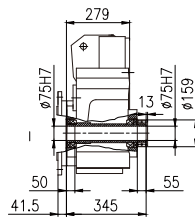
F209HI/F309HI



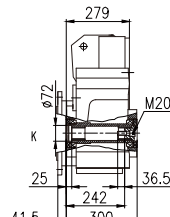
F209HK/F309HK



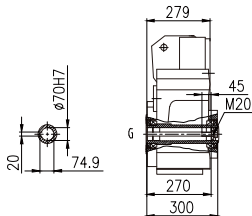
F209FG/F309FG



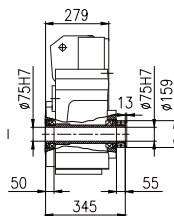
F209FI/F309FI



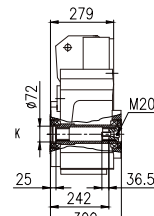
F209FK/F309FK



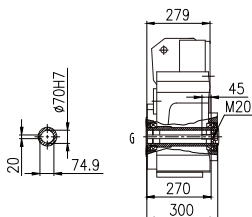
F209SG/F309SG



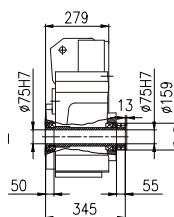
F209SI/F309SI



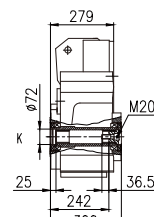
F209SK/F309SK



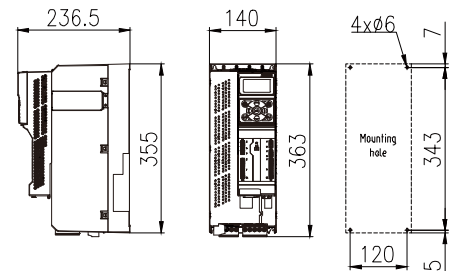
F209AG/F309AG  
F209TG/F309TG



F209AI/F309AI  
F209TI/F309TI



F209AK/F309AK  
F209TK/F309TK

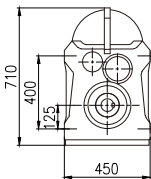
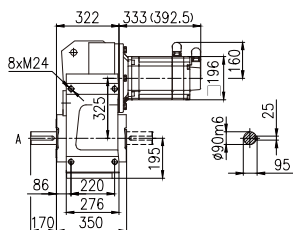


Control module: AX-CM55-PA-PE(ProfNet)  
or AX-CM55-EA-PE(EtherCAT)  
Power module: AX-PM26-B3C11-N(without filter)  
or AX-PM26-B3C11-F(with filter)  
Operation panel: A1-OP25

注:渐开线花键空心轴的花键规格DIN5480:  
m2×z34×α30×D70×9H

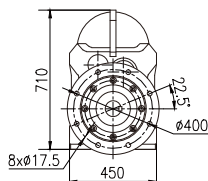
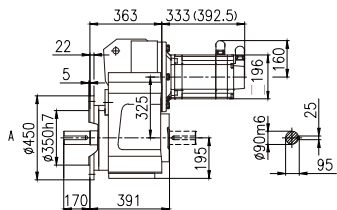
Note: Involute spline size DIN5480:  
m2×z34×α30×D70×9H

**F210/F310-MX100M1E15FS0 Dimensions (mm)**



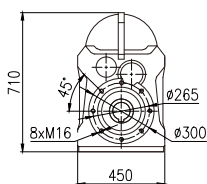
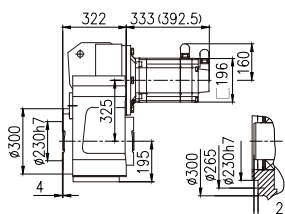
F210HA/F306HA  
F210HC/F306HC

Horizontal foot-mounted(H)

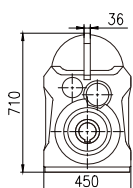
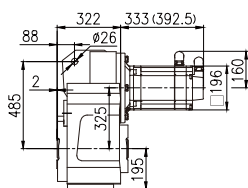


F210FA/F306FA  
F210FC/F306FC

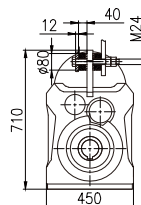
Flange-mounted(F)



Short flange-mounted(S)



Shaft-mounted(A)



Torque arm-mounted  
with accessory(T)

注:括号内为带制动器的伺服马达长度

Note: Figures with parentheses are shown for length of servo gearmotor with brake

F210/F310-MX100M1E15FS0 Dimensions (mm)			Corresponding Servo Drive
<p>F210HG/F310HG</p>	<p>F210HI/F310HI</p>	<p>F210HK/F310HK</p>	<p>Control module: AX-CM55-PA-PE(ProfNet) or AX-CM55-EA-PE(EtherCAT) Power module: AX-PM26-B3C11-N(without filter) or AX-PM26-B3C11-F(with filter) Operation panel: A1-OP25</p>
<p>F210FG/F310FG</p>	<p>F210FI/F310FI</p>	<p>F210FK/F310FK</p>	
<p>F210SG/F310SG</p>	<p>F210SI/F310SI</p>	<p>F210SK/F310SK</p>	
<p>F210AG/F310AG F210TG/F310TG</p>	<p>F210AI/F310AI F210TI/F310TI</p>	<p>F210AK/F310AK F210TK/F310TK</p>	

注:渐开线花键空心轴的花键规格DIN5480:  
m3×z27×α30×D85×9H

Note: Involute spline size DIN5480:  
m3×z27×α30×D85×9H

伺服马达:9.11kW58Nm  
18.4A-1500r/min

Servo motor:9.11kW58Nm  
18.4A-1500r/min

齿轮箱实际 输出转速	齿轮箱实际 输出扭矩	齿轮箱公称 减速比代号	齿轮箱公称 减速比	齿轮箱精确 减速比	齿轮箱 齿数比	齿轮箱额定 输出扭矩	齿轮箱 转动惯量	齿轮箱 背隙	齿轮箱 服务系数
Actual Output Speed of Gearbox	Actual Output Torque of Gearbox	Nominal Ratio Code of Gearbox	Nominal Ratio of Gearbox	Exact Ratio of Gearbox	Gear Ratio of Gearbox	Normal Output Torque of Gearbox	Rotational Inertia of Gearbox	Back Lash of Gearbox	Service Coefficient of Gearbox
$n_{2N}$ (r/min)	T2 (N.m)	Code	$i_N$	$i_{ex}$	$i_z$	$T_{2N}$	$J \cdot 10^{-4}$ (kg.m <sup>2</sup> )	$\Phi$ (°)	f
364	239	B40	4	4.12	1633/396	560	17	10	2.34
320	272	B45	4.5	4.69	568/121	580	13	10	2.13
288	302	B50	5	5.21	1775/341	600	11	10	1.99
278	313	B56	5.6	5.4	437/81	600	14	9	1.92
244	356	B63	6.3	6.14	608/99	660	11	9	1.85
220	395	B71	7.1	6.81	1900/279	660	9.1	9	1.67
188	462	B80	8	7.97	1219/153	700	10.2	7	1.52
231	376	B63	6.3	6.48	4489/693	900	25	9	2.39
211	412	B71	7.1	7.1	1541/217	1000	22	9	2.43
183	476	B80	8	8.2	402/49	1000	19	9	2.1
171	508	B90	9	8.75	5695/651	1000	17	8	1.97
144	603	C10	10	10.4	2491/240	1100	18	6	1.82
133	655	C11	11.2	11.3	611/54	1300	15.7	6	1.98
118	737	C13	12.5	12.7	6298/495	1400	12.9	6	1.9
108	806	C14	14	13.9	2162/155	1400	11.3	6	1.74
93.2	934	C16	16	16.1	564/35	1550	9.2	6	1.66
87.2	998	C18	18	17.2	1598/93	1550	8.4	6	1.55
112	777	C14	14	13.4	3565/266	3100	37	5	3.99
101	864	C16	16	14.9	3680/247	3100	33	5	3.59
88.8	980	C18	18	16.9	7705/456	3100	30	5	3.16
79.4	1096	C20	20	18.9	11155/589	3100	27	5	2.83
69.4	1253	C22	22.4	21.6	2875/133	3200	24	5	2.55
62.2	1398	C25	25	24.1	8470/351	3200	39	8	2.29
54.7	1589	C28	28	27.4	12100/441	3200	32	8	2.01
47.2	1844	C32	31.5	31.8	32065/1008	3200	26	8	1.74
43.2	2013	C36	35.5	34.7	39325/1134	3200	24	8	1.59
49.2	1769	C32	31.5	30.5	49536/1625	4700	57	8	2.66
44.2	1966	C36	35.5	33.9	54782/1615	4700	115	6	2.39
37.4	2326	C40	40	40.1	23177/578	4700	93	6	2.02
33.4	2604	C45	45	44.9	61103/1360	4700	84	6	1.8
31.3	2784	C50	50	48	25284/527	4700	80	6	1.69
27.3	3184	C56	56	54.9	9331/170	4700	65	6	1.48
32.8	2656	C45	45	45.8	556479/12160	8200	116	7	3.09
29.9	2906	C50	50	50.1	1001/20	8200	168	5	2.82
27.6	3149	C56	56	54.3	5159/95	8200	153	5	2.6
23.7	3677	C63	63	63.4	1078/17	8200	126	5	2.23
21.3	4077	C71	71	70.3	5621/80	8200	115	5	2.01
20.1	4321	C80	80	74.5	2310/31	8200	106	5	1.9
17.7	4913	C90	90	84.7	847/10	8200	89	5	1.67
15.8	5498	D10	100	94.8	1232/13	8200	78	5	1.49

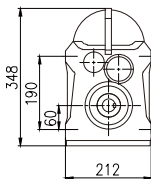
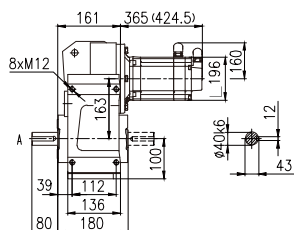
注:启停次数≤60次/小时,服务系数f推荐1.5;  
启停次数≤120次/小时,服务系数f推荐1.75;  
启停次数>120次/小时,服务系数f推荐2以上;

Attention:Operation frequency≤60 times/h,  
service coefficient f is recommended as 1.5;  
Operation frequency≤120 times/h, service  
coefficient f is recommended as 1.75;  
Operation frequency≥120 times/h, service  
coefficient f is recommended as over 2.

伺服齿轮马达订货号	伺服驱动器订货号			线缆配置订货号		制动电阻订货号
	控制模块	功率模块	操作面板	伺服马达动力线	伺服马达信号线	
Servo Gearmotor Order Number	Servo Drive Order Number			Cable Configuration Order Number		Braking Resistor Order Number
	Control Module	Power Module	Operation Panel	Power Cable of Servo Gearmotor	Signal Cable of Servo Gearmotor	
F206□□-B40-D□□□-MX100L1E15FS0	AX-CM55-□□-PE PA:PROFINET EA:EtherCAT	AX-PM26-B3C15-□ N:Without filter F:With filter	A1-OP25	A1-H□□-A40-□□□ 18:Without brake 16:With brake B30=3m B50=5m B70=7m C10=10m C15=15m C20=20m C30=30m C40=40m C50=50m	A1-H17-A□□-□□□ 10:Without battery box 11:With battery box B30=3m B50=5m B70=7m C10=10m C15=15m C20=20m A1-H17-A□□-□□□ 12:Without battery box 13:With battery box C30=30m C40=40m C50=50m	A1-H02-A80-K-C36
F206□□-B45-D□□□-MX100L1E15FS0						
F206□□-B50-D□□□-MX100L1E15FS0						
F206□□-B56-D□□□-MX100L1E15FS0						
F206□□-B63-D□□□-MX100L1E15FS0						
F206□□-B71-D□□□-MX100L1E15FS0						
F206□□-B80-D□□□-MX100L1E15FS0						
F207□□-B63-D□□□-MX100L1E15FS0						
F207□□-B71-D□□□-MX100L1E15FS0						
F207□□-B80-D□□□-MX100L1E15FS0						
F207□□-B90-D□□□-MX100L1E15FS0						
F207□□-C10-D□□□-MX100L1E15FS0						
F207□□-C11-D□□□-MX100L1E15FS0						
F207□□-C13-D□□□-MX100L1E15FS0						
F207□□-C14-D□□□-MX100L1E15FS0						
F207□□-C16-D□□□-MX100L1E15FS0						
F207□□-C18-D□□□-MX100L1E15FS0						
F208□□-C14-D□□□-MX100L1E15FS0						
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F208□□-C18-D□□□-MX100L1E15FS0						
F208□□-C20-D□□□-MX100L1E15FS0						
F208□□-C22-D□□□-MX100L1E15FS0						
F308□□-C25-D□□□-MX100L1E15FS0						
F308□□-C28-D□□□-MX100L1E15FS0						
F308□□-C32-D□□□-MX100L1E15FS0						
F308□□-C36-D□□□-MX100L1E15FS0						
F309□□-C32-D□□□-MX100L1E15FS0						
F309□□-C36-D□□□-MX100L1E15FS0						
F309□□-C40-D□□□-MX100L1E15FS0						
F309□□-C45-D□□□-MX100L1E15FS0						
F309□□-C50-D□□□-MX100L1E15FS0						
F309□□-C56-D□□□-MX100L1E15FS0						
F310□□-C45-D□□□-MX100L1E15FS0						
F310□□-C50-D□□□-MX100L1E15FS0						
F310□□-C56-D□□□-MX100L1E15FS0						
F310□□-C63-D□□□-MX100L1E15FS0						
F310□□-C71-D□□□-MX100L1E15FS0						
F310□□-C80-D□□□-MX100L1E15FS0						
F310□□-C90-D□□□-MX100L1E15FS0						
F310□□-D10-D□□□-MX100L1E15FS0						

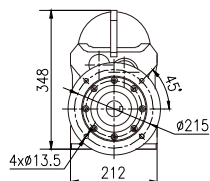
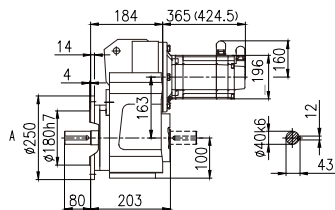


**F206/F306-MX100L1E15FS0 Dimensions (mm)**



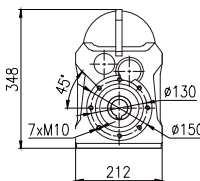
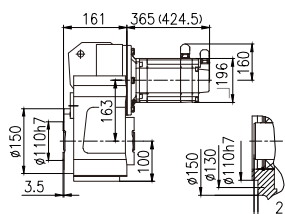
F206HA/F306HA  
F206HC/F306HC

Horizontal foot-mounted(H)

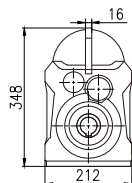
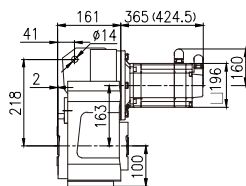


F206FA/F306FA  
F206FC/F306FC

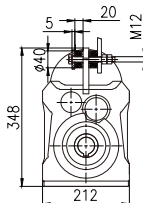
Flange-mounted(F)



Short flange-mounted(S)



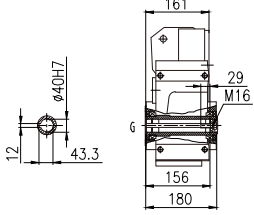
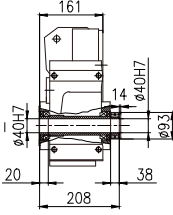
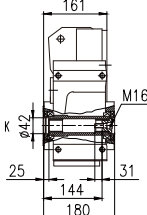
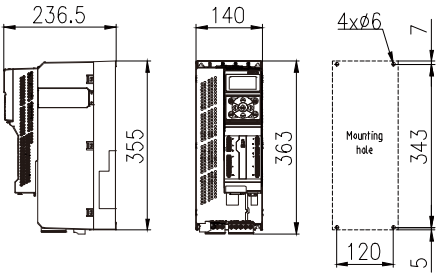
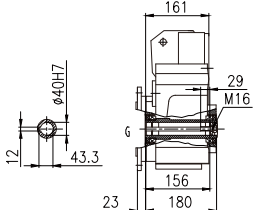
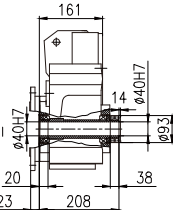
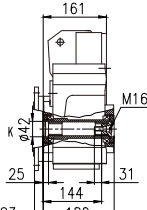
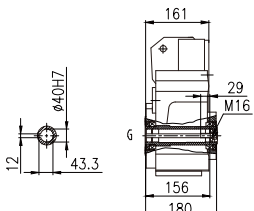
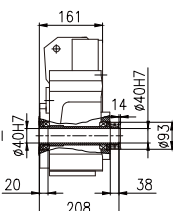
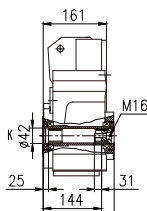
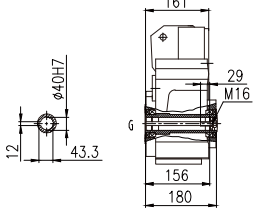
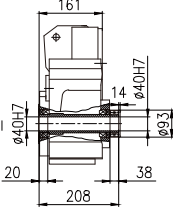
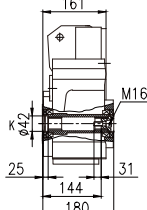
Shaft-mounted(A)



Torque arm-mounted  
with accessory(T)

注:括号内为带制动器的伺服马达长度

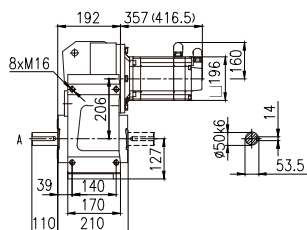
Note: Figures with parentheses are shown for length of servo gearmotor with brake

F206/F306-MX100L1E15FS0 Dimensions (mm)			Corresponding Servo Drive
 <p>F206HG/F306HG</p>	 <p>F206HI/F306HI</p>	 <p>F206HK/F306HK</p>	 <p>Control module: AX-CM55-PA-PE(ProfNet) or AX-CM55-EA-PE(EtherCAT) Power module: AX-PM26-B3C15-N(without filter) or AX-PM26-B3C15-F(with filter) Operation panel: A1-OP25</p>
 <p>F206FG/F306FG</p>	 <p>F206FI/F306FI</p>	 <p>F206FK/F306FK</p>	
 <p>F206SG/F306SG</p>	 <p>F206SI/F306SI</p>	 <p>F206SK/F306SK</p>	
 <p>F206AG/F306AG F206TG/F306TG</p>	 <p>F206AI/F306AI F206TI/F306TI</p>	 <p>F206AK/F306AK F206TK/F306TK</p>	

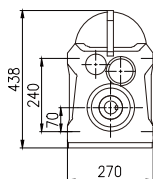
注:渐开线花键空心轴的花键规格DIN5480:  
m2×z16×α30×D35×9H

Note: Involute spline size DIN5480:  
m2×z16×α30×D35×9H

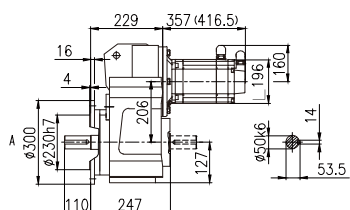
## F207/F307-MX100L1E15FS0 Dimensions (mm)



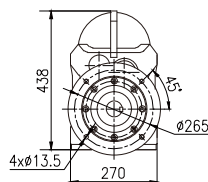
F207HA/F307HA  
F207HC/F307HC



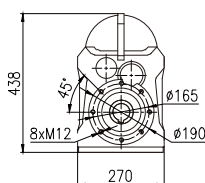
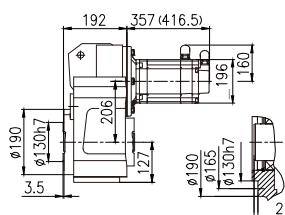
Horizontal foot-mounted(H)



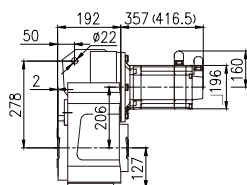
F207FA/F307FA  
F207FC/F307FC



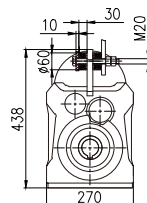
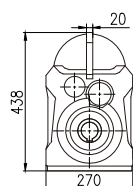
Flange-mounted(F)



Short flange-mounted(S)



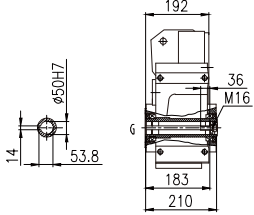
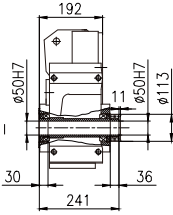
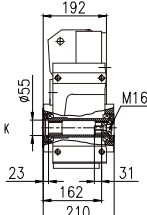
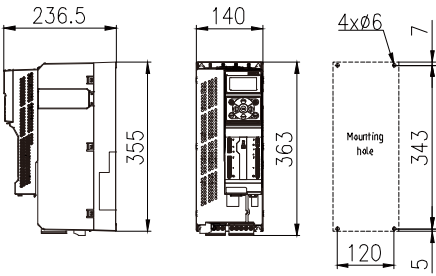
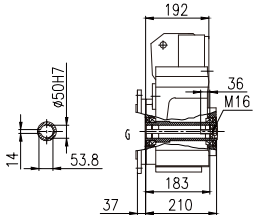
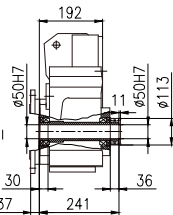
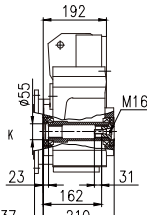
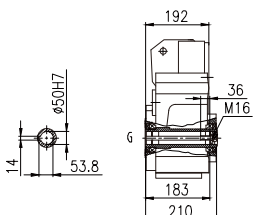
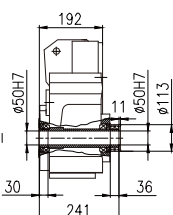
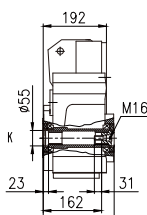
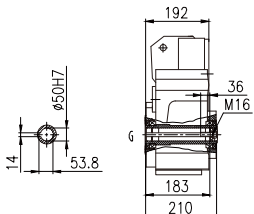
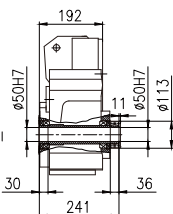
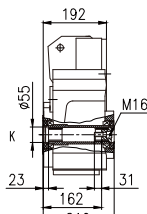
Shaft-mounted(A)



Torque arm-mounted  
with accessory(T)

注:括号内为带制动器的伺服马达长度

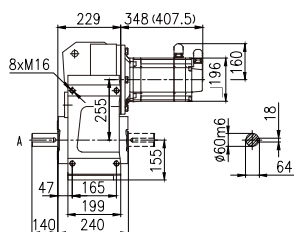
Note: Figures with parentheses are shown for length of servo gearmotor with brake

F207/F307-MX100L1E15FS0 Dimensions (mm)			Corresponding Servo Drive
 <p>F207HG/F307HG</p>	 <p>F207HI/F307HI</p>	 <p>F207HK/F307HK</p>	 <p>Control module: AX-CM55-PA-PE(ProfiNet) or AX-CM55-EA-PE(EtherCAT) Power module: AX-PM26-B3C15-N(without filter) or AX-PM26-B3C15-F(with filter) Operation panel: A1-OP25</p>
 <p>F207FG/F307FG</p>	 <p>F207FI/F307FI</p>	 <p>F207FK/F307FK</p>	
 <p>F207SG/F307SG</p>	 <p>F207SI/F307SI</p>	 <p>F207SK/F307SK</p>	
 <p>F207AG/F307AG F207TG/F307TG</p>	 <p>F207AI/F307AI F207TI/F307TI</p>	 <p>F207AK/F307AK F207TK/F307TK</p>	

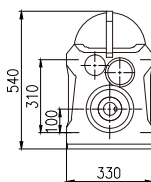
注:渐开线花键空心轴的花键规格DIN5480:  
m2×z24×α30×D50×9H

Note: Involute spline size DIN5480:  
m2×z24×α30×D50×9H

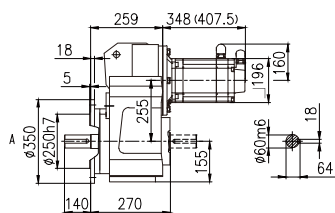
## F208/F308-MX100L1E15FS0 Dimensions (mm)



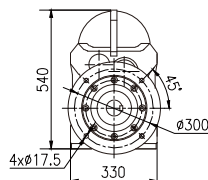
F208HA/F308HA  
F208HC/F308HC



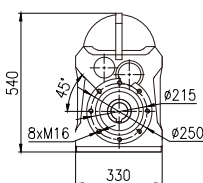
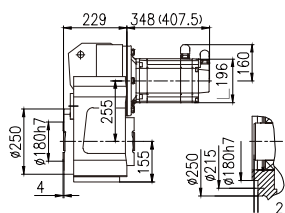
Horizontal foot-mounted(H)



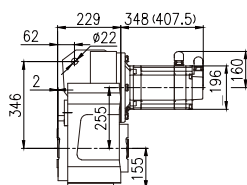
F208FA/F308FA  
F208FC/F308FC



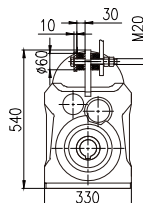
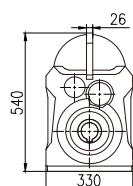
Flange-mounted(F)



Short flange-mounted(S)



Shaft-mounted(A)



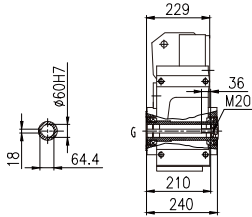
Torque arm-mounted  
with accessory(T)

注:括号内为带制动器的伺服马达长度

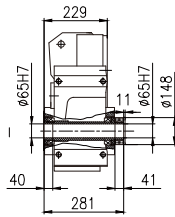
Note: Figures with parentheses are shown for length of servo gearmotor with brake

## F208/F308-MX100L1E15FS0 Dimensions (mm)

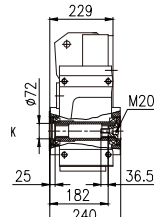
## Corresponding Servo Drive



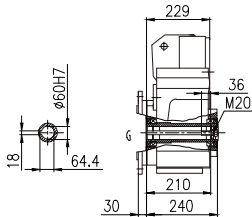
F208HG/F308HG



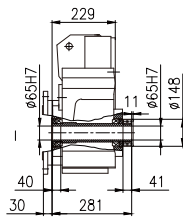
F208HI/F308HI



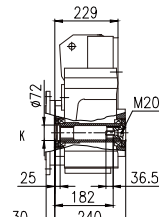
F208HK/F308HK



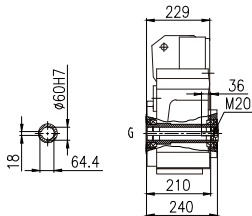
F208FG/F308FG



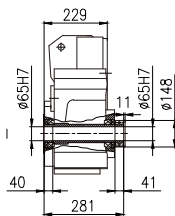
F208FI/F308FI



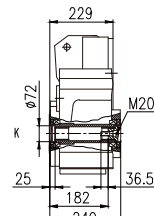
F208FK/F308FK



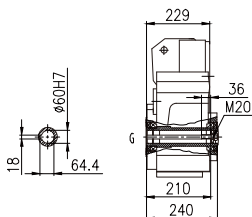
F208SG/F308SG



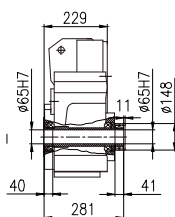
F208SI/F308SI



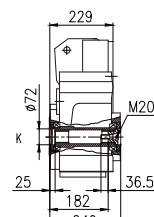
F208SK/F308SK



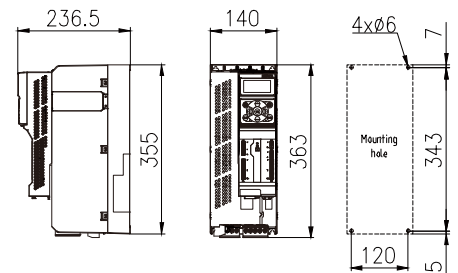
F208AG/F308AG  
F208TG/F308TG



F208AI/F308AI  
F208TI/F308TI



F208AK/F308AK  
F208TK/F308TK

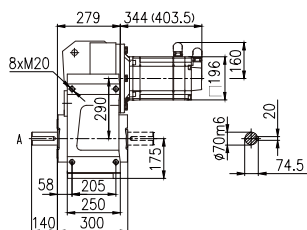


Control module: AX-CM55-PA-PE(ProfNet)  
or AX-CM55-EA-PE(EtherCAT)  
Power module: AX-PM26-B3C15-N(without filter)  
or AX-PM26-B3C15-F(with filter)  
Operation panel: A1-OP25

注:渐开线花键空心轴的花键规格DIN5480:  
m2×z31×α30×D65×9H

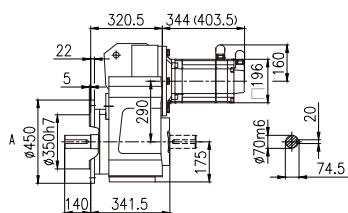
Note: Involute spline size DIN5480:  
m2×z31×α30×D65×9H

## F209/F309-MX100L1E15FS0 Dimensions (mm)



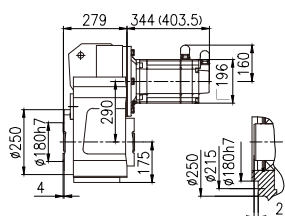
F209HA/F309HA  
F209HC/F309HC

Horizontal foot-mounted(H)

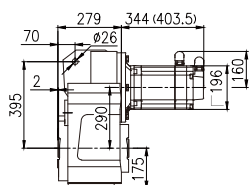


F209FA/F309FA  
F209FC/F309FC

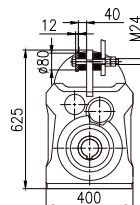
Flange-mounted(F)



Short flange-mounted(S)



Shaft-mounted(A)



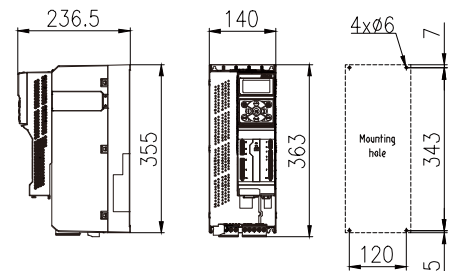
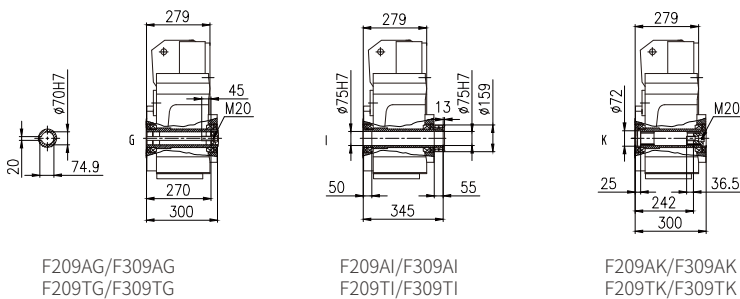
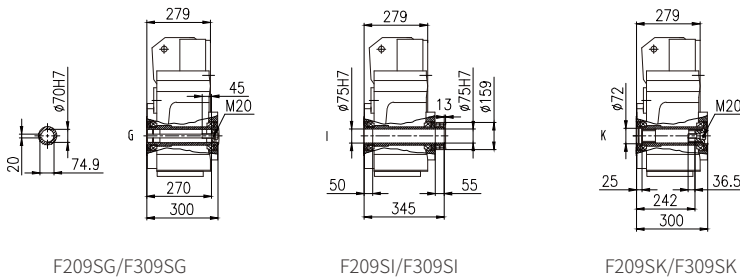
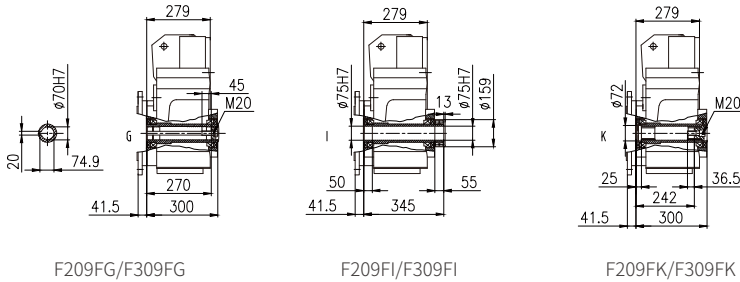
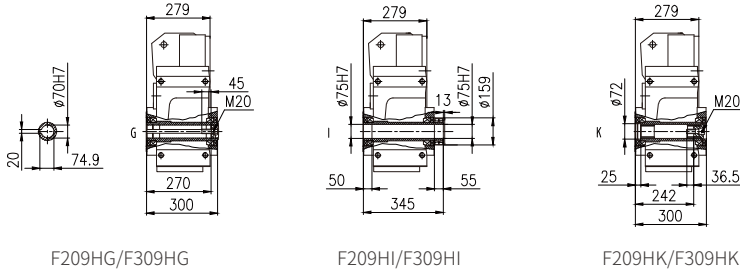
Torque arm-mounted  
with accessory(T)

注:括号内为带制动器的伺服马达长度

Note: Figures with parentheses are shown for length of servo gearmotor with brake

**F209/F309-MX100L1E15FS0 Dimensions (mm)**

**Corresponding Servo Drive**



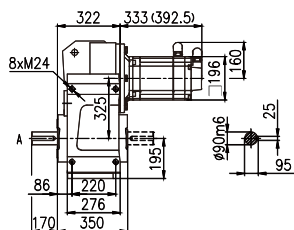
Control module: AX-CM55-PA-PE(ProfNet)  
or AX-CM55-EA-PE(EtherCAT)  
Power module: AX-PM26-B3C15-N(without filter)  
or AX-PM26-B3C15-F(with filter)  
Operation panel: A1-OP25

注:渐开线花键空心轴的花键规格DIN5480:  
m2×z34×α30×D70×9H

Note: Involute spline size DIN5480:  
m2×z34×α30×D70×9H

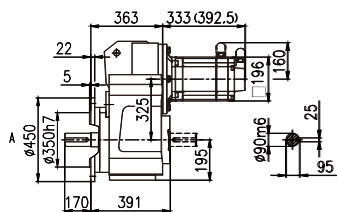


## F210/F310-MX100L1E15FS0 Dimensions (mm)



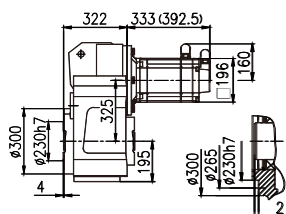
F210HA/F306HA  
F210HC/F306HC

Horizontal foot-mounted(H)

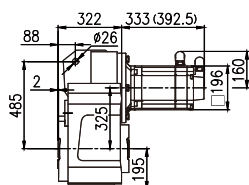


F210FA/F306FA  
F210FC/F306FC

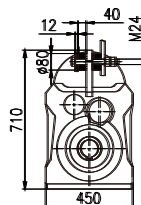
Flange-mounted(F)



Short flange-mounted(S)



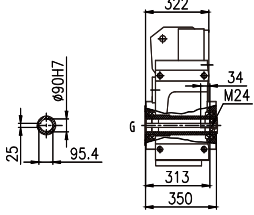
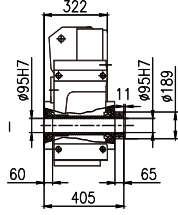
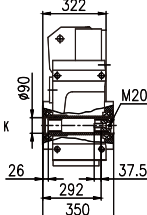
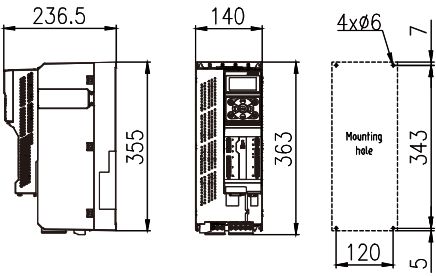
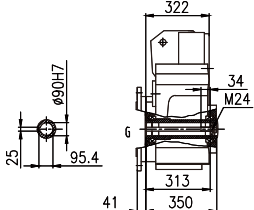
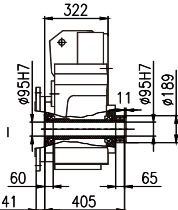
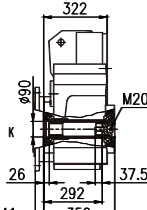
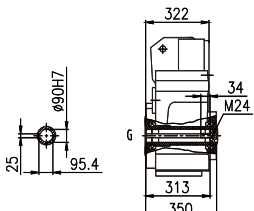
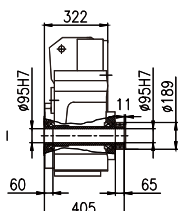
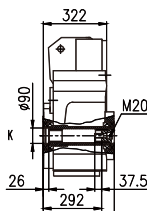
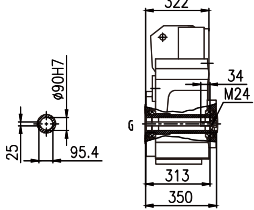
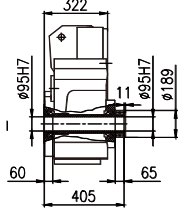
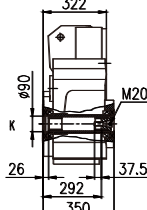
Shaft-mounted(A)



Torque arm-mounted  
with accessory(T)

注:括号内为带制动器的伺服马达长度

Note: Figures with parentheses are shown for length of servo gearmotor with brake

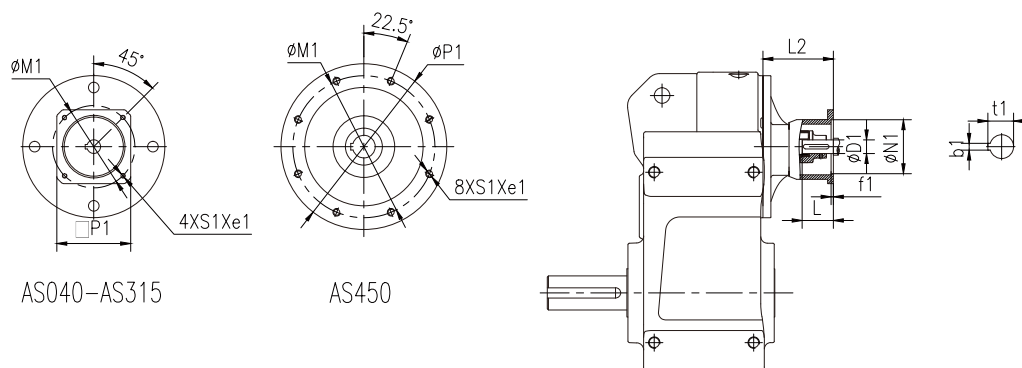
F210/F310-MX100L1E15FS0 Dimensions (mm)			Corresponding Servo Drive
 <p>F210HG/F310HG</p>	 <p>F210HI/F310HI</p>	 <p>F210HK/F310HK</p>	 <p>Control module: AX-CM55-PA-PE(ProfNet) or AX-CM55-EA-PE(EtherCAT) Power module: AX-PM26-B3C15-N(without filter) or AX-PM26-B3C15-F(with filter) Operation panel: A1-OP25</p>
 <p>F210FG/F310FG</p>	 <p>F210FI/F310FI</p>	 <p>F210FK/F310FK</p>	
 <p>F210SG/F310SG</p>	 <p>F210SI/F310SI</p>	 <p>F210SK/F310SK</p>	
 <p>F210AG/F310AG F210TG/F310TG</p>	 <p>F210AI/F310AI F210TI/F310TI</p>	 <p>F210AK/F310AK F210TK/F310TK</p>	

注:渐开线花键空心轴的花键规格DIN5480:  
m3×z27×α30×D85×9H

Note: Involute spline size DIN5480:  
m3×z27×α30×D85×9H

### 4 AS输入法兰尺寸

### 4 AS Input Flange Dimensions

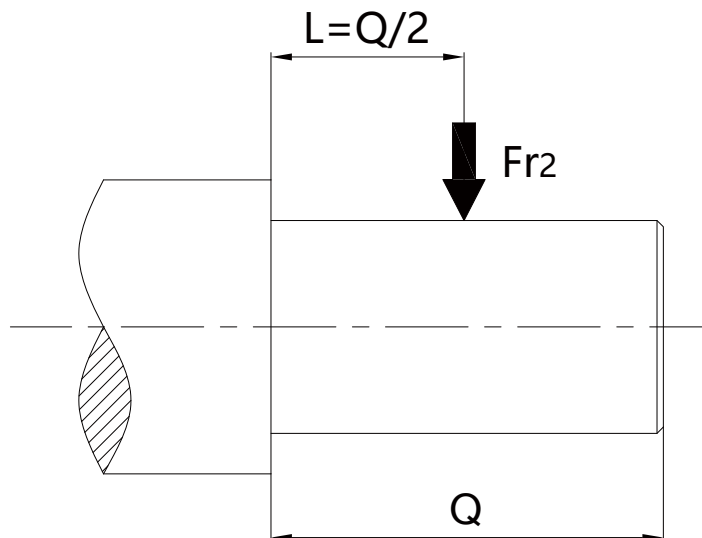


Size	Flange	Range of Ratio	e1	D1	N1	M1	P1	f1	b1	t1	L	S1	L2
F202 F302	AS040	4-112	4	8H7	30H7	46	78	4	2	9	25	M4	70
	AS055	4-112	4	9H7	40H7	63	78	4	3	10.4	25	M5	70
	AS060	4-112	10	14H7	50H7	70	60	4	5	16.3	30	M5	114
	AS070	4-112	10	14H7	60H7	75	70	4	5	16.3	30	M5	114
	AS080	4-112	10	19H7	70H7	90	80	4	6	21.8	35	M6	120
	AS090	4-112	10	19H7	80H7	100	90	4	6	21.8	40	M6	125
	AS100	4-63	14	19H7	95H7	115	100	4	6	21.8	45	M8	122
	AS125	4-63	15	24H7	110H7	130	130	5	8	27	50	M8	133
F203 F303	AS040	4-125	4	8H7	30H7	46	78	4	2	9	25	M4	70
	AS055	4-125	4	9H7	40H7	63	78	4	3	10.4	25	M5	70
	AS060	4-125	10	14H7	50H7	70	60	4	5	16.3	30	M5	114
	AS070	4-125	10	14H7	60H7	75	70	4	5	16.3	30	M5	114
	AS080	4-125	10	19H7	70H7	90	80	4	6	21.8	35	M6	120
	AS090	4-125	10	19H7	80H7	100	90	4	6	21.8	40	M6	125
	AS100	4-71	14	19H7	95H7	115	100	4	6	21.8	45	M8	122
	AS125	4-71	15	24H7	110H7	130	130	5	8	27	50	M8	133
F204 F304	AS060	4.5-160	10	14H7	50H7	70	60	4	5	16.3	30	M5	116
	AS070	4.5-160	10	14H7	60H7	75	70	4	5	16.3	30	M5	116
	AS080	4.5-160	10	19H7	70H7	90	80	4	6	21.8	35	M6	122
	AS090	4.5-160	10	19H7	80H7	100	90	4	6	21.8	40	M6	127
	AS100	4.5-100	14	19H7	95H7	115	100	4	6	21.8	45	M8	124
	AS125	4.5-100	15	24H7	110H7	130	130	5	8	27	50	M8	135
	AS140	4.5-100	15	24H7	110H7	145	130	6.5	8	27	55	M8	135
	AS160	4.5-100	15	32H7	130H7	165	155	5	10	35.3	60	M10	190
F205 F305	AS060	4-140	10	14H7	50H7	70	60	4	5	16.3	30	M5	116
	AS070	4-140	10	14H7	60H7	75	70	4	5	16.3	30	M5	116
	AS080	4-140	10	19H7	70H7	90	80	4	6	21.8	35	M6	122
	AS090	4-140	10	19H7	80H7	100	90	4	6	21.8	40	M6	127
	AS100	4-80	14	19H7	95H7	115	100	4	6	21.8	45	M8	124
	AS125	4-80	15	24H7	110H7	130	130	5	8	27	50	M8	135
	AS140	4-80	15	24H7	110H7	145	130	6.5	8	27	55	M8	135
	AS160	4-80	15	32H7	130H7	165	155	5	10	35.3	60	M10	190
F206 F306	AS060	4-200	10	14H7	50H7	70	60	4	5	16.3	30	M5	116
	AS070	4-200	10	14H7	60H7	75	70	4	5	16.3	30	M5	116
	AS080	4-200	10	19H7	70H7	90	80	4	6	21.8	35	M6	122
	AS090	4-200	10	19H7	80H7	100	90	4	6	21.8	40	M6	127
	AS100	4-112	14	19H7	95H7	115	100	4	6	21.8	45	M8	124
	AS125	4-112	15	24H7	110H7	130	130	5	8	27	50	M8	135
	AS140	4-112	15	24H7	110H7	145	130	6.5	8	27	55	M8	135
	AS160	4-112	15	32H7	130H7	165	155	5	10	35.3	60	M10	190
	AS180	4-35.5	16	35H7	114.3H7	200	180	7	10	38.3	80	M12	220
AS190	4-35.5	18	38H7	180H7	215	190	6	10	41.3	80	M12	220	

Size	Flange	Range of Ratio	e1	D1	N1	M1	P1	f1	b1	t1	L	S1	L2
F207 F307	AS060	20-250	10	14H7	50H7	70	60	4	5	16.3	30	M5	108
	AS070	20-250	10	14H7	60H7	75	70	4	5	16.3	30	M5	108
	AS080	20-250	10	19H7	70H7	90	80	4	6	21.8	35	M6	114
	AS090	20-250	10	19H7	80H7	100	90	4	6	21.8	40	M6	119
	AS100	4-160	14	19H7	95H7	115	100	4	6	21.8	45	M8	116
	AS125	4-160	15	24H7	110H7	130	130	5	8	27	50	M8	127
	AS140	4-160	15	24H7	110H7	145	130	6.5	8	27	55	M8	127
	AS160	4-160	15	32H7	130H7	165	155	5	10	35.3	60	M10	180
	AS180	4-71	16	35H7	114.3H7	200	180	7	10	38.3	80	M12	210
AS190	4-71	18	38H7	180H7	215	190	6	10	41.3	80	M12	210	
AS240	4-71	28	38H7	230H7	265	240	5	10	41.3	80	M12	210	
F208 F308	AS070	112-250	10	14H7	60H7	75	70	4	5	16.3	30	M5	105
	AS080	112-250	10	19H7	70H7	90	80	4	6	21.8	35	M6	111
	AS090	112-250	10	19H7	80H7	100	90	4	6	21.8	40	M6	116
	AS100	4-200	14	19H7	95H7	115	100	4	6	21.8	45	M8	113
	AS125	4-200	15	24H7	110H7	130	130	5	8	27	50	M8	124
	AS140	4-200	15	24H7	110H7	145	130	6.5	8	27	55	M8	124
	AS160	4-200	15	32H7	130H7	165	155	5	10	35.3	60	M10	170
	AS180	4-100	16	35H7	114.3H7	200	180	7	10	38.3	80	M12	203
	AS190	4-100	18	38H7	180H7	215	190	6	10	41.3	80	M12	203
AS240	4-100	28	38H7	230H7	265	240	5	10	41.3	80	M12	203	
AS260	4-100	40	48H7	250H7	300	260	6	14	51.8	110	M16	272	
F209 F309	AS160	4-250	15	32H7	130H7	165	155	5	10	35.3	60	M10	171
	AS180	4-140	16	35H7	114.3H7	200	180	7	10	38.3	80	M12	202
	AS190	4-140	18	38H7	180H7	215	190	6	10	41.3	80	M12	202
	AS240	4-140	28	38H7	230H7	265	240	5	10	41.3	80	M12	202
	AS260	4-140	40	48H7	250H7	300	260	6	14	51.8	110	M16	271
	AS315	4-100	40	55H7	300H7	350	315	6	16	59.3	110	M16	327
F210 F310	AS160	16-224	15	32H7	130H7	165	155	5	10	35.3	60	M10	161
	AS180	5-140	16	35H7	114.3H7	200	180	7	10	38.3	80	M12	189
	AS190	5-140	18	38H7	180H7	215	190	6	10	41.3	80	M12	189
	AS240	5-140	28	38H7	230H7	265	240	5	10	41.3	80	M12	189
	AS260	5-140	40	48H7	250H7	300	260	6	14	51.8	110	M16	258
	AS315	5-112	40	55H7	300H7	350	315	6	16	59.3	110	M16	327
F212 F312	AS180	5-180	16	35H7	114.3H7	200	180	7	10	38.3	80	M12	175
	AS190	5-180	18	38H7	180H7	215	190	6	10	41.3	80	M12	175
	AS240	5-180	28	38H7	230H7	265	240	5	10	41.3	80	M12	175
	AS260	5-180	40	48H7	250H7	300	260	6	14	51.8	110	M16	244
	AS315	5-140	40	55H7	300H7	350	315	6	16	59.3	110	M16	316
	AS450	5-112	30	55H7	350H7	400	450	6	16	59.3	140	M16	343
F215 F315	AS260	14-180	40	48H7	250H7	300	260	6	14	51.8	110	M16	234
	AS315	6.3-125	40	55H7	300H7	350	315	6	16	59.3	110	M16	298
	AS450	6.3-100	30	55H7	350H7	400	450	6	16	59.3	140	M16	325

**5 允许的输出轴  
径向力Fr2(N)**

**5 Permissible Radial  
Force of Output  
Shaft Fr2(N)**



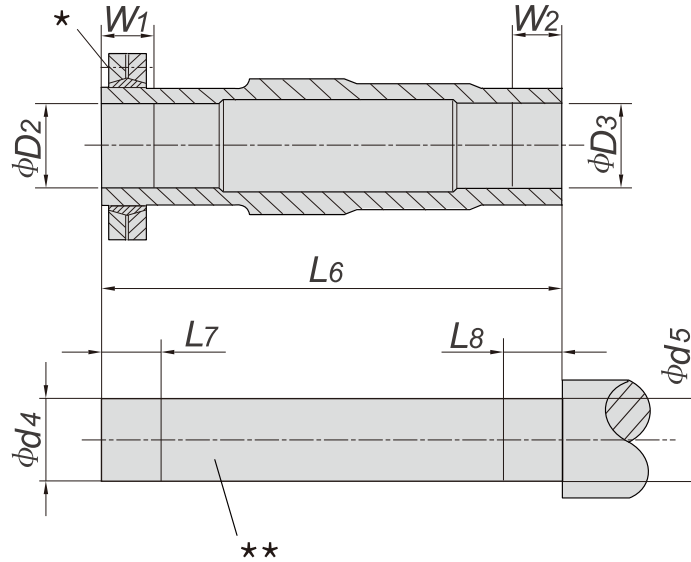
$n_{2N}$ (r/min)	Fr2 (N)								
	F202 F302	F203 F303	F204 F304	F205 F305	F206 F306	F207 F307	F208 F308	F209 F309	F210 F310
315~425	1281	1827	2079	3986	7641	9140	9210	9380	/
280~315	1334	1908	2115	4104	7965	9320	9480	9540	14000
224~280	1378	1971	2151	4220	8280	9510	9770	10080	15300
200~224	1423	2043	2223	4396	8694	9700	10060	10080	18990
180~200	1448	2115	2277	4549	9090	9890	10360	10530	20880
160~180	1478	2115	2646	5095	9810	10090	10670	11520	21600
140~160	1548	2214	2925	5478	10260	10290	11000	12240	22500
125~140	1623	2322	3096	5357	9270	10500	11320	12240	20610
112~125	1695	2475	3366	5586	9270	10710	11660	12250	21870
100~112	1745	2547	3555	5741	9270	10920	12010	13000	22050
90~100	1892	2763	3888	6003	9270	11140	12370	13760	22700
80~90	1961	2862	4005	6093	9270	11370	12740	14590	24300
71~80	2090	3051	4293	6308	9270	11600	13130	15460	25290
63~71	2157	3150	4527	6478	9270	11820	13520	16400	27000
56~63	2410	3519	4923	6755	9270	12060	13930	17380	28980
45~56	2503	3654	5247	6974	9270	12300	14340	18420	30330
40~45	2644	3861	5328	7028	9270	12550	14770	19520	34470
35.5~40	2644	3861	5328	7028	9270	12800	15220	23400	35550
31.5~35.5	2644	3861	5328	7028	9270	13050	15670	21240	37800
28~31.5	2644	3861	5328	7028	9270	13320	16150	23220	39150
25~28	2644	3861	5328	7028	9270	13580	16630	23220	41820
22.4~25	2644	3861	5328	7028	9270	13850	17130	26100	43020
≤22.4	2644	3861	5328	7028	9270	14130	17640	26910	44820

**6 被驱动轴  
推荐尺寸 (mm)**

**6 Recommended  
Dimensions for Driven  
Equipment Shaft (mm)**

**6.1 锁紧盘**

**6.1 Shrink Disk**



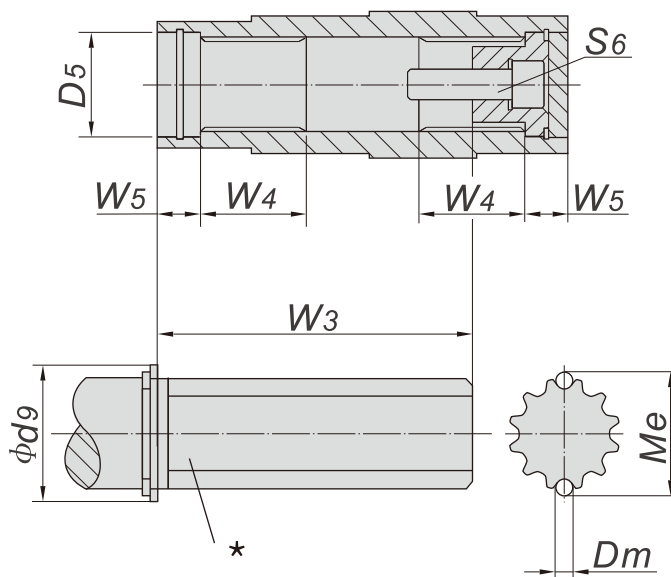
Type	D2	D3	d4	d5	L6	L7	L8	W1	W2	Shrink Disk Type	Shrink Disk Bolt	Shrink Disk Weight (kg)
F202 F302	25H7	25H7	25h6	25h6	128	35	35	30	30	SP2-36×72	M6	0.5
F203 F303	30H7	30H7	30h6	30h6	146	35	25	30	20	SP2-44×80	M6	0.6
F204 F304	35H7	35H7	35h6	35h6	177	35	25	30	20	SP2-44×80	M6	0.6
F205 F305	40H7	40H7	40h6	40h6	195	40	30	35	25	SP2-50×90	M6	0.8
F206 F306	40H7	40H7	40h6	40h6	208	43	25	38	20	SP2-50×90	M6	0.8
F207 F307	50H7	50H7	50h6	50h6	241	41	35	36	30	SP2-62×110	M6	1.3
F208 F308	65H7	65H7	65h6	65h6	281	46	45	41	40	SP2-80×145	M8	1.9
F209 F309	75H7	75H7	75h6	75h6	345	60	55	55	50	SP2-90×155	M8	3.3
F210 F310	95H7	95H7	95h6	95h6	405	75	70	65	60	SP2-110×185	M10	5.9

\* 螺栓  
\*\* 被驱动轴

\* Bolt  
\*\* Driven Equipment Shaft

6.2 花键轴

6.2 Involute Spline



Size	D5	Dm	d9	Me	W3	W4	W5	S6
F202 F302	32	2.25	36	20.28	72	25	18	M10×30
F203 F303	37	2.25	42	25.28	85	25	18	M10×30
F204 F304	37	3.5	42	27.71	115	32	18	M10×30
F205 F305	42	3.5	47	27.71	125	42	25	M16×40
F206 F306	42	3.5	47	27.71	140	42	25	M16×40
F207 F307	55	3.5	62	42.62	160	52	23	M16×50
F208 F308	72	3.5	82	57.65	180	62	25	M20×60
F209 F309	72	3.5	90	62.66	240	72	25	M20×60
F210 F310	90	5.25	105	73.92	290	89	26	M20×60

★ 被驱动轴

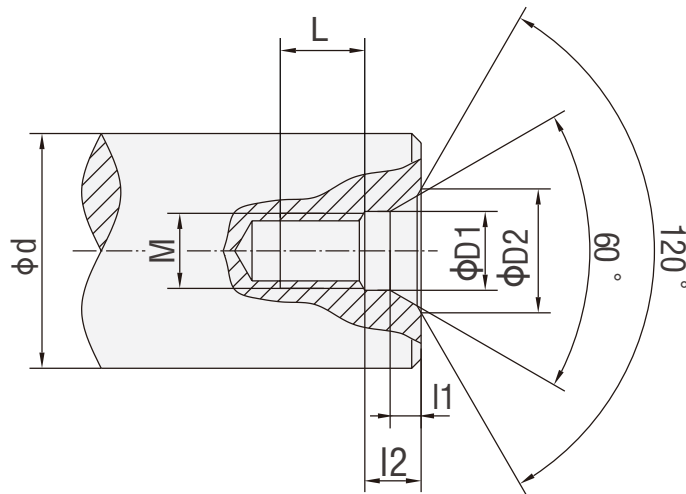
★ Driven Equipment Shaft

**7 轴端中心孔尺寸 (mm)**

**7 Shaft End Centre Hole (mm)**

轴端C型螺纹中心孔

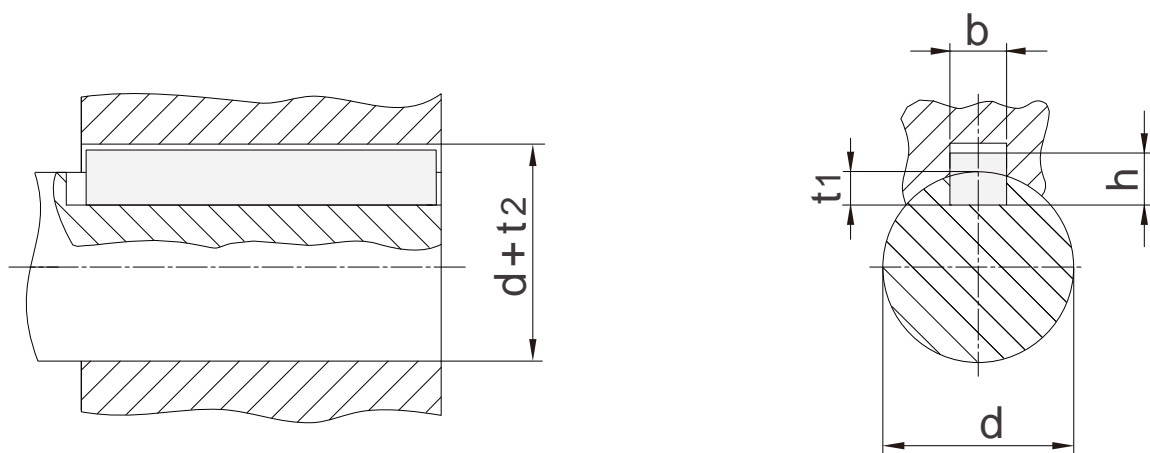
Type C screw central hole in shaft end



d	M	L	12	11	D1	D2
7 < d ≤ 10	M3	10	2.6	1.8	3.2	5.8
10 < d ≤ 13	M4	10	3.2	2.1	4.3	7.4
13 < d ≤ 16	M5	10	4	2.4	5.3	8.8
16 < d ≤ 21	M6	12	5	2.8	6.4	10.5
21 < d ≤ 24	M8	12	6	3.3	8.4	13.2
24 < d ≤ 30	M10	15	7.5	3.8	10.5	16.3
30 < d ≤ 38	M12	20	9.5	4.4	13	19.8
38 < d ≤ 50	M16	25	12	5.2	17	25.3
50 < d ≤ 85	M20	30	15	6.4	21	31.3
85 < d ≤ 130	M24	35	18	8	25	38
130 < d ≤ 225	M30	45	18	11	31	48



**8 平键与键槽的尺寸 (mm) 8 Dimension of Parallel Key and Keyway (mm)**



d	b	h	t <sub>1</sub>	d + t <sub>2</sub>
8 < d ≤ 10	3	3	1.8	d + 1.4
10 < d ≤ 12	4	4	2.5	d + 1.8
12 < d ≤ 17	5	5	3	d + 2.3
17 < d ≤ 22	6	6	3.5	d + 2.8
22 < d ≤ 30	8	7	4	d + 3.3
30 < d ≤ 38	10	8	5	d + 3.3
38 < d ≤ 44	12	8	5	d + 3.3
44 < d ≤ 50	14	9	5.5	d + 3.8
50 < d ≤ 58	16	10	6	d + 4.3
58 < d ≤ 65	18	11	7	d + 4.4
65 < d ≤ 75	20	12	7.5	d + 4.9
75 < d ≤ 85	22	14	9	d + 5.4
85 < d ≤ 95	25	14	9	d + 5.4
95 < d ≤ 110	28	16	10	d + 6.4
110 < d ≤ 130	32	18	11	d + 7.4
130 < d ≤ 150	36	20	12	d + 8.4
150 < d ≤ 170	40	22	13	d + 9.4
170 < d ≤ 200	45	25	15	d + 10.4
200 < d ≤ 230	50	28	17	d + 11.4
230 < d ≤ 260	56	32	20	d + 12.4

## 9 可选附件和指定配置

## 9 Accessories and Specific Configuration

### 9.1 补偿油箱

### 9.1 Oil Compensating Tank

齿轮马达在以下工况时建议采用补偿油箱浸油润滑。

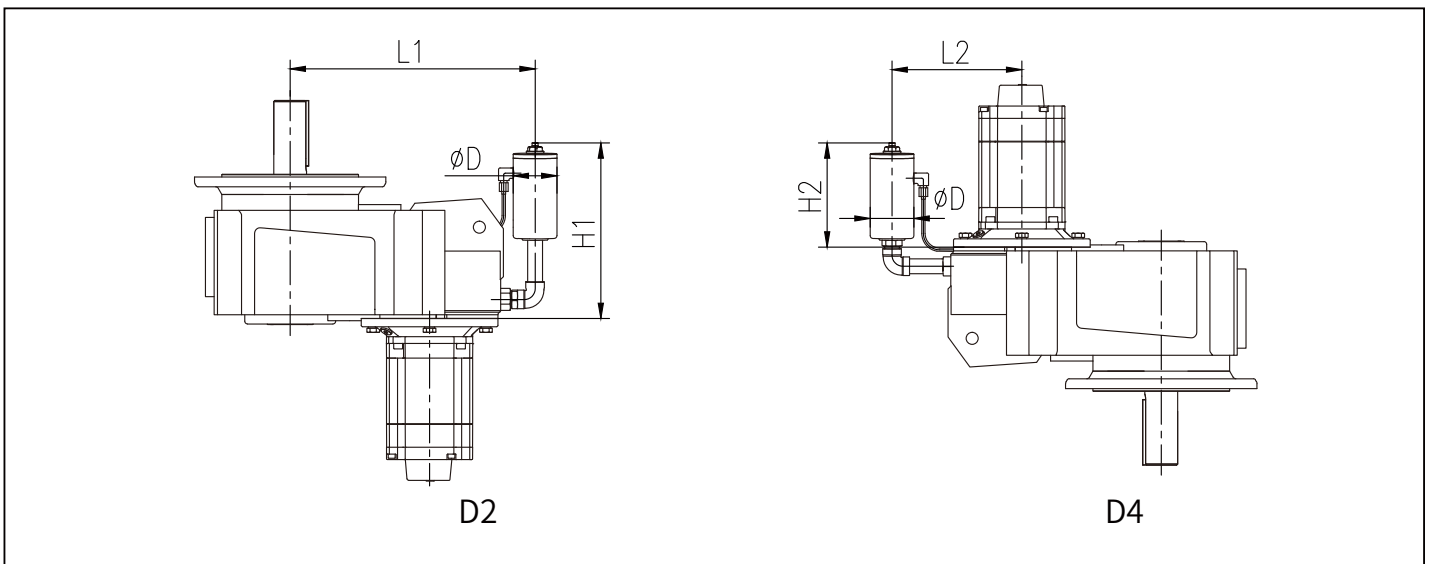
Oil compensating tank lubrication is recommended for gearmotor under working conditions below.

1. 在安装方位为D2时，为保证输出轴承润滑，部分型号出厂标配补偿油箱；

1. In term of D2 mounting position, sectional types of ex-factory have been applied with oil compensating tank for lubrication of output bearings;

2. 安装方位为D4时，出厂标配补偿油箱。

2. Oil compensating tank is standard accessory for the type with D4 mounting position.



Type	D	L1	H1	L2	H2
F202 F302	42	225	220	275	110
F203 F303	42	240	215	290	115
F204 F304	42	280	220	325	110
F205 F305	42	280	220	330	115
F206 F306	42	310	220	360	110
F207 F307	80	400	370	505	200
F208 F308	80	480	375	585	200
F209 F309	80	550	385	655	185
F210 F310	120	670	475	760	280

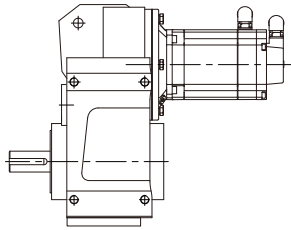
### 10 润滑油 (L)

### 10 Oil (L)

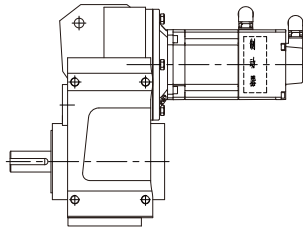
Mounting position Size	D1	D2	D3	D4	D5	D6
F202 F302	0.7	0.9	1	1	0.9	0.8
F203 F303	1.2	1.4	1.3	1.5	1.3	1.1
F204 F304	1.8	2.1	2.2	2.3	2.2	1.9
F205 F305	2.1	2.8	2.5	2.9	2.4	2.3
F206 F306	3.1	3.9	4.1	4.2	3.9	3.3
F207 F307	5.8	7.8	7.6	8.6	7.2	6.8
F208 F308	10.9	14.8	13.7	14.7	13.2	11.3
F209 F309	20	28	27	26	24	21
F210 F310	25	37	35	36	32	27

**11 重量表 (Kg)**

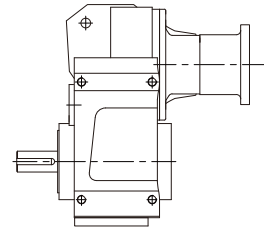
**11 Weight (Kg)**



F202~F210  
F302~F310 + Servo motor (without brake)



F202~F210  
F302~F310 + Servo motor (with brake)



F202~F215  
F302~F315 + AS input flange

齿轮箱重量表 (Kg)

Weight of Gearbox (kg)

规格 Size	F202 F302	F203 F303	F204 F304	F205 F305	F206 F306	F207 F307
重量 Weight	12	16	20	26	36	60
规格 Size	F208 F308	F209 F309	F210 F310	F212 F312	F215 F315	
重量 Weight	107	189	270	454	780	

直联MX伺服马达重量表 (kg)

Weight of MX Directly-connected Servo Motor (kg)

机座号 Size	028S	036S	036M	048S	048M	063M		080M		100M
额定功率 (kW) Normal Power (kW)	0.28	0.47	0.75	1	1.5	2.05	2.76	3.98	5.03	6.6
不带制动器 Without Brake	1.8	2.7	3.9	4.5	7	10.9	10.9	21.9	21.9	42.4
带制动器 With Brake	2	3.1	4.3	5.2	7.7	11.8	11.8	23.9	23.9	47.2

AS输入法兰重量表 (Kg)

Weight of AS Input Flange (kg)

规格 Size	AS040	AS055	AS060	AS070	AS080	AS090	AS100	AS125
重量 Weight	3	3	4	5	5	5	6	7
规格 Size	AS140	AS160	AS180	AS190	AS240	AS260	AS315	AS450
重量 Weight	6	13	24	25	30	70	95	112

## 伺服驱动器

### 12 驱动器概述

AX精准系列伺服驱动器是专为高性能伺服应用设计的模块化伺服驱动器，搭配CM55/CM51控制模块，和适配不同功率伺服马达的功率模块及一些可选附件组成，灵活的模块化为使用者的系统设计及应用提供更丰富的选择。

AX伺服驱动器配合MX永磁同步伺服马达，可以做到精准的位置、速度、扭矩控制，AX伺服驱动器也可以驱动博能异步马达，实现精确的异步伺服控制。

AX精准系列伺服驱动器由三部分组成：



**操作面板(OP25)或上位机调试软件BonengDrivesoft**：操作面板或上位机调试软件可以为用户提供方便快捷的参数设定方法，支持汉字显示，更简单易懂的信息反馈，及高级示波器检测诊断功能。

**控制模块(CM51/CM55)**：控制模块为用户提供丰富的控制接口，输入输出端子，模拟信号，及通讯等，且通过多种方式可对所接入的马达进行控制和监视。

**功率模块(PM26)**：书本型功率模块功率范围从0.75kW-132kW，支持多种控制模块，使马达调速变得简单且灵活，且包含了完备的驱动器保护功能。

## Servo Drive

### 12 Servo drive overview

AX precision series servo drive is modular designed for high-performance servo applications, consisting of a CM55/CM51 control module, a power module adapted to different power motors, and some optional accessories. AX series servo drive provides users with richer options for system design and application though its flexible modularization feature. AX servo drive can achieve accurate position, speed, and torque control when combined with the MX permanent magnet synchronous servo motor, as well as drive the Boneng asynchronous motor to achieve accurate asynchronous servo control.

The AX servo drive consist of three parts:

**Operation panel ( OP25 ) or desktop software BongDrivesoft**: operation panel and desktop software can provide users with convenient and efficient methods for parameters configuration. The OP25 and BonengDrivesoft can display in English and Chinese, and the BonengDrivesoft can also provide users with advanced functions such as oscilloscope, condition monitoring and diagnosis, and etc.

**Control module ( CM51/CM55 )**: The control module contains a wealth of control interfaces, input and output terminals, analog signals, and can support communication bus control, which control the motor connected through the Power module.

**Power module ( PM26 )**: The power module has a power range from 0.75kW to 132kW, supports a variety of modules, which makes spindle speed adjustment easy and flexible. In addition, complete driver and motor protection functions are available for the power module.

### 13 驱动器整机安装尺寸图

### 13 Drive full machine mounting size

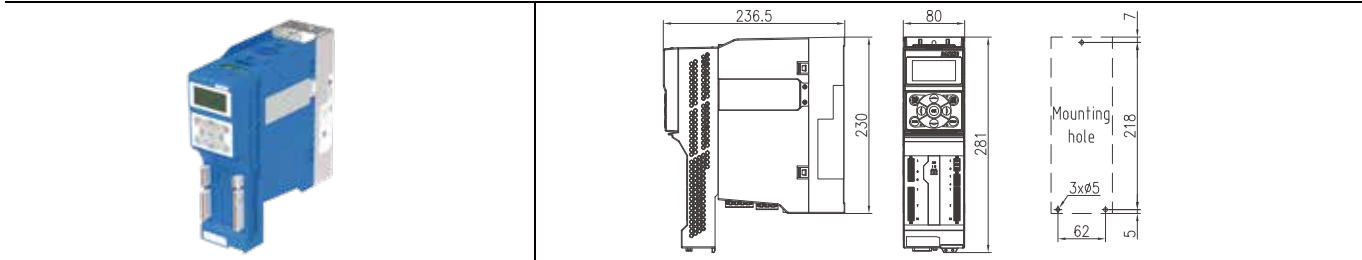
#### 13.1 OP25+CM55+PM26

#### 13.1 OP25+CM55+PM26

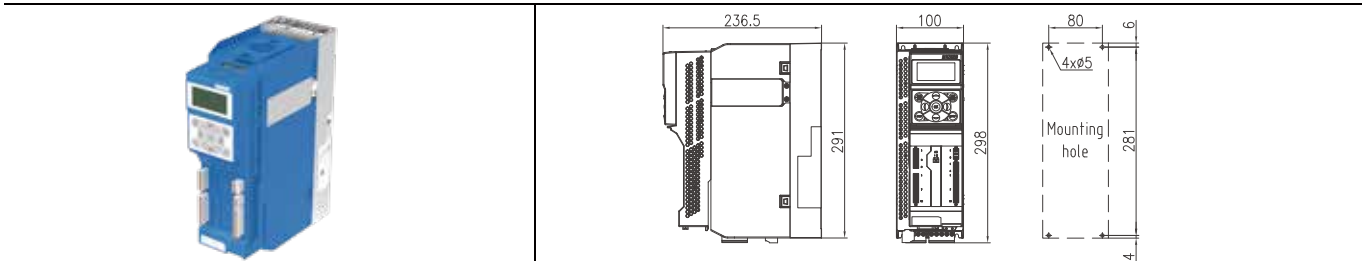
OP25+CM55+PM26组合的整机外形图及安装尺寸图，B1-B6功率范围，单位：mm

The overall appearance and installation dimension of OP25+CM55+PM26 combination, B1-B6 power range, with unit: mm.

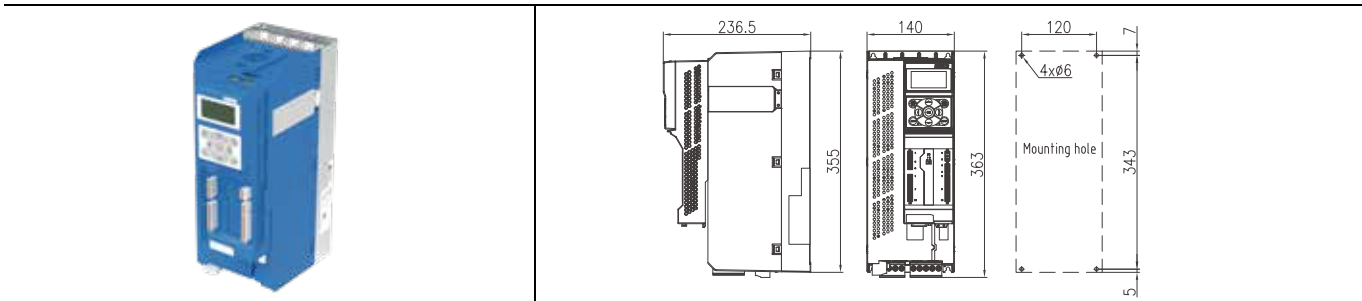
B1(0.75kW-3kW):



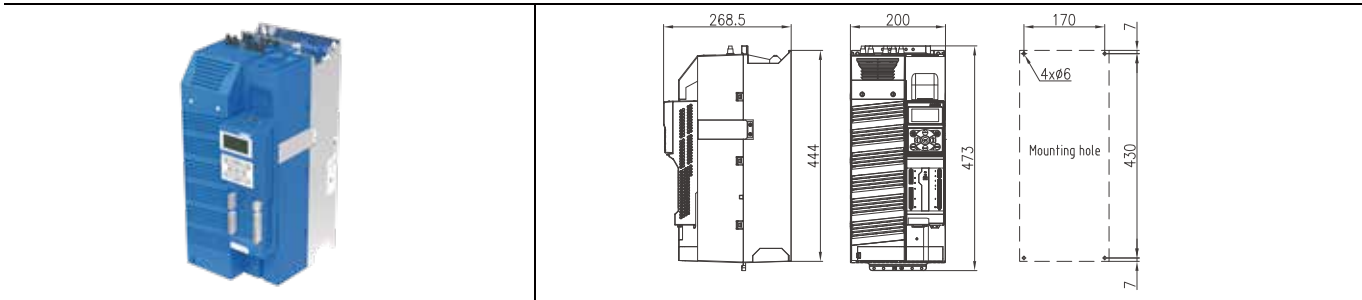
B2(4kW-7.5kW)



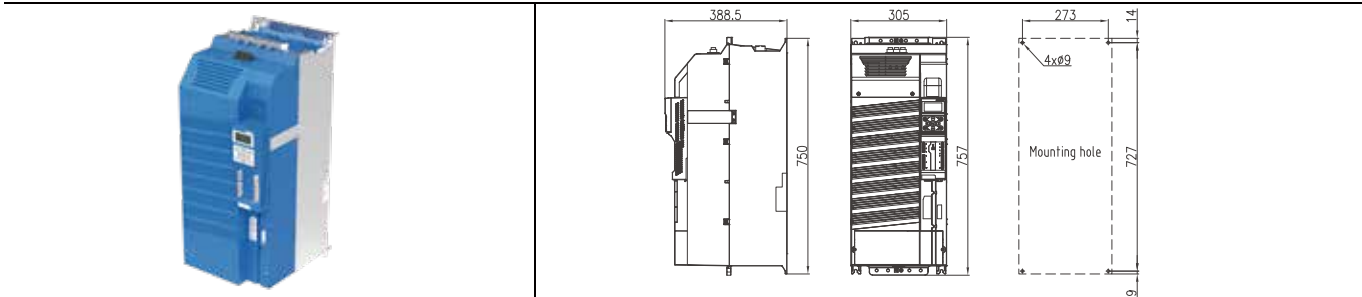
B3(11kW-15kW)



B4(18.5kW-37kW)



B6(45kW-132kW)



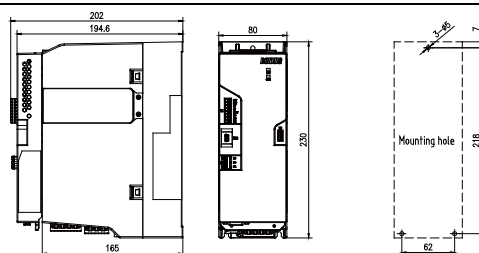
## 13.2 CM51+PM26

CM51+PM26组合的整机外形图及安装尺寸图，B1-B6功率范围，单位：mm

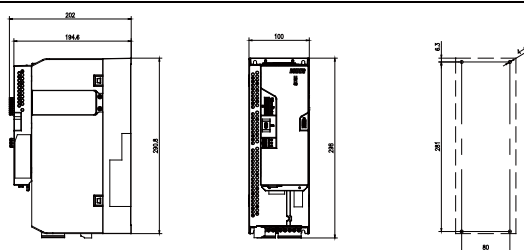
## 13.2 CM51+PM26

The overall appearance and installation dimension of CM51+PM26 combination, B1-B6 power range, with unit: mm

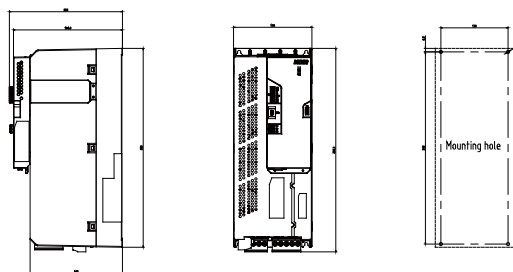
B1(0.75kW-3kW):



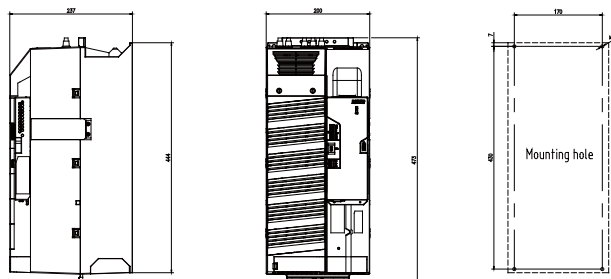
B2(4kW-7.5kW)



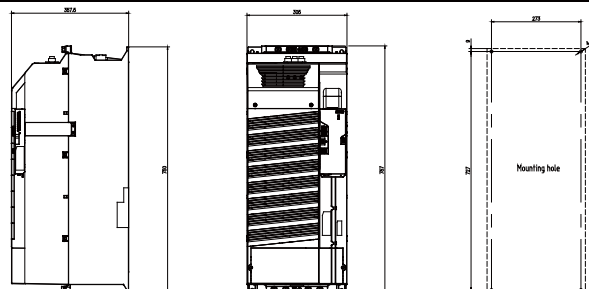
B3(11kW-15kW)



B4(18.5kW-37kW)



B6(45kW-132kW)



## 14 驱动器控制模块

### 14.1 控制模块CM55

#### 14.1.1 概述

CM55模块是专为总线型伺服系统应用而设计的控制模块，支持EtherCAT及PROFINET通讯，PROFINET通讯支持RT及IRT应用，除了标准的同步伺服电机为还支持异步伺服定位。



CM55控制模块

## 14 Control module

### 14.1 Control module CM55

#### 14.1.1 Information

The CM55 module is a control module designed specifically for bus type servo system applications, supporting EtherCAT and PROFINET communication. PROFINET communication supports RT and IRT applications, and in addition to standard synchronous servo motors, it also supports asynchronous servo positioning.

CM55 control module

#### 14.1.2 控制模块型号表示方法

博能精准系列伺服驱动器

控制模块

通讯协议

EA=EtherCAT及博能自定义通讯DriveLink  
PA=PROFINET及博能自定义通讯DriveLink

编码器接口

PE=增量式/绝对值编码器

控制模块订货号

#### 14.1.2 Designation rules and nameplate for control module

Boneng AX-series precision servo drive

Control module

Communication protocol

EA=EtherCAT and Boneng defined DriveLink.  
PA=PROFINET and Boneng defined DriveLink

Encoder Interface

PE=photoelectric incremental /absolute encoder

AX - CM55 - PA - PE

Control module order number

型号 Model	接口类型描述	Interface type description
AX-CM55-EA-PE	支持EtherCAT及博能自定义DriveLink通讯, 增量/绝对式光电编码器	Support EtherCAT and Boneng defined DriveLink, incremental /absoluteoptical encoder.
AX-CM55-PA-PE	支持PROFINET及博能自定义DriveLink通讯, 增量/绝对式光电编码器	Support PROFINET and Boneng defined DriveLink, incremental /absoluteoptical encoder.



### 14.1.3 控制模块技术参数

### 14.1.3 Technical date

功能	Functions		
总线接口	Bus interface	AX-CM55-PA-PE	AX-CM55-PA-PE
		AX-CM55-EA-PE	AX-CM55-EA-PE
工作电源	Power supply	功率模块供电	By power module
		外部端子供电	By external terminals
输出电源	Power output	+24V输出	+24V output
		+10V输出	+10V output
		DB15接口编码器电源	DB15 encoder power supply
		RJ45接口编码器电源	RJ45 encoder power supply
数字量输入	Digital input	11个 (DI0_DI10)	11 (DI0_DI10)
数字量输出	Digital output	1个继电器 (DO0)	1 relay (DO0)
数字量输入/输出	Bidirectional digital input and output	8个 (DIO20_DIO27)	8 (DIO20_DIO27)
模拟量输入	Analog input	1个 (AI0)	1 (AI0)
温度传感器	Temperature sensor	2个	2
编码器信号输入	Encoder interface	ABZ	ABZ
		BISS-C	BISS-C
		RS485	RS485
USB接口	USB interface	1个	1
指示灯	Status LEDs	2个双色指示灯	2two-color LEDs
		3个单色指示灯	3single-color LEDs
键盘接口	Keyboard interface	支持OP25	OP25 supported
工作温度	Use ambient temperature	-20°C … +50°C	-20°C … +50°C
存储温度	Storage temperature	-40°C … +70°C	-40°C … +70°C
相对空气湿度	Environment humidity	<95%	<95%
污染	Pollution	符合IEC 61800-5-1	IEC 61800-5-1
电磁兼容性	Electromagnetic compatibility	符合IEC 61800-3	IEC 61800-3

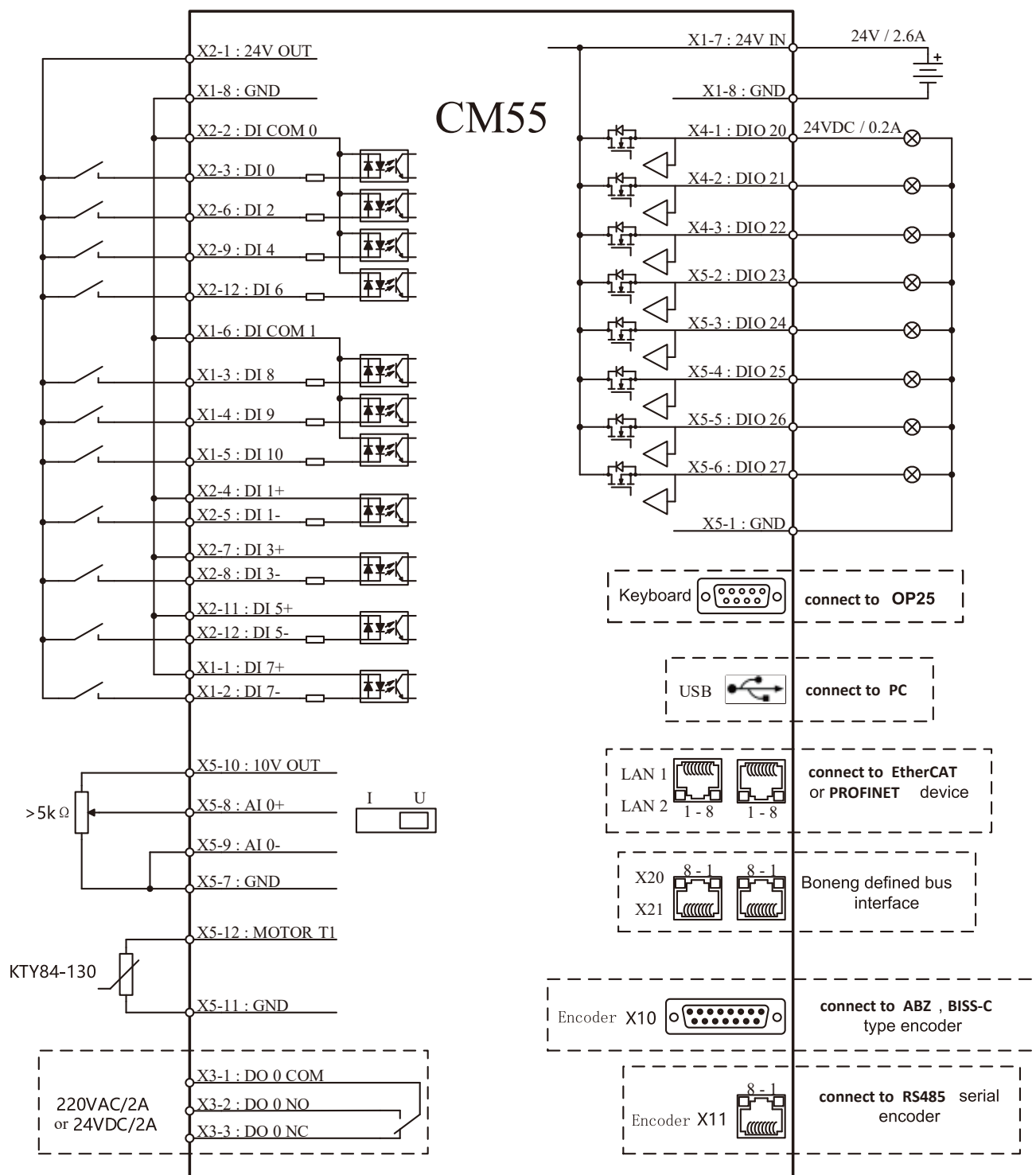
技术数据	Technical data
<ul style="list-style-type: none"> <li>支持PROFINET、DriveLink</li> <li>RJ45接口</li> </ul>	<ul style="list-style-type: none"> <li>PROFINET, DriveLink bus</li> <li>RJ45 interface</li> </ul>
<ul style="list-style-type: none"> <li>支持EtherCAT、DriveLink</li> <li>RJ45接口</li> </ul>	<ul style="list-style-type: none"> <li>EtherCAT, DriveLink bus</li> <li>RJ45 interface</li> </ul>
<ul style="list-style-type: none"> <li>数字量输入/输出端子作为输出使用时需外接24V电源</li> </ul>	<ul style="list-style-type: none"> <li>DI/DO terminal as an output,an external 24v power supply is required</li> </ul>
<ul style="list-style-type: none"> <li>电压范围: DC 20.8 ... 28.8V</li> <li>最大电流: 2.6A</li> </ul>	<ul style="list-style-type: none"> <li>Voltage range: DC 20.8~28.8V</li> <li>Maximum current: 2.6A</li> </ul>
<ul style="list-style-type: none"> <li>电压范围: DC 18V ... 26.8V</li> <li>最大电流: 200mA</li> </ul>	<ul style="list-style-type: none"> <li>Voltage range:DC 18V~26.8V</li> <li>Maximum current: 200mA</li> </ul>
<ul style="list-style-type: none"> <li>电压范围: DC 9.5V ... 10.5V</li> <li>最大电流: 40mA</li> </ul>	<ul style="list-style-type: none"> <li>Voltage range:DC 9.5V~10.5V</li> <li>Maximum current: 40mA</li> </ul>
<ul style="list-style-type: none"> <li>电压: DC 5V或DC 24V</li> <li>最大电流: 350mA</li> </ul>	<ul style="list-style-type: none"> <li>Voltage: DC 5V or DC 24V</li> <li>Maximum current: 350mA</li> </ul>
<ul style="list-style-type: none"> <li>电压: DC 5V</li> <li>最大电流: 200mA</li> </ul>	<ul style="list-style-type: none"> <li>Voltage: DC 5V</li> <li>Maximum current: 200mA</li> </ul>
<ul style="list-style-type: none"> <li>DI1、DI3、DI5、DI7为非公共端子类型</li> <li>DI0、DI2、DI4、DI6公共端子DICO M0</li> <li>DI8、DI9、DI10公共端子DICO M1</li> <li>电气隔离</li> <li>支持Source和Sink模式</li> <li>电压: DC 24V、AC 36V</li> <li>"1"信号电压: &gt;11V</li> <li>"0"信号电压: &lt;5V</li> <li>24V典型电流: 4mA</li> <li>响应时间: 6ms (含软件滤波)</li> </ul>	<ul style="list-style-type: none"> <li>Differential inputs: DI1、DI3、DI5、DI7</li> <li>Single inputs: DI0、DI2、DI4、DI6 share DICO M0</li> <li>Single inputs: DI8、DI9、DI10 share DICO M1</li> <li>Electrical isolation</li> <li>Support Source and Sink mode</li> <li>Voltage: DC 24V, AC 36V</li> <li>Level"1"voltage: &gt; 11V</li> <li>Level"0"voltage: &lt;5V</li> <li>24V typical current: 4mA</li> <li>Response time: 6ms(Including software filter)</li> </ul>
<ul style="list-style-type: none"> <li>电压: DC 24V、AC 220V</li> <li>连续电流: 2A</li> <li>切换电流: 2A</li> <li>触点类型: 1常开1常闭</li> </ul>	<ul style="list-style-type: none"> <li>Voltage: DC 24V、AC 220V</li> <li>Continous current: 2A</li> <li>Switching current: 2A</li> <li>Contact type: 1 nomally open and 1 close</li> </ul>
<ul style="list-style-type: none"> <li>电压: 最大DC 30V</li> <li>电流: 输出最大200mA, 24V输入典型4mA</li> <li>频率: 最大100Hz</li> <li>输入"1"信号电压: &gt;15V</li> <li>输入"0"信号电压: &lt;5V</li> <li>非电气隔离</li> <li>外部供电端子需接24V</li> </ul>	<ul style="list-style-type: none"> <li>Voltage: DC 30V maximum</li> <li>Current: output 200mA maximum, 24V input typical 4mA</li> <li>Frequency:100Hz maximum</li> <li>Input level"1" voltage: &gt;15V</li> <li>Input level"0"voltage: &lt;5V</li> <li>Non-electrically isolated</li> <li>24V power supply is needed for DIO</li> </ul>
<ul style="list-style-type: none"> <li>差分输入</li> <li>拨码开关切换电压和电流模式</li> <li>电压型支持-10V ... +10V、0V ... 10V</li> <li>电流型支持0mA ... 20mA、4mA ... 20mA</li> <li>电流型内阻250Ω</li> <li>响应时间: 2ms (含软件滤波)</li> <li>精度: ±1%</li> </ul>	<ul style="list-style-type: none"> <li>Differential input</li> <li>Dip switch to choose voltage and current mode</li> <li>Voltage range(voltage mode): -10V~+10V、0V~10V</li> <li>Current range(current mode): 0mA~20mA、4mA~20mA</li> <li>Internal resistance in current mode: 250Ω</li> <li>Response time: 2ms(including software filter)</li> <li>Precision:±1%</li> </ul>
<ul style="list-style-type: none"> <li>分别位于端子X5和X11</li> <li>支持KTY84-130、PTC</li> <li>支持24V的单端信号、5V和24V的差分信号</li> </ul>	<ul style="list-style-type: none"> <li>Respectively at the X5and X11</li> <li>Support KTY84-130、PTC</li> <li>24V single-ended signal.5V and 24V differential signal</li> </ul>
<ul style="list-style-type: none"> <li>输入频率: 最大250kHz</li> <li>断线侦测: 仅支持差分类型</li> </ul>	<ul style="list-style-type: none"> <li>Input frequency:250kHz maximum</li> <li>Disconnection detection: only support differential mode</li> </ul>
<ul style="list-style-type: none"> <li>最大长度: 5V差分类型100m</li> <li>24V开集极类型50m</li> <li>24V推挽类型100m</li> <li>24V差分类型300m</li> </ul>	<ul style="list-style-type: none"> <li>Maximum wire length: 5V differential mode: 100m</li> <li>24V open-collector type: 50m</li> <li>24V push-pull: 100m</li> <li>24V differential mode: 300m</li> </ul>
<ul style="list-style-type: none"> <li>波特率: 最大4Mbps</li> <li>最大长度: 500kbps时100m</li> </ul>	<ul style="list-style-type: none"> <li>Baud rate: 4 Mbps maximum</li> <li>Maximum wire length: 100m at 500 kbps</li> </ul>
<ul style="list-style-type: none"> <li>波特率: 最大2.5Mbps</li> <li>最大长度: 500kbps时100m</li> </ul>	<ul style="list-style-type: none"> <li>Baud rate: 2.5 Mbps maximum</li> <li>Maximum wire length: 100m at 500kbps</li> </ul>
<ul style="list-style-type: none"> <li>USB 2.0</li> <li>Mini-B</li> </ul>	<ul style="list-style-type: none"> <li>USB 2.0</li> <li>Mini-B</li> </ul>
<ul style="list-style-type: none"> <li>RDY指示灯: 红绿双色</li> <li>BF指示灯: 红绿双色</li> </ul>	<ul style="list-style-type: none"> <li>RDY LED: red and green</li> <li>BF LED: red and green</li> </ul>
<ul style="list-style-type: none"> <li>SAFE指示灯: 黄色</li> <li>LNK1指示灯: 绿色</li> <li>LNK2指示灯: 绿色</li> </ul>	<ul style="list-style-type: none"> <li>SAFE LED: yellow</li> <li>LNKI LED: green</li> <li>LNK2 LED: green</li> </ul>
<ul style="list-style-type: none"> <li>可直接安装或外引安装</li> </ul>	<ul style="list-style-type: none"> <li>Install directly or external with extension cable</li> </ul>
不允许有凝露	Condensation prohibited
适用于污染等级2的环境	Pollution degree: level 2

## 14.1.4 控制模块电气连接

## 14.1.4 Control module wiring

### 14.1.4.1 控制模块接线示意图

### 14.1.4.1 Control module wiring example

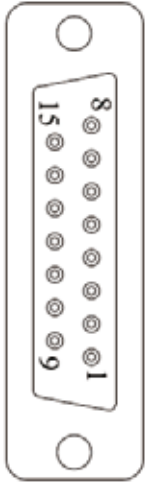


14.1.4.2 编码器接口信号定义

14.1.4.2 Encoder interface

a) 编码器接口(X10)信号定义

a) Encoder interface(X10) signals

	Pin.	信号说明	Signal description
	1	BISS-C的数据+	BISS-C data+
	2	BISS-C的时钟+	BISS-C clock+
	3	BISS-C的时钟-	BISS-C clock-
	4	编码器电源(5V或24V)	Encoder power supply(5V or 24V)
	5	编码器电源(5V或24V)	Encoder power supply(5V or 24V)
	6	编码器电源侦测输入	Encoder power detection input
	7	电源地	Power ground
	8	BISS-C的数据-	BISS-C data-
	9	编码器电源侦测输入接地	Encoder power detection ground
	10	增量式信号Z+	Incremental type Z+
	11	增量式信号Z-	Incremental type Z-
	12	增量式信号B-	Incremental type B-
	13	增量式信号B+	Incremental type B+
	14	增量式信号A-	Incremental type A-
15	增量式信号A+	Incremental type A+	

b) 编码器接口(X11)信号定义

b) Encoder interface(X11) signals

	Pin.	信号说明	Signal description
	1	KTY84-130或PTC输入	KTY84-130/PTC input
	2	KTY84-130或PTC的接地	KTY84-130/PTC ground
	3	—	—
	4	RS485信号B	RS485 signal B
	5	RS485信号A	RS485 signal A
	6	—	—
	7	编码器电源(5V)	Encoder power supply(5V)
8	编码器电源地	Power ground	

## 14.2 控制模块CM51

## 14.2 Control module CM51

### 14.2.1 概述

### 14.2.1 General information

CM51模块是精简输入输出接口后，专为总线型伺服系统应用而设计的控制模块，支持PROFINET总线及RT, IRT应用，且支持同步伺服及异步伺服控制。

The CM51 module is a control module designed specifically for bus type servo system applications after simplifying the input and output interfaces. It supports PROFINET bus and RT, IRT applications, as well as synchronous and asynchronous servo control.



CM51 模块

CM51 module

### 14.2.3 CM51控制模块技术参数

### 14.2.3 CM51 Technical date

功能	Functions		
总线接口	Bus interface	AX-CM51-PN-PE	AX-CM51-PN-PE
工作电源	Power supply	功率模块供电	By power module
		外部端子供电	By external terminals
输出电源	Power output	+24V输出	+24V output
		DB9接口编码器电源	DB9 encoder power supply
		RJ45接口编码器电源	RJ45 encoder power supply
数字量输入	Digital input	2个	2
数字量输出	Digital output	1个继电器 (DO0)	1 relay (DO0)
温度传感器	Temperature sensor	1个	1
编码器信号输入	Encoder interface	ABZ	ABZ
		RS485	RS485
USB接口	USB interface	1个	1
指示灯	Status LEDs	2个双色指示灯	2two-color LEDs
键盘接口	Keyboard interface	支持OP25	OP25 supported
工作温度	Use ambient temperature	-20°C ... +50°C	-20°C ... +50°C
存储温度	Storage temperature	-40°C ... +70°C	-40°C ... +70°C
相对空气湿度	Environment humidity	<95%	<95%
污染	Pollution	符合IEC 61800-5-1	IEC 61800-5-1
电磁兼容性	Electromagnetic compatibility	符合IEC 61800-3	IEC 61800-3

## 14.2.2 控制模块型号表示方法

## 14.2.2 Designation rules and nameplate for control module

博能精准系列伺服驱动器

Boneng AX-series precision servo drive

控制模块

Control module

通讯协议

Communication protocol

PN = PROFINET

PN = PROFINET

编码器接口

Encoder Interface

PE=增量式/绝对值编码器

PE=photoelectric incremental /absolute encoder

AX-CM51-PN-PE

## 订货号

## Order number

型号 Model	接口类型描述	Interface type description
AX-CM51-PN-PE	支持PROFINET通讯, 增量/绝对式光电编码器	Support PROFINET, incremental / absoluteoptical encoder

### 技术数据

### Technical data

- 支持PROFINET
- RJ45接口

- PROFINET
- RJ45 interface

- DC 24V/0.6A

- DC 24V/0.6A

- 电压范围: DC 20.8 ... 28.8V
- 最大电流: 0.6A

- Voltage range: DC 20.8~28.8V
- Maximum current: 0.6A

- 电压范围: DC 18V ... 26.8V
- 最大电流: 100mA

- Voltage range:DC 18V~26.8V
- Maximum current: 100mA

- 电压: DC 24V
- 最大电流: 200mA

- Voltage: DC 24V
- Maximum current: 200mA

- 电压: DC 5V
- 最大电流: 200mA

- Voltage: DC 5V
- Maximum current: 200mA

- DI0、DI1公共端子M0
- 电气隔离
- 支持Source和Sink模式
- 电压: DC 24V
- "1"信号电压: >11V
- "0"信号电压: <5V
- 24V典型电流: 4mA
- 响应时间: 6ms (含软件滤波)

- Single inputs: DI0、DI1 share M0
- Electrical isolation
- Support Source and Sink mode
- Voltage: DC 24V
- Level"1"voltage: >11V
- Level"0"voltage: <5V
- 24V typical current: 4mA
- Response time: 6ms (Including software filter)

- 电压: DC 24V、AC 220V
- 连续电流: 2A
- 切换电流: 2A
- 触点类型: 1常开1常闭

- Voltage: DC 24V、AC 220V
- Continuous current: 2A
- Switching current: 2A
- Contact type: 1 normally open and 1 close

- 位于RS485类型编码器端子X11
- 支持KTY84-130、PTC

- Respectively at the X11
- Support KTY84-130、PTC

- 支持24V的差分信号
- 输入频率: 最大250kHz
- 最大长度: 300m

- 24V differential signal
- Input frequency: 250kHz maximum
- Maximum wire length: 300m

- 波特率: 最大2.5Mbps
- 最大长度: 500kbps时100m

- Baud rate: 2.5 Mbps maximum
- Maximum wire length: 100m at 500kbps

- USB 2.0
- Mini-B

- USB 2.0
- Mini-B

- RDY指示灯: 红绿双色
- COM指示灯: 红绿双色

- RDY LED: red and green
- COM LED: red and green

- 仅支持外引安装

- Only external with extension cable

不允许有凝露

Condensation prohibited

适用于污染等级2的环境

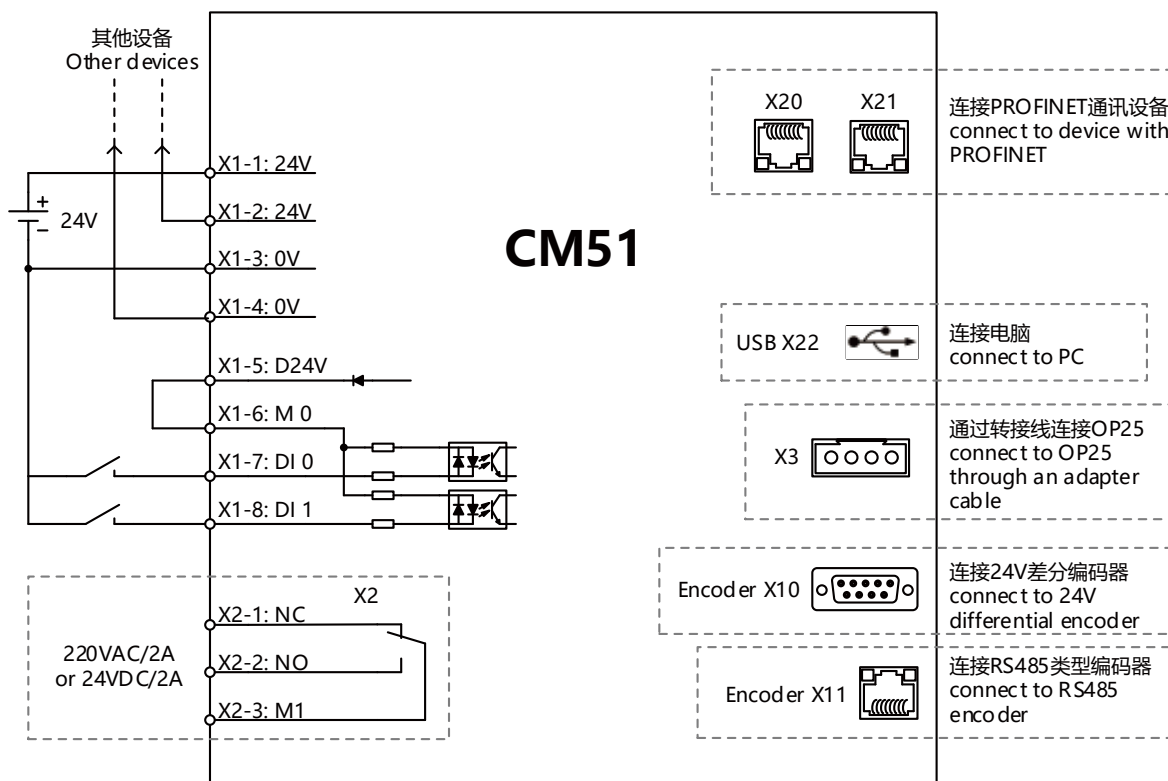
Pollution degree: level 2

## 14.2.4 控制模块电气连接

## 14.2.4 Control module wiring

### 14.2.4.1 控制模块接线示意图

### 14.2.4.1 Control module wiring example



### 14.2.4.2 编码器接口信号定义

### 14.2.4.2 Encoder interface

#### a) 编码器接口(X10)信号定义

#### a) Encoder interface(X10) signals

	Pin.	信号说明	Signal description
	1	编码器信号Z+	Incremental type Z+
	2	编码器信号Z-	Incremental type Z-
	3	编码器信号B+	Incremental type B+
	4	编码器信号A+	Incremental type A+
	5	编码器电源地	Power ground
	6	-	-
	7	编码器信号B-	Incremental type B-
	8	编码器信号A-	Incremental type A-
	9	编码器电源 (24V)	Encoder power supply (24V)

#### b) 编码器接口(X11)信号定义

#### b) Encoder interface(X11) signals

	Pin.	信号说明	Signal description
	1	KTY84-130或PTC输入	KTY84-130/PTC input
	2	KTY84-130或PTC的接地	KTY84-130/PTC ground
	3	—	—
	4	RS485信号B	RS485 signal B
	5	RS485信号A	RS485 signal A
	6	—	—
	7	编码器电源(5V)	Encoder power supply(5V)
8	编码器电源地	Power ground	

## 15 驱动器功率模块

## 15 Power module

### 15.1 功率模块概述

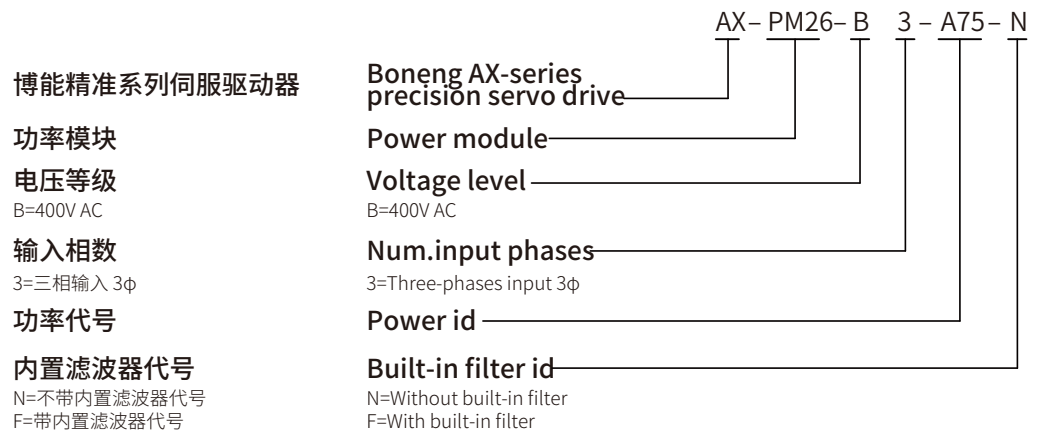
### 15.1 General information

伺服驱动器功率模块AX-PM26的功率范围为0.75kW-132kW,可适配博能MX系列伺服马达,用户无需担心MX伺服马达和AX-PM26的选型匹配问题,只需要按样本前面章节中厂家推荐的默认选型匹配表进行匹配即可。AX-PM26伺服功率模块匹配AX-CM55伺服控制模块,构成了博能精准定位的伺服驱动器。

The power module AX-PM26 has a power range from 0.75 kW to 132 kW, can be adapted to the MX-series motor, which makes it easily for users to choose motor and AX-PM26( just select as what recommended in the default model matching table) without worrying about matching problems. The AX-PM26 can be matched to AX-CM55 to form a precisely positioned servo drive.

### 15.2 功率模块型号表示方法

### 15.2 Designation rules and nameplate for power module





## 功率模块订货数据

## Power module order number

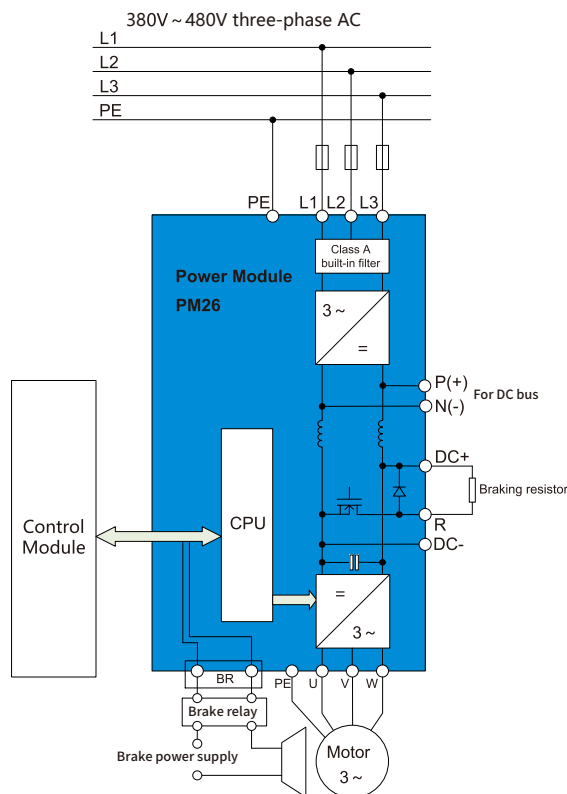
380~480V 3AC输入					380~480V 3AC input		
额定数据			Rated data		外形尺寸 Dimension type	型号 Model	
额定功率(kW)	Rated Power(kW)	额定电流(A)	额定电流(A)	Rated Current(A)		无内置滤波器	No built-in filter
0.75			1.25		B1	AX-PM26-B3A75-N	
1.5			2.42			AX-PM26-B3B15-N	
2.2			3.43			AX-PM26-B3B22-N	
3			4.51			AX-PM26-B3B30-N	
4			5.93		B2	AX-PM26-B3B40-N	
5.5			7.69			AX-PM26-B3B55-N	
7.5			10.53			AX-PM26-B3B75-N	
11			15.2		B3	AX-PM26-B3C11-N	
15			18.71			AX-PM26-B3C15-N	
18.5			22.22		B4	AX-PM26-B3C18-N	
22			26.32			AX-PM26-B3C22-N	
30			35.09			AX-PM26-B3C30-N	
37			43.86			AX-PM26-B3C37-N	
45			52.63		B6	AX-PM26-B3C45-N	
55			64.33			AX-PM26-B3C55-N	
75			84.79			AX-PM26-B3C75-N	
90			104.09			AX-PM26-B3C90-N	
110			119.88			AX-PM26-B3D11-N	
132			146.2			AX-PM26-B3D13-N	

注:带内置滤波器的功率模块PM26无现货库存,如需要,请咨询厂家。

Note: PM26 with built-in filter is out of stock, contact us if need.

### 15.3 功率模块电气连接

### 15.3 Power module wiring



注: PM26的BR接口仅在配合控制模块CM55时可用,配合控制模块CM51时不可用,可以接端子上的继电器来控制抱闸。

Note: The BR interface of PM26 is only available when working with control module CM55, but not when working with control module CM51. It can be connected to a relay on the terminal to control the holding brake.

### 15.4 功率模块通用技术参数

### 15.4 General technical data for power module

		PM26功率模块 (通用参数)	PM26 power module(general parameters)
输入电压	Voltage input	380...480V 3AC ±10%	380...480V 3AC ±10%
输入频率	Input frequency	47...63Hz	47...63Hz
默认载波频率	Default carrier frequency	变频模式: 90kW及以下4kHz,110kW及以上2kHz	Frequency conversion mode: 4 kHz for 90 kW and below; 2 kHz for 110 kW and above.
		伺服模式: 90kW及以下8kHz,110kW及以上4kHz	Servo mode: 8 kHz for 90 kW and below; 4 kHz for 110kW and above.
功率因数	Power factor	0.95	0.95
驱动器效率	Drive efficiency	95...97%	95...97%
过载能力	Overload capacity	在30s周期性冲击负载下, 可实现3倍3s的过载能力	Under 30s periodic impact load,can withstand 3 times the overload for 3s.
电磁兼容	Electromagnetic compatibility	可选符合EN 55011标准的A级滤波器和B级滤波器	Optional A-level and B-level filters complying with EN 55011.
可选制动方式	Optional braking method	●DC制动	直流电流制动, 制动力有限
		●外挂制动单元	直流母线上外接制动单元, 或外挂回馈单元制动
		●内置制动斩波器, 需外接制动电阻	DC current braking, with limited braking force. External braking unit on DC bus /external feedback unit braking. Built-in braking chopper, external resistor is required.
防护等级	Protection level	IP20	IP20
工作温度	Use ambient temperature	-20...+40℃ 无需降额; +40℃...+50℃ 每升高1℃降额1.5%; +50℃...+60℃ 每升高1℃降额5%	-20~+40C: no derating; +40C~+50C: decrease by 1.5% for every 1C increase; +50C~+60C: decrease by 5% for every 1C increase.
存储温度	Storage temperature	-40...+70℃	-40...+70℃
相对湿度	Relative humidity	< 95% RH, 无结露	<95% RH,no condensation
冷却方式	Cooling method	内部风冷	功率部分采用内置风扇强制风冷
安装海拔高度	Installation altitude	海拔1000m以下无需降额; 1000m...4000m 每升高100m降额1%	No derating within 1000m: 1000m_4000m: decrease by 1% for every 100m rise in altitude
标准SCCR	Standard SCCR	小于100kA	Less than 100kA
保护功能	Protective function	●欠电压	●Under voltage
		●过电压	●Over voltage
		●过载	●Overload
		●接地故障	●Ground fault
		●短路	●Short-circuit
		●马达抱闸保护	●Motor braking protection
		●马达过温	●Motor over temperature
		●输出缺相	●Output phase loss
		●变频器过温	●Inverter over temperature

### 15.5 功率模块详细技术参数

### 15.5 Detailed technical parameters

		进线电压380~480V 3AC				Incoming line voltage 380~480V 3AC				
技术参数		Technical data		AX-PM26-B3A75	AX-PM26-B3B15	AX-PM26-B3B22	AX-PM26-B3B30	AX-PM26-B3B40	AX-PM26-B3B55	AX-PM26-B3B75
额定输出功率 kW		Rated output power kW		0.75	1.5	2.2	3	4	5.5	7.5
额定输入电流	Rated output current	带进线电抗器A	With incoming line reactorA	2.3	4.3	6.1	8	10.4	15.3	18.7
		不带进线电抗器A	Without incoming line reactorA	2.6	4.9	7.6	10.2	13.4	17.2	21.9
额定输出电流 A		Rated output current A		1.25	2.42	3.43	4.51	5.93	7.69	10.53
效率η		Efficiencyη		> 0.95						
功率损失kW		Power loss kW		0.1	0.11	0.14	0.16	0.18	0.24	0.3
冷却风量要求 m <sup>3</sup> /s		Cooling air requirement m <sup>3</sup> /s		0.005			0.024		0.055	
噪声水平 dB(A)		Noise level dB(A)		< 40				< 50		
控制单元接口		Interface with control unit		1						
制动电阻连接电缆的最大长度m		Maxi mumcable length ofbrakingresistor m		15						
进线电源连接	Power supply wiring	L1、L2、L3		螺钉端子						
		电缆截面积mm <sup>2</sup>	Cable sectional Aera mm <sup>2</sup>	1~2.5				2.5~6		
马达连接	Motor wiring	U、V、W		螺钉端子						
		电缆截面积mm <sup>2</sup>	Cable sectional Aera mm <sup>2</sup>	1~2.5				2.5~6		
直流母线连接(制动电阻的连接)	DC bus connection (connection of braking resistor)	DC+、DC-、R		螺钉端子						
		电缆截面积mm <sup>2</sup>	Cable sectional Aera mm <sup>2</sup>	1~2.5				2.5~6		
PE连接		PE connection		外壳上的M4螺钉						
最大马达电缆长度	Maximum motor cable length	屏蔽电缆 m	Shielded cable m	50						
		非屏蔽电缆 m	Unshielded cable m	100						
防护等级		Protection level		IP20						
外形尺寸		Dimensions		B1				B2		
大约重量 kg		Weight kg		1.7				2.8		

AX-PM26-B3C11	AX-PM26-B3C15	AX-PM26-B3C18	AX-PM26-B3C22	AX-PM26-B3C30	AX-PM26-B3C37	AX-PM26-B3C45	AX-PM26-B3C55	AX-PM26-B3C75	AX-PM26-B3C90	AX-PM26-B3D11	AX-PM26-B3D13		
11	15	18.5	22	30	37	45	55	75	90	110	132		
26	33	39	46	63	78	86	104	140	172	198	242		
32	39	46	53	73	88	78	94	117	154	189	218		
15.2	18.71	22.22	26.32	35.09	43.86	52.63	64.33	84.79	104.09	119.88	146.2		
> 0.95													
0.4	0.5	0.7	1	1.3	1.67	1.93	2.48	2.3	3.02				
0.055			2x0.055			0.083			0.153				
< 40			< 50			< 75							
1													
15													
螺钉端子						Screw terminal			电缆终端			Cable termination	
4...10			6...25			35...2x120							
螺钉端子						Screw terminal			电缆终端			Cable termination	
4...10			6...25			35...2x120							
螺钉端子													
螺钉端子						Screw terminal			Screw terminal			Screw terminal	
4...10			6...25			25...70							
外壳上的M4螺钉		M4 screws on the housing		外壳上的M5螺钉		M5 screws on the housing		电缆终端			Cable termination		
50													
100													
IP20													
B3			B4			B6							
7			16			65							

## 16 驱动器操作面板

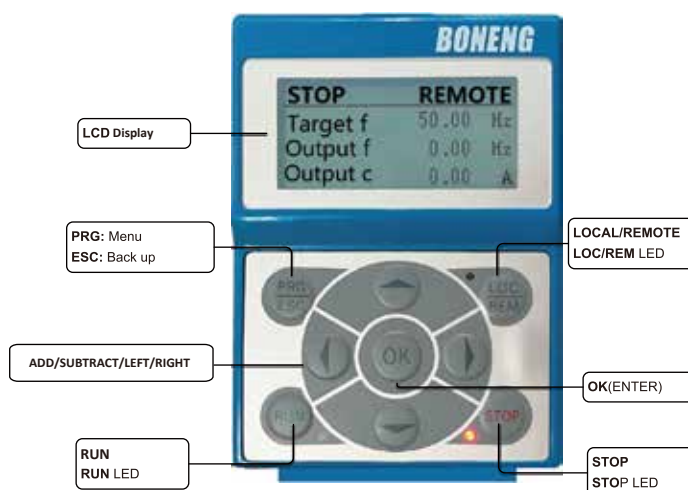
### 16.1 操作面板概述

操作面板OP25为驱动器调试提供更加灵活的调试诊断方式，AX系列伺服驱动器可以通过PC及上位机进行调试，也可以使用OP25进行快捷调试。

## 16 Operation panel

### 16.1 General information

The AX-series drive can be debugged with either PC-Software (BonengDrivesoft) or Operation Panel(OP25). The operation Panel(OP25) can make drive debugging and diagnosis easier and more flexible.



操作面板订货型号为：  
A1-OP25

The Operation Panel order number is: A1-OP25

注：A1-OP25和AX-CM51-PN-PE匹配时，需要通过专用转接线来连接，请直接订购AD-OP25即可，既包含了操作键盘也包含了转接线。

Note: When A1-OP25 and AX-CM51-PN-PE are matched, they need to be connected through a dedicated adapter cable. Please order AD-OP25 directly, which includes both the operation keyboard and the adapter cable.

## 17 驱动器可选件

### 17.1 制动电阻

制动电阻用于使大转动惯量的负载迅速制动。在马达和负载制动时，动能转换成的再生电能会返回到驱动器中，直流母线电压因此抬高，驱动器将这些再生的能量几乎全部消耗在制动电阻上；400V 50/60Hz AX精准系列伺服驱动器可选的制动电阻推荐规格如下：

## 17 Options

### 17.1 Braking Resistor

The braking resistor is used to quickly brake the load with large moment of inertia. When the load and motor brake, the regenerative energy converted from kinetic energy will be returned to the driver, and then the DC bus voltage will be raised. The braking resistor is installed to consume almost all of this part of energy to keep the DC bus voltage level. The recommended model of optional Braking Resistor for 400V-50/60 Hz AX-series servo drives are as follows:

驱动器			允许的最小 制动电阻	推荐值		博能型号	
框架	无内置滤波器型号	有内置滤波器型号		功率(W)	阻值(Ω)	订货号	等效制动电阻
Power module			Minimum allowable resistance value for the brake resistor	Recommend value		BONENG Type	
Frame size	Article number without filter	Article number with filter		Power (W)	Resistance (Ω)	Article number	Equivalent brake resistor
B1	AX-PM26-B3A75-N	AX-PM26-B3A75-F	374Ω	60	750	A1-H02-A06-K-D75	60W 750Ω
	AX-PM26-B3B15-N	AX-PM26-B3B15-F	374Ω	80	390	A1-H02-A08-K-D39	80W 390Ω
	AX-PM26-B3B22-N	AX-PM26-B3B22-F	140Ω	150	180	A1-H02-A15-K-D18	150W 180Ω
	AX-PM26-B3B30-N	AX-PM26-B3B30-F	140Ω	150	180	A1-H02-A15-K-D18	150W 180Ω
B2	AX-PM26-B3B40-N	AX-PM26-B3B40-F	75Ω	300	100	A1-H02-A30-K-D10	300W 100Ω
	AX-PM26-B3B55-N	AX-PM26-B3B55-F	75Ω	300	100	A1-H02-A30-K-D10	300W 100Ω
	AX-PM26-B3B75-N	AX-PM26-B3B75-F	75Ω	400	75	A1-H02-A40-K-C75	400W 75Ω
B3	AX-PM26-B3C11-N	AX-PM26-B3C11-F	30Ω	800	36	A1-H02-A80-K-C36	800W 36Ω
	AX-PM26-B3C15-N	AX-PM26-B3C15-F	30Ω	800	36	A1-H02-A80-K-C36	800W 36Ω
B4	AX-PM26-B3C18-N	AX-PM26-B3C18-F	27Ω	1000	27	A1-H02-B10-K-C27	1000W 27Ω
	AX-PM26-B3C22-N	AX-PM26-B3C22-F	27Ω	1000	27	A1-H02-B10-K-C27	1000W 27Ω
	AX-PM26-B3C30-N	AX-PM26-B3C30-F	15Ω	2000	15	A1-H02-B20-K-C15	2000W 15Ω
	AX-PM26-B3C37-N	AX-PM26-B3C37-F	15Ω	2000	15	A1-H02-B20-K-C15	2000W 15Ω
B6	AX-PM26-B3C45-N	AX-PM26-B3C45-F	10Ω	3000	10	A1-H02-B30-K-C10	3000W 10Ω
	AX-PM26-B3C55-N	AX-PM26-B3C55-F	10Ω	3000	10	A1-H02-B30-K-C10	3000W 10Ω
	AX-PM26-B3C75-N	AX-PM26-B3C75-F	7.1Ω	4000	7.5	A1-H02-B40-K-B75	4000W 7.5Ω
	AX-PM26-B3C90-N	AX-PM26-B3C90-F	7.1Ω	4000	7.5	A1-H02-B40-K-B75	4000W 7.5Ω
	AX-PM26-B3D11-N	AX-PM26-B3D11-F	5Ω	6000	5	A1-H02-B60-K-B50	6000W 5Ω
	AX-PM26-B3D13-N	AX-PM26-B3D13-F	5Ω	6000	5	A1-H02-B60-K-B50	6000W 5Ω

## 17.2 进线电抗器

当系统的故障率高时，需要加装进线电抗器以保护驱动器不受过大的谐波电流的干扰，改善驱动器的输入侧功率因数；防止过载，并将进线谐波限制在允许的值内，以确保驱动器达到期望的使用寿命。400V 50/60Hz AX精准系列伺服驱动器可选的进线电抗器推荐型号如下表：

## 17.2 Incoming line reactors

A incoming line reactor is required and needful to prevent the drive from being disturbed by excessive harmonic currents, and improve the input side power factor, when the system has a high failure rate. In addition, the incoming line reactor can limit the line harmonics to allowable values to ensure the drive's expected service life, when the overload occurs. The recommended model of optional incoming line reactors for 400V-50/60 Hz AX-series servo drives are listed below:

框架 Dimension types	驱动器 Drives		进线电抗器 推荐参数		Recommended parameters of reactors	订货号 Order number
	无内置滤波器 型号	Without built-in filter	额定电流 (A)	Rated current (A)	电感 (mH)	
B1	AX-PM26-B3A75-N		2.6		5.9	A1-H12-TB280
	AX-PM26-B3B15-N		4.9		3.1	A1-H12-TB280
	AX-PM26-B3B22-N		7.1		2.2	A1-H12-TB200
	AX-PM26-B3B30-N		9.2		1.7	A1-H12-TB140
B2	AX-PM26-B3B40-N		12.2		1.3	A1-H12-TA930
	AX-PM26-B3B55-N		15.8		1	A1-H12-TA700
	AX-PM26-B3B75-N		21.6		0.8	A1-H12-TA700
B3	AX-PM26-B3C11-N		31.2		0.5	A1-H12-TA470
	AX-PM26-B3C15-N		38.4		0.4	A1-H12-TA350
B4	AX-PM26-B3C18-N		45.6		0.5	A1-H12-TA280
	AX-PM26-B3C22-N		54		0.4	A1-H12-TA240
	AX-PM26-B3C30-N		72		0.3	A1-H12-TA160
	AX-PM26-B3C37-N		90		0.2	A1-H12-TA160
B6	AX-PM26-B3C45-N		120		0.117	A1-H12-TB120
	AX-PM26-B3C55-N		150		0.094	A1-H12-TA095
	AX-PM26-B3C75-N		200		0.07	A1-H12-TA070
	AX-PM26-B3C90-N		250		0.056	A1-H12-TA056
	AX-PM26-B3D11-N		250		0.056	A1-H12-TA056
	AX-PM26-B3D13-N		290		0.048	A1-H12-TA048

### 17.3 进线滤波器

进线滤波器的作用是抑制驱动器通过输入电源线所传输到公共电网中的电磁干扰,同时也衰减从电源线进入驱动器的干扰;在安装时请尽量靠近驱动器的输入端子侧进行安装,请使用驱动器专用的进线滤波器。400V 50/60Hz AX精准系列伺服驱动器可选的进线滤波器推荐型号如下表:

### 17.3 Incoming filter

The function of the incoming line filter is to suppress the electromagnetic interference transmitted from/to the drive to/from the public power supply network through the power supply line. When use it, please choose recommended drive specific line filter, and install it as close to the input end of the drive as possible. The recommended types of incoming line filter for 400V-50/60 Hz AX-series servo drives are as follows:

框架 Dimension types	驱动器 Drives		EMC 滤波器	EMC filter	订货号 Order number
	无内置 滤波器 型号	Without built-in filter	额定 电流 (A)	Rated current (A)	
B1	AX-PM26-B3A75-N		2.9		A1-H11-A-C10
	AX-PM26-B3B15-N		5.5		A1-H11-A-C10
	AX-PM26-B3B22-N		7.7		A1-H11-A-C10
	AX-PM26-B3B30-N		10.1		A1-H11-A-C10
B2	AX-PM26-B3B40-N		13.3		A1-H11-A-C20
	AX-PM26-B3B55-N		17.2		A1-H11-A-C20
	AX-PM26-B3B75-N		22.2		A1-H11-A-C30
B3	AX-PM26-B3C11-N		32.6		A1-H11-A-C36
	AX-PM26-B3C15-N		39.9		A1-H11-A-C50
B4	AX-PM26-B3C18-N		36		A1-H11-A-C50
	AX-PM26-B3C22-N		42		A1-H11-A-C50
	AX-PM26-B3C30-N		57		A1-H11-A-C65
	AX-PM26-B3C37-N		70		A1-H11-A-C80
B6	AX-PM26-B3C45-N		100		A1-H11-A-D10
	AX-PM26-B3C55-N		130		A1-H11-A-D13
	AX-PM26-B3C75-N		150		A1-H11-A-D15
	AX-PM26-B3C90-N		180		A1-H11-A-D18
	AX-PM26-B3D11-N		200		A1-H11-A-D20
	AX-PM26-B3D13-N		250		A1-H11-A-D25



### 17.4 出线电抗器

当驱动器和马达之间的距离超过50米时，由于长电缆对地的寄生电容效应导致漏电流过大，驱动器容易频繁发生过流保护，同时为了避免马达绝缘损坏，须加输出电抗器补偿，输出电抗器可以减小马达绕组上的电压负载，以及采用长的马达电缆时，容性充放电电流加在功率部分的附加负载。400V 50/60Hz AX 精准系列伺服驱动器可选的输出电抗器推荐型号如下表：

### 17.4 Outlet reactor

When the motor is more than 50m away from the drive, due to the parasitic capacitance effect of the long cable to the ground, the leakage current will become too large to trigger the over-current fault to protect the drive. To avoid this case and prevent motors from being damaged, a outlet reactor can be used. Because the outlet reactor can reduce the voltage applied to the motor windings and the additional load that capacitive charge/discharge current added to the power module when long cable used. The recommended model of optional Outlet Reactor for 400V-50/60 Hz AX-series servo drives are as follows:

驱动器		Drives		进线电抗器 推荐参数		Recommended parameters of reactors		订货 号	Order number
框架 Dimension types	无内置 滤波器 型号	Without built-in filter	额定 电流 (A)	Rated current (A)	电感 (mH)	Rated inductance (A)			
B1	AX-PM26-B3A75-N		2.6		3.2		A1-H13-TB140		
	AX-PM26-B3B15-N		4.9		1.7		A1-H13-TB140		
	AX-PM26-B3B22-N		7.1		1.2		A1-H13-TB100		
	AX-PM26-B3B30-N		9.2		0.9		A1-H13-TA700		
B2	AX-PM26-B3B40-N		12.2		0.7		A1-H13-TA470		
	AX-PM26-B3B55-N		15.8		0.5		A1-H13-TA350		
	AX-PM26-B3B75-N		21.6		0.4		A1-H13-TA230		
B3	AX-PM26-B3C11-N		31.2		0.3		A1-H13-TA180		
	AX-PM26-B3C15-N		38.4		0.2		A1-H13-TA180		
B4	AX-PM26-B3C18-N		45.6		0.2		A1-H13-TA140		
	AX-PM26-B3C22-N		54		0.2		A1-H13-TA120		
	AX-PM26-B3C30-N		72		0.1		A1-H13-TA087		
	AX-PM26-B3C37-N		90		0.1		A1-H13-TA078		
B6	AX-PM26-B3C45-N		120		0.058		A1-H13-TA058		
	AX-PM26-B3C55-N		150		0.047		A1-H13-TA047		
	AX-PM26-B3C75-N		200		0.035		A1-H13-TA035		
	AX-PM26-B3C90-N		250		0.028		A1-H13-TA028		
	AX-PM26-B3D11-N		250		0.028		A1-H13-TA028		
	AX-PM26-B3D13-N		290		0.024		A1-H13-TA024		



# 博能产品集成图

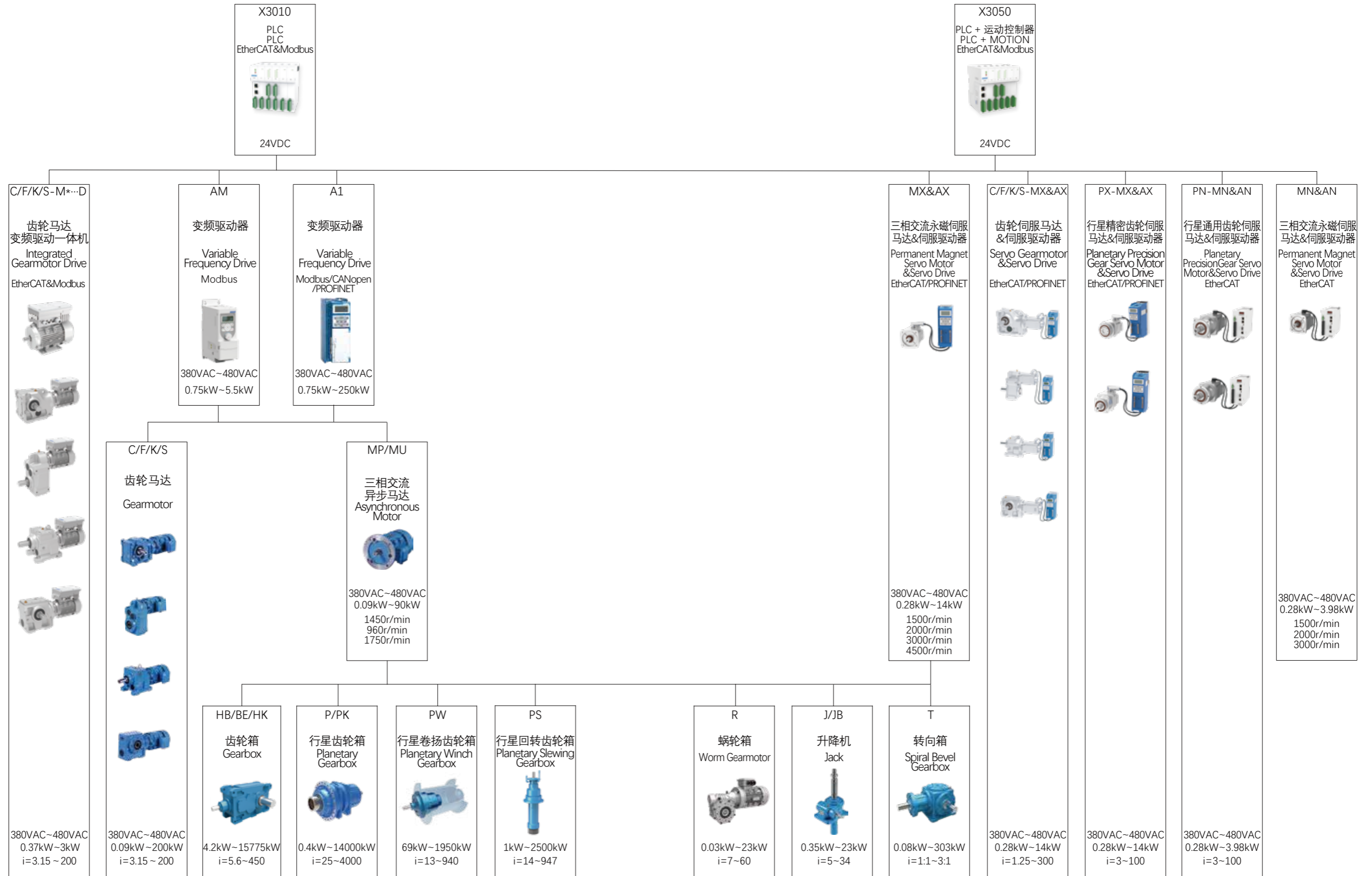
# Boneng Product Integration Diagram

CONTROL  
控制层

DRIVE  
驱动层

MOTOR  
马达层

GEAR  
齿轮层



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