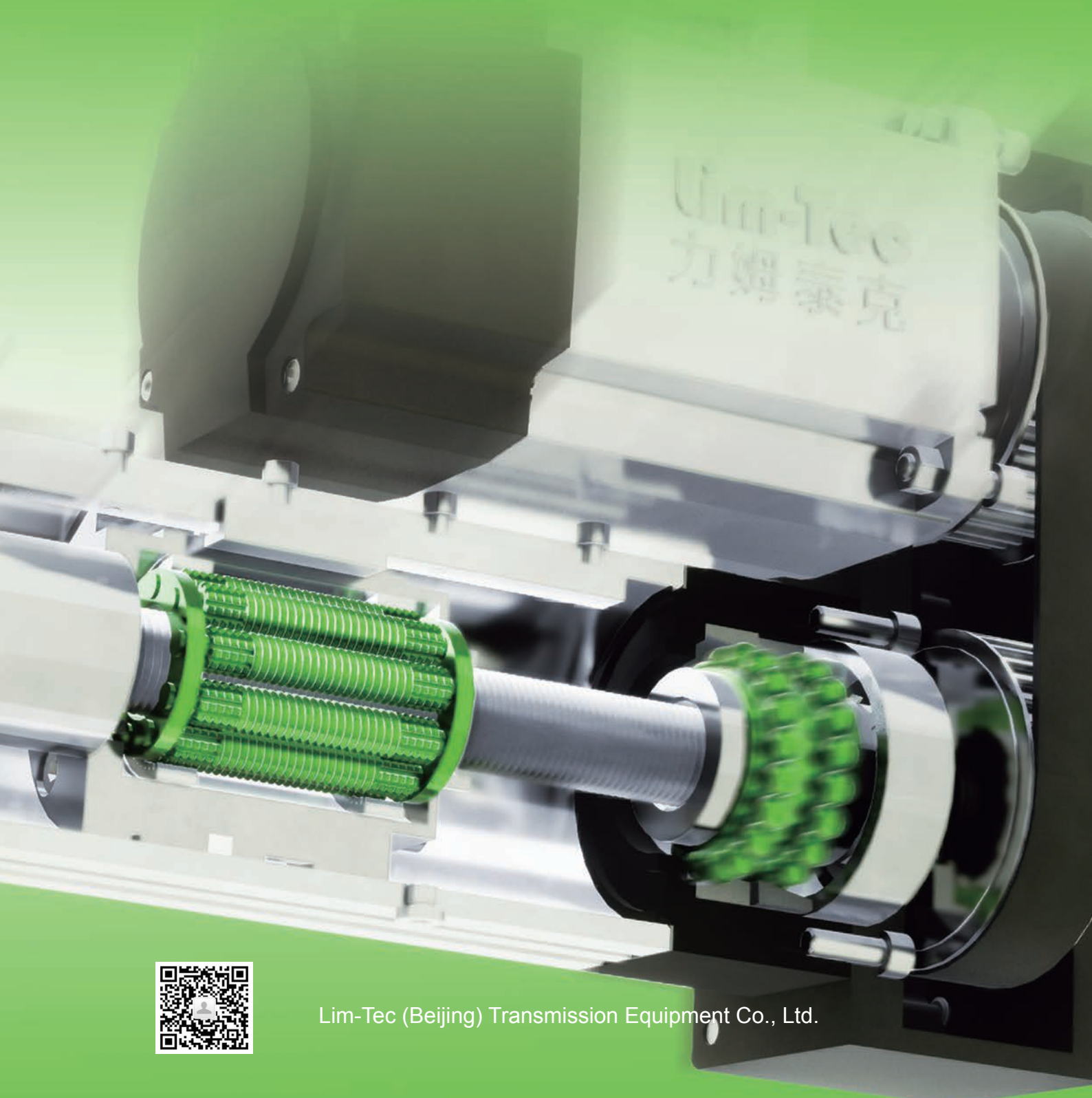


CODE: 836388

# Lim-Tec<sup>®</sup> Catalog 2024

*FMR-Series (Roller Screw)*



Lim-Tec (Beijing) Transmission Equipment Co., Ltd.

On Feb.25, 2016, Lim-Tec successfully landed on NEEQ with the code of 836388, pioneering the linear motion development in China.

In 2005, Joint Venture Enterprise Lim-Tec (Beijing) Transmission Equipment Co.,Ltd was set up by Lim-Tec Group and Beijing Reloh International Trade Co., Ltd to introduce advanced European linear motion technology and the concept of modular combination design, guiding the new direction of domestic screw jack and linear actuator industry.

We have more than 10 branch offices in China to provide high-quality products, well-rounded technical support and prompt after-sales service. Up to Nov.30, 2020, there were 200000 sets of products successfully applied to automobile equipment, automation assembly, metallurgical industry,aerospace industry, port machinery and other industries.

200 million RMB has been invested to introduce nearly a hundred CNC machine tools as well as to build a modern 20 thousand metre square plant with constant tempreture control. Eventually, our anual production capacity has reached 50 thousand sets, making Lim-Tec a competitive and professional linear actuator/screw jack/servo actuator manufacturing centre in the world.





# Contents

<b>FMR SERIES ROLLER SCREW SERVO ACTUATOR</b>	
ROLLER SCREW SERVO ACTUATOR INTRODUCTION .....	46
ROLLER SCREW SERVO ACTUATOR PERFORMANCE .....	48
FMR SERVO ACTUATOR DIMENSION .....	52

# [ FMR SERIES ROLLER SCREW SERVO ACTUATOR ]

## ■ Performance FMR:

Load range: From 500kgs - 100 Tons

Stroke Max.4 Meters.

Max. Speed:1m/s; Max. Acceleration: 1g

High Efficiency roller screw, continuously duty cycle.

Positioning Accuracy 0.02mm; Closed loop: 0.01mm

Force Accuracy: closed-loop precision 0.5%; Built-in pressure sensor available

Ultra-long lifespan, 10-15 times longer than similar ball screw electric cylinders.

High protection level IP65, suitable for harsh working environments.

High-performance lubricants, maintenance-free for life.



## Coding:

Series	Size	Lead	Stroke	Mounting	Front attachment	Input version	Accessories	Motor
DMB Series	25	5	100	FF Front Flang	BA Female thread	NMT Drive shaft Only	AR Anti-Rotate device	Lenze
FMR Series	35	10	200	RF Rear Flange	FM Male thread	G05 Planetary gearing 5:1 ratio	FCM Magnetic reed switches	Siemens
EMB Series	40	20	300	RC Rear clevis	ROE Rod end	GX Planetary gearing special ratio	FCP Inductive proximity switches	Yaskawa
DMA Series	50	25	400	ST Trunnion	TS Ball joint	SC Inline including motor flange	SP Rear bracket	Panasonic
	60	30	500	SH Side mount	FO Clevis end	P10 Parallel 1:1 ratio	B Bellow	Mitsubishi
	80	50	600	SF Side Flange	FL Flange end	P20 Parallel 2:1 ratio	PF Pre-load	FUJI
	200		700	GM Guide mounition	TC Bearing support	PGXX Gear housing	PL Load Sensor	Other
			800			FZ Anti-impact attachment		
		900						
		1000						
		Special						

### Coding

FMR - 40 - 10 - 300 - FF - FO - P10 - FCP - SGMGH20A A



## The difference between planetary roller screws and ball screws

Planetary roller screws and ball screws have similar structures, but the difference lies in the load transfer element, which are threaded rollers, rather than balls. Our main advantage has numerous contact points to support the load.

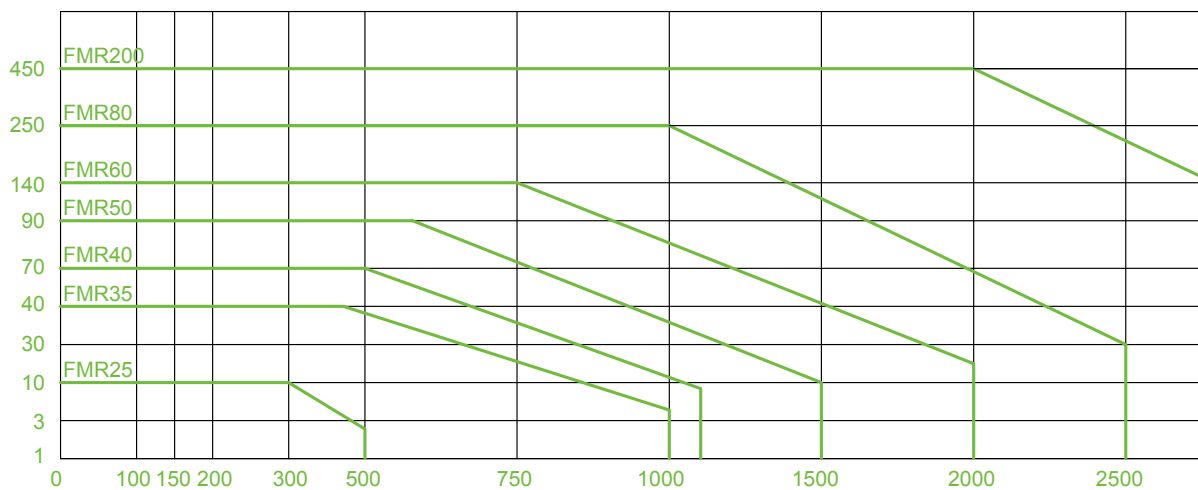
### Capacity and lifespan

The advantages of planetary roller screws lie in the ability to provide higher rated dynamic and static load. The use of threaded rollers instead of balls allows the load to be rapidly released through numerous contact points, thereby providing higher impact resistance.



Critical Buckling Force Graphs:

Load /KN



Stable length L mm

## Both planetary roller screws and ball screws are suitable for use with Hertz law.

According to Hertz law, the static load capacity of planetary roller screws is 3 times that of ball screws, and their lifespan is 15 times that of ball screws.

### Speed and acceleration

Planetary roller screws can provide higher rotational speeds and higher accelerations. RV series planetary roller screws are non-circulating, which allows for double rotational speed compared to ball screws, and accelerations of up to 3g.

### Lead and pitch

The lead of planetary roller screws can be smaller than that of ball screws. Since the lead is a function of the pitch of the planetary roller screw, it can be smaller than 0.5mm or even smaller. The lead of planetary roller screws can be designed and calculated as an integer or a decimal (e.g., moving 3.32mm per revolution), there will be no need for reduction gears to match. Changes in lead do not result in any geometric size changes for the screw shaft and nut. The lead of the ball screw is limited by the diameter of the ball, so the lead will be standard.

### Rigidity and strength

The numerous contact points of planetary roller screws will significantly increase rigidity and impact resistance.

Performance table:

Model	FMR25	FMR35		FMR40		FMR50			FMR60			FMR80		FMR200	
Screw dia mm	15	25		30		39			48			60		75	
Lead mm	5	5	10	10	20	10	15	20	10	20	10	20	10	20	20
Rated Force KN	7	25	25	50	50	70	70	70	100	130	160	200	250	250	350
Maximum force KN	10	40	40	70	70	90	90	90	140	140	250	250	450	450	450
Max. Speed mm/s	375	250	500	416	832	333	500	666	250	500	200	400	167	334	334
Efficiency	0.78	0.75	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Torque at Rated Force Nm	7.14	24.88	49.76	99.5	199.1	139.3	208.3	278.7	199.04	517.5	318.5	796.2	497.6	1433.1	1433.1
Dynamic Load of Roller Screw KN	26	72.8	84.2	106.3	123.3	152.6	167.6	172.8	231.5	265.7	338.6	395	497.8	572	572
Parallel mounting inertia $kgm^2 \cdot 10^{-3}$	0.1	5.236		12.413		70.423			80.16			195.362		725.3	
Inline coupling inertia $kgm^2 \cdot 10^{-1}$	0.08	4.136		6.425		29.369			53.28			143.215		625.1	
Inertia/100mm $kgm^2 \cdot 10^{-4}$	0.052	1.3		2.1		4.52			10.1			29.36		32.5	
Max. Stroke mm	500	800		1000		1200			1500			2000		2500	
Max. input rpm	4500	3000		2500		2000			1500			1200		1000	
Max. Acceleration $m/s^2$	6	6	10	6	10	6	10	10	6	10	3	10	3	10	10
Weight ( Without motor ) kg	6.9	21.6		27.5		70.6			100.2			126.1		165.2	
Weight per 100mm stroke kg	1	1.92		2.35		4.5			6.3			14.6		21.1	
Max.idling angle	±0.3	±0.3		±0.3		±0.3			±0.3			±0.3		±0.3	
Axial backlash mm	0.05	0.05		0.05		0.05			0.05			0.05		0.05	
Lead Tolerance within 300mm/mm	0.023	0.023		0.023		0.023			0.023			0.023		0.023	
Repeat accuracy mm	0.02	0.02		0.02		0.02			0.02			0.02		0.02	

### FMR25 Performance Specification :

Model	Lead mm	Reducer	Ratio	Speed at 1500rpm mm/s	Actual load N										Max.linear speed mm/s
					7000		6000		5000		3000		1500		
					Power KW	Torque Nm	Power KW	Torque Nm	Power KW	Torque Nm	Power KW	Torque Nm	Power KW	Torque Nm	
FMR25-05	5	Parallel 1:1	NON	125	1.368	8.708	1.172	7.464	0.977	6.220	0.586	3.732	0.293	1.866	375
			1:3	42	0.480	3.056	0.411	2.619	0.343	2.183	0.206	1.310	0.103	0.655	375
			1:5	25	0.288	1.833	0.247	1.571	0.206	1.310	0.123	0.786	0.062	0.393	375
			1:10	13	0.144	0.917	0.123	0.786	0.103	0.655	0.062	0.393	0.031	0.196	375
		Parallel 2:1	NON	63	0.684	4.354	0.586	3.732	0.488	3.110	0.293	1.866	0.147	0.933	375
			NON	125	1.216	7.741	1.042	6.635	0.868	5.529	0.521	3.317	0.261	1.659	375
			1:3	42	0.427	2.716	0.366	2.328	0.305	1.940	0.183	1.164	0.091	0.582	375
			1:5	25	0.256	1.630	0.219	1.397	0.183	1.164	0.110	0.698	0.055	0.349	375
			1:10	13	0.128	0.815	0.110	0.698	0.091	0.582	0.055	0.349	0.027	0.175	375
			1:10	13	0.128	0.815	0.110	0.698	0.091	0.582	0.055	0.349	0.027	0.175	375

### FMR35 Performance Specification

Model	Lead mm	Reducer	Ratio	Speed at 1500rpm mm/s	Actual load N										Max.linear speed mm/s
					25000		20000		15000		10000		6000		
					Power KW	Torque Nm	Power KW	Torque Nm	Power KW	Torque Nm	Power KW	Torque Nm	Power KW	Torque Nm	
FMR35-05	5	Parallel 1:1	NON	125	4.885	31.101	3.908	24.881	2.931	18.660	1.954	12.440	1.172	7.464	250
			1:3	42	1.714	10.913	1.371	8.730	1.028	6.548	0.686	4.365	0.411	2.619	250
			1:5	25	1.028	6.548	0.823	5.238	0.617	3.929	0.411	2.619	0.247	1.571	250
			1:10	13	0.514	3.274	0.411	2.619	0.309	1.964	0.206	1.310	0.123	0.786	250
		Parallel 2:1	NON	63	2.442	15.550	1.954	12.440	1.465	9.330	0.977	6.220	0.586	3.732	250
			NON	125	4.342	27.645	3.474	22.116	2.605	16.587	1.737	11.058	1.042	6.635	250
			1:3	42	1.524	9.700	1.219	7.760	0.914	5.820	0.609	3.880	0.366	2.328	250
			1:5	25	0.914	5.820	0.731	4.656	0.548	3.492	0.366	2.328	0.219	1.397	250
			1:10	13	0.457	2.910	0.366	2.328	0.274	1.746	0.183	1.164	0.110	0.698	250
			1:10	13	0.457	2.910	0.366	2.328	0.274	1.746	0.183	1.164	0.110	0.698	250
FMR35-10	10	Parallel 1:1	NON	250	9.770	62.201	7.816	49.761	5.862	37.321	3.908	24.881	2.345	14.928	500
			1:3	83	3.428	21.825	2.742	17.460	2.057	13.095	1.371	8.730	0.823	5.238	500
			1:5	50	2.057	13.095	1.645	10.476	1.234	7.857	0.823	5.238	0.494	3.143	500
			1:10	25	1.028	6.548	0.823	5.238	0.617	3.929	0.411	2.619	0.247	1.571	500
		Parallel 2:1	NON	125	4.885	31.101	3.908	24.881	2.931	18.660	1.954	12.440	1.172	7.464	500
			NON	250	8.684	55.290	6.947	44.232	5.211	33.174	3.474	22.116	2.084	13.270	500
			1:3	83	3.047	19.400	2.438	15.520	1.828	11.640	1.219	7.760	0.731	4.656	500
			1:5	50	1.828	11.640	1.463	9.312	1.097	6.984	0.731	4.656	0.439	2.794	500
			1:10	25	0.914	5.820	0.731	4.656	0.548	3.492	0.366	2.328	0.219	1.397	500
			1:10	25	0.914	5.820	0.731	4.656	0.548	3.492	0.366	2.328	0.219	1.397	500

### FMR40 Performance Specification

Model	Lead mm	Reducer	Ratio	Speed at 1500rpm mm/s	Actual load N										Max.linear speed mm/s
					50000		40000		30000		20000		10000		
					Power KW	Torque Nm	Power KW	Torque Nm	Power KW	Torque Nm	Power KW	Torque Nm	Power KW	Torque Nm	
FMR40-10	10	Parallel 1:1	NON	250	19.540	124.403	15.632	99.522	11.724	74.642	7.816	49.761	3.908	24.881	416
			1:3	83	6.856	43.650	5.485	34.920	4.114	26.190	2.742	17.460	1.371	8.730	416
			1:5	50	4.114	26.190	3.291	20.952	2.468	15.714	1.645	10.476	0.823	5.238	416
			1:10	25	2.057	13.095	1.645	10.476	1.234	7.857	0.823	5.238	0.411	2.619	416
		Parallel 2:1	NON	125	9.770	62.201	7.816	49.761	5.862	37.321	3.908	24.881	1.954	12.440	416
			NON	250	17.369	110.580	13.895	88.464	10.421	66.348	6.947	44.232	3.474	22.116	416
			1:3	83	6.094	38.800	4.875	31.040	3.657	23.280	2.438	15.520	1.219	7.760	416
			1:5	50	3.657	23.280	2.925	18.624	2.194	13.968	1.463	9.312	0.731	4.656	416
			1:10	25	1.828	11.640	1.463	9.312	1.097	6.984	0.731	4.656	0.366	2.328	416
			1:10	25	1.828	11.640	1.463	9.312	1.097	6.984	0.731	4.656	0.366	2.328	416
FMR40-20	20	Parallel 1:1	NON	500	39.079	248.806	31.264	199.045	23.448	149.283	15.632	99.522	7.816	49.761	832
			1:3	167	13.712	87.300	10.970	69.840	8.227	52.380	5.485	34.920	2.742	17.460	832
			1:5	100	8.227	52.380	6.582	41.904	4.936	31.428	3.291	20.952	1.645	10.476	832
			1:10	50	4.114	26.190	3.291	20.952	2.468	15.714	1.645	10.476	0.823	5.238	832
		Parallel 2:1	NON	250	19.540	124.403	15.632	99.522	11.724	74.642	7.816	49.761	3.908	24.881	832
			NON	500	34.737	221.161	27.790	176.929	20.842	132.696	13.895	88.464	6.947	44.232	832
			1:3	167	12.189	77.600	9.751	62.080	7.313	46.560	4.875	31.040	2.438	15.520	832
			1:5	100	7.313	46.560	5.850	37.248	4.388	27.936	2.925	18.624	1.463	9.312	832
			1:10	50	3.657	23.280	2.925	18.624	2.194	13.968	1.463	9.312	0.731	4.656	832
			1:10	50	3.657	23.280	2.925	18.624	2.194	13.968	1.463	9.312	0.731	4.656	832



## FMR50 Performance Specification

Model	Lead mm	Reducer	Ratio	Speed at 1500rpm mm/s	Actual load N										Max.linear speed mm/s	
					70000		50000		30000		20000		10000			
					Power KW	Torque Nm	Power KW	Torque Nm	Power KW	Torque Nm	Power KW	Torque Nm	Power KW	Torque Nm		
FMR50-10	10	Parallel 1:1	NON	250	27.356	174.164	19.540	124.403	11.724	74.642	7.816	49.761	3.908	24.881	333	
			1:3	83	9.598	61.110	6.856	43.650	4.114	26.190	2.742	17.460	1.371	8.730	333	
			1:5	50	5.759	36.666	4.114	26.190	2.468	15.714	1.645	10.476	0.823	5.238	333	
			1:10	25	2.880	18.333	2.057	13.095	1.234	7.857	0.823	5.238	0.411	2.619	333	
		Parallel 2:1	NON	125	13.678	87.082	9.770	62.201	5.862	37.321	3.908	24.881	1.954	12.440	333	
			NON	250	24.316	154.812	17.369	110.580	10.421	66.348	6.947	44.232	3.474	22.116	333	
		Inline shaft coupling 1:1	1:3	83	8.532	54.320	6.094	38.800	3.657	23.280	2.438	15.520	1.219	7.760	333	
			1:5	50	5.119	32.592	3.657	23.280	2.194	13.968	1.463	9.312	0.731	4.656	333	
			1:10	25	2.560	16.296	1.828	11.640	1.097	6.984	0.731	4.656	0.366	2.328	333	
							70000		50000		30000		20000		10000	
		FMR50-15	15	Parallel 1:1	NON	375	41.033	261.246	29.310	186.604	17.586	111.963	11.724	74.642	5.862	37.321
1:3	125				14.398	91.665	10.284	65.475	6.170	39.285	4.114	26.190	2.057	13.095	500	
1:5	75				8.639	54.999	6.170	39.285	3.702	23.571	2.468	15.714	1.234	7.857	500	
1:10	38				4.319	27.500	3.085	19.643	1.851	11.786	1.234	7.857	0.617	3.929	500	
Parallel 2:1	NON			188	20.517	130.623	14.655	93.302	8.793	55.981	5.862	37.321	2.931	18.660	500	
	NON			375	36.474	232.219	26.053	165.870	15.632	99.522	10.421	66.348	5.211	33.174	500	
Inline shaft coupling 1:1	1:3			125	12.798	81.480	9.141	58.200	5.485	34.920	3.657	23.280	1.828	11.640	500	
	1:5			75	7.679	48.888	5.485	34.920	3.291	20.952	2.194	13.968	1.097	6.984	500	
	1:10			38	3.839	24.444	2.742	17.460	1.645	10.476	1.097	6.984	0.548	3.492	500	
							70000		50000		30000		20000		10000	
FMR50-20	20			Parallel 1:1	NON	500	54.711	348.328	39.079	248.806	23.448	149.283	15.632	99.522	7.816	49.761
		1:3	167		19.197	122.220	13.712	87.300	8.227	52.380	5.485	34.920	2.742	17.460	666	
		1:5	100		11.518	73.332	8.227	52.380	4.936	31.428	3.291	20.952	1.645	10.476	666	
		1:10	50		5.759	36.666	4.114	26.190	2.468	15.714	1.645	10.476	0.823	5.238	666	
		Parallel 2:1	NON	250	27.356	174.164	19.540	124.403	11.724	74.642	7.816	49.761	3.908	24.881	666	
			NON	500	48.632	309.625	34.737	221.161	20.842	132.696	13.895	88.464	6.947	44.232	666	
		Inline shaft coupling 1:1	1:3	167	17.064	108.640	12.189	77.600	7.313	46.560	4.875	31.040	2.438	15.520	666	
			1:5	100	10.238	65.184	7.313	46.560	4.388	27.936	2.925	18.624	1.463	9.312	666	
			1:10	50	5.119	32.592	3.657	23.280	2.194	13.968	1.463	9.312	0.731	4.656	666	
							70000		50000		30000		20000		10000	

## FMR60 Performance Specification

Model	Lead mm	Reducer	Ratio	Speed at 1500rpm mm/s	Actual load N										Max.linear speed mm/s
					100000		80000		60000		40000		20000		
					Power KW	Torque Nm	Power KW	Torque Nm	Power KW	Torque Nm	Power KW	Torque Nm	Power KW	Torque Nm	
FMR60-10	10	Parallel 1:1	NON	250	39.079	248.806	31.264	199.045	23.448	149.283	15.632	99.522	7.816	49.761	250
			1:3	83	13.712	87.300	10.970	69.840	8.227	52.380	5.485	34.920	2.742	17.460	250
			1:5	50	8.227	52.380	6.582	41.904	4.936	31.428	3.291	20.952	1.645	10.476	250
			1:10	25	4.114	26.190	3.291	20.952	2.468	15.714	1.645	10.476	0.823	5.238	250
			1:20	13	2.171	13.823	1.737	11.058	1.303	8.294	0.868	5.529	0.434	2.765	250
		Parallel 2:1	NON	125	19.540	124.403	15.632	99.522	11.724	74.642	7.816	49.761	3.908	24.881	250
			NON	250	34.737	221.161	27.790	176.929	20.842	132.696	13.895	88.464	6.947	44.232	250
		Inline shaft coupling 1:1	1:3	83	12.189	77.600	9.751	62.080	7.313	46.560	4.875	31.040	2.438	15.520	250
			1:5	50	7.313	46.560	5.850	37.248	4.388	27.936	2.925	18.624	1.463	9.312	250
			1:10	25	3.657	23.280	2.925	18.624	2.194	13.968	1.463	9.312	0.731	4.656	250
			1:20	13	1.930	12.287	1.544	9.829	1.158	7.372	0.772	4.915	0.386	2.457	250
					130000		100000		80000		50000		20000		
FMR60-20	20	Parallel 1:1	NON	500	101.607	646.895	78.159	497.611	62.527	398.089	39.079	248.806	15.632	99.522	500
			1:3	167	35.651	226.981	27.424	174.601	21.939	139.680	13.712	87.300	5.485	34.920	500
			1:5	100	21.391	136.188	16.454	104.760	13.164	83.808	8.227	52.380	3.291	20.952	500
			1:10	50	10.695	68.094	8.227	52.380	6.582	41.904	4.114	26.190	1.645	10.476	500
			1:20	25	5.645	35.939	4.342	27.645	3.474	22.116	2.171	13.823	0.868	5.529	500
		Parallel 2:1	NON	250	50.803	323.447	39.079	248.806	31.264	199.045	19.540	124.403	7.816	49.761	500
			NON	500	90.317	575.018	69.475	442.321	55.580	353.857	34.737	221.161	13.895	88.464	500
		Inline shaft coupling 1:1	1:3	167	31.690	201.761	24.377	155.200	19.502	124.160	12.189	77.600	4.875	31.040	500
			1:5	100	19.014	121.056	14.626	93.120	11.701	74.496	7.313	46.560	2.925	18.624	500
			1:10	50	9.507	60.528	7.313	46.560	5.850	37.248	3.657	23.280	1.463	9.312	500
			1:20	25	5.018	31.945	3.860	24.573	3.088	19.659	1.930	12.287	0.772	4.915	500

## FMR80 Performance Specification

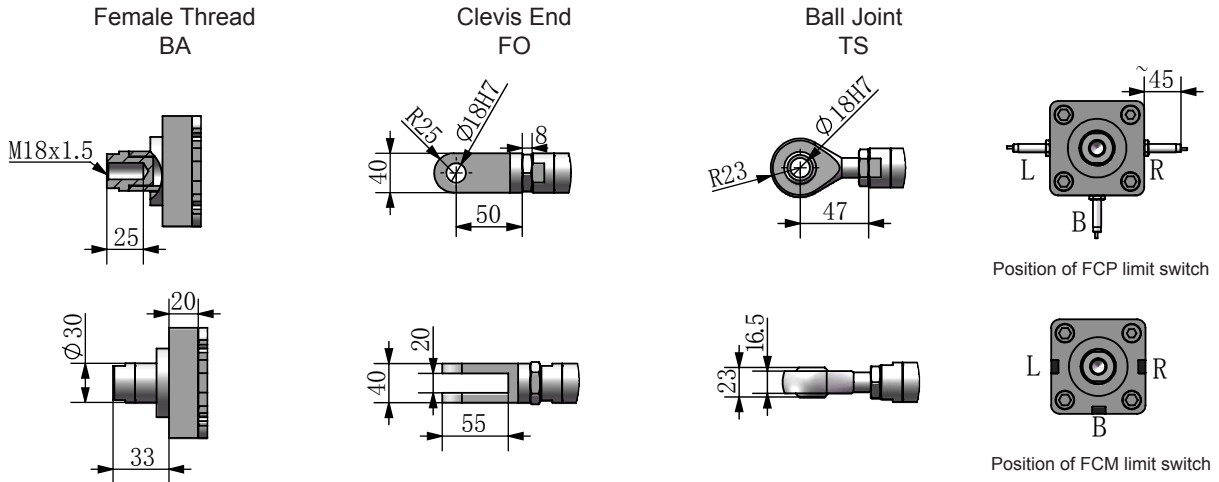
Model	Lead mm	Reducer	Ratio	Speed at 1500rpm mm/s	Actual load N										Max.linear speed mm/s
					160000		120000		100000		80000		50000		
					Power KW	Torque Nm	Power KW	Torque Nm	Power KW	Torque Nm	Power KW	Torque Nm	Power KW	Torque Nm	
FMR80-10	10	Parallel 1:1	NON	250	62.527	398.089	46.895	298.567	39.079	248.806	31.264	199.045	19.540	124.403	200
			1:3	83	21.939	139.680	16.454	104.760	13.712	87.300	10.970	69.840	6.856	43.650	200
			1:5	50	13.164	83.808	9.873	62.856	8.227	52.380	6.582	41.904	4.114	26.190	200
			1:10	25	6.582	41.904	4.936	31.428	4.114	26.190	3.291	20.952	2.057	13.095	200
			1:20	13	3.474	22.116	2.605	16.587	2.171	13.823	1.737	11.058	1.086	6.911	200
			1:50	5	1.389	8.846	1.042	6.635	0.868	5.529	0.695	4.423	0.434	2.765	200
		Parallel 2:1	NON	125	31.264	199.045	23.448	149.283	19.540	124.403	15.632	99.522	9.770	62.201	200
			NON	250	55.580	353.857	41.685	265.393	34.737	221.161	27.790	176.929	17.369	110.580	200
		Inline shaft coupling 1:1	1:3	83	19.502	124.160	14.626	93.120	12.189	77.600	9.751	62.080	6.094	38.800	200
			1:5	50	11.701	74.496	8.776	55.872	7.313	46.560	5.850	37.248	3.657	23.280	200
			1:10	25	5.850	37.248	4.388	27.936	3.657	23.280	2.925	18.624	1.828	11.640	200
			1:20	13	3.088	19.659	2.316	14.744	1.930	12.287	1.544	9.829	0.965	6.143	200
			1:50	5	1.235	7.863	0.926	5.898	0.772	4.915	0.618	3.932	0.386	2.457	200
					200000	150000	100000	80000	50000						
FMR80-20	20	Parallel 1:1	NON	500	156.318	995.223	117.238	746.417	78.159	497.611	62.527	398.089	39.079	248.806	400
			1:3	167	54.848	349.201	41.136	261.901	27.424	174.601	21.939	139.680	13.712	87.300	400
			1:5	100	32.909	209.521	24.682	157.140	16.454	104.760	13.164	83.808	8.227	52.380	400
			1:10	50	16.454	104.760	12.341	78.570	8.227	52.380	6.582	41.904	4.114	26.190	400
			1:20	25	8.684	55.290	6.513	41.468	4.342	27.645	3.474	22.116	2.171	13.823	400
			1:50	10	3.474	22.116	2.605	16.587	1.737	11.058	1.389	8.846	0.868	5.529	400
		Parallel 2:1	NON	250	78.159	497.611	58.619	373.209	39.079	248.806	31.264	199.045	19.540	124.403	400
			NON	500	138.949	884.643	104.212	663.482	69.475	442.321	55.580	353.857	34.737	221.161	400
		Inline shaft coupling 1:1	1:3	167	48.754	310.401	36.566	232.801	24.377	155.200	19.502	124.160	12.189	77.600	400
			1:5	100	29.252	186.241	21.939	139.680	14.626	93.120	11.701	74.496	7.313	46.560	400
			1:10	50	14.626	93.120	10.970	69.840	7.313	46.560	5.850	37.248	3.657	23.280	400
			1:20	25	7.719	49.147	5.790	36.860	3.860	24.573	3.088	19.659	1.930	12.287	400
			1:50	10	3.088	19.659	2.316	14.744	1.544	9.829	1.235	7.863	0.772	4.915	400

## FMR200 Performance Specification

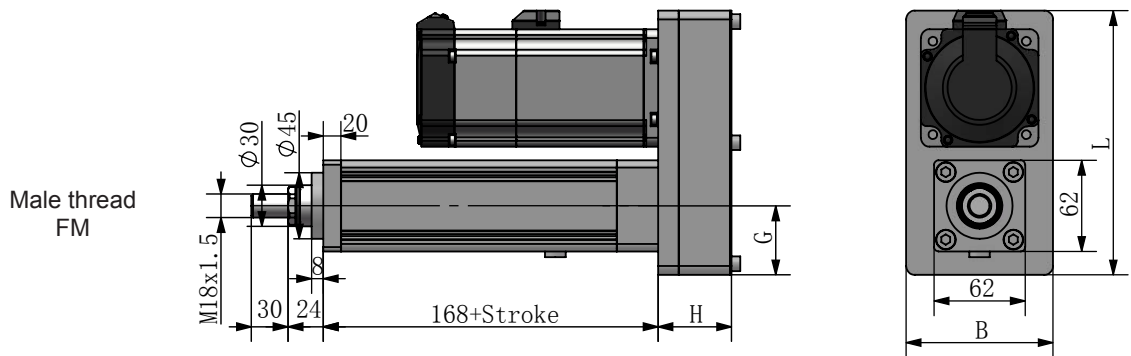
Model	Lead mm	Reducer	Ratio	Speed at 1500rpm mm/s	Actual load N										Max.linear speed mm/s
					250000		200000		150000		100000		50000		
					Power KW	Torque Nm	Power KW	Torque Nm	Power KW	Torque Nm	Power KW	Torque Nm	Power KW	Torque Nm	
FMR200-10	10	Parallel 1:1	NON	250	97.699	622.014	78.159	497.611	58.619	373.209	39.079	248.806	19.540	124.403	167
			1:3	83	34.280	218.251	27.424	174.601	20.568	130.950	13.712	87.300	6.856	43.650	167
			1:5	50	20.568	130.950	16.454	104.760	12.341	78.570	8.227	52.380	4.114	26.190	167
			1:10	25	10.284	65.475	8.227	52.380	6.170	39.285	4.114	26.190	2.057	13.095	167
			1:20	13	5.428	34.556	4.342	27.645	3.257	20.734	2.171	13.823	1.086	6.911	167
			1:50	5	2.171	13.823	1.737	11.058	1.303	8.294	0.868	5.529	0.434	2.765	167
		Parallel 2:1	NON	125	48.849	311.007	39.079	248.806	29.310	186.604	19.540	124.403	9.770	62.201	167
			NON	250	86.843	552.902	69.475	442.321	52.106	331.741	34.737	221.161	17.369	110.580	167
		Inline shaft coupling 1:1	1:3	83	30.471	194.001	24.377	155.200	18.283	116.400	12.189	77.600	6.094	38.800	167
			1:5	50	18.283	116.400	14.626	93.120	10.970	69.840	7.313	46.560	3.657	23.280	167
			1:10	25	9.141	58.200	7.313	46.560	5.485	34.920	3.657	23.280	1.828	11.640	167
			1:20	13	4.825	30.717	3.860	24.573	2.895	18.430	1.930	12.287	0.965	6.143	167
			1:50	5	1.930	12.287	1.544	9.829	1.158	7.372	0.772	4.915	0.386	2.457	167
					350000	250000	150000	100000	50000						
FMR200-20	20	Parallel 1:1	NON	500	273.556	1741.640	195.397	1244.029	117.238	746.417	78.159	497.611	39.079	248.806	334
			1:3	167	95.985	611.102	68.560	436.501	41.136	261.901	27.424	174.601	13.712	87.300	334
			1:5	100	57.591	366.661	41.136	261.901	24.682	157.140	16.454	104.760	8.227	52.380	334
			1:10	50	28.795	183.331	20.568	130.950	12.341	78.570	8.227	52.380	4.114	26.190	334
			1:20	25	15.198	96.758	10.855	69.113	6.513	41.468	4.342	27.645	2.171	13.823	334
			1:50	10	6.079	38.703	4.342	27.645	2.605	16.587	1.737	11.058	0.868	5.529	334
		Parallel 2:1	NON	250	136.778	870.820	97.699	622.014	58.619	373.209	39.079	248.806	19.540	124.403	334
			NON	500	243.161	1548.125	173.686	1105.803	104.212	663.482	69.475	442.321	34.737	221.161	334
		Inline shaft coupling 1:1	1:3	167	85.320	543.202	60.943	388.001	36.566	232.801	24.377	155.200	12.189	77.600	334
			1:5	100	51.192	325.921	36.566	232.801	21.939	139.680	14.626	93.120	7.313	46.560	334
			1:10	50	25.596	162.960	18.283	116.400	10.970	69.840	7.313	46.560	3.657	23.280	334
			1:20	25	13.509	86.007	9.649	61.434	5.790	36.860	3.860	24.573	1.930	12.287	334
			1:50	10	5.404	34.403	3.860	24.573	2.316	14.744	1.544	9.829	0.772	4.915	334

## FMR25 Overall Dimension:

### Front Attachment



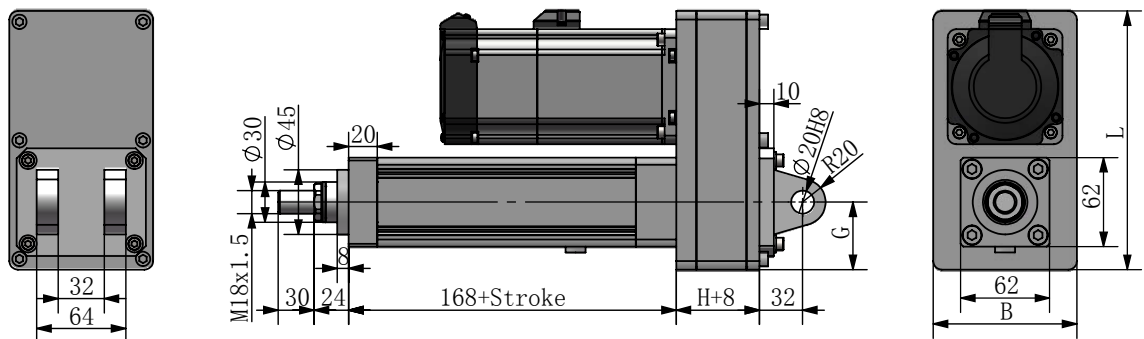
### FMR25 Parallel dimension-P10,P20



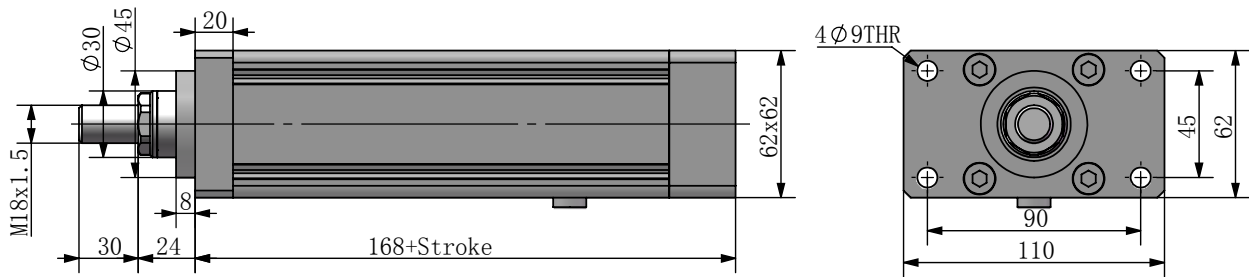
Power	H	L	B	G
Lower than 750W	50	180	100	47
750W-1.5KW	65	265	150	71

The dimension in above table is for reference only, the dimension will be different depends on different motor manufacturer.

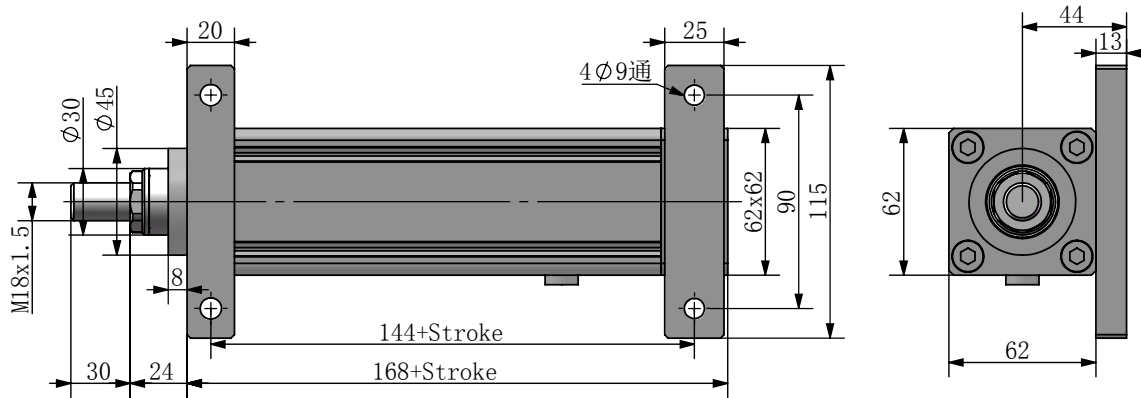
### FMR25 Rear clevis mounting-RC



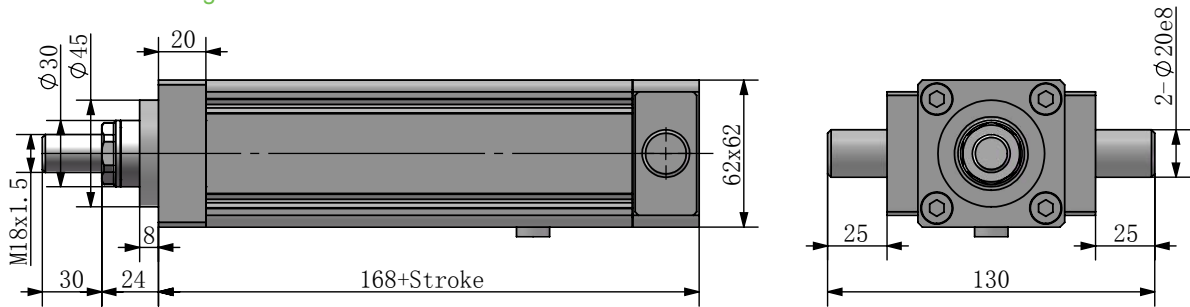
### FMR25 Front flange mounting-SF



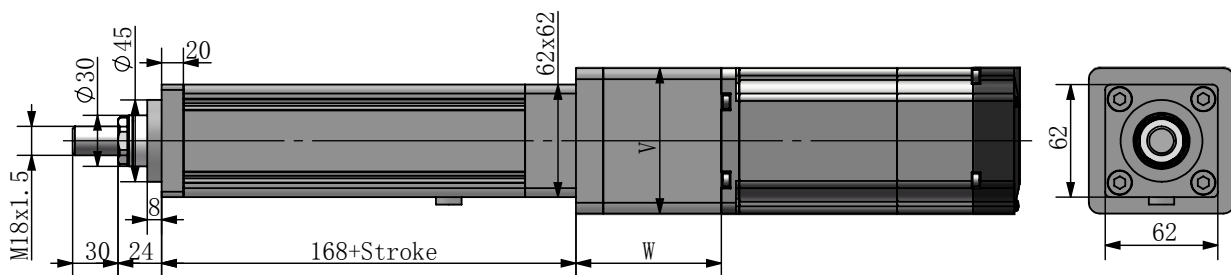
### FMR25 Side flange mounting-SF



### FMR25 Trunnion mounting-ST



### FMR25 Inline dimension-SC

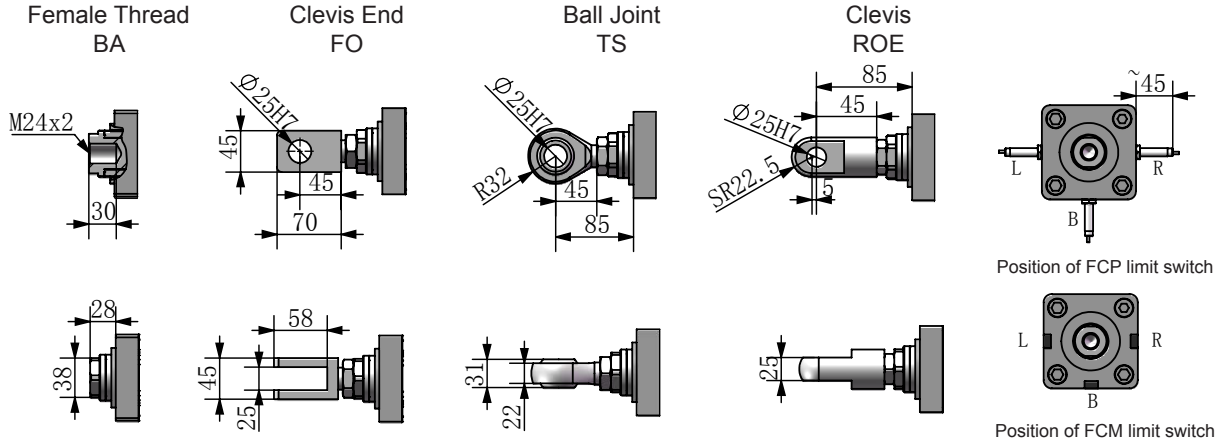


Power Size	Ratio	Lower than 750W			750W-1.5KW		
		1:1	3~10:1	15~100:1	1:1	3~10:1	15~100:1
W		83.6	160.6	197.6	90.5	194	242
V		80	80	80	100	100	100

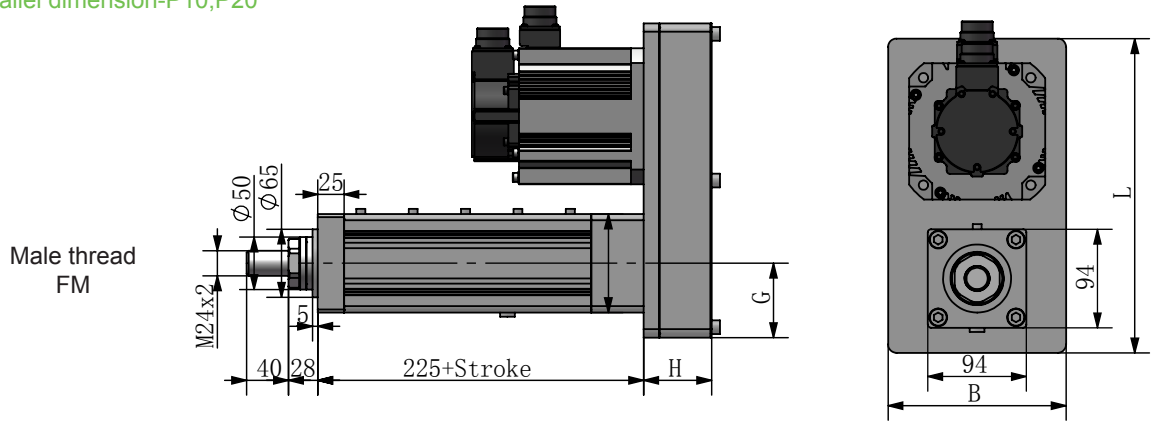
The dimension in above table is for reference only, the dimension will be different depends on different motor manufacturer.

FMR35 Overall Dimension:

Front Attachment



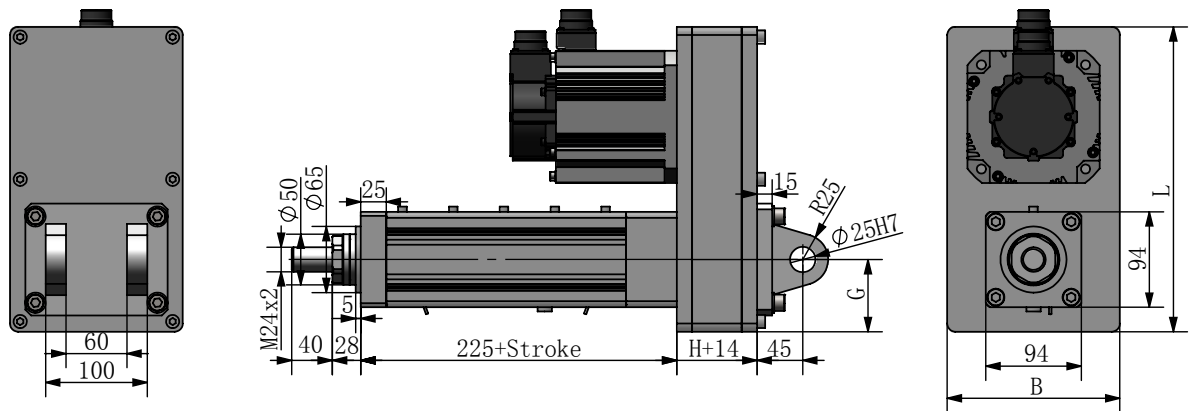
FMR35 Parallel dimension-P10,P20



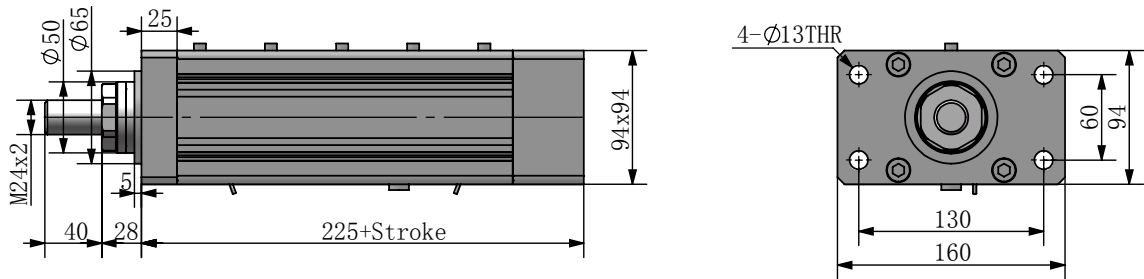
Power	H	L	B	G
Lower than 2.0W	65	300	170	71
2.0KW-3.5KW	80	350	170	75

The dimension in above table is for reference only, the dimension will be different depends on different motor manufacturer.

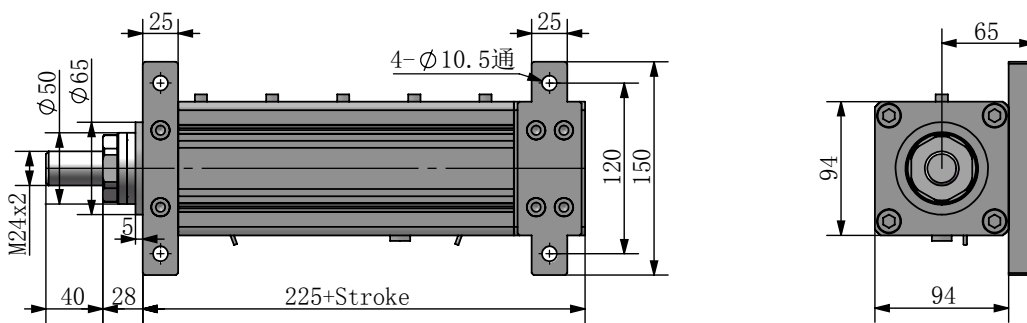
FMR35 Rear clevis mounting-RC



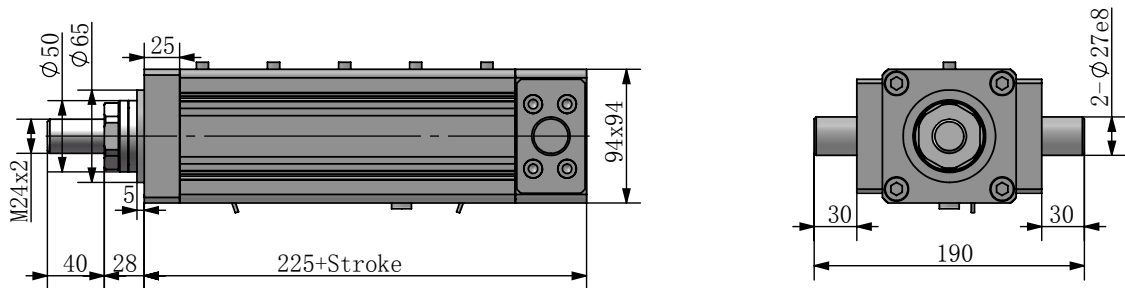
### FMR35 Front flange mounting-FF



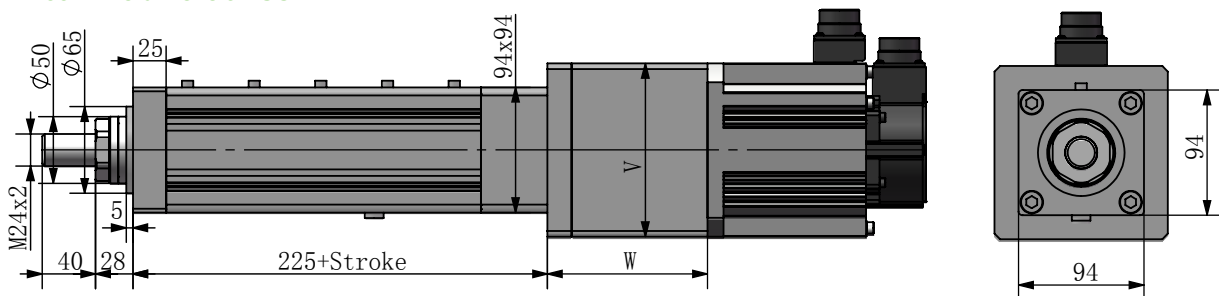
### FMR35 Side flange mounting-SF



### FMR35 Trunnion mounting-ST



### FMR35 Inline dimension-SC

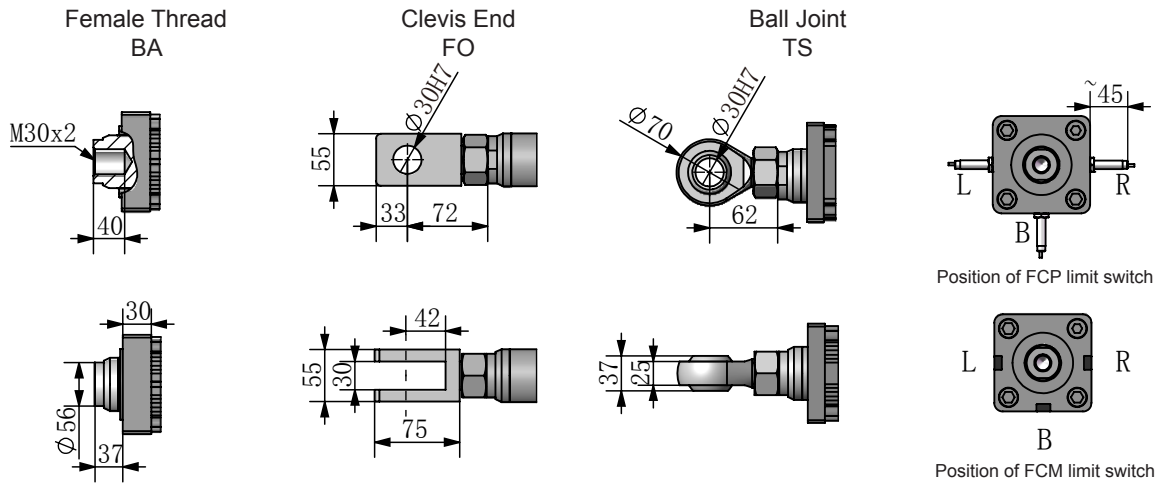


Power Size / Ratio	Lower than 2.0KW			2.0KW-3.5KW		
	1:1	3~10:1	15~100:1	1:1	3~10:1	15~100:1
W	132	222	284	187	315	377
V	130	130	130	180	192	192

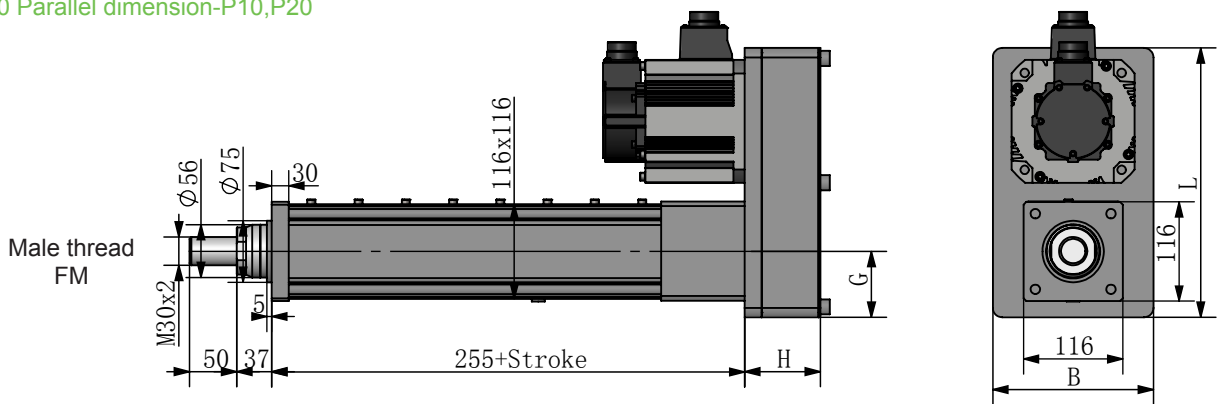
The dimension in above table is for reference only, the dimension will be different depends on different motor manufacturer.

## FMR40 Overall Dimension:

### Front Attachment



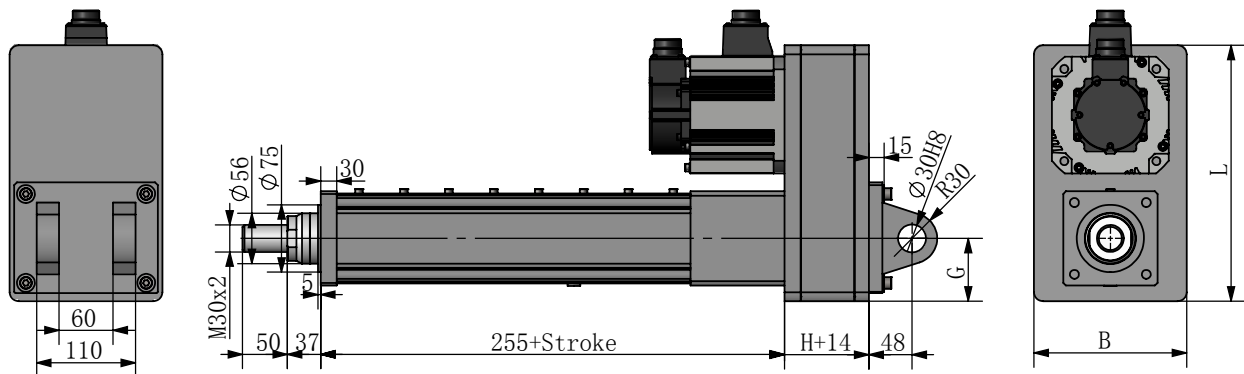
### FMR40 Parallel dimension-P10,P20



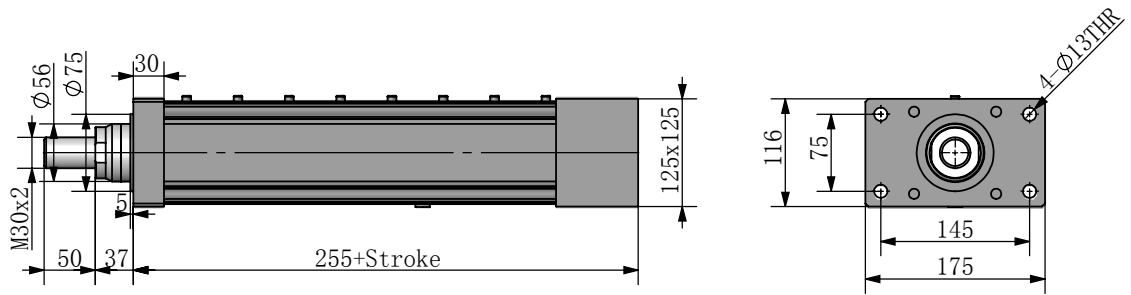
Power	H	L	B	G
Lower than 2.5KW	80	285	170	75
2.5KW-5KW	90	350	200	95
5KW-9KW	90	375	220	95

The dimension in above table is for reference only, the dimension will be different depends on different motor manufacturer.

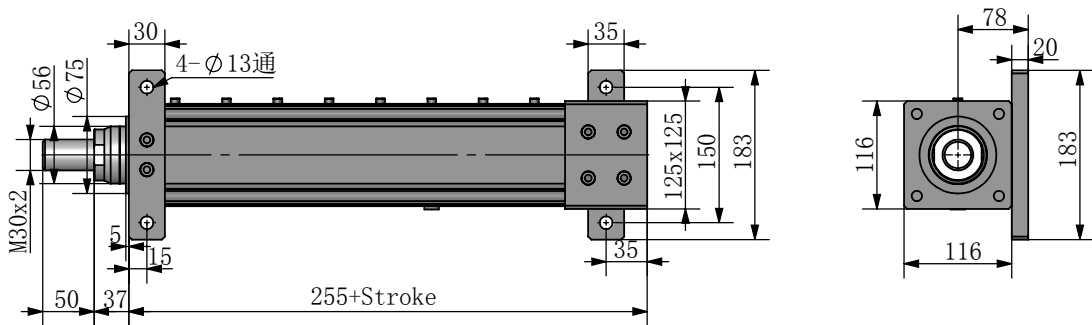
### FMR40 Rear clevis mounting-RC



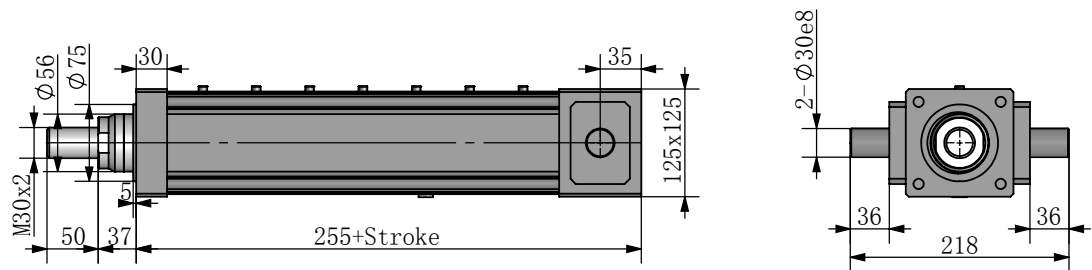
### FMR40 Front flange mounting-FF



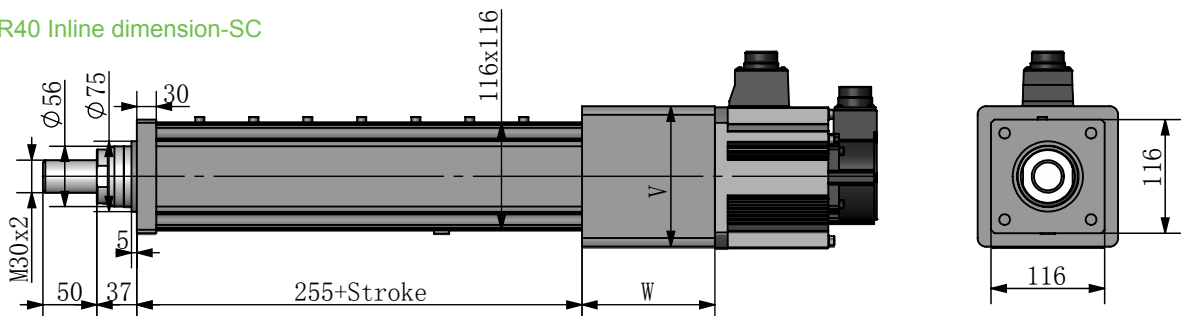
### FMR40 Side flange mounting-SF



### FMR40 Trunnion mounting-ST



### FMR40 Inline dimension-SC



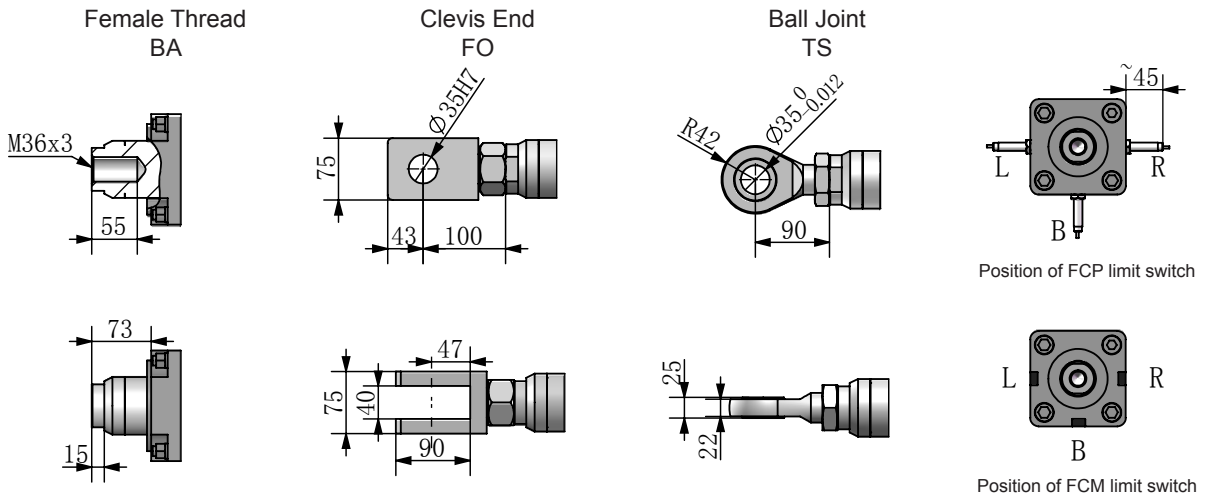
Power Size \ Ratio	Lower than 2.5KW			2.5KW-5KW			5KW-9KW		
	1:1	3~10:1	15~100:1	1:1	3~10:1	15~100:1	1:1	3~10:1	15~100:1
W	133	228.5	276.5	134	255.5	329.5	198	340	430
V	130	130	130	130	130	130	192	192	192

The dimension in above table is for reference only, the dimension will be different depends on different motor manufacturer.

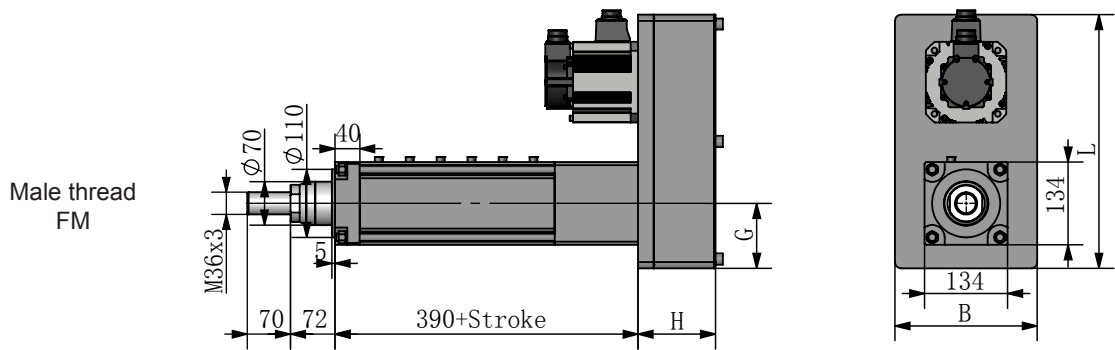


FMR50 Overall Dimension:

Front Attachment



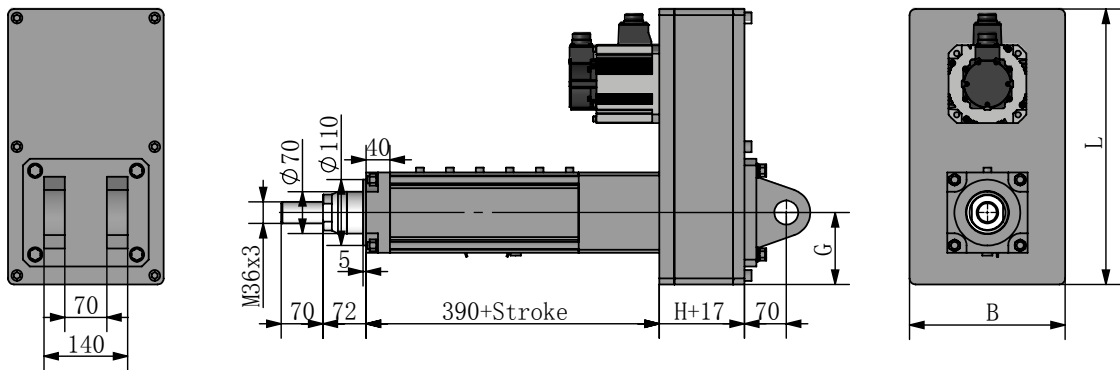
FMR50 Parallel dimension-P10,P20



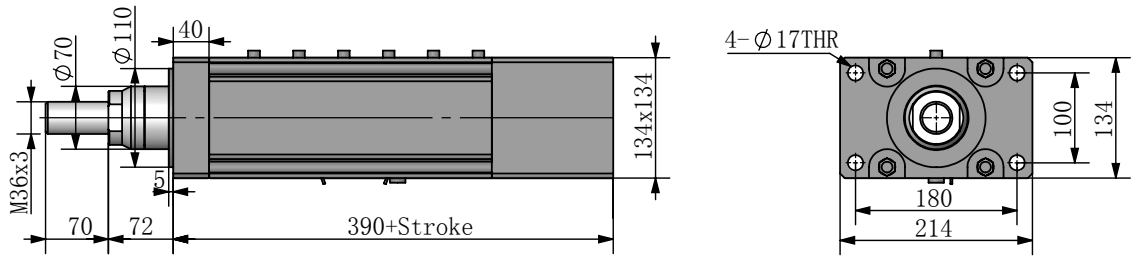
Power	H	L	B	G
Lower than 5KW	125	410	230	105
5KW-10KW	125	460	260	120
10KW-14KW	125	545	310	155

The dimension in above table is for reference only, the dimension will be different depends on different motor manufacturer.

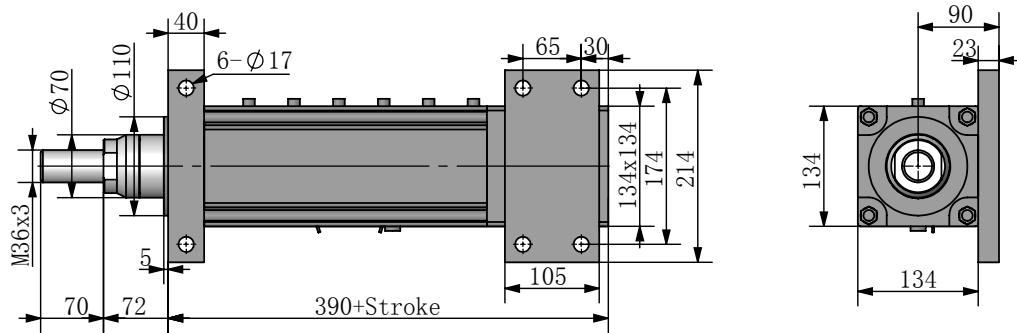
FMR50 Rear clevis mounting-RC



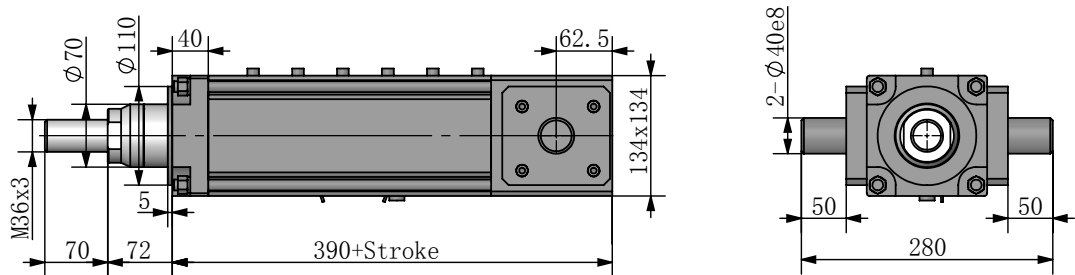
FMR50 Front flange mounting-FF



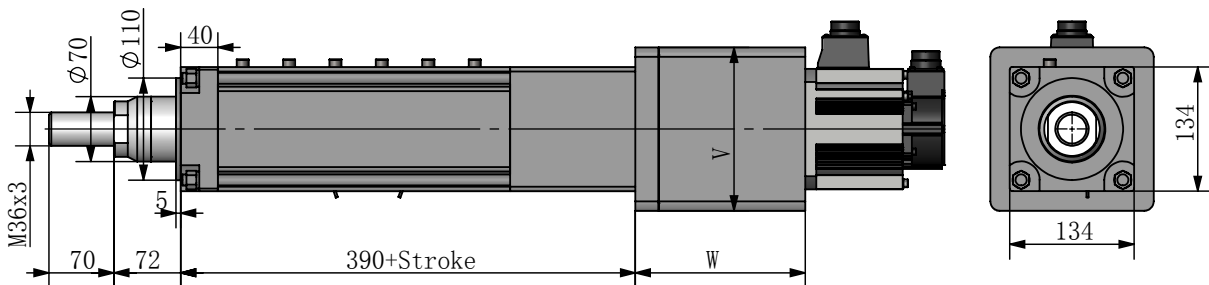
FMR50 Side flange mounting-SF



FMR50 Trunnion mounting-ST



FMR50 Inline dimension-SC

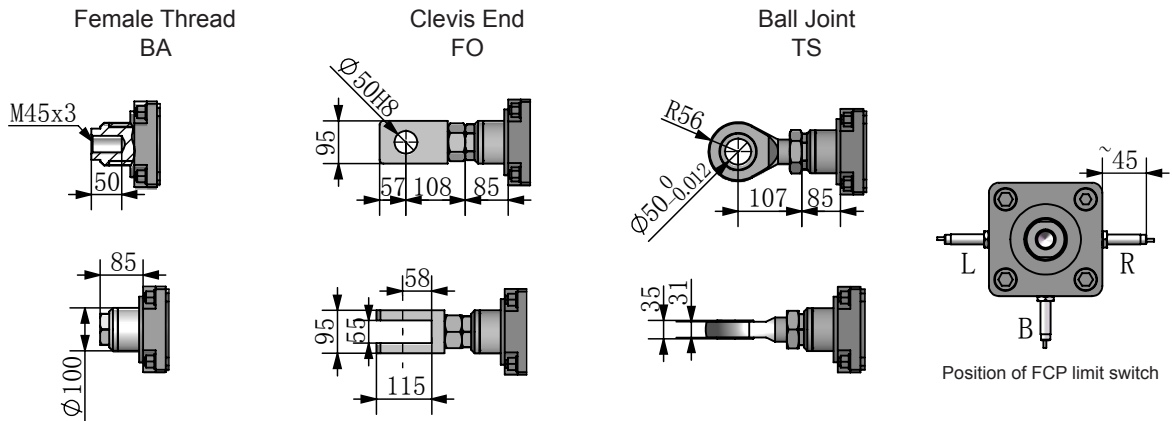


Power Size	Ratio	Lower than 5KW			5KW-10KW			10KW-14KW		
		1:1	3~10:1	15~100:1	1:1	3~10:1	15~100:1	1:1	3~10:1	15~100:1
W		197	339	429	207	349	439	242	425	519
V		176	176	176	192	192	192	260	260	260

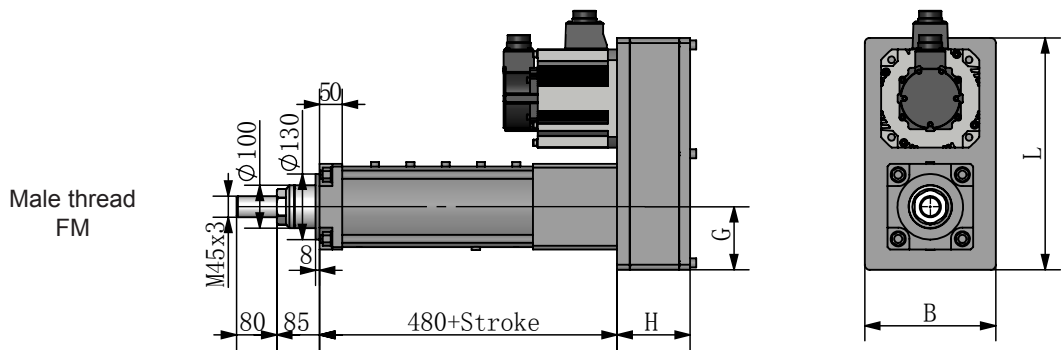
The dimension in above table is for reference only, the dimension will be different depends on different motor manufacturer.

FMR60 Overall Dimension:

Front Attachment



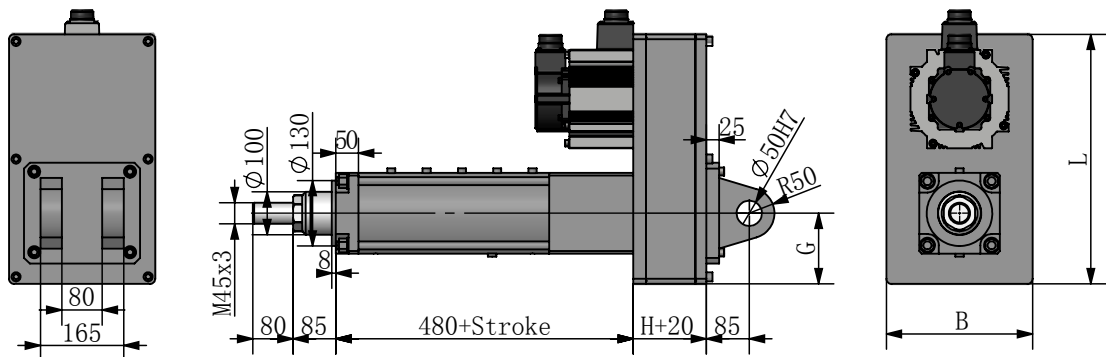
FMR60 Parallel dimension-P10,P20



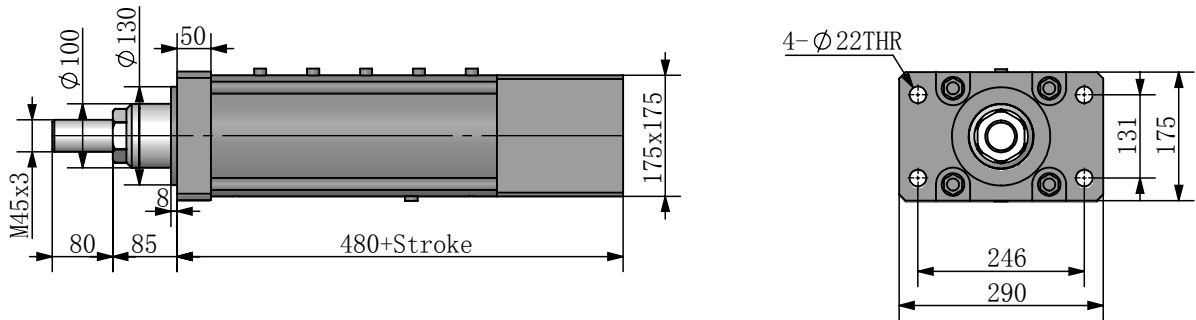
Power	H	L	B	G
Lower than 6KW	125	460	260	125
6KW-12KW	125	495	290	140
12KW-18KW	125	590	335	165

The dimension in above table is for reference only, the dimension will be different depends on different motor manufacturer.

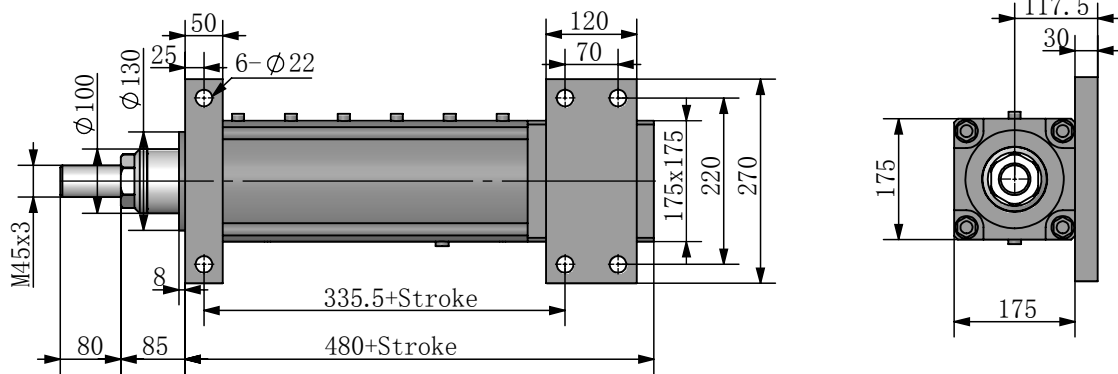
FMR60 Rear clevis mounting-RC



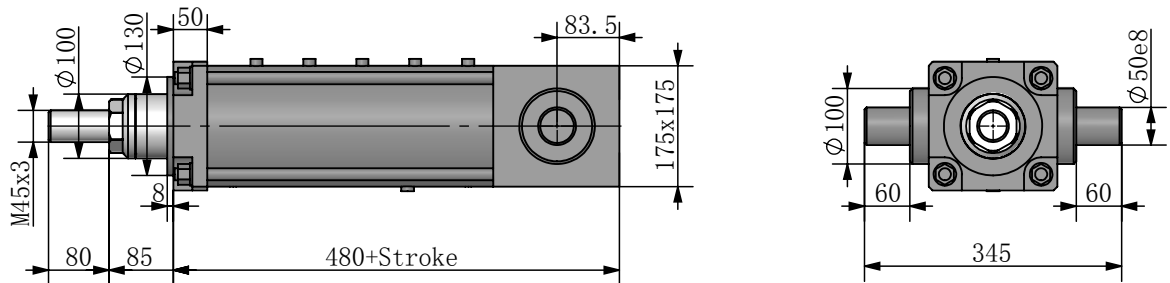
### FMR60 Front flange mounting-FF



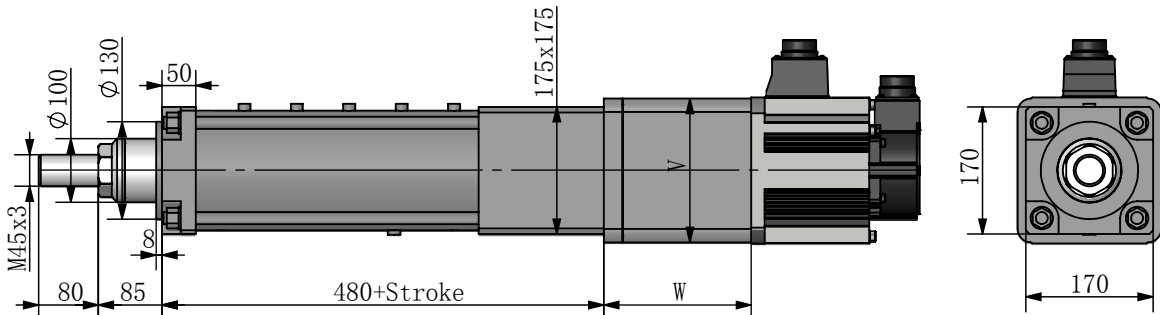
### FMR60 Side flange mounting-SF



### FMR60 Trunnion mounting-ST



### FMR60 Inline dimension-SC

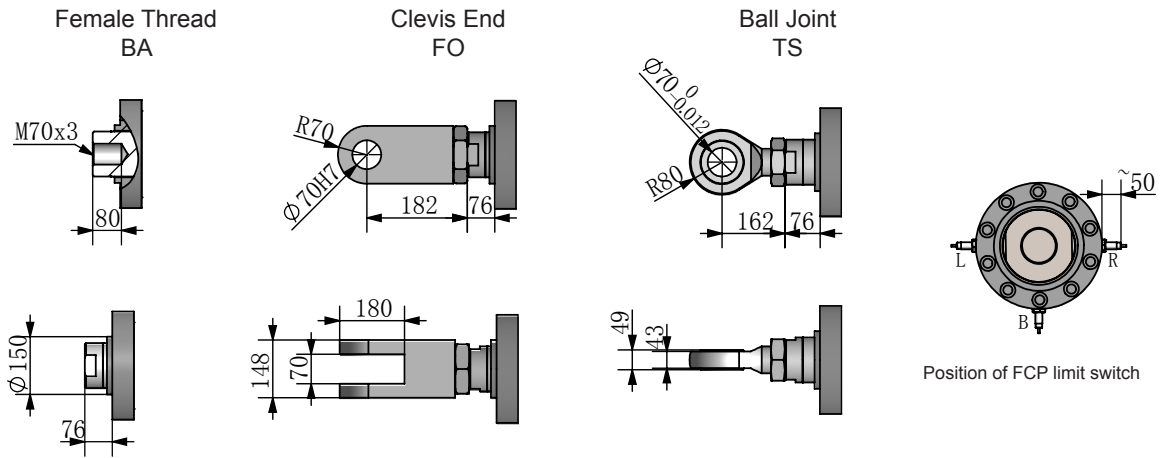


Power Size	Ratio	Lower than 6KW			6KW-12KW			12KW-18KW		
		1:1	3~10:1	15~100:1	1:1	3~10:1	15~100:1	1:1	3~10:1	15~100:1
W		215	357	447	245	428	522	300	526.5	577
V		192	192	192	260	260	260	280	280	280

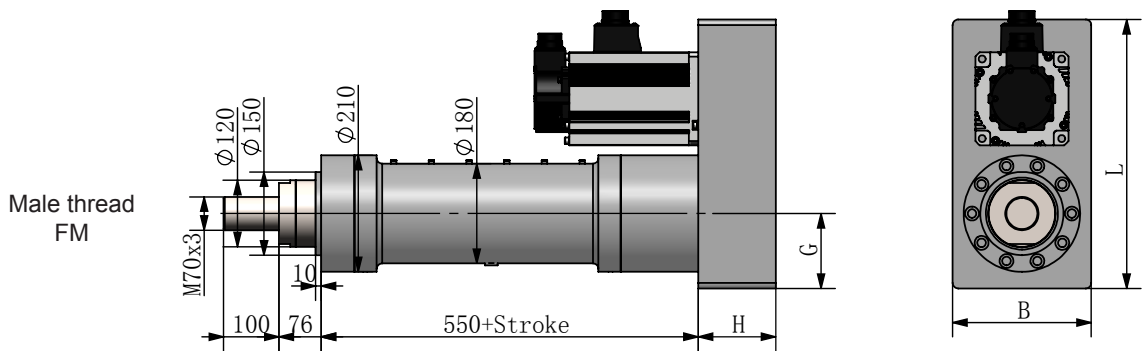
The dimension in above table is for reference only, the dimension will be different depends on different motor manufacturer.

## FMR80 Overall Dimension:

### Front Attachment



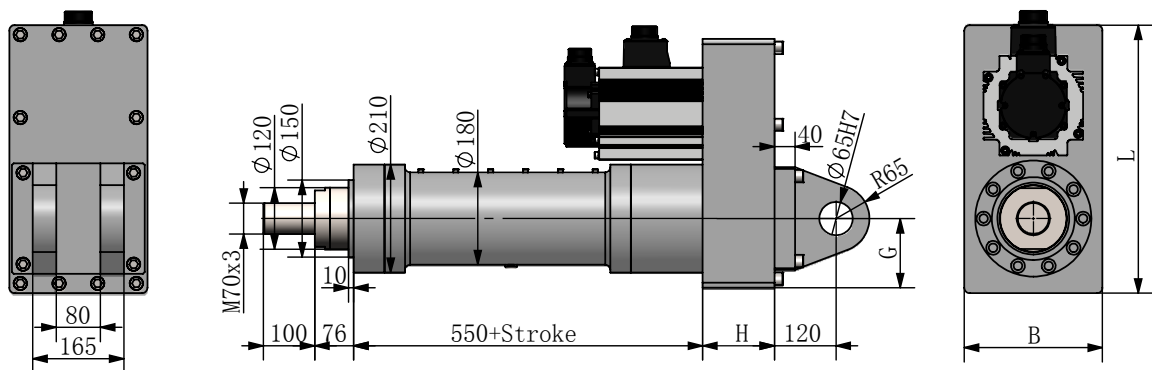
### FMR80 Parallel dimension-P10,P20



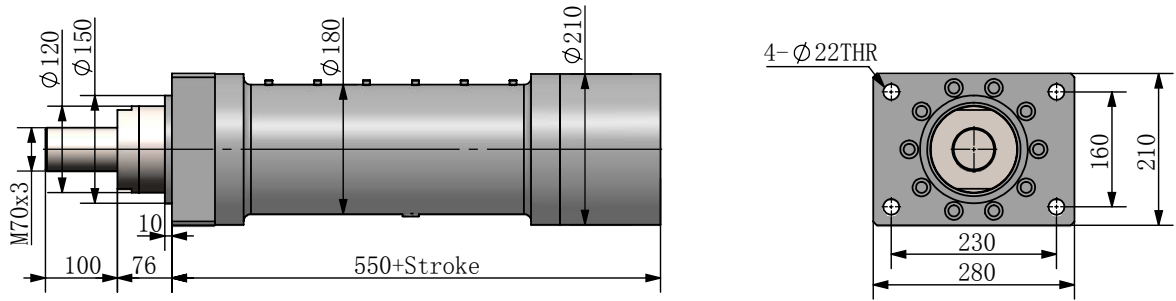
Power	H	L	B	G
Lower than 8KW	140	485	250	135
8KW-15KW	160	530	300	175
15KW-30KW	180	560	330	220

The dimension in above table is for reference only, the dimension will be different depends on different motor manufacturer.

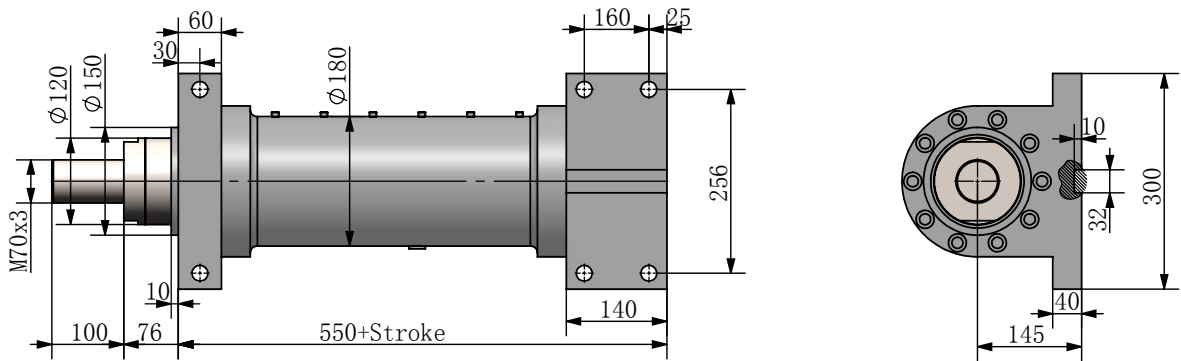
### FMR80 Rear clevis mounting-RC



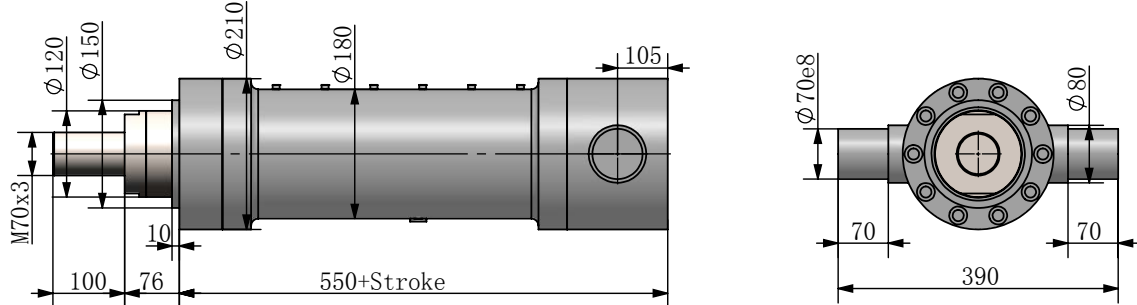
### FMR80 Front flange mounting-FF



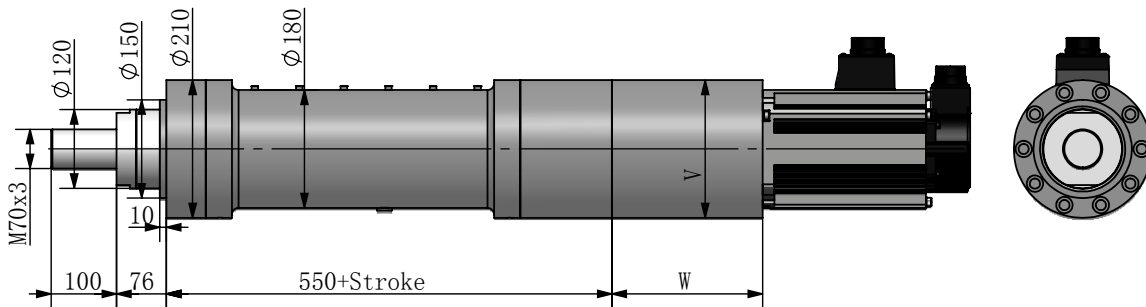
### FMR80 Side flange mounting-SF



### FMR80 Trunnion mounting-ST



### FMR80 Inline dimension-SC

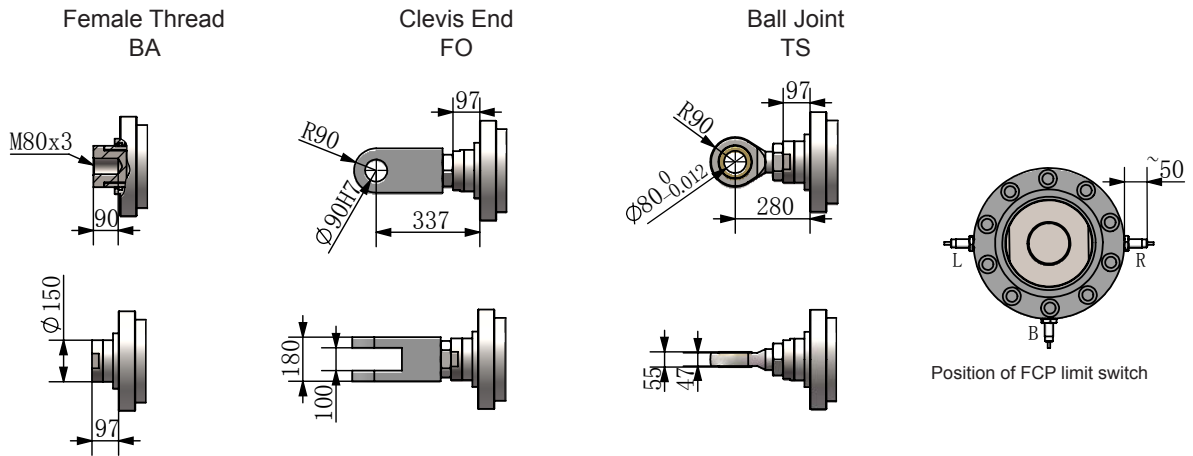


Power Size	Ratio	Lower than 8KW			8KW-15KW			15KW-30KW		
		1:1	3~10:1	15~100:1	1:1	3~10:1	15~100:1	1:1	3~10:1	15~100:1
W		230	240	260	230	250	270	250	360	430
V		210	210	210	250	250	250	290	290	290

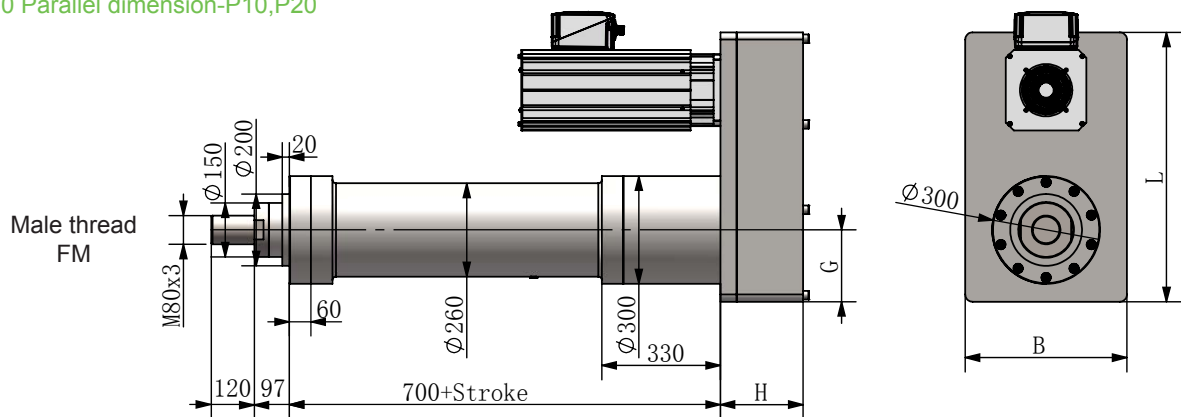
The dimension in above table is for reference only, the dimension will be different depends on different motor manufacturer.

## FMR200 Overall Dimension:

### Front Attachment



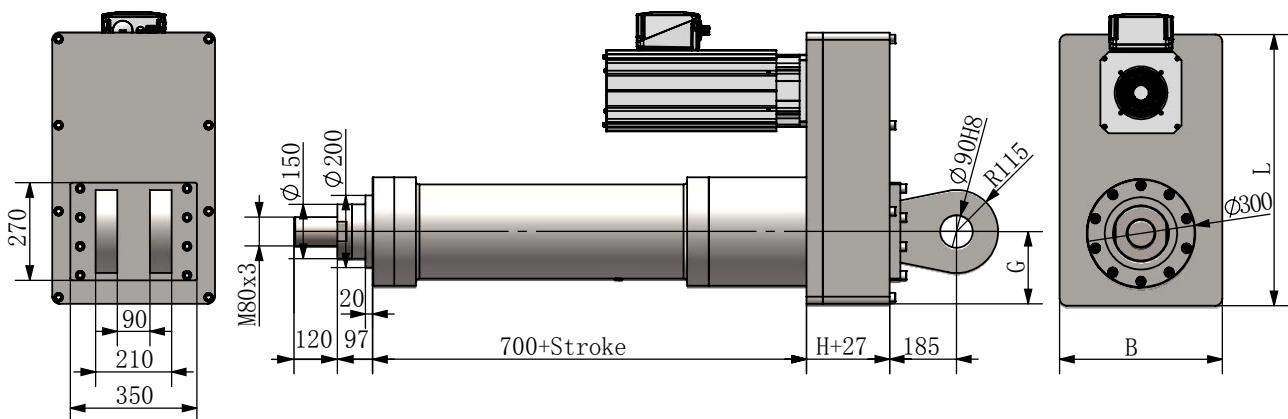
### FMR200 Parallel dimension-P10,P20



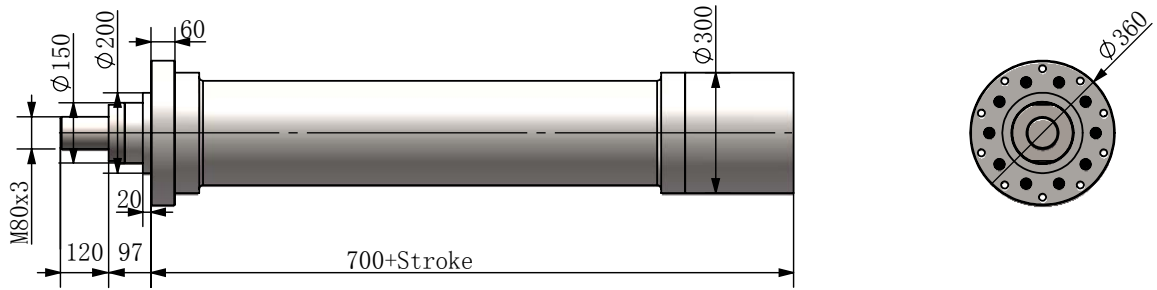
Power	H	L	B	G
Lower than 50KW	230	750	450	200
50KW-150KW	230	900	550	300
150KW-200KW	230	1000	650	350

The dimension in above table is for reference only, the dimension will be different depends on different motor manufacturer.

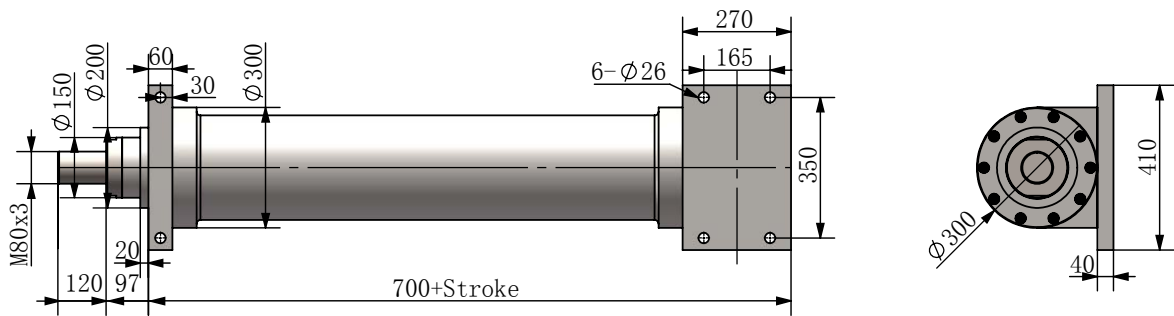
### FMR200 Rear clevis mounting-RC



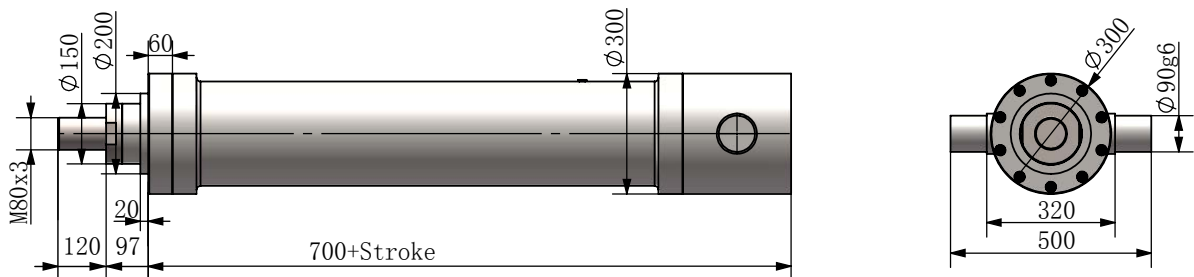
FMR200 Front flange mounting-FF



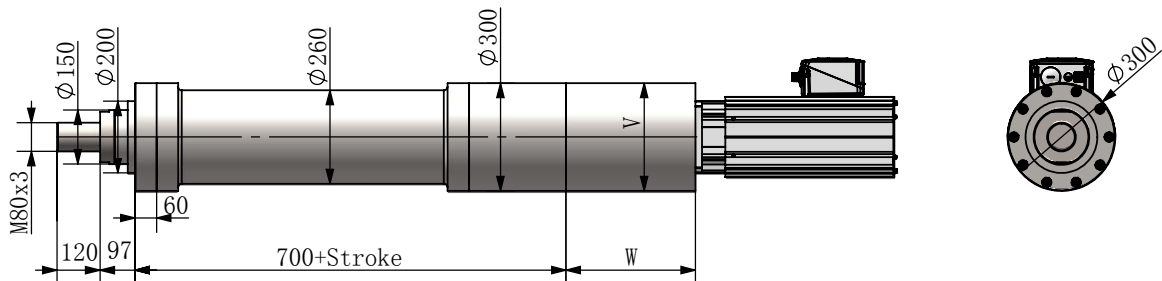
FMR200 Side flange mounting-SF



FMR200 Trunnion mounting-ST



FMR200 Inline dimension-SC



Power Size	Ratio	Lower than 50KW			50KW-150KW			150KW-200KW		
		1:1	3~10:1	15~100:1	1:1	3~10:1	15~100:1	1:1	3~10:1	15~100:1
W		215	357	447	245	428	522	300	526.5	577
V		300	300	300	340	340	340	380	380	380

The dimension in above table is for reference only, the dimension will be different depends on different motor manufacturer.



# Lim-Tec<sup>®</sup>

**LIM-TEC (BeiJing) Transmission Equipment Co.,LTD.**

Head office:

No.91, West Section, Gongye 6th Road, High-Tech Industry Development Zone, Dachang Hui  
Autonomous County, Langfang City, Hebei Province 065300

Website: [www.lim-tec.com](http://www.lim-tec.com) <https://www.lim-tec.de/>

Email: [info@lim-tec.com](mailto:info@lim-tec.com)