

WJM030 Series

- Iron Core Technology
- Low Cogging Force
- Compact Size



Linear Motion

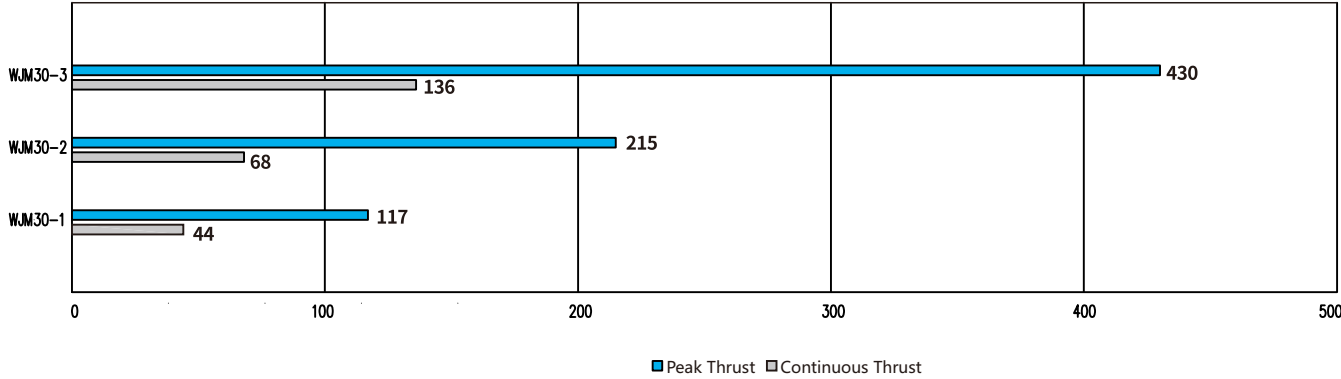
Vertical & Horizontal

Angular

Rotary

Vertical & Rotary

Thrust Graph



Specification Parameters

	Symbol	Unit	WJM30-1	WJM30-2	WJM30-3
Continuous Thrust	F_c	N	44	68	136
Continuous Current	I_c	A_{rms}	3	2.3	4.6
Peak Thrust [1s]	F_p	N	117	215	430
Limiting Current [1s]	I_u	A_{rms}	12	9	18
Thrust Constant	K_f	N/A_{rms}	14.8	29.6	29.6
Attractive Force Between Mover & Stator	F_a	N	189	389	760
Max. Coil Temperature	T_{max}	°C	100	100	100
Electrical Time Constant	K_e	ms	4.1	4.1	4.1
Resistance [Phase-to-Phase, 25°C]	R_{25}	Ω	2	4	2
Inductance [Phase-to-Phase, 25°C]	L	mH	8.2	16.3	8.1
Pole Pitch	2τ	mm	20	20	20
Back EMF Constant	K_v	$V_{rms}/[m/s]$	12.1	24.2	24.2
Continuous Thermal Power (Natural Cooling) @ 100°C	P_{CN}	W	34.6	42.3	86.7
Motor Constant [25°C]	K_m	$N/\sqrt{W}$	8.5	12.1	17
Thermal Dissipation Constant (Natural Cooling)	R_{TH}	$W/^\circ C$	0.5	0.5	0.5
Thermal Sensor Switch	-	-	PT100	PT100	PT100
Max. Operating Voltage	-	V_{DC}	330	330	330
Mover Mass	M_f	kg	0.35	0.6	1.1
Stator Unit Mass	M_s	kg/m	3.25	3.25	3.25

Note: All data in this table is measured at an ambient temperature of 25°C and represents values obtained without forced cooling. Except for dimensional specifications, all other specifications have a tolerance of ±10%. Our company reserves the right to make changes, and relevant parameters are subject to change without prior notice.

• Mover Model Number Designation System

WJM

030

A

-

L05

Series

WJM

Mover Width

50

Mover Length

1:56mm

2:96mm

3:176mm

Coil Wire Length

L05: 0.5m

For other lengths, please consult our sales team.

• Stator Model Number Designation System

DJM

030

-

L80

Series

WJM

Stator Width

030: 50mm

Stator Length

L80: 80mm

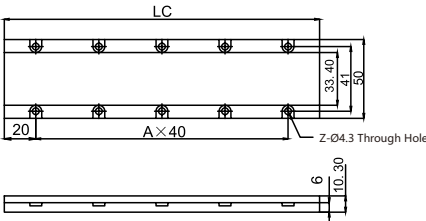
L200: 200mm

L400: 400mm

Stator Model	Length LC	Width	Height	A	Z	Pole Pitch	Weight
Unit	mm	mm	mm	PCS	PCS	mm	Kg/m
WJM030-L80	80	50	10.3	1	4	20	3.25
WJM030-L200	200	50	10.3	4	10	20	3.25
WJM030-L400	400	50	10.3	9	20	20	3.25

The coils of the WJM030 series can be freely paired with WJM030-L80, WJM030-L200, or WJM030-L400.

• Stator Size



* For special length requirements, please consult our sales team.



Linear Motor Specifications Overview

MAXWELL

Linear Motor Specifications Overview

MAXWELL

•WJM030-1 Series: Dimensions

In Stock

Lead Time: 7 Days

The lead time is subject to change during special periods. Please consult our sales team.

0

15.0

41.0

56.0

0

15.0

35.0

50.0

4×M3▽3.5

56.0

80.0

23.2

Motor Cable Ø7.4

Minimum Bend Radius = 74.0

Hall Sensor Cable Ø3.8

Hall Module

Motor Magnetic Track

0.0

34.3-0.2

27.3

21.9

11.1

10.3

0.0

0.0

5.0

20.0

50.0

0.0

50.0

(0.8)

Gap

Motor Cable Ø7.4

Minimum Bend Radius = 74.0

Hall Sensor Cable Ø3.8

Hall Module

Force-Speed Curve

Force-Speed Curve: WJM030-1

DC Bus Voltage: 330V

Force (N)

Speed (m/s)

Continuous Force

Peak Force

Force-Speed Curve: WJM030-1

DC Bus Voltage: 600V

Force (N)

Speed (m/s)

Continuous Force

Peak Force

•WJM030-3 Series: Dimensions

In Stock

Lead Time: 7 Days

The lead time is subject to change during special periods. Please consult our sales team.

0.0

12.0

36.0

60.0

116.0

140.0

164.0

176.0

0.0

15.0

35.0

50.0

12×M3▽3.5

176.0

200.0

23.2

Motor Cable Ø7.4

Minimum Bend Radius = 74.0

Hall Sensor Cable Ø3.8

Hall Module

Motor Magnetic Track

0.0

34.3-0.2

27.3

21.9

11.1

10.3

0.0

0.0

5.0

20.0

50.0

0.0

50.0

(0.8)

Gap

Motor Cable Ø7.4

Minimum Bend Radius = 74.0

Hall Sensor Cable Ø3.8

Hall Module

Force-Speed Curve

Force-Speed Curve: WJM030-3

DC Bus Voltage: 330V

Force (N)

Speed (m/s)

Continuous Force

Peak Force

Force-Speed Curve: WJM030-3

DC Bus Voltage: 600V

Force (N)

Speed (m/s)

Continuous Force

Peak Force

•WJM030-2 Series: Dimensions

In Stock

Lead Time: 7 Days

The lead time is subject to change during special periods. Please consult our sales team.

0.0

12.0

36.0

60.0

84.0

96.0

0.0

15.0

35.0

50.0

8×M3▽3.5

96.0

120.0

23.2

Motor Cable Ø7.4

Minimum Bend Radius = 74.0

Hall Sensor Cable Ø3.8

Hall Module

Motor Magnetic Track

0.0

34.3-0.2

27.3

21.9

11.1

10.3

0.0

0.0

5.0

20.0

50.0

0.0

50.0

(0.8)

Gap

Motor Cable Ø7.4

Minimum Bend Radius = 74.0

Hall Sensor Cable Ø3.8

Hall Module

Force-Speed Curve

Force-Speed Curve: WJM030-2

DC Bus Voltage: 330V

Force (N)

Speed (m/s)

Continuous Force

Peak Force

Force-Speed Curve: WJM030-2

DC Bus Voltage: 600V

Force (N)

Speed (m/s)

Continuous Force

Peak Force

MEMO