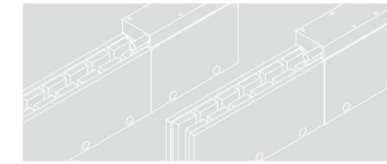


# KUM Series

## Ironless Linear Motor



### CONTENTS

High thrust density, low temperature rise.  
 Good dynamic curve motion.  
 No magnetic attraction, no cogging force.

#### KUM2

Continuous Thrust: 25.5N~51N  
 Peak Thrust: 127.6N~255.2N  
 Mover Length: B: 91mm / D: 151mm  
 Length of stator: L120: 119.7mm / L180: 179.7mm



#### KUM3

Continuous Thrust: 64.2N~128.3  
 Peak Thrust: 279N~558N  
 Mover Length: B: 121mm / D: 241mm  
 Length of stator: L120: 119.5mm / L180: 179.5mm



#### KUM4

Continuous Thrust: 119.8N~239.5N  
 Peak Thrust: 676.9N~1353.7N  
 Mover Length: B: 121mm / D: 241mm  
 Length of stator: L120: 119.5mm / L180: 179.5mm



#### KUM5

Continuous Thrust: 205.5N~411.0  
 Peak Thrust: 1479.6N~2959.2N  
 Mover Length: B: 169mm / D: 337mm  
 Length of stator: L168: 167.5mm / L252: 251.5mm



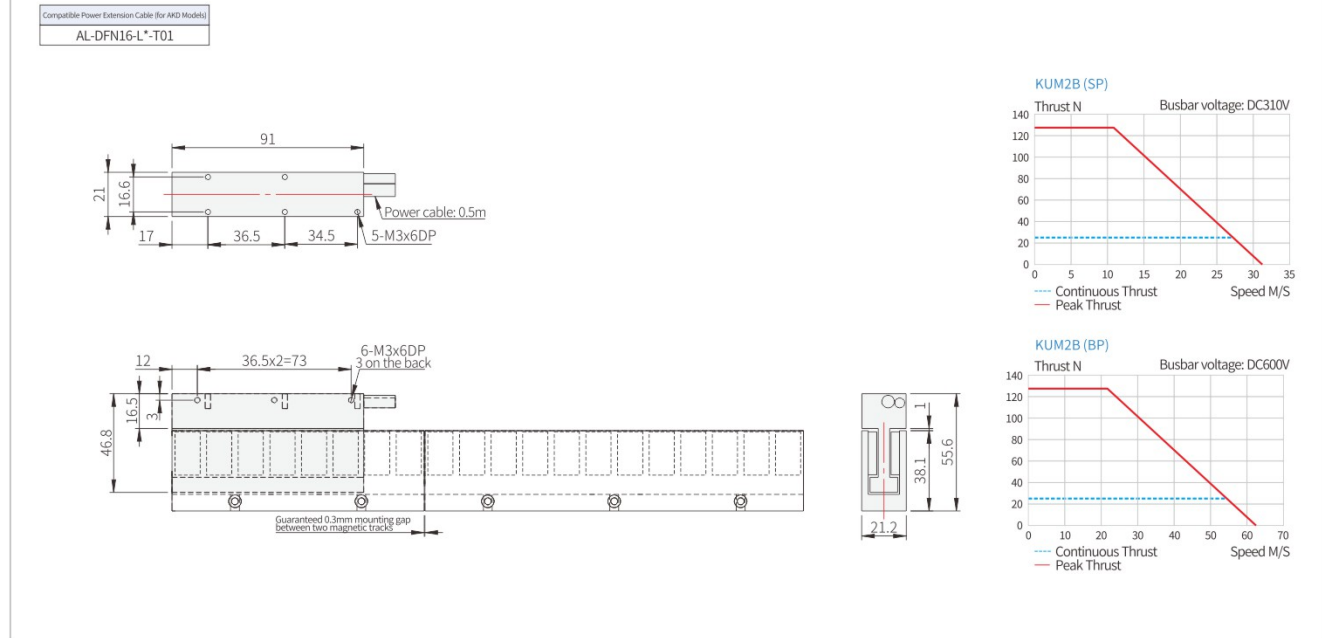
KUM2 Ironless Linear Motor

KUM2 Ironless Linear Motor

- With coreless technology
- Compact size, Applicability to vertical-axis
- Keep great curvilinear motion



• KUM2-S3 Dimensional parameters



Rules of coil order number

KUM2 - S - S3 - 0.5

Motor model

Winding code

S	SP
P	BP

Coil Length

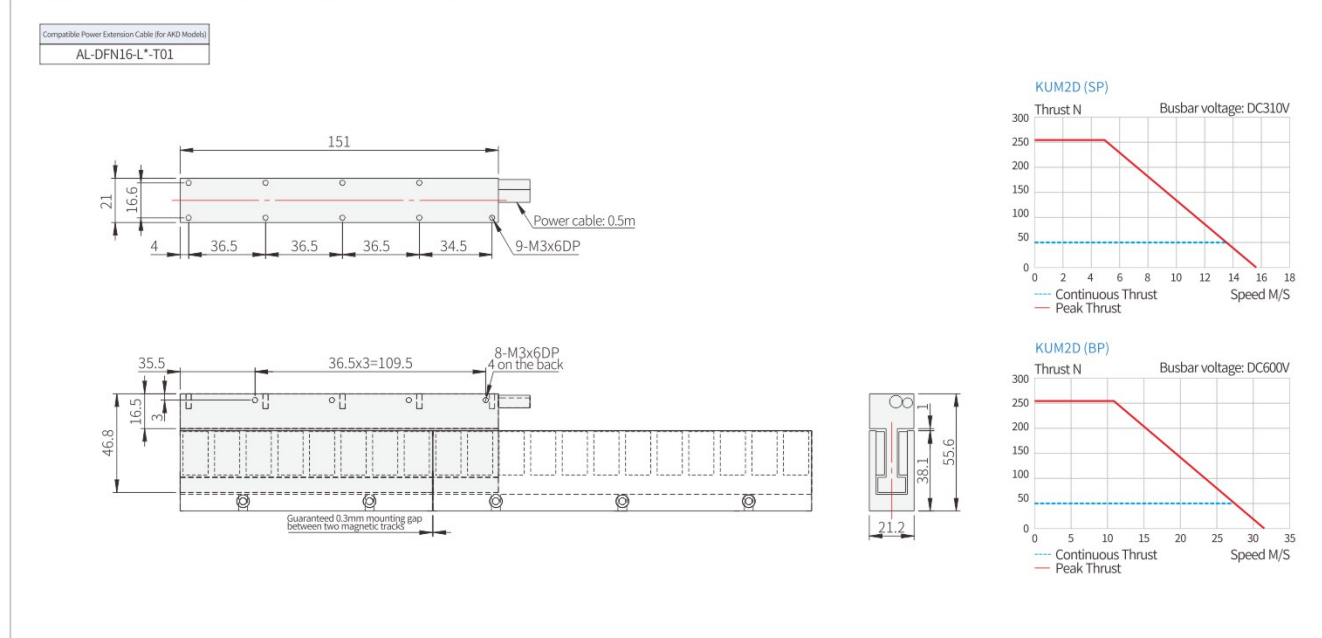
S3
S6

Cable Length(m)

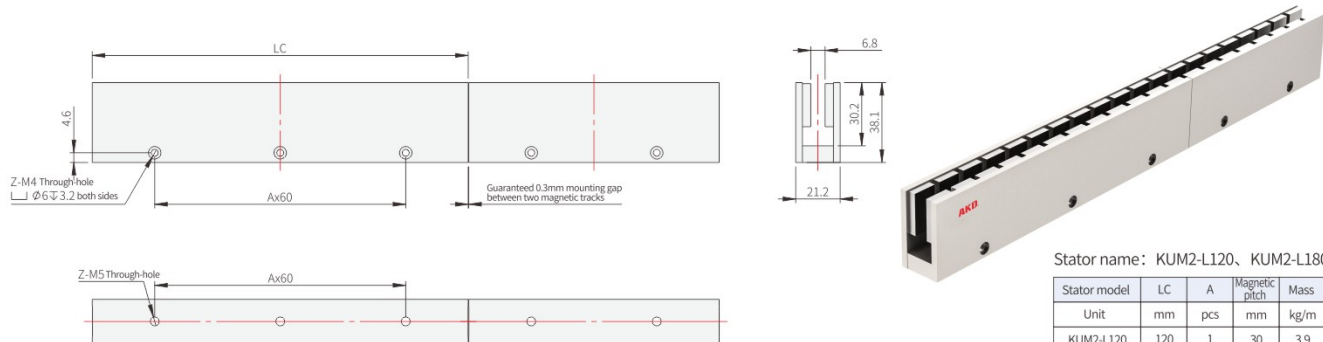
0.5 "Default"
3.0

Note:  
\*Compatible Power Extension Cable: D-FN16-Lxx-T01.  
\*Motor Connector (Male): 16M-4K

• KUM2-S6 Dimensional parameters



Stator dimensions



\*Please consult our business personnel when special length is required.

Performance Parameters	Continuous thrust	Peak thrust	Continuous current	Peak current	Thrust constant ±10%	Constant of reverse electromotive force ±10%	Motor constant ±10%	Resistance ±10%	Inductance ±30%	Electrical time constant	Rated power	Max. allowable voltage	Heat dissipation constant	Magnetic attraction	Coil weight	Max. temperature
Unit	N	N	A	A	N/A	V/m/s	N/√W	Ohm	mH	ms	W	Vdc	W/°C	KN	Kg	°C
KUM2-S3	25.5	127.6	2.1	10.5	12.15	9.91	4.5	7.15	1.59	0.22	31.5	310	0.42	0	0.16	120
KUM2-S6	51	255.2	2.1	10.5	24.3	19.83	6.4	14.30	3.18	0.22	63.10	310	0.84	0	0.27	120

\*1.Measurement room temperature is 25°C, depending on the cooling environment.  
\*2.DC current is used for resistance measurement, including 0.5m standard cable.  
\*3.Inductance measurement frequency 1kHz.  
\*4.Relevant parameter specifications are subject to changes with out a prior notice.

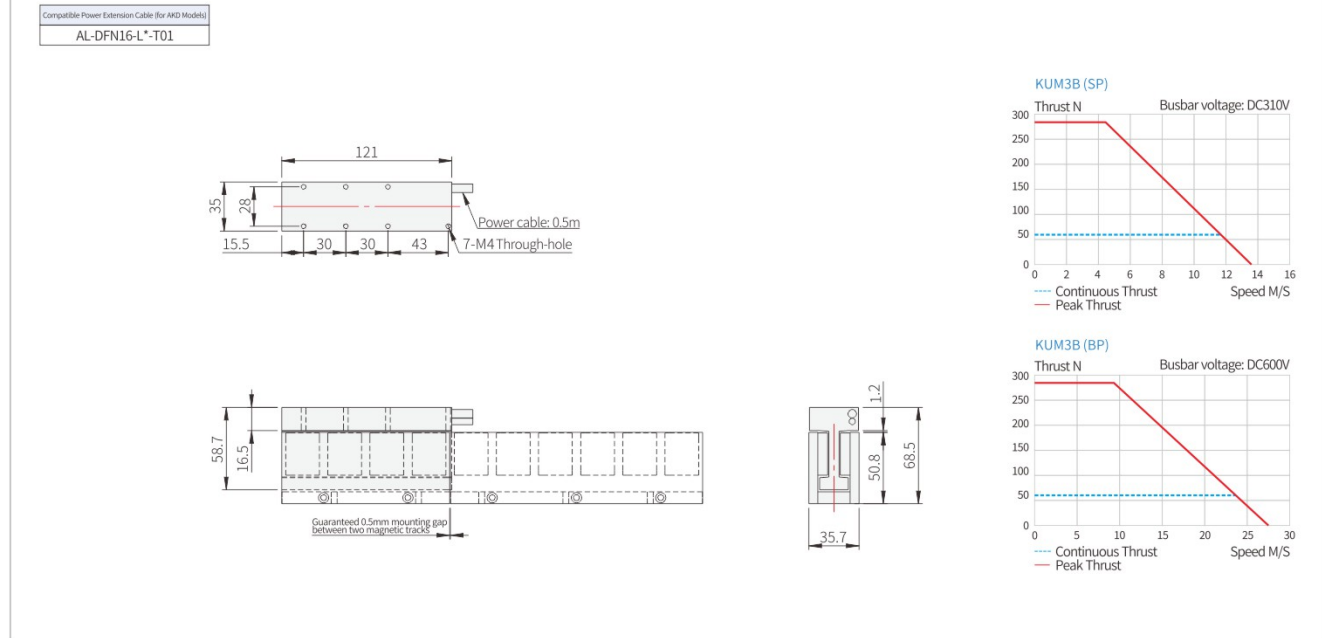
KUM3 Ironless Linear Motor

KUM3 Ironless Linear Motor

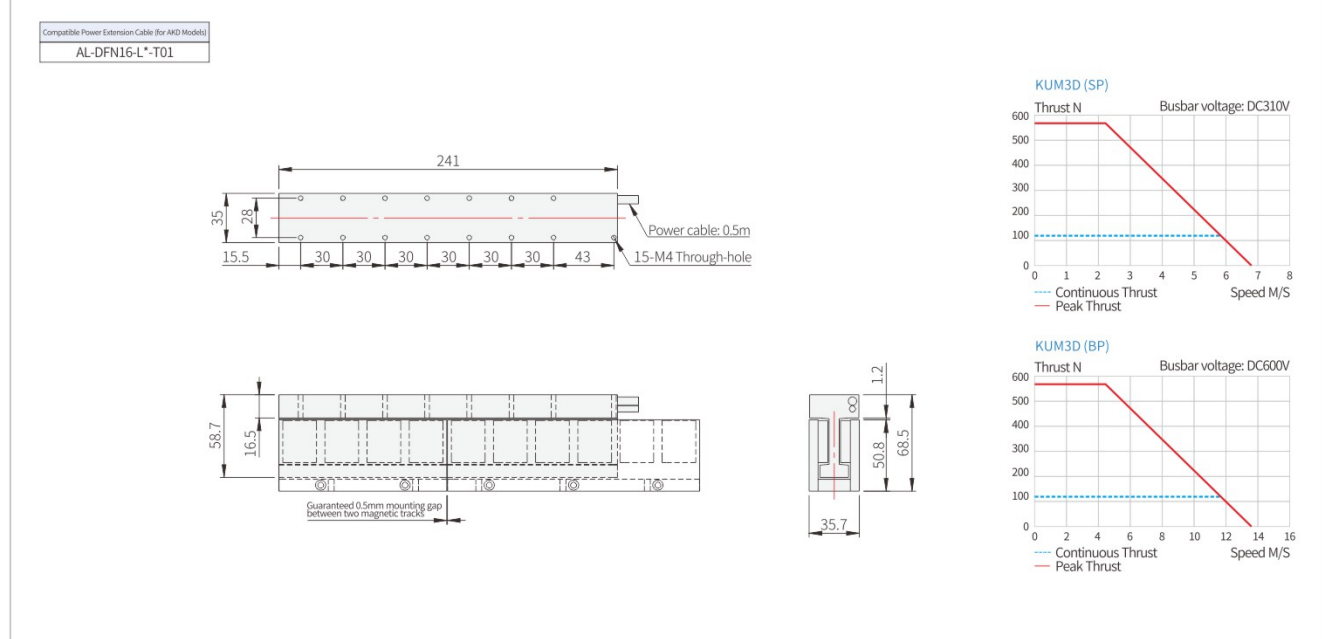
- With coreless technology
- Compact size, Applicability to vertical-axis
- Keep great curvilinear motion



• KUM3-S2 Dimensional parameters

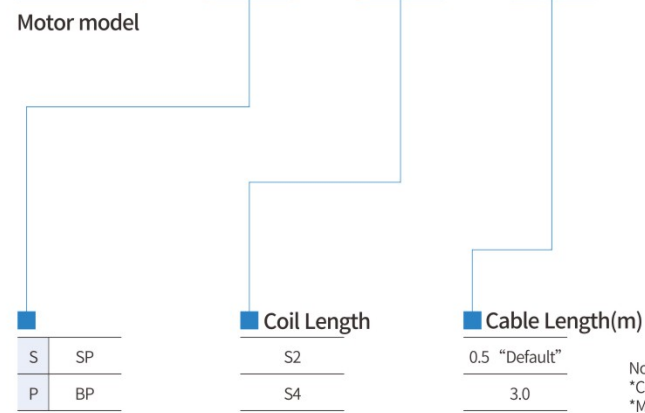


• KUM3-S4 Dimensional parameters



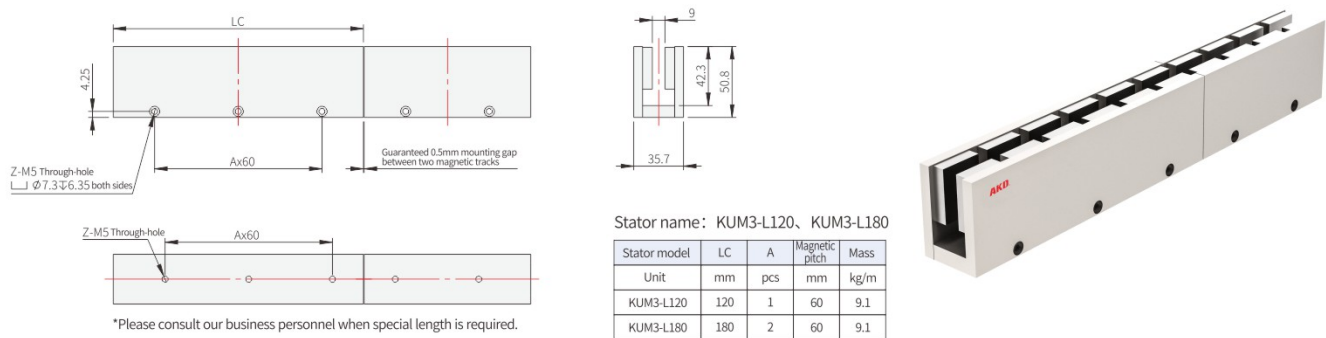
Rules of coil order number

KUM3 - S - S3 - 0.5



Note:  
\*Compatible Power Extension Cable: D-FN16-Lxx-T01.  
\*Motor Connector (Male): 16M-4K

Stator dimensions



Performance Parameters	Continuous thrust	Peak thrust	Continuous current	Peak current	Thrust constant ±10%	Constant of reverse electromotive force ±10%	Motor constant ±10%	Resistance ±10%	Inductance ±30%	Electrical time constant	Rated power	Max. allowable voltage	Heat dissipation constant	Magnetic attraction	Coil weight	Max. temperature
Unit	N	N	A	A	N/A	V/m/s	N/√W	Ohm	mH	ms	W	Vdc	W/°C	KN	Kg	°C
KUM3-S2	SP	64.2	279	2.3	10	27.9	22.8	6.39	4.10	0.64	33.8	310	0.45	0	0.42	120
	BP			4.6	20	14	11.4	1.60	1.03							
KUM3-S4	SP	128.3	558	2.3	10	55.8	45.5	12.78	8.20	0.64	67.6	310	0.90	0	0.84	120
	BP			4.6	20	27.9	22.8	3.20	2.05							

\*1.Measurement room temperature is 25°C, depending on the cooling environment.  
\*2.DC current is used for resistance measurement, including 0.5m standard cable.  
\*3.Inductance measurement frequency 1kHz.  
\*4.Relevant parameter specifications are subject to changes with out a prior notice.

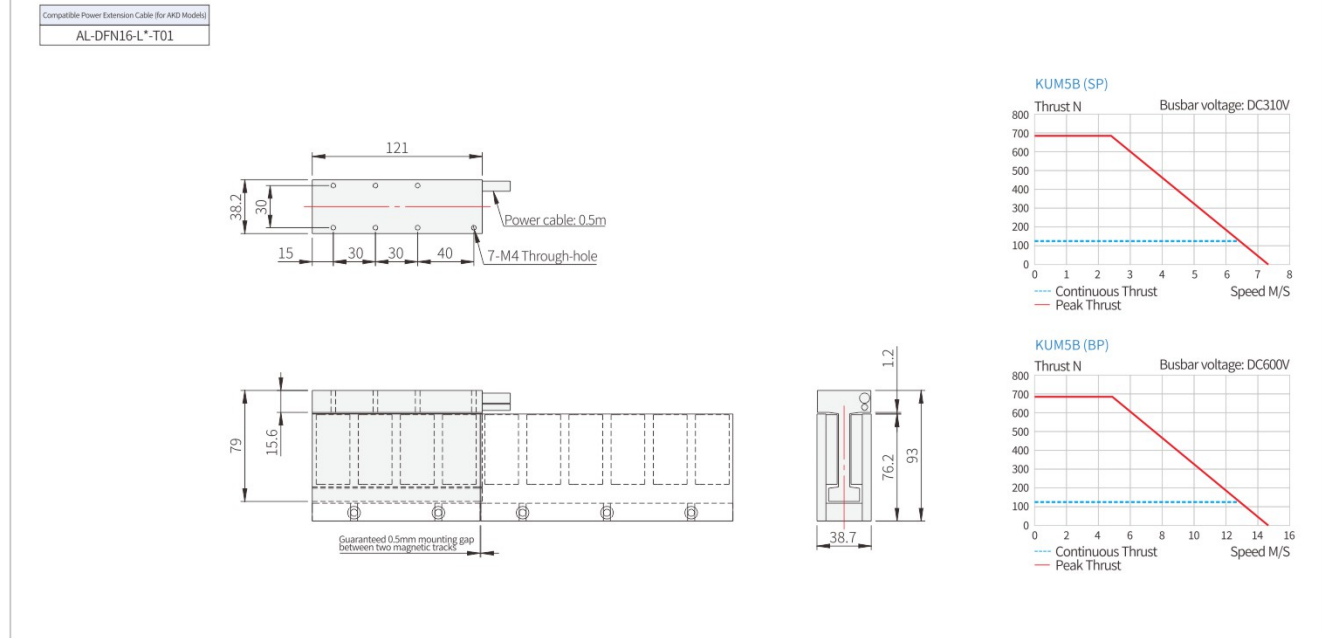
KUM4 Ironless Linear Motor

KUM4 Ironless Linear Motor

- With coreless technology
- Compact size, Applicability to vertical-axis
- Keep great curvilinear motion



• KUM4-S2 Dimensional parameters



Rules of coil order number

KUM4 - S - S3 - 0.5

Motor model

Coil Length

Cable Length(m)

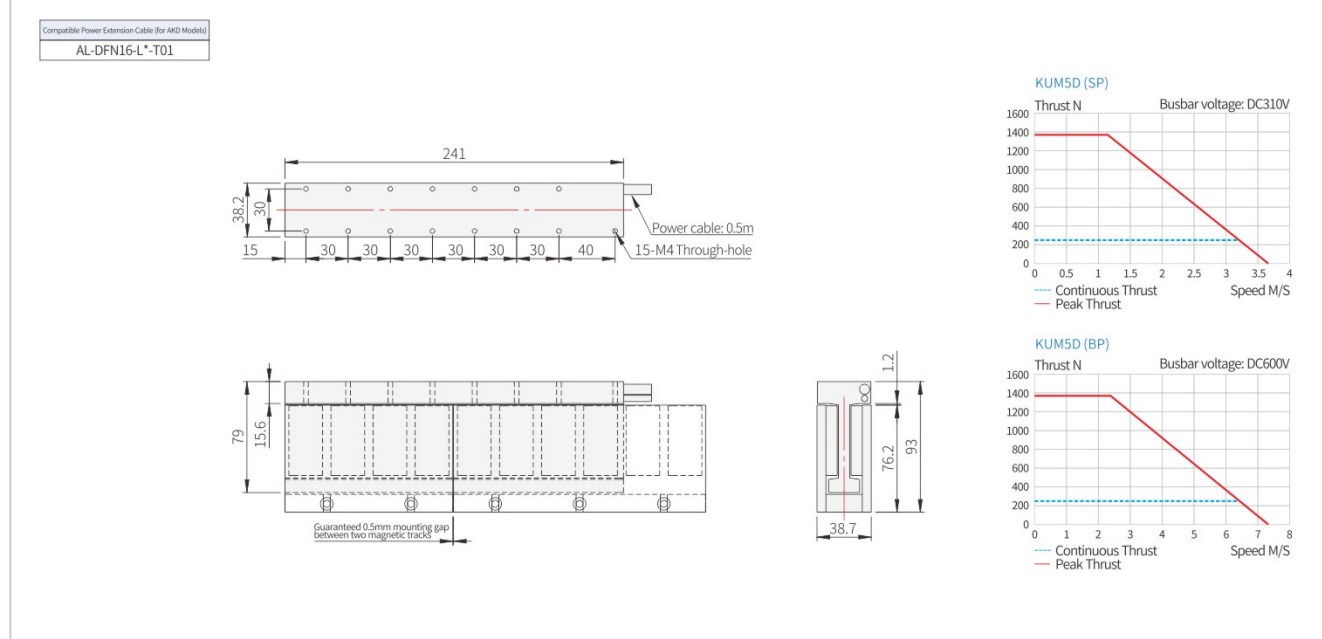
S	SP
P	BP

S2
S4

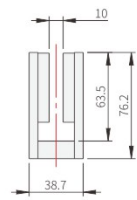
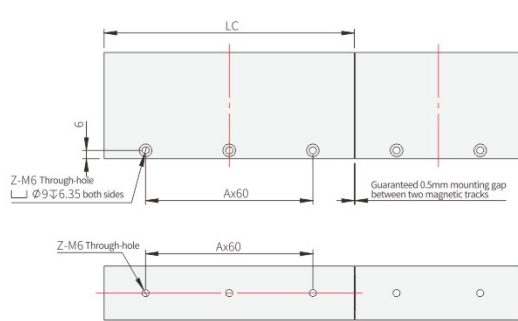
0.5 "Default"
3.0

Note:  
\*Compatible Power Extension Cable: D-FN16-Lxx-T01.  
\*Motor Connector (Male): 16M-4K

• KUM4-S4 Dimensional parameters



Stator dimensions



Stator name: KUM4-L120, KUM4-L180

Stator model	LC	A	Magnetic pitch	Mass
Unit	mm	pcs	mm	kg/m
KUM4-L120	120	1	60	15.2
KUM4-L180	180	2	60	15.2



\*Please consult our business personnel when special length is required.

Performance Parameters	Continuous thrust	Peak thrust	Continuous current	Peak current	Thrust constant ±10%	Constant of reverse electromotive force ±10%	Motor constant ±10%	Resistance ±10%	Inductance ±30%	Electrical time constant	Rated power	Max. allowable voltage	Heat dissipation constant	Magnetic attraction	Coil weight	Max. temperature
Unit	N	N	A	A	N/A	V/m/s	N/√W	Ohm	mH	ms	W	Vdc	W/°C	KN	Kg	°C
KUM4-S2	SP	119.8	676.9	2.3	13	52.07	42.5	9.27	6.53	0.71	49.0	310	0.65	0	0.54	120
	BP			4.6	26	26	21.2	2.32	1.63							
KUM4-S4	SP	239.5	1353.7	2.3	13	104.1	85	18.53	13.07	0.71	98.0	310	1.30	0	1.08	120
	BP			4.6	26	52.07	42.5	4.63	3.27							

\*1.Measurement room temperature is 25°C, depending on the cooling environment.  
\*2.DC current is used for resistance measurement, including 0.5m standard cable.  
\*3.Inductance measurement frequency 1kHz.  
\*4.Relevant parameter specifications are subject to changes with out a prior notice.

