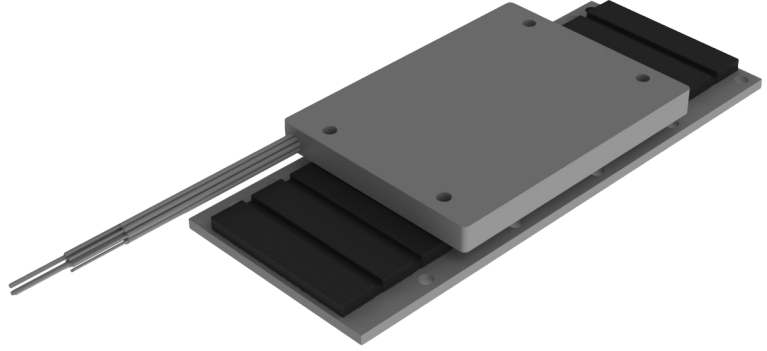


KMC89S SERIES - IRONLESS LINEAR MOTOR

DIMENSIONS AND SPECIFICATIONS

Magnet plate dimensions		
Code	KMM890066	KMM890099
Le (mm)	66	99
M5 bolts	8	10
Mass (kg/m)	1,06	
<i>Magnet yokes can be butted together.</i>		
Code	KMM890115	KMM890264
Le (mm)	115	264
M5 bolts	12	26
Mass (kg/m)	1,06	
<i>Magnet yokes can be butted together.</i>		



		Parameter	Remarks	Sym	Unit	KMC89S		
Performance	Winding type					IU02H	IU04H	IU06H
	Motor type, max voltage ph-ph					3-phase synchronous Iron core, 45V _{ac rms} (60V _{dc})		
	Peak force @ 6°C/s increase	Magnet @ 25°C	F _p	N	20	40	60	
	Continuous force*	Coils @ 110°C	F _c	N	5	10	15	
	Maximum speed**	@ 60 V	V _{max}	m/s	6			
	Motor force constant	Mount. sfc. @ 20°C	K	N/A _{rms}	6			
Electrical	Motor constant	Coils @ 25°C	S	N ² /W	3	6	9	
	Peak current	Magnet @ 25°C	i _p	A _{rms}	3.3	6.7	10	
	Continuous current air cooled	Coils @ 110°C	I _c	A _{rms}	0.8	1.7	2.5	
	Back EMF Phase-Phase _{peak}		B _{emf}	V/m/s	5			
	Resistance per phase	Coils @ 25°C ex. cable	R _{ph}	Ω	4.75	2.38	1.58	
	Induction per phase	l < 0.6 lp	L _{ph}	mH	0.8	0.4	0.3	
Thermal	Electrical time constant	Coils @ 25°C	T _e	ms	0.16			
	Max. continuous power loss	All coils	P _c	W	11.2	22.4	33.6	
	Thermal resistance	Coils to mount. sfc.	R _{th}	°C/W	1.6	0.8	0.53	
Mechanical	Temperature cut-off / sensor				None			
	Coil unit weight	ex. cables	W	kg	0.03	0.05	0.08	
	Coil unit length	ex. cables	L	mm	45	78	111	
	Motor attraction force	rms @ 0 A	F _a	N	0			
	Magnet pitch NN		t	mm	16,5			
	Cable Type (power)	Length 3 m	d	mm (AWG)	Leadwires 3*0.3mm ²			
	Cable Type (sensor)	Length 3 m	d	mm (AWG)	NA			
	Cable Life	Minimum			12,000,000			
	Bending Radius Static	Minimum			4x cable diameter			
Bending Radius Dynamic	Minimum			7.5x cable diameter				

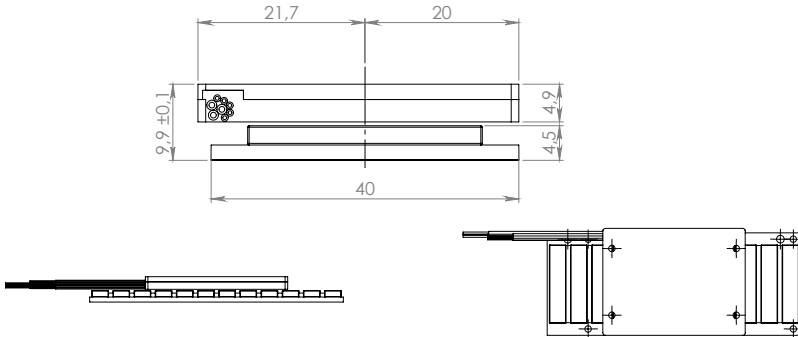
* These values are only applicable when the mounting surface is at 20°C and the motor is driven at maximum continuous current. If these values differ in your application, please check our simulation tool.

** Actual values depend on bus voltage. Please check the F/v diagram in our simulation tool.

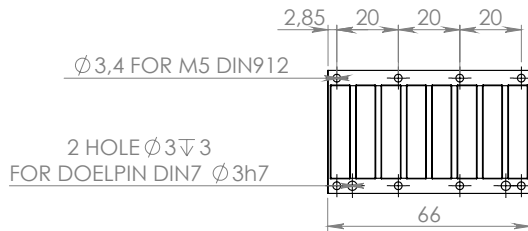
*** Depending on bending radius, velocity and acceleration.

KMC89S SERIES - IRONLESS LINEAR MOTOR DIMENSIONS AND SPECIFICATIONS

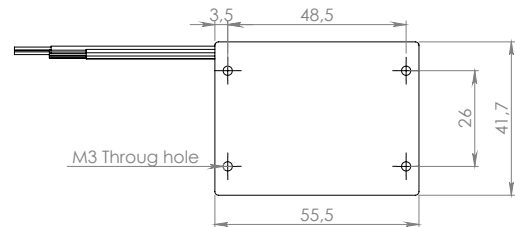
MAGNET PLATES



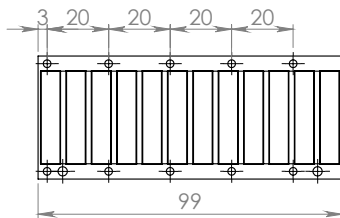
KMM890066



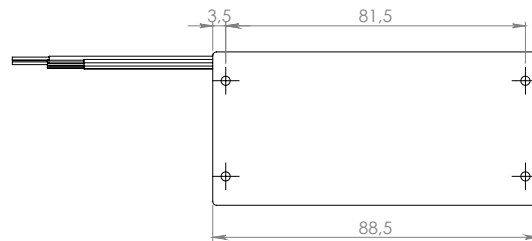
KMC89S-IU02N



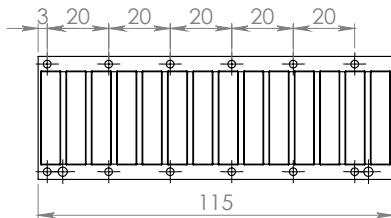
KMM890099



KMC89S-IU04H



KMM890115



KMM890264

