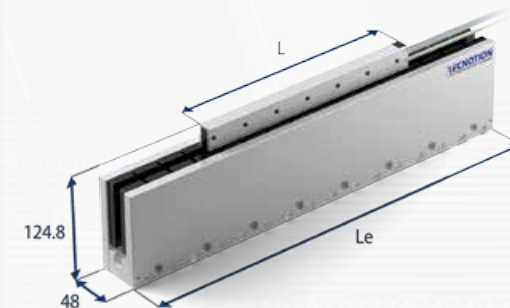


	Parameter	Remarks	Symbol	Unit	UXX3		UXX6		UXX9		UXX12		UXX18
Performance	Winding type				N	S	N	S	N	S	N	S	N
	Motortype, max voltage ph-ph				3-phase synchronous Ironless, 230V _{ac rms} (300V _{dc})								
	Peak Force @ 20°C/s increase	magnet @ 25°C	F _p	N	700		1400		2100		2800		4200
	Continuous Force*	coils @ 110°C	F _c	N	141		282		423		564		846
	Maximum Speed**	@ 300 V	v _{max}	m/s	2.7	6.6	2.7	6.6	2.7	6.6	2.7	6.6	2.7
	Motor Force Constant	mount. sfc. @ 20°C	K	N/A _{rms}	124	50.3	124	50.3	124	50.3	124	50.3	124
	Motor Constant	coils @ 25°C	S	N ² /W	323		647		970		1293		1940
Electrical	Peak Current	magnet @ 25°C	I _p	A _{rms}	5.6	13.9	11.3	28	16.9	42	22.6	56	34
	Maximum Continuous Current	coils @ 110°C	I _c	A _{rms}	1.14	2.80	2.27	5.6	3.4	8.4	4.5	11.2	6.8
	Back EMF Phase-Phase _{peak}		B _{emf}	V/m/s	101	41	101	41	101	41	101	41	101
	Resistance per Phase*	coils @ 25°C ex. cable	R _{ph}	Ω	15.8	2.6	7.9	1.29	5.3	0.86	4.0	0.65	2.6
	Induction per Phase		L _{ph}	mH	28	4.6	14	2.3	9	1.5	7	1.2	4.7
	Electrical Time Constant*	coils @ 25°C	τ _e	ms	1.8		1.8		1.8		1.8		1.8
Thermal	Maximum Continuous Power Loss	all coils	P _c	W	82		165		247		330		494
	Thermal Resistance	coils to mount. sfc.	R _{th}	°C/W	1.04		0.52		0.35		0.26		0.17
	Thermal Time Constant*	up to 63% max. coiltemp.	τ _{th}	s	156		156		156		156		156
	Temperature Cut-off / Sensor				PTC 1kΩ / NTC								
Mechanical	Coil Unit Weight	ex. cables	W	kg	0.55		0.95		1.35		1.75		2.55
	Coil Unit Length	ex. cables	L	mm	134		248		362		476		704
	Motor Attraction Force		F _a	N	0		0		0		0		0
	Magnet Pitch NN		τ	mm	57		57		57		57		57
	Cable Mass		m	kg/m	0.18		0.18		0.18		0.18		0.18
	Cable Type (Power)	length 1 m	d	mm (AWG)	6.4 (18) except UXX3S***								
	Cable Type (Sensor)	length 1 m	d	mm (AWG)	4.3 (26)								



UXX6 in 456mm magnet yoke shown

Approvals



UXX3S Power Cable (FLEX cable of 3m)

Cable Type	9.0 (21) mm (AWG)
Cable Life****	5,000,000 cycles
Bending Radius Static	4x cable diameter
Bending Radius Dynamic	10x cable diameter

****Depending on Bending Radius, Velocity and Acceleration.

Magnet yoke dimensions

Le (mm)	114	171	456
M6 bolts	2	3	8
Mass (kg/m)	25		
Magnet yokes can be butted together.			

All specifications ±10%

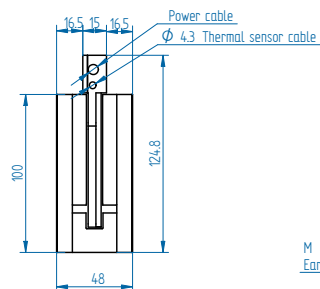
* These values are only applicable when the mounting surface is at 20°C and the motor is driven at maximum continuous current. If these values differ in your application, please check our simulation tool.

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

*** The UXX3S is only available with a FLEX power cable. The specifications for this cable can be found in the table on the right side of this page.

Ver. 1.08

UXX 456mm



DETAIL A

