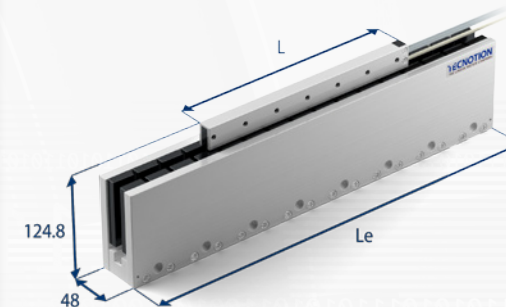


	Parameter	Remarks	Symbol	Unit	UXX3		UXX6		UXX9		UXX12		UXX18
					N	S	N	S	N	S	N	S	N
Performance	Winding type				N	S	N	S	N	S	N	S	N
	Motor type, max voltage ph-ph				3-phase synchronous Ironless, 230V _{ac rms} (300V _{dc})								
	Peak Force @ 20°C/s increase	magnet @ 25°C	F _p	N	700		1400		2100		2800		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
Electrical	Motor Constant	coils @ 25°C	S	N ² /W	323		647		970		1293		1940
	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 _f	Ω	15.8	2.6	7.9	1.29	5.3	0.86	4.0	0.65	2.6
	Induction per Phase	l < 0.6 l _p	L _f	mH	28	4.6	14	2.3	9	1.5	7	1.2	4.7
Thermal	Electrical Time Constant*	coils @ 25°C	τ _e	ms	1.8		1.8		1.8		1.8		1.8
	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*	to max. coil temp.	τ _{th}	s	156		156		156		156		156
Mechanical	Temperature Cut-off / Sensor				PTC 1kΩ / NTC								
	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 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)	24		
Magnet yokes can be butted together.			

All specifications ±10%

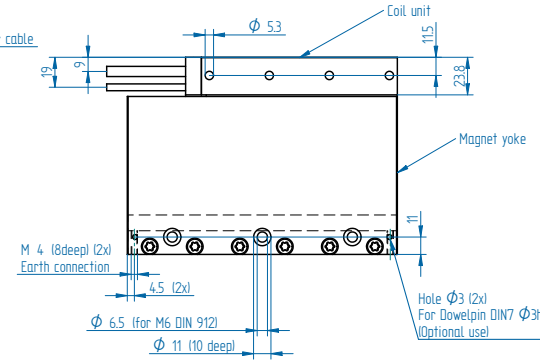
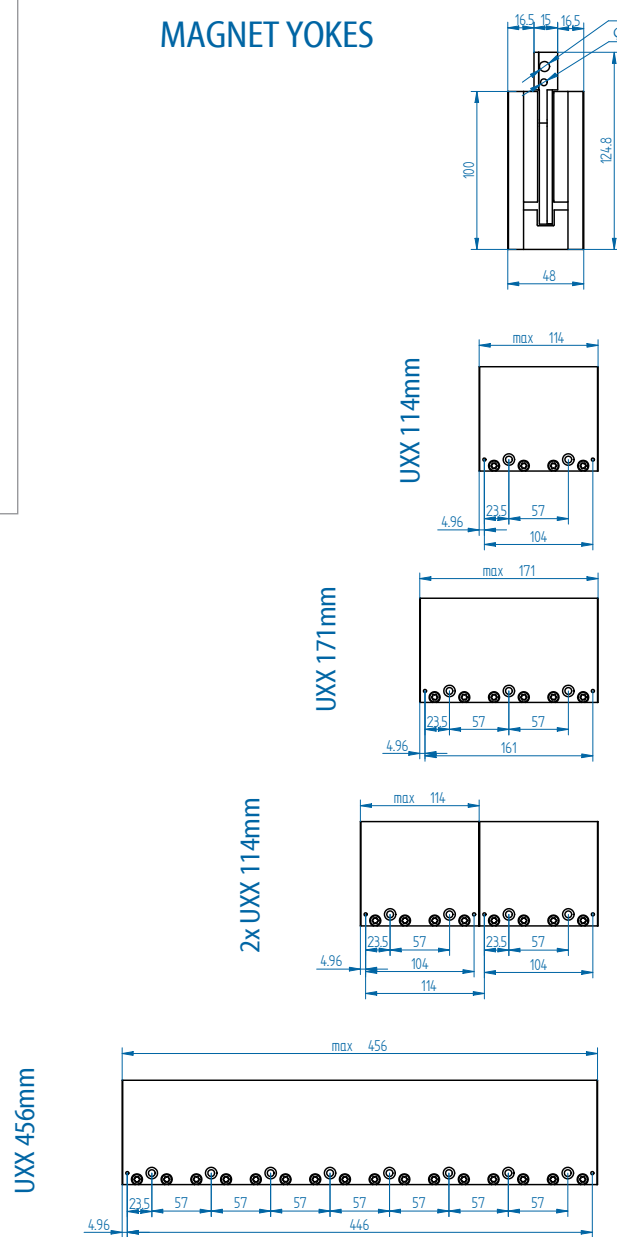
* These values are only applicable when the mounting surface is at 20°C and the motor is driven at maximum continuous current. If these values differ in your application, please check our simulation tool.

** 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 box on the right side of this page.

Mounting instructions and flatness or parallelism requirements can be found in the Ironless installation manual. CAD files and 3D models can be downloaded from our website.

MAGNET YOKES



COIL UNITS

