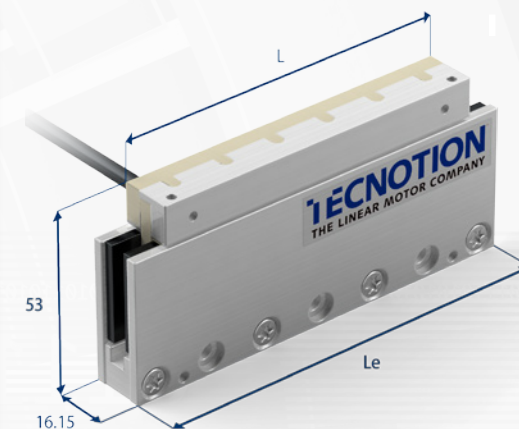


	Parameter	Remarks	Symbol	Unit	UF3	UF6
Performance	Motortype, max voltage ph-ph				3-phase synchronous Ironless, 45V _{ac rms} (60V _{dc})	
	Peak Force @ 20°C/s increase	magnet @ 25°C	F _p	N	42.5	85
	Continuous Force*	coils @ 110°C	F _c	N	19.5	39
	Maximum Speed**	@ 60 V	v _{max}	m/s	5.1	5.1
	Motor Force Constant	mount. sfc. @ 20°C	K	N/A _{rms}	12.3	12.3
	Motor Constant	coils @ 25°C	S	N ² /W	14.6	29.2
Electrical	Peak Current	magnet @ 25°C	I _p	A _{rms}	3.5	6.9
	Maximum Continuous Current	coils @ 110°C	I _c	A _{rms}	1.58	3.17
	Back EMF Phase-Phase _{peak}		B _{emf}	V / m/s	10.1	10.1
	Resistance per Phase*	coils @ 25°C ex. cable	R _f	Ω	3.5	1.8
	Induction per Phase	l < 0.6 Ip	L _f	mH	1.24	0.62
	Electrical Time Constant*	coils @ 25°C	τ _e	ms	0.36	0.36
Thermal	Maximum Continuous Power Loss	all coils	P _c	W	35	70
	Thermal Resistance	coils to mount. sfc.	R _{th}	°C/W	2.4	1.2
	Thermal Time Constant	to max. coil temp.	τ _{th}	s	34	34
	Temperature Sensor*				NTC	NTC
Mechanical	Coil Unit Weight	ex. cables	W	kg	0.045	0.087
	Coil Unit Length	ex. cables	L	mm	49	97
	Motor Attraction Force		F _a	N	0	0
	Magnet Pitch NN		τ	mm	24	24
	Cable Mass		m	kg/m	0.07	0.07
	Cable Type (Power and Sensor)	length 1 m	d	mm (AWG)	4.3 (24)	
	Cable Life (FLEX)***	minimum			15,000,000 cycles	
	Bending Radius Static	minimum			5x cable diameter	
	Bending Radius Dynamic	minimum			8x 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 radius, velocity and acceleration.



UF6 in 120mm magnet yoke shown

Approvals



Magnet yoke dimensions

Le (mm)	72	120
M4 bolts	2	3
Mass (kg/m)	3.2	

Magnet yokes can be butted together.

All specifications ±10%

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

