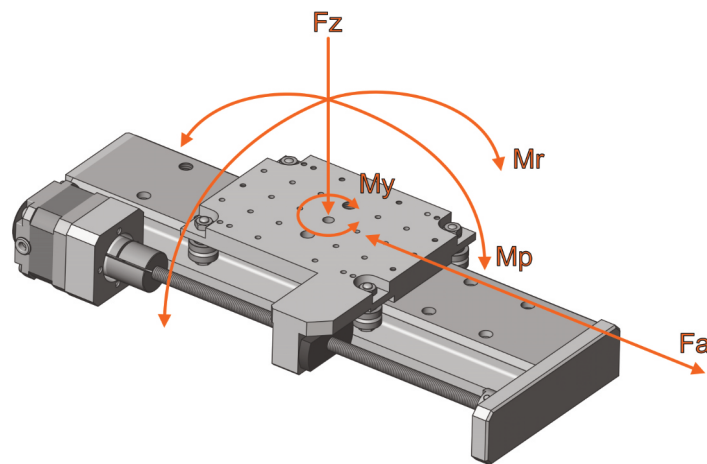


SPECIFICATIONS

Specification	VSM17-X-050	VSM17-X-100	VSM17-X-150	VSM17-X-200	VSM17-X-250	VSM17-X-300
Travel	50 mm	100 mm	150 mm	200 mm	250 mm	300 mm
Resolution	5 μ m (1 μ m for option HR)					
Maximum Speed	15 mm/s (3 mm/s for option HR)					
Repeatability	Better than 1 μ m					
Centred Load Capacity (Normal) (Fz)	50 kg					
Maximum Load Moment (Mr, Mp, My)	30 Nm					
Axial Load Capacity @ 1000 Hz 1 A Phase Current (Fa)	15 kg					
Backlash	Less than resolution					
Roll, Pitch and Yaw (Unloaded)	± 48 μ rad	± 90 μ rad	± 80 μ rad	± 70 μ rad	± 70 μ rad	± 70 μ rad
Roll, Pitch and Yaw Compliance	16 μ rad/Nm	32 μ rad/Nm	29 μ rad/Nm	26 μ rad/Nm	29 μ rad/Nm	29 μ rad/Nm
Straightness of Travel	3 μ m/100 mm					
Leadscrew Accuracy	0.055/100 mm					
Stepper Motor	AML D35.1					
Vacuum Environment	$<1 \times 10^{-10}$ mBar					
Maximum Temperature	150°C (200°C for option SS) (reduces to 120°C when an optical encoder is fitted)					
MTBF (5 kg load and 30% duty cycle)	15,000 hrs					
Mass Including Motor	1 kg	1.6 kg	2.1 kg	2.7 kg	3.2 kg	4.9 kg
Mass Including Motor (option SS)	2.2 kg	4.4 kg	6 kg	8 kg	TBC	TBC

LOAD DIAGRAM:



Optional Encoder Specification	ER (Incremental Encoder)	EA (Absolute Encoder)
Readhead	Renishaw TONiC™ T1630-15M	Renishaw RESOLUTE™ RL26BVE050D15V
Scale	RKLC20 20 μ m pitch	RELA30 30 μ m pitch
Interface Module	T10040A10A 40x interpolation factor	None
Electrical Interface	Square wave differential line driver to EIA RS422A	BiSS-C (unidirectional) 26 bit
Resolution	500 nm	50 nm