

MTE Series Technical Data

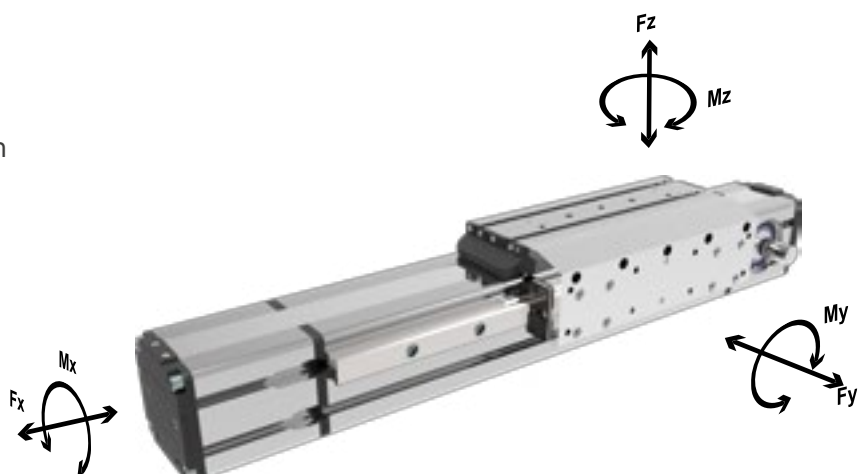
The Matara MTE series actuator has all of the benefits of the MTB series, with an additional externally fitted linear guide. This allows for higher static and dynamic loads in all directions.

Technical Data			
Size		55x55	80x80
Max. speed	m/s	3	3
Max. stroke length	mm	6700	6700
Min. stroke length	mm	100	100
Pulley drive ratio	mm	120	160
Number of teeth of pulley		24	32
Tooth belt with Steel Reinforced Polyurethane ATL 5 profile clearance 0. Width =	mm	16	25
Max rpm	rpm	1500	1000
Base weight	Kg	4.2	8.0
Add for 100 mm of stroke	Kg	0.37	1.1
Max. load*	Fx N	820	1950
	Fy N	9180	17170
	Fz N	9180	17170
Moments*	Mx Nm	335	527
	My Nm	408	620
	Mz Nm	408	620
Inertia moment Aluminum profile	Ix cm ⁴	36	183
Inertia moment Aluminum profile	Iy cm ⁴	45	226
Repeatability	mm	± 0.05	± 0.05
Max. radial load on input shaft	N	300	300
No load torque	Nm	>0.5	>0.7

* Max values for dynamic conditions.
Please refer to the following formula when
combined loads are applied.

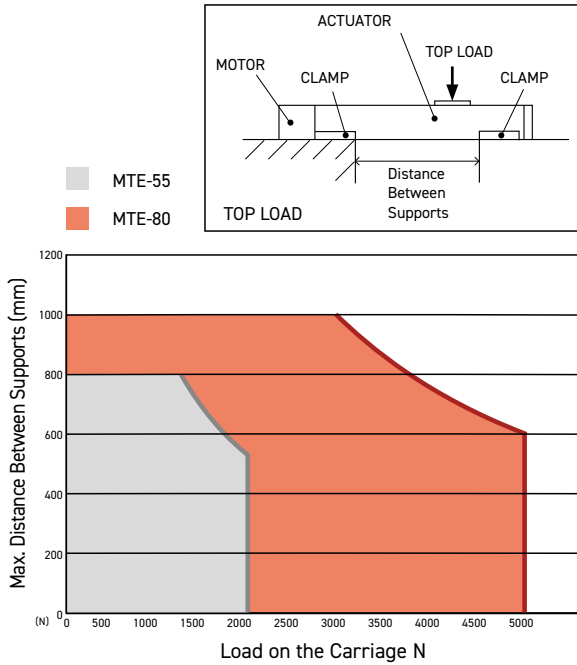
$$\frac{F_{yA}}{F_y} + \frac{F_{zA}}{F_z} + \frac{M_{xA}}{M_x} + \frac{M_{yA}}{M_y} + \frac{M_{zA}}{M_z} \leq 1$$

The A letters show the calculated value.

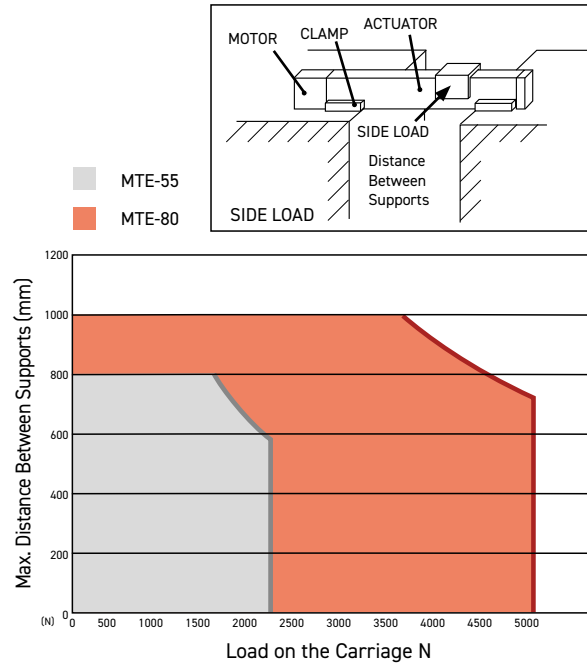


Deflection of Linear Unit

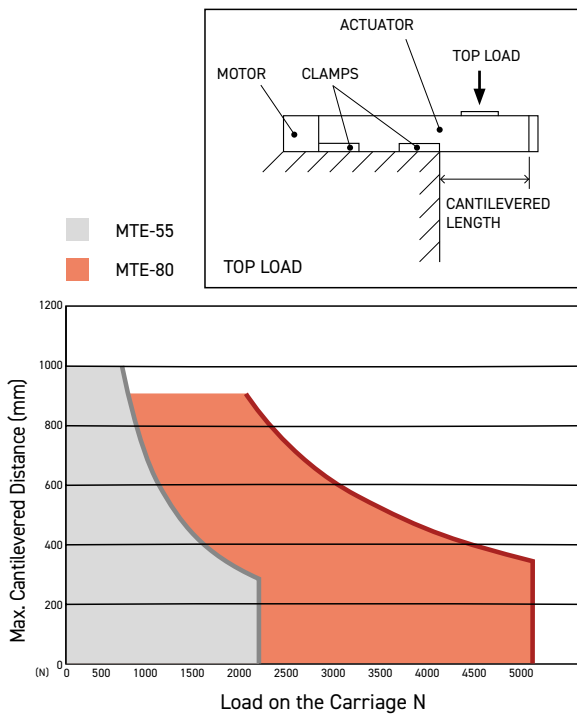
End supported top load



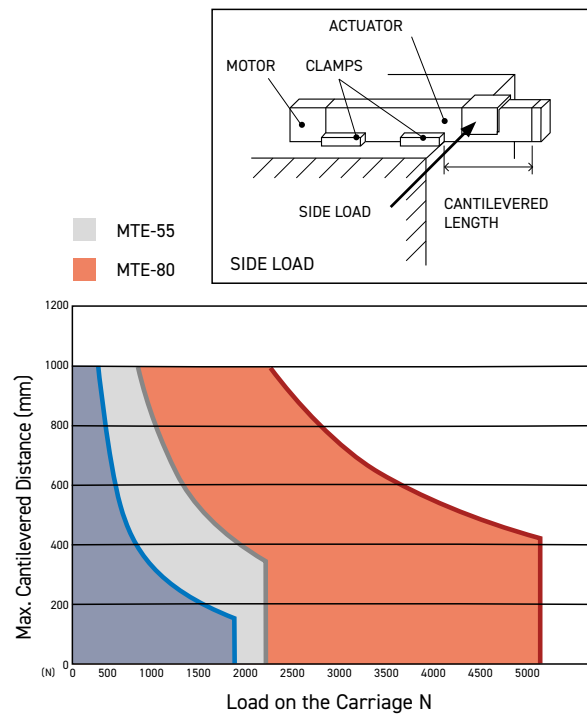
End supported side load



Cantilevered top load

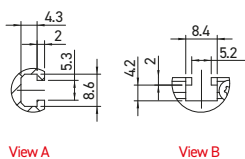
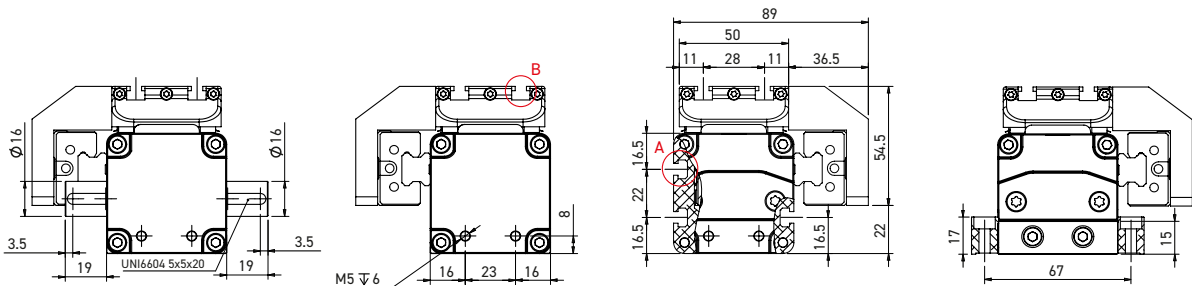
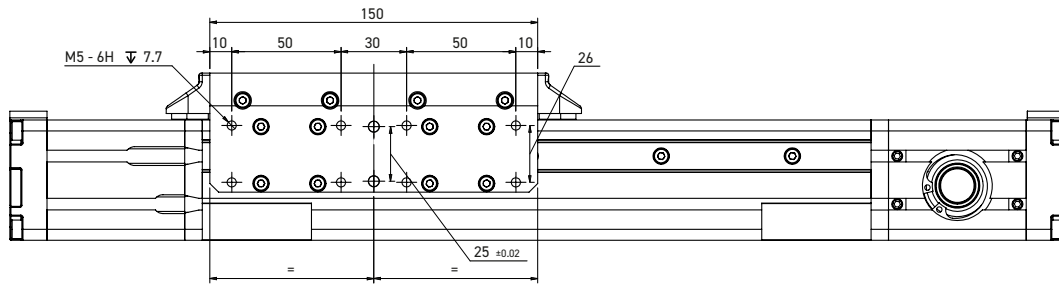
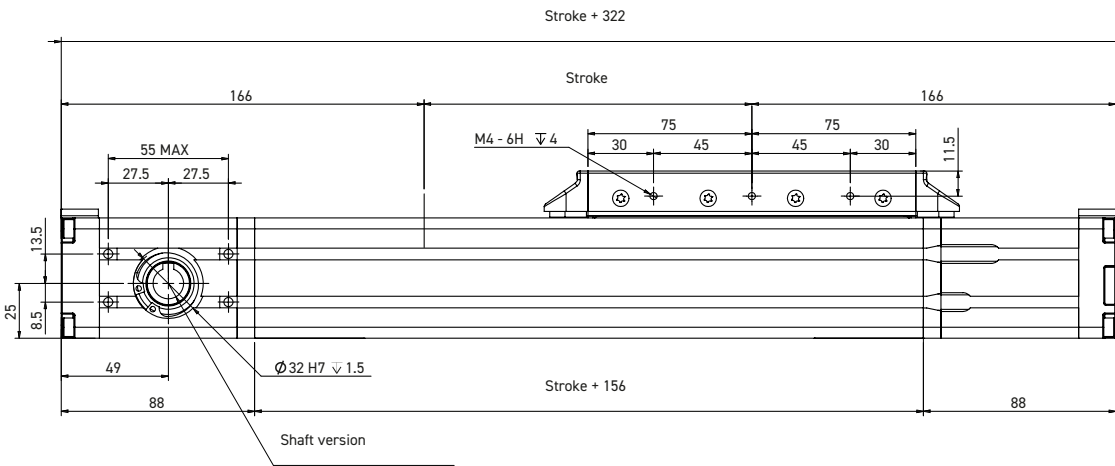
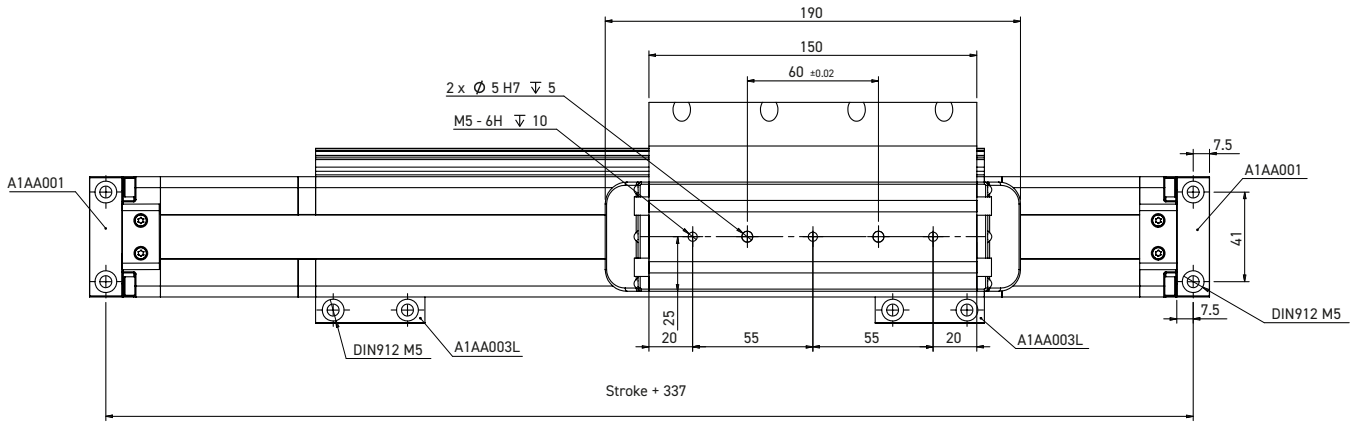


Cantilevered side load



Belt Driven Actuators
MTB Series
MTE Series
MTS Series
MTZ Series
MTF Series
CTJ Series
Ball Screw Actuators
MTV Series
CTV Series
PNCE Series
Automation Components

MTE55 Series Dimensions



Female mount F4



Left mount M6L

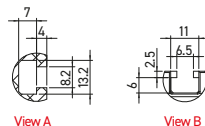
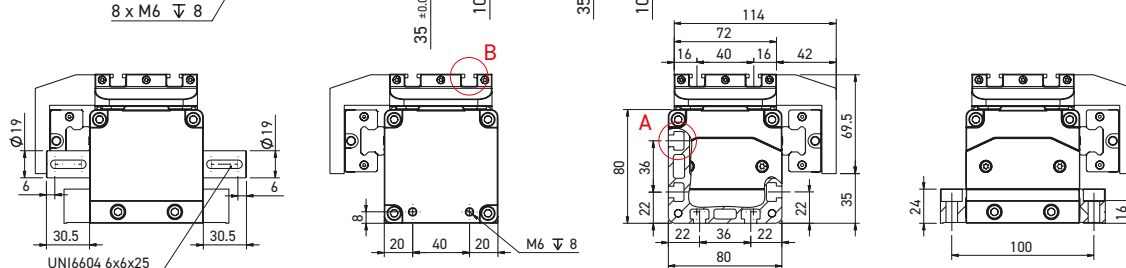
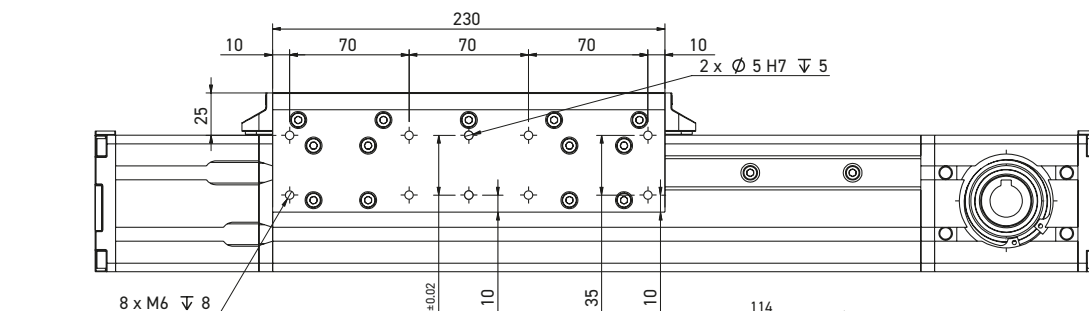
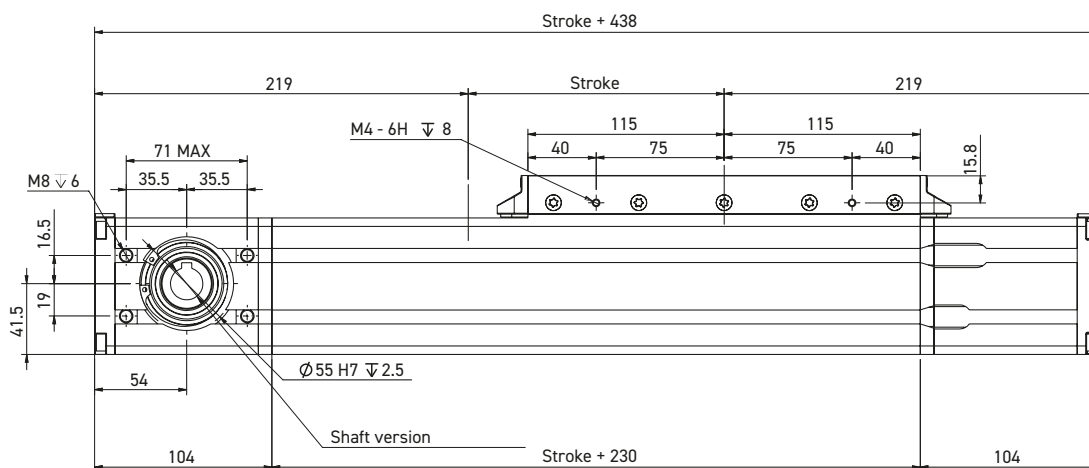
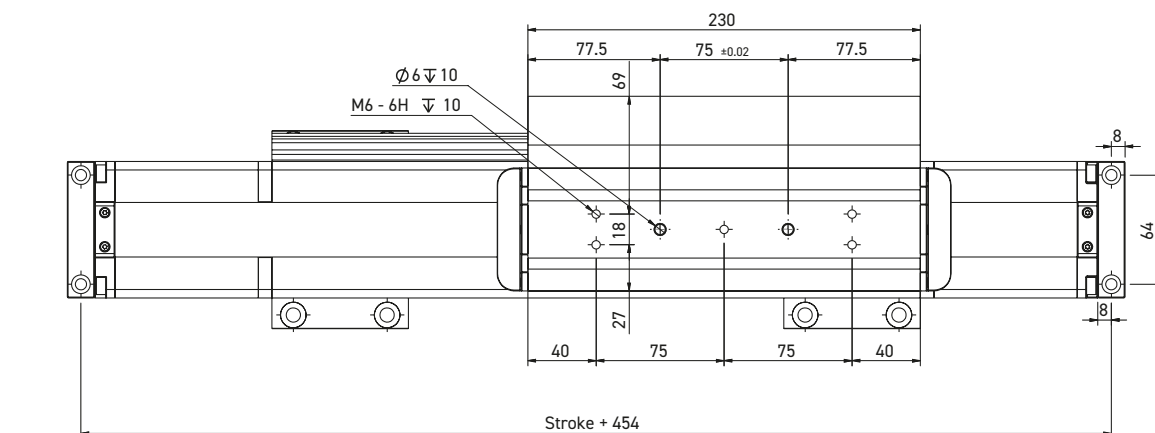


Dual mount D6



Right mount M6R

MTE80 Series Dimensions



Female mount F9

Left mount M9L

Dual mount D9

Right mount M9R

- Belt Driven Actuators
- MTB Series
- MTE Series**
- MTS Series
- MTZ Series
- MTF Series
- CTJ Series
- Ball screw Actuators
- MTV Series
- CTV Series
- PNCE Series
- Automation Components

MTE Series Order Example

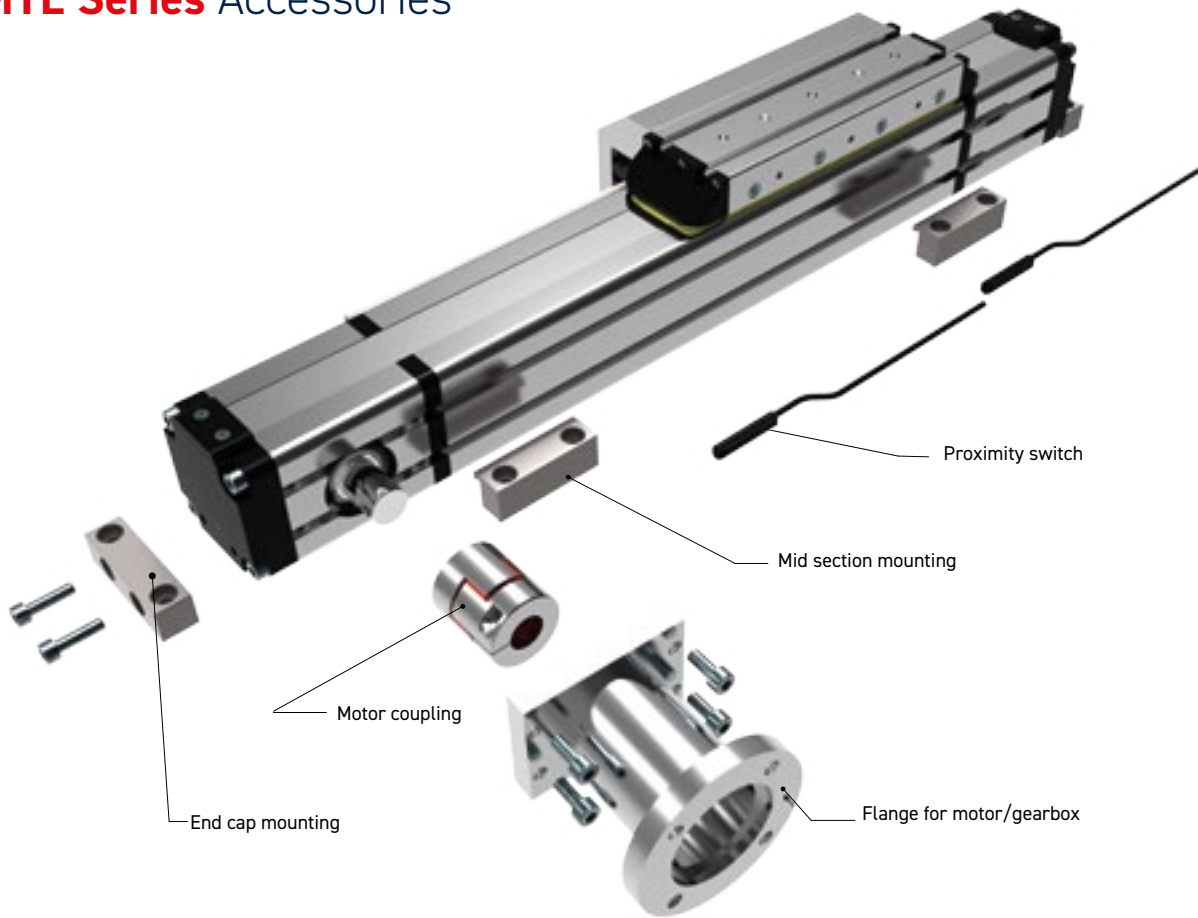
Code: **MTE** **80** - **2100** - **D9**
Options: 1 2 3 4

Options		Selection	
1	Series	MTE	
2	Size	55 (55x55)	80 (80x80)
3	Stroke	0-6700 mm	
4	Shaft Versions *	F2 F4 M6L M6R D6	F6 F9 M9L M9R D9

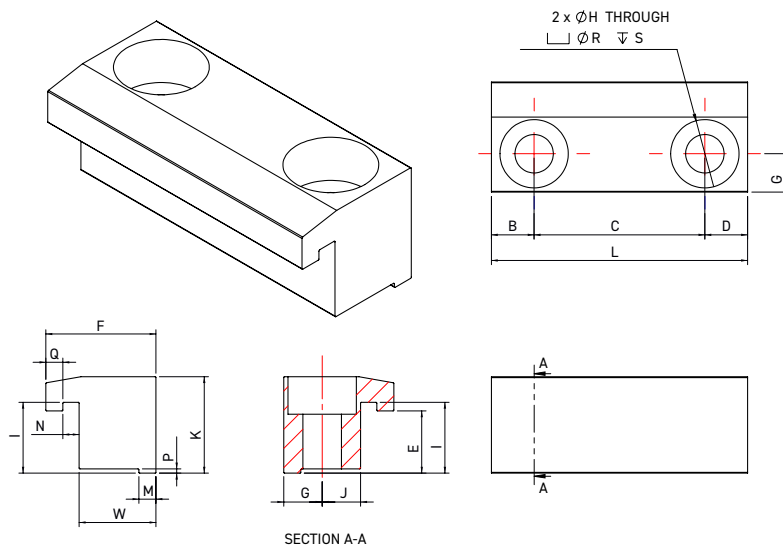
*Shaft Version Codes

F2	Female shaft Ø12 mm with keyshaft	M6L	Male shaft Ø16 mm mount left	D6	Double male shaft Ø16 mm
F4	Female shaft Ø14 mm with keyshaft	M9L	Male shaft Ø19 mm mount left	D9	Double male shaft Ø19 mm
F6	Female shaft Ø16 mm with keyshaft	M6R	Male shaft Ø16 mm mount right		
F9	Female shaft Ø19 mm with keyshaft	M9R	Male shaft Ø19 mm mount right		

MTE Series Accessories

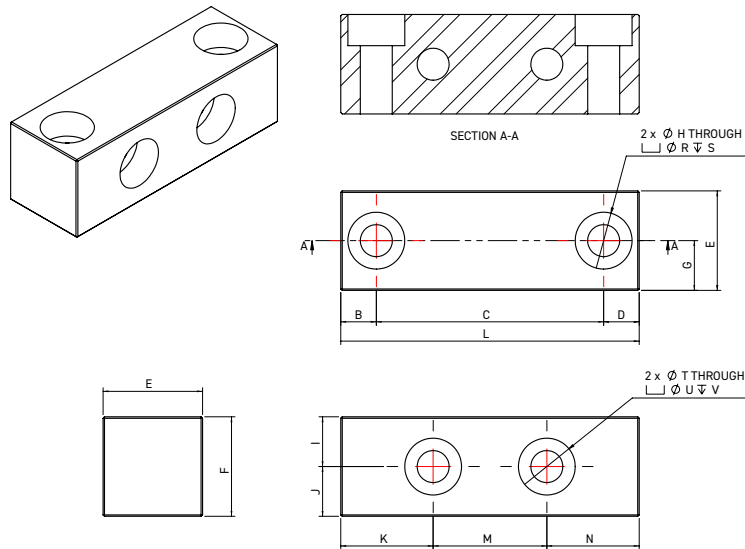


Mid Section Mounting



Linear Unit	Dimensions (mm)															ØH	ØR	∇S	Code
	B	C	D	E	F	G	I	J	K	L	M	N	P	Q	W				
MTE 55	8	34	8	12.9	16	6	13.9	6	17	50	2	2.5	0.5	1.5	12	5.5	10	5.4	A1AA003L
MTE 80	12.5	55	12.5	16	26.5	8	17.9	10	24	80	2	4.5	0.5	4	18	8.4	15	8.6	A2AA003L

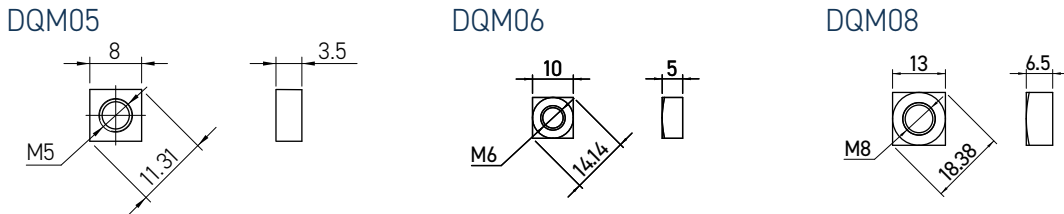
End Cap Mounting



Linear Unit	Dimensions (mm)												ØH	ØR	S	T	U	V	Code
	B	C	D	E	F	G	I	J	K	L	M	N							
MTE 55	7	41	7	15	15	7.5	7	8	16	55	23	16	5.5	10	5	5.5	10	5	A1AA001L
MTE 80	8	64	8	16	16	8	8	8	20	65	40	20	6.6	11	6	6.6	11	6	A2AA001L

Slot Nuts

Square Nuts

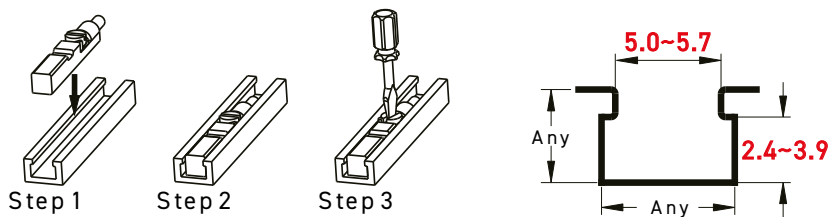


T Nuts



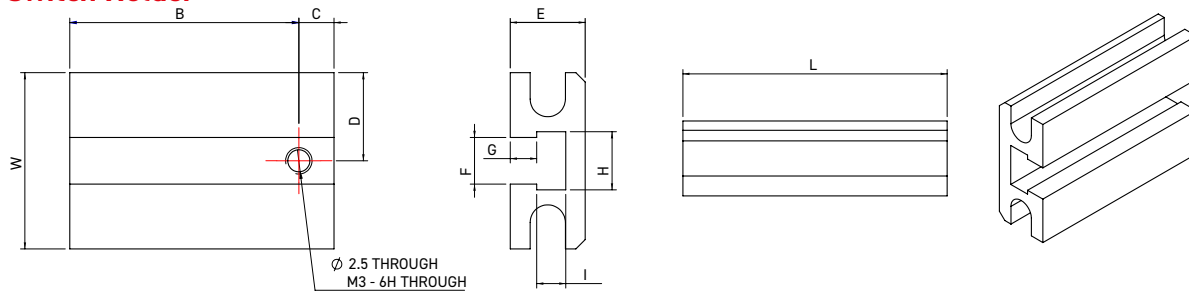
Code	Nut Type	MTE 55	MTE 80
DQM05	Square Nut - M5	X	
DQM06	Square Nut - M6		X
DQM08	Square Nut - M8		X
DTM05-M5	Slot Nut T - M5	X	
DTM06-M6	Slot Nut T - M6		X

Magnetic Sensor



Characteristic	AL39-R	AL39-S
Switching Logic	SPST Normally Open	Solid State Output, Normally Open
Sensor Type	Reed Switch	NPN/PNP Automatic Detection
Operating Voltage	5~240V DC/AC	5~30V DC
Switching Current	100 mA Max.	100 mA Max.
Switching Rating	10 W Max.	3 W Max.
Current Consumption	—	7.5 mA Max. @ 24V
Voltage Drop	2.5V Max. @ 100mA DC	1 V Max. @ 200 mA DC
Leakage Current	—	0.01 mA Max.
Indicator	Red LED	Red LED
Cable	2.9 , 2C, Grey Oil Resistat PUR	2.9 , 3C, Black Oil Resistat PUR
Sensitivity	35 ~ 45 Gauss	40 ~ 800 Gauss
Switching Frequency	200 Hz	5000 Hz
Temperature range	-10 ~ 70°C	-10 ~ 70°C
Shock	30 G	50 G
Vibration	9 G	9 G
Enclosure Classification	IP 65 (EN60529)	IP 65 (EN60529)
Protection Circuit	—	Power Reverse Polarity; Surge Suppression
CE Certificate NO.	E8N 11 0 4 53334 005	—
3C Certificate NO.	No. : 2 004010305127433	—
CNEx Certificate NO.	CNEx16.2333X(ExnCIIT6GC)	—
Connect Diagram		
	<p>AL-39R AL-39R-QD8 AL-39R-QD12 AL-39R-EZ2M</p>	<p>M8, M12, EZ QUICK CONNECT OR (IEC61076-2-101)</p> <p>2 wire QD wiring</p> <p>M83M </p> <p>M124M </p> <p>EZ2M </p> <p>3 wire QD wiring</p> <p>M83M </p> <p>M124M </p> <p>EZ3M </p>

Sensor Switch Holder



Linear Unit	Dimensions (mm)										Code
	B	C	D	E	F	G	H	I	L	W	
MTE 80	26	4	6.5	6.5	5.3	1.8	6.6	3.3	30	13	A9AA_AD80

Belt Driven Actuators
Series MTB
MTE Series
MTS Series
MTZ Series
MTF Series
CTJ Series
Ball Screw Actuators
Series MTV
CTV Series
PNCE Series
Automation Components