

## 2.3 Industrial Servomotor

### 2.3.1 Overview

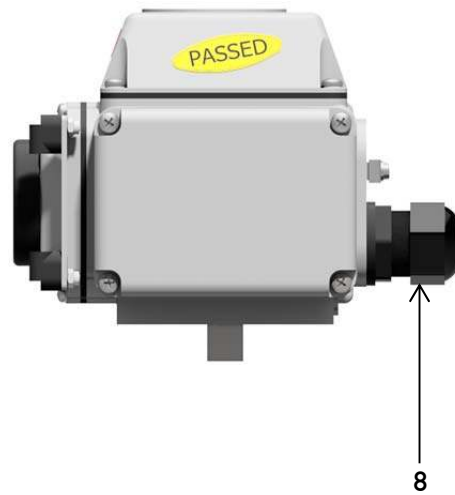
The industrial servomotor is a rotary type electric actuator, suitable for use with the M.M. module. The body is made with die-cast aluminium, and it is light, compact, highly efficient and powerful.

Features:

- Light and compact
- Easy to handle and suitable for use in narrow spaces
- Simple structure design
- Trouble-free mounting on air damper, maintenance and testing
- Manual operation function crank handle supplied with the servomotor
- Manual operation is only possible when the power is discontinued, with the attached manual crank handle. If manual operation is performed whilst the unit has power, this will cause damage.
- Protect function
- Thermal protector is built in to prevent motor burnout by overloading.
- Easy for wiring
- Connection is simplified by using a terminal block inside

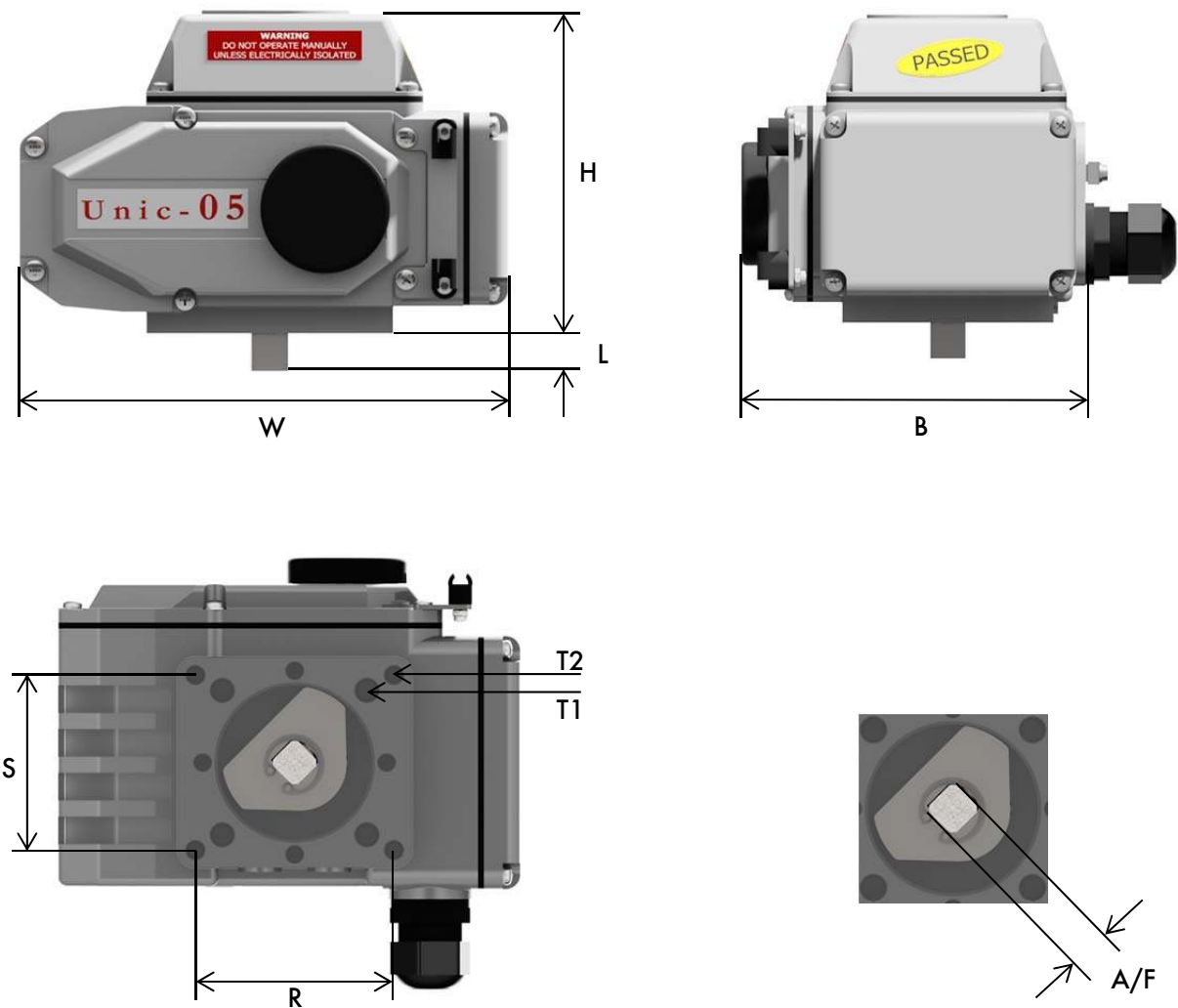


2.3.2 External Drawings



Number	Name
1	Body
2	Drive unit cover
3	Autoflame feedback potentiometer
4	Power instruments cover
5	Control unit/terminal strip cover
6	Output shaft
7	Manual handle shaft
8	Cord lock for conduit connection

2.3.3 Dimensions



Metric Units:

Part Number	Torque	Dimensions			Shaft			Dimensions		
	Nm	W	H	B	L	A/F	R	S	T1	T2
MM10070 -Unic 05	39.2	159	111	115	12	12	68	60	M8	M6
MM10072 -Unic 10	98	208	137	123	16.5	15	82	70	M8	M6
MM10074 -Unic 20	126	257	145	157	26.5	23	118	84	M10	M10
MM10078 -Unic 40	392	257	145	157	26.5	23	118	84	M10	M10

Imperial Units:

Part Number	Torque	Dimensions			Shaft			Mounting		
	ft lbs	W	H	B	L	A/F	R	S	T1	T2
MM10070 -Unic 05	29	6.26	4.37	4.53	0.47	0.47	2.68	2.36	M8	M6
MM10072 -Unic 10	72	8.19	5.39	4.84	0.65	0.59	3.23	2.76	M8	M6
MM10074 -Unic 20	144	10.12	5.71	6.18	1.04	0.91	4.65	3.31	M10	M10
MM10078 -Unic 40	289	10.12	5.71	6.18	1.04	0.91	4.65	3.31	M10	M10

## 2 Servomotors

### 2.3.4 Specifications

Item	Specification
Power	220/240VAC 50/60Hz 110VAC 60 Hz
Output Shaft Torque	MM10070 - 39.2Nm (29 Lb.ft) MM10072 - 98Nm (72 Lb.ft) MM10074 - 196Nm (144 Lb.ft) MM10078 - 392Nm (289 Lb.ft)
Operating Angle	0 - 90 degrees
Operating Time	15 - 30 seconds/ 50Hz (nominal)
Protect System	Thermal protector built in
Ambient Temperature	-25°C - 55°C (-13F - 131F)
Rated Current	MM10070 - 0.4A/ 200V (0.75A/ 100V) MM10072 - 0.3A/ 200V (0.6A/ 100V) MM10074 - 0.45A/ 200V (1A/ 100V) MM10078 - 0.9A/ 200V (2A/ 100V)
Insulation Resistance	100Mohm/ 500VDC
Withstand Voltage	1500VAC/ minute
Manual Operation	Crank handle attached
Stopper	Mechanical stopper - open/ close adjustable
Enclosure	IP65/ NEMA4
Mounting Angle	360 degrees - all directions
Positioning	M.M drive
Drive Motor	MM10070 - 8W (E type) MM10072 - 20W (E type) MM10074 - 30W (E type) MM10078 - 90W (E type)
Body material	Die cast aluminium ADC - 12
Coating	Baking varnish
Weight	MM10070 - 2Kg (4.4lbs) MM10072 - 4.5Kg (9.9lbs) MM10074 - 9Kg (19.8lbs) MM10078 - 9.5Kg (20.9lbs)
Wiring Conduit	½" NPT

The industrial servomotor is available as explosion proof with ATEX approval for hazardous environments:

Industrial Servomotor Unic 10, 230V	98Nm, 72 ft lbs. Ex nA nL IIC T4	MM10072/EXP
Industrial Servomotor Unic 10, 120V	98Nm, 72 ft lbs. Ex nA nL IIC T4	MM10072/110/EXP