



BELT DRIVEN ACTUATORS > MSA-R20 ACTUATOR

# MSA-R20 ACTUATOR

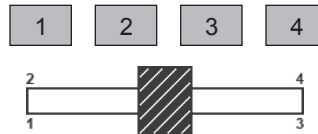


## MSA-R20 OPTIONS

### SHAFT TYPE

- Single
- Double

### DRIVE SHAFT LOCATION



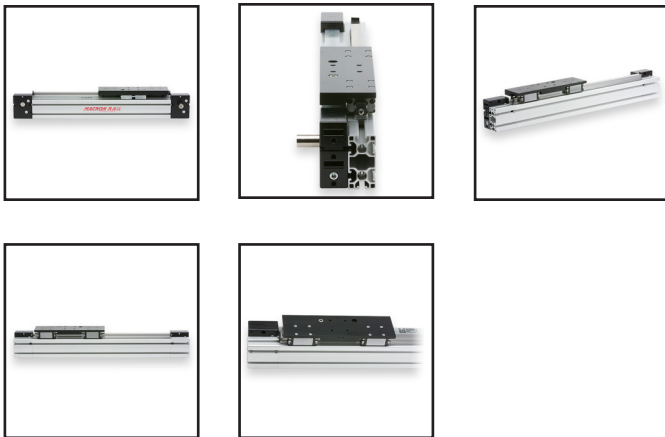
### TRAVELS

(Min 150mm - Max 5575mm)

### OPTIONS FOR:

- Motor Mounting
- Sensors
- Gearbox

### HOW TO BUILD YOUR MSA-R20:



### Macron Solutions Since 1987

MACRON DYNAMICS, INC.  
 100 Phyllis Drive  
 Croydon, PA 19021  
 © 2014 MACRON DYNAMICS, INC.

1-800-MACRON-1 (1-800-622-7661)  
 Phone: 267-557-3590  
 Fax: 215-443-0981

### Macron Guarantee

All Macron actuators and belt drives are covered by our  
 1-Year Warranty



BELT DRIVEN ACTUATORS > MSA-R20 ACTUATOR

# MSA-R20 ACTUATOR

## SPECIFICATIONS

### Specifications

Motion	<b>Horizontal or Vertical</b>
Max Speed - horizontal [vertical] - mm / sec	<b>5000 [5000]</b>
Max Load - horizontal [vertical] - lbs.	<b>1000 [300]</b>
Repeatability - mm	<b>+/-0.025</b>
Moment Load Max - in. - lbs. [Nm]	<b>1062 [120]</b>
Positional Accuracy - mm / meter	<b>+/- 0.4</b>
Acceleration max - G's	<b>10</b>
Beam Dimensions - mm	<b>80 x 80</b>
<b>Motor Sizing Information</b>	
Weight of Drive Pulley - oz. / kgs.	<b>11.3 / 0.32</b>
Weight of Idler Pulley - oz. / kgs.	<b>7.7 / 0.22</b>
Weight of Cart - lbs. / kgs.	<b>4.0 / 1.81</b>
Weight of Belt - kgs. based on travel selected	<b>((Travel in meters x 2) + 0.47) x 0.12</b>
Travel per Revolution - mm	<b>150</b>
Pulley Pitch Diameter - mm	<b>47.74</b>
Pulley Material / Width - mm	<b>steel / 25</b>
Breakaway Torque - oz. - in.	<b>26 - 28</b>
Coefficient Friction	<b>0.05</b>
Rolling Resistance - lbs. / kgs.	<b>N/A</b>

## SPECIFICATIONS

### Weight

Weight - min. travel unit (150 mm) - lbs. / kgs.	<b>15.0 / 6.8</b>
Weight - additional 25 mm of travel - lbs. / kgs.	<b>0.75 / 0.034</b>
<b>Travels</b>	
Standard Travels - min max - mm (25 mm increment)	<b>150 / 5575</b>

### Features

- Extruded aluminum actuator body with T-slots for ease of mounting
- Easy to adjust belt tensioner
- One piece, machined and stress proof shafted pulley
- Zero backlash belt to pulley design
- Corrosion resistant components

### Macron Solutions Since 1987

MACRON DYNAMICS, INC.  
 100 Phyllis Drive  
 Croydon, PA 19021  
 © 2014 MACRON DYNAMICS, INC.

1-800-MACRON-1 (1-800-622-7661)  
 Phone: 267-557-3590  
 Fax: 215-443-0981

### Macron Guarantee

All Macron actuators and belt drives are covered by our  
 1-Year Warranty