

# Motor/Motorized Linear Slide

## Product Recommendation Information Sheet: Ball Screw Drive

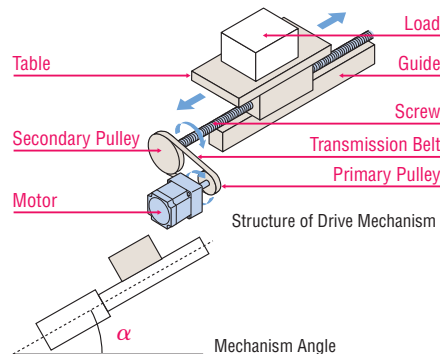
### Required Product

- Induction Motor, Reversible Motor, Electromagnetic Brake Motor, etc.  
  AC Speed Control Motor  
  Brushless Motor  
 Stepping Motor  
  Motorized Linear Slide

### Drive Mechanism Specifications

● If in doubt, leave the applicable fields blank. We will call you if necessary.

● Mass of load (Including table)	$m$	=	kg, or	lb
● Friction coefficient of the guide	$\mu$	=		
● Ball screw shaft diameter	$D_B$	=	mm, or	in
● Ball screw length	$L_B$	=	mm, or	in
● Ball screw lead (pitch)	$P_B$	=	mm/rev, or	in/rev
● Ball screw efficiency	$\eta_B$	=		
● Ball screw material	Material:	=		
● Preload	$F_O$	=	N, or	lb
● Mechanism angle	$\alpha$	=	deg	
● External force on table	$F_A$	=	N, or	lb



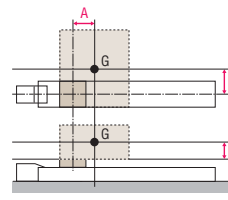
Fill in the fields below if belt pulleys or gears are used, or leave blank if a direct-coupling structure is used.

● Primary pulley diameter and mass	$D_{P1}$	=	mm, or	in
● If you are not sure about the mass, enter the thickness and material. →				
● Secondary pulley diameter and mass	$D_{P2}$	=	mm, or	in
● If you are not sure about the mass, enter the thickness and material. →				

$m_{P1}$	=	kg, or	lb
$L_{P1}$	=	mm, or	in
Material:			
$m_{P2}$	=	kg, or	lb
$L_{P2}$	=	mm, or	in
Material:			

Fill in the fields below if you are selecting a motorized linear slide.

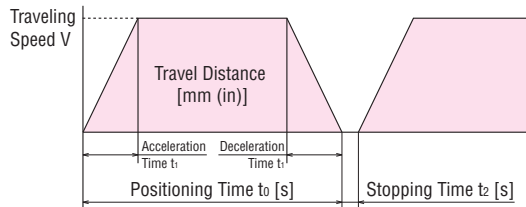
● Overhung distance from center of gravity	$A$	=	mm, or	in
	$B$	=	mm, or	in
	$C$	=	mm, or	in
● Total required travel distance	$L$	=	mm, or	in



### Operating Conditions

● If in doubt, leave the applicable fields blank. We will call you if necessary.

● Travel distance per motion		=	mm, or	in
● Positioning time	$t_0$	=	s	
● Desired acceleration/deceleration time, if any	$t_1$	=	s	
● Stopping time	$t_2$	=	s	
● Desired traveling speed, if any	$V$	=	mm/s, or	in/s
● Stopping accuracy	$\pm$	=	mm, or	in
● Power supply voltage		=	VAC, or	VDC



### Customer Information

Date: \_\_\_\_\_

Name: _____	Tel: _____ Ext: _____
Title: _____	Fax: _____
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Address: _____	Application: _____
City: _____	_____
State/Zip: _____	_____

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# Motor/Motorized Linear Slide

## Product Recommendation Information Sheet: Belt and Pulley Drive

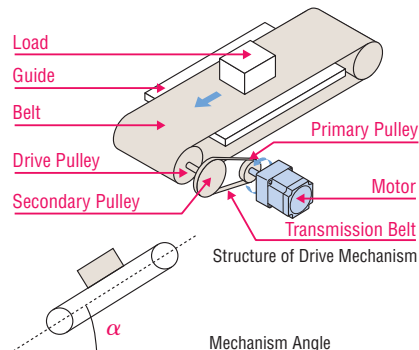
### Required Product

- Induction Motor, Reversible Motor, Electromagnetic Brake Motor, etc.  
  AC Speed Control Motor  
  Brushless Motor  
 Stepping Motor  
  Motorized Linear Slide

### Drive Mechanism Specifications

● If in doubt, leave the applicable fields blank. We will call you if necessary.

● Mass of load (Including belt)	$m$	=	kg, or	lb
● Friction coefficient of the guide and belt	$\mu$	=		
● Number of drive pulley	$n$	=		
● Drive pulley pitch circle diameter	$D_P$	=	mm, or	in
● Drive pulley inner diameter	$D_{P1}$	=	mm, or	in
● Drive pulley thickness	$L_P$	=	mm, or	in
● Drive pulley mass (per unit)	$m_P$	=	kg/pulley, or	lb/pulley
● Drive pulley material	Material:			
● Mechanism angle	$\alpha$	=	deg	
● External force	$F_A$	=	N, or	lb



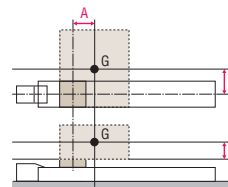
Fill in the fields below if belt pulleys or gears are used, or leave blank if a direct-coupling structure is used.

● Primary pulley diameter and mass	$D_{P1}$	=	mm, or	in
● If you are not sure about the mass, enter the thickness and material. →				
● Secondary pulley diameter and mass	$D_{P2}$	=	mm, or	in
● If you are not sure about the mass, enter the thickness and material. →				

$m_{P1}$	=	kg, or	lb
$L_{P1}$	=	mm, or	in
Material:			
$m_{P2}$	=	kg, or	lb
$L_{P2}$	=	mm, or	in
Material:			

Fill in the fields below if you are selecting a motorized linear slide.

● Overhung distance from center of gravity	$A$	=	mm, or	in
	$B$	=	mm, or	in
	$C$	=	mm, or	in
● Total required travel distance	$L$	=	mm, or	in

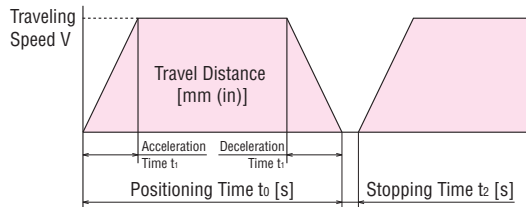


Surface that a motorized linear slide is mounted

### Operating Conditions

● If in doubt, leave the applicable fields blank. We will call you if necessary.

● Travel distance per motion		=	mm, or	in
● Positioning time	$t_0$	=	s	
● Desired acceleration/deceleration time, if any	$t_1$	=	s	
● Stopping time	$t_2$	=	s	
● Desired traveling speed, if any	$V$	=	mm/s, or	in/s
● Stopping accuracy	$\pm$	=	mm, or	in
● Power supply voltage		=	VAC, or	VDC



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State/Zip: _____	_____

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# Motor/Hollow Rotary Actuator Product Recommendation Information Sheet: Table Drive

## Required Product

- Induction Motor, Reversible Motor, Electromagnetic Brake Motor, etc.  
  AC Speed Control Motor  
  Brushless Motor  
 Stepping Motor  
  Hollow Rotary Actuator

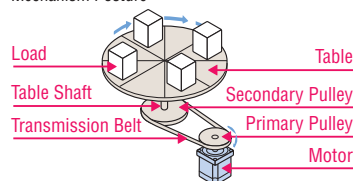
## Drive Mechanism Specifications

● If in doubt, leave the applicable fields blank. We will call you if necessary.

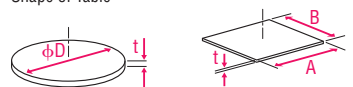
Table shape and dimensions

<input type="checkbox"/> Disk type: Diameter	$\phi D =$	mm, or	in
<input type="checkbox"/> Square type: Length	$A =$	mm, or	in
Width	$B =$	mm, or	in
● Table thickness	$t =$	mm, or	in
● Table mass or material	$m =$	kg, or	lb, or material →
● Table shaft diameter	$D_2 =$	mm, or	in
● Table shaft length	$L =$	mm, or	in
● Table shaft mass or material	$m_2 =$	kg, or	lb, or material →

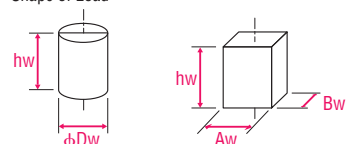
Mechanism Posture



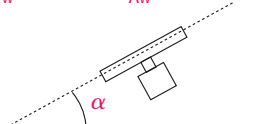
Shape of Table



Shape of Load



Mechanism Angle



Load shape and dimensions

<input type="checkbox"/> Cylinder type: Diameter	$\phi D_w =$	mm, or	in
<input type="checkbox"/> Square cylinder type: Length	$A_w =$	mm, or	in
Width	$B_w =$	mm, or	in
● Load height	$h_w =$	mm, or	in
● Load mass or material	$m =$	kg, or	lb, or material →
● Load turning radius	$r =$	mm, or	in
● Number of loads	$n =$		
● Mechanism angle	$\alpha =$	deg	

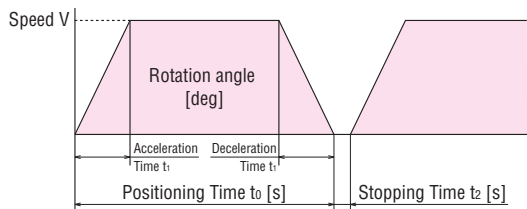
Fill in the fields below if belt pulleys or gears are used, or leave blank if a direct-coupling structure is used.

● Primary pulley diameter and mass	$DP_1 =$	mm, or	in	$MP_1 =$	kg, or	lb
● If you are not sure about the mass, enter the thickness and material. →				$LP_1 =$	mm, or	in
				Material:		
● Secondary pulley diameter and mass	$DP_2 =$	mm, or	in	$MP_2 =$	kg, or	lb
● If you are not sure about the mass, enter the thickness and material. →				$LP_2 =$	mm, or	in
				Material:		

## Operating Conditions

● If in doubt, leave the applicable fields blank. We will call you if necessary.

● Rotation angle per motion		deg
● Positioning time	$t_0 =$	s
● Desired acceleration/deceleration time, if any	$t_1 =$	s
● Stopping time	$t_2 =$	s
● Desired speed, if any	$V =$	~ r/min
● Stopping accuracy	$\pm$	deg
● Power supply voltage		VAC, or VDC



## Customer Information

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# Cooling Fan

## Product Recommendation Information Sheet: Ventilation Cooling/Exhaust

### Required Cooling Fan

- Axial Flow Fan     Centrifugal Blower     Cross Flow Fan

### Specifications of Equipment ● If in doubt, leave the applicable fields blank. We will call you if necessary.

● Total heat generated or total electric power consumption of equipment ..... 

$Q$	=	W
-----	---	---

If you are not sure about the total heat generated, enter the total input, total output and efficiency in the fields below.

• Total input ..... 

$P_{in}$	=	W
----------	---	---

• Total output ..... 

$P_{out}$	=	W
-----------	---	---

• Efficiency ..... 

$\eta$	=	%
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● Internal temperature without fan operation ..... 

$T'$	=	°C, or	°F
------	---	--------	----

● Maximum temperature inside equipment (desired temperature) ..... 

$T$	=	°C, or	°F
-----	---	--------	----

● Ambient temperature of equipment (cooling air) ..... 

$T_a$	=	°C, or	°F
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#### Dimensions of equipment

● Equipment width ..... 

$W$	=	mm, or	in
-----	---	--------	----

● Equipment height ..... 

$h$	=	mm, or	in
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● Equipment depth ..... 

$d$	=	mm, or	in
-----	---	--------	----

● Equipment case thickness ..... 

$l$	=	mm, or	in
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● Equipment material and paint ..... 

	=		
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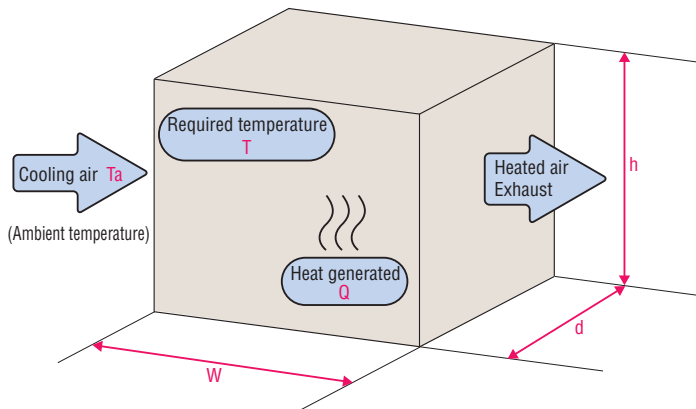
    → Radiant factor ..... 

	=	%	
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● Power supply voltage ..... 

	=	VAC, or	VDC
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● Provide an illustration showing the fan installation position, positions of suction intake and exhaust outlet, layout of internal components, etc., based on the information available.



### Customer Information

Date: \_\_\_\_\_

Name: _____	Tel: _____	Ext: _____
Title: _____	Fax: _____	
Company: _____	E-mail: _____	
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State/Zip: _____		

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# Cooling Fan Product Recommendation Information Sheet: Duct Exhaust

## Required Cooling Fan

- Axial Flow Fan   
  Centrifugal Blower   
  Cross Flow Fan

## Specifications of Equipment ● If in doubt, leave the applicable fields blank. We will call you if necessary.

● Required exhaust capacity ..... 

$Q$	=	m <sup>3</sup> /min, or	CFM
-----	---	-------------------------	-----

● Required air velocity ..... 

$T$	=	m/s, or	in/s
-----	---	---------	------

Dimensions of suction intake or exhaust outlet

● Width ..... 

$W$	=	mm, or	in
-----	---	--------	----

● Deep ..... 

$D$	=	mm, or	in
-----	---	--------	----

● The illustration below assumes that air is suctioned from the bottom and exhausted from the top. If air is suctioned from the top, an exhaust outlet is provided at the bottom.

Duct dimensions

● Diameter ..... 

$\phi D$	=	mm, or	in
----------	---	--------	----

● Duct length ..... 

$L$	=	mm, or	in
-----	---	--------	----

Filter characteristics

● Air velocity ..... 

	=	mm/s, or	in/s
--	---	----------	------

● Pressure loss ..... 

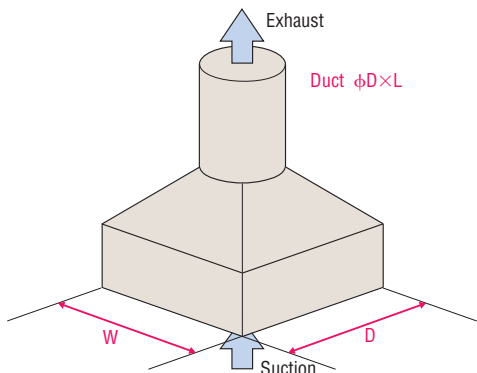
	=	Pa	
--	---	----	--

● Exhaust temperature ..... 

	=	°C, or	°F
--	---	--------	----

● Power supply voltage ..... 

	=	VAC, or	VDC
--	---	---------	-----



- Add to or change the illustration shown to the left based on the information available.
- Duct shape (locations of bends, bending angles, etc.)
- Fan installation position

## Customer Information

Date: \_\_\_\_\_

Name: _____	Tel: _____ Ext: _____
Title: _____	Fax: _____
Company: _____	E-mail: _____
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State/Zip: _____	_____

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# Product Recommendation Information Sheet: Other Application

**■ Specifications of Automated Equipment** Use the space below to draw the outline of your mechanism and list the operating conditions required.

- Safety Standards
- List of Safety Standard Approved Products
- RoHS Directive Compliance
- ISO 9001, ISO 14001
- Global Power Supply Voltages
- Oriental Motor Corporate Overview
- Oriental Motor Global Sales Network
- Product Recommendation Sheets
- Conversion Charts
- Product Line Updates
- Product Index

**■ Customer Information**

Date: \_\_\_\_\_

Name: _____	Tel: _____	Ext: _____
Title: _____	Fax: _____	
Company: _____	E-mail: _____	
Address: _____	Application: _____	
City: _____		
State/Zip: _____		

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