

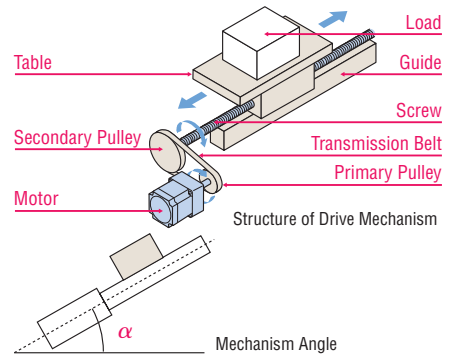
Motor/Motorized Linear Slide Product Recommendation Information Sheet: Ball Screw Drive

Required Product

- Induction Motor, Reversible Motor, Electromagnetic Brake Motor, etc.
 AC Speed Control Motor
 Brushless Motor
 Stepping Motor
 Servo 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



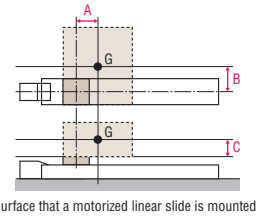
Fill in the fields below if belt pulleys or gears are used or leave blank if a direct-coupling structure is used.

- 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:

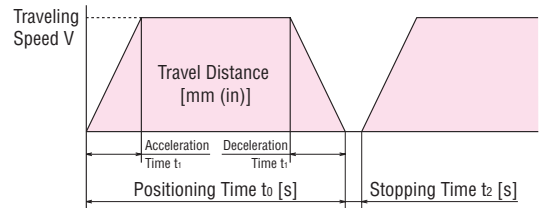
Fill in the fields below if you are selecting a motorized linear slide.

- 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 $t_o =$ 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: _____
Company: _____	E-mail: _____
Address: _____	Application: _____
City: _____	_____
State/Zip: _____	_____

Contact: Technical Support TEL: (800)468-3982 FAX: (800)309-7999 www.orientalmotor.com

Motor/Motorized Linear Slide Product Recommendation Information Sheet: Belt and Pulley Drive

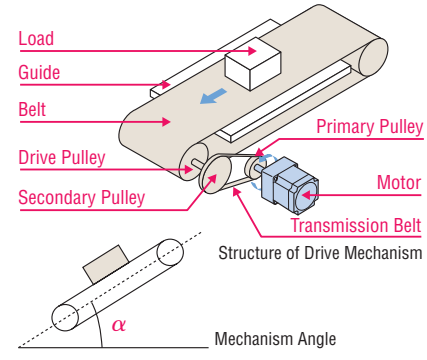
Safety Standards
 Management of Chemical Substances In Products
 ISO 9001, ISO 14001
 Global Power Supply Voltages
 Oriental Motor Corporate Overview
 Oriental Motor Global Sales Network
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 Product Index

Required Product

- Induction Motor, Reversible Motor, Electromagnetic Brake Motor, etc.
 AC Speed Control Motor
 Brushless Motor
 Stepping Motor
 Servo 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	μ	=		
● 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	α	=	deg	
● External force	F_A	=	N, or	lb



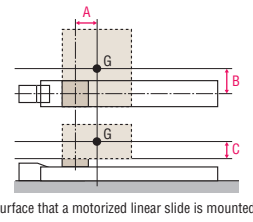
Fill in the fields below if belt pulleys or gears are used or leave blank if a direct-coupling structure is used.

● 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:			

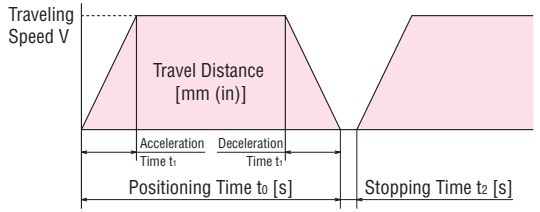
Fill in the fields below if you are selecting a motorized linear slide.

● 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



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

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Motor/Hollow Rotary Actuator

Product Recommendation Information Sheet: Table Drive

Required Product

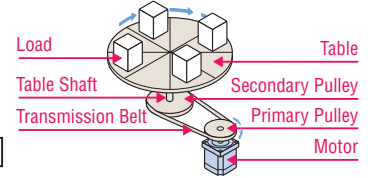
- Induction Motor, Reversible Motor, Electromagnetic Brake Motor, etc.
 AC Speed Control Motor
 Brushless Motor
 Stepping Motor
 Servo Motor
 Hollow Rotary Actuator

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

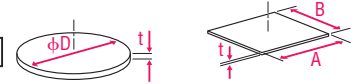
Table shape and dimensions

<input type="checkbox"/> Disk type: Diameter	ϕD =	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



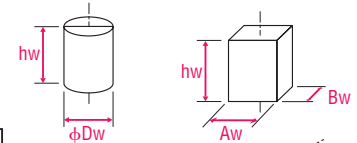
Shape of Table



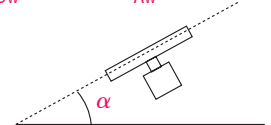
Load shape and dimensions

<input type="checkbox"/> Cylinder type: Diameter	ϕD_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	α =	deg	

Shape of Load



Mechanism Angle

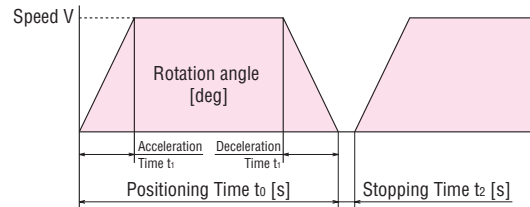


Fill in the fields below if belt pulleys or gears are used or leave blank if a direct-coupling structure is used.

● Primary pulley diameter and mass	$DP1$ =	mm, or	in	$mp1$ =	kg, or	lb
● If you are not sure about the mass, enter the thickness and material. →				$LP1$ =	mm, or	in
				Material:		
● Secondary pulley diameter and mass	$DP2$ =	mm, or	in	$mp2$ =	kg, or	lb
● If you are not sure about the mass, enter the thickness and material. →				$LP2$ =	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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Address: _____	Application: _____	
City: _____		
State/Zip: _____		

Contact: Technical Support TEL: (800)468-3982 FAX: (800)309-7999 www.orientalmotor.com

Cooling Fan

Product Recommendation Information Sheet: Ventilation Cooling/Exhaust

- Safety Standards
- Management of Chemical Substances In Products
- ISO 9001, ISO 14001
- Global Power Supply Voltages
- Oriental Motor Corporate Overview
- Oriental Motor Global Sales Network
- Product Recommendation Information Sheets
- Conversion Charts
- Product Line Updates
- Product Index

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.

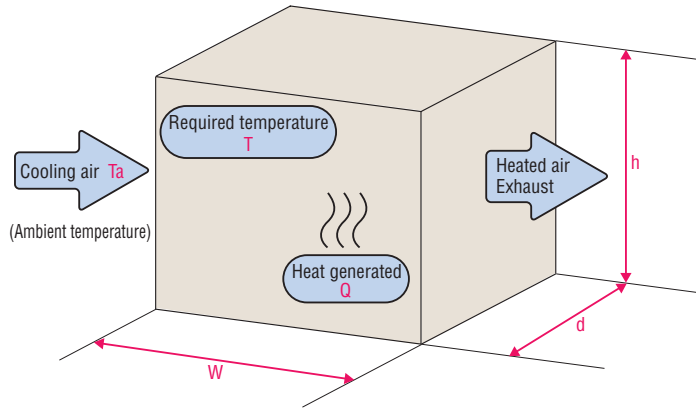
• Total input $P_{in} =$ _____ W
 • Total output $P_{out} =$ _____ W
 • Efficiency $\eta =$ _____ %

● 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

Dimensions of equipment

● Equipment width $W =$ _____ mm, or _____ in
 ● Equipment height $h =$ _____ mm, or _____ in
 ● Equipment depth $d =$ _____ mm, or _____ in
 ● Equipment case thickness $l =$ _____ mm, or _____ in
 ● Equipment material and paint _____
 → Radiant factor _____ %
 ● Power supply voltage _____ VAC, or _____ VDC

● 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

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

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 = m³/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

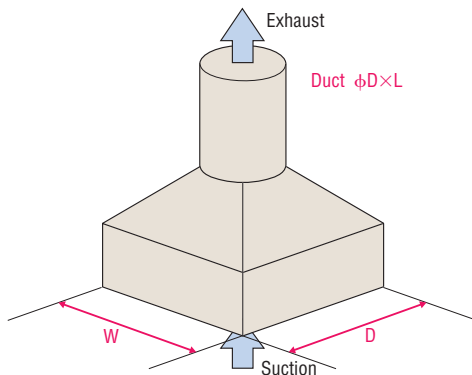
● The illustration below assumes that air is suctioned from the bottom and exhausted from the top. If air is suctioned from the top, an exhaust outlet is provided at the bottom.

Duct dimensions

● Diameter ϕD = 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: _____

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Title: _____	Fax: _____
Company: _____	E-mail: _____
Address: _____	Application: _____
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Contact: Technical Support TEL: (800)468-3982 FAX: (800)309-7999 www.orientalmotor.com

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.

■ Customer Information

Date: _____

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

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