Product Recommendation Information Sheet

Rack-and-Pinion

■Desired Product
● If you have no desired product, leave the applicable fields blank. We will call you if necessary.

Desired Motor(s)

☐ αSTEP   ☐ Stepper Motor   ☐ Servo Motor   ☐ Brushless Motor

☐ AC Motor   ☐ Others

■Moving Form

○ Rack moving type with pinion side fixed   ○ Pinion side moving type with rack side fixed (Motor side moving type)

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

- ● Total Mass of Load and Table ········· m_1 =   kg
- ● Guide Friction Coefficient ················ μ =
- ● Mass of Rack ······························· m_3 =   kg
- ● Pitch Circle Diameter of Pinion ········ D_P =   mm
- ● Mass of Pinion ································ M_P =   kg
- ● Pinion Width (Thickness) ················· L_P =   mm
- ● Pinion Material ······························ Materials:
- ● Inclination Angle of the Mechanism ·· θ =   deg.
- ● External Force Applied (External force) ········ F_A =   N

Load   Table   Rack   Pinion   Guide   Primary Side Pulley   Motor   Secondary Side Pulley

θ Position of Mechanism
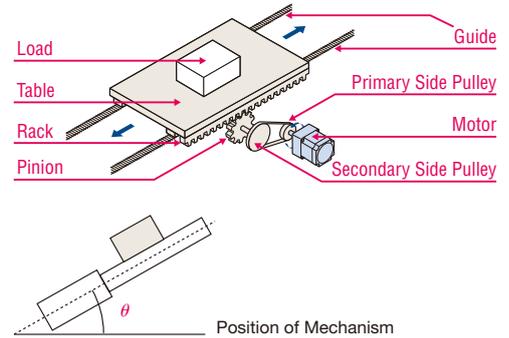
Please enter if you use connecting belt pulley or gear. Not required for direct connection.

- ● Primary Side Pulley Diameter and Mass ······· D_{P1} =   mm m_{P1} =   kg
  - ● If the mass is unknown, please enter the width and material. → L_{P1} =   mm   Materials:
- ● Secondary Side Pulley Diameter and Mass ··· D_{P2} =   mm m_{P2} =   kg
  - ● If the mass is unknown, please enter the width and material. → L_{P2} =   mm   Materials:
- ● For electric linear slide sizing, use the specific request form.

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

- ● Travel Amount per Operation ············   mm
- ● Positioning Time ····························· t_0 =   s
- ● Desired Acceleration and Deceleration Time · t_1 =   s
- ● Stop Time ······································ t_2 =   s
- ● Desired Travel Speed (If any) ············ V =   mm/s
- ● Desired Stopping Accuracy (If any) ··· ±   mm
- ● Power Supply Voltage ······················   V,   Hz
- ● Necessity of Holding Force After Power is Turned off ········ ○ Yes   ○ No

Travel Speed V

Travel Amount [mm]

Acceleration Time t1   Deceleration Time t1

Positioning Time t0 [S]   Stop Time t2 [S]

ORIENTAL MOTOR CO., LTD.
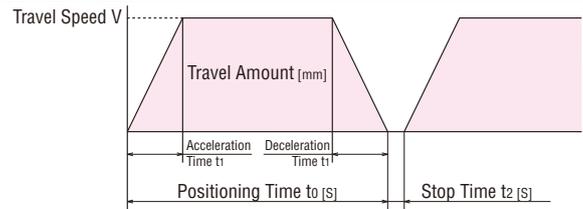
■Others

● Application, Equipment Name···················
● Estimated Number of Units to be Used ····· | unit(s)
● Estimated Purchase Date ·······················
● Supply Source (Sales office)····················

● Other (Requests, Contact information, Items not written above, etc.)