

# SRD05

## Rod type (With support guide)



- CE compliance
- Origin on the non-motor side is selectable: Lead 6, 12

### Ordering method

#### SRD05

<b>Model</b>	<b>Lead</b>	<b>Model</b>	<b>Brake</b>	<b>Origin position</b> <small>Note 1</small>	<b>Bracket plate</b>	<b>Stroke</b>	<b>Cable length</b> <small>Note 2</small>	<b>Robot positioner</b>	<b>I/O</b>	<b>Battery</b> <small>Note 6</small>
	12: 12mm 06: 6mm 02: 2mm	S: Straight model J: Space-saving model <small>Note 3</small> (motor installed on top)	N: With no brake B: With brake	N: Standard Z: Non-motor side	N: No plate H: With plate	50 to 300 (50mm pitch)	1L: 1m 3L: 3m 5L: 5m 10L: 10m	S2: TS-S2 <small>Note 4</small> SH: TS-SH	NP: NPN PN: PNP CC: CC-Link DN: DeviceNet™ EP: EtherNet/IP™ GW: No I/O board <small>Note 5</small>	B: With battery (Absolute) N: None (Incremental)
								<b>SD</b>	<b>1</b>	
								<b>Robot driver</b>	<b>I/O cable</b>	
								SD: TS-SD	t: 1m	

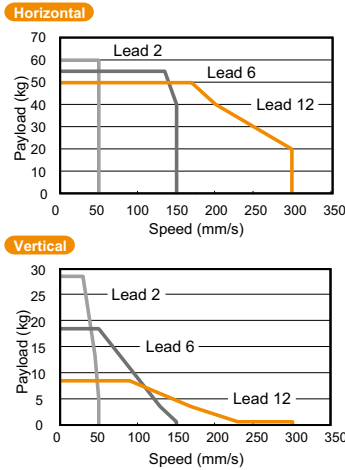
Note 1. When "2mm lead" is selected, the origin position cannot be changed (to non-motor side).  
 Note 2. The robot cable is flexible and resists bending.  
 Note 3. See P.85 for grease gun nozzles.  
 Note 4. See P.446 for DIN rail mounting bracket.  
 Note 5. Select this selection when using the gateway function. For details, see P.439.  
 Note 6. Select whether or not the battery is provided only when using the TS-SH.

### Basic specifications

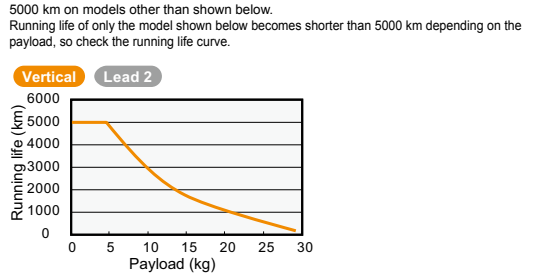
<b>Motor</b>	56 □ Step motor	
<b>Resolution (Pulse/rotation)</b>	20480	
<b>Repeatability (mm)</b>	±0.02	
<b>Deceleration mechanism</b>	Ball screw φ12 (Class C10)	
<b>Ball screw lead (mm)</b>	12	6
<b>Maximum speed</b> <small>Note 1</small> (mm/sec)	300	150
<b>Maximum payload (kg)</b>	<b>Horizontal</b>	<b>Vertical</b>
	50	55
	8.5	18.5
	28.5	
<b>Max. pressing force (N)</b>	250	550
<b>Stroke (mm)</b>	50 to 300 (50pitch)	
<b>Lost motion</b>	0.1mm or less	
<b>Rotating backlash (°)</b>	±0.05	
<b>Overall length (mm)</b>	<b>Horizontal</b>	<b>Vertical</b>
	Stroke+276	Stroke+316
<b>Maximum outside dimension of body cross-section (mm)</b>	W56.4 × H71	
<b>Cable length (m)</b>	Standard: 1 / Option: 3, 5, 10	

Note 1. The maximum speed needs to be changed in accordance with the payload.  
 See the "Speed vs. payload" graph shown on the right.  
 For details, see P. 84.

### Speed vs. payload



### Running life

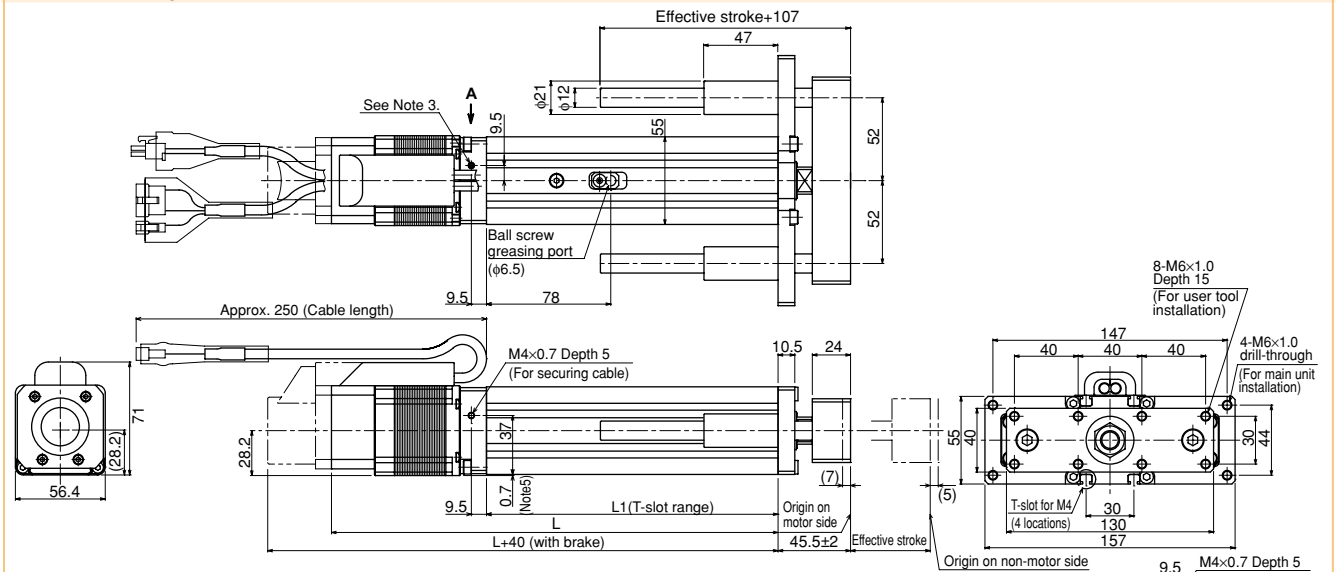


Note. See P.85 for running life distance to life time conversion example.

### Controller

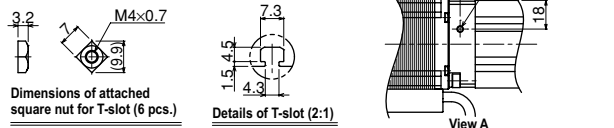
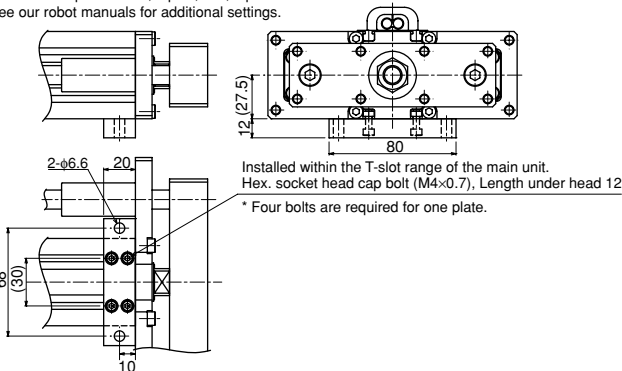
Controller	Operation method	Controller	Operation method
TS-S2	I/O point trace / Remote command	TS-SD	Pulse train control
TS-SH			

### SRD05 Straight model S



#### Option: Horizontal installation plate (foot)

\* Contents of option: Plate, 2 pcs., Nut, 8 pcs.  
 See our robot manuals for additional settings.



Effective stroke	50	100	150	200	250	300
<b>L1</b>	183	233	283	333	383	433
<b>L</b>	280.5	330.5	380.5	430.5	480.5	530.5
<b>Weight (kg)</b> <small>Note 8</small>	3.1	3.6	4.1	4.5	5.0	5.5

Note1. It is possible to apply only the axial load.  
 Use the external guide together so that any radial load is not applied to the rod.  
 Note2. For lead 2mm specifications, the origin on the non-motor side cannot be set.  
 Note3. When the lead is 2mm, this dimension is 27mm.  
 Note4. When running the cables, secure cables so that any load is not applied to them.  
 Note5. Remove the M4 hex. socket head cap set bolts and use them to secure the cables. (Effective screw thread depth 5)  
 Note6. The cable's minimum bend radius is R30.  
 Note7. Take great care as the outer case of the motor projects from the bottom of the main unit.  
 Note8. Models with a brake will be 0.2kg heavier.  
 Note9. Distance to mechanical stopper.

**SRD05 Space-saving model (motor installed on top) U**

