

# BD04

Belt type

CE compliance

## Ordering method

<b>BD04</b>	<b>48</b>	<b>N</b>	<b>N</b>			<b>S2</b>		
<b>Model</b>	<b>Lead</b> 48: 48mm	<b>Brake</b> N: With no brake	<b>Origin position</b> N: Standard	<b>Stroke</b> 300: 300mm 500: 500mm 600: 600mm 700: 700mm 800: 800mm 900: 900mm 1000: 1000mm	<b>Cable length</b> <small>Note 1</small> 1K: 1m 3K: 3m 5K: 5m 10K: 10m	<b>Robot positioner</b> S2: TS-S2 <small>Note 2</small>	<b>I/O</b> NP: NPN PN: PNP CC: CC-Link DN: DeviceNet™ EP: EtherNet/IP™ PT: PROFINET GW: No I/O board <small>Note 3</small>	
						<b>SH</b>		
						<b>Robot positioner</b> SH: TS-SH	<b>I/O</b> NP: NPN PN: PNP CC: CC-Link DN: DeviceNet™ EP: EtherNet/IP™ PT: PROFINET GW: No I/O board <small>Note 3</small>	<b>Battery</b> B: With battery (Absolute) N: None (Incremental)
						<b>SD</b>	<b>1</b>	
						<b>Robot driver</b> SD: TS-SD	<b>I/O cable</b> t: 1m	

Note 1. The robot cable is flexible and resists bending.  
 Note 2. See P.634 for DIN rail mounting bracket.  
 Note 3. Select this selection when using the gateway function. For details, see P.96.

## Basic specifications

<b>Motor</b>	28 □ Step motor
<b>Resolution (Pulse/rotation)</b>	4096
<b>Repeatability</b> <small>Note 1</small> (mm)	+ΔD
<b>Drive method</b>	Belt
<b>Equivalent lead (mm)</b>	φ
<b>Maximum speed</b> <small>Note 2</small> (mm/sec)	100
<b>Maximum payload (kg)</b>	1
<b>Stroke (mm)</b>	300 500 600 700 800 900 1000
<b>Overall length (mm) (Horizontal installation)</b>	Stroke + 195
<b>Maximum outside dimension of body cross-section (mm)</b>	W40 × H39
<b>Cable length (m)</b>	Standard: 1 / Option: 3, 5, 10

Note 1. Positioning repeatability in one direction.  
 Note 2. The maximum speed needs to be changed in accordance with the payload.  
 See the "Speed vs. payload" graph shown on the right.

## Allowable overhang

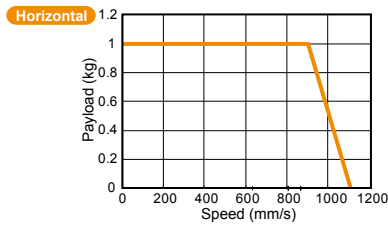
Horizontal installation (Unit: mm)				Wall installation (Unit: mm)			
	A	B	C		A	B	C
0.5kg	8036	1950	1504	0.5kg	1614	1942	8013
1kg	3933	968	747	1kg	798	961	3969

Note. Distance from center of slider upper surface to carrier center-of-gravity at a guide service life of 10,000km (This does not warrant the service life of the product.). (Service life is calculated for 600mm stroke models.)

## Static loading moment

(Unit: N·m)		
MY	MP	MR
10	10	20

## Speed vs. payload

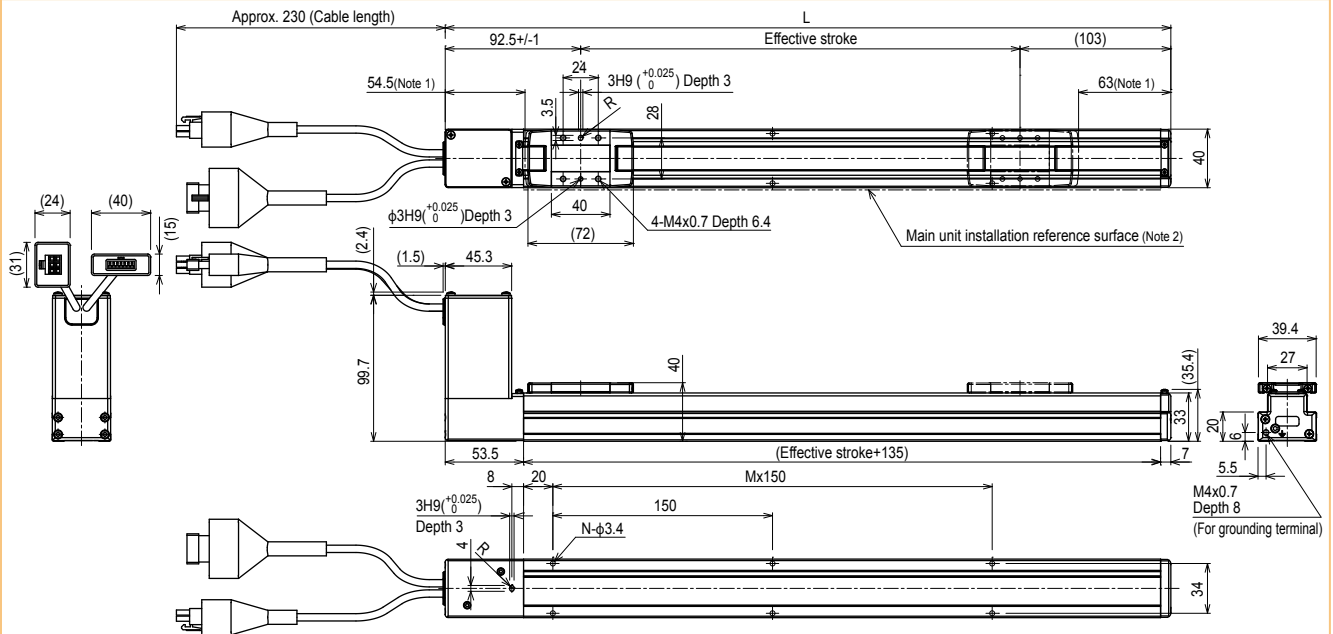


Quick reference		
Payload (kg)	Speed (mm/sec)	%
1	900	90
0.5	1000	95
0	1100	100

## Controller

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

## BD04



Effective stroke	300	500	600	700	800	900	1000
<b>L</b>	495.5	695.5	795.5	895.5	995.5	1095.5	1195.5
<b>M</b>	2	4	4	5	6	6	7
<b>N</b>	6	10	10	12	14	14	16
<b>Weight (kg)</b>	1.19	1.45	1.58	1.71	1.84	1.97	2.1

Note 1. Position from both ends to the mechanical stopper. (Movable range during return-to-origin)  
 Note 2. When installing using the main unit installation reference surface, make the mating or positioning height 2mm or more higher than the reference surface since the R-chamfering is provided on the main unit. (Recommended height, 5mm)  
 Note 3. The minimum bending radius of the motor cable is R30.