

# BD05

Belt type

CE compliance

## Ordering method

<b>BD05</b>	<b>48</b>	<b>N</b>	<b>N</b>			<b>S2</b>	
Model	Lead 48: 48mm	Brake N: With no brake	Origin position N: Standard	Stroke	Cable length <sup>Note 1</sup>	Controller	I/O selection
				300: 300mm 500: 500mm 600: 600mm 700: 700mm 800: 800mm 900: 900mm 1000: 1000mm 1200: 1200mm 1500: 1500mm 1800: 1800mm 2000: 2000mm	1L: 1m 3L: 3m 5L: 5m 10L: 10m	S2: TS-S2	NP: NPN PN: PNP CC: CC-Link DN: DeviceNet EP: EtherNet/IP <sup>Note 2</sup>

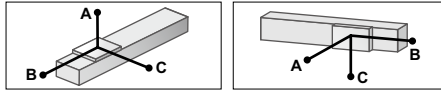
Note 1. The robot cable is flexible and resists bending.  
Note 2. EtherNet/IP will be supported from August, 2013.

## Basic specifications

Motor	42 □ Step motor
Resolution (Pulse/rotation)	20480
Repeatability <sup>Note 1</sup> (mm)	+/-0.1
Drive method	Belt
Equivalent lead (mm)	48
Maximum speed <sup>Note 2</sup> (mm/sec)	1400
Maximum payload (kg)	5
Stroke (mm)	300/500/600/700/800/900/1000/1200/1500/1800/2000
Overall length (mm) (Horizontal installation)	Stroke + 241.8
Maximum outside dimension of body cross-section (mm)	W58 × H123
Cable length (m)	Standard: 1 / Option: 3, 5, 10

Note 1. Positioning repeatability in one direction.  
Note 2. The maximum speed may vary depending on the payload.  
Check the "Speed vs. payload" graph (reference).

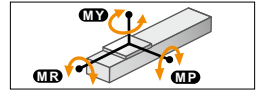
## Allowable overhang <sup>Note</sup>



	Horizontal installation (Unit: mm)			Wall installation (Unit: mm)		
	A	B	C	A	B	C
1kg	9445	2274	1681	1784	2312	9545
3kg	2982	702	553	573	743	3082
5kg	1689	385	325	331	429	1789

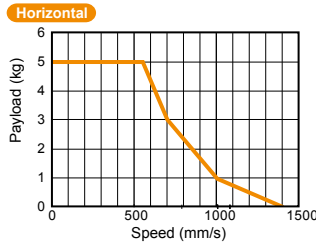
Note. Distance from center of slider upper surface to carrier center-of-gravity at a guide service life of 10,000km (This does not warrant the service life of the product). (Service life is calculated for 600mm stroke models.)

## Static loading moment



(Unit: N-m)		
MY	MP	MR
27	27	52

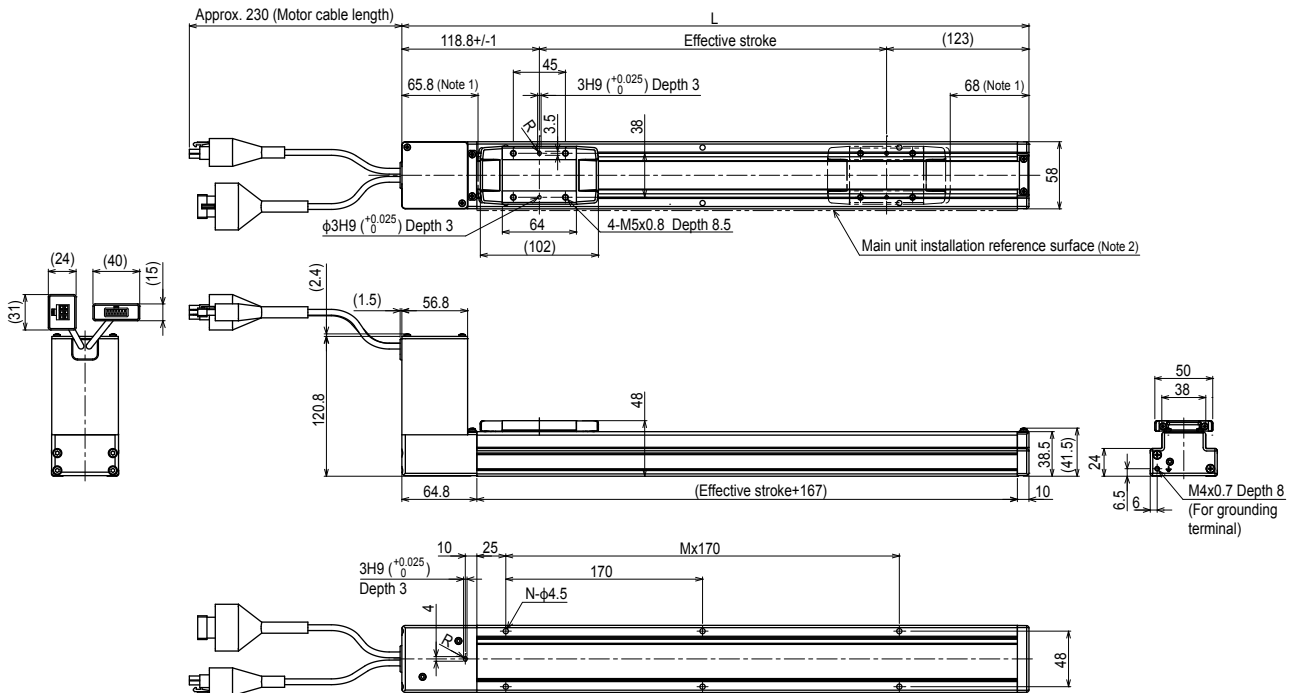
## Speed vs. payload



## Controller

Controller	Operation method
TS-S2	I/O point trace / Remote command

## BD05



Effective stroke	300	500	600	700	800	900	1000	1200	1500	1800	2000
L	541.8	741.8	841.8	941.8	1041.8	1141.8	1241.8	1441.8	1741.8	2041.8	2241.8
M	2	3	4	4	5	6	6	7	9	11	12
N	6	8	10	10	12	14	14	16	20	24	26
Weight (kg)	2.39	2.85	3.08	3.31	3.54	3.77	4	4.46	5.15	5.84	6.3

Note1. Position from both ends to the mechanical stopper. (Movable range during return-to-origin)  
Note2. 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)  
Note3. The minimum bending radius of the motor cable is R30.