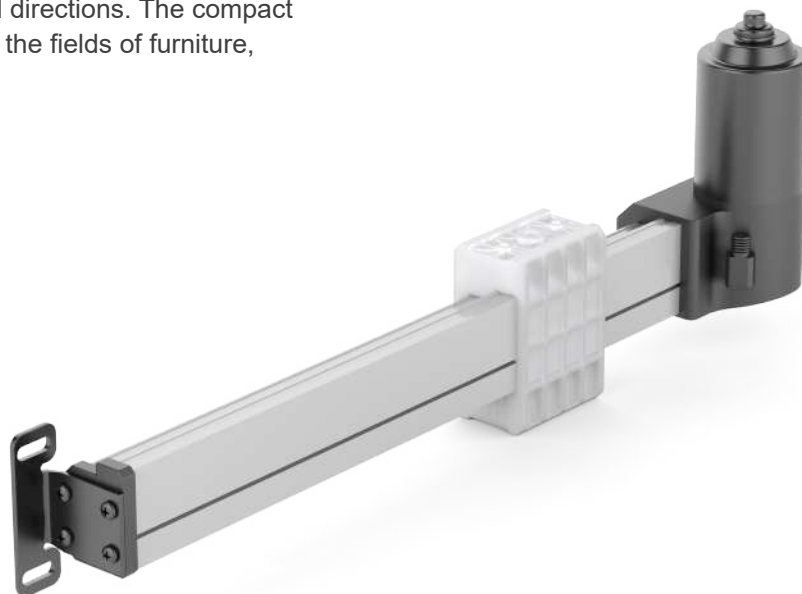


# Actuator

## BD62

BD62 belongs to the design concept of slider-type linear motion, which can obtain a larger stroke with a smaller installation size, and can be applied in both push and pull directions. The compact size design is an ideal driving solution in the fields of furniture, home care and fitness equipment.



### Features and Options

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**Main applications:** Furniture, Home care and Fitness equipment

**Standard features:**

- Input voltage: 24V DC
- Max. load: 3000N (Push / Pull)
- Max. speed at no load: 6.2mm/sec (Typical value)
- Speed at full load: 3.8mm/sec (Typical value @3000N loaded)
- Stroke: 100 ~ 1000mm
- Noise level:  $\leq 55$ dB
- Preset limit switches
- Front end cover has the metal plate for fixing
- Duty cycle: 10%, max. 2 min. continuous operation in 20 min.
- Operating ambient temperature: -20°C ~ +65°C

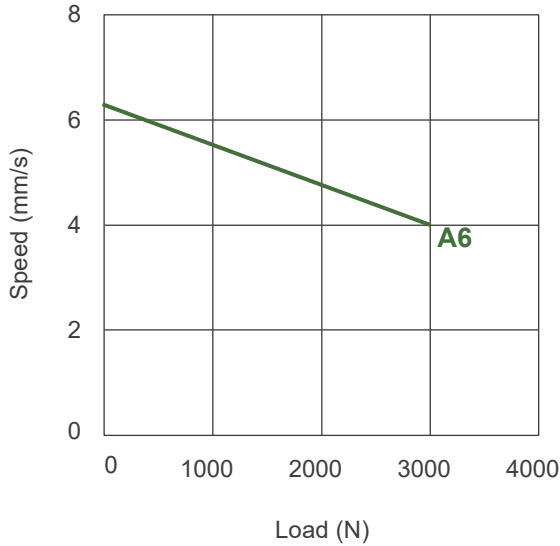
**Options:**

- Positioning signal feedback with Hall effect sensor x 2

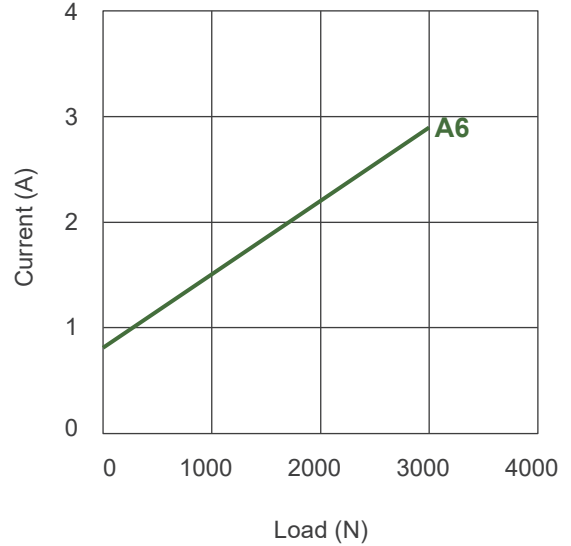
## Performance Data

Model No.	Max. load (N)	Self-locking ability (N) *	Typical Speed (mm/s) **		Typical Current (A) **	
			No Load	Full Load	No Load	Full Load
BD62-D0-24DA6	3000	3000	6.3	4.0	0.8	2.9

Speed VS. Load



Current VS. Load



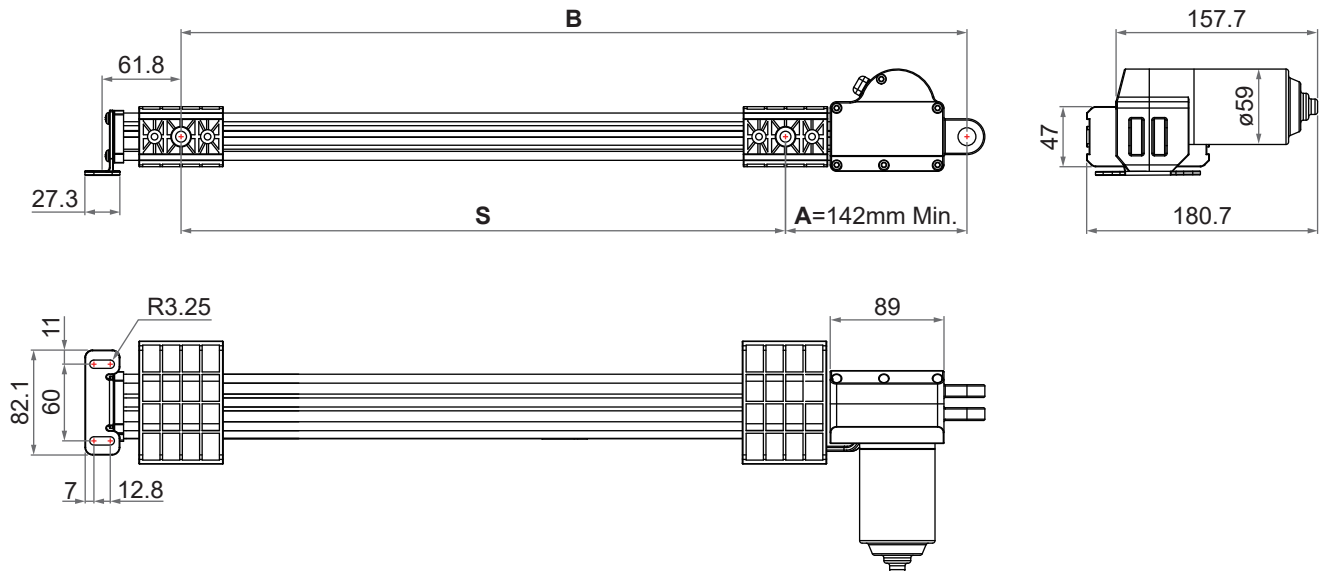
### Remarks:

- \* The self-locking ability is performed by short circuit the motor terminals when the actuator is powered off. All MOTECK compatible control boxes are designed with this feature. Mechanical brake in push direction is available upon request, to further enhance the self-locking ability to maximum load.
- \*\* The typical speed or typical current means the average value neither upper limit nor lower limit, which measured under room temperature and stable power. The performance curves are made with typical values.

## Dimensions

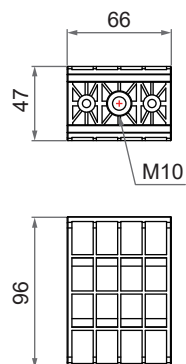
- Available stroke (S) range = 100 ~ 1000mm
- Extended length (B) = Retracted length (A) + Stroke (S)
- Retracted length (A) = 142mm Min. (±3mm)

- Drawing



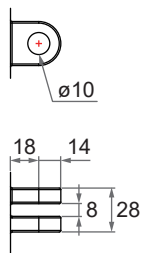
- Front connector

D: D-type plastic slider block



- Rear connector

0: Plastic



Unit: mm

## Compatibility

Product	Model	BD62 spec
<b>Control box</b>	T-control, CS1, CS2, CB3T, CB4M, CBT2	<ul style="list-style-type: none"> <li>• Without positioning sensor</li> <li>• With Moteck F-type 4-pin DIN plug</li> </ul>
	CF11H, CF12H	<ul style="list-style-type: none"> <li>• Without positioning sensor</li> <li>• With Moteck L3-type minifit 6-pin plug</li> </ul>
	CB3T-SY, CB4M-S, CB4M-B	<ul style="list-style-type: none"> <li>• With dual Hall effect sensors for positioning</li> <li>• With Moteck F-type 6-pin DIN plug</li> </ul>
	CF11S, CF12S	<ul style="list-style-type: none"> <li>• With dual Hall effect sensors for positioning</li> <li>• With Moteck L3-type minifit 6-pin plug</li> </ul>
<b>Hand control</b>	Depend on control box	<ul style="list-style-type: none"> <li>• Powered by control box</li> </ul>
	HS15	<ul style="list-style-type: none"> <li>• With Moteck S-type DIN 41529 male plug <sup>(1)</sup></li> </ul>
	HB, TPSL, HS02, HZ02, HZ03, HZ04, HZ05, HZ06	<ul style="list-style-type: none"> <li>• With Moteck direct-cut power cable DL1 <sup>(2)</sup></li> </ul>
<b>Accessory</b>	Power adapter: DPA-58-2920-C8 (formerly TSW1), DPA-87-2930-C6 (formerly TSW3), WPA-29-2910-NA (formerly TSW4), DPA-87-2930-C8	<ul style="list-style-type: none"> <li>• With Moteck direct-cut power cable DL1</li> </ul>


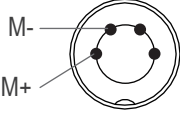
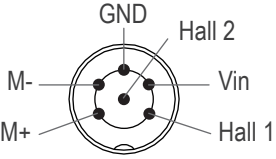

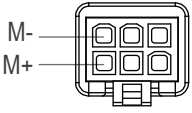
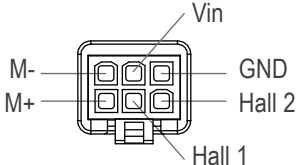


### Remarks:

(1) The S-type DIN 41529 plug of the actuator is connected to the HS15 hand control directly, no control box.

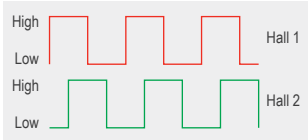
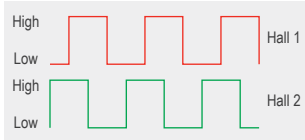
(2) The actuator is connected to the hand control through the DL1 cable directly, no control box.

## Cable Plug

### A. Connecting control devices that provide power

	Without positioning feedback	Positioning feedback with dual Hall effect sensors
 Moteck F-type DIN male plug	 4p2c	 6p6c
 Moteck L3-type Minifit male plug	 6p2c	 6p6c
 Moteck S-type DIN 41529 male plug	 2p2c	N/A

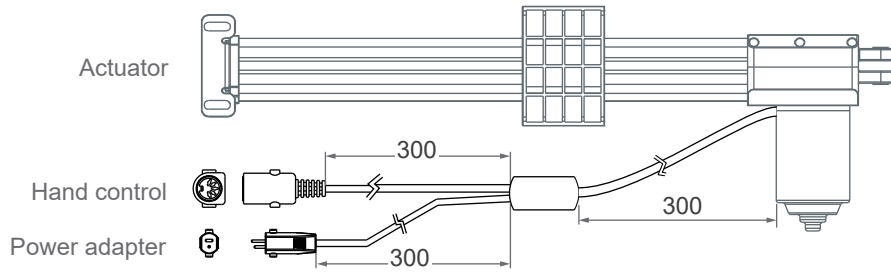
**Note:** Pin definition

	Definition	Descriptions
Power	M+	Connect M+ to "Vdc +" & M- to "Vdc -" of DC power to extend the actuator. Switch the polarity of DC input to retract it.
	M-	
Signal	Vin	Voltage input range: 5 ~ 20V
	Hall 1 output	High= Input - 1.2V ( $\pm 0.6V$ ) Low= GND Hall signal data:
	Hall 2 output	 Actuator extends
		 Actuator retracts
	GND	Hall effect sensor resolution: 6.667 pulses/mm

## B. Connecting control devices that DO NOT provide power

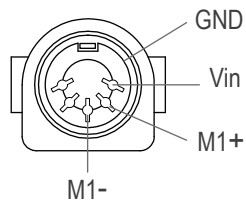
### 1. Cable solution

- With direct-cut power cable DL1



### 2. Hand control connector: Motek U-type DIN 5-pin female connector

- 1 drive

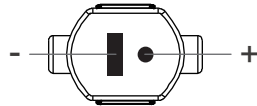


**Note:** Connect M1+ to "Vdc +" & M1- to "Vdc -" of DC power to extend the M1 actuator.  
Switch the polarity of DC input to retract it.



U-type female connector

### 3. Power connector: Motek S-type DIN 41529 2-pin male plug




S-type male plug

## Cable with Flying Leads

- Basic, without positioning feedback.

	Wire color	Definition	Descriptions
Power wires	White	DC Power	Connect white wire to "Vdc +" & black wire to "Vdc -" of DC power to extend the actuator. Switch the polarity of DC input to retract it.
	Black		

- With dual Hall effect sensors for positioning

	Wire color	Definitions	Descriptions
Power wires	Blue	DC Power	Connect blue wire to "Vdc +" & brown wire to "Vdc -" of DC power to extend the actuator. Switch the polarity of DC input to retract it.
	Brown		
Signal wires	Yellow	Vin	Voltage input range: 5 ~ 20V
	Red	Hall 1 output	High= Input - 1.2V (±0.6V) Low= GND Hall signal data:
	Green	Hall 2 output	 <p>Hall effect sensor resolution: 6.667 pulses/mm</p>
	Black	GND	

## Ordering Key

BD62 - D 0 - 24 D A6 - 157 . 0612 - H 0 R 0	
<b>Front connector</b> (Refer to Page 3)	<b>D:</b> D-type plastic slider block
<b>Rear connector</b> (Refer to Page 3)	<b>0:</b> Plastic
<b>Input voltage</b>	<b>24:</b> 24V DC
<b>Motor</b>	<b>D:</b> Default motor
<b>Motor and spindle type</b>	<b>A6:</b> 2500rpm / 6mm pitch
<b>Retracted length</b> (Refer to Page 3)	<b>XXX</b>
<b>Extended length</b> (Refer to Page 3)	<b>XXXX</b>
<b>Positioning feedback</b>	<b>0:</b> None <b>H:</b> Dual Hall effect sensors
<b>Reserved</b>	<b>0</b>
<b>Location of cable outlet</b> (Refer to Page 6)	<b>R:</b> Rear end
<b>Cable</b>	<b>0:</b> 300mm straight <b>1:</b> 1000mm straight <b>2:</b> 450mm with 300mm coiled <b>A:</b> Direct-cut power cable DL1 (Refer to Page 6)

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