

Actuator

BD23

BD23 is a quiet and robust actuator, with its speed well-maintained either with or without load. Besides, BD23 can be presented with its cable coming either on the front or the rear end, depending on your choice, and is designed to be connected to the handset and power supply to make up a simple system without control box for furniture applications like recliner sofa.



Features and Options

Main applications: Furniture, recliner sofa

Standard features:

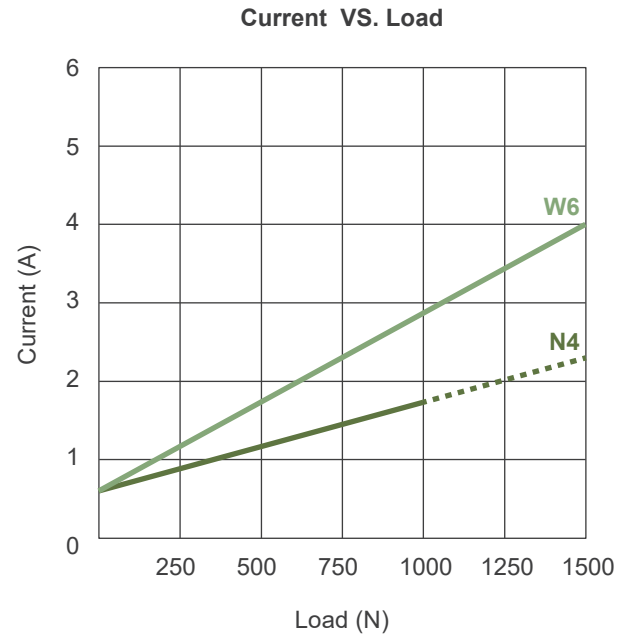
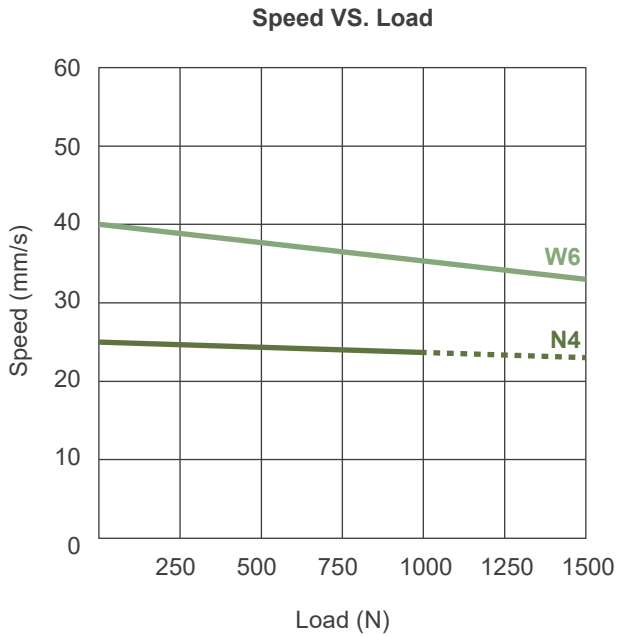
- Input voltage: 24V DC
- Max. load: 1500N (Push/Pull)
- Max. speed at no load: 40mm/sec (Typical value)
- Max. speed at full load: 33mm/sec (Typical value @1500N loaded)
- Stroke: 40 ~ 230mm
- Noise level: ≤ 53 dB
- Preset limit switches
- Duty cycle: 10%, max. 2 min. continuous operation in 20 min.
- Operating ambient temperature: -20°C ~ +65°C
- Storage ambient temperature: -25°C ~ +65°C

Options:

- Location of cable outlet
- There are 3 plastic slider block type can be chosen

Performance Data

Model No.	Push Max. (N)	Pull Max. (N)	Typical speed (mm/s) *		Typical current (A) @24V DC *	
			No load	Full load	No load	Full load
BD23-XX-24-N4-XXX.XXX	1500	1000	25	23	0.6	2.3
BD23-XX-24-W6-XXX.XXX	1500	1500	40	33	0.6	4.0



Push / Pull Load — Push Load - - -

Remarks:

* 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

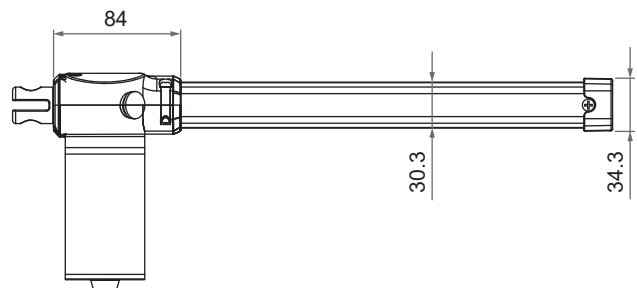
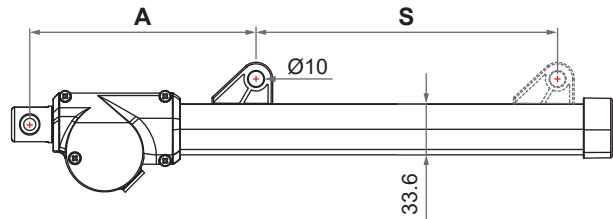
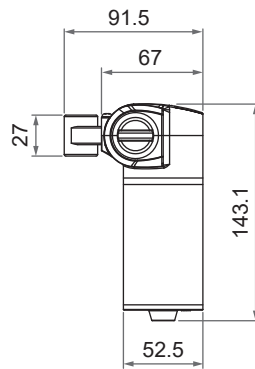
Extended length = Retracted length (A) + Stroke (S)

Front connector type	Available stroke range (S)	Retracted length (A)
R, B	$40 \leq S \leq 230\text{mm}$	$A \geq 133\text{mm} (\pm 3\text{mm})$
C	$50 \leq S \leq 230\text{mm}$	$A \geq 156\text{mm} (\pm 3\text{mm})$

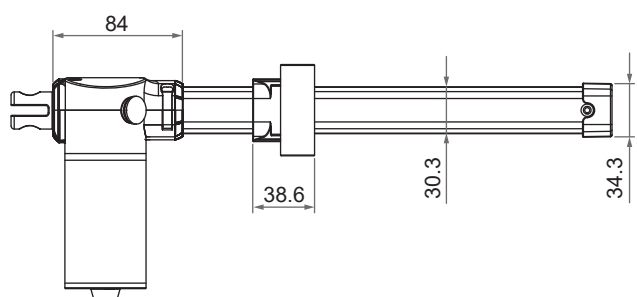
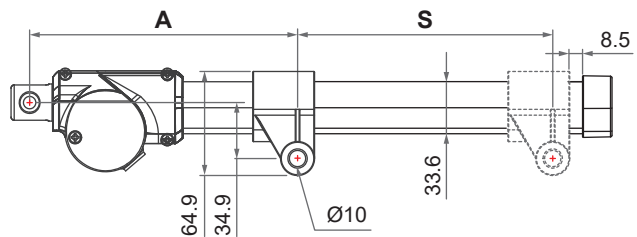
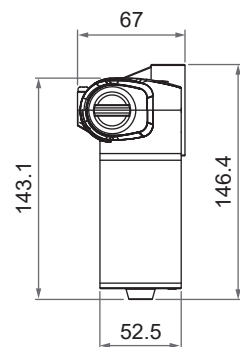
Drawing

• Front connector

R: R-type plastic slider block

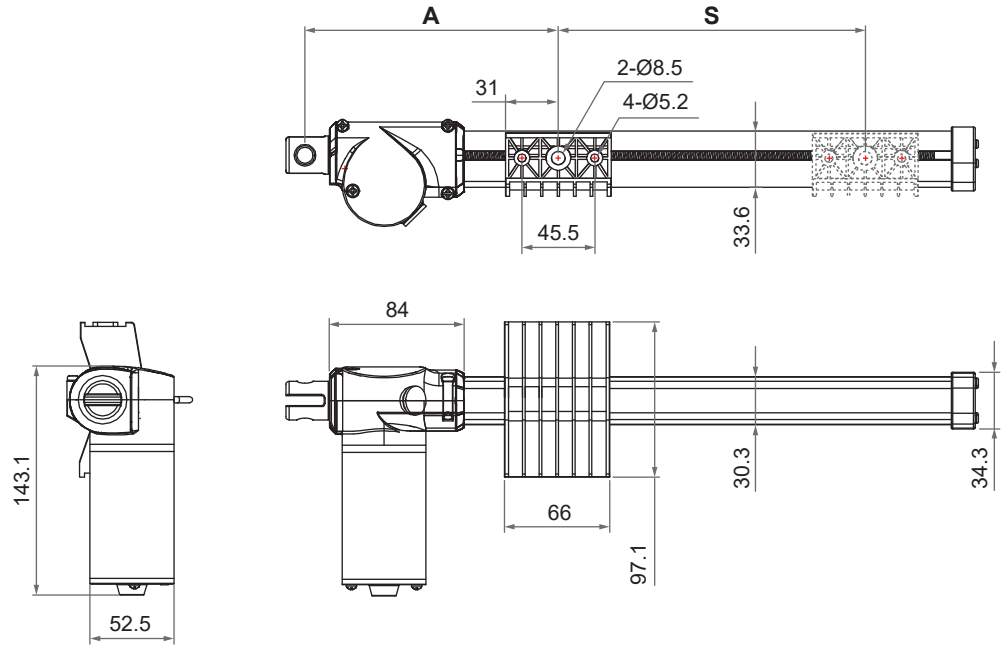


B: B-type plastic slider block



Unit: mm

C: C-type plastic slider block

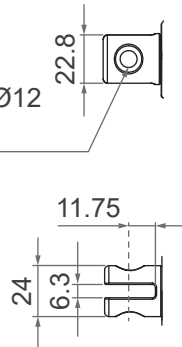


Unit: mm

• **Rear connector**

2: Metal

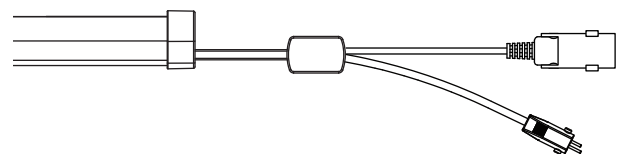
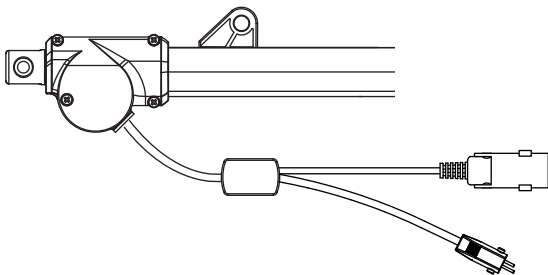
Diameter of pivot without bushing: Ø8, Ø10, Ø12
 Diameter of pivot with bushing: Ø8, Ø10



• **Location of cable outlet**

R: Rear end outlet

F: Front end outlet



Note: B-type plastic slider block must choose rear end outlet.

Compatibility

Product	Model	BD23 spec
Control box	T-control, CS1, CS2, CB3T, CB4M, CBT2	<ul style="list-style-type: none"> • Without positioning sensor • With Moteck F-type 4-pin DIN plug
	CF11H, CF12H	<ul style="list-style-type: none"> • Without positioning sensor • With Moteck L3-type minifit 6-pin plug
Hand control	Depend on control box	<ul style="list-style-type: none"> • Powered by control box
	HS15	<ul style="list-style-type: none"> • With Moteck S-type DIN 41529 male plug ⁽¹⁾
	HB, TPSL, HS02, HZ02, HZ03, HZ04, HZ05, HZ06	<ul style="list-style-type: none"> • With Moteck direct-cut power cable DL1 ⁽²⁾
Accessory	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"> • With Moteck direct-cut power cable DL1
Seating frame (Not included in Moteck product scope)	6054	<ul style="list-style-type: none"> • BD23-B2-24-N4-175.475-R4
	5181	<ul style="list-style-type: none"> • BD23-C2-24-W6-156.360-F4
	368TX	<ul style="list-style-type: none"> • BD23-R2-24-N4-156.360-F4


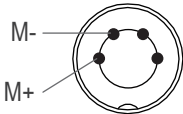

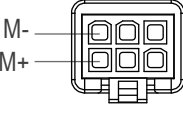


Remarks:

(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

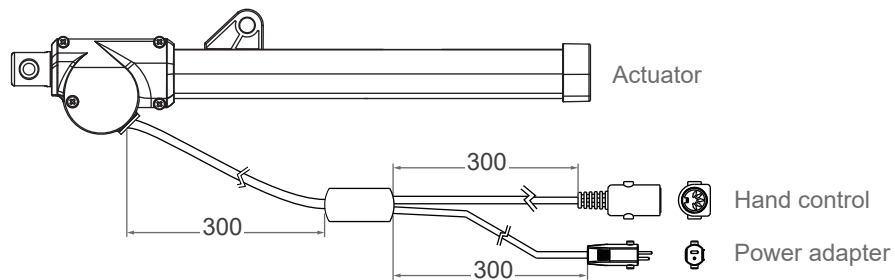
Without positioning feedback	
 <p>Moteck F-type DIN male plug</p>	 <p>4p2c</p>
 <p>Moteck L3-type Minifit male plug</p>	 <p>6p2c</p>
 <p>Moteck S-type DIN 41529 male plug</p>	 <p>2p2c</p>

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.

B. Connecting control devices that DO NOT provide power

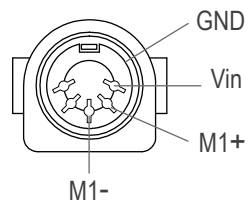
1. Cable solution

- With direct-cut power cable DL1



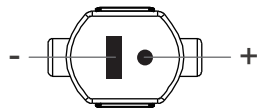
2. Hand control connector: Moteck U-type DIN 5-pin female connector

- 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.

3. Power connector: Moteck S-type DIN 41529 2-pin 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		

Ordering Key

BD23 - R 2 - 24 - N4 - 133 . 363 - R A

Front connector type (Refer to Page 3 & 4)	B: B-type plastic slider block C: C-type plastic slider block R: R-type plastic slider block
Rear connector type (Refer to Page 4)	2: Metal
Input voltage	24: 24V DC
Motor and Spindle type	N4: 4500rpm, 4mm pitch W6: 5500rpm, 6mm pitch
Retracted length (Refer to Page 3)	XXX
Extended length (Refer to Page 3)	XXX
Location of cable outlet (Refer to Page 4)	F: Front end outlet R: Rear end outlet (B-type plastic nut must choose rear end outlet)
Cable length	0: 300mm straight 1: 1000mm straight 2: 450mm long with 300mm spiral A: Direct-cut power cable DL1 (Refer to Page 7)

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