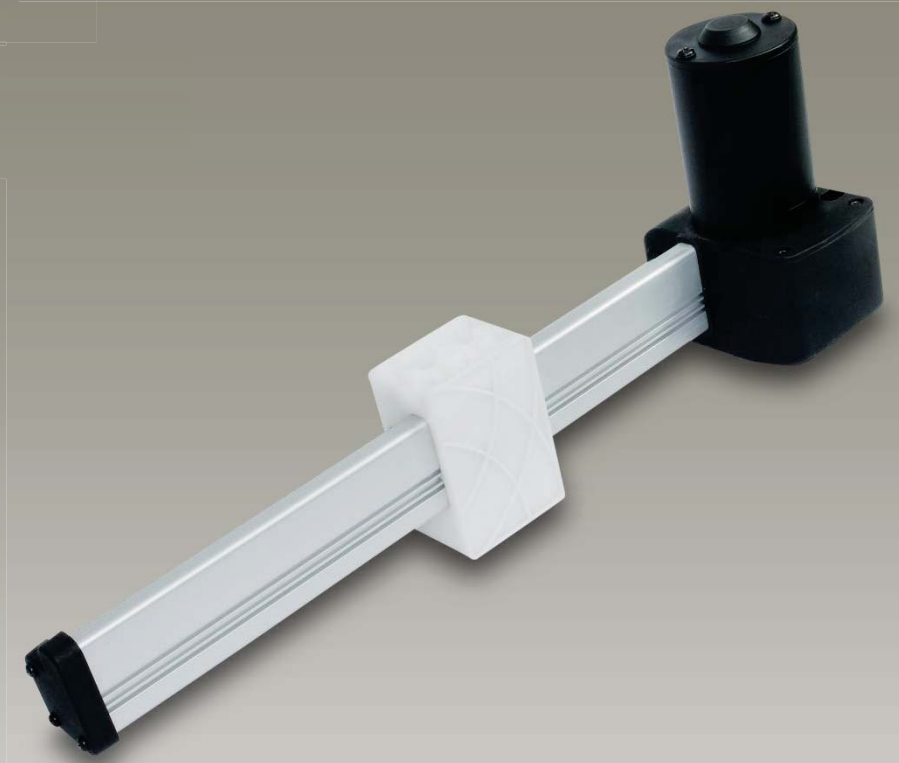


# Actuator

## BD61



## Features

- ◆ BD61 is a quiet and powerful actuator designed for use in furniture, homecare and fitness equipment. The actuator block allows a big stroke range in confined spaces. The small fitting dimensions make BD61 an ideal solution for recliners with lifting assistance.
- ◆ Main applications : furniture, homecare, and fitness equipment
- ◆ Input voltage : 24V DC / 12V DC
- ◆ Max. load : 6000N (push) / 4000N (pull)
- ◆ Max. current : 6A @ 12V DC, 3A @ 24V DC
- ◆ Max. speed at no load : 33.3 mm/sec
- ◆ Max. speed at full load : 2.9 mm/sec @ 6000N
- ◆ Stroke : 100~1600mm
- ◆ Duty cycle : 10% or 2 min continuous operation in 20 min.
- ◆ Color : Black
- ◆ Certified : EN61000-6-1 / EN61000-6-3 / EN61000-4-2 / EN61000-4-3 / EN61000-4-8  
IEC61000-4-2 / IEC61000-4-3 / IEC61000-4-8
- ◆ Noise Level :  $\leq$  50dB
- ◆ Adjustable limit switches

# Options

- ◆ Positioning signal feedback with Hall effect sensor x 1
- ◆ Positioning signal feedback with Hall effect sensor x 2

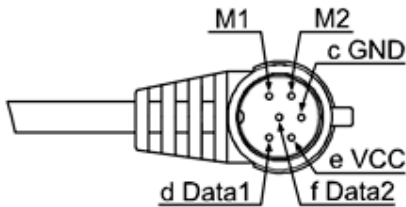
# Compatibility

## 1. Control box

|   |  |
|---|--|
| Without feedback sensor                                 | T control, CSI, TR11, TL01, CB3T, CB4M |
| Positioning signal feedback with Hall effect sensor x 1 | CB4M-SY                                |
| Positioning signal feedback with Hall effect sensor x 2 | CB3T-SY, CB4M-4SY                      |

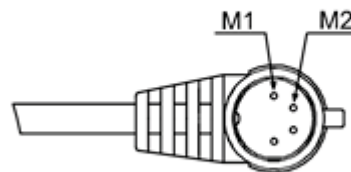
## Pin Assignment

1x or 2x Hall sensors for positioning



M1(+) & M2(-) : Extends  
Pin 'Data2' is defined for 2x Hall sensors only

No sensor feedback



M1(+) & M2(-) : Extends

## 2. Handset

- (1) Depend on the control box
- (2) HB, H2G, H3B

(With special actuator cable option to connect to power supply and handset, without control box)

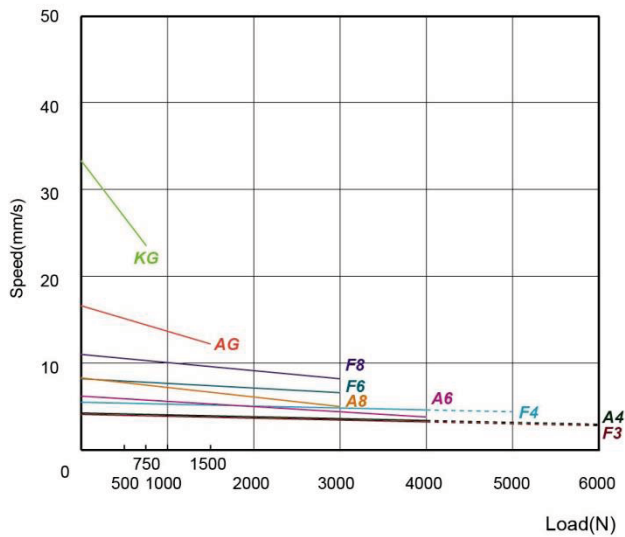
## 3. Accessory

Switch Mode Power Supply : TSW1, TSW2, TSW3, TSW4

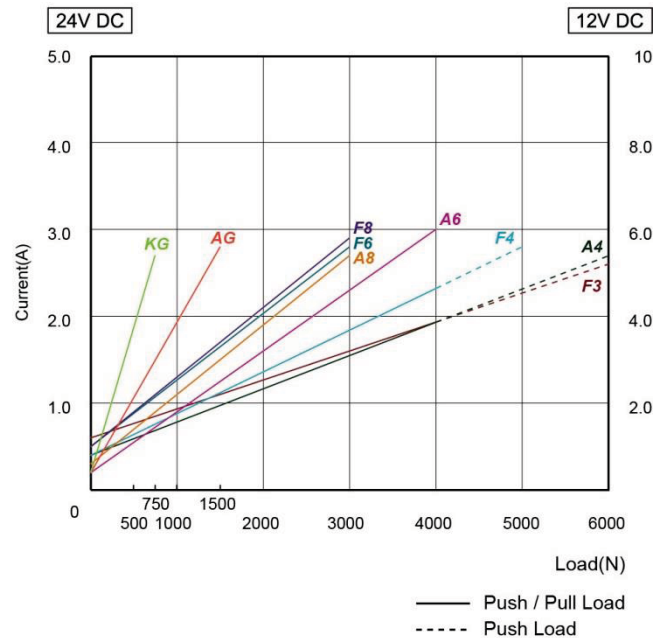
# Performance Data

| Model No.           | Push Max. (N) | Pull Max. (N) | Speed (mm/s) |           | Current (A) |     |           |     |
|---------------------|---------------|---------------|--------------|-----------|-------------|-----|-----------|-----|
|                     |               |               | No load      | Full load | No load     |     | Full load |     |
|                     |               |               |              |           | 12V         | 24V | 12V       | 24V |
| BD61-XX-F3- XXX.XXX | 6000          | 4000          | 4.1          | 2.8       | 1.2         | 0.6 | 5.2       | 2.6 |
| BD61-XX-A4- XXX.XXX | 6000          | 4000          | 4.2          | 2.9       | 0.8         | 0.4 | 5.4       | 2.7 |
| BD61-XX-F4- XXX.XXX | 5000          | 3500          | 5.5          | 4.4       | 0.8         | 0.4 | 5.6       | 2.8 |
| BD61-XX-A6- XXX.XXX | 4000          | 3000          | 6.2          | 3.8       | 0.4         | 0.2 | 5.0       | 2.5 |
| BD61-XX-F6- XXX.XXX | 4000          | 3000          | 8.2          | 6.6       | 1.0         | 0.5 | 5.6       | 2.8 |
| BD61-XX-A8- XXX.XXX | 3000          | 2500          | 8.3          | 5.0       | 0.6         | 0.3 | 5.4       | 2.7 |
| BD61-XX-F8- XXX.XXX | 3000          | 2500          | 11.0         | 8.2       | 1.0         | 0.5 | 5.8       | 2.9 |
| BD61-XX-AG- XXX.XXX | 1500          | 1500          | 16.6         | 12.2      | 0.4         | 0.2 | 5.6       | 2.8 |
| BD61-XX-KG- XXX.XXX | 750           | 750           | 33.3         | 23.5      | 0.4         | 0.2 | 5.2       | 2.6 |

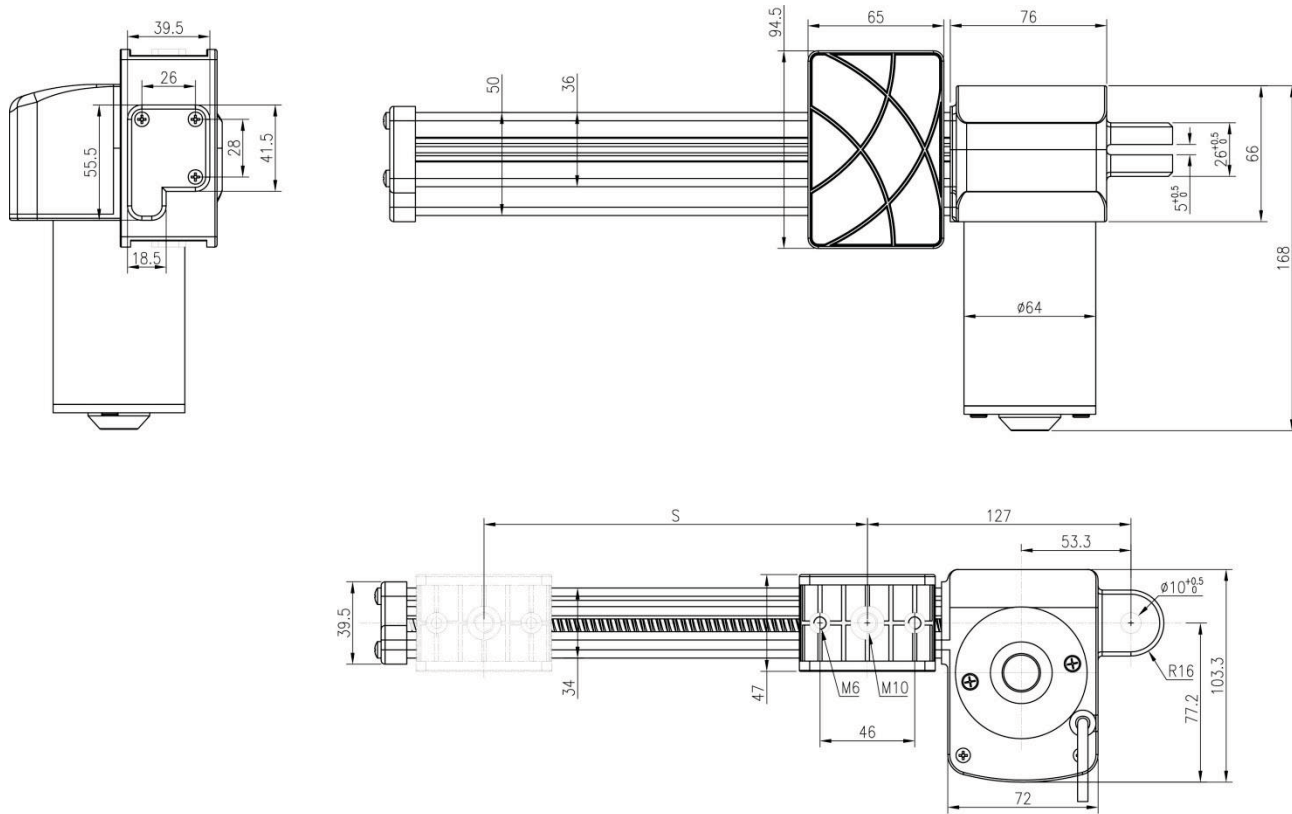
Speed vs. Load



Current vs. Load



# Dimensions



Unit: mm

- ◆ Available stroke (S) range = 100~1600mm
- ◆ Retracted length (A) = 127mm Min.
- ◆ Extended length (B) = A + S

# Ordering Key

BD61—□□—□□—□□□.□□□—C□□—□□□

**Input Voltage**

24 : 24V DC

12 : 12V DC

**Motor and Spindle Type**

F3, A4, F4, A6, F6, A8, F8, AG, KG

(Refer to Performance Data)

**Retracted Length**

(Refer to paragraph Dimensions)

**Extended Length**

(Refer to paragraph Dimensions)

**Front Connector**

1 : Plastic

**Rear Connector**

1 : Plastic

**Options**

HS1 : Hall effect sensor x 1

HS2 : Hall effect sensor x 2



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