

# Actuator

## BDF60



### Features

- ◆ BDF60 is a quiet and powerful actuator designed for use in furniture application. It's equipped with adjustable limit switch, so the travel range can be adjusted easily.
- ◆ Main applications : Furniture
- ◆ 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 : 33.3mm/sec
- ◆ Max. speed at full load : 2.9 mm/sec @ 6000N
- ◆ Stroke : 50 ~ 300 mm
- ◆ Duty cycle : 10% or 2 min continuous operation in 20 min.
- ◆ IP Protection level : IP42
- ◆ Color : Black
- ◆ Certified : EN61000-6-3 / EN61000-6-1 / EN61000-4-2 / EN61000-4-3 / EN61000-4-8  
IEC6100-4-2 / 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

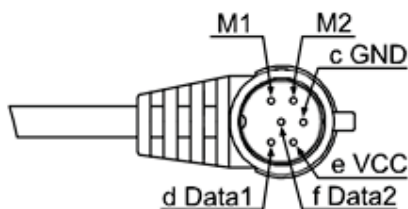
## Compatibility

### 1. Control box

Without sensor feedback	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, CB3T-SYH, CB4M-4SY

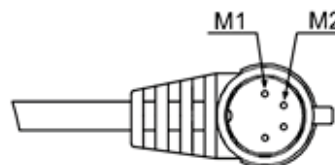
### Pin Assignment

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 control box
- (2) HB, H2G, H3B (With special actuator cable option to connect to power supply and handset, without control box)

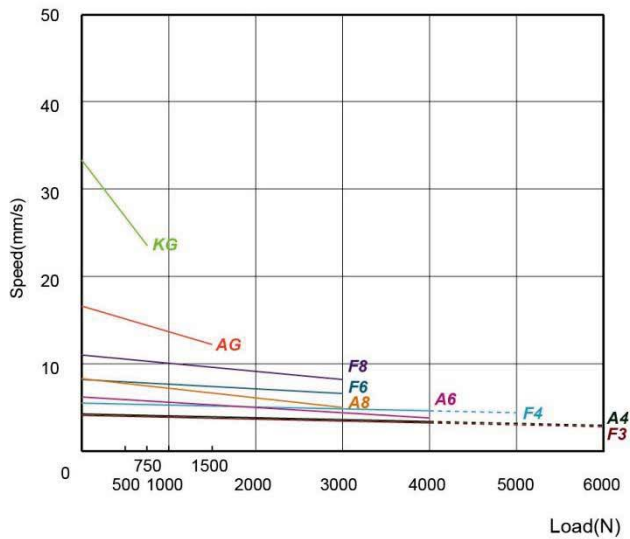
### 3. Accessory

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

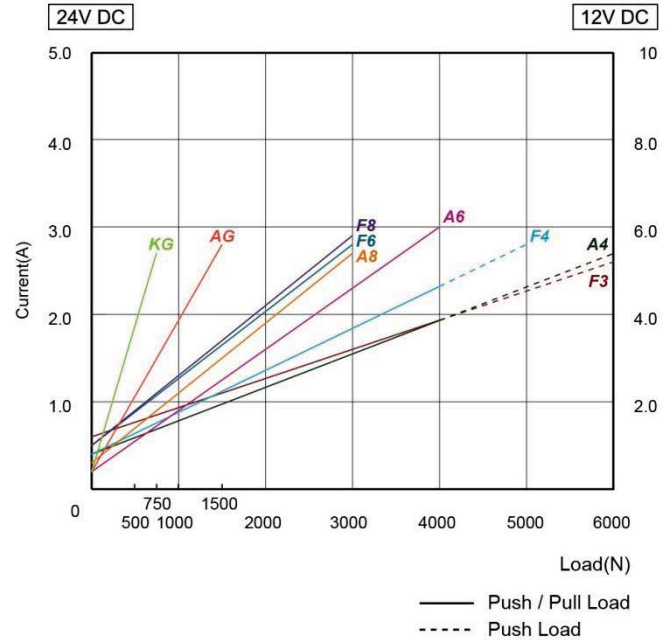
# Performance Data

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
BDF60-XX-F3- XXX.XXX	6000	4000	4.1	2.8	1.2	0.6	5.2	2.6
BDF60-XX-A4- XXX.XXX	6000	4000	4.2	2.9	0.8	0.4	5.4	2.7
BDF60-XX-F4- XXX.XXX	5000	3500	5.5	4.4	0.8	0.4	5.6	2.8
BDF60-XX-A6- XXX.XXX	4000	3000	6.2	3.8	0.4	0.2	5.0	2.5
BDF60-XX-F6- XXX.XXX	4000	3000	8.2	6.6	1.0	0.5	5.6	2.8
BDF60-XX-A8- XXX.XXX	3000	2500	8.3	5.0	0.6	0.3	5.4	2.7
BDF60-XX-F8- XXX.XXX	3000	2500	11.0	8.2	1.0	0.5	5.8	2.9
BDF60-XX-AG- XXX.XXX	1500	1500	16.6	12.2	0.4	0.2	5.6	2.8
BDF60-XX-KG- XXX.XXX	750	750	33.3	23.5	0.4	0.2	5.4	2.7

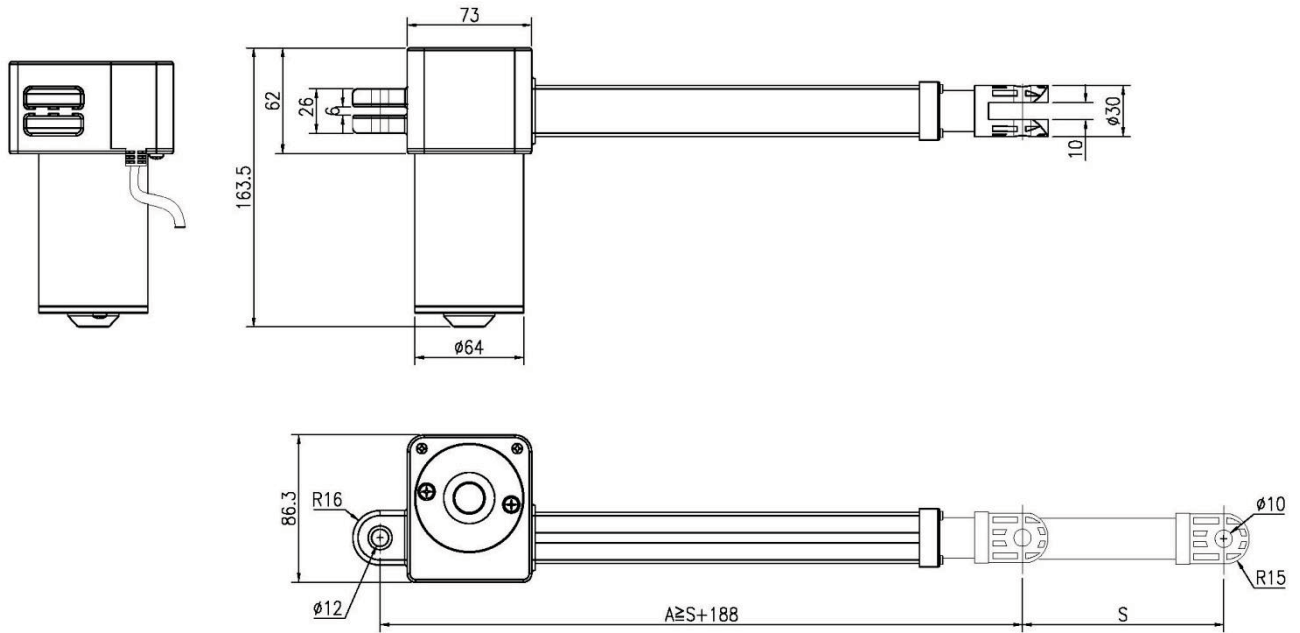
Speed vs Load



Current vs Load

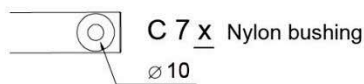
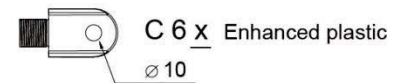
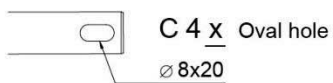
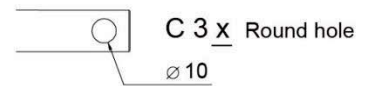
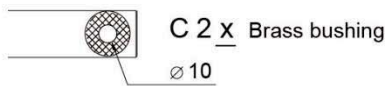


# Dimensions

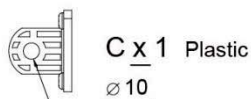


Unit: mm

## ◆ Front Connectors



## ◆ Rear Connectors



◆ Available stroke (S) range = 50~300mm

◆ Retracted length (A)

Front connector = C1x, C5x, C6x  $\geq$  stroke + 188mm

Front connector = C2x, C3x, C4x, C7x  $\geq$  stroke + 160mm

◆ Extended length = S+A

# Ordering Key

BDF60 —   —   —    .    — 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

2 : Brass bushing

3 : Round hole

4 : Oval hole

5 : Metal

6 : Enhanced plastic

7 : Nylon bushing

## Rear Connector

1 : Plastic

## Options

HS1 : Hall effect sensor x 1

HS2 : Hall effect sensor x 2



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