

Product Data Sheet

Actuator 01OS10

01OS10 is a small and quiet actuator. It allows small fitting dimensions, which makes 01OS10 an ideal solution for recliner and bed. It is able to connect with hand control and power supply, and make up a simple system without control box.



Feature

- Main applications: Furniture
- Input voltage: 24V DC
- Max. Load: 1000N (Push) / 500N (Pull)
- Typical speed at no load: 15.1 mm/sec
- Typical speed at full load: 5.8 mm/sec (1000N load)
- Stroke: 35 ~ 50 mm
- Noise level: ≤ 50 dB
- IP Protection level: IP42
- Color: Black
- Preset limit switches
- Duty cycle: 10%, max. 2 min. continuous operation in 18 min.
- Ambient operation temperature: $-20^{\circ}\text{C} \sim +65^{\circ}\text{C}$
- Certified: CE Marking, EMC Directive 2014/30/EU

Option

- Positioning signal feedback with Hall effect sensor x 2
- Mechanical push only extension tube
- PTC thermistor for thermal protection

Compatibility

Product	Model	01OS10 spec
Control box	01R Control, 01XA1, 01XA2, 01XV3R, 01XV4N, 01XVR2	- Without positioning sensor feedback - 4-pin F-type DIN plug
	01XV3R-AT, 01XV4N-A, 01XV4N-V	- With dual Hall effect sensors - 6-pin F-type DIN plug
Hand control	Depend on control box	- Powered by control box
	01GV, 01G2F, 01GL02, 01GL03, 01GL04, 01GL05, 01GL06	- With dedicated cable DL1*
Accessory	Switching mode power supply: 01RAQ1, 01RAQ4, 01RAQ5	- With dedicated cable DL1
	01R connector (Extension cable of actuator and handset, to connect to power supply or transformer box)	- 4-pin F-type DIN plug

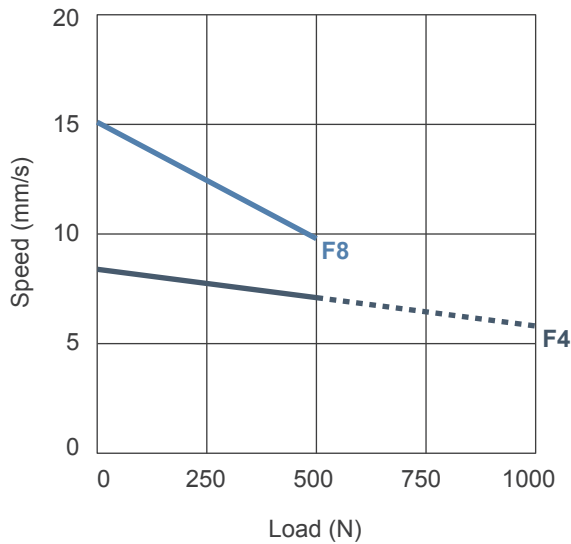
Remarks:

- * Dedicated cable DL1 to connect to power supply and control directly, without control box.

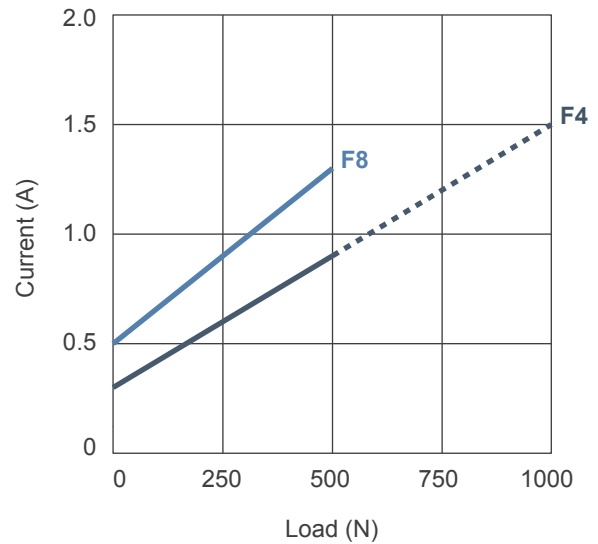
Performance Data

Model	Push Max. (N)	Pull Max. (N)	*Typical Speed (mm/s)		*Typical Current (A) @ 24V	
			No load	Full load	No load	Full load
01OS10-24SF4-XXX.XXX-XXXXX0X	1000	500	8.4	5.8	0.3	1.5
01OS10-24SF8-XXX.XXX-XXXXX0X	500	500	15.1	9.8	0.5	1.3

Speed vs. Load



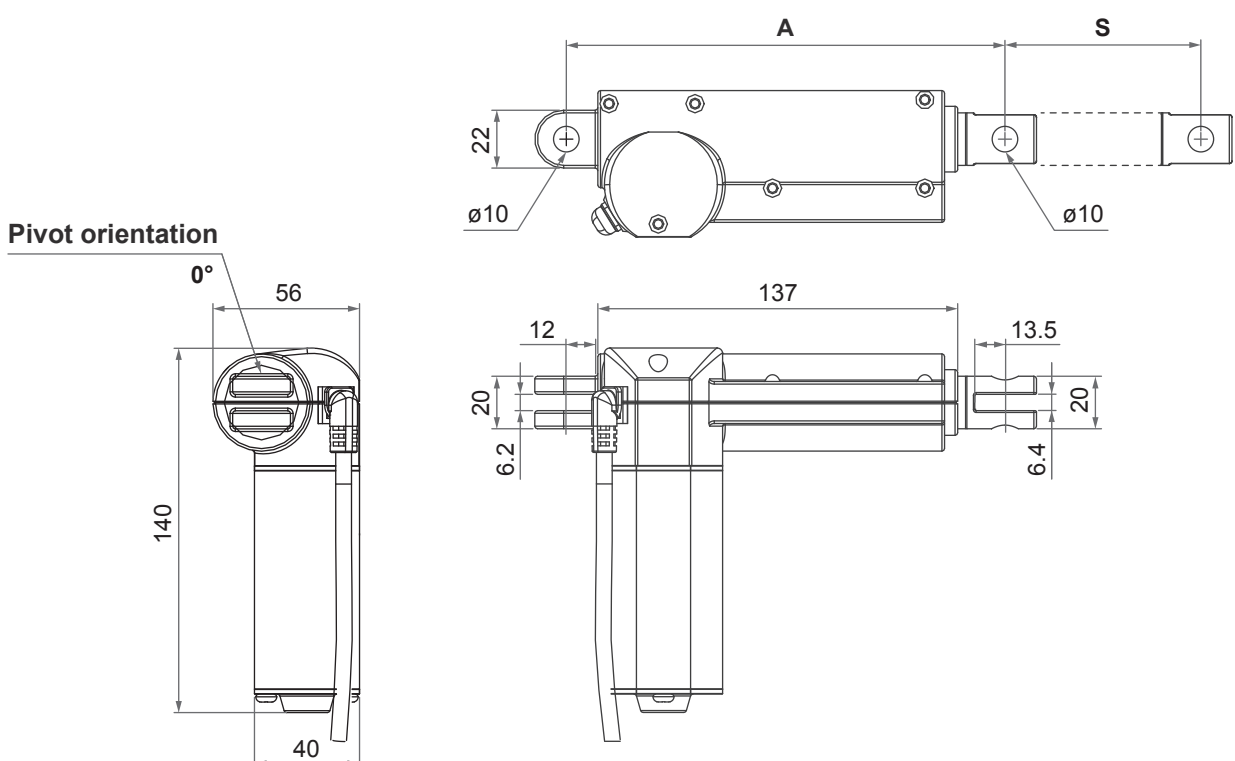
Current vs. Load



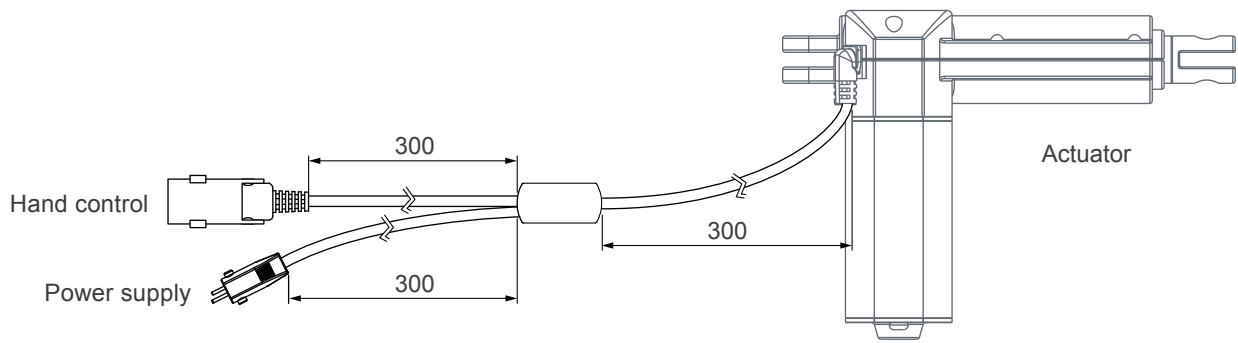
Remarks:

- * The typical speed or typical current means the average value neither upper limit nor lower limit. The performance curves are made with typical values.

Dimensions



Dedicated cable DL1



Installation Dimension

Front connector code	Rear connector code	Retracted length (A)
2	4	$A \geq 160\text{mm} (\pm 3\text{mm})$
3, 6	4	$A \geq 170\text{mm} (\pm 3\text{mm})$

Available stroke (S) range = 35 ~ 50 mm

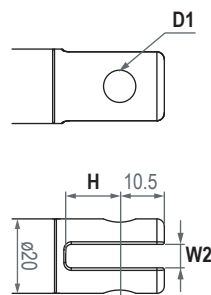
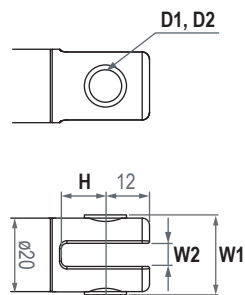
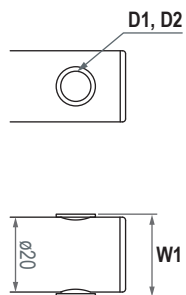
Extended length = S + A

• **Front connector**

2: Drilled hole

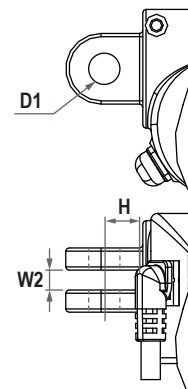
3: Metal slot

6: Plastic slot



• **Pivot orientation of rear connector**

4: Plastic, 0°



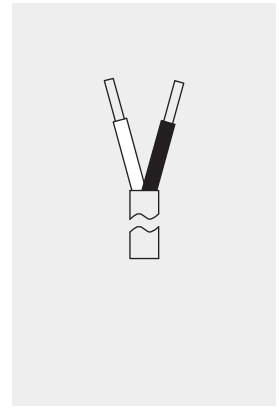
Front connector code	Diameter of pivot without bushing (D1)	Diameter of pivot with bushing (D2)	Width with bushing (W1)	Slot width (W2)	Slot depth (H)
2	ø8, ø10	ø8	22	N/A	N/A
3	ø8, ø10	ø8	22	6.4	13.5
6	ø8, ø10	N/A	N/A	6.4	15
Rear connector code	Diameter of pivot without bushing (D1)	Diameter of pivot with bushing (D2)	Width with bushing (W1)	Slot width (W2)	Slot depth (H)
4	ø8, ø10	ø8	N/A	6.2	12

Wiring

Wire definitions:

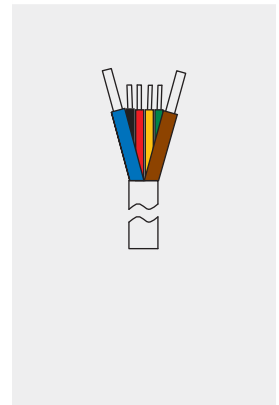
- Without positioning sensor feedback

Power	
White	Black
M+	M-



- With dual Hall effect sensors

Power		Signal			
Blue	Brown	Black	Yellow	Red	Green
M+	M-	GND	VCC	Data 1	Data 2



Note:

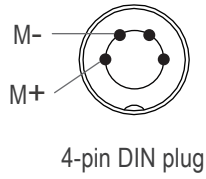
1. Connect Pin (M+) to "+" & Pin (M-) to "-" of DC power, the actuator will extend.
2. Hall effect sensor resolution:

Model No.	Resolution (pulses/mm)
01OS10-24SF4-XXX.XXX-XXXHX0X	7.00
01OS10-24SF8-XXX.XXX-XXXHX0X	3.50

Cable Plug

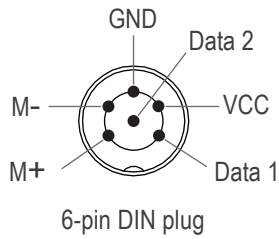
With F-type DIN plug (required to be connected to the control box):

- Without positioning sensor feedback



4-pin DIN plug

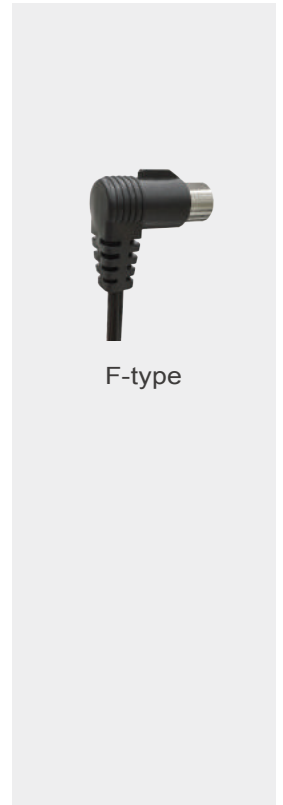
- With dual Hall effect sensors



6-pin DIN plug

Note:

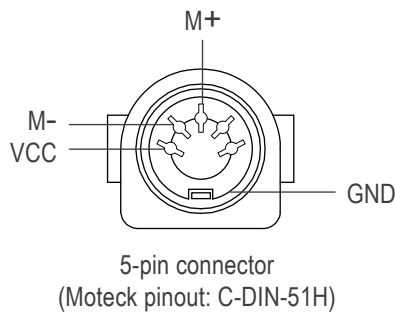
1. Connect Pin (M+) to "+" & Pin (M-) to "-" of DC power, the actuator will extend.



F-type

With special cable DL1 (NOT required to be connected to any control box):

- Hand control connector: with U-type female connector

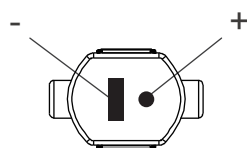


5-pin connector
(Moteck pinout: C-DIN-51H)

Note:

1. Connect Pin (M+) to "+" & Pin (M-) to "-" of DC power, the actuator will extend.

- Power plug: with S-type DIN 41529 male plug



DIN 41529 plug (S-type for DL1 only)



U-type



S-type

Ordering Key

	01OS10 - 24 S F8 - 160 . 210 - 6 4 0 H 1 0 A
Input voltage	24: 24V DC
Motor power	S: Short motor
Motor and spindle type	F4 F8 (Refer to Performance Data)
Retracted length	XXX (Refer to Dimensions)
Extended length	XXX (Refer to Dimensions)
Front connector	2: Drilled hole 3: Metal slot 6: Plastic slot (Refer to Dimensions)
Rear connector	4: Plastic (Refer to Dimensions)
Pivot orientation of rear connector	0: 0° (Refer to Dimensions)
Positioning feedback	0: None H: Hall effect sensor x 2
Option	0: None 1: Push only extension tube 2: PTC thermal protection 3: Push only + PTC thermal protection
Reserved	0: No meaning
Cable	0: 300 mm straight 1: 1000 mm straight 2: 450 mm with 300 mm coiled A: Dedicated cable DL1, without control box