

Product Data Sheet

Actuator 01KS40

01KS40 is designed for industrial applications. There are two motor positions available which make it more flexible for installation in limited space. Default external reed sensors provide end of stroke indication to control unit. And additional reed sensor is optional as 'position reached' signal feedback.



Feature

- Main applications: Industrial
- Input voltage: 24V DC / 12V DC
- Max. dynamic load: 3000N (ACME) / 4000N (Ball Screw)
- Max. static load: 4000N (ACME) / 6000N (Ball Screw)
- Max. speed: 20.5 mm/sec @ no load
- Max. current: Refer to Performance Data
- Stroke: 100 ~ 400 mm
- IP Protection level: IP54
- End of stroke indication: External reed sensors, NC type (normal close)
- ACME or Ball Screw threaded spindle is available
- Friction clutch for over load protection*
- Outer tube color: Anodized black or aluminum gray
- Stainless extension tube
- Power cord length: 250 mm (with tinned wires)
- Duty cycle: 10%, max. 2 min. continuous operation in 18 min.
- Ambient operation temperature: -25°C ~ +65°C
- Certified: CE Marking, EMC Directive 2014/30/EU

* **Remarks:** It's only used for abnormal condition to avoid damage on transmission parts of actuator or structurals.

Option

- 'Position reached' signal feedback: The 3rd external reed sensor, NC type (normal close)
- Standard motor position is on the right (Fig. 1). There is optional motor position on the left (Fig. 2)



Fig. 1



Fig. 2

Compatibility

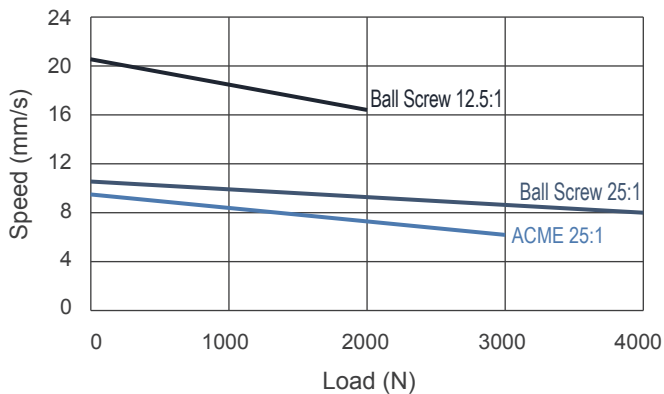
Product	Model	01KS40 spec
Control box	01XK10*	24V DC motor

*Remarks: 01XK10 could not automatically stop LD40 in response to its end of stroke signal feedback. Users must control it manually.

Performance Data

Model No.	Spindle type	Gear ratio	Push / Pull Max. (N)	Typical Speed (mm/s)		Typical Current (A)			
				No load	Full load	No load		Full load	
						12V	24V	12V	24V
01KS40-XX-25F4B-XXX.XXX-11-XXXXX	Ball Screw	25:1	4000	10.5	8	2	1	10.5	5.3
01KS40-XX-12F4B-XXX.XXX-11-XXXXX	Ball Screw	12.5:1	2000	20.5	16.3	1.9	1	11.3	5.6
01KS40-XX-25F4A-XXX.XXX-11-XXXXX	ACME	25:1	3000	9.5	6.2	2.5	1.3	15.5	7.3

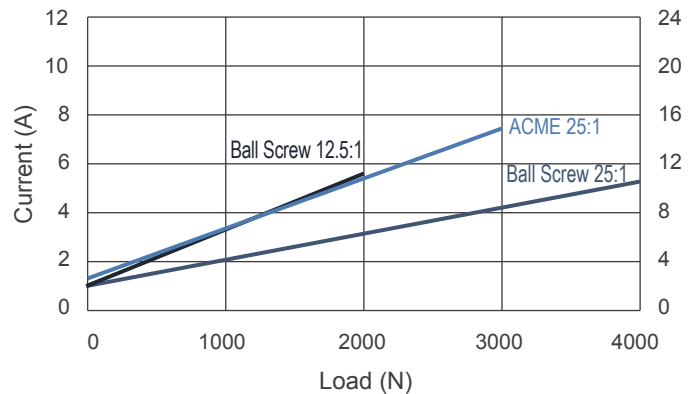
Speed vs. Load



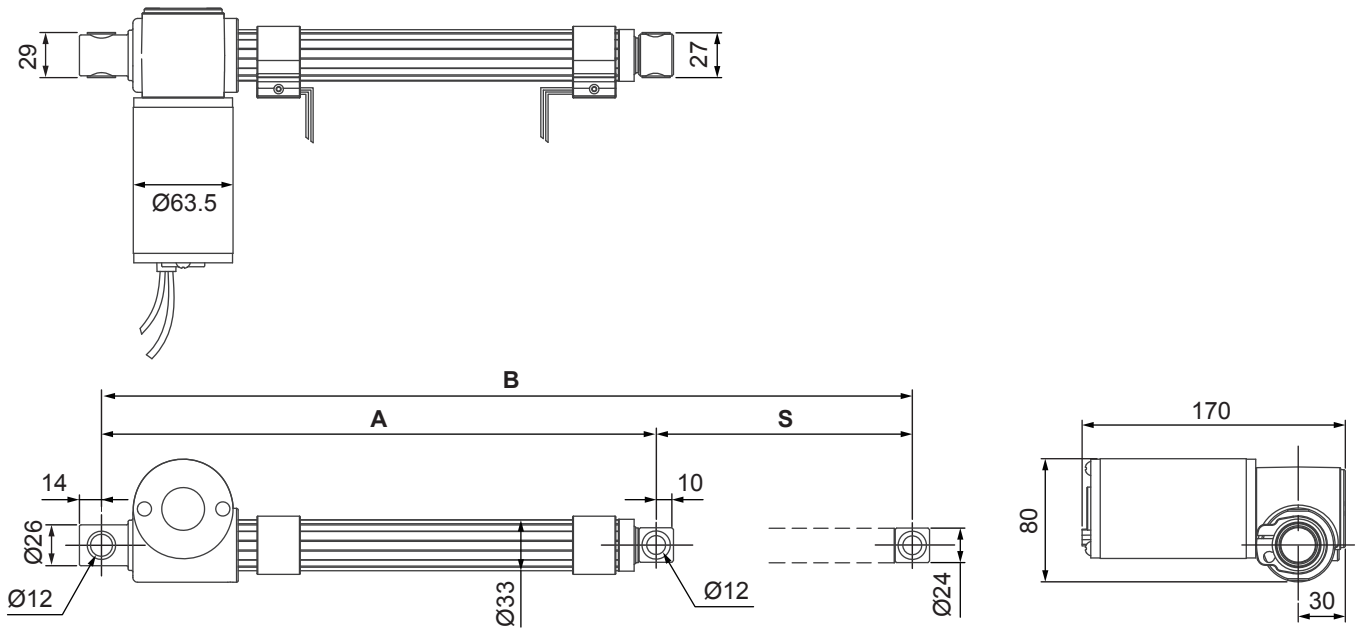
24V DC

Current vs. Load

12V DC



Dimensions



* Motor position on the right.

Installation dimension

Stroke (S)	100	150	200	250	300	350	400
Retracted Length (A)	253	303	353	403	453	503	553
Extended Length (B)	353	453	553	653	753	853	953

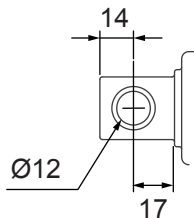
Available stroke (S) range: 100 ~ 400 mm (tolerance: +0/-5 mm)

Extended length (B): $S + A$

Retracted length (A) $\geq S + 153$ mm (tolerance: ± 3 mm)

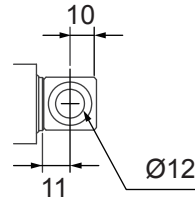
Rear connector

1: Metal with plastic bushing



Front connector

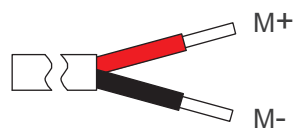
1: Metal with plastic bushing



Wiring

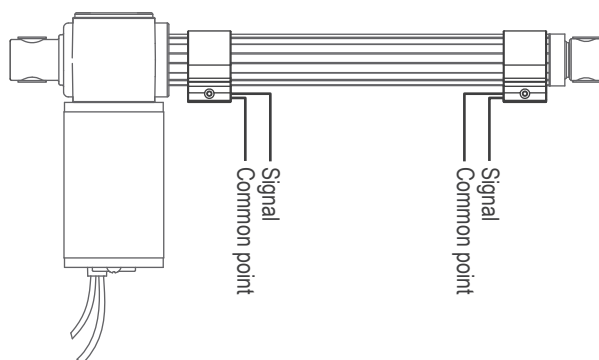
Power cord

- Connect Red (M+) to '+' & Black (M-) to '-' of DC power, the actuator will extend.



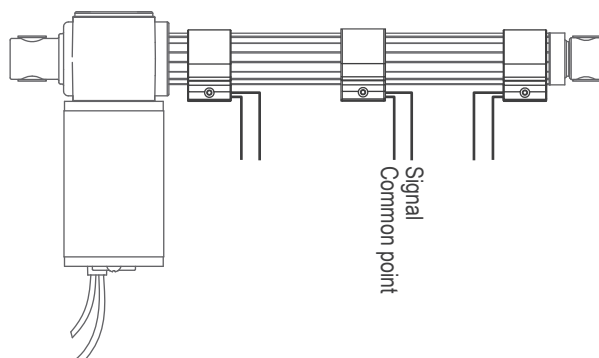
External reed sensors for 'end of stroke indication'

- Pick either one of wires on each sensor and connect them as common point, then the other one is defined as signal input.



The 3rd reed sensor (for 'position reached' signal feedback)

- The third one must be installed in between the other two, as shown below.



Ordering Key

01KS40 - 24 - 25 F 4B - 253 . 353 - 1 1 - R 2 0 4 2	
Input voltage	12: 12V DC 24: 24V DC
Gear ratio	25: 25:1 12: 12:1
Motor code	F
Spindle type	4B: Pitch= 4mm, Ball Screw 4A: Pitch= 4mm, ACME (Refer to Performance Data)
Retracted length	(Refer to Dimensions)
Extended length	(Refer to Dimensions)
Front connector	1: Metal with plastic bushing (Refer to page 3)
Rear connector	1: Metal with plastic bushing (Refer to page 3)
Motor position	R: Motor position on the right (standard) L: Motor position on the left (option) (Refer to page 2)
Reed sensor	2: Reed sensor x 2 (standard) 3: Reed sensor x 3 (please define the 3rd reed sensor position)
Reserved	0: No meaning
IP Protection level	4: IP54 (standard)
Cable length	2: 250 mm 5: 500 mm A: 1000 mm