

Product Data Sheet

Actuator 01US11

01US11 is designed for industrial applications, such as agricultural and construction machines. Comparing with 01US10, the installation length of 01US11 is 40mm less than 01US10. This makes 01US11 ideal for application which requires a shorter dimension. Ball Screw and ACME spindle are both available to choose.



Feature

- Main applications: Industrial
- Input voltage: 12 / 24 / 48V DC
- Max. rated load: 3,500N (ACME) / 7,000N (Ball Screw)
- Max. static load: 4,500N (ACME) / 13,600N (Ball Screw)
- Typical speed at no load: 72.1 mm/sec
- Stroke: 102 ~ 610 mm
- IP Protection level: IP54
- Overload protection by clutch
- Adjustable limit switches*
- Extension tube material: Iron (for ACME) or stainless steel (for Ball Screw)
- Color: Black
- Power cord length: 250 mm (with tinned wires)
- Bottom cable outlet
- Duty cycle: 25%, max. 2 min. continuous operation in 8 min.
- Ambient operation temperature: -25°C ~ +65°C
- Certified: CE Marking, EMC Directive 2014/30/EU

***Remarks:** Limit switch adjustment shall not apply to 01US11 models that with optional IP65 protection, because protection will be ineffective once user has ever opened the back cover. Please refer to 01US11 User Guide for details.

Option

- IP Protection level: IP65
- Side cable outlet
- Mounting bracket (MB30) (Fig. 1)



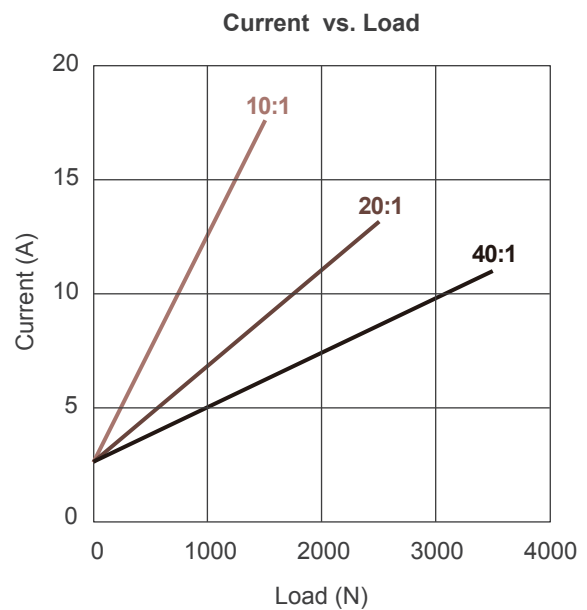
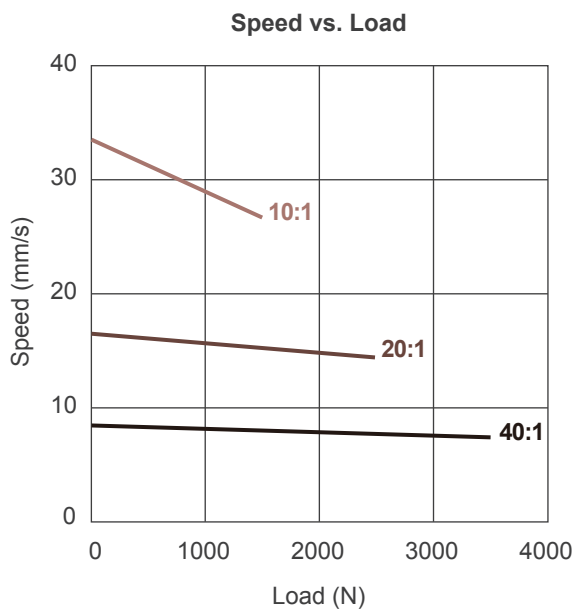
Fig. 1

Performance Data

ACME type

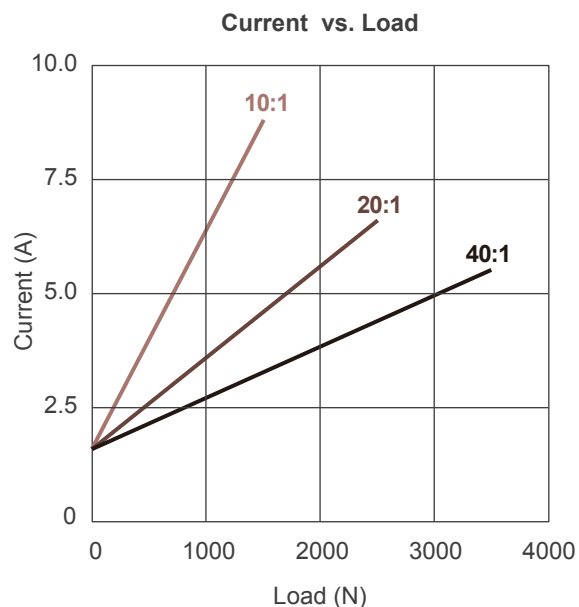
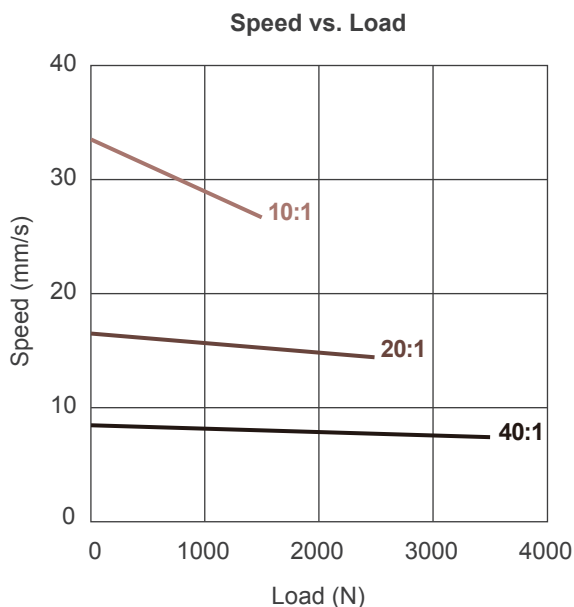
- 12V DC motor

Model No.	Gear ratio	Push/Pull Max. (N)	Typical Speed (mm/s)		Typical Current (A)	
			No load	Full load	No load	Full load
01US11-12- 10 -A-XXX	10:1	1500	33.5	26.7	2.6	17.6
01US11-12- 20 -A-XXX	20:1	2500	16.8	14.3	2.6	13.2
01US11-12- 40 -A-XXX	40:1	3500	8.4	7.4	2.6	11.0



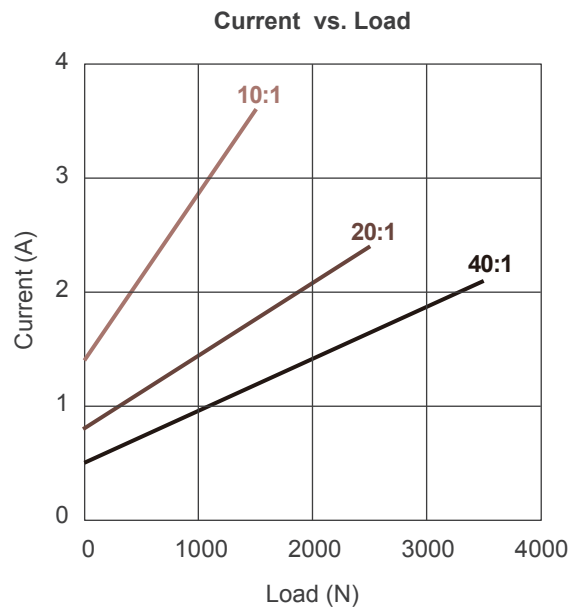
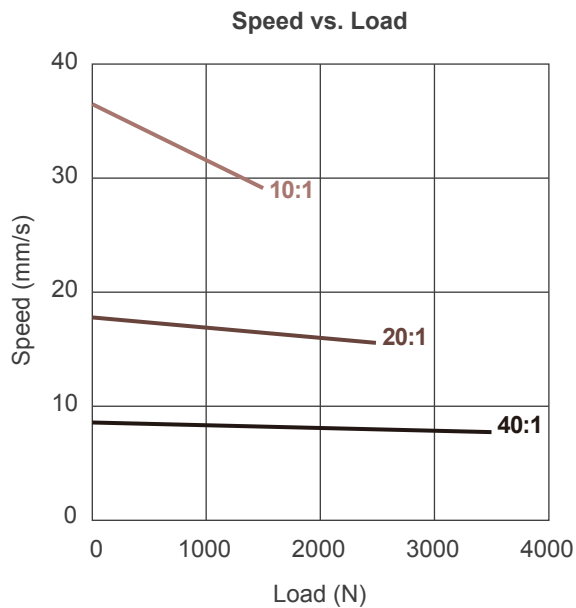
● 24V DC motor

Model No.	Gear ratio	Push/Pull Max. (N)	Typical Speed (mm/s)		Typical Current (A)	
			No load	Full load	No load	Full load
01US11-24-10-A-XXX	10:1	1500	33.5	26.7	1.6	8.8
01US11-24-20-A-XXX	20:1	2500	16.8	14.3	1.6	6.6
01US11-24-40-A-XXX	40:1	3500	8.4	7.4	1.6	5.5



● 48V DC motor

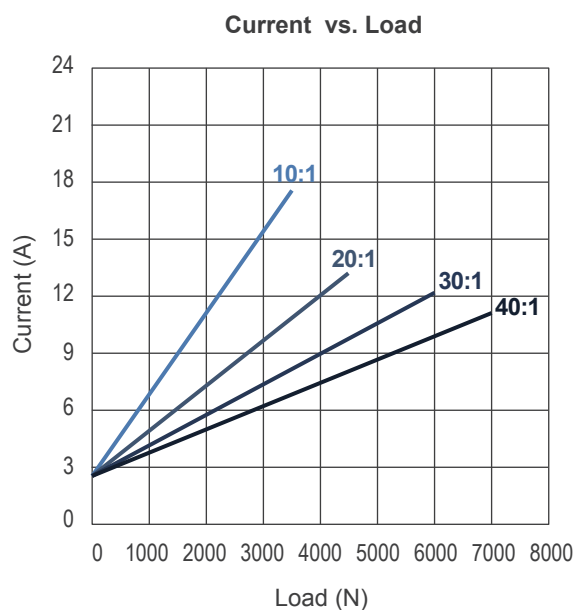
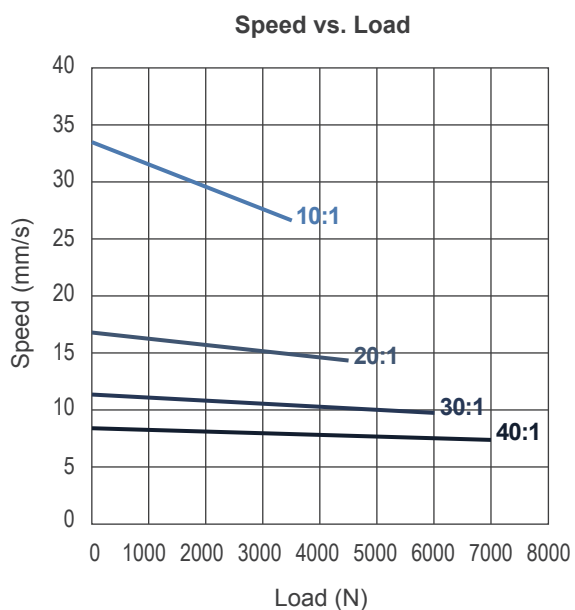
Model No.	Gear ratio	Push/Pull Max. (N)	Typical Speed (mm/s)		Typical Current (A)	
			No load	Full load	No load	Full load
01US11-48-10-A-XXX	10:1	1500	36.5	29.1	1.4	3.6
01US11-48-20-A-XXX	20:1	2500	17.8	15.3	0.8	2.4
01US11-48-40-A-XXX	40:1	3500	8.6	7.8	0.5	2.1



Ball Screw type

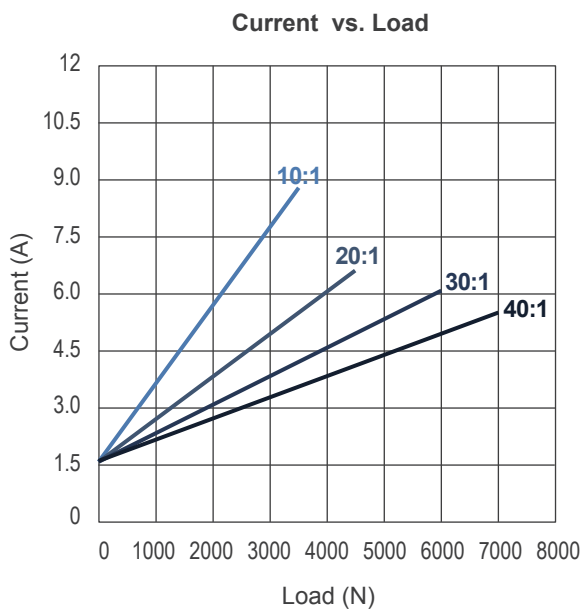
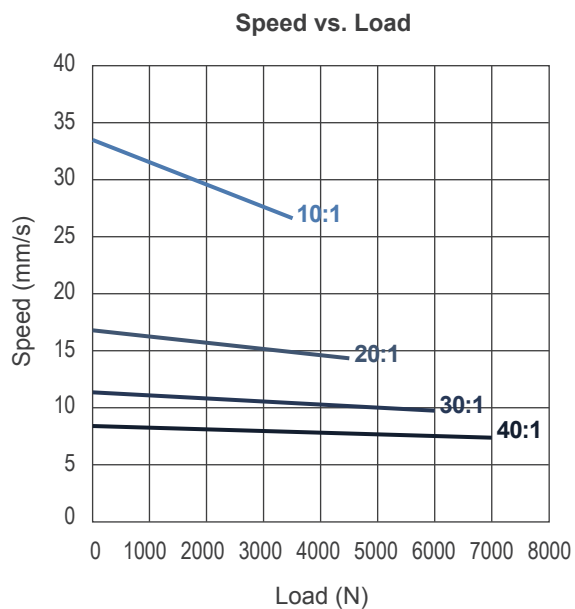
• 12V DC motor

Model No.	Gear ratio	Push/Pull Max. (N)	Typical Speed (mm/s)		Typical Current (A)	
			No load	Full load	No load	Full load
01US11-12-10-B-XXX	10:1	3500	33.5	26.7	2.6	17.6
01US11-12-20-B-XXX	20:1	4500	16.8	14.3	2.6	13.2
01US11-12-30-B-XXX	30:1	6000	11.2	9.8	2.6	12.1
01US11-12-40-B-XXX	40:1	7000	8.4	7.4	2.6	11.0



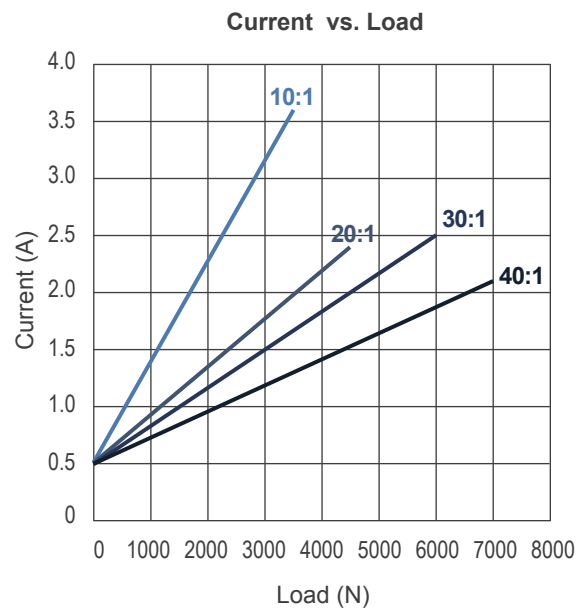
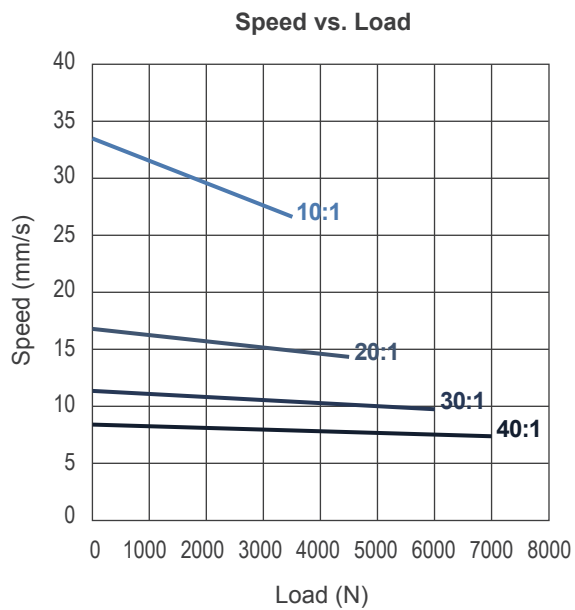
• 24V DC motor

Model No.	Gear ratio	Push/Pull Max. (N)	Typical Speed (mm/s)		Typical Current (A)	
			No load	Full load	No load	Full load
01US11-24-10-B-XXX	10:1	3500	33.5	26.7	1.6	8.8
01US11-24-20-B-XXX	20:1	4500	16.8	14.3	1.6	6.6
01US11-24-30-B-XXX	30:1	6000	11.2	9.8	1.6	6.1
01US11-24-40-B-XXX	40:1	7000	8.4	7.4	1.6	5.5



● 48V DC motor

Model No.	Gear ratio	Push/Pull Max. (N)	Typical Speed (mm/s)		Typical Current (A)	
			No load	Full load	No load	Full load
01US11-48-10-B-XXX	10:1	3500	36.5	29.1	0.5	3.6
01US11-48-20-B-XXX	20:1	4500	17.8	15.3	0.5	2.4
01US11-48-30-B-XXX	30:1	6000	11.7	10.3	0.5	2.5
01US11-48-40-B-XXX	40:1	7000	8.6	7.8	0.5	2.1

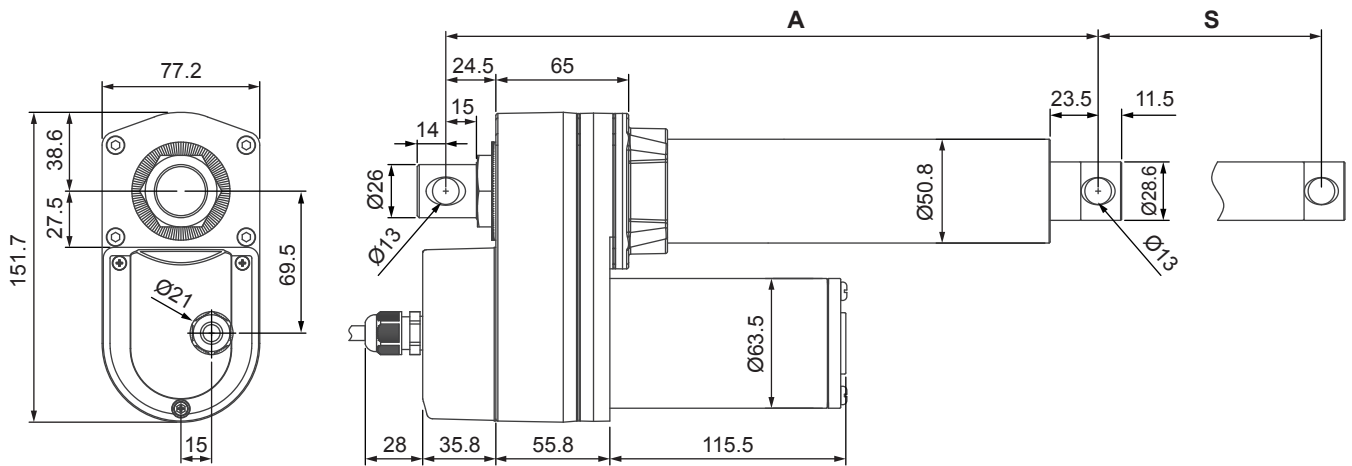


Remarks:

- * 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

ACME type

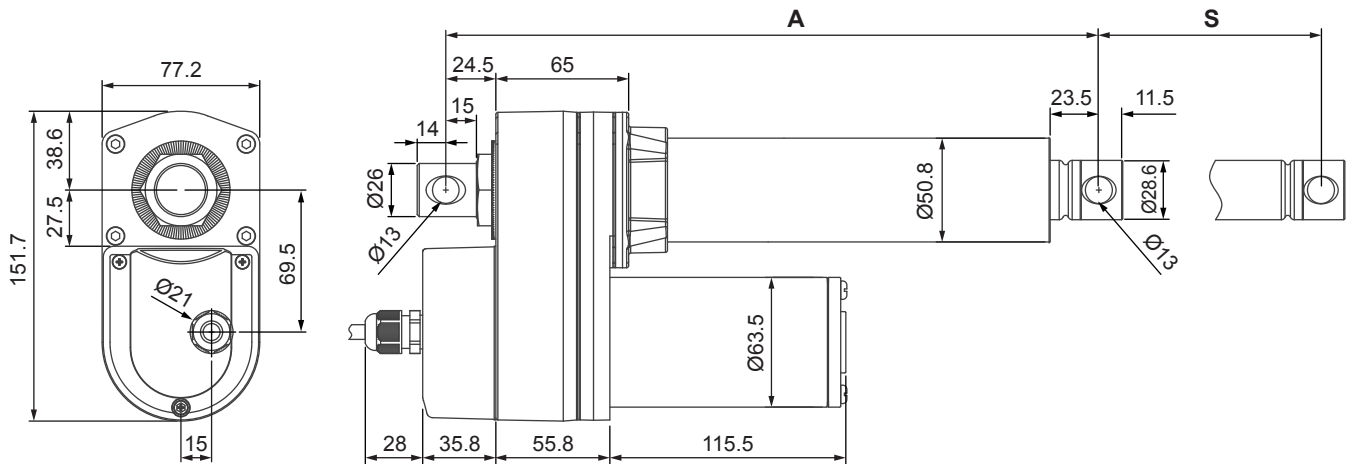


• Installation Dimension

Stroke (S)	102 (4")	153 (6")	203 (8")	254 (10")	305 (12")	457 (18")	610 (24")
Retracted Length (A)	319	370	420	471	573	725	878

(tolerance: ±5mm)

Ball Screw type



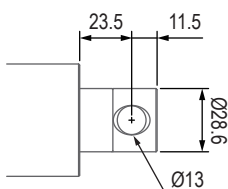
• Installation Dimension

Stroke (S)	102 (4")	153 (6")	203 (8")	254 (10")	305 (12")	457 (18")	610 (24")
Retracted Length (A)	359	410	461	512	640	792	945

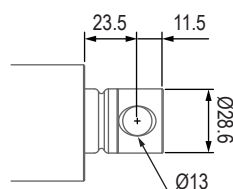
(tolerance: ±5mm)

• Front connector

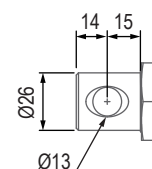
ACME type



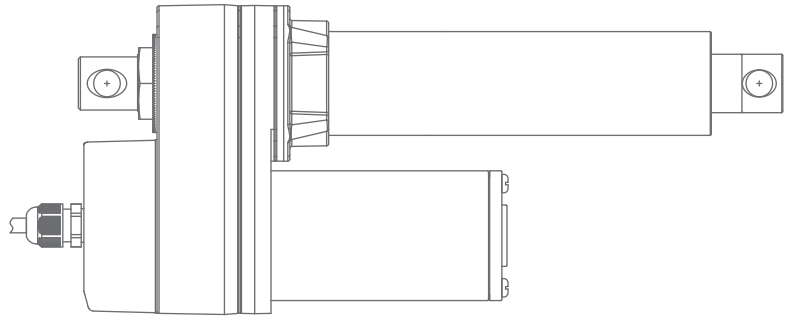
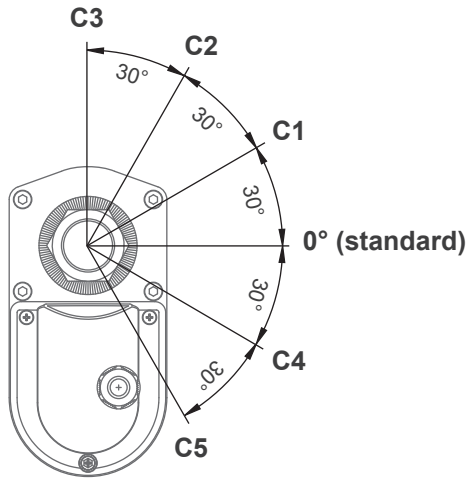
Ball Screw type



• Rear connector



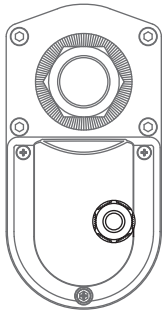
● Pivot orientation of rear connector



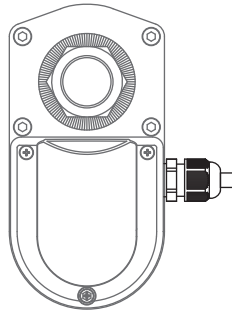
Note: As an example in 0° pivot of rear connector.

● Location of cable outlet

Bottom cable outlet

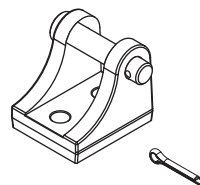
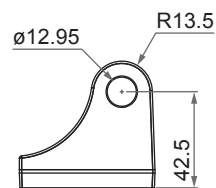
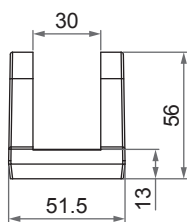
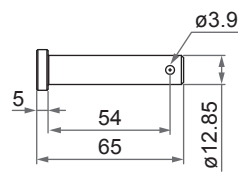
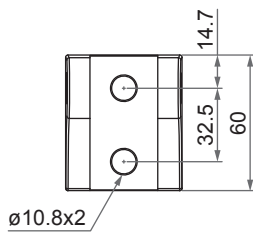


Side cable outlet



● Mounting bracket (MB30)

(Only for 0° pivot of rear connector)



Compatibility

Product	Model	ID11 spec
Control box	01XU10	24V motor

Wiring



Power	
Red	Black
M+	M-

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

Certifications

The 01US11 actuator is compliant with the following regulations, in terms of the essential conformity requirements of EMC Directive of 2014/30/EU.

Emission	Immunity
EN 61000-6-3:2007+A1:2011	EN 61000-6-1:2007 IEC 61000-4-2:2008 IEC 61000-4-3:2006+A1:2007+A2:2100 IEC 61000-4-8:2009

Ordering Key

01US11- 24 - 20 - B - 305 - IP65 - SC - M1	
Input voltage	12: 12V DC 24: 24V DC 48: 48V DC
Gear ratio	10: 10:1 20: 20:1 30: 30:1 (Ball Screw only) 40: 40:1
Spindle type	A: ACME B: Ball Screw
Stroke	102: 102 mm (4") 153: 153 mm (6") 203: 203 mm (8") 254: 254 mm (10") 305: 305 mm (12") 457: 457 mm (18") 610: 610 mm (24")
IP Protection level	Blank: IP54 Protection level (standard) IP65: IP65 Protection level
Location of cable outlet	Blank: Bottom cable outlet (standard) SC: Side cable outlet
Pivot orientation of Rear connector	Blank: 0° (standard) C1: 30° counter-clockwise C2: 60° counter-clockwise C3: 90° counter-clockwise C4: 30° clockwise C5: 60° clockwise (Please refer to page 7)
Mounting bracket (MB30)	Blank: None M1: Mounting bracket x 1 M2: Mounting bracket x 2 (Only for 0° pivot of rear connector)



More information about usage is provided in 01US11 User Guide, which can be downloaded from website.