

Actuator ID11

ID11 is designed for industrial and agricultural application or construction equipment. In comparison with ID10, the install dimension is 40mm shorter with limit switch but no potentiometer option, this takes advantage of specific install requirement. Ball Screw and ACME spindle are available on ID11.



Features and Options

Main applications: Industrial, Agricultural, Construction equipment

Standard features:

- 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)
- Max. speed at no load: 36.5 mm/sec (typical value)
- Stroke: 102 / 153 / 203 / 254 / 305 / 457 / 610mm
- IP level: IP54
- Overload protection by clutch
- Built-in CAM type limit switches (refer to notice below)
- Extension tube material: Iron (for ACME) or stainless steel (for Ball Screw)
- Color: Black
- Bottom cable outlet
- Power cord length: 250mm (with tinned wires)
- Duty cycle: 25%, max. 2 min. continuous operation in 8 min.
- Operating ambient temperature: -25°C ~ +65°C
- Certified: CE Marking, EMC Directive 2014/30/EU

Options:

- IP level: IP65
- Side cable outlet
- Mounting bracket (MB30)



1. If the actuator is jammed by obstructions or the load is severely overweight, the actuator's clutch protection device will trip and run idly to protect the actuator or the customer's mechanical equipment from damage. However, once the clutch is tripped, the stroke range of the actuator will deviate from the original factory setting, which will affect normal use.
2. Users are forbidden to open the outer cover of the limit switch so as not to affect the original protection level of the actuator, resulting in the immediate failure of the original factory protection commitment.

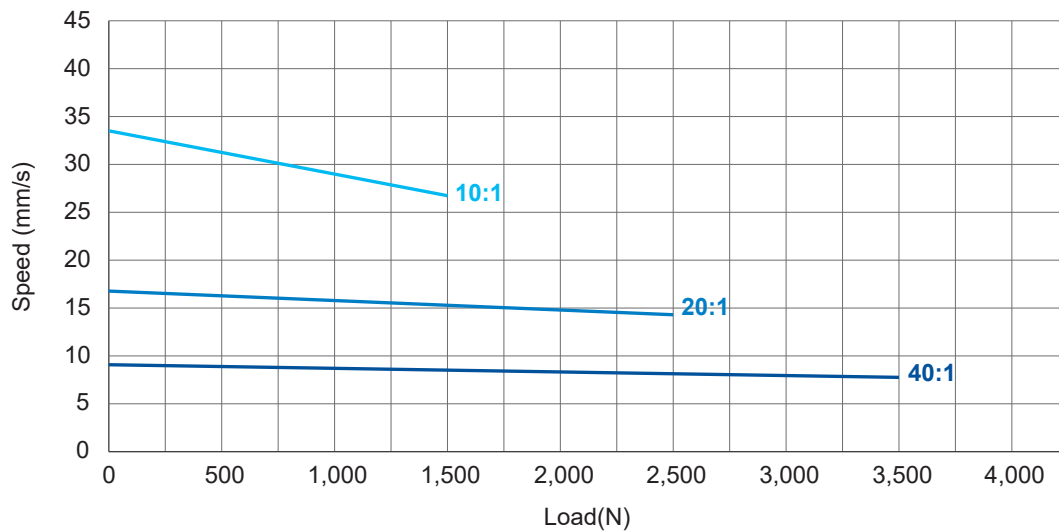
Performance Data

ACME type

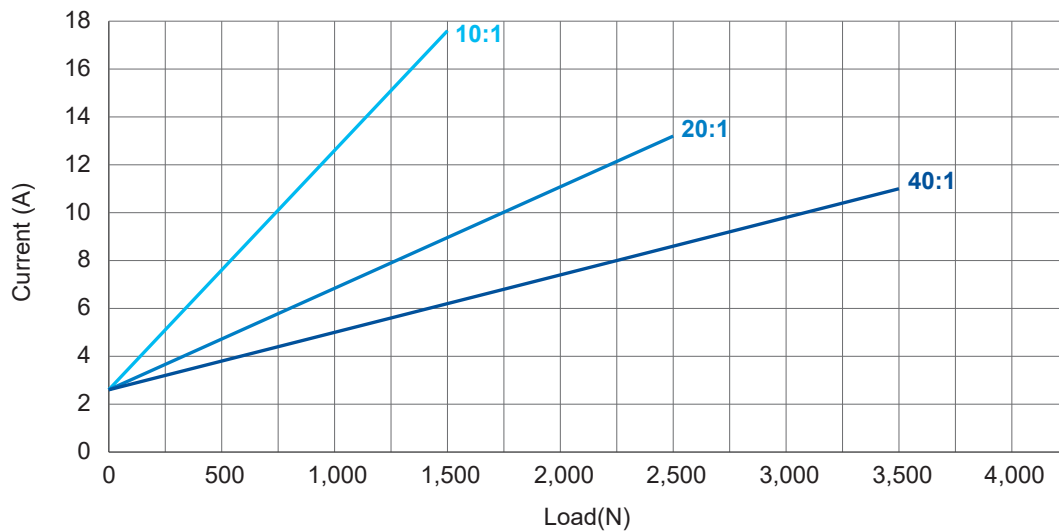
- 12V DC motor

Model No.	Gear ratio	Push/Pull Max. (N)	*Typical Speed (mm/s)		*Typical Current (A)	
			No load	Full load	No load	Full load
ID11-12-10-A	10:1	1500	33.5	26.7	2.6	17.6
ID11-12-20-A	20:1	2500	16.8	14.3	2.6	13.2
ID11-12-40-A	40:1	3500	8.4	7.3	2.6	11.0

Speed vs. Load



Current vs. Load

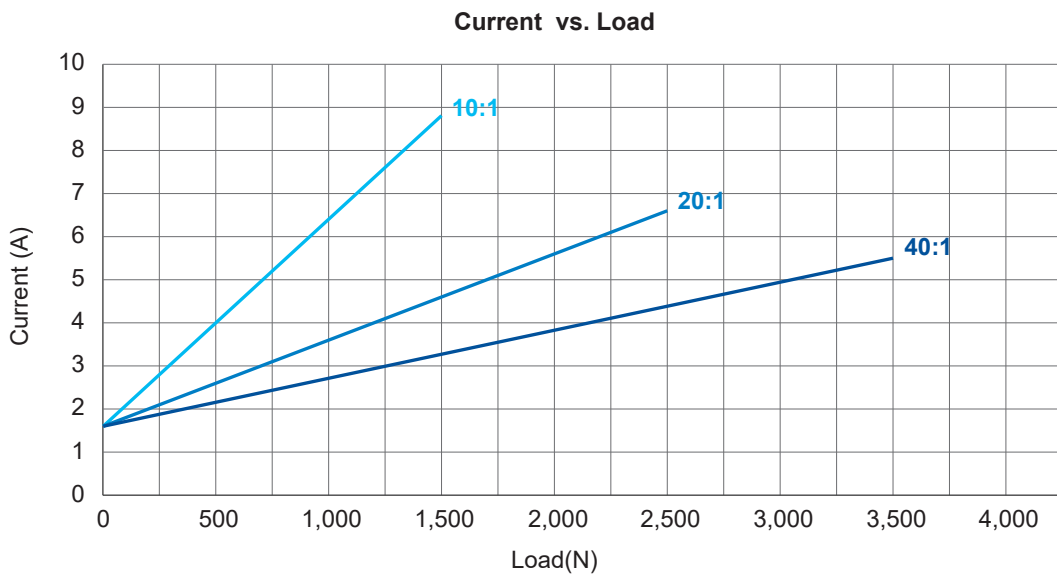
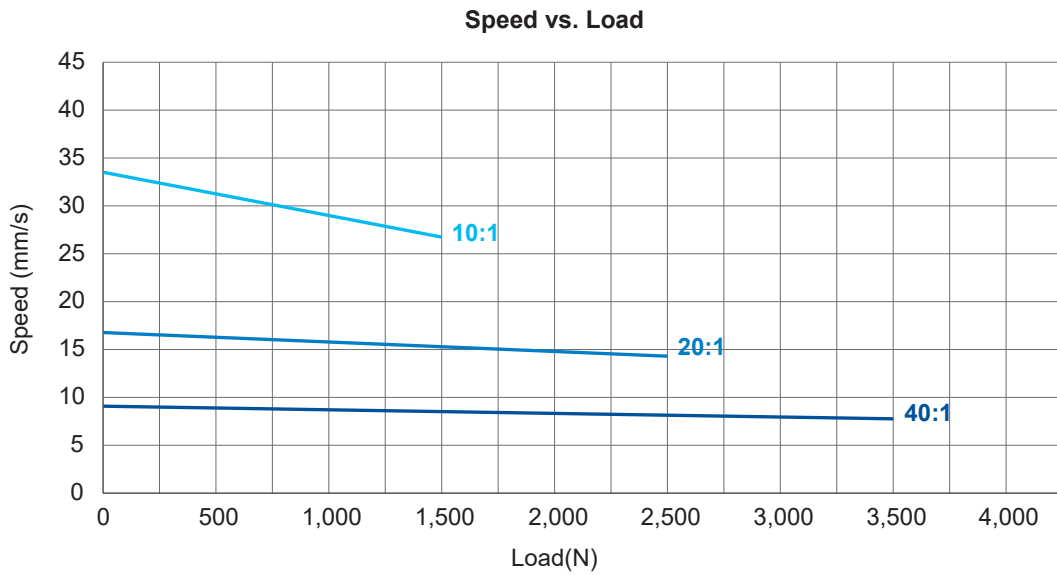


Remarks:

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

● 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
ID11-24-10-A	10:1	1500	33.5	26.7	1.6	8.8
ID11-24-20-A	20:1	2500	16.8	14.3	1.6	6.6
ID11-24-40-A	40:1	3500	8.4	7.3	1.6	5.5

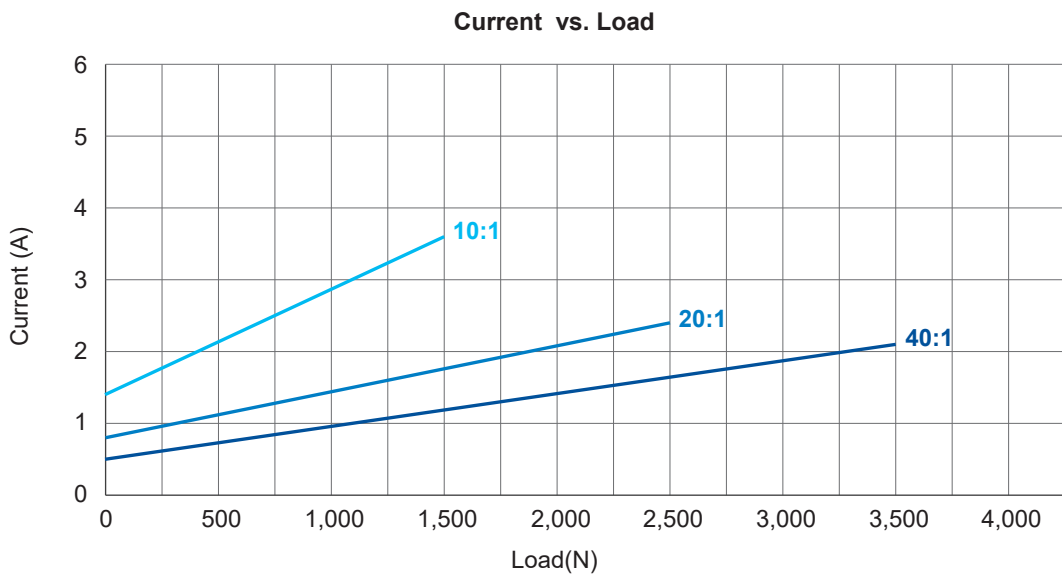
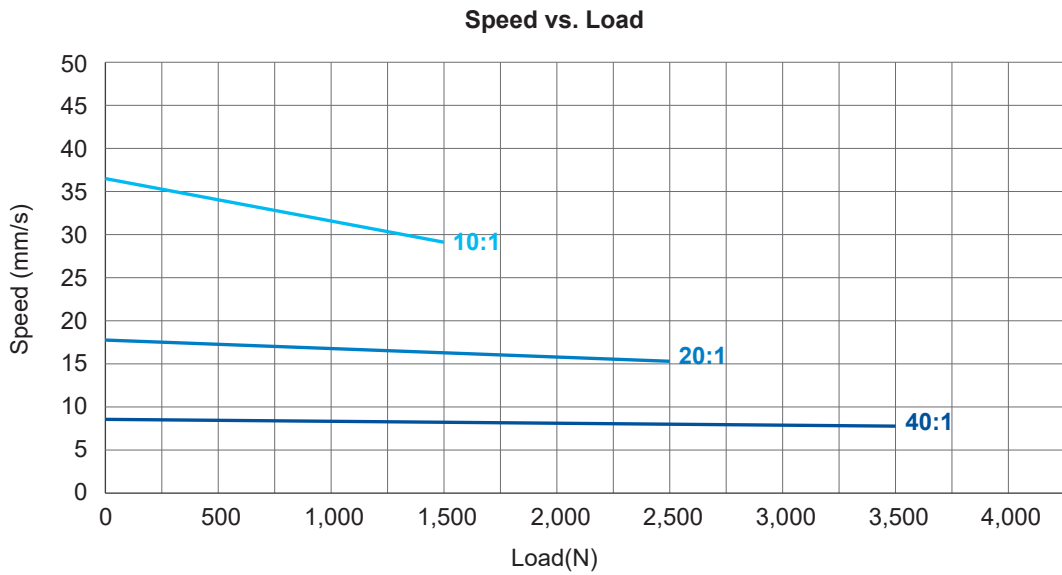


Remarks:

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● 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
ID11-48-10-A	10:1	1500	36.5	29.1	1.4	3.6
ID11-48-20-A	20:1	2500	17.8	15.3	0.8	2.4
ID11-48-40-A	40:1	3500	8.6	7.8	0.5	2.1



Remarks:

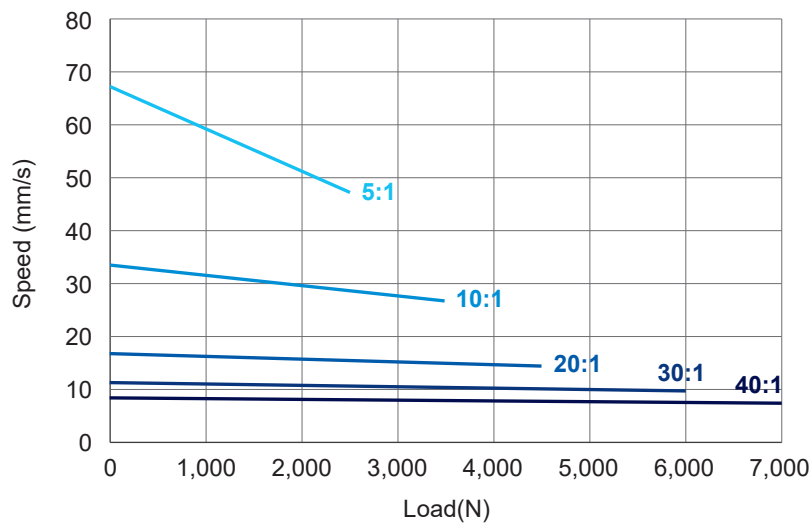
* The typical speed or typical current means the average value neither upper limit nor lower limit. The performance curves are made with typical values.

Ball Screw type

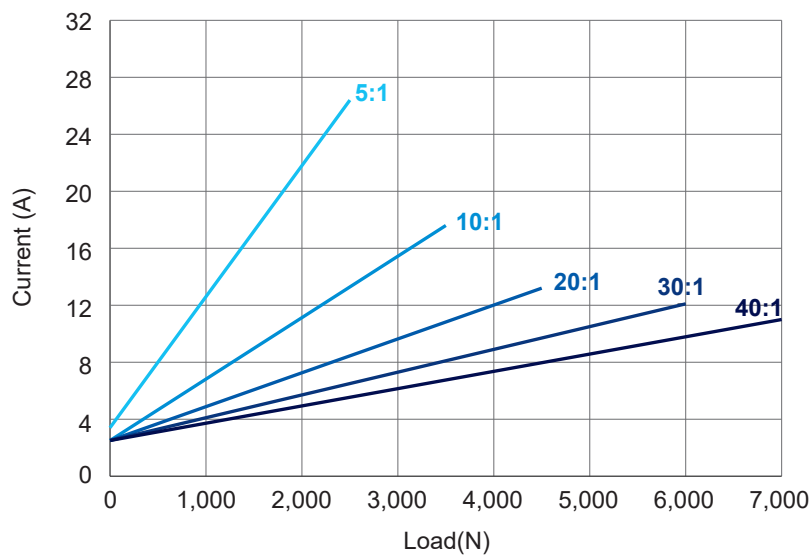
• 12V DC motor

Model No.	Gear ratio	Push/Pull Max. (N)	Typical Speed (mm/s)		Typical Current (A)	
			No load	Full load	No load	Full load
ID11-12-10-B-XXX	10:1	3500	33.5	26.7	2.6	17.6
ID11-12-20-B-XXX	20:1	4500	16.8	14.3	2.6	13.2
ID11-12-30-B-XXX	30:1	6000	11.2	9.8	2.6	12.1
ID11-12-40-B-XXX	40:1	7000	8.4	7.4	2.6	11.0

Speed vs. Load



Current vs. Load



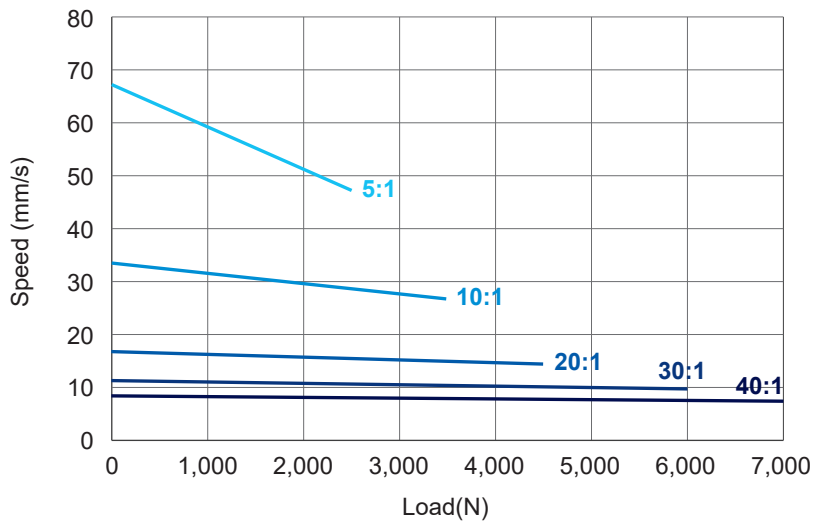
Remarks:

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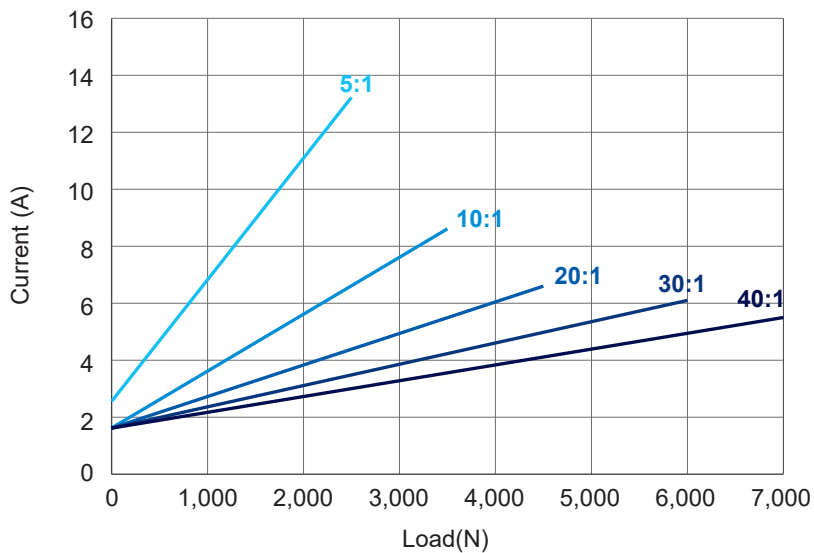
● 24V DC motor

Model No.	Gear ratio	Push/Pull Max. (N)	Typical Speed (mm/s)		Typical Current (A)	
			No load	Full load	No load	Full load
ID11-24-10-B-XXX	10:1	3500	33.5	26.7	1.6	8.8
ID11-24-20-B-XXX	20:1	4500	16.8	14.3	1.6	6.6
ID11-24-30-B-XXX	30:1	6000	11.2	9.8	1.6	6.1
ID11-24-40-B-XXX	40:1	7000	8.4	7.4	1.6	5.5

Speed vs. Load



Current vs. Load



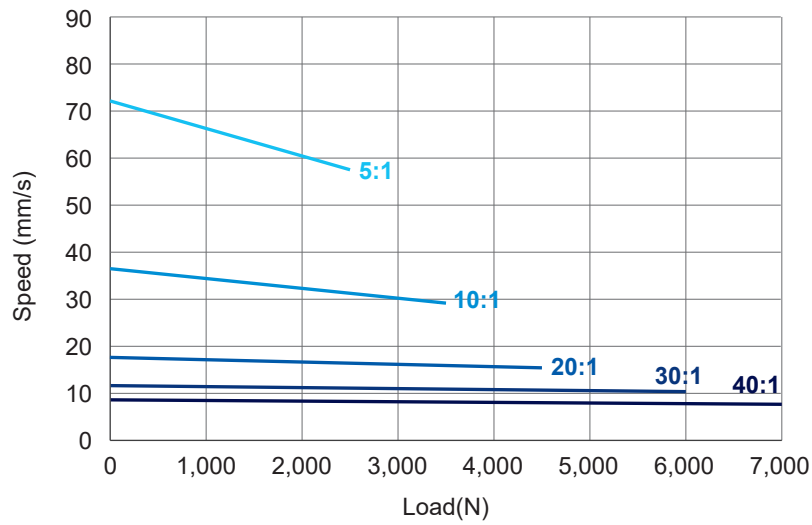
Remarks:

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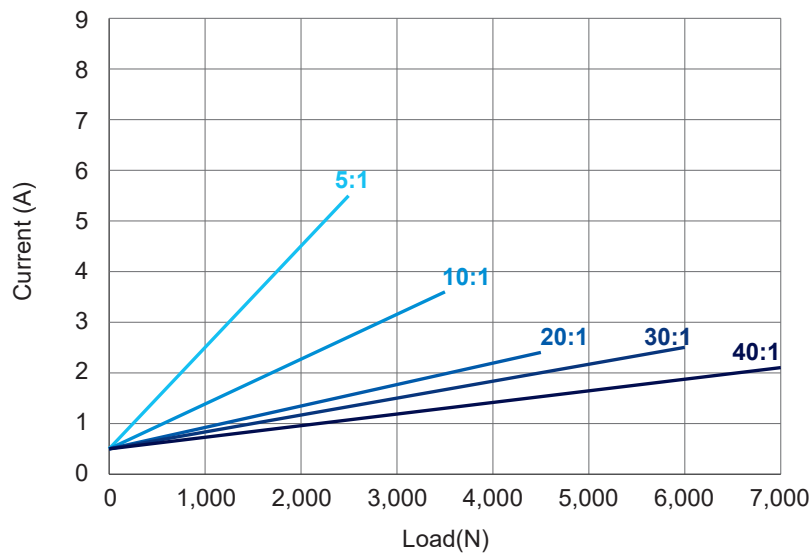
● 48V DC motor

Model No.	Gear ratio	Push/Pull Max. (N)	Typical Speed (mm/s)		Typical Current (A)	
			No load	Full load	No load	Full load
ID11-48-10-B-XXX	10:1	3500	36.5	29.1	0.5	3.6
ID11-48-20-B-XXX	20:1	4500	17.8	15.3	0.5	2.4
ID11-48-30-B-XXX	30:1	6000	11.7	10.3	0.5	2.5
ID11-48-40-B-XXX	40:1	7000	8.6	7.8	0.5	2.1

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

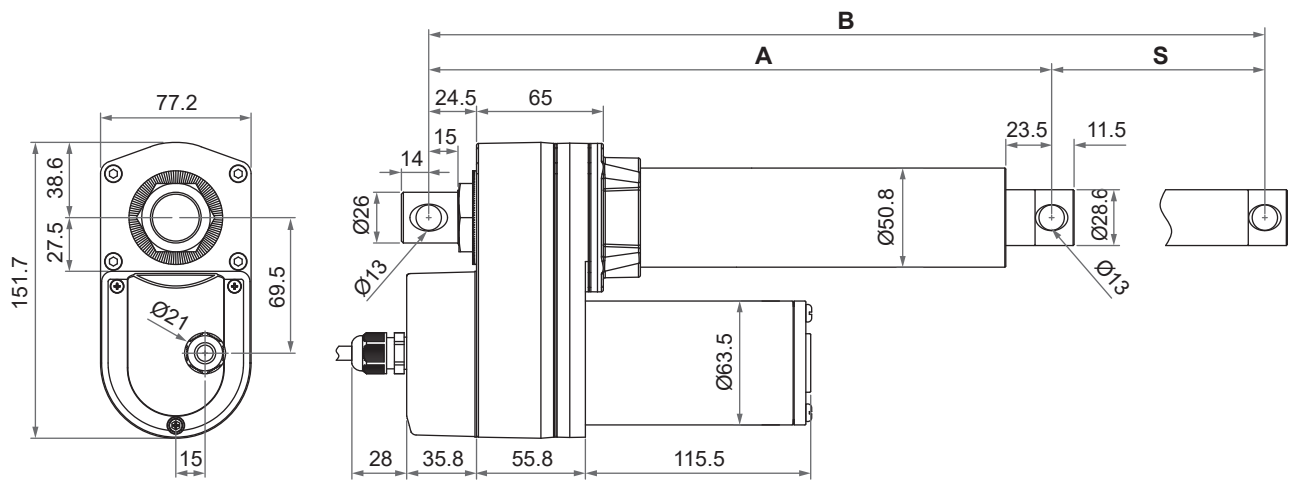
- Extended length (B) = Retracted length (A) + Stroke (S)
- Retracted length (A)

Spindle type	Stroke (S)						
	102 (4")	153 (6")	203 (8")	254 (10")	305 (12")	457 (18")	610 (24")
ACME	319	370	420	471	573	725	878
Ball Screw	359	410	461	512	640	792	945

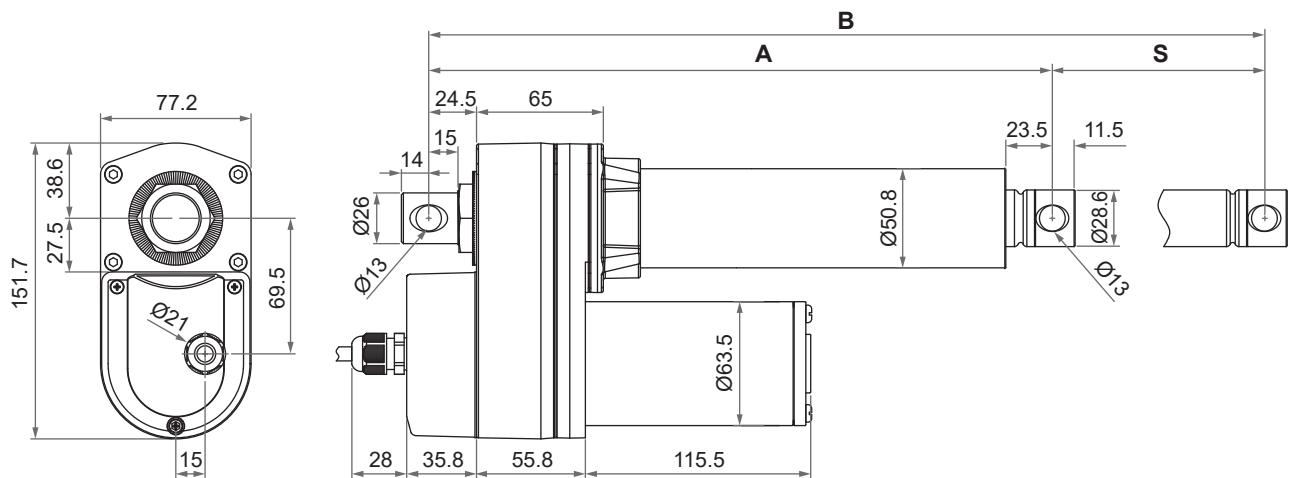
(Tolerance: ±5mm)

• Drawing

- ACME type



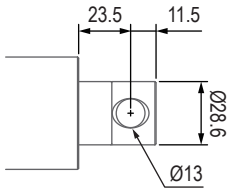
- Ball Screw type



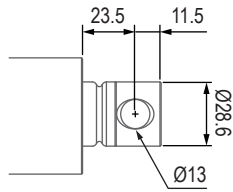
Unit: mm

● **Front connector**

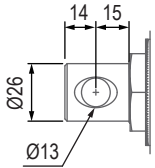
ACME type



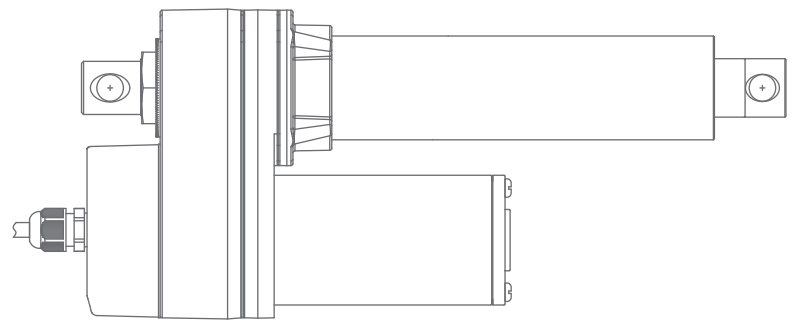
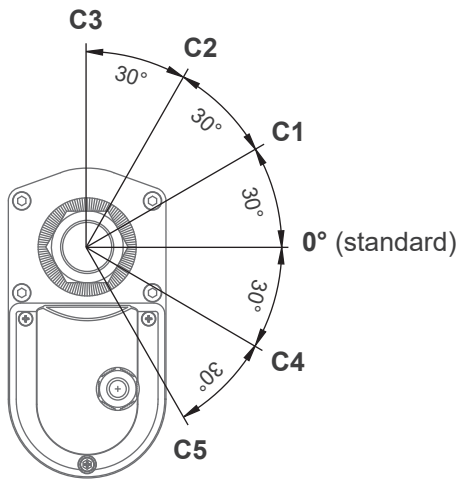
Ball Screw type



● **Rear connector**



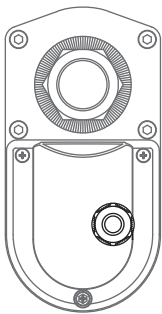
● **Pivot orientation of rear connector**



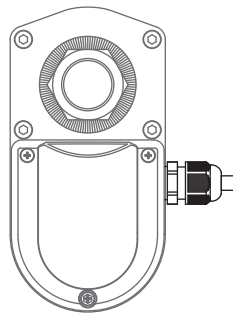
Note: As an example in 0° pivot of rear connector.

● **Location of cable outlet**

Bottom cable outlet

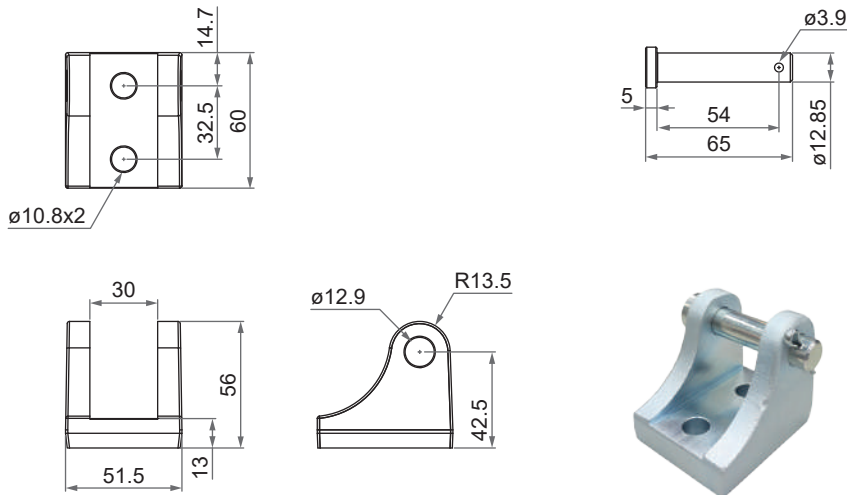


Side cable outlet



• **Mounting bracket (MB30)**

(Only for 0° pivot of rear connector)



Compatibility

Product	Model	ID11 spec
Control box	CI10	• 24V motor

Wiring

	Wire color	Definition
Power wires	Red	Connect red wire to '+' and black wire to '-' of DC power, to extend the actuator. Switch the polarity to retract it.
	Black	

Certifications

The ID11 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+A2:2010 IEC 61000-4-8:2009

Ordering Key

	ID11 - 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: 102mm (4") 153: 153mm (6") 203: 203mm (8") 254: 254mm (10") 305: 305mm (12") 457: 457mm (18") 610: 610mm (24")
IP Level	Blank: IP54 (Standard) IP65: IP65
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 9)
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 ID11 User Guide, which can be downloaded from Moteck website.

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