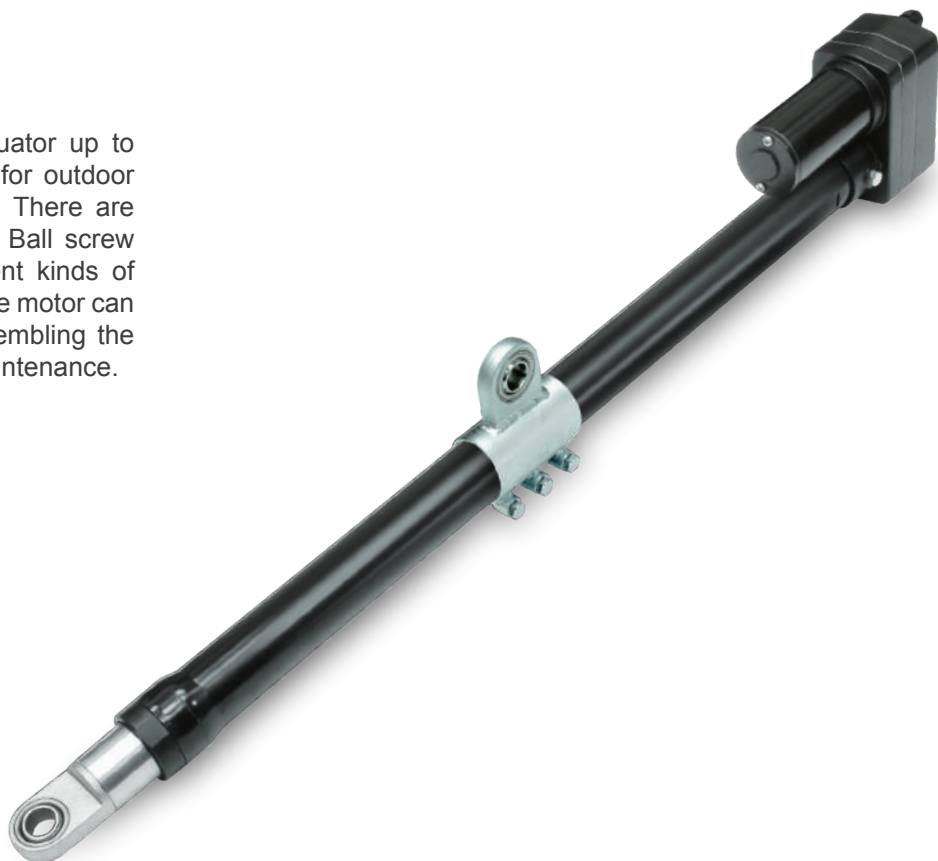


Actuator ID18

ID18 is a robust and powerful actuator up to 18,000N thrust, which is designed for outdoor applications, such as solar tracker. There are several options available, including Ball screw spindle, ACME spindle, and different kinds of sensors for positioning feedback. The motor can be replaced directly without disassembling the actuator, which is convenient for maintenance.



Feature

- Main application: Solar tracker
- Input voltage: 24V DC / 36V DC
- Rated load: 12,000N (Ball screw) / 9,000N (ACME)
- Max. static load: 36,000N
- Max. dynamic load: 18,000N (Ball screw) / 12,000N (ACME) in push and pull direction
- Max. speed at no load: 3.3 mm/sec
- Max. speed at full load: 2.7 mm/sec @ 12,000N
- Stroke: 610 mm (24") / 914 mm (36") / 1219 mm (48") (other strokes are available)
- Max. current: 4.0A @ 24V DC
- IP Protection level: IP65
- Preset limit switches
- Color: Black
- Duty cycle: 10%, max. 2 min. continuous operation in 20 min.
- Ambient operation temperature: -25°C ~ +65°C
- Certified: CE Marking, EMC Directive 2014/30/EU and 2004/108/EC

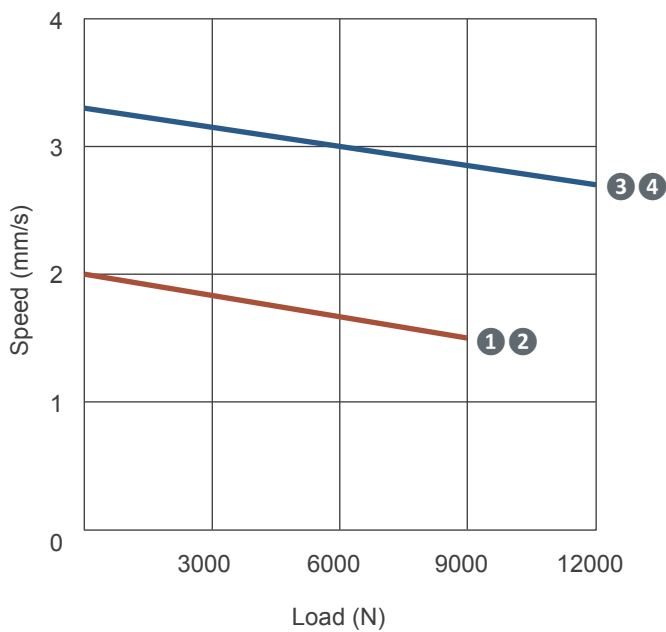
Option

- Single Hall effect sensor for digital positioning feedback
- Reed sensor for digital positioning feedback
- Potentiometer for analog positioning feedback

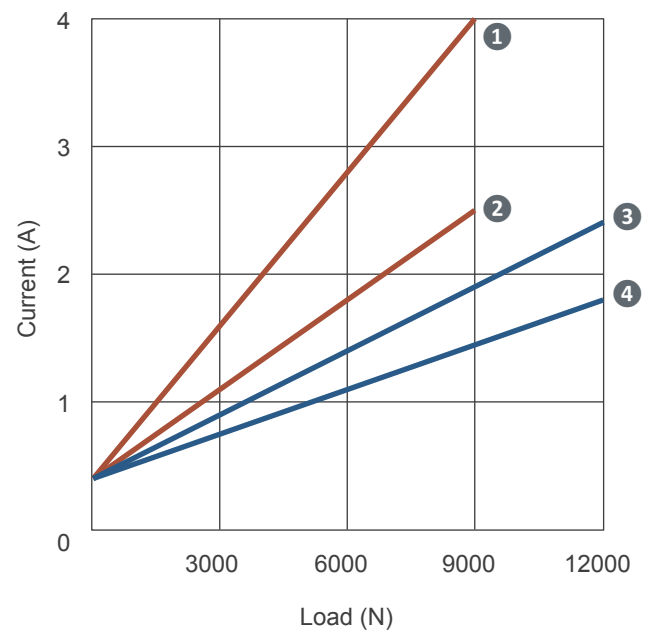
Performance Data

No.	Model No.	Input voltage (V)	Gear ratio	Motor code	Spindle type	Max. load (N)	Speed (mm/s)		Current (A)	
							No load	Full load	No load	Full load
①	ID18-2458S3A	24	58:1	S	ACME	9000	2.0	1.5	0.4	4.0
②	ID18-3658S3A	36	58:1	S	ACME	9000	2.0	1.5	0.4	2.5
③	ID18-2458S5B	24	58:1	S	Ball screw	12000	3.3	2.7	0.4	2.4
④	ID18-3658S5B	36	58:1	S	Ball screw	12000	3.3	2.7	0.4	1.8

Speed vs. Load

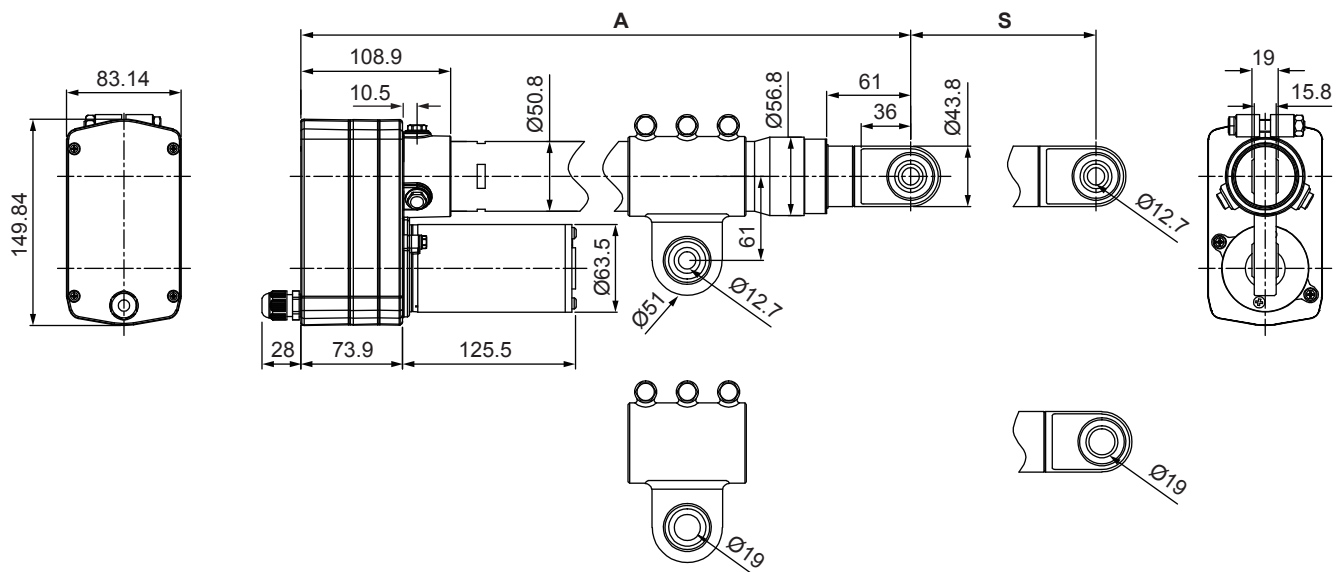


Current vs. Load

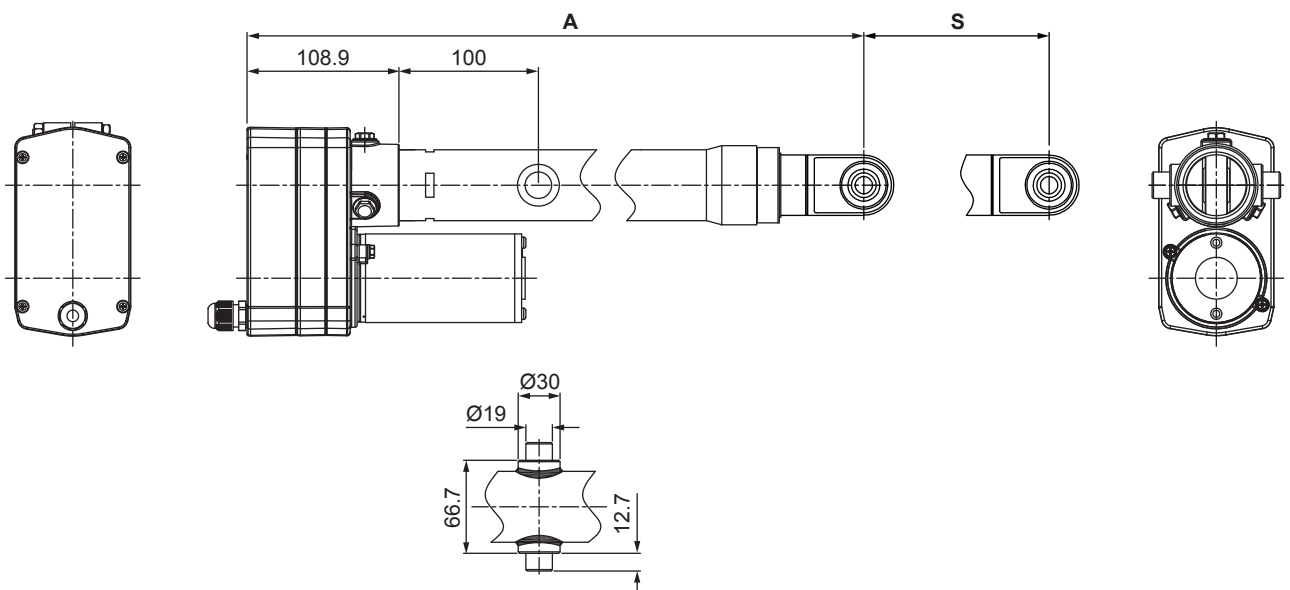


Dimensions

Standard



With trunnion mount



Installation dimension

Model No.	Spindle type	Stroke (mm)	Retracted length (A)*
ID18-XXXXX5B610-XXXXXXX	Ball screw	610	1116
ID18-XXXXX5B914-XXXXXXX	Ball screw	914	1420
ID18-XXXXX5BC19-XXXXXXX	Ball screw	1219	1725
ID18-XXXXX3A610-XXXXXXX	ACME	610	1063
ID18-XXXXX3A914-XXXXXXX	ACME	914	1367
ID18-XXXXX3AC19-XXXXXXX	ACME	1219	1672

*Remarks:

Retracted length as drawing "A"

Wiring

Standard



Power	
Red	Black
M+	M-

With Hall effect sensor x 1

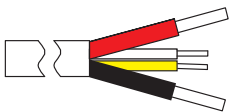
Resolution, Ball 20 PPI, ACME 32 PPI



Power		Signal		
Red	Black	White	Yellow	Blue
M+	M-	VCC	Data	GND

With reed sensor

Resolution, Ball 30 PPI, ACME 48 PPI



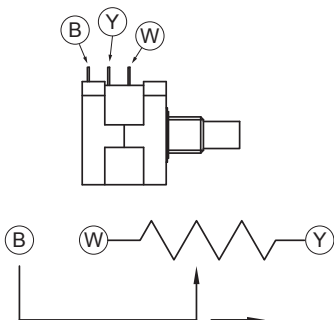
Power		Signal	
Red	Black	White	Yellow
M+	M-	GND	Data

With potentiometer (POT)

The resistance between blue and white wires increases when the actuator extends, and decreases when it retracts.



Power		Signal		
Red	Black	White	Yellow	Blue
M+	M-	GND	VCC	Data



Spindle type	Stroke (mm)	Resistance ($\pm 0.3K\Omega$)
Ball screw	610	0.3 ~ 8.6
Ball screw	914	0.3 ~ 7.7
Ball screw	1219	0.3 ~ 8.4
ACME	610	0.3 ~ 8.1
ACME	914	0.3 ~ 7.9
ACME	1219	0.3 ~ 8.1

Remarks:

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

Ordering Key

	ID18 - 24 58 S 3A C19 - 1 1 H 1 B 5 1
Input voltage	24: 24V DC 36: 36V DC
Gear ratio	58: 58:1
Motor code	S: Standard motor
Spindle type	3A: ACME, 3.175 mm pitch 5B: Ball screw, 5.08 mm pitch
Stroke	610: 610 mm (24") 914: 914 mm (36") C19: 1219 mm (48")
Front connector	Spherical rod eye 1: Ø19 mm (3/4") (standard) 0: Ø12.7 mm (1/2") (Refer to Dimension)
Rear connector	1: Tube clamp with spherical bearing, Ø19 mm (3/4") (standard) 0: Tube clamp with spherical bearing, Ø12.7 mm (1/2") T: With trunnion mount, Ø19 mm (3/4"), L: 12.7 mm (1/2") (Refer to Dimension)
Positioning feedback	H: Hall effect sensor x 1 (standard) R: Reed sensor P: Potentiometer 0: None
Cable	1: Bare wires / 250 mm / Black
Color	B: Black
IP Protection level	5: IP65
Others	1: Cable outlet at body side (standard) 0: Cable outlet at body bottom

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