

Actuator

ID18



Features

- ◆ ID18 is a robust and powerful actuator designed for outdoor applications in harsh environment, such as solar tracker. There are several customized 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.
- ◆ Main applications : Solar tracker
- ◆ Input voltage : 24V DC / 36V DC
- ◆ Rated load : 12000N(Ball Screw), 9000N(ACME)
- ◆ Max. static load : 36000N
- ◆ Max. current : 4.0A @ 24V DC
- ◆ 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 stroke are available)
- ◆ Duty cycle : 10% or 2 min. continuous operation in 20 min.
- ◆ IP protection level : IP65
- ◆ Color : Black
- ◆ Preset limit switches
- ◆ Power wire length : 250mm bare wires
- ◆ Ambient operating temperature : -25~+65°C

Options

- ◆ Hall effect sensor for positioning feedback.
- ◆ Reed sensor for positioning feedback.
- ◆ Potentiometer for positioning feedback.

Compatibility

1. Control box

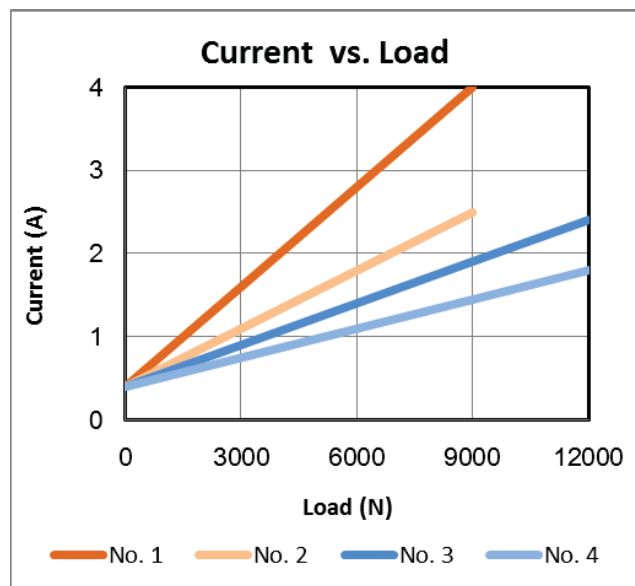
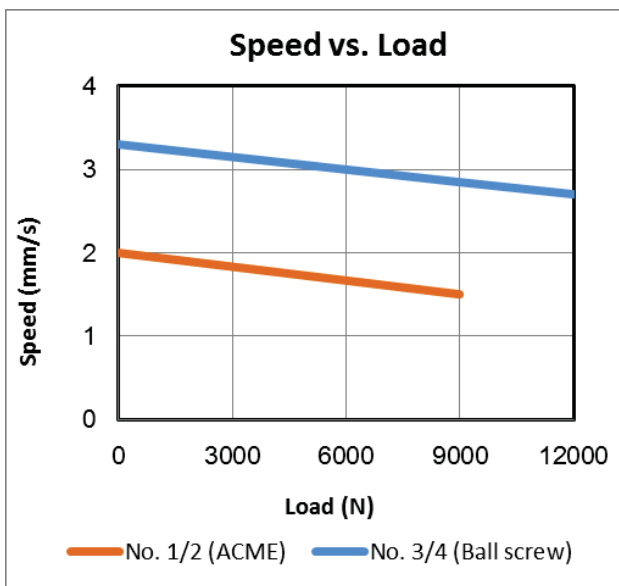
None

2. Accessory

None

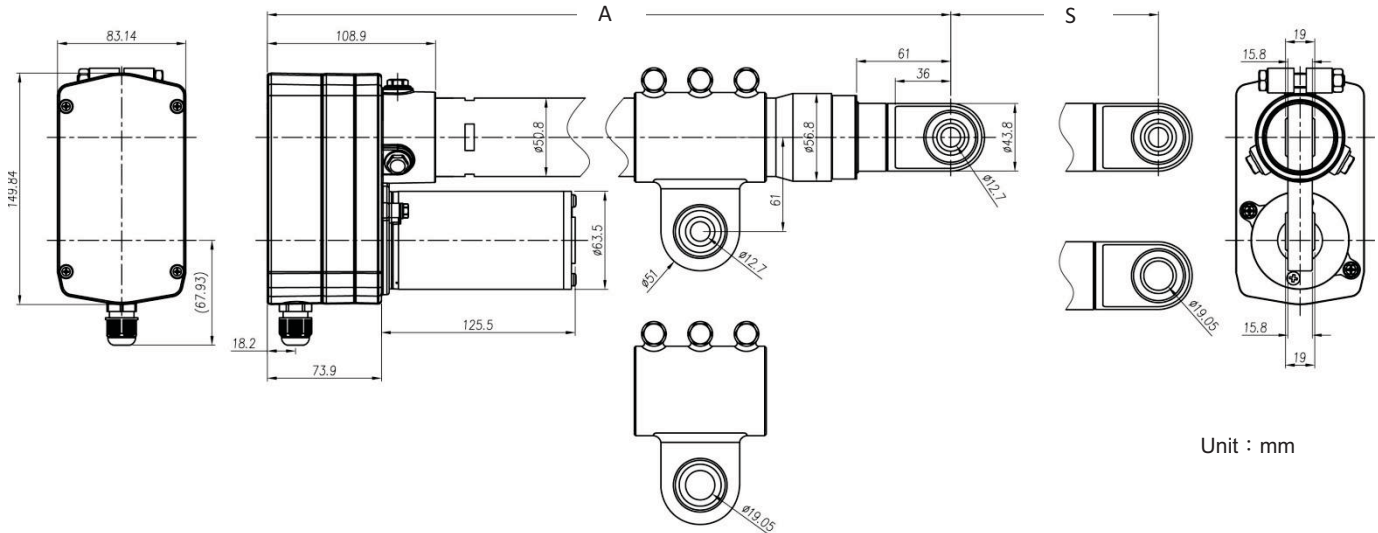
Performance Data

No.	Model No.	Max. Load (N)	Speed (mm/s)		Input Voltage (V)	Current (A)	
			No load	Full load		No load	Full load
1	ID18-2458S3Axxx-xxxxxxx	9,000	2.0	1.5	24	0.4	4.0
2	ID18-3658S3Axxx-xxxxxxx	9,000	2.0	1.5	36	0.4	2.5
3	ID18-2458S5Bxxx-xxxxxxx	12,000	3.3	2.7	24	0.4	2.4
4	ID18-3658S5Bxxx-xxxxxxx	12,000	3.3	2.7	36	0.4	1.8



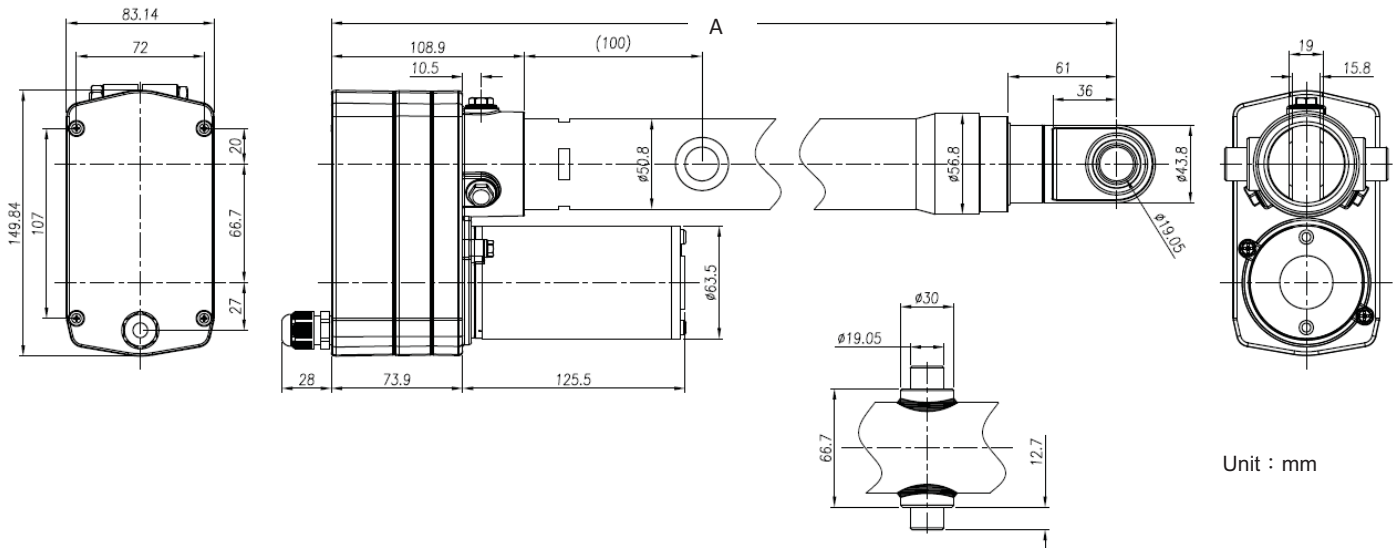
Dimensions

◆ Standard



Unit : mm

◆ With trunnion mount



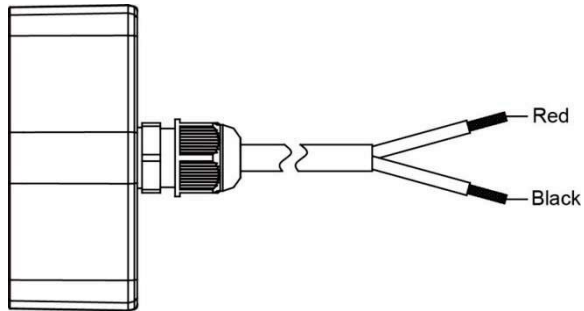
Unit : mm

Model No.	Spindle Type	Stroke	Retracted Length (A)
ID18-xxxxx 5B610 -xxxxxxx	Ball Screw	610 mm	1,116 mm
ID18-xxxxx 5B914 -xxxxxxx	Ball Screw	914 mm	1,420 mm
ID18-xxxxx 5BC19 -xxxxxxx	Ball Screw	1219 mm	1,725 mm
ID18-xxxxx 3A610 -xxxxxxx	ACME	610 mm	1,063 mm
ID18-xxxxx 3A914 -xxxxxxx	ACME	914 mm	1,367 mm
ID18-xxxxx 3AC19 -xxxxxxx	ACME	1,219 mm	1,672 mm

Wiring

◆ Standard

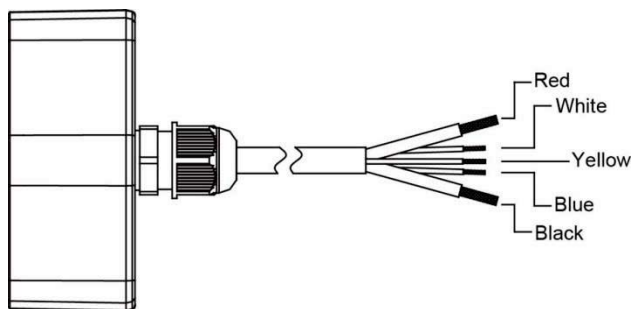
Red (+), Black (-) for extension



◆ With Hall Sensor

Red (+), Black (-) for extension

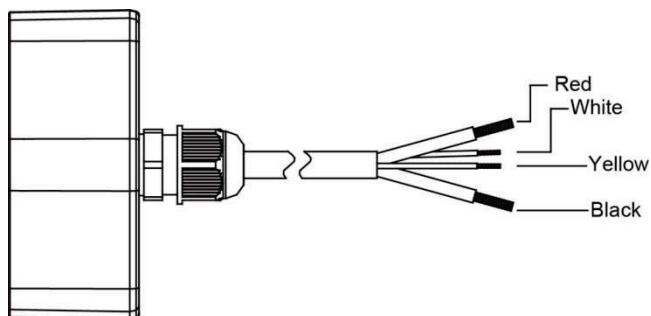
White (Vcc), Yellow (Data), Blue (GND)



◆ With Reed Sensor

Red (+), Black (-) for extension.

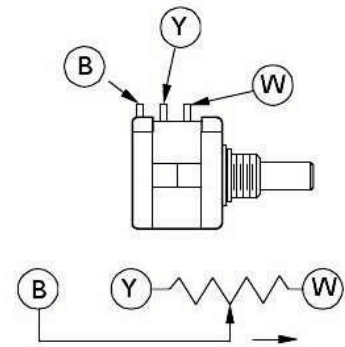
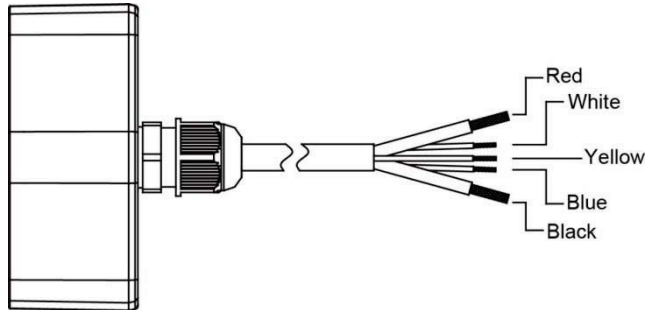
White & Yellow (Data)



◆ With Potentiometer

Red (+), Black (-) for extension

White, Yellow & Blue (data)



Pin assignment for POT

Resistance value of potentiometer (between blue and white wires)

Spindle type	Stroke	Resistance ($\pm 0.3K\Omega$)
ACME	610 mm (24")	0.3 ~ 8.1
	914 mm (36")	0.3 ~ 7.9
	1,219 mm (48")	0.3 ~ 8.1
Ball screw	610 mm (24")	0.3 ~ 8.6
	914 mm (36")	0.3 ~ 7.7
	1,219 mm (48")	0.3 ~ 8.4

Ordering Key

ID18—

Input Voltage

24 : 24V DC
36 : 36V DC

Gear Ratio

58 : 58:1

Motor Code

S : Standard motor

Spindle Code

3A : ACME, 3.175 mm pitch
5B : Ball Screw, 5.08 mm pitch

Stroke

610 : 610 mm (24")
914 : 914 mm (36")
C19 : 1,219 mm (48")

Front Connector

1 : Spherical rod end, φ3/4"
0 : Spherical rod end, φ1/2"

Rear Connector

1 : Tube clamp with spherical bearing, φ3/4"
0 : Tube clamp with spherical bearing, φ1/2"
T : With trunnion mount, φ3/4", L 1/2"

Positioning feedback

H : Hall Sensor
R : Reed Sensor
P : Potentiometer
0 : None

Cable & Plug

1 : Tinned wires / 250mm / Black

Color

B : Black

IP level

5 : IP65

Others

1 : Cable outlet at body side
0 : Cable outlet at body bottom



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