



Small for powerful

We provide tubular actuator options for sea, land and air fields to achieve automation in multiple fields.





Product Brochure

Product Naming.....	1
DDTG-16.....	2
DDTG-28.....	6
DDTG-38.....	11
DDTG-48.....	16
DDTG-53.....	21
DDTG-55.....	26
DDTG-64.....	31

DDTG 35 AL - L - 12 - 100 - 30 - 100/300 - B - H - W - 0

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ / ⑨ ⑩ ⑪ ⑫ ⑬

- | | |
|-----------------------|---|
| ① Brand | DDTG=众威利达 |
| ② Diameter | 16=16mm, 28=28mm, 38=38mm, 48=48mm, 53=53mm, 55=55mm, 64=64r |
| ③ Out tube Material | AL=Aluminum S/S=stainless steel |
| ④ Noise Level Options | N=Normal, L=Low Noise |
| ⑤ Voltage | X=V DC |
| ⑥ Load | X=N |
| ⑦ Load speed | X=mm/s |
| ⑧ Stroke | X=mm |
| ⑨ Retracted Length | X=mm |
| ⑩ Color | B=Black, S=Sliver, C=Custommized |
| ⑪ Added function | N=None, C=Over current protection, H=Hall sensor, LSN=Limit switch, LSH=Limit Switch+Hall Sensor, LSC=Limit Switch+Over Current Protection, LSS=Limit switch signal output line |
| ⑫ Protection Class | M=IP65, N=IP66, W=IP67/IP67M, K=IP69K |
| ⑬ Front Mounting Type | O=O Type, C=Clevis, U=Universal Joint, S=Special Design |

ACTUATOR FIXTURE



O type
(Standard)

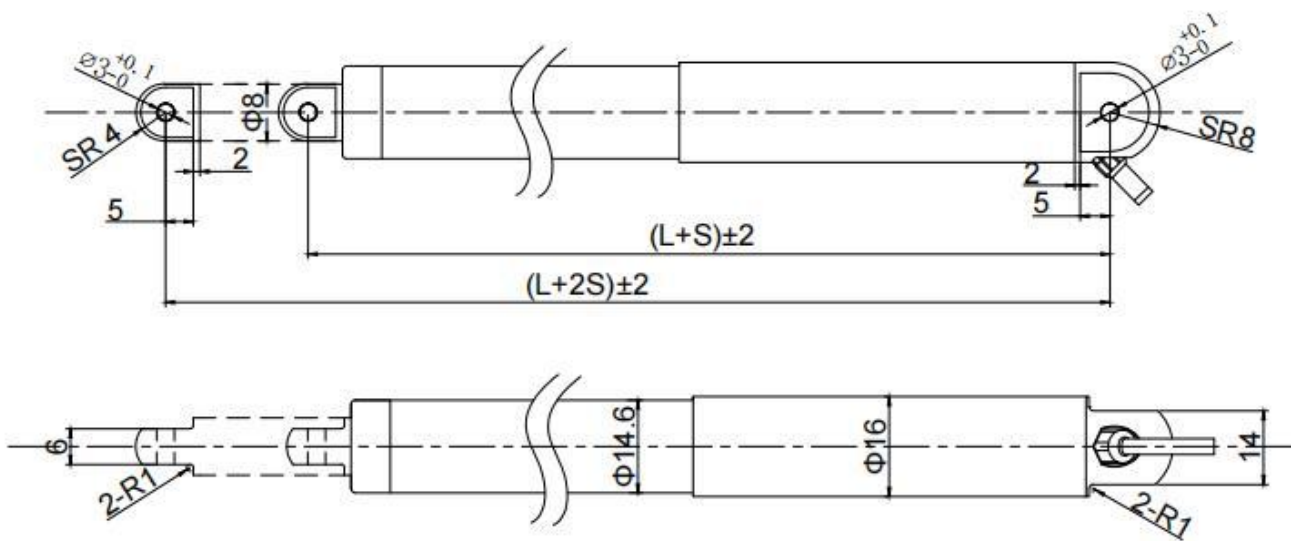


Clevis
(Standard)



Universal Joint Type
(Optional)

DDTG-16



DDTG-16 Standard Dimensional Drawing

Standard means without any additional function(Over current protection,hall sensor)
The dimensional tolerance not shown in the drawing can refer to IS02768-mk

APPLICATIONS AND BENEFITS

- DDTG-16 has a maximum force of 100N, providing strength support in a narrow space.
- DDTG-16 is used in robots, yachts, smart technology, home and other fields.

MINIMUM INSTALLATION DISTANCE :

Stroke(mm)	S	50	100
Function			
Limit switch	100+S	150	250
It is not possible to add overload protection and Hall elements			

Notes:The minimum stroke is 20mm. The maximum stroke of this actuator is 100mm.

CUSTOMIZABLE OPTIONS:

- Stroke
- Wire length
- Installation connector size
- Installation dimensions
- Exterior color

SPEED AND FORCE

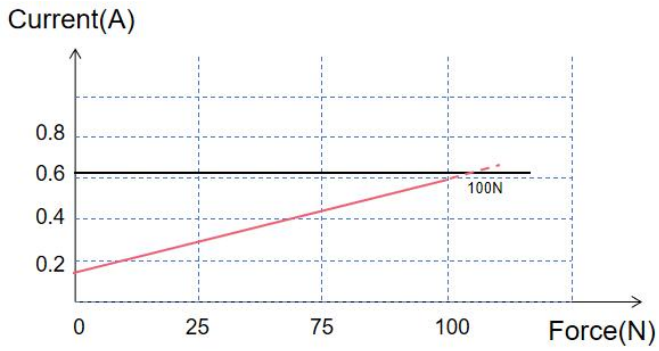
Voltage(V)	12V	24V	Material of outer tube	6063 Aluminium/ Stainless steel
No-load current(A)	≤0.05		Material of lead screw	Trapezoid, Steel
Load current(A)	≤ 0.5	≤0.3	Material of piston rod	316 stainless steel
Power(W)	6		Material of the nut	Engineering plastic /Copper
Protection class	IP67/IP69K		Colour	Black
Operating temperature	-20~60℃		Wire length(m)	1
Stored temperature	-40~60℃		Certification	CE, IFTA16949()
Noise on load(dB)	60dB		Wire connection	tinned bare wires 2 pins connector
Backlash (mm)	0.3		End mounting	o type
Working duty(s2)	Work for 2 minutes, stop for 18 minutes		Life time(cycles)	≥10k

STANDARD SPECIFICATIONS

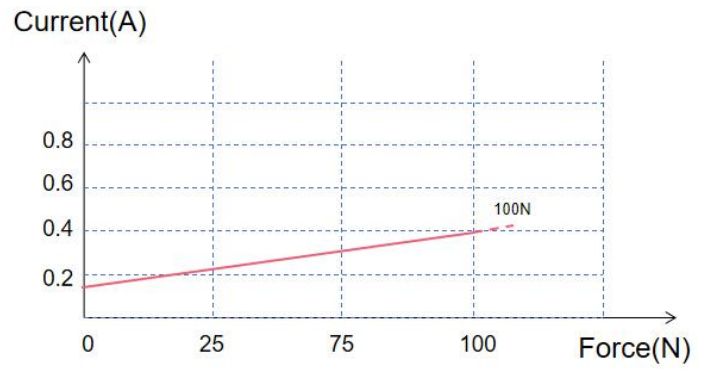
Max Load(N)	50	100
self-locking Force(N)	250	250
NO-load speed(mm/s)	8	7
Load speed(mm/s)	6	5

CURVE

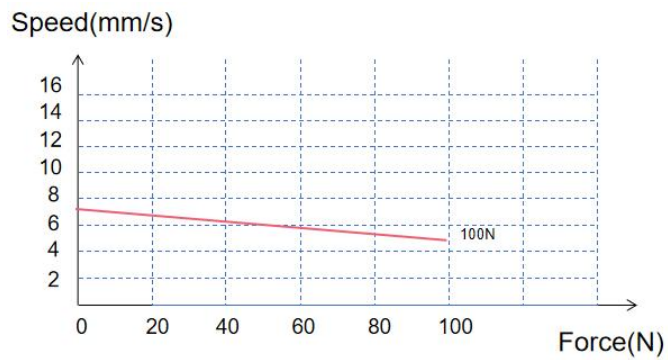
Speed or current accuracy $\pm 15\%$, applications with dotted lines are generally not recommended.



12V graph (force/current)

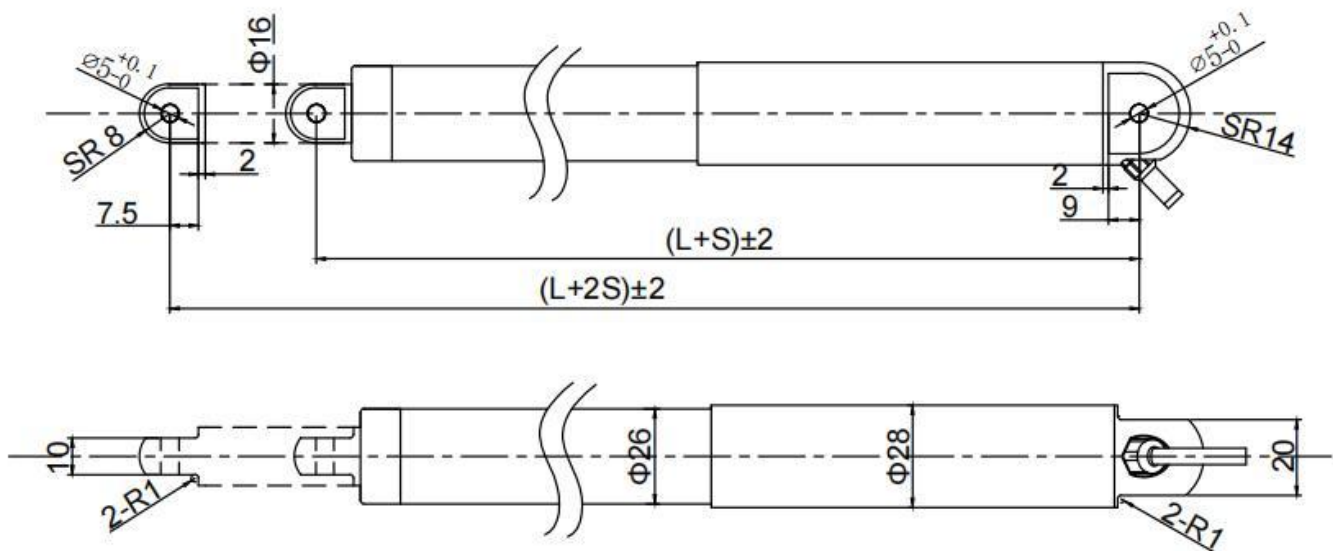


24V graph (force/current)



Graph (Force/Speed)

DDTG-28



DDTG-28 Standard Dimensional Drawing

Standard means without any additional function(Over current protection,hall sensor)
The dimensional tolerance not shown in the drawing can refer to ISO2768-mk

APPLICATIONS AND BENEFITS

- DDTG-28 linear actuator is widely used in RV,yacht,medical equipment,electric Windows and intelligent robots.
- DDTG-28 linear actuator has a built-in travel limit switch to effectively control the actuator movement.
- DDTG-28 linear actuator has small size and lightweight design,and is a reliable and efficient electric actuator with stable design and synchronous function of Hall element and control.

MINIMUM INSTALLATION DISTANCE :

Stroke≤300mm

Stroke(mm) Function	L+S	50	100	150	200	300
Limit Switch	185+S	235	285	335	385	485
Limit Switch + Over Current Protection	205+S	255	305	355	405	505
Limit Switch + Hall Sensor	205+S	255	305	355	405	505

Note: Overload protection and Hall cannot be used at the same time.
The default waterproof rating is IP67, which can be upgraded to IP67M/IP69K for underwater sports.

Stroke > 300mm

Stroke(mm)	L+S	350	400
Function			
Limit Switch	210+S	560	610
Limit Switch + Over Current Protection	230+S	580	630
Limit Switch + Hall Sensor	230+S	580	630

Note: Overload protection and Hall cannot be used at the same time.
The default waterproof rating is IP67, which can be upgraded to IP67M/IP69K for underwater sports.

CUSTOMIZABLE OPTIONS:

- Stroke
- Wire length
- Installation connector size
- Installation dimensions
- Exterior color (Regularly black, other colors can be customized)

SPEED AND FORCE

Max Load(N)	100	250	500
self-locking Force(N)	200	400	550
NO-load speed(mm/s)	14	11	5
Load speed(mm/s)	11	7.5	4
Conventional motor speed ratio	12000:42.8	12000:64	14000:150

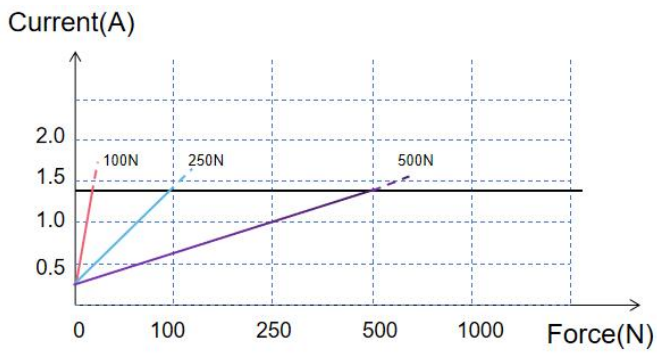
Note: The motor speed ratio for low noise requirements is different from the conventional model.

STANDARD SPECIFICATIONS

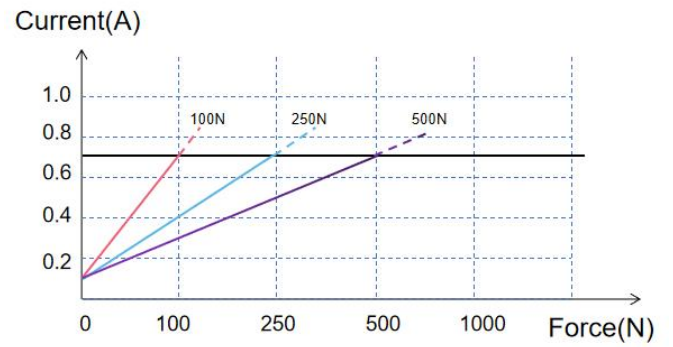
Voltage(V)	12V 24V	Material of outer tube	6063 Aluminium/ Stainless steel
No-load current(A)	≤0.3 ≤0.25	Material of lead screw	#45steel
Load current(A)	≤1.5 ≤0.75	Material of piston rod	316 stainless steel
Power(W)	18	Material of the nut	plastic/Copper
Protection class	IP67/IP69K	Colour	Black
Operating temperature	-20~60℃	Wire length(m)	1
Stored temperature	-40~60℃	Certification	CE, IFTA16949
Noise on load(dB)	60dB	Wire connection	No connector/2 core/6 core
Backlash (mm)	0.5~1	End mounting	o type
Working duty(s2)	Work for 2 minutes, stop for 18 minutes	Life time(cycles)	≥10k

CURVE

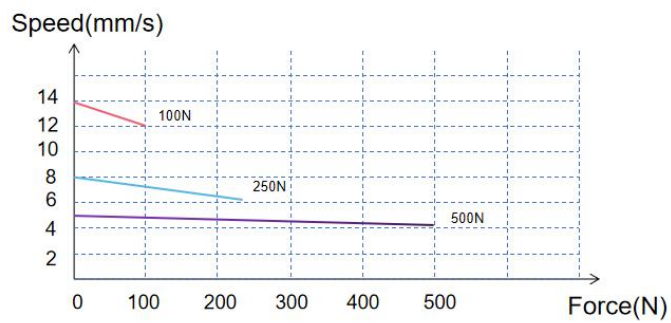
Speed or current accuracy $\pm 15\%$, applications with dotted lines are generally not recommended.



12V graph (force/current)

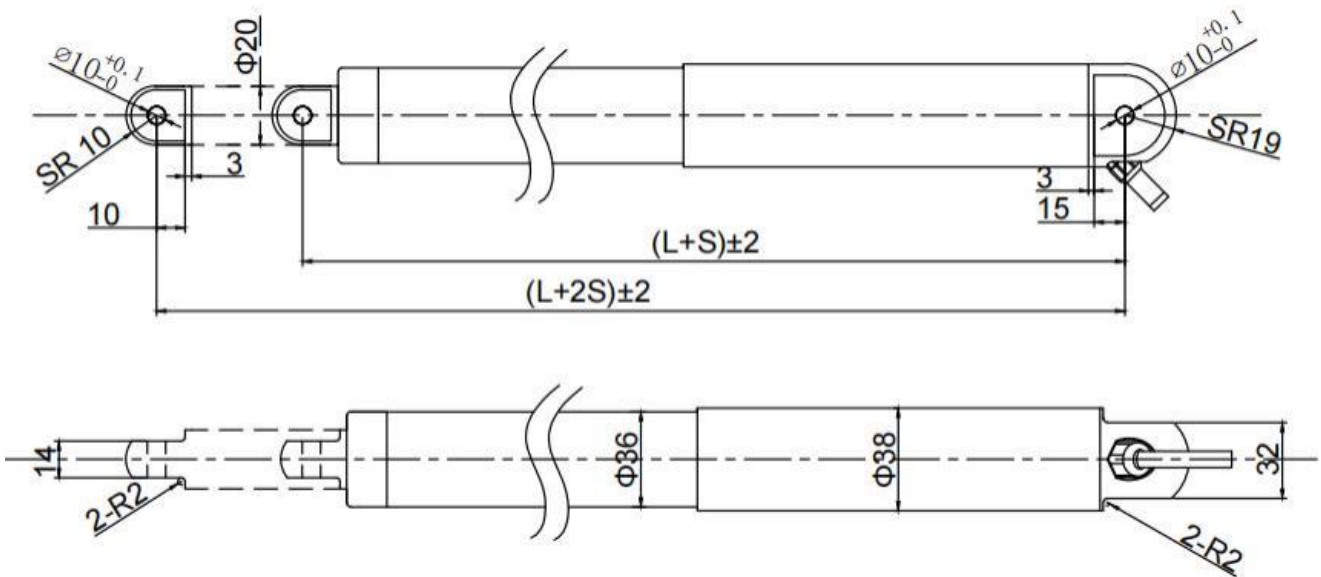


24V graph (force/current)



Graph (Force/Speed)

DDTG-38



DDTG-38 Standard Dimensional Drawing

Standard means without any additional function(Over current protection,hall sensor)
The dimensional tolerance not shown in the drawing can refer to IS02768-mk

APPLICATIONS AND BENEFITS

- DDTG-38 linear actuator is widely used in RV,yacht,medical equipment,agricultural equipment,electric Windows and intelligent robots.
- DDTG-38 linear actuator has a built-in travel limit switch to effectively control the rod movement.
- DDTG-38 linear actuator has small size and lightweight design,and is a reliable and efficient electric rod with stable design and synchronous function of Hall element and control box.

MINIMUM INSTALLATION DISTANCE :

Strokes \leq 400mm

Stroke(mm)	L+S	50	100	200	300	400
Function						
Limit Switch	235+S	285	335	435	535	635
Limit switch + Over Current Protection	250+S	300	350	450	550	650
Limit switch + Hall Sensor	250+S	300	350	450	500	650

Note: Overload protection and Hall cannot be used at the same time.
The default waterproof rating is IP67, which can be upgraded to IP67M/IP69K for underwater sports.

Stroke > 400mm

Stroke(mm)	L+S	450	500
Function			
Limit Switch	245+S	695	745
Limit switch + Over Current Protection	260+S	710	760
Limit switch + Hall Sensor	260+S	710	760

Note: Overload protection and Hall cannot be used at the same time.
The default waterproof rating is IP67, which can be upgraded to IP67M/IP69K for underwater sports.

CUSTOMIZABLE OPTIONS:

- Stroke
- Wire length
- Installation connector size
- Installation dimensions
- Exterior color(Regularly black, other colors can be customized)

SPEED AND FORCE

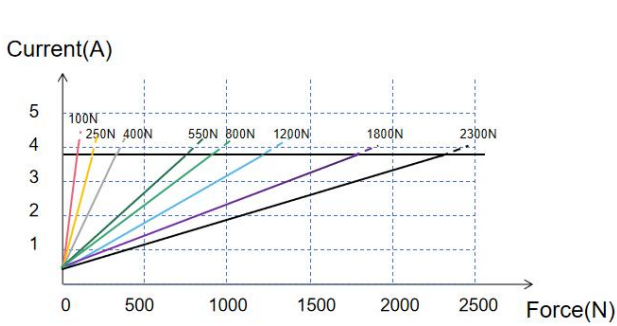
Max Load(N)	100	250	400	550	800	1200	1800	2300
self-locking Force(N)	150	600	600	1700	1700	1900	3700	3500
NO-load speed(mm/s)	35	24	16	12	12	8	6	3.5
Load speed(mm/s)	33	18	14.5	7	7	6	4	2.5

STANDARD SPECIFICATIONS

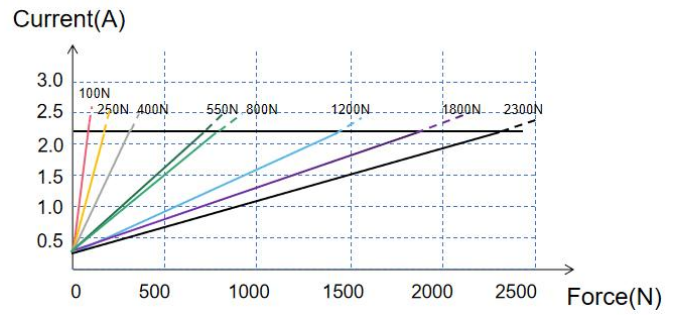
Voltage(V)	12V 24V	Material of outer tube	6063 Aluminium/ Stainless steel
No-load current(A)	≤0.7 ≤0.35	Material of lead screw	#45steel
Load current(A)	≤3.8 ≤ 2	Material of piston rod	316 stainless steel
Power(W)	50	Material of the nut	Engineering plastic /Copper
Protection class	IP67/IP69K	Colour	Black
Operating temperature	-20~60℃	Wire length(m)	1.5
Stored temperature	-40~60℃	Certification	CE, IFTA16949()
Noise on load(dB)	60dB	Wire connection	tinned bare wires 2 pins connector
Backlash (mm)	0.5~1	End mounting	o type
Working duty(s2)	Work for 2 minutes, stop for 18 minutes	Life time(cycles)	≥10k

CURVE

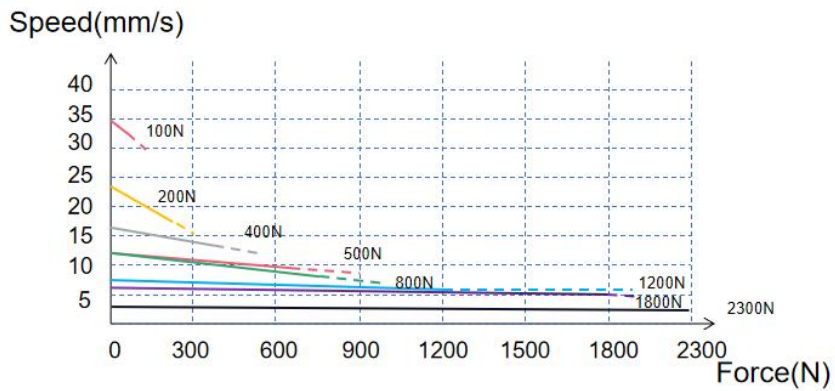
Speed or current accuracy $\pm 15\%$, applications with dotted lines are generally not recommended.



12V graph (force/current)

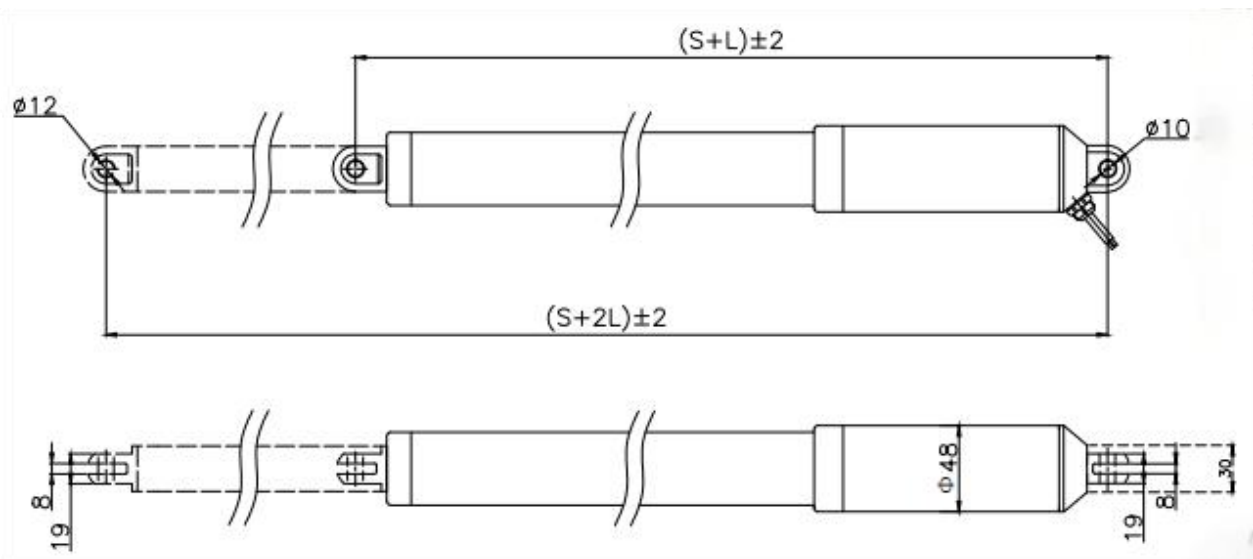


24V graph (force/current)



Graph (Force/speed)

DDTG-48



DDTG -48 Standard Dimensional Drawing

Standard means without any additional function(Over current protection,hall sensor)
The dimensional tolerance not shown in the drawing can refer to IS02768-mk

APPLICATIONS AND BENEFITS

- DDTG-48: Our DDTG-48 products are widely used in the European market, with stronger thrust and faster speed

MINIMUM INSTALLATION DISTANCE :

Stroke < 400mm

Stroke(mm) \ Function	L+S	100	200	300	400
Limit Switch	305+S	405	505	605	705
Limit Switch + Over Current Protection	325+S	425	525	625	725
Limit Switch + Hall Sensor	325+S	425	525	625	725

Note: Overload protection and Hall cannot be used at the same time.
The default waterproof rating is IP67, which can be upgraded to IP67M/IP69K for underwater sports.

Stroke≥400mm

Stroke(mm)	L+S	450	500
Function			
Limit Switch	325+S	775	825
Limit Switch + Over Current Protection	345+S	795	845
Limit Switch + Hall Sensor	345+S	795	845

Note: Overload protection and Hall cannot be used at the same time.
The default waterproof rating is IP67, which can be upgraded to IP67M/IP69K for underwater sports.

CUSTOMIZABLE OPTIONS:

- Stroke
- Wire length
- Installation connector size
- Installation dimensions
- Exterior color(Regularly black, other colors can be customized)

SPEED AND FORCE

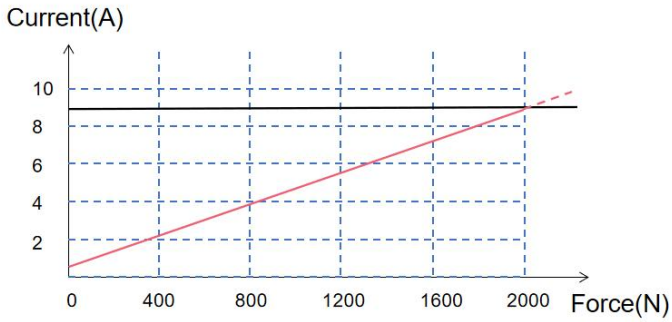
Max Load(N)	1000	2000
self-locking Force(N)	3000	3000
NO-load speed(mm/s)	14	13
Load speed(mm/s)	11	10

STANDARD SPECIFICATIONS

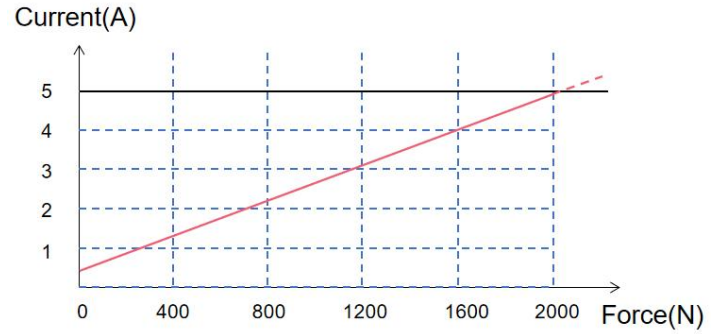
Voltage(V)	12V 24V	Material of outer tube	6063 Aluminium/ Stainless steel
No-load current(A)	≤1.5 ≤0.7	Material of lead screw	#45steel
Load current(A)	≤10 ≤5	Material of piston rod	316 stainless steel
Power(W)	120	Material of the nut	Engineering plastic /Copper
Protection class	IP67/IP69K	Colour	Black
Operating temperature	-20~60℃	Wire length(m)	1.5
Stored temperature	-40~60℃	Certification	CE, IFTA16949()
Noise on load(dB)	≤60dB	Wire connection	tinned bare wires 2 pins connector
Backlash (mm)	0.5~1	End mounting	o type
Working duty(s2)	Work for 2 minutes, stop for 18 minutes	Life time(cycles)	≥10k

CURVE

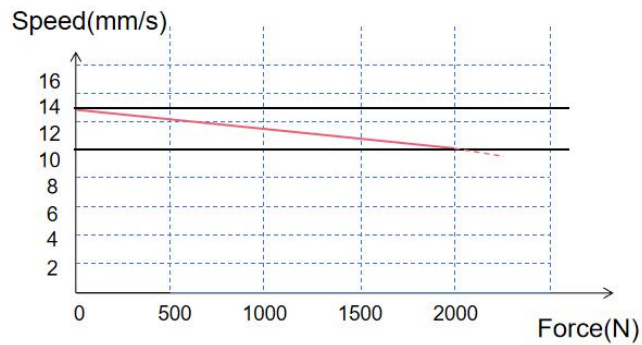
Speed or current accuracy $\pm 15\%$, applications with dotted lines are generally not recommended.



12V graph (force/current)

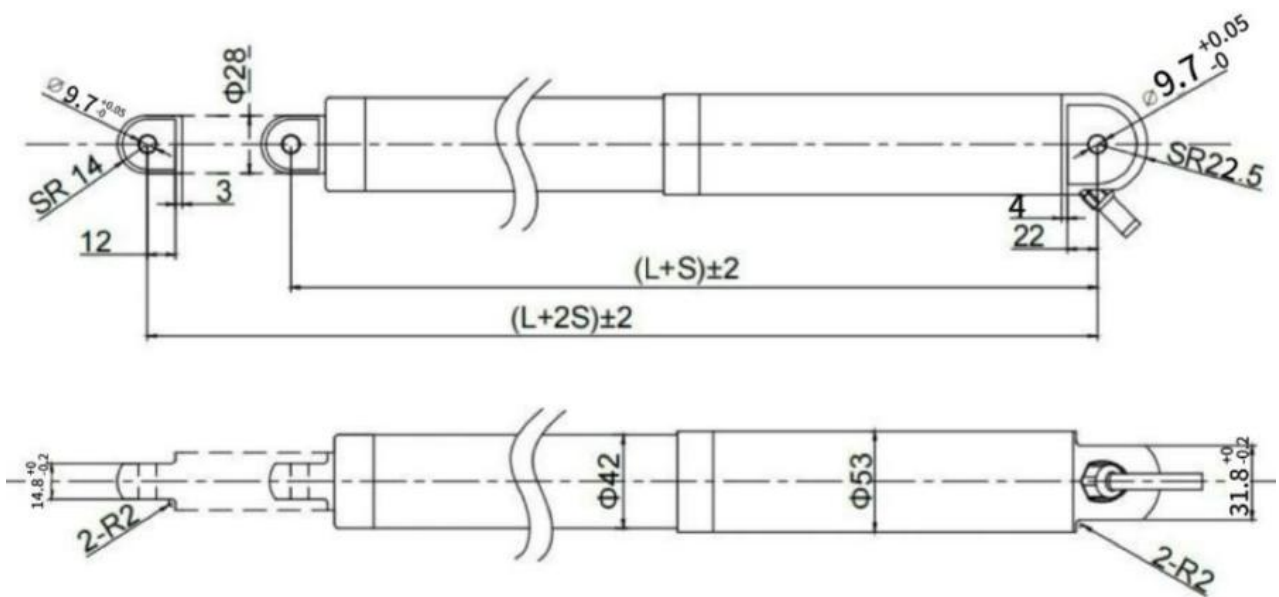


24V graph (force/current)



Graph (Force/Speed)

DDTG-53



DDTG-53 Standard Dimensional Drawing

Standard means without any additional function(Over current protection,hall sensor)
The dimensional tolerance not shown in the drawing can refer to IS02768-mk

APPLICATIONS AND BENEFITS

- DDTG-53 linear actuator is a linear actuator with extremely high speed and large thrust.
- DDTG-53 linear actuator has a high waterproof rating, reaching IP67, IP69K.
- DDTG-53 linear actuator used in yacht navigation marks, chimneys, RV brackets, agricultural machinery and other fields.

MINIMUM INSTALLATION DISTANCE :

Strokes \leq 400mm

Stroke(mm)	L+S	100	200	300	400
Function					
Limit Switch	305+S	405	505	605	705
Limit Switch + Over Current Protection	325+S	425	525	625	725
Limit Switch + Hall Sensor	325+S	425	525	625	725

Note:Optional IP67M/IP69K, minimum mounting distance increased by 20mm from the original size.

Overload protection and Hall cannot be used at the same time.

The default waterproof rating is IP67, which can be upgraded to IP67M/IP69K for underwater sports.

Stroke > 400mm

Stroke(mm)	L+S	450	500
Function			
Limit Switch	325+S	775	825
Limit Switch + Over Current Protection	345+S	795	845
Limit Switch + Hall Sensor	345+S	795	845

Note: Overload protection and Hall cannot be used at the same time.
The default waterproof rating is IP67, which can be upgraded to IP67M/IP69K for underwater sports.

CUSTOMIZABLE OPTIONS:

- Stroke
- Wire length
- Installation connector size
- Installation dimensions
- Exterior color(Regularly black, other colors can be customized)

SPEED AND FORCE

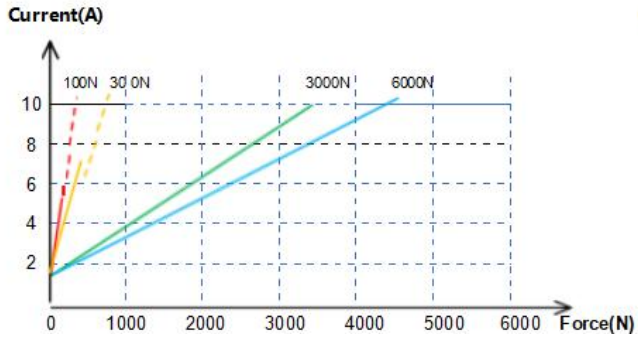
Max Load(N)	1200	1800	3000	4500	6000
self-locking Force(N)	2500	3500	6000	8000	8000
NO-load speed(mm/s)	15	13	9	6	4
Load speed(mm/s)	13	9.5	6	4.5	3

STANDARD SPECIFICATIONS

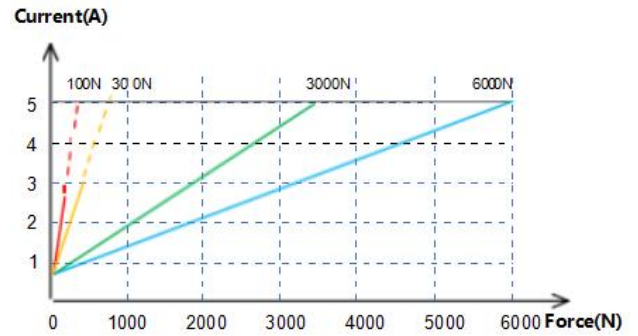
Voltage(V)	12V	24V	Material of outer tube	6063 Aluminium/ Stainless steel
No-load current(A)	≤2	≤1	Material of lead screw	#45steel
Load current(A)	≤10	≤5	Material of piston rod	316 stainless steel
Power(W)	120		Material of the nut	Engineering plastic /Copper
Protection class	IP67/IP69K		Colour	Black
Operating temperature	-20~60℃		Wire length(m)	1.5
Stored temperature	-40~60℃		Certification	CE, IFTA16949()
Noise on load(dB)	≤60dB		Wire connection	tinned bare wires 2 pins connector
Backlash (mm)	0.5~1		End mounting	o type
Working duty(s2)	Work for 2 minutes, stop for 18 minutes		Life time(cycles)	≥10k

CURVE

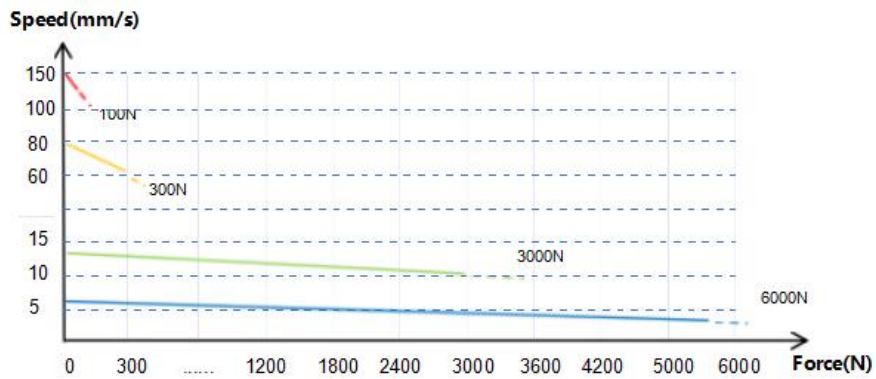
Speed or current accuracy $\pm 15\%$, applications with dotted lines are generally not recommended.



12V graph (force/current)

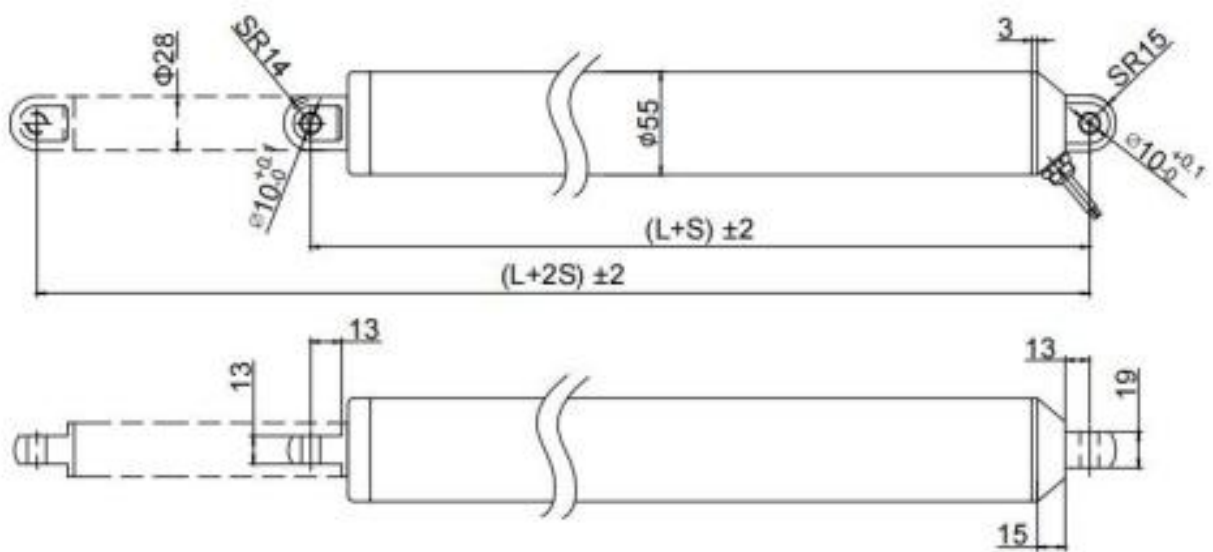


24V graph (force/current)



Graph (Force/speed)

DDTG-55



BLW-55 Standard Dimensional Drawing

Standard means without any additional function(Over current protection,hall sensor)
The dimensional tolerance not shown in the drawing can refer to IS02768-mk

APPLICATIONS AND BENEFITS

- DDTG-55 linear actuator is a linear actuator with extremely high speed and large thrust.
- DDTG-55 linear actuator has a high waterproof rating, reaching IP67, IP69K.
- DDTG-55 linear actuator used in yacht navigation marks, chimneys, RV brackets, agricultural machinery and other fields.

MINIMUM INSTALLATION DISTANCE :

Stroke≤400mm

Stroke(mm)	L+S	100	200	300	400
Function					
Limit Switch	325+S	425	525	625	725
Limit Switch + Over Current Protection	345+S	445	545	645	745
Limit Switch + Hall Sensor	345+S	445	545	645	745

Note: Over 400N, increase mounting dimensions by 20mm.

Overload protection and Hall cannot be used at the same time.

The default waterproof rating is IP67, which can be upgraded to IP67M/IP69K for underwater sports.

STANDARD SPECIFICATIONS

Stroke > 400mm

Stroke(mm)	L+S	450	500
Function			
Limit Switch	345+S	795	845
Limit Switch + Over Current Protection	365+S	815	865
Limit Switch + Hall Sensor	365+S	815	865

Note: Over 400N, increase mounting dimensions by 20mm.

Overload protection and Hall cannot be used at the same time.

The default waterproof rating is IP67, which can be upgraded to IP67M/IP69K for underwater sports.

CUSTOMIZABLE OPTIONS:

- Stroke
- Wire length
- Installation connector size
- Installation dimensions
- Exterior color (Regularly black, other colors can be customized)

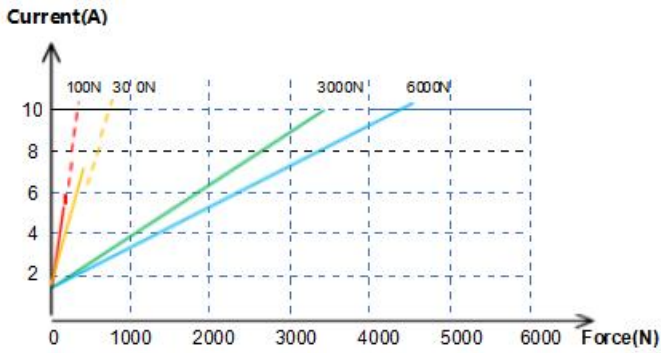
SPEED AND FORCE

Max Load(N)	100	300	600
self-locking Force(N)	500	600	1200
NO-load speed(mm/s)	140	80	58
Load speed(mm/s)	130	60	40

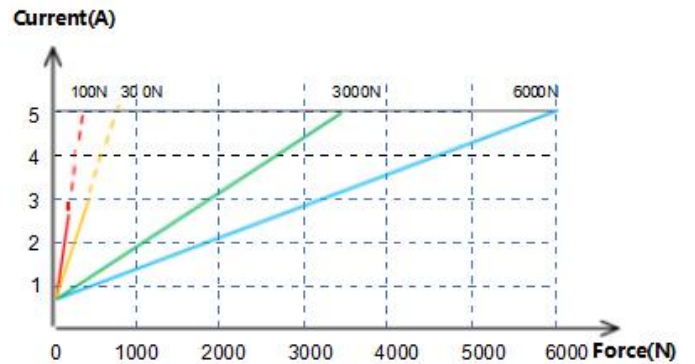
Voltage(V)	12V	24V	Material of outer tube	6063 Aluminium/ Stainless steel
No-load current(A)	≤2	≤1	Material of lead screw	#45steel
Load current(A)	≤10	≤5	Material of piston rod	316 stainless steel
Power(W)	120		Material of the nut	Engineering plastic /Copper
Protection class	IP67/IP69K		Colour	Black
Operating temperature	-20~60℃		Wire length(m)	1.5
Stored temperature	-40~60℃		Certification	CE, IFTA16949()
Noise on load(dB)	≤60dB		Wire connection	tinned bare wires 2 pins connector
Backlash (mm)	0.5~1		End mounting	o type
Working duty(s2)	Work for 2 minutes, stop for 18 minutes		Life time(cycles)	≥10k

CURVE

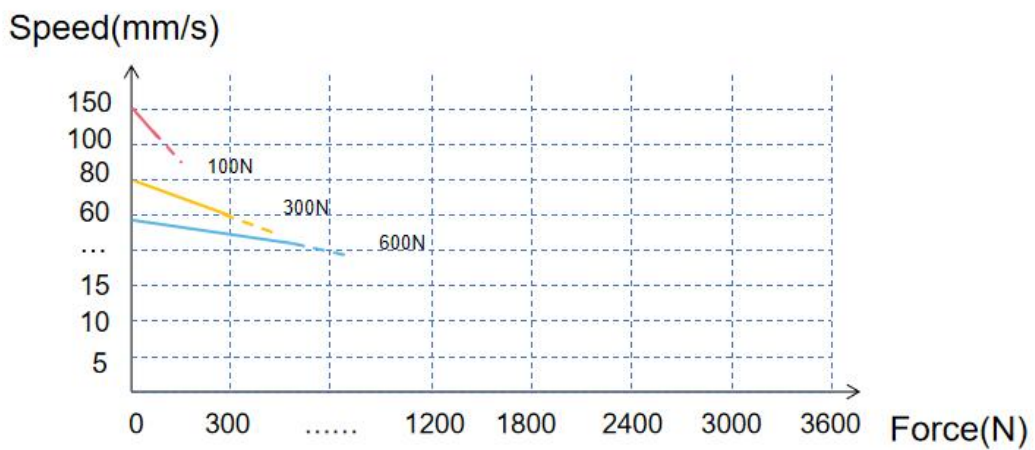
Speed or current accuracy $\pm 15\%$, applications with dotted lines are generally not recommended.



12V graph (force/current)

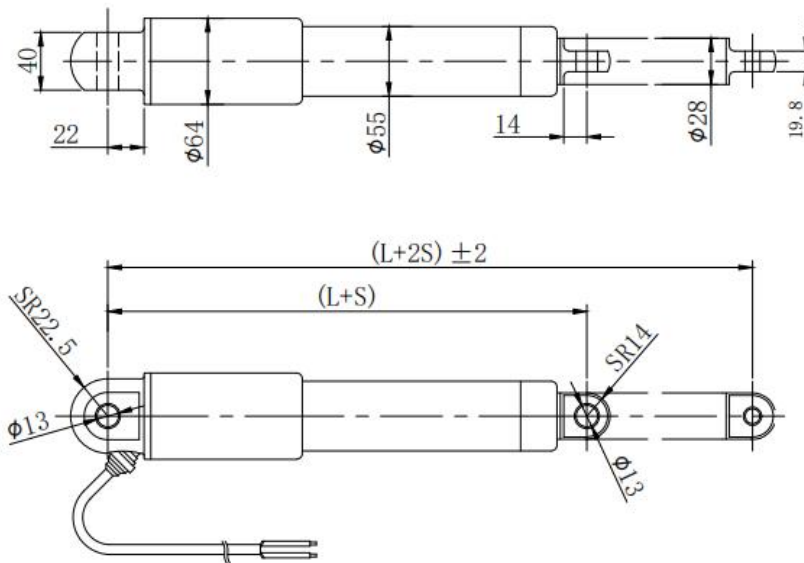


24V graph (force/current)



Graph (Force/speed)

DDTG-64



DDTG-64 Standard Dimensional Drawing

Standard means without any additional function(Over current protection,hall sensor)
The dimensional tolerance not shown in the drawing can refer to IS02768-mk

APPLICATIONS AND BENEFITS

- DDTG-64: Our DDTG-64 products are widely used in the North American market, with stronger thrust and faster speed

MINIMUM INSTALLATION DISTANCE :

Stroke \leq 400mm

Stroke(mm) Function	L+S	100	200	300	400
Limit Switch	385+S	485	585	685	785
Limit Switch + Over Current Protection	400+S	500	600	700	800
Limit Switch + Hall Sensor	400+S	500	600	700	800

Note: Overload protection and Hall cannot be used at the same time.
The default waterproof rating is IP67, which can be upgraded to IP67M/IP69K for underwater sports.

STANDARD SPECIFICATIONS

Stroke > 400mm

Stroke(mm)	L+S	450	500
Function			
Limit Switch	405+S	855	905
Limit Switch + Over Current Protection	420+S	870	920
Limit Switch + Hall Sensor	420+S	870	920

Note: Overload protection and Hall cannot be used at the same time.
The default waterproof rating is IP67, which can be upgraded to IP67M/IP69K for underwater sports.

CUSTOMIZABLE OPTIONS:

- Stroke
- Wire length
- Installation connector size
- Installation dimensions
- Exterior color(Regularly black, other colors can be customized)

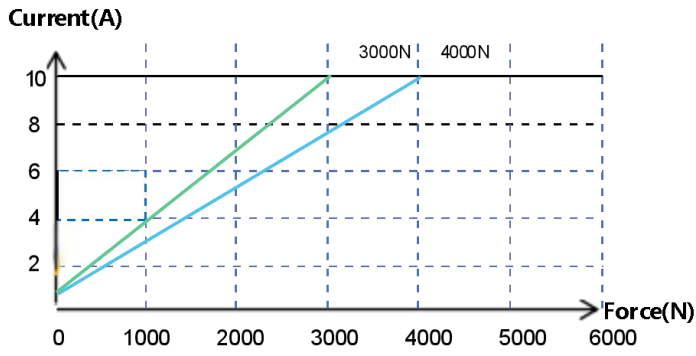
SPEED AND FORCE

Max Load(N)	3000	4000
self-locking Force(N)	6000	8000
NO-load speed(mm/s)	25	15
Load speed(mm/s)	20	10

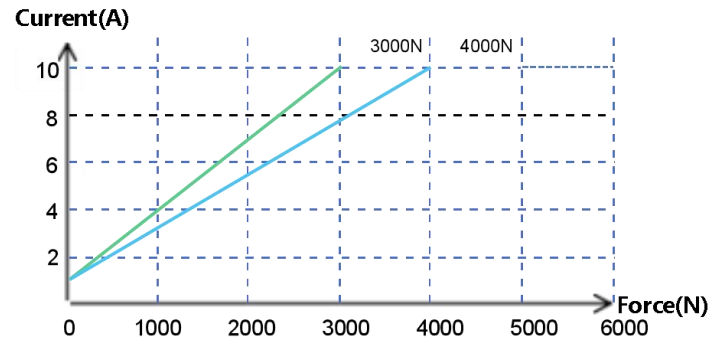
Voltage(V)	12V	24V	Material of outer tube	6063 Aluminium/ Stainless steel
No-load current(A)	≤3	≤3	Material of lead screw	#45steel
Load current(A)	≤10	≤10	Material of piston rod	316 stainless steel
Power(W)	120	240	Material of the nut	Engineering plastic /Copper
Protection class	IP67/IP69K		Colour	Black
Operating temperature	-20~60℃		Wire length(m)	1.5
Stored temperature	-40~60℃		Certification	CE, IFTA16949()
Noise on load(dB)	≤60dB		Wire connection	tinned bare wires 2 pins connector
Backlash (mm)	0.5~1		End mounting	o type
Working duty(s2)	Work for 2 minutes, stop for 18 minutes		Life time(cycles)	≥10k

CURVE

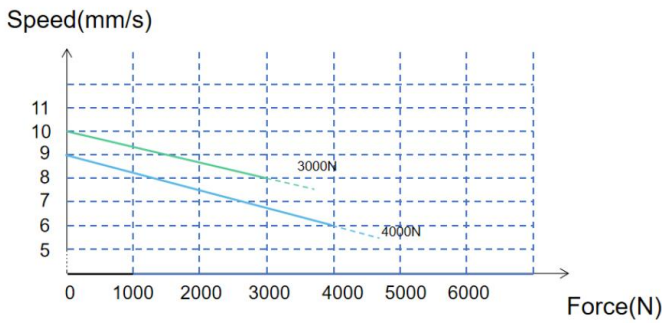
Speed or current accuracy $\pm 15\%$, applications with dotted lines are generally not recommended.



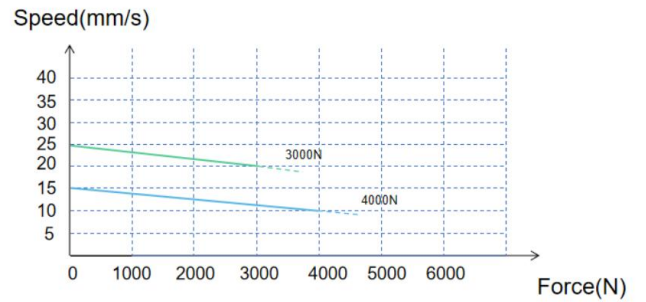
Voltage 12V graph (force/current)



Voltage 24V graph (force/current)



Voltage 12V graph (force/speed)



Voltage 24V graph (force/speed)