

LINEAR ACTUATOR RD-398H2



Product Specifications

Linear Actuator RD-398H2

Product characteristics

- RD-398H2 is a Linear actuator with quick release function,
The following models are available:
398H2 G 6 4D5 24 888/888 B AL 01 E 02 0 05 1D5
- It is characterized by small size, high accuracy and complete synchronization,
good self-locking performance, sanitary, direct motor drive.
High protection grade IP54 and low noise;
Applicable to household electric beds, medical electric
beds, beauty beds, dental chairs, or related
automated industrial machinery.



Features and options

- Maximum thrust: 3000N 4000N 6000N
- Maximum tension: 2000N 3000N 5000N
- Color: White / Black
- Protection grade: IP54
- Stroke length: 100 / 150 / 200 / 250 / 300 / 350 / 400mm. Special stroke can be customized
- Installation dimension: minimum installation distance (L) $\geq 155 + \text{stroke (s)} + \text{safety distance (c)}$

$L = S + 155$ (40 < S ≤ 200)	$L = S + 155 + 5$ (200 < S ≤ 250)
$L = S + 155 + 10$ (250 < S ≤ 300)	$L = S + 155 + 15$ (300 < S ≤ 350)
$L = S + 155 + 20$ (350 < S ≤ 400)	$L = S + 155 + 25$ (300 < S ≤ 450)
$L = S + 155 + 30$ (450 < S ≤ 500)	$L = S + 155 + 35$ (300 < S ≤ 550)
$L = S + 155 + 40$ (550 < S ≤ 600)	
- Noise level: $\leq 48\text{dB (a)}$ (ambient noise $\leq 40\text{dB}$)
- Quick release function: Standard
- Safety nut: optional
- Single Hall feedback: optional
- Built in electronic limit switch
- Weight: about 3 kg (different stroke/ installation distance, weight difference)
- Static bending moment: lateral load is not allowed

Use:

- Working duty ratio: 10%; Continuous use for 2 minutes, rest for 18 minutes
- Service temperature: 5-40 ℃
- Storage temperature: - 5-45 ℃
- Supporting controller: optional Runda conventional controller
- Relative humidity: 20% - 90% at 30 ℃, non condensing
- Atmospheric pressure: 700-1060hpa

Certificate

- EN60601-1/EN60601-1-2 & ROHS2.0

Technical Parameter

Voltage (V)	Lead (mm)	Maximum load (N)	self-locking force (N)	No load speed (mm/s)	Load speed (mm/s)	Load speed (A)
24	5	4000	4000	6.0	5.0	4.5
29	5	4000	4000	8.5	7.5	4.5
24	4	6000	6000	5.0	3.5	5.0
29	4	6000	6000	6.5	5.0	5.0
24	3	8000	8000	4.0	3.0	5.5
29	3	8000	8000	5.0	5.0	5.5

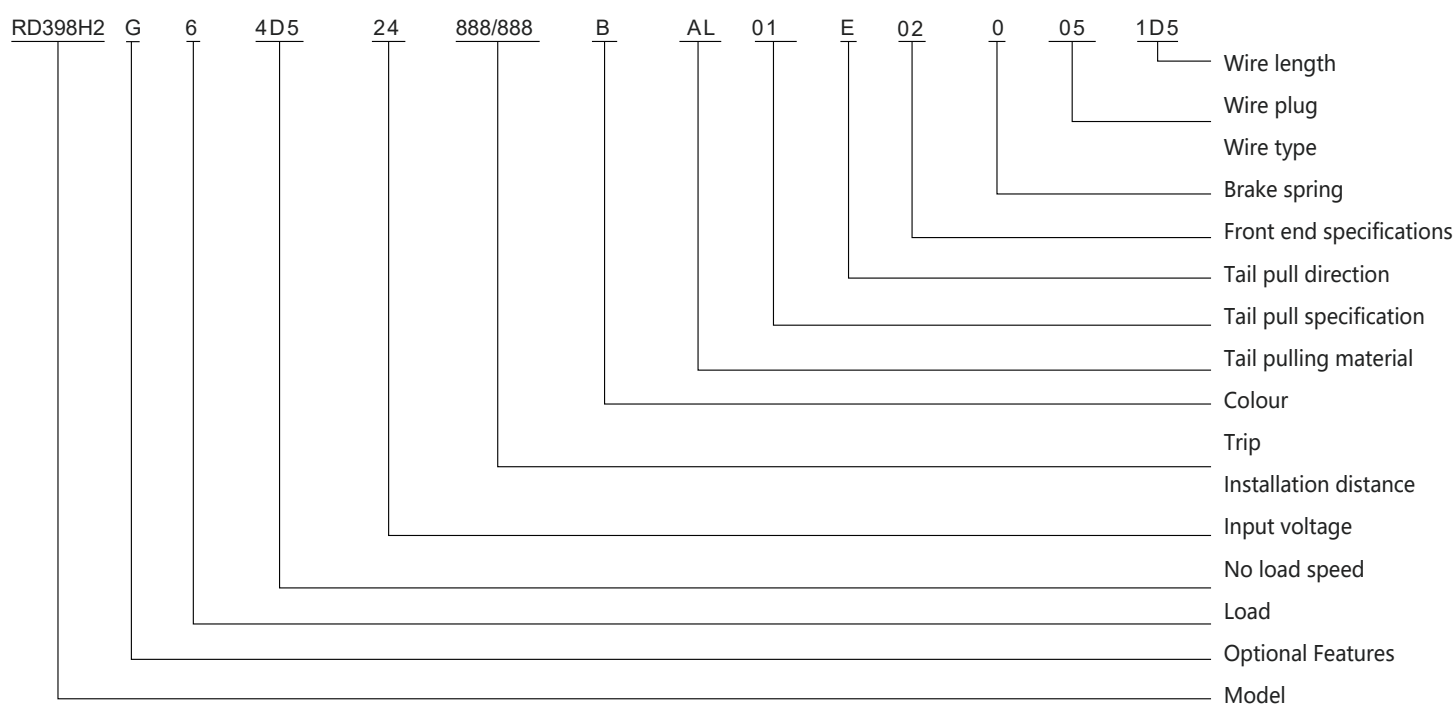
Note: the above data is the average value of test data at room temperature of 25 ℃

Naming rule example

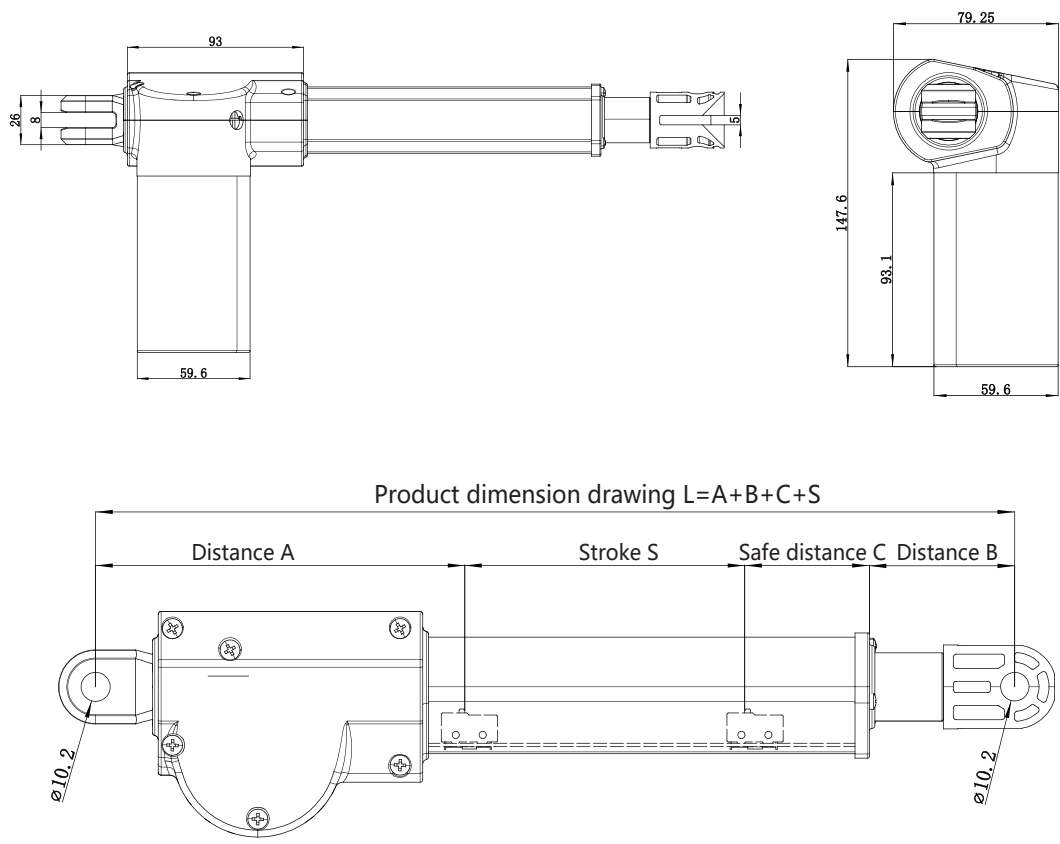
Model	RD398H2		
Optional function			O=Standard G=Reed pipe Y=Hall feedback P=Anti-trap
Load			4=4000N 6=6000N 8=8000N
No-load speed*D*			4-15mm/s (Example: 4D=4mm/s 、 4D5=4.5mm/s)
Input voltage			24=24VDC 29=29VDC
Stroke / Installation distance			Stroke=XXX / Installation distance=XXX
Color			A=White B=Black
Tail pull material			AL=aluminum alloy
Tail pull specification			01=Groove width8, groove depth29, hole diameter of cushion sleeve8.1 02=Groove width8, groove depth29, hole diameter of cushion sleeve10.1 03=Groove width8, groove depth29, hole diameter of cushion sleeve10.2
Tail pull direction			E=90° F=0°
Front end specification			01= front iron head slotted 02= front iron head not slotted
Brake spring			0=No brake function 1=Brake function
Wire plug Wire type			05=5-core 4-pin straight line insertion 06=5-core 4-pin linear bending plug 07=6-core 5-pin straight line insertion 08=6-core 5-pin linear bending plug
Wire length*D*			Example: 1D5=1.5m 、 2D0=2.0m

RD398H2

示例



产品尺寸图

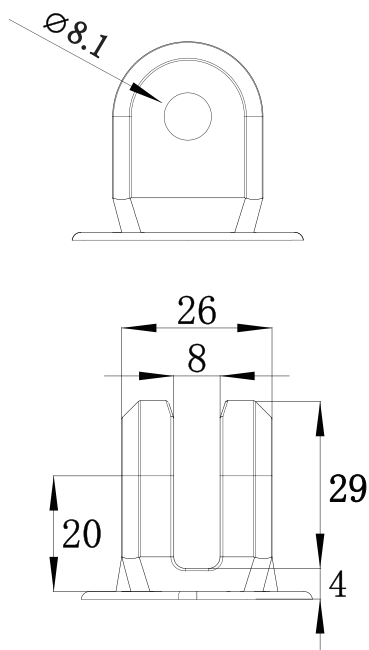


Min. Installation size $\geq 155+C+S$

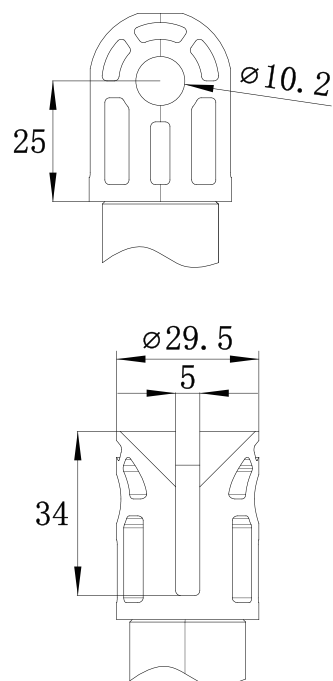
Stroke S (mm)	safe distance C (mm)
$40 < S \leq 150$	--
$150 < S \leq 200$	--
$200 < S \leq 250$	5
$250 < S \leq 300$	10
$300 < S \leq 350$	15
$350 < S \leq 400$	20
$400 < S \leq 450$	25
$450 < S \leq 500$	30
$500 < S \leq 550$	35
$550 < S \leq 600$	40

Pulling head dimension drawing(01)

Tail Pull:

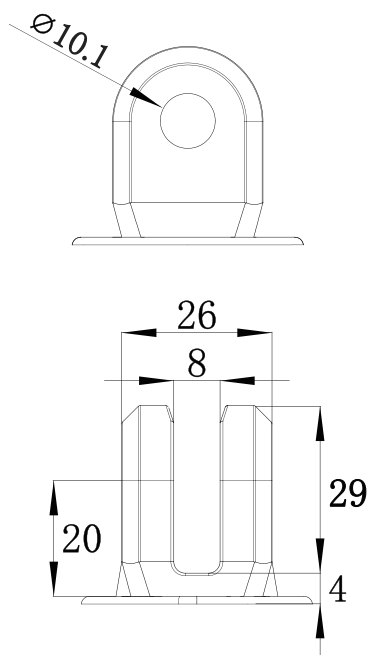


Front Pull:

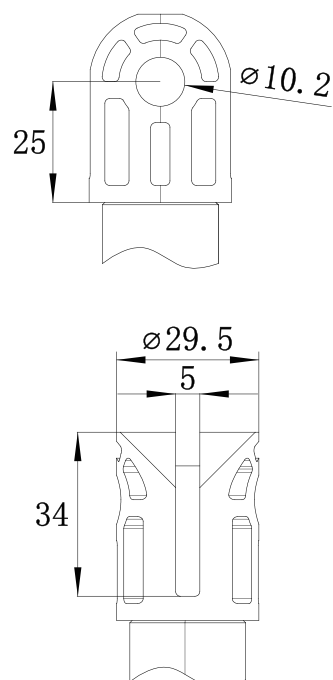


Pulling head dimension drawing(02)

Tail Pull:

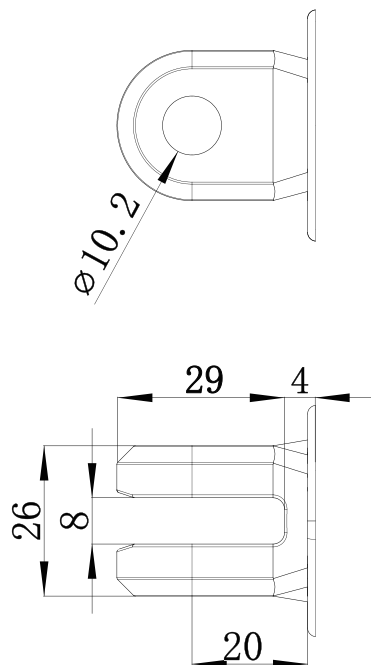


Front Pull:

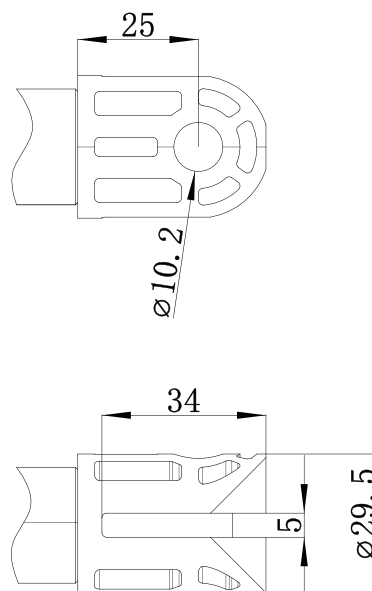


Pulling head dimension drawing(02)

Tail Pull:

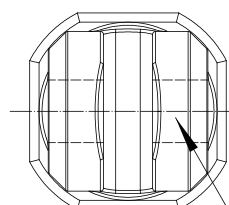
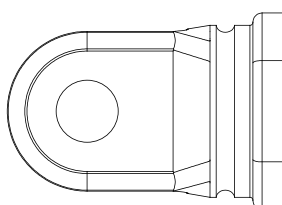


Front Pull:



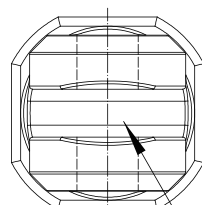
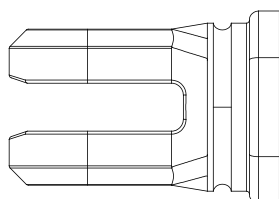
Tail pull direction

$F=0^\circ$



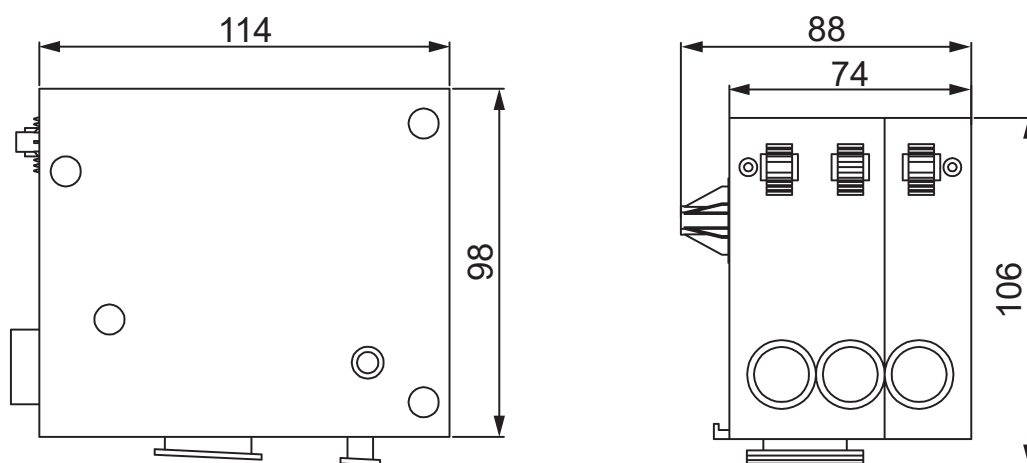
The center line of the throughhole is parallel to the ground

$E=90^\circ$

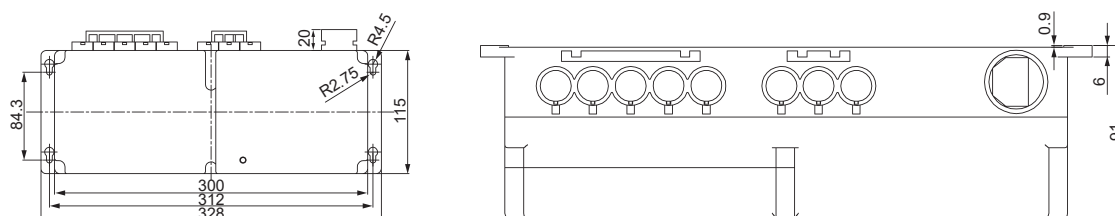


The center line of the through hole is perpendicular to the ground

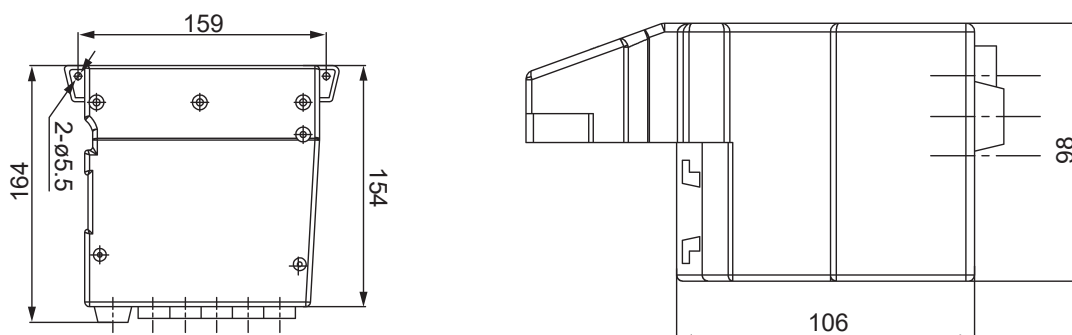
Outline drawing of corresponding controller of RD-A398



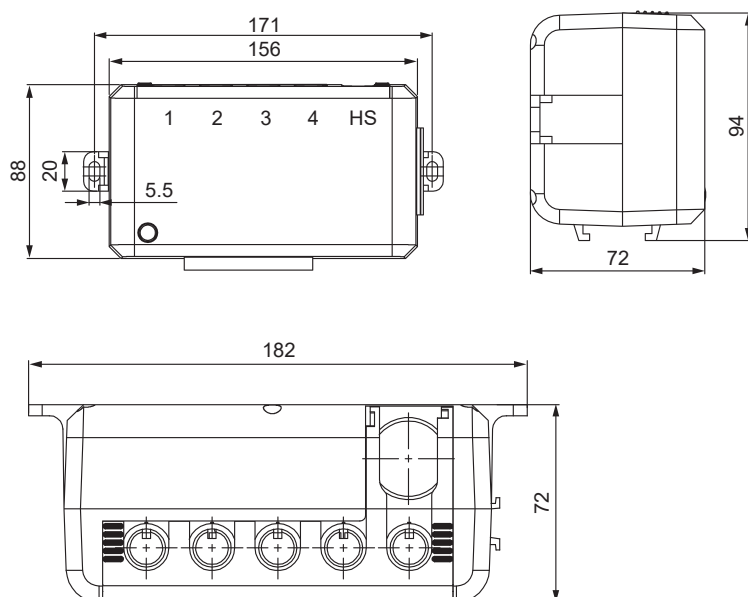
Outline drawing of corresponding controller of RD-B398



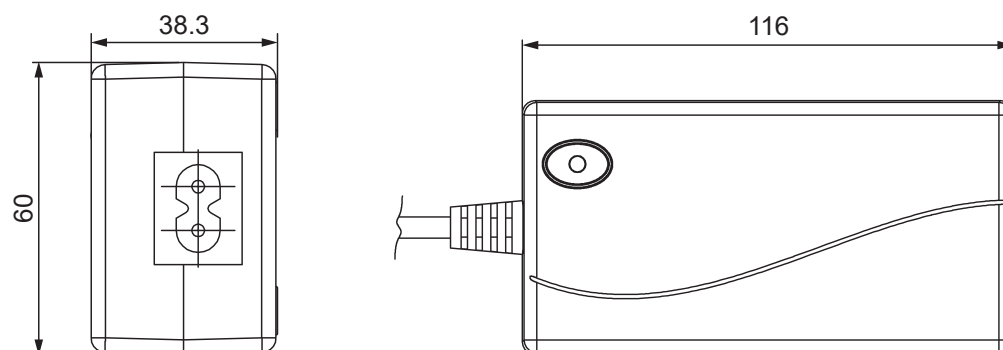
Outline drawing of corresponding controller of RD-D398



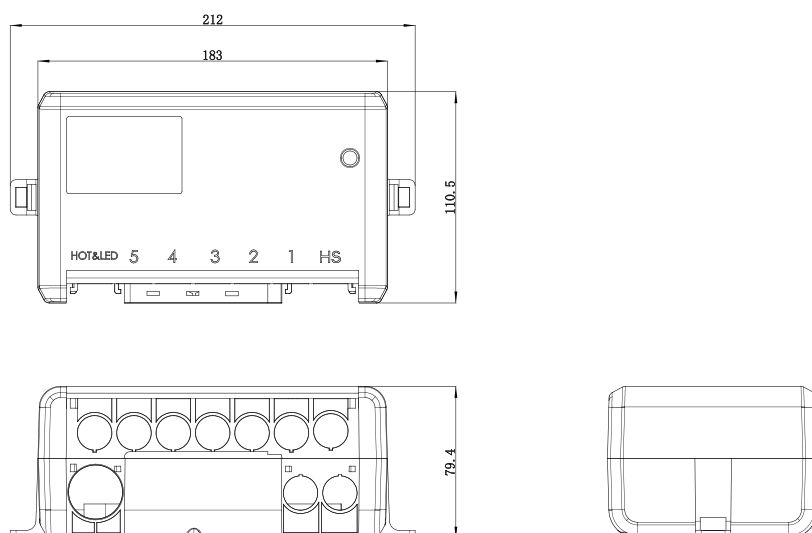
Outline drawing of corresponding controller of RD-E398



Outline drawing of corresponding controller of RD-F398



Outline drawing of corresponding controller of RD-H398

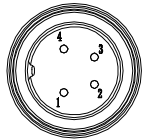
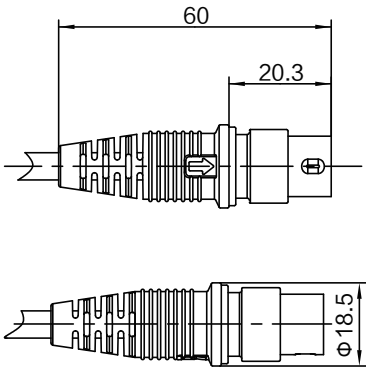


Motor line

Motor line: 4-core motor straight plug 5-core motor straight plug

1.4-core motor straight plug

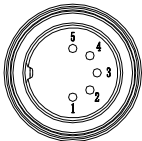
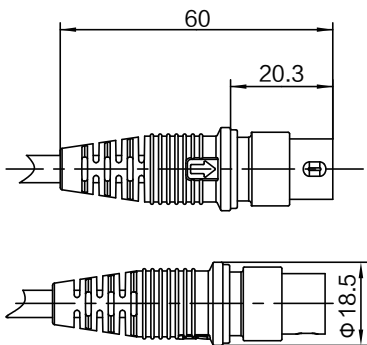
Matching controller: RD-H398



4-core motor straight plug		
PINS	Color	Function
1	Yellow	Upper limit
2	Brown	Motor positive stage
3	Blue	Motor negative stage
4	White	Lower limit
Outer ring	NC	Ground (black)

2.5-core motor straight plug

Matching controller: RD-H398



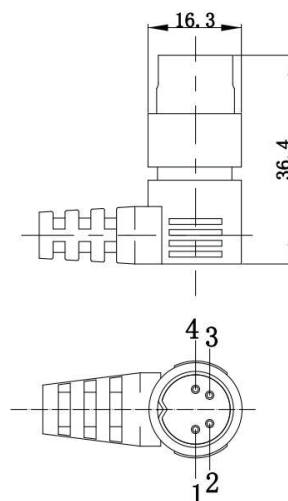
5-core motor straight plug		
PINS	Color	Function
1	Yellow	Upper limit
2	Brown	Motor positive stage
3	Dark Brown	Intermediate limit
4	Blue	Motor negative stage
5	White	Lower limit
6	Outer ring	Ground (black)

3.4-core motor bent plug

Matching controller: RD-H398



4-core motor straight plug		
PINS	Color	Function
1	Yellow	Upper limit
2	Brown	Motor positive stage
3	Blue	Motor negative stage
4	White	Lower limit
Outer ring	NC	Ground (black)

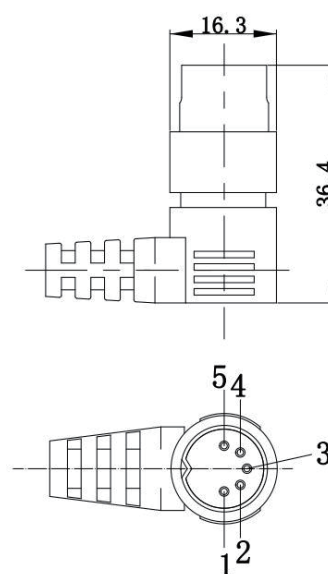


4.5-core motor bent plug

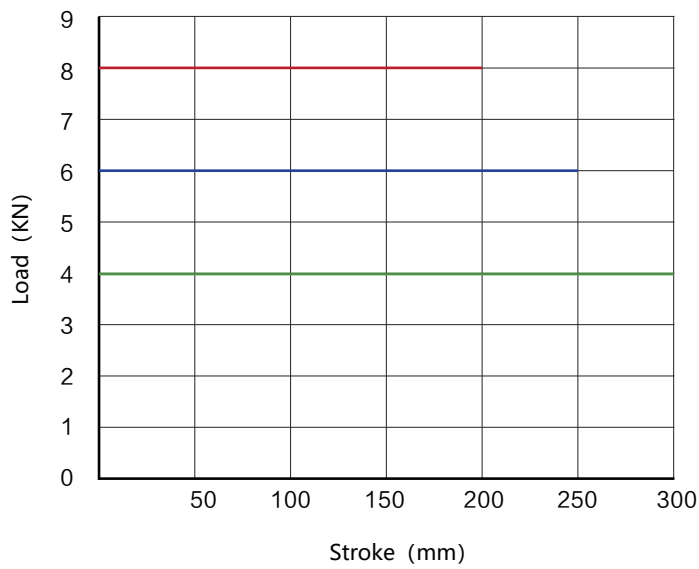
Matching controller: RD-H398



5-core motor straight plug		
PINS	Color	Function
1	Yellow	Upper limit
2	Brown	Motor positive stage
3	Dark Brown	Intermediate limit
4	Blue	Motor negative stage
5	White	Lower limit
6	Outer ring	Ground (black)



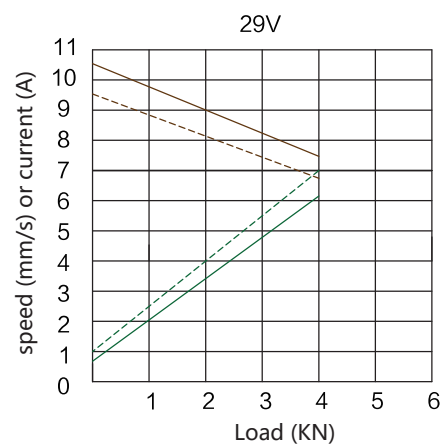
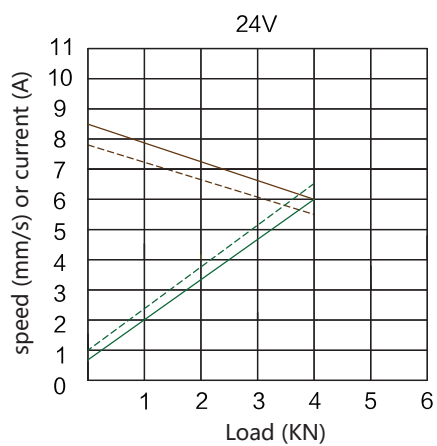
Relationship between stroke and load



Characteristic curve

RD-398H2 4000N current, speed and load relationship diagram

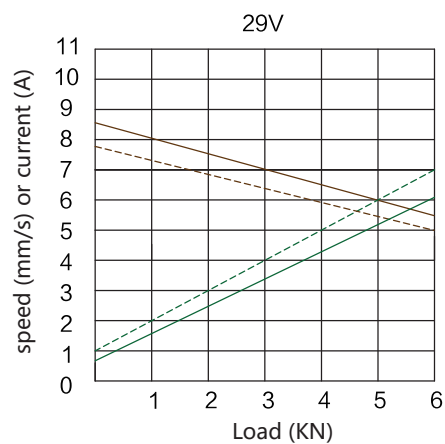
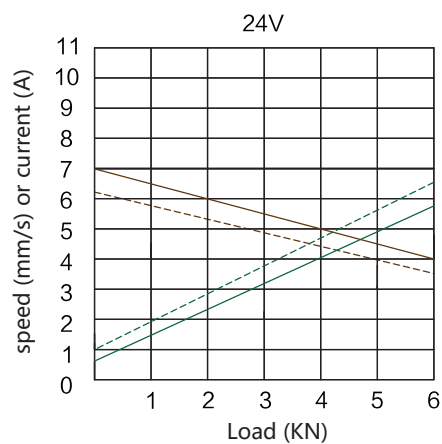
Typical speed — Minimum speed - - - Typical current — Maximum current - - -



Characteristic curve

RD-398H2 6000N current, speed and load relationship diagram

Typical speed ——— Minimum speed - - - - - Typical current ——— Maximum current - - - - -



Characteristic curve

RD-398H2 8000N current, speed and load relationship diagram

Typical speed ——— Minimum speed - - - - - Typical current ——— Maximum current - - - - -

