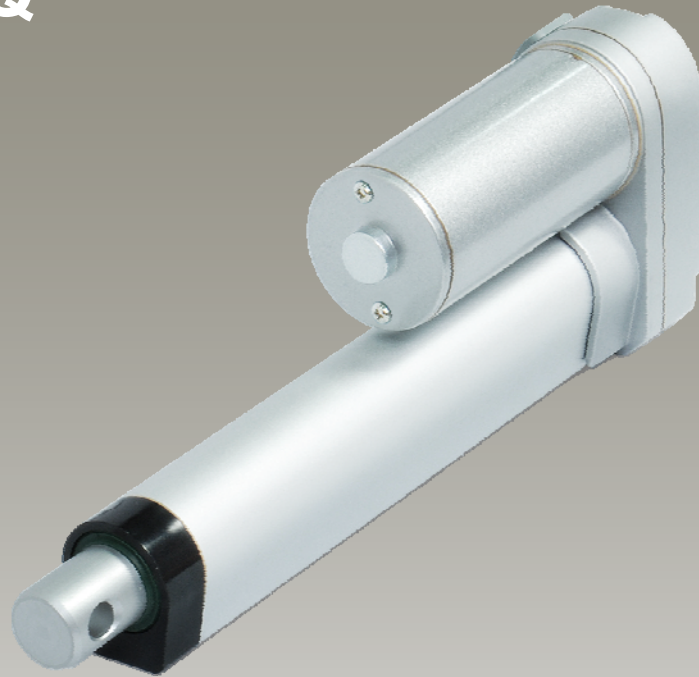


VMD3/3Q

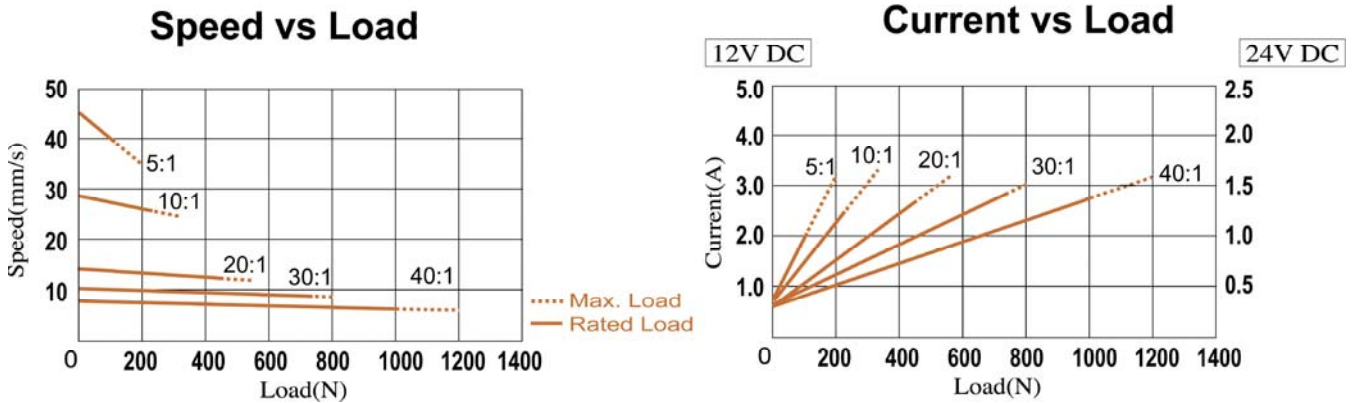


Features

- ◆ VMD3 features its compact design, which is suitable for various applications that require limited installation space, such as window opener and adjustable car driver seat. Quiet version, VMD3Q, is available for applications that require compact size and quiet operation.
- ◆ Main applications : Industrial, homecare, furniture
- ◆ Input voltage : 24Vdc / 12Vdc
- ◆ Max. dynamic load : 1200N (push/pull)
- ◆ Max. static load : 2500N (push/pull)
- ◆ Max. current : 3.5 A @ 12Vdc
- ◆ Max. speed : 44 mm/sec @ no load
- ◆ Stroke : 50~300 mm (other strokes are available)
- ◆ Factory preset limit switches (not adjustable)
- ◆ Duty cycle : 25% or 1 min continuous operation in 4 min.
- ◆ IP protection level : IP54 Standard (IP65 Optional)
- ◆ Ambient operating temperature: -25°C ~ +65°C
- ◆ Color : Aluminum grey
- ◆ Certified : EN 55014-1 & EN55014-2
- ◆ Noise level : ≤ 70 dB (Normal version) / ≤ 55 dB (Quiet version)

Performance Data

◆ VMD3

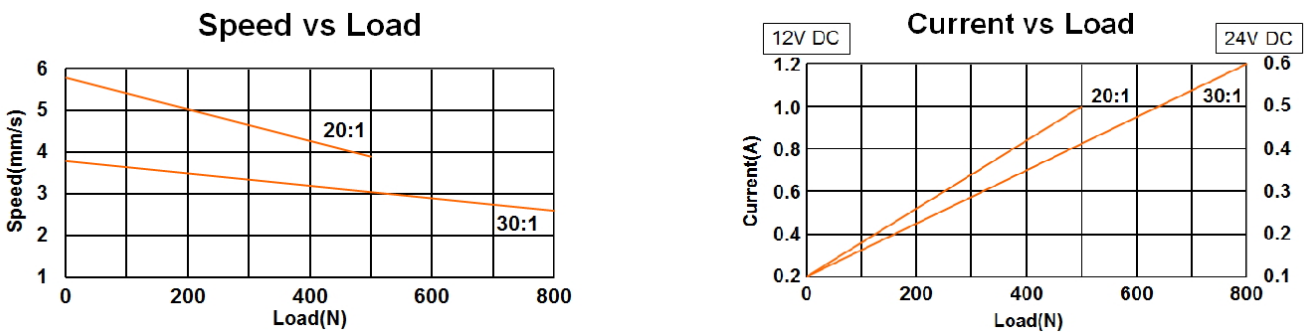


Model No.	Push/Pull Max. (N)	Speed (mm/s)		Current (A)			
		No load	Full load	No load		Full load	
				12V	24V	12V	24V
VMD3-XX-05-(E6/K3)-XXX	150	43.9	40.0	0.8	0.4	2.0	1.0
VMD3-XX-10-(E6/K3)-XXX	250	27.6	26.0	0.8	0.4	2.4	1.2
VMD3-XX-20-(E6/K3)-XXX	500	14.6	13.5	0.8	0.4	2.6	1.3
VMD3-XX-30-(E6/K3)-XXX	800	9.5	9.1	0.8	0.4	2.9	1.5
VMD3-XX-40-(E6/K3)-XXX	1000	7.0	6.5	0.8	0.4	2.8	1.4

E6: 3000 RPM motor with 6mm double start acme screw

K3: 6000 RPM motor with 3mm single start acme screw

◆ VMD3Q


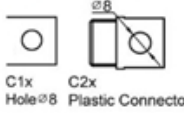
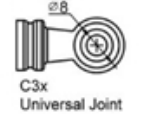


Model No.	Push/Pull Max. (N)	Speed (mm/s)		Current (A)			
		No load	Full load	No load		Full load	
				12V	24V	12V	24V
VMD3Q-XX-20-D3-XXX	500	5.8	3.9	0.2	0.1	1.0	0.5
VMD3Q-XX-30-D3-XXX	800	3.8	2.6	0.2	0.1	1.2	0.6

D3: 2400 RPM motor with 3mm single start acme screw

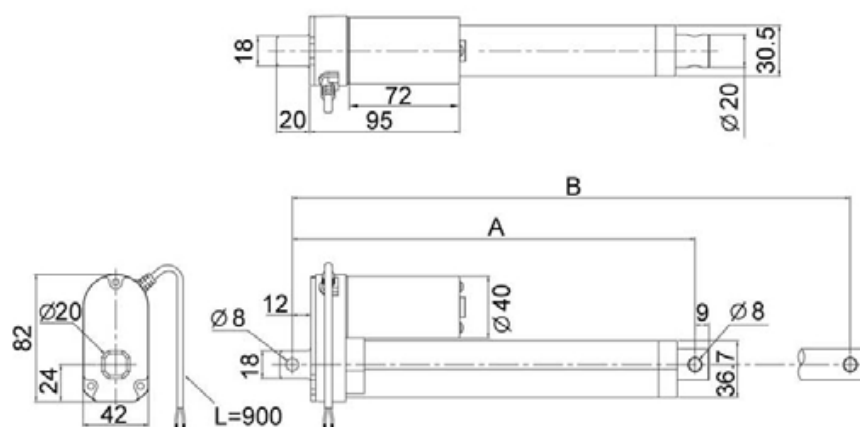
Dimensions

◆ Standard type



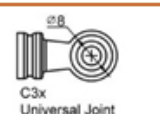
	Stroke	50	100	150	200	250	300
 C1x Hole \varnothing 8 C2x Plastic Connector	A	158	209	260	311	362	413
	B	208	309	410	511	612	713
 C3x Universal Joint	A	199	250	301	352	403	454
	B	249	350	451	552	653	754

Unit : mm

A:Retracted Length
B:Extended Length
Stroke=B-A

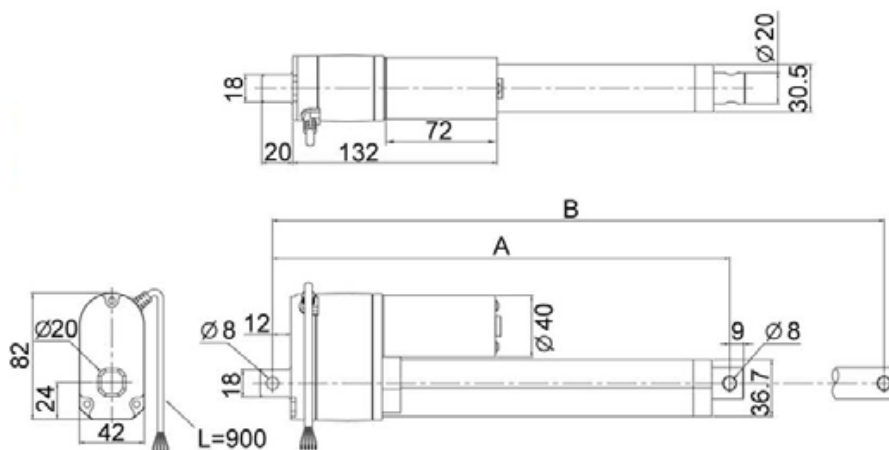


◆ POT type


	Stroke	50	100	150	200	250	300
 C1x Hole \varnothing 8 C2x Plastic Connector	A	195	246	297	348	399	450
	B	245	346	447	548	649	750
 C3x Universal Joint	A	236	287	338	389	440	491
	B	286	387	488	589	690	791

Unit : mm

A:Retracted Length
B:Extended Length
Stroke=B-A

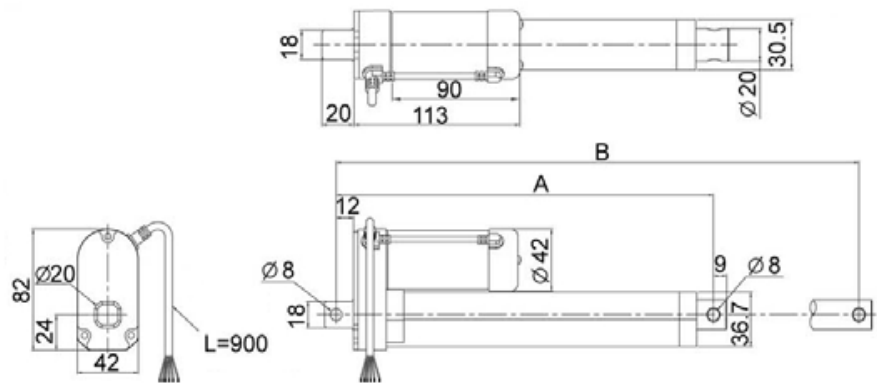


◆ Hall effect sensor type

	Stroke	50	100	150	200	250	300
C1x Hole $\varnothing B$	A	158	209	260	311	362	413
	B	208	309	410	511	612	713
C2x Plastic Connector	A	199	250	301	352	403	454
	B	249	350	451	552	653	754

Unit : mm

A: Retracted Length
B: Extended Length
Stroke = B - A



Front Connector

Pivot orientation of rear connector

1: Drilled hole

2: Plastic

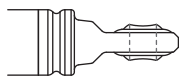
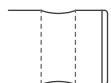
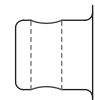
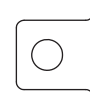
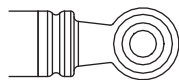
3: Spherical rod eye

4: Plastic

1: Drilled hole

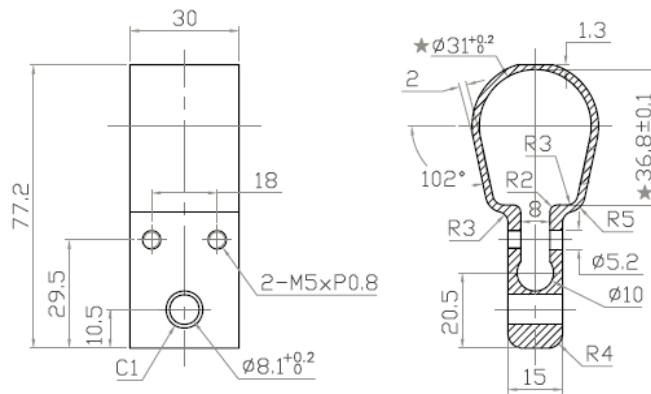
0°

90°

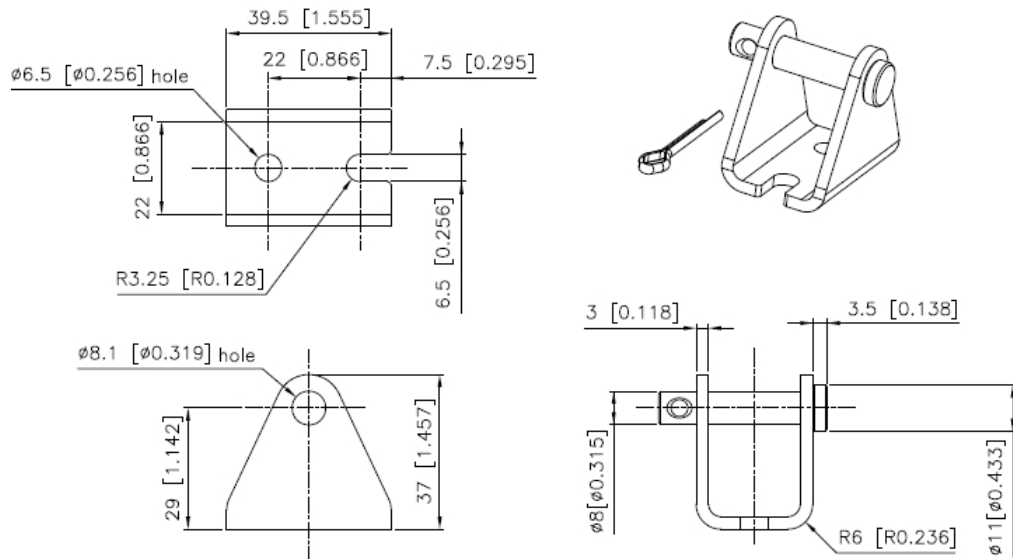


Front connector code	Diameter of pivot without bushing	Slot width	Slot depth
1	Ø6.4, Ø8, Ø10	N/A	N/A
2	Ø8	6	6.5
3	Ø8	N/A	N/A
4	Ø8, Ø10	N/A	N/A
Rear connector code			
1	Ø6.4, Ø8, Ø10	N/A	N/A

◆ Clamp



◆ Mounting bracket

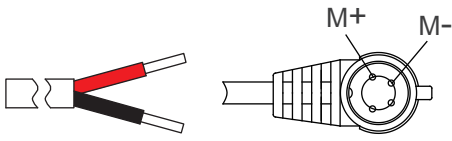


Compatibility

Product	Model	LD3 spec
Control box	T control, CS1, CS2, CBT2, CB3T, CB4M	- Without positioning sensor feedback - 4-Pin Moteck F-type DIN plug
	CB3T-SY, CB4M-S, CB4M-B	- With dual Hall sensors - 6-Pin Moteck F-type DIN plug

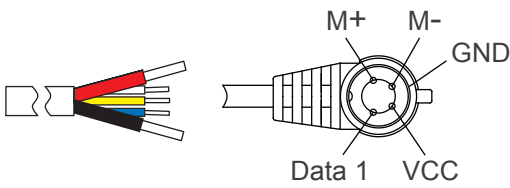
Wiring & Cable Plug

Standard



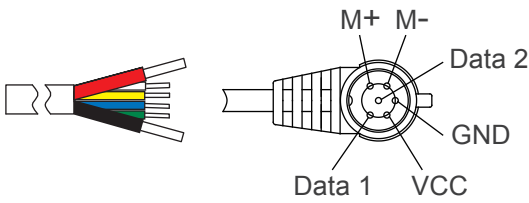
Power	
Red	Black
M+	M-

With Hall effect sensor



Power		Signal		
Red	Black	White	Yellow	Blue
M+	M-	GND	VCC	Data 1

With Dual Hall effect sensor

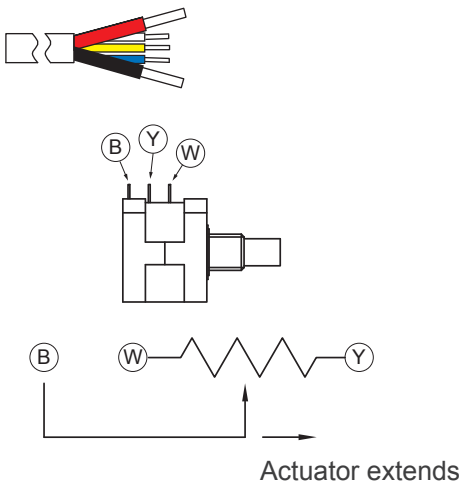


Power		Signal			
Red	Black	White	Yellow	Blue	Green
M+	M-	GND	VCC	Data 1	Data 2

Gear ratio	Resolution (pulses/mm)
5:1	2.3
10:1	3.6
20:1	6.9
30:1	10.6
40:1	14.3

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

Stroke (mm)	Resistance (tolerance: $\pm 0.3K\Omega$)
50	0.3 ~ 9.3K
100	0.3 ~ 9.7K
150	0.3 ~ 8.6K
200	0.3 ~ 9.6K
250	0.3 ~ 9.3K
300	0.3 ~ 9.3K

Note:

Connect (M+) to '+' & (M-) to '-' of DC power to extend actuator.

Ordering Key

LD3 - 24 - 10 - K3 - 100 - C 1 1 - HS2 - IP54 - 0 0

Type	Blank: Normal version Q: Quiet version
Input voltage	12: 12V DC 24: 24V DC
Gear ratio	05, 10, 40 (for normal version only) 20, 30 (Refer to Performance Data)
Motor and Spindle type	K3 D3 (for Quiet version only) (Refer to Performance Data)
Stroke	050: 50 mm 100: 100 mm 150: 150 mm 200: 200 mm 250: 250 mm 300: 300 mm
Front connector	1: Drilled hole 2: Plastic, slot type 3: Spherical rod eye 4: Plastic (Refer to page 4)
Rear connector	1: Drilled hole (Refer to page 4)
Positioning feedback	Blank: None HS1: Hall effect sensor HS2: Dual Hall effect sensor POT: Potentiometer
IP Protection level	54: IP54 (standard) 65: IP65
Clamp	Blank: None C: Clamp
Mounting bracket	Blank: None M: Mounting bracket

Terms of Use

The user is responsible for application suitability of Venture products. As ongoing improvement process continues, products listed on the Venture website are subject to change without prior notice. Venture reserves the right to terminate the sales or remove any product displayed on the website, or listed in its catalogues.