

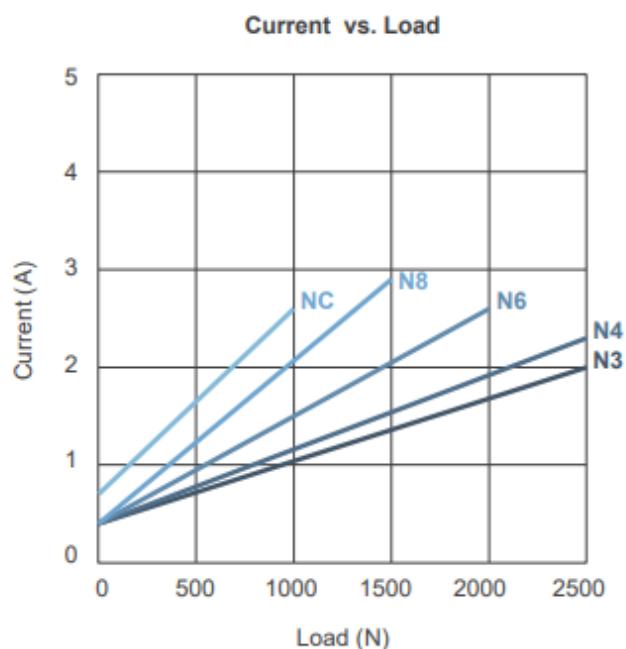
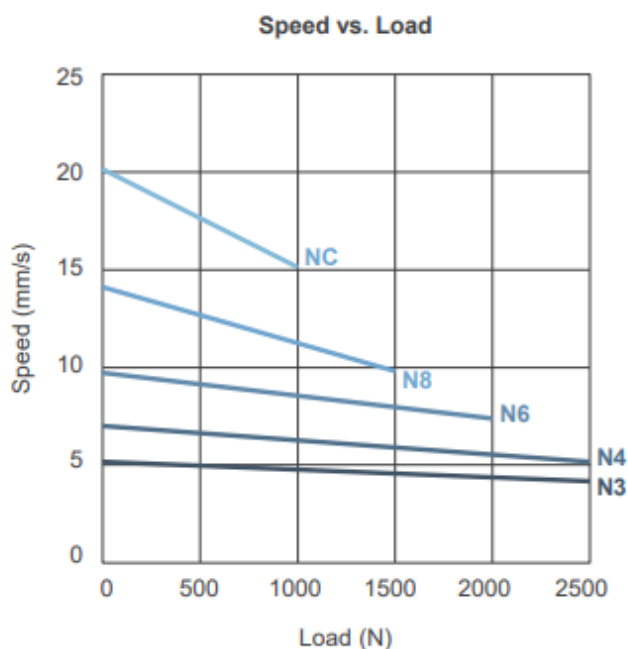


## TECHNICAL SPECIFICATIONS

Motor type	24V DC
Maximum strength	-Push : 2 500N -Pull : 2 500N
Speed	-At no load : 20.1mm/sec -At full load : 5.1mm/sec
Stroke	-100 ~ 400mm or tailor-made -Present limit switches
Compatibility	-TB ; BCS1 ; BCS2 ; BCT2 ; BC3T ; BC4M -(CB2P) ; (CB4P) ; BC6C ; BC7C -(CF12H) -BC3T-SY ; BC3T-SYD ; BC4M-S ; BC4M-B -BC4P-SY -BC5P-M -(CF12S) ; (CF15H)
Noise level	≤50dB
Protection level	IPX5
Colour	Aluminium grey
Duty cycle	10% (max 2 min. continuous operation in 20 min)
Ambient temperature	-20°C ~ +65°C
Standards certification	CE Marking, EMC Directive 93/42/EEC and 2014/30/EU
<b>Options :</b>	
Positioning signal feedback	2 Hall effect sensor

## PERFORMANCES

Model	Push/Pull max. (N)	*Typical speed (mm/s)		*Typical current @ 24VDC	
		No load	Full load	No load	Full load
V221-24N3-XXX.XXX-XXX00XX	2 500	5.2	4.1	0.4	2.0
V221-24N4-XXX.XXX-XXX00XX	2 500	7.0	5.1	0.4	2.3
V221-24N6-XXX.XXX-XXX00XX	2 000	9.7	7.4	0.4	2.6
V221-24N8-XXX.XXX-XXX00XX	1 500	14.1	9.8	0.4	2.9
V221-24NC-XXX.XXX-XXX00XX	1 000	20.1	15.1	0.7	2.6



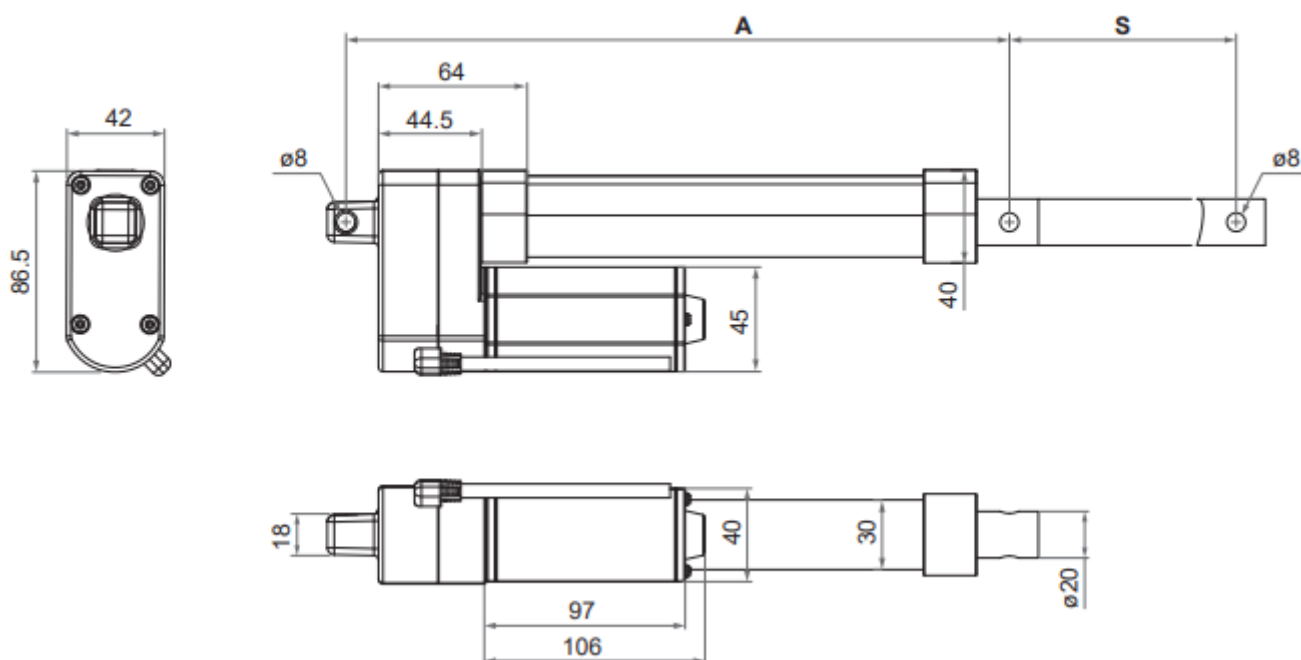
### Remarks:

- \* The typical speed or typical current means the average value neither upper limit nor lower limit. The performance curves are made with typical values.

## STANDARD DIMENSIONS

Standard (without positioning feedback)

Unit: mm



## Installation Dimension

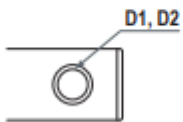
Front connector code	Retracted length (A)
2, 4	$A \geq S + 135 \text{ mm } (\pm 3\text{mm})$
3, 6	$A \geq S + 145 \text{ mm } (\pm 3\text{mm})$

Available stroke (S) range = 100 ~ 400 mm

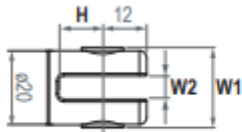
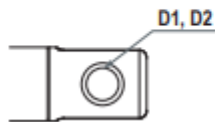
Extended length = S + A

### Front connector

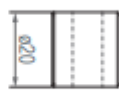
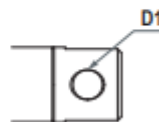
2: Drilled hole



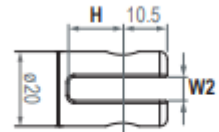
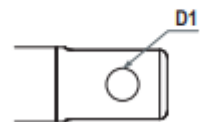
3: Metal slot



4: Plastic solid



6: Plastic slot

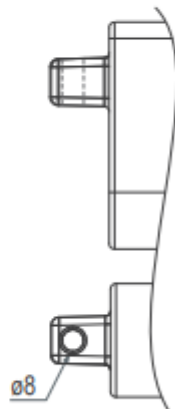
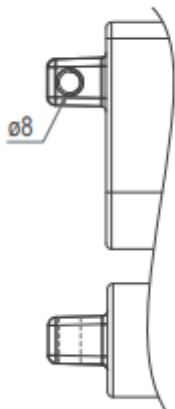


Front connector code	Diameter of pivot without bushing (D1)	Diameter of pivot with bushing (D2)	Width with bushing (W1)	Slot width (W2)	Slot depth (H)
2	ø8, ø10	ø8	22	N/A	N/A
3	ø8, ø10	ø8	22	6.4	13.5
4	ø8, ø10	N/A	N/A	N/A	N/A
6	ø8, ø10	N/A	N/A	6.4	15

### Pivot orientation of rear connector

0: Metal 0°

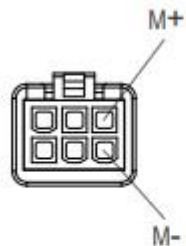
9: Metal 90°



## CABLE PLUG

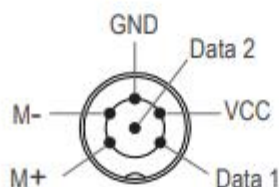
### Without positioning sensor feedback

- With Moteck F-type, H-type or V-type DIN plug
- With Moteck L3-type minifit 6-pin plug

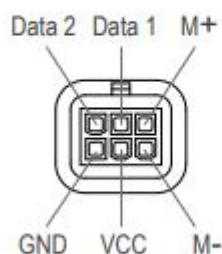


### With dual Hall effect sensors

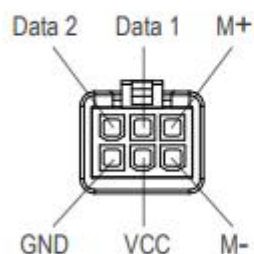
- With Moteck F-type, H-type or V-type DIN plug



- With Moteck L2-type minifit 6-pin plug



- With Moteck L3-type minifit 6-pin plug



**Note:** Connect Pin (M+) to "+" & Pin (M-) to "-" of DC power, the actuator will extend.



## WIRING

### Wire definitions:

- Without positioning sensor feedback

Power	
Blue	Brown
M+	M-

**Note:**

1. Connect Blue (M+) to "+" & Brown (M-) to "-" of DC power, the actuator will extend.

- With Hall effect sensor x 2

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

**Note:**

1. Connect Blue (M+) to "+" & Brown (M-) to "-" of DC power, the actuator will extend.
2. Hall effect sensor resolution



Model No.	Resolution (pulses/mm)
MD21-24N3-XXX.XXX-XXH00XX	14.0
MD21-24N4-XXX.XXX-XXH00XX	10.5
MD21-24N6-XXX.XXX-XXH00XX	7.0
MD21-24N8-XXX.XXX-XXH00XX	5.25
MD21-24NC-XXX.XXX-XXH00XX	3.5

3. Voltage input range (VCC): 3.5~20V

4. Output voltage of signal (Data) = Input voltage of VCC

5. Hall signal data

