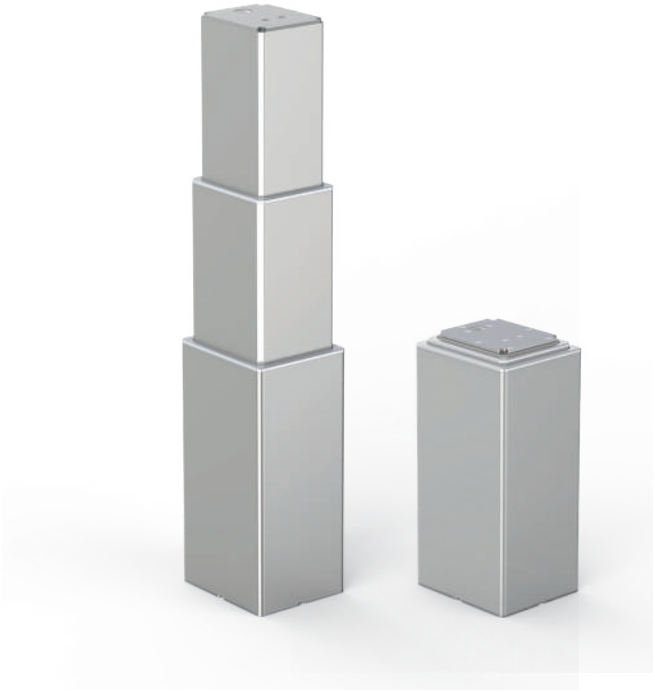
Lifting Column
DLC3

DLC3 is an efficient electric lifting column designed for industrial and some medical environments. With its three-segment design, DLC3 offers a more compact installation size and a longer travel range compared to traditional two-segment lifting columns. Furthermore, its unique structure allows it to withstand significantly larger lateral forces, making it more stable and reliable than common actuator. This makes DLC3 an ideal choice for lifting applications.



Features and Options

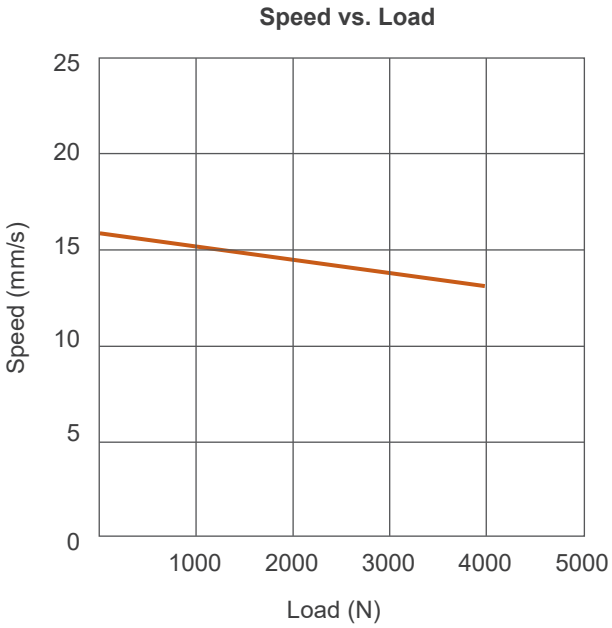
- Main applications: Industrial, medical, homecare, furniture
- Input voltage: 24V DC
- Max. load: 4000N (push)
- Speed at no load: 16mm/sec (Typical value)
- Speed at full load: 13mm/sec (Typical value @4000N loaded)
- Stroke: 260~1200mm
- Bending moment: max. 2000Nm (static) / max. 1000Nm (dynamic)
- Duty cycle: 10%, max. 2 min. continuous operation in 20 min.
- Noise level: ≦65dB
- IP Protection level: IPX6 (Static, non-action)
- Anodized aluminum body
- Cable length: 1000mm straight
- Preset limit switches
- Ambient operation temperature: 5°C ~ +45°C

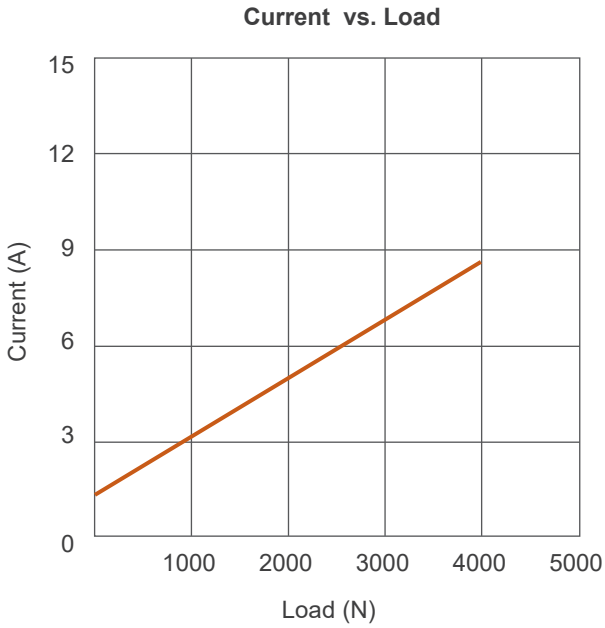
Options:

- Digital positioning feedback with Hall effect sensors x 2
- Cable length: 2000mm straight

Performance Data

Model No.	Push Max. (N)	*Typical Speed (mm/s)		*Typical Current (A) @ 24V	
		No Load	Full Load	No Load	Full Load
DLC3-24**FC**-0700-5AH03	4000	16	13	1.4	8.7





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.

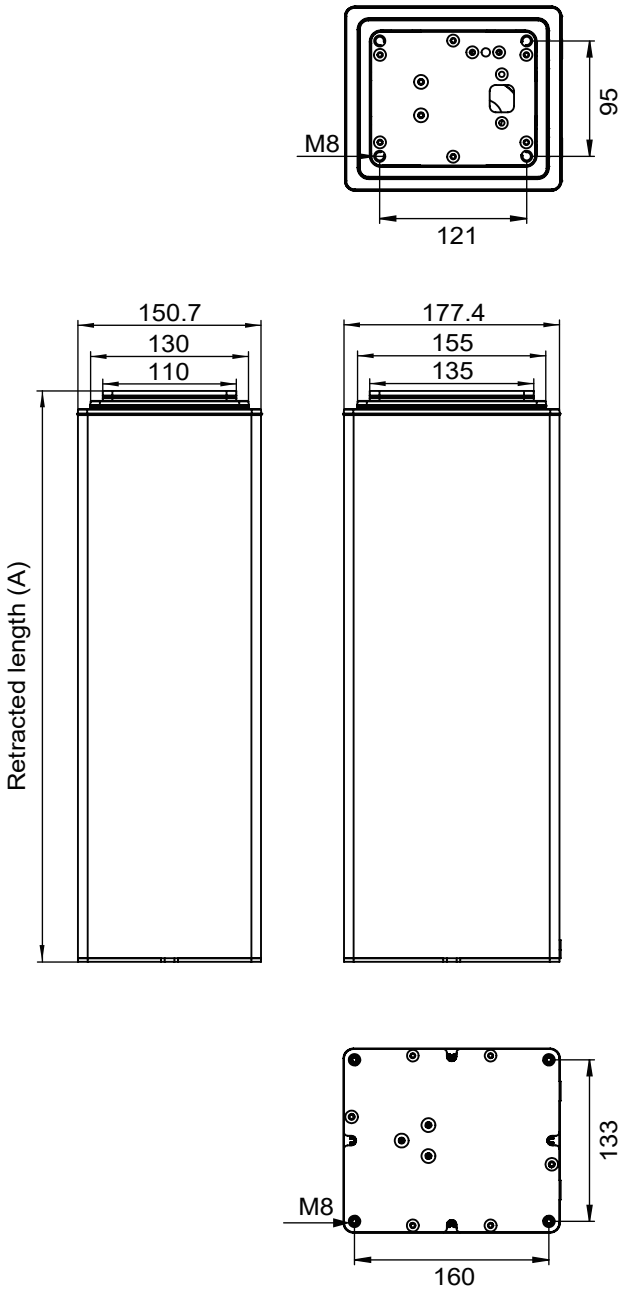
Dimensions

- Available Stroke (S) range of each Retracted Length (A)

Unit: mm

	Retracted Length (A)			
	370	570	700	820
Stroke (S)	≦440	≦840	≦1100	≦1200

(Tolerance: ±5mm)



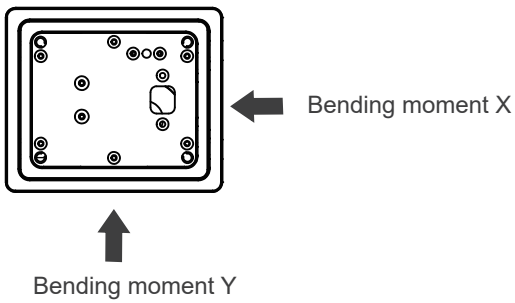
Bending Moment

● **Dynamic Bending Moment X direction (unit: Nm)**

Stroke (mm)	Retracted Length (mm)			
	370	570	700	820
100-300	1000	1000	1000	1000
301-440	600	600	600	800
441-700	N/A	300	300	500
701-840	N/A	200	200	300
841-1100	N/A	N/A	200	200
1101-1200	N/A	N/A	N/A	200

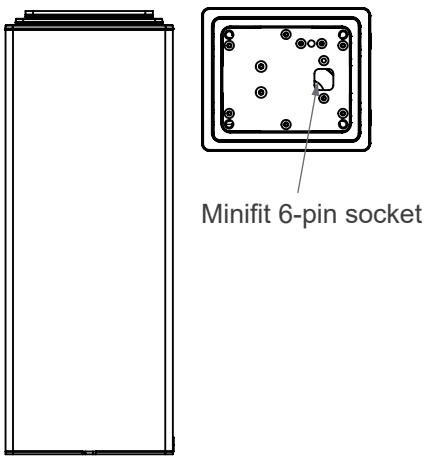
● **Dynamic Bending moment Y direction = X*0.8**

● **Static bending moment = dynamic*2**



Power Cord Inlet

● **Detachable cable from top**

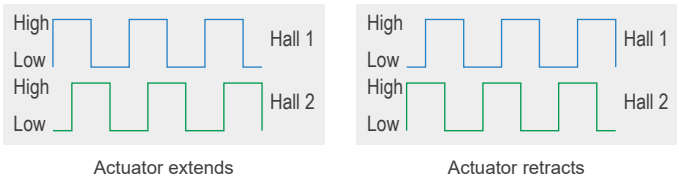


Wiring with Flying Leads

● Without positioning feedback

	Wire color	Definitions	Descriptions
Power wires	Red	DC Power	Connect red wire to “Vdc +” & black wire to “Vdc -“ of DC power to extend the actuator. Switch the polarity of DC input to retract it.
	Black		

● Positioning feedback with dual Hall effect sensors

	Wire color	Definitions	Descriptions
Power wires	Red	DC Power	Connect red wire to “Vdc +” & black wire to “Vdc -“ of DC power to extend the actuator. Switch the polarity of DC input to retract it.
	Black		
Signal wires	Yellow	Vin	Voltage input range: 5 ~ 20V
	Blue	Hall 1 output	High= Input - 1.2V (±0.6V) Low= GND Hall signal data:  Hall effect sensor resolution: 2.99 pulses/mm
	Green	Hall 2 output	
	White	GND	

Ordering Key

DLC3 - 24 FC - 0700 - 5 A H 0 3

Input voltage	**24**: 24V DC
Performance code	**FC** (Refer to Performance Data)
Stroke	**XXXX** (Refer to Dimensions)
Retracted Length	**3**: 370mm **5**: 570mm **7**: 700mm **8**: 820mm (Refer to Dimensions)
Power cord inlet	**A**: Detachable cable from top
Positioning feedback	**0**: None **H**: Hall effect sensors x 2
Reserved	**0**: No meaning
Power cord length	**3**: 1000mm straight (standard) **6**: 2000mm straight