

Linear actuator

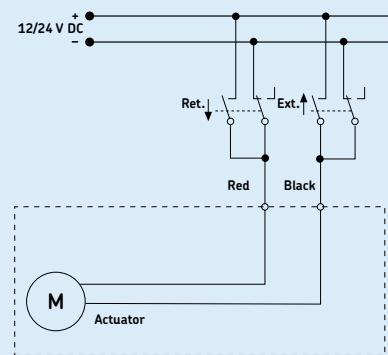
CAHB-21 series

Benefits

- High efficiency ball screw
- Extension tube (stainless steel)
- Protection tube (steel)
- Enhanced corrosion resistance
- Mechanical overload protection (clutch)
- Lubricated for service life
- Robust, designed for tough environment
- No back driving
- Certified (CE: EN 55011)

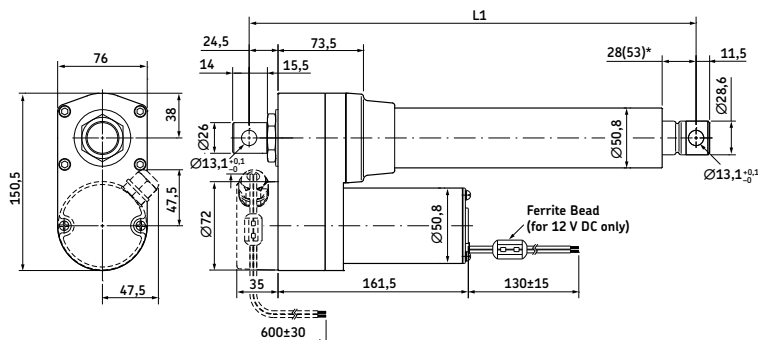


Connecting diagram



Dimensional drawing

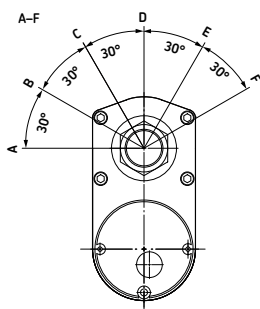
Basic configuration (dashed line for optional limit switch)



Without limit switch:
 RED (+) & BLACK (-) = retraction
 RED (-) & BLACK (+) = extension
 With limit switch:
 RED (+) & BLACK (-) = extension
 RED (-) & BLACK (+) = retraction

Legend:
 L1 = retracted length
 * 53 = dimension with limit switch

Different rear attachment



Stroke (mm)	With limit switch ¹⁾						Without limit switch ²⁾					
	102	153	204	305	457	610	102	153	204	305	457	610
L1 Retracted length	393	444	495	659	811	964	317	368	419	521	735	888

¹⁾ Tolerance: S, L1 and L2 = ± 5,0 mm (if S ≥ 305 mm, S = ± 7,5 mm)

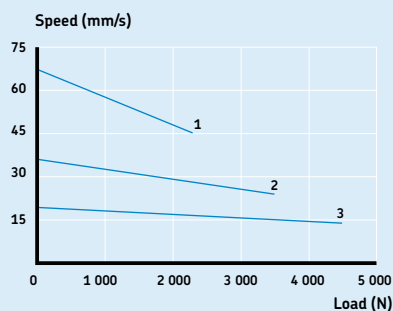
²⁾ Tolerance: S = ± 2,5 mm and L1, L2 = ± 3,8 mm

Technical data

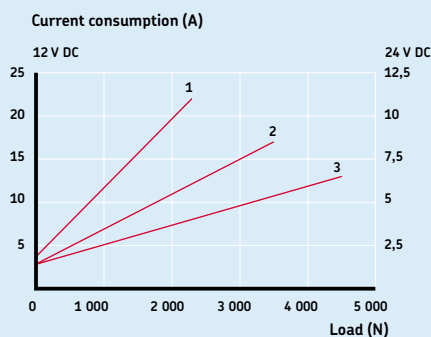
	Unit	CAHB-21... 1	CAHB-21... 2	CAHB-21... 3
Push load	N	2 300	3 500	4 500
Pull load	N	2 300	3 500	4 500
Speed (full load to no load)	mm/s	45 to 65	24 to 36	14 to 19
Stroke	mm	102 to 610	102 to 610	102 to 610
Retracted length	mm	—*	—*	—*
Voltage	V DC	12 or 24	12 or 24	12 or 24
Power consumption	W	N/A	N/A	N/A
Current consumption	12 V DC	22	17	13
	24 V DC	11	8,5	6,5
Duty cycle	%	25	25	25
Ambient temperature	°C	-40 to +85	-40 to +85	-40 to +85
Type of protection	IP	66	66	66
Weight (at 305 mm stroke)	kg	6,5	6,5	6,5
Color	—	Black	Black	Black

* see above table

Performance diagrams



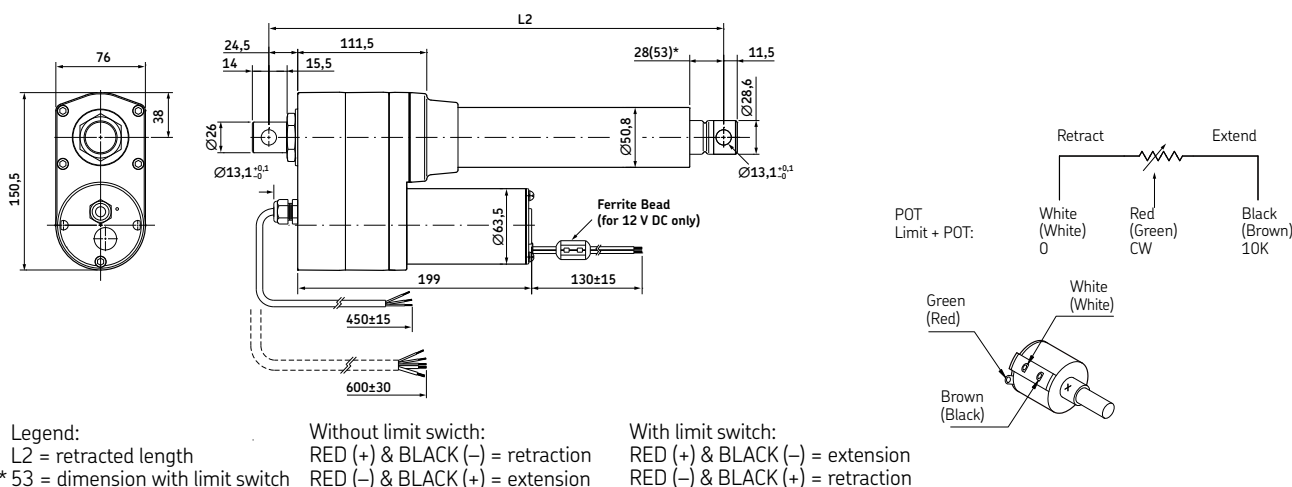
Speed-load diagram



Current-load diagram

Dimensional drawing

Optional potentiometer (dashed line for optional limit switch)



Legend:

L2 = retracted length

* 53 = dimension with limit switch

Without limit switch:

RED (+) & BLACK (-) = retraction

RED (-) & BLACK (+) = extension

With limit switch:

RED (+) & BLACK (-) = extension

RED (-) & BLACK (+) = retraction

Stroke (mm)	With limit switch ¹⁾						Without limit switch ²⁾					
	102	153	204	305	457	610	102	153	204	305	457	610
L2 Retracted length	431	482	533	697	849	1 002	355	406	457	559	773	926

¹⁾ Tolerance: S and L2 = ± 5,0 mm (If S ≥ 305 mm, S = ± 7,5 mm)

²⁾ Tolerance: S = ± 2,5 mm and L2 = ± 3,8 mm

Potentiometer resolution

Stroke (mm)	102	153	204	305	457	610
Ohm/mm	59,0	59,0	29,5	29,5	9,84	9,84

C A H B - 2 1 - [] [] N - [] [] [] [] - A [] [] [] [] [] - 0 0 0

Type

Voltage:

12 V DC
24 V DC

A
B

Load:

2 300 N
3 500 N
4 500 N

1
2
3

Screw:

Ball screw

N

Stroke:

102 mm
153 mm
204 mm
305 mm
457 mm
610 mm

102
153
204
305
457
610

Retracted length:

Stroke

with L.S.¹⁾

102 mm
153 mm
204 mm
305 mm
457 mm
610 mm

w/o POT²⁾

393 mm
444 mm
495 mm
659 mm
811 mm
964 mm

with POT²⁾

431 mm
482 mm
533 mm
697 mm
849 mm
A02 mm (1 002 mm)

w/o L.S.¹⁾

102 mm
153 mm
204 mm
305 mm
457 mm
610 mm

317 mm
368 mm
419 mm
521 mm
735 mm
888 mm

355 mm
406 mm
457 mm
559 mm
773 mm
926 mm

IP:

Standard (IP 66)

A

Front attachment:

Standard (hole: Ø 13,1 mm)
Customized

A
X

Rear attachment:

Standard (0° and hole: Ø 13,1 mm)
30°
60°
90°
120°
150°
Customized

A
B
C
D
E
F
X

Option 1:

None
Limit switch (only for load version 4 500 N)

0
L

Option 2:

None
Potentiometer

0
P

Option 3:

None
Thermal protection

0
T

¹⁾L.S. = Limit switch
²⁾POT = Potentiometer

