

# Linear actuator

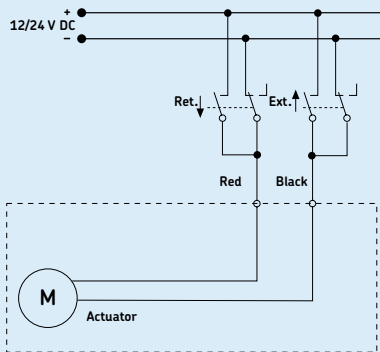
CAHB-20 series

## Benefits

- ACME screw drive
- Extension tube (stainless steel)
- Protection tube (steel)
- Enhanced corrosion resistance
- Mechanical overload protection (clutch)
- Lubricated for service life
- Robust, designed for tough environment
- Self-locking
- Certified (CE: EN 55011)

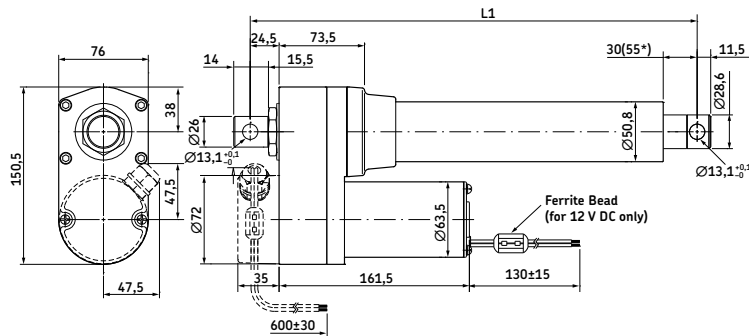


Connecting diagram

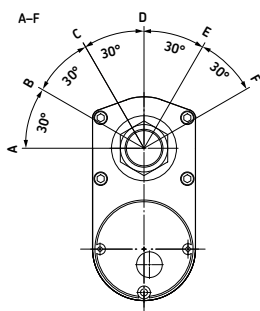


Dimensional drawing

Basic configuration (dashed line for optional limit switch)



Different rear attachment



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

Legend:  
 L1 = retracted length  
 \*55 = dimension with limit switch

Stroke (mm)	With limit switch <sup>1)</sup>						Without limit switch <sup>2)</sup>					
	102	153	204	305	457	610	102	153	204	305	457	610
L1 Retracted length	338	389	440	592	744	897	262	313	364	465	668	821

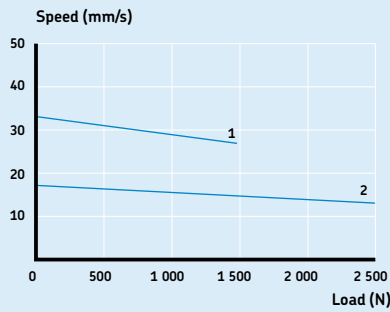
<sup>1)</sup> Tolerance: S and L1 = ± 5,0 mm (If S ≥ 305 mm, S = ± 7,5 mm)  
<sup>2)</sup> Tolerance: S = ± 2,5 mm and L1 = ± 3,8 mm

Technical data

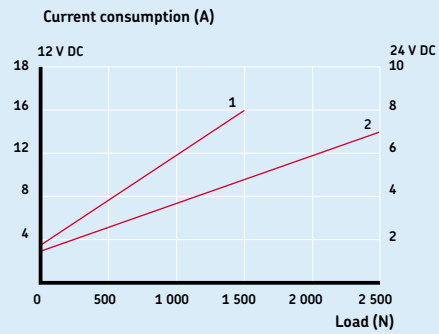
	Unit	CAHB-20... 1	CAHB-20... 2
Push load	N	1 500	2 500
Pull load	N	1 500	2 500
Speed (full load to no load)	mm/s	27 to 33	13 to 17
Stroke	mm	102 to 610	102 to 610
Retracted length	mm	_*	_*
Voltage	V DC	12 or 24	12 or 24
Power consumption	W	N/A	N/A
Current consumption	12 V DC	16	14
	24 V DC	8	7
Duty cycle	%	25	25
Ambient temperature	°C	-40 to +85	-40 to +85
Type of protection	IP	66	66
Weight (at 305 mm stroke)	kg	5,5	5,5
Color	-	Black	Black

\* see above table

Performance diagrams



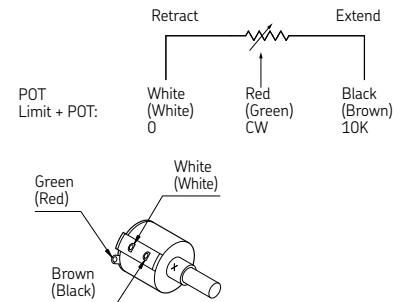
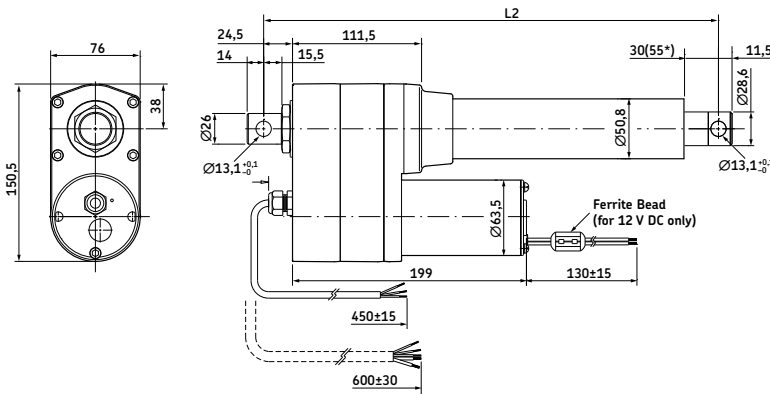
Speed-load diagram



Current-load diagram

Dimensional drawing

Optional potentiometer (dashed line for optional limit switch)



Legend:  
 L2 = retracted length  
 \*55 = 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 <sup>1)</sup>						Without limit switch <sup>2)</sup>					
	102	153	204	305	457	610	102	153	204	305	457	610
L2 Retracted length	376	427	478	630	782	935	300	351	402	503	706	859

<sup>1)</sup> Tolerance: S and L2 = ± 5,0 mm (If S ≥ 305 mm, S = ± 7,5 mm)  
<sup>2)</sup> 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

Ordering key

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

Type

Voltage:

12 V DC  
24 V DC

A  
B

Load:

1 500 N  
2 500 N

1  
2

Screw:

Acme screw

A

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.<sup>1)</sup>

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

w/o POT<sup>2)</sup>

338 mm  
389 mm  
440 mm  
592 mm  
744 mm  
897 mm

with POT<sup>2)</sup>

376 mm  
427 mm  
478 mm  
630 mm  
782 mm  
935 mm

w/o L.S.<sup>1)</sup>

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

262 mm  
313 mm  
364 mm  
465 mm  
668 mm  
821 mm

300 mm  
351 mm  
402 mm  
503 mm  
706 mm  
859 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 2 500 N)

0  
L

Option 2:

None  
Potentiometer

0  
P

Option 3:

None  
Thermal protection

0  
T

<sup>1)</sup>L.S. = Limit switch  
<sup>2)</sup>POT = Potentiometer

