

CAHB-20A

Linear actuator

Benefits

- Compact design which has been tested for vigorous use
- Robust and reliable
- Thermal protection and virtually maintenance-free

Features:

- Integrated overload and thermal protection
- Robust design
- IP66
- Optional potentiometer and limit switches

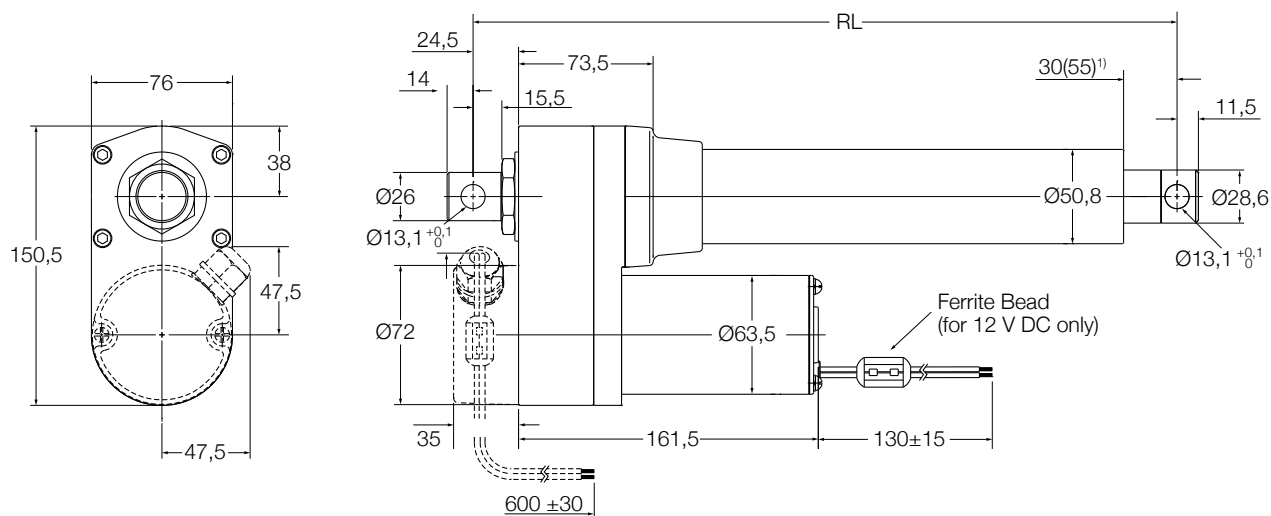


Technical data

Designation	Unit	CAHB-20-x1A	CAHB-20-x2A
Performance data			
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
Voltage	V DC	12 or 24	12 or 24
Nominal current 12 V DC	A	16	14
24 V DC	A	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

Dimensional drawing

Basic configuration (dashed line for optional limit switch)



Attachment orientation (see page 14)

¹⁾ 55 = dimension with limit switch

Without limit switch:

RED (+) & BLACK (-) = retraction
 RED (-) & BLACK (+) = extension

With limit switch:

RED (+) & BLACK (-) = extension
 RED (-) & BLACK (+) = retraction

Legend:

RL = retracted length

Retracted length calculation (RL)

Stroke [mm]	With limit switch ¹⁾						Without limit switch ²⁾					
	102	153	204	305	457	610	102	153	204	305	457	610
Retracted length (RL)	338	389	440	592	744	897	262	313	364	465	668	821

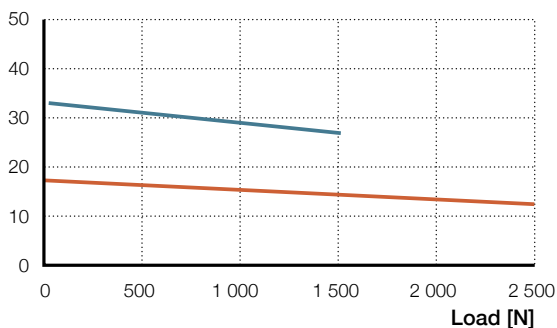
¹⁾ Tolerance: S and RL = ± 5,0 mm (If S ≥ 305 mm, S = ± 7,5 mm)

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

Performance diagrams

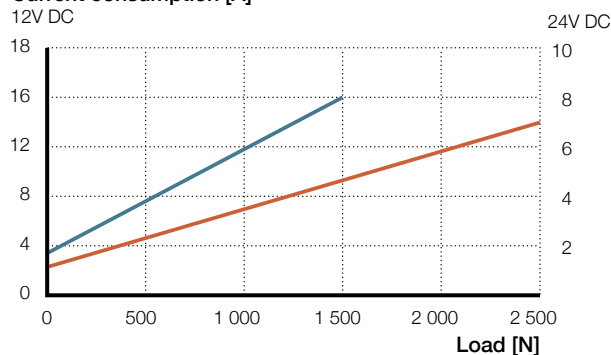
Speed-load diagram

Speed [mm/s]



Current-load diagram

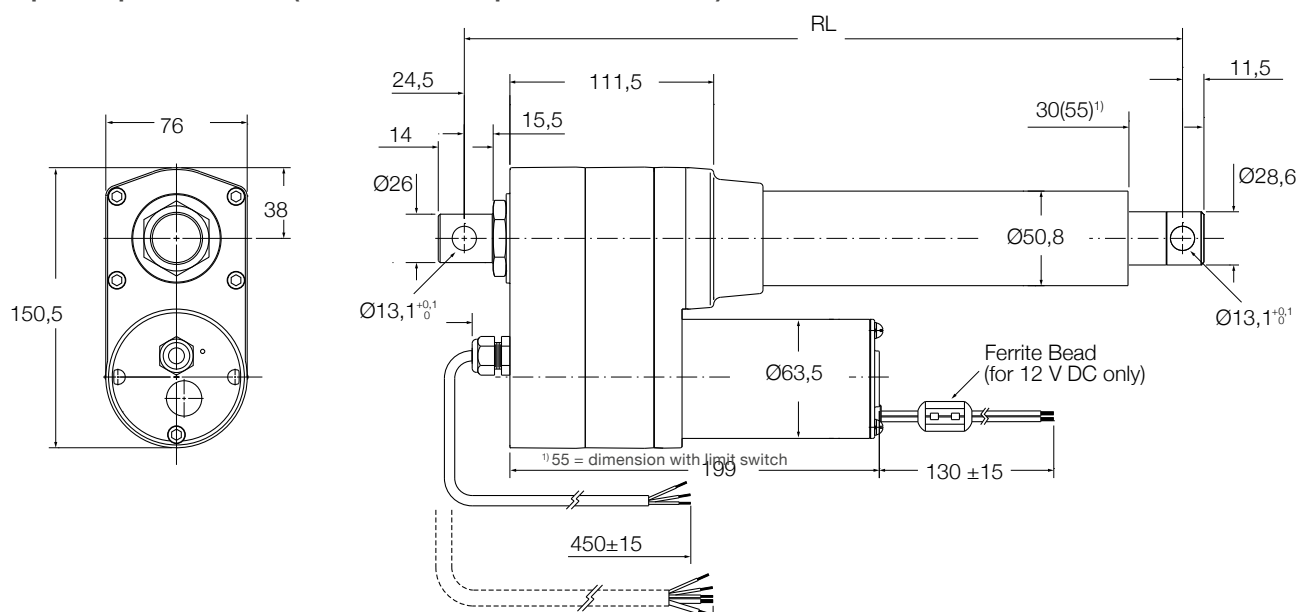
Current consumption [A]



— CAHB-20...1 — CAHB-20...2

Dimensional drawing

Optional potentiometer (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:

RL = retracted length

Retracted length calculation (RL)

Stroke [mm]	With limit switch ¹⁾						Without limit switch ²⁾					
	102	153	204	305	457	610	102	153	204	305	457	610
Retracted length (RL)	376	427	478	630	782	935	300	351	402	503	706	859

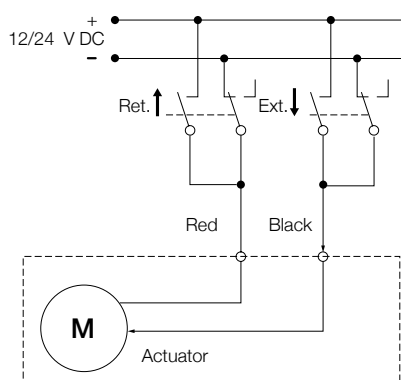
¹⁾ Tolerance: S and RL = ± 5,0 mm (If S ≥ 305 mm, S = ± 7,5 mm)

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

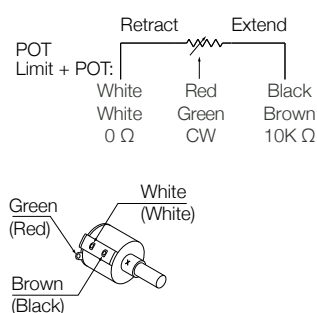
Potentiometer resolution

Stroke [mm]	102	153	204	305	457	610
Ω/mm	59,0	59,0	29,5	29,5	9,84	9,84

Connecting diagram

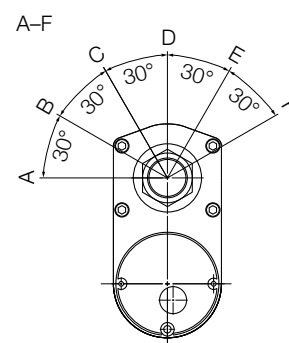


Electrical diagrams



Attachment orientation

(refer to ordering key Attachment orientation)



Ordering key

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

Type

Voltage

A 12 V DC

B 24 V DC

Load

1 1 500 N

2 2 500 N

Design

Stroke

102 102 mm

153 153 mm

204 204 mm

305 305 mm

457 457 mm

610 610 mm

Retracted length

Please refer to the table "Retracted length calculation" on **page 13 and 14**

Ingress protection

A Standard: IP66

Front attachment

A Standard (hole: Ø13,1 mm)

X Customized

Rear attachment

A Standard (0° and hole: Ø13,1 mm)

B 30°

C 60°

D 90°

E 120°

F 150°

X Customized

Option 1

0 None

L Limit switch (only for load version 2 500 N)

Option 2

0 None

P Potentiometer

Option 3

0 None

T Thermal protection

Customization

The actuators have protection Clutch and EMC filter.