

# CAHB-30A

## Linear actuator

### Benefits

- Powered by AC voltage
- Designed and tested for harsh environments
- Reliable and cost-effective
- Reduced development and start-up times
- Virtually maintenance-free

### Features

- Optional potentiometer and limit switches
- Self-locking
- Integrated thermal and overload protection
- Robust design, IP65, wide temperature range, corrosion resistant

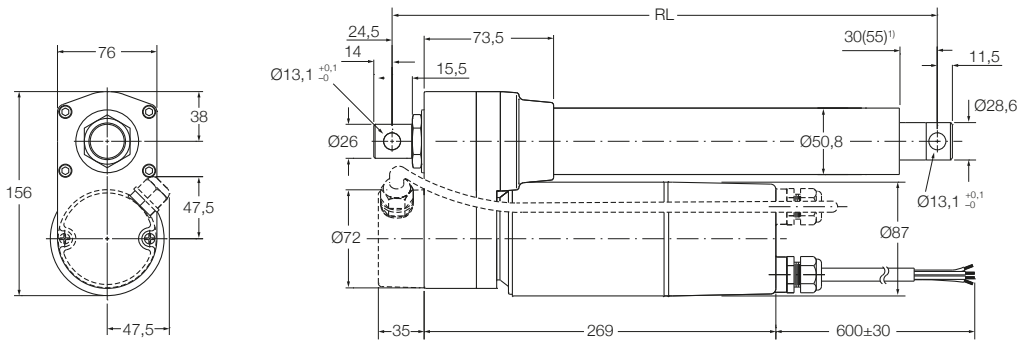


### Technical data

		Unit	CAHB-30A... 1	CAHB-30A... 2
Rated push load		N	1 500	2 300
Rated pull load		N	1 500	2 300
Speed (full load to no load)	115 V AC/60 Hz	mm/s	25 to 26	12 to 13
	230 V AC/50 Hz	mm/s	21 to 22	11 to 12
Stroke		mm	102 to 610	102 to 610
Voltage		V AC	115 or 230	115 or 230
Nominal current	115 V AC/60 Hz	A	2,3	1,8
	230 V AC/50 Hz	A	1,35	1,4
Duty cycle		%	25 (94/376 s)	25 (94/376 s)
Ambient temperature		°C	-26 to +65	-26 to +65
Type of protection		IP	65S	65S
Weight		kg	9	9
Color		-	Black	Black

## Dimensional drawing

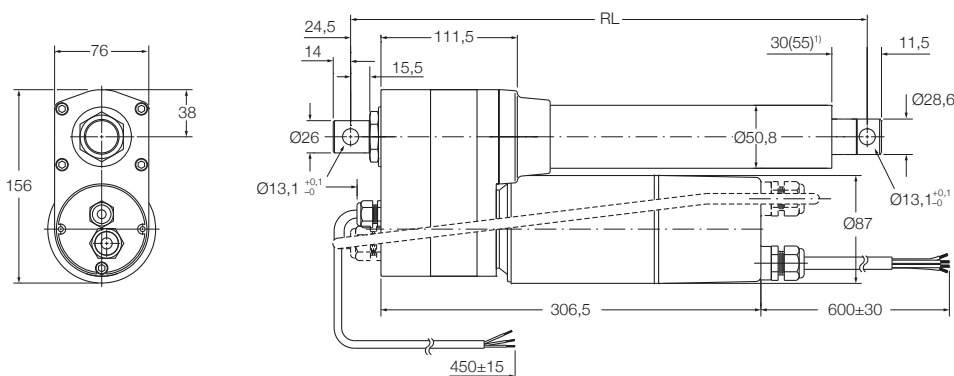
### Basic configuration (dashed line for optional limit switch)



**Legend:**  
RL = retracted length

<sup>1)</sup> 55 = dimension with limit switch

### Optional potentiometer (dashed line for optional limit switch)



**Legend:**  
RL = retracted length

<sup>1)</sup> 55 = dimension with limit switch

## Retracted length calculation (RL)

### Basic configuration

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
Retracted length (RL)	440	440	440	592	744	897	380	415	415	465	668	821

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

<sup>2)</sup> Tolerance: S = ± 2,5 mm and RL = ± 3,8 mm

### Optional potentiometer

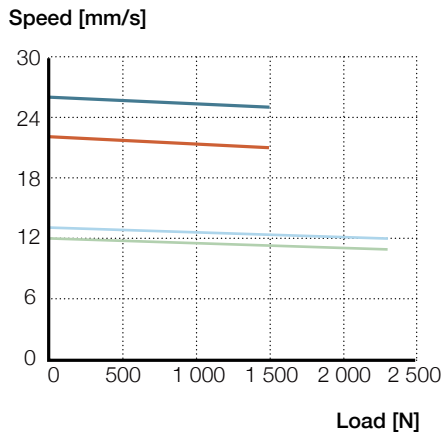
Stroke [mm]	With limit switch <sup>1)</sup>						Without limit switch <sup>2)</sup>					
	102	153	204	305	457	610	102	153	204	305	457	610
Retracted length (RL)	478	478	478	630	782	935	418	453	453	503	706	859

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

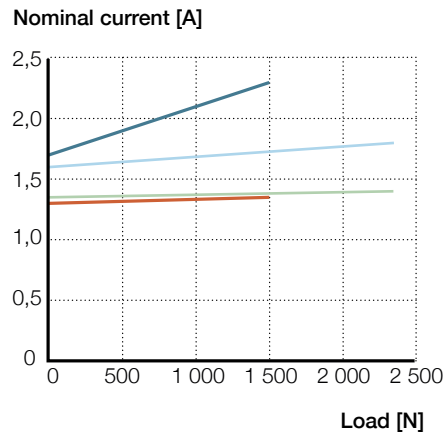
<sup>2)</sup> Tolerance: S = ± 2,5 mm and RL = ± 3,8 mm

## Performance diagrams

Speed-load diagram



Current-load diagram

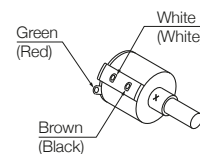
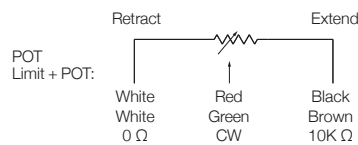
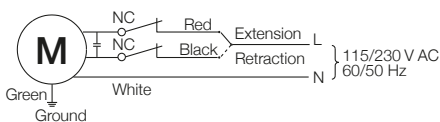
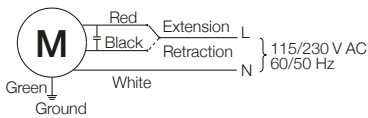


— 1 (115 VAC)      — 1 (230 VAC)      — 2 (115 VAC)      — 2 (230 VAC)

## Electrical specifications

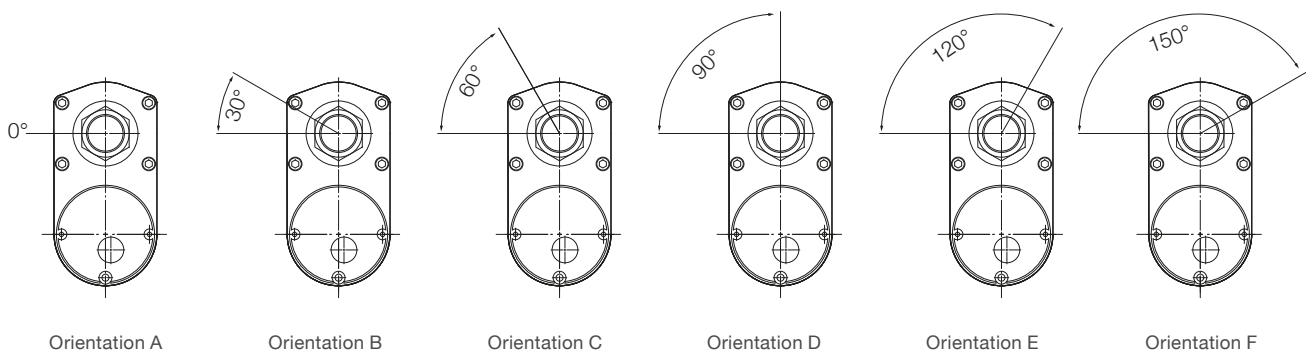
### Potentiometer resolution

Stroke [mm]	102	153	204	305	457	610
$\Omega/\text{mm}$	59,0	59,0	29,5	29,5	9,84	9,84



## Attachment orientation

(refer to ordering key Attachment orientation)



## Ordering key

	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="padding: 2px;">C</td> <td style="padding: 2px;">A</td> <td style="padding: 2px;">H</td> <td style="padding: 2px;">B</td> <td style="padding: 2px;">3</td> <td style="padding: 2px;">0</td> </tr> </table> <span style="margin: 0 5px;">-</span> <table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px; text-align: center;">A</td> </tr> </table> <span style="margin: 0 5px;">-</span> <table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> </tr> </table> <span style="margin: 0 5px;">-</span> <table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="width: 20px; height: 20px; text-align: center;">A</td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px; text-align: center;">0</td> </tr> </table> <span style="margin: 0 5px;">-</span> <table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="width: 20px; height: 20px; text-align: center;">0</td> <td style="width: 20px; height: 20px; text-align: center;">0</td> <td style="width: 20px; height: 20px; text-align: center;">0</td> </tr> </table>	C	A	H	B	3	0			A					A					0	0	0	0
C	A	H	B	3	0																		
		A																					
A					0																		
0	0	0																					
<b>Type</b> _____																							
<b>Voltage</b> _____																							
N 115 V AC																							
P 230 V AC																							
<b>Load</b> _____																							
1 1 500 N																							
2 2 300 N																							
<b>Screw</b> _____																							
A Acme screw																							
<b>Stroke</b> _____																							
102 102 mm																							
153 153 mm																							
204 204 mm																							
305 305 mm																							
457 457 mm																							
610 610 mm																							
<b>Retracted length</b> _____																							
Please refer to the table "Retracted length calculation" on <b>page 43</b>																							
<b>IP</b> _____																							
A Standard (IP 65)																							
<b>Front attachment</b> _____																							
A Standard (hole: Ø13,1 mm)																							
X Customized <sup>1)</sup>																							
<b>Rear attachment</b> _____																							
A Standard (0° and hole: Ø13,1 mm)																							
B 30°																							
C 60°																							
D 90°																							
E 120°																							
F 150°																							
X Customized <sup>1)</sup>																							
<b>Option 1</b> _____																							
0 None																							
L Limit switch (only for load version 2 300 N)																							
<b>Option 2</b> _____																							
0 None																							
P Potentiometer																							
<b>Customization</b> _____																							

<sup>1)</sup> Only available on request. Contact Ewellix for more information on minimum quantities and additional costs.