

CAHB-31N

Linear actuator

Benefits

- Powered by AC voltage
- High efficiency
- 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
- Ball screw with a brake
- Self-locking
- Integrated thermal and overload protection
- Robust design, IP65, wide temperature range, corrosion resistant

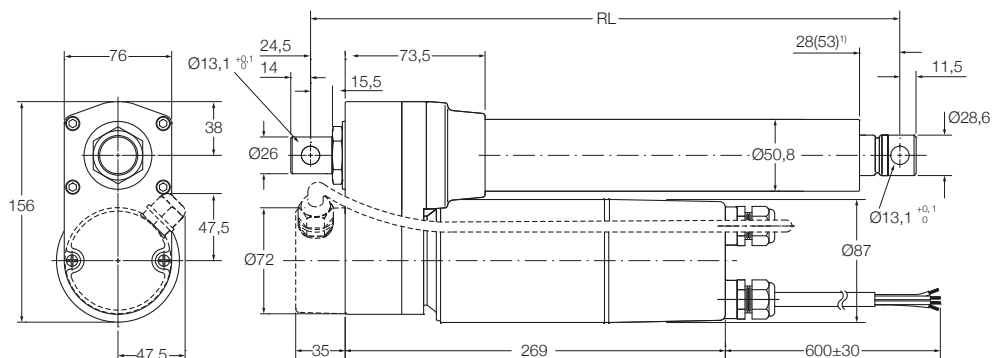


Technical data

		Unit	CAHB-31N... 1	CAHB-31N... 2	CAHB-31N... 3
Rated push load		N	2 300	4 500	6 000
Rated pull load		N	2 300	4 500	6 000
Speed (full load to no load)	115 V AC/60 Hz	mm/s	48 to 57	22 to 28	13 to 15
	230 V AC/50 Hz	mm/s	40 to 50	20 to 24	11 to 13
Stroke		mm	102 to 610	102 to 610	102 to 610
Voltage		V AC	115 or 230	115 or 230	115 or 230
Nominal current	115 V AC/60 Hz	A	3	2,6	2,2
	230 V AC/50 Hz	A	1,5	1,4	1,4
Duty cycle		%	25 (94/376 s)	25 (94/376 s)	25 (94/376 s)
Ambient temperature		°C	-26 to +65	-26 to +65	-26 to +65
Type of protection		IP	65S	65S	65S
Weight		kg	9,5	9,5	9,5
Color		-	Black	Black	Black

Dimensional drawing

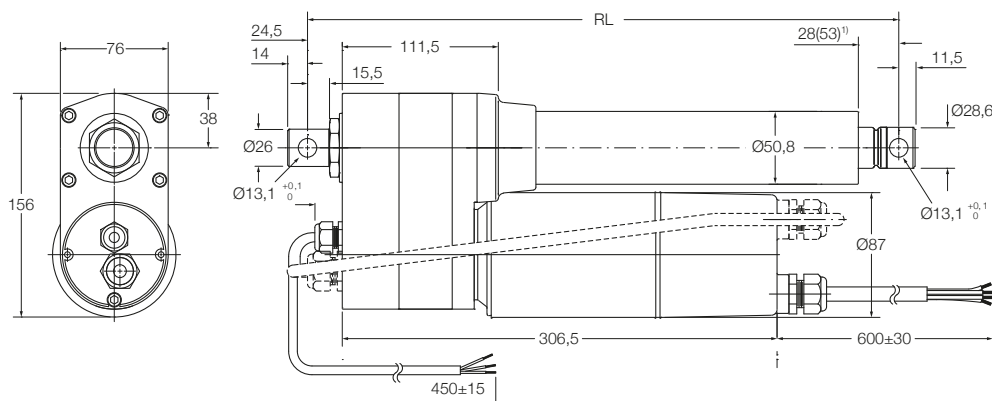
Basic configuration (dashed line for optional limit switch)



Legend:
RL = retracted length

¹) 53 = dimension with limit switch

Optional potentiometer (dashed line for optional limit switch)



Legend:
RL = retracted length

¹) 53 = dimension with limit switch

Retracted length calculation (RL)

Basic configuration

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)	444	444	495	659	811	964	380	419	419	521	735	888

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

Optional potentiometer

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)	482	482	533	697	849	1002 (code A02)	418	457	457	559	773	926

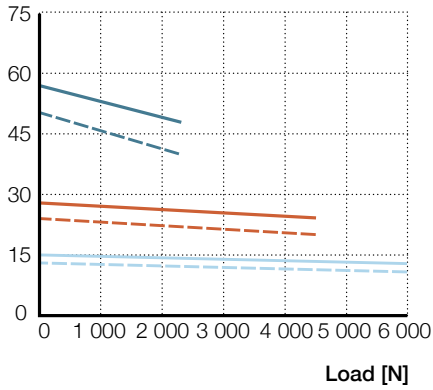
¹⁾ Tolerance: S and RL = ± 5,0 mm (If S≥305 mm, S = ± 7,5 mm)

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

Performance diagrams

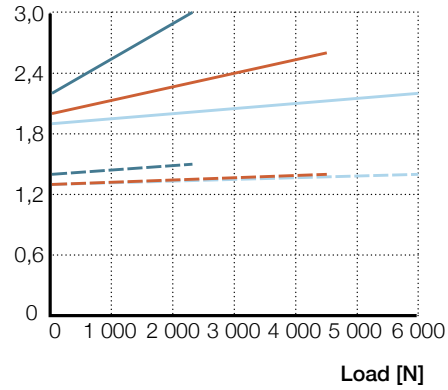
Speed-load diagram

Speed [mm/s]



Current-load diagram

Nominal current [A]



- 1 (115 VAC) — 2 (115 VAC) — 3 (115 VAC)
- - - 1 (230 VAC) - - - 2 (230 VAC) - - - 3 (230 VAC)

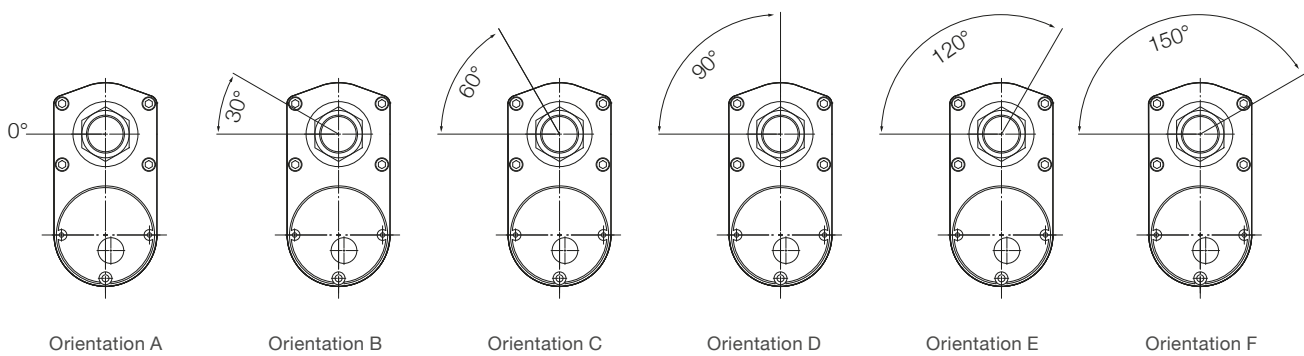
Electrical specifications

Potentiometer resolution

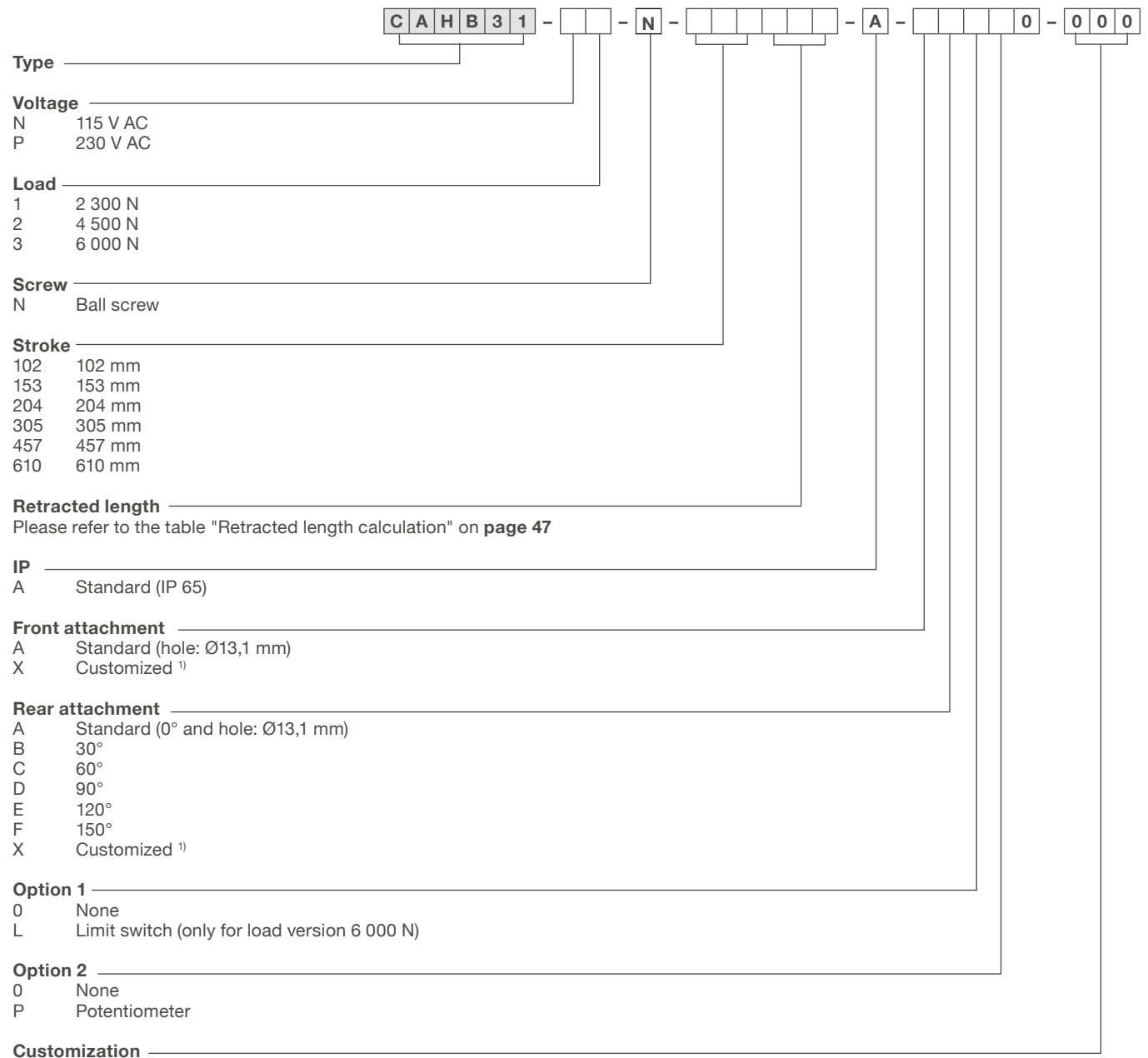
Stroke [mm]	102	153	204	305	457	610
Ω/mm	59,0	59,0	29,5	29,5	9,84	9,84

Attachment orientation

(refer to ordering key Attachment orientation)



Ordering key



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