

CAHB-10

Linear actuator

Benefits

- Compact design
- Designed for harsh environment
- Robust and reliable
- Integrated limit switches
- Quiet operation
- Thermal protection
- Optional potentiometer and 2-Hall encoder available
- Electromagnetic compatibility (EMC) compliant



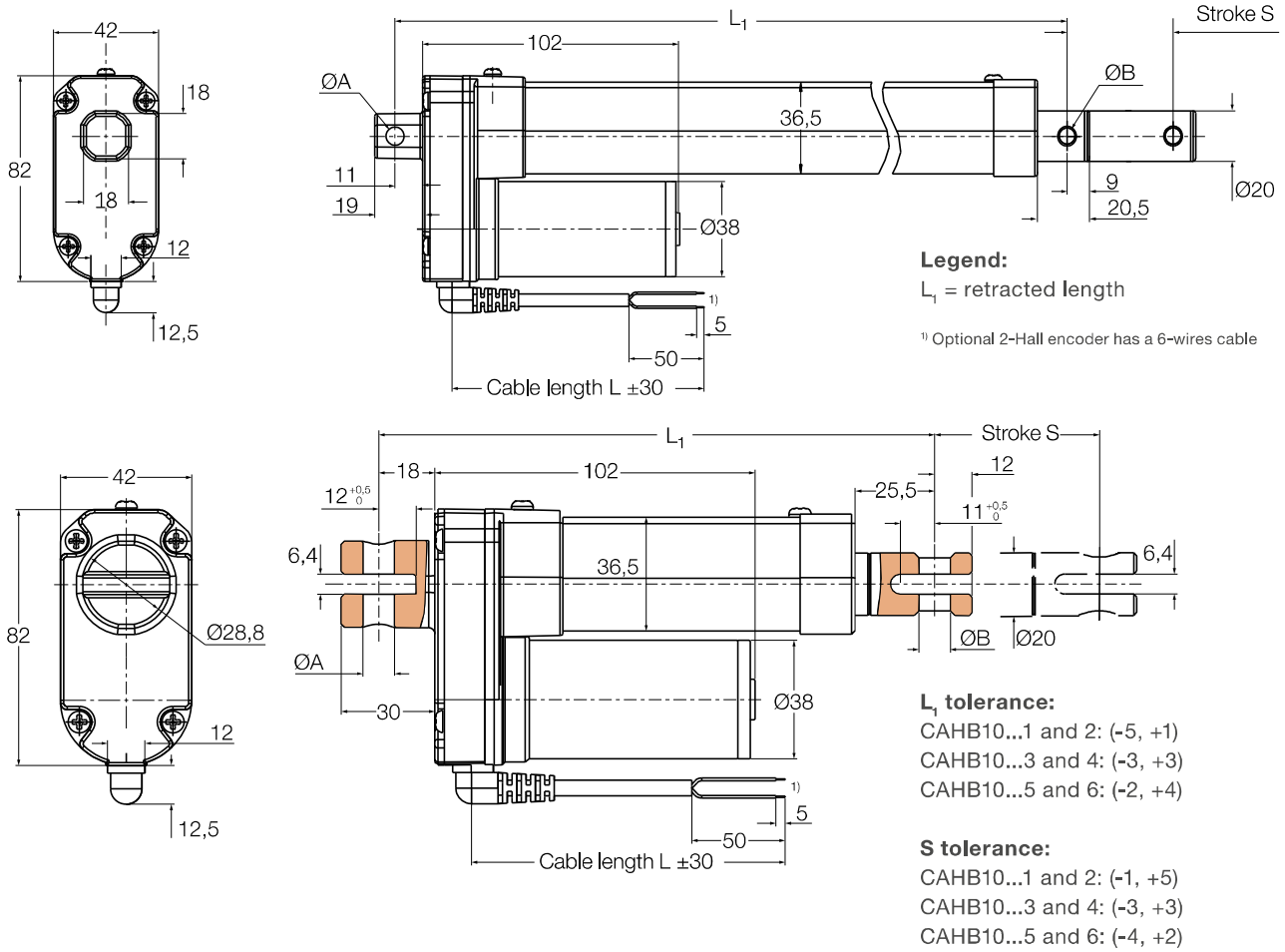
Technical data

Designation	Unit	CAHB-10... 1	CAHB-10... 2	CAHB-10... 3	CAHB-10... 4	CAHB-10... 5	CAHB-10... 6
Push load	N	120	240	500	750	1 000	1 500
Pull load	N	120	240	500	750	1 000	1 500
Speed (full load to no load)	mm/s	45 to 56	24 to 30	13 to 16	8 to 10	6 to 8	5 to 8
Stroke	mm	50 to 300	50 to 300	50 to 300	50 to 300	50 to 300	50 to 300
Retracted length	mm	– ¹⁾	– ¹⁾	– ¹⁾	– ¹⁾	– ¹⁾	– ¹⁾
Voltage	V DC	12 or 24	12 or 24	12 or 24	12 or 24	12 or 24	12 or 24
Power consumption	W	N/A	N/A	N/A	N/A	N/A	N/A
Current consumption 12 V DC	A	4	3,5	3,2	3	2,8	4,4
24V DC	A	2,2	2	1,8	1,8	1,6	2,8
Duty cycle	%	25	25	25	25	25	20
Ambient temperature	°C	–40 to +85	–40 to +85	–40 to +85	–40 to +85	–40 to +85	–40 to +85
Type of protection	IP	66s/69k	66s/69k	66s/69k	66s/69k	66s/69k	66s/69k
Weight (at 300 mm stroke)	kg	1,5	1,5	1,5	1,5	1,5	1,5
Color	–	Silver	Silver	Silver	Silver	Silver	Silver
Limit switches	–	Yes	Yes	Yes	Yes	Yes	Yes
Thermal protection	–	Yes	Yes	Yes	Yes	Yes	Yes

¹⁾ For basic configuration see dimensional drawing ↪ page 5
 For potentiometer configuration see dimensional drawing ↪ page 7

Dimensional drawing

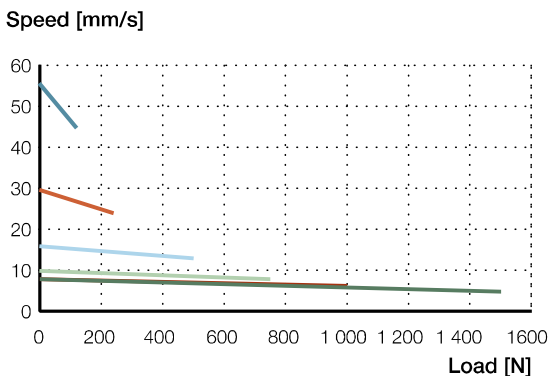
Basic configuration and optional 2-Hall encoder



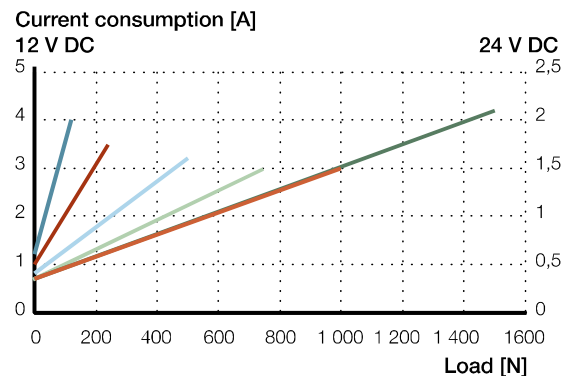
Stroke [mm]	50	100	150	200	250	300
Retracted length (L_1)	158	209	260	311	362	413
Retracted length with fork head	179	230	281	332	383	434

Performance diagrams

Speed-load diagram



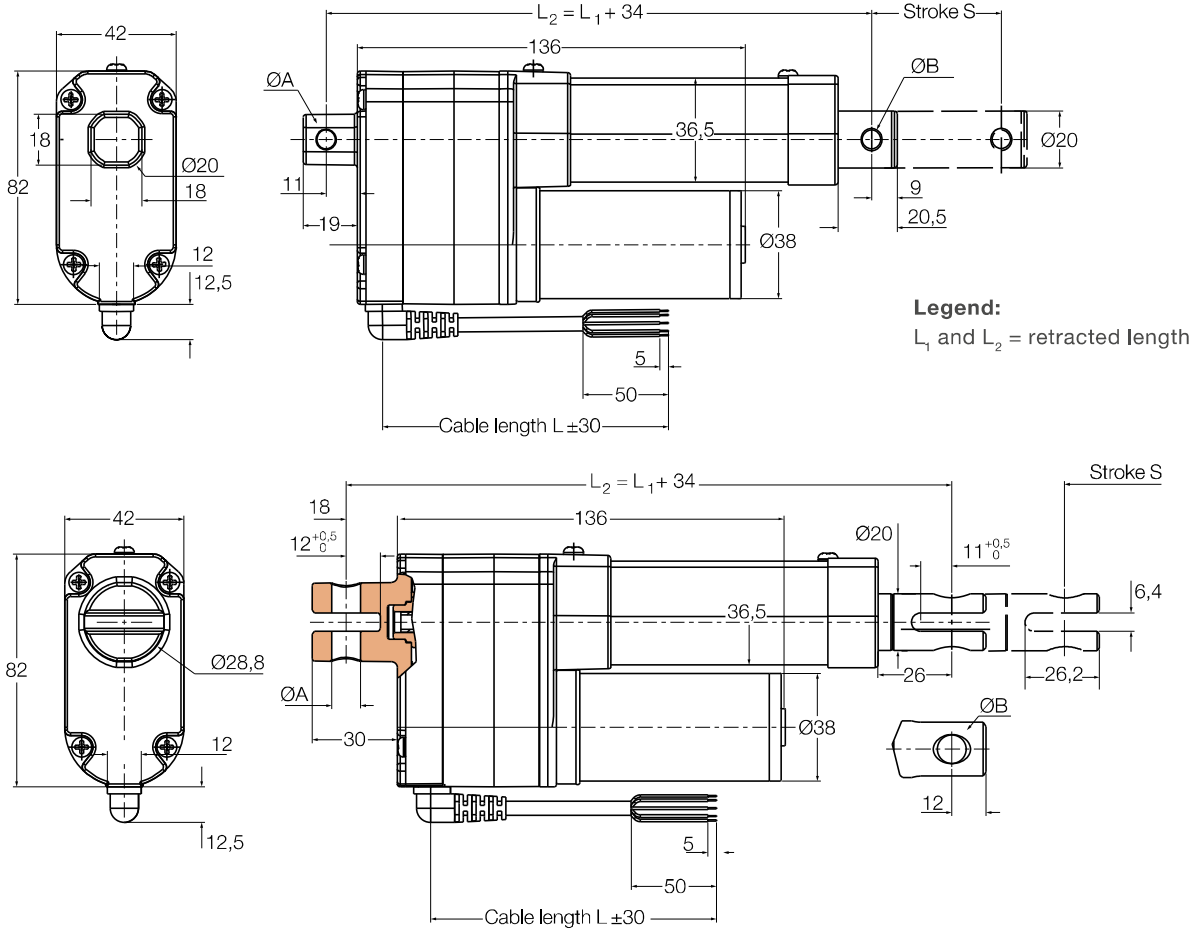
Current-load diagram



- CAHB-10...1
- CAHB-10...3
- CAHB-10...5
- CAHB-10...2
- CAHB-10...4
- CAHB-10...6

Dimensional drawing

Optional potentiometer



L₂ tolerance:

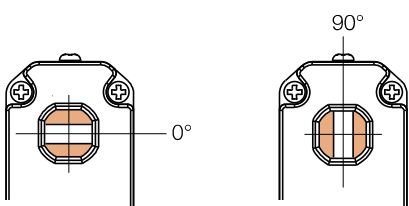
- CAHB10...1 and 2: (-5, +1)
- CAHB10...3 and 4: (-3, +3)
- CAHB10...5 and 6: (-2, +4)

S tolerance:

- CAHB10...1 and 2: (-1, +5)
- CAHB10...3 and 4: (-3, +3)
- CAHB10...5 and 6: (-4, +2)

Stroke (mm)	50	100	150	200	250	300
Retracted length (L ₂)	192	243	294	345	396	447
Retracted length with fork head	213	264	315	366	417	468

Attachment



Encoder resolution

Type	CAHB-10...1	CAHB-10...2	CAHB-10...3	v CAHB-10...4	CAHB-10...5/6
Mm/pulse	0,3	0,15	0,075	0,05	0,038

Potentiometer resolution

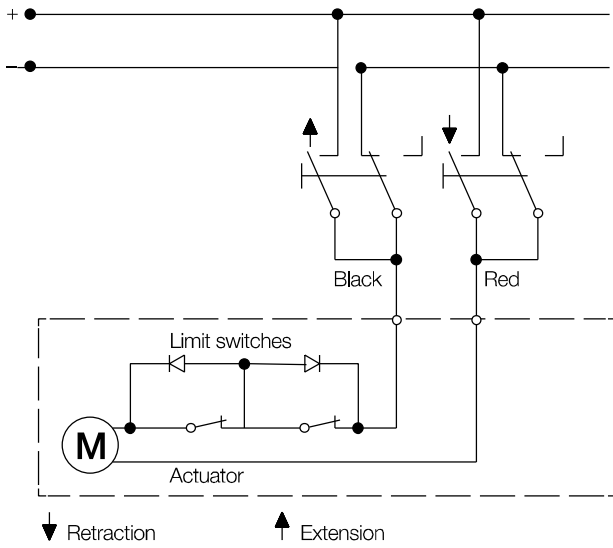
Stroke [mm]	50~80	80~160	160~300
Minimum resistance value of potentiometer	700~1 300 Ω	700~1 300 Ω	700~1 300 Ω
Potentiometer resolution	100 Ω /mm	50 Ω /mm	16,6 Ω /mm

Absolute analog output

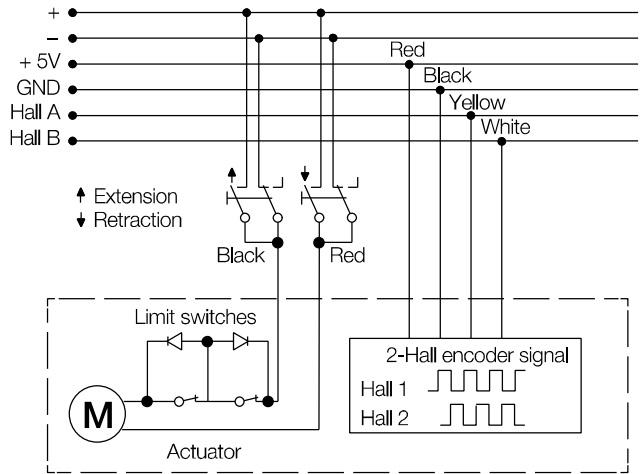
Stroke [mm]	50~80	80~160	160~300
Initial value VS RL position (V)	0,5	0,5	0,5
Resolution (mm)	0,024	0,049	0,0146
Position feedback change (V/mm)	0,05	0,025	0,0083

Connecting diagram

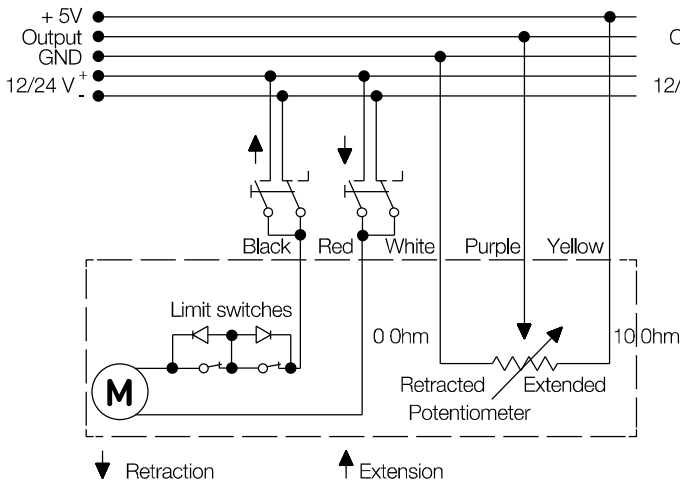
Basic configuration
12/24 V DC



2-Hall encoder
12/24 V DC



Potentiometer



Absolute analog output

