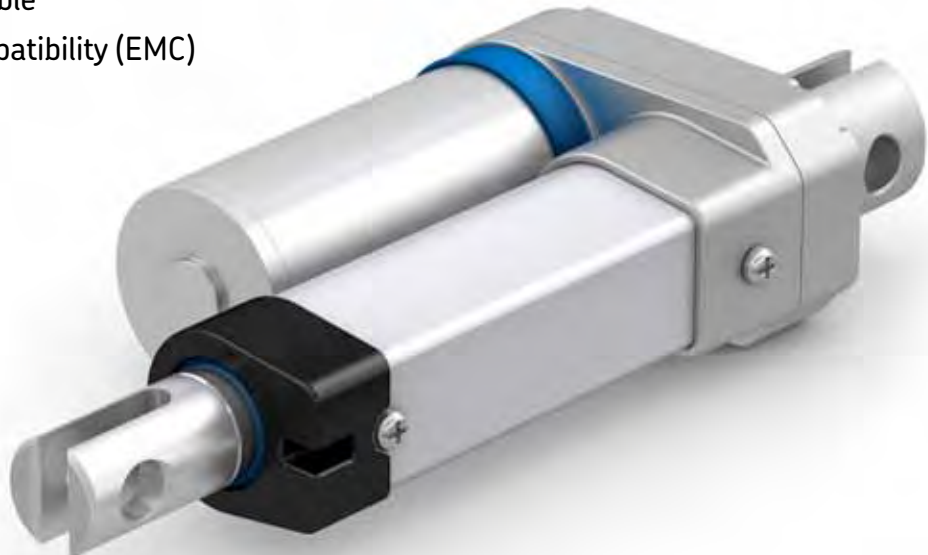


# Linear actuator

CAHB-10 series

## Benefits

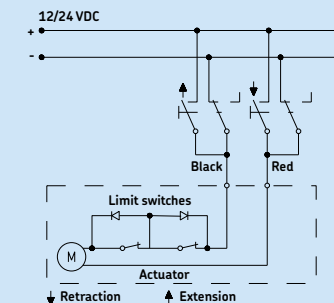
- Compact design
- Designed for harsh environment
- Robust and reliable
- Integrated limit switches
- Quiet operation
- Thermal protection
- Optional potentiometer and 2-Hall encoder available
- Electromagnetic compatibility (EMC) compliant



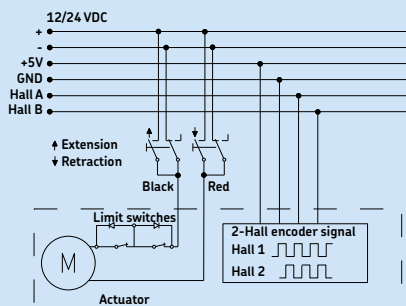
**SKF**

Connecting diagram

Basic configuration

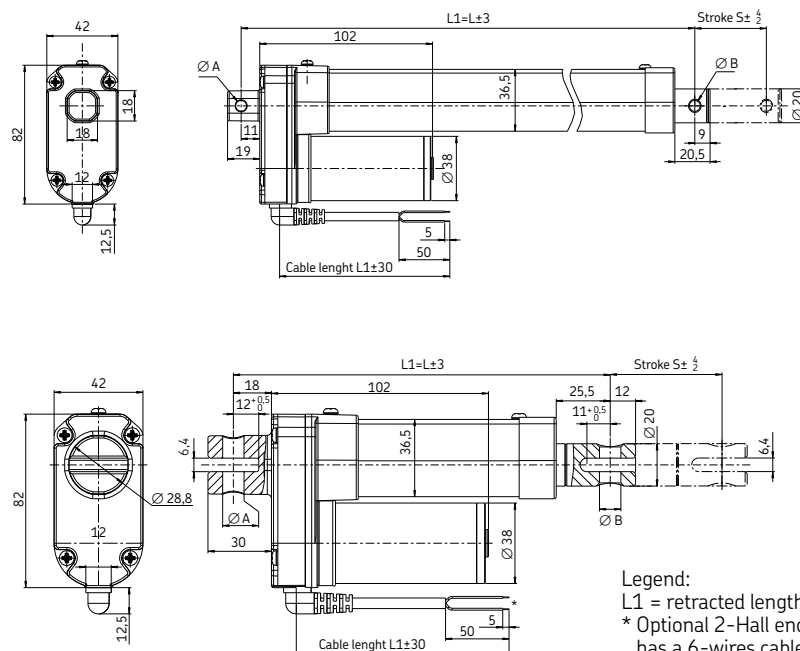


2-Hall encoder



Dimensional drawing

Basic configuration and optional 2-Hall encoder



Stroke (mm)	50	100	150	200	250	300
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Retracted length (L1)	158	209	260	311	362	413
Retracted length with fork head	179	230	281	332	383	434

Encoder resolution

Gear ratio	5:1	10:1	20:1	30:1	40:1
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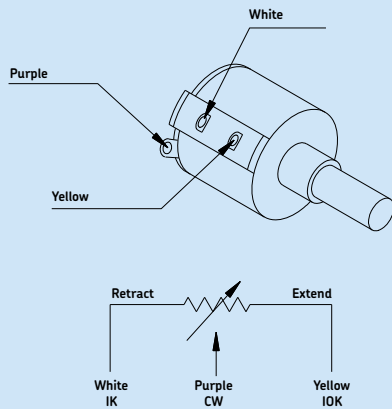
Mm/pulse	0,3	0,15	0,075	0,05	0,038
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Technical data

	Unit	CAHB-10... 1	CAHB-10... 2	CAHB-10... 3	CAHB-10... 4	CAHB-10... 5
Push load	N	120	240	500	750	1 000
Pull load	N	120	240	500	750	1 000
Speed (full load to no load)	mm/s	45 to 56	24 to 30	13 to 16	8 to 10	6 to 8
Stroke	mm	50 to 300	50 to 300	50 to 300	50 to 300	50 to 300
Retracted length	mm	_*	_*	_*	_*	_*
Voltage	V DC	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
Current consumption	12 V DC	A	4	3,5	3,2	3
	24 V DC	A	2,2	2,0	1,8	1,6
Duty cycle	%	25	25	25	25	25
Ambient temperature	°C	-40 to +85	-40 to +85	-40 to +85	-40 to +85	-40 to +85
Type of protection	IP	66s	66s	66s	66s	66s
Weight (at 300 mm stroke)	kg	1,5	1,5	1,5	1,5	1,5
Color	-	Silver	Silver	Silver	Silver	Silver
Limit switches	-	Yes	Yes	Yes	Yes	Yes
Thermal protection	-	Yes	Yes	Yes	Yes	Yes

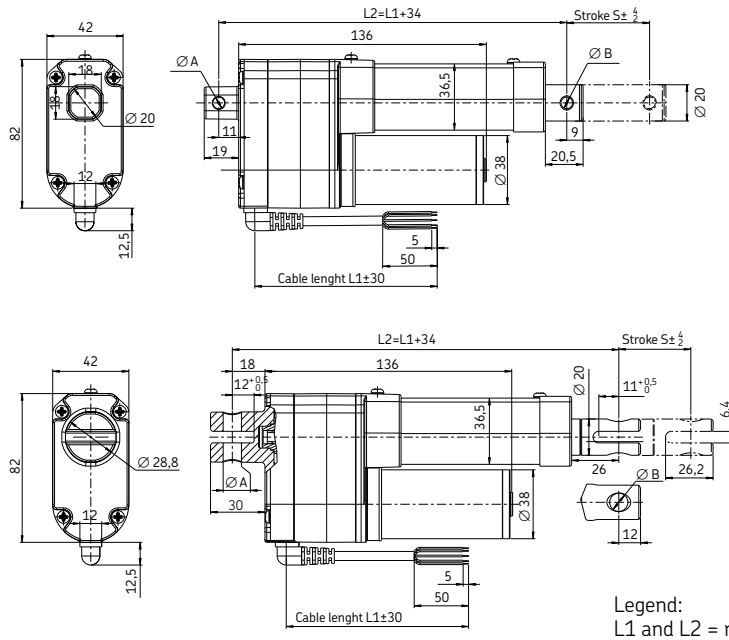
\* See above table

Potentiometer



Dimensional drawing

Optional potentiometer



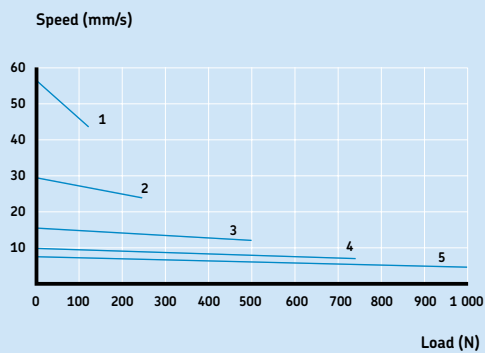
Legend:  
L1 and L2 = retracted length

Stroke (mm)	50	100	150	200	250	300
Retracted length (L2)	192	243	294	345	396	447
Retracted length with fork head	213	264	315	366	417	468

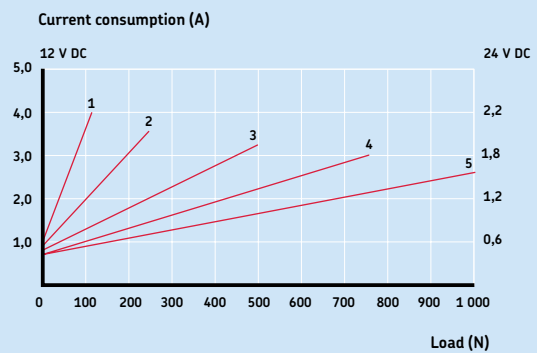
Potentiometer resolution

Stroke (mm)	50-80	80-160	160-300
Minimum resistance value of potentiometer	700-1300 Ω	700-1300 Ω	700-1300 Ω
Potentiometer resolution	100 Ω/mm	50 Ω/mm	16,6 Ω/mm

Performance diagrams



Speed-load diagram



Current-load diagram

**Ordering key**

C
A
H
B
- 1 0 -
 
 
A
-
 
 
 
- A
 
 
 
 
0 - 0 0 0

<b>Type</b>				
<b>Voltage:</b> 12 V DC 24 V DC	A B			
<b>Load:</b> 120 N 240 N 500 N 750 N 1 000 N	1 2 3 4 5			
<b>Screw:</b> TR12 screw Customized	A X			
<b>Stroke:</b> 50 mm 100 mm 150 mm 200 mm 250 mm 300 mm	050 100 150 200 250 300			
<b>Retracted length:*</b>				
<i>Stroke without potentiometer:**</i>	<i>A(B)+A(B)</i>	<i>A(B)+C</i>	<i>C+A(B)</i>	<i>C+C</i>
50 mm	158 mm	165 mm	172 mm	179 mm
100 mm	209 mm	216 mm	223 mm	230 mm
150 mm	260 mm	267 mm	274 mm	281 mm
200 mm	311 mm	318 mm	325 mm	332 mm
250 mm	362 mm	369 mm	376 mm	383 mm
300 mm	413 mm	420 mm	427 mm	434 mm
<b>IP:</b> Standard (IP 66s)	A			
<b>Front attachment:</b> Rod with hole Ø 6,4 mm Rod with hole Ø 8 mm Fork head with hole Ø 10,1 mm Customized	A B C X			
<b>Rear attachment:</b> Rod with hole Ø 6,4 mm Rod with hole Ø 8 mm Fork head with hole Ø 10,1 mm Customized	A B C X			
<b>Hole direction of the attachments:</b> 0° 90°	A B			
<b>Option 1:</b> None Potentiometer 2-Hall encoder	O P H			
<b>Cable length:</b> 600 mm without connector 1 000 mm without connector 1 500 mm without connector 2 000 mm without connector 2 500 mm without connector 3 000 mm without connector Customized	A B C D E F X			
<b>Auxiliary code (Standard products are "00")</b>				

\* Retracted length will be enlanged 34 mm with Potentiometer option  
 \*\* Front attachment + Rear attachment; A, B, C mean the attachment types

