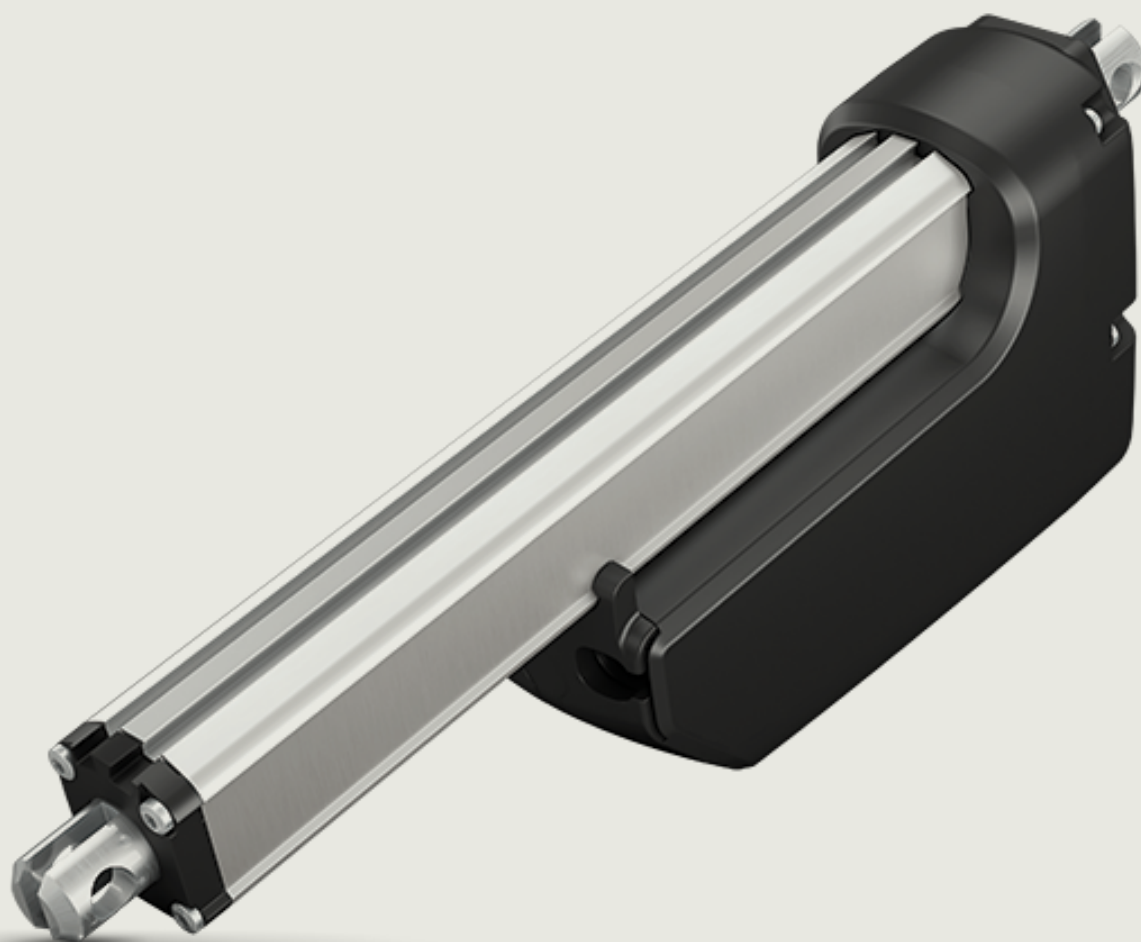


Actuator LA33 With IC Advanced **Connection diagram**



Connection diagram

33XXXXXXXXXX3XXX=XXXXXAX2XXXXX

	12/24 V DC +	BROWN	Power	2		
	GND -	BLUE		1		
	Digital input	RED	Signal	2		
	Digital input	BLACK		1		
	Feedback	VIOLET		4		
	Signal GND	WHITE		3		
	Digital output	YELLOW		5		
	Digital output	GREEN		6		



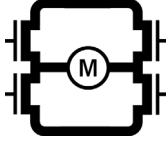
Please be aware that if the power supply is not properly connected, you might damage the actuator!



Configuration of IC Advanced is possible with the BusLink software for PC
The newest version is available online [here](#).

Please note: The BusLink configuration cable must be purchased separately
Item number for BusLink cable kit: 0367999 (adapter + USB2Lin)

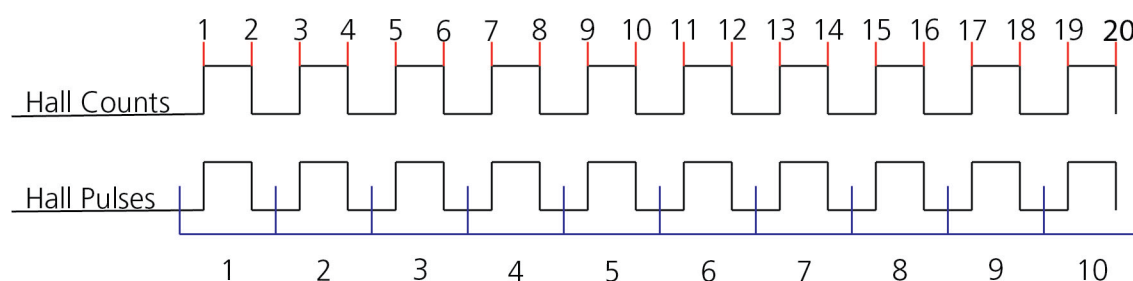
I/O specifications

Input/Output	Specification	Comments
Description	<p>Easy-to-use interface with integrated power electronics (H-bridge).</p> <p>The actuator can also be equipped with an electronic circuit that gives an absolute or relative feedback signal.</p> <p>The version with "IC option" cannot be operated with PWM (power supply).</p>	
Brown	<p>12 - 24 V DC + (VCC)</p> <p>12 V \pm 20 %</p> <p>24 V \pm 10 %</p> <p>12 V, max. 13 A</p> <p>- current cut off at 15 A</p> <p>24 V, max. 9 A</p> <p>- current cut off at 10 A</p>	<p>Note:</p> <p>Do not change the power supply polarity on the Brown and Blue wires!</p> <p>Power supply GND (-) is electrically connected to the housing</p>
Blue	<p>12-24 V DC - (GND)</p> <p>Connect Blue to negative</p>	<p>If the temperature drops below 0 °C, all current limits will automatically increase to:</p> <p>20 A for 12 V</p> <p>15 A for 24 V</p>
Red	Extends the actuator	<p>The signal becomes active at:</p> <p>> 67% of V_{IN}</p> <p>The signal becomes inactive at:</p> <p>< 33% of V_{IN}</p> <p>Input current: 10 mA</p>
Black	Retracts the actuator	
Green	Endstop reached out	<p>Output voltage min. $V_{IN} - 2$ V</p> <p>Source current max. 100 mA</p> <p>Endstop Signals are NOT potential free.</p> <p>Endstop reached can be configured with BusLink software according to any position needed.</p> <p>When configuring virtual endstop, it is not necessary to choose the position feedback.</p> <p>Endstop reached and virtual endstop will work even when feedback is not chosen.</p>
Yellow	<p>Endstop reached in (Option 1)</p> <p>Constantly high (Option 2)</p>	

Input/Output	Specification	Comments
Violet	Analogue feedback (0-10 V): Configure any high/low combination between 0-10 V	Ripple max. 200 mV Transaction delay 20 ms Linear feedback 0.5 % Max. current output. 1 mA
	Single Hall output (PNP) Movement per Single Hall count: 0.1372 mm per count Frequency is 14-26 Hz on Single Hall output depending on load Higher voltage on the motor can result in shorter pulses	Output voltage min. $V_{IN} - 2\text{ V}$ Max. current output: 12 mA Max. 680 nF
	Digital output feedback PWM: Configure any high/low combination between 0-100 %	Output voltage min. $V_{IN} - 2\text{ V}$ Frequency: 75 Hz \pm 10 Hz as standard, but this can be customised. Duty cycle: Any low/high combination between 0 and 100 percent. Open collector source current max. 12 mA
	Analogue feedback (4-20 mA): Configure any high/low combination between 4-20 mA	Tolerances $\pm 0.2\text{ mA}$ Transaction delay 20 ms Linear feedback 0.5 % Output: Source Serial resistance: 12 V max. 300 ohm 24 V max. 900 ohm
	All absolute value feedbacks (0-10 V, PWM and 4-20 mA)	Standby power consumption: 12 V, 60 mA 24 V, 45 mA It is recommendable to have the actuator activate its limit switches on a regular basis to ensure more precise positioning
White	Signal GND	For correct wiring of Power GND and Signal GND - please see figure below

A Hall count occurs every time the signal changes direction, either upwards or downwards

A Hall pulse consists of two Hall counts.

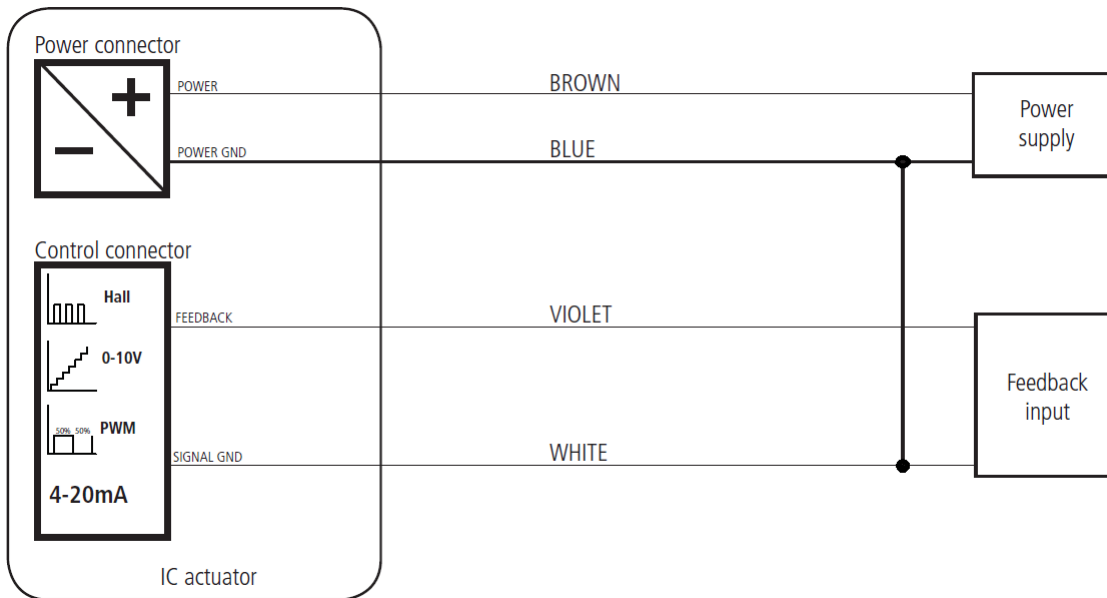




- Current cut-offs should not be used as stop function! This might damage the actuator. Current cut-offs should only be used in emergencies!
- Current cut-off limits are not proportional with the load curves of the actuator. This means that the current cut-offs cannot be used as load indicator.
- There are tolerances on the spindle, nut, gear wheels etc. and these tolerances will have an influence on the current consumption for the specific actuator.



Correct wiring of Power GND and Signal GND for IC Advanced:



Please note: This section only applies for 0-10 V, Hall and PWM feedback options.

Terms of use

LINAK® takes great care in providing accurate and up-to-date information on its products. However, the user is responsible for determining the suitability of LINAK products for a specific application. Due to continual development, LINAK products are subject to frequent modifications and changes. LINAK reserves the rights to conduct modifications, updates, and changes without any prior notice. For the same reason, LINAK cannot guarantee the correctness and actual status of imprinted information on its products.

LINAK uses its best efforts to fulfil orders. However, for the reasons mentioned above, LINAK cannot guarantee availability of any particular product at any given time. LINAK reserves the right to discontinue the sale of any product displayed on its website or listed in its catalogues or in other written material created and produced by LINAK, LINAK subsidiaries, or LINAK affiliates. All sales are subject to the 'Standard Terms of Sale and Delivery for LINAK A/S' available on LINAK websites. LINAK and the LINAK logotype are registered trademarks of LINAK A/S. All rights reserved.