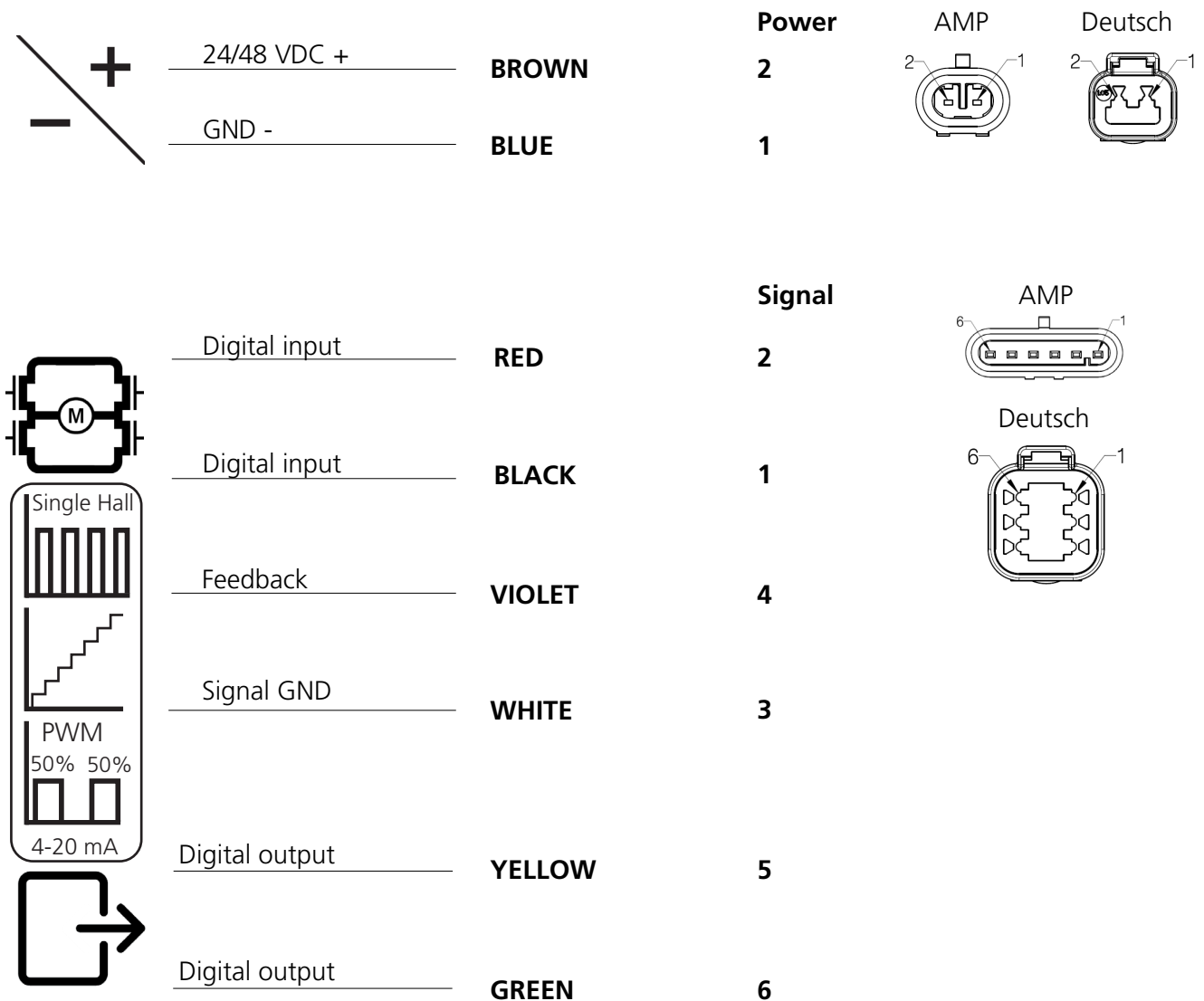



Actuator LA36  
With IC Advanced  
**Connection diagram**




## Connection diagram

36XXXXXXXXX23XX-XXXXXXXXXXXXXXXXXX

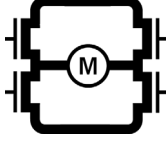


 Please be aware that if the power supply is not properly connected, you might damage the actuator!

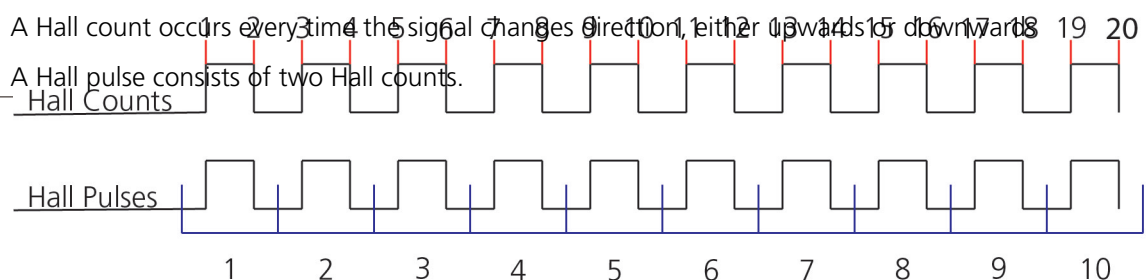
 Configuration of IC Advanced is possible with the BusLink software for PC. The newest version is available online at [LINA.K.COM/TECHLINE](http://LINA.K.COM/TECHLINE)

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 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 VDC <math>\pm</math> 20 %, current limit 30 A</p> <p>24 VDC <math>\pm</math> 10 %, current limit 20 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 VDC - (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>30 A for 12 V</p> <p>25 A for 24 V</p>
Red	Extends the actuator	<p>The signal becomes active at:</p> <p>&gt; 67% of <math>V_{IN}</math></p> <p>The signal becomes inactive at:</p> <p>&lt; 33% of <math>V_{IN}</math></p> <p>Input current: 10 mA</p>
Black	Retracts the actuator	
Green	Endstop reached out	<p>Output voltage min. <math>V_{IN} - 2</math> V</p> <p>Source current max. 100 mA</p> <p>Endstop signals are NOT potential free.</p> <p>Endstop signals can be configured with BusLink software according to any position needed.</p>
Yellow	<p>Endstop reached in (Option 1)</p> <p>Constantly high (Option 2)</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>

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. Overvoltage on the motor can result in shorter pulses	Output voltage min. $V_{IN} - 2$ V Max. current output: 12 mA Max. 680 nF
	Digital output feedback PWM: Configure any high/low combination between 0-100 %	Output voltage min. $V_{IN} - 2$ 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 +/- 0.2 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 to 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

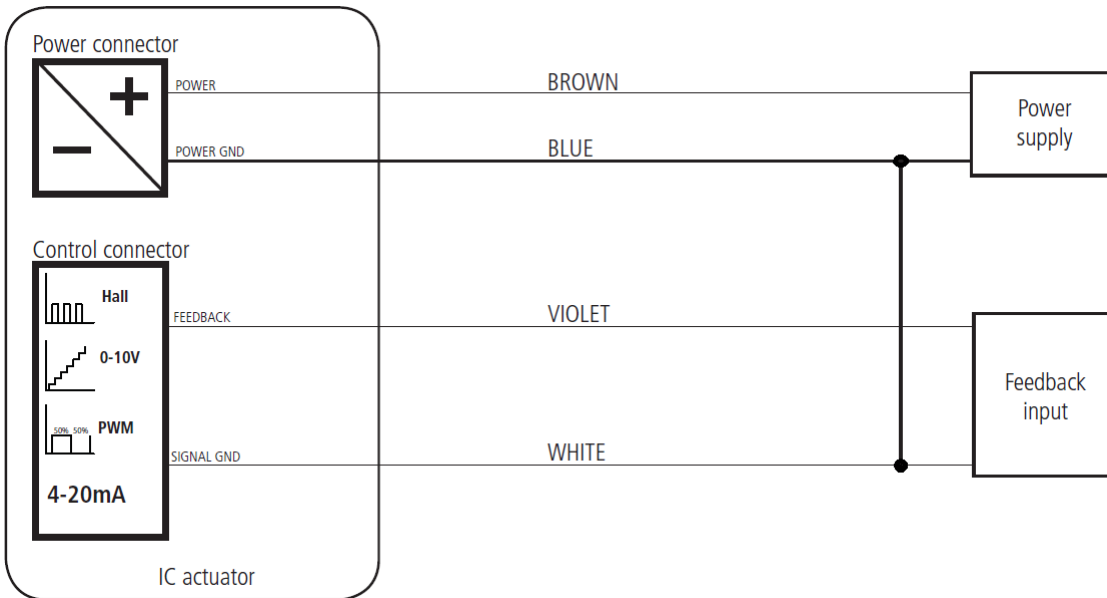




- Current cut-offs should not be used as stop function! This might damage the actuator. Current cut-offs should only be used in emergencies!
- Current cut-off limits are not proportional with the load curves of the actuator. This means that the current cut-offs cannot be used as load indicator.
- There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

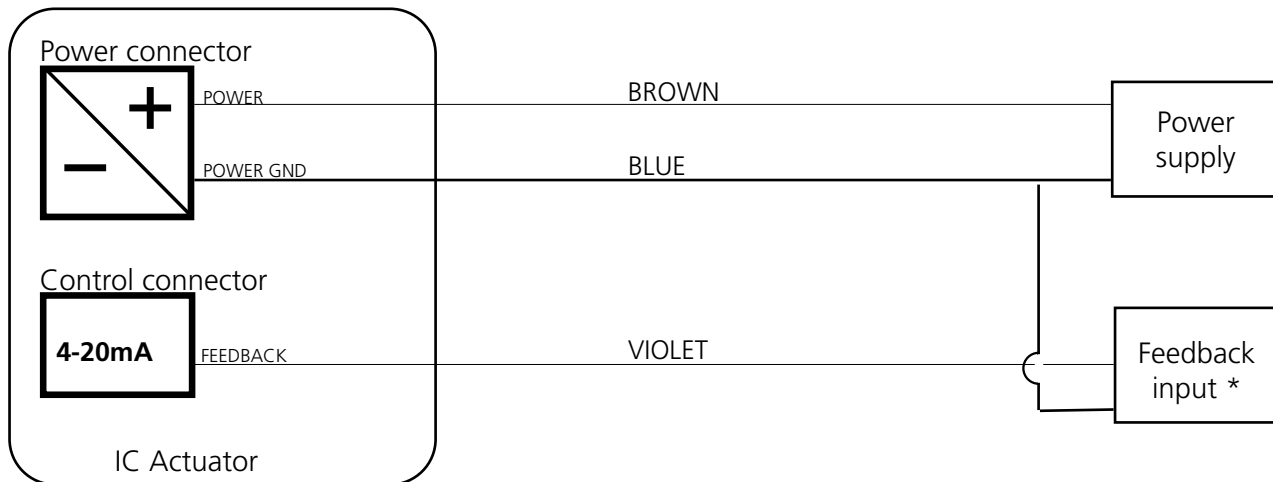


Correct wiring of Power GND and Signal GND for IC Advanced:



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

The following connection illustration applies for 4-20 mA only:



\* Only to be used on differential input card. Do not use single ended input card.

Do NOT connect or put the white wire anywhere near GND, as this will create ground loops, disturbing the mA-signal.

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