Actuator LA33
Endstop signals and relative positioning - Single hall
Connection diagram
Connection diagram

33XXXXXXXXX0KXXXX=XXXX1XXXXX

*BROWN/BLUE: Endstop signals out are NOT potential free (see specifications on next page)

**Tip:** If you wish to use the endstop signals, you will have to keep power on the brown, blue, red and black wires, otherwise the signal will be lost.
## I/O Specifications

<table>
<thead>
<tr>
<th>Input/Output</th>
<th>Specification</th>
<th>Comments</th>
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</thead>
<tbody>
<tr>
<td><strong>Description</strong></td>
<td>The actuator can be equipped with Single hall that gives a relative positioning feedback signal when the actuator moves. See connection diagram, figure above</td>
<td>Hall</td>
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</table>
| **Brown** | 12 or 24VDC (+/-)  
12V ± 20%  
24V ± 10%  
Under normal conditions: | To extend actuator: Connect Brown to positive  
To retract actuator: Connect Brown to negative |
| **Blue** | 12V, max. 13A depending on load  
24V, max. 9A depending on load | To extend actuator: Connect Blue to negative  
To retract actuator: Connect Blue to positive |
| **Red** | Signal power supply (+) 12-24VDC | Current consumption: Max. 40mA, also when the actuator is not running |
| **Black** | Signal power supply GND (-) | |
| **Green** | Endstop signal out | Output voltage min. \( V_{IN} - 2V \)  
Source current max. 100mA  
NOT potential free |
| **Yellow** | Endstop signal in | |
| **Violet** | Single Hall output (PNP)  
Movement per Single Hall pulse:  
33090: Actuator = 0.3 mm per count  
33150: Actuator = 0.5 mm per count  
33200: Actuator = 1.1 mm per count  
Frequency:  
Frequency is up to 125 Hz on Single Hall output depending on load and spindle.  
Overvoltage on the motor can result in shorter pulses. | Output voltage min. \( V_{IN} - 2V \)  
Max. current output: 12mA  
Max. 680nF  
N.B. For more precise measurements, please contact LINAK A/S  
Low frequency with a high load  
Higher frequency with no load |
| **Input:** | Single hall output: | Micro - Processor |
| Hall A | | |
| Hall B | | |
| **White** | Not to be connected | |