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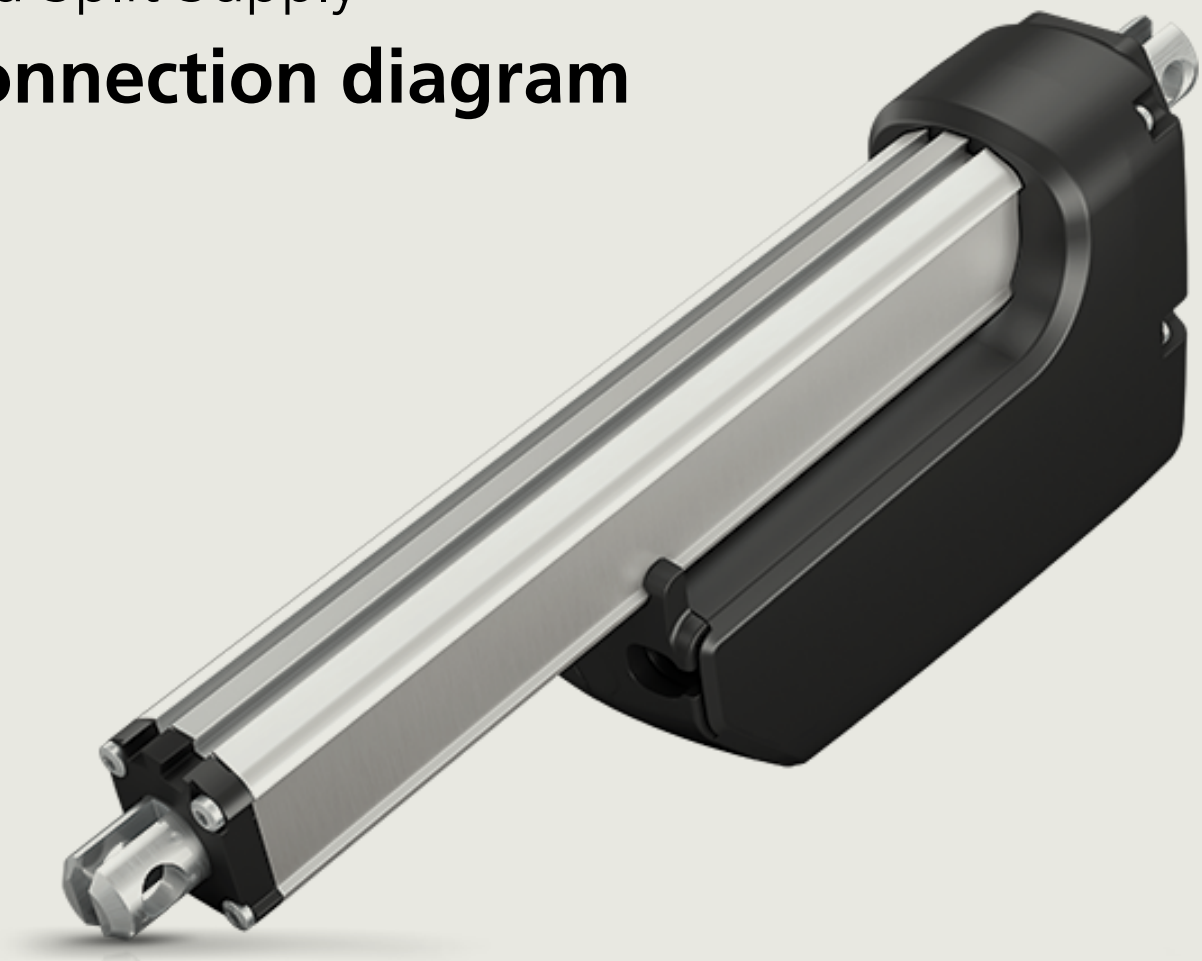
Actuator LA33

With CAN bus J1939, 0-point, Hardware Addressing and Split Supply

Connection diagram



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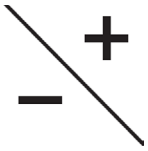
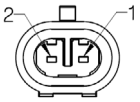
Connection diagram

33XXXXXXXX003X2X=XXXXXX0GXXXXX



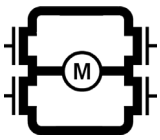
		Power
24/48 V DC +	**BROWN**	**2**
GND -	**BLUE**	**1**

AMP



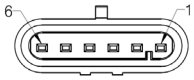
Deutsch

		Signal
Split power supply	**ORANGE**	**5**
Digital input Hardware addressing 2	**RED**	**1**
Digital input Hardware addressing 1	**BLACK**	**2**
Hardware addressing 3	**LIGHT BLUE**	**6**
Bus	**YELLOW**	**3**
Bus	**GREEN**	**4**
Not to be connected	**GREY**	**0**
Data	**VIOLET**	**7**
Data GND	**WHITE**	**8**

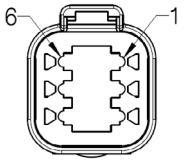


Service-Interface

AMP



Deutsch



The BusLink software tool is available for CAN bus actuators and can be used for:

Diagnostics, manual run and configuration

The newest version is available online here.

Please note: The BusLink configuration cable must be purchased separately

Item number for BusLink cable kit: 0367997 (adapter + USB2Lin)

I/O specifications

<table>
<tr><th>Input/Output</th><th colspan="4">Specification</th><th colspan="2">Comments</th></tr>
<tr><td>Description</td><td colspan="4">Compatible with the SAE J1939 standard. Uses CAN messages to command movement, setting parameters and to deliver feedback from the actuator.
Actuator identification is provided,using standard J1939 address claim or fixed addresses.</td><td colspan="2">  </td></tr>
<tr><td rowspan="6">Brown
Connect to positive</td><td colspan="4">24-48 V DC + (VCC)
Connect Brown to positive</td><td colspan="2" rowspan="6">Note: Do not swap the power supply polarity on the Brown and Blue wires!
The PCB is coupled to the housing through a capacitor.
Current limit levels can be adjusted through Actuator Connect®.
If the temperature drops below 0 °C, all current limits will automatically increase with a factor 2.</td></tr>
<tr><td>Vsup</td><td>Vmin</td><td>Vmax</td><td></td></tr>
<tr><td rowspan="2">24 V</td><td>16 V</td><td>36 V</td><td>Motor running</td></tr>
<tr><td>10 V</td><td>60 V</td><td>Motor not running
CAN communication possible</td></tr>
<tr><td rowspan="2">48 V</td><td>36 V</td><td>58 V</td><td>Motor running</td></tr>
<tr><td>24 V</td><td>60 V</td><td>Motor not running
CAN communication possible</td></tr>
<tr><td colspan="4">24 V, current limit 13 A
48 V, current limit 8 A</td></tr>
<tr><td>Blue
Connect to negative</td><td colspan="4">- (GND)</td></tr>
<tr><td>Red</td><td colspan="4">Extends the actuator/
Hardware addressing (2)</td><td rowspan="2">Manual run
If not connected to VCC at startup:</td><td rowspan="2">HW addressing
When used for Hardware addressing connect to VCC or negative (GND)</td></tr>
<tr><td>Black</td><td colspan="4">Retracts the actuator/
Hardware addressing (1)
The signal becomes:
active at: > 67% of V_{IN}
inactive at: < 33% of V_{IN}
Input current: 10 mA</td></tr>
</table>

Input/Output	Specification	Comments
Green	Can_L	Actuators with CAN bus does not contain the 120 Ω terminal resistor. The physical layer is in accordance with J1939-15.* Speed: Autobaud up to 500 kbps (CAN bus prior to version 3.0 up to 250 kbps) Max. bus length: 40 meters Max. stub length: 3 meters Max. node count: 10 (can be extended to 30 under certain circumstances) Wiring: Unshielded twisted pair Cable impedance: 120 Ω (±10 %)
Yellow	Can_H	
Orange	Split supply: 24 V DC with ≈ 28mA current consumption 48 V DC with ≈ 16mA current consumption Connect to positive. The split supply uses the common GND from the power supply	Split supply is for operational power only.
Light Blue	HW addressing (3)	When used for Hardware addressing connect to VCC or negative (GND)
Violet	Service interface	Only Actuator Connect® can be used as service interface. Use Grey adapter cable
White	Service interface GND	

* J1939-15 refers to Twisted Pair and Shielded cables.
The standard/default cables delivered with CAN actuators do not comply with this.

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