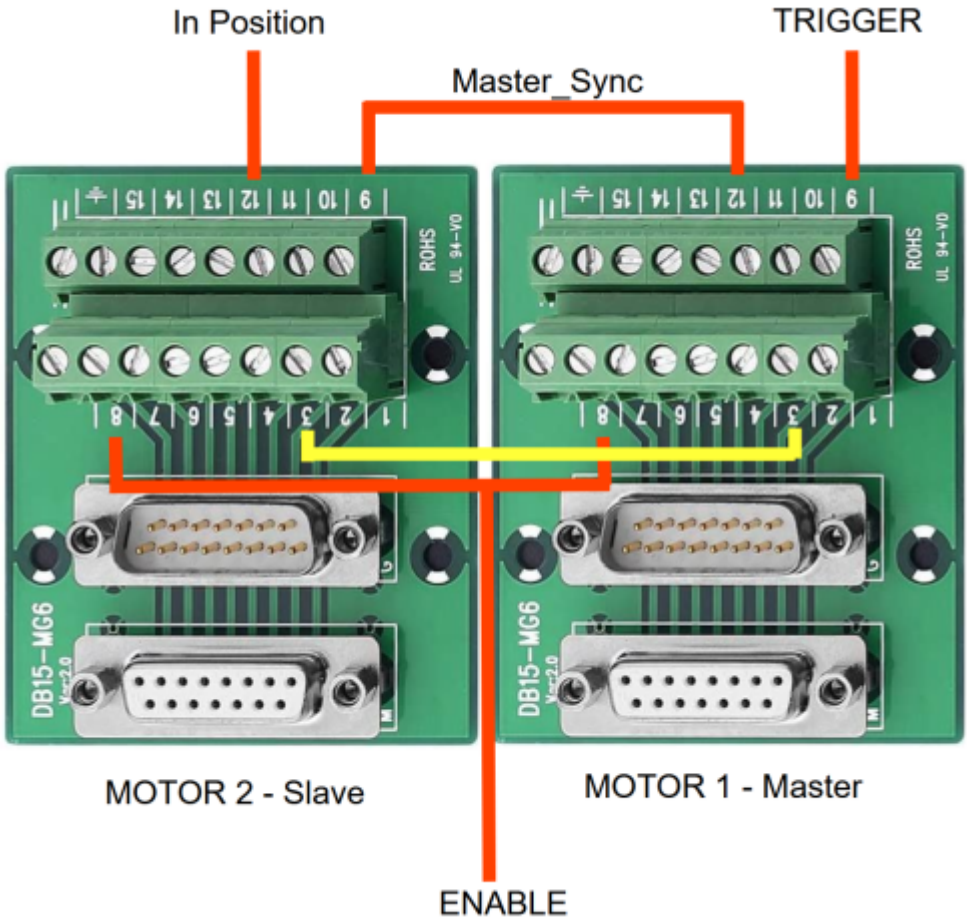
Electrical Connections

Connection between the two motors

The pick and place robot works with 2 external signal provided by the PLC or sensor. Trigger signal is the start signal for the pick and place sequence stored inside the two motors using NiLAB Starter Software. Enable signal is to switch on for the two motors provided by the PLC. Normally, when the motors are configured as pick and place every Disable the two motors performed homing procedure (Soft landing) to ensure a parking position for the robotic hands.
In position outoput signal is the signal generated by the slave motor at every positioning task. For example if the pick and place is programmed with 4 motion tasks this signal change for 4 times.
Master sync is the signal generated by the master motor to synchronize the motion of the second motor slave.

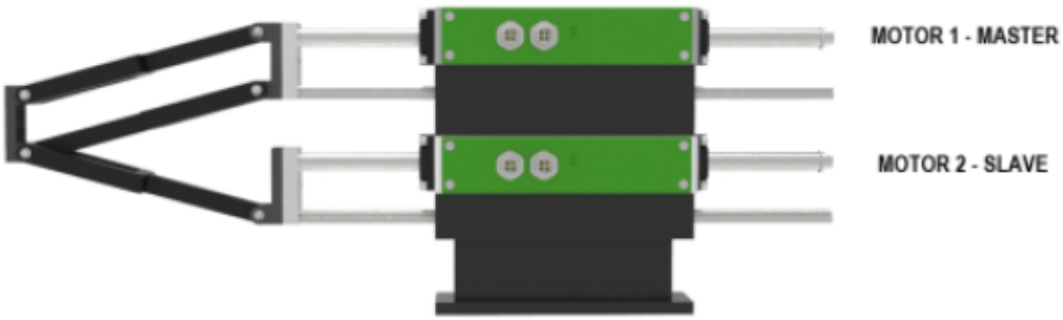


The signal must be connected together as in the table below (with reference to the photo above)

SIGNAL	MOTOR 1	MOTOR 2	DESCRIPTION
ENABLE	Pin 8	Pin 8	Switch-on the motors
TRIGGER	Pin 9	-	Motion trigger from PLC
Master_sync	Pin 12	Pin 9	Master signal for synchronization
In Position	-	Pin 12	In position signal from Slave
GND	Pin 3	Pin 3	Ground signal

How to identify the motor

The master motor (motor 1) is the upper motor in the pick and place assembly, as reported in the drawing below:



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