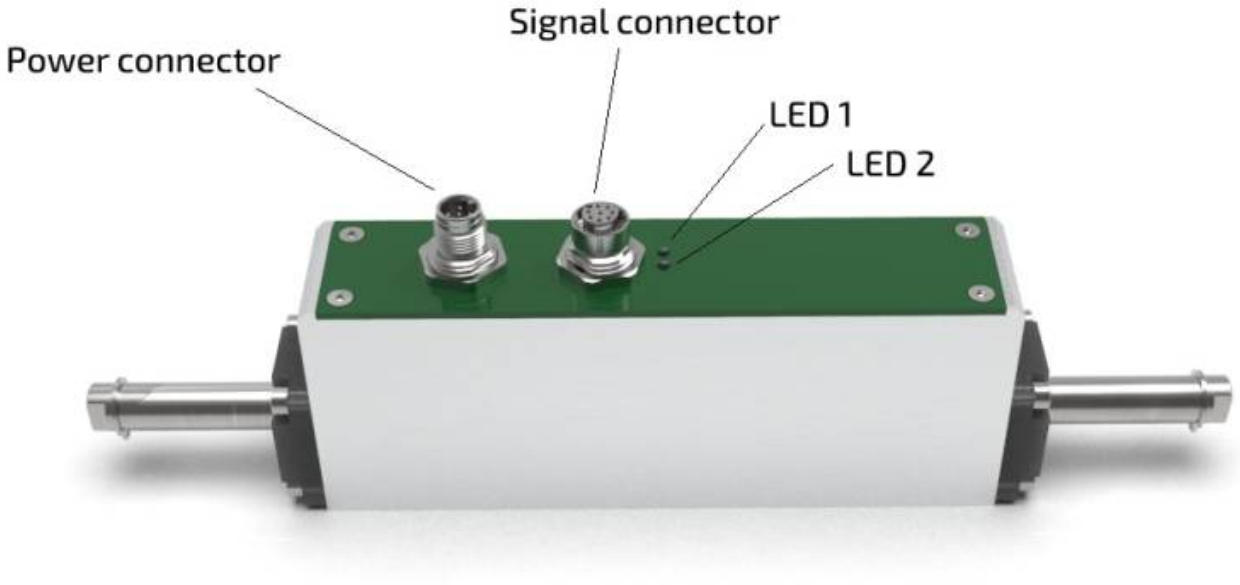
Connections - NLi120Q or NLi120X

MODBUS RTU only



Nli120Q/X is equipped with two M12 connectors.
For power connector ⇒ power female DA00022011 flying leads and for signal connector ⇒ signal male DA00012011.

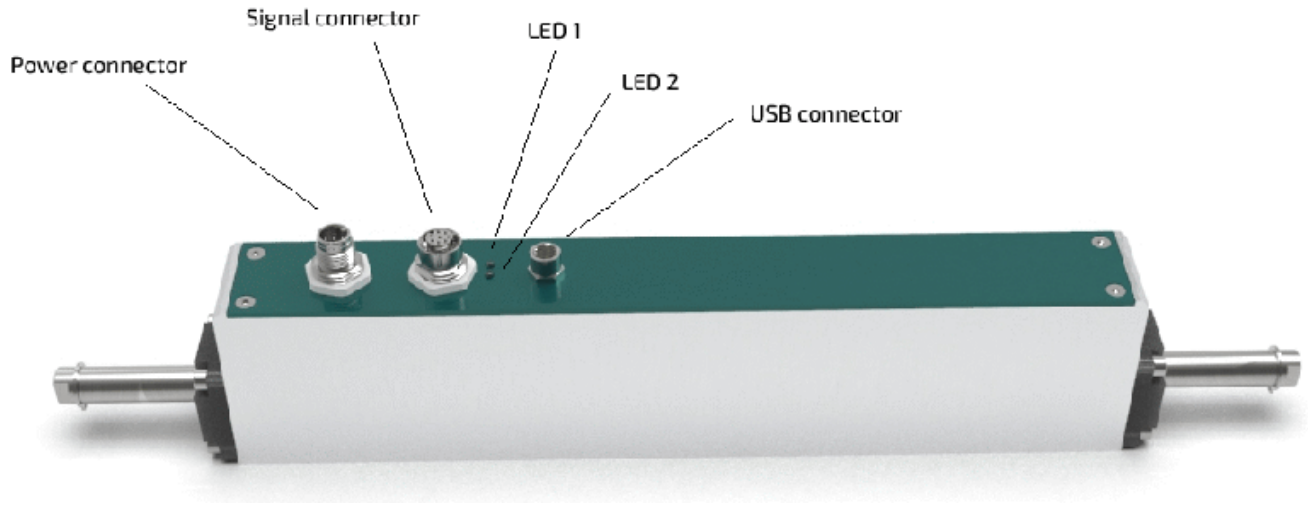
	
Signal cable DA00012011	Power cable DA0022011 The power cable terminates with two wire: RED (+24VDC), BLACK (GROUND).

The signal cable DA00012011 terminates with with D-SUB15 male connector with this pinout:

D-SUB 15 Pinout	SIGNAL	DESCRIPTION	FUNCTION
1	RS485_B	Modbus B	
2	RS485_A	Modbus A	
3	GND	Ground	
4	NC	Not connected	
5	NC	Not connected	
6	GND	Ground	
7	GND	Ground	
8	DIG_IN_0	Digital Input 0 (24V logic)	Enable/Homing
9	DIG_IN_1	Digital Input 1 (24V logic)	Motion trigger
10	DIG_OUT_0	Digital output 0 (24V logic, PNP)	Motor running
11	DIG_OUT_1	Digital output 1 (24V logic, PNP)	Motor fault
12	DIG_OUT_2	Digital output 2 (24V logic, PNP)	Programmable

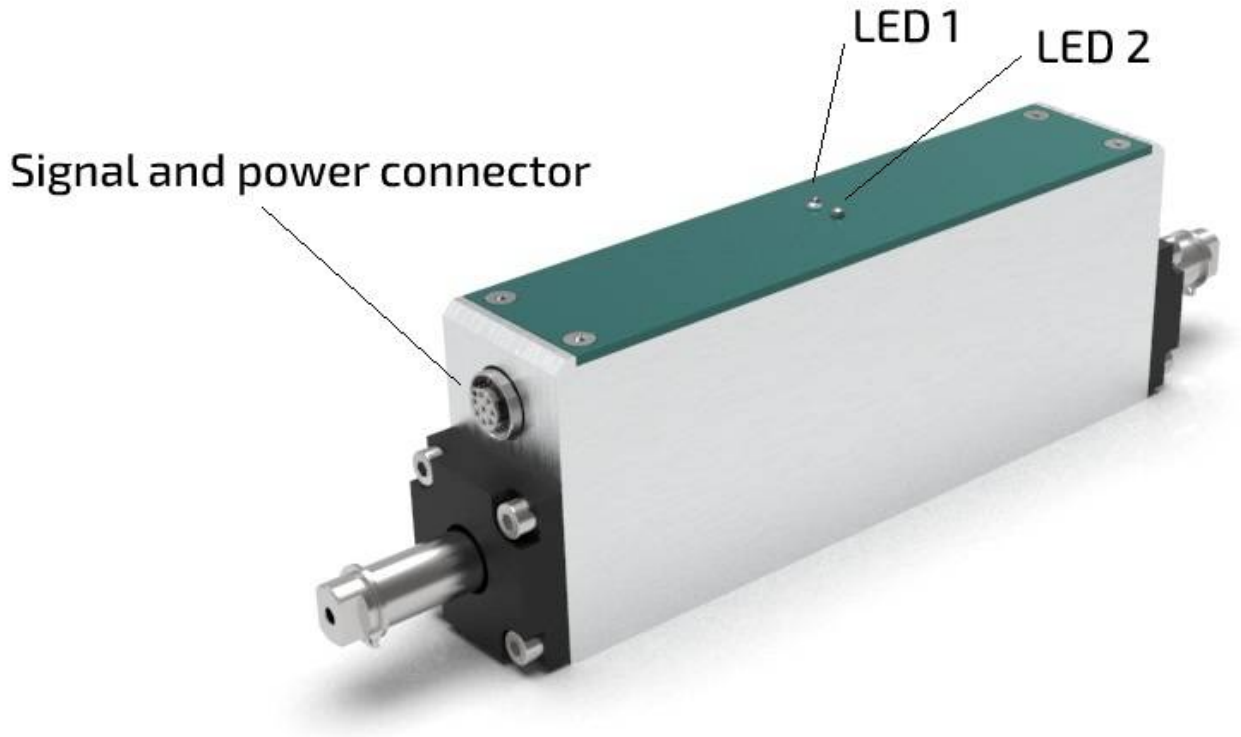
The programmable output have the following options: In Position, Homing in progress, Overtemp fault, sin/cos fault, I2T fault, Master sync, gripper command. This is programmable with NILAB Starter software.

MODBUS RTU + USB



This model has the same connectors and pinout of the MODBUS RTU only except for the additional USB connector for MODBUS over USB connection.

CANopen, MODBUS RTU and single rear connector

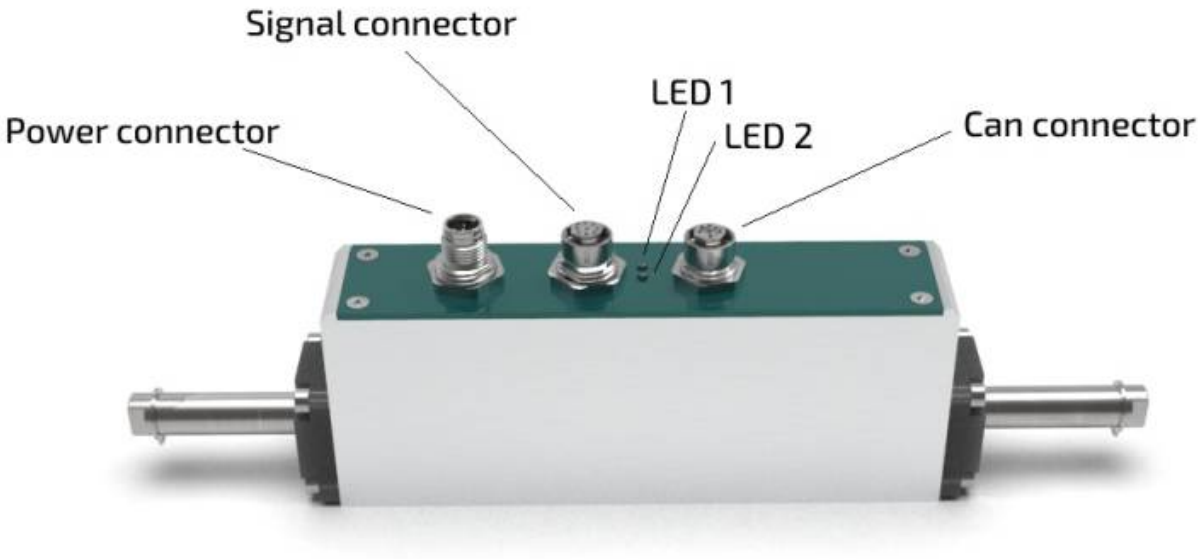


The hybrid for NLi120Q/X M12 and D-SUB9 connector is DA012019-5M



D-SUB9 Pinout	SIGNAL	SIGNAL	WIRE COLOR
1	CAN_H	Canbus high	Brown
2	CAN_L	Canbus LOW	Green
3	MODBUS_A	Modbus A	Yellow
4	MODBUS_B	Modbus B	Grey
5	–	–	–
6	GND	Ground	Violet
7	GND	Ground	Blue
8	24V	Power	White
9	24V	Power	Red

MODBUS RTU and CANopen or ANALOG INPUTS



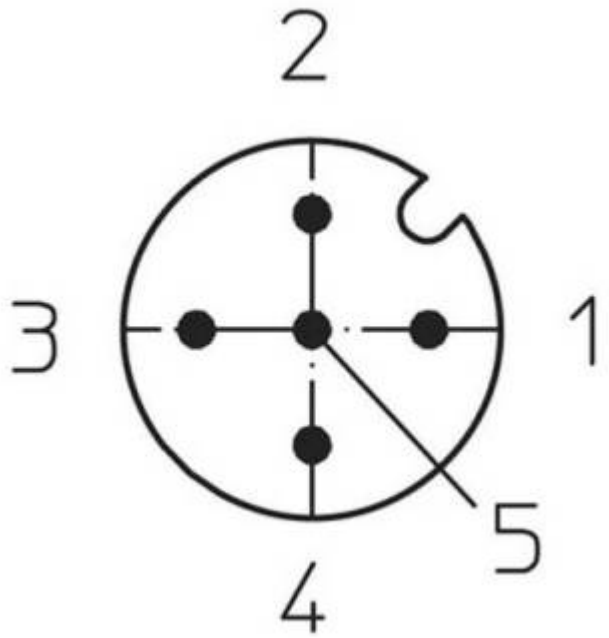
The Can cable for NLi120Q/X (third connector M12 female) and D-SUB9 connector is DA122011



D-SUB9 Pinout	SIGNAL	CAN VERSION	ANALOG VERSION	CAN VERSION WIRE COLOR
1	NC	–	PULSE IN/OUT	-
2	CAN_L	Canbus LOW	DIR IN/OUT	White
3	CAN_GND	Canbus Ground	GND	Yellow/Green or Gray
4	NC	–	-	-
5	NC	–	ANP (0 to 10V voltage control)	-
6	NC	–	ANN (4 to 20mA current control)	-
7	CAN_H	CAN HIGH	-	Brown
8	CAN_RES	TERMINATION RESISTANCE	-	Black
9	CAN_H	CAN HIGH	-	Blue

In order to have the termination on the node, please make a jumper between CAN_RES andf CAN_L (Pin 8 and Pin 2)

M12 power connector on the motor side pinout



Pin	Signal	Description
1	+24VDC	24VDC power line
2	+24VDC	24VDC power line

3	GND	Ground
4	GND	Ground
5	NC	Not connected

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