

Connecting the EE-SY761/762 to the DC-02 DigiSpeed-XL™

The Omron EE-SY671 and EE-SY761 optical sensors are ideal for use as optical index sensors in CNC applications. They are as close to “plug and play” as you will get. The sensors are very easy to install and have the following features;

- Built in sensitivity adjuster
- Built in amplifier and driver IC, capable of switching loads up to 100mA
- Wide operating voltage range, 5 – 24 VDC
- Activity indicator window

To connect the sensor to the DigiSpeed™, three connections are required, namely

1. 5 VDC supply
2. GND (0 V), and
3. Index input

The sensor may be connected to either the 3.5mm stereo connector, J1, or to the three pin header J7 as shown in Illustration 1. Use the table below to identify the connector pin outs.

J1	Signal	J7
Tip	Index input	J7-2
Middle	5 VDC	J7-3
Barrel	GND (0 VDC)	J7-1 ¹

Table 1: Sensor Connector Pin out

Further information on this sensor and it's accessories may be found in the sensor's datasheet.

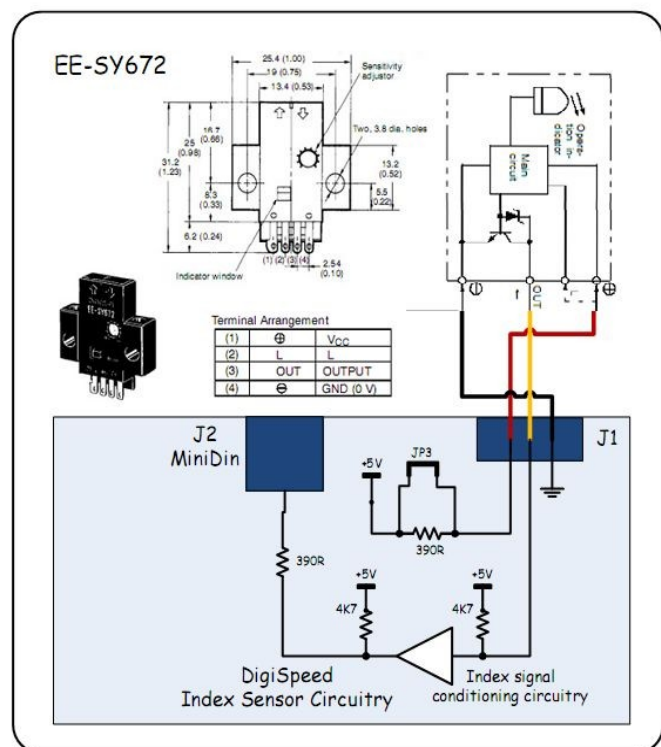


Illustration 1: Sensor Connection to DigiSpeed-XL™

Jumper JP3 depicted above shorts out a 390 ohm resistor that is between pin 1 and the 5 VDC supply. This jumper must be inserted when using this sensor.

For more information consult the DigiSpeed-XL™ user manual.

¹ Pin 1 of the connector has a square pad on the overlay. The remaining pins are numbered sequentially.

For easy wiring, consider using the EE-1006 matching 2 Meter cable and connector.

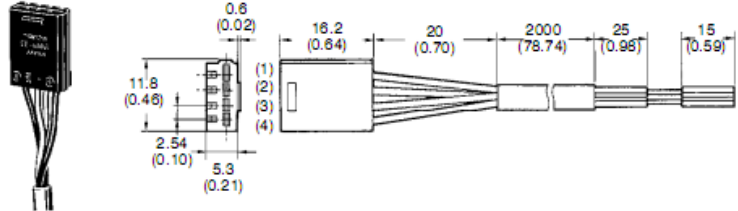


Illustration 2: EE-1006 Connector with Cable

Alternatively, the EE-1001 solder connector is also available if you wish to make up your own cable.

The sensor, connector and accessories may be purchased from Mouser Electronics <http://www.mouser.com> or other suppliers

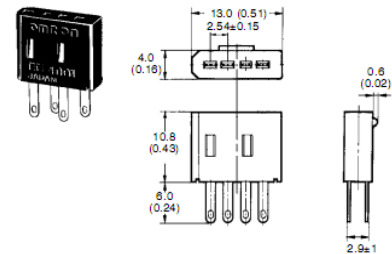


Illustration 3: EE-1006 Solder Connector

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