The encoder uses a **6-pin connector (JST PHR-6)** with the following pin assignments:

1. **Black**: Motor terminal (-)
2. **Red**: Motor terminal (+)
3. **Brown**: Hall Sensor Vcc (Power supply for the Hall effect sensors, 3.5V - 20V)
4. **Green**: Hall Sensor Ground (GND)
5. **Blue**: Hall Sensor Channel A output (Vout)
6. **Purple**: Hall Sensor Channel B output (Vout)