# GEN series
# 1-KAB2140-3

LEMO to female BNC breakout cable

Data sheet

### Special features

- **GN310B breakout cable**
- **Female BNC**
- **RG-58 C/U**
- **50 Ω**
- **UV resistent**
- **Wide temperature range**
- **Flame retardant**

**LEMO to female BNC breakout cable**
A 3 meter (9.8 ft) coaxial cable with LEMO FGG.1B.304 (male) on one side and female BNC on the other side. The female BNC supports a direct connection to e.g. current probes.

This cable supports high frequency current measurements with GN310B/GN311B cards when current channels are used to measure voltages coming from e.g. current probes.

## Cable Connector and Wiring

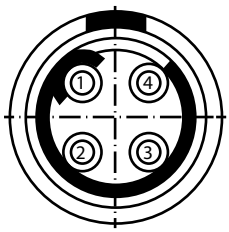


**Figure 1.1:** Cable connector soldering view

| Signal name (Cable wire) | Pin number |
|---|---|
| Not connected | 1 |
| Voltage input (Signal wire) | 2 |
| Not connected | 3 |
| Input return (Shield) | 4 |

| Electric Specifications at 20 °C | |
|---|---|
| Signal wire (Maximum DC resistance) | 40.7 Ω / km |
| Shield (Maximum DC resistance) | 17 Ω / km |
| Minimum isolation resistance | 5 GΩ / km |
| Maximum cable capacity at 1 kHz | 105 pF |
| Propagation speed | 66% |
| 1 MHz typical signal attenuation | 1.6 dB / 100 m |
| 5 MHz typical signal attenuation | 3.6 dB / 100 m |
| 10 MHz typical signal attenuation | 5.0 dB / 100 m |
| 20 MHz typical signal attenuation | 7.5 dB / 100 m |

| General RG-58 C/U Cable details (MIL-C 17 F) | |
|---|---|
| Signal resistance | 50 ± 2 Ω |
| Cable capacitance | 101 pF / m |
| Dielectric constant | 2.3 |
| Signal wire | Tinned braided copper wire |
| Shield wire | 94% covered tinned braided copper wire |
| Dielectric | PE (Polyethylene) |
| Cable outside | Black PVC |
| Internal diameter | 0.9 ± 0,051 mm |
| Diaelectric diameter | 4.95 ± 0,12 mm |
| Weight | 39 kg/km |
| Minimum band radius | 30 mm |
| Operating temperature (In fixed installations) | -40 °C to +80 °C |
| Maximum operating voltage | 2 kV RMS @ 50 Hz |
| Test voltage | 5 kV |
| Flame retardant | According IEC 60332-1-2 |

## Ordering Information

| Article | | Description | Order No. |
|---|---|---|---|
| Female BNC voltage input cable |  | Shielded cable for 1-GN31xB current channels in voltage mode.<br>LEMO breakout cable with female BNC for ease of connecting e.g. current probes. The female BNC is connected to the Voltage input pin of the current channel. The cable is one side shielded to minimize the typical impact of electromagnetic disturbance generated by high power switching power supplies. | 1-KAB2140-3 |



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