

periLINE basic

hybrid Single Pair Ethernet (SPE) cable assembly



The periLINE hybrid SPE cable assembly connects products with hybrid SPE interface like the Perinet *Smart Components* or the periMICA within the Seamless IoT Connectivity system. It carries both data and power supply and, thereby, facilitates easy and straight-forward deployment. Assorted cable lengths allow for adaptation to any given setting or environment. The *basic* edition of the periLINE hybrid SPE cable assembly is particularly suitable for the last meters because of its short bending radii. Use cases vary from industrial production lines to commercial applications and smart buildings, to name but a few.

Interfaces

- Type: M8 connector according to IEC 63171-6:2021(style 6P-M8C/6P-M8CI without shielding)
- Communication: 100BASE-T1 Single Pair Ethernet (IEEE 802.3bw)

Cable

- Type: flexible
- Outer diameter: $4.2 \pm 0.2 \text{ mm}$
- Compliance: ROHS 2.0 requirements

Material

- Conductor: Stranded Tinned Copper
- Jacket: PVC

Physical and Electrical Performance

- Temperature Range: $-40 \dots +80^\circ\text{C}$
- Typical diameter data pair: 26AWG
- Typical diameter power pair: 20AWG
- Maximum voltage: 30VDC
- Typical voltage: 24VDC
- Max current: 2.0A

Characteristic Impedance

- Impedance: $100 \pm 15 \Omega$, 1MHz
- Dielectric Strength: 2.0kV/1min, AC

Mechanical Dimensions

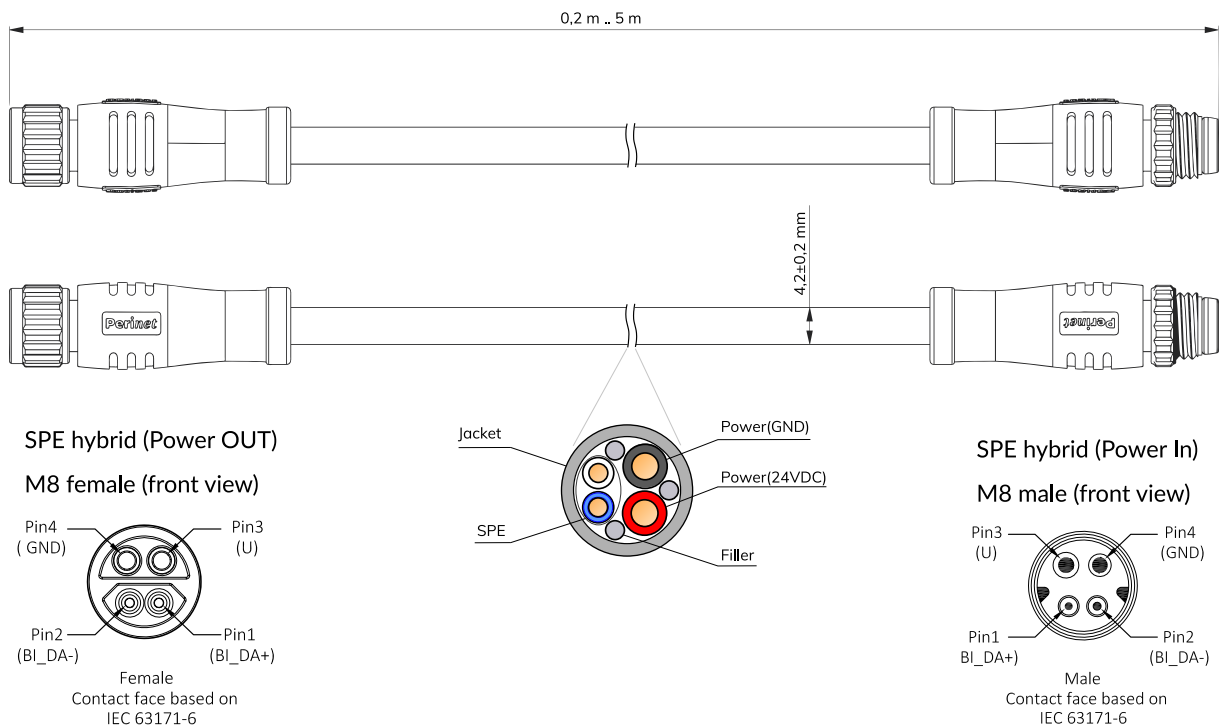


Figure 1: Mechanical Dimensions

Ordering Information

Ordering Code	Product Name	Description
PRN.000.045	periLINE basic 0.2m	0.2m hybrid SPE cable assembly for data and power
PRN.000.046	periLINE basic 1m	1.0m hybrid SPE cable assembly for data and power
PRN.000.049	periLINE basic 5m	2.0m hybrid SPE cable assembly for data and power

Support Products

Ordering Code	Product Name	Description
PRN.000.002	periNODE 0-10V	smart adapter for 0 to 10V signal type.
PRN.000.006	periNODE Pt100	smart adapter for Pt100 based RTDs.
PRN.000.010	periNODE GPIO	smart adapter for GPIO signal type.
PRN.000.008	periSWITCH 3-port	hybrid SPE 3-port switch with M8 connectors.
PRN.000.003	periSTART standard	hybrid SPE media converter with M8 connector.