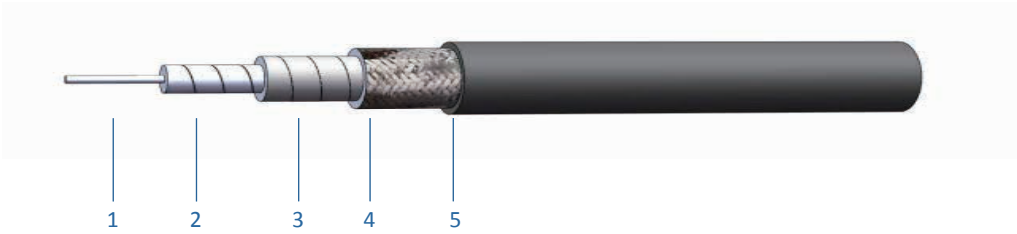
# ZJE series Ultra low loss stable amplitude and phase cable assembly




| Data / Type | ZJE80 | | ZJE81 | | ZJE83 | | ZJE100 | |
|---|---|---|---|---|---|---|---|---|
| **Structure** | | | | | | | | |
| Specification | Size(mm) | Material | Size(mm) | Material | Size(mm) | Material | Size(mm) | Material |
| 1-Material | 2.30 | Silver plated copper | 2.40 | Silver plated copper | 2.44 | Silver plated copper | 3.00 | Silver plated copper |
| 2-Dielectric | 6.20 | Low density PTFE | 6.36 | Low density PTFE | 6.50 | Low density PTFE | 8.24 | Low density PTFE |
| 3-Inner shielding | 6.44 | Silver plated copper strip | 6.60 | Silver plated copper strip | 6.90 | Silver plated copper strip | — | Silver plated copper strip |
| 4-Outer shielding | 7.05/7.20 | Silver plated copper wire | 7.10 | Silver plated copper wire | 7.65 | Silver plated copper wire | 9.20 | Silver plated copper wire |
| 5-Sheath | 7.90 | Grey FEP or customized | 8.10 | Grey PFA or customized | 8.30 | FEP or customized | 10.00 | FEP or customized |
| **Mechanical and environmental performance** | | | | | | | | |
| Static bending radius(mm) | 39.00 | | 40.00 | | 41.00 | | 41.00 | |
| Dynamic bending radius(mm) | 79.00 | | 81.00 | | 83.00 | | 83.00 | |
| Weight(Kg/m) | 0.130 | | 0.140 | | 0.162 | | 0.206 | |
| Temperature, install and use (°C) | -55~165 | | -55~165 | | -55~165 | | -55~105 | |
| **Electrical performance** | | | | | | | | |
| Working frequency(GHz) | 18 | | 18 | | 18 | | 10 | |
| Cut-off frequency(GHz) | 18 | | 18 | | 18 | | 13.5 | |
| OHM(Ohms) | 50 | | 50 | | 50 | | 50 | |
| VOP | 83% | | 83% | | 83% | | 83% | |
| Shielding efficiency(dB) | >90 | | >90 | | >90 | | >90 | |
| Withstand voltage medium(V,DC) | 2500 | | 2500 | | 2500 | | 3000 | |
| **Attenuation value (typical value at 25 ° C) and transmission power value (typical value at 40 ° C)** | | | | | | | | |
| Frequency MHz | dB/100 m | Average power KW | dB/100 m | Average power KW | dB/100 m | Average power KW | dB/100 m | Average power KW |
| 1000 | 14.7 | 1.812 | 13.7 | 1.894 | 13.3 | 1.894 | 10.4 | 2.289 |
| 2000 | 21.0 | 1.270 | 19.5 | 1.324 | 18.9 | 1.326 | 15.0 | 1.590 |
| 3000 | 26.0 | 1.030 | 24.1 | 1.071 | 23.4 | 1.075 | 18.7 | 1.281 |
| 4000 | 30.1 | 0.887 | 28.1 | 0.921 | 27.1 | 0.925 | 21.8 | 1.097 |
| 5000 | 33.9 | 0.789 | 31.6 | 0.818 | 30.5 | 0.822 | 24.6 | 0.972 |
| 6000 | 37.3 | 0.717 | 34.8 | 0.743 | 33.6 | 0.747 | 27.2 | 0.880 |
| 8000 | 43.4 | 0.616 | 40.6 | 0.636 | 39.1 | 0.641 | 31.9 | 0.750 |
| 10000 | 48.8 | 0.547 | 45.8 | 0.564 | 44.1 | 0.569 | 36.1 | 0.662 |
| 12400 | 54.8 | 0.488 | 51.5 | 0.502 | 49.5 | 0.507 | — | — |
| 16000 | 62.8 | 0.425 | 59.3 | 0.436 | 56.9 | 0.442 | — | — |
| 18000 | 67.0 | 0.399 | 63.3 | 0.409 | 60.6 | 0.414 | — | — |
| K1 | 0.456300 | | 0.419490 | | 0.408997 | | 0.316177 | |
| K2 | 0.000320 | | 0.000389 | | 0.000320 | | 0.000448 | |
| Attenuation of other frequency points | $K1^*\sqrt{FMhz}+K2^*FMHz$ | | | | | | | |