



## opticalCON DUO HYBRID

Assembled extra rugged hybrid cable with 2 multi-mode fibers and 4 x 0.75 mm<sup>2</sup> copper conductors, GFK strength member and aramid yarn as cable retention. Low weight robust hybrid cable, only 78kg/km. Optimized design for opticalCON termination. Most suitable for powered applications in audio and video use.

The opticalCON DUO cable connector accommodates a standard optical LC-Duplex connector in a ruggedized and durable all-metal housing. It features a spring loaded push-pull locking mechanism and an excellent cable retention utilizing aramid yarn. The optical connection is exceptional well protected against dirt and dust by an automatically operated sealing cover. The cable connector comes pre-assembled and is not available as a single component. The cable is available in different lengths and is packed either in a case, on drum or airspool.

## Features & Benefits

- Ruggedized and dirt protected fiber optic connection system
- Extra robust hybrid cable with 2 multimode fibers and 4 x 0.75 mm<sup>2</sup> copper wires
- Accommodates standard optical LC-Duplex connectors
- Excellent dust and dirt protection due to automatic sealing shutter with silicone gasket
- Easy to clean, no special tools required
- Lockable with opticalCON DUO Chassis NO2-4FDW-A / NO2-4FDW-1-A
- Waterproof acc. to IP65 safety standard in mated condition
- opticalCON multimode fiber cables offer laser and bend optimized OM3 fibers
- Cable connector features rugged all metal housing and heavy duty cable retention
- Reliable Push-Pull locking mechanism
- Available in different packaging versions
- The product is designed and intended for use in combination with NEUTRIK brand connectors only

## Cable cross section

Cable O.D.: 8.9 mm



## Packaging options and max. cable length



|               | 0<br>Airspool | 1<br>opticalCON Case | 2<br>Drum Schill GT310 | 3<br>Drum Schill GT380 | 4<br>Drum Schill HT582 | 5<br>Drum Schill GT450 | 6<br>Drum Schill SK4812            |
|---------------|---------------|----------------------|------------------------|------------------------|------------------------|------------------------|------------------------------------|
| <b>Wide</b>   | -             | 490 mm / 19.3"       | ø 310 mm / 12.2"       | ø 380 mm / 15.0"       | ø 580 mm / 22.0"       | ø 445 mm / 17.6"       | 518 mm / 20.4"<br>ø 460 mm / 18.1" |
| <b>High</b>   | -             | 340 mm / 13.4"       | <b>NOT AVAILABLE</b>   | 491 mm / 19.3"         | 710 mm / 28.0"         | 555 mm / 21.8"         | 562 mm / 22.1"                     |
| <b>Depth</b>  | -             | 150 mm / 5.9"        | 230 mm / 9.1"          | 303 mm / 11.9"         | 271 mm / 10.6"         | 312 mm / 12.2"         | 422 mm / 16.6"                     |
| <b>Weight</b> | -             | 1.5 kg               | 2.2 kg                 | 4.7 kg                 | 13.9 kg                | 5.4 kg                 | 16.7 kg                            |

## Technical Information

| Product       |                       |
|---------------|-----------------------|
| <b>Title</b>  | opticalCON DUO HYBRID |
| <b>Gender</b> | male                  |

| Electrical                       |   |
|----------------------------------|---|
| <b>Contact resistance</b>        | < 7 mΩ  |
| <b>Dielectric strength</b>       | 1,5 kVdc  |
| <b>Insulation resistance</b>     | > 10 GΩ (initial)   |
| <b>Rated current per contact</b> | 3A  |
| <b>Rated voltage per contact</b> | 50V AC / 50Hz   |
|                                  | 50V DC  |
|                                  | When operating outside the intended connection frequency, the electronic and electrical devices must be tuned to each other including the transmission path. The Neutrik Group accepts no liability in this case. |

| Mechanical              |                      |
|-------------------------|----------------------|
| <b>Cable retention</b>  | 500 N                |
| <b>Insertion force</b>  | < 45 N               |
| <b>Withdrawal force</b> | < 45 N               |
| <b>Lifetime</b>         | > 5000 mating cycles |
| <b>Wiresize</b>         | 4 x 18 AWG           |
| <b>Locking device</b>   | Push-Pull            |

| Material             |  |
|----------------------|--|
| <b>Boot</b>          | Rubber (EPDM)                              |
| <b>Bushing</b>       | Zinc diecast (ZnAl4Cu1)                    |
| <b>Contacts</b>      | Brass (CuZn39Pb3)                          |
| <b>Insert</b>        | Polyamide (PA 6, PBT 30 % GR, PBT 50 % GR) |
| <b>Shell</b>         | Zinc diecast (ZnAl4Cu1)                    |
| <b>Shell plating</b> | Black chromium                             |
| <b>Strain relief</b> | Polyacetal (POM) (brass)                   |

| Environmental                     |   |
|-----------------------------------|---|
| <b>Temperature range</b>          | Operating temperature -40 °C to +75 °C by relative humidity 93% |
| <b>Flammability</b>               | UL94 V-0  |
| <b>Certification according to</b> | IEC 61984 :2008   |
|                                   | UL 1977 :2016   |
|                                   | CSA C22.2 No 182.3 :2016  |

| Optical                  |                            |
|--------------------------|----------------------------|
| <b>Insertion loss</b>    | < 0.4 dB / connection (PC) |
| <b>Optical connector</b> | LC-Duplex                  |
| <b>Optical wiring</b>    | ISO / IEC 11801            |

| Mobile cable           |              |
|------------------------|--------------|
| Colour                 | black, matte |
| Core diameter          | 50 µm        |
| Cladding diameter      | 125 µm       |
| Comment                | PUR          |
| minimal bending radius | 8.9 cm       |
| Number of fibers       | 2            |
| Cable retention        | Aramid yarn  |
| Strength member        | GFK          |
| Weigth                 | 78 kg/km     |
| Overall diameter       | 8.9 mm       |