

HITRONIC® HDM Reel Cable

DB26610104

valid from: 22.08.2016

1. Product Description

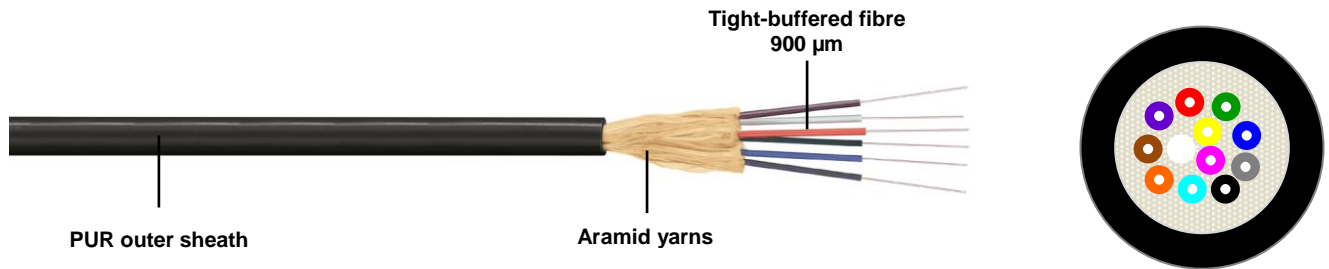
Cable designation: A/J-V(ZN)11Y resp. U-V(ZN)11Y

2. Application

HITRONIC® HDM are universally applicable mini breakout cables with up to 12 tight-buffered fibres for mobile and flexible use outdoors and inside buildings. They are suitable for frequent reeling/unreeling as well as for use under increased mechanical stress, based on military norm MIL-C-85045. They also are resistant to specific oils, microbes and hydrolysis.

Areas of application: Broadcasting, event technology

3. Product Design



| | |
|-----------------------------------|--|
| Fibre type | Glass optical fibre (GOF) |
| Construction | Up to 12 buffered fibres (900 µm) enclosed by strain relief elements |
| Strain relief | Aramid yarns, longitudinal |
| Outer Sheath | Polyurethane (PUR) |
| Identification of buffered fibres | Blue, orange, green, brown, grey, white, red, black, yellow, violet, pink, turquoise |
| Colour of outer sheath | Black, similar RAL 9005 |



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4. Optical and Physical Properties of Cabled Fibre (and Bare Fibre)

| Multimode fibre | | 50/125 µm | 50/125 µm | 50/125 µm | 62.5/125 µm | |
|----------------------------|-----------|------------|--------------|-------------|-------------|---------------|
| | | OM4 | OM3 | OM2 | OM1 | |
| Attenuation | @ 850 nm | dB/km | ≤ 3,5 (2,5) | ≤ 3,5 (2,5) | ≤ 3,5 (2,5) | ≤ 3,5 (3,0) |
| | @1300 nm | dB/km | ≤ 1,5 (0,7) | ≤ 1,5 (0,7) | ≤ 1,5 (0,7) | ≤ 1,5 (0,7) |
| Bandwidth | @ 850 nm | MHz·km | ≥ 3500 | ≥ 1500 | ≥ 500 | ≥ 200 |
| | @1300 nm | MHz·km | ≥ 500 | ≥ 500 | ≥ 500 | ≥ 500 |
| Numerical aperture | | | 0,2 ± 0,015 | 0,2 ± 0,015 | 0,2 ± 0,015 | 0,275 ± 0,015 |
| Core diameter | | µm | 50 ± 2,0 | 50 ± 2,0 | 50 ± 2,0 | 62,5 ± 2,5 |
| Cladding diameter | | µm | 125 ± 1,0 | 125 ± 1,0 | 125 ± 1,0 | 125 ± 2,0 |
| Primary coating diameter | | µm | 242 ± 5,0 | 242 ± 5,0 | 242 ± 5,0 | 245 ± 10,0 |
| Secondary coating diameter | | µm | 900 ± 10,0 | 900 ± 10,0 | 900 ± 10,0 | 900 ± 10,0 |
| Single-mode fibre | | | 9/125 µm | | | |
| (ITU-T G.652.D) | | | | | | |
| Attenuation | @ 1310 nm | dB/km | ≤ 0.4 (0.35) | | | |
| | @ 1550 nm | dB/km | ≤ 0.4 (0.21) | | | |
| Chromatic dispersion | @ 1310 nm | ps/(nm·km) | ≤ 3.0 | | | |
| | @ 1550 nm | ps/(nm·km) | ≤ 18 | | | |
| Zero dispersion wavelength | | Nm | 1300 - 1322 | | | |
| Cut-off wavelength | | Nm | ≤ 1260 | | | |
| PMD | | ps/km | ≤ 0.1 | | | |
| Mode field diameter | | µm | 9.0 ± 0.4 | | | |
| Cladding diameter | | µm | 125 ± 1 | | | |
| Primary coating diameter | | µm | 242 ± 7 | | | |
| Secondary coating diameter | | µm | 900 ± 10 | | | |

5. Thermal Properties

| | |
|--------------------------|----------------|
| Operating temperature | -40°C to +70°C |
| Installation temperature | -5°C to +50°C |
| Storage temperature | -40°C to +70°C |

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6. Mechanical Properties

| | | |
|--------------------------|----------------------|--------|
| Max. number of fibres | | 12 |
| Min. bending radius (mm) | without tensile load | 15 x D |
| | with tensile load | 20 x D |
| Max. crush resistance | N | 2000 |

7. Approvals

- The cable complies to the EU Directive 2011/65/EU: RoHS (Restriction of the use of hazardous substances)
- Environmental and mechanical tests comply to EN 187000 and IEC 60794

8. Product Range Overview

| Article number | Article designation | No. of Fibres | Outer Ø (mm) | Weight (kg/km) | Tensile Strength long/short (N) |
|----------------------------------|-----------------------------------|---------------|--------------|----------------|---------------------------------|
| Multimode 50/125 µm OM4 | | | | | |
| 26610404 | HITRONIC® HDM600 4G 50/125 OM4 | 4 | 5.5 ± 0.3 | 24 | 600/1100 |
| 26610406 | HITRONIC® HDM600 6G 50/125 OM4 | 6 | 5.6 ± 0.3 | 29 | 600/1100 |
| 26610408 | HITRONIC® HDM700 8G 50/125 OM4 | 8 | 6.2 ± 0.3 | 36 | 700/1250 |
| 26610412 | HITRONIC® HDM700 12G 50/125 OM4 | 12 | 6.7 ± 0.3 | 49 | 700/1250 |
| Multimode 50/125 µm OM3 | | | | | |
| 26610304 | HITRONIC® HDM600 4G 50/125 OM3 | 4 | 5.5 ± 0.3 | 24 | 600/1100 |
| 26610306 | HITRONIC® HDM600 6G 50/125 OM3 | 6 | 5.6 ± 0.3 | 29 | 600/1100 |
| 26610308 | HITRONIC® HDM700 8G 50/125 OM3 | 8 | 6.2 ± 0.3 | 36 | 700/1250 |
| 26610312 | HITRONIC® HDM700 12G 50/125 OM3 | 12 | 6.7 ± 0.3 | 49 | 700/1250 |
| Multimode 50/125 µm OM2 | | | | | |
| 26610204 | HITRONIC® HDM600 4G 50/125 OM2 | 4 | 5.5 ± 0.3 | 24 | 600/1100 |
| 26610206 | HITRONIC® HDM600 6G 50/125 OM2 | 6 | 5.6 ± 0.3 | 29 | 600/1100 |
| 26610208 | HITRONIC® HDM700 8G 50/125 OM2 | 8 | 6.2 ± 0.3 | 36 | 700/1250 |
| 26610212 | HITRONIC® HDM700 12G 50/125 OM2 | 12 | 6.7 ± 0.3 | 49 | 700/1250 |
| Multimode 62.5/125 µm OM1 | | | | | |
| 26610104 | HITRONIC® HDM600 4G 62.5/125 OM1 | 4 | 5.5 ± 0.3 | 24 | 600/1100 |
| 26610106 | HITRONIC® HDM600 6G 62.5/125 OM1 | 6 | 5.6 ± 0.3 | 29 | 600/1100 |
| 26610108 | HITRONIC® HDM700 8G 62.5/125 OM1 | 8 | 6.2 ± 0.3 | 36 | 700/1250 |
| 26610112 | HITRONIC® HDM700 12G 62.5/125 OM1 | 12 | 6.7 ± 0.3 | 49 | 700/1250 |
| Single-mode 9/125 µm OS2 | | | | | |
| 26610904 | HITRONIC® HDM600 4E 9/125 OS2 | 4 | 5.5 ± 0.3 | 24 | 600/1100 |
| 26610906 | HITRONIC® HDM600 6E 9/125 OS2 | 6 | 5.6 ± 0.3 | 29 | 600/1100 |
| 26610908 | HITRONIC® HDM700 8E 9/125 OS2 | 8 | 6.2 ± 0.3 | 36 | 700/1250 |
| 26610912 | HITRONIC® HDM700 12E 9/125 OS2 | 12 | 6.7 ± 0.3 | 49 | 700/1250 |