

HITRONIC® HDM Reel Cable

DB266 10104

valid from: 22.08.2016

1. Product Description

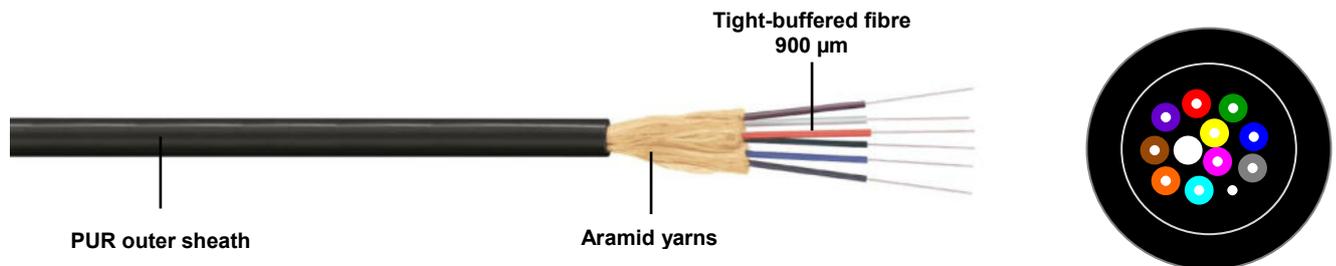
Cable designation: A/J-V(ZN)11Y resp. U-V(ZN)11Y

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