

26310102	DATA SHEET	
valid from: 2025-12-01	HITRONIC® TORSION	

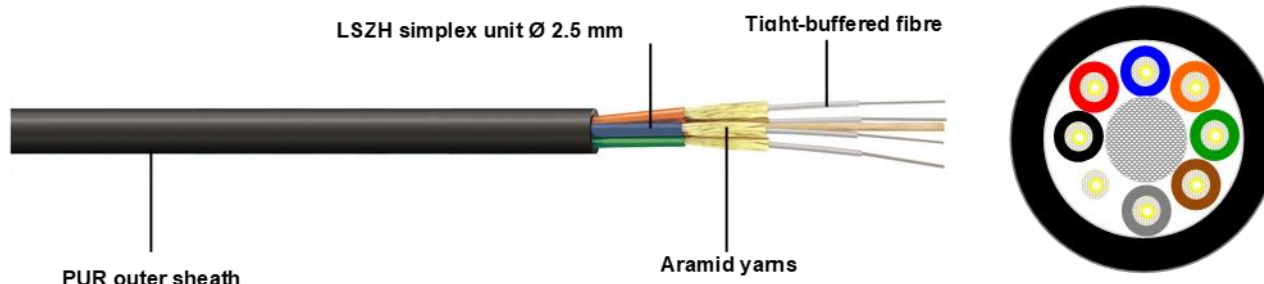
Product Description

Cable designation: A/J-V(ZN)H11Y or U-V(ZN)H11Y

Universal mobile breakout cable for direct connector assembly (based on military norm MIL-C-85045), with up to 12 tight-buffered simplex units, flame-retardant and halogen-free sheaths, high flexibility, UV-resistant and excellent mechanical resistance

Application

Field of use: For use in outdoors or indoors, as links between moving parts, inside wind towers
Methods of deployment: trunking, ducts, trays, building riser, empty plastic pipes, raised floors and ple-nums for short distances



Design

Cable core	Up to 12 tight-buffered simplex units enclosed by individual aramid fibres and LSZH sheaths (diameter 2.5 mm), and an overall TPU outer sheath
Cable inner sheath	LSZH, halogen-free, flame-retardant, low smoke
Cable outer sheath	Polyurethane (TPU), halogen-free, flame-retardant, UV-resistant
Colour of inner sheath	Blue, orange, green, brown, grey, white, red, black, yellow, violet, pink, turquoise
Colour of outer sheath	Black (RAL 9005)
Identification of simplex units	Colour-coded (refer to colour of inner sheath)
Strain relief	Aramid yarns
Type of armouring	none

Optical Fibre Characteristics

Multimode fibre		50/125 µm	50/125 µm	50/125 µm	62.5/125 µm
		OM4	OM3	OM2	OM1
Attenuation	@ 850 nm dB/km @ 1300 nm dB/km	≤ 3.5 (2.5) ≤ 1.5 (0.7)	≤ 3.5 (2.5) ≤ 1.5 (0.7)	≤ 3.5 (2.5) ≤ 1.5 (0.7)	≤ 3.5 (3.0) ≤ 1.5 (0.7)
Bandwidth	@ 850 nm MHz-km @ 1300 nm MHz-km	≥ 3500 ≥ 500	≥ 1500 ≥ 500	≥ 500 ≥ 500	≥ 200 ≥ 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
Primary coating diameter	µm	242 ± 5	242 ± 5	242 ± 5	245 ± 10
Single-mode fibre		9/125 µm			
		(ITU-T G.652.D)			
Attenuation	@ 1310 nm dB/km @ 1550 nm dB/km	≤ 0.4 (0.35) ≤ 0.4 (0.21)			
Chromatic dispersion	@ 1310 nm ps/(nm-km) @ 1550 nm ps/(nm-km)	≤ 3.0 ≤ 18			

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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			

Mechanical and Thermal Properties

Temperature range	Operating:	-40 °C to +70 °C
	Installation:	0 °C to +50 °C
	Storage:	-40 °C to +70 °C
Flammability	acc. to IEC 60332-1-2 resp. EN 60332-1-2	
Halogen free	acc. to IEC 60754-1 resp. EN 60754-1	
Max. number of fibres / simplex units	12	
Simplex cable diameter (mm)	2.5	
Outer cable diameter (mm)	refer to range overview	
Cable weight	refer to range overview	
Min. bending radius (mm)	without tensile load	15 x D
	with tensile load	20 x D
Max. tensile strength (N)	Long-term	refer to range overview
	Short-term	
Max. crush resistance (N)	2000	
Torsional stress	torsion angle:	± 180° /m
	torsion speed:	360° /min
	cycles:	5.000

General requirements This cable is conform to EU-Directive 2011/65/EU (RoHS, Restriction of the use of certain hazardous substances).

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Product Range Overview

Article number	Article designation	No. of Fibres	Outer $\varnothing$ (mm)	Weight (kg/km)	Tensile Strength long/short (N)
Multimode 50/125 μm OM4					
26310402	HITRONIC® TORSION 2G 50/125 OM4	2	8.4 $\pm$ 0.3	54	600/1000
26310404	HITRONIC® TORSION 4G 50/125 OM4	4	8.4 $\pm$ 0.3	54	800/1350
26310408	HITRONIC® TORSION 8G 50/125 OM4	8	11.6 $\pm$ 0.5	95	1600/2700
26310412	HITRONIC® TORSION 12G 50/125 OM4	12	14.7 $\pm$ 0.5	122	2400/3500
Multimode 50/125 μm OM3					
26310302	HITRONIC® TORSION 2G 50/125 OM3	2	8.4 $\pm$ 0.3	54	600/1000
26310304	HITRONIC® TORSION 4G 50/125 OM3	4	8.4 $\pm$ 0.3	54	800/1350
26310308	HITRONIC® TORSION 8G 50/125 OM3	8	11.6 $\pm$ 0.5	95	1600/2700
26310312	HITRONIC® TORSION 12G 50/125 OM3	12	14.7 $\pm$ 0.5	122	2400/3500
Multimode 50/125 μm OM2					
26310202	HITRONIC® TORSION 2G 50/125 OM2	2	8.4 $\pm$ 0.3	54	600/1000
26310204	HITRONIC® TORSION 4G 50/125 OM2	4	8.4 $\pm$ 0.3	54	800/1350
26310208	HITRONIC® TORSION 8G 50/125 OM2	8	11.6 $\pm$ 0.5	95	1600/2700
26310212	HITRONIC® TORSION 12G 50/125 OM2	12	14.7 $\pm$ 0.5	122	2400/3500
Multimode 62.5/125 μm OM1					
26310102	HITRONIC® TORSION 2G 62.5/125	2	8.4 $\pm$ 0.3	54	600/1000
26310104	HITRONIC® TORSION 4G 62.5/125	4	8.4 $\pm$ 0.3	54	800/1350
26310108	HITRONIC® TORSION 8G 62.5/125	8	11.6 $\pm$ 0.5	95	1600/2700
26310112	HITRONIC® TORSION 12G 62.5/125	12	14.7 $\pm$ 0.5	122	2400/3500
Single-mode 9/125 μm OS2					
26310902	HITRONIC® TORSION 2E 9/125 OS2	2	8.4 $\pm$ 0.3	54	600/1000
26310904	HITRONIC® TORSION 4E 9/125 OS2	4	8.4 $\pm$ 0.3	54	800/1350
26310908	HITRONIC® TORSION 8E 9/125 OS2	8	11.6 $\pm$ 0.5	95	1600/2700
26310912	HITRONIC® TORSION 12E 9/125 OS2	12	14.7 $\pm$ 0.5	122	2400/3500

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