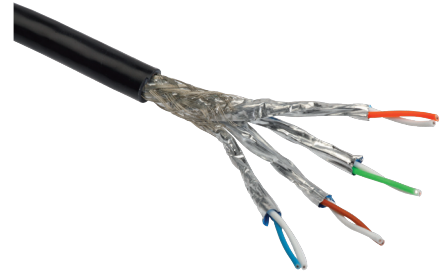


Ha-VIS EtherRail® flexible data cable, 8-wire, Cat. 7



Advantages

- Transmission of Gigabit and 10 Gigabit Ethernet acc. IEEE 802.3 and multimedia services
- Suitable for data cabling in rail vehicles and buses
- Fire protection acc. EN 45545-1, -2 and -5, flame retardant and heat resistant acc. DIN 5510 (1-4) and EN 50264-1
- Temperature range from -40 °C up to +90 °C
- UV resistant
- RoHS conform, halogen free LSZH

Application

This data cable was especially designed for installation within and outside rail vehicles and buses. The cable fulfils the fire protection requirements according to the international standards for railway vehicles and buses and is suitable for operation over a wide temperature range. Cable design, material and compounds as well as processing (electron beam cross-linking) follow the basic requirements of the European standardisation for railway applications EN 45545-1, -2 and -5. The robust PIMF cable construction guarantees a reliable data transmission up to 10Gbit/sec. and for multimedia services.

The cable has been designed to be compatible with products from HARTING like *har-speed* M12 Crimp and Han® Gigabit Module.

Description

Ha-VIS EtherRail® flexible data cable. PIMF
2x4xAWG24/7, Category 7

Sheath material: Elastomer. electron beam cross-linked

Colour: black

Cable sheath diameter:
(8.8 +/- 0.2) mm

Transmission performance:
Category 7 / transmission class D, E, E_A and F up to 600MHz according
ISO/IEC 11801 and EN 50173-1
Transmission rate: 1/10 Gbit/s

Operating temperature range:
-40 °C ... +90 °C

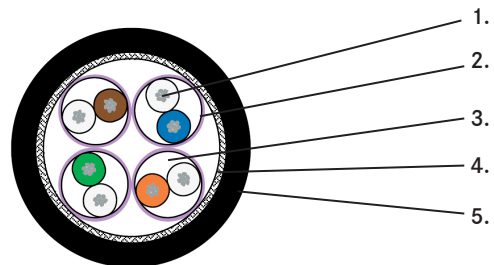
Cable weight: 79kg/km

Order information:

100 m ring	09 45 600 0692
500 m ring	09 45 600 0693
1000 m ring	09 45 600 0694

Order number

Drawing



- 1. Conductor**
tinned stranded copper wire AWG 24/7
- 2. Insulation**
cellular PE
- 3. Pair**
4x (2x AWG 24) with aluminium-bonded polyester tape
color: white/blue, white/orange, white/green, white/brown, Ø 1.55 mm
- 4. Shielding**
tinned fine copper braid
- 5. Outer sheath**
electron-beam cross-linked elastomer, compound 603
Color: black
Printing
"HARTING" Ha-VIS EtherRail® CAT 7 LSZH 4x2xAWG24/7
"Part-Number" "Chargecode" "Meter"

Technical characteristics

Transmission performance	Category 7 acc. EN 50288-2-1, IEC 61156-6 acc. ISO/IEC 11801 and EN 50173	
Mechanical features		
minimum bending radius	Repeated bending: 12 x cable diameter Singular bending: 6 x cable diameter	
Tensile strength	max. 100 N	
Electrical characteristics at 20 °C		
Coupling attenuation at 10 MHz	< 5 mOhm/m	
Characteristic impedance at 100 MHz	100 Ohm +/- 5 Ohm	
Test voltage	1000 V	
(wire/wire/screen rms 50Hz for 1min)		
Operating voltage	125 V AC	
Fire protection for railway vehicles	DIN 5510 Level 1 - 4	
Flammability, smoke and toxicity (FST)		
Vertical flame propagation on single cables	EN 60332-1-2	Carbonisation > 50 and ≤ 540 mm
Smoke density	EN 61034-2	transparency > 70 %
Fire protection in railway vehicles	EN 50306-4	
Halogen free	EN 50267-2-1	HCl and HBr < 0.5 %
Corrosiveness of brand gases	EN 50267-2-2	pH > 4.3
Material characteristics		
Ozone resistance	EN 50264-3-1	72h/40 °C, Procedere B Volume concentration 200x10 ⁻⁶
Oil resistance	EN 50264-3-1	72h/100 °C, IRM 902
Fuel resistance	EN 50264-3-1	168h/70 °C, IRM 903
Marginal fire load	DIN 51900	
Thermic features		
Maximum conductor temperature	+ 90 °C	
Printing	"HARTING" Ha-VIS EtherRail® CAT 7 LSZH 4x2xAWG24/7 "Part-Number" "Chargecode" "Meter"	
Weight	79 kg/km	
Copper number	35 kg/100m	

