

MULTI-ETHERNET CABLE (ARMORED)

Cables for maritime environments in non-explosive and explosive areas, suitable for EC-940S-HD, EC940S-PTZ-HD and EC-840S-19I

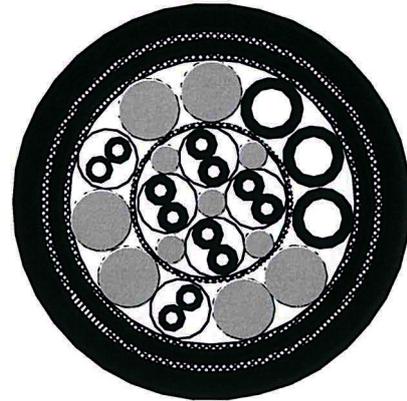


The **VB-CAM-Multi-Ethernet cable** provides the perfect solution to connect IP cameras in hazardous areas. The cable includes one complete Ethernet cable and different kind of wires for power supply and signal contacts when needed.

The cable is suitable with the camera series:

- EC-940S-AFZ-HD
- EC-940-PTZ-HD
- EC-840S-TIC-19I

- ▶ Stahl Ident-No: 252571
- ▶ Set-up: CAT 5e + 3 x 2.5 mm² + 2x2x0.34mm²



SET-UP	
CAT 5e:	4 x (2x0.34 mm ²)
Conductor:	Cu wire 0.66 mm blank
Insulation:	Special PE mixture
Colors:	wt-bl, wt-or, wt-gn, wt-br
Stranding:	2 wires each twisted to a pair
Stranding:	4 pairs twisted to a cable
Banding:	PP-foil, 1 layer
Banding:	Aluminium insulation, 1 layer
Insulation:	Tin-plated Cu wire mesh insulation, optical coverage 80%
Banding:	Fleece, 1 layer
Wires 2.5 mm²	
Conductor:	Cu wire blank, 50 x 0.25 mm
Insulation:	Special PP-mixture
Colors:	blue, brown, green/yellow
wire diameter:	3.0 ^{+0.10} mm
Wires 0.34 mm²	
Conductor:	Cu wire blank, 7x 0.25 mm
Insulation:	Special PP-mixture
Colors:	red, black, pink, violet
wire diameter:	1.40 ^{+0.05} mm
Pair stranding:	2 wires each twisted to a pair
Final stranding:	CAT 5e in the core, 3 x 2.5 mm ² + 2x2x0.34 mm ² + filler stranded tension-free
Banding:	Fleece, 1 layer
Isolation:	Tin-plated Cu wire mesh insulation, optical coverage 85%
Banding:	Fleece, 1 layer
Inner sheath:	Extruded embedding with special PUR-mixture
Isolation:	Tin-plated Cu wire mesh insulation, optical coverage 65%
Outer sheath	
Material:	Special flame-resistant and halogen-free polyurethan mix
Color:	similar to RAL 9005 black, matt
Outer diameter:	19.2 ±0.5 mm
Imprint:	Meter indication
Weight:	approx 472 kg/km

GENERAL PROPERTIES			
IEC 60332-1:	Flame-retardent	Mud resistant:	acc. NEK 606
IEC 60754-2:	Halogen-free		
DIN 60811-404:	Oil-resitant (168h at 100 °C)		
	RoHS compliant (Directive 2011/65/EC)		
DIN ISO 4892-2:	Ozon and UV resistant		
DIN EN 50288-2-1:	Ethernet		
UL - External Use (Cable Flame)			
Wire style:	UL 10493		
Sheath style:	UL 20233		
Resistant against oil and gasoline, seawater resistant, resistant against coolants, lubricants and cold cleaners, for use in maritime environments, ozon and UV resistant.			
The cable is suitable for fixed installation.			

TECHNICAL SPECIFICATIONS		
Testing voltage	Conductor resistance	Nominal voltage
3000 V (Spark tester)	0.34mm ² => 56.0 Ω/km (at 20°C)	300V
1000 V (wire-wire)	2.50mm ² => 7.98 Ω/km (bei 20°C)	
Operating temperature	Bend radius	
fixed installation:	fixed installation:	
-60°C to 80°C	5 x outer diameter	

ELECTRICAL PROPERTIES for CAT 5e	
Loop resistance:	max 120 Ohm/km acc. VDE 0812
Insulation resistance:	min 2 GOhm x km at +20°C
Operation capacity :	nom 50 nF/km
wave impedance at 100MHz:	100 Ohm ± 15 Ohm
Testing voltage:	700 V / AC
Operation voltage:	< 125 V
Propagation speed:	approx 0.67 c
Signal propagation delay:	max. 510 ns/100m
Delay difference:	< 20 ns/100m
Shieldingeffectiveness at 100 MHz:	> 80 dB
Transfer impedance:	< 30 mOhm/m at 1 MHz < 50 mOhm/m at 10 MHz < 50 mOhm/m at 30 MHz