KERPEN
Special Markets and Applications

HIGH VOLTAGE CABLE
(multicore)

SL-V2YCEH
6 kV (DC) / 70°C
zero halogen, flame retardant

screened

Application

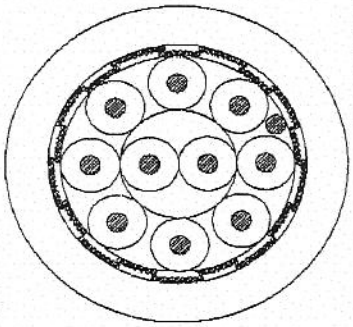
Used as fixed or flexible installed control cable for high voltage (dc) supply for electrical equipments and control units in research. For indoor and outdoor use in dry and wet locations. With reduced smoke emission, corrosiveness and toxicity of combustion gases acc. to CERN saftey instruction IS 23.

Construction

- **Cores**
  Conductor ..... Tinned copper, flexible stranded, AWG26/7
  Insulation..... Polyethylene
  Colour Code.. Natural-coloured

- **Further Construction**
  Wrapping..... Min. 1 layer of plastic tape, nom. 36µm
  Screen..... Tinned copper wire braid, opt. coverage min. 80 % over tinned copper drain wire, AWG26/7
  Outer Sheath. Zero halogen, flame retardant polymer
  Colour..... Red

- **Cable Marking**
  Imprint ..... **KERPENWERK TYPE 6kV(DC) ZERO HALOGEN yyWww Length marking**
  Manufacturer's identification thread



Technical Data

Flame retardancy:	IEC 60332-1	***Temperature range:***	
Flame propagation:	IEC 60332-3 cat. C	-30°C up to +70°C	
Smoke density:	IEC 61034-1 and -2	*(during operation)*	
Amount of halogen acid gas:	IEC 60754-1; 0%	-5°C up to +50°C	
Degree of acidity of gases:	IEC 60754-2	*(during installation)*	
Outer sheath:		***Min. bending radius:***	
Limiting Oxygen Index (LOI):	**min. 43%** (IEC 60332-3 ann. B)	6 x cable-∅ *(fixed installation)*	
Temperature Index (TI):	**min. 260°C** (ASTM-D-2863)	10 x cable-∅ *(flexible installation)*	

Abbreviations

SL-	high voltage cable
v	tinned copper conductor
2Y	insulation of PE
C	screen
E	drain wire
H	outer sheath of LSZH

Test voltage

	Character	Unit	Values
Core/Core	*nom.*	kV (DC)	12
Core/Screen	*nom.*	kV (DC)	12

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Geometrical and Electrical Data

Number of Cores	Conductor		Core	Cable				Part Number
	Single-wire-Ø (nom.) mm	Conductor resistance at 20°C (max.) Ω/km	Core-Ø (approx.) mm	Screen-wire-Ø (nom.) mm	Sheath-thickness (nom.) mm	Overall Diameter (approx.) mm	Weight (approx.) kg/km	
Conductor Size AWG26/7								
10	0.16	147	1.3	0.15	1.0	8.1	85	
20	0.16	147	1.3	0.15	1.0	9.7	120	
23	0.16	147	1.3	0.15	1.2	10.7	145	
25	0.16	147	1.3	0.15	1.2	11.2	155	
30	0.16	147	1.3	0.15	1.2	12.0	170	
32	0.16	147	1.3	0.15	1.2	12.0	180	
34	0.16	147	1.3	0.15	1.2	12.4	190	
37	0.16	147	1.3	0.15	1.2	12.4	195	
52	0.16	147	1.3	0.20	1.2	14.4	265	
56	0.16	147	1.3	0.20	1.2	14.8	280	

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