

VCVH6-F **Screened PVC Flat Cables**



VCVH6-F

Screened PVC Flat Cables

Applications

Used for hoisting control systems in festoons on overhead cranes.
Copper screens are efficient against electro magnetic disturbances caused by power and control cables.

Control 300/500 V
Power 0.6/1 (1.2) kV

Design

1. Conductor

Flexible plain copper
class 5
IEC 60228

2. Insulation

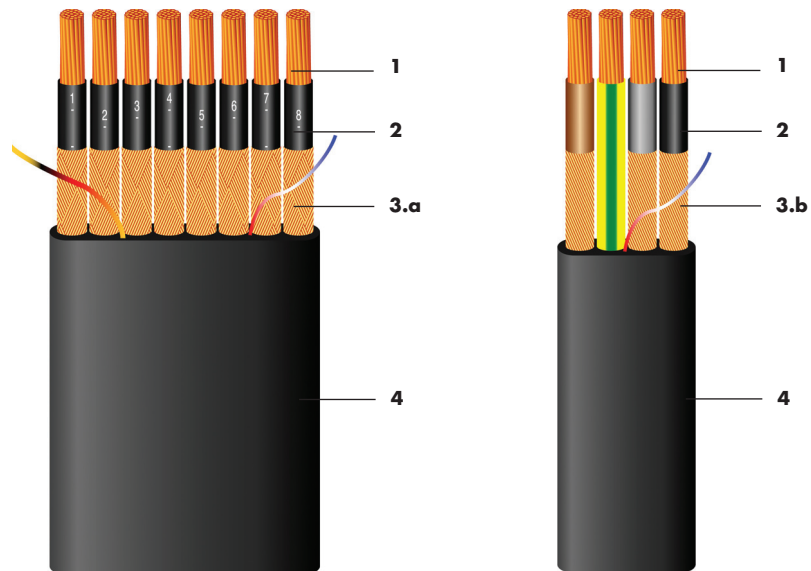
PVC

3. Screen

- a. Plain copper braid
- b. Plain copper spinning on phase cores.
Earth core is unscreened.

4. Outer-sheath

PVC
Colour: black



Marking

VCVH6-F
Number of cores - cross-section
voltage - NEXANS - year - week

Cores Identification

power:
black-grey-brown
earth conductor: green/yellow

control:
black with white printed
numbers

Standards

Nexans specification

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Cable Characteristics

Mechanical properties

Tensile stress of the conductor	static	15 N/mm ²
	dynamic	30 N/mm ²
Bending radii	see construction characteristics page 3.1 E	
Tests	Bending test	
Travelling Festoon speed	up to 120 m/min	

Chemical properties

Oil, acid and alkaline resistant.
 For indoor and outdoor applications. Moisture, UV and ozone resistance.
 Flame-retardant according to IEC 60 332 part 1.

Electrical and Thermal properties

Control cables:		
Nominal voltage	U ₀ /U	300/500 V
Maximum operating voltage in AC systems	U _m	500 V
Capacitance between cores:		170 nF/km
Capacitance between core and screen:		350 nF/km
Power cables:		
Nominal voltage	U ₀ /U	0.6/1 kV
Maximum operating voltage in AC systems	U _m	1.2 kV
Test voltage:		
- Control	2.0 kV - 50 Hz in AC	
- Power	2.5 kV - 50 Hz in AC	
Current rating (A)	see electrical characteristics page 3.2 B	
Max. temperature at the conductor:		
- in service	+ 70 °C	
- in short circuit	+ 150 °C	
Max. surface temperature:		
- fixed installation	- 35 °C up to + 60 °C	
- mobile operation	- 25 °C up to + 60 °C	



Flexible



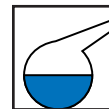
Good



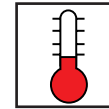
Lead free compound



Good



Good



-25 + 60 °C



Good

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	Number of cores and nominal cross-section (mm ²)	Outer dimensions approx. (mm)	Weight approx. (kg/km)
CONTROL	4 x 1.5*	18 x 5.5	220
	8 x 1.5*	34 x 5.5	430
	12 x 1.5*	50 x 5.5	650
POWER	4 G 4*	23 x 7	360
	4 G 6*	29 x 9	580
	4 G 10*	37 x 11	900
	4 G 16*	46 x 14	1,280
	4 G 25*	50 x 14.5	1,800
	4 G 35*	55 x 16	2,300

*Stocked products

Options

- Other cross-sections on request