

# I.C.M. INDUSTRIA CAVI MERLOTTI S.R.L.

## H05Z1-K

Single core non-sheathed cables with halogen-free thermoplastic insulation, and low emission of smoke

Class Eca – DoP 22ICM018

### CONSTRUCTION FEATURES

<b>Conductor</b>	Annealed bare copper class 5
<b>Isolation</b>	TI 7 quality thermoplastic compound
<b>Color</b>	Green, black, blue, brown, gray, orange, pink, red, turquoise, white, yellow, and any bicolor combination.
<b>Marking</b>	I.C.M. S.R.L. – H05Z1-K – Eca

### ELECTRICAL CHARACTERISTICS

Voltage rating  $U_0/U$  300/500 V

### MECHANICAL CHARACTERISTICS

<b>Max operating temperature</b>	70 °C
<b>Max short circuit temperature</b>	160 °C
<b>Min operating temperature</b>	-10 °C
<b>Min laying temperature</b>	5 °C
<b>Max tesile strenght</b>	50 N/mm <sup>2</sup>
<b>Min bending radius</b>	4 x $\varnothing_{ext}$

### REFERENCE STANDARDS, REGULATIONS AND DIRECTIVES

CEI EN 50525-3-31; CEI EN 50363-7; CEI EN 50565-2; Dir. 2014/35/UE; Dir. 2011/65/UE; Reg. 305/2011 UE

### USE CONDITIONS

Cables suitable in locations where a low level of emission of smoke and corrosive gases are required in case of fire or burning; fixed protected installation inside appliances and in lighting fittings. The defined tests for smoke and halogen free gases relates only to the cables, and not to cable and conduit together.

The cables are suitable for installation in surface-mounted or embedded conduits when used only for signaling or control circuits. These cables are not intended to provide circuit integrity in case of fire.

Formation	Maximum conductor resistance at 20°C	Prescribed insulation thickness	Average outer $\varnothing$ Lower limit	Average outer $\varnothing$ Upper limit	Nominal outer $\varnothing$	Nominal weight	Minimum insulation resistance at nominal temperature	Current flow at 30°C in tube in air (*)
	Ohm/km	mm	mm	mm	mm	Kg/km	MOhm x km	A
1x0.50	39	0.6	2.1	2.5	2.2	10	0.013	3
1x0.75	26	0.6	2.2	2.7	2.3	12	0.011	6
1x1	19.5	0.6	2.4	2.8	2.5	15	0.010	10

(\*) Calculation of the current flow carried out by considering a circuit with 3 active conductors