

TECHNICAL DATA SHEET LOW VOLTAGE POWER CABLE

Cable Description:

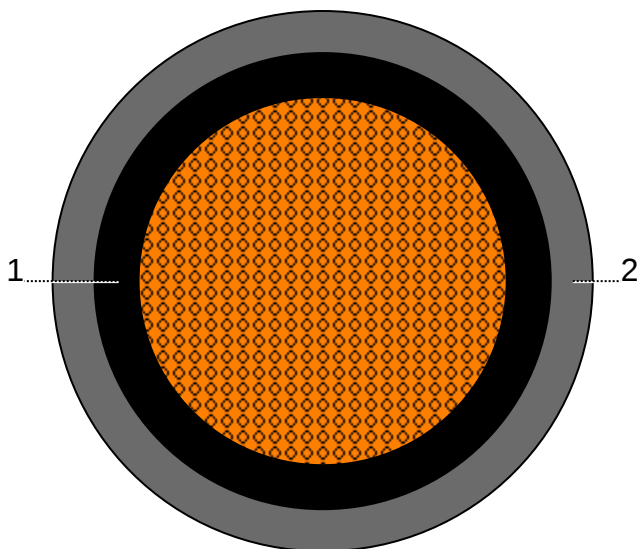
Cu / PVC / PVC 1kV 1X70 mm² black 90 °C (Flex)
IEC 60502-1 FR-IEC 60332-1

Design and Construction Data:		
Reference Manufacturing Standards		IEC/BS EN 60228, IEC 60502-1
Max. Permissible Continuous Conductor Temp	°C	90
Max. Conductor Short Circuit Temp for 5 Seconds	°C	160 °C
Rated Voltage ' U ₀ / U '	kV	0.6 / 1.0
Number of Conductors x Cross-Section	mm ²	1 x 70
Conductor Material & Shape		Copper & Flexible Class 5 non-compacted Round Shape
Insulation Material		PVC
Conductor Nominal Insulation Thickness	mm	1.40
Insulation Color		BLACK
Outer Sheath Material		PVC
Colour of Outer Sheath		BLACK
Approximate Cable Overall Diameter	mm	17.1
Electrical Data:		
Max Conductor DC resistance @ 20 °C	ohms/km	0.2720
Max Conductor AC resistance @ 90 °C Two Cables	ohms/km	0.3476
Max Conductor AC resistance @ 90 °C Three Cables/Trefoil Formation	ohms/km	0.3479
Max Conductor Short Circuit Current @ 1 Second	kA	6.99
Current Carry Capacity		
Laid in air @ 40 °C Ambient Temperature		
Free In Flat Shape	A	277
Free In Trefoil Shape	A	222
In Pipes	A	168
Laid in Ground		
Direct Laid In Flat Shape	A	251
Direct Laid In Trefoil Shape	A	238
Laid In Duct	A	187
Laid in Ground with the following conditions: Ambient Ground Temperature: 35 °C Depth of laying in ground: 0.5 m Soil Thermal Resistivity: 1.2 °K.m/W		
Additional Data:		
Maximum pulling Tension	kN	3.50
Maximum side wall pressure	kN/m	25.5
Minimum Bending Radius	mm	137
The Cable shall meet all Test requirements of: IEC/BS EN 60228, IEC 60502-1, IEC 60332-1		
Packing Data:		
Drum Type		Non-Returnable
Length of Cable per drum (± 5%)	m	1000
Drum Dimensions "Height x Width" (Approx.)	m	1.1 x 0.81
Gross Weight (Approximate without Lagging)	kg	850

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Cable Marking:

BAHRA CABLES CO. KSA 1 X 70 mm² Cu / PVC / PVC (Flex) 600 / 1000 V IEC 60502-1 FR IEC 60332-1
Manufacturing Year - Meter marked

Cable Drawing


Description	Cu / PVC / PVC 1kV 1X70 mm ² black 90 °C (Flex)	Approx. Diameter
1	Core	
	Flexible Copper Conductor	11.70
	PVC insulated	14.50
2	PVC Outer Sheathing	17.11