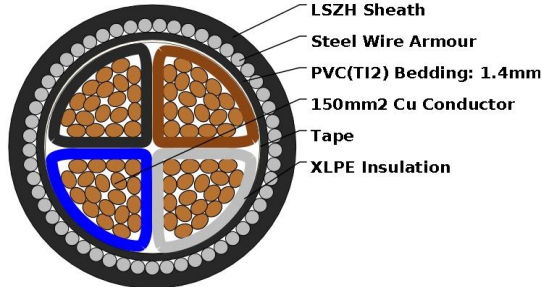


**Cable Code:** CARMZC150004BK3>  
**Description:** METSEC CU/XLPE/SWA/LSZH ARMoured CABLE 4COREx150.00MM BLACK (BS STD) - Loose  
**Reference:** 6944X  
**Standard:** BS 6724



**Main Application:**

Armoured power cables are available with both copper and aluminium conductors as required. The armour provides additional protection where mechanical stress has the potential to cause damage to the cable, such as direct burial, outdoors or underground. The armour also enables the cable to withstand higher pulling loads. It should be noted, however, that the armour provides no protection for climatic conditions.

**Parameters:**

<b>Physical</b>	Conductor	Copper	
	Insulation	XLPE	
	Cross sectional area	150 sq mm	
	No. of Cores:	4	
	Core Colours:	Brown, Black, Grey, Blue	
	Nom. Thickness of Insulation	1.4 mm	
	Nom. Overall Diameter	50.49 mm	
<b>Electrical</b>	Nom. Weight	8.33689 kg/m	
	Rated Voltage (U <sub>0</sub> /U)	600/1000 V	
	Max. permissible operating voltage in AC systems (U <sub>m</sub> )	1.2 kV	
	AC Test voltage over 5 minutes	3.5 kV	
	Max. Conductor D.C Resistance	20°C	0.124 Ohms
	Max. Conductor A.C Resistance	@ 90°C	0.158 Ohms
	Min. Insulation Resistance	@ 90°C	MΩ.km
	Current Rating	Direct in Ground	348 A
	Current Rating	In Duct	288 A
	Current Rating	Installed in Free Air	369 A
	Approx. Volt Drop		0.3 mV/A/m
	Inductive Reactance of Cable at 50Hz (approx.)		0.07173 Ω/km
	Mutual Reactance		0.22833 mH/km
Capacitance of Cable (approx.)		μF/km	
Short Circuit Current Rating for 1 second duration		21.45 kA	
<b>Thermal</b>	Maximum conductor operating temperature:	90 °C	
	Lowest ambient temperature for fixed installation:	-30 °C	
	Lowest installation temperature:	5 °C	
	Maximum short-circuit conductor temperature:	250 °C	
<b>Mechanical</b>	Tensile load	9000 N/mm <sup>2</sup>	
	Min. bending radii (BS 7671)	8 * d	
<b>Chemical</b>	Resistance to oil:	According to IEC Standard	
	Weather resistance:		

#### **BASIC ASSUMPTION FOR CURRENT RATINGS & RATING FACTORS**

The current ratings of cables as indicated in various tables have been calculated on certain assumed conditions. In actual practice these conditions may be different. Therefore to determine the actual current ratings as per installation conditions, the tabulated ratings shall be multiplied with appropriate factors

- i. Maximum permissible temperature: 90°C for XLPE insulation, 70°C for general purpose PVC, 85°C for HR PVC
- ii. Ground/Duct temperature: 35°C
- iii. Ambient temperature: 40°C
- iv. Thermal resistivity of soil: 1.2°C m/W
- v. Thermal resistivity of Dielectric 650°C cm/W for PVC, 350°C cm/W for XLPE
- vi. Cables are installed in a single circuit
- vii. Depth of laying: 500mm

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