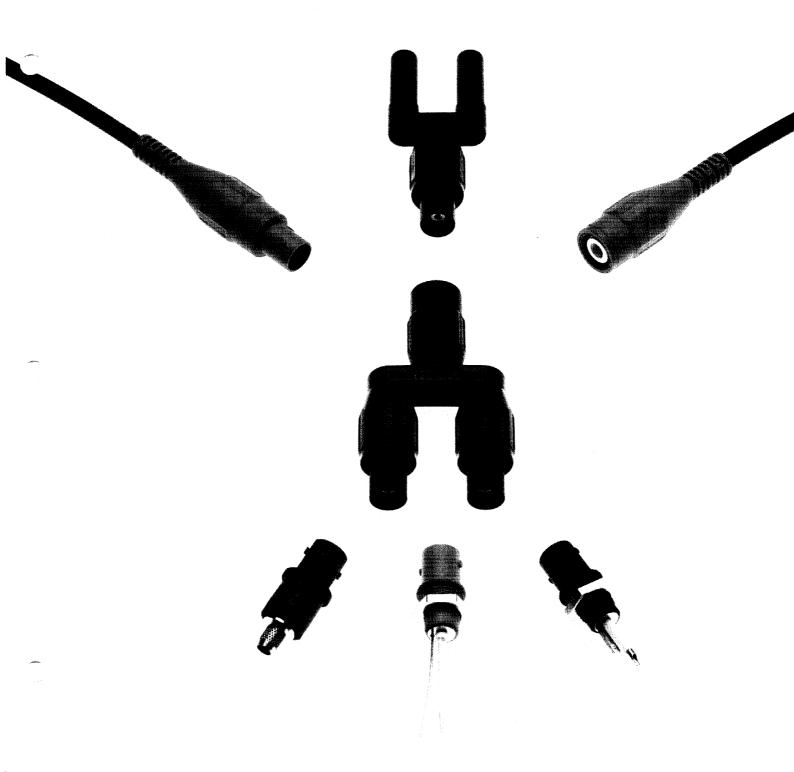
Protection-BNC

- Fully Insulated BNC Connectors, BNC Leads, BNC Adaptors, Panel-mount BNC Sockets
 - Protection Level 1000 V, Overvoltage Category II in accordance with EN 61010-2-031 (IEC 1010-2-031)





Why use fully insulated BNC connectors?

Conventional BNC connectors are not suitable for analysis measurements on mains systems because in general the measuring instruments are not earthed. While carrying out such measurements, so-called 'floating measurements', the user is at risk from electric shock when handling the un-insulated parts.

Only by using a combination of fully insulated instruments and touch proof test accessories can the user be safeguarded from accidents. In addition, the importance of using fully insulated shielded test accessories has been increased due to the EMC directive which requires the use of shielded leads in a larger number of applications.

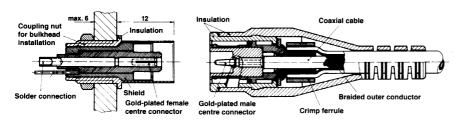
The HCK Protection-BNC series offers a system of touch proof BNC connectors which are especially suitable for high frequency applications.

The connectors are designed with clearance and creepage distances in accordance with EN 61010 and IEC 1010-2-031 for a rated voltage of 1000 V to earth, overvoltage category II (CAT II). The voltage between the inner and outer conductor must not exceed 500 V.

The Protection-BNC series includes BNC leads with RG 58 or RG 59 cable, fully insulated BNC panel-mount sockets and several adaptors for the transition between BNC systems and 4 mm safety systems. All connectors in the Protection-BNC series are fully compatible with conventional BNC connectors although, when connected to un-insulated BNCs the voltage rating of 1000 V is no longer applicable for the whole system.



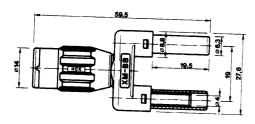
Fully insulated BNC panel-mount socket and BNC lead



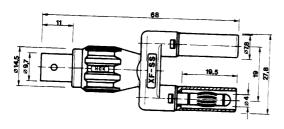
... a more detailed internal view

Safety adaptors BNC / 4 mm

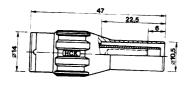
BNC adaptor, XM-BB



BNC adaptor, XF-SS



BNC adaptor, XM-B



A male BNC connector linked to two 4 mm safety sockets. The goldplated contact pin of the BNC is connected to the red, and the shield to the black, safety socket.

Technical specifications

(H)

Voltage inner conductor / shield:

max. 500 V

Voltage between shield

1000 V, CAT II / 600 V, CAT III

and outer insulation: Insulation:

Polyamide (PA)

Colour:

black / red

XM-BB 97871

A female BNC connector linked to two 4 mm safety plugs. The gold-plated contact socket of the BNC is connected to the red, and the shield to the black, safety plug.

Technical specifications

(ŲL)

Voltage inner conductor / shield:

max. 500 V

Voltage between shield

and outer insulation: Insulation:

1000 V, CAT II / 600 V, CAT III Polyamide (PA)

Colour:

black / red

XF-SS

97881

A single pole BNC adaptor. The gold-plated contact pin of the male BNC is connected to a 4 mm safety socket.

Technical specifications

Voltage inner conductor / shield:

max. 500 V

Voltage between shield and outer insulation:

1000 V, CAT II / 600 V, CAT III

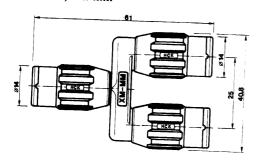
Insulation: Polyamide (PA)

Colours: 1 - 3

XM-B 9799*

BNC safety distributors

BNC distributor, XM-MM



Three male BNC connectors inter-linked to allow the distribution of measuring signals.

Technical specifications

Voltage inner conductor / shield:

max. 500 V

Voltage between shield and outer insulation:

1000 V, CAT II / 600 V, CAT III

Insulation:

Polyamide (PA)

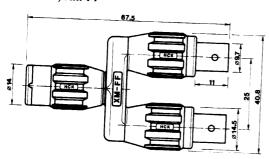
Colour:

black

XM-MM

97821

BNC distributor, XM-FF



One male BNC inter-linked to two female BNC connectors.

Technical specifications

Voltage inner conductor / shield: max. 500 V

Voltage between shield

and outer insulation: 1000 V, CAT II / 600 V, CAT III

Insulation: Polyamide (PA)

Colour: black

XM-FF 97831

Safety adaptor leads BNC / 4 mm

Adaptor leads, XLAM-414 and XLAF-414

with two in-line safety plugs, type XL-414, on one side and either male BNC (XLAM-414) or female BNC (XLAF-414) on the other. The inner conductor of the RG 58 BNC lead is connected to the red, and the shield to the black, safety plug. The inner contact of the BNC connector is gold-plated.

Technical specifications:

Voltage between

inner conductor and shield:

Voltage between shield and outer insulation:

Insulation of BNC connectors

and axial safety plugs: Insulation of the cable:

Colours of BNC connectors:

Colour of the 4 mm plugs:

Colour of the cable:

max. 500 V 1000 V, CAT II / 600 V, CAT III

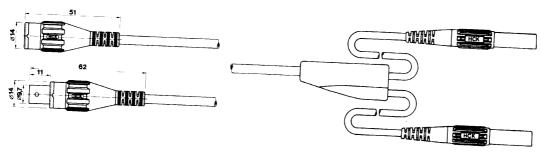
Polyamide (PA)

Silicone 1 - 3

black and red

black

approx. 50 cm	approx.	approx.	approx.
	100 011	150 cm	200 cm
9776*105	9776*110	9776*115	0770
0		3//0 113	9776*120
9/77*105 9777*	9777*110	9777*115	9777*120
	approx. 50 cm 9776*105 9777*105	50 cm 100 cm 9776*105 9776*110	50 cm 100 cm 150 cm 9776*105 9776*110 9776*115



Adaptor leads, XLAM-480 and XLAF-480

with two right-angled safety plugs, type XL-480, on one side and either male BNC (XLAM-480) or female BNC (XLAF-480) on the other. The inner conductor of the RG 58 BNC lead is connected to the red, and the shield to the black, safety plug. The inner contact of the BNC connector is gold-plated.

Technical specifications:

Voltage between

inner conductor and shield:

Voltage between shield and outer insulation:

Insulation of BNC connectors and angled safety plugs:

Insulation of the cable:

Colours of BNC connectors:

Colour of the 4 mm plugs:

Colour of the cable:

max. 500 V

1000 V, CAT II / 600 V, CAT III

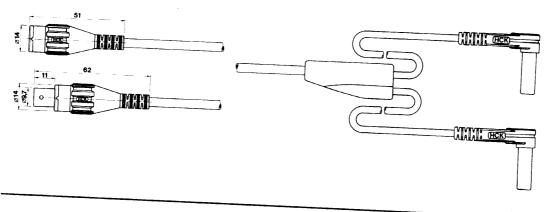
Polyamide (PA) Silicone

1 - 3

black and red

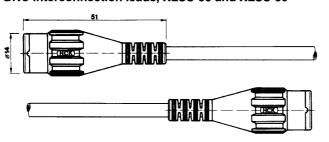
black

Lengths:	approx. 50 cm	approx.	approx.	approx.
VI AM 400		100 0111	150 cm	200 cm
XLAM-480	9778*105	9778*110	0770+445	
XLAF-480	077044	3.10 110	9778*115	9778*120
7EAT-400	9779*105	9779*110	9779*115	0770+400
			0,70 113	9779*120



Protection BNC test leads

BNC interconnection leads, XLSS-58 and XLSS-59



Coaxial lead, with male BNC connectors on both ends of either RG 58 C/U or RG 59 coaxial cable. Inner contact is gold-plated.

Technical specifications

Voltage between

inner conductor and shield:

max. 500 V

Voltage between shield

and outer insulation:

Impedance:

1000 V, CAT II / 600 V, CAT III 50 Ω (XLSS-58), 75 Ω (XLSS-59)

Insulation of BNC connectors: Colours of BNC connectors:

Polyamide (PA)

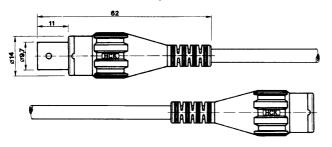
1 - 3

Colour of the cable:

black

Lengths:	50 cm	100 cm	150 cm	200 cm
XLSS-58	9770*105	9770*110	9770*115	9770*120
XLSS-59	9771*105	9771*110	9771*115	9771*120

BNC interconnection leads, XLSK-58 and XLSK-59



Coaxial lead, with a male BNC connector on one end and a female BNC connector on the other, of either RG 58 C/U or RG 59 coaxial cable. The inner contact is gold-plated.

Technical specifications

Voltage between

inner conductor and shield:

max. 500 V

Voltage between shield

and outer insulation:

1000 V, CAT II / 600 V, CAT III

Impedance:

50 Ω (XLSK-58), 75 Ω (XLSK-59)

Insulation of BNC connectors: Colours of BNC connectors:

Polyamide (PA) 1 - 3

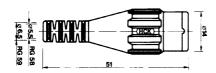
Colour of the cable:

black

Lengths:	50 cm	100 cm	150 cm	200 cm
XLSK-58	9773*105	9773*110	9773*115	9773*120
XLSK-59	9774*105	9774*110	9774*115	9774*120

Protection BNC connectors for self-assembling

BNC male connectors, XBS-58 and XBS-59



Fully insulated male BNC connector for self assembly by customer onto standard coaxial cable RG 58 or RG 59. The inner contact pin is gold-plated and may be crimped or soldered to the cable and the shield is connected by means of a crimping sleeve. The two part insulator is snapped together after cable termination.

Technical specifications



Voltage between

inner conductor and shield:

Voltage between shield

and outer insulation:

Impedance:

Insulation:

Colours:

XBS-58

XBS-59

max. 500 V

1000 V, CAT II / 600 V, CAT III

50Ω (XBS-58), 75Ω (XBS-59)

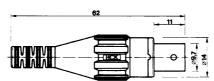
Polyamide (PA)

1 - 3

9760*

9761*

BNC female connectors, XBK-58 and XBK-59



Fully insulated female BNC connector for self assembly by customer onto standard coaxial cable RG 58 or RG 59. The inner contact socket is gold-plated and may be crimped or soldered to the cable and the shield is connected by means of a crimping sleeve. The two part insulator is snapped together after cable termination.

Technical specifications



Voltage between

inner conductor and shield:

Voltage between shield and outer insulation:

Impedance:

Insulation: Colours:

XBK-58 XBK-59

max. 500 V

1000 V. CAT II / 600 V. CAT III 50Ω (XBK-58), 75Ω (XBK-59)

Polyamide (PA)

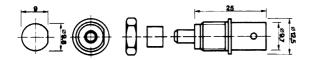
1 - 3

9762*

9763*

BNC insulated panel-mount sockets

BNC panel-mount sockets, XBB-C 58 and XBB-C 59



Fully insulated panel-mount BNC socket for connection to RG 58 or RG 59 coaxial cable . The inner contact is gold-plated and may be crimped or soldered to the cable, the shield is connected by means of a crimping sleeve.

Technical specifications

Voltage inner conductor / shield:

Voltage between shield

and outer insulation:

Insulation, external: Insulation, internal:

Colours:

XBB-C 58 XBB-C 59 max. 500 V

1000 V, CAT II / 600 V, CAT III

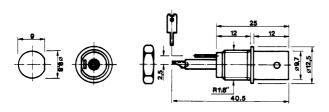
Polyamide (PA)

Polyethylene (PE)

1 - 3 **9766***

9767*

BNC panel-mount socket, XBB-L



Fully insulated panel-mount BNC socket with solder connections. The inner contact is gold-plated and the shield is nickel-plated with a tin-plated solder connection.

Technical specifications

Voltage inner conductor / shield:

Voltage between shield

and outer insulation:

Insulation, external: Insulation, internal:

Colours:

XBB-L

max. 500 V

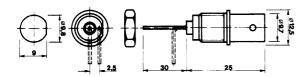
1000 V, CAT II / 600 V, CAT III

Polyamide (PA) Teflon[®] (PTFE)

1 - 3

9764*

BNC panel-mount socket, XBB-P



Fully insulated panel-mount BNC socket with two solder connections which can be bent and is suitable for direct connection to circuit boards. The inner contact is gold-plated and the shield is nickel-plated.

Technical specifications

Voltage inner conductor / shield:

Voltage between shield and outer insulation:

Insulation, external:

Insulation, internal: Length of connection wires:

Diameter of connection wires:

Colours:

XBB-P

max. 500 V

1000 V, CAT II / 600 V, CAT III

Polyamide (PA) Polyethylene (PE)

30 mm

0.8 mm

1 - 3

9765*

*Colours: 1=black, 2=red, 3=blue

HCK-Messzubehör GmbH

Hövelstrasse 214 D-45326 Essen

Postfach 12 00 26 D-45311 Essen

Tel. 0201/8 31 05 -0 Fax 0201/8 31 05 99

Multi-Contact (UK) Ltd.

3 Presley Way Crownhill
Milton Keynes
GB-Buckinghamshire MK 8 OES

Tel. 0908 26 55 44 Fax 0908 26 20 80

Multi-Contact USA

Head Office

5560 Skylane Boulevard Santa Rosa, CA 95403

Tel. 707/575-7575 Fax 707/575-7573