



2021 PRODUCT CATALOGUE

WWW.KAMAROSS.CO.ZA



ABOUT US

Kamarossi Cables & Electrical Distributors is focused on the production and distribution of electrical accessories, specialised cables and products.

We are able to distribute and manufacture any type of communication-, electrical-, fiber-, control-, and power cables specified according to a client's individual specifications.

Kamarossi, in conjunction with another company, manufactures joint and termination kits which are SABS approved.

Kamarossi is also an agent for Geokon Inc. and import geotechnical instrumentation for the mining industry. We offer "EXCELLENT SERVICE", with short delivery times and have good quality products which we supply to various industries in the market, which includes the mining, industrial, automation and building industries.



CABLING

SOLAR-TECH (H1Z2Z-K)

FLEXIBLE SINGLE CORE, PHOTOVOLTAIC SYSTEMS, HALOGEN FREE



TÜVRheinland®
Precisely Right.



Technical Data

Single core flexible cable for photovoltaic or solar systems in accordance with EN 50618; IEC 60228; EN 50395; EN50396; EN 60332-1-2; EN 61034-1: -2; EN 50525-1; EN 60216-1: -2

Temperatures

Operating: -40°C to 90°C

Max core: 120°C (for 20,000hrs)

Voltage Rating

U0/U AC: 1.0/1.0kV

U0/U DC: 1.5/1.5kV

Test Voltage

6.5kV AC

Min. Bending Radius

14 x OD

Tensile Strength

15N/mm²

Application

Solar cable is suitable for the interconnection of various components in photovoltaic systems such as between photovoltaic (PV) panels and from panels to the inverter. Suitable for fixed outdoor installations in conduits, or similar closed systems.

The cable is manufactured to the latest requirements for PV systems, in accordance to the following Reference standards: EN50618 – EN60216-1-2 – EN 610345. The special insulation provides qualities such as high abrasion resistance and a high temperature rating. Moreover, the insulation is flame retardant, ozone and UV-resistant (Protection class II).

Construction

Annealed tinned copper conductors (Class 5)

Double insulated

Bedding of flexible cross-linked polymer

Outer sheath of special halogen free compound

Outer sheath colour Black / Red

Properties & Identification

Ozone and UV Resistant

TÜV and VDE approved

Estimated service lifespan of 25 years or more

Additional

Cable Print: H1Z2Z2-K (size) 1.0/1.0kV TÜV RHEINLAND TYPE APPROVED R601 (reg. no.) CE

CABLING



TELEPHONE – INDOOR

TELKOM (SAPO) SPEC, MULTICORE PVC, UNSCREENED



Technical Data

Indoor telephone cable to Telkom spec 268 / 271

Conductor Size

0.9mm²

Conductor Resistance

95.25 Ω /Km (@ 20°C)

Mutual Capacitance

90 nF/km

Capacity Unbalance p-p

400 pF/500m (800Hz Ind. Max)

Insulation Resistance

37.5 M Ω .km @500V DC (Individual Minimum)

Test Voltage

3,000V DC

Application

Telephone cable is used in PABX's, panel and switch gear connections.

Additional

Available in 100m coils and 500m drums

Construction

Solid annealed bare copper conductor
 Core insulation with PVC (Type 02 to BS 6746)
 Twisted pairs minimise interference and crosstalk.
 Polyethylene (Mylar) tape
 Outer sheath white polyvinyl chloride (PVC)

Properties & Identification

Alternative sheath colours are available on request.

Accessories

Connectors
RJ9 Clear



Surface Mount
RJ11 Mini Western
Jack



Glue Stick
40 x 11mm Clear
Part no. GLUESTICK



TELEPHONE – OUTDOOR (ARMOURED)

TELKOM (SAPO) SPEC, MULTICORE PVC, STEEL WIRE ARMOURED



Technical Data

Telephone cable to Telkom spec 268 / 271 or (SAPO) Conductor Size
 0.6mm

Conductor Resistance

95.25 Ω /Km (@ 20°C)

Mutual Capacitance

90 nF/km

Capacity Unbalance p-p

400 pF/500m (800Hz Ind. Max)

Insulation Resistance

37.5 M Ω .km @500V DC
 (Individual Minimum)

Test Voltage

3,000V DC

Application

Telephone cable is used in PABX's, panel and switch gear connections.
 Outdoor, armoured cable is suitable for direct burial.

Construction

Solid annealed bare copper conductor
 Core insulation with PVC (Type 02 to BS 6746)
 Twisted pairs minimise interference and crosstalk.
 Polyethylene (Mylar) tape
 Bedding with PVC and galvanised steel wire armouring
 Outer sheath white polyvinyl chloride (PVC)
 Alternative sheath colours are available on request.

Additional

Available in 500m drums



CABLING



RG CABLES (MIL-C-17)

RG COAXIAL CABLES, RG58, RG59, RG213, RG59 + POWER



Technical Data

Coaxial cable per MIL-C-17

Temperatures

Operating: -20°C to 85°C

Insulation Resistance

1,000 MΩ/km

Frequency Range

3 GHz f(max.)

Propagation Velocity

0.66 v/c

Type RG.../U	58	59	213
Part no.	RG58MILC17	COARG59	COARG213
Cable Structure			
Inner conductor Ø (mm)	19 x 0.8	1 x 0.6	7 x 0.75
Insulation Ø (mm)	2.95	3.7	7.24
Outer Conductor	Braid, Tinned, Copper	Braid, Copper	Braid, Copper
Min. bending radius (mm)	25	30	50
Outer Ø (mm)	21.0	26.0	10.3
Electrical Characteristics			
Impedance (Ω)	50 ± 2	75 ± 3	50 ± 2
Attenuation at 20°C	(db/100m)	(db/100m)	(db/100m)
100 MHz	17	11.5	7
200 MHz	24	16.5	10.2
500 MHz	39	27	17
800 MHz	51	35	23
1000 MHz	56	41	-
Capacitance pF/m	101	67	101

Construction

Inner conductor as per specification below

PE insulation

Braided screen with 95% coverage

Black outer jacket with PVC

Properties & Identification

R=Radio, G=Guide, U=Utility

Fire retardant as per IEC 60332-1

Conforms to RoHS directive

Application

Used with transmitters, receivers, computers, radio, video and in high frequency transmission.

Additional

Available in 500m wooden drums and 100m coils.

Accessories

Connectors
RG59 6mm Male or
Female
Crimp or Solder versions



Barrel Connectors
RG 59 Barrel
Connector
Female to Female



Glue Stick
40 x 11mm Clear
Part no. GLUESTICK



CABLING

FIRE-TECH (FIRE DETECTION) FIRE RESISTANT CABLE (PH30 / PH120)



Technical Data

Fire rated cable conforms to IEC/EN 60332.3-24; EN 60332-3-25
 Flame retardant as per IEC/EN 60332.1-2

Temperatures

Operating: 0°C to 80°C
 Conductor Max: 180°C
 Short Circuit: 350°C

Voltage Rating

U0/U 300/500 V

Min. Bending Radius

10 x OD

Halogen Free

< 0.5mg/g (EN 50267-2-1; IEC 60754.1; IEC 60754.2)

Low Smoke Emission

Transmittance > 60% (IEC 61034-2)

Application

Fire rated cables are designed to ensure circuit continuity in the event of a fire. Primarily intended for use in fire detection and fire alarm systems, emergency lighting circuits or if cables need to operate when fire resistance is required. Suitable for indoor installations. Cable shielded with Aluminium/polyester and unshielded.

Additional

Cable Print: FIRE-TECH 2 x 1.00 100/100V PH30/(120)
 CEI 20-105 UNI 9795 CEI UNEL 36762 C-4
 (U0=400 V) EN 50200 CEI EN 60332-3-25
 (Production Batch) CE (Meter marking)

Marking Colour: Blue

Construction

Annealed copper conductors as per EN 60228 Class 5.
 Core insulation ceramifiable silicone rubber
 Twisted pairs with polyester foil tape
 Annealed stranded tinned copper drain wire
 Shielded with aluminium/PET foil
 Outer sheath thermoplastic halogen free compound (TI7) as per EN 50363-3; EN 50267-2-1
 Outer sheath colour Red (RAL 3000)

Fire Resistance

Ph30: 120 minutes at 830 C in accordance with EN50200
 30 minutes at 950 C in accordance with BS 6387 cat. CWZ
Ph120: 120 minutes at 950 C per BS 6387 cat. CWZ.

Variations

Outer sheath Red or White. Additional colours on request. Alternatively, available in mineral fibre (Mica) construction per EN50200.

x = PH30 / PH120

CABLING



KAMNET LAN - CAT5E UTP

CATEGORY 5 ENHANCED, UNSHIELDED TWISTED PAIRS



Technical Data

Ethernet LAN cable per ISO/IEC 11801 TIA/EIA 568.2

Temperatures

Operating: -20°C to 85°C

Voltage rating:

Operating: 250V

Test: 1,500V

Min. Bending Radius

5 x OD

Impedance

67 Ω

Capacitance

Conductor: 120 nF/km

Shield: 160 nF/km

Resistance @ 20°C

Insulation: >20 M Ω /km

Electrical: <145 Ω /km

Application

Used in the secondary and tertiary network level for the implementation of services such as Gigabit Ethernet, Fast Ethernet, Ethernet etc.

Construction

F/UTP 4 x 2 x 24AWG

Annealed bare copper conductors (0.51mm ϕ)

or Copper clad aluminium conductors (0.55mm ϕ)

Core insulation with polyethylene compound

Outer sheath with special PVC (RoHS compliant)

Properties & Identification

Flame retardant as per IEC 60332-41

Available in solid or stranded bare copper or copper clad aluminium conductors.

Standard outer sheath colour Grey RAL 7001

Additional colours available on request: x = Grey (GY), Blue (BU), Green (GN), Yellow (YE), Red (RD), White (WH).

Also available in Black outer sheath with UV Protection

Accessories

Connectors

RJ45 Cat5 Unshielded
Part no. RJ45EUTP-CL



Boots

RJ45 Colour Coded
Part no. RJ45EBT-x



Inline Connectors

RJ45 Unshielded
Part no. RJ455INLINE-x



Surface Mount

RJ45 Cat5 UTP
Part no. SMBD5EUTP-x



Patch Cord

Cat5 UTP
Pure Copper or CCA



Glue Stick

40 x 11mm Clear
Part no. GLUESTICK



CABLING



KAMNET LAN - CAT6E UTPX

CATEGORY 6 ENHANCED, UNSHIELDED TWISTED PAIRS



Technical Data

Ethernet LAN cable per ISO/IEC 11801 TIA/EIA 5688.2

Temperatures

Operating: -20°C to 70°C

Voltage rating:

Operating: 250V

Test: 1,500V

Min. Bending Radius

8 x OD

Impedance

100 (±15) Ω

Capacitance

56 nF/km

Tensile Strength

13.8MPa

Resistance @ 20°C

Insulation: >50 MΩ/km

Electrical: <74 Ω/km

Application

Used in the secondary and tertiary network level for the implementation of services such as Gigabit Ethernet, Fast Ethernet, Ethernet etc.

Construction

U/UTP 4 x 2 x 24AWG

Annealed bare copper conductors (0.51mm ø)

or Copper clad aluminium conductors (0.55mm ø)

Core insulation with high density, low molecular weight, polyethylene compound (LDPE) (OD: 1.05mm (±0.05mm))

Outer sheath with special PVC (RoHS compliant) (OD: 6.3mm (±0.3mm))

Nylon rip cord

Properties & Identification

Flame retardant as per IEC 60332-41

Available in solid or stranded bare copper as well as solid or stranded copper clad aluminium conductors.

Standard outer sheath colour Grey RAL 7001

Additional colours available on request: x = Grey (GY), Blue (BU), Green (GN), Yellow (YE), Red (RD), White (WH).

Also available in Black outer sheath with UV Protection

Accessories

Connectors

RJ45 Cat6 Unshielded
Part no. RJ456EUTP-CL



Boots

RJ45 Colour Coded
Part no. RJ456EBT-x



Inline Connectors

RJ45 Shielded
Part no. RJ456INLINE-x



Surface Mount

RJ45 Cat6 UTP
Part no. SMBD6EUTP-x



Patch Cord

Cat6 UTP
Pure Copper or CCA



Glue Stick

40 x 11mm Clear
Part no. GLUESTICK



Stock and availability upon request. Additional sizes available on request. Data subject to change without prior notice. This data cancels all previous data. Every effort has been made to ensure the accuracy of this data, Kamarossi does not accept responsibility for any errors or omissions.

CABLING



KAMNET CAT5E FTP

CATEGORY 5 ENHANCED, SHIELDED TWISTED PAIRS



Technical Data

Ethernet LAN cable per ISO/IEC 11801 TIA/EIA 5688.2

Temperatures

Operating: -20°C to 85°C

Voltage rating:

Operating: 250V

Test: 1,500V

Min. Bending Radius

5 x OD

Impedance

67 Ω

Capacitance

Conductor: 120 nF/km

Shield: 160 nF/km

Resistance @ 20°C

Insulation: >20 M Ω /km

Electrical: <145 Ω /km

Construction

U/FTP 4 x 2 x 24AWG

Annealed bare copper conductors (0.51mm ϕ)

or Copper clad aluminium conductors (0.55mm ϕ)

Core insulation with high density polyethylene compound

Solid tinned copper drain wire (Cu version) or tinned copper clad aluminium (CCA version).

Screened with aluminium/polyester foil tape (100% coverage with 25% overlap)

Outer sheath with special PVC (RoHS compliant)

Properties & Identification

Flame retardant as per IEC 60332-41

Available in solid or stranded bare copper or copper clad aluminium conductors.

Standard outer sheath colour Grey RAL 7001

Additional colours available on request: x = Grey (GY), Blue (BU), Green (GN), Yellow (YE), Red (RD), White (WH).

Also available in Black outer sheath with UV Protection

Application

Used in the secondary and tertiary network level for the implementation of services such as Gigabit Ethernet, Fast Ethernet, Ethernet etc.

KAMNET CAT6E FTP

CATEGORY 6, OVERALL FOIL SCREENED TWISTED PAIRS



Technical Data

Ethernet LAN cable per ISO/IEC 11801 TIA/EIA 5688.2

Temperatures

Operating: -20°C to 70°C

Voltage rating:

Operating: 250V

Test: 1,500V

Min. Bending Radius

8 x OD

Impedance

100 (± 15) Ω

Capacitance

56 nF/km

Tensile Strength

13.8 Mpa

Resistance @ 20°C

Insulation: >20 M Ω /km

Electrical: <74 Ω /km

Construction

F/UTP 4 x 2 x 24AWG

Annealed bare copper conductors (0.51mm ϕ)

or Copper clad aluminium conductors (0.55mm ϕ)

Core insulation with high density, low molecular weight, polyethylene compound (LDPE) (OD: 0.9mm (± 0.05 mm))

Twisted pairs assembled around a cross-filler

Solid tinned copper drain wire (Cu version) or copper clad aluminium (CCA version).

Screened with aluminium/polyester foil tape (100% coverage with 25% overlap)

Outer sheath with special 90 C PVC (RoHS compliant) (OD: 5.8mm (± 0.2 mm)) Nylon rip cord

Properties & Identification

Flame retardant as per IEC 60332-41

Available in solid or stranded bare copper as well as solid or stranded copper clad aluminium conductors.

Standard outer sheath colour Grey RAL 7001

Additional colours available on request: x = Grey (GY), Blue (BU), Green (GN), Yellow (YE), Red (RD), White (WH).

Also available in Black outer sheath with UV Protection

Application

Used in the secondary and tertiary network level for the implementation of services such as Gigabit Ethernet, Fast Ethernet, Ethernet etc. The foils screen shields the cable from EMI and the cable is therefore suitable for use in tight cable channels and near power cables or machinery.

CABLING



FIBRE OPTIC CABLE - HDD

HEAVY DUTY DUCT, SINGLE, MULTI-MODE AND COMPOSITE



Technical Data

Fibre fully comply with:
 ITU-T Specifications for the relevant fibre type used in these cables.
 The blown or hauled duct cable is designed for blown duct applications.
 The cable's non-metallic construction makes it immune to lightning.
 Excellent optical reliability is ensured by the Thixotropic gel filling in the tubes which provide protection against vibration.
 IBIDA, PLP or Powertel to be consulted for accessories for this type of cable.

Cable

Central Strength Member	Class reinforced plastic
Peripheral Strength Member	Water blocking glass yarn
Filler Material	Natural polyethylene

Polyethylene Sheath

Diameter (mm) Nominal	9.4	9.4	9.4	9.4	10.8	12.4	15.4
Weight (kg/km) Nominal	66	66	66	66	91	118	189
Outer Sheath	(Black, UV stabilized) or coloured (no stripe)						
Material	Polyethylene						
Radial thickness	Nominal 1.6mm						

Fibre Identification

Fibre identification	1.Blue 2.Orange 3.Green 4.Brown 5.Grey 6.White
Loose tube identification	1.Blue 2.Orange 3.Green 4.Brown 5.Grey 6.White
Shipping length	(Single Mode) 2000m to 6000m (Multi Mode) 2000m to 4000m

Construction

GRP, water blocking binding yarns, fibre optics in PBT tubes filled with Thixotropic gel, water blocking glass yarn, Polyethylene / LSZH outer sheath.

No. of Fibres	8	12	18	24	48	72	96	144
Fibre per tube	8	6/12	6	6/12	12	12	12	12
No. of Elements	4	4	4	4	4	6	8	12
No. of tubes	1	2/1	3	4/2	4	6	8	12
No. of fillers	3	2/3	1	0/2	0	0	0	0
Material of tubes	PBT (Polybutylene terephthalate)							
Radial thickness	Nominal 0.35mm							

Physical Properties

Allowable tension during installation (N)	1200	1200	1200	1200	1200	1200	1393	2220
After installation bending radius	600	600	600	600	600	600	600	600
Bending radius after installation	10 x Cable Diameter							
Bending radius during installation	20 x Cable Diameter							
Crush resistance (50mm x 50mm plates for 1 min)	2500 N							
Impact Tes (2Nm/25mm ANVIL)	2 X 3 impacts 100mm apart							
Water penetration (24 hours)	3 meter							
Temperature range	-20 / +70°C							

Stock and availability upon request. Additional sizes available on request. Data subject to change without prior notice. This data cancels all previous data. Every effort has been made to ensure the accuracy of this data, Kamarossi does not accept responsibility for any errors or omissions.

CABLING



FIBRE OPTIC CABLE - CST

CST DOUBLE JACKET RODENT PROOF – SINGLE, MULTI -MODE OR COMPOSITE



Technical Data

Fiber fully comply with:
 ITU-T Specifications for the relevant fibre type used in these cables.
 The blown or hauled duct cable is designed for blown duct applications.
 The corrugated plastic clad steel tape armoured cable is suitably protected against rodent attack and will provide protection for alternative applications where the cable is exposed to abnormal crushing or impact forces during installation or service.

Armouring (Corrugated Copolymer Steel Tape)

Radial thickness	Nominal 0.25mm
	Cable
Central strength member	Class reinforced plastic
Peripheral strength member	Water blocking glass / aramid yarn
Filler material	Natural polyethylene

Polyethylene Sheath

Diameter (mm) Nominal	14.8	14.8	14.8	14.8	16.2	17.8	20.8
Weight (kg/km) Nominal	184	184	184	185	222	265	363
Outer Sheath	Black or coloured (no stripe)						
Material	Polyethylene						
Radial thickness	Nominal 1.6mm						

Low Smoke Zero Halogen (LSZH) Sheath

Diameter (mm) Nominal	16.0	16.0	16.0	16.0	17.4	19.0	22.0
Weight (kg/km) Nominal	254	254	254	255	299	350	462
Outer Sheath	Black or coloured (no stripe)						
Material	Low smoke zero halogen (LSZH)						
Radial thickness	Nominal 2.0mm						

Construction

GRP, water blocking binding yarns, fibre optics in PBT tubes filled with Thixotropic gel, water blocking glass yarn, Polyethylene / LSZH sheath. CST Provides excellent moisture barrier and the cable is further protected against moisture ingress by a water blocking tape under the CST. CST Provides Rodent attack resistance. Longitudinal CST tape prevents cable spiralling, twisting and kinking during installation. IBIDA, PLP, or Powertel to be consulted for accessories for this type of cable.

No. of Fibres	8	12	24	48	72	96	144
Fibre per tube	4/8	6	6	12	12	12	12
No. of Elements	4	4	4	4	6	8	12
No. of tubes	2	2	4	4	6	8	12
No. of fillers	2	2	0	0	0	0	0
Material of tubes	PBT (Polybutylene terephthalate)						

Physical Properties

Allowable tension during installation (N)	2171	2171	2171	2171	2611	3123	4000
After installation bending radius	599	600	600	600	600	600	600
Bending radius (4 turns x 10 cycles)	12 x Cable Diameter						
Crush resistance (100mm) x 100mm plates for 1 min)	4000 N						
Impact Test (4Nm/25mm ANVIL)	2 x 3 impacts 100mm apart						
Water penetration (24 hours)	3 meter						
Temperature range	-20 / +70°C						

Fibre Identification

Fibre identification	1.Blue 2.Orange 3.Green 4.Brown 5.Grey 6.White
Loose tube identification	1.Blue 2.Orange 3.Green 4.Brown 5.Grey 6.White
Shipping length	(Single Mode) 2000m to 6000m (Multi Mode) 2000m to 4000m

Stock and availability upon request. Additional sizes available on request. Data subject to change without prior notice. This data cancels all previous data. Every effort has been made to ensure the accuracy of this data, Kamarossi does not accept responsibility for any errors or omissions.

CABLING

OAM DEF SPEC (MYLAR) FOIL-TECH OVERALL ALUMINIUM-MYLAR SCREENED PAIRS



Technical Data

Aluminium-Mylar screened instrumentation cable in accordance with DEF STAN 61-12

Temperature Range

-15°C / + 70°C

Voltage Rating

U/U 300/500V

Test Voltage

1,500V

Min. Bending Radius

10 x OD

Application

Multicore flexible cables designed for high density wiring between components, instruments and electronic equipment. They are used in aircraft, process control systems, computers, data processors, military vehicles and military equipment.

Construction

Annealed tin copper conductors (Class 5 Stranded)
Core insulation of special PVC (T12) (Y12)
Cores, twisted pairs, cabled in concentric layers
Stranded tinned copper drain wire
100% Shield coverage with aluminium /PET foil
Outer sheath of special PVC (TM2) (YM2)

Properties & Identification

Outer sheath colour Grey (RAL 7001)
Flame retardant as per IEC 60332-1-2; EN 60332-1-2
As per Def Stan 61-12 Part 4

Additional

This cable is also available in IOAM (Individually and Overall Aluminium-Mylar).
Large pair sizes are only available by special manufacture.

Marking

0.22MM X 2 PR FOIL-TECH OAM (Meter.)

CABLING



PVC CONTROL CABLE

FLEXIBLE MULTICORE, SPECIAL PVC, 300/500V



Technical Data

Multicore control cable with special PVC insulation and jacket

Temperatures

Fixed: -40°C to 80°C

Flexing: -5°C to 70°C

Voltage Rating

U0/U 300/500V

Test Voltage

3,000V

Min. Bending Radius

Fixed: 3 x OD

Occasional flexing: 10 x OD

Flexing application: 15 x OD

Application

Control cable is suitable for measuring and monitoring in machine tool manufacturing, plant engineering, power stations, heating and air conditioning systems, refrigeration plants, office equipment machines and installations for data processing. The cable is used in dry, damp and wet environments at medium mechanical stress. It is suitable for flexible, but not continuously moving applications, without tensile load or compulsory guidance, as well as for fixed laying.

Construction

Flexible bare copper conductors per CEI 20-29 Class 5 and DIN VDE 0295 K5

PVC Insulation compound type TI1 per CEI 20-11 and VDE 0207 with special mechanical resistance.

Black numbered cores with or without green yellow core

Outer jacket in PVC TM2 per CEI 20-11 and VDE 0207

Properties & Identification

QA and testing as per ISO 9001 – 2000 CSQ-IMQ (EQ-NET)

Flame retardant, Test method B per DIN VDE 0472 part 804 and IEC 60332-1 per our VDE Reg. No. 7097

Oil resistant per DIN EN 50290-2-22 resp. VDE 0819-102, TM54.

The cable conforms to Low Voltage Directive (LVD) 2006/95/EC CE.

Additional

Available in drums, coils or cut to size (conditions apply).

CABLING



PVC SCREENED CONTROL CABLE

FLEXIBLE MULTICORE, BRAIDED SCREEN, SPECIAL PVC, 300/500V



Technical Data

EMC compliant control cable with numbered cores. Low space requirement due to compact design.

Temperatures

Fixed: -40°C to 80°C

Flexing: -5°C to 70°C

Voltage Rating

U0/U 300/500V

Test Voltage

3,000V

Min. Bending Radius

Fixed: 3 x OD

Occasional flexing: 10 x OD

Capacitance

A/A ca. 120nF/km

A/S ca. 160nF/km

Inductance

Ca. 0.65mH/km

Application

The application for control cable with braided screen includes all electrical systems in dry, damp or wet environments, especially in industrial and/or EMC-critical installations. It is suitable for fixed installation, but also for flexible applications under conditions of sporadic, not continuously returning movement on or in machinery, appliances, rail vehicles, ventilation, air-conditioning systems, office machines and industrial plants. Suitable for applications with low mechanical stress.

Construction

Flexible bare copper conductors per CEI 20-29 Class 5 and DIN-VDE 0295 K5

PVC Insulation compound type T11 per CEI 20-11 and VDE 0207 with special mechanical resistance.

Black numbered cores with or without green yellow core Polyester tape

Tinned copper braided screen.

Properties & Identification

Flame retardant, Test method B per IEC 60332-1

Adapted to DIN VDE 0245 and 0281

Conforms to Low Voltage Directive (LVD) 2006/95/EC CE

Per our VDE Reg. 8154

Additional

Available in drums, coils or cut to size (conditions may apply).

CABLING



INSTRUMENTATION – ARMoured & UNARMoured

MULTIPAIR XLPE, OAM / IOAM SCREENED, ARMoured (APL / SWA) / UNARMoured



Technical Data

Screened instrumentation cable with APL or SWA.

Voltage Rating

U0/U 300/500V

Test Voltage

1,500V

Temperature Rating

Ground up to 90%

Electrical Parameters

Conductor (mm)	Resistance (Ω/Km)	Capacitance (pF/m)		Inductance (mH/Km)
		Mutual	Ground	
0.5	39.00	100	200	0.68
1.0	13.30	120	240	0.61
1.5	13.30	130	260	0.65

Construction

Stranded annealed copper (SANS 1411, Part 1, Class 4)

Core insulation with cross-linked polyethylene compound in accordance with SANS 1411, Part 4

Core identification black and white twisted pairs, numbered alpha and numerically at regular intervals

IOAM: Each pair / triad is individually screened with aluminium / polyester tape and drain wire (0.5mm² stranded tinned copper wire) or

OAM: Screen with overall aluminium/polyester tape with annealed tinned copper drain wire.

APL: Bedding sheath and flame-retardant UV aluminium polyethylene laminate for protection. Tinned copper drain wire or

SWA: Bedding sheath and armoured with galvanised steel wire for protection.

Outer sheath with flame retardant Polyvinyl chloride (PVC) compound with temperature rating up to p 90 C in accordance with SANS 1411, Part 2, type 5S.

FR (Flame Retardant)

LH (Low Halogen Blue Stripe)

HFC (Halogen Free White Stripe)

Application

Used for transmission of analogue and digital signals in process control systems. Indoor and outdoor installations, dry or damp conditions, on racks and in conduits. Not allowed for direct connection to low impedance source. It is recommended for direct burial.

Additional

Minimum order quantities may apply.