THE WORLD OF LAPP

CAMUNA CAVI INSTRUMENTATION CABLES

COMMON EN 50288-7 CONSTRUCTIONS WITH SHORTER DELIVERY TIME



LAPP CAMUNACAVI

CAMUNA CAVI INSTRUMENTATION CABLES

COMMON EN 50288-7 CONSTRUCTIONS WITH SHORTER DELIVERY TIME

How we help you:

In this short catalog, you can find most common constructions for our EN 50288-7 Instrumentation Cables. You can choose one of the listed constructions and change if required the outer sheath color. All remaining characteristics will be as per catalog pages description. The delivery will be 40 to 50% faster than for a fully customized cable solution.

In case you cannot satisfy your needs with the cables in this catalog you can always look to the Camuna Cavi general catalog or ask for a customized solution by contacting us and specifying in detail your requirement

Legend for pictograms

FIRE BEHAVIOUR

OIL RESISTANT

HYDROCARBON AND CHEMICAL

SUNLIGHT RESISTANT

HALOGEN FREE

LOW SMOKE

Acronyms

AL/HDPE/PA: **MULTI LAYER SHEATH**

IS: **INDIVIDUAL STATIC ALUMINIUM FOIL SCREEN**

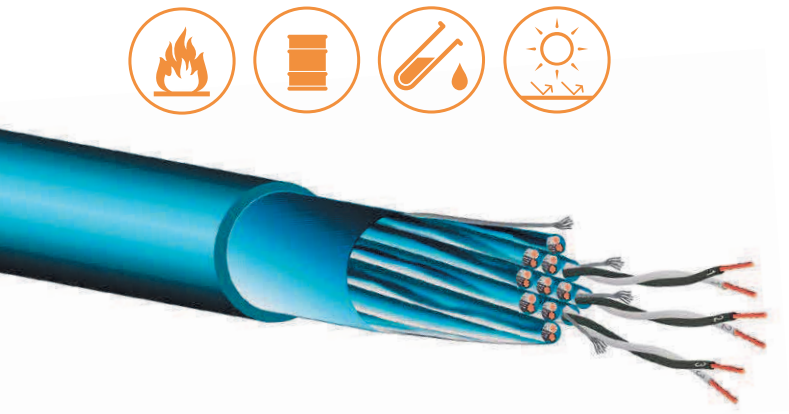
LSZH: **LOW SMOKE ZERO HALOGEN**

OS: **OVERALL STATIC ALUMINIUM FOIL SCREEN**

SWA: **STEEL WIRE ARMOUR**

SWB: **STEEL WIRE BRAID**

TC: **TINNED COPPER**



CU/XLPE/IS/OS/PVC

Individual and overall screened instrumentation cable for intrinsically safe circuits

Info

RE4XHOHR 300/500 V EN 50288-7

Benefits

- Sunlight resistant
- Hydrocarbon and Chemical resistant
- Fire behaviour
- Oil resistant

Product features

Twisted pair or triad signal cable, individual and overall screened, XLPE insulated and PVC jacketed

Norm references / Approvals

- **Hydrocarbon & Oil resistance**
  CEI 20-34/0
- **Halogen acid gas**
  IEC 60754-1 (max 20%)
- **Fire behaviour**
  IEC 60332-1-2
  IEC 60332-3-22 (Cat. A)

Design

- **Conductor:** Stranded Annealed Copper
- **Core insulation:** XLPE
- **Screen:** IS/OS Aluminum/PET + TC Drain wire
- **Outer sheath:** PVC, blue RAL 5015

Technical data

Core identification code:
Pairs are black & white with printed numbers
Triads are black, white, red with printed numbers

Insulation resistance:
5000 MOhm x km

Conductor stranding:
Class 2 IEC 60228

Nominal Voltage Uo/U:
300/500 V

Test voltage:
C/C 1500 V x 1 minute

Temperature range:
during operation: -30° to +70°C
during installation: -5° to +50°C

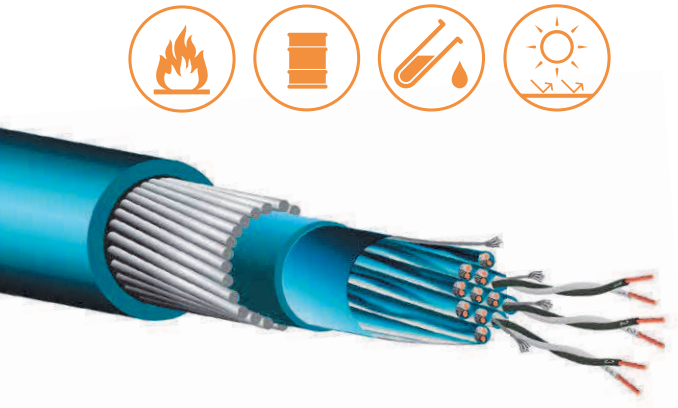
Minimum Bending Radius:
8 x Outer Diameter

Number cores and mm² per conductor	Approx. Outer Diameter (mm)	Copper index (kg/km)	Approx. Weight (kg/km)
CU/XLPE/IS/OS/PVC RE4XHOHR 300/500V EN 50288-7			
1x2x1*	6,7	23	73
2x2x1	10,8	44	151
6x2x1	15,6	124	272
10x2x1	20,4	205	436
12x2x1	21,1	246	498
16x2x1	23,6	326	644
20x2x1	26,6	406	796
24x2x1	29,7	486	954
30x2x1	31,7	607	1.155
1x3x1*	7,1	33	85
3x3x1	13,1	93	247
6x3x1	17,6	181	373
10x3x1	23,0	300	600
12x3x1	23,8	359	694
1x2x1,5*	7,3	32	90
2x2x1,5	12,1	61	193
6x2x1,5	17,5	177	357
10x2x1,5	22,8	292	573
12x2x1,5	23,6	349	661
16x2x1,5	26,4	465	853
20x2x1,5	29,7	580	1.059
24x2x1,5	33,4	695	1.279
30x2x1,5	35,6	868	1.560
1x3x1,5*	7,7	46	107
3x3x1,5	14,6	132	318
6x3x1,5	19,7	260	581
10x3x1,5	25,7	430	787
12x3x1,5	26,6	516	909

* CU/XLPE/OS/PVC RE4OHR

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.
Photographs are not to scale and do not represent detailed images of the respective products

AVAILABLE ALSO IN: Conductor Class 5, Tinned conductor, other colors



CU/XLPE/IS/OS/PVC/SWA/PVC

Armoured individual and overall
screened instrumentation cable for intrinsically safe circuits
CU/XLPE/IS/OS/PVC/SWA/PVC

Info

RE4XHOHRFR 300/500 V
EN 50288-7

Benefits

- Sunlight resistant
- Hydrocarbon and Chemical resistant
- Fire behaviour
- Oil resistant

Product features

Armoured twisted pair or triad signal cable, individual and overall screened, XLPE insulated and PVC jacketed

Norm references / Approvals

- **Hydrocarbon & Oil resistance**
  CEI 20-34/0
- **Halogen acid gas**
  IEC 60754-1 (max 20%)
- **Fire behaviour**
  IEC 60332-1-2
  IEC 60332-3-22 (Cat. A)

Design

- **Conductor:** Stranded Annealed Copper
- **Core insulation:** XLPE
- **Screen:** IS/OS Aluminum/PET + TC Drain wire
- **Inner sheath:** PVC, blue RAL 5015
- **Armour:** Galvanized Steel Wire
- **Outer sheath:** PVC, blue RAL 5015

Technical data

Core identification code:
Pairs are black & white with printed numbers
Triads are black, white, red with printed numbers

Insulation resistance:
5000 MOhm x km

Conductor stranding:
Class 2 IEC 60228

Nominal Voltage Uo/U:
300/500 V

Test voltage:
C/C 1500 V x 1 minute

Temperature range:
during operation: -30° to +70°C
during installation: -5° to +50°C

Minimum Bending Radius:
10 x Outer Diameter

Number cores and mm² per conductor	Approx. Outer Diameter (mm)	Copper index (kg/km)	Approx. Weight (kg/km)
CU/XLPE/IS/OS/PVC/SWA/PVC RE4XHOHRFR 300/500V EN 50288-7			
1x2x1*	11,3	23	252
2x2x1	16,0	44	444
6x2x1	21,5	124	802
10x2x1	26,7	205	1.135
12x2x1	27,4	246	1.219
16x2x1	29,9	326	1.443
20x2x1	33,9	406	1.887
24x2x1	37,4	486	2.200
30x2x1	39,4	607	2.475
1x3x1*	11,8	33	279
3x3x1	18,1	93	581
6x3x1	23,7	181	976
10x3x1	29,3	300	1.380
12x3x1	30,1	359	1.498
1x2x1,5*	12,1	32	289
2x2x1,5	16,9	61	498
6x2x1,5	23,6	177	954
10x2x1,5	29,1	292	1.346
12x2x1,5	29,9	349	1.458
16x2x1,5	33,7	465	1.938
20x2x1,5	37,4	580	2.307
24x2x1,5	41,1	695	2.664
30x2x1,5	44,3	868	3.357
1x3x1,5*	12,5	46	316
3x3x1,5	19,8	132	697
6x3x1,5	25,8	260	1.155
10x3x1,5	33,1	430	1.845
12x3x1,5	33,9	516	2.001

* CU/XLPE/OS/PVC/SWA/PVC RE4XOHRFR

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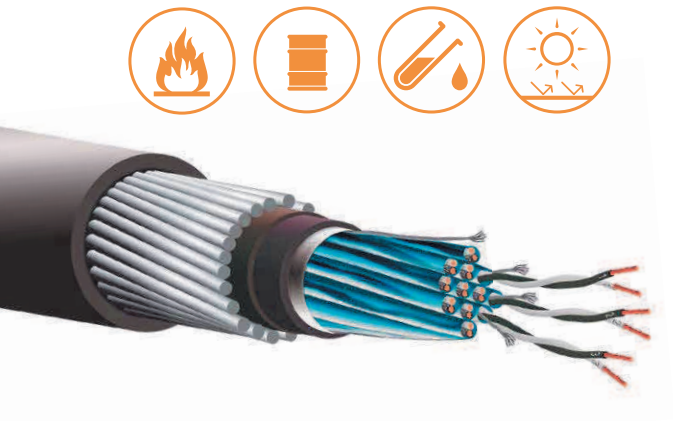
Photographs are not to scale and do not represent detailed images of the respective products

AVAILABLE ALSO IN: Conductor Class 5, Tinned conductor, Armour SWB, DSTA, other colors



CU/XLPE/IS/AL/HDPE/PA/SWA/PVC

Armoured, AL/HDPE/PA jacketed,
Individual and Overall screened instrumentation
cable CU/XLPE/IS/AL/HDPE/PA/SWA/PVC

Info

RE4XHOH5ER4FR
300/500 V EN 50288-7

Benefits

- Sunlight resistant
- Hydrocarbon and Chemical resistant
- Fire behaviour
- Oil resistant

Product features

Armoured, AL/HDPE/PA jacketed, twisted pair or triad signal cable, individual and overall screened, XLPE insulated and PVC jacketed

Norm references / Approvals

- **Hydrocarbon & Oil resistance**
  CEI 20-34/0
- **Halogen acid gas**
  IEC 60754-1 (max 20%)
- **Fire behaviour**
  IEC 60332-1-2

Design

- **Conductor:** Stranded Annealed Copper
- **Core insulation:** XLPE
- **Screen:** IS Aluminum/PET + TC Drain wire, OS Aluminum longitudinal tape (AL) + TC Drain wire
- **Chemical Barrier:** AL/HDPE/PA
- **Armour:** Galvanized Steel Wire
- **Outer sheath:** PVC, black

Technical data

Core identification code:
Pairs are black & white with printed numbers
Triads are black, white, red with printed numbers

Insulation resistance:
5000 MOhm x km

Conductor stranding:
Class 2 IEC 60228

Nominal Voltage Uo/U:
300/500 V

Test voltage:
C/C 1500 V x 1 minute

Temperature range:
during operation: -30° to +70°C
during installation: -5° to +50°C

Minimum Bending Radius:
10 x Outer Diameter

Number cores and mm² per conductor	Approx. Outer Diameter (mm)	Copper index (kg/km)	Approx. Weight (kg/km)
CU/XLPE/IS/OS/AL/HDPE/PA/SWA/PVC RE4XHOH5ER4FR 300/500 V EN 50288-7			
1x2x1*	13,0	23	306
2x2x1	17,4	44	505
6x2x1	23,3	124	914
10x2x1	28,1	205	1.260
12x2x1	29,0	246	1.340
16x2x1	31,5	326	1.565
20x2x1	35,7	406	2.058
24x2x1	39,1	486	2.390
30x2x1	40,9	607	2.613
1x3x1*	13,4	33	328
3x3x1	19,8	93	658
6x3x1	25,1	181	1.089
10x3x1	30,9	300	1.561
12x3x1	32,7	359	1.851
1x2x1,5*	13,6	32	336
2x2x1,5	18,5	61	565
6x2x1,5	24,9	177	1.052
10x2x1,5	30,7	292	1.495
12x2x1,5	31,5	349	1.589
16x2x1,5	35,6	465	2.094
20x2x1,5	39,1	580	2.467
24x2x1,5	42,8	695	2.874
30x2x1,5	46,0	868	3.531
1x3x1,5*	14,0	46	367
3x3x1,5	21,9	132	887
6x3x1,5	27,4	260	1.293
10x3x1,5	34,5	430	1.525
12x3x1,5	35,7	516	2.208

* CU/XLPE/OS/AL/HDPE/PA/SWA/PVC RE4XOH5ER4FR

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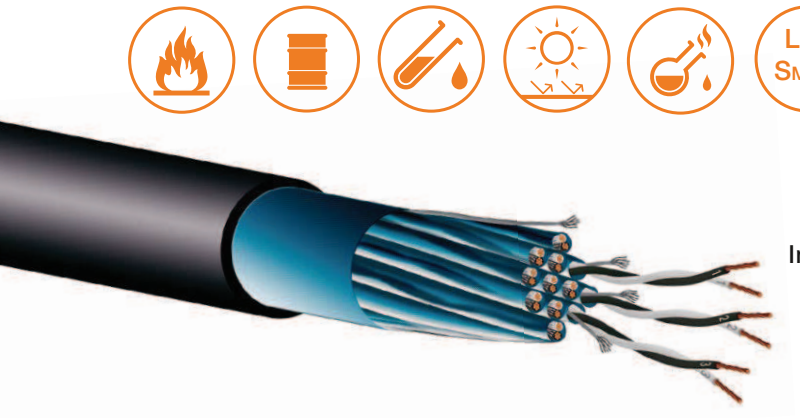
AVAILABLE ALSO IN: Conductor Class 5, Tinned copper conductor, other colors



CU/XLPE/IS/OS/LSZH

Individual and overall screened instrumentation cable LSZH
CU/XLPE/IS/OS/LSZH

Info

RE4XHOHM1 300/500 V EN 50288-7

Benefits

- Sunlight resistant
- Hydrocarbon and Chemical resistant
- Fire behaviour
- Oil resistant

Product features

Twisted pair or triad signal cable, individual and overall screened, XLPE insulated and LSZH jacketed

Norm references / Approvals

- **Hydrocarbon & Oil resistance**
  CEI 20-34/0
- **Smoke**
  IEC 61034-1 and 2
- **Halogen acid gas**
  IEC 60754-1 and 2
- **Fire behaviour**
  IEC 60332-1-2
  IEC 60332-3-22 (Cat. A)

Design

- **Conductor:** Stranded Annealed Copper
- **Core insulation:** XLPE
- **Screen:** IS/OS Aluminum/PET + TC Drain wire
- **Outer sheath:** LSZH, black

Technical data

Core identification code:
Pairs are black & white with printed numbers
Triads are black, white, red with printed numbers

Insulation resistance:
5000 MOhm x km

Conductor stranding:
Class 2 IEC 60228

Nominal Voltage Uo/U:
300/500 V

Test voltage:
C/C 1500 V x 1 minute

Temperature range:
during operation: -30° to +70°C
during installation: -5° to +50°C

Minimum Bending Radius:
8 x Outer Diameter

Number cores and mm² per conductor	Approx. Outer Diameter (mm)	Copper index (kg/km)	Approx. Weight (kg/km)
CU/XLPE/IS/OS/LSZH RE4XHOHM1 300/500 V EN 50288-7			
1x2x1*	6,7	23	75
2x2x1	10,8	44	156
6x2x1	15,6	124	277
10x2x1	20,4	205	444
12x2x1	21,1	246	507
16x2x1	23,6	326	654
20x2x1	26,6	406	809
24x2x1	29,7	486	968
30x2x1	31,7	607	1.173
1x3x1*	7,0	33	88
3x3x1	13,0	93	249
6x3x1	17,6	181	380
10x3x1	23,0	300	611
12x3x1	23,8	359	705
1x2x1,5*	7,3	32	93
2x2x1,5	12,1	61	200
6x2x1,5	17,5	177	363
10x2x1,5	22,8	292	583
12x2x1,5	23,6	349	672
16x2x1,5	26,4	465	866
20x2x1,5	29,7	580	1.074
24x2x1,5	33,4	695	1.298
30x2x1,5	35,6	868	1.581
1x3x1,5*	7,7	46	110
3x3x1,5	14,6	132	327
6x3x1,5	19,7	260	497
10x3x1,5	25,7	430	799
12x3x1,5	26,6	516	922

* CU/XLPE/OS/LSZH RE4XOHM1

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.
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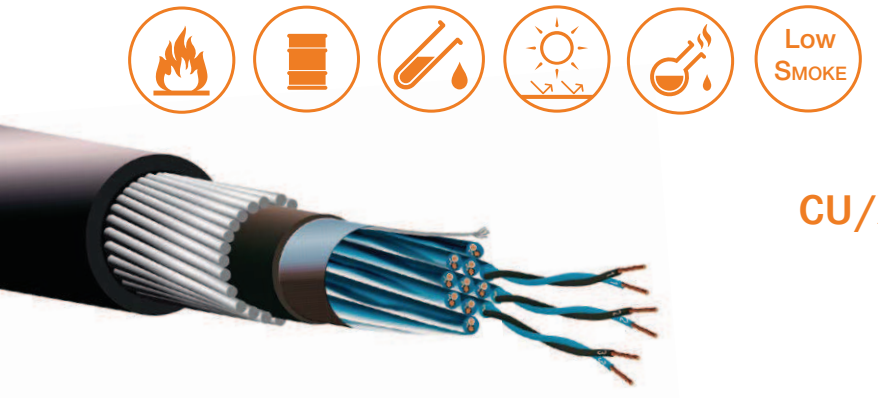
AVAILABLE ALSO IN: Conductor Class 5, Tinned copper conductor, other colors



CU/XLPE/IS/OS/LSZH/SWA/LSZH

Armoured individual and overall screened instrumentation cable LSZH
CU/XLPE/IS/OS/LSZH/SWA/LSZH

Info

RE4XHOHM1FM1
300/500 V EN 50288-7

Benefits

- Sunlight resistant
- Hydrocarbon and Chemical resistant
- Fire behaviour
- Oil resistant

Product features

Armoured twisted pair or triad signal cable, individual and overall screened, XLPE insulated and LSZH jacketed

Norm references / Approvals

- **Hydrocarbon & Oil resistance**
  CEI 20-34/0
- **Smoke**
  IEC 61034-1 and 2
- **Halogen acid gas**
  IEC 60754-1 and 2
- **Fire behaviour**
  IEC 60332-1-2
  IEC 60332-3-22 (Cat. A)

Design

- **Conductor:** Stranded Annealed Copper
- **Core insulation:** XLPE
- **Screen:** IS/OS Aluminum/PET + TC Drain wire
- **Inner sheath:** LSZH, black
- **Armour:** Galvanized Steel Wire
- **Outer sheath:** LSZH, black

Technical data

Core identification code:
Pairs are black & white with printed numbers
Triads are black, white, red with printed numbers

Insulation resistance:
5000 MOhm x km

Conductor stranding:
Class 2 IEC 60228

Nominal Voltage Uo/U:
300/500 V

Test voltage:
C/C 1500 V x 1 minute

Temperature range:
during operation: -30° to +70°C
during installation: -5° to +50°C

Minimum Bending Radius:
10 x Outer Diameter

Number cores and mm² per conductor	Approx. Outer Diameter (mm)	Copper index (kg/km)	Approx. Weight (kg/km)
CU/XLPE/IS/OS/LSZH/SWA/LSZH RE4XHOHM1FM1 300/500 V EN 50288-7			
1x2x1*	11,3	23	256
2x2x1	16,0	44	452
6x2x1	21,5	124	814
10x2x1	26,7	205	1.150
12x2x1	27,4	246	1.235
16x2x1	29,9	326	1.461
20x2x1	33,9	406	1.908
24x2x1	37,4	486	2.225
30x2x1	39,4	607	2.503
1x3x1*	11,8	33	284
3x3x1	18,1	93	590
6x3x1	23,7	181	989
10x3x1	29,3	300	1.397
12x3x1	30,1	359	1.516
1x2x1,5*	12,1	32	294
2x2x1,5	17,1	61	515
6x2x1,5	23,6	177	968
10x2x1,5	29,1	292	1.364
12x2x1,5	29,9	349	1.477
16x2x1,5	33,7	465	1.959
20x2x1,5	37,4	580	2.332
24x2x1,5	41,1	695	2.693
30x2x1,5	44,3	868	3.390
1x3x1,5*	12,5	46	321
3x3x1,5	19,8	132	708
6x3x1,5	25,8	260	1.170
10x3x1,5	33,0	430	1.866
12x3x1,5	33,9	516	2.022

* CU/XLPE/OS/LSZH/SWA/LSZH RE4XOHM1FM1

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AVAILABLE ALSO IN: Conductor Class 5, Tinned copper conductor, Armour SWB, other colors

LAPP CAMUNACAVI

Cable's identification code
GEN to CEI-UNEL 35011

Conductors

U	Solid Conductor
R	Stranded conductor
F	Flexible Conductor
FF	Extra Flexible Conductor

Insulations

R	PVC
R2	PVC Type R2
R3	PVC 105°C
R7	PVC 90°C
E	Polyethylene
E4	Cross-linked Polyethylene (XLPE)
G4	Silicon Rubber
G7	Hich Module Ethylene Propylene Rubber (HEPR)
G10	Low Smoke Cross-Linked Polyolefin (XLPO)
T	Mica Glass Tape

Cable's shape

O	Round shape cable
D	Flat Cable
X	Cores twisted in pairs, triad, quad

Shields

C	Copper Concentric conductor
H	Aluminium Polyester Tape
H1	Copper tape or Copper wires shield
H2	Copper Braid Shield
H3	Double Copper Braid Shield
H5	Longitudinal Aluminium Tape

Armours

A	Steel Wire Braid
F	Steel Wires
N	Steel Tape
Z	Steel Stripes
L	Lead Jacket
H4	Longitudinal Corrugated Steel Tape

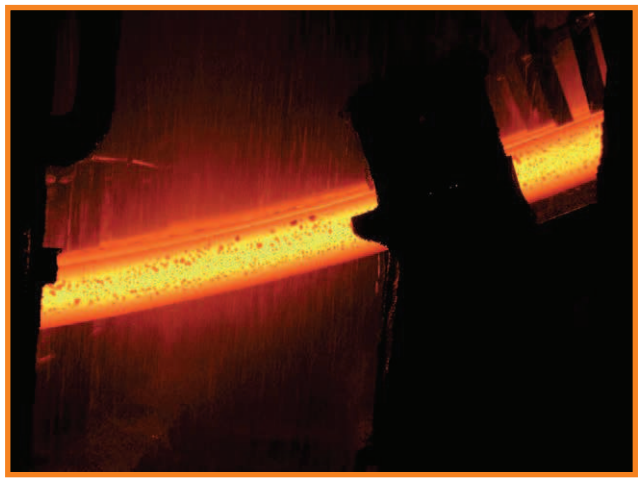
Jackets

R	PVC
R4	Polyamide (nylon)
E	Polyethylene
E4	Cross-linked Polyethylene (XLPE)
G	Cross-linked Elastomer
M1	Low Smoke Halogen Free Thermoplastic Material
M2	Low Smoke Halogen Free cross-linked Material
T	Textitle Braid
T1	Glass Type
T2	Special Textile
P	Polyutherane
Tpe	Termoplastic Elastomer

CONDUCTORS
INSULATIONS
CABLE'S SHAPE
SHIELDS
ARMOURS
JACKETS

LAPP CAMUNACAVI

Applications Fields



Camuna Cavi is listed on the vendor lists of the major EPC, Operators and End-Users.
We supplies products in full compliance with our costumers' technical specifications to meet applications whenever durability, quality and reliability are mandatory.

- Oil & Gas
- Offshore
- Onshore
- Chemical & Petrochemical
- Process industries
- Water treatment
- Power plant
- Iron & Steel
- Mining
- Ship building

For current information contact us: info@camunacavi.it

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