

FAST TRACK

Everything for Rail. All from One Source.

prysmian

The planet's pathways

Connecting the World.

Today and in the Future.

150
YEARS OF EXPERIENCE

30
F&E CENTRES WORLDWIDE

Prysmian is among the world's leading providers of cable and system solutions for the energy and telecommunications sectors.

Backed by more than 150 years of experience, the company delivers a comprehensive portfolio of products, services and engineering expertise.



Our expertise spans underground and submarine cable systems for power transmission and distribution, as well as specialised cable solutions for a wide range of industries. We also offer a comprehensive range of medium- and low-voltage cables for construction and infrastructure projects.



Prysmian provides a comprehensive range of cable and system solutions for modern telecommunications networks. The portfolio includes optical fibres, fibre optic and copper cables, as well as connectivity products and accessories for the reliable transmission of voice, video and data.



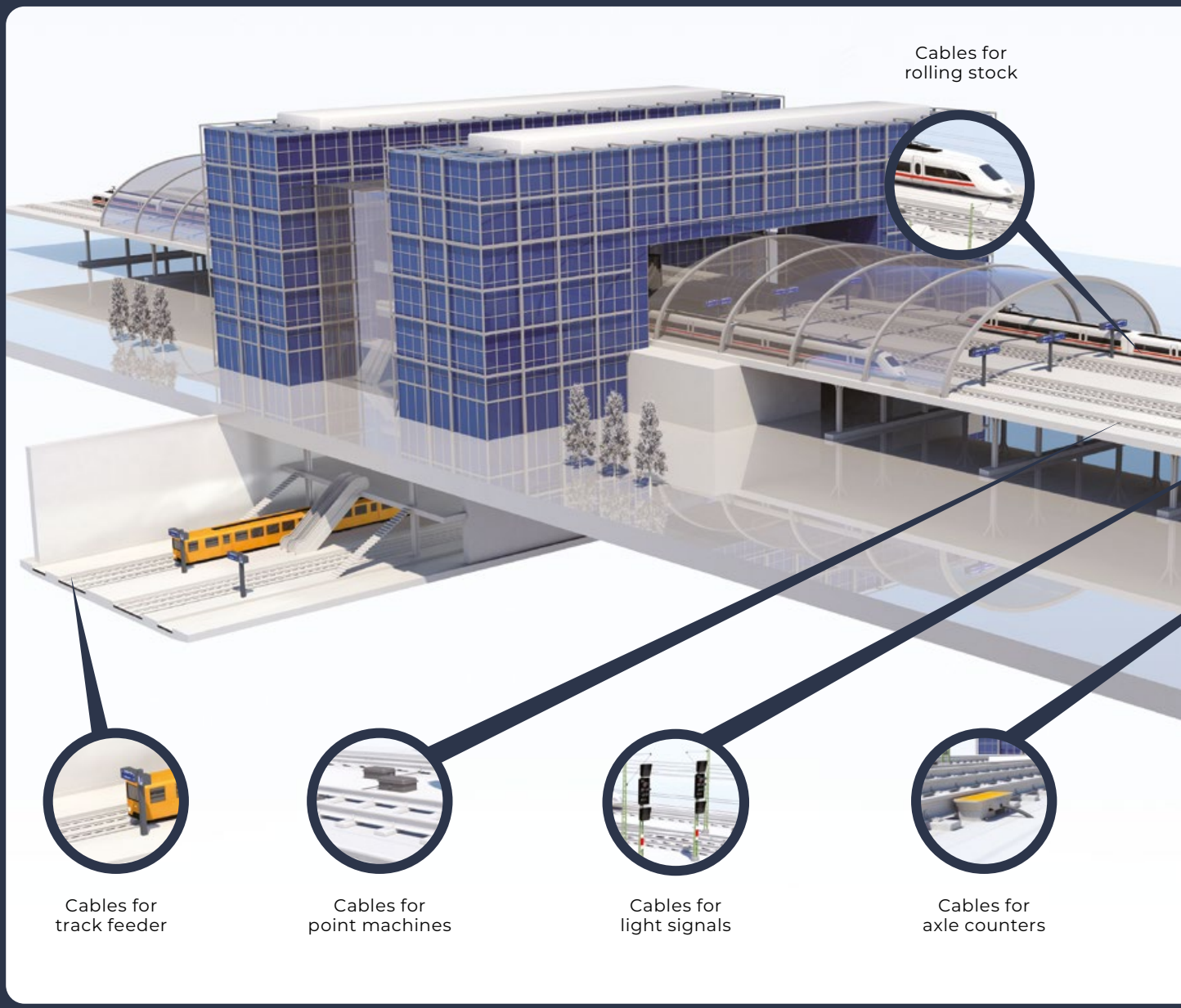
We are committed to environmental and social responsibility across our operations, supporting the protection of the global environment and creating lasting value for the people and communities connected to our business.



Innovation means anticipating our customers' needs and the challenges of tomorrow, and transforming them into high-performance solutions. Supported by a global network of research and development centres, we drive technological progress, share expertise across borders and remain closely connected to our customers and their markets.

CABLE & SYSTEM SOLUTIONS FOR RAIL INFRASTRUCTURE

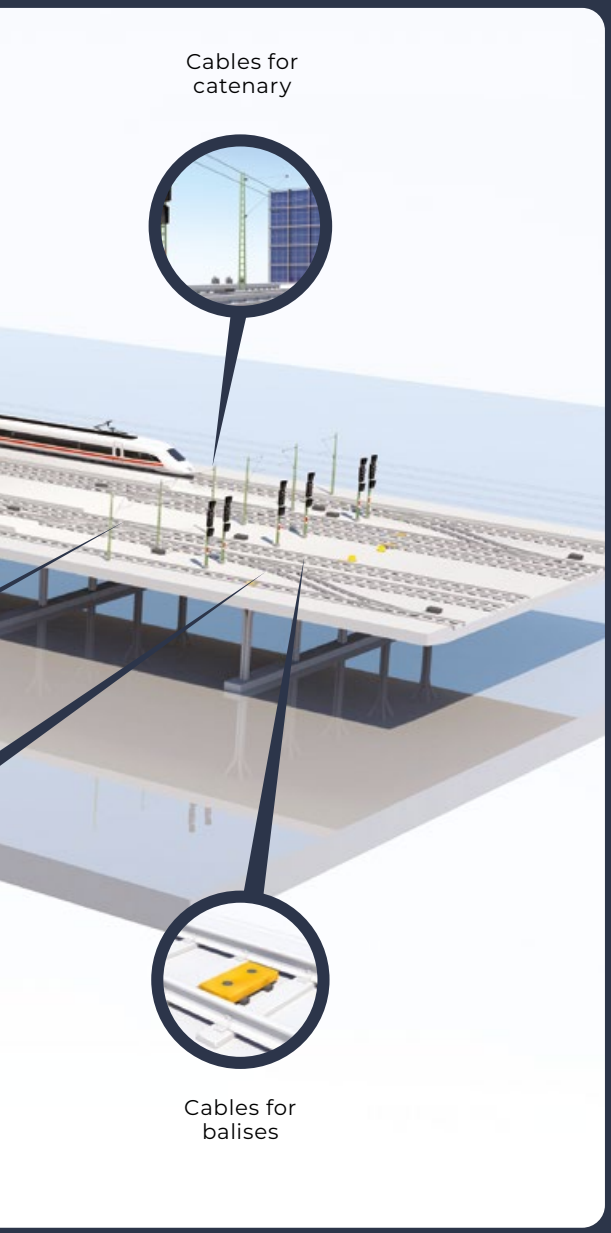
The right solution for every connection



HIGH QUALITY
MADE IN GERMANY

POWER. SIGNALLING. COMMUNICATION.

Modern rail infrastructure is the foundation of safe, reliable and efficient rail transport. From power supply and signalling systems to communications networks, Prysmian provides solutions for all critical applications across the rail network.



EPOWER SUPPLY OF TRAINS

AC oder DC, continuous load
High currents and tensions
Large conductor cross-sections

EARTHING

High return current flows
Medium conductor cross-sections

POINT MACHINES

Only short-term power load, no continuous load, ≤ 380 V
Small conductor cross-sections up to 2.5 mm²

SIGNAL LIGHTS

Continuous load, low tensions and currents, 24-48 V
Small conductor cross-sections up to 2.5 mm²

AXLE COUNTERS

Hf requirements
No continuous load
Small conductor cross-sections up to 2.5 mm²

BEACON CABLES

Hf requirements
No continuous load
Small conductor cross-sections up to 2.5 mm²

GSM-R/RADIO COMMUNICATION

Data supply via fibre optic cables
Use of radiating coaxial cables in tunnels
Telecommunication and data cables

VDE DESIGNATION CODES FOR CABLES

1. CABLE TYPE

A-	Outdoor cable
AJ-	Outdoor cable with protection against inductive interference

2. CABLE DESIGN

2Y	Polyethylene (PE) insulation material
02Y	Cellular polyethylene (PE) insulation material
02YS	Foam-skin polyethylene (PE) insulation material
DF	Loose tube (fibre optic cable)
F	Petroleum jelly filling compound
OF	Low capacitance filling compound
TF	Filling with water swellable yarns and fleeces
(L)2Y	Moisture barrier sheath (laminated AL-foil bonded to PE sheath)
(St)	Screen of copper tape
D	Screen of concentrically positioned copper wires
Z	Screen of concentrically positioned aluminium wires
(ZG)	Non-metallic tensile strength elements
(SR)	Armouring of corrugated steel tape, longitudinally applied
B	Armouring of helically applied steel tape
Y	Polyvinyl chloride (PVC) sheathing material
2Y	Polyethylene (PE) sheathing material
4Y	Polyamid (PA) sheathing material
H	Halogen free, flame retardant sheathing material
V	Reinforced sheathing

LSZH-FR

LS	Low smoke
ZH	Zero halogen
FR	Flame/Fire retardant



PRODUCT-PORTFOLIO

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A-2Y(L)2YB2Y H45



Railway signalling cables for applications with transmission of low frequent signals through symmetric circuits like axle counters and similar. For installation directly on or into the ground or in ducts. Increased mechanical protection due to additional steel tape armouring. Stranding pattern: n x 4 x 0.9 / 1.4 mm.

A-2Y(L)2YB2Y H45		
Certifications and Standards	Deutsche Bahn AG 416.0115 V 1.1	
Diameter conductor [mm]	0,9	1,4
Loop resistance [Ohm]	≤ 56,6	≤ 23,4
Insulation resistance [MΩ·km]	≥ 10000	≥ 10000
Max. operation capacitance [nF/km]	≤ 45 *)	≤ 45 *)
Capacitance unbalance at 800 Hz		
k_1 (100 % / 50 % all values) [pf/500 m]	≤ 650 / ≤ 150	≤ 650
$k_{9\text{-}12}$ (neighboured quads) [pf/500 m]	≤ 500 / ≤ 150	≤ 500
$k_{9\text{-}12}$ (over-neighboured quads) [pf/500 m]	≤ 150	≤ 150
$e_{al/2}$ [pf/500 m]	≤ 1300	≤ 1300
Far-end crosstalk attenuation at 90 kHz 100 % / 80 % all values [dB/km]	≥ 58 / ≥ 62	≥ 33
Attenuation at 90 kHz [dB/km]	≤ 3,3	≤ 2,6
Test voltage [kV] 50 Hz - 1 min		
core/core	2,5	2,5
core/screen	2,5	2,5

*) ≤ 52 nF/km for one quad cable and for central quads, where 1st layer consists only of one quad, as well as in the outer layer of armoured cables.

A-2YOF(L)2YB2Y H95



Railway signalling cables for operation of light signals or point machines or similar applications. For installation directly on or into the ground or in ducts. Cable design with improved mutual capacitance value for higher distances. Increased mechanical protection due to additional steel tape armouring. Stranding pattern: n x 1 x 1.4 / 1.8 mm.

A-2YOF(L)2YB2Y H95		
Certifications and Standards	Deutsche Bahn AG PH 416.0114 v.2.1	
Diameter conductor [mm]	1,4	1,8
Conductor resistance at 20° C [Ohm/km]	≤ 11,9	≤ 7,2
Insulation resistance [MΩ·km]	≥ 1500	≥ 1500
Max. operation capacitance [nF/km]	≤ 95 *)	≤ 95 *)
Nominal voltage U [V]	600	600
Nominal voltage U_0 [V]	420	420
Test voltage [kV] 50 Hz - 1 min		
core/core	2,5	2,5
core/screen	2,5	2,5

*) ≤ 105 nF/km for single core in cable core.

A-2YOF(L)2YB2Y H115



Railway signalling cables for operation of light signals or point machines or similar applications. For installation directly on or into the ground or in ducts. Increased mechanical protection due to additional steel tape armouring. Stranding pattern: n x 1 x 0.9 mm.

A-2YOF(L)2YB2Y H115	
Certifications and Standards	Deutsche Bahn AG PH 416.0113 v.2.1
Diameter conductor [mm]	0,9
Conductor resistance at 20° C [Ohm/km]	≤ 28,9
Insulation resistance [MΩ·km]	≥ 1500
Max. operation capacitance [nF/km]	≤ 115 *)
Nominal voltage U [V]	600
Nominal voltage U_0 [V]	420
Test voltage [kV] 50 Hz - 1 min	
core/core	2,5
core/screen	2,5

*) ≤ 120 nF/km for single core in cable core.

A-2YOF(L)2YB2Y H145



Railway signalling cables for operation of light signals or point machines or similar applications. For installation directly on or into the ground or in ducts. Increased mechanical protection due to additional steel tape armouring. Stranding pattern: n x 1 x 1.4 / 1.8 mm.

A-2YOF(L)2YB2Y H145		
Certifications and Standards	Deutsche Bahn AG PH 416.0113 v.2.1	
Diameter conductor [mm]	1,4	1,8
Conductor resistance at 20° C [Ohm/km]	≤ 11,9	≤ 7,2
Insulation resistance [MΩ·km]	≥ 1500	≥ 1500
Max. operation capacitance [nF/km]	≤ 145 *)	≤ 145 *)
Nominal voltage U [V]	600	600
Nominal voltage U_0 [V]	420	420
Test voltage [kV] 50 Hz - 1 min		
core/core	2,5	2,5
core/screen	2,5	2,5

*) ≤ 155 nF/km for single core in cable core.

AJ-2Y(L)2Y2YDB2Y



Combi cables are used as railway signalling cables to combine applications with transmission of low frequent signals through symmetric circuits like axle counters with power supply cores for light signals or point machines in one cable. Suitable for installation along electrified tracks. Additional copper wire screen as protection against inductive interference. Increased mechanical protection due to additional steel tape armouring. Stranding pattern: n x 4 x 0.9 / 1.4 + m x 1 x 1.4 / 1.8 mm.

AJ-2Y(L)2Y2YDB2Y			
Certifications and Standards	Deutsche Bahn AG PH 416.0118		
Star-quad stranded cores			
Diameter conductor [mm]	0.9	1.4	1.8
Loop resistance [Ohm]	≤ 56.6	≤ 23.4	–
Insulation resistance [MΩ·km]	≥ 10000	≥ 10000	–
Max. operation capacitance [nF/km]	≤ 45 *)	≤ 45 *)	–
Capacitance unbalance at 800 Hz			
k_t [pf/500 m]	≤ 650	≤ 650	–
k_{9-12} (neighboured quads) [pf/500 m]	≤ 500	≤ 500	–
k_{9-12} (over-neighboured quads) [pf/500 m]	≤ 150	≤ 150	–
$e_{a1/2}$ [pf/500 m]	≤ 1300	≤ 1300	–
Far-end crosstalk attenuation at 40 kHz 1 [dB/km]	≥ 60	≥ 60	–
Characteristic impedance at 40 kHz [Ω]	130 ± 12 %	130 ± 12 %	–
Attenuation at 40 kHz [dB/km]	≤ 2.6	≤ 1.5	–
Core stranded cores			
Diameter conductor [mm]	0.9	1.4	1.8
Conductor resistance at 20° C [Ohm/km]	≤ 28.9	≤ 11.9	≤ 7.2
Insulation resistance [MΩ·km]	≥ 10000	≥ 10000	≥ 10000
Max. operation capacitance [nF/km]	≤ 120	≤ 120	≤ 120
Test voltage [kV] 50 Hz - 1 min			
core/core	2.5	2.5	2.5
core/screen	2.5	2.5	2.5
Reduction factor at 16.666 Hz			
for class 600	0.55 at appr. 100 V/km		
for class 500	0.35 at appr. 75 V/km		
for class 400	0.15 at appr. 100 V/km		

*) ≤ 52 nF/km for one quad cable and for central quads, where 1st layer consists only of one quad, as well as in the outer layer of armoured cables.

AJ-2YOF(L)2YDB2Y H115



Cables are used as railway signalling cables for operation of light signals or point machines or similar applications. For installation directly on or into the ground or in ducts. Suitable for installation along electrified tracks. Additional copper wire screen as protection against inductive interference. Increased mechanical protection due to additional steel tape armouring. Stranding pattern: n x 1 x 0.9 mm.

AJ-2YOF(L)2YDB2Y H115	
Certifications and Standards	Deutsche Bahn AG PH 416.0113 v.2.1
Diameter conductor [mm]	0,9
Conductor resistance at 20° C [Ohm/km]	≤ 28,9
Insulation resistance [MΩ·km]	≥ 1500
Max. operation capacitance [nF/km]	≤ 115 *)
Nominal voltage U [V]	600
Nominal voltage U_0 [V]	420
Test voltage [kV] 50 Hz - 1 min	
core/core	2,5
core/screen	2,5
Reduction factor at 16.666 Hz	
for class 600	0.55 at appr. 100 V/km
for class 500	0.35 at appr. 75 V/km
for class 400	0.15 at appr. 100 V/km

*) ≤ 120 nF/km for single core in cable core.

AJ-2Y(L)2YDB2Y H45



Cables are used as railway signalling cables for applications with transmission of low frequent signals through symmetric circuits like axle counters and similar. For installation directly on or into the ground or in ducts. Suitable for installation along electrified tracks. Additional copper wire screen as protection against inductive interference. Increased mechanical protection due to additional steel tape armouring. Stranding pattern: n x 4 x 0.9 / 1.4 mm.

AJ-2Y(L)2YDB2Y H45		
Certifications and Standards	Deutsche Bahn AG 416.0115 V 1.1 Deutsche Bahn AG 416.0116 V 2.0	
Diameter conductor [mm]	0,9	1,4
Loop resistance [Ohm]	≤ 56,6	≤ 23,4
Insulation resistance [MΩ·km]	≥ 10000	≥ 10000
Max. operation capacitance [nF/km]	≤ 45 *)	≤ 45 *)
Capacitance unbalance at 800 Hz		
k_1 (100 % / 50 % all values) [pf/500 m]	≤ 650 / ≤ 150	≤ 650
$k_{9\text{-}12}$ (neighboured quads) [pf/500 m]	≤ 500 / ≤ 150	≤ 500
$k_{9\text{-}12}$ (over-neighboured quads) [pf/500 m]	≤ 150	≤ 150
$e_{a1/2}$ [pf/500 m]	≤ 1300	≤ 1300
Far-end crosstalk attenuation at 90 kHz 100 % / 80 % all values [dB/km]	≥ 58 / ≥ 62	≥ 33
Attenuation at 90 kHz [dB/km)	≤ 3,3	≤ 2,6
Test voltage [kV] 50 Hz - 1 min		
core/core	2,5	2,5
core/screen	2,5	2,5
Reduction factor at 16.666 Hz		
for class 600	0.55 at appr. 100 V/km	
for class 500	0.35 at appr. 75 V/km	
for class 400	0.15 at appr. 100 V/km	

*) ≤ 52 nF/km for one quad cable and for central quads, where 1st layer consists only of one quad, as well as in the outer layer of armoured cables.

AJ-2YOF(L)2YDB2Y H95



Cables are used as railway signalling cables for operation of light signals or point machines or similar applications. Cable design with improved mutual capacitance value for higher distances. For installation directly on or into the ground or in ducts. Suitable for installation along electrified tracks. Additional copper wire screen as protection against inductive interference. Increased mechanical protection due to additional steel tape armouring. Stranding pattern: n x 1 x 1.4 / 1.8 mm.

AJ-2YOF(L)2YDB2Y H95		
Certifications and Standards	Deutsche Bahn AG PH 416.0114 v.2.1	
Diameter conductor [mm]	1,4	1,8
Conductor resistance at 20° C [Ohm/km]	≤ 11,9	≤ 7,2
Insulation resistance [MΩ·km]	≥ 1500	≥ 1500
Max. operation capacitance [nF/km]	≤ 95 *)	≤ 95 *)
Nominal voltage U [V]	600	600
Nominal voltage U_0 [V]	420	420
Test voltage [kV] 50 Hz - 1 min		
core/core	2,5	2,5
core/screen	2,5	2,5
Reduction factor at 16.666 Hz		
for class 600	0.55 at appr. 100 V/km	
for class 500	0.35 at appr. 75 V/km	
for class 400	0.15 at appr. 100 V/km	

*) ≤ 105 nF/km for single core in cable core.

AJ-2YOF(L)2YDB2Y H145



Cables are used as railway signalling cables for operation of light signals or point machines or similar applications. They may be installed directly on or into the ground or in ducts. Suitable for installation along electrified tracks. Additional copper wire screen as protection against inductive interference. Increased mechanical protection due to additional steel tape armouring. Stranding pattern:
n x 1 x 1.4 / 1.8 mm.

AJ-2YOF(L)2YDB2Y H145		
Certifications and Standards	Deutsche Bahn AG PH 416.0113 v.2.1	
Diameter conductor [mm]	1,4	1,8
Conductor resistance at 20° C [Ohm/km]	≤ 11,9	≤ 7,2
Insulation resistance [MΩ·km]	≥ 1500	≥ 1500
Max. operation capacitance [nF/km]	≤ 145 *)	≤ 145 *)
Nominal voltage U [V]	600	600
Nominal voltage U_0 [V]	420	420
Test voltage [kV] 50 Hz - 1 min		
core/core	2,5	2,5
core/screen	2,5	2,5
Reduction factor at 16.666 Hz		
for class 600	0.55 at appr. 100 V/km	
for class 500	0.35 at appr. 75 V/km	
for class 400	0.15 at appr. 100 V/km	

*) ≤ 155 nF/km for single core in cable core.

FEBI



ables are used as railway signalling cables for operation of light signals or point machines or similar applications. For installation directly on or into the ground or in ducts. Increased mechanical protection due to additional steel tape armouring. The cables are flame retardant according IEC 60332-1. Stranding pattern:
n x 1 x 1.5 / 2.5 mm.

FEBI		
Certifications and Standards	Bane Nor specification (Norway) Flame retardant acc. to IEC EN 60332-1	
Nominal cross section conductor [mm²]	1.5	2.5
Conductor resistance at 20° C [Ohm/km]	≤ 12.1	≤ 7.41
Insulation resistance [MΩ·km]	1000	1000
Nominal voltage U [V]	750	750
Test voltage [kV] 50 Hz - 1 min		
core/core	12	12
core/screen	12	12

AJ-02YSTF(L)2YDB2Y



TK-Cable for general cabling as replacement in new installations for cables with F-, TF-, TFS- and Coax-design elements acc. to Deutsche Bahn AG PH 416.0530 v.1.1. For installation directly on or into the ground or in ducts. Suitable for installation along electrified tracks. Additional copper wire screen as protection against inductive interference. Increased mechanical protection due to additional steel tape armouring. Stranding pattern: n x 4 x 1.4 + m x 4 x 0.9 mm.

AJ-02YSTF(L)2YDB2Y		
Certifications and Standards	Deutsche Bahn AG PH 416.0530 v.1.1	
Diameter conductor [mm]	0,9	1,4
Loop resistance [Ohm]	≤ 56,6	≤ 23,4
Insulation resistance [MΩ·km]	≥ 10000	≥ 10000
Max. operation capacitance [nF/km]	≤ 34	≤ 36
Capacitance unbalance at 800 Hz		
k_1 [pf/km]	≤ 400	≤ 400
k_{9-12} [pf/km]	≤ 400	≤ 400
$e_{a1/2}$ [pf/km]	≤ 1650	≤ 1650
Attenuation at		
800 Hz [dB/km]	≤ 0,60	≤ 0,40
1 MHz [dB/km]	≤ 8,5	≤ 8,0
Test voltage [kV] 50 Hz - 1 min		
core/core	2,5	2,5
core/screen	2,5	2,5

More electrical values as well as completion of values and corresponding notes shall be taken form the specification of Deutsche Bahn PH 416.0530 v1.1.

TELECOMMUNICATION CABLES

AJ-02YSF(L)2YDB2Y



Railway station communication cables for operation of telecommunication and data transmission networks in acc. to Deutsche Bahn AG PH 416.0531 v.1.0. For installation directly on or into the ground or in ducts. Suitable for installation along electrified tracks. Additional copper wire screen as protection against inductive interference. Increased mechanical protection due to additional steel tape armouring.

AJ-02YSF(L)2YDB2Y	
Certifications and Standards	Deutsche Bahn AG PH 416.0531 v.1.0
Diameter conductor [mm]	0,8
Loop resistance [Ohm]	≤ 73,2
Insulation resistance [MΩ·km]	≥ 5000
Max. operation capacitance [nF/km]	≤ 42
Capacitance unbalance at 800 Hz	
k_1 [pf/km]	≤ 2660
k_{9-12} [pf/km]	≤ 1330
Attenuation at 800 Hz [dB/km]	≤ 0,69
Test voltage [kV] 50 Hz - 1 min	
core/core	0,5
core/screen	2,0

More electrical values as well as completion of values and corresponding notes shall be taken form the specification of Deutsche Bahn PH 416.0531 v1.0.

TELECOMMUNICATION CABLES

A-02YSF(L)2Y



Railway station communication cables for operation of telecommunication and data transmission networks in acc. to Deutsche Bahn AG PH 416.0531 v.1.0. For installation directly on or into the ground or in ducts.

A-02YSF(L)2Y	
Certifications and Standards	Deutsche Bahn AG PH 416.0531 v.1.0
Diameter conductor [mm]	0,8
Loop resistance [Ohm]	≤ 73,2
Insulation resistance [MΩ·km]	≥ 5000
Max. operation capacitance [nF/km]	≤ 42
Capacitance unbalance at 800 Hz	
k_1 [pf/km]	≤ 2660
k_{9-12} [pf/km]	≤ 1330
Attenuation at 800 Hz [dB/km]	≤ 0,69
Test voltage [kV] 50 Hz - 1 min	
core/core	0,5
core/screen	2,0

More electrical values as well as completion of values and corresponding notes shall be taken form the specification of Deutsche Bahn PH 416.0531 v1.0.

EARTHING CABLES

(N)ASTYY 0,6/1 KV



These aluminium-cables are intended for fixed installation as railway earthing cables for short-circuit proof PE-connection or potential equalization between rail and connective, but not energized parts (e.g. overhead line masts, fixtures of train pre-heating device, sound protection panels, guardrails).

(N)AStYY 0.6/1kV	
Type designation	(N)AStYY
Standard	DIN VDE 0276-603, DIN EN 60228, DIN EN 60332-1-2
Conductor	Aluminium-magnesium alloy with steel wire core, stranded, compacted class 2
Insulation	Polyvinyl chloride (PVC)
Sheath	Polyvinyl chloride (PVC)
Nominal voltage [kV]	0.6/1 (1.2)
Laying temperature min. [°C]	–5
Max. conductor temperature [°C]	70
Max. conductor temperature at short circuit [°C]	160
Ambient temperature fix installation (min) [°C]	–30

NYYBY-O 0,6/1 KV

NAGETIER-SCHUTZ



Part of the power supply system of the DSTW. They are intended for use in the DSTW track field. Areas of application include free routes, train stations, railway tunnels and building entries in GFK.

NYYBY-O 0,6/1 kV	
Type designation	NYYBY-O
Standard	DIN VDE 0271, DIN VDE 0276-603, LH DLST.038 DB NETZ AG, DIN EN 60228, DIN VDE 0293-308, DIN EN 50575, DIN EN 60332-1-1 / DIN EN 60332-1-2
Conductor	Bare copper, round, single wire, class 1 up to and including 16 mm² and round, stranded, compacted, class 2 from 25 mm²
CPR class	E_{ca}
Insulation	Polyvinyl chloride (PVC)
Armouring	Armouring tape, galvanised steel
Sheath	Polyvinyl chloride (PVC)
Nominal voltage [kV]	0,6/1 (1,2)
Laying temperature min. [°C]	–5
Max. conductor temperature [°C]	70
Max. conductor temperature at short circuit [°C]	160

N2X2YB2Y-O 0,6/1 KV

NAGETIER-SCHUTZ



Part of the power supply system of the DSTW. They are intended for use in the DSTW track field. Areas of application include free routes, train stations, railway tunnels and building entries in GFK.

N2X2YB2Y-O 0,6/1 kV	
Type designation	N2X2YB2Y-O
Standard	DIN VDE 0276-603, LH DLST.038 DB NETZ AG, DIN EN 60228, DIN VDE 0293-308, DIN EN 50575
Conductor	Bare copper, round, single wire, class 1 up to and including 16 mm² and round, stranded, compacted, class 2 from 25 mm²
CPR class	F_{ca}
Insulation	XLPE
Armouring	Armouring tape, galvanised steel
Sheath	Polyethylene (PE)
Nominal voltage [kV]	0,6/1 (1,2)
Laying temperature min. [°C]	–20
Max. conductor temperature [°C]	90
Max. conductor temperature at short circuit [°C]	160

PROTOLON GGSG 1,8/3 KV



For the power supply of DC railway lines and conductor rail systems. Designed for demanding installation conditions, tight bending radii and high mechanical loads. Suitable for installation in conduits and ducts, as well as in dry, damp and wet environments. CPR Euroclass Eca.

PROTOLON GGSG 1,8/3 kV	
Certifications and Standards	gemäß der „Systemanforderungen an Bahnenergiekabel (1,8/3 kV)“ der DB Netz AG
Type designation	GGSG
Standard	DIN VDE 0250-813, DIN EN 60228 / IEC 60228, DIN EN 50363-1, DIN EN 50363-2-1
CPR class	E_{ca}
Conductor	Copper, plain, finely stranded class 5
Insulation	EPR
Screen	Bare copper, finely stranded class 5, 2nd insulation: Ethylene Propylene Rubber (EPR)
Sheath	Chlorinated polyethylene (CM/CPE)
Nominal voltage [kV]	1,8/3 (3,6)
Laying temperature min. [°C]	–25
Max. conductor temperature [°C]	90
Ambient temperature fix installation (min) [°C]	–40
Max. conductor temperature at short circuit [°C]	250

PROTOLON(H) GHXSGHXOE 1,8/3 KV



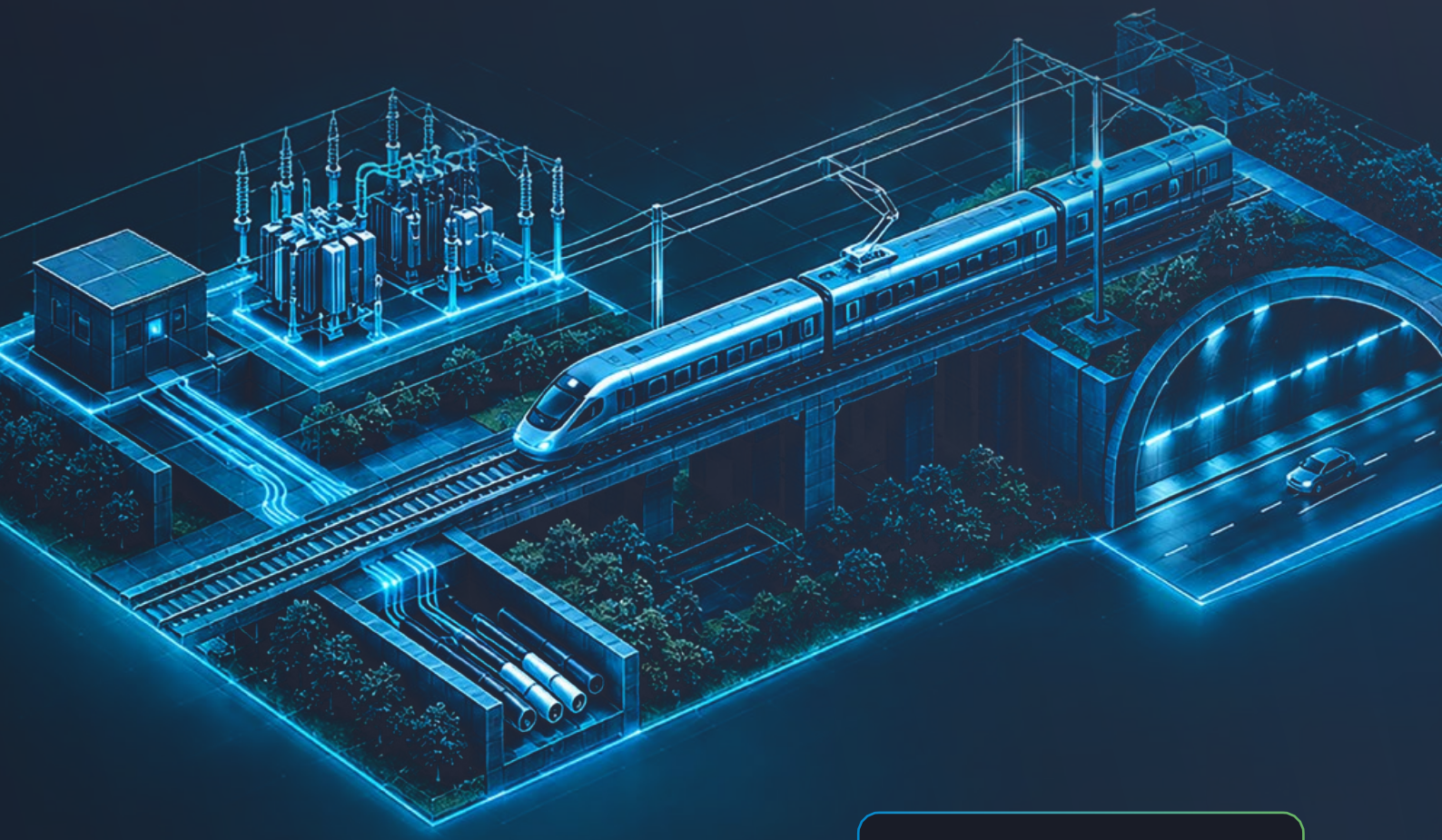
For the power supply of DC railway lines and conductor rail systems. The cable is suitable for demanding applications involving tight bending radii, vibrations and challenging installation conditions. Suitable for use in dry, damp and wet environments, as well as in conduits and ducts. CPR Euroclass B2ca (s1a, d0, a1).

PROTOLON(H) GHXSGHXOE 1,8/3 kV	
Certifications and Standards	Acc. to “System Requirements for Track Feeder Cables (1.8/3 kV)“ of DB Netz AG
Brand	PROTOLON(H)
Type designation	GHXSGHXOE
Standard	DIN VDE 0250-813, DIN EN 60228 / IEC 60228, DIN EN 50363-1, DIN EN 50363-2-1
CPR class	$B2_{ca}$-s1a,d0,a1
Conductor	Copper, plain, finely stranded class 5
Insulation	EPR
Screen	Bare copper, finely stranded class 5, 2nd insulation: Ethylene Propylene Rubber (EPR)
Sheath	EVA rubber
Nominal voltage [kV]	1.8/3 (3.6)
Laying temperature min. [°C]	–25
Max. conductor temperature [°C]	90
Ambient temperature fix installation (min) [°C]	–40
Max. conductor temperature at short circuit [°C]	250

RAIL NETWORK COMPONENTS

More than cable for modern rail infrastructure

From tunnel lighting systems to medium voltage connectivity solutions, Prysmian complements its portfolio with Rail Network Components designed to support the safe and reliable operation of modern rail networks.



INFRASTRUCTURE SOLUTIONS

- Connecta® Tunnel Lighting Solutions

MEDIUM VOLTAGE CONNECTIVITY

- ELASPEED® Joints
- Slip-on Terminations
- ELASCON® Separable Connectors

CABLE QUALITY BEGINS WITH TRANSPORT

A cable is a valuable asset and is normally transported on a cable drum. While the individual components of a drum may appear robust, they can become vulnerable when carrying cables weighing more than four tonnes. When handled correctly, the drum protects the cable from damage during transport.

If the drum is damaged, the cable may also be affected. In some cases, such damage is only detected after installation, when repairs can become extremely costly. Scan the QR code to learn how proper drum handling can help prevent damage and protect your investment.



ALESEA® – Intelligent Cable Drum Management

With ALESEA®, cable drums become intelligent assets. The solution provides real-time drum tracking and automated inventory monitoring, creating greater visibility across the entire supply chain. This helps optimise logistics processes, improve inventory management and reduce losses.

MORE INFORMATION ABOUT ALESEA®

Scan the QR code to learn more about proper drum handling and discover the digital capabilities of ALESEA®.



The correct handling of cable drums



PRYSMIAN

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