
Caledonian
Rolling Stock Cables
www.caledonian-cables.co.uk
www.addison-cables.com
ADDISON

Caledonian & Addison, established in 1978, produced a wide range of copper and fiber optic cables for communication, power and electronics in its 2 plants in UK and 5 plants in China, with turnover exceeding USD exceeding USD 40 million in Yr 2004. Caledonian products are sold in more than 35 countries around the globe.

Our extensive global network of manufacturing facilities gives us significant scale and the flexibility to fulfill our customer requirements. This global presence provides design and consultancy solutions that are combined with core cable manufacturing and logistics services, and vertically integrated with our E commerce technologies, to optimize customer operations by lowering costs and reducing time to market.

Caledonian & Addison has been respected for its high standards of quality, excellent service level, competitive pricing and a unique and innovative spirit. With our latest technologies, we are both inspired and well-positioned to meet the changing needs of our customers. We have the resources to diversify and to enhance our product lines and services. We understand the need for change and with our accurate planning we are ready for the future and the promise of new marketing opportunities. Our tradition of growth through excellence is assured.

ISO 9001
REGISTERED FIRM

Registration Certificate

This document certifies that the administration systems of

Caledonian Cables Limited / Addison Technology Limited

Marchants Industrial Centre, Mill Lane, Laughton, Lewes, Sussex, BN8 6AJ, United Kingdom

have been assessed and approved by QAS International to the following management systems, standards and guidelines:

ISO 9001 : 2008

With the permitted exclusion of clauses 7.3 Design and Development

The approved administration systems apply to the following:

The manufacture and supply of electrical cables and ancillary power equipment to customers internationally.

Original Approval 6th September 1997
Current Certificate 7th February 2013
Certificate Expiry 7th February 2014
Certificate Number A6211

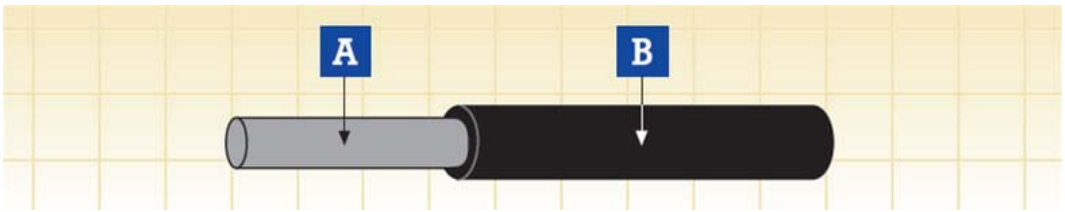
On behalf of QAS International

www.qas-international.com

This certificate remains valid while the holder maintains their quality administration systems in accordance with the standards and guidelines stated above, which will be audited annually by QAS International. The holder is entitled to display the above registration mark for the duration of this certificate. This certificate must be returned to QAS International on reasonable request.
Issuing Office: QAS International, 3VA Oxford Street, Malmesbury, Wiltshire, SN16 9AX

Our Design Centers work closely with customers to constantly improve its standard range of products and technologies and to develop customized, country and industry-specific solutions. Caledonian has established an extensive network of design, manufacturing, and logistics facilities in the world's major markets to serve the growing outsourcing needs of both multinational and regional customers.

Super-thin Wall Unsheathed Single Core Cables
DTRF 750V



A. Conductor B. Insulation

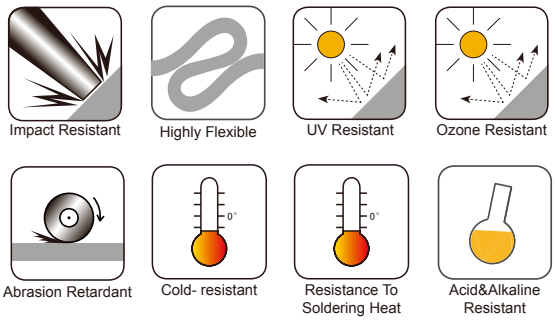
Application

-Used as power and control cable for protected installations inside and outside of rail and transport vehicles, where handling and installation cost are an important factor.
-Used in control, auxillary and main circuit wiring such as cable harnesses, switchboards and control panels, driver desks etc.

Construction

Conductor
Tinned copper wires

Insulation
Electron beam crosslinkable LSZH compound



Electrical & Mechanical Properties

Nominal Voltage	750V
Short Circuit Temperature (5s)	250°C
Operating Temperature	-60°C/+125°C
Minimum Bending Radius	3 x Overall Diameter (OD≤20mm); 5 x Overall Diameter (OD≥20mm)

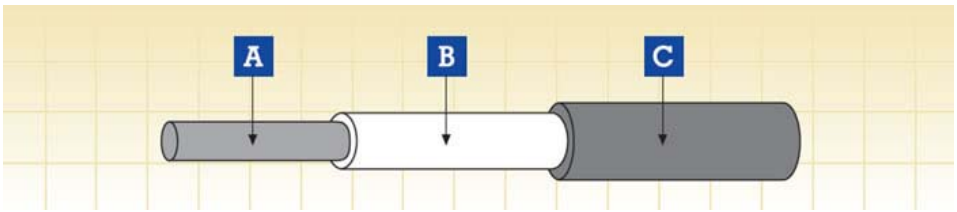
Fire Performance

Flame Retardant	GB/T18380.1-2001 DZ-1
Low Corrosivity (Acidity & Conductivity)	GB/T17650.1-1998; GB/T17650.2-1998
Halogen Free	GB/T17650.1-1998; GB/T17650.2-1998
Low Smoke	GB/T17651.1-1998; GB/T17651.2-1998

DTRF 750V

Nominal Cross-Sectional Area	Conductor Construction	Nominal Insulation Thickness	Maximum Overall Diameter	Weight	Maximum Conductor Resistance 20°C
mm²	No/mm	mm	mm	kg/km	Ω/km
0.5	19/0.18	0.30	1.50	7.6	40.1
0.75	19/0.23	0.35	1.85	12.1	26.7
1.0	19/0.26	0.35	2.00	14.5	20.0
1.2	19/0.28	0.35	2.16	16.3	17.6
1.5	19/0.32	0.40	2.40	21.3	13.7
2.5	19/0.41	0.45	2.95	33.6	8.21
4.0	19/0.52	0.45	3.50	50.8	5.00

Super-thin Wall Sheathed Single Core Cables
DTREF 750V



A. Conductor B. Insulation C. Sheath

Application

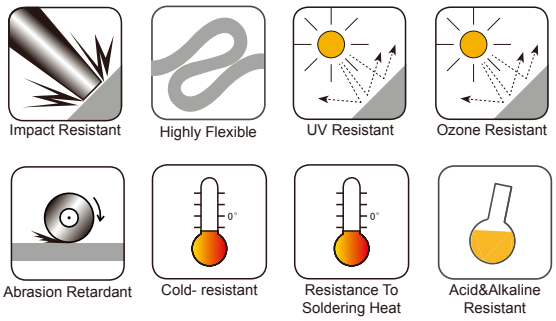
-Used as power and control cable for protected installations inside and outside of rail and transport vehicles, where handling and installation cost are an important factor.
-Used in control, auxillary and main circuit wiring such as cable harnesses, switchboards and control panels, driver desks etc.

Construction

Conductor
Tinned copper wires

Insulation
Electron beam crosslinkable LSZH compound

Sheath
TPU plastic sheath



Electrical & Mechanical Properties

Nominal Voltage	750V
Short Circuit Temperature (5s)	250°C
Operating Temperature	-60°C/+125°C
Minimum Bending Radius	3 x Overall Diameter (OD≤20mm); 5 x Overall Diameter (OD≥20mm)

Fire Performance

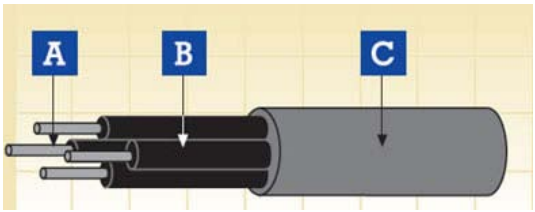
Flame Retardant	GB/T18380.1-2001 DZ-1
Low Corrosivity (Acidity & Conductivity)	GB/T17650.1-1998; GB/T17650.2-1998
Halogen Free	GB/T17650.1-1998; GB/T17650.2-1998
Low Smoke	GB/T17651.1-1998; GB/T17651.2-1998

DTREF 750V

Nominal Cross-Sectional Area	Conductor Construction	Nominal Insulation Thickness	Nominal Sheath Thickness	Maximum Overall Diameter	Weight	Maximum Conductor Resistance 20°C
mm²	No/mm	mm	mm	mm	kg/km	Ω/km
0.5	19/0.18	0.25	0.12	1.64	7.8	40.1
0.75	19/0.23	0.25	0.12	1.89	11.6	26.7
1.0	19/0.26	0.25	0.12	2.04	14.0	20.0
1.2	19/0.28	0.25	0.12	2.20	15.8	17.6
1.5	19/0.32	0.30	0.12	2.44	20.8	13.7
2.5	19/0.41	0.30	0.12	2.89	31.8	8.21
4.0	19/0.52	0.35	0.12	3.54	49.9	5.00

IRM 903 Fuel Oil Resistant
IRM 902 Mineral Oil Resistant
Fire Retardant NF C32-070-2.2(C2) IEC60332-3-24/EN50266-2-4
Flame Retardant NF C32-070-2.1(C1) IEC60332-1-2/EN50265-2-1
Low Toxicity NF X70-100/NF F63 808 TM1-04/BS 6853
Low Corrosivity IEC60754-2/EN50267-2-2/3 NF C32-074/VDE 0472-813
Low Smoke Emission IEC 61034-2 / EN 50268-2 NF C32-073/VDE 0472-816
Zero Halogen IEC 60754-1/EN 50267-2-1 NF C32-074//VDE 0472-815

Super-thin Wall Multicore Cables
DT-RFE 750V



A. Conductor B. Insulation C. Sheath

Application

-Used as power and control cable for protected installations inside and outside of rail and transport vehicles, where handling and installation cost are an important factor.
-Used in control, auxillary and main circuit wiring such as cable harnesses, switchboards and control panels, driver desks etc.

Construction

Conductor

Tinned copper wires

Insulation

Electron beam crosslinkable LSZH compound

Sheath

TPU plastic sheath

Electrical & Mechanical Properties

Nominal Voltage	750V
Short Circuit Temperature (5s)	250°C
Operating Temperature	-60°C/+125°C
Minimum Bending Radius	3 x Overall Diameter (OD≤20mm) 5 x Overall Diameter (OD≥20mm)

Fire Performance

Flame Retardant	GB 12666-90 DZ-1
Low Corrosivity (Acidity & Conductivity)	GB/T17650.1-1998; GB/T17650.2-1998
Halogen Free	GB/T17650.1-1998; GB/T17650.2-1998
Low Smoke	GB/T17651.1-1998; GB/T17651.2-1998

DT-RFE 750V

Number of conductor×Nominal Cross-Sectional Area	Conductor Construction	Maximum Overall Diameter	Weight	Maximum Conductor Resistance 20°C
mm²	No/mm	mm	kg/km	Ω/km
2×0.5	19/0.18	3.84	34.0	40.1
3×0.5	19/0.18	3.97	42.5	40.1
4×0.5	19/0.18	4.60	53.5	40.1
5×0.5	19/0.18	4.82	68.1	40.1
6×0.5	19/0.18	5.06	70.5	40.1
7×0.5	19/0.18	5.40	79.0	40.1
8×0.5	19/0.18	5.96	90.5	40.1
2×0.75	19/0.23	4.14	39.0	26.7
3×0.75	19/0.23	4.71	53.5	26.7
4×0.75	19/0.23	5.16	66.0	26.7

Chinese Standard Rolling Stock Cables

Number of conductor×Nominal Cross-Sectional Area	Conductor Construction	Maximum Overall Diameter	Weight	Maximum Conductor Resistance 20°C
mm²	No/mm	mm	kg/km	Ω/km
5×0.75	19/0.23	5.56	77.8	26.7
6×0.75	19/0.23	5.76	92.8	26.7
7×0.75	19/0.23	6.15	104.0	26.7
8×0.75	19/0.23	6.76	117.0	26.7
2×1.0	19/0.26	4.38	45.0	20.0
3×1.0	19/0.26	5.00	63.0	20.0
4×1.0	19/0.26	5.51	77.5	20.0
5×1.0	19/0.26	5.96	93.0	20.0
6×1.0	19/0.26	6.26	111.5	20.0
7×1.0	19/0.26	6.60	126.0	20.0
8×1.0	19/0.26	7.36	143.0	20.0
2×1.5	19/0.32	5.04	52.5	13.7
3×1.5	19/0.32	5.88	82.5	13.7
4×1.5	19/0.32	6.14	105.5	13.7
5×1.5	19/0.32	6.96	120.0	13.7
6×1.5	19/0.32	7.56	144.75	13.7
7×1.5	19/0.32	7.80	164.5	13.7
8×1.5	19/0.32	8.46	185.0	13.7
2×2.0	19/0.37	6.10	63.7	10.0
3×2.0	19/0.37	6.41	94.7	10.0
4×2.0	19/0.37	7.14	122.5	10.0
5×2.0	19/0.37	8.14	152.2	10.0
6×2.0	19/0.37	8.65	181.9	10.0
7×2.0	19/0.37	8.86	210.7	10.0
8×2.0	19/0.37	9.56	240.4	10.0
2×2.5	19/0.41	6.60	77.5	8.21
3×2.5	19/0.41	7.16	118.0	8.21
4×2.5	19/0.41	8.06	142.5	8.21
5×2.5	19/0.41	9.06	169.0	8.21
6×2.5	19/0.41	9.77	213.2	8.21
7×2.5	19/0.41	10.26	240.0	8.21
8×2.5	19/0.41	11.26	280.0	8.21
2×4.0	19/0.52	7.70	111.0	5.00
3×4.0	19/0.52	8.21	160.65	5.00


Corona Resistant


Highly Flexible


UV Resistant


Ozone Resistant


Abrasion Retardant


Cold- resistant


Resistance To Soldering Heat


Acid&Alkaline Resistant


IRM 903
Fuel Oil Resistant


IRM 902
Mineral Oil Resistant


Fire Retardant
NF C32-070-2.2(C2)
IEC60332-3-24/EN50266-2-4


Flame Retardant
NF C32-070-2.1(C1)
IEC60332-1-2/EN50265-2-1

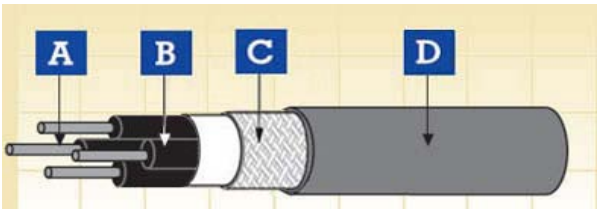

Low Toxicity
NF X70-100/NF F63 808
TM1-04/BS 6853


Low Corrosivity
IEC60754-2/EN50267-2-2/3
NF C32-074/VDE 0472-813


Low Smoke Emission
IEC 61034-2 / EN 50268-2
NF C32-073/VDE 0472-816

Zero Halogen
IEC 60754-1/EN 50267-2-1
NF C32-074//VDE 0472-815

Super-thin Wall Screened Multicore Cables
DT-RFPE 750V



A. Conductor B. Insulation C. Screen D. Sheath

Application

-Used as power and control cable for protected installations inside and outside of rail and transport vehicles, where handling and installation cost are an important factor.
-Used in control, auxillary and main circuit wiring such as cable harnesses, switchboards and control panels, driver desks etc.

Construction

Conductor
Tinned copper wires

Insulation
Electron beam crosslinkable LSZH compound

Screen
Tinned copper wire braid

Sheath
TPU plastic sheath

Electrical & Mechanical Properties

Nominal Voltage	750V
Short Circuit Temperature (5s)	250°C
Operating Temperature	-60°C/+125°C
Minimum Bending Radius	3 x Overall Diameter (OD≤20mm) 5 x Overall Diameter (OD≥20mm)

Fire Performance

Flame Retardant	GB 12666-90 DZ-1
Low Corrosivity (Acidity & Conductivity)	GB/T17650.1-1998; GB/T17650.2-1998
Halogen Free	GB/T17650.1-1998; GB/T17650.2-1998
Low Smoke	GB/T17651.1-1998; GB/T17651.2-1998

DT-RFPE 750V

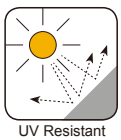
Number of conductor×Nominal Cross-Sectional Area	Conductor Construction	Maximum Overall Diameter	Weight	Maximum Conductor Resistance 20°C
mm²	No/mm	mm	kg/km	Ω/km
2×0.5	19/0.18	4.10	47.50	40.1
3×0.5	19/0.18	4.23	57.50	40.1
4×0.5	19/0.18	4.84	70.00	40.1
5×0.5	19/0.18	5.06	84.10	40.1
6×0.5	19/0.18	5.20	93.00	40.1
7×0.5	19/0.18	5.34	103.00	40.1
8×0.5	19/0.18	6.20	116.50	40.1

Chinese Standard Rolling Stock Cables

Number of conductor×Nominal Cross-Sectional Area	Conductor Construction	Maximum Overall Diameter	Weight	Maximum Conductor Resistance 20°C
mm²	No/mm	mm	kg/km	Ω/km
2×0.75	19/0.23	4.38	54.00	26.7
3×0.75	19/0.23	4.95	70.55	26.7
4×0.75	19/0.23	5.40	83.50	26.7
5×0.75	19/0.23	5.80	100.25	26.7
6×0.75	19/0.23	6.00	115.25	26.7
7×0.75	19/0.23	6.39	130.00	26.7
8×0.75	19/0.23	7.00	144.50	26.7
2×1.0	19/0.26	4.62	60.50	20.0
3×1.0	19/0.26	5.24	80.50	20.0
4×1.0	19/0.26	5.75	96.57	20.0
5×1.0	19/0.26	6.20	115.26	20.0
6×1.0	19/0.26	6.50	134.00	20.0
7×1.0	19/0.26	6.84	153.55	20.0
8×1.0	19/0.26	7.60	168.35	20.0
2×1.5	19/0.32	5.25	77.50	13.7
3×1.5	19/0.32	6.12	98.50	13.7
4×1.5	19/0.32	6.38	121.60	13.7
5×1.5	19/0.32	7.20	145.00	13.7
6×1.5	19/0.32	7.80	169.95	13.7
7×1.5	19/0.32	8.04	192.00	13.7
8×1.5	19/0.32	8.70	212.50	13.7
2×2.0	19/0.37	6.34	86.50	10.0
3×2.0	19/0.37	6.65	118.30	10.0
4×2.0	19/0.37	7.38	151.50	10.0
5×2.0	19/0.37	8.38	184.90	10.0
6×2.0	19/0.37	8.89	218.60	10.0
7×2.0	19/0.37	9.10	248.40	10.0
8×2.0	19/0.37	9.80	282.10	10.0
2×2.5	19/0.41	6.84	97.50	8.21
3×2.5	19/0.41	7.40	134.00	8.21
4×2.5	19/0.41	8.30	165.00	8.21
5×2.5	19/0.41	9.30	196.80	8.21
6×2.5	19/0.41	10.01	238.20	8.21
7×2.5	19/0.41	10.50	276.90	8.21
8×2.5	19/0.41	11.50	320.00	8.21
2×4.0	19/0.52	7.94	133.50	5.00
3×4.0	19/0.52	8.45	185.65	5.00


Corona Resistant


Highly Flexible


UV Resistant


Ozone Resistant


Abrasion Retardant


Cold- resistant


Resistance To Soldering Heat


Acid&Alkaline Resistant


IRM 903
Fuel Oil Resistant


IRM 902
Mineral Oil Resistant


Fire Retardant
NF C32-070-2.2(C2)
IEC60332-3-24/EN50266-2-4


Flame Retardant
NF C32-070-2.1(C1)
IEC60332-1-2/EN50265-2-1

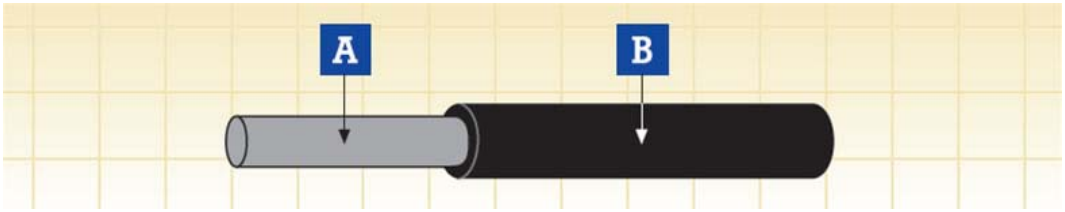

Low Toxicity
NF X70-100/NF F63 808
TM1-04/BS 6853


Low Corrosivity
IEC60754-2/EN50267-2-2/3
NF C32-074/VDE 0472-813


Low Smoke Emission
IEC 61034-2 / EN 50268-2
NF C32-073/VDE 0472-816

Zero Halogen
IEC 60754-1/EN 50267-2-1
NF C32-074/VDE 0472-815

Low Smoke Halogen Free Flame Retardant Thin Wall Single Core Cables WDZ-DCYJB-125, WDZ-DCYJB/2-125, WDZ-DCYJB/3-125 WDZ-DCYJB-150, WDZ-DCYJB/2-150, WDZ-DCYJB/3-150 750V



A. Conductor B. Insulation

Application

-Used as power and control cable for protected installations inside and outside of rail and transport vehicles, where handling and installation cost are an important factor.
-Used in control, auxillary and main circuit wiring such as cable harnesses, switchboards and control panels, driver desks etc.

Construction

Conductor
Tinned copper wires

Separator (if available)

Insulation
Cross-link polyolefin compound

Electrical & Mechanical Properties

Nominal Voltage	750V
Long-term Working Temperature	125°C (WDZ-DCYJB-125, WDZ-DCYJB/2-125, WDZ-DCYJB/3-125); 150°C (WDZ-DCYJB-150, WDZ-DCYJB/2-150, WDZ-DCYJB/3-150)
Lowest Operation Temperature	-60°C
Minimum Bending Radius	6 x Overall Diameter

Fire Performance

Flame Retardant	GB/T18380.1-2001; IEC 60332-3-25 D
Low Corrosivity (Acidity & Conductivity)	GB/T17650.1-1998; GB/T17650.2-1998
Halogen Free	GB/T17650.1-1998; GB/T17650.2-1998
Low Smoke	GB/T17651.1-1998; GB/T17651.2-1998

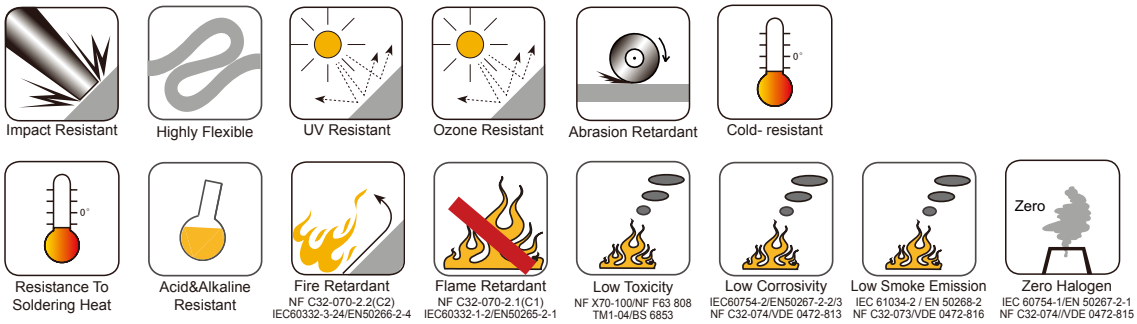
WDZ-DCYJB-125, WDZ-DCYJB/2-125, WDZ-DCYJB/3-125 WDZ-DCYJB-150, WDZ-DCYJB/2-150, WDZ-DCYJB/3-150 750V

Nominal Cross-Sectional Area	Conductor Construction	Nominal Insulation Thickness	Maximum Overall Diameter	Maximum Conductor Resistance 20°C
mm²	No/mm	mm	mm	Ω/km
0.5	19/0.18	0.3	1.5	40.1
0.75	19/0.23	0.3	1.75	26.7
1.0	19/0.26	0.3	1.85	20.0
1.2	19/0.28	0.3	2.00	17.6
1.5	19/0.32	0.3	2.15	13.7
2.0	19/0.37	0.3	2.45	10.0

Chinese Standard Rolling Stock Cables

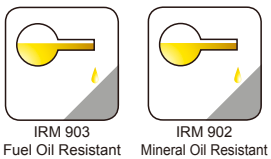
Nominal Cross-Sectional Area	Conductor Construction	Nominal Insulation Thickness	Maximum Overall Diameter	Maximum Conductor Resistance 20°C
mm²	No/mm	mm	mm	Ω/km
2.5	19/0.41	0.3	2.65	8.21
4	19/0.52	0.3	3.20	5.0
6	19/0.64	0.3	3.85	3.4

For WDZ-DCYJB, WDZ-DCYJB/2, WDZ-DCYJB/3 type:

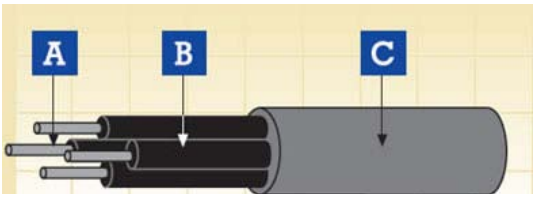


For WDZ-DCYJB/2 type:

For WDZ-DCYJB/3 type:



Low Smoke Halogen Free Flame Retardant Thin Wall Multicore Cables WDZ-DCK/B-100, WDZ-DCK/B-125 250V, 750V



A. Conductor B. Insulation C. Sheath

Application

-Used as power and control cable for protected installations inside and outside of rail and transport vehicles, where handling and installation cost are an important factor.
-Used in control, auxillary and main circuit wiring such as cable harnesses, switchboards and control panels, driver desks etc.

Construction

Conductor
Tinned copper wires

Separator (if available)

Insulation
Low smoke halogen free flame retardant compound

Filler

Separator

Sheath
Low smoke halogen free flame retardant compound

Electrical & Mechanical Properties

Nominal Voltage	250V, 750V
Long-term Working Temperature	100°C (WDZ-DCK/B-100); 125°C (WDZ-DCK/B-125)
Lowest Operation Temperature	-40°C
Minimum Bending Radius	2 x Overall Diameter (OD≤10mm); 4 x Overall Diameter (10mm≤OD≤20mm); 6 x Overall Diameter (OD≥20mm)

Fire Performance

Flame Retardant	GB/T 18380.1-2001; GB/T 18380.3-2001 C
Low Corrosivity (Acidity & Conductivity)	GB/T17650.1-1998; GB/T17650.2-1998
Halogen Free	GB/T17650.1-1998; GB/T17650.2-1998
Low Smoke	GB/T17651.1-1998; GB/T17651.2-1998

WDZ-DCK/B-100, WDZ-DCK/B-125 250V

Number of conductor×Nominal Cross-Sectional Area	Conductor Construction	Overall Diameter	Weight	Maximum Conductor Resistance 20°C
mm²	No/mm	mm	kg/km	Ω/km
2×0.5	16/0.20	5.0	38	40.1
3×0.5	16/0.20	5.7	46	40.1
5×0.5	16/0.20	6.5	65	40.1

Chinese Standard Rolling Stock Cables

Number of conductor×Nominal Cross-Sectional Area	Conductor Construction	Overall Diameter	Weight	Maximum Conductor Resistance 20°C
mm²	No/mm	mm	kg/km	Ω/km
7×0.5	16/0.20	7.0	80	40.1
11×0.5	16/0.20	8.7	117	40.1
16×0.5	16/0.20	9.5	154	40.1
19×0.5	16/0.20	10.0	176	40.1
20×0.5	16/0.20	10.5	187	40.1
24×0.5	16/0.20	11.5	217	40.1
33×0.5	16/0.20	13.0	295	40.1
37×0.5	16/0.20	13.4	324	40.1
43×0.5	16/0.20	15.0	373	40.1
48×0.5	16/0.20	15.2	407	40.1
2×0.75	24/0.20	5.5	48	26.7
3×0.75	24/0.20	6.2	57	26.7
5×0.75	24/0.20	7.2	82	26.7
7×0.75	24/0.20	7.7	102	26.7
11×0.75	24/0.20	9.7	152	26.7
16×0.75	24/0.20	10.7	203	26.7
19×0.75	24/0.20	11.2	233	26.7
20×0.75	24/0.20	11.7	248	26.7
24×0.75	24/0.20	13.4	302	26.7
33×0.75	24/0.20	14.6	394	26.7
37×0.75	24/0.20	15.1	434	26.7
43×0.75	24/0.20	16.9	501	26.7
48×0.75	24/0.20	17.2	549	26.7
2×1.0	32/0.20	5.9	55	20.0
3×1.0	32/0.20	6.6	67	20.0
5×1.0	32/0.20	7.6	98	20.0
7×1.0	32/0.20	8.2	124	20.0
11×1.0	32/0.20	10.5	186	20.0
16×1.0	32/0.20	11.5	250	20.0
19×1.0	32/0.20	12.5	301	20.0
20×1.0	32/0.20	13.1	320	20.0
24×1.0	32/0.20	14.4	373	20.0
33×1.0	32/0.20	15.8	490	20.0
37×1.0	32/0.20	16.4	540	20.0
43×1.0	32/0.20	18.7	643	20.0
48×1.0	32/0.20	19.0	704	20.0
2×1.5	48/0.20	6.5	70	13.7
3×1.5	48/0.20	7.2	86	13.7
5×1.5	48/0.20	8.4	129	13.7
7×1.5	48/0.20	9.1	166	13.7
11×1.5	48/0.20	11.7	252	13.7
16×1.5	48/0.20	13.3	356	13.7
19×1.5	48/0.20	14.0	411	13.7
20×1.5	48/0.20	14.6	436	13.7
24×1.5	48/0.20	16.2	511	13.7
33×1.5	48/0.20	18.1	693	13.7
37×1.5	48/0.20	18.8	765	13.7
43×1.5	48/0.20	21.0	855	13.7
48×1.5	48/0.20	21.4	973	13.7
2×2.5	77/0.20	7.4	96	8.21
3×2.5	77/0.20	8.2	125	8.21
5×2.5	77/0.20	9.7	185	8.21
7×2.5	77/0.20	10.5	241	8.21
11×2.5	77/0.20	14.0	383	8.21
16×2.5	77/0.20	15.5	524	8.21
19×2.5	77/0.20	16.3	607	8.21
20×2.5	77/0.20	17.1	646	8.21
24×2.5	77/0.20	19.4	778	8.21
33×2.5	77/0.20	21.3	1034	8.21
37×2.5	77/0.20	22.1	1145	8.21
43×2.5	77/0.20	25.0	1337	8.21

Number of conductor×Nominal Cross-Sectional Area	Conductor Construction	Overall Diameter	Weight	Maximum Conductor Resistance 20°C
mm²	No/mm	mm	kg/km	Ω/km
48×2.5	77/0.20	25.4	1474	8.21
2×4.0	77/0.26	8.6	139	5.09
3×4.0	77/0.26	9.5	186	5.09
5×4.0	77/0.26	11.3	279	5.09
7×4.0	77/0.26	12.7	382	5.09
11×4.0	77/0.26	16.5	591	5.09
16×4.0	77/0.26	18.7	833	5.09
19×4.0	77/0.26	19.7	968	5.09
20×4.0	77/0.26	20.7	1029	5.09
24×4.0	77/0.26	23.2	1230	5.09
33×4.0	77/0.26	25.5	1643	5.09
37×4.0	77/0.26	26.5	1822	5.09
43×4.0	77/0.26	29.8	2112	5.09
48×4.0	77/0.26	30.3	2334	5.09

WDZ-DCK/B-100, WDZ-DCK/B-125 750V

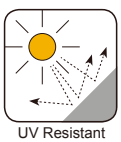
Number of conductor×Nominal Cross-Sectional Area	Conductor Construction	Overall Diameter	Weight	Maximum Conductor Resistance 20°C
mm²	No/mm	mm	kg/km	Ω/km
2×0.5	16/0.20	5.2	44	40.1
3×0.5	16/0.20	5.9	51	40.1
5×0.5	16/0.20	6.8	71	40.1
7×0.5	16/0.20	7.3	87	40.1
11×0.5	16/0.20	9.1	128	40.1
16×0.5	16/0.20	10.0	167	40.1
19×0.5	16/0.20	10.5	191	40.1
20×0.5	16/0.20	11.0	215	40.1
24×0.5	16/0.20	12.5	249	40.1
33×0.5	16/0.20	13.7	320	40.1
37×0.5	16/0.20	14.1	351	40.1
43×0.5	16/0.20	15.8	422	40.1
48×0.5	16/0.20	16.0	459	40.1
2×0.75	24/0.20	5.7	52	26.7
3×0.75	24/0.20	6.4	62	26.7
5×0.75	24/0.20	7.4	88	26.7
7×0.75	24/0.20	8.0	110	26.7
11×0.75	24/0.20	10.1	163	26.7
16×0.75	24/0.20	11.1	216	26.7
19×0.75	24/0.20	11.7	261	26.7
20×0.75	24/0.20	12.7	278	26.7
24×0.75	24/0.20	14.0	322	26.7
33×0.75	24/0.20	15.3	419	26.7
37×0.75	24/0.20	15.8	470	26.7
43×0.75	24/0.20	18.1	552	26.7
48×0.75	24/0.20	18.4	602	26.7
2×1.0	32/0.20	6.1	61	20.0
3×1.0	32/0.20	6.8	73	20.0
5×1.0	32/0.20	7.9	106	20.0
7×1.0	32/0.20	8.5	133	20.0
11×1.0	32/0.20	10.9	212	20.0
16×1.0	32/0.20	12.0	281	20.0
19×1.0	32/0.20	13.0	322	20.0
20×1.0	32/0.20	13.6	342	20.0
24×1.0	32/0.20	15.0	398	20.0
33×1.0	32/0.20	16.5	540	20.0
37×1.0	32/0.20	17.1	593	20.0
43×1.0	32/0.20	19.5	685	20.0
48×1.0	32/0.20	19.8	749	20.0
2×1.5	48/0.20	6.7	78	13.7

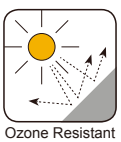
Chinese Standard Rolling Stock Cables

Number of conductor×Nominal Cross-Sectional Area	Conductor Construction	Overall Diameter	Weight	Maximum Conductor Resistance 20°C
mm²	No/mm	mm	kg/km	Ω/km
3×1.5	48/0.20	7.4	94	13.7
5×1.5	48/0.20	8.7	133	13.7
7×1.5	48/0.20	9.4	171	13.7
11×1.5	48/0.20	12.5	272	13.7
16×1.5	48/0.20	13.8	366	13.7
19×1.5	48/0.20	14.5	424	13.7
20×1.5	48/0.20	15.1	451	13.7
24×1.5	48/0.20	16.8	528	13.7
33×1.5	48/0.20	18.8	717	13.7
37×1.5	48/0.20	19.5	792	13.7
43×1.5	48/0.20	21.8	916	13.7
48×1.5	48/0.20	22.2	1007	13.7
2×2.5	77/0.20	7.6	99	8.21
3×2.5	77/0.20	8.4	129	8.21
5×2.5	77/0.20	10.0	190	8.21
7×2.5	77/0.20	10.8	247	8.21
11×2.5	77/0.20	14.4	393	8.21
16×2.5	77/0.20	16.0	537	8.21
19×2.5	77/0.20	16.8	622	8.21
20×2.5	77/0.20	18.0	680	8.21
24×2.5	77/0.20	20.0	797	8.21
33×2.5	77/0.20	22.0	1060	8.21
37×2.5	77/0.20	23.0	1185	8.21
43×2.5	77/0.20	25.8	1371	8.21
48×2.5	77/0.20	26.2	1511	8.21
2×4.0	77/0.26	8.8	142	5.09
3×4.0	77/0.26	9.7	190	5.09
5×4.0	77/0.26	11.6	285	5.09
7×4.0	77/0.26	13.0	389	5.09
11×4.0	77/0.26	16.9	599	5.09
16×4.0	77/0.26	19.2	849	5.09
19×4.0	77/0.26	20.2	986	5.09
20×4.0	77/0.26	21.2	1049	5.09
24×4.0	77/0.26	23.8	1246	5.09
33×4.0	77/0.26	26.2	1667	5.09
37×4.0	77/0.26	27.2	1849	5.09
43×4.0	77/0.26	30.6	2143	5.09
48×4.0	77/0.26	31.1	2368	5.09

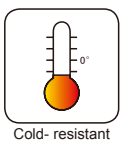

Corona Resistant


Highly Flexible


UV Resistant


Ozone Resistant


Abrasion Retardant


Cold- resistant


Resistance To Soldering Heat


Acid&Alkaline Resistant


IRM 903
Fuel Oil Resistant


IRM 902
Mineral Oil Resistant


Fire Retardant
NF C32-070-2.2(C2)
IEC60332-3-24/EN50266-2-4


Flame Retardant
NF C32-070-2.1(C1)
IEC60332-1-2/EN50265-2-1

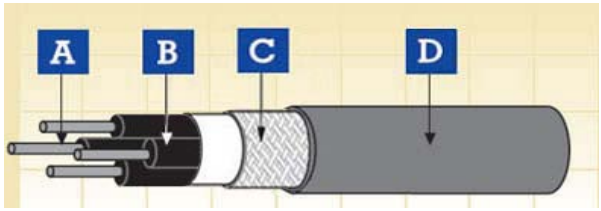

Low Toxicity
NF X70-100/NF F63 808
TM1-04/BS 6853


Low Corrosivity
IEC60754-2/EN50267-2-2/3
NF C32-074/VDE 0472-813


Low Smoke Emission
IEC 61034-2 / EN 50268-2
NF C32-073/VDE 0472-816

Zero Halogen
IEC 60754-1/EN 50267-2-1
NF C32-074//VDE 0472-815

Low Smoke Halogen Free Flame Retardant Thin Wall Screened Multicore Cables WDZ-DCKP/B-100, WDZ-DCKP/B-125 250V, 750V



A. Conductor B. Insulation C. Screen D. Sheath

Application

-Used as power and control cable for protected installations inside and outside of rail and transport vehicles, where handling and installation cost are an important factor.
-Used in control, auxillary and main circuit wiring such as cable harnesses, switchboards and control panels, driver desks etc.

Construction

Conductor
Tinned copper wires

Separator (if available)

Insulation
Low smoke halogen free flame retardant compound

Filler

Separator

Screen

Tinned copper braid

Sheath
Low smoke halogen free flame retardant compound

Electrical & Mechanical Properties

Nominal Voltage	250V, 750V
Long-term Working Temperature	100°C (WDZ-DCKP/B-100); 125°C (WDZ-DCKP/B-125)
Lowest Operation Temperature	-40°C
Minimum Bending Radius	2 x Overall Diameter (OD≤10mm); 4 x Overall Diameter (10mm≤OD≤20mm); 6 x Overall Diameter (OD≥20mm)

Fire Performance

Flame Retardant	GB/T 18380.1-2001; GB/T 18380.3-2001 C
Low Corrosivity (Acidity & Conductivity)	GB/T17650.1-1998; GB/T17650.2-1998
Halogen Free	GB/T17650.1-1998; GB/T17650.2-1998
Low Smoke	GB/T17651.1-1998; GB/T17651.2-1998

Chinese Standard Rolling Stock Cables

WDZ-DCKP/B-100, WDZ-DCKP/B-125 250V

Number of conductor×Nominal Cross-Sectional Area	Conductor Construction	Overall Diameter	Weight	Maximum Conductor Resistance 20°C
mm²	No/mm	mm	kg/km	Ω/km
2×0.5	16/0.20	5.8	67	40.1
3×0.5	16/0.20	6.5	76	40.1
5×0.5	16/0.20	7.3	100	40.1
7×0.5	16/0.20	7.8	118	40.1
11×0.5	16/0.20	9.5	166	40.1
16×0.5	16/0.20	10.3	209	40.1
19×0.5	16/0.20	10.8	232	40.1
20×0.5	16/0.20	11.3	246	40.1
24×0.5	16/0.20	12.3	283	40.1
33×0.5	16/0.20	13.8	369	40.1
37×0.5	16/0.20	14.2	400	40.1
43×0.5	16/0.20	15.8	459	40.1
48×0.5	16/0.20	16.0	494	40.1
2×0.75	24/0.20	6.3	79	26.7
3×0.75	24/0.20	7.0	90	26.7
5×0.75	24/0.20	8.0	120	26.7
7×0.75	24/0.20	8.5	144	26.7
11×0.75	24/0.20	10.5	207	26.7
16×0.75	24/0.20	11.5	263	26.7
19×0.75	24/0.20	12.0	296	26.7
20×0.75	24/0.20	12.5	314	26.7
24×0.75	24/0.20	14.2	377	26.7
33×0.75	24/0.20	15.4	476	26.7
37×0.75	24/0.20	15.9	519	26.7
43×0.75	24/0.20	17.7	597	26.7
48×0.75	24/0.20	18.0	647	26.7
2×1.0	32/0.20	6.7	89	20.0
3×1.0	32/0.20	7.4	102	20.0
5×1.0	32/0.20	8.4	139	20.0
7×1.0	32/0.20	9.0	169	20.0
11×1.0	32/0.20	11.3	244	20.0
16×1.0	32/0.20	12.3	315	20.0
19×1.0	32/0.20	13.3	370	20.0
20×1.0	32/0.20	13.9	392	20.0
24×1.0	32/0.20	15.2	454	20.0
33×1.0	32/0.20	16.6	579	20.0
37×1.0	32/0.20	17.2	633	20.0
43×1.0	32/0.20	19.7	774	20.0
48×1.0	32/0.20	20.0	838	20.0
2×1.5	48/0.20	7.3	107	13.7
3×1.5	48/0.20	8.0	125	13.7
5×1.5	48/0.20	9.2	175	13.7
7×1.5	48/0.20	9.9	216	13.7
11×1.5	48/0.20	12.5	318	13.7
16×1.5	48/0.20	14.1	430	13.7
19×1.5	48/0.20	14.8	489	13.7
20×1.5	48/0.20	15.4	519	13.7
24×1.5	48/0.20	17.0	603	13.7
33×1.5	48/0.20	19.1	823	13.7
37×1.5	48/0.20	19.8	901	13.7
43×1.5	48/0.20	22.0	1037	13.7
48×1.5	48/0.20	22.4	1128	13.7
2×2.5	77/0.20	8.2	139	8.21
3×2.5	77/0.20	9.0	171	8.21
5×2.5	77/0.20	10.5	240	8.21
7×2.5	77/0.20	11.3	300	8.21
11×2.5	77/0.20	14.8	462	8.21
16×2.5	77/0.20	16.3	612	8.21
19×2.5	77/0.20	17.1	701	8.21

Number of conductor×Nominal Cross-Sectional Area	Conductor Construction	Overall Diameter	Weight	Maximum Conductor Resistance 20°C
mm²	No/mm	mm	kg/km	Ω/km
20×2.5	77/0.20	17.9	744	8.21
24×2.5	77/0.20	20.4	917	8.21
33×2.5	77/0.20	22.3	1187	8.21
37×2.5	77/0.20	23.1	1306	8.21
43×2.5	77/0.20	26.0	1519	8.21
48×2.5	77/0.20	26.4	1658	8.21
2×4.0	77/0.26	9.4	189	5.09
3×4.0	77/0.26	10.3	240	5.09
5×4.0	77/0.26	12.1	344	5.09
7×4.0	77/0.26	13.5	455	5.09
11×4.0	77/0.26	17.3	686	5.09
16×4.0	77/0.26	19.7	967	5.09
19×4.0	77/0.26	20.7	1110	5.09
20×4.0	77/0.26	21.7	1178	5.09
24×4.0	77/0.26	24.2	1398	5.09
33×4.0	77/0.26	26.5	1821	5.09
37×4.0	77/0.26	27.5	2008	5.09
43×4.0	77/0.26	31.0	2366	5.09
48×4.0	77/0.26	31.5	2592	5.09

WDZ-DCKP/B-100, WDZ-DCKP/B-125 750V

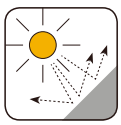
Number of conductor×Nominal Cross-Sectional Area	Conductor Construction	Overall Diameter	Weight	Maximum Conductor Resistance 20°C
mm²	No/mm	mm	kg/km	Ω/km
2×0.5	16/0.20	6.0	72	40.1
3×0.5	16/0.20	6.7	80	40.1
5×0.5	16/0.20	7.6	105	40.1
7×0.5	16/0.20	8.1	124	40.1
11×0.5	16/0.20	9.9	175	40.1
16×0.5	16/0.20	10.8	219	40.1
19×0.5	16/0.20	11.3	245	40.1
20×0.5	16/0.20	11.8	260	40.1
24×0.5	16/0.20	13.3	312	40.1
33×0.5	16/0.20	14.5	389	40.1
37×0.5	16/0.20	14.9	422	40.1
43×0.5	16/0.20	16.6	485	40.1
48×0.5	16/0.20	16.8	522	40.1
2×0.75	24/0.20	6.5	83	26.7
3×0.75	24/0.20	7.2	94	26.7
5×0.75	24/0.20	8.2	126	26.7
7×0.75	24/0.20	8.8	151	26.7
11×0.75	24/0.20	10.9	216	26.7
16×0.75	24/0.20	11.9	274	26.7
19×0.75	24/0.20	12.5	310	26.7
20×0.75	24/0.20	13.5	342	26.7
24×0.75	24/0.20	14.8	394	26.7
33×0.75	24/0.20	16.1	499	26.7
37×0.75	24/0.20	16.6	543	26.7
43×0.75	24/0.20	19.1	670	26.7
48×0.75	24/0.20	19.4	722	26.7
2×1.0	32/0.20	6.9	92	20.0
3×1.0	32/0.20	7.6	106	20.0
5×1.0	32/0.20	8.7	145	20.0
7×1.0	32/0.20	9.3	176	20.0
11×1.0	32/0.20	11.7	255	20.0
16×1.0	32/0.20	12.8	328	20.0
19×1.0	32/0.20	13.8	385	20.0
20×1.0	32/0.20	14.4	408	20.0
24×1.0	32/0.20	15.8	472	20.0

Chinese Standard Rolling Stock Cables

Number of conductor×Nominal Cross-Sectional Area	Conductor Construction	Overall Diameter	Weight	Maximum Conductor Resistance 20°C
mm²	No/mm	mm	kg/km	Ω/km
33×1.0	32/0.20	17.3	602	20.0
37×1.0	32/0.20	17.9	675	20.0
43×1.0	32/0.20	20.5	806	20.0
48×1.0	32/0.20	20.8	873	20.0
2×1.5	48/0.20	7.5	111	13.7
3×1.5	48/0.20	8.2	129	13.7
5×1.5	48/0.20	9.5	181	13.7
7×1.5	48/0.20	10.2	224	13.7
11×1.5	48/0.20	13.3	342	13.7
16×1.5	48/0.20	14.6	443	13.7
19×1.5	48/0.20	15.3	505	13.7
20×1.5	48/0.20	15.9	536	13.7
24×1.5	48/0.20	17.6	623	13.7
33×1.5	48/0.20	19.8	851	13.7
37×1.5	48/0.20	20.5	931	13.7
43×1.5	48/0.20	22.8	1072	13.7
48×1.5	48/0.20	23.2	1165	13.7
2×2.5	77/0.20	8.4	143	8.21
3×2.5	77/0.20	9.2	176	8.21
5×2.5	77/0.20	10.8	246	8.21
7×2.5	77/0.20	11.6	308	8.21
11×2.5	77/0.20	15.2	475	8.21
16×2.5	77/0.20	16.8	629	8.21
19×2.5	77/0.20	17.6	719	8.21
20×2.5	77/0.20	19.0	809	8.21
24×2.5	77/0.20	21.0	942	8.21
33×2.5	77/0.20	23.0	1219	8.21
37×2.5	77/0.20	24.0	1351	8.21
43×2.5	77/0.20	26.8	1559	8.21
48×2.5	77/0.20	27.2	1702	8.21
2×4.0	77/0.26	9.6	194	5.09
3×4.0	77/0.26	10.5	244	5.09
5×4.0	77/0.26	12.4	351	5.09
7×4.0	77/0.26	13.8	463	5.09
11×4.0	77/0.26	17.7	696	5.09
16×4.0	77/0.26	20.2	987	5.09
19×4.0	77/0.26	21.2	1132	5.09
20×4.0	77/0.26	22.2	1202	5.09
24×4.0	77/0.26	24.8	1418	5.09
33×4.0	77/0.26	27.2	1857	5.09
37×4.0	77/0.26	28.2	2047	5.09
43×4.0	77/0.26	31.8	2413	5.09
48×4.0	77/0.26	32.3	2643	5.09

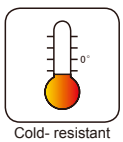

Corona Resistant


Highly Flexible


UV Resistant


Ozone Resistant


Abrasion Retardant


Cold- resistant


Resistance To Soldering Heat


Acid&Alkaline Resistant


IRM 903
Fuel Oil Resistant


IRM 902
Mineral Oil Resistant


Fire Retardant
NF C32-070-2.2(C2)
IEC60332-3-24/EN50266-2-4


Flame Retardant
NF C32-070-2.1(C1)
IEC60332-1-2/EN50265-2-1

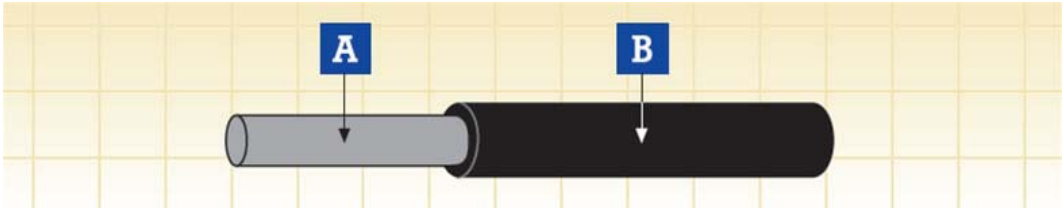

Low Toxicity
NF X70-100/NF F63 808
TM1-04/BS 6853


Low Corrosivity
IEC60754-2/EN50267-2-2/3
NF C32-074/VDE 0472-813


Low Smoke Emission
IEC 61034-2 / EN 50268-2
NF C32-073/VDE 0472-816

Zero Halogen
IEC 60754-1/EN 50267-2-1
NF C32-074//VDE 0472-815

Low Smoke Halogen Free Flame Retardant Unsheathed Single Core Cables WDZ-DCYJ-125, WDZ-DCYJ/2-125, WDZ-DCYJ/3-125 750V, 1500V, 3000V



A. Conductor B. Insulation

Application

-Used as power and control cable for protected installations inside and outside of rail and transport vehicles, where handling and installation cost are an important factor.
-Used in control, auxillary and main circuit wiring such as cable harnesses, switchboards and control panels, driver desks etc.

Construction

Conductor
Tinned copper wires

Separator (if available)

Insulation
Cross-link Polyolefin insulation

Electrical & Mechanical Properties

Nominal Voltage	750V,1500V, 3000V
Operating Temperature	-55°C/+125°C
Minimum Bending Radius	3 x Overall Diameter (OD≤20mm); 5 x Overall Diameter (OD≥20mm)

Fire Performance

Flame Retardant	GB 12666-90 DZ-1
Low Corrosivity (Acidity & Conductivity)	GB/T17650.1-1998; GB/T17650.2-1998
Halogen Free	GB/T17650.1-1998; GB/T17650.2-1998
Low Smoke	GB/T17651.1-1998; GB/T17651.2-1998

WDZ-DCYJ-125, WDZ-DCYJ/2-125, WDZ-DCYJ/3-125 750V

Nominal Cross-Sectional Area	Conductor Construction	Nominal Insulation Thickness	Maximum Overall Diameter	Weight	Maximum Conductor Resistance 20°C
mm²	No/mm	mm	mm	kg/km	Ω/km
0.75	24/0.20	0.8	3.0	14	26.7
1.0	32/0.20	0.8	3.3	16	20.0
1.5	48/0.20	0.8	3.6	21	13.7
2.5	77/0.20	0.8	4.2	31	8.21
4	126/0.20	0.8	5.0	52	5.09
6	189/0.20	0.8	5.7	73	3.39
10	322/0.20	1.2	7.7	126	1.95
16	513/0.20	1.2	9.0	184	1.24
25	798/0.20	1.2	10.5	274	0.795

Nominal Cross-Sectional Area	Conductor Construction	Nominal Insulation Thickness	Maximum Overall Diameter	Weight	Maximum Conductor Resistance 20°C
mm²	No/mm	mm	mm	kg/km	Ω/km
35	1121/0.20	1.2	11.8	378	0.565
50	703/0.30	1.4	13.9	540	0.393
70	999/0.30	1.6	16.5	767	0.277
95	1332/0.30	1.6	18.6	1031	0.210
120	1702/0.30	1.8	21.0	1267	0.164
150	2109/0.30	2.0	23.4	1557	0.132
185	1443/0.40	2.0	25.5	1881	0.108
240	1924/0.40	2.2	29.4	2518	0.0817
300	2368/0.40	2.2	32.0	3084	0.0654

WDZ-DCYJ-125, WDZ-DCYJ/2-125, WDZ-DCYJ/3-125 1500V

Nominal Cross-Sectional Area	Conductor Construction	Nominal Insulation Thickness	Maximum Overall Diameter	Weight	Maximum Conductor Resistance 20°C
mm²	No/mm	mm	mm	kg/km	Ω/km
0.75	24/0.20	1.2	3.9	19	26.7
1.0	32/0.20	1.2	4.1	22	20.0
1.5	48/0.20	1.2	4.4	27	13.7
2.5	77/0.20	1.2	5.0	38	8.21
4	126/0.20	1.2	5.9	55	5.09
6	189/0.20	1.2	6.6	82	3.39
10	322/0.20	1.4	8.1	131	1.95
16	513/0.20	1.4	9.4	190	1.24
25	798/0.20	1.4	10.9	282	0.795
35	1121/0.20	1.4	12.2	397	0.565
50	703/0.30	1.6	14.4	561	0.393
70	999/0.30	1.8	17.0	779	0.277
95	1332/0.30	2.0	19.4	1045	0.210
120	1702/0.30	2.2	21.4	1282	0.164
150	2109/0.30	2.4	24.2	1574	0.132
185	1443/0.40	2.4	26.3	1919	0.108
240	1924/0.40	2.6	30.2	2561	0.0817
300	2368/0.40	2.6	32.8	3177	0.0654

WDZ-DCYJ-125, WDZ-DCYJ/2-125, WDZ-DCYJ/3-125 3000V

Nominal Cross-Sectional Area	Conductor Construction	Nominal Insulation Thickness	Maximum Overall Diameter	Weight	Maximum Conductor Resistance 20°C
mm²	No/mm	mm	mm	kg/km	Ω/km
0.75	24/0.20	1.4	4.3	26	26.7
1.0	32/0.20	1.4	4.5	28	20.0
1.5	48/0.20	1.4	4.8	34	13.7
2.5	77/0.20	1.4	5.3	46	8.21
4	126/0.20	1.4	6.3	64	5.09
6	189/0.20	1.4	7.0	87	3.39
10	322/0.20	1.6	8.5	143	1.95
16	513/0.20	1.6	9.8	203	1.24
25	798/0.20	1.6	11.3	306	0.795
35	1121/0.20	1.6	12.6	416	0.565

Chinese Standard Rolling Stock Cables

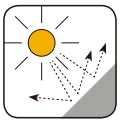
Nominal Cross-Sectional Area	Conductor Construction	Nominal Insulation Thickness	Maximum Overall Diameter	Weight	Maximum Conductor Resistance 20°C
mm²	No/mm	mm	mm	kg/km	Ω/km
50	703/0.30	2.0	15.2	584	0.393
70	999/0.30	2.0	17.4	804	0.277
95	1332/0.30	2.2	19.8	1074	0.210
120	1702/0.30	2.4	21.8	1298	0.164
150	2109/0.30	2.6	24.6	1609	0.132
185	1443/0.40	2.6	26.8	1939	0.108
240	1924/0.40	2.8	30.6	2604	0.0817
300	2368/0.40	2.8	33.4	3177	0.0654

For WDZ-DCYJ, WDZ-DCYJ/2, WDZ-DCYJ/3 type:


Impact Resistant

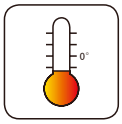

Highly Flexible


UV Resistant


Ozone Resistant


Abrasion Retardant


Cold- resistant


Resistance To Soldering Heat


Acid&Alkaline Resistant


Fire Retardant
NF C32-070-2.2(C2)
IEC60332-3-24/EN50266-2-4


Flame Retardant
NF C32-070-2.1(C1)
IEC60332-1-2/EN50265-2-1


Low Toxicity
NF X70-100/NF F63 808
TM1-04/BS 6853


Low Corrosivity
IEC60754-2/EN50267-2-2/3
NF C32-074/VDE 0472-813


Low Smoke Emission
IEC 61034-2 / EN 50268-2
NF C32-073/VDE 0472-816

Zero Halogen
IEC 60754-1/EN 50267-2-1
NF C32-074//VDE 0472-815

For WDZ-DCYJ/2 type:

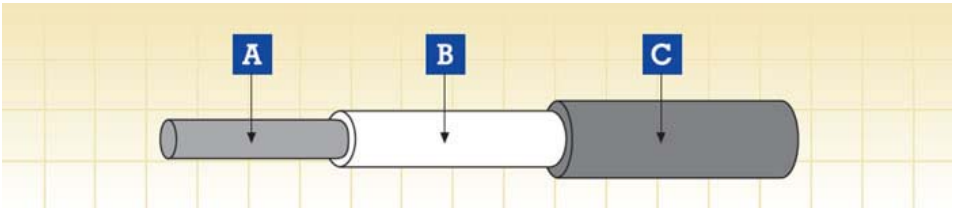

IRM 902
Mineral Oil Resistant

For WDZ-DCYJ/3 type:


IRM 903
Fuel Oil Resistant


IRM 902
Mineral Oil Resistant

100°C Single Core Cables
DCEYH, DCEYHR, DCEH/3-100 250V, 750V, 1.5kV, 3kV



A. Conductor B. Insulation C. Sheath

Application

-Used as power and control cable for protected installations inside and outside of rail and transport vehicles, where handling and installation cost are an important factor.
-Used in control, auxillary and main circuit wiring such as cable harnesses, switchboards and control panels, driver desks etc.

Construction

Conductor
Tinned annealed copper wires

Separator (if available)

Insulation
EPDM insulation

Sheath
CSM Sheath

Electrical & Mechanical Properties

Nominal Voltage	250V, 750V, 1.5kV, 3kV
Long-term Working Temperature	100°C
Lowest Installation Temperature	-25°C
Minimum Bending Radius	6 x Overall Diameter (OD≤20mm); 8 x Overall Diameter (OD≥20mm)

Fire Performance

Flame Retardant	GB/T18380.1-2001

DCEYH 250V

Nominal Cross-Sectional Area	Conductor Construction	Nominal Insulation Thickness	Maximum Overall Diameter	Weight	Maximum Conductor Resistance 20°C
mm²	No/mm	mm	mm	kg/km	Ω/km
0.5	-	0.4	2.8	12	40.1
0.75	7/0.37	0.4	3.2	15	24.8
1.0	7/0.43	0.4	3.2	19	18.7
1.5	19/0.32	0.4	3.5	25	12.5
2.5	19/0.41	0.4	4.3	36	7.59

DCEYHR 250V

Nominal Cross-Sectional Area	Conductor Construction	Nominal Insulation Thickness	Maximum Overall Diameter	Weight	Maximum Conductor Resistance 20°C
mm²	No/mm	mm	mm	kg/km	Ω/km
0.5	16/0.20	0.4	2.8	12	40.1
0.75	24/0.20	0.4	3.2	15	26.7
1.0	32/0.20	0.4	3.2	19	20.0
1.5	30/0.25(48/0.20)	0.4	3.5	25	13.7
2.5	49/0.25(77/0.20)	0.4	4.3	36	8.21

DCEYH 750V

Nominal Cross-Sectional Area	Conductor Construction	Nominal Insulation Thickness	Maximum Overall Diameter	Weight	Maximum Conductor Resistance 20°C
mm²	No/mm	mm	mm	kg/km	Ω/km
0.75	7/0.37	0.6	4.0	21	24.8
1.0	7/0.43	0.6	4.1	24	18.7
1.5	19/0.32	0.6	4.4	31	12.5
2.5	19/0.41	0.7	5.1	45	7.59
4	19/0.52	0.7	5.7	63	4.54
6	19/0.64	0.7	6.4	86	3.00
10	49/0.52	0.8	8.6	152	1.78
16	84/0.49	0.8	10.5	243	1.20
25	133/0.49	1.0	13.0	350	0.760
35	189/0.49	1.0	14.5	471	0.535
50	259/0.49	1.2	17.0	624	0.390
70	259/0.58	1.2	19.0	830	0.271
95	259/0.68	1.4	21.5	1137	0.197
120	336/0.67	1.4	23.5	1400	0.156
150	427/0.67	1.8	27.8	1817	0.123
185	570/0.67	1.8	29.5	2186	0.101
240	732/0.64	2.2	34.0	2683	0.0787
300	912/0.64	2.2	37.0	3462	0.0632

DCEYHR 750V

Nominal Cross-Sectional Area	Conductor Construction	Nominal Insulation Thickness	Maximum Overall Diameter	Weight	Maximum Conductor Resistance 20°C
mm²	No/mm	mm	mm	kg/km	Ω/km
0.75	24/0.20	0.6	4.0	21	26.7
1.0	32/0.20	0.6	4.1	24	20.0
1.5	30/0.25(48/0.20)	0.6	4.4	31	13.7
2.5	49/0.25(77/0.20)	0.7	5.1	45	8.21
4	56/0.30(128/0.20)	0.7	5.7	63	5.09
6	84/0.30	0.7	6.4	86	3.39
10	84/0.40	0.8	8.6	152	1.95
16	126/0.40	0.8	10.5	243	1.24
25	196/0.40	1.0	13.0	350	0.795
35	276/0.40	1.0	14.5	471	0.565
50	396/0.40	1.2	17.0	624	0.393
70	380/0.49	1.2	19.0	830	0.277
95	513/0.49	1.4	21.5	1137	0.210
120	630/0.49	1.4	23.5	1400	0.164
150	777/0.49	1.8	27.8	1817	0.132
185	976/0.49	1.8	29.5	2186	0.108
240	1281/0.49	2.2	34.0	2683	0.0817
300	1586/0.49	2.2	37.0	3462	0.0654

DCEH/3-100 750V

Nominal Cross-Sectional Area	Conductor Construction	Nominal Insulation Thickness	Maximum Overall Diameter	Weight	Maximum Conductor Resistance 20°C
mm²	No/mm	mm	mm	kg/km	Ω/km
0.5	16/0.20(28/0.15)	0.6	4.4	17	40.1
0.75	24/0.20(42/0.15)	0.6	4.7	21	26.7
1.0	32/0.20(56/0.15)	0.6	4.9	24	20.0
1.5	30/0.25(85/0.15)	0.6	5.4	31	13.7
2.5	50/0.25(140/0.15)	0.7	5.2	45	8.21
4	56/0.30(228/0.15)	0.7	6.8	63	5.09
6	84/0.30(189/0.20)	0.7	7.8	86	3.39
10	80/0.40(324/0.20)	0.8	9.0	152	1.95
16	126/0.40(513/0.20)	0.8	10.5	243	1.24
25	196/0.40(783/0.20)	1.0	13.0	350	0.795
35	276/0.40(1107/0.20)	1.0	14.5	471	0.565

Nominal Cross-Sectional Area	Conductor Construction	Nominal Insulation Thickness	Maximum Overall Diameter	Weight	Maximum Conductor Resistance 20°C
mm²	No/mm	mm	mm	kg/km	Ω/km
50	396/0.40(702/0.30)	1.2	17.0	624	0.393
70	360/0.50(999/0.30)	1.2	19.5	830	0.277
95	475/0.50(1332/0.30)	1.4	21.5	1137	0.210
120	608/0.50(1702/0.30)	1.4	23.5	1400	0.164
150	756/0.50(2109/0.30)	1.8	28.0	1817	0.132
185	925/0.50(1443/0.40)	1.8	29.5	2186	0.108
240	1221/0.50(1891/0.40)	2.2	34.0	2683	0.0817
300	1525/0.50(2379/0.40)	2.2	37.0	3462	0.0654

DCEYH 1500V

Nominal Cross-Sectional Area	Conductor Construction	Nominal Insulation Thickness	Maximum Overall Diameter	Weight	Maximum Conductor Resistance 20°C
mm²	No/mm	mm	mm	kg/km	Ω/km
1.0	7/0.43	0.8	4.9	32	18.7
1.5	19/0.32	0.8	5.3	40	12.5
2.5	19/0.41	0.9	6.2	58	7.59
4	19/0.52	0.9	6.8	77	4.54
6	19/0.64	0.9	7.5	101	3.0
10	49/0.52	1.0	9.5	169	1.78
16	84/0.49	1.0	11.0	250	1.20
25	133/0.49	1.2	13.5	361	0.76
35	189/0.49	1.2	15.0	483	0.535
50	259/0.49	1.4	17.9	651	0.390
70	259/0.58	1.4	19.0	864	0.271
95	259/0.68	1.6	22.5	1177	0.197
120	336/0.67	1.6	24.0	1443	0.156
150	427/0.67	2.0	27.0	1840	0.123
185	570/0.67	2.0	29.0	2211	0.101
240	732/0.64	2.4	35.0	2926	0.0787
300	912/0.64	2.4	38.0	3529	0.0632

DCEYHR 1500V

Nominal Cross-Sectional Area	Conductor Construction	Nominal Insulation Thickness	Maximum Overall Diameter	Weight	Maximum Conductor Resistance 20°C
mm²	No/mm	mm	mm	kg/km	Ω/km
1.0	32/0.20	0.8	4.9	32	20.0
1.5	30/0.25(48/0.20)	0.8	5.3	40	13.7
2.5	49/0.25(77/0.20)	0.9	6.2	58	8.21
4	56/0.30(128/0.20)	0.9	6.8	77	5.09
6	84/0.30	0.9	7.5	101	3.39
10	84/0.40	1.0	9.5	169	1.95
16	126/0.40	1.0	11.0	250	1.24
25	196/0.40	1.2	13.5	361	0.795
35	276/0.40	1.2	15.0	483	0.565
50	396/0.40	1.4	17.9	651	0.393
70	380/0.49	1.4	19.0	864	0.277
95	513/0.49	1.6	22.5	1177	0.210
120	630/0.49	1.6	24.0	1443	0.164
150	777/0.49	2.0	27.0	1840	0.132
185	976/0.49	2.0	29.0	2211	0.108
240	1281/0.49	2.4	35.0	2926	0.0817
300	1586/0.49	2.4	38.0	3529	0.0654

DCEH/3-100 1500V

Nominal Cross-Sectional Area	Conductor Construction	Nominal Insulation Thickness	Maximum Overall Diameter	Weight	Maximum Conductor Resistance 20°C
mm²	No/mm	mm	mm	kg/km	Ω/km
1.0	32/0.20(56/0.15)	0.8	6.0	32	20.0
1.5	30/0.25(85/0.15)	0.8	6.6	40	13.7
2.5	50/0.25(140/0.15)	0.9	7.6	58	8.21
4	56/0.30(228/0.15)	0.9	8.2	77	5.09
6	84/0.30(189/0.20)	0.9	8.8	101	3.39
10	84/0.40(324/0.20)	1.0	9.8	169	1.95
16	126/0.40(513/0.20)	1.0	11.0	250	1.24
25	196/0.40(783/0.20)	1.2	13.5	361	0.795
35	276/0.40(1107/0.20)	1.2	15.0	483	0.565
50	396/0.40(702/0.30)	1.4	18.0	651	0.393
70	360/0.50(999/0.30)	1.4	19.5	864	0.277
95	475/0.50(1332/0.30)	1.6	22.5	1177	0.210
120	608/0.50(1702/0.30)	1.6	24.5	1443	0.164
150	756/0.50(2109/0.30)	2.0	28.0	1840	0.132
185	925/0.50(1443/0.40)	2.0	30.0	2211	0.101
240	1221/0.50(1891/0.40)	2.4	35.0	2926	0.0817
300	1525/0.50(2379/0.40)	2.4	38.0	3529	0.0654

DCEYH 3000V

Nominal Cross-Sectional Area	Conductor Construction	Nominal Insulation Thickness	Maximum Overall Diameter	Weight	Maximum Conductor Resistance 20°C
mm²	No/mm	mm	mm	kg/km	Ω/km
2.5	19/0.41	1.4	8.0	83	7.59
4	19/0.52	1.4	8.6	104	4.54
6	19/0.64	1.4	9.2	131	3.0
10	49/0.52	1.6	11.2	205	1.78
16	84/0.49	1.6	15.5	281	1.20
25	133/0.49	1.8	15.5	410	0.76
35	189/0.49	1.8	17.0	539	0.535
50	259/0.49	2.0	20.0	733	0.390
70	259/0.58	2.0	22.0	954	0.271
95	259/0.68	2.2	24.5	1200	0.197
120	336/0.67	2.2	26.5	1556	0.156
150	427/0.67	2.6	30.0	1966	0.123
185	570/0.67	2.6	32.0	2348	0.101
240	732/0.64	3.0	37.0	3089	0.0787
300	912/0.64	3.0	40.0	3702	0.0632

DCEYHR 3000V

Nominal Cross-Sectional Area	Conductor Construction	Nominal Insulation Thickness	Maximum Overall Diameter	Weight	Maximum Conductor Resistance 20°C
mm²	No/mm	mm	mm	kg/km	Ω/km
2.5	49/0.25(77/0.20)	1.4	8.0	83	8.21
4	56/0.30(128/0.20)	1.4	8.6	104	5.09
6	84/0.30	1.4	9.2	131	3.39
10	84/0.40	1.6	11.2	205	1.95
16	126/0.40	1.6	15.5	281	1.24
25	196/0.40	1.8	15.5	410	0.795
35	276/0.40	1.8	17.0	539	0.565
50	396/0.40	2.0	20.0	733	0.393
70	380/0.49	2.0	22.0	954	0.277
95	513/0.49	2.2	24.5	1200	0.210
120	630/0.49	2.2	26.5	1556	0.164
150	777/0.49	2.6	30.0	1966	0.132
185	976/0.49	2.6	32.0	2348	0.108
240	1281/0.49	3.0	37.0	3089	0.0817
300	1586/0.49	3.0	40.0	3702	0.0654

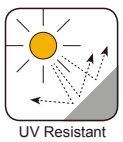
Chinese Standard Rolling Stock Cables

DCEH/3-100 3000V

Nominal Cross-Sectional Area	Conductor Construction	Nominal Insulation Thickness	Maximum Overall Diameter	Weight	Maximum Conductor Resistance 20°C
mm²	No/mm	mm	mm	kg/km	Ω/km
2.5	50/0.25(140/0.15)	1.4	8.6	83	8.21
4	56/0.30(228/0.15)	1.4	9.2	104	5.09
6	84/0.30(189/0.20)	1.4	10.0	131	3.39
10	80/0.40(324/0.20)	1.6	12.5	205	1.95
16	126/0.40(513/0.20)	1.6	15.5	281	1.24
25	196/0.40(783/0.20)	1.8	15.5	410	0.795
35	276/0.40(1107/0.20)	1.8	17.0	539	0.565
50	396/0.40(702/0.30)	2.0	20.0	733	0.393
70	360/0.50(999/0.30)	2.0	22.0	954	0.277
95	475/0.50(1332/0.30)	2.2	24.5	1200	0.210
120	608/0.50(1702/0.30)	2.2	26.5	1556	0.164
150	756/0.50(2109/0.30)	2.6	30.0	1966	0.132
185	925/0.50(1443/0.40)	2.6	32.0	2348	0.108
240	1221/0.50(1891/0.40)	3.0	37.0	3089	0.0817
300	1525/0.50(2379/0.40)	3.0	40.0	3702	0.0654


Impact Resistant


Highly Flexible


UV Resistant


Ozone Resistant

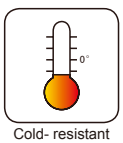

Abrasion Retardant


IRM 903
Fuel Oil Resistant


IRM 902
Mineral Oil Resistant


Fire Retardant
NF C32-070-2.2(C2)
IEC60332-3-24/EN50266-2-4

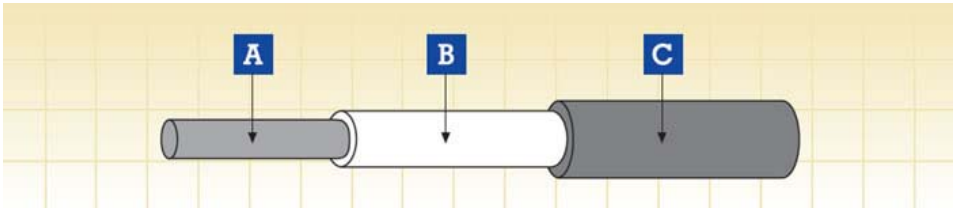

Flame Retardant
NF C32-070-2.1(C1)
IEC60332-1-2/EN50265-2-1


Cold- resistant


Resistance To
Soldering Heat


Acid&Alkaline
Resistant

Low Smoke Halogen Free Flame Retardant Single Core Cables WDZ-DCEVM-100, WDZ-DCEVM-125 1.8/3kV



A. Conductor B. Insulation C. Sheath

Application

-Used as power and control cable for protected installations inside and outside of rail and transport vehicles, where handling and installation cost are an important factor.
-Used in control, auxillary and main circuit wiring such as cable harnesses, switchboards and control panels, driver desks etc.

Construction

Conductor

Tinned copper wires

Separator (if available)

Insulation

Low smoke halogen free flame retardant compound

Sheath

Low smoke halogen free flame retardant compound

Electrical & Mechanical Properties

Nominal Voltage	1.8/3kV
Long-term Working Temperature	100°C (WDZ-DCEVM-100); 125°C (WDZ-DCEVM-125)
Lowest Operation Temperature	-40°C
Minimum Bending Radius	2 x Overall Diameter (OD≤10mm); 4 x Overall Diameter (10mm≤OD≤20mm); 6 x Overall Diameter (OD≥20mm)

Fire Performance

Flame Retardant	GB/T18380.1-2001; GB/T18380.3-2001 C
Low Corrosivity (Acidity & Conductivity)	GB/T17650.1-1998; GB/T17650.2-1998
Halogen Free	GB/T17650.1-1998; GB/T17650.2-1998
Low Smoke	GB/T17651.1-1998; GB/T17651.2-1998

WDZ-DCEVM-100, WDZ-DCEVM-125 1.8/3kV

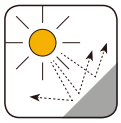
Nominal Cross-Sectional Area	Conductor Construction	Nominal Insulation Thickness	Nominal Sheath Thickness	Maximum Overall Diameter	Maximum Conductor Resistance 20°C
mm²	No/mm	mm	mm	mm	Ω/km
2.5	77/0.20	0.9	0.9	6.5	8.21
4	77/0.26	0.9	0.9	7.2	5.09
6	84/0.30	0.9	0.9	7.9	3.39
10	84/0.40	1.0	0.9	9.2	1.95
16	126/0.40	1.0	1.0	11.0	1.24
25	196/0.40	1.2	1.1	13.2	0.795
35	276/0.40	1.2	1.1	14.5	0.565
50	396/0.40	1.2	1.1	16.2	0.393

Chinese Standard Rolling Stock Cables

Nominal Cross-Sectional Area	Conductor Construction	Nominal Insulation Thickness	Nominal Sheath Thickness	Maximum Overall Diameter	Maximum Conductor Resistance 20°C
mm²	No/mm	mm	mm	mm	Ω/km
70	380/0.49	1.4	1.4	19.0	0.277
95	513/0.49	1.6	1.6	22.0	0.210
120	630/0.49	1.6	1.6	24.0	0.164
150	777/0.49	1.8	1.7	26.0	0.132
185	976/0.49	1.8	1.7	28.5	0.108
240	1281/0.49	1.8	1.7	30.9	0.0817
300	1586/0.49	1.8	1.7	33.5	0.0654


Impact Resistant


Highly Flexible


UV Resistant


Ozone Resistant


Abrasion Retardant

Cold- resistant

Resistance To Soldering Heat


Acid&Alkaline Resistant


IRM 903
Fuel Oil Resistant


IRM 902
Mineral Oil Resistant


Fire Retardant
NF C32-070-2.2(C2)
IEC60332-3-24/EN50266-2-4


Flame Retardant
NF C32-070-2.1(C1)
IEC60332-1-2/EN50265-2-1

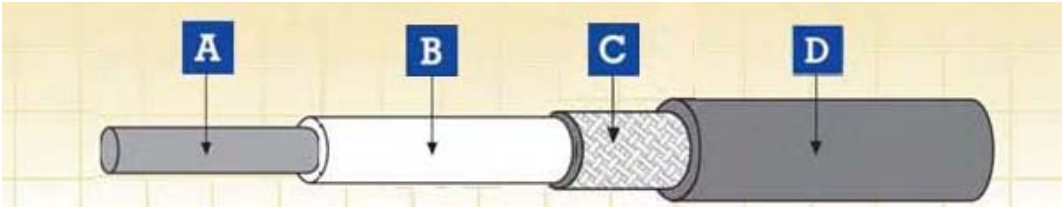

Low Toxicity
NF X70-100/NF F63 808
TM1-04/BS 6853


Low Corrosivity
IEC60754-2/EN50267-2-2/3
NF C32-074/VDE 0472-813


Low Smoke Emission
IEC 61034-2 / EN 50268-2
NF C32-073/VDE 0472-816

Zero Halogen
IEC 60754-1/EN 50267-2-1
NF C32-074//VDE 0472-815

Low Smoke Halogen Free Flame Retardant Screened Single Core Cables WDZ-DCEVMP-100, WDZ-DCEVMP-125 1.8/3kV



A. Conductor B. Insulation C. Screen D. Sheath

Application

-Used as power and control cable for protected installations inside and outside of rail and transport vehicles, where handling and installation cost are an important factor.
-Used in control, auxillary and main circuit wiring such as cable harnesses, switchboards and control panels, driver desks etc.

Construction

Conductor

Tinned copper wires

Separator (if available)

Insulation

Low smoke halogen free flame retardant compound

Screen

Tinned copper braid

Sheath

Low smoke halogen free flame retardant compound

Electrical & Mechanical Properties

Nominal Voltage	1.8/3kV
Long-term Working Temperature	100°C (WDZ-DCEVMP-100); 125°C (WDZ-DCEVMP-125)
Lowest Operation Temperature	-40°C
Minimum Bending Radius	2 x Overall Diameter (OD≤10mm); 4 x Overall Diameter (10mm≤OD≤20mm); 6 x Overall Diameter (OD≥20mm)

Fire Performance

Flame Retardant	GB/T18380.1-2001; GB/T18380.3-2001 C
Low Corrosivity (Acidity & Conductivity)	GB/T17650.1-1998; GB/T17650.2-1998
Halogen Free	GB/T17650.1-1998; GB/T17650.2-1998
Low Smoke	GB/T17651.1-1998; GB/T17651.2-1998

WDZ-DCEVMP-100, WDZ-DCEVMP-125 1.8/3kV

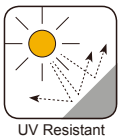
Nominal Cross-Sectional Area	Conductor Construction	Nominal Insulation Thickness	Nominal Sheath Thickness	Maximum Overall Diameter	Maximum Conductor Resistance 20°C
mm²	No/mm	mm	mm	mm	Ω/km
16	126/0.40	1.0	1.0	13.0	1.24
25	196/0.40	1.2	1.1	15.0	0.795
35	276/0.40	1.2	1.1	17.0	0.565
50	396/0.40	1.2	1.1	18.5	0.393
70	380/0.49	1.4	1.4	21.0	0.277

Chinese Standard Rolling Stock Cables

Nominal Cross-Sectional Area	Conductor Construction	Nominal Insulation Thickness	Nominal Sheath Thickness	Maximum Overall Diameter	Maximum Conductor Resistance 20°C
mm²	No/mm	mm	mm	mm	Ω/km
95	513/0.49	1.6	1.6	23.0	0.210
120	630/0.49	1.6	1.6	24.5	0.164
150	777/0.49	1.8	1.7	26.5	0.132

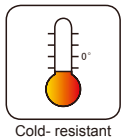

Impact Resistant


Highly Flexible


UV Resistant


Ozone Resistant


Abrasion Retardant


Cold- resistant


Resistance To Soldering Heat


Acid&Alkaline Resistant


IRM 903
Fuel Oil Resistant


IRM 902
Mineral Oil Resistant


Fire Retardant
NF C32-070-2.2(C2)
IEC60332-3-24/EN50266-2-4


Flame Retardant
NF C32-070-2.1(C1)
IEC60332-1-2/EN50265-2-1

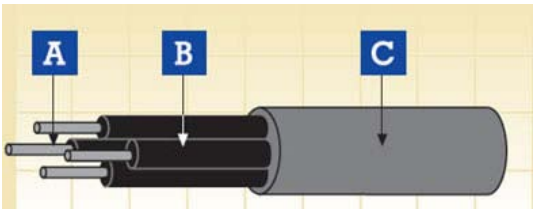

Low Toxicity
NF X70-100/NF F63 808
TM1-04/BS 6853


Low Corrosivity
IEC60754-2/EN50267-2-2/3
NF C32-074/VDE 0472-813


Low Smoke Emission
IEC 61034-2 / EN 50268-2
NF C32-073/VDE 0472-816

Zero Halogen
IEC 60754-1/EN 50267-2-1
NF C32-074//VDE 0472-815

Low Smoke Halogen Free Flame Retardant Multicore Cables WDZ-DCK-100, WDZ-DCK-125 250V, 750V



A. Conductor B. Insulation C. Sheath

Application

-Used as power and control cable for protected installations inside and outside of rail and transport vehicles, where handling and installation cost are an important factor.
-Used in control, auxillary and main circuit wiring such as cable harnesses, switchboards and control panels, driver desks etc.

Construction

Conductor
Tinned copper wires

Separator (if available)

Insulation
Low smoke halogen free flame retardant compound

Filler

Separator

Sheath
Low smoke halogen free flame retardant compound

Electrical & Mechanical Properties

Nominal Voltage	250V, 750V
Long-term Working Temperature	100°C (WDZ-DCK-100); 125°C (WDZ-DCK-125)
Lowest Operation Temperature	-40°C
Minimum Bending Radius	2 x Overall Diameter (OD≤10mm); 4 x Overall Diameter (10mm≤OD≤20mm); 6 x Overall Diameter (OD≥20mm)

Fire Performance

Flame Retardant	GB/T 18380.1-2001; GB/T 18380.3-2001 C
Low Corrosivity (Acidity & Conductivity)	GB/T17650.1-1998; GB/T17650.2-1998
Halogen Free	GB/T17650.1-1998; GB/T17650.2-1998
Low Smoke	GB/T17651.1-1998; GB/T17651.2-1998

WDZ-DCK-100, WDZ-DCK-125 250V

Number of conductor×Nominal Cross-Sectional Area	Conductor Construction	Overall Diameter	Weight	Maximum Conductor Resistance 20°C
mm²	No/mm	mm	kg/km	Ω/km
2×0.5	16/0.20	6.6	62	40.1
3×0.5	16/0.20	7.3	70	40.1

Chinese Standard Rolling Stock Cables

Number of conductor×Nominal Cross-Sectional Area	Conductor Construction	Overall Diameter	Weight	Maximum Conductor Resistance 20°C
mm²	No/mm	mm	kg/km	Ω/km
5×0.5	16/0.20	8.4	96	40.1
7×0.5	16/0.20	9.0	116	40.1
11×0.5	16/0.20	11.2	167	40.1
16×0.5	16/0.20	12.2	215	40.1
19×0.5	16/0.20	13.2	256	40.1
20×0.5	16/0.20	13.8	272	40.1
24×0.5	16/0.20	15.1	313	40.1
33×0.5	16/0.20	16.5	398	40.1
37×0.5	16/0.20	17.0	436	40.1
43×0.5	16/0.20	19.4	487	40.1
48×0.5	16/0.20	19.7	564	40.1
2×0.75	24/0.20	7.1	71	26.7
3×0.75	24/0.20	7.9	83	26.7
5×0.75	24/0.20	9.0	113	26.7
7×0.75	24/0.20	9.7	141	26.7
11×0.75	24/0.20	12.2	206	26.7
16×0.75	24/0.20	13.8	282	26.7
19×0.75	24/0.20	14.4	320	26.7
20×0.75	24/0.20	15.0	342	26.7
24×0.75	24/0.20	16.6	394	26.7
33×0.75	24/0.20	18.1	507	26.7
37×0.75	24/0.20	19.1	574	26.7
43×0.75	24/0.20	21.3	661	26.7
48×0.75	24/0.20	21.6	720	26.7
2×1.0	32/0.20	7.5	80	20.0
3×1.0	32/0.20	8.2	94	20.0
5×1.0	32/0.20	9.5	133	20.0
7×1.0	32/0.20	10.2	164	20.0
11×1.0	32/0.20	13.3	256	20.0
16×1.0	32/0.20	14.6	333	20.0
19×1.0	32/0.20	15.3	381	20.0
20×1.0	32/0.20	16.0	405	20.0
24×1.0	32/0.20	17.6	470	20.0
33×1.0	32/0.20	19.7	629	20.0
37×1.0	32/0.20	20.4	690	20.0
43×1.0	32/0.20	22.7	795	20.0
48×1.0	32/0.20	23.1	868	20.0
2×1.5	48/0.20	8.1	97	13.7
3×1.5	48/0.20	8.9	115	13.7
5×1.5	48/0.20	10.3	167	13.7
7×1.5	48/0.20	11.1	210	13.7
11×1.5	48/0.20	14.5	328	13.7
16×1.5	48/0.20	16.0	436	13.7
19×1.5	48/0.20	16.8	499	13.7
20×1.5	48/0.20	17.5	531	13.7
24×1.5	48/0.20	19.8	638	13.7
33×1.5	48/0.20	21.6	831	13.7
37×1.5	48/0.20	22.4	913	13.7
43×1.5	48/0.20	25.4	1081	13.7
48×1.5	48/0.20	25.8	1182	13.7
2×2.5	77/0.20	9.0	126	8.21
3×2.5	77/0.20	9.9	159	8.21
5×2.5	77/0.20	11.6	228	8.21
7×2.5	77/0.20	12.5	291	8.21
11×2.5	77/0.20	16.5	457	8.21
16×2.5	77/0.20	18.2	616	8.21
19×2.5	77/0.20	19.5	709	8.21
20×2.5	77/0.20	20.4	775	8.21
24×2.5	77/0.20	22.6	905	8.21
33×2.5	77/0.20	25.2	1217	8.21
37×2.5	77/0.20	26.1	1342	8.21

Number of conductor×Nominal Cross-Sectional Area	Conductor Construction	Overall Diameter	Weight	Maximum Conductor Resistance 20°C
mm²	No/mm	mm	kg/km	Ω/km
43×2.5	77/0.20	29.2	1551	8.21
48×2.5	77/0.20	29.7	1702	8.21
2×4.0	77/0.26	10.6	179	5.09
3×4.0	77/0.26	11.6	233	5.09
5×4.0	77/0.26	14.1	356	5.09
7×4.0	77/0.26	15.3	459	5.09
11×4.0	77/0.26	20.2	721	5.09
16×4.0	77/0.26	22.3	979	5.09
19×4.0	77/0.26	23.5	1132	5.09
20×4.0	77/0.26	25.1	1231	5.09
24×4.0	77/0.26	27.8	1441	5.09
33×4.0	77/0.26	30.5	1910	5.09
37×4.0	77/0.26	31.7	2111	5.09
43×4.0	77/0.26	36.6	2536	5.09
48×4.0	77/0.26	37.2	2786	5.09

WDZ-DCK-100, WDZ-DCK-125 750V

Number of conductor×Nominal Cross-Sectional Area	Conductor Construction	Overall Diameter	Weight	Maximum Conductor Resistance 20°C
mm²	No/mm	mm	kg/km	Ω/km
2×0.5	16/0.20	7.8	78	40.1
3×0.5	16/0.20	8.6	89	40.1
5×0.5	16/0.20	10.0	124	40.1
7×0.5	16/0.20	10.8	151	40.1
11×0.5	16/0.20	14.1	239	40.1
16×0.5	16/0.20	15.4	302	40.1
19×0.5	16/0.20	16.2	340	40.1
20×0.5	16/0.20	17.0	364	40.1
24×0.5	16/0.20	19.1	437	40.1
33×0.5	16/0.20	20.9	557	40.1
37×0.5	16/0.20	21.6	607	40.1
43×0.5	16/0.20	24.6	723	40.1
48×0.5	16/0.20	24.9	783	40.1
2×0.75	24/0.20	8.3	89	26.7
3×0.75	24/0.20	9.1	103	26.7
5×0.75	24/0.20	10.7	145	26.7
7×0.75	24/0.20	11.5	178	26.7
11×0.75	24/0.20	15.1	280	26.7
16×0.75	24/0.20	16.6	362	26.7
19×0.75	24/0.20	17.4	410	26.7
20×0.75	24/0.20	18.6	457	26.7
24×0.75	24/0.20	20.6	526	26.7
33×0.75	24/0.20	22.5	674	26.7
37×0.75	24/0.20	23.3	740	26.7
43×0.75	24/0.20	26.5	878	26.7
48×0.75	24/0.20	26.9	955	26.7
2×1.0	32/0.20	8.7	98	20.0
3×1.0	32/0.20	9.5	115	20.0
5×1.0	32/0.20	11.1	163	20.0
7×1.0	32/0.20	12.0	203	20.0
11×1.0	32/0.20	15.8	319	20.0
16×1.0	32/0.20	17.4	415	20.0
19×1.0	32/0.20	18.7	494	20.0
20×1.0	32/0.20	19.6	527	20.0
24×1.0	32/0.20	21.6	609	20.0
33×1.0	32/0.20	24.1	812	20.0
37×1.0	32/0.20	25.0	889	20.0
43×1.0	32/0.20	27.9	1024	20.0
48×1.0	32/0.20	28.4	1116	20.0

Chinese Standard Rolling Stock Cables

Number of conductor×Nominal Cross-Sectional Area	Conductor Construction	Overall Diameter	Weight	Maximum Conductor Resistance 20°C
mm²	No/mm	mm	kg/km	Ω/km
2×1.5	48/0.20	9.3	116	13.7
3×1.5	48/0.20	10.2	143	13.7
5×1.5	48/0.20	11.9	200	13.7
7×1.5	48/0.20	13.3	265	13.7
11×1.5	48/0.20	17.0	396	13.7
16×1.5	48/0.20	19.2	544	13.7
19×1.5	48/0.20	20.2	623	13.7
20×1.5	48/0.20	21.1	644	13.7
24×1.5	48/0.20	23.4	769	13.7
33×1.5	48/0.20	26.0	1030	13.7
37×1.5	48/0.20	27.0	1131	13.7
43×1.5	48/0.20	30.2	1305	13.7
48×1.5	48/0.20	30.7	1427	13.7
2×2.5	77/0.20	10.2	147	8.21
3×2.5	77/0.20	11.2	186	8.21
5×2.5	77/0.20	13.6	278	8.21
7×2.5	77/0.20	14.7	352	8.21
11×2.5	77/0.20	19.4	552	8.21
16×2.5	77/0.20	21.4	736	8.21
19×2.5	77/0.20	22.5	847	8.21
20×2.5	77/0.20	24.0	928	8.21
24×2.5	77/0.20	26.6	1080	8.21
33×2.5	77/0.20	29.2	1417	8.21
37×2.5	77/0.20	30.3	1561	8.21
43×2.5	77/0.20	35.0	1891	8.21
48×2.5	77/0.20	35.6	2069	8.21
2×4.0	77/0.26	11.4	193	5.09
3×4.0	77/0.26	12.5	251	5.09
5×4.0	77/0.26	15.2	384	5.09
7×4.0	77/0.26	16.5	496	5.09
11×4.0	77/0.26	21.9	784	5.09
16×4.0	77/0.26	24.6	1083	5.09
19×4.0	77/0.26	25.9	1250	5.09
20×4.0	77/0.26	27.2	1329	5.09
24×4.0	77/0.26	30.2	1557	5.09
33×4.0	77/0.26	33.2	2063	5.09
37×4.0	77/0.26	35.5	2370	5.09
43×4.0	77/0.26	39.8	2741	5.09
48×4.0	77/0.26	40.5	3011	5.09
2×10	332/0.20	18.4	430	1.95


Corona Resistant


Highly Flexible


UV Resistant


Ozone Resistant


Abrasion Retardant


Cold- resistant


Resistance To Soldering Heat


Acid&Alkaline Resistant


IRM 903
Fuel Oil Resistant


IRM 902
Mineral Oil Resistant


Fire Retardant
NF C32-070-2.2(C2)
IEC60332-3-24/EN50266-2-4


Flame Retardant
NF C32-070-2.1(C1)
IEC60332-1-2/EN50265-2-1

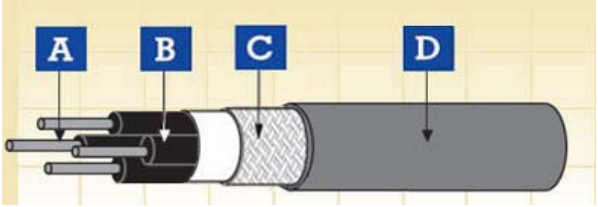

Low Toxicity
NF X70-100/NF F63 808
TM1-04/BS 6853


Low Corrosivity
IEC60754-2/EN50267-2-2/3
NF C32-074/VDE 0472-813


Low Smoke Emission
IEC 61034-2 / EN 50268-2
NF C32-073/VDE 0472-816

Zero Halogen
IEC 60754-1/EN 50267-2-1
NF C32-074//VDE 0472-815

Low Smoke Halogen Free Flame Retardant Screened Multicore Cables WDZ-DCKP-100, WDZ-DCKP-125 250V, 750V



A. Conductor B. Insulation C. Screen D. Sheath

Application

-Used as power and control cable for protected installations inside and outside of rail and transport vehicles, where handling and installation cost are an important factor.
-Used in control, auxillary and main circuit wiring such as cable harnesses, switchboards and control panels, driver desks etc.

Construction

Conductor
Tinned copper wires

Separator (if available)

Insulation
Low smoke halogen free flame retardant compound

Filler

Separator

Screen

Tinned copper braid

Sheath
Low smoke halogen free flame retardant compound

Electrical & Mechanical Properties

Nominal Voltage	250V, 750V
Long-term Working Temperature	100°C (WDZ-DCKP-100); 125°C (WDZ-DCKP-125)
Lowest Operation Temperature	-40°C
Minimum Bending Radius	2 x Overall Diameter (OD≤10mm); 4 x Overall Diameter (10mm≤OD≤20mm); 6 x Overall Diameter (OD≥20mm)

Fire Performance

Flame Retardant	GB/T 18380.1-2001; GB/T 18380.3-2001 C
Low Corrosivity (Acidity & Conductivity)	GB/T17650.1-1998; GB/T17650.2-1998
Halogen Free	GB/T17650.1-1998; GB/T17650.2-1998
Low Smoke	GB/T17651.1-1998; GB/T17651.2-1998

WDZ-DCKP-100, WDZ-DCKP-125 250V

Number of conductor×Nominal Cross-Sectional Area	Conductor Construction	Overall Diameter	Weight	Maximum Conductor Resistance 20°C
mm²	No/mm	mm	kg/km	Ω/km
2×0.5	16/0.20	7.4	97	40.1
3×0.5	16/0.20	8.1	107	40.1

Chinese Standard Rolling Stock Cables

Number of conductor×Nominal Cross-Sectional Area	Conductor Construction	Overall Diameter	Weight	Maximum Conductor Resistance 20°C
mm²	No/mm	mm	kg/km	Ω/km
5×0.5	16/0.20	9.2	139	40.1
7×0.5	16/0.20	9.8	163	40.1
11×0.5	16/0.20	12.0	228	40.1
16×0.5	16/0.20	13.0	282	40.1
19×0.5	16/0.20	14.0	327	40.1
20×0.5	16/0.20	14.6	347	40.1
24×0.5	16/0.20	15.9	396	40.1
33×0.5	16/0.20	17.3	490	40.1
37×0.5	16/0.20	17.8	530	40.1
43×0.5	16/0.20	20.4	622	40.1
48×0.5	16/0.20	20.7	701	40.1
2×0.75	24/0.20	7.9	109	26.7
3×0.75	24/0.20	8.7	122	26.7
5×0.75	24/0.20	9.8	159	26.7
7×0.75	24/0.20	10.5	191	26.7
11×0.75	24/0.20	13.0	272	26.7
16×0.75	24/0.20	14.6	356	26.7
19×0.75	24/0.20	15.2	398	26.7
20×0.75	24/0.20	15.8	424	26.7
24×0.75	24/0.20	17.4	484	26.7
33×0.75	24/0.20	18.9	607	26.7
37×0.75	24/0.20	20.1	706	26.7
43×0.75	24/0.20	22.3	809	26.7
48×0.75	24/0.20	22.6	871	26.7
2×1.0	32/0.20	8.3	120	20.0
3×1.0	32/0.20	9.0	136	20.0
5×1.0	32/0.20	10.3	182	20.0
7×1.0	32/0.20	11.0	218	20.0
11×1.0	32/0.20	14.1	327	20.0
16×1.0	32/0.20	15.4	412	20.0
19×1.0	32/0.20	16.1	464	20.0
20×1.0	32/0.20	16.8	493	20.0
24×1.0	32/0.20	18.4	567	20.0
33×1.0	32/0.20	20.7	765	20.0
37×1.0	32/0.20	21.4	831	20.0
43×1.0	32/0.20	23.7	953	20.0
48×1.0	32/0.20	24.1	1029	20.0
2×1.5	48/0.20	8.9	140	13.7
3×1.5	48/0.20	9.7	161	13.7
5×1.5	48/0.20	11.1	221	13.7
7×1.5	48/0.20	11.9	269	13.7
11×1.5	48/0.20	15.3	407	13.7
16×1.5	48/0.20	16.8	523	13.7
19×1.5	48/0.20	17.6	591	13.7
20×1.5	48/0.20	18.3	628	13.7
24×1.5	48/0.20	20.8	773	13.7
33×1.5	48/0.20	22.6	982	13.7
37×1.5	48/0.20	23.4	1068	13.7
43×1.5	48/0.20	26.4	1259	13.7
48×1.5	48/0.20	26.8	1336	13.7
2×2.5	77/0.20	9.8	176	8.21
3×2.5	77/0.20	10.7	212	8.21
5×2.5	77/0.20	12.4	291	8.21
7×2.5	77/0.20	13.3	360	8.21
11×2.5	77/0.20	17.3	549	8.21
16×2.5	77/0.20	19.0	718	8.21
19×2.5	77/0.20	20.5	865	8.21
20×2.5	77/0.20	21.4	919	8.21
24×2.5	77/0.20	23.6	1065	8.21
33×2.5	77/0.20	26.2	1395	8.21
37×2.5	77/0.20	27.1	1527	8.21

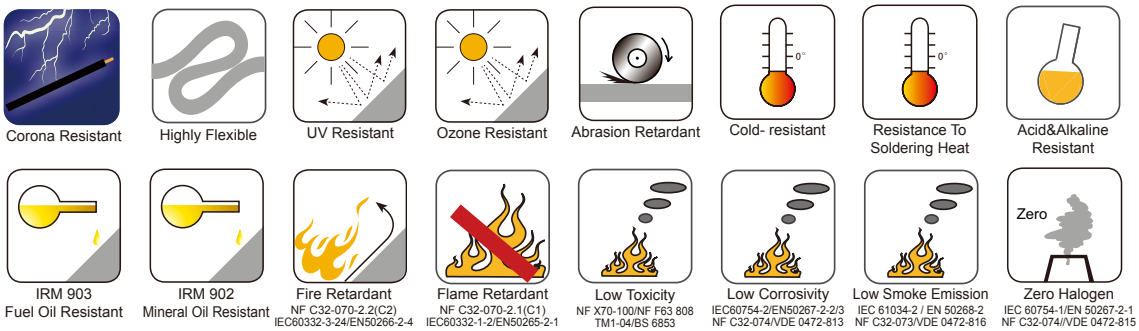
Number of conductor×Nominal Cross-Sectional Area	Conductor Construction	Overall Diameter	Weight	Maximum Conductor Resistance 20°C
mm²	No/mm	mm	kg/km	Ω/km
43×2.5	77/0.20	30.4	1800	8.21
48×2.5	77/0.20	30.9	1956	8.21
2×4.0	77/0.26	11.4	239	5.09
3×4.0	77/0.26	12.4	296	5.09
5×4.0	77/0.26	14.9	433	5.09
7×4.0	77/0.26	16.1	543	5.09
11×4.0	77/0.26	21.2	862	5.09
16×4.0	77/0.26	23.3	1137	5.09
19×4.0	77/0.26	24.5	1299	5.09
20×4.0	77/0.26	26.1	1408	5.09
24×4.0	77/0.26	28.8	1638	5.09
33×4.0	77/0.26	31.7	2173	5.09
37×4.0	77/0.26	32.9	2383	5.09
43×4.0	77/0.26	37.8	2755	5.09
48×4.0	77/0.26	38.4	3009	5.09

WDZ-DCKP-100, WDZ-DCKP-125 750V

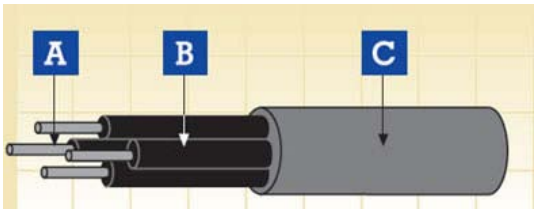
Number of conductor×Nominal Cross-Sectional Area	Conductor Construction	Overall Diameter	Weight	Maximum Conductor Resistance 20°C
mm²	No/mm	mm	kg/km	Ω/km
2×0.5	16/0.20	8.6	100	40.1
3×0.5	16/0.20	9.4	113	40.1
5×0.5	16/0.20	10.8	153	40.1
7×0.5	16/0.20	11.6	182	40.1
11×0.5	16/0.20	14.9	277	40.1
16×0.5	16/0.20	16.2	343	40.1
19×0.5	16/0.20	17.0	384	40.1
20×0.5	16/0.20	17.8	410	40.1
24×0.5	16/0.20	20.1	509	40.1
33×0.5	16/0.20	21.9	636	40.1
37×0.5	16/0.20	22.6	689	40.1
43×0.5	16/0.20	25.6	808	40.1
48×0.5	16/0.20	25.9	870	40.1
2×0.75	24/0.20	9.1	112	26.7
3×0.75	24/0.20	9.9	128	26.7
5×0.75	24/0.20	11.5	175	26.7
7×0.75	24/0.20	12.3	211	26.7
11×0.75	24/0.20	15.9	319	26.7
16×0.75	24/0.20	17.4	406	26.7
19×0.75	24/0.20	18.2	457	26.7
20×0.75	24/0.20	19.6	525	26.7
24×0.75	24/0.20	21.6	603	26.7
33×0.75	24/0.20	23.5	759	26.7
37×0.75	24/0.20	24.3	828	26.7
43×0.75	24/0.20	27.5	970	26.7
48×0.75	24/0.20	27.9	1048	26.7
2×1.0	32/0.20	9.5	123	20.0
3×1.0	32/0.20	10.3	141	20.0
5×1.0	32/0.20	11.9	195	20.0
7×1.0	32/0.20	12.8	238	20.0
11×1.0	32/0.20	16.6	361	20.0
16×1.0	32/0.20	18.2	462	20.0
19×1.0	32/0.20	19.7	563	20.0
20×1.0	32/0.20	20.6	600	20.0
24×1.0	32/0.20	22.6	690	20.0
33×1.0	32/0.20	25.1	894	20.0
37×1.0	32/0.20	26.0	974	20.0
43×1.0	32/0.20	28.9	1121	20.0
48×1.0	32/0.20	29.4	1215	20.0

Chinese Standard Rolling Stock Cables

Number of conductor×Nominal Cross-Sectional Area	Conductor Construction	Overall Diameter	Weight	Maximum Conductor Resistance 20°C
mm²	No/mm	mm	kg/km	Ω/km
2×1.5	48/0.20	10.0	143	13.7
3×1.5	48/0.20	11.0	172	13.7
5×1.5	48/0.20	12.7	235	13.7
7×1.5	48/0.20	14.1	299	13.7
11×1.5	48/0.20	17.8	442	13.7
16×1.5	48/0.20	20.2	615	13.7
19×1.5	48/0.20	21.2	698	13.7
20×1.5	48/0.20	22.1	744	13.7
24×1.5	48/0.20	24.4	858	13.7
33×1.5	48/0.20	27.0	1120	13.7
37×1.5	48/0.20	28.0	1224	13.7
43×1.5	48/0.20	31.4	1455	13.7
48×1.5	48/0.20	31.9	1580	13.7
2×2.5	77/0.20	11.0	180	8.21
3×2.5	77/0.20	12.0	218	8.21
5×2.5	77/0.20	14.4	314	8.21
7×2.5	77/0.20	15.5	391	8.21
11×2.5	77/0.20	20.4	623	8.21
16×2.5	77/0.20	22.4	816	8.21
19×2.5	77/0.20	23.5	933	8.21
20×2.5	77/0.20	25.0	1011	8.21
24×2.5	77/0.20	27.6	1173	8.21
33×2.5	77/0.20	30.4	1562	8.21
37×2.5	77/0.20	31.5	1712	8.21
43×2.5	77/0.20	36.2	2033	8.21
48×2.5	77/0.20	36.8	2213	8.21
2×4.0	77/0.26	12.2	228	5.09
3×4.0	77/0.26	13.3	288	5.09
5×4.0	77/0.26	16.0	424	5.09
7×4.0	77/0.26	17.3	540	5.09
11×4.0	77/0.26	22.9	867	5.09
16×4.0	77/0.26	25.6	1168	5.09
19×4.0	77/0.26	26.9	1340	5.09
20×4.0	77/0.26	28.2	1424	5.09
24×4.0	77/0.26	31.4	1707	5.09
33×4.0	77/0.26	34.4	2230	5.09
37×4.0	77/0.26	36.7	2514	5.09
43×4.0	77/0.26	41.0	2904	5.09
48×4.0	77/0.26	41.7	3177	5.09



Railway Passenger DC Power Connector Cables
WDZ-DCK-125 750V



A. Conductor B. Insulation C. Sheath

Application

-Used as power and control cable for protected installations inside and outside of rail and transport vehicles, where handling and installation cost are an important factor.
-Used in control, auxillary and main circuit wiring such as cable harnesses, switchboards and control panels, driver desks etc.

Construction

Conductor
Tinned copper wires

Separator (if available)

Insulation
Low smoke halogen free flame retardant compound

Filler

Separator

Sheath
Low smoke halogen free flame retardant compound

Electrical & Mechanical Properties

Nominal Voltage	750V
Long-term Working Temperature	125°C
Lowest Operation Temperature	-40°C
Minimum Bending Radius	2 x Overall Diameter (OD≤10mm); 4 x Overall Diameter (10mm≤OD≤20mm); 6 x Overall Diameter (OD≥20mm)

Fire Performance

Flame Retardant	GB/T 18380.1-2001; GB/T 18380.3-2001 C
Low Corrosivity (Acidity & Conductivity)	GB/T17650.1-1998; GB/T17650.2-1998
Halogen Free	GB/T17650.1-1998; GB/T17650.2-1998
Low Smoke	GB/T17651.1-1998; GB/T17651.2-1998

WDZ-DCK-125 750V

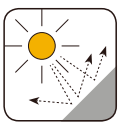
Number of conductor×Nominal Cross-Sectional Area	Conductor Construction	Overall Diameter	Weight	Maximum Conductor Resistance 20°C
mm²	No/mm	mm	kg/km	Ω/km
2×6	189/0.20	14.1	289	3.39
3×6	189/0.20	15.0	375	3.39
4×6	189/0.20	16.4	470	3.39
3×10	322/0.20	19.3	603	1.95

Chinese Standard Rolling Stock Cables

Number of conductor×Nominal Cross-Sectional Area	Conductor Construction	Overall Diameter	Weight	Maximum Conductor Resistance 20°C
mm²	No/mm	mm	kg/km	Ω/km
4×10	322/0.20	21.2	761	1.95
2×16	513/0.20	20.6	630	1.24
3×16	513/0.20	22.1	850	1.24
4×16	513/0.20	24.3	1079	1.24
2×25	798/0.20	24.0	887	0.79
3×25	798/0.20	25.6	1198	0.79
4×25	798/0.20	28.6	1554	0.79
2×35	1121/0.20	26.6	1141	0.56
3×35	1121/0.20	28.5	1580	0.56
4×35	1121/0.20	31.7	2047	0.56
2×50	703/0.30	31.0	1573	0.393
3×50	703/0.30	33.1	2160	0.393
4×50	703/0.30	36.7	2819	0.393


Corona Resistant

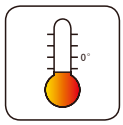

Highly Flexible


UV Resistant


Ozone Resistant


Abrasion Retardant


Cold- resistant


Resistance To Soldering Heat


Acid&Alkaline Resistant


IRM 903
Fuel Oil Resistant


IRM 902
Mineral Oil Resistant


Fire Retardant
NF C32-070-2.2(C2)
IEC60332-3-24/EN50266-2-4


Flame Retardant
NF C32-070-2.1(C1)
IEC60332-1-2/EN50265-2-1

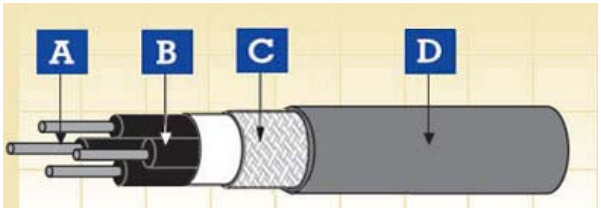

Low Toxicity
NF X70-100/NF F63 808
TM1-04/BS 6853


Low Corrosivity
IEC60754-2/EN50267-2-2/3
NF C32-074/VDE 0472-813


Low Smoke Emission
IEC 61034-2 / EN 50268-2
NF C32-073/VDE 0472-816

Zero Halogen
IEC 60754-1/EN 50267-2-1
NF C32-074//VDE 0472-815

Screened Railway Passenger DC Power Connector Cables WDZ-DCKP-125 750V



A. Conductor B. Insulation C. Screen D. Sheath

Application

-Used as power and control cable for protected installations inside and outside of rail and transport vehicles, where handling and installation cost are an important factor.
-Used in control, auxillary and main circuit wiring such as cable harnesses, switchboards and control panels, driver desks etc.

Construction

Conductor
Tinned copper wires

Separator (if available)

Insulation
Low smoke halogen free flame retardant compound

Filler

Separator

Screen

Tinned copper braid

Sheath
Low smoke halogen free flame retardant compound

Electrical & Mechanical Properties

Nominal Voltage	750V
Long-term Working Temperature	125°C
Lowest Operation Temperature	-40°C
Minimum Bending Radius	2 x Overall Diameter (OD≤10mm); 4 x Overall Diameter (10mm≤OD≤20mm); 6 x Overall Diameter (OD≥20mm)

Fire Performance

Flame Retardant	GB/T 18380.1-2001; GB/T 18380.3-2001 C
Low Corrosivity (Acidity & Conductivity)	GB/T17650.1-1998; GB/T17650.2-1998
Halogen Free	GB/T17650.1-1998; GB/T17650.2-1998
Low Smoke	GB/T17651.1-1998; GB/T17651.2-1998

Chinese Standard Rolling Stock Cables

WDZ-DCK-125 750V

Number of conductor×Nominal Cross-Sectional Area	Conductor Construction	Overall Diameter	Weight	Maximum Conductor Resistance 20°C
mm²	No/mm	mm	kg/km	Ω/km
2×6	189/0.20	14.9	361	3.39
3×6	189/0.20	15.8	452	3.39
4×6	189/0.20	17.2	554	3.39
3×10	322/0.20	20.3	729	1.95
4×10	322/0.20	22.4	912	1.95
2×16	513/0.20	21.6	764	1.24
3×16	513/0.20	23.1	994	1.24
4×16	513/0.20	25.5	1252	1.24
2×25	798/0.20	25.2	1056	0.79
3×25	798/0.20	26.6	1367	0.79
4×25	798/0.20	29.8	1780	0.79
2×35	1121/0.20	27.8	1329	0.56
3×35	1121/0.20	29.5	1768	0.56
4×35	1121/0.20	32.9	2297	0.56
2×50	703/0.30	32.2	1819	0.393
3×50	703/0.30	34.5	2439	0.393
4×50	703/0.30	38.1	3130	0.393


Corona Resistant


Highly Flexible


UV Resistant


Ozone Resistant


Abrasion Retardant


Cold- resistant


Resistance To Soldering Heat


Acid&Alkaline Resistant


IRM 903
Fuel Oil Resistant


IRM 902
Mineral Oil Resistant


Fire Retardant
NF C32-070-2.2(C2)
IEC60332-3-24/EN50266-2-4


Flame Retardant
NF C32-070-2.1(C1)
IEC60332-1-2/EN50265-2-1

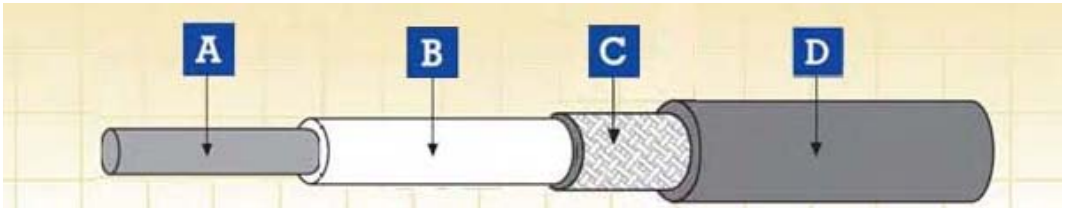

Low Toxicity
NF X70-100/NF F63 808
TM1-04/BS 6853


Low Corrosivity
IEC60754-2/EN50267-2-2/3
NF C32-074/VDE 0472-813


Low Smoke Emission
IEC 61034-2 / EN 50268-2
NF C32-073/VDE 0472-816

Zero Halogen
IEC 60754-1/EN 50267-2-1
NF C32-074//VDE 0472-815

Non-halogen Flame-retardant Electromagnetic Shield Power Cables WD-PWYYRP-125 1.8/3 kV



A. Conductor B. Insulation C. Screen D. Sheath

Application

-Used as power and control cable for protected installations inside and outside of rail and transport vehicles, where handling and installation cost are an important factor.
-Used in control, auxillary and main circuit wiring such as cable harnesses, switchboards and control panels, driver desks etc.

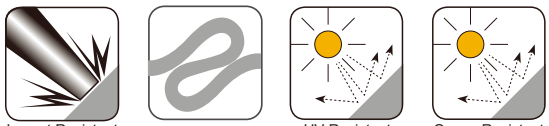
Construction

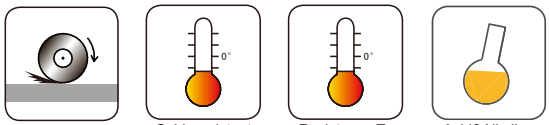
Conductor
Soft tinned annealed brass wires

Insulation
125°C non-halogen flame-retardant compound

Screen
Tinned copper wire braid

Sheath
125°C non-halogen flame-retardant compound.





Electrical & Mechanical Properties

Nominal Voltage	1.8/3 kV
Long-term Working Temperature	125°C
Short Circuit Temperature (5s)	250°C
Long-term Working Ambient Temperature	-40°C/+70°C
Minimum Bending Radius	5 x Overall Diameter

Fire Performance

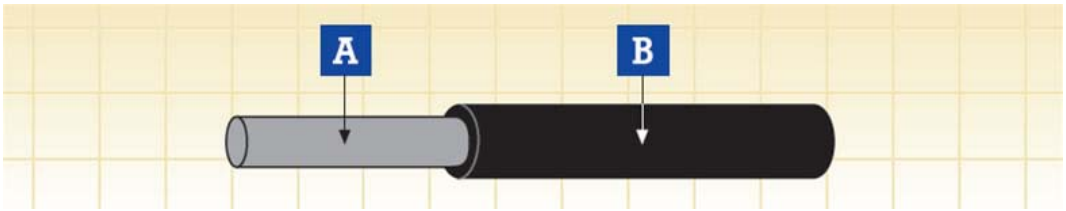
Flame Retardant	GB 12666.2-1990 DZ-1
Low Corrosivity (Acidity & Conductivity)	GB/T17650.1-1998; GB/T17650.2-1998
Halogen Free	GB/T17650.1-1998; GB/T17650.2-1998
Low Smoke	GB/T17651.1-1998; GB/T17651.2-1998

WD-PWYYRP-125 1.8/3 kV

Nominal Cross-Sectional Area	Stranding	Insulation Thickness	Sheath Thickness	Maximum Overall Diameter	Weight	Maximum Conductor Resistance 20°C
mm²	No/mm	mm	mm	mm	kg/km	Ω/km
35	1107/0.2	1.8	1.2	16.5	666	0.393
70	2220/0.2	1.9	1.5	21.0	1172	0.210

IRM 903 Fuel Oil Resistant
IRM 902 Mineral Oil Resistant
Fire Retardant NF C32-070-2.2(C2) IEC60332-3-24/EN50266-2-4
Flame Retardant NF C32-070-2.1(C1) IEC60332-1-2/EN50265-2-1
Low Toxicity NF X70-100/NF F63 808 TM1-04/BS 6853
Low Corrosivity IEC60754-2/EN50267-2-2/3 NF C32-074/VDE 0472-813
Low Smoke Emission IEC 61034-2 / EN 50268-2 NF C32-073/VDE 0472-816
Zero Halogen IEC 60754-1/EN 50267-2-1 NF C32-074//VDE 0472-815

Silicon Rubber Cables
YGC-KBR 1.5 kV



A. Conductor B. Insulation

Application

-Used as power and control cable for protected installations inside and outside of rail and transport vehicles, where handling and installation cost are an important factor.
-Used in control, auxillary and main circuit wiring such as cable harnesses, switchboards and control panels, driver desks etc.

Construction

Conductor
Tinned annealed copper wires

Insulation
High tear strength silicon rubber

Electrical & Mechanical Properties

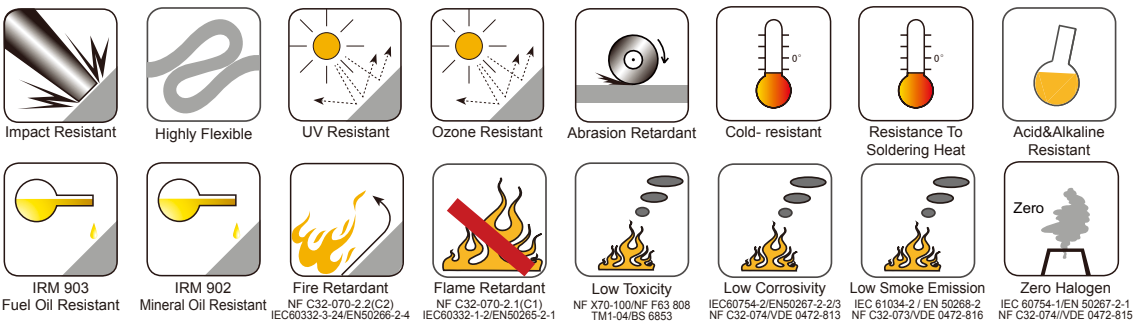
Nominal Voltage	1500V
Long-term Working Temperature	150°C
Short Circuit Temperature (5s)	300°C
Ambient Temperature	-50°C/+150°C
Minimum Bending Radius	3 x Overall Diameter

Fire Performance

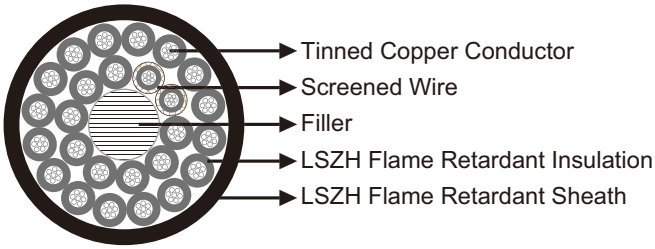
Flame Retardant	GB/T18380.1-2001 DZ-1
Low Corrosivity (Acidity & Conductivity)	GB/T17650.1-1998; GB/T17650.2-1998
Halogen Free	GB/T17650.1-1998; GB/T17650.2-1998
Low Smoke	GB/T17651.1-1998; GB/T17651.2-1998

YGC-KBR 1.5 kV

Nominal Cross-Sectional Area	Stranding	Insulation Thickness	Maximum Overall Diameter	Weight	Maximum Conductor Resistance 20°C
mm²	No/mm	mm	mm	kg/km	Ω/km
50	999/0.25	3.5	18.5	911	0.393
95	1936/0.25	3.5	22.5	1485	0.210



Low Smoke Halogen Free Flame Retardant Rolling Stock Multicore Jumper Cables WDZ-DCKPJ-100 300/500V



Application

-Used as power and control cable for protected installations inside and outside of rail and transport vehicles, where handling and installation cost are an important factor.
-Used in control, auxillary and main circuit wiring such as cable harnesses, switchboards and control panels, driver desks etc.

Construction

Unscreened Conductors

Tinned copper wires with low smoke halogen free flame retardant insulation

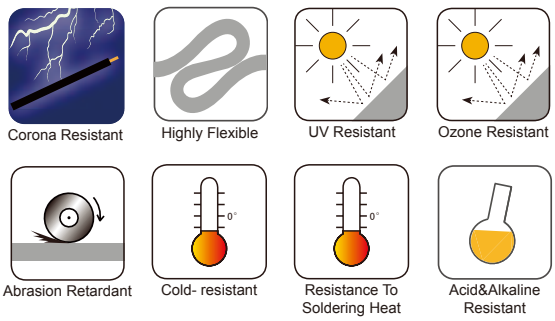
Screened Wires

2×1mm² tinned copper wires with low smoke halogen free flame retardant insulation and screen.

Filler

Sheath

Low smoke halogen free flame retardant compound



Electrical & Mechanical Properties

Nominal Voltage	300/500V
Long-term Working Temperature	100°C
Lowest Operation Temperature	-25°C
Minimum Bending Radius	6 x Overall Diameter

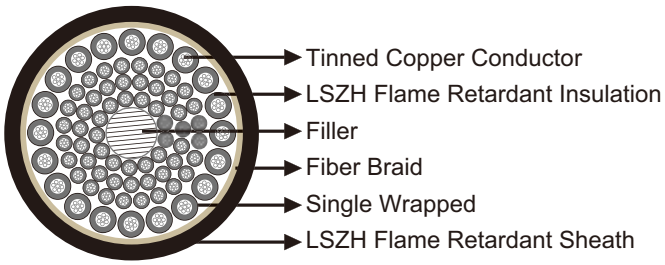
Fire Performance

Flame Retardant	GB/T 18380.1-2001; GB/T 18380.3-2001 C
Low Corrosivity (Acidity & Conductivity)	GB/T17650.1-1998; GB/T17650.2-1998
Halogen Free	GB/T17650.1-1998; GB/T17650.2-1998
Low Smoke	GB/T17651.1-1998; GB/T17651.2-1998

WDZ-DCKPJ-100

Number of conductor×Nominal Cross-Sectional Area	Conductor Construction	Nominal Insulation Thickness	Nominal Sheath Thickness	Nominal Overall Diameter	Maximum Conductor Resistance 20°C
mm²	No/mm	mm	mm	mm	Ω/km
24×1.5+2×1	24×48/0.20+2×32/0.20	0.8/0.6	2.0	25.3	13.7/20.0

Low Smoke Halogen Free Flame Retardant Rolling Stock Multicore Jumper Cables WDZ-DCKT-P-125 750V 20×3.5+56×1.25



Application

-Used as power and control cable for protected installations inside and outside of rail and transport vehicles, where handling and installation cost are an important factor.
-Used in control, auxillary and main circuit wiring such as cable harnesses, switchboards and control panels, driver desks etc.

Construction

Conductor
Tinned copper wires

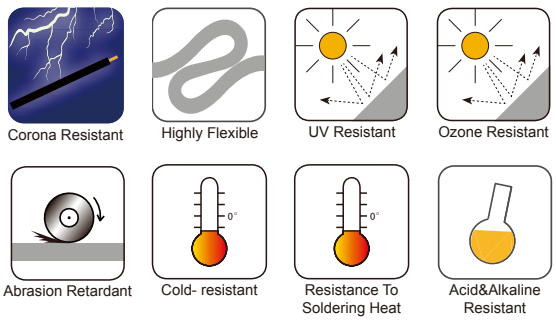
Insulation
Low smoke halogen free flame retardant compound

Single Wrapped

Filler

Fiber Braid

Sheath
Low smoke halogen free flame retardant compound



Electrical & Mechanical Properties

Nominal Voltage	750V
Long-term Working Temperature	125°C
Lowest Operation Temperature	-25°C
Minimum Bending Radius	6 x Overall Diameter

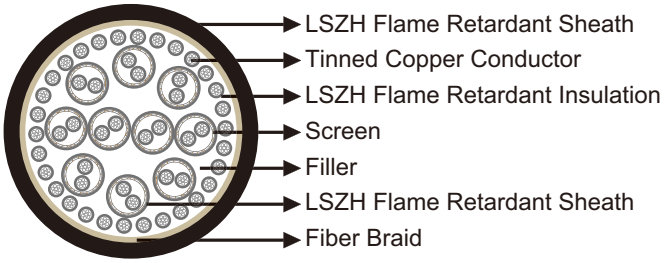
Fire Performance

Flame Retardant	GB/T 18380.1-2001; GB/T 18380.3-2001 C
Low Corrosivity (Acidity & Conductivity)	GB/T17650.1-1998; GB/T17650.2-1998
Halogen Free	GB/T17650.1-1998; GB/T17650.2-1998
Low Smoke	GB/T17651.1-1998; GB/T17651.2-1998

WDZ-DCKT-P-125

Number of conductor×Nominal Cross-Sectional Area	Conductor Construction	Nominal Insulation Thickness	Nominal Sheath Thickness	Nominal Overall Diameter	Maximum Conductor Resistance 20°C
mm²	No/mm	mm	mm	mm	Ω/km
20×3.5+56×1.25	20×66/0.26+56×50/0.18	1.0/0.8	3.3	49	5.38/15.5

Low Smoke Halogen Free Flame Retardant Rolling Stock Multicore Jumper Cables WDZ-DCKT-P-125 750V 10×2×1.25+30×1.25



Application

-Used as power and control cable for protected installations inside and outside of rail and transport vehicles, where handling and installation cost are an important factor.
-Used in control, auxillary and main circuit wiring such as cable harnesses, switchboards and control panels, driver desks etc.

Construction

Single Conductors

Tinned copper wires with low smoke halogen free flame retardant insulation and single wrapping.

Twisted Pairs

Consisted of tinned copper wires, low smoke halogen free flame retardant insulation, wrapping, screen and low smoke halogen free flame retardant sheath

Filler

Fiber Braid

Outer Sheath

Low smoke halogen free flame retardant compound


Corona Resistant

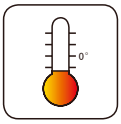

Highly Flexible


UV Resistant


Ozone Resistant


Abrasion Retardant


Cold- resistant


Resistance To Soldering Heat


Acid&Alkaline Resistant

Electrical & Mechanical Properties

Nominal Voltage	750V
Long-term Working Temperature	125°C
Lowest Operation Temperature	-25°C
Minimum Bending Radius	6 x Overall Diameter

Fire Performance

Flame Retardant	GB/T 18380.1-2001; GB/T 18380.3-2001 C
Low Corrosivity (Acidity & Conductivity)	GB/T17650.1-1998; GB/T17650.2-1998
Halogen Free	GB/T17650.1-1998; GB/T17650.2-1998
Low Smoke	GB/T17651.1-1998; GB/T17651.2-1998

WDZ-DCKT-P-125

Number of conductor×Nominal Cross-Sectional Area	Conductor Construction	Nominal Insulation Thickness	Nominal Inner Sheath Thickness	Nominal Outer Sheath Thickness	Nominal Overall Diameter	Maximum Conductor Resistance 20°C
mm²	No/mm	mm	mm	mm	mm	Ω/km
10×2×1.25+30×1.25	10×2×50/0.18+30×50/0.18	0.7	0.8	3.3	49	15.5


IRM 903
Fuel Oil Resistant


IRM 902
Mineral Oil Resistant


Fire Retardant
NF C32-070-2.2(C2)
IEC60332-3-24/EN50266-2-4


Flame Retardant
NF C32-070-2.1(C1)
IEC60332-1-2/EN50265-2-1

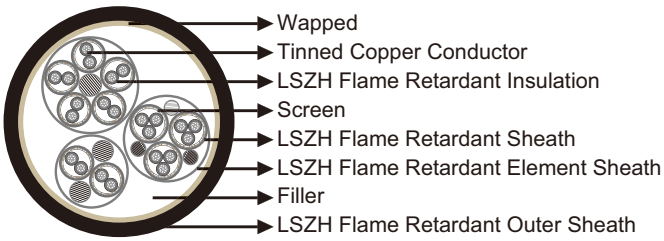

Low Toxicity
NF X70-100/NF F63 808
TM1-04/BS 6853


Low Corrosivity
IEC60754-2/EN50267-2-2/3
NF C32-074/VDE 0472-813


Low Smoke Emission
IEC 61034-2 / EN 50268-2
NF C32-073/VDE 0472-816

Zero Halogen
IEC 60754-1/EN 50267-2-1
NF C32-074//VDE 0472-815

Low Smoke Halogen Free Flame Retardant Rolling Stock Multicore Jumper Cables WDZ-DCKT-P-125 750V 2×2×1.25+5×2×1.25+3×3×1.25



Application

-Used as power and control cable for protected installations inside and outside of rail and transport vehicles, where handling and installation cost are an important factor.
-Used in control, auxillary and main circuit wiring such as cable harnesses, switchboards and control panels, driver desks etc.

Construction

5×2×50/0.18mm² &2×2×1.25mm² Element

Tinned copper wires with low smoke halogen free flame retardant insulation. Two insulated wires are twisted together to form a pair. Every pair is screened and sheathed. Pairs are stranded with fillers and covered with an element sheath.

3×3×1.25mm² Element

Tinned copper wires with low smoke halogen free flame retardant insulation. There insulated wires are twisted together to form a triple. Every triple is screened and sheathed. Triples are stranded with fillers and covered with an element sheath.

Filler

Wrapped

Outer Sheath

Low smoke halogen free flame retardant compound.


Corona Resistant


Highly Flexible


UV Resistant


Ozone Resistant


Abrasion Retardant


Cold- resistant


Resistance To Soldering Heat


Acid&Alkaline Resistant

Electrical & Mechanical Properties

Nominal Voltage	750V
Long-term Working Temperature	125°C
Lowest Operation Temperature	-25°C
Minimum Bending Radius	6 x Overall Diameter

Fire Performance

Flame Retardant	GB/T 18380.1-2001; GB/T 18380.3-2001 C
Low Corrosivity (Acidity & Conductivity)	GB/T17650.1-1998; GB/T17650.2-1998
Halogen Free	GB/T17650.1-1998; GB/T17650.2-1998
Low Smoke	GB/T17651.1-1998; GB/T17651.2-1998

WDZ-DCKT-P-125

Number of conductor×Nominal Cross-Sectional Area	Conductor Construction	Nominal Insulation Thickness	Nominal Inner Sheath Thickness	Nominal Outer Sheath Thickness	Nominal Overall Diameter
mm²	No/mm	mm	mm	mm	mm
2×2×1.25+5×2×1.25 +3×3×1.25	2×2×50/0.18+5×2×50/0.1 8+3×3×50/0.18	0.8	0.8/1.0	3.5	56


IRM 903
Fuel Oil Resistant


IRM 902
Mineral Oil Resistant


Fire Retardant
NF C32-070-2.2(C2)
IEC60332-3-24/EN50266-2-4


Flame Retardant
NF C32-070-2.1(C1)
IEC60332-1-2/EN50265-2-1

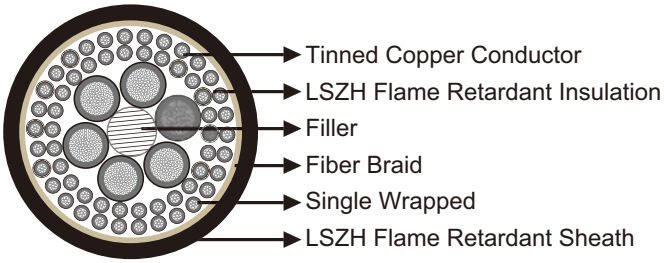

Low Toxicity
NF X70-100/NF F63 808
TM1-04/BS 6853


Low Corrosivity
IEC60754-2/EN50267-2-2/3
NF C32-074/VDE 0472-813


Low Smoke Emission
IEC 61034-2 / EN 50268-2
NF C32-073/VDE 0472-816

Zero Halogen
IEC 60754-1/EN 50267-2-1
NF C32-074//VDE 0472-815

Low Smoke Halogen Free Flame Retardant Rolling Stock Multicore Jumper Cables WDZ-DCKT-P-125 750V 6×22+48×1.25+8×1.25P



Application

-Used as power and control cable for protected installations inside and outside of rail and transport vehicles, where handling and installation cost are an important factor.
-Used in control, auxillary and main circuit wiring such as cable harnesses, switchboards and control panels, driver desks etc.

Construction

Conductor
Tinned copper wires

Insulation
Low smoke halogen free flame retardant compound

Single Wrapped

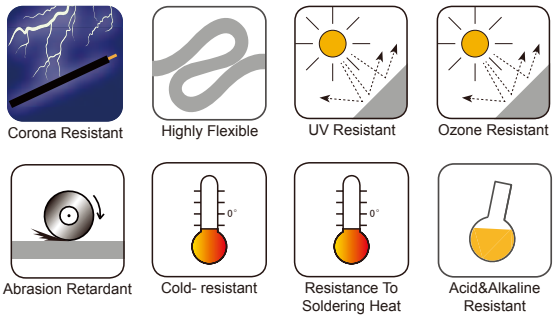
Screen

Filler

Wrapped

Fiber Braid

Outer Sheath
Low smoke halogen free flame retardant compound



Electrical & Mechanical Properties

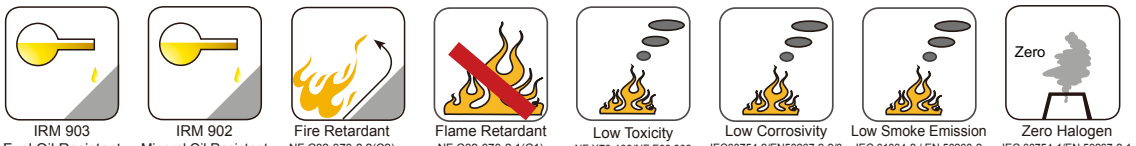
Nominal Voltage	750V
Long-term Working Temperature	125°C
Lowest Operation Temperature	-25°C
Minimum Bending Radius	6 x Overall Diameter

Fire Performance

Flame Retardant	GB/T 18380.1-2001; GB/T 18380.3-2001 C
Low Corrosivity (Acidity & Conductivity)	GB/T17650.1-1998; GB/T17650.2-1998
Halogen Free	GB/T17650.1-1998; GB/T17650.2-1998
Low Smoke	GB/T17651.1-1998; GB/T17651.2-1998

WDZ-DCKT-P-125

Number of conductor×Nominal Cross-Sectional Area	Conductor Construction	Nominal Insulation Thickness	Nominal Outer Sheath Thickness	Nominal Overall Diameter
mm²	No/mm	mm	mm	mm
6×22+48×1.25+8×1.25P	6×418/0.26+48×48/0.18+3/0.25+8×48/0.18+3/0.25	1.2/0.8	4.0	53



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