SKARB

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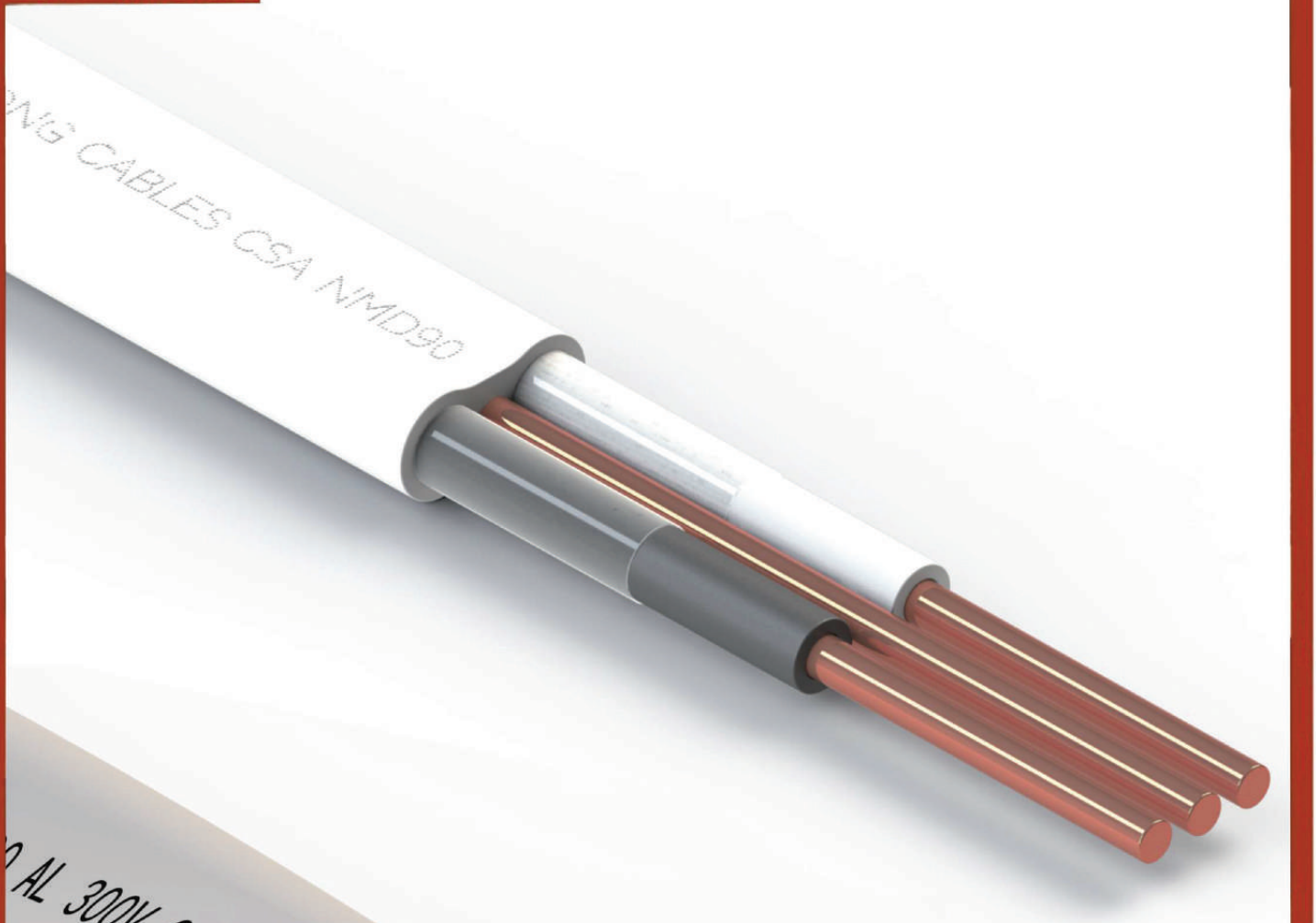

NMD90 Copper

Non-metallic Sheathed Cable, 300V;
T90 Nylon or RW90 Insulation, PVC Jacket, Copper, Building Wire

Copper Conductors
300V / -40°C MIN
90°C MAX
PVC / Nylon Insulation
PVC Jacket

Application:

NMD90 cables may be used for both exposed work in dry locations or concealed work in dry or damp locations.The maximum allowable conductor temperature is 90˚C. The minimum recommended installation temperature is -25˚C or -40˚C for two-conductor cables and -25˚C for three-conductor cables (with suitable handling procedures). Material should be properly stored above 0˚C for 24 hours prior to installation.

Structure:

1.**Conductor:** Annealed copper conductors—compressed standing for stranded conductors

2.**Insulation:** PVC insulation and nylon covering or Cross-linked Polyethylene (XLPE)

3.**Overall Jacket:** PVC, Heat and moisture-resistant, flame retardant FT1.

Standard: CSA C22.2 No. 48 (non-metallic sheathed cable)

cUL File No.: E487898 **CSA file No.:** 271587 **Voltage:** 300V

Working temperature: -40°C/ -25°C MIN, 90°C MAX

Performance: FT-1 Flame retardant; Heat and moisture-resistant, SUN

Printing: HT CABLES CSA 271587 14AWG 2C NMD90 NYLON CABLE FT1 300V (-25℃) YEAR ****m

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Jacket Color:

- ○ ·WHITE - General Residential Wiring
- ·RED - 2 Black and Red conductors
- ·ORANGE - No. 10 AWG General Residential Wiring
- ·YELLOW - No. 12 AWG General Residential Wiring
- ·BLUE - No. 14 AWG - 2 black and white conductors

Technical data:

Conductor					Grounding Wire		Jacket Thickness	Cable Dimensions	Weight	Max. DC resistance at 20C
Size AWG	NO.	No. of strands	Insulation Thickness	Nylon Thickness	Size (AWG)	No. of Strands				
			mm	mm			mm	mm	kg/km	(Ω/km)
14	2	1	0.76	0.13	14	1	0.76	4.9 × 9.9	103.8	8.62
12	2	1	0.76	0.13	14	1	0.76	5.3 × 11.2	131.5	5.43
10	2	1	0.76	0.13	12	1	0.76	5.9 × 12.8	185.3	3.41
8	2	7	0.89	0.16	10	1	1.14	8.1 × 16.4	314.6	2.14
6	2	7	1.14	0.20	8	7	1.14	9.6 × 20.2	477.2	1.35
14	3	1	0.76	0.13	14	1	0.76	8.8	132.9	8.62
12	3	1	0.76	0.13	14	1	0.76	9.8	173.9	5.43
10	3	1	0.76	0.13	12	1	0.76	11.0	247.5	3.41
8	3	7	0.89	0.16	10	1	1.14	14.8	414.1	2.14
6	3	7	1.14	0.20	8	7	1.14	18.1	631.4	1.36
4	3	7	1.14	0.20	8	7	1.52	21.4	917.3	0.848
3	3	7	1.14	0.20	6	7	2.03	24.1	1,188.0	0.673
2	3	7	1.14	0.20	6	7	2.03	25.8	1,400.9	0.534

All dimensions are nominal and subject to normal manufacturing tolerances.

NMD90 Aluminum

Non-metallic Sheathed Cable, 300V;
T90 Nylon or RW90 Insulation, PVC Jacket, Aluminum, Building Wire

Aluminum Conductors
300V / -40°C MIN
90°C MAX
XLPE Insulation
PVC Jacket

Application:

NMD90 cables may be used for both exposed work in dry locations or concealed work in dry or damp locations.The maximum allowable conductor temperature is 90°C. The minimum recommended installation temperature is -25°C or -40°C for two-conductor cables and -25°C for three-conductor cables (with suitable handling procedures). Material should be properly stored above 0°C for 24 hours prior to installation.

Structure:

1.**Conductor:** Aluminum Alloy 8000 series ACM with AL grounding wire
2.**Insulation:** PVC insulation and nylon covering or Cross-linked Polyethylene (XLPE)
3.**Insulation color:** Black, red and white for 3 conductor
4.**Jacket:** PVC, Heat and moisture-resistant, flame retardant FT1.

Standard: CSA C22.2 No. 48 (non-metallic sheathed cable)

cUL File No.: E487898 **CSA file No.:** 271587 **Voltage:** 300V

Working temperature: -40°C/ -25°C MIN, **90°C** MAX

Performance: FT-1 Flame retardant; Heat and moisture-resistant

Printing: HT CABLES CSA 271587 ***AWG ***C NMD90 NYLON CABLE FT1 300V (-25℃) YEAR ****m

Jacket Color: ·Grey

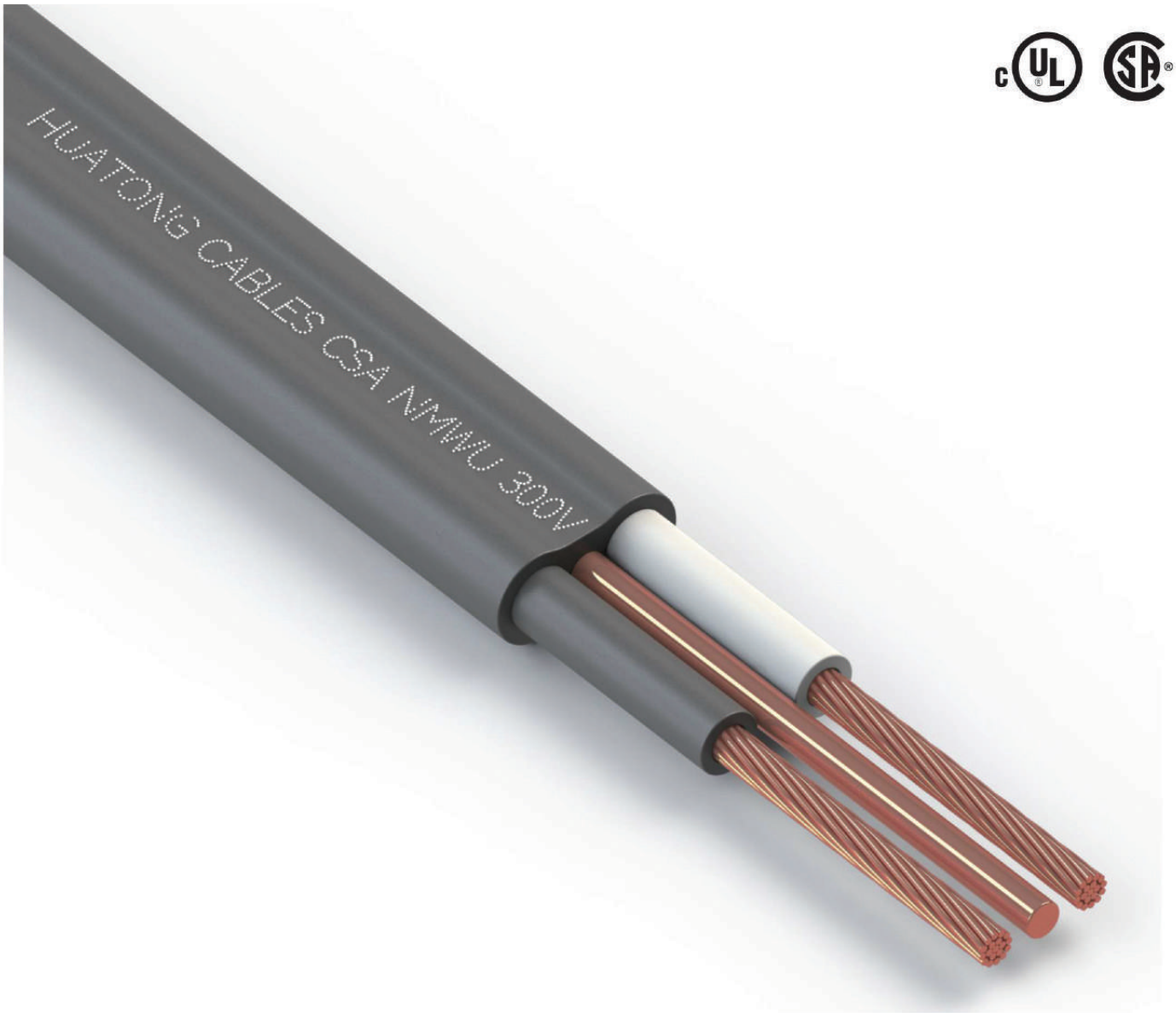
Technical data:

Conductor					Grounding Wire		Jacket Thickness	Cable Dimensions	Weight	Max. DC resistance at 20C
Size AWG	NO.	No. of strands	Insulation Thickness	Nylon Thickness	Size (AWG)	No. of Strands				
			mm	mm			mm	mm	kg/km	(Ω/km)
8	3	7	0.89	0.16	10	1	1.14	14.8	231.8	3.52
6	3	7	1.14	0.20	8	7	1.14	18.1	337.6	2.21
4	3	7	1.14	0.20	8	7	1.52	21.4	475.6	1.39
3	3	7	1.14	0.20	6	7	2.03	24.1	614.7	1.1
2	3	7	1.14	0.20	6	7	2.03	25.8	701.2	0.875
8	4	7	0.89	0.16	10	1	1.14	14.8	285.9	3.52
6	4	7	1.14	0.20	8	7	1.14	18.1	421.4	2.21
4	4	7	1.14	0.20	8	7	1.52	21.4	591.4	1.39
3	4	7	1.14	0.20	6	7	2.03	24.1	760.7	1.1
2	4	7	1.14	0.20	6	7	2.03	25.8	870.6	0.875

All dimensions are nominal and subject to normal manufacturing tolerances.

NMWU

Non-metallic Sheathed Cable, 300V, CU, PVC or XLPE, PVC



Copper Conductors
300V / -40°C MIN
60°C MAX
PVC or XLPE Insulation
PVC Jacket

Application:

NWMU cables may be used for underground installations, including direct burial. It may also be used for environments exposed to the weather in dry and wet locations. The maximum allowable conductor temperature is 60°C. The minimum recommended installation temperature is -40°C for two-conductor cables (sizes AWG 14 to AWG 6) and -25°C for all other sizes. Material should be properly stored above 0°C for 24 hours prior to installation.

Structure:

1.Conductor: Annealed copper conductors with compressed standing for stranded conductors

2.Grounding Conductor: Annealed bare copper conductors

3.Insulation: Cross-linked Polyethylene (XLPE) or Polyvinyl chloride (PVC)

4.Jacket: Polyvinyl Chloride (PVC), black

5.Conductor Colors: White and black (for 2 conductor cables); white, black and red (for 3 conductor cables)

Standard: CSA C22.2 No. 48 (non-metallic sheathed cable)

cUL File No.: E487898 **CSA file No.:** 271587 **Voltage:** 300V

Working temperature: -40°C/ -25°C MIN, **60°C** MAX

Performance: FT-1 Flame retardant; Sun Res (SR)

Printing: HT CABLES CSA 271587 ***AWG ***C AL ACM NMWU NYLON CABLE FT1 300V (-25℃) YEAR ****m

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Technical data:

Conductor				Grounding Wire		Jacket Thickness	Cable Dimensions	Weight	Max. DC resistance at 20C
Size AWG	NO.	No. of strands	Insulation Thickness mm	Size (AWG)	No. of Strands	mm	mm	kg/km	(Ω/km)
14	2	1	1.52	14	1	0.76	6.3 × 12.7	142	8.62
12	2	1	1.52	14	1	0.76	6.8 × 13.6	173	5.43
10	2	1	1.52	12	1	0.76	7.3 × 15.1	234	3.41
8	2	7	1.90	10	1	1.14	9.9 × 20.0	402	2.14
6	2	7	2.29	8	7	1.14	11.6 × 23.5	565	1.35
14	3	1	1.52	14	1	0.76	11.9	181	8.62
12	3	1	1.52	14	1	0.76	12.8	227	5.43
10	3	1	1.52	12	1	0.76	13.9	306	3.41
8	3	7	1.90	10	1	1.14	18.6	523	2.14
6	3	7	2.29	10	7	1.14	22.3	752	1.35

All dimensions are nominal and subject to normal manufacturing tolerances.

RPVU90 RPV90

Photovoltaic Cable, 600V or 1000V or 2000V;
XLPE Insulation, Single Conductor, Copper or Aluminum

Application:

RPVU90, RPV90 cables may be installed indoors or outdoors, in raceways and conduits, both above and below ground, and may be direct buried. RPVU90 can be used in direct burial installations. It must comply with CE Code Rules 12-012 and 4-004. They are 90°C, 2 kV rated, and suitable for use in a photovoltaic system.

Type RPVU90 cable is for use on the DC and AC side of a photovoltaic system, suitable for installation in both wet and dry locations, and may be exposed to sunlight.
Type RPV90 cable is for use on the DC and AC side of a photovoltaic system, suitable for installation in dry locations, and may be exposed to sunlight.
RPVU90/RPV90 cables are RoHS Compliant

Structure:

Conductor: Stranded AA-8000 aluminum conductor size 6 AWG to 1000 kcmil, or Solid or stranded copper conductor size 14 AWG to 1000 kcmil

Insulation: Heat and moisture resistant, low temperature Cross-Linked Polyethylene (XLPE)

Standard:

- CSA C22.2 No. 38 - Thermoset-insulated Wires And Cables.
- CSA C22.2 No. 271-11 - Photovoltaic Cables.
- ASTM B3, B8, B787.

cUL File No.: E365883 **CSA file No.:** 271587 **Voltage:** 600V/1000V/2000V
Working temperature: -40°C MIN, **90°C** MAX

Performance:

- Deformation-resistant at high temperatures
- Excellent moisture resistance, exceeds UL 44
- Stable electrical properties over a broad temperature range
- Increased flexibility
- Resistant to crush and compression cuts
- UV/sunlight-resistant

Printing:

RPVU90: HT CABLES CSA 271587 ***AWG(***mm2) RPVU90 CU/XLPE 90C DRY OR WET (-40C) FT1 DIR BUR SUN RES 2000V YEAR ****m

RPV90: HT CABLES CSA 271587 ***AWG(***mm2) RPV90 CU/XLPE 90C DRY (-40C) FT1 SUN RES 2000V YEAR ****m

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Technical data:

1000V/2000V RPVU90 Copper Conductor / Aluminum AA8000 Conductor

Size (AWG/ Kcmil)	Conductor		Ins. Thickness		Approx O.D.		Weight/Km		Max. DC resistance at 20 C	
	Nos of strands (CU)	Nos of strands (AL)	mm (CU)	mm (AL)	mm (CU)	mm (AL)	kgs (CU)	kgs (AL)	Ω/km (CU)	Ω/km (AL)
12	7	/	1.52	/	5.3	/	57.8	/	5.43	/
10	7	/	1.52	/	5.9	/	79.9	/	3.41	/
8	7	/	2.03	/	7.7	/	130.2	/	2.14	/
6	7	7	2.03	2.03	8.6	8.4	165.7	84	1.35	2.210
4	7	7	2.03	2.03	9.8	9.5	246.1	113	0.848	1.390
2	7	7	2.03	2.03	11.3	10.9	366.9	156	0.534	0.875
1/0	19	18	2.41	2.41	14.0	13.3	576.0	238	0.335	0.550
2/0	19	18	2.41	2.41	14.8	14.4	706.1	285	0.266	0.436
3/0	19	19	2.41	2.41	16.4	15.5	876.3	341	0.211	0.346
4/0	19	19	2.41	2.41	17.8	16.9	1,083.4	412	0.167	0.274
250	37	36	2.79	2.79	19.8	18.8	1,293.4	498	0.142	0.232
350	37	36	2.79	2.79	22.4	21.3	1,768.1	657	0.101	0.166
400	37	36	2.79	2.79	23.5	22.3	2,003.5	734	0.0885	0.145
500	37	36	2.79	2.79	25.6	24.3	2,473.2	888	0.0709	0.116
750	61	60	3.18	3.18	31.0	29.3	3,676.8	1,305	0.0472	0.0774

2000V RPV90 Aluminum AA8000 Conductor

Size (AWG/Kcmil)	Conductor	Ins. Thickness	Approx O.D.	Weight/Km	Max. DC resistance at 20 C)
	Nos of strands	mm	mm	kgs	Ω/km
6	7	1.78	7.9	74.1	2.210
4	7	1.78	9.0	102.0	1.390
3	7	1.78	9.6	120.5	1.100
2	7	1.78	10.4	143.6	0.875
1	18	2.29	12.2	192.5	0.693
1/0	18	2.29	13.1	228.6	0.550
2/0	18	2.29	14.2	274.0	0.436
3/0	19	2.29	15.3	329.6	0.346
4/0	19	2.29	16.7	398.8	0.274
250	36	2.67	18.5	482.6	0.232
350	36	2.67	21.0	639.1	0.166
400	36	2.67	22.0	715.2	0.145
500	36	2.67	24.0	867.0	0.116
750	60	3.05	29.0	1,271.3	0.0774
1500	91	3.56	41.2	2,452.8	0.0387

All dimensions are nominal and subject to normal manufacturing tolerances.

RW90/RWU90 Wire

Thermoset-Insulated Wire, 600V;
XLPE Insulation, Single Conductor, Copper or Aluminum

Application:

For open wiring and raceways(except cable throughs and ventilated flexible cableway) in dry or wet locations. For exposed wiring where exposed to weather with sunlight resistant insulation. Approved for use with ceiling fixtures.

Structure:

Conductor: Annealed bare copper wires or compact aluminum 8000 series wires

Insulation: Cross-Linked Polyethylene (XLPE)

Standard: CSA Standard C22.2 No.38 (Thermoset-Insulated Wires and Cables)
cUL File No.: E466693 **CSA file No.:** 271587
Voltage: 600V 1000V or 2000V For RW90. 1000V For RWU90
Working temperature: -40°C MIN. **90°C** MAX
Performance: Sun Res(SR), Cold(-40C)
Marking on the surface of cable: HT CABLES CSA 271587 ***AWG TYPE RW90 or RWU90 XLPE 90C FT4 SR 600V (-40℃) YEAR ****m

Technical data:

RW90 600V

Conductor			Insulation thickness	Approx. OD (mm)
AWG/KCMIL	Nos of strands(CU)	Nos of strands(AL)	(mm)	CU
14	1 or 7	1	0.76	3.4
12	1 or 7	1	0.76	3.9
10	1 or 7	1	0.76	4.5
8	19	19	1.14	6
6	19	19	1.14	7
4	19	19	1.14	8.2
2	19	19	1.14	9.8
1	19	19	1.4	10.9
1/0	19	19	1.4	11.9
2/0	19	18	1.4	12.9
3/0	19	19	1.4	14.2
4/0	19	19	1.4	15.6
250	37	37	1.65	17.2
350	37	37	1.65	19.8
400	37	37	1.65	20.9
500	37	37	1.65	23.1
750	61	61	2.03	28.3
1000	61	61	2.03	32.1

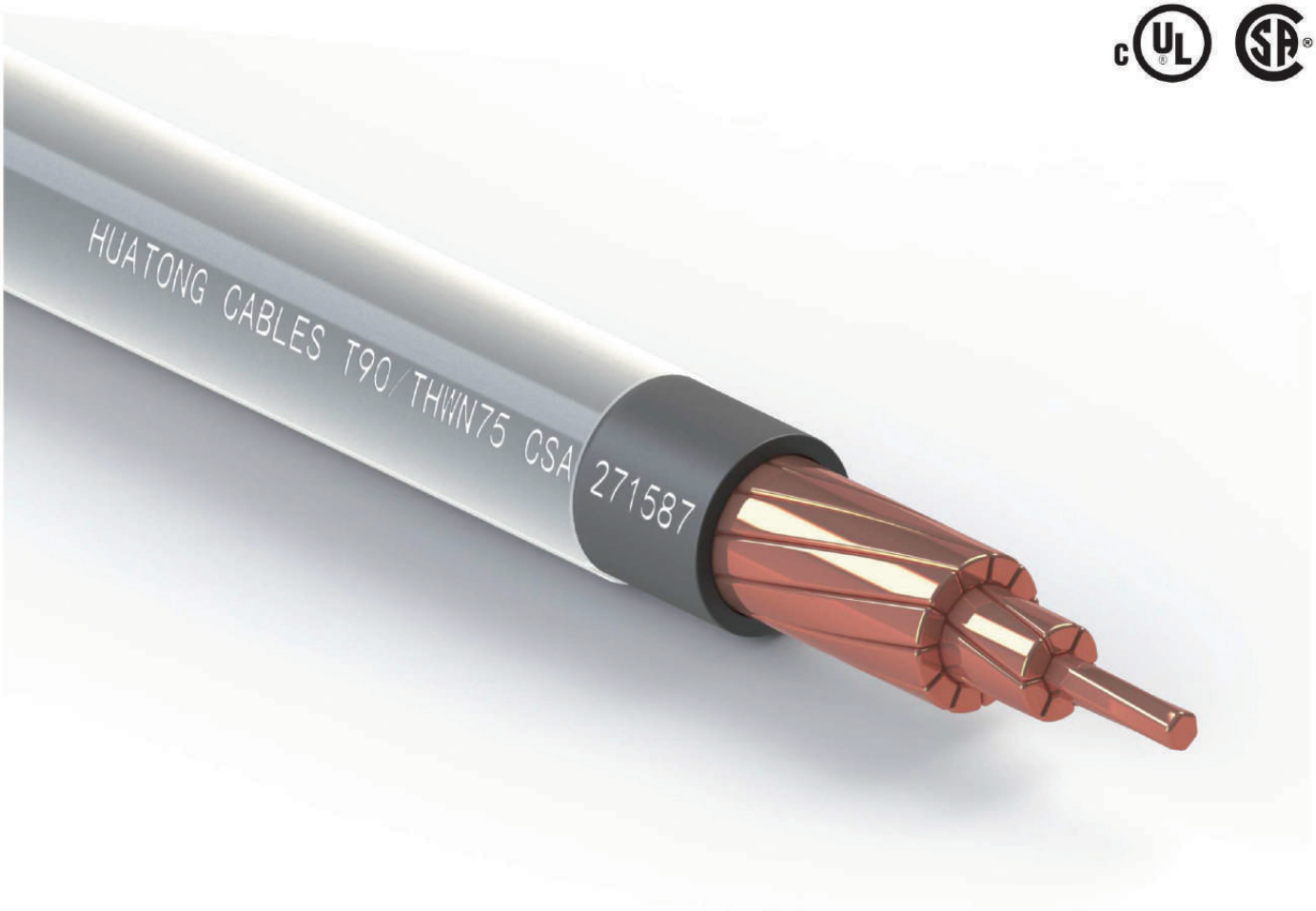
RW90 1000V

Conductor			Insulation thickness	Approx. OD
AWG/KCMIL	Nos of strands(CU)	Nos of strands(AL)	(mm)	(mm)
14	1 or 7	/	1.14	4.1
12	1 or 7	/	1.14	4.6
10	1 or 7	/	1.14	5.2
8	19	19	1.14	6.0
6	19	19	1.52	7.8
4	19	19	1.52	9
2	19	19	1.52	10.5
1/0	19	19	2.03	13.2
2/0	19	19	2.03	14.2
3/0	19	19	2.03	15.5
4/0	19	19	2.03	16.9
250	37	37	2.28	18.5
350	37	37	2.28	21.1
400	37	37	2.28	22.2
500	37	37	2.28	24.4
750	61	61	2.28	28.8
1000	61	61	2.28	32.6

All dimensions are nominal and subject to normal manufacturing tolerances.

T90 Nylon/TWN75

Thermoplastic-Insulated Wire, 600V;
PVC Insulation, Nylon Jacket, Single Conductor, Copper or Aluminum



Application:

General purpose building wire for installation as exposed or concealed wiring and in raceways (except cable troughs) in dry or damp locations. Approved for use with ceiling fixtures.

Structure:

1.Conductor: Annealed solid or stranded copper,aluminum optional
2.Insulation: PVC, color can be black, red, blue, green, white, orange etc
3.Jacket: Nylon

Standard: CSA C22.2 No. 75-14 - Thermoplastic-Insulated Wires and Cables
UL 83 - Thermoplastic-Insulated Wires and Cables

cUL File No.: E468871 **CSA file No.:** 271587 **Voltage:** 600V

Working temperature: **90°C** dry for T90 Nylon,**75°C** wet or dry for TWN75

Performance: FT-1 Flame retardant; Oil Res

Printing: HT CABLES CSA 271587 ***AWG Type T90 NYLON or TWN75 STR CU/PVC/NYLON 600V 90C DRY OR WET YEAR ****m

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Technical data:

Size AWG /Kcmil	Number of strands (Nos)	Insulation Thickness	Nylon Thickness	Overall Diameter	Approx. Weight	DC conductor resistance at 20℃
		mm	mm	mm	Kg/km	Ω/km
14	1	0.38	0.10	2.6	23.6	8.45
12	1	0.38	0.10	3.1	35.4	5.31
10	1	0.51	0.10	3.8	56.2	3.34
14	19	0.38	0.10	2.9	25.0	8.62
12	19	0.38	0.10	3.4	37.4	5.43
10	19	0.51	0.10	4.3	59.0	3.41
8	19	0.76	0.13	5.6	96.6	2.14
6	19	0.76	0.13	6.5	145.0	1.35
4	19	1.02	0.15	8.1	231.0	0.848
3	19	1.02	0.15	9.1	286.3	0.673
2	19	1.02	0.15	9.9	353.5	0.534
1	19	1.27	0.18	11.4	452.6	0.423
1/0	19	1.27	0.18	12.0	556.0	0.335
2/0	19	1.27	0.18	13.1	688.7	0.266
3/0	19	1.27	0.18	14.3	856.2	0.211
4/0	19	1.27	0.18	15.7	1,064.0	0.167
250	37	1.52	0.20	17.5	1,266.7	0.142
300	37	1.52	0.20	18.8	1,501.3	0.118
350	37	1.52	0.20	20.0	1,735.1	0.101
400	37	1.52	0.20	21.2	1,977.5	0.0885
500	37	1.52	0.20	23.5	2,452.0	0.0709
600	61	1.78	0.23	25.8	2,943.7	0.059
750	61	1.78	0.23	28.4	3,646.3	0.0472

All dimensions are nominal and subject to normal manufacturing tolerances.

TW/TW75/TWU/TWU75

Thermoplastic-Insulated Wire, 600V;
PVC Insulation, Single Conductor, Copper or Aluminum

Technical data: TW/TW75

Size AWG /Kcmil	Number of strands (Nos)	Insulation Thickness	Overall Diameter	Approx. Weight	DC conductor resistance at 20℃
		mm	mm	Kg/km	Ω/km
14	1	0.76	3.1	27.7	8.45
12	1	0.76	3.6	40.2	5.31
10	1	0.76	4.1	59.5	3.34
14	19	0.76	3.4	29.0	8.62
12	19	0.76	3.9	42.0	5.43
10	19	0.76	4.5	62.0	3.41
8	19	1.14	6.0	103.4	2.14
6	19	1.52	7.7	167.0	1.35
4	19	1.52	8.9	247.2	0.848
3	19	1.52	9.7	302.7	0.673
2	19	1.52	10.5	371.7	0.534
1	19	2.03	12.4	487.4	0.423
1/0	19	2.03	13.3	596.6	0.335
2/0	19	2.03	14.4	733.5	0.266
3/0	19	2.03	15.7	905.9	0.211
4/0	19	2.03	17.1	1121.0	0.167
250	37	2.41	19.0	1333.9	0.142
300	37	2.41	20.3	1573.3	0.118
350	37	2.41	21.6	1812.7	0.101
400	37	2.41	22.7	2058.8	0.0885
500	37	2.41	24.8	2531.8	0.0709
600	61	2.79	27.6	3048.7	0.0590
750	61	2.79	30.2	3762.0	0.0472

Application:

Suitable for use in conduit or other recognized raceways for services, feeders, and branch circuit wiring. Applications include general purpose grounding for power and distribution circuits in residential, industrial, and commercial buildings.

Structure:

1.Conductor: Annealed solid or stranded copper,aluminum optional

2.Insulation: PVC, color can be black, red, blue, green, white, purple, orange, etc

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Standard: CSA C22.2 No. 75-14 - Thermoplastic-Insulated Wires and Cables
UL 83 - Thermoplastic-Insulated Wires and Cables

cUL File No.: E468871 **CSA file No.:** 271587 **Voltage:** 600V

Working temperature: **60°C** wet or dry for TW,TWU75,**75°C** wet or dry for TW75,TWU75

Printing: HT CABLES CSA 271587 14AWG Type TW75/TWU75 STR CU/PVC 600V 75C DRY OR WET YEAR ****m

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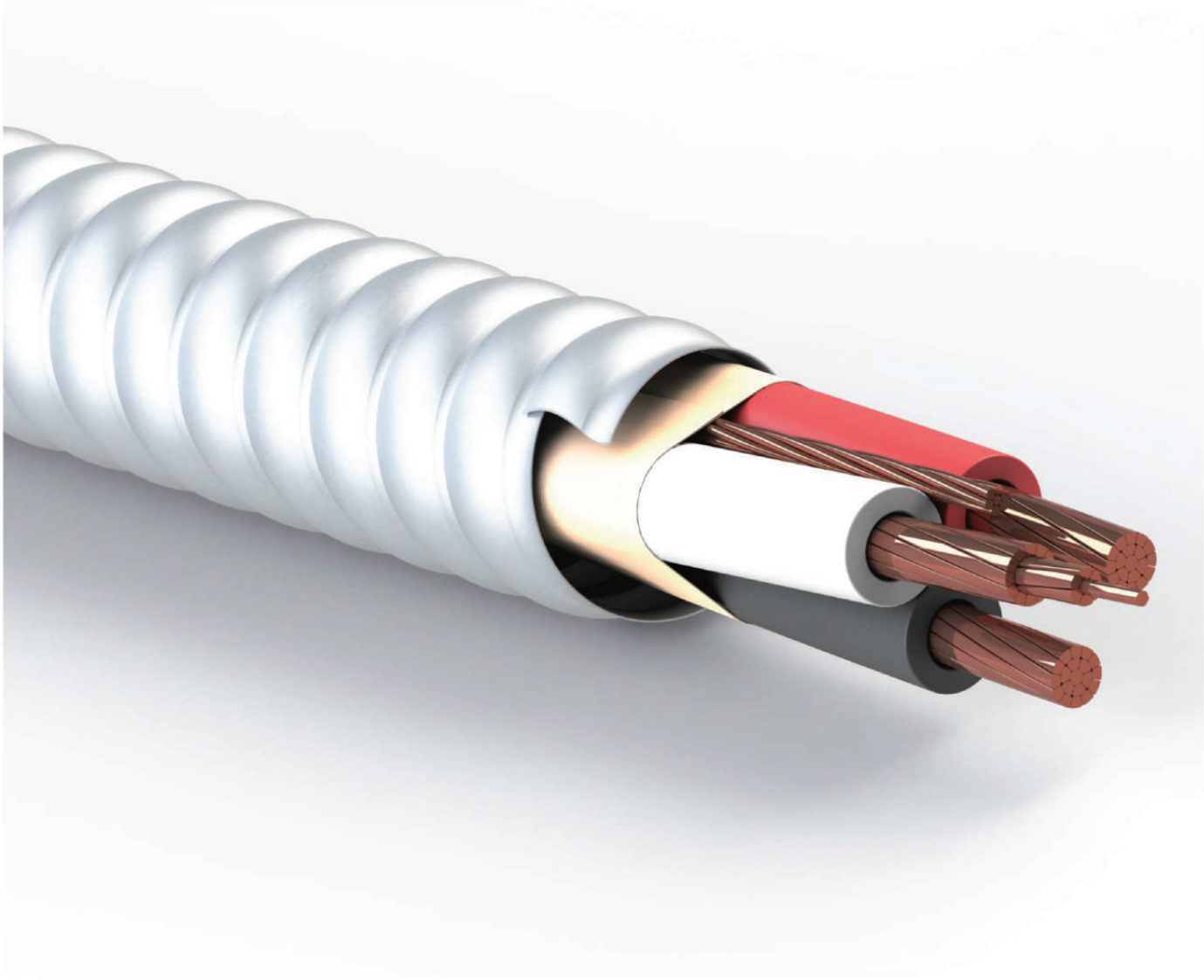
Technical data:TWU/TWU75

Size AWG /Kcmil	Number of strands (Nos)	Insulation Thickness	Overall Diameter	Approx. Weight	DC conductor resistance at 20℃
		mm	mm	Kg/km	Ω/km
14	1	1.52	4.7	42.1	8.45
12	1	1.52	5.1	56.2	5.31
10	1	1.52	5.6	77.4	3.34
14	19	1.52	4.9	44.3	8.62
12	19	1.52	5.4	59.0	5.43
10	19	1.52	6.0	81.2	3.41
8	19	2.03	7.8	133.0	2.14
6	19	2.03	8.7	187.3	1.35
4	19	2.03	10.0	270.5	0.848
3	19	2.03	10.7	327.7	0.673
2	19	2.03	11.5	398.7	0.534
1	19	2.41	13.2	510.8	0.423
1/0	19	2.41	14.0	621.5	0.335
2/0	19	2.41	15.1	760.4	0.266
3/0	19	2.41	16.4	935.2	0.211
4/0	19	2.41	17.8	1152.9	0.167
250	37	2.79	19.8	1369.3	0.142
300	37	2.79	21.1	1611.1	0.118
350	37	2.79	22.4	1852.8	0.101
400	37	2.79	23.5	2100.9	0.0885
500	37	2.79	25.6	2577.7	0.0709
600	61	3.18	28.4	3101.0	0.0590
750	61	3.18	31.0	3819.2	0.0472

All dimensions are nominal and subject to normal manufacturing tolerances

AC90

Metal Clad Armored Cable, 600V;
RW90 Insulation, Armored, Multi-conductor, Copper or Aluminum



Application:

For open and concealed wiring in dry locations only. For use in cable troughs and ventilated flexible cableways in dry locations only. Minimum recommended installation temperature minus 40˚C (with suitable handling procedures). Maximum conductor temperature 90˚C. Approved for use with ceiling fixtures. Armoured cable for commercial, industrial and apartment use.

Structure:

1. **Conductor:** Copper conductor with Copper grounding wire 14AWG to 2AWG or aluminium alloy 8000 series ACM with AL groundig wire 6AWG to 750MCM
2. **Insulation:** Cross-linked polyethylene insulation (RW90 XLPE)
3. **Assemble wrap:** Conductor assembly paper wrapped
4. **Armored:** Interlocked aluminum armour
5. **Number of conductor:** Two, three or four core round laid

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Standard: CSA C22.2 No. 51 - Armoured Cables

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cUL File No.: E466697 **CSA file No.:** 271587 **Voltage:** 600V

Working temperature: in dry locations only at temperature not to exceed 90˚C.

Performance: FT4 Flame retardant; Lead free and ROHS compliant.

Printing: HT CABLES CSA 271587 ***AWG ***C AC90 Armored CABLE FT4 600V (-40C) YEAR ****m

Technical data:

Copper conductor with sizes series in 2, 3, 4 core, other sizes also available

Conductor				Grounding Wire		OD	Weight	Max. DC Resistance of phase conductor at 20C
Size	No.	Nos. of strands	Insulation Thickness	Size	No. of Strands			
Awg/kcmil			mm	awg		mm	Kg/km	Ω/km
14	2	1	0.76	14	1	11.1	157.2	8.45
12	2	1	0.76	14	1	11.9	187.1	5.31
10	2	1	0.76	12	1	13.0	246.6	3.34
14	3	1	0.76	14	1	12.3	188.3	8.45
12	3	1	0.76	14	1	13.2	231.4	5.31
10	3	1	0.76	12	1	14.3	308.7	3.34
8	3	7	1.14	10	1	19.1	505.2	2.14
6	3	7	1.14	8	7	21.3	705.1	1.35
4	3	7	1.14	8	7	24.1	965.5	0.848
3	3	7	1.14	6	7	25.4	1,195.2	0.673
2	3	7	1.14	6	7	26.9	1,410.2	0.534
14	4	1	0.76	14	1	13.3	203.2	8.45
12	4	1	0.76	14	1	14.3	260.0	5.31
10	4	1	0.76	12	1	15.6	355.7	3.34
8	4	7	1.14	10	1	18.5	525.1	2.14
6	4	7	1.14	8	7	23.5	875.0	1.35
4	4	7	1.14	8	7	26.0	1,215.2	0.848

All dimensions are nominal and subject to normal manufacturing tolerances

Technical data:

Aluminium conductor with sizes series in 3, 4 core, other sizes also available

Conductor				Grounding Wire		OD	Weight	Max. DC Resistance of phase conductor at 20C
Size	No.	Nos. of strands	Insulation Thickness	Size	No. of Strands			
Awg/kcmil			mm	awg		mm	Kg/km	Ω/km
6	3	7	1.14	8	7	21.4	324.2	2.21
4	3	7	1.14	6	7	23.9	436.3	1.39
2	3	7	1.14	6	7	26.8	577.0	0.875
1	3	19	1.40	4	7	30.5	695.1	0.639
1/0	3	19	1.40	4	7	32.5	826.3	0.550
2/0	3	19	1.40	4	7	34.9	971.2	0.436
3/0	3	19	1.40	4	7	37.7	1,150.5	0.346
4/0	3	19	1.40	4	7	40.8	1,421.7	0.274
250	3	37	1.65	2	7	42.5	1,696.2	0.232
350	3	37	1.65	2	7	48.0	2,200.5	0.166
500	3	37	1.65	1	19	54.8	2,964.0	0.116
750	3	61	2.03	1/0	19	64	4,194.2	0.0774
6	4	7	1.14	8	7	23.5	402.8	2.21
4	4	7	1.14	6	7	26	538.2	1.39
2	4	7	1.14	6	7	30	720.9	0.875
1	4	19	1.40	4	7	33.1	890.1	0.639
1/0	4	19	1.40	4	7	35.7	1044.6	0.550
2/0	4	19	1.40	4	7	38.4	1,231.0	0.436
3/0	4	19	1.40	4	7	41.4	1,512.5	0.346
4/0	4	19	1.40	4	7	43.0	1,810.7	0.274
250	4	37	1.65	2	7	47.0	2,158.2	0.232
350	4	37	1.65	2	7	52.8	2,818.0	0.166
500	4	37	1.65	1	19	60.3	3,817.0	0.116
750	4	61	2.03	1/0	19	70.3	5,430.6	0.0774

All dimensions are nominal and subject to normal manufacturing tolerances

ACWU90

Metal Clad Armored Cable, 600V or 1000V;
RW90 Insulation, Armored, PVC Jacket, Multi-conductor, Aluminum

Application:

ACWU 90 cables are primarily intended for exposed and concealed wiring in dry or wet locations and where exposed to the weather. For use in ventilated, non-ventilated, and ladder type cable trays in wet and dry locations, direct earth burial, service entrance above or below ground.

Structure:

1. **Conductor:** Three or four compact 8000 Series ACM aluminum conductors with bare aluminum bonding wire in multi-conductor cables
2. **Insulation:** Cross-linked polyethylene insulation (XLPE)
3. **Assemble wrap:** Conductor assembly paper or PP tape wrapped
4. **Armored :** Interlocked aluminum armor
5. **Overall Jacket:** PVC jacket
6. **Conductor color:** Black, red and white for 3 conductor;
   Black, red, blue and white for 4 conductor

Standard: CSA Standard CSA C22.2 No. 51-20 (Metal-clad Cable)

cUL File No.: E466697 **CSA file No.:** 271587 **Voltage:** 600V

Working temperature: -40°C/ -25°C MIN, 90°C MAX

Performance: FT4 Flame retardant; Sunlight Resistant

Printing: HT CABLES CSA 271587 ***MCM ***C ACWU90 AL ACM TYPE RW90 XLPE SUN RES FT4 600V (-40℃) YEAR ****m

Technical data: AL Conductor with bare AL aluminum tape interlocked armoured size series in 3 and 4 core

No of phase	Size	Insulation thickness	Bonding wire Size	PVC Jacket	Approximate Total Diameter	Approximate Net Cable Weight
	AWG or Kcmil	mm	AWG	mm	mm	kg/km
3	6	1.14	8	1.27	21.6	807.4
3	4	1.14	6	1.27	24.2	980.8
3	3	1.14	6	1.27	25.4	1,071.4
3	2	1.14	6	1.27	27	1,188.4
3	1	1.40	4	1.27	29.9	1,411.6
3	1/0	1.40	4	1.27	31.8	1,575.2
3	2/0	1.40	4	1.27	34	1,772.8
3	3/0	1.40	4	1.27	36.6	2,015.2
3	4/0	1.40	4	1.27	39.5	2,304.1
3	250	1.65	2	1.52	43.5	2,668.4
3	300	1.65	2	1.52	46.2	2,980.2
3	350	1.65	2	1.52	48.8	3,281.0
3	400	1.65	2	1.52	51.1	3,584.2
3	500	1.65	1	1.52	58.7	4,712.7
3	600	2.03	1	1.90	65.4	5,478.4
3	750	2.03	1	1.90	67.2	6,245.3
4	6	1.14	8	1.27	23.7	931.9
4	4	1.14	6	1.27	26.6	1,141.9
4	3	1.14	6	1.27	28	1,256.4
4	2	1.14	6	1.27	29.8	1,401.9
4	1	1.40	4	1.27	33.2	1,674.9
4	1/0	1.40	4	1.27	35.3	1,881.3
4	2/0	1.40	4	1.27	37.7	2,126.3
4	3/0	1.40	4	1.27	40.1	2,416.1
4	4/0	1.40	4	1.27	43.8	2,781.4
4	250	1.65	2	1.52	51.2	3,708.4
4	300	1.65	2	1.52	54.3	4,128.9
4	350	1.65	2	1.52	57.1	4,534.4
4	400	1.65	2	1.52	59.7	4,942.6
4	500	1.65	1	1.90	65.2	5,733.4
4	600	2.03	1	1.90	71.8	6,704.0
4	750	2.03	1	1.90	77.6	7,847.1

All dimensions are nominal and subject to normal manufacturing tolerances.

TECK90

Metal Clad Armored Cable, 600v or 1000V;
RW90 Insulation, Armored, PVC Jacket, Multi-conductor, Copper or Aluminum

Application:

For exposed or concealed wiring in wet or dry locations. For use in ventilated, non-ventilated and ladder type cable troughs and ventilated flexible cableway in wet or dry locations. Sunlight Resistant. Typical applications are for control. lighting and power circuits in: pulp and paper mills, steel mills, food processing plants, commercial centers, mines, generating stations, refineries, industrial plants and chemical plants.

Structure:

1.Conductor: Annealed stranded bare copper wires, class B

2.Insulation: Cross-linked Polyethylene (XLPE) Type RW90.
Color: Black, white for 2 conductors;
Black ,red, blue for 3 conductors;
Black, red, blue, white for 4 conductors.

3.Bonding conductor: annealed bare copper wires,class B.

4.Inner Jacket: Flame-retardant and moisture resistant Polyvinyl Chloride (PVC)

5.Armour: Aluminum Interlock Armour (AIA); steel tape as the optional.

6.Outer-jacket: Low-temperature, moisture and sunlight resistant Polyvinyl Chloride (PVC), black

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Standard:

- CSA C22.2 No. 131, Type TECK90 cable
- CSA C22.2 No. 38, Thermoset insulated wires and cables (Type RW90)

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cUL File No.: E466697 **CSA file No.:** 271587 **Voltage**: 600V/1000V

Working temperature: -25°C MIN ,+90°C MAX

Performance: Low-temperature, moisture and sunlight resistant
FT4- Flame Test

Printing: HT CABLES TYPE TECK90 CSA 271587 600V XLPE ***AWG (***mm2) +***AWG (***) RW90 insulated -25C AIA PVC FT4 SR YEAR ****m

Technical data: 600V

Phase Conductor		Bonding Conductor	Phase conductor single wire numbers	Insulation thickness	Jacket Thickness	APProx. Diameter armoured	Nominal thickness of outer sheath	APProx. O'D' of cable
Cores	AWG or KCMIL	AWG or KCMIL	Nos.	mm	mm	mm	mm	mm
2	14	14	7	0.76	1.14	14.1	1.00	16.0
2	12	14	7	0.76	1.14	15.1	1.00	17.0
2	10	12	7	0.76	1.14	16.3	1.00	18.0
2	8	10	7	1.14	1.52	19.5	1.00	22.0
2	6	8	7	1.14	1.52	21.3	1.00	23.0
2	4	8	7	1.14	1.52	23.5	1.00	26.0
2	3	6	7	1.14	1.52	24.7	1.00	27.0
2	2	6	7	1.14	2.03	27.3	1.00	29.0
2	1	6	19	1.40	2.03	29.9	1.00	32.0
2	1/0	6	19	1.40	2.03	31.8	1.00	34.0
2	2/0	6	19	1.40	2.03	33.9	1.00	36.0
2	3/0	4	19	1.40	2.03	36.2	1.00	38.0
2	4/0	4	19	1.40	2.03	38.9	1.20	41.0
2	250	4	37	1.65	2.03	42.2	1.20	45.0
2	300	4	37	1.65	2.03	44.7	1.20	47.0
2	350	3	37	1.65	2.79	48.6	1.20	51.0
2	400	3	37	1.65	2.79	50.8	1.20	53.0
2	450	3	37	1.65	2.79	52.8	1.20	55.0
2	500	3	37	1.65	2.79	54.7	1.20	57.0
2	550	3	37	2.03	2.79	58.2	1.50	61.0
2	600	2	61	2.03	2.79	60.1	1.50	63.0
2	650	2	61	2.03	2.79	61.7	1.50	65.0
2	700	2	61	2.03	2.79	63.4	1.50	66.0
2	750	2	61	2.03	2.79	64.9	1.50	68.0
3	14	14	7	0.76	1.14	14.7	1.00	17.0
3	12	14	7	0.76	1.14	15.7	1.00	18.0
3	10	12	7	0.76	1.14	17.0	1.00	19.0
3	8	10	7	1.14	1.52	20.4	1.00	22.0
3	6	8	7	1.14	1.52	22.3	1.00	24.0
3	4	8	7	1.14	1.52	24.8	1.00	27.0
3	3	6	7	1.14	2.03	27.1	1.00	29.0
3	2	6	7	1.14	2.03	28.8	1.00	31.0
3	1	6	19	1.40	2.03	31.6	1.00	34.0
3	1/0	6	19	1.40	2.03	33.6	1.00	36.0
3	2/0	6	19	1.40	2.03	35.8	1.00	38.0
3	3/0	4	19	1.40	2.03	38.4	1.20	41.0
3	4/0	4	19	1.40	2.03	41.3	1.20	44.0
3	250	4	37	1.65	2.03	44.8	1.20	47.0
3	300	4	37	1.65	2.79	49.1	1.20	51.0
3	350	3	37	1.65	2.79	51.6	1.20	54.0
3	400	3	37	1.65	2.79	54.0	1.20	56.0
3	450	3	37	1.65	2.79	56.2	1.20	59.0
3	500	3	37	1.65	2.79	58.2	1.50	61.0
3	550	3	37	2.03	2.79	62.0	1.50	65.0
3	600	2	61	2.03	2.79	64.1	1.50	67.0
3	650	2	61	2.03	2.79	65.8	1.50	69.0
3	700	2	61	2.03	2.79	67.6	1.50	71.0
3	750	2	61	2.03	2.79	69.3	1.50	72.0

All dimensions are nominal and subject to normal manufacturing tolerances

Technical data: 1000V

Phase Conductor		Bonding Conductor	Phase conductor single wire numbers	Conducto r diamete	Insulation Thickness	Inner jacket Thickness	Min.outer jacket Thickness	Outer jacket DIA
Cores	AWG or KCMIL	AWG or KCMIL	Nos.	mm	mm	mm	mm	mm
2	12	14	7	2.34	1.14	1.14	1.00	19.2
3	12	14	7	2.34	1.14	1.14	1.00	19.9
2	10	12	7	2.94	1.14	1.14	1.00	20.4
3	10	12	7	2.94	1.14	1.52	1.00	22.0
2	8	10	7	3.72	1.14	1.52	1.00	22.7
3	8	10	7	3.72	1.14	1.52	1.00	23.7
2	6	8	7	4.68	1.52	1.52	1.00	26.1
3	6	8	7	4.68	1.52	1.52	1.00	28.4
2	4	8	7	5.88	1.52	2.03	1.00	30.6
3	4	8	7	5.88	1.52	2.03	1.00	32.0
2	3	6	7	6.6	1.52	2.03	1.00	32.0
3	3	6	7	6.6	1.52	2.03	1.00	33.5
2	2	6	7	7.41	1.52	2.03	1.00	33.6
3	2	6	7	7.41	1.52	2.03	1.00	35.3
2	1	6	19	8.40	2.03	2.03	1.00	37.6
3	1	6	19	8.40	2.03	2.03	1.00	39.6
2	1/0	6	19	9.00	2.03	2.03	1.00	38.8
3	1/0	6	19	9.00	2.03	2.03	1.20	41.4
2	2/0	6	19	10.10	2.03	2.03	1.20	41.5
3	2/0	6	19	10.10	2.03	2.03	1.20	43.8
2	3/0	4	19	11.30	2.03	2.03	1.20	43.9
3	3/0	4	19	11.30	2.03	2.03	1.20	46.4
2	4/0	4	19	12.70	2.03	2.03	1.20	46.7
3	4/0	4	19	12.70	2.03	2.03	1.20	50.4
2	250	4	37	13.90	2.28	2.03	1.20	51.1
3	250	4	37	13.90	2.28	2.79	1.20	55.6
2	300	4	37	15.20	2.28	2.79	1.20	55.3
3	300	4	37	15.20	2.28	2.79	1.20	58.4
2	350	3	37	16.40	2.28	2.79	1.20	57.7
2	400	3	37	17.60	2.28	2.79	1.20	60.1
3	400	3	37	17.60	2.28	2.79	1.50	64.3
2	500	3	37	19.80	2.28	2.79	1.50	65.2
3	500	3	37	19.80	2.28	2.79	1.50	69.1

All dimensions are nominal and subject to normal manufacturing tolerances.

SJOW SJOOW

Flexible Cords 300V;
EPR Insulation, CPE Jack, Multi-conductor, Copper

Application:

Type SJOOW SJOW Flexible Cords are permitted for use by Article 400 and related articles of the National Electrical Code. Type SJOW SJOOW Cords include wiring for portable tools, portable appliances, equipment, small motors and associated machinery.

Structure:

1.Conductor: Fully annealed, stranded bare copper, per ASTM B-174, sizes 18 - 2AWG

2.Insulation: Ethylene-propylene rubber (EPR)
1-core black
2-cores black/white
3-cores black/white/green
4-cores black/white/green/red
5-cores black/white/green/red/orange

3.Jacket: Black heavy duty CPE thermosetting compound

Standard: UL 62 & CSA C22.2 No. 49, Standard for Flexible Cords and Cables

cUL File No.: E477374 **Voltage:** 300V

Working temperature: -40°C/-25°C MIN. 90°C/105°C MAX

Performance: Water resistant and an oil resistant jacket
Lightweight and good flexibility
FT1 and FT2 Flame Test

Other Rubber Cable Optional : Type SJ, SJO ,SJOO

Printing: HT CABLES c(UL) E477374 ***AWG (***mm2) ***C SJOOW (-40C to 90C) FT2 WATER RESISTANT 300V YEAR ***m

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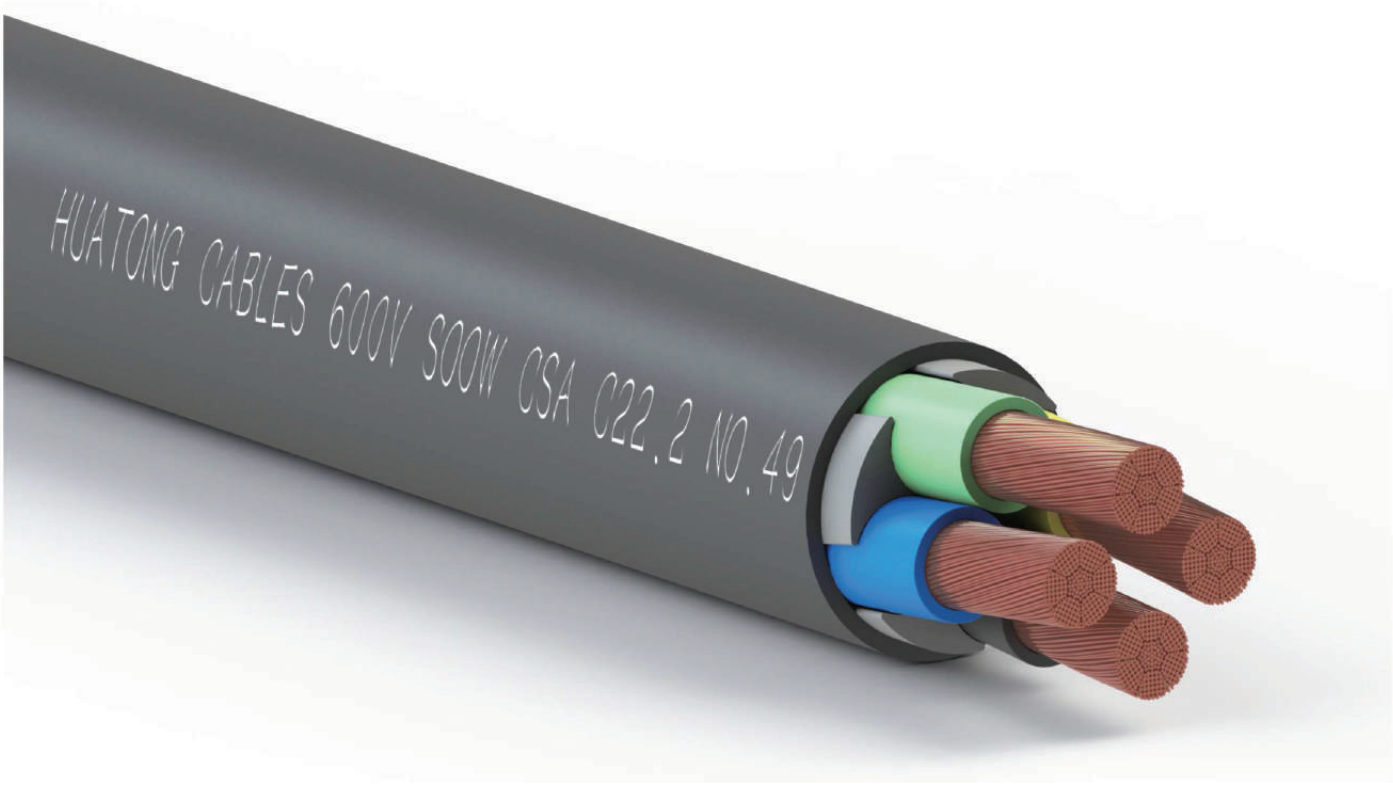
SJOOW SJOW Technical data:

Size AWG /Kcmil	Core of conductor	Nominal Insulation Thickness	Nominal Sheath Thickness	Overall Diameter	Weight	Max. DC resistance at 20C (Ω/km)
		mm	mm	mm	kg/km	
18	2	0.76	0.76	7.2	71.9	22.4
18	3	0.76	0.76	7.6	87.1	22.4
18	4	0.76	0.76	8.4	106.8	22.4
18	5	0.76	0.76	9.2	128.7	22.4
16	2	0.76	0.76	7.8	90.2	14.1
16	3	0.76	0.76	8.3	111.3	14.1
16	4	0.76	0.76	9.1	136.7	14.1
16	5	0.76	0.76	10.1	165.8	14.1
14	2	0.76	0.76	8.6	115.3	8.88
14	3	0.76	0.76	9.2	144.2	8.88
14	4	0.76	0.76	10.1	180.1	8.88
14	5	0.76	0.76	11.1	218.9	8.88
12	2	0.76	1.14	10.3	172.3	5.58
12	3	0.76	1.14	11.0	214.4	5.58
12	4	0.76	1.14	12.0	266.5	5.58
12	5	0.76	1.14	13.2	322.3	5.58
10	2	1.14	1.52	14.0	303.9	3.51
10	3	1.14	1.52	14.9	376.1	3.51
10	4	1.14	1.52	16.3	467.6	3.51
10	5	1.14	1.52	17.9	565.4	3.51

All dimensions are nominal and subject to normal manufacturing tolerances

SOW SOOW

Flexible Cords, 600V;
EPR Insulation, CPE Jack, Multi-conductor, Copper



Application:

Type SOW SOOW Flexible Cords are permitted for use by Article 400 and related articles of the National Electrical Code. SOOW SOW cords are designed for extra hard usage on industrial equipment, heavy tools, battery chargers, portable lights and power extensions. They are sunlight, water, oil and weather resistant and suitable for outdoor applications.

Structure:

1.Conductor: Fully annealed, stranded bare copper, per ASTM B-174, sizes 18 - 2AWG

2.Insulation: Ethylene-propylene rubber (EPR)
1-core black
2-cores black/white
3-cores black/white/green
4-cores black/white/green/red
5-cores black/white/green/red/orange

3.Jacket: Black heavy duty CPE thermosetting compound

Standard: UL 62 & CSA C22.2 No. 49, Standard for Flexible Cords and Cables

cUL File No.: E477374 **Voltage:** 600V

Working temperature: -40°C/-25°C MIN. 90°C/105°C MAX

Performance: Water resistant and an oil resistant jacket
Lightweight and good flexibility
FT1 and FT2 Flame Test
Sunlight Resistant

Other Rubber Cable Optional : Type S, SO ,SOO ,SV, SVO, SVOO

Printing: HT CABLES c(UL) E477374 ***AWG (***mm2) ***C SOOW (-40C to 90C) FT2 WATER RESISTANT 600V YEAR ***m

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SOOW SOW Technical data:

Size AWG /Kcmil	Core of conductor	Nominal Insulation Thickness	Nominal Sheath Thickness	Overall Diameter	Weight	Max. DC resistance at 20C (Ω/km)
		mm	mm	mm	kg/km	
18	2	0.76	1.52	8.7	101.2	22.4
18	3	0.76	1.52	9.1	118.1	22.4
18	4	0.76	1.52	9.8	141.2	22.4
16	2	0.76	1.52	9.4	123.5	14.1
16	3	0.76	1.52	9.8	145.3	14.1
16	4	0.76	1.52	10.7	176.6	14.1
14	2	1.14	2.03	12.8	223.5	8.88
14	3	1.14	2.03	13.5	263.7	8.88
14	4	1.14	2.03	14.6	318.4	8.88
12	2	1.14	2.41	14.6	299.1	5.58
12	3	1.14	2.41	15.3	354.1	5.58
12	4	1.14	2.41	16.6	429.3	5.58
10	2	1.14	2.41	15.9	374.5	3.51
10	3	1.14	2.41	16.7	450.9	3.51
10	4	1.14	2.41	18.2	552.8	3.51
8	3	1.52	2.79	22.1	770.2	2.23
8	4	1.52	3.18	24.9	992.7	2.23
8	5	1.52	3.18	27.1	1,180.3	2.23
6	3	1.52	3.18	25.3	1,055.6	1.40
6	4	1.52	3.56	28.4	1,358.2	1.40
6	5	1.52	3.56	30.9	1,618.1	1.40
4	3	1.52	3.56	28.7	1,412.9	0.882
4	4	1.52	3.94	32.0	1,810.4	0.882
4	5	1.52	3.94	34.9	2,163.8	0.882
2	3	1.52	3.94	33.6	2,053.1	0.555
2	4	1.52	4.32	37.4	2,631.4	0.555
2	5	1.52	4.32	40.8	3,159.2	0.555

All dimensions are nominal and subject to normal manufacturing tolerances.

USEI-90

Low Voltage Cable, 600V; XLPE Insulation, PVC Jacket, Copper or Aluminum

Application:

USEI-90 underground distribution cable is designed to be used for secondary distribution and underground service operating at 600 volts or less. Cables are intended for underground installation, either direct burial or in duct systems.

Structure:

1.Conductors: Compact stranded aluminum conductors class B or Compact stranded copper conductors class B

2.Insulation: Cross-linked polyethylene (XLPE) insulation, which meeting the requirements of CSA C22.2 No. 38 for Type RW90 insulation

3.Jacket: PVC outer jacket, weather resistant, sunlight resistant, cut through resistant, FT1 rated material.

4.Neutral Conductor: The neutral conductor may be the same size as the power conductor, or it may be reduced.

Phase identification:

Which is provided by means of jacket color coding. All cables provided with sequential printing.

1. Three conductor cable consists of a red and a black colored power conductor and a white colored neutral.
2. Four conductor cable consists of a red, black, and blue colored phase conductor and a white colored neutral.

Standard: · CSA C22.2 No. 52 Underground secondary and service-entrance cables
· CSA C22.2 No. 38 Thermoset-insulated wires and cables

cUL File No.: E466669 **Voltage:** 600V **Working temperature: -40°C MIN, 90C MAX**

Printing: HT CABLES c(UL) E466669 Type USEI ***AWG(***mm2) ***C -40C to 90C SUN RES 600V YEAR ****m

Technical data for aluminum conductor:

3 CONDUCTOR							
2 PHASE CONDUCTORS			1 FULL NEUTRAL CONDUCTOR			Cable	
SIZE	Insulation Thickness	Jacket Thickness	SIZE	Insulation Thickness	Jacket Thickness	Cable Diameter	Cable Weight
	(mm)	(mm)		(mm)	(mm)	(mm)	(kg/km)
4	1.14	0.76	4	1.14	0.76	20.5	354.5
2	1.14	0.76	2	1.14	0.76	23.8	491.7
1	1.4	1.14	1	1.4	1.14	28.5	687.4
1/0	1.4	1.14	1/0	1.4	1.14	30.4	805.0
2/0	1.4	1.14	2/0	1.4	1.14	32.8	952.2
3/0	1.4	1.14	3/0	1.4	1.14	35.4	1,134.6
4/0	1.4	1.14	4/0	1.4	1.14	38.4	1,357.5
250	1.65	1.65	250	1.65	1.65	44.3	1,753.4
350	1.65	1.65	350	1.65	1.65	49.7	2,262.3
500	1.65	1.65	500	1.65	1.65	57.0	3,019.3
750	2.03	1.65	750	2.03	1.65	68.2	4,357.1

Technical data for copper conductor:

3 CONDUCTOR							
2 PHASE CONDUCTORS			1 FULL NEUTRAL CONDUCTOR			Cable	
SIZE	Insulation Thickness	Jacket Thickness	SIZE	Insulation Thickness	Jacket Thickness	Cable Diameter	Cable Weight
	(mm)	(mm)		(mm)	(mm)	(mm)	(kg/km)
4	1.14	0.76	6	1.14	0.76	20.5	750.8
2	1.14	0.76	4	1.14	0.76	23.8	1,122.4
1	1.4	1.14	3	1.4	1.14	28.5	1,484.3
1/0	1.4	1.14	2	1.4	1.14	30.4	1,810.7
2/0	1.4	1.14	1	1.4	1.14	32.8	2,219.2
3/0	1.4	1.14	1/0	1.4	1.14	35.4	2,731.1
4/0	1.4	1.14	2/0	1.4	1.14	38.4	3,367.2
250	1.65	1.65	3/0	1.14	1.14	44.3	4,138.8
350	1.65	1.65	250	1.65	1.65	49.7	5,586.8
500	1.65	1.65	350	1.65	1.65	57.0	7,771.2
750	2.03	1.65	500	1.65	1.65	68.2	11,494.4

All dimensions are nominal and subject to normal manufacturing tolerances.

CIC -TC CABLE

Low Voltage Cable, 600V;
T90 NYLON Insulation, PVC Jacket, Multi-conductor, Copper

Application:
CIC-TC Cable used for power, control, signal, communication and lighting circuits in commercial and industrial environments. Suitable for installation in cable trays, supported by messenger wire in open air, raceways, channels, conduits and ducts. Approved for direct burial and outdoors in cable trays where sunlight resistant is required. Also may be installed in wet or dry locations or in areas exposed to chemicals and oils.

Structure:

1.Conductor: Stranded annealed bare copper
Ground Conductor(Optional): One (1) bare stranded copper conductor

2.Insulation: PVC/Nylon T90 Nylon
Optional Insulation: Cross-linked Polyethylene (XLPE) TYPE RW90.

3.Shielding(Optional): Copper Tape Shielding(CTS, Overlap @20%)

4.Outer Jacket: Flame-retardant, and sunlight resistant Polyvinyl Chloride (PVC), Black

Standard: C22.2 No. 230 & 239

cUL File No.: E468830 **Voltage:** 600V **Working temperature: -25°C** to **+90°C**

Performance: Self-extinguishing and flame retardant according to CSA FT4;
The materials used during manufacturing are cadmium-free, contain no silicone and are free from substances harmful to the wetting properties of lacquers;
UV resistant;
Direct burial rated.

Printing: HT CABLES c(UL) E468830 Type CIC-TC 600V **°C **AWG PVC/N -25C SUN RES YEAR ****m

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TYPE CIC-TC POWER CABLE PVC/Nylon Insulation

Conductor Size	No. of conductor	No. of Strands	Ground Wire	Insulation	Nylon	Jacket	Overall Diameter	Net
				Thickness	Thickness	Thickness		Weight
AWG			AWG	mm	mm	mm	mm	kg/km
14	3	7	14	0.38	0.10	1.14	8.9	146
14	4	7	14	0.38	0.10	1.14	9.7	178
12	3	7	14	0.38	0.10	1.14	9.7	190
12	4	7	14	0.38	0.10	1.14	10.8	236
10	3	7	12	0.51	0.10	1.14	11.6	281
10	4	7	12	0.51	0.10	1.14	12.9	352
8	3	7	10	0.76	0.13	1.52	15.5	450
8	4	7	10	0.76	0.13	1.52	16.8	523
6	3	7	8	0.76	0.13	1.52	18.4	626
6	4	7	8	0.76	0.13	1.52	20.2	1,142
4	3	7	8	1.02	0.15	1.52	21.8	964
4	4	7	8	1.02	0.15	1.52	24.3	1,197
3	3	7	6	1.02	0.15	2.03	23.5	1,199
2	3	7	6	1.02	0.15	2.03	25	1,432
2	4	7	6	1.02	0.15	2.03	28	1,648
1	3	19	6	1.27	0.18	2.03	28.1	1,720
1	4	19	6	1.27	0.18	2.03	31.7	2,261
1/0	3	19	6	1.27	0.18	2.03	30.7	2,160
1/0	4	19	6	1.27	0.18	2.03	33.4	2,696
2/0	3	19	6	1.27	0.18	2.03	32.9	2,584
2/0	4	19	6	1.27	0.18	2.03	36.9	3,405
3/0	3	19	4	1.27	0.18	2.03	35.8	3,158
3/0	4	19	4	1.27	0.18	2.03	40	4,099
4/0	3	19	4	1.27	0.18	2.03	38.9	3,834
4/0	4	19	4	1.27	0.18	2.03	44.9	5,112

All dimensions are nominal and subject to normal manufacturing tolerances.

2000V Type W MSHA

Portable Power Cable, 2000V;
EPR Insulation, CPE Jacket, Multi-conductor, Copper

Application:

For use in all stationary, underground, or surface mining applications. For use with drills and pumps, and as portable power and temporary power supply cables.

Structure:

1.**Conductors**: Annealed flexible stranded tin copper

2.**Separator**: Tape separator between conductor and insulation (if necessary)

3.**Insulation**: Ethylene-propylene rubber (EPR)
1-core black
2-cores black/white
3-cores black/white/green
4-cores black/white/green/red
5-cores black/white/green/red/orange

4. **Assembly**: Power and ground cores cabled together to form a round core

5. **Filler**: rubber filled binder tape over core.

6. **Jacket**: Black heavy duty CPE thermosetting compound.

Standard:
- c(UL) listed
- MSHA listed
- ICEA Standard S-75-381/NEMA WC-58, ASTM B-172 and B-33
- CSA C22.2, No. 96 Portable Power Cords

cUL File No.: E482608 **MSHA Approval No.** 07-KA160016 **Voltage:** 2000V

Performance: Excellent flexibility ; Highly ozone, sun, weather and flame resistant ; Oil and heat resistant.

Printing: HT CABLES c(UL) E482608 ***AWG ***C TYPE W FT1 2000V YEAR ***m

Technical data:

Phase conductor no. x cross section	Phase conductor stranding	Nom. insulation thick.	Approx. diam.	Approx. weight	Ampacity (90°C conductor and 30°C ambient temp.)
AWG/KCMIL	No.	mm	mm	kg/km	A
		4-cores			
4×8	133	1.52	24.6	975	54
4×6	133	1.52	28.3	1,350	72
4×4	259	1.52	32.1	1,880	93
4×2	259	1.52	36.3	2,620	122
4×1	259	2.03	43.4	3,455	143
4×1/0	266	2.03	45.2	4,050	165
4×2/0	342	2.03	48	4,900	192
4×3/0	418	2.03	51.4	5,730	221
4×4/0	532	2.03	56.3	7,090	255
4×250	627	2.41	66.2	8,300	280
4×350	888	2.41	74.2	10,910	335
4×500	1221	2.41	85.3	14,730	395
		5-cores			
5×8	133	1.52	27.2	1,155	50
5×6	133	1.52	31.5	1,525	68
5×4	259	1.52	35.2	2,130	88
5×2	259	1.52	39.8	3,050	116
5×1	259	2.03	47.1	3,965	136
5×1/0	266	2.03	50.4	5,070	150
5×2/0	342	2.03	54.1	5,350	172
5×3/0	418	2.03	57.6	7,035	200
5×4/0	532	2.03	62.6	8,200	230
5×250	627	2.41	69	9,425	256
5×500	1221	2.41	88.9	17,300	395

All dimensions are nominal and subject to normal manufacturing tolerances.

2000V Type G MSHA

Portable Power Cable, 2000V;
EPR Insulation, CPE Jacket, Multi-conductor, Copper

Application:

Type G cable is a heavy-duty industrial cable for use in flexible, portable, and extra-hard usage applications. Highly flexible and easy to work with in cold conditions. cUL Listed.

Structure:

1. **Conductors:** Annealed flexible stranded tin copper
2. **Separator:** Tape separator between conductor and insulation
3. **Insulation:** Ethylene-propylene rubber (EPR)
4. **Grounding conductors:** Four cores in annealed flexible stranded copper, EPR insulated
5. **Assembly:** Power and ground cores cabled together to form a round core
6. **Filler:** As needed to round the cable core
7. **Jacket:** Black, Chlorinated Polyethylene (CPE)

Standard:

- CSA C22. 2 No.96 Portable Power Cable
- cUL listed
- MSHA approved

cUL File No.: E482608 **MSHA Approval No.** 07-KA160016 **Voltage:** 2000V

Performance: Excellent flexibility ; Highly ozone, sun, weather and flame resistant ; Oil and heat resistant.

Printing: HT CABLES c(UL) E482608 ***/C ***AWG ***/GRD ***AWG TYPE G 2000V 90C SUN RES OIL RES 90C WET OR DRY FT1 FT5 (-40C) Year ***m

Technical data:

Phase Conductor No. × Cross Section	Grounding Wire No. × Section	Nominal Insulation Thickness	Approx. Diameter	Approx. Weight
(AWG/MCM)	(AWG)	(mm)	(mm)	(kg/km)
4×8	4×12	1.52	27.4	1,071.7
4×6	4×12	1.52	28.7	1,295.0
4×4	4×10	1.52	31.8	1,771.3
4×3	4×10	1.52	32.8	2,115.0
4×2	4×9	1.52	37.1	2,813.3
4×1	4×8	2.03	42.2	3,304.5
4×1/0	4×7	2.03	44.7	3,646.8
4×2/0	4×6	2.03	47.5	4,435.7
4×3/0	4×5	2.03	50.8	5,418.1
4×4/0	4×4	2.03	55.4	6,594.1
4×250	4×3	2.41	65.0	8,901.2
4×350	4×2	2.41	68.3	11,029.8
4×500	4×1/0	2.41	82.8	15,420.9

All dimensions are nominal and subject to normal manufacturing tolerances.

2000V Type G-GC MSHA

Portable Power Cable, 2000V;
EPR Insulation, CPE Jacket, Multi-conductor, Copper

Application:

For use in stationary, underground, or surface mining applications. For use with drills and pumps, and other portable power applications where equipment grounding is required.

Structure:

1. **Conductors**: Annealed flexible stranded tin copper
2. **Separator**: Tape separator between conductor and insulation
3. **Insulation**: Ethylene-propylene rubber (EPR) Color black/white/red
4. **Grounding conductors:** Annealed flexible stranded tin copper, green / green / yellow EPR insulation
5. **Assembly:** Power and ground cores cabled together to form a round core
6. **Filler:** rubber filled binder tape over core.
7. **Jacket:** Black heavy duty CPE thermosetting compound.

Standard:

- c(UL) listed
- MSHA listed
- ICEA Standard S-75-381/NEMA WC-58, ASTM B-172 and B-33
- CSA C22.2, No. 96 Portable Power Cables

cUL File No.: E482608 **MSHA Approval No.** 07-KA160017 **Voltage**: 2000V

Performance: Excellent flexibility ; Highly ozone, sun, weather and flame resistant ; Oil and heat resistant.

Printing: HT CABLES c(UL) E482608 ***AWG ***C TYPE G-GC FT1 2000V YEAR ***m

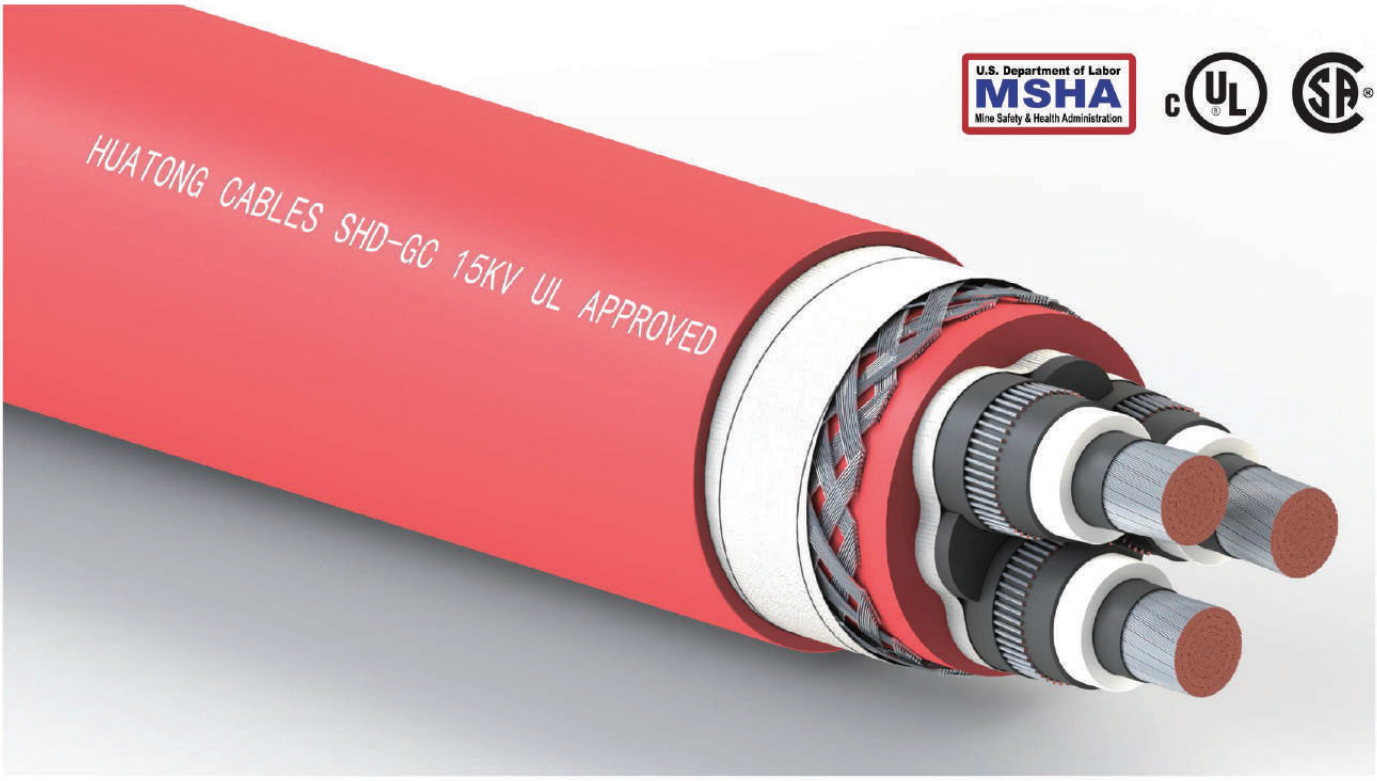
Technical data:

Phase conductor no. x cross section	Phase conductor stranding	Grounding wire no. x section	Ground check wire no. x section	Nom. insulation thick.	Approx. diam.	Approx. weight	Ampacity (90°C conductor and 30°C ambient temp.)
AWG/KCMIL	No.	AWG	AWG	mm	mm	kg/km	A
3×6	133	2×10	1×10	1.52	26.6	1,095	79
3×4	259	2×8	1×10	1.52	30.2	1,585	104
3×3	259	2×8	1×10	1.52	31.5	1,855	120
3×2	259	2×7	1×10	1.52	34	2,200	138
3×1	259	2×6	1×8	2.03	38.3	2,805	161
3×1/0	266	2×5	1×8	2.03	41.9	3,410	186
3×2/0	342	2×4	1×8	2.03	44.4	4,035	215
3×3/0	418	2×3	1×8	2.03	48	4,865	249
3×4/0	532	2×2	1×8	2.03	51.8	5,915	287
3×250	627	2×2	1×6	2.41	60.7	7,365	320
3×350	888	2×1/0	1×6	2.41	68	9,860	394
3×500	1221	2×2/0	1×6	2.41	76.9	13,230	487

All dimensions are nominal and subject to normal manufacturing tolerances.

SHD -GC MSHA

Portable Power Cable, 8KV/15KV;
EPR Insulation, Shield, CPE Jacket, Multi-conductor, Copper



Application:

use in heavy duty medium voltage service as a power supply cable for mobile and portable mining equipment, loaders, drag lines, shovels, dredges and drills, where flex life is required, and for systems that require an internal ground check conductor for added safety. Type SHD-GC is for applications up to 5,000 volts and temperatures from -40˚C to +90˚C

Structure:

1. **Conductors:** 6awg thru 500kcmil annealed tinned coated copper conductor, bunched wires, rope-lay-stranded per ASTM B172.
2. **Conductor Shield:** Extruded thermosetting semi-conducting stress control layer over conductor
3. **Insulation:** Ethylene propylene Rubber (EPR) insulation.
4. **Insulation Shield:** A flexible coated copper/textile braid shield is applied over non-conducting overlapped tape.
5. **Ground Check Conductor:** Annealed tinned coated copper, rope-lay-stranded per ASTM B172, insulated with high-strength yellow polypropylene.
6. **Ground Conductor:** Annealed tinned coated copper, rope-lay-stranded per ASTM B172. Two conductors in contact with the flexible copper braid shield.
7. **Separator:** Polyamide open braid applied overall.
8. **Jacket:** Flame retardant, thermosetting Chlorinated Polyethylene (CPE).

Standard:
- ICEA S-75-381 Portable and Power Feeder Cables for use in mines and similar applications.
- CSA C22.2, No. 96 Portable Power Cables
- Meets flame test requirements and is accepted for listing by MSHA.

Performance: Excellent flexibility ;
Highly ozone, sun, weather and flame resistant ;
Oil and heat resistant.

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cUL File No.: E482605 **MSHA Approval No.** 07-KA160017 **Voltage:** 5KV-25KV
Working temperature: in dry locations only at temperature not to exceed **90°C.**
Printing: HT CABLES c(UL) E482605 Type SHD-GC ***AWG (KCMIL)***V 90C Portable Power Cables YEAR ****m

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Technical data:

TYPE SHD-GC Cable 8000V

Cond. Number	Cond.Size (AWG/Kcmil)	Cond. Strands	Nominal Insulation thickness	Ground size (AWG)	Ground check conductor	Nominal jacket thickess	Approx. OD	Net weight
			mm		(AWG)	mm	mm	kg/ km
3	4	259	3.80	8	8	5.20	49.3	3,594
3	2	259	3.80	6	8	5.60	53.8	4,554
3	1	259	3.80	5	8	5.60	56.1	5,104
3	1/0	259	3.80	4	8	5.60	58.9	5,700
3	2/0	329	3.80	3	8	6.00	62.5	6,593
3	3/0	413	3.80	2	8	6.40	66.5	7,738
3	4/0	532	3.80	1	8	6.40	69.8	8,713
3	250	608	3.80	1/0	6	6.40	73.4	9,948
3	300	741	3.80	1/0	6	6.70	77.2	11,384
3	350	851	3.80	2/0	6	7.10	81.3	12,739
3	500	1221	3.80	4/0	6	7.50	90.4	16,757

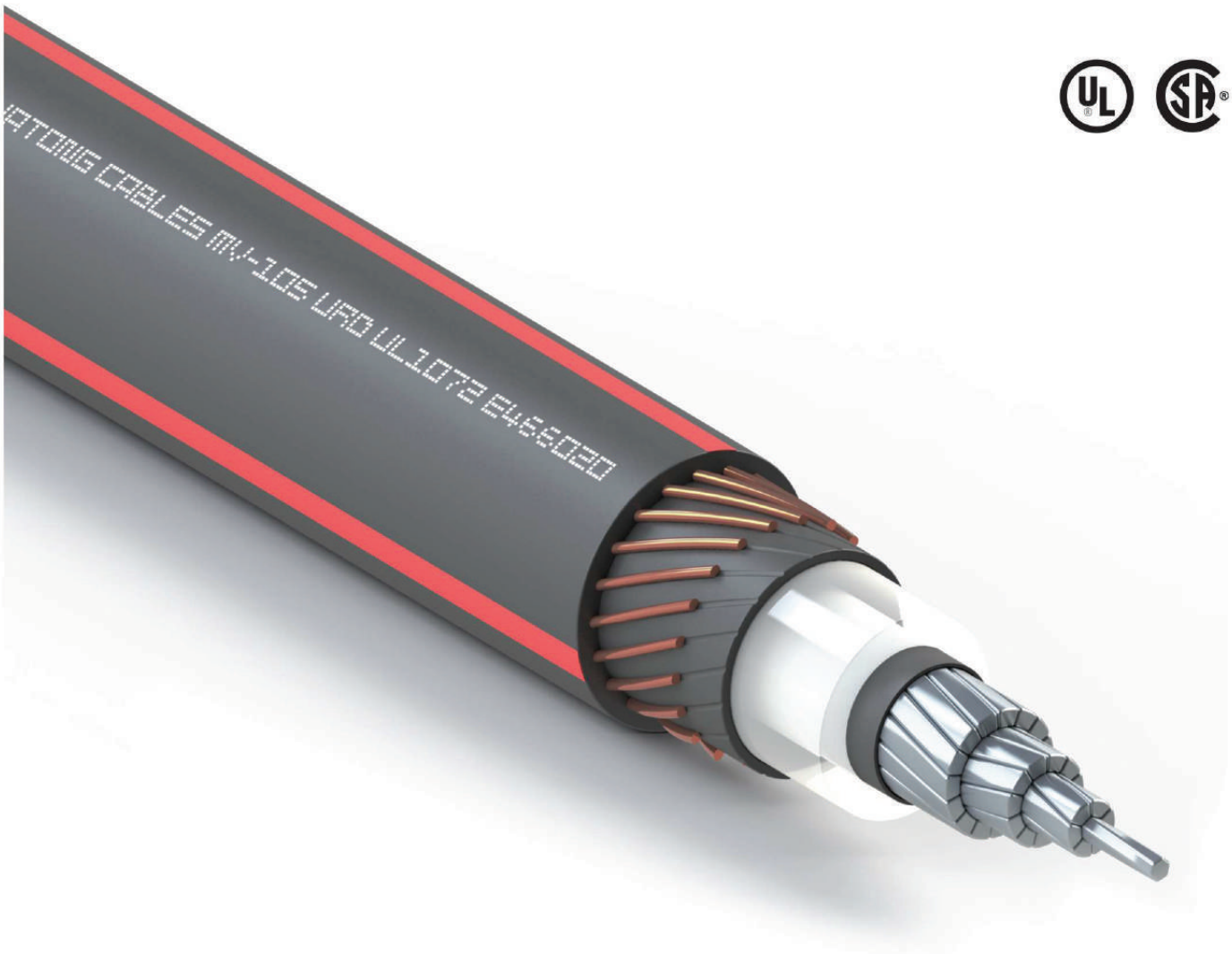
TYPE SHD-GC 15000 V

Cond. Number	Cond.Size (AWG/Kcmil)	Cond. Strands	Nominal Insulation thickness	Ground size (AWG)	Ground check conductor	Nominal jacket thickess	Approx. OD	Net weight
			mm		(AWG)	mm	mm	kg/ km
3	2	259	5.30	6	8	6.00	61.2	5,529
3	1	259	5.30	5	8	6.00	64.0	6,042
3	1/0	259	5.30	4	8	6.40	67.0	6,927
3	2/0	329	5.30	3	8	6.40	69.3	7,783
3	3/0	413	5.30	2	8	6.70	73.7	8,922
3	4/0	532	5.30	1	8	6.70	77.5	10,209
3	250	608	5.30	1/0	6	6.70	78.7	11,149
3	350	851	5.30	2/0	6	7.10	85.9	13,194
3	500	1221	5.30	4/0	6	7.10	92.7	17,463

All dimensions are nominal and subject to normal manufacturing tolerances.

MV-90/MV-105 URD Cable

Underground Residential Distribution Cable, 5-35 KV;
TR -XLPE Insulation, Neutral Concentric wire, LLDPE Jack, Single Conductor,
Copper or Aluminum



Application:

5-46 kV URD Cable (MV-90/MV-105)Underground Residential Distribution Cables are intended for use in dry or wet locations for distribution of single or three phase medium voltage power. Suited for use in wet and dry areas, conduits, ducts, troughs, trays, direct burial, sunlight, and where superior electrical properties are desired. These cables are capable of operating continuously at the conductor temperature not in excess of 90°C for normal operation. 130°C for emergency overload, and 250°C for short circuit conditions.

Structure:

1. **Conductor:** Solid or Class B compressed concentric lay stranded 1350 aluminum or Copper conductors, Conductor moisture block (optional).
2. **Conductor screen:** Semi conductive extruded layer.
3. **Insulation:** Tree-Retardant Cross-linked Polyethylene (TR-XLPE).
4. **Insulation screen:** Semi conductive extruded layer, Easy strippable.
5. **Neutral:** Helically applied, annealed, solid bare copper wires.
6. **Outer sheath:** Sun resistant Linear Low Density Polyethylene (LLDPE) sheath, ex truded to fill spaces between neutral wires.

Standard:

- UL1072 Medium-Voltage Power Cables.
- ICEA S-94-649 Concentric Neutral Cables Rated 5 - 46kV.
- AEIC CS8 Specification for Extruded Dielectric, Shielded Power Cables Rated 5 through 46 kV.
- CSA C68.5 - Primary shielded and concentric neutral cable for distribution utilities.

UL File No.: E466020 **CSA file No.:** 271587 **Voltage:** Rated voltage (U): 5~46 kV

Working temperature: -40°C or **-25°C** MIN, **90°C** or 105 °C MAX

Performance: Min. Bending Radius during Installation : 20xD
Min. Bending Radius Fix installed : 15Xd
Sun resistance
-40 Degree

Printing: HT CABLES (UL) E466020 ***AWG MV-90 35KV AL TRXLPE 1/3 CN 11x 14AWG 345 MILS 100% INS LLDPE JACKET SUN RES YEAR ****m

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Core Identification
Insulation : Natural

Outer Sheath Colors
Available colors : Black with 3 red stripes.

Optional:

- Voltage: 5KV, 8KV, 15KV, 25 KV, 28 KV, 35 KV, 46KV.
- Insulation Level: 100%, 133%, 173%.
- Conductor: Copper, Aluminum, Aluminum Alloy AA8000Series.
- Insulation material: EPR (UL Certification ONLY)
- Copper Concentric Copper Neutral: Full Neutral, 1/3 Neutral, 1/6 Neutral, 1/8 Neutral, 1/12 Neutral.
- Screen: Copper Tape Shield.
- Jacket: XLPE (UL Certification ONLY) or PVC.

Technical data:

URD Power Cable-AL TR-XLPE 15 kV 100% 1/3 Concentric Neutral XLPE (International Unit System) Range and Dimension

SIZE AWG/MCM	Nominal conductor diameter	Nominal insulation thickness	Nominal diameter over insulation	Strands No.	Strands diameter	Jacket thickness	Jacket Diameter	Weight
AWG/MCM	(mm)	(mm)	(mm)	-	(mm)	(mm)	(mm)*	(kg/km)*
2	7.0	4.45	17.0	6	1.29	1.40	24.2	602.0
1/0	9.0	4.45	18.9	6	1.63	1.40	26.8	782.2
2/0	10.1	4.45	20.0	11	1.29	1.40	27.2	839.8
3/0	11.4	4.45	21.3	14	1.29	1.40	28.5	956.9
4/0	12.8	4.45	22.7	11	1.63	1.40	30.6	1,127.1
250	13.9	4.45	23.8	13	1.63	1.40	31.7	1,256.0
350	16.5	4.45	26.4	18	1.63	1.40	34.8	1,591.2
500	19.6	4.45	29.5	16	2.05	1.40	38.8	2,069.3
750	24.1	4.45	34.4	15	2.59	2.03	46.0	2,994.6
1000	27.8	4.45	38.1	20	2.59	2.03	49.7	3,699.1
1250	31.2	5.59	43.9	20	2.91	2.03	56.9	4,748.8
1500	34.1	5.59	47.3	24	2.91	2.03	60.2	5,489.6

All dimensions are nominal and subject to normal manufacturing tolerances.

URD Power Cable-AL TR-XLPE 15 kV 133% 1/3 Concentric Neutral XLPE (International Unit System) Range and Dimension

SIZE AWG/MCM	Nominal conductor diameter	Nominal insulation thickness	Nominal diameter over insulation	Strands No.	Strands diameter	Jacket thickness	Jacket Diameter	Weight
AWG/MCM	(mm)	(mm)	(mm)	-	(mm)	(mm)	(mm)*	(kg/km)*
2	7.0	5.59	19.2	6	1.29	1.40	26.5	692.1
1/0	9.0	5.59	21.2	6	1.63	1.40	29.1	881.4
2/0	10.1	5.59	22.3	11	1.29	1.40	29.5	940.3
3/0	11.4	5.59	23.6	14	1.29	1.40	30.8	1,061.8
4/0	12.8	5.59	25	11	1.63	1.40	32.9	1,239.2
250	13.9	5.59	26.1	13	1.63	1.40	34.5	1,405.0
350	16.5	5.59	28.7	18	1.63	1.40	37.1	1,718.2
500	19.6	5.59	31.8	16	2.05	1.40	41.0	2,209.8
750	24.1	5.59	36.7	15	2.59	2.03	48.2	3,160.0
1000	27.8	5.59	40.4	20	2.59	2.03	52.7	3,953.9
1250	31.2	5.59	43.9	20	2.91	2.03	56.9	4,748.8
1500	34.1	5.59	47.3	24	2.91	2.03	60.2	5,489.6

All dimensions are nominal and subject to normal manufacturing tolerances.

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