

SECTION-VI

APPLIANCE WIRING MATERIAL



PRODUCTS

TRI RATED CABLE

Page No.: 172 - 173

UL 1015

Page No.: 174 - 175

UL 1007

Page No.: 176

UL 1569

Page No.: 177

UL 1275

Page No.: 178

UL 2587

Page No.: 179 - 181

UL 2464

Page No.: 182 - 184

UL 2576, 2598

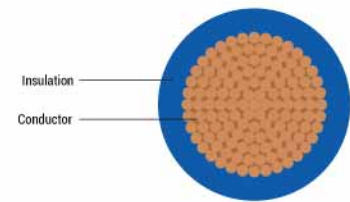
Page No.: 185 - 186

UL 3289/3321/3173 3271/3344 XLPE Cable

Page No.: 187 - 188

UL 2586

Page No.: 189



Application

These cables are used for internal wiring of panels and electrical equipment. These are used as connection wire in machines laid in protective tubes and flexible pipes and also for motors and transformers.

Technical Data

Standard : UL 1015, 758, CSA C 22.2 No 210 & BS 6231

Nominal Voltage : 600V

UL - Type AWM 105°C 600V

CSA - Type AWM 105°C 600V

BS 6231 CK type 90°C 600V / 1000 V

Test Voltage (Spark Test)

AWG 18 to 16 : 6kV

≥ AWG 8: 7.5kV

Temperature Range : Flexing -5°C to +105°C. Fixed installation -20°C to +105°C

Bending Radius :

Cable diameter ≤ 8 mm : 4 x outer diameter

Approx diameter > 8 to 12 mm : 5 x outer diameter

Approx diameter > 12 mm : 6 x outer diameter

Cable Construction

Stranded copper conductor / according to BS EN 60228, cl. 5.

PVC-core insulation according to UL - Standard 1581, Class 43 and CSA - C22.2 No. 210 ULVW - 1 and CSA FT - 1, heat and damp resistant

Properties

Conditionally resistant to - Oils, Solvents, Acids, Dye.

PVC self - extinguishing and flame retardant, test method to UL VW-1 and CSA FT 1 / FT 2

Flame retardant to EN 60332 - 1- 2.

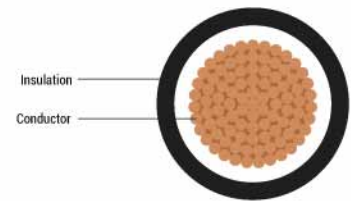
Cable Design Parameters

Kindly complete the part numbers for these cables by adding the suffix (in place of 'xx') for the insulation colour required:

01 - green, 02 - black, 03 - red, 04 - blue, 05 - yellow, 06 - green/yellow, 07 - white, 08 -Violet, 09 - brown, 10 - orange, 11 - pink, 12 - grey, 13 - light blue

Part Number	AWG No.	No. of Cores and Nominal Cross Sectional (Sq. mm)	Approx. Cable Diameter (mm)	Approx. Copper Weight (kg/km)	Approx. Cable Weight (kg/km)
06010101xx30	21	1 x 0.5	2.6	4.1	11.0
06010102xx30	19	1 x 0.75	2.8	6.1	13.5
06010103xx30	18	1 x 1	2.9	8.1	16.0
06010104xx30	16	1 x 1.5	3.2	11.7	21.0
06010105xx30	14	1 x 2.5	3.6	19.5	31.0
06010106xx30	12	1 x 4	4.1	31.5	45.0
06010107xx30	10	1 x 6	4.7	47.1	63.0
06010108xx30	8	1 x 10	6.3	81.6	111.0
06010109xx30	6	1 x 16	8.3	131.8	183.0
06010110xx30	4	1 x 25	9.6	204.8	267.0
06010111xx30	2	1 x 35	10.8	299.7	374.0
06010112xx30	1	1 x 50	13.2	416.8	531.0
06010113xx30	2/0	1 x 70	14.9	597.2	733.0
06010114xx30	3/0	1 x 95	16.4	774.0	928.0
06010115xx30	4/0	1 x 120	18	980.0	1156.0
06010116xx30	250 kcmil	1 x 150	20.3	1208.1	1439.0
06010117xx30	350 kcmil	1 x 185	22.4	1568.2	1834.0
06010118xx30	450 kcmil	1 x 240	24.7	2018.2	2324.0

For current ratings & voltage drop refer table no. 8-1.



Application

These cables are used for internal wiring of panels and electrical equipment. These are used as connection wire in machines laid in protective tubes and flexible pipes and also for motors and transformers.

Technical Data

Standard : UL - Std. 758, CSA C 22.2 No. 210

Nominal Voltage : 600V

UL - type AWM 105°C 600V

CSA - type AWM 105°C 600V

Test Voltage (Spark Test)

AWG 24 : 4kV

AWG 22 and 20 : 5kV

AWG 18 to 16 : 6kV

≥ AWG 8 : 7.5kV

Temperature Range : Flexing -5°C to +105°C. Fixed installation -20°C to +105°C

Temperature at Conductor : Max. UL and CSA : +105°C

Bending Radius : Flexing 10 x cable ϕ . Fixed installation 5 x cable ϕ

Cable Construction

Annealed plain or tinned stranded copper conductor.

PVC - core insulation according to UL - Standard 1581, Class 43 Tab. 50.182, heat and damp resistant.

Properties

Conditionally resistant to oils, solvents, acids and dyes.

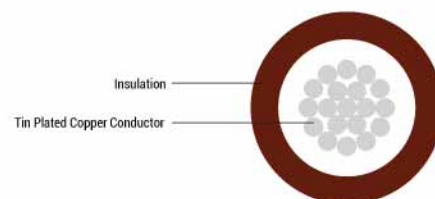
PVC self - extinguishing and flame retardant, test method to UL VW-1 and CSA FT 1 / FT 2

Cable Design Parameters

Kindly complete the part numbers for these cables by adding the suffix (in place of 'xx') for the insulation colour required:

01 - green, 02 - black, 03 - red, 04 - blue, 05 - yellow, 06 - green/yellow, 07 - white, 08 -Violet, 09 - brown, 10 - orange, 11 - pink, 12 - grey.

Part Number	AWG No.	No. of Cores and Nominal Cross Sectional (Sq. mm)	Approx. Cable Diameter (mm)	Approx. Copper Weight (kg/km)	Approx. Cable Weight (kg/km)
06020101xx30	24	1 x 0.21	2.2	2.1	7
06020102xx30	22	1 x 0.33	2.4	3.5	9
06020103xx30	20	1 x 0.52	2.5	5.2	11
06020104xx30	18	1 x 0.82	2.8	8.3	16
06020105xx30	16	1 x 1.32	3.1	13.5	22
06020106xx30	14	1 x 2.08	3.5	20.4	31
06020107xx30	12	1 x 3.31	4.0	32.5	45
06020108xx30	10	1 x 5.26	4.6	51.7	68
06020109xx30	8	1 x 8.35	6.2	82.5	113
06020110xx30	6	1 x 13.3	8.0	132.1	184
06020111xx30	4	1 x 21.14	9.4	207.3	275
06020112xx30	3	1 x 26.65	10.2	262	339
06020113xx30	2	1 x 33.61	11.0	330.3	416
06020114xx30	1	1 x 42.38	13.0	416.9	543
06020115xx30	1/0	1 x 53.47	13.8	524.6	659
06020116xx30	2/0	1 x 67.4	15.2	661	820
06020117xx30	3/0	1 x 85.0	16.5	832.3	1013
06020118xx30	4/0	1 x 107.2	18.0	1050.9	1257
06020119xx30	250 kcmil	1 x 127	20.0	1245	1507
06020120xx30	300 kcmil	1 x 152	21.4	1489.8	1780
06020121xx30	350 kcmil	1 x 178	22.6	1734.6	2048
06020122xx30	400 kcmil	1 x 203	24.0	1989.9	2338
06020123xx30	500 kcmil	1 x 254	26.0	2479.5	2868



Application

These cables are used for internal wiring of switchboards, electronic and electrical equipment, e. g. households, radio of televisions, monitor and control desks.

Technical Data

Standard : UL - Std. 758 , CSA C 22.2 No. 210

Nominal Voltage : 300V

Test Voltage : 2000V

Test Voltage (Spark Test)

AWG 26-20 : 4kV, AWG 10 -18 : 5kV

Temperature Range : Flexible -5°C to +80°C. Fixed installation -20°C to + 80°C

CSA - AWM I A/B

Bending Radius : Flexing 10 x cable ø. Fixed installation 5 x cable ø

Cable Construction

Annealed plain or tinned stranded copper conductor.

PVC - core insulation according to UL - Standard 1581, Class 43 Tab. 50.182, heat and damp resistant.

Properties

Conditionally resistant to oils, solvents, acids and dyes.

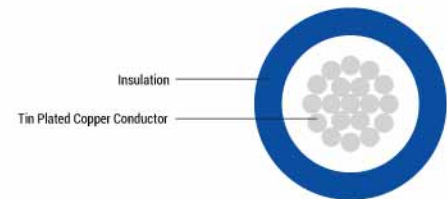
PVC self - extinguishing and flame retardant, test method to UL VW-1 and CSA FT 1 / FT 2

Cable Design Parameters

Kindly complete the part numbers for these cables by adding the suffix (in place of 'xx') for the insulation colour required:

01 - green, 02 - black, 03 - red, 04 - blue, 05 - yellow, 06 - green/yellow, 07 - white, 08 -Violet, 09 - brown, 10 - orange, 11 - pink, 12 - grey, 13 - light blue.

Part Number	AWG No.	No. of Cores and Nominal Cross Sectional (Sq. mm)	Approx. Cable Diameter (mm)	Approx. Copper Weight (kg/km)	Approx. Cable Weight (kg/km)
06030101xx30	26	1 x 0.14	1.3	1.4	3.0
06030102xx30	24	1 x 0.21	1.5	2.1	4.3
06030103xx30	22	1 x 0.33	1.6	3.5	5.8
06030104xx30	20	1 x 0.52	1.9	5.2	8.0
06030105xx30	18	1 x 0.82	2.2	8.3	12.0
06030106xx30	16	1 x 1.32	2.5	13.5	18.4



Application

These cables are used for internal wiring of switchboards, electronic and electrical equipment, e. g. households, radio of televisions, monitor and control desks.

Technical Data

Standard : UL - Std. 758 , CSA C 22.2 No.210

Nominal Voltage : 300V

Test Voltage : 2000V

Test Voltage (spark test)

AWG 26 - 20 : 4kV, AWG 10 -18: 5kV

Temperature Range : Flexible -5°C to + 105°C. Fixed installation -20°C to + 105°C

CSA - AWM I A/B

Bending Radius : Flexing 10 x cable ϕ . Fixed installation 5 x cable ϕ

Cable Construction

Annealed plain or tinned stranded copper conductor.

PVC - core insulation according to UL - Standard 1581, Class 43 Tab. 50.182, heat and damp resistant.

Properties

Conditionally resistant to oils, solvents, acids and dyes.

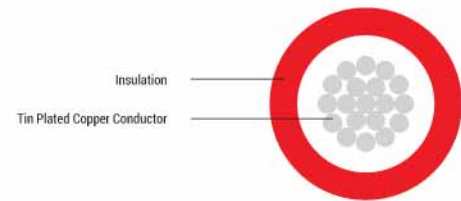
PVC self - extinguishing and flame retardant, test method to UL VW-1 and CSA FT 1 / FT 2

Cable Design Parameters

Kindly complete the part numbers for these cables by adding the suffix (in place of 'xx') for the insulation colour required:

01 - green, 02 - black, 03 - red, 04 - blue, 05 - yellow, 06 - green/yellow, 07 - white, 08 -Violet, 09 - brown, 10 - orange, 11 - pink, 12 - grey, 13 - light blue.

Part Number	AWG No.	No. of Cores and Nominal Cross Sectional (Sq. mm)	Approx. Cable Diameter (mm)	Approx. Copper Weight (kg/km)	Approx. Cable Weight (kg/km)
06040101xx30	26	1 x 0.14	1.3	1.4	3.0
06040102xx30	24	1 x 0.21	1.5	2.1	4.3
06040103xx30	22	1 x 0.33	1.6	3.5	5.8
06040104xx30	20	1 x 0.52	1.8	5.2	8.0
06040105xx30	18	1 x 0.82	2.1	8.3	12.0
06040106xx30	16	1 x 1.32	2.5	13.5	18.4
06040107xx30	14	1 x 2.08	3.0	20.4	27.3
06040108xx30	12	1 x 3.31	3.5	32.5	41.3
06040109xx30	10	1 x 5.26	4.1	51.7	62.8



Application

PVC-insulated heavy wall lead wire, for use as hook - up wire and for internal wiring on refrigeration equipments.

Technical Data

Standard : UL - Std. 758, CSA C 22.2 No.210

Temperature Range : -20°C to 105°C

Nominal Voltage : 600V

Test Voltage (Spark Test)

AWG 18 to 16 : 6kV

≥ AWG 8: 7.5kV

Bending Radius : Fixed installation 5 x cable ø

Cable Construction

Annealed plain or tinned stranded copper conductor.

PVC - core insulation Type TW, Recognized Component QMTT2 heat and damp resistant.

Properties

Conditionally resistant to oils.

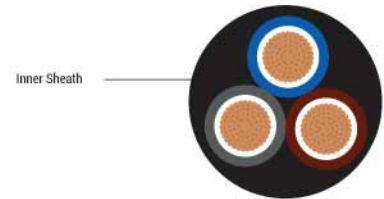
PVC self - extinguishing and flame retardant, test method to UL VW-1 and CSA FT 1 / FT 2

Cable Design Parameters

Kindly complete the part numbers for these cables by adding the suffix (in place of 'xx') for the insulation colour required:

01 - green, 02 - black, 03 - red, 04 - blue, 05 - yellow, 06 - green/yellow, 07 - white, 08 -Violet, 09 - brown, 10 - orange, 11 - pink, 12 - grey, 13 - light blue.

Part Number	AWG No.	No. of Cores and Nominal Cross Sectional (Sq. mm)	Approx. Cable Diameter (mm)	Approx. Copper Weight (kg/km)	Approx. Cable Weight (kg/km)
06050101xx30	18	1 x 0.82	4.3	8.3	27.4
06050102xx30	16	1 x 1.32	4.6	13.5	35.1
06050103xx30	14	1 x 2.08	5.0	20.4	44.9
06050104xx30	12	1 x 3.31	5.5	32.5	60.6
06050105xx30	10	1 x 5.26	6.1	51.7	84.5



Application

Used in machine tools, control systems, connection between control panels and machines, assembly lines and other industrial equipment and moderate flexing applications.

Technical Data

Standard : UL - Std. 758; Control cable of special - PVC to UL AWM; Style 2587 cores according to UL 1015

Nominal Voltage : 600V

Test Voltage : 3000V

Temperature Range : Flexing -5°C to +90°C. Fixed installation -20°C to + 90°C

Insulation Resistance : Min 20 MΩ x km

Minimum Bending Radius : For permanent approx, 7.5 x cable ø

Cable Construction

Bare copper, fine wire conductors 0.5 - 35 Sq. mm (as per AWG - cross sections).

Special PVC core insulation class 43 to UL Standard 1581; color codes as per H05VV - F upto 5 cores.

Black conductors with consecutive numbering in white for above 5 cores.

Green - yellow earth core in the outer layer (3 cores and above).

Cores stranded in layers with optimal lay - length.

Special PVC outer sheath class 43 to UL Standard 1581 colour grey (RAL 7001).

PVC self - extinguishing and flame retardant, test method VW - 1, FT 1.

Properties

Suitable for installation in dry, moist or wet environment.

Resistant to mineral oils, synthetic oils and water based coolants. Aids easy stripping of sheath due to use of adequate Talc.

Cable Design Parameters

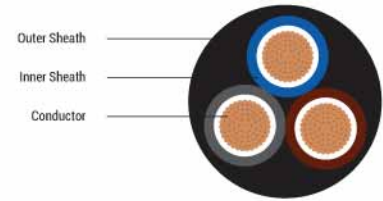
Kindly complete the part numbers for these cables by adding the suffix (in place of 'z') for the sheath colour required:

1 - black (RAL 9005), 3 - grey (RAL 7001).

Part Number	No. of Cores	AWG No.	Approx. Cable Diameter (mm)	Approx. Copper Weight (kg/km)	Approx. Cable Weight (kg/km)
06060101000z	2	21	6.4	7.9	53
06060102000z	3	21	7.1	11.9	68.5
06060103000z	4	21	8.5	15.8	96.9
06060104000z	6	21	11	23.7	157.9
06060105000z	10	21	11.7	39.5	190.7
06060106000z	12	21	12.1	47.4	208.4
06060107000z	16	21	13.5	63.2	262.2
06060108000z	18	21	15.3	71.1	327.8

Part Number	No. of Cores	AWG No.	Approx. Cable Diameter (mm)	Approx. Copper Weight (kg/km)	Approx. Cable Weight (kg/km)
06060109000z	24	21	17.8	94.8	444.5
06060110000z	2	19	6.8	11.9	62.4
06060111000z	3	19	7.1	17.8	73.5
06060112000z	4	19	8.2	23.7	96.5
06060113000z	6	19	9.8	35.6	139.3
06060114000z	10	19	12.5	59.3	229.5
06060115000z	12	19	13	71.1	252.2
06060116000z	16	19	15.5	94.8	353.8
06060117000z	18	19	16.3	106.7	393.8
06060118000z	24	19	19	142.3	535
06060119000z	2	18	7.1	15.8	70.4
06060120000z	3	18	7.5	23.7	83.8
06060121000z	4	18	8.5	31.6	110.1
06060122000z	6	18	10.2	47.4	159.5
06060123000z	10	18	13.1	79	263.7
06060124000z	12	18	13.6	94.8	291.1
06060125000z	16	18	16.2	126.5	405.8
06060126000z	18	18	17	142.3	452.2
06060127000z	24	18	19.9	189.7	615
06060128000z	2	16	7.6	23.4	85.2
06060129000z	3	16	8.3	35.1	107.7
06060130000z	4	16	9.1	46.8	135.1
06060131000z	6	16	11	70.2	196.8
06060132000z	10	16	14.1	117	326.7
06060133000z	12	16	15.6	140.4	398.3
06060134000z	16	16	17.3	187.2	501.9
06060135000z	18	16	18.3	210.6	560.2
06060136000z	24	16	21.4	280.8	762.5
06060137000z	2	14	8.7	39	119.9
06060138000z	3	14	9.2	58.5	146.6
06060139000z	4	14	10.2	78	185.4
06060140000z	5	14	12.3	97.5	255.8
06060141000z	2	12	9.8	62	162.6
06060142000z	3	12	10.4	93	202
06060143000z	4	12	11.6	124	257.3
06060144000z	5	12	14	155	353.7

Part Number	No. of Cores	AWG No.	Approx. Cable Diameter (mm)	Approx. Copper Weight (kg/km)	Approx. Cable Weight (kg/km)
06060145000z	2	10	10.9	93	214.7
06060146000z	3	10	11.6	139.5	270.6
06060147000z	4	10	12.9	186	346.5
06060148000z	2	8	15.3	158.4	402.6
06060149000z	3	8	16.2	237.6	501.4
06060150000z	4	8	18	316.8	638.1
06060151000z	2	6	19.4	263.8	654.5
06060152000z	3	6	21.1	395.7	843.3
06060153000z	4	6	23.5	527.6	1074.8
06060154000z	2	4	22.2	410.4	911.1
06060155000z	3	4	23.6	615.6	1153.6
06060156000z	4	4	26.3	820.7	1479.2
06060157000z	2	2	24.7	596.7	1201.9
06060158000z	3	2	26.3	895.1	1540.7
06060159000z	4	2	30.3	1193.4	2053.9



Application

Suitable for use as a command, measuring and control cable in tool making machinery conveyor system and production lines, in industrial plants and in air conditioning as well as in the steel producing industries.

Technical Data

Standard : UL- Std. 758. Special PVC command cable, approved to UL-Style 2464, cores according to AWG 24-16 to UL-Style 1007/1569

Nominal Voltage : 300V

Test Voltage : 1500V

Break down Voltage : Min. 3000V

Temperature Range : Flexible -10°C to +80°C. Fixed installation -20°C to + 80°C

Minimum Bending Radius : Flexing approx. 15x cable ø

Cable Construction

Annealed Plain copper, fine wire conductors AWG 24 -16, Table 30.3 UL 1581 ASTM - B.

Conductor make - up to.

0.22 Sq. mm = 8 x 0.187mm

0.44 Sq. mm = 16 x 0.187 mm

0.66 Sq. mm = 24 x 0.187 mm

0.88 Sq. mm = 32 x 0.187 mm

1.30 Sq. mm = 30 x 0.235 mm

Special PVC core insulation class 43, semirigid to UL- Std. 1581 table 50.182 and 50.183.

Colour coded to H05VV - F up to 5 cores coloured black with numbers for above 5 cores.

Cores stranded in layers with optimal lay-length.

Special PVC outer jacket class 43 to UL - Std. 1581 table 50.182.

Outer jacket colour black or grey.

Properties

PVC self-extinguishing and flame retardant, test method VW-1, FT 1

Cable Design Parameters

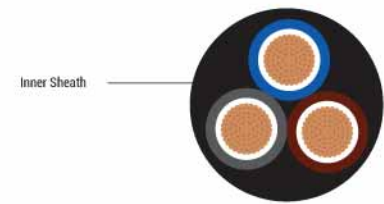
Kindly complete the part numbers for these cables by adding the suffix (in place of 'z') for the sheath colour required:

1 - black (RAL 9005), 3 - grey (RAL 7001)

Part Number	No. of Cores	AWG No.	Approx. Cable Diameter (mm)	Approx. Copper Weight (kg/km)	Approx. Cable Weight (kg/km)
06070101000z	2	24	5.1	4	32.9
06070102000z	3	24	5.3	5.9	36.9
06070103000z	4	24	5.7	7.9	43.5

Part Number	No. of Cores	AWG No.	Approx. Cable Diameter (mm)	Approx. Copper Weight (kg/km)	Approx. Cable Weight (kg/km)
06070104000z	6	24	6.5	11.9	58.1
06070105000z	10	24	7.9	19.8	87.8
06070106000z	12	24	8.1	23.7	95.2
06070107000z	16	24	8.9	31.6	116.5
06070108000z	18	24	9.3	35.6	128.6
06070109000z	24	24	10.7	47.4	170.6
06070110000z	2	21	5.7	7.9	43.6
06070111000z	3	21	5.9	11.9	50.1
06070112000z	4	21	6.4	15.8	60.1
06070113000z	6	21	7.4	23.7	82.3
06070114000z	10	21	9.1	39.5	127.7
06070115000z	12	21	9.4	47.4	140
06070116000z	16	21	10.3	63.2	173.9
06070117000z	18	21	10.8	71.1	192.9
06070118000z	24	21	12.5	94.8	258.1
06070119000z	2	19	6.1	11.9	52.3
06070120000z	3	19	6.3	17.8	61.1
06070121000z	4	19	6.9	23.7	74.1
06070122000z	6	19	8.0	35.6	102.8
06070123000z	10	19	9.9	59.3	161.6
06070124000z	12	19	10.2	71.1	178.5
06070125000z	16	19	11.2	94.8	223.6
06070126000z	18	19	11.8	106.7	248.5
06070127000z	24	19	13.7	142.3	333.8
06070128000z	2	18	6.7	15.8	64.4
06070129000z	3	18	7.0	23.7	75.9
06070130000z	4	18	7.6	31.6	92.8
06070131000z	6	18	8.9	47.4	130.2
06070132000z	10	18	11.1	79	207
06070133000z	12	18	11.4	94.8	229.4
06070134000z	16	18	12.6	126.5	288.6
06070135000z	18	18	13.3	142.3	321.5
06070136000z	24	18	15.5	189.7	433.8
06070137000z	2	16	7.3	23.4	80.4
06070138000z	3	16	7.6	35.1	96.2
06070139000z	4	16	8.3	46.8	118.8

Part Number	No. of Cores	AWG No.	Approx. Cable Diameter (mm)	Approx. Copper Weight (kg/km)	Approx. Cable Weight (kg/km)
06070140000z	6	16	9.8	70.2	168.5
06070141000z	10	16	12.3	117	271
06070142000z	12	16	12.7	140.4	302
06070143000z	16	16	14	187.2	382.6
06070144000z	18	16	14.8	210.6	427
06070145000z	24	16	17.3	280.8	577.7



Application

These cables are used for internal wiring of public address systems, intercoms, internal telephones, remote control circuits, wiring for machine tool control circuits, medical equipments.

Technical Data

Standard : UL - Std. 758; UL - Style 2576, 2598

Nominal Voltage : 300V

Temperature Range : -20°C to + 80°C

Test Voltage : 1500V

Minimum Bending Radius : Flexing approx. 15x cable \varnothing

Cable Construction

Annealed Plain copper, fine wire conductors AWG 24 - 16, Table 30.3 UL 1581 ASTM - B.

Special PVC core insulation class 43, semirigid to UL - Std. 1581 table 50.182 and 50.183.

Colour coded to H05VV - F up to 5 cores; coloured black with numbers for above 5 cores.

Cores stranded in layers with optimal lay - length.

Special PVC outer jacket class 43 to UL - Std. 1581 table 50.182.

Outer jacket colour black or grey.

Properties

PVC self-extinguishing and flame retardant, test method VW-1, FT 1

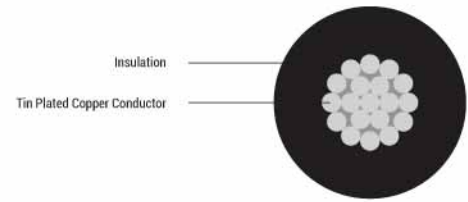
Cable Design Parameters

Kindly complete the part numbers for these cables by adding the suffix (in place of 'z') for the sheath colour required:

1 - black (RAL 9005), 3 - grey (RAL 7001)

Part Number	No. of Cores	AWG No.	Approx. Cable Diameter (mm)	Approx. Copper Weight (kg/km)	Approx. Cable Weight (kg/km)
06080101000z	2	24	5.1	4.0	32.9
06080102000z	3	24	5.3	5.9	36.9
06080103000z	4	24	5.7	7.9	43.5
06080104000z	6	24	6.5	11.9	58.1
06080105000z	10	24	7.9	19.8	87.8
06080106000z	12	24	8.1	23.7	95.2
06080107000z	16	24	8.9	31.6	116.5
06080108000z	18	24	9.3	35.6	128.6
06080109000z	24	24	10.7	47.4	170.6
06080110000z	2	21	5.7	7.9	43.6
06080111000z	3	21	5.9	11.9	50.1

Part Number	AWG No.	No. of Cores x Cross Section (Sq. mm)	Approx. Cable Diameter (mm)	Approx. Copper Weight (kg/km)	Approx. Cable Weight (kg/km)
06080112000z	4	21	6.4	15.8	60.1
06080113000z	6	21	7.4	23.7	82.3
06080114000z	10	21	9.1	39.5	127.7
06080115000z	12	21	9.4	47.4	140
06080116000z	16	21	10.3	63.2	173.9
06080117000z	18	21	10.8	71.1	192.9
06080118000z	24	21	12.5	94.8	258.1
06080119000z	2	19	6.1	11.9	52.3
06080120000z	3	19	6.3	17.8	61.1
06080121000z	4	19	6.9	23.7	74.1
06080122000z	6	19	8.0	35.6	102.8
06080123000z	10	19	9.9	59.3	161.6
06080124000z	12	19	10.2	71.1	178.5
06080125000z	16	19	11.2	94.8	223.6
06080126000z	18	19	11.8	106.7	248.5
06080127000z	24	19	13.7	142.3	333.8
06080128000z	2	18	6.7	15.8	64.4
06080129000z	3	18	7.0	23.7	75.9
06080130000z	4	18	7.6	31.6	92.8
06080131000z	6	18	8.9	47.4	130.2
06080132000z	10	18	11.1	79.0	207
06080133000z	12	18	11.4	94.8	229.4
06080134000z	16	18	12.6	126.5	288.6
06080135000z	18	18	13.3	142.3	321.5
06080136000z	24	18	15.5	189.7	433.8
06080137000z	2	16	7.3	23.4	80.4
06080138000z	3	16	7.6	35.1	96.2
06080139000z	4	16	8.3	46.8	118.8
06080140000z	6	16	9.8	70.2	168.5
06080141000z	10	16	12.3	117.0	271
06080142000z	12	16	12.7	140.4	302
06080143000z	16	16	14.0	187.2	382.6
06080144000z	18	16	14.8	210.6	427
06080145000z	24	16	17.3	280.8	577.7



Application

These cables have excellent resistance to abrasion, deformation, cut-through and chemical attack. This wire is widely used in appliances, transformers, electrical heating, motors, ballast, lighting and cooking equipment. Suitable for use as Appliance Wiring Material (AWM), coil leads and as Class B IEEE 130°C Class Motor Leads. Economical replacement for silicone rubber/glass braid insulated wire and cable.

Technical Data

Standard : UL - Std. 758. Complies to CSA No. 22.2 210 and 127
 Nominal Voltage : 600V
 Test Voltage (Spark Test)
 AWG 22 and 20 = 5kV
 AWG 18 to 10 = 6kV
 ≥ AWG 8 = 7.5kV
 Temperature Range : Flexible -5°C to +150°C. Fixed installation -50°C to +150°C
 Temperature at Conductor : Max. UL : +150°C
 Bending Radius : Approx. 5 x cable ø

Cable Construction

Annealed plain or tinned stranded copper conductor.
 XLPE insulation according to UL- Std. 1581 Table 50.232, Complies to CSA No. 22.2 210 and 127.

Properties

PVC self - extinguishing and flame retardant, test method to FT 2

Cable Design Parameters

AWG	Metric Cross Section Area (Sq. mm)	No. of Strands/Strand Dia. (mm)	Max. DC Conductor Resistance for ABC @ 20°C (Ω/km)	Max. DC Conductor Resistance for ATC @ 20°C (Ω/km)	Insulation Thickness (mm)	Nominal Cable Diameter (mm)
21	0.50	16/0.2	43.6	46.9	0.762	2.4
19	0.75	24/0.2	27.4	29.1	0.762	2.6
18	1.00	32/0.2	21.8	23.2	0.762	2.8
16	1.50	30/0.25	13.7	14.6	0.762	3.1
14	2.50	50/0.25	8.62	8.96	0.762	3.5
12	4.00	56/0.3	5.43	5.64	0.762	4.0
10	6.00	84/0.3	3.409	3.546	0.762	4.6

AWG	Metric Cross Section Area (Sq. mm)	No. of Strands/Strand Dia. (mm)	Max. DC Conductor Resistance for ABC @ 20°C (Ω/km)	Max. DC Conductor Resistance for ATC @ 20°C (Ω/km)	Insulation Thickness (mm)	Nominal Cable Diameter (mm)
8	10.00	140/0.3	2.144	2.23	1.143	6.1
6	16.00	126/0.4	1.348	1.403	1.524	7.9
4	25.00	196/0.4	0.8481	0.882	1.524	9.1
2	35.00	276/0.4	0.5335	0.5548	1.524	10.7
1	50.00	296/0.4	0.423	0.4398	2.032	12.8
2/0	70.00	360/0.5	0.266	0.2766	2.032	14.8
3/0	95.00	480/0.5	0.211	0.2194	2.032	16.2
4/0	120.00	608/0.5	0.1673	0.1722	2.032	17.7

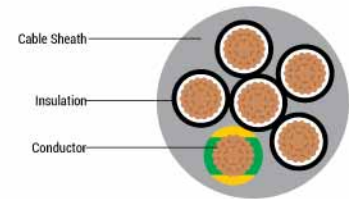
Kindly complete the part numbers for these cables by adding the suffix (in place of 'xx') for the insulation colour required:

01 - green, 02 - black, 03 - red, 04 - blue, 05 - yellow, 06 - green/yellow, 07 - white, 08 -violet, 09 - brown, 10 - orange, 11 - pink, 12 - grey, 13 - light blue

Kindly complete the part numbers by adding the suffix (in place of 'c') for the conductor type required:

0 = annealed bare copper (ABC), 1 = annealed tinned copper (ATC)

AWG	Metric Cross Section Area (Sq. mm)	Part Number				
		UL 3289	UL 3321	UL 3173	UL 3271	UL 3344
21	0.5	06090101xx9c	06090116xx9c	06090131xx9c	06090146xx9c	06090161xx9c
19	0.75	06090102xx9c	06090117xx9c	06090132xx9c	06090147xx9c	06090162xx9c
18	1.00	06090103xx9c	06090118xx9c	06090133xx9c	06090148xx9c	06090163xx9c
16	1.5	06090104xx9c	06090119xx9c	06090134xx9c	06090149xx9c	06090164xx9c
14	2.5	06090105xx9c	06090120xx9c	06090135xx9c	06090150xx9c	06090165xx9c
12	4.00	06090106xx9c	06090121xx9c	06090136xx9c	06090151xx9c	06090166xx9c
10	6.00	06090107xx9c	06090122xx9c	06090137xx9c	06090152xx9c	06090167xx9c
8	10.00	06090108xx9c	06090123xx9c	06090138xx9c	06090153xx9c	06090168xx9c
6	16.00	06090109xx9c	06090124xx9c	06090139xx9c	06090154xx9c	06090169xx9c
4	25.00	06090110xx9c	06090125xx9c	06090140xx9c	06090155xx9c	06090170xx9c
2	35.00	06090111xx9c	06090126xx9c	06090141xx9c	06090156xx9c	06090171xx9c
1	50.00	06090112xx9c	06090127xx9c	06090142xx9c	06090157xx9c	06090172xx9c
2/0	70.00	06090113xx9c	06090128xx9c	06090143xx9c	06090158xx9c	06090173xx9c
3/0	95.00	06090114xx9c	06090129xx9c	06090144xx9c	06090159xx9c	06090174xx9c
4/0	120.00	06090115xx9c	06090130xx9c	06090145xx9c	06090160xx9c	06090175xx9c



Application

This cables are used for grinding machines, CNC, machine tools, control systems, assembly lines, machining centers, bottling equipment, data processing equipment and connections between control panels and machines.

Technical Data

Standard : UL-758 UL 2586

Nominal Voltage : 1000 Vac

Temperature Range : -30°C to + 150 °C

Test Voltage : 1500 V

Minimum Bending Radius : 12x cable Ø

Cable Construction

Annealed Plain copper, fine wire conductor AWG 24 – 16, Table 30.3 UL 1581 ASTM – B.

Special PVC Core insulation class 43, semirigid to UL – Std. 1581 table 50.182 and 50.183.

Colour coded to H05VV-F up to 5 cores; coloured black with number for above 5 cores.

Cores stranded in layers with optimal lay-length.

Special PVC Outer jacket class 43 to UL – Std. 1581 table 50.182.

Outer jacket colour black or grey

Properties

PVC self-extinguishing and flame retardant, test method FT 1, FT 2

Note : This cable is available in different variants - Shielded, Braided, Shielded and Braided, etc.

Cable design parameters shall be provided on request for relevant cable construction.