UL/CSA

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ELECTRIC WIRE & CABLE

# MYUNGBO

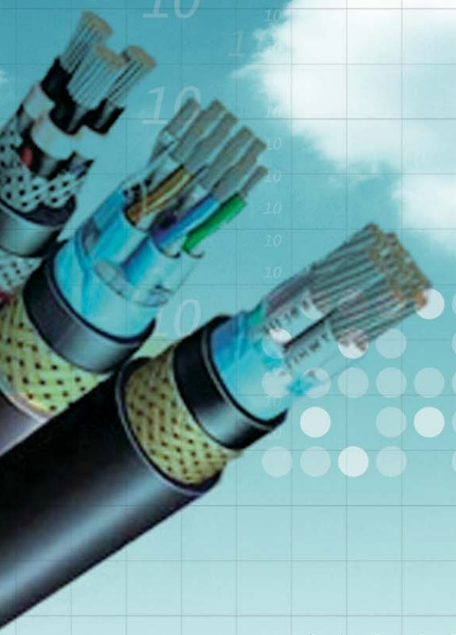
친환경 케이블을 선도하는 (주)명보케이블


**MYUNGBO CABLE CO., Ltd.**

Office : 505-28 Jugok-ri, Ujeong-eup, Hwaseong-si, Gyeonggi-do, Korea
TEL : +82-31-354-1284 FAX : +82-31-354-1286



**MYUNGBO CABLE CO., Ltd.**



친환경 케이블을 선도하는 (주)명보케이블

# 인/사/말

미래의 꿈을 실현하는 끊임없는 도전!!
주식회사 명보 케이블!!

명보 케이블은 고객과 함께 발전하며 한 차원 높은 친환경 제품과 고객 만족으로 미래를 열어가고자 합니다.

명보 케이블은 1997년 창사 이래 정보 에너지 전송 케이블 분야의 차별화된 경쟁력 확보를 위하여 노력하고 있습니다.

시공을 초월하는 정보전달의 꿈을 실현하고 미래사회의 완벽한 최첨단 기술력의 제품으로 고객의 꿈을 실현하기 위해, 고객의 변화와 요구를 이해하고 앞서가는 명보 케이블로 미래정보와 에너지 전송 분야의 새로운 주인으로 거듭 태어나겠습니다.

신기술도입과 연구 품질보증을 통한 서비스 향상, 최고의 품질과 납기, 가격 경쟁력 확보를 통한 고객 만족을 위하여 최선을 다하겠습니다.

명보 케이블과 함께 발전하는 기업을 위하여 지속적인 관심과 성원을 부탁드립니다.

대표이사 조창제

# C/O/N/T/E/N/T/S

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28 AWM 2405 STYLE
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39 AWM 2969 STYLE
40 AWM 2990 STYLE
41 AWM 20276 STYLE
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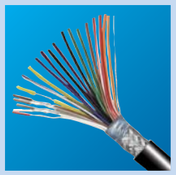
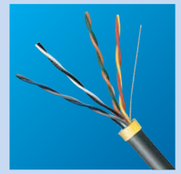


## PRODUCT HALOGEN FREE (NON-PVC)




45 AWM 10066 STYLE
46 AWM 10530 STYLE
47 AWM 10643 STYLE
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49 AWM 10666 STYLE
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62 AWM 20549 STYLE
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70 AWM 21451 STYLE
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## OTHER


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85 TECHNICAL. DATA ~
95 TECHNICAL. DATA
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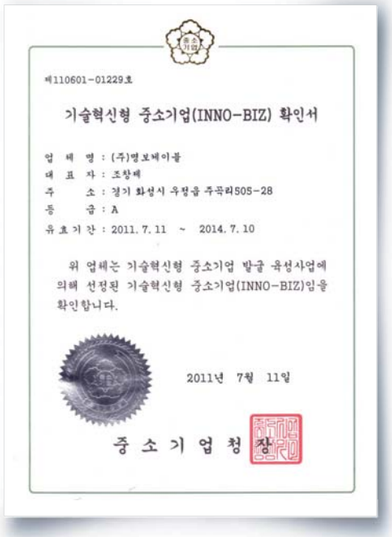
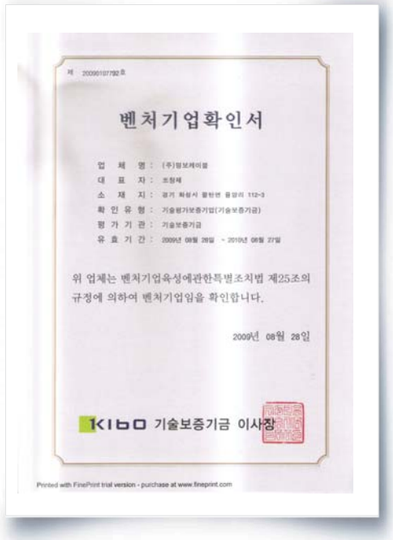
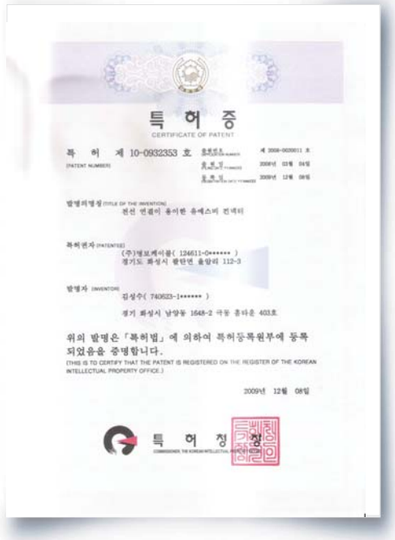
# 특/허/증 및 인/증/서

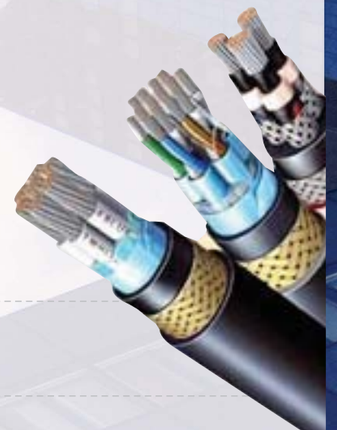

# 회/사/연/혁

| | |
|---|---|
| 1997. 07. 30 | 명보 케이블 창업 설립 |
| 2000. 10. 13 | 명보 케이블 확장 이전 |
| 2002. 01. 01 | 법인 설립 |
| 2002. 07. 26 | 화성 공장 신축 이전 |
| 2002. 10. 23 | 공장 등록 |
| | 공장부지면적:1,663 , 제조시설면적: 946.56 , 부대시설: 138.72m |
| 2002. 12. 16 | UL인증 획득 - Style1015, 1533, 1185, 2095, 2725, 2835, 2464, 2789, 2851 |
| 2002. 12. 18 | UL인증 획득 - Style1007, 1061 |
| 2003. 05. 20 | 생산 라인 증설 |
| 2003. 06. 16 | UL인증 획득 -Style1617, 1618, 2448, 2468, 2919 2990, 2405, 2547, 2969, 20276, 20379 |
| 2003. 06. 16 | CSA인증 획득 |
| 2004. 04. 16 | KS Q ISO 9001인증 |
| 2005. 01. 15 | ♠MBM상표권 획득 |
| 2005. 10. 24 | 명보 (천진) 케이블 유한 공사 설립 |
| 2006. 05. 17 | NON-PVC UL&cUL인증 획득 (UL10981, UL21460) |
| 2007. 11. 04 | IBK 기업은행 FAMILY 기업 선정 |
| 2009. 02. 13 | NON-PVC UL&cUL인증 추가 획득(UL21451외 11개 STYLE) |
| 2009. 08. 28 | 벤처 기업 인증 |
| 2009. 12. 08 | 특허등록 (USB Connector 특허제 10-0932353호) |
| 2010. 04. 16 | 명보 (베트남) 케이블 설립 |
| 2011. 02. 21 | 화성 공장 신축 이전 경기도 화성시 우정읍 주곡리 505-28 |
| 2011. 06. 16 | 기업부설연구소 설립인가(제2011111 397) |
| 2011. 07. 11 | 기술혁신형중소기업(INNO BIZ) 선정 (제 10601-01229호) |


(주)명보케이블 **본사전경**

Electric Wire & Cable

# MYUNGBO CABLE



친환경 케이블 선도기업

# (주)명보케이블


(주)명보케이블 **생산동전경**

(주)명보케이블

# 베트남법인

공장전경

조립라인 전경

몰딩사출 공정

몰딩사출 공정

제조현장 전경

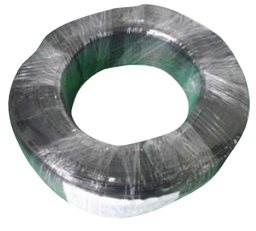
## 일반현황 및 연혁

| | |
|---|---|
| **법인명** | 명보 베트남<br>[ MYUNG BO VIETNAM CO.,LTD. ] |
| **설립일** | 2010년 4 월 12일 |
| **사업분야** | UL CABLE 제조 및 판매 |
| **생산품목** | 충전기용외 Cable류, 충전기용 Cable assembly |
| **진출목적** | ▣ 제조 경쟁력 확보<br>▣ 고객사 동반자 관계 구축 및 고객 중심의 제조 기반 |
| **자격 및 인증 내역** | ▣ UL인증취득 (2011.01)<br>▣ ISO9001/14000 인증취득 (2011.02) |
| **주소** | LO 7,KHU CONG NGHIEP SONG KHE – NOI HOANG – THANH PHO BAC GIANG – TINH BAC GIANG – VIET NAM |
| **기타** | 400명(종업원수), 12,000㎡(임대공장건축면적) |

## 주요 생산 제품

충전기용 CABLE: UL2835(PVC)

충전기용 CABLE ASSEMBLY



충전기용 CABLE: UL21451(NON-PVC)

충전기용 CABLE ASSEMBLY

## DATA LINK CABLE

| 전체사진 | USB A PLUG | MICRO USB PLUG |
|---|---|---|

■ Category

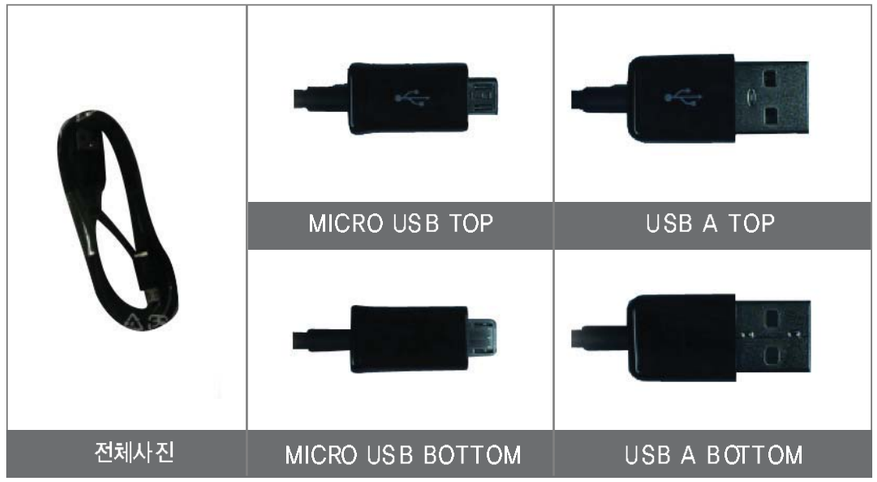
This specification is described for the MOBILE PHONE

### 1. ELECTRICAL SPECIFICATION

| ITEM | SPEC | 비고 |
|---|---|---|
| INPUT | DC 5.0V | NORMAL |
| USB 2.0 | HIGH SPEED(480Mbps)<br>EYE DIAGRAM(FAR END) | |
| IMPEDANCE | 90ohm ± 10ohm | |
| Insulation Resistance | DC 500V 1분 인가 500Mohm 이상<br>DC 500V 1분 인가 500Mohm 이상 (생산) | DC제품군적용 |
| Withstand Voltage | AC 250V 1분 인가 CUT OFF CURRENT 5mA<br>AC 350V 1초 1mA 이하(생산) | DC제품군적용 |

### 2. MECHANICAL CHARACTERISTICS

| ITEM | | SPEC | 비고 |
|---|---|---|---|
| CABLE SIZE | | 1,000mm +20mm/-20mm,φ3.80 | |
| MATERIAL | CASE | PC | |
| | CABLE | NON-PVC | |
| Noninflammable Grade | | VO | |
| COLOR | | BLACK | |
| WEIGHT | | 27.2g ± 5% | |
| INTERFACE | | MICRO USB TO USB A | |
| PLUG | | USB 10kg 이상 | |



| 전체사진 | MICRO USB TOP | USB A TOP |
|---|---|---|
| | MICRO USB BOTTOM | USB A BOTTOM |

■ Category

This specification is described for the MOBILE PHONE

### 1. ELECTRICAL SPECIFICATION

| ITEM | SPEC | 비고 |
|---|---|---|
| INPUT | DC 5.0V | NORMAL |
| USB 2.0 | HIGH SPEED(480Mbps)<br>EYE DIAGRAM(FAR END) | |
| IMPEDANCE | 90ohm ± 10ohm | |
| Insulation Resistance | DC 500V 1분 인가 500Mohm 이상<br>DC 500V 1분 인가 500Mohm 이상 (생산) | DC제품군적용 |
| Withstand Voltage | AC 250V 1분 인가 CUT OFF CURRENT 5mA<br>AC 350V 1초 1mA 이하(생산) | DC제품군적용 |

### 2. MECHANICAL CHARACTERISTICS

| ITEM | | SPEC | 비고 |
|---|---|---|---|
| CABLE SIZE | | 1,000mm +20mm/-20mm,φ3.0 | |
| MATERIAL | CASE | PC | |
| | CABLE | NON-PVC | |
| Noninflammable Grade | | VO | |
| COLOR | | BLACK | |
| WEIGHT | | 22.55g ± 5% | |
| INTERFACE | | MICRO USB TO USB A | |
| PLUG | | USB 10kg 이상 | |



(주)명보케이블
# 천진법인

공장전경

집합 공정

**법인명** 명보(천진) 케이블
[ MYUNG BO (TIAN JIN) CABLE CO.,LTD. ]

**설립일** 2005년 10 월 24일

**사업분야** UL CABLE 제조 및 판매

**생산품목** 충전기, CAMERA 용 외 각종 CABLE류

**진출목적** ▣ 제조 경쟁력 확보
▣ 고객사 동반자 관계 구축 및 고객 중심의 제조 기반

**인증 내역** ▣ UL인증취득 (2006.01)

**주소** JINGHAI JISHUKAIFAPU TIAN JIN OF CHINA

**기타** 98명(종업원수), 5,300㎡(공장면적)

편조 공정

압출 공정

(주)명보케이블

# 연 구 소

## 1. 설립배경

㈜명보케이블은 전자, 통신 분야의 각종 케이블을 제조, 판매하는 업체로써 오랜 경험과 노하우로 안정적이고 우수한 품질의 케이블을 생산하는데 총력을 다하고 있습니다.
기업부설연구소를 설립하여 다양하고 고부가가치의 제품을 연구개발하여 향후 통신 및 전력 시장의 선두기업으로 성장하기 위하여 노력하고 있다.

## 2. 관장 기능

-친환경 소재를 이용한 제품 연구개발
-휴대폰 단말기용 통신케이블 연구개발
-동일한 성능에 최저 중량과
 최저 외경 제품 연구개발
-고객의 요구에 부합하는 제품 연구개발

## 3. 전문연구분야

-환경오염 물질을 함유하지 않은 친환경 소재를
 이용한 케이블 연구개발
-모든 주파수 대역을 소화해 낼 수 있는 통신
 케이블 연구개발
-Halogen Free 제품 연구개발



# 연구소 사용설비

## iEDX-100A

| | iEDX-100A | OPTION |
|---|---|---|
| 측정방법 | Energy Dispersive X-ray Analysis | |
| 시료 형태 | Solid/Liquid/Powder | |
| 챔버 | Air | |
| X-ray Tube | 50kVp, 50W, Rh Target | |
| Filter | 5 Filter Auto Change | Auto sample change |
| Detection System | Si-Pin Diode (Peltier System) | SDD (Silicon Drift Detector) |
| Energy Resolution | 149eV at Mn-Kα(5.9eV) | 125eV at Mn-Ka(5.9eV) |
| Detection Element | Na(11) ~ U(92) | |
| Measurement Area | 2-10 mm, User Selectable | |
| Operating Software | Automatic Measurement (Korean/English) | |
| Analyze Method | FP/Calibration Method | |
| Sample Monitoring | CCD Camera | |
| Control System | Desk-Top/Note Book, USB Interface | |

TX5102

# Specifications

| Model | | TX5103DI | TX5103DIS | TX5102DI | TX5102 |
|---|---|---|---|---|---|
| **Voltage output** | | | | | |
| AC | Output voltage range | 0.05kV~5kV | | | |
| | Voltage frequency | 50Hz~60Hz selectable | | | |
| | Max. output power | 150VA (5kV/30mA) | | 100VA (5kV/20mA) | |
| DC | Output voltage range | 0.05kV~6kV | | 0.05kV~6kV | —— |
| | Max. output power | 0.01~10mA | | 0.01~5mA | —— |
| | Discharge function | Auto discharge after test ends | | —— | |
| IR | Output voltage range | 50V ~ 1000V | | —— | |
| | Max. output power | 10 VA (1000V/10mA) | | —— | |
| | Discharge function | Auto discharge after test ends | | | —— |
| 8 channels sweep | | —— | Available | —— | |
| **Voltage display** | | | | | |
| Digit | Test range | 0.00kV ~ 6.00kV AC/DC | | | |
| | Accuracy | ±(1.0%reading+2V) | | | |
| **Current display** | | | | | |
| Test range | AC | 0.1mA ~ 30mA | | 0.1mA ~ 20mA | |
| | DC | 0.01mA ~ 10mA | | 0.01mA ~5mA | — |
| Accuracy | | ±(1%reading+10digits) | | (after correction) | |
| Arc detection | AC | 1mA ~ 15mA | | 1mA~ 15mA | |
| | DC | 1mA ~ 10mA | | 1mA ~ 5mA | |
| Insulation resistance display | | | | | |
| Resistance test range | | 0.01MΩ ~ 10mA) | | | —— |
| Resistance test accuracy | | ±(5%reading+5digits) (after correction) | | | —— |
| **Parameter setup** | | | | | |
| Voltage rising time | | 0.1s ~ 999s | | | |
| Voltage down time | | 0.1s ~ 999s | | | |
| Voltage waiting time | | 0.1s ~ 99.9s (only for DC) | | | |
| Test time setup | | 0.3s ~ 999s | | | |
| Other function | | Fast discharge, body protection, Handler, RS-232C~GPIB interface | | | |

## Features

- TX5102 : AC withstanding voltage tester
- TX5103DI/TX5102DI : AC/DC withstanding voltage & insulation tester
- TX5103DIS : 8- channel scanning AC/DC withstanding voltage & insulation tester
- 240x64 Dot-matrix graphic LCD display
- Fast discharge and arc detection function
- Body protection function
- Built-in 8-channel matrix scanner for convenient use
- Set voltage rising time, test time, and voltage dropping time randomly for different load, DC withstanding voltage current judging & waiting time
- 100 test steps being stored per group, totally 50 groups, and the total testing steps are limited at 500
- Current base number correction function
- Brand new operation interface and humanized panel design
- Abundant interfaces Handler, RS-232c, SCAN, GPIB(optional)

## General specifications

- Power Requirements : AC 100V ~ 120V, AC 200V ~ 240V, 47HZ ~ 63Hz
- Operation Tempo&Humo : 0℃~40℃≤ 90% RH
- Dimensions(WxHxD): 330x140x385mm
- Weight : 20Kg(TX5103DI/TX5102DI) , 16Kg(TX5102)

## Ordering information

- TX5102 :AC withstanding voltage tester
- TX5102DI :AC/DC withstanding voltage & insulation tester
- TX5103DI :AC/DC withstanding voltage & insulation tester

## Instrument Accessories

- TX90003R : HV Test lead wire - 1ea
- TX90003B : Ground lead wire - 1ea
- Fuse(3A/220V)(TX5103DI) - 2ea
- Fuse(2A/220V)(TX5102/TX5102DI) - 2ea
- TX9004, Test lead - 1ea



Product PVC

# AWM 1007 STYLE

## Insulated Wire

Standard UL Subject 758
UL Standard 1581

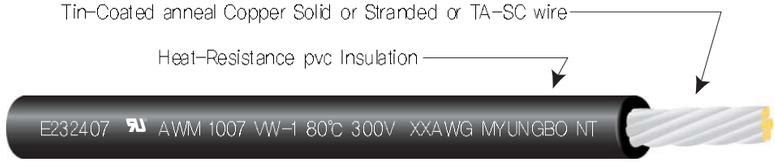

### ■ Applications ■

Internal wiring of appliances.

### ■ Characteristic ■

–Rating Temp.& Volt : UL 80℃ 300V
–Flammability : VW–1, FT1 Pass

### ■ Construction ■




| Conductors | | | Insulation | | Conductor Max Resistance Ω/㎞ | Insulation Min. Resistance MΩ/㎞ | Dielectric Withstanding Voltage AC V/min | Allowable Current A |
|---|---|---|---|---|---|---|---|---|
| AWG Size | Number&dia of conductors pcs/㎜ | Nor. overall Diameter ㎜ | Nominal Thickness ㎜ | Nor. overall Diameter ㎜ | | | | |
| 30 | 7/0.10 | 0.30 | 0.40 | 1.10 | 376.96 | 15 | 3,000 | 2.3 |
| 28 | 7/0.127 | 0.38 | 0.40 | 1.25 | 237.38 | | | 3.0 |
| 26 | 7/0.16 | 0.48 | 0.40 | 1.35 | 148.94 | | | 4.0 |
| 24 | 11/0.16 | 0.61 | 0.40 | 1.45 | 93.25 | | | 5.3 |
| 22 | 17/0.16 | 0.76 | 0.40 | 1.60 | 55.00 | | | 7.2 |
| 20 | 21/0.18 | 0.95 | 0.40 | 1.80 | 34.60 | | | 9.4 |
| 18 | 34/0.18 | 1.21 | 0.40 | 2.00 | 21.80 | | | 12.5 |
| 16 | 26/0.254 | 1.55 | 0.40 | 2.40 | 13.70 | | | 15.9 |



# AWM 1015 STYLE

## Single conductor with extruded insulation

Standard UL Subject 758
UL Standard 1581

### ■ Applications ■

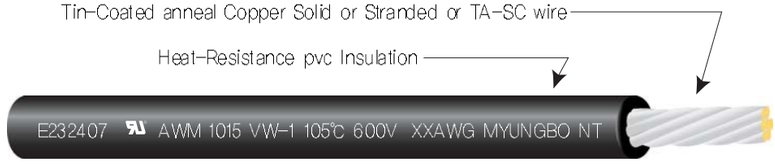
Internal Wiring of Appliances; or Internal Wiring of Appliances where exposed to oil at a temperature not exceeding 60 deg. C or 80 deg.

### ■ Characteristic ■

–Rating Temp.& Volt : UL 80℃, 90℃ or 105℃ 600V ac, 750V dc.

–Flammability : VW–1, FT1 Pass

### ■ Construction ■




| Conductors | | | Insulation | | Conductor Max Resistance Ω/㎞ | Insulation Min. Resistance MΩ/㎞ | Dielectric Withstanding Voltage AC V/min | Allowable Current A |
|---|---|---|---|---|---|---|---|---|
| AWG Size | Number&dia of conductors pcs/㎜ | Nor. overall Diameter ㎜ | Nominal Thickness ㎜ | Nor. overall Diameter ㎜ | | | | |
| 30 | 7/0.10 | 0.30 | 0.80 | 1.90 | 376.96 | 15 | 3,000 | 3.7 |
| 28 | 7/0.127 | 0.38 | 0.80 | 1.98 | 237.38 | | | 4.3 |
| 26 | 7/0.16 | 0.48 | 0.80 | 2.10 | 148.94 | | | 5.8 |
| 24 | 11/0.16 | 0.61 | 0.80 | 2.20 | 93.25 | | | 7.6 |
| 22 | 17/0.16 | 0.76 | 0.80 | 2.35 | 55.00 | | | 10.0 |
| 20 | 21/0.18 | 0.95 | 0.80 | 2.60 | 34.60 | | | 13.1 |
| 18 | 34/0.18 | 1.21 | 0.80 | 2.90 | 21.80 | | | 17.2 |
| 16 | 26/0.254 | 1.55 | 0.80 | 3.15 | 13.70 | | | 22.8 |

# AWM 1061 STYLE

## SRPVC Insulated Wire

Standard UL Subject 758
UL Standard 1581

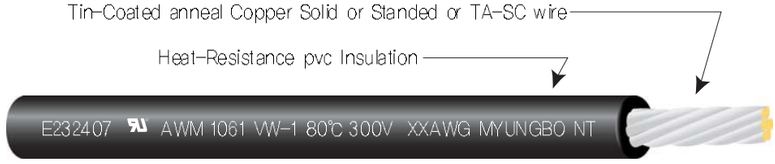

### ■ Applications ■

Internal Wiring in Electric Bookkeeping, Accounting, Time-Recording Machines, or Electronic Equipment if within a chassis or protected from mechanical injury.

### ■ Characteristic ■

- Rating Temp. & Volt : UL 80℃ 300V
- Flammability : VW-1, FT1 Pass

### ■ Construction ■




| Conductors | | | Insulation | | Conductor Max Resistance Ω/km | Insulation Min. Resistance MΩ/km | Dielectric Withstanding Voltage AC V/min | Allowable Current A |
|---|---|---|---|---|---|---|---|---|
| AWG Size | Number&dia of conductors pcs/mm | Nor. overall Diameter mm | Nominal Thickness mm | Nor. overall Diameter mm | | | | |
| 30 | 7/0.10 | 0.30 | 0.25 | 0.80 | 376.96 | 15 | 3,000 | 2.0 |
| 28 | 7/0.127 | 0.38 | 0.25 | 0.90 | 237.38 | | | 2.6 |
| 26 | 7/0.16 | 0.48 | 0.25 | 1.00 | 148.94 | | | 3.4 |
| 24 | 11/0.16 | 0.61 | 0.25 | 1.10 | 93.25 | | | 4.6 |
| 22 | 17/0.16 | 0.76 | 0.25 | 1.30 | 55.00 | | | 6.1 |
| 20 | 21/0.18 | 0.95 | 0.25 | 1.50 | 34.60 | | | 8.4 |
| 18 | 34/0.18 | 1.21 | 0.25 | 1.80 | 21.80 | | | 11.3 |
| 16 | 26/0.254 | 1.55 | 0.25 | 2.10 | 13.70 | | | 15.2 |



# AWM 1569 STYLE

## Single Conductor with extruded insulation

Standard UL Subject 758
UL Standard 1581


### ■ Applications ■

Internal wiring of appliances or electronic equipment where not subjected to movement or mechanical damage, Tag may also indicate the following, "600 Volts Peak for Electronic Use Only."

### ■ Characteristic ■

- Rating Temp.& Volt : UL 80℃, 90℃, 105℃ 300V,
- Flammability : VW-1, FT1 Pass

### ■ Construction ■


| Conductors | | | Insulation | | Conductor Max Resistance Ω/km | Insulation Min. Resistance MΩ/km | Dielectric Withstanding Voltage AC V/min | Allowable Current A |
|---|---|---|---|---|---|---|---|---|
| AWG Size | Number&dia of conductors pcs/mm | Nor. overall Diameter mm | Nominal Thickness mm | Nor. overall Diameter mm | | | | |
| 30 | 7/0.10 | 0.30 | 0.40 | 0.80 | 376.96 | 15 | 3,000 | 2.0 |
| 28 | 7/0.127 | 0.38 | 0.40 | 0.90 | 237.38 | | | 2.6 |
| 26 | 7/0.16 | 0.48 | 0.40 | 1.00 | 148.94 | | | 3.4 |
| 24 | 11/0.16 | 0.61 | 0.40 | 1.10 | 93.25 | | | 4.6 |
| 22 | 17/0.16 | 0.76 | 0.40 | 1.30 | 55.00 | | | 6.1 |
| 20 | 21/0.18 | 0.95 | 0.40 | 1.50 | 34.60 | | | 8.4 |
| 18 | 34/0.18 | 1.21 | 0.40 | 1.80 | 21.80 | | | 11.3 |
| 16 | 26/0.254 | 1.55 | 0.40 | 2.10 | 13.70 | | | 15.2 |

# AWM 1617 STYLE

## Insulated Wire(Double Insulated Wire)

Standard UL Subject 758
UL Standard 1581


### ■ Applications ■

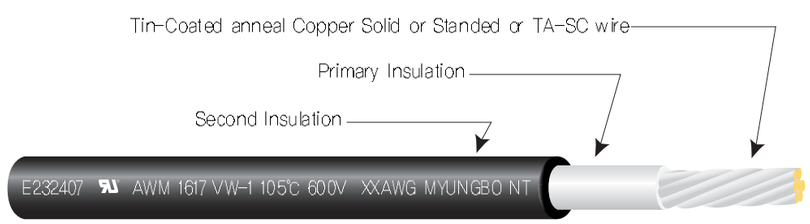
Internal wiring of electronic equipment.

Specially excellent for internal wiring of audio and video and Monitor among electronic equipment.

### ■ Characteristic ■

-Rating Temp.& Volt : UL 105℃ 600V, CSA 105℃ 600V
-Flammability : VW-1, FT1 Pass
-Excellent abrasion and mechanical strength

### ■ Construction ■




| Conductors | | | Primary Insulation | | Second Insulation | | Conductor Max Resistance Ω/km | Insulation Min. Resistance MΩ/km | Dielectric Withstanding Voltage AC V/min | Allowable Current A |
|---|---|---|---|---|---|---|---|---|---|---|
| AWG Size | Number&dia of conductors pcs/㎜ | Nor. overall Diameter ㎜ | Nominal Thickness ㎜ | Nor. overall Diameter ㎜ | Nominal Thickness ㎜ | Nominal Diameter ㎜ | | | | |
| 30 | 7/0.10 | 0.30 | 0.80 | 1.90 | 0.25 | 2.40 | 376.96 | 15 | 3,000 | 9.20 |
| 28 | 7/0.127 | 0.38 | 0.80 | 2.00 | 0.25 | 2.50 | 237.38 | | | 10.6 |
| 26 | 7/0.16 | 0.48 | 0.80 | 2.10 | 0.25 | 2.60 | 148.94 | | | 11.2 |
| 24 | 11/0.16 | 0.61 | 0.80 | 2.25 | 0.25 | 2.75 | 93.25 | | | 12.6 |
| 22 | 17/0.16 | 0.76 | 0.80 | 2.35 | 0.25 | 2.90 | 55.00 | | | 14.6 |
| 20 | 21/0.18 | 0.95 | 0.80 | 2.56 | 0.25 | 3.05 | 34.60 | | | 17.2 |
| 18 | 34/0.18 | 1.21 | 0.80 | 2.90 | 0.25 | 3.40 | 21.80 | | | 21.9 |
| 16 | 26/0.254 | 1.55 | 0.80 | 3.15 | 0.25 | 3.65 | 13.70 | | | 28.1 |



# AWM 1618 STYLE

## Insulated Wire(Double Insulated Wire)

Standard UL Subject 758
UL Standard 1581

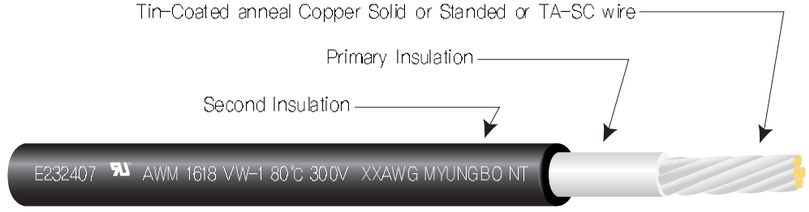

### ■ Applications ■

Internal wiring of Electronic Equipment.

### ■ Characteristic ■

- Rating Temp.& Volt : UL 80℃ 300V
- Flammability : VW-1, FT1 Pass
- Excellent abrasion and mechanical strength

### ■ Construction ■




| Conductors | | | Primary Insulation | | Second Insulation | | Conductor Max Resistance Ω/km | Insulation Min. Resistance MΩ/km | Dielectric Withstanding Voltage AC V/min | Allowable Current A |
|---|---|---|---|---|---|---|---|---|---|---|
| AWG Size | Number&dia of conductors pcs/㎜ | Nor. overall Diameter ㎜ | Nominal Thickness ㎜ | Nor. overall Diameter ㎜ | Nominal Thickness ㎜ | Nominal Diameter ㎜ | | | | |
| 30 | 7/0.10 | 0.30 | 0.40 | 1.10 | 0.45 | 2.00 | 376.96 | 15 | 3,000 | 5.1 |
| 28 | 7/0.127 | 0.38 | 0.40 | 1.25 | 0.45 | 2.20 | 237.38 | | | 6.4 |
| 26 | 7/0.16 | 0.48 | 0.40 | 1.35 | 0.45 | 2.30 | 148.94 | | | 7.3 |
| 24 | 11/0.16 | 0.61 | 0.40 | 1.45 | 0.45 | 2.35 | 93.25 | | | 8.6 |
| 22 | 17/0.16 | 0.76 | 0.40 | 1.60 | 0.45 | 2.50 | 55.00 | | | 10.2 |
| 20 | 21/0.18 | 0.95 | 0.40 | 1.80 | 0.45 | 2.70 | 34.60 | | | 12.7 |
| 18 | 34/0.18 | 1.21 | 0.40 | 2.00 | 0.45 | 2.90 | 21.80 | | | 16.9 |
| 16 | 26/0.254 | 1.55 | 0.40 | 2.40 | 0.45 | 3.30 | 13.70 | | | 22.9 |

# AWM 1185 STYLE

Single conductor using extruded non-integral jacket.

Standard UL Subject 758
UL Standard 1581

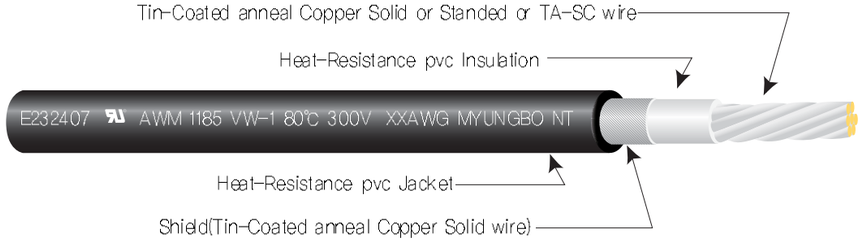

## ■ Applications ■

Internal Wiring of Appliances and Electronic Equipment

## ■ Characteristic ■

- Rating Temp.& Volt : UL 80℃ 300V
- Flammability : VW-1, FT1 Pass
- Excellent abrasion and cut-through resistance

## ■ Construction ■




| Conductors | | | Insulation | | Shield | | Jacket | | Conductor Max Resistance Ω/km | Insulation Min. Resistance MΩ/km | Dielectric Withstanding Voltage AC V/min | Allowable Current A |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AWG Size | Number& dia of conductors pcs/mm | Nor. overall Diameter mm | Nominal Thickness mm | Nor. overall Diameter mm | Wire of Diameter mm | Nor. overall Diameter mm | Nominal Thickness mm | Nominal Diameter mm | | | | |
| 30 | 7/0.10 | 0.30 | 0.40 | 1.10 | 0.12 | 1.34 | 0.40 | 2.20 | 376.96 | 15 | 3,000 | 2.0 |
| 28 | 7/0.127 | 0.38 | 0.40 | 1.18 | 0.12 | 1.42 | 0.40 | 2.30 | 237.38 | | | 2.6 |
| 26 | 7/0.16 | 0.48 | 0.40 | 1.30 | 0.12 | 1.54 | 0.40 | 2.40 | 148.94 | | | 3.4 |
| 24 | 11/0.16 | 0.61 | 0.40 | 1.45 | 0.12 | 1.69 | 0.40 | 2.50 | 93.25 | | | 4.6 |
| 22 | 17/0.16 | 0.76 | 0.40 | 1.60 | 0.12 | 1.84 | 0.40 | 2.70 | 55.00 | | | 6.1 |
| 20 | 21/0.18 | 0.95 | 0.40 | 1.80 | 0.12 | 2.04 | 0.40 | 2.90 | 34.60 | | | 8.4 |
| 18 | 34/0.18 | 1.21 | 0.40 | 2.00 | 0.12 | 2.24 | 0.40 | 3.00 | 21.80 | | | 11.3 |
| 16 | 26/0.254 | 1.55 | 0.40 | 2.30 | 0.12 | 2.54 | 0.40 | 3.30 | 13.70 | | | 15.2 |



# AWM 1533 STYLE

Jacketed Wire

Standard UL Subject 758
UL Standard 1581

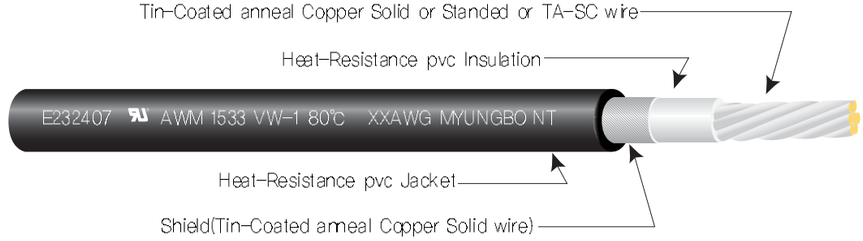

## ■ Applications ■

Internal Wiring of Electronic Equipment Where Not Exposed to Movement or Mechanical Abuse.

## ■ Characteristic ■

- Rating Temp.& Volt : UL 80℃ 300V Volt not specify
- Flammability : VW-1, FT1 Pass
- Excellent abrasion and cut-through resistance

## ■ Construction ■




| Conductors | | | Insulation | | Shield | | Jacket | | Conductor Max Resistance Ω/km | Insulation Min. Resistance MΩ/km | Dielectric Withstanding Voltage AC V/min | Allowable Current A |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AWG Size | Number& dia of conductors pcs/mm | Nor. overall Diameter mm | Nominal Thickness mm | Nor. overall Diameter mm | Wire of Diameter mm | Nor. overall Diameter mm | Nominal Thickness mm | Nominal Diameter mm | | | | |
| 30 | 7/0.10 | 0.30 | 0.25 | 0.80 | 0.12 | 1.04 | 0.35 | 1.74 | 376.96 | 15 | 3,000 | 2.0 |
| 28 | 7/0.127 | 0.38 | 0.25 | 0.90 | 0.12 | 1.14 | 0.35 | 1.80 | 237.38 | | | 2.6 |
| 26 | 7/0.16 | 0.48 | 0.25 | 1.00 | 0.12 | 1.24 | 0.35 | 1.90 | 148.94 | | | 3.4 |
| 24 | 11/0.16 | 0.61 | 0.25 | 1.10 | 0.12 | 1.34 | 0.35 | 2.00 | 93.25 | | | 4.6 |
| 22 | 17/0.16 | 0.76 | 0.25 | 1.30 | 0.12 | 1.54 | 0.35 | 2.20 | 55.00 | | | 6.1 |
| 20 | 21/0.18 | 0.95 | 0.25 | 1.50 | 0.12 | 1.74 | 0.35 | 2.40 | 34.60 | | | 8.4 |
| 18 | 34/0.18 | 1.21 | 0.25 | 1.80 | 0.12 | 2.04 | 0.35 | 3.70 | 21.80 | | | 11.3 |
| 16 | 26/0.254 | 1.55 | 0.25 | 2.10 | 0.12 | 2.34 | 0.35 | 3.00 | 13.70 | | | 15.2 |

# AWM 1777 STYLE

Single conductor using extruded non-integral jacket.

Standard UL Subject 758
UL Standard 1581

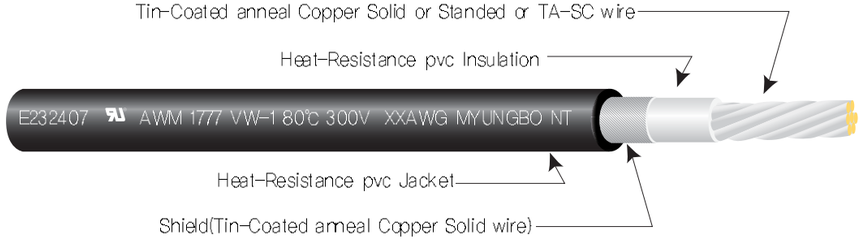

## ■ Applications ■

Internal or external wiring.

## ■ Characteristic ■

- Rating Temp.& Volt : UL 80℃ 300V
- Flammability : VW-1, FT1 Pass

## ■ Construction ■



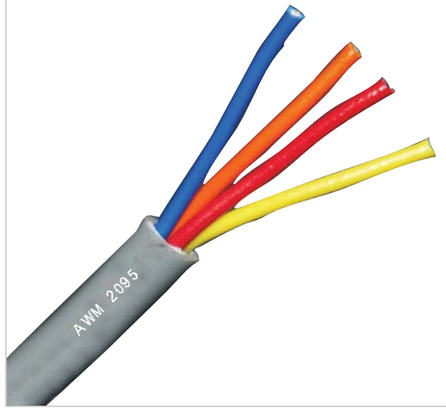

| Conductors | | | Insulation | | Shield | | Jacket | | Conductor Max Resistance Ω/km | Insulation Min. Resistance Mo/km | Dielectric Withstanding Voltage AC V/min | Allowable Current A |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AWG Size | Number&dia of conductors pcs/mm | Nor. overall Diameter mm | Nominal Thickness mm | Nor. overall Diameter mm | Wire of Diameter mm | Nor. overall Diameter mm | Nominal Thickness mm | Nominal Diameter mm | | | | |
| 30 | 7/0.10 | 0.30 | 0.25 | 0.80 | 0.12 | 1.04 | 0.80 | 2.65 | 376.96 | 15 | 3,000 | 2.0 |
| 28 | 7/0.127 | 0.38 | 0.25 | 0.90 | 0.12 | 1.14 | 0.80 | 2.70 | 237.38 | | | 2.6 |
| 26 | 7/0.16 | 0.48 | 0.25 | 1.00 | 0.12 | 1.24 | 0.80 | 2.85 | 148.94 | | | 3.4 |
| 24 | 11/0.16 | 0.61 | 0.25 | 1.10 | 0.12 | 1.34 | 0.80 | 2.95 | 93.25 | | | 4.6 |
| 22 | 17/0.16 | 0.76 | 0.25 | 1.25 | 0.12 | 1.49 | 0.80 | 3.10 | 55.00 | | | 6.1 |
| 20 | 21/0.18 | 0.95 | 0.25 | 1.45 | 0.12 | 1.69 | 0.80 | 3.30 | 34.60 | | | 8.4 |
| 18 | 34/0.18 | 1.21 | 0.25 | 1.70 | 0.12 | 1.94 | 0.80 | 3.50 | 21.80 | | | 11.3 |
| 16 | 26/0.254 | 1.55 | 0.25 | 2.00 | 0.12 | 2.24 | 0.80 | 3.85 | 13.70 | | | 15.2 |



# AWM 2095 STYLE

Insulated Wire(Double Insulated Wire)

Standard UL Subject 758
UL Standard 1581



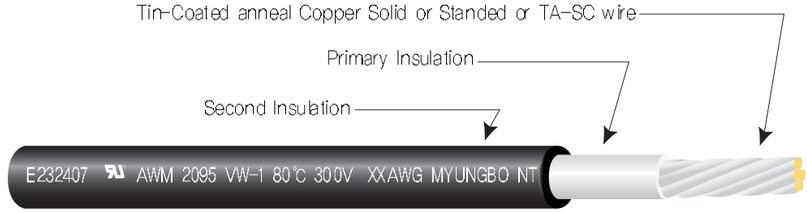

## ■ Applications ■

Internal wiring of electronic equipment and appliances. Tags may indicate the following: "600 volts Peak for Electronic use only".

## ■ Characteristic ■

- Rating Temp.& Volt : UL 80℃ 300V,
- Flammability : VW-1, FT1 Pass

## ■ Construction ■

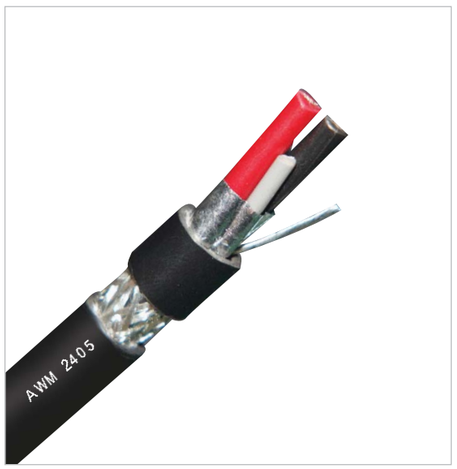



| Conductors | | | Insulation | | Shield | | | Jacket | |
|---|---|---|---|---|---|---|---|---|---|
| AWG Size | Number of core pcs | Number&dia of conductors pcs/mm | Material | Nominal Thickness mm | Metal of TYPE | Wrap shield | Braided shield | Material | Nominal Thickness mm |
| 30 | 2~50 | 7/0.10 | Heat-resistance or SR PVC | 0.80 | AL/PS TAPE | Optional | Optional | Extruded PVC | 0.40 |
| 28 | 2~50 | 7/0.127 | | 0.90 | | | | | |
| 26 | 2~50 | 7/0.16 | | 1.00 | | | | | |
| 24 | 2~50 | 11/0.16 | | 1.10 | | | | | |
| 22 | 2~50 | 17/0.16 | | 1.30 | | | | | |
| 20 | 2~50 | 21/0.18 | | 1.50 | | | | | |
| 18 | 2~50 | 34/0.18 | | 1.80 | | | | | |
| 16 | 2~50 | 26/0.254 | | 2.10 | | | | | |

# AWM 2405 STYLE

Multiple-conductor cable using non-integral jacket

Standard UL Subject 758
UL Standard 1581



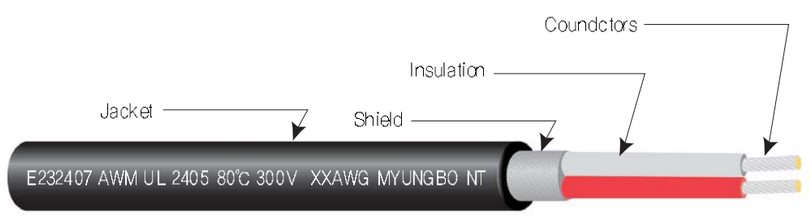

## ■ Applications ■

Internal wiring of electronic equipment.

## ■ Characteristic ■

- Rating Temp.& Volt : UL 80℃ 300V
- Flammability : VW-1, FT1 Pass

## ■ Construction ■




| Conductors | | | Insulation | | Shield | | | Jacket | |
|---|---|---|---|---|---|---|---|---|---|
| AWG Size | Number of core pcs | Number&dia of conductors pcs/㎜ | Material | Nominal Thickness ㎜ | Metal of TYPE | Wrap shield | Braided shield | Material | Nominal Thickness ㎜ |
| 30 | 2~6 | 7/0.10 | Extruded PVC | 0.40 | AL/PS TAPE | Optional | Optional | Extruded PVC | 0.40 |
| 28 | 2~6 | 7/0.127 | | 0.40 | | | | | |
| 26 | 2~6 | 7/0.16 | | 0.40 | | | | | |
| 24 | 2~6 | 11/0.16 | | 0.40 | | | | | |
| 22 | 2~6 | 17/0.16 | | 0.40 | | | | | |
| 20 | 2~6 | 21/0.18 | | 0.40 | | | | | |
| 18 | 2~6 | 34/0.18 | | 0.40 | | | | | |
| 16 | 2~6 | 26/0.254 | | 0.40 | | | | | |



# AWM 2448 STYLE

Multiconductor Cable with Extruded Non-Integral Jacket

Standard UL Subject 758
UL Standard 1581

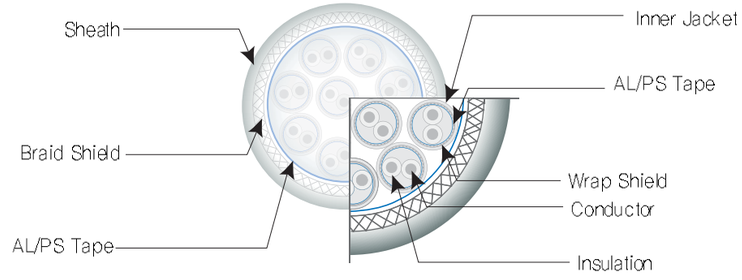

## ■ Applications ■

Internal wiring of electronic equipment.

## ■ Characteristic ■

- Rating Temp.& Volt : UL 60℃, 80℃ 30V,
- Flammability : VW-1, FT1 Pass

## ■ Construction ■

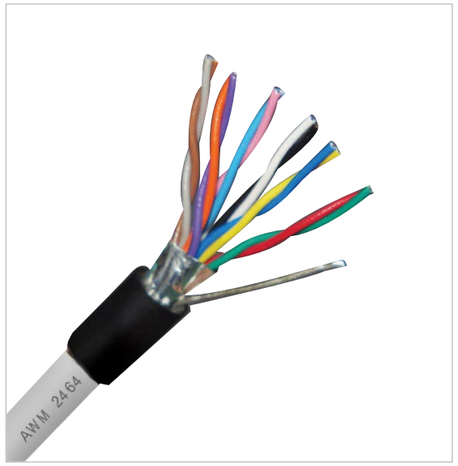



| Conductors | | | Insulation | | Shield | | | Jacket | |
|---|---|---|---|---|---|---|---|---|---|
| AWG Size | Number of core pcs | Number&dia of conductors pcs/㎜ | Material | Nominal Thickness ㎜ | Metal of TYPE | Wrap shield | Braided shield | Material | Nominal Thickness ㎜ |
| 30 | 2~50 | 7/0.10 | Heat-resistance or SR PVC | 0.25 | AL/PS TAPE | Optional | Optional | Extruded PVC | 0.80 |
| 28 | 2~50 | 7/0.127 | | 0.25 | | | | | |
| 26 | 2~50 | 7/0.16 | | 0.25 | | | | | |
| 24 | 2~50 | 11/0.16 | | 0.25 | | | | | |
| 22 | 2~50 | 17/0.16 | | 0.25 | | | | | |
| 20 | 2~50 | 21/0.18 | | 0.25 | | | | | |
| 18 | 2~50 | 34/0.18 | | 0.25 | | | | | |
| 16 | 2~50 | 26/0.254 | | 0.25 | | | | | |

# AWM 2464 STYLE

## Jacketed Cable

Standard UL Subject 758
UL Standard 1581



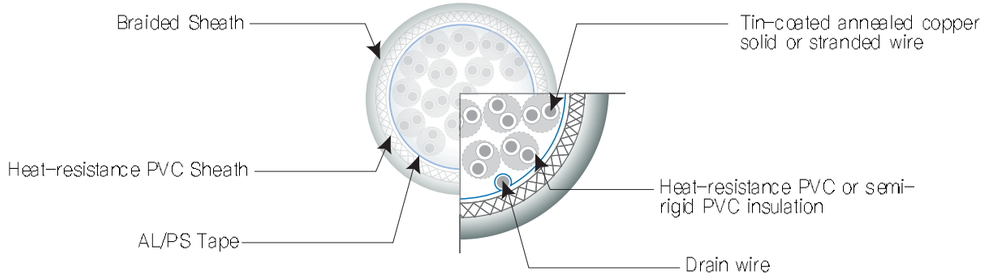

### ■ Applications ■

Internal wiring or external interconnection of electronic equipment (such as desk-type calculators, dictating machines, or x-ray equipment).

### ■ Characteristic ■

- Rating Temp.& Volt : UL 80℃ 300V
- Flammability : VW-1, FT1 Pass

### ■ Construction ■




| Conductors | | | Insulation | | Shield | | | Jacket | |
|---|---|---|---|---|---|---|---|---|---|
| AWG Size | Number of core pcs | Number&dia of conductors pcs/㎜ | Material | Nominal Thickness ㎜ | Metal of TYPE | Wrap shield | Braided shield | Material | Nominal Thickness ㎜ |
| 30 | 2~50 | 7/0.10 | Heat-resistance or SR PVC | 0.25 | AL/PS TAPE | Optional | Optional | Extruded PVC | 0.80 |
| 28 | 2~50 | 7/0.127 | | 0.25 | | | | | |
| 26 | 2~50 | 7/0.16 | | 0.25 | | | | | |
| 24 | 2~50 | 11/0.16 | | 0.25 | | | | | |
| 22 | 2~50 | 17/0.16 | | 0.25 | | | | | |
| 20 | 2~50 | 21/0.18 | | 0.25 | | | | | |
| 18 | 2~50 | 34/0.18 | | 0.25 | | | | | |
| 16 | 2~50 | 26/0.254 | | 0.25 | | | | | |



# AWM 2468 STYLE

## Flat Ribbon-Type Cable

Standard UL Subject 758
UL Standard 1581

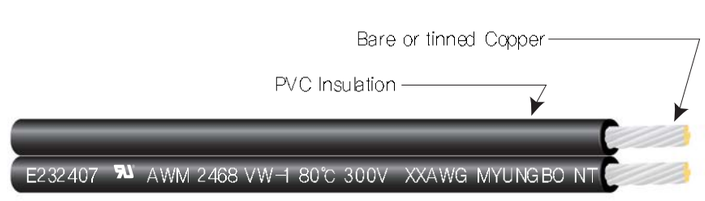

### ■ Applications ■

Internal wiring of Appliances ; or internal wiring of Appliances where exposed to oil at a temperature not exceeding 60℃ or 80℃, whichever is applicable.

### ■ Characteristic ■

- Rating Temp.& Volt : UL 80℃ 300V, CSA 80℃ 300V
- Flammability : VW-1, FT1 Pass
- Applicable to both crimp and pressure rewiing connections.

### ■ Construction ■




| No. of Core | Conductors | | | Insulation | | Max. conductor Resistance Ω/㎞ | min. insulation Resistance MΩ/㎞ | Unit length m |
|---|---|---|---|---|---|---|---|---|
| | AWG SIZE | Number&dia of conductors pcs/㎜ | Nominal overall dia ㎜ | Nominal Thickness ㎜ | Nominal overall dia ㎜ | | | |
| 2 | 28 | 7/0.127 | 0.38 | 0.40 | 1.20×2.5 | 237.38 | 5 | 610 |
| 3 | | | | | 1.20×3.8 | | | |
| 4 | | | | | 1.20×5.5 | | | |
| 2 | 26 | 7/0.16 | 0.48 | 0.40 | 1.3×2.7 | 148.94 | 5 | 610 |
| 3 | | | | | 1.3×4.1 | | | |
| 4 | | | | | 1.3×5.5 | | | |
| 2 | 24 | 11/0.16 | 0.61 | 0.40 | 1.45×3.0 | 93.25 | 5 | 610 |
| 3 | | | | | 1.45×4.5 | | | |
| 4 | | | | | 1.45×6.1 | | | |
| 2 | 22 | 17/0.16 | 0.76 | 0.40 | 1.60×3.3 | 55.00 | 5 | 610 |
| 3 | | | | | 1.60×5.0 | | | |
| 4 | | | | | 1.60×6.7 | | | |

# UL AWM 2651 STYLE

## FLAT CABLE

Standard UL Subject 758
UL Standard 1581

### ■ Applications ■

Internal wiring electronic equipment.
Conductors Two~150 Conductors.

### ■ Characteristic ■

-Rating Temp.& Volt : UL 105 Voltage 300V°C
-Flammability : VW-1, FT1 Pass
-Material : NON-TOXIC PVC

| Cores | Conductors | | | Insulation | Jacket | Conductor Max Resistance Ω/km | Insulation Min. Resistance MΩ/km | Dielectric Withstanding Voltage AC V/min | Unit Length m (Feet) |
|---|---|---|---|---|---|---|---|---|---|
| | AWG SIZE | Number& dia of conductors pcs/mm | Nor.overall Diamete mm | Nor.overall Diamete mm | Wide mm | | | | |
| 8 | 28 | 7/0.127 | 0.38 | 0.88 | 8.89 | 237.38 | 15 | 2,000 | 61 (2.00) |
| 10 | | | | | 11.43 | | | | |
| 14 | | | | | 16.51 | | | | |
| 16 | | | | | 19.06 | | | | |
| 20 | | | | | 24.13 | | | | |
| 26 | | | | | 31.75 | | | | |
| 30 | | | | | 36.83 | | | | |
| 34 | | | | | 41.91 | | | | |



# UL AWM 2547 STYLE

## Jacketed Wire

Standard UL Subject 758
UL Standard 1581

### ■ Applications ■

Internal wiring of electronic equipment where
not exposed to movement or mechanical abuse

### ■ Characteristic ■

- Rating Temp.& Volt : UL 80℃ Voltage Not Spec.
- Flammability : VW-1, FT1 Pass

### ■ Construction ■


| Conductors | | | Insulation | | Shield | | | Jacket | |
|---|---|---|---|---|---|---|---|---|---|
| AWG Size | Number of core pcs | Number&dia of conductors pcs/㎜ | Material | Nominal Thickness ㎜ | Metal of TYPE | Wrap shield | Braided shield | Material | Nominal Thickness ㎜ |
| 30 | 2~3 | 7/0.10 | SR PVC | 0.25 | AL/PS TAPE | Optional | Optional | Extruded PVC | 0.30 |
| 28 | 2~3 | 7/0.127 | | 0.25 | | | | | |
| 26 | 2~3 | 7/0.16 | | 0.25 | | | | | |
| 24 | 2~3 | 11/0.16 | | 0.25 | | | | | |
| 22 | 2~3 | 17/0.16 | | 0.25 | | | | | |
| 20 | 2~3 | 21/0.18 | | 0.25 | | | | | |
| 18 | 2~3 | 34/0.18 | | 0.25 | | | | | |
| 16 | 2~3 | 26/0.254 | | 0.25 | | | | | |

# AWM 2725 STYLE

## Electronic Cable

Standard UL Subject 758
UL Standard 1581

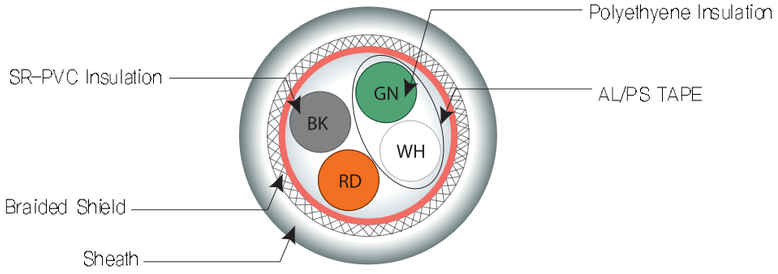

### ■ Applications ■

Internal wiring of electronic equipment in Class 2 systems only.

### ■ Characteristic ■

- Rating Temp.& Volt : UL 80℃ 30V
- Flammability : VW-1, FT1 Pass
- Low voltage computer cable, USB cable

### ■ Construction ■




| Pair of Core | Conductors | Insulation | | Shield | | | Sheath | | Unit length m (feet) |
|---|---|---|---|---|---|---|---|---|---|
| | AWG SIZE | Material | Nominal Thickness ㎜ | Material of Tape | Braid coverage of percent % | Drain wire Material | Material | Nominal Thickness ㎜ | |
| 2core & 2core | 28AWG(2Core) 28AWG(2Core) | Polyethylene SR-PVC | 0.25 | AL/PS Tape | Min. 70 | Tin-coated annealed copper stranded wire | Heat-resistance PVC | 1.0 | 305 (1,000) or 610 (2,000) |
| 2core & 2core | 28AWG(2Core) 26AWG(2Core) | Polyethylene SR-PVC | 0.25 | | | | | | |
| 2core & 2core | 28AWG(2Core) 24AWG(2Core) | Polyethylene SR-PVC | 0.25 | | | | | | |
| 2core & 2core | 28AWG(2Core) 22AWG(2Core) | Polyethylene SR-PVC | 0.25 | | | | | | |
| 2core & 2core | 28AWG(2Core) 20AWG(2Core) | Polyethylene SR-PVC | 0.25 | | | | | | |



# AWM 2789 STYLE

## Jacketed Cable

Standard UL Subject 758
UL Standard 1581


### ■ Applications ■

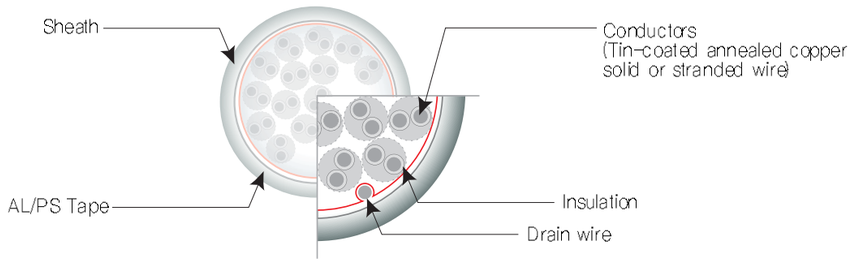
Internal wiring and external interconnection in class 2 circuits of electronic equipment.

Telephone network cable etc.

### ■ Characteristic ■

-Rating Temp.& Volt : UL 60℃ 30V, CSA 60℃ 30V
-Flammability : VW-1, FT1 Pass

### ■ Construction ■

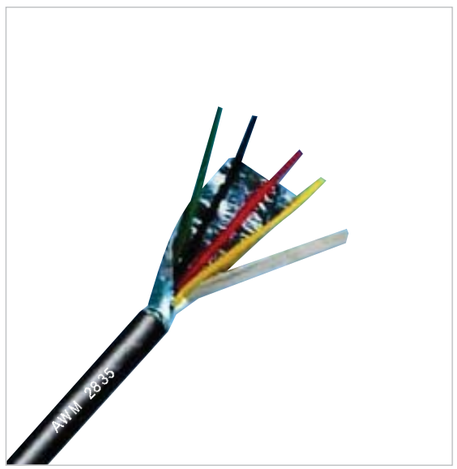



| Pair of Core | Conductors | Insulation | | Shield | | | Sheath | | Unit length m (feet) |
|---|---|---|---|---|---|---|---|---|---|
| | AWG SIZE | Material | Nominal Thickness ㎜ | Material of Tape | Braid coverage of percent % | Drain wire Material | Material | Nominal Thickness ㎜ | |
| 2pair ~ 50pair | 30AWG~ 20AWG (Solid or stranded) | Polyethylene or SR-PVC | 0.10 ~ 0.25 | AL/PS Tape | Min. 70 | Tin-coated annealed copper stranded wire | Heat-resistance PVC | 1.0 | 305 or 200 |

# AWM 2835 STYLE

## PVC Jacket Cable

Standard UL Subject 758
UL Standard 1581



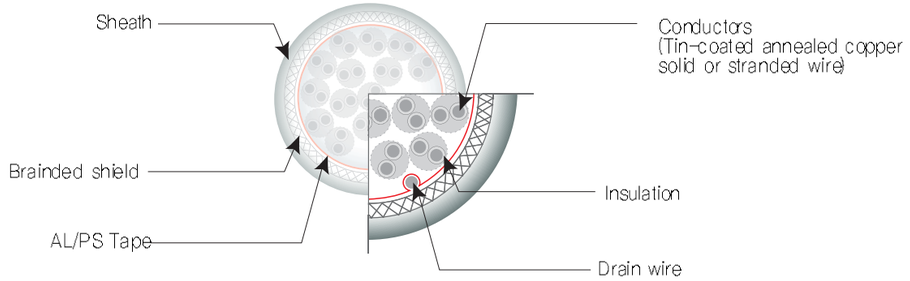

### ■ Applications ■

External interconnection in class 2 circuits of electronic

### ■ Characteristic ■

-Rating Temp.& Volt : UL 60℃ 30V, CSA 80℃ 30V
-Flammability : VW-1, FT1 Pass
-Small cuter diameter saves space
-Excellent flexibility and easy wiring

### ■ Construction ■



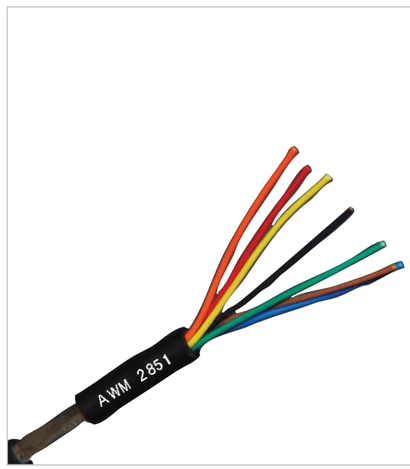

| Pair of Core | Conductors | Insulation | | Shield | | | Sheath | | Unit length m (feet) |
|---|---|---|---|---|---|---|---|---|---|
| | AWG SIZE | Material | Nominal Thickness mm | Material of Tape | Braid coverage of percent % | Drain wire Material | Material | Nominal Thickness mm | |
| 2pair ~ 50pair | 30AWG~ 20AWG (Solid or stranded) | Heat-resistance or SR PVC | 0.10 ~ 0.25 | AL/PS Tape | Min. 70 | Tin-coated annealed copper stranded wire | Heat-resistance PVC | 0.50 | 305 or 200 |



# AWM 2851 STYLE

## Jacketed Cable

Standard UL Subject 758
UL Standard 1581



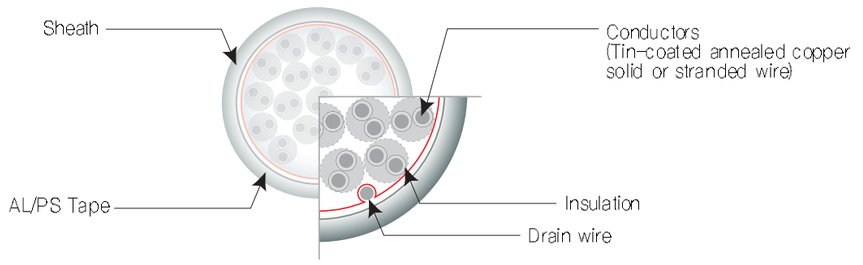

### ■ Applications ■

- Internal Wiring of Class 2 circuits in Electronic Equipment.
- Telephone network cable etc.

### ■ Characteristic ■

- Rating Temp.& Volt : UL 80℃ 30V
- Flammability : VW-1, FT1 Pass

### ■ Construction ■

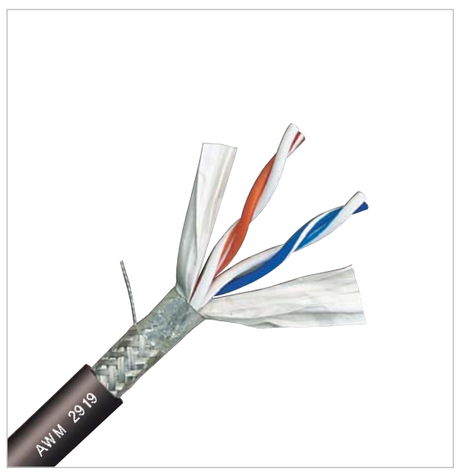



| Pair of Core | Conductors | Insulation | | Shield | | | Sheath | | Unit length m (feet) |
|---|---|---|---|---|---|---|---|---|---|
| | AWG SIZE | Material | Nominal Thickness mm | Material of Tape | Braid coverage of percent % | Drain wire Material | Material | Nominal Thickness mm | |
| 2pair ~ 50pair | 30AWG~ 20AWG (Solid or stranded) | Heat-resistance or SR PVC | 0.10 ~ 0.25 | AL/PS Tape | Min. 70 | Tin-coated annealed copper stranded wire | Heat-resistance PVC | 0.40 | 305 or 200 |

# AWM 2919 STYLE

## Low Voltage Cable

Standard UL Subject 758
UL Standard 1581



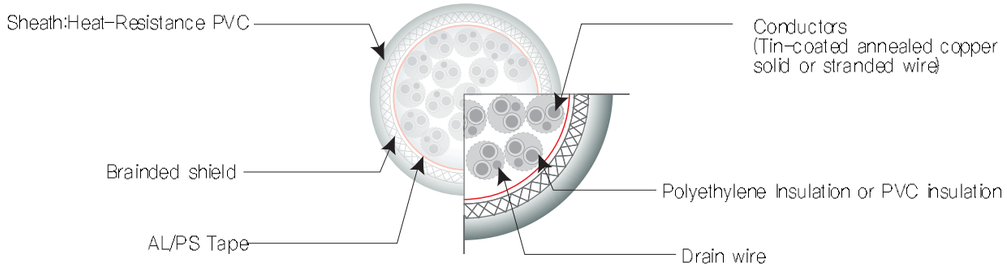

### ■ Applications ■

As internal wiring external interconnection in class 2 circuits of electronic computer and electric business machines.

### ■ Characteristic ■

- Rating Temp.& Volt : UL 80℃ 30V
- Flammability : VW-1, FT1 Pass

### ■ Construction ■




| Pair of Core | Conductors | Insulation | | Shield | | | Sheath | | Unit length m (feet) |
|---|---|---|---|---|---|---|---|---|---|
| | AWG SIZE | Material | Nominal Thickness mm | Material of Tape | Braid coverage of percent % | Drain wire Material | Material | Nominal Thickness mm | |
| 2pair ~ 50pair | 30AWG~ 14AWG (Solid or stranded) | Polyethylene or SR-PVC | 0.20 | AL/PS Tape | Min. 70 | Tin-coated annealed copper stranded wire | Heat-resistance PVC | 0.80 | 305 or 200 |



# UL AWM 2969 STYLE

## Jacketed Cable

Standard UL Subject 758
UL Standard 1581

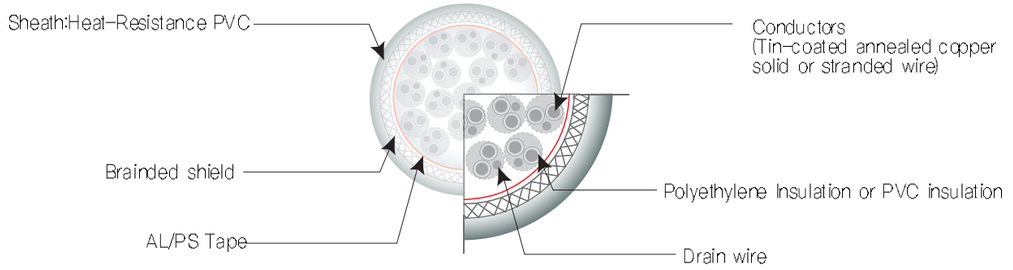

### ■ Applications ■

Internal or external wiring of Class 2 systems of audio and video equipment and electronic equipment.

### ■ Characteristic ■

- Rating Temp.& Volt : UL 80℃ 30V
- Flammability : VW-1, FT1 Pass

### ■ Construction ■




| Pair of Core | Conductors | Insulation | | Shield | | | Sheath | | Unit length m (feet) |
|---|---|---|---|---|---|---|---|---|---|
| | AWG SIZE | Material | Nominal Thickness mm | Material of Tape | Braid coverage of percent % | Drain wire Material | Material | Nominal Thickness mm | |
| 2pair ~ 50pair | 30AWG~ 20AWG (Solid or stranded) | Polyethylene or SR-PVC | 0.20 | AL/PS Tape | Min. 70 | Tin-coated annealed copper stranded wire | Heat-resistance PVC | 0.80 | 305 or 200 |

# AWM 2990 STYLE

## Multiple-conductor cable using non-integral jacket

Standard UL Subject 758
UL Standard 1581

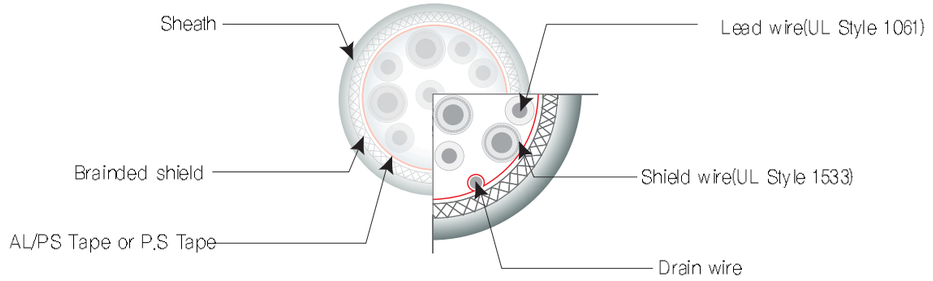

### ■ Applications ■

Internal Wiring or External Interconnection of Electronic Equipment, class 2 circuits only.

### ■ Characteristic ■

- Rating Temp.& Volt : UL 80℃ 30V
- Flammability : VW-1, FT1 Pass

### ■ Construction ■




| Pair of Core | Conductors | Insulation | | Shield | | | Sheath | | Unit length m (feet) |
|---|---|---|---|---|---|---|---|---|---|
| | AWG SIZE | Material | Nominal Thickness mm | Material of Tape | Braid coverage of percent % | Drain wire Material | Material | Nominal Thickness mm | |
| 2pair ~ 50pair | 30AWG~ 14AWG (Solid or stranded) | Polyethylene or SR-PVC | 0.20 | AL/PS Tape | Min. 70 | Tin-coated annealed copper stranded wire | Heat-resistance PVC | 0.80 | 305 or 200 |



# AWM 20276 STYLE

## Multi-conductor Cable with Extruded Non-Integral Jacket

Standard UL Subject 758
UL Standard 1581


### ■ Applications ■

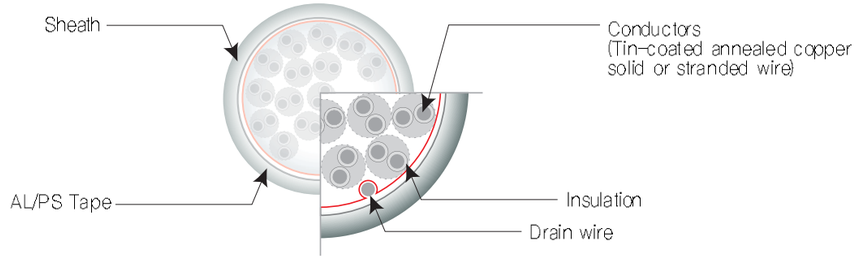
- Construction A:
  Internal wiring or external interconnection of electronic equipment in Class 2 circuits only.

- Construction B:
  Internal wiring of electronic equipment in Class 2 circuits only.

### ■ Characteristic ■

- Rating Temp.& Volt : UL 80℃ 30V
- Flammability : VW-1, FT1 Pass

### ■ Construction ■




| Pair of Core | Conductors | Insulation | | Shield | | | Sheath | | Unit length m (feet) |
|---|---|---|---|---|---|---|---|---|---|
| | AWG SIZE | Material | Nominal Thickness mm | Material of Tape | Braid coverage of percent % | Drain wire Material | Material | Nominal Thickness mm | |
| 2pair ~ 50pair | 30AWG~ 20AWG (Solid or stranded) | Polyethylene or SR-PVC | 0.10 ~ 0.25 | AL/PS Tape | Min. 70 | Tin-coated annealed copper stranded wire | Heat-resistance PVC | 1.0 | 305 or 200 |

# UL AWM 20379 STYLE

## Multi-conductor Cable with Extruded Non-Integral Jacket

Standard UL Subject 758
UL Standard 1581

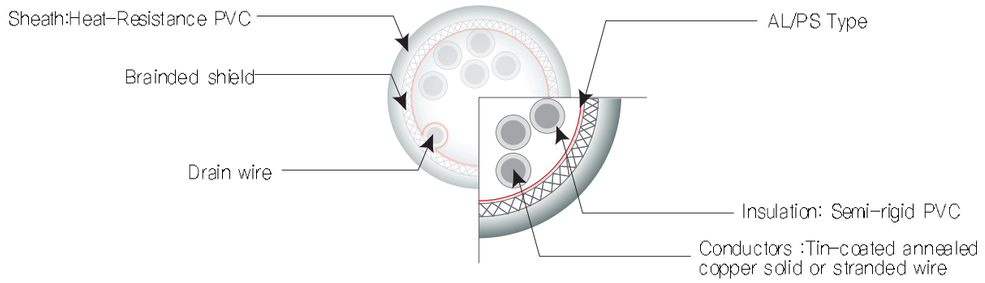

### ■ Applications ■

- Use No. 1 – Internal wiring in Class 2 circuits of electronic equipment where each end is terminated in connectors.
- Use No. 2 – Internal wiring in Class 2 circuits of electronic equipment or external interconnection in Class 2 circuits of electronic equipment where not routed along walls, floors, or other abuse areas.

### ■ Characteristic ■

- Rating Temp.& Volt : UL 80℃ 30V
- Flammability : VW-1, FT1 Pass

### ■ Construction ■




| Pair of Core | Conductors | Insulation | | Shield | | | Sheath | | Unit length m (feet) |
|---|---|---|---|---|---|---|---|---|---|
| | AWG SIZE | Material | Nominal Thickness ㎜ | Material of Tape | Braid coverage of percent % | Drain wire Material | Material | Nominal Thickness ㎜ | |
| 2pair ~ 50pair | 30AWG~ 20AWG (Solid or stranded) | Polyethylene or SR-PVC | 0.10 ~ 0.25 | AL/PS Tape | Min. 70 | Tin-coated annealed copper stranded wire | Heat-resistance PVC | 1.0 | 305 or 200 |



ELECTRIC WIRE & CABLE

MYUNGBO CABLE

Product

# HALOGEN FREE
(NON-PVC)



# AWM 10066 STYLE

## Jacketed Cable

Standard UL Subject 758
UL Standard 1581

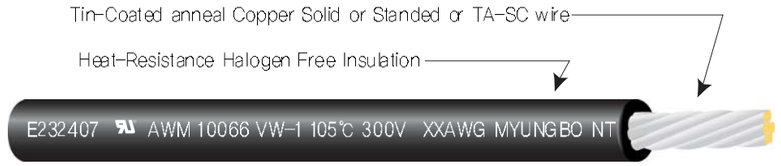

## ■ Applications ■

Internal wiring of Appliances.

## ■ Characteristic ■

- Rating Temp.& Volt : UL 105℃, 300V
- Flammability : VW-1, FT1 Pass
- Halogen Free(NON-PVC) Cable

## ■ Construction ■




| Conductors | | | Insulation | | Conductor Max Resistance Ω/km | Insulation Min. Resistance MΩ/km | Dielectric Withstanding Voltage AC V/min | Allowable Current A |
|---|---|---|---|---|---|---|---|---|
| AWG Size | Number&dia of conductors pcs/mm | Nor. overall Diameter mm | Nominal Thickness mm | Nor. overall Diameter mm | | | | |
| 30 | 7/0.10 | 0.30 | 0.80 | 1.90 | 376.96 | 15 | 3,000 | 3.7 |
| 28 | 7/0.127 | 0.38 | 0.80 | 1.98 | 237.38 | | | 4.3 |
| 26 | 7/0.16 | 0.48 | 0.80 | 2.10 | 148.94 | | | 5.8 |
| 24 | 11/0.16 | 0.61 | 0.80 | 2.20 | 93.25 | | | 7.6 |
| 22 | 17/0.16 | 0.76 | 0.80 | 2.35 | 55.00 | | | 10.0 |
| 20 | 21/0.18 | 0.95 | 0.80 | 2.60 | 34.60 | | | 13.1 |
| 18 | 34/0.18 | 1.21 | 0.80 | 2.90 | 21.80 | | | 17.2 |
| 16 | 26/0.254 | 1.55 | 0.80 | 3.15 | 13.70 | | | 22.8 |

# UL AWM 10530 STYLE

## Insulated Wire

Standard UL Subject 758
UL Standard 1581

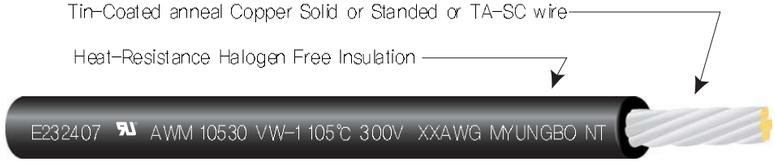

### ■ Applications ■

Internal wiring, Where Not Subjected to Mechanical Abuse.

### ■ Characteristic ■

- Rating Temp.& Volt : UL 105℃ 600V
- Flammability : VW-1, FT1 Pass
- Halogen Free(NON-PVC) Cable

### ■ Construction ■




| Conductors | | | Insulation | | Conductor Max Resistance Ω/km | Insulation Min. Resistance MΩ/km | Dielectric Withstanding Voltage AC V/min | Allowable Current A |
|---|---|---|---|---|---|---|---|---|
| AWG Size | Number&dia of conductors pcs/㎜ | Nor. overall Diameter ㎜ | Nominal Thickness ㎜ | Nor. overall Diameter ㎜ | | | | |
| 30 | 7/0.10 | 0.30 | 0.25 | 0.80 | 376.96 | 15 | 3,000 | 2.0 |
| 28 | 7/0.127 | 0.38 | 0.25 | 0.90 | 237.38 | | | 2.6 |
| 26 | 7/0.16 | 0.48 | 0.25 | 1.00 | 148.94 | | | 3.4 |
| 24 | 11/0.16 | 0.61 | 0.25 | 1.10 | 93.25 | | | 4.6 |
| 22 | 17/0.16 | 0.76 | 0.25 | 1.30 | 55.00 | | | 6.1 |
| 20 | 21/0.18 | 0.95 | 0.25 | 1.50 | 34.60 | | | 8.4 |
| 18 | 34/0.18 | 1.21 | 0.25 | 1.80 | 21.80 | | | 11.3 |
| 16 | 26/0.254 | 1.55 | 0.25 | 2.10 | 13.70 | | | 15.2 |



# AWM 10643 STYLE

## TPE Insulated Wire

Standard UL Subject 758
UL Standard 1581


### ■ Applications ■

Internal Wiring of electronic equipment where not subjected to mechanical abuse.

### ■ Characteristic ■

- Rating Temp.& Volt : UL 105℃ 600V
- Flammability : VW-1, FT1 Pass
- Halogen Free(NON-PVC) Cable

### ■ Construction ■


| Conductors | | | Insulation | | Conductor Max Resistance Ω/km | Insulation Min. Resistance MΩ/km | Dielectric Withstanding Voltage AC V/min | Allowable Current A |
|---|---|---|---|---|---|---|---|---|
| AWG Size | Number&dia of conductors pcs/㎜ | Nor. overall Diameter ㎜ | Nominal Thickness ㎜ | Nor. overall Diameter ㎜ | | | | |
| 30 | 7/0.10 | 0.30 | 0.40 | 1.10 | 376.96 | 15 | 3,000 | 2.3 |
| 28 | 7/0.127 | 0.38 | 0.40 | 1.25 | 237.38 | | | 3.0 |
| 26 | 7/0.16 | 0.48 | 0.40 | 1.35 | 148.94 | | | 4.0 |
| 24 | 11/0.16 | 0.61 | 0.40 | 1.45 | 93.25 | | | 5.3 |
| 22 | 17/0.16 | 0.76 | 0.40 | 1.60 | 55.00 | | | 7.2 |
| 20 | 21/0.18 | 0.95 | 0.40 | 1.80 | 34.60 | | | 9.4 |
| 18 | 34/0.18 | 1.21 | 0.40 | 2.00 | 21.80 | | | 12.5 |
| 16 | 26/0.254 | 1.55 | 0.40 | 2.40 | 13.70 | | | 15.9 |

# UL AWM 10645 STYLE

Single conductor with extruded insulation

Standard UL Subject 758
UL Standard 1581

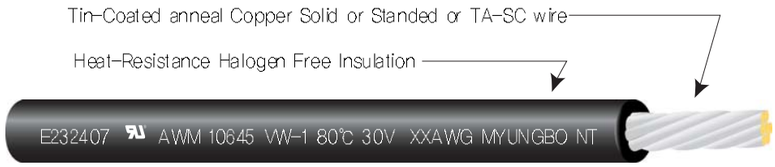

## ■ Applications ■

For further processing in cables for electronic equipment or appliances.

## ■ Characteristic ■

- Rating Temp.& Volt : UL 80℃ 30V
- Flammability : VW-1, FT1 Pass
- Halogen Free(NON-PVC) Cable

## ■ Construction ■




| Conductors | | | Insulation | | Conductor Max Resistance Ω /km | Insulation Min. Resistance MΩ/km | Dielectric Withstanding Voltage AC V/min | Allowable Current A |
|---|---|---|---|---|---|---|---|---|
| AWG Size | Number&dia of conductors pcs/mm | Nor. overall Diameter mm | Nominal Thickness mm | Nor. overall Diameter mm | | | | |
| 30 | 7/0.10 | 0.30 | 0.20 | 0.70 | 376.96 | 15 | 3,000 | 2.3 |
| 28 | 7/0.127 | 0.38 | 0.20 | 0.80 | 237.38 | | | 3.0 |
| 26 | 7/0.16 | 0.48 | 0.20 | 0.90 | 148.94 | | | 4.0 |
| 24 | 11/0.16 | 0.61 | 0.20 | 1.00 | 93.25 | | | 5.3 |
| 22 | 17/0.16 | 0.76 | 0.20 | 1.20 | 55.00 | | | 7.2 |
| 20 | 21/0.18 | 0.95 | 0.20 | 1.40 | 34.60 | | | 9.4 |
| 18 | 34/0.18 | 1.21 | 0.20 | 1.60 | 21.80 | | | 12.5 |
| 16 | 26/0.254 | 1.55 | 0.20 | 2.00 | 13.70 | | | 15.9 |



# AWM 10666 STYLE

Single conductor with extruded insulation.

Standard UL Subject 758
UL Standard 1581


## ■ Applications ■

Internal wiring, Where Not Subjected to Mechanical Abuse.

## ■ Characteristic ■

- Rating Temp.& Volt : UL 105℃ 600V
- Flammability : VW-1, FT1 Pass
- Halogen Free(NON-PVC) Cable

## ■ Construction ■


| Conductors | | | Insulation | | Conductor Max Resistance Ω /km | Insulation Min. Resistance MΩ/km | Dielectric Withstanding Voltage AC V/min | Allowable Current A |
|---|---|---|---|---|---|---|---|---|
| AWG Size | Number&dia of conductors pcs/mm | Nor. overall Diameter mm | Nominal Thickness mm | Nor. overall Diameter mm | | | | |
| 30 | 7/0.10 | 0.30 | 0.25 | 0.80 | 376.96 | 15 | 3,000 | 2.0 |
| 28 | 7/0.127 | 0.38 | 0.25 | 0.90 | 237.38 | | | 2.6 |
| 26 | 7/0.16 | 0.48 | 0.25 | 1.00 | 148.94 | | | 3.4 |
| 24 | 11/0.16 | 0.61 | 0.25 | 1.10 | 93.25 | | | 4.6 |
| 22 | 17/0.16 | 0.76 | 0.25 | 1.30 | 55.00 | | | 6.1 |
| 20 | 21/0.18 | 0.95 | 0.25 | 1.50 | 34.60 | | | 8.4 |
| 18 | 34/0.18 | 1.21 | 0.25 | 1.80 | 21.80 | | | 11.3 |
| 16 | 26/0.254 | 1.55 | 0.25 | 2.10 | 13.70 | | | 15.2 |

# UL AWM 1790 STYLE

Single conductor with extruded insulation.

Standard UL Subject 758
UL Standard 1581

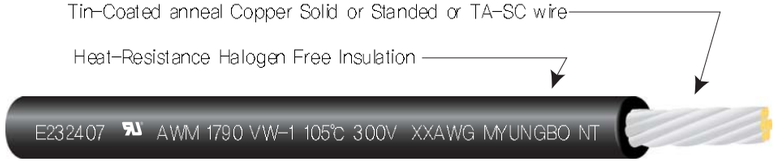

## ■ Applications ■

For use as Motor Leads or Internal Wiring of Appliances. Tags may indicate the following: 600 Volts Peak – For Electronic Use Only.

## ■ Characteristic ■

- Rating Temp.& Volt : UL 105℃ 300V
- Flammability : VW-1, FT1 Pass
- Halogen Free(NON-PVC) Cable

## ■ Construction ■




| Conductors | | | Insulation | | Conductor Max Resistance Ω /km | Insulation Min. Resistance MΩ/km | Dielectric Withstanding Voltage AC V/min | Allowable Current A |
|---|---|---|---|---|---|---|---|---|
| AWG Size | Number&dia of conductors pcs/㎜ | Nor. overall Diameter ㎜ | Nominal Thickness ㎜ | Nor. overall Diameter ㎜ | | | | |
| 30 | 7/0.10 | 0.30 | 0.40 | 1.10 | 376.96 | 15 | 3,000 | 2.3 |
| 28 | 7/0.127 | 0.38 | 0.40 | 1.25 | 237.38 | | | 3.0 |
| 26 | 7/0.16 | 0.48 | 0.40 | 1.35 | 148.94 | | | 4.0 |
| 24 | 11/0.16 | 0.61 | 0.40 | 1.45 | 93.25 | | | 5.3 |
| 22 | 17/0.16 | 0.76 | 0.40 | 1.60 | 55.00 | | | 7.2 |
| 20 | 21/0.18 | 0.95 | 0.40 | 1.80 | 34.60 | | | 9.4 |
| 18 | 34/0.18 | 1.21 | 0.40 | 2.00 | 21.80 | | | 12.5 |
| 16 | 26/0.254 | 1.55 | 0.40 | 2.40 | 13.70 | | | 15.9 |



# AWM 10720 STYLE

Single conductor with extruded insulation.

Standard UL Subject 758
UL Standard 1581


## ■ Applications ■

For use as Motor Leads or Internal Wiring of Appliances. Tags may indicate the following: 600 Volts Peak – For Electronic Use Only.

## ■ Characteristic ■

- Rating Temp.& Volt : UL 105℃ 300V
- Flammability : VW-1, FT1 Pass
- Halogen Free(NON-PVC) Cable

## ■ Construction ■


| Conductors | | | Insulation | | Conductor Max Resistance Ω /km | Insulation Min. Resistance MΩ/km | Dielectric Withstanding Voltage AC V/min | Allowable Current A |
|---|---|---|---|---|---|---|---|---|
| AWG Size | Number&dia of conductors pcs/㎜ | Nor. overall Diameter ㎜ | Nominal Thickness ㎜ | Nor. overall Diameter ㎜ | | | | |
| 30 | 7/0.10 | 0.30 | 0.30 | 1.00 | 376.96 | 15 | 3,000 | 2.3 |
| 28 | 7/0.127 | 0.38 | 0.30 | 1.15 | 237.38 | | | 3.0 |
| 26 | 7/0.16 | 0.48 | 0.30 | 1.25 | 148.94 | | | 4.0 |
| 24 | 11/0.16 | 0.61 | 0.30 | 1.35 | 93.25 | | | 5.3 |
| 22 | 17/0.16 | 0.76 | 0.30 | 1.50 | 55.00 | | | 7.2 |
| 20 | 21/0.18 | 0.95 | 0.30 | 1.70 | 34.60 | | | 9.4 |
| 18 | 34/0.18 | 1.21 | 0.30 | 1.90 | 21.80 | | | 12.5 |
| 16 | 26/0.254 | 1.55 | 0.30 | 2.30 | 13.70 | | | 15.9 |

# UL AWM 10646 STYLE

Single conductor with extruded insulation.

Standard UL Subject 758
UL Standard 1581

## ■ Applications ■

For further processing in cables.

## ■ Characteristic ■

- Rating Temp.& Volt : UL 80℃ 300V
- Flammability : VW-1, FT1 Pass
- Halogen Free(NON-PVC) Cable

## ■ Construction ■


| Conductors | | | Insulation | | Conductor Max Resistance Ω/km | Insulation Min. Resistance MΩ/km | Dielectric Withstanding Voltage AC V/min | Allowable Current A |
|---|---|---|---|---|---|---|---|---|
| AWG Size | Number&dia of conductors pcs/mm | Nor. overall Diameter mm | Nominal Thickness mm | Nor. overall Diameter mm | | | | |
| 30 | 7/0.10 | 0.30 | 0.20 | 0.70 | 376.96 | 15 | 3,000 | 2.3 |
| 28 | 7/0.127 | 0.38 | 0.20 | 0.80 | 237.38 | | | 3.0 |
| 26 | 7/0.16 | 0.48 | 0.20 | 0.90 | 148.94 | | | 4.0 |
| 24 | 11/0.16 | 0.61 | 0.20 | 1.00 | 93.25 | | | 5.3 |
| 22 | 17/0.16 | 0.76 | 0.20 | 1.20 | 55.00 | | | 7.2 |
| 20 | 21/0.18 | 0.95 | 0.20 | 1.40 | 34.60 | | | 9.4 |
| 18 | 34/0.18 | 1.21 | 0.20 | 1.60 | 21.80 | | | 12.5 |
| 16 | 26/0.254 | 1.55 | 0.20 | 2.00 | 13.70 | | | 15.9 |



# AWM 10981 STYLE

Insulated Wire

Standard UL Subject 758
UL Standard 1581

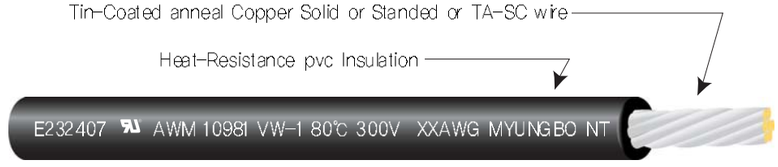

## ■ Applications ■

Internal wiring, installed where not subjected to movement or mechanical abuse.

## ■ Characteristic ■

- Rating Temp.& Volt : UL 80℃ 300V
- Flammability : VW-1, FT1 Pass
- Halogen Free(NON-PVC) Cable

## ■ Construction ■




| Conductors | | | Insulation | | Conductor Max Resistance Ω/km | Insulation Min. Resistance MΩ/km | Dielectric Withstanding Voltage AC V/min | Allowable Current A |
|---|---|---|---|---|---|---|---|---|
| AWG Size | Number&dia of conductors pcs/mm | Nor. overall Diameter mm | Nominal Thickness mm | Nor. overall Diameter mm | | | | |
| 30 | 7/0.10 | 0.30 | 0.25 | 0.80 | 376.96 | 15 | 3,000 | 2.0 |
| 28 | 7/0.127 | 0.38 | 0.25 | 0.90 | 237.38 | | | 2.6 |
| 26 | 7/0.16 | 0.48 | 0.25 | 1.00 | 148.94 | | | 3.4 |
| 24 | 11/0.16 | 0.61 | 0.25 | 1.10 | 93.25 | | | 4.6 |
| 22 | 17/0.16 | 0.76 | 0.25 | 1.30 | 55.00 | | | 6.1 |
| 20 | 21/0.18 | 0.95 | 0.25 | 1.50 | 34.60 | | | 8.4 |
| 18 | 34/0.18 | 1.21 | 0.25 | 1.80 | 21.80 | | | 11.3 |
| 16 | 26/0.254 | 1.55 | 0.25 | 2.10 | 13.70 | | | 15.2 |

# UL AWM 10982 STYLE

## Insulated Wire

Standard UL Subject 758
UL Standard 1581


### ■ Applications ■

Internal Wiring.

### ■ Characteristic ■

- Rating Temp.& Volt : UL 80℃ 300V
- Flammability : VW-1, FT1 Pass
- Halogen Free(NON-PVC) Cable

### ■ Construction ■


| Conductors | | | Insulation | | Conductor Max Resistance Ω/km | Insulation Min. Resistance MΩ/km | Dielectric Withstanding Voltage AC V/min | Allowable Current A |
|---|---|---|---|---|---|---|---|---|
| AWG Size | Number&dia of conductors pcs/mm | Nor. overall Diameter mm | Nominal Thickness mm | Nor. overall Diameter mm | | | | |
| 30 | 7/0.10 | 0.30 | 0.40 | 1.10 | 376.96 | 15 | 3,000 | 2.3 |
| 28 | 7/0.127 | 0.38 | 0.40 | 1.25 | 237.38 | | | 3.0 |
| 26 | 7/0.16 | 0.48 | 0.40 | 1.35 | 148.94 | | | 4.0 |
| 24 | 11/0.16 | 0.61 | 0.40 | 1.45 | 93.25 | | | 5.3 |
| 22 | 17/0.16 | 0.76 | 0.40 | 1.60 | 55.00 | | | 7.2 |
| 20 | 21/0.18 | 0.95 | 0.40 | 1.80 | 34.60 | | | 9.4 |
| 18 | 34/0.18 | 1.21 | 0.40 | 2.00 | 21.80 | | | 12.5 |
| 16 | 26/0.254 | 1.55 | 0.40 | 2.40 | 13.70 | | | 15.9 |



# AWM 10983 STYLE

## Jacketed Cable

Standard UL Subject 758
UL Standard 1581


### ■ Applications ■

Internal Wiring of Electronic Equipment Where Not Exposed to Movement or Mechanical Abuse.

### ■ Characteristic ■

- Rating Temp.& Volt : UL 80℃ 300V
- Flammability : VW-1, FT1 Pass
- Halogen Free(NON-PVC) Cable

### ■ Construction ■


| Conductors | | | Insulation | | Shield | | Jacket | | Conductor Max Resistance Ω/km | Insulation Min. Resistance MΩ/km | Dielectric Withstanding Voltage AC V/min | Allowable Current A |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AWG Size | Number&dia of conductors pcs/mm | Nor. overall Diameter mm | Nominal Thickness mm | Nor. overall Diameter mm | Wire of Diameter mm | Nor. overall Diameter mm | Nominal Thickness mm | Nominal Diameter mm | | | | |
| 30 | 7/0.10 | 0.30 | 0.25 | 0.80 | 0.12 | 1.04 | 0.30 | 1.65 | 376.96 | 15 | 3,000 | 2.0 |
| 28 | 7/0.127 | 0.38 | 0.25 | 0.90 | 0.12 | 1.14 | 0.30 | 1.75 | 237.38 | | | 2.6 |
| 26 | 7/0.16 | 0.48 | 0.25 | 1.00 | 0.12 | 1.24 | 0.30 | 1.85 | 148.94 | | | 3.4 |
| 24 | 11/0.16 | 0.61 | 0.25 | 1.10 | 0.12 | 1.34 | 0.30 | 1.95 | 93.25 | | | 4.6 |
| 22 | 17/0.16 | 0.76 | 0.25 | 1.30 | 0.12 | 1.54 | 0.30 | 2.15 | 55.00 | | | 6.1 |
| 20 | 21/0.18 | 0.95 | 0.25 | 1.50 | 0.12 | 1.74 | 0.30 | 2.35 | 34.60 | | | 8.4 |
| 18 | 34/0.18 | 1.21 | 0.25 | 1.80 | 0.12 | 2.04 | 0.30 | 2.65 | 21.80 | | | 11.3 |
| 16 | 26/0.254 | 1.55 | 0.25 | 2.10 | 0.12 | 2.34 | 0.30 | 2.94 | 13.70 | | | 15.2 |

# AWM 10984 STYLE

Multiple-conductor cable using non-integral jacket

Standard UL Subject 758
UL Standard 1581

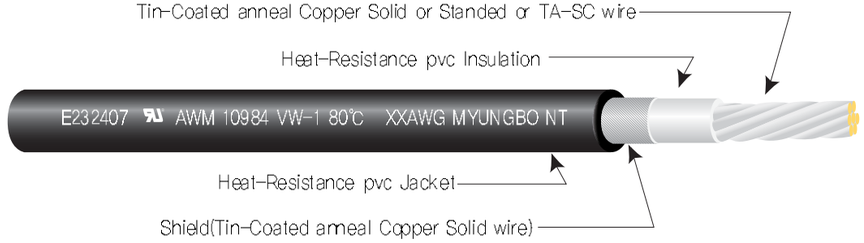

## ■ Applications ■

Internal Wiring

## ■ Characteristic ■

- Rating Temp.& Volt : UL 80℃, Not SPEC
- Flammability : VW-1, FT1 Pass
- Halogen Free(NON-PVC) Cable

## ■ Construction ■




| Conductors | | | Insulation | | Shield | | Jacket | | Conductor Max Resistance Ω/km | Insulation Min. Resistance MΩ/km | Dielectric Withstanding Voltage AC V/min | Allowable Current A |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AWG Size | Number& dia of conductors pcs/mm | Nor. overall Diameter mm | Nominal Thickness mm | Nor. overall Diameter mm | Wire of Diameter mm | Nor. overall Diameter mm | Nominal Thickness mm | Nominal Diameter mm | | | | |
| 30 | 7/0.10 | 0.30 | 0.25 | 0.80 | 0.12 | 1.04 | 0.40 | 1.75 | 376.96 | 15 | 3,000 | 2.0 |
| 28 | 7/0.127 | 0.38 | 0.25 | 0.90 | 0.12 | 1.14 | 0.40 | 1.85 | 237.38 | | | 2.6 |
| 26 | 7/0.16 | 0.48 | 0.25 | 1.00 | 0.12 | 1.24 | 0.40 | 1.95 | 148.94 | | | 3.4 |
| 24 | 11/0.16 | 0.61 | 0.25 | 1.10 | 0.12 | 1.34 | 0.40 | 2.10 | 93.25 | | | 4.6 |
| 22 | 17/0.16 | 0.76 | 0.25 | 1.30 | 0.12 | 1.54 | 0.40 | 2.30 | 55.00 | | | 6.1 |
| 20 | 21/0.18 | 0.95 | 0.25 | 1.50 | 0.12 | 1.74 | 0.40 | 2.50 | 34.60 | | | 8.4 |
| 18 | 34/0.18 | 1.21 | 0.25 | 1.80 | 0.12 | 2.04 | 0.40 | 2.80 | 21.80 | | | 11.3 |
| 16 | 26/0.254 | 1.55 | 0.25 | 2.10 | 0.12 | 2.34 | 0.40 | 3.10 | 13.70 | | | 15.2 |



# AWM 10985 STYLE

Jacketed wire.

Standard UL Subject 758
UL Standard 1581

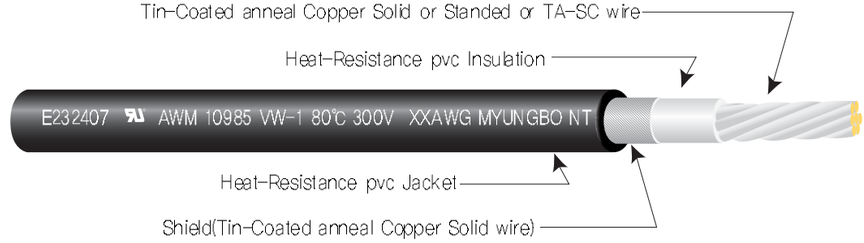

## ■ Applications ■

Internal Wiring.

## ■ Characteristic ■

- Rating Temp.& Volt : UL 80℃, 300V
- Flammability : VW-1, FT1 Pass
- Halogen Free(NON-PVC) Cable

## ■ Construction ■




| Conductors | | | Insulation | | Shield | | Jacket | | Conductor Max Resistance Ω/km | Insulation Min. Resistance MΩ/km | Dielectric Withstanding Voltage AC V/min | Allowable Current A |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AWG Size | Number& dia of conductors pcs/mm | Nor. overall Diameter mm | Nominal Thickness mm | Nor. overall Diameter mm | Wire of Diameter mm | Nor. overall Diameter mm | Nominal Thickness mm | Nominal Diameter mm | | | | |
| 30 | 7/0.10 | 0.30 | 0.40 | 1.10 | 0.12 | 1.34 | 0.40 | 2.20 | 376.96 | 15 | 3,000 | 2.0 |
| 28 | 7/0.127 | 0.38 | 0.40 | 1.20 | 0.12 | 1.44 | 0.40 | 2.30 | 237.38 | | | 2.6 |
| 26 | 7/0.16 | 0.48 | 0.40 | 1.30 | 0.12 | 1.54 | 0.40 | 2.40 | 148.94 | | | 3.4 |
| 24 | 11/0.16 | 0.61 | 0.40 | 1.40 | 0.12 | 1.64 | 0.40 | 2.50 | 93.25 | | | 4.6 |
| 22 | 17/0.16 | 0.76 | 0.40 | 1.60 | 0.12 | 1.84 | 0.40 | 2.60 | 55.00 | | | 6.1 |
| 20 | 21/0.18 | 0.95 | 0.40 | 1.80 | 0.12 | 2.04 | 0.40 | 2.80 | 34.60 | | | 8.4 |
| 18 | 34/0.18 | 1.21 | 0.40 | 2.00 | 0.12 | 2.34 | 0.40 | 3.20 | 21.80 | | | 11.3 |
| 16 | 26/0.254 | 1.55 | 0.40 | 2.40 | 0.12 | 2.64 | 0.40 | 3.50 | 13.70 | | | 15.2 |

# AWM 11027 STYLE

## Single conductor with extruded insulation

Standard UL Subject 758
UL Standard 1581

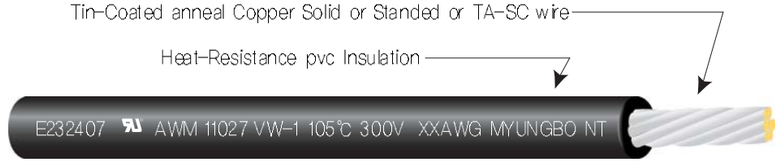

### ■ Applications ■

Internal Wiring

### ■ Characteristic ■

- Rating Temp.& Volt : UL 105℃, 300V
- Flammability : VW-1, FT1 Pass
- Halogen Free(NON-PVC) Cable

### ■ Construction ■




| Conductors | | | Insulation | | Conductor Max Resistance Ω /km | Insulation Min. Resistance MΩ/km | Dielectric Withstanding Voltage AC V/min | Allowable Current A |
|---|---|---|---|---|---|---|---|---|
| AWG Size | Number&dia of conductors pcs/㎜ | Nor. overall Diameter ㎜ | Nominal Thickness ㎜ | Nor. overall Diameter ㎜ | | | | |
| 30 | 7/0.10 | 0.30 | 0.20 | 0.80 | 376.96 | 15 | 3,000 | 2.0 |
| 28 | 7/0.127 | 0.38 | 0.20 | 0.90 | 237.38 | | | 2.6 |
| 26 | 7/0.16 | 0.48 | 0.20 | 1.00 | 148.94 | | | 3.4 |
| 24 | 11/0.16 | 0.61 | 0.20 | 1.10 | 93.25 | | | 4.6 |
| 22 | 17/0.16 | 0.76 | 0.20 | 1.30 | 55.00 | | | 6.1 |
| 20 | 21/0.18 | 0.95 | 0.20 | 1.50 | 34.60 | | | 8.4 |
| 18 | 34/0.18 | 1.21 | 0.20 | 1.80 | 21.80 | | | 11.3 |
| 16 | 26/0.254 | 1.55 | 0.20 | 2.10 | 13.70 | | | 15.2 |



# AWM 11028 STYLE

## Insulated wire

Standard UL Subject 758
UL Standard 1581

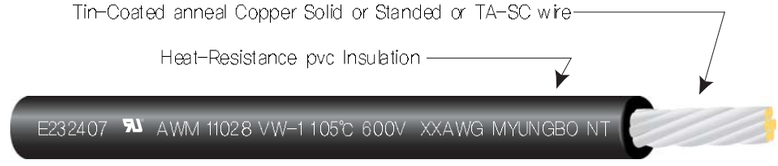

### ■ Applications ■

Internal Wiring.

### ■ Characteristic ■

- Rating Temp.& Volt : UL 105℃, 600V
- Flammability : VW-1, FT1 Pass
- Halogen Free(NON-PVC) Cable

### ■ Construction ■




| Conductors | | | Insulation | | Conductor Max Resistance Ω /km | Insulation Min. Resistance MΩ/km | Dielectric Withstanding Voltage AC V/min | Allowable Current A |
|---|---|---|---|---|---|---|---|---|
| AWG Size | Number&dia of conductors pcs/㎜ | Nor. overall Diameter ㎜ | Nominal Thickness ㎜ | Nor. overall Diameter ㎜ | | | | |
| 30 | 7/0.10 | 0.30 | 0.20 | 0.80 | 376.96 | 15 | 3,000 | 2.3 |
| 28 | 7/0.127 | 0.38 | 0.20 | 0.90 | 237.38 | | | 3.0 |
| 26 | 7/0.16 | 0.48 | 0.20 | 1.00 | 148.94 | | | 4.0 |
| 24 | 11/0.16 | 0.61 | 0.20 | 1.10 | 93.25 | | | 5.3 |
| 22 | 17/0.16 | 0.76 | 0.20 | 1.30 | 55.00 | | | 7.2 |
| 20 | 21/0.18 | 0.95 | 0.20 | 1.50 | 34.60 | | | 9.4 |
| 18 | 34/0.18 | 1.21 | 0.20 | 1.80 | 21.80 | | | 12.5 |
| 16 | 26/0.254 | 1.55 | 0.20 | 2.10 | 13.70 | | | 15.9 |

# AWM 11150 STYLE

Insulated wire

Standard UL Subject 758
UL Standard 1581

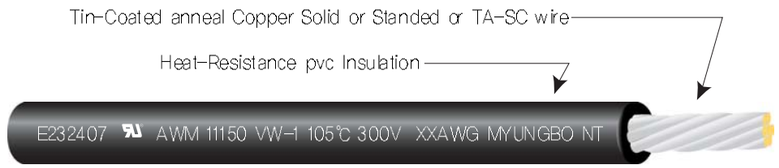

## ■ Applications ■

Internal Wiring

## ■ Characteristic ■

- Rating Temp.& Volt : UL 105℃ 300V
- Flammability : VW-1, FT1 Pass
- Halogen Free(NON-PVC) Cable

## ■ Construction ■



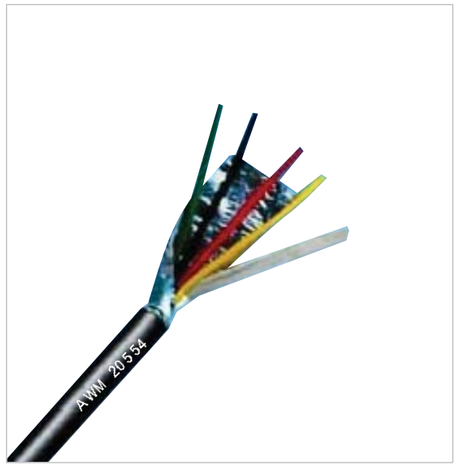

| Conductors | | | Insulation | | Conductor Max Resistance Ω /km | Insulation Min. Resistance MΩ/km | Dielectric Withstanding Voltage AC V/min | Allowable Current A |
|---|---|---|---|---|---|---|---|---|
| AWG Size | Number&dia of conductors pcs/㎜ | Nor. overall Diameter ㎜ | Nominal Thickness ㎜ | Nor. overall Diameter ㎜ | | | | |
| 30 | 7/0.10 | 0.30 | 0.20 | 0.70 | 376.96 | 15 | 3,000 | 2.3 |
| 28 | 7/0.127 | 0.38 | 0.20 | 0.80 | 237.38 | | | 3.0 |
| 26 | 7/0.16 | 0.48 | 0.20 | 0.90 | 148.94 | | | 4.0 |
| 24 | 11/0.16 | 0.61 | 0.20 | 1.00 | 93.25 | | | 5.3 |
| 22 | 17/0.16 | 0.76 | 0.20 | 1.20 | 55.00 | | | 7.2 |
| 20 | 21/0.18 | 0.95 | 0.20 | 1.40 | 34.60 | | | 9.4 |
| 18 | 34/0.18 | 1.21 | 0.20 | 1.60 | 21.80 | | | 12.5 |
| 16 | 26/0.254 | 1.55 | 0.20 | 2.00 | 13.70 | | | 15.9 |



# AWM 20554 STYLE

Multiple-conductor cable using non-integral jacket

Standard UL Subject 758
UL Standard 1581



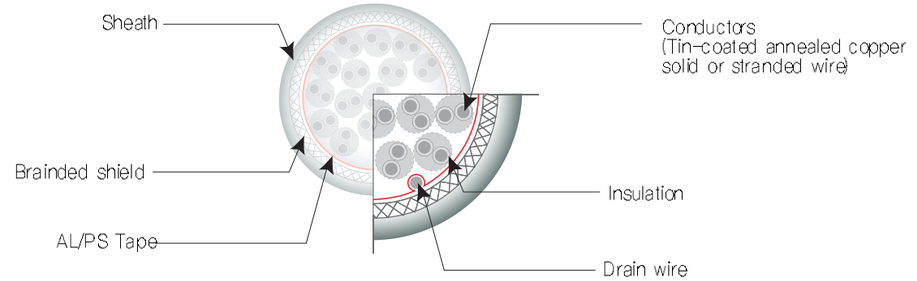

## ■ Applications ■

Internal wiring of electronic equipment and appliances

## ■ Characteristic ■

- Rating Temp.& Volt : UL 80℃ 30V
- Flammability : VW-1, FT1 Pass

## ■ Construction ■

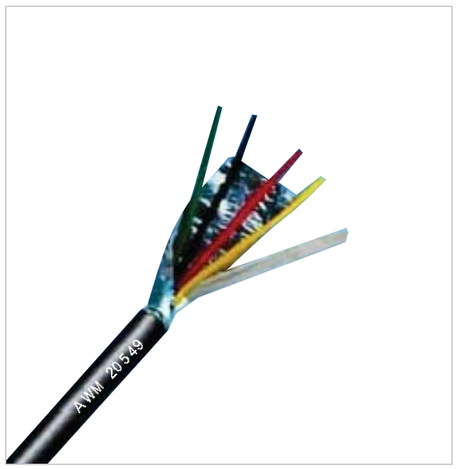



| Pair of Core | Conductors | Insulation | | Shield | | | Sheath | | Unit length m (feet) |
|---|---|---|---|---|---|---|---|---|---|
| | AWG SIZE | Material | Nominal Thickness ㎜ | Material of Tape | Braid coverage of percent % | Drain wire Material | Material | Nominal Thickness ㎜ | |
| 2core ~ 50core | 30AWG~ 16AWG (Solid or stranded) | Polyethylene or TPE or mppe | 0.20 | AL/PS Tape | Min. 70 | Tin-coated annealed copper stranded wire | TPU | 1.0 | 305 or 200 |

# AWM 20549 STYLE

Multiple-conductor cable using non-integral jacket

Standard UL Subject 758
UL Standard 1581



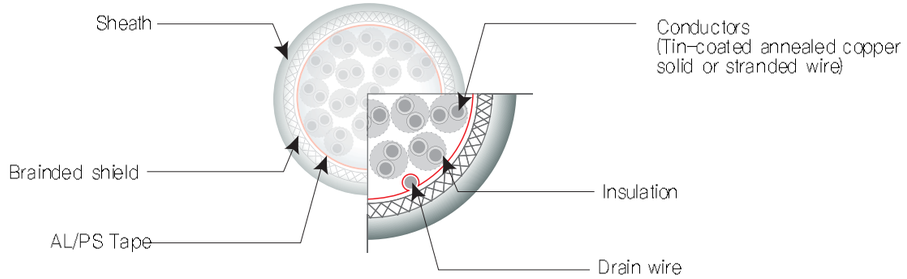

## ■ Applications ■

Internal wiring of electronic equipment and appliances. Tags may indicate the following: "600 volts Peak for Electronic use only."

## ■ Characteristic ■

- Rating Temp.& Volt : UL 80℃, 300V
- Flammability : VW-1, FT1 Pass
- Halogen Free(NON-PVC) Cable

## ■ Construction ■




| Pair of Core | Conductors | Insulation | | Shield | | | Sheath | | Unit length m (feet) |
|---|---|---|---|---|---|---|---|---|---|
| | AWG SIZE | Material | Nominal Thickness mm | Material of Tape | Braid coverage of percent % | Drain wire Material | Material | Nominal Thickness mm | |
| 2core ~ 50core | 30AWG~ 16AWG (Solid or stranded) | Polyethylene or TPE or mppe | 0.20 | AL/PS Tape | Min. 70 | Tin-coated annealed copper stranded wire | TPU | 1.0 | 305 or 200 |



# AWM 20736 STYLE

Jacketed Cord

Standard UL Subject 758
UL Standard 1581

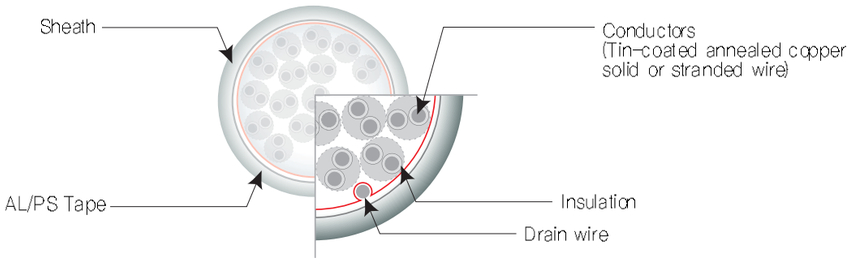

## ■ Applications ■

Internal cable of electronic equipment, or "Handset Wire Telephone Cord For Subscriber Sets" May be marked "-30 deg C" or "minus 30 deg C".

## ■ Characteristic ■

- Rating Temp.& Volt : UL 60℃, 150V, 300V
- Flammability : VW-1, FT1 Pass

## ■ Construction ■




| Pair of Core | Conductors | Insulation | | Shield | | | Sheath | | Unit length m (feet) |
|---|---|---|---|---|---|---|---|---|---|
| | AWG SIZE | Material | Nominal Thickness mm | Material of Tape | Braid coverage of percent % | Drain wire Material | Material | Nominal Thickness mm | |
| 2core ~ 50core | 30AWG~ 16AWG (Solid or stranded) | Polyethylene or TPE or mppe | 0.20 | AL/PS Tape | Min. 70 | Tin-coated annealed copper stranded wire | TPU | 1.0 | 305 or 200 |

# AWM 20841 STYLE

Multiple-conductor cable using non-integral jacket

Standard UL Subject 758
UL Standard 1581

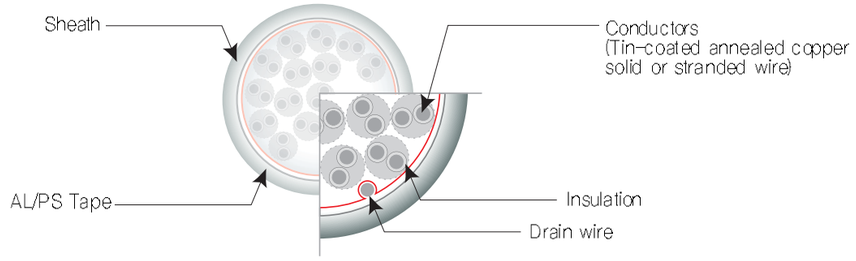

## ■ Applications ■

External interconnection of electronic equipment.

## ■ Characteristic ■

- Rating Temp.& Volt : UL 80℃, 300V
- Flammability : VW-1, FT1 Pass

## ■ Construction ■




| Pair of Core | Conductors | Insulation | | Shield | | | Sheath | | Unit length m (feet) |
|---|---|---|---|---|---|---|---|---|---|
| | AWG SIZE | Material | Nominal Thickness ㎜ | Material of Tape | Braid coverage of percent % | Drain wire Material | Material | Nominal Thickness ㎜ | |
| 2core ~ 50core | 30AWG~ 16AWG (Solid or stranded) | Polyethylene or TPE or mppe | 0.20 | AL/PS Tape | Min. 70 | Tin-coated annealed copper stranded wire | TPE | 0.80 | 305 or 200 |



# AWM 20844 STYLE

Jacketed Cable.

Standard UL Subject 758
UL Standard 1581

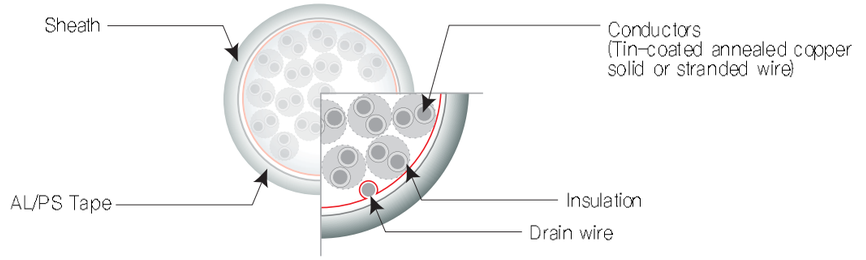

## ■ Applications ■

External interconnection of electronic equipment

## ■ Characteristic ■

- Rating Temp.& Volt : UL 80℃, 30V
- Flammability : VW-1, FT1 Pass

## ■ Construction ■

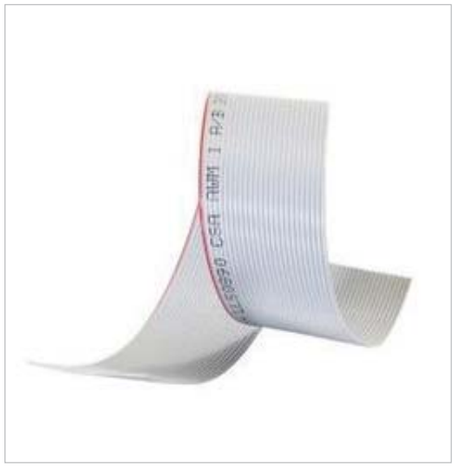



| Pair of Core | Conductors | Insulation | | Shield | | | Sheath | | Unit length m (feet) |
|---|---|---|---|---|---|---|---|---|---|
| | AWG SIZE | Material | Nominal Thickness ㎜ | Material of Tape | Braid coverage of percent % | Drain wire Material | Material | Nominal Thickness ㎜ | |
| 2core ~ 50core | 30AWG~ 16AWG (Solid or stranded) | Polyethylene or TPE or mppe | 0.20 | AL/PS Tape | Min. 70 | Tin-coated annealed copper stranded wire | TPE | 0.80 | 305 or 200 |

# UL AWM 20574 STYLEUS

## FLAT CABLE

Standard UL Subject 758
UL Standard 1581



### ■ Applications ■

Internal wiring electronic equipment.
Conductors Two~150 Conductors.

### ■ Characteristic ■

–Rating Temp.& Volt : UL 105 Voltage 300V˚C
–Flammability : VW–1, FT1 Pass –Material : NON
–TOXIC PVC

| Cores | Conductors | | | Insulation | Jacket | Conductor Max Resistance Ω/km | Insulation Min. Resistance MΩ/km | Dielectric Withstanding Voltage AC V/min | Unit Length m (Feet) |
|---|---|---|---|---|---|---|---|---|---|
| | AWG SIZE | Number& dia of conductors pcs/mm | Nor.overall Diamete mm | Nor.overall Diamete mm | Wide mm | | | | |
| 8 | 28 | 7/0.127 | 0.38 | 0.88 | 8.89 | 237.38 | 15 | 2,000 | 61 (2.00) |
| 10 | | | | | 11.43 | | | | |
| 14 | | | | | 16.51 | | | | |
| 16 | | | | | 19.06 | | | | |
| 20 | | | | | 24.13 | | | | |
| 26 | | | | | 31.75 | | | | |
| 30 | | | | | 36.83 | | | | |
| 34 | | | | | 41.91 | | | | |



# UL AWM 21515 STYLEUS

## mPPE Insulated Flat Ribbon Cable

Standard UL Subject 758
UL Standard 1581

### ■ Applications ■

Internal wiring.
Conductors Two or More Conductors..

### ■ Characteristic ■

–Rating Temp.& Volt : UL 105 Voltage 300V˚C
–Flammability : VW–1, FT1 Pass
–Material : NON–TOXIC PVC

| Cores | Conductors | | | Insulation | Jacket | Conductor Max Resistance Ω/km | Insulation Min. Resistance MΩ/km | Dielectric Withstanding Voltage AC V/min | Unit Length m (Feet) |
|---|---|---|---|---|---|---|---|---|---|
| | AWG SIZE | Number& dia of conductors pcs/mm | Nor.overall Diamete mm | Nor.overall Diamete mm | Wide mm | | | | |
| 8 | 28 | 7/0.127 | 0.38 | 0.88 | 8.89 | 237.38 | 15 | 2,000 | 61 (2.00) |
| 10 | | | | | 11.43 | | | | |
| 14 | | | | | 16.51 | | | | |
| 16 | | | | | 19.06 | | | | |
| 20 | | | | | 24.13 | | | | |
| 26 | | | | | 31.75 | | | | |
| 30 | | | | | 36.83 | | | | |
| 34 | | | | | 41.91 | | | | |

# AWM 21271 STYLE

Multiconductor Cable with Extruded Non-Integral Jacket.

Standard UL Subject 758
UL Standard 1581

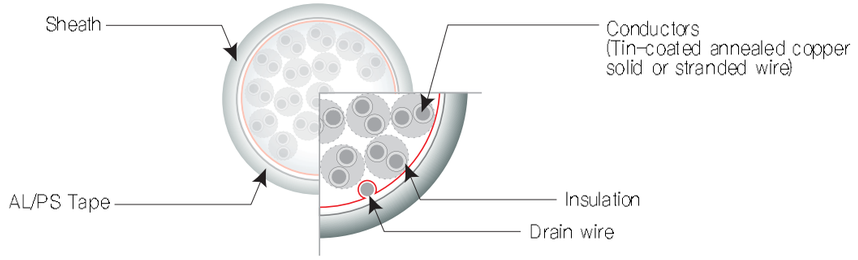

## ■ Applications ■

External interconnection or internal wiring of electronic equipment.

## ■ Characteristic ■

- Rating Temp.& Volt : UL 80℃, 30V
- Flammability : VW-1, FT1 Pass

## ■ Construction ■




| Pair of Core | Conductors | Insulation | | Shield | | | Sheath | | Unit length m (feet) |
|---|---|---|---|---|---|---|---|---|---|
| | AWG SIZE | Material | Nominal Thickness ㎜ | Material of Tape | Braid coverage of percent % | Drain wire Material | Material | Nominal Thickness ㎜ | |
| 2core ~ 50core | 30AWG~ 16AWG (Solid or stranded) | Polyethylene or TPE or mppe | 0.20 | AL/PS Tape | Min. 70 | Tin-coated annealed copper stranded wire | TPE | 0.60 | 305 or 200 |



# AWM 21445 STYLE

Multiple-conductor cable using non-integral jacket.

Standard UL Subject 758
UL Standard 1581

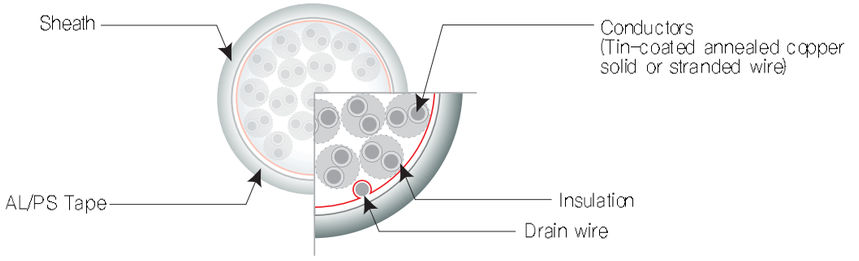

## ■ Applications ■

Internal wiring.

## ■ Characteristic ■

- Rating Temp.& Volt : UL 80℃, 30V
- Flammability : VW-1, FT1 Pass

## ■ Construction ■

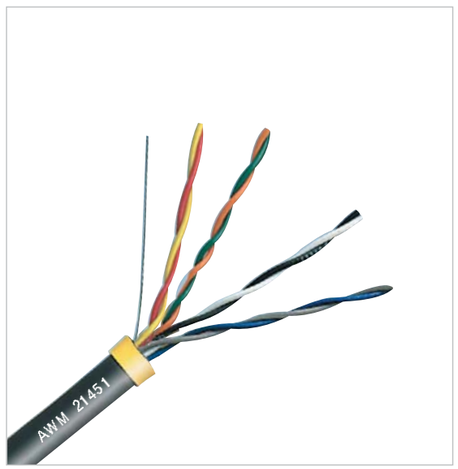



| Pair of Core | Conductors | Insulation | | Shield | | | Sheath | | Unit length m (feet) |
|---|---|---|---|---|---|---|---|---|---|
| | AWG SIZE | Material | Nominal Thickness ㎜ | Material of Tape | Braid coverage of percent % | Drain wire Material | Material | Nominal Thickness ㎜ | |
| 2core ~ 50core | 30AWG~ 16AWG (Solid or stranded) | Polyethylene or TPE or mppe | 0.20 | AL/PS Tape | Min. 70 | Tin-coated annealed copper stranded wire | TPE | 0.30 | 305 or 200 |

# AWM 21451 STYLE

Multiple-conductor cable using non-integral jacket.

Standard UL Subject 758
UL Standard 1581



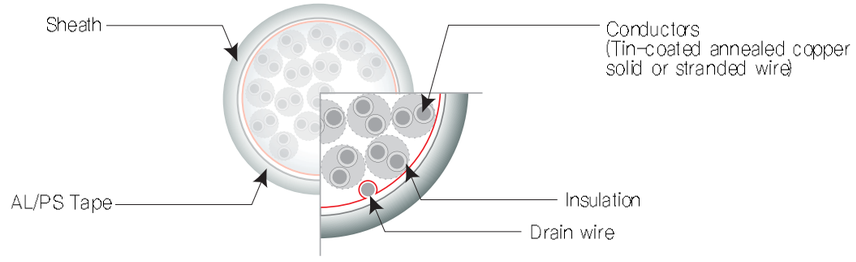

## ■ Applications ■

Internal wiring.

## ■ Characteristic ■

- Rating Temp.& Volt : UL 80℃, 30V
- Flammability : VW-1, FT1 Pass

## ■ Construction ■



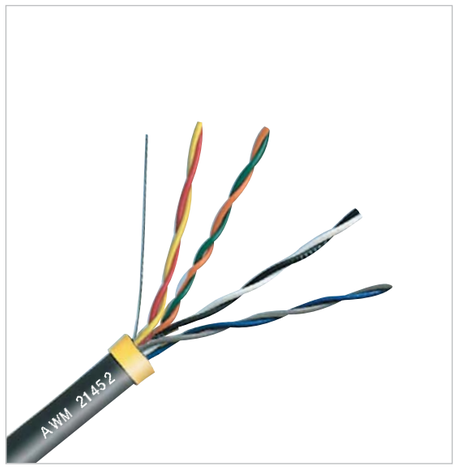

| Pair of Core | Conductors | Insulation | | Shield | | | Sheath | | Unit length m (feet) |
|---|---|---|---|---|---|---|---|---|---|
| | AWG SIZE | Material | Nominal Thickness mm | Material of Tape | Braid coverage of percent % | Drain wire Material | Material | Nominal Thickness mm | |
| 2core ~ 50core | 30AWG~16AWG (Solid or stranded) | Polyethylene or TPE or mppe | 0.20 | AL/PS Tape | Min. 70 | Tin-coated annealed copper stranded wire | mPPE-PE | 0.30 | 305 or 200 |



# AWM 21452 STYLE

Jacketed Cable.

Standard UL Subject 758
UL Standard 1581



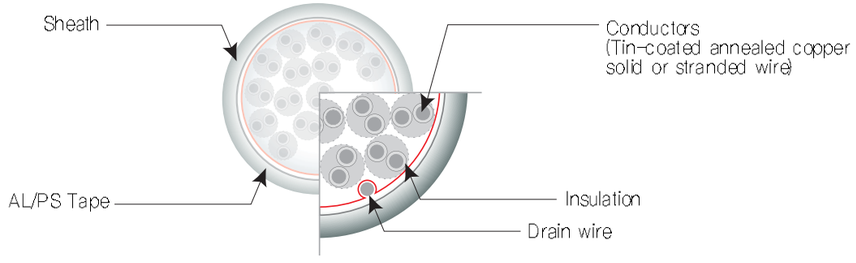

## ■ Applications ■

Internal wiring.

## ■ Characteristic ■

- Rating Temp.& Volt : UL 60℃, 30V
- Flammability : VW-1, FT1 Pass

## ■ Construction ■

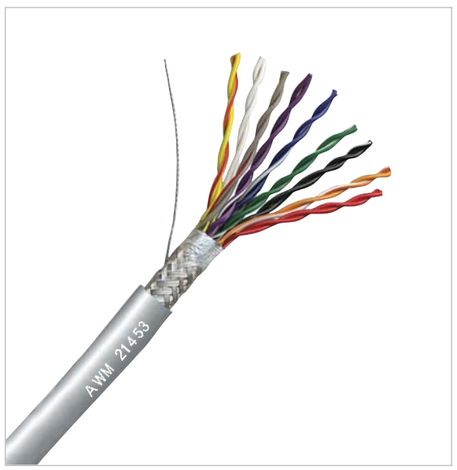



| Pair of Core | Conductors | Insulation | | Shield | | | Sheath | | Unit length m (feet) |
|---|---|---|---|---|---|---|---|---|---|
| | AWG SIZE | Material | Nominal Thickness mm | Material of Tape | Braid coverage of percent % | Drain wire Material | Material | Nominal Thickness mm | |
| 2core ~ 50core | 30AWG~16AWG (Solid or stranded) | Polyethylene or TPE or mppe | 0.20 | AL/PS Tape | Min. 70 | Tin-coated annealed copper stranded wire | mPPE-PE | 0.40 | 305 or 200 |

# AWM 21453 STYLE

Jacketed Cable.

Standard UL Subject 758
UL Standard 1581



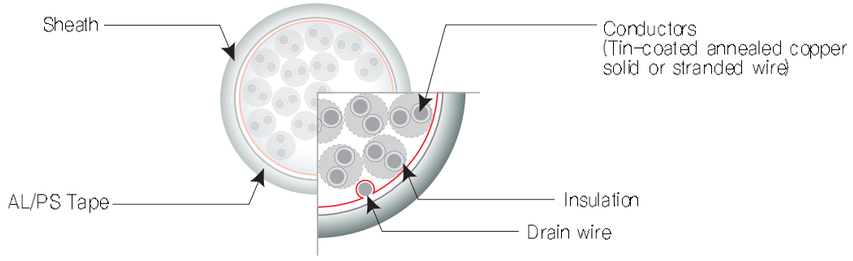

## ■ Applications ■

Internal wiring in Class 2 circuits.

## ■ Characteristic ■

- Rating Temp.& Volt : UL 60℃, 30V
- Flammability : VW-1, FT1 Pass

## ■ Construction ■




| Pair of Core | Conductors | Insulation | | Shield | | | Sheath | | Unit length m (feet) |
|---|---|---|---|---|---|---|---|---|---|
| | AWG SIZE | Material | Nominal Thickness mm | Material of Tape | Braid coverage of percent % | Drain wire Material | Material | Nominal Thickness mm | |
| 2core ~ 50core | 30AWG~ 16AWG (Solid or stranded) | Polyethylene or TPE or mppe | 0.20 | AL/PS Tape | Min. 70 | Tin-coated annealed copper stranded wire | mPPE-PE | 0.40 | 305 or 200 |



# AWM 21454 STYLE

Jacketed Cable.

Standard UL Subject 758
UL Standard 1581

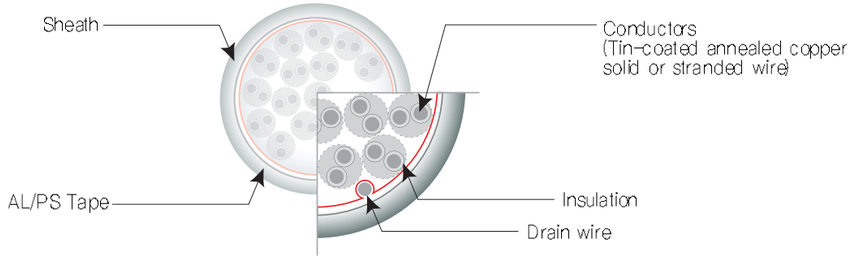

## ■ Applications ■

Internal wiring in Class 2 circuits and both ends are terminated in connectors.

## ■ Characteristic ■

- Rating Temp.& Volt : UL 60℃, 30V
- Flammability : VW-1, FT1 Pass

## ■ Construction ■




| Pair of Core | Conductors | Insulation | | Shield | | | Sheath | | Unit length m (feet) |
|---|---|---|---|---|---|---|---|---|---|
| | AWG SIZE | Material | Nominal Thickness mm | Material of Tape | Braid coverage of percent % | Drain wire Material | Material | Nominal Thickness mm | |
| 2core ~ 50core | 30AWG~ 16AWG (Solid or stranded) | Polyethylene or TPE or mppe | 0.20 | AL/PS Tape | Min. 70 | Tin-coated annealed copper stranded wire | mPPE-PE | 0.40 | 305 or 200 |

# AWM 21455 STYLE

Multiconductor Cable with Extruded Non-Integral Jacket

Standard UL Subject 758
UL Standard 1581

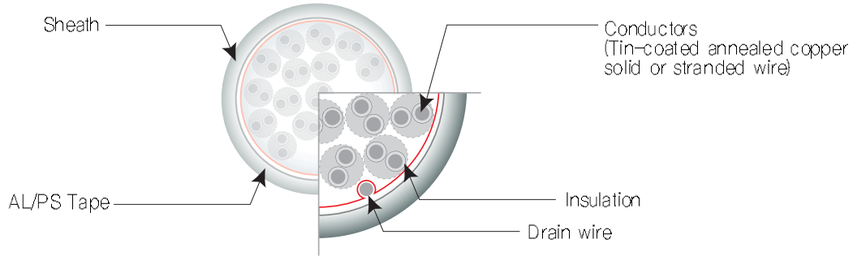

## ■ Applications ■

Internal wiring.

## ■ Characteristic ■

- Rating Temp.& Volt : UL 80℃, 30V
- Flammability : VW-1, FT1 Pass

## ■ Construction ■




| Pair of Core | Conductors | Insulation | | Shield | | | Sheath | | Unit length m (feet) |
|---|---|---|---|---|---|---|---|---|---|
| | AWG SIZE | Material | Nominal Thickness mm | Material of Tape | Braid coverage of percent % | Drain wire Material | Material | Nominal Thickness mm | |
| 2core ~ 50core | 30AWG~ 16AWG (Solid or stranded) | Polyethylene or TPE or mppe | 0.20 | AL/PS Tape | Min. 70 | Tin-coated annealed copper stranded wire | mPPE-PE | 0.40 | 305 or 200 |



# AWM 21456 STYLE

Multiconductor Cable with Extruded Non-Integral Jacket

Standard UL Subject 758
UL Standard 1581

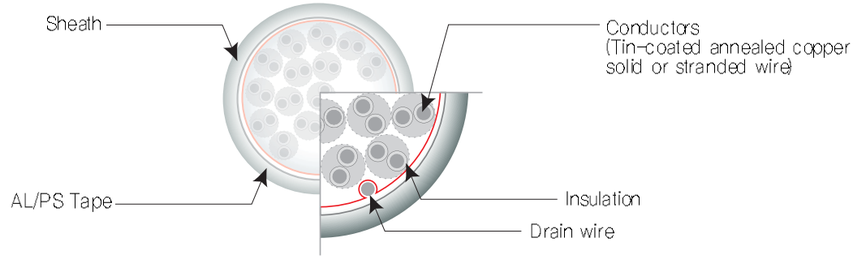

## ■ Applications ■

Internal wiring in Class 2 circuits and both ends are terminated in connectors.

## ■ Characteristic ■

- Rating Temp.& Volt : UL 80℃, 30V
- Flammability : VW-1, FT1 Pass

## ■ Construction ■

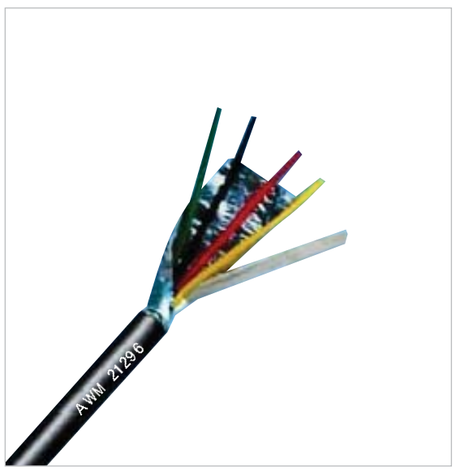



| Pair of Core | Conductors | Insulation | | Shield | | | Sheath | | Unit length m (feet) |
|---|---|---|---|---|---|---|---|---|---|
| | AWG SIZE | Material | Nominal Thickness mm | Material of Tape | Braid coverage of percent % | Drain wire Material | Material | Nominal Thickness mm | |
| 2core ~ 50core | 30AWG~ 16AWG (Solid or stranded) | Polyethylene or TPE or mppe | 0.20 | AL/PS Tape | Min. 70 | Tin-coated annealed copper stranded wire | mPPE-PE | 0.40 | 305 or 200 |

# AWM 21296 STYLE

Jacketed cable

Standard UL Subject 758
UL Standard 1581



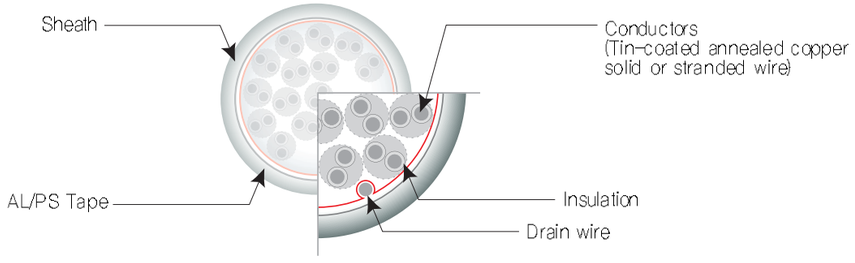

## ■ Applications ■

- Internal wiring

## ■ Characteristic ■

- Rating Temp.& Volt : UL 105 , 300V˚C
- Flammability : VW-1, FT1 Pass

## ■ Construction ■



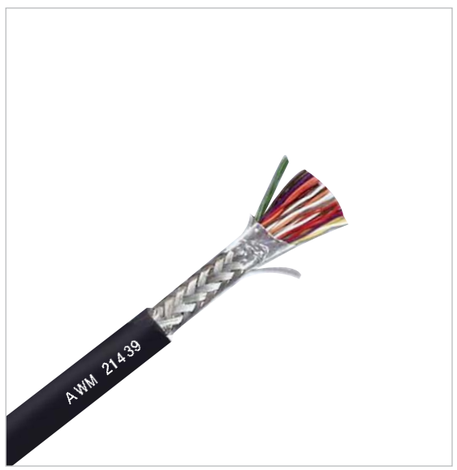

| Number of Core | Conductors | Insulation | | Shield | | | Sheath | | Unit length m |
|---|---|---|---|---|---|---|---|---|---|
| | AWG SIZE | Material | Nominal Thickness mm | Material of Tape | Braid coverage of percent % | Drain wire Material | Material | Nominal Thickness mm | |
| 2core ~ 50core | 30AWG~ (Solid or stranded) | Polyethylene or TPE or mppe | 0.20 | AL/PS Tape | Min. 70 | Tin-coated annealed copper stranded wire | TPE | 0.40 | 305 or 200 |



# AWM 21439 STYLE US

Jacketed cable

Standard UL Subject 758
UL Standard 1581



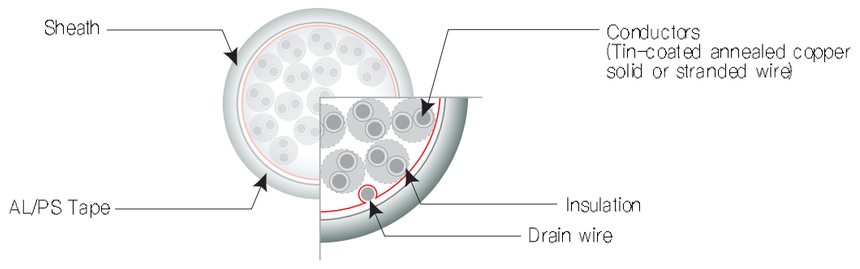

## ■ Applications ■

- Internal wiring

## ■ Characteristic ■

- Rating Temp.& Volt : UL 105 , 300V˚C
- Flammability : VW-1, FT1 Pass

## ■ Construction ■




| Number of Core | Conductors | Insulation | | Shield | | | Sheath | | Unit length m |
|---|---|---|---|---|---|---|---|---|---|
| | AWG SIZE | Material | Nominal Thickness mm | Material of Tape | Braid coverage of percent % | Drain wire Material | Material | Nominal Thickness mm | |
| 2core ~ 50core | 30AWG~ 10AWG (Solid or stranded) | Polyethylene or TPE or mppe | 0.20 | AL/PS Tape | Min. 70 | Tin-coated annealed copper stranded wire | TPE | 0.40 | 305 or 200 |

# AWM 21460 STYLE

## Jacketed Cable

Standard UL Subject 758
UL Standard 1581

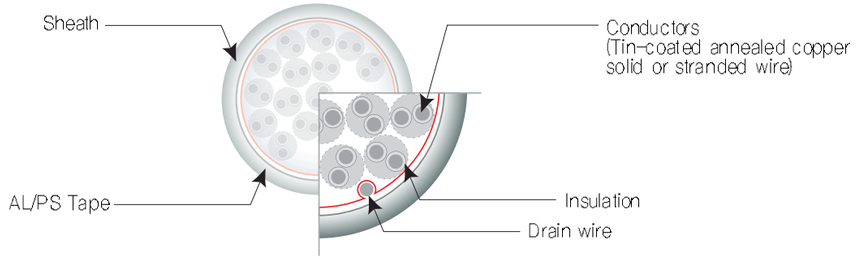

### ■ Applications ■

Internal wiring

### ■ Characteristic ■

- Rating Temp.& Volt : UL 80℃, 300V
- Flammability : VW-1, FT1 Pass

### ■ Construction ■




| Pair of Core | Conductors | Insulation | | Shield | | | Sheath | | Unit length m (feet) |
|---|---|---|---|---|---|---|---|---|---|
| | AWG SIZE | Material | Nominal Thickness mm | Material of Tape | Braid coverage of percent % | Drain wire Material | Material | Nominal Thickness mm | |
| 2core ~ 50core | 30AWG~ 16AWG (Solid or stranded) | Polyethylene or TPE or mppe | 0.20 | AL/PS Tape | Min. 70 | Tin-coated annealed copper stranded wire | mPPE-PE | 0.40 | 305 or 200 |



# AWM 21464 STYLE

## Multiconductor cable with extruded non-integral jacket

Standard UL Subject 758
UL Standard 1581

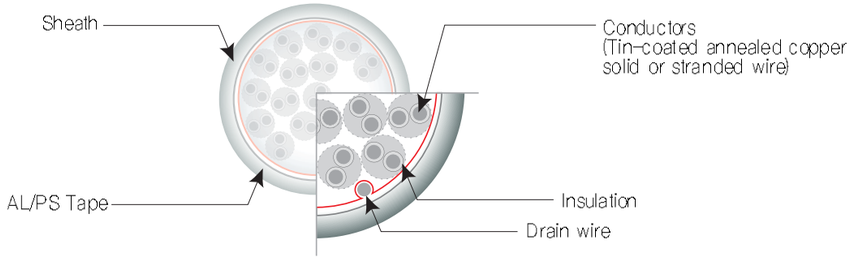

### ■ Applications ■

Internal Wiring and External Interconnection.

### ■ Characteristic ■

- Rating Temp.& Volt : UL 60℃, 30V
- Flammability : VW-1, FT1 Pass

### ■ Construction ■

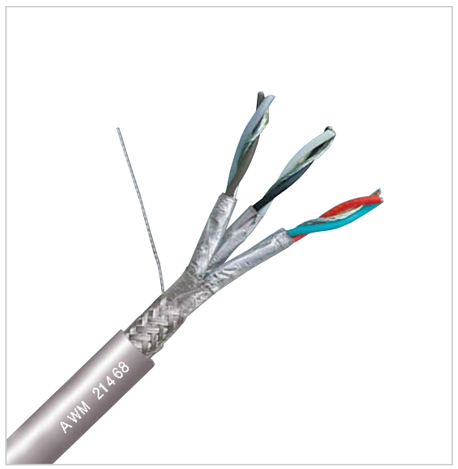



| Pair of Core | Conductors | Insulation | | Shield | | | Sheath | | Unit length m (feet) |
|---|---|---|---|---|---|---|---|---|---|
| | AWG SIZE | Material | Nominal Thickness mm | Material of Tape | Braid coverage of percent % | Drain wire Material | Material | Nominal Thickness mm | |
| 2core ~ 50core | 30AWG~ 16AWG (Solid or stranded) | Polyethylene or TPE or mppe | 0.20 | AL/PS Tape | Min. 70 | Tin-coated annealed copper stranded wire | TPE | 0.80 | 305 or 200 |

# AWM 21468 STYLE

Jacketed Cable.

Standard UL Subject 758
UL Standard 1581



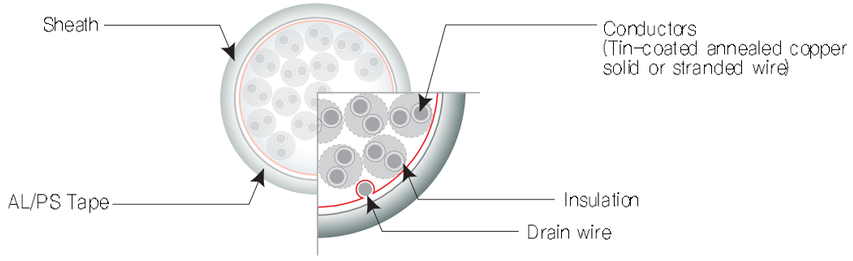

## ■ Applications ■

Internal Wiring.

## ■ Characteristic ■

- Rating Temp.& Volt : UL 60℃, 30V
- Flammability : VW-1, FT1 Pass

## ■ Construction ■




| Pair of Core | Conductors | Insulation | | Shield | | | Sheath | | Unit length m (feet) |
|---|---|---|---|---|---|---|---|---|---|
| | AWG SIZE | Material | Nominal Thickness mm | Material of Tape | Braid coverage of percent % | Drain wire Material | Material | Nominal Thickness mm | |
| 2core ~ 50core | 30AWG~ 16AWG (Solid or stranded) | Polyethylene or TPE or mppe | 0.20 | AL/PS Tape | Min. 70 | Tin-coated annealed copper stranded wire | mPPE-PE | 0.30 | 305 or 200 |



# AWM 21469 STYLE

Jacketed Cable.

Standard UL Subject 758
UL Standard 1581

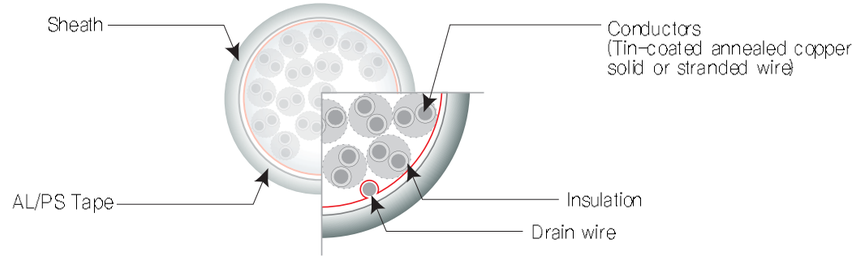

## ■ Applications ■

Internal Wiring.

## ■ Characteristic ■

- Rating Temp.& Volt : UL 60℃, 30V
- Flammability : VW-1, FT1 Pass

## ■ Construction ■




| Pair of Core | Conductors | Insulation | | Shield | | | Sheath | | Unit length m (feet) |
|---|---|---|---|---|---|---|---|---|---|
| | AWG SIZE | Material | Nominal Thickness mm | Material of Tape | Braid coverage of percent % | Drain wire Material | Material | Nominal Thickness mm | |
| 2core ~ 50core | 30AWG~ 16AWG (Solid or stranded) | Polyethylene or TPE or mppe | 0.20 | AL/PS Tape | Min. 70 | Tin-coated annealed copper stranded wire | mPPE-PE | 0.30 | 305 or 200 |

# AWM 21572 STYLE

Multiple-conductor cable using non-integral jacket.

Standard UL Subject 758
UL Standard 1581

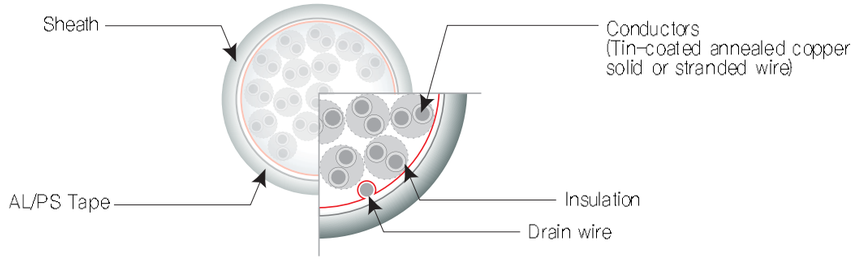

## ■ Applications ■

Internal wiring and external wiring of Class 2 circuit.

## ■ Characteristic ■

- Rating Temp.& Volt : UL 80℃, 30V
- Flammability : VW-1, FT1 Pass

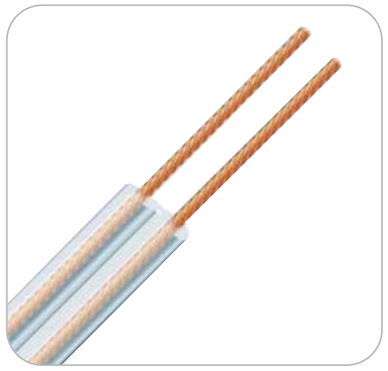
## ■ Construction ■

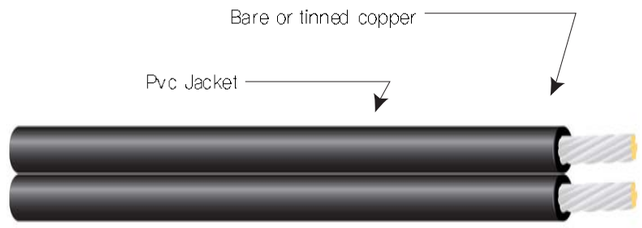



| Pair of Core | Conductors | Insulation | | Shield | | | Sheath | | Unit length m (feet) |
|---|---|---|---|---|---|---|---|---|---|
| | AWG SIZE | Material | Nominal Thickness mm | Material of Tape | Braid coverage of percent % | Drain wire Material | Material | Nominal Thickness mm | |
| 2core ~ 50core | 30AWG~ 16AWG (Solid or stranded) | Polyethylene or TPE or mppe | 0.20 | AL/PS Tape | Min. 70 | Tin-coated annealed copper stranded wire | TPE | 0.40 | 305 or 200 |



# SPEAKER CABLE






## ■ PRODUCTS ■

MBM S/P 30C

MBM S/P 50C

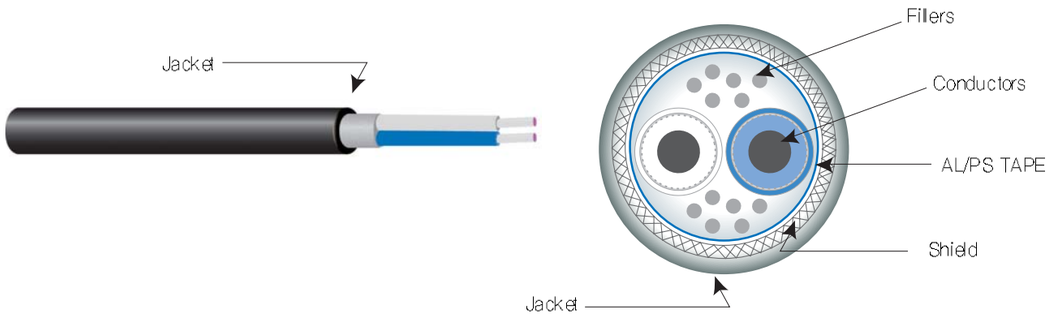
MBM S/P 84C

MBM S/P 2502
MBM S/P 2504

## ■ SPECIFICATION ■

| 제품명 | 도체규격(mm/pcs) | 시즈외경(mm) | 조장 | 특성및 기타 |
|---|---|---|---|---|
| MBM S/P 30C | 30/0.16*2C | 3.2x3.2 | 100M | 일반 설치용 |
| MBM S/P 50C | 50/0.16*2C | 4.3x4.3 | 100M | 일반 설치용 |
| MBM S/P 84C | 84/0.16TA*2C | 4.5x4.5 | 100M | 홈시어터외 고급형. 중저음 전달 우수 |
| MBM S/P 2502 | 180/0.12A(2.0SQMM) * 2C | 9.0±0.1 | 200M | 야외 행사용등 고급형 |
| MBM S/P 2504 | 180/0.12A(2.0SQMM) * 4C | 11.0±0.1 | 200M | 야외 행사용등 고급형 |

# MICROPHONE CABLE



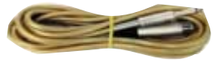

## ■ PRODUCTS ■

MBM 6050 100M

갈색동박 A'SSY

청색동박 A'SSY

보라동박 A'SSY



골드편조 A'SSY

흑색고급 A'SSY

## ■ SPECIFICATION ■

| 제품명 | 도체규격(mm/pcs) | 편조(shield) | | 시즈 (sheath) | | 색상(color) | 제품특성 |
|---|---|---|---|---|---|---|---|
| | | 구성(mm/pcs) | 편조율(%) | 두께 | 외경(mm) | | |
| MBM 6050 CABLE | 50/0.08A×2C | 7/0.10A×16 | 85% | 1.2±0.2 | 6.1 | BLK | ■99.99%의 고순도 동선을 사용하여 원음전달이 탁월 함<br>■고밀도 차폐(85%~95%)로 외부 노이즈 차단이 뛰어남<br>■내구성및절연성,무독성 PVC를 적용하였으며, 다양한 색상으로 소비자 기호별 만족도 높음 |
| MBM 2004 CABLE | 60/0.08A×2C | 8/0.10TA×16 | 95% | 1.2±0.2 | 5.9 | BLK | |
| MBM 동박 CABLE | 8횡권(8/0.10합금)×2C | 35/1중동박 | 80% | 1.2±0.2 | 6.2 | BRN, BLU, VOT | |
| MBM 쉴드 CABLE | 50/0.08A×2C | 7/0.10TA×16 | 85% | 1.2±0.2 | 6.1 | BLK, BRN, GOLD, D/BLU | |
| A'SSY CABLE | 상기 각 제품별 MBM 오리지널 CANNON : 5PLUG 조립품 일체 | | | | | | |



# TECHNICAL. DATA

## 1. FLAME TEST METHOD

### FLAME RETARDANT TEST

The wiring material for electronic and electric equipments is under strong demand of flame retardance and tested in various methods. This section describes the horizontal and the vertical test of UL Subject 758 VW-1, and the 60° inclined burning test method for electrical appliances.

### 1) UL Subject 758 horizontal flame retardant test

The wire is set horizontally and a flame in applied from a specified burner to test piece for 30 seconds. The time during which the 6-inch section between 7-inch and 13-inch marks from the flame application position is burning is measured,

① Burning speed must be 1 inch/1 minute or less
② No burning dripping

### 2) UL Subject 758 VW-1 test

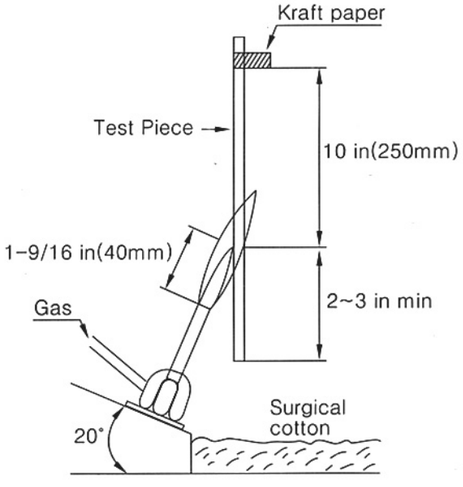
The test piece is held vertically and the flame is set so that the front end of the reducing flame portion from the Tirrill gas burner is applied.
After application of the flame five tines, each for 15 seconds, in a 15-second interval, following requirements must be satisfied :

(1) The test piece must not burn for more than 60 seconds after each application. (When the test piece is burning for more the 15 seconds after application, wait till it goes off before proceeding to the next application.)
(2) A Kraft paper on top of wire must not be burnt for 25% or more.
(3) Dripping from the burning test piece must not causes burning of surgical cotton placed under the test piece.

### 3) Electric appliances 60° inclination test : KS and JIS standard

About 300mm test piece is taken from the finished product and this test peice is inclined to 60° form a horizontal surface. The lower end of this test piece is burnt with a reducing frame portion of oxidizing flame of about 130 mm in length from a Bunsen burner.
Burning must be extinguished by itself when the flame is removed.

〈VW-1 Test〉



## 2. PHYSICAL PROPERTIES OF INSULATION MATERIALS

| | Characteristics \ Name of material | High-density poly-ethylene (Crystal-linity 85%) | Low density poly-ethylene (Crystal-linity 65%) | PVC | Heat resistant PVC | Nylon6 | FEP* | PFA* | TFE* | ETFE* |
|---|---|---|---|---|---|---|---|---|---|---|
| Electrical properties | Volume resistance (Ω·cm 20℃) | $\rangle 10^{17}$ | $\rangle 10^{17}$ | $\rangle 10^{12}$~$10^{15}$ | $\rangle 10^{12}$~$10^{15}$ | 4~$14^{14}$ | $\rangle 10^{15}$ | $\rangle 10^{15}$ | $\rangle 10^{15}$ | $\rangle 10^{16}$ |
| | Specific capacity (50~$10^{6}$ Hz) | 2.25~2.3 | 2.25~2.3 | 5~8 | 5~8 | 3.1~3.9 | 2.1 | 2.1 | 2.1 | 2.6 |
| | Dielectric strength (KV/mm) | 30~50 | 30~50 | 20~30 | 20~30 | 25.8 | 20~25 | 20~40 | 20 | 16 |
| | Dielectric tangent (50~$10^{6}$ Hz%) | 0.02~0.05 | 0.02~0.05 | 8~15 | 8~15 | 2~4 | 0.02~0.07 | 0.03 | 0.02 | 0.06 ~ 0.5 |
| Mechanical properties | Tensile strength (kg/mm²) | 2.0~3.5 | 2.0~3.5 | 1.0~2.5 | 1.0~2.5 | 6.3 | 1.9~2.2 | 2.8 | 1.4 ~ 3.5 | 3.5 ~ 5.0 |
| | Elongation(%) | 100~400 | 300~750 | 100~350 | 100~350 | 250 | 250~330 | 280~300 | 200~400 | 100~400 |
| | Flexibility | Good | Superior | Superior | Superior | Good | Superior | Superior | Superior | Superior |
| | Cut-through resistance | Superior | Superior | Normal | Normal | Superior | Superior | Superior | Superior | Superior |
| Physical properties | Specific gravity(20℃) | 0.94~0.96 | 0.92~0.93 | 1.2~1.5 | 1.2~1.5 | 1.1~1.2 | 2.1~2.2 | 2.1~2.2 | 2.1~2.2 | 1.7 |
| | Melting point(℃) | 135~140 | 112~120 | Softening point about 130 | Softening point about 130 | 210~215 | 275 | 302~310 | 327 | 270 |
| | Heat resistant temperature (continuous use ℃) | 85 | 75 | 60 | 75 ~ 105 | 105 | 200 | 260 | 260 | 150 |
| | Min. use temperature(℃) | 〈 -60 | 〈 -60 | -15~-40 | -15~-40 | -60 | 〈-80 | 〈-80 | 〈-100 | 〈-200 |
| Others | Flame retardant | Readily flammable | Readily flammable | Flame retardant | Flame retardant | Readily flammable | Non-flam-mable | Non-flam-mable | Non-flam-mable | Flam retardant |
| | Oil resistance | Relatively high resistive | Medium resistive | Medium resistive | Medium resistive | Relatively high resistive | Extremely high resistive | Extremely high resistive | Extremely high resistive | Extremely high resistive |
| | Acid resistance | Highly resistive | Highly resistive | Highly resistive | Highly resistive | Less resis-tive against high con-centration | Extremely high resistive | Extremely high resistive | Extremely high resistive | High resistive |
| | Alkali resistance | Highly resistive | Highly resistive | Highly resistive | Highly resistive | Less resistive | Extremely high resistive | Extremely high resistive | Extremely high resistive | High resistive |
| | Ozone resistance | Highly resistive | Highly resistive | Highly resistive | Highly resistive | Highly resistive | Highly resistive | Highly resistive | Highly resistive | Highly resistive |
| | Water resistance (Water absorptivity %) | Superior ((0.01) | Superior | Good | Good | Good (0.4) | Superior (0.01) | Superior (0.00) | Superior (0.00) | Superior (0.1) |
| | Workability | superior | superior | superior | superior ~Good | Good | Good | Good | Good | Good |



TECHNICAL. DATA

## 3. CONSTRUCTION OF CONDUCTOR TWISTED WIRE

### 1. Various Kinds of Strand Wires

1) Concentric stand wire : It is twisted with 1 layer or a few layers alternatrly to the right to the right and left in every layers to the circumference 1 or a few element wires, and used in conductors, etc, of aria transmission line, power line and various kinds of insulating electric wires.

2) Aggregated twisted wire : Marking every element wire in a bundle, It is twisted in the same direction and used mainly in the conductor of cord.

3) Composite stand wire(rope stand wire) : It is a twisted wire by every element wires of concentric stand wire, and excels in flexibility at the rate of the conductor sectional area

### 2. Performance Calculation Formula of Concentric Stand Wire

1) When marking the number of element wires(n') of every layers, n as number of layers
   1 piece in the center  n' = 6n
   m pieces in the center  n" = 6n + m  m 〉 1 integer

2) Total number of element wires (N)
   1 piece in the center  N = 3n(1+n) + 1
   m pieces in the center  N = 3n(1+n) + M(1+n)  m 〉 1 integer

3) Outside diameter of strand wire(W)
   When marking the element wire diameter as d
   1 piece in the center  D = (1 + 2n)d
   3 pieces in the center  D = (2.155 + 2n)d

4) Weight of strand wire(W)
   When marking the weight of element wore as w, and $k_1$ as weight twisting rate
   $W = (1+k_1)\, N \times w$

5) Electric resistance of strand wire(R)
   When marking the resistance of element wire as r, and $k_2$ as resistance twisting rate
   $R = \frac{r}{N}(1 + k_2)$

6) The tensile load of strand wire is in general approximately 90% of the total of every tensile loads of element wires.

### 3. Aggregated Strand Wire

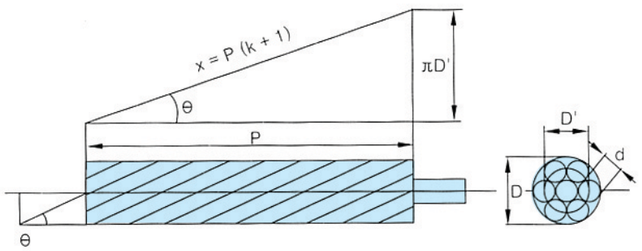
1) Outside diameter of strand wire(D)
   $D = d \times 1.154 \sqrt{N}$
2) The calculation of weight, electric, resistance and tensile load is same as that of the concentric strand wire.

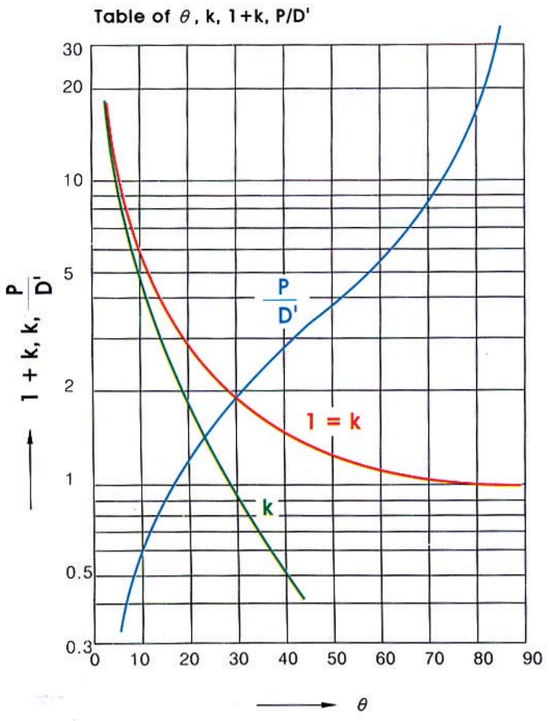
## 4. Strand Wire Angle and Twisting Rate of Concentric Strand Wire

In the concentric strand wire, when marking d=diameter of element wire, D=outer diameter of strand wire, D'=diameter of later core, P=twisted stroke(pitch), that is to say, length of strand wire central wire central shaft per time, X=length of strand element wire central shaft per twist, $\theta$=angle of strand wire(shown in the following figure) and K=twisting rate, the lollowing relation is established among these.

$x = P(k+1)$ $\quad \frac{P}{D'} = \pi / \tan\theta$ $\quad k+1 = \frac{1}{COS\theta}$ $\quad$ Where, $\theta = 0$ to $90^\circ$

### Chart of Strand Wire Angle and Twisting Rate of Concentric Twisted Wire




### Twisting Rate of Various Kinds of Strand Wires

| Number of Strand Wires | Twisting rate K |
|---|---|
| 7 | 1.2 |
| 12 | 1.2 |
| 19 | 1.2 |
| 37 | 1.7 |





## 5. CONSTRUCTION OF EXTERNAL CONDUCTOR(SHIELD)

### 1. Braid Shield

Braid density

$\gamma = (2F - F^2) \times 100\%$

$F = \frac{NCd}{2P \sin\alpha}$

$\sin\alpha = \frac{1}{\sqrt{1 + \left(\frac{P}{\pi(D+2d)}\right)^2}}$

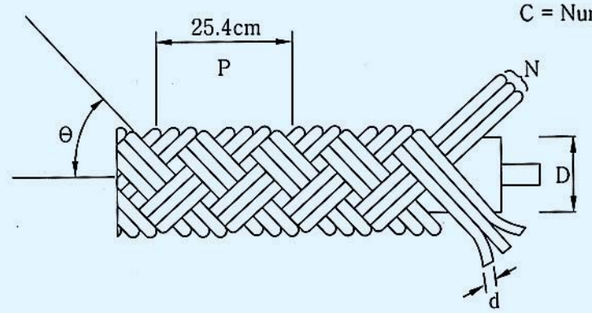
N = Number of takings of 1 blow
C = Number of blows
d = Braid element wire diameter(mm)
$\alpha$ = Element wire angle against the electric wire axis of ordinate
P = Braid pitch(mm)
D = Dimeter under the braid(mm)

Calculation of pitch and picks

$P = \frac{25.4C}{2Q} = 12.7 \frac{C}{Q}$

$Q = 12.7 \frac{C}{P}$

P = Pitch(mm)
Q = Picks
C = Number of blows



## 6. DIRECT CURRENT CONDUCTOR RESISTANCE CALCULATION FORMULA

### 1. Fundamental Formula

$$R = \rho \frac{L}{S}$$

$\rho$ = Volume inherent resistance ($\Omega$-m)
S = Sectional area
L = Length

Resistance of standard copper of 1mm² of sectional area and 1 m of length

$R = 0.017241\Omega$
$= 1/58\Omega$

Direct current resistance of soft copper single wire

$$R = \frac{4 \times 10^3}{58\pi\sigma d^2} \quad (\Omega/km)$$

$\sigma$ = Dielectric rate (%)
d = Element wire outside diameter

Direct current resistance of strand wire
(1) At entirely same construction

$$R = \frac{4 \times 10^3}{58\pi\sigma d^2} \quad (1+S) \quad (\Omega/km)$$

n = Number of element wire
s = Twisting rate Less than 60 peices 2%
More than 60 peices 3%

(2) When being constituted by 2 kinds of element wires.

$$R = \frac{1}{\frac{n_1}{R_1 \sigma} + \frac{n_2}{R_2 \sigma}} \quad (1+S) \ (\Omega/km)$$

### Dielectric Rate σ

| DIAMETER(mm) | COPPER | TINNED ANNEALED COPPER WIRE | HARD COPPER |
|---|---|---|---|
| Less than 0.10 to 0.26 | 0.98 | 0.93 | – |
| Less than 0.26 to 0.50 | 0.993 | 0.94 | 0.96 |
| Less than 0.50 to 2.0 | 1.00 | 0.96 | 0.96 |
| Less than 2.0 to 8.0 | 1.00 | 0.97 | 0.97 |

### 2. Resistance Temperature Coefficient of Copper Wire

The constant mass resistnace temperature coefficient is called the temperature coefficient when considering how the resistance of a certain copper wire of constant mass changes against the temperature change, without taking into account the dilation and shrinkage by the temperature of copper wire. Now, when making it as resistance of copper wire at t℃ and $t_0$℃ for Rt and $R_{t_0}$ there is the following relation.

$$Rt = R_{t_0} (1 + \alpha_{t_0}(t - t_0))$$

This $\alpha_{t_0}$ is called the constant mass temperature coefficient, and following formula is expressed.

$$R_{t_0} = \frac{1}{0.00393 \times \frac{\sigma}{100}} + (t_0 - 20)$$

However, $\alpha$ is the dielectric rate(%) of copper wire.

From this formula various constant mass resistance temperature coefficient in the dielectric rate and the temperature are calculated.



TECHNICAL. DATA

## 7. ALLOWABLE CURRENT OF THE WIRE

### ALLOWABLE CURRENT CALCULATION EQUATION

1. The allowable current of insulated wire is calculated as follows. (JIS 168 C)
(Single core cable laid or duct)

$$I = \mathbb{I}_0 \sqrt{\frac{T_1 - T_2}{r \cdot Rth}}$$

$$= \mathbb{I}_0 \sqrt{\frac{T_1 - 40}{r \cdot Rth}} \quad \text{(For the base temperature of 40℃)}$$

$$r = \{1 + \alpha (T_1 - 20)\} r_0$$
$$= \{1 + 0.00393(T_1 - 20)\} r_0 \text{ (For copper conductor)}$$

$$Rth = R_1 + R_3$$

$$R_1 = \frac{\rho 1}{2\pi} Ln \frac{d_2}{d_1}$$

$$R_3 = \frac{10\rho_3}{\pi d_2}$$

I : Allowable current [A]
$T_1$ : Conductor max. allowable Temperature [℃] insulation heat resistant temperature)
$T_2$ : Ambient temperature (generally 40℃)
$r_0$ : Conductor effective resistance of wire at $T_1$℃ [Ω/cm]
r : Conductor effective resistance of wire at 20 ℃ [Ω/cm]
$\alpha$ : Temperature coefficient of conductor resistance For copper wire 0.00393 For AL wire 0.0040
Rth : Gross thermal resistance of insulation [℃ · cm/W]
$d_1$ : Conductor outside dia. [mm]
$d_2$ : Insulation outside dia. [mm]
$\mathbb{I}_0$ : Allowable current reduction rate when multiple of wires and laid.

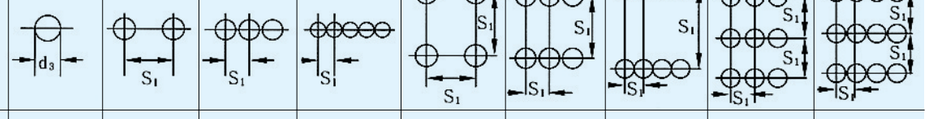
| $\rho_1$ : Unique thermal resistance of insulation [℃ · cm/W] | |
|---|---|
| Polyethylene | 450 |
| PVC | 600 |
| FEP | 400 |
| TFE | 450 |
| Nylon | 450 |

| $\rho_3$ : Surface radiation thermal resistance [℃ · cm²/W] | |
|---|---|
| Materials shown in the left table | $500 + 10\ d_2\ (d_2 \leqq 40)$ |
| Immersed braid Included | $400 + 20\ d_2\ (d_2 \leqq 20)$ |
| 〃 | $800\ (d_2 > 20)$ |

| Max. allowable temperature (℃) (Refer to heat resisrance of each material) | |
|---|---|
| General PVC | 60 |
| Heat resisrant PVC | 75, 80, 90, 105 |
| PE | 75 |
| FEP | 200 |

2. The reduction rate must be applied when multiple of insulated wires are to be laid side by side.

Reduction rate for multiple laying in air($I_0$)

| No. of wire | Cuttent reduction rate ($I_0$) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 6 | 4 | 6 | 8 | 9 | 12 |
| Arrangement / Centerdistance |  | | | | | | | | |
| $S_1 = d_3$ | 1.00 | 0.85 | 0.80 | 0.70 | 0.70 | 0.60 | – | – | – |
| $S_1 = 2d_3$ | | 0.95 | 0.90 | 0.90 | 0.90 | 0.90 | 0.85 | 0.80 | 0.80 |
| $S_1 = 3d_3$ | | 1.00 | 0.95 | 0.95 | 0.95 | 0.95 | 0.90 | 0.85 | 0.85 |

3. When the base temperature ($T_2$) is different from 40 (or 30)℃, the compensation factor for each temperature must be applied.

Base temperature compensation factor

$$I' = 1 \times \sqrt{\frac{T_1 - T_2}{T_1 - 40}}$$

$I'$ : Allowable current at the base temperature of $T_2$

$I$ : Allowable current at the base temperature of 40℃

$T_1$ : Conductor max. temperature

## Allowable current of wire for internal wiring of electric equipment

The allowale current of wire for internal wiring of various electric equipment is as follows when one wire is installed in air.

| Nomal conductor sectional area mm² | Allowable current | | |
|---|---|---|---|
| | PVC cord for appliances | Heat resistant PVC cord | PVC insulated wire for 600v electric equipment |
| 0.75 | 7 | 8 | 10 |
| 1.25 | 12 | 14 | 13 |
| 2.0 | 17 | 20 | 18 |
| 3.5 | 23 | 28 | 26 |
| 5.5 | 35 | 42 | 36 |
| 8 | – | – | 46 |
| 14 | – | – | 68 |
| 22 | – | – | 95 |
| 30 | – | – | 116 |
| 38 | – | – | 135 |
| 50 | – | – | 159 |
| 60 | – | – | 185 |
| 80 | – | – | 225 |
| 100 | – | – | 262 |
| Conductor max. allowable temperature | 65 | 75 | 60 |
| Ambient temperature | 30 | 30 | 40 |

Allowable current compensation factor table
When the ambient temoerature is differrent, multiply the following factor according to the temperature to calculate the alloeable current.

| Ambient temperture ℃ | Factor | | |
|---|---|---|---|
| | Vinyl cord for application | Heat resistant PVC cord | Vinyl insulated wire for 600v electric equipment |
| 90 | – | – | – |
| 80 | – | – | – |
| 70 | – | 0.33 | – |
| 65 | – | 0.47 | – |
| 60 | – | 0.58 | – |
| 55 | 0.41 | 0.66 | 0.50 |
| 50 | 0.58 | 0.74 | 0.71 |
| 45 | 0.71 | 0.81 | 0.87 |
| 40 | 0.82 | 0.88 | 1.00 |
| 35 | 0.91 | 0.94 | 1.12 |
| 30 | 1.00 | 1.00 | 1.22 |



TECHNICAL. DATA

## 8. A.W.G - mm CONVERSION TABLE

The figure in parenthess in mm. G, is mm. The figure in the weight column are calculated with 8.89 of copper specific gravity and 2.7 of aluminum specific gracity.

### Sectional Area Conversion Table

| | SQUARE MILLIMETER | CIRCULAR MIL | SQUARE INCH |
|---|---|---|---|
| Square millimeter | 1 | 1973.5 | 0.001550 |
| Circular mil | 0.00050671 | 1 | $0.7854 \times 10^{-6}$ |
| Square inch | 645.16 | $1.272 \times 10^{-6}$ | 1 |

(Example) 1mm² = 1,973.5 circular mils = 0.001550 square inch

| GAGE | | DIAMETER | | AREA | | | WEIGHT | |
|---|---|---|---|---|---|---|---|---|
| | | MIL | MILLIMETER | CIRCULAR MIL | SQUARE INCH | SQUARE MILLIMETER | COPPER | ALUMINUM |
| A.W.G | mm.G | mil | mm | cm | in² | mm² | kg / km | |
| | 12 | 472.4 | 12.000 | 232,162 | .1753 | 113.1 | 1,005.0 | 305.4 |
| 4/0 | | 460.0 | 11.684 | 211,600 | .1662 | 107.2 | 853.0 | 289.4 |
| 3/0 | | 409.6 | 10.404 | 167,807 | .1318 | 85.03 | 755.9 | 229.6 |
| | 10 | 393.7 | 10.000 | 155,000 | .1217 | 78.54 | 698.2 | 212.1 |
| 2/0 | | 364.8 | 9.266 | 133,079 | .1045 | 67.42 | 599.4 | 182.0 |
| | 9 | 354.3 | 9.000 | 125,528 | .09859 | 63.62 | 565.6 | 171.8 |
| 0 | | 324.9 | 8.252 | 105,560 | .08291 | 53.49 | 475.5 | 144.4 |
| | 8 | 315.0 | 8.000 | 99,225 | .07793 | 50.27 | 446.9 | 135.7 |
| 1 | | 289.3 | 7.348 | 83,694 | .06573 | 42.41 | 377.0 | 114.5 |
| | 7 | 275.6 | 7.000 | 75,955 | .05966 | 38.48 | 342.1 | 103.9 |
| 2 | | 257.6 | 6.544 | 66,358 | .05212 | 33.63 | 299.0 | 90.80 |
| | 6.5 | 255.9 | 6.500 | 65,485 | .05143 | 33.18 | 295.0 | 89.59 |
| | 6.0 | 236.2 | 6.000 | 55,790 | .04382 | 28.27 | 251.3 | 76.33 |
| 3 | | 229.4 | 5.827 | 52,624 | .04133 | 26.66 | 237.0 | 71.98 |
| | 5.5 | 216.5 | 5.500 | 46,872 | .03681 | 23.72 | 210.9 | 63.99 |
| 4 | | 204.3 | 5.189 | 41,738 | .03278 | 21.15 | 188.0 | 57.11 |
| | 5.0 | 196.9 | 5.000 | 38,770 | .03045 | 19.63 | 174.5 | 53.00 |
| 5 | | 181.9 | 4.621 | 33,088 | .02599 | 16.77 | 149.1 | 45.28 |
| | 4.5 | 177.2 | 4.500 | 31,400 | .02466 | 15.90 | 141.4 | 42.93 |
| | (4.3) | 169.3 | 4.300 | 28,662 | .02250 | 14.51 | 129.0 | 39.18 |
| | (4.2) | 165.4 | 4.200 | 27,357 | .02148 | 13.85 | 123.1 | 37.40 |
| | | 162.0 | 4.115 | 26,244 | .02061 | 13.30 | 118.2 | 35.91 |
| 6 | 4.0 | 157.5 | 4.000 | 24,806 | .01948 | 12.57 | 100.8 | 33.94 |
| | (3.8) | 149.6 | 3.800 | 22,380 | .01757 | 11.34 | 100.8 | 30.62 |

# TECHNICAL. DATA

| GAGE | | DIAMETER | | AREA | | | WEIGHT | |
|---|---|---|---|---|---|---|---|---|
| | | MIL | MILLIMETER | CIRCULAR MIL | SQUARE INCH | SQUARE MILLIMETER | COPPER | ALUMINUM |
| A.W.G | mm.G | mil | mm | cm | $in^2$ | $mm^2$ | kg / km | |
| | (3.7) | 145.7 | 3.700 | 21,228 | .01666 | 10.75 | 95.57 | 29.03 |
| 7 | | 144.3 | 3.665 | 20,822 | .01635 | 10.55 | 93.79 | 28.49 |
| | 3.5 | 137.8 | 3.500 | 18,989 | .01491 | 9.621 | 85.53 | 25.98 |
| 8 | | 128.5 | 3.264 | 16,512 | .01297 | 8.368 | 74.39 | 22.59 |
| | 3.2 | 126.0 | 3.200 | 15,876 | .01247 | 8.042 | 71.49 | 21.71 |
| 9 | | 114.4 | 2.906 | 13,087 | .01028 | 6.632 | 58.96 | 17.91 |
| | 2.9 | 114.2 | 2.900 | 13,042 | .01024 | 6.605 | 58.72 | 17.87 |
| | 2.6 | 102.4 | 2.600 | 10,486 | .008246 | 5.309 | 47.29 | 14.33 |
| 10 | | 101.9 | 2.588 | 10,384 | .008156 | 5.262 | 46.78 | 14.21 |
| 11 | | 90.74 | 2.305 | 8,234 | .006467 | 4.172 | 37.09 | 11.26 |
| | 2.3 | 90.55 | 2.300 | 8,199 | .006439 | 4.155 | 36.94 | 11.22 |
| 12 | | 80.81 | 2.053 | 6,530 | .005129 | 3.309 | 29.42 | 8.934 |
| | 2.0 | 78.74 | 2.000 | 6,200 | .004869 | 3.142 | 27.93 | 8.483 |
| 13 | | 71.96 | 1.828 | 5,178 | .004067 | 2.624 | 23.33 | 7.085 |
| | 1.8 | 70.87 | 1.800 | 5,023 | .003945 | 2.545 | 22.63 | 6.872 |
| 14 | | 64.08 | 1.628 | 4,106 | .003225 | 2.081 | 18.50 | 5.619 |
| | 1.6 | 62.99 | 1.600 | 3,968 | .003116 | 2.011 | 17.88 | 5.430 |
| 15 | | 57.07 | 1.450 | 3,257 | .002558 | 1.650 | 14.67 | 4.455 |
| | 1.4 | 55.12 | 1.400 | 3,038 | .002386 | 1.539 | 13.68 | 4.155 |
| 16 | | 50.82 | 1.291 | 2,583 | .002029 | 1.309 | 11.64 | 3.534 |
| | 1.2 | 47.24 | 1.200 | 2232 | .001753 | 1.131 | 10.06 | 3.054 |
| 17 | | 45.26 | 1.150 | 2,048 | .001608 | 1.037 | 9.219 | 2.800 |
| 18 | | 40.30 | 1.024 | 1,624 | .001275 | 0.8226 | 7.3113 | 2221 |
| | 1.0 | 39.37 | 1.000 | 1,550 | .001217 | 0.7854 | 6.982 | 2.121 |
| 19 | | 35.89 | 0.9116 | 1,288 | .001012 | 0.6529 | 5.804 | 1.763 |
| | .90 | 35.43 | 0.9000 | 1,255 | .0009857 | 0.6362 | 5.656 | 1.718 |
| 20 | | 32.00 | 0.8118 | 1,021 | .00080 19 | 0.5174 | 4.600 | 1.676 |
| | .80 | 31.50 | 0.8000 | 992.3 | .0007794 | 0.5027 | 4.469 | 1.357 |
| 21 | | 28.46 | 0.7229 | 810.0 | .0006362 | 0.4105 | 3.649 | 1.108 |
| | .70 | 27.56 | 0.7000 | 759.6 | .0005966 | 0.3848 | 3.421 | 1.039 |
| | .65 | 28.59 | 0.6500 | 654.8 | .0005143 | 0.3318 | 2.950 | 0.8959 |
| 22 | | 25.35 | 0.6439 | 642.6 | .0005047 | 0.3256 | 2.895 | 0.8791 |
| | .60 | 23.62 | 0.6000 | 557.9 | .0004382 | 0.2827 | 2.513 | 0.7633 |
| 23 | | 22.57 | 0.5733 | 509.4 | .0004001 | 0.2581 | 2295 | 0.6969 |
| | .55 | 21.65 | 0.5500 | 468.7 | .0003681 | 0.2376 | 2.112 | 0.6415 |
| 24 | | 20.10 | 0.5106 | 404.0 | .0003173 | 0.2047 | 1.820 | 0.5527 |
| | .50 | 19.69 | 0.5000 | 387.7 | .0003045 | 0.1963 | 1.745 | 0.5300 |
| 25 | .45 | 17.90 | 0.4547 | 320.4 | .0002516 | 0.1623 | 1.443 | 0.4382 |
| | | 17.72 | 0.4500 | 314.0 | .0002466 | 0.1590 | 1.414 | 0.4293 |



# TECHNICAL. DATA

| GAGE | | DIAMETER | | AREA | | | WEIGHT | |
|---|---|---|---|---|---|---|---|---|
| | | MIL | MILLIMETER | CIRCULAR MIL | SQUARE INCH | SQUARE MILLIMETER | COPPER | ALUMINUM |
| A.W.G | mm.G | mil | mm | cm | $in^2$ | $mm^2$ | kg / km | |
| 26 | | 15.95 | 0.4049 | 254.1 | .0001996 | 0.1288 | 1.145 | 0.3478 |
| | .40 | 1575 | 0.400 | 248.1 | .0001949 | 0.1257 | 1.118 | 0.3394 |
| 27 | | 1420 | 0.3606 | 201.6 | .0001583 | 0.1021 | 0.9077 | 0.2757 |
| | .35 | 1378 | 0.3500 | 189.9 | .0001491 | 0.09621 | 0.8553 | 0.2598 |
| 28 | | 12.64 | 0.3211 | 159.8 | .0001255 | 0.08097 | 0.7198 | 0.2186 |
| | .32 | 12.60 | 0.3200 | 158.8 | .0001247 | 0.08042 | 0.7149 | 0.2171 |
| | 2.9 | 11.42 | 0.2900 | 130.4 | .0001024 | 0.0605 | 0.5872 | 0.1783 |
| 29 | | 11.26 | 0.2869 | 126.8 | .00009959 | 0.06425 | 0.5712 | 0.1735 |
| | 2.6 | 10.24 | 0.2600 | 104.9 | .00008239 | 0.05309 | 0.4720 | 0.1433 |
| 30 | | 10.03 | 0.2548 | 100.6 | .0007901 | 0.05097 | 0.4531 | 0.1376 |
| | .23 | 9.055 | 0.2300 | 81.99 | .0006440 | 0.04155 | 0.3694 | 0.1122 |
| 31 | | 8.928 | 0.2268 | 79.71 | .0006260 | 0.04039 | 0.3951 | 0.1091 |
| 32 | | 7.950 | 0.2091 | 6320 | .0004964 | 0.03203 | 0.2848 | 0.08648 |
| | .20 | 7.874 | 0.2000 | 62.00 | .0004869 | 0.03142 | 0.2793 | 0.08483 |
| | .18 | 7.087 | 0.1800 | 50.23 | .0003945 | 0.02545 | 0.2263 | 0.06372 |
| 33 | | 7.080 | 0.1798 | 50.13 | .0003937 | 0.02540 | 0.2258 | 0.06858 |
| 34 | | 6.305 | 0.1601 | 39.75 | .0003122 | 0.02014 | 0.1790 | 0.05438 |
| | .16 | 6.299 | 0.1600 | 39.68 | .0003116 | 0.02011 | 0.1788 | 0.05430 |
| 35 | | 5.615 | 0.1426 | 31.53 | .0002476 | 0.01597 | 0.1420 | 0.04312 |
| | .14 | 5.512 | 0.1400 | 30.38 | .0002386 | 0.01267 | 0.1368 | 0.04155 |
| 36 | | 5.000 | 0.1270 | 25.00 | .0001963 | 0.01267 | 0.1126 | 0.03421 |
| | .12 | 4.724 | 0.1200 | 22.32 | .0001753 | 0.01131 | 0.1006 | 0.03054 |
| 37 | | 4.453 | 0.1131 | 19.83 | .0001557 | 0.01005 | 0.08934 | 0.02714 |
| 38 | | 3.145 | 0.1007 | 1572 | .0001235 | 0.007968 | 0.07084 | 0.02151 |
| | .10 | 3.937 | 0.1000 | 15.50 | .0001217 | 0.007854 | 0.06982 | 0.02121 |
| 39 | | 3.531 | 0.08969 | 12.47 | .00009794 | 0.006319 | 0.05618 | 0.01706 |
| 40 | | 3.145 | 0.07987 | 9.891 | .00007768 | 0.005012 | 0.04456 | 0.01353 |
| 41 | | 2.800 | 0.07112 | 7.842 | .00006159 | 0.003973 | 0.03532 | 0.01073 |
| 42 | | 2.494 | 0.06335 | 6.219 | .00004884 | 0.003151 | 0.02801 | 0.008508 |
| 43 | | 2221 | 0.05641 | 4.932 | .00003873 | 0.002499 | 0.0222 | 0.006747 |
| 44 | | 1.978 | 0.05024 | 3.910 | .00003072 | 0.001982 | 0.01762 | 0.005351 |
| | 0.05 | 1.969 | 0.05000 | 3.877 | .00003045 | 0.001963 | 0.01745 | 0.005300 |
| 45 | | 1.761 | 0.04473 | 3.102 | .00002436 | 0.001572 | 0.01398 | 0.004244 |
| 46 | | 1.568 | 0.03984 | 2.460 | .00001946 | 0.001246 | 0.01108 | 0.003364 |
| 47 | | 1.397 | 0.03547 | 1.951 | .00001532 | 0.0009884 | 0.008787 | 0.002669 |
| 48 | | 1.244 | 0.03159 | 1.547 | .00001215 | 0.0007838 | 0.006968 | 0.002116 |
| 49 | | 1.107 | 0.02813 | 1.227 | .00000963 5 | 0.0006216 | 0.005526 | 0.001678 |
| 50 | | 0.9863 | 0.02505 | 0.9728 | .00000764 1 | 0.0004929 | 0.004382 | 0.001331 |

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