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**The Information contained in this catalog is valid at the time of printing.  
Please logon to our website for updated information.**

## Overall Shielded Instrumentation Cables per NEC 725

### APPLICATIONS

- For cable tray installation in intrinsically safe environment.
- For transmission of analog or digital signals designed for process control

### STANDARDS

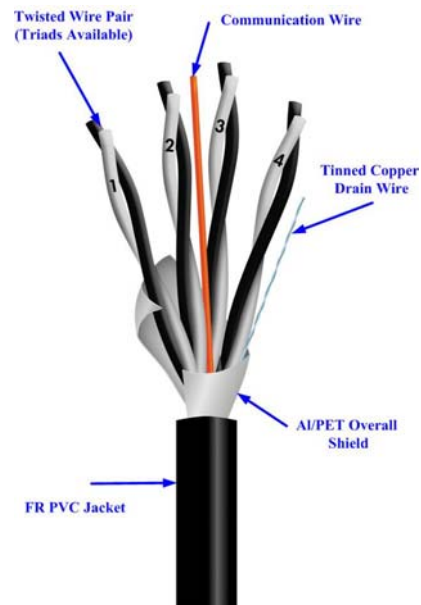
- **NEC 725** Class 1, division 2 Hazardous Areas
- IEC-60332-1
- UL 1581 VW-1

### CONSTRUCTION

<b>Conductor:</b>	7-strand concentric bare copper Class B
<b>Insulation:</b>	FR PVC complying with BS 6746 Type 5
<b>Pairs/Triads:</b>	Two or three cores are twisted into Pairs or Triads, in nominal lays of 50 to 60 mm
<b>Color Code:</b>	<ul style="list-style-type: none"> <li>- Pairs: Black white with successive numbers</li> <li>- Triads: Black red white with successive numbers</li> </ul>
<b>Communication Wire:</b>	<ul style="list-style-type: none"> <li>- 22 AWG tinned copper, 7-strand conductor</li> <li>- Orange colored PVC insulated</li> </ul>
<b>Cabling:</b>	Pairs or triads and communication wire are cabled into a cable core
<b>Overall Shielding:</b>	Shielded with a polyester/aluminum (AL/PET) foil, aluminum side facing inwards. 100% coverage.
<b>Drain wire:</b>	7-strand tinned copper having the same size as the conductor
<b>Outer Sheath:</b>	Black FR PVC complying with BS 6746 Type 9.

### RATING

- Operating temperature range -10°C to 90°C
- 300 Vrms 90°C
- Fire retardancy per IEC 60332-1, UL-1581 VW-1
- Cables meeting IEC-60332-3C are available
- Cables meeting IEEE 383 Cl. IE and UL-1666 are available



### ELECTRICAL PROPERTIES

- **Max. DC Resistance @ 20°C**
  - 16 AWG - 13.9 Ohm/km
  - 18 AWG - 22.0 Ohm/km
  - 20 AWG - 35.9 Ohm/km
- **Dielectric Strength:**
  - Insulation - 2000 Vdc/ 1 min. between conductors
  - Sheath 5000 Vdc /1 min

### MARKING

Cables are marked as follows:

**TELDOR CABLES --- Part No. --- Description (e.g. 4x2x16AWG) --- RoHS --- Meter Marking (optional)** or per customer request.

### ORDERING

Consult the standard cable part numbers table next page. Standard packaging: 500 and 1000 meters on suitable drums. Other packaging options, constructions and materials may be available. Please contact the Teldor Cables Marketing Staff listed on page 2.

## Overall Shielded Instrumentation Cables per NEC 725

### Cable Part Numbers, Construction, Dimensions and Weights

Part No.	Size AWG	Pairs = P Triads = T	No. of Pairs / Triads	Jacket Thickness mm	Cable Nominal Diameter mm	Cable Nominal Weight kg/km
667001-D	20	P	1	0.50	4.6	29
611564-D	20	P	2	1.30	8.7	67
667004-D	20	P	4	1.30	10.0	123
610596-D	20	P	8	1.30	12.5	201
667012-D	20	P	12	1.30	14.6	277
667016-D	20	P	16	1.55	16.8	374
667024-D	20	P	24	1.55	19.9	520
612158-D	18	P	1	0.50	5.05	39
666002-D	18	P	2	1.30	9.80	112
666004-D	18	P	4	1.30	11.0	162
666008-D	18	P	8	1.30	13.9	274
666012-D	18	P	12	1.30	16.3	375
666016-D	18	P	16	1.55	18.8	498
666024-D	18	P	24	1.55	22.2	704
605380-D	16	P	1	0.50	5.7	62
612070-D	16	P	2	1.30	10.7	140
612071-D	16	P	4	1.30	12.3	226
665008-D	16	P	8	1.30	16.4	373
665012-D	16	P	12	1.30	19.1	533
665016-D	16	P	16	1.55	21.1	685
670001-D	20	T	1	0.50	4.9	37
670004-D	20	T	4	1.30	11.9	165
670008-D	20	T	8	1.30	17.9	300
670012-D	20	T	12	1.55	19.0	420
670016-D	20	T	16	1.55	21.1	525
669001-D	18	T	1	0.50	5.5	51
669004-D	18	T	4	1.30	13.2	220
669012-D	18	T	12	1.55	21.2	555
669016-D	18	T	16	1.55	23.1	720
605392-D	16	T	1	0.50	6.1	69
668002-D	16	T	2	1.30	12.5	215
668004-D	16	T	4	1.30	14.6	305
668006-D	16	T	6	1.30	17.4	390
668008-D	16	T	8	1.30	22.3	520
668012-D	16	T	12	1.55	23.5	730
668016-D	16	T	16	1.55	26.2	930

All cable dimensions and weights are subject to normal manufacturing tolerances.

## *Individual and Overall Shielded Instrumentation Cables per NEC 725*

### **APPLICATIONS**

- For cable tray installation in intrinsically safe environment.
- For transmission of analog or digital signals designed for process control

### **STANDARDS**

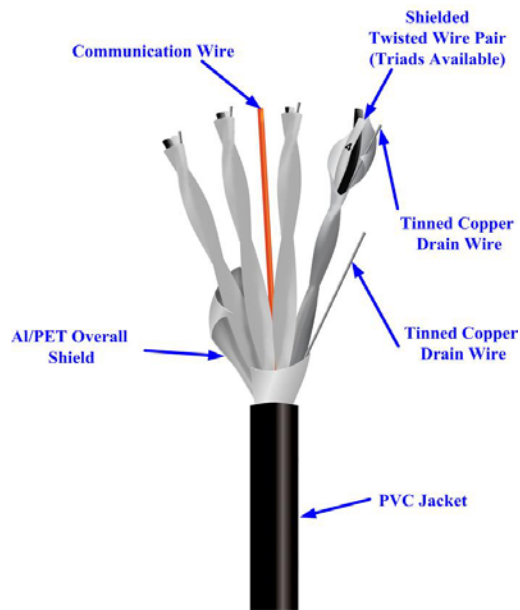
- **NEC 725** Class 1, division 2 Hazardous Areas
- IEC-60332-1
- UL 1581 VW-1

### **CONSTRUCTION**

<b>Conductor:</b>	7-strand concentric bare copper Class B
<b>Insulation:</b>	FR PVC complying with BS 6746 Type 5
<b>Pairs/Triads:</b>	Two or three cores are twisted into Pairs or Triads, in nominal lays of 50 to 60 mm
<b>Color Code:</b>	<ul style="list-style-type: none"> <li>- Pairs: Black white with successive numbers</li> <li>- Triads: Black red white with successive numbers</li> </ul>
<b>Individual Shielding</b>	Each pair/triad is individually shielded with a polyester/aluminum (AL/PET) foil, aluminum side facing inwards; 100% coverage
<b>Pair/Triad Drain Wire</b>	7-strand tinned copper having a diameter of 20AWG or 22 AWG depending on core size
<b>Communication Wire:</b>	<ul style="list-style-type: none"> <li>- 22 AWG tinned copper, 7-strand conductor</li> <li>- Orange colored PVC insulated</li> </ul>
<b>Cabling:</b>	Pairs or triads and communication wire are cabled into a cable core
<b>Overall Shielding:</b>	Shielded with a polyester/aluminum (AL/PET) foil, aluminum side facing inwards. 100% coverage.
<b>Drain wire:</b>	7-strand tinned copper having the same size as the conductor
<b>Outer Sheath:</b>	Black FR PVC complying with BS 6746 Type 9.

### **RATING**

- Operating temperature range -10°C to 90°C
- 300 Vrms 90°C
- Fire retardancy per IEC 60332-1, UL-1581 VW-1
- Cables meeting IEC-60332-3C are available
- Cables meeting IEEE 383 Cl. IE and UL-1666 are available



### **ELECTRICAL PROPERTIES**

- **Max. DC Resistance @ 200C**
  - 16 AWG - 13.9 Ohm/km
  - 18 AWG - 22.0 Ohm/km
  - 20 AWG - 35.9 Ohm/km
- **Mutual capacitance @25°C/1kHz**
  - 16 AWG - 185 pF/m
  - 18 AWG - 170 pF/m
  - 20 AWG - 145 pF/m
- **Dielectric Strength**
  - Insulation - 2000 Vdc/ 1 min. between conductors
  - Sheath 5000 Vdc /1 min

### **MARKING**

Cables are marked as follows:

**TEL DOR CABLES --- Part No. --- Description (e.g. 4x2x16AWG) --- RoHS --- Meter Marking (optional)**  
or per customer request.

### **ORDERING**

Consult the standard cable part numbers table next page.  
Standard packaging: 500 and 1000 meters on suitable drums. Other packaging options, constructions and materials may be available. Please contact the Teldor Cables Marketing Staff listed on page 2.

## Individual and Overall Shielded Instrumentation Cables per NEC 725

### Cable Part Numbers, Construction, Dimensions and Weights

Part No.	Size AWG	Pairs = P Triads = T	No. of Pairs /Triads	Jacket Thickness mm	Cable Nominal Diameter mm	Cable Nominal Weight kg/km
667001-D	20	P	1	0.50	4.6	29
611500-D	20	P	2	1.30	9.2	96
612069-D	20	P	4	1.30	10.5	150
673006-D	20	P	6	1.30	11.9	210
612084-D	20	P	8	1.30	13.0	240
673012-D	20	P	12	1.55	15.7	365
673016-D	20	P	16	1.55	17.5	450
673024-D	20	P	24	1.80	21.1	680
612158-D	18	P	1	0.50	5.0	39
612080-D	18	P	2	1.30	10.2	128
612081-D	18	P	4	1.30	12.8	210
612155-D	18	P	7	1.30	14.6	320
672008-D	18	P	8	1.30	17.4	350
611517-D	18	P	10	1.55	17.5	443
672012-D	18	P	12	1.55	18.5	488
672016-D	18	P	16	1.55	20.5	610
672024-D	18	P	24	1.80	25.8	920
605379-D	16	P	1	0.50	5.7	62
665001-D	16	P	1	0.90	6.5	71
612072-D	16	P	2	1.30	11.0	180
612073-D	16	P	4	1.30	12.9	260
671008-D	16	P	8	1.30	16.7	452
671012-D	16	P	12	1.55	20.8	670
671016-D	16	P	16	1.55	23.1	867
671024-D	16	P	24	1.80	29.6	1281
670001-D	20	T	1	0.50	4.9	37
675004-D	20	T	4	1.30	12.2	185
675006-D	20	T	6	1.30	14.5	280
675008-D	20	T	8	1.30	18.4	345
675012-D	20	T	12	1.55	19.5	470
675016-D	20	T	16	1.55	21.7	595
669001-D	18	T	1	0.50	5.5	51
677004-D	18	T	4	1.30	13.1	250
677008-D	18	T	8	1.80	19.6	520
677012-D	18	T	12	1.55	21.1	647
677016-D	18	T	16	1.55	23.4	826
605392-D	16	T	1	0.50	6.00	69
668001-D	16	T	1	0.90	6.80	85
676004-D	16	T	4	1.30	14.8	340
676006-D	16	T	6	1.30	17.8	440
676008-D	16	T	8	1.30	23.3	580
676012-D	16	T	12	1.55	24.1	915
676016-D	16	T	16	1.55	26.8	1160

All cable dimensions and weights are subject to normal manufacturing tolerances.

## Overall Shielded Moisture Resistant Instrumentation Cables per NEC 725

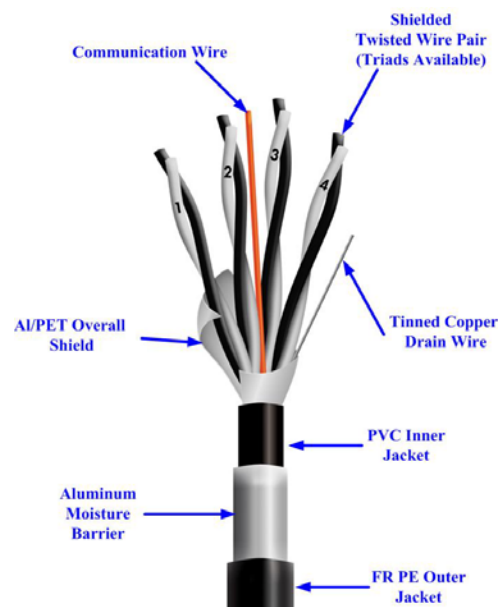
### APPLICATIONS

- For cable tray installation in intrinsically safe environment.
- For transmission of analog or digital signals designed for process control
- For direct burial installations

### STANDARDS

- **NEC 725** Class 1, division 2 Hazardous Areas
- IEC-60332-1
- UL 1581 VW-1

### CONSTRUCTION



<b>Conductor:</b>	7-strand concentric bare copper Class B
<b>Insulation:</b>	FR PVC complying with BS 6746 Type 5
<b>Pairs/Triads:</b>	Two or three cores are twisted into Pairs or Triads, in nominal lays of 50 to 60 mm
<b>Color Code:</b>	<ul style="list-style-type: none"> <li>- Pairs: Black white with successive numbers</li> <li>- Triads: Black red white with successive numbers</li> </ul>
<b>Communication Wire:</b>	<ul style="list-style-type: none"> <li>- 22 AWG tinned copper, 7-strand conductor</li> <li>- Orange colored PVC insulated</li> </ul>
<b>Cabling:</b>	Pairs or triads and communication wire are cabled into a cable core
<b>Overall Shielding:</b>	Shielded with a polyester/aluminum (AL/PET) foil, aluminum side facing inwards. 100% coverage.
<b>Drain wire:</b>	7-strand tinned copper having the same size as the conductor
<b>Inner jacket</b>	Black FR PVC complying with BS 6746 Type 9
<b>Moisture barrier</b>	Sealed aluminum tape
<b>Outer jacket:</b>	Black flame retardant (FR) PE

### RATING

- Operating temperature range -10°C to 90°C
- 300 Vrms 90°C
- Fire retardancy per IEC 60332-1, UL-1581 VW-1

### ELECTRICAL PROPERTIES

- **Max. DC Resistance @ 20°C**
  - 16 AWG - 13.9 Ohm/km
  - 18 AWG - 22.0 Ohm/km
  - 20 AWG - 35.9 Ohm/km
- **Dielectric Strength**
  - Insulation - 2000 Vdc/ 1 min. between conductors
  - Sheath 5000 Vdc /1 min

### MARKING

Cables are marked as follows:

**TELDOR CABLES --- Part No. --- Description (e.g. 4x2x16AWG) --- RoHS --- Meter Marking (optional)**  
or per customer request.

### ORDERING

Consult the standard cable part numbers table next page  
Standard packaging: 500 and 1000 meters on suitable drums. Other packaging options, constructions and materials may be available. Please contact the Teldor Cables Marketing Staff listed on page 2.

## Overall Shielded Moisture Resistant Instrumentation Cables per NEC 725

### Cable Part Numbers, Construction, Dimensions and Weights

Part No.	Size AWG	Pairs = P Triads = T	No. of Pairs / Triads	Inner Jacket Thickness mm	Outer Jacket Thickness mm	Cable Nominal Diameter mm	Cable Nominal Weight kg/km
627001-D	20	P	1	0.50	0.80	7.6	92
627002-D	20	P	2	1.30	1.30	12.4	160
627004-D	20	P	4	1.30	1.30	14.3	190
627008-D	20	P	8	1.30	1.30	16.5	310
627012-D	20	P	12	1.30	1.30	19.3	495
627016-D	20	P	16	1.55	1.55	21.5	600
627020-D	20	P	20	1.55	1.65	23.1	620
626001-D	18	P	1	0.50	0.80	8.1	97
626004-D	18	P	4	1.30	1.30	15.0	260
626008-D	18	P	8	1.30	1.30	17.9	390
626012-D	18	P	12	1.30	1.65	21.0	540
626016-D	18	P	16	1.55	1.65	23.5	685
626024-D	18	P	24	1.55	1.65	26.9	915
605485-D	16	P	1	0.50	0.80	8.7	105
625002-D	16	P	2	1.30	1.30	15.4	230
625004-D	16	P	4	1.30	1.30	17.0	335
625008-D	16	P	8	1.30	1.30	20.2	510
625012-D	16	P	12	1.30	1.65	23.8	720
625016-D	16	P	16	1.55	1.65	25.8	890
625024-D	16	P	24	1.55	1.65	29.7	1225
630901-D	20	T	1	0.50	0.80	7.9	95
630904-D	20	T	4	1.30	1.30	15.0	257
630908-D	20	T	8	1.55	1.65	23.8	510
630912-D	20	T	12	1.55	1.65	24.4	610
630916-D	20	T	16	1.55	1.65	26.4	730
629001-D	18	T	1	0.50	0.80	8.4	105
629004-D	18	T	4	1.30	1.30	16.8	330
629012-D	18	T	12	1.55	1.65	24.5	740
629016-D	18	T	16	1.55	1.65	27.3	930
604680-D	16	T	1	0.50	0.80	9.0	110
628004-D	16	T	4	1.30	1.30	18.3	415
628008-D	16	T	8	1.55	1.65	28.2	770
628012-D	16	T	12	1.55	1.65	28.9	975
628016-D	16	T	16	1.55	1.65	31.6	1215

All cable dimensions and weights are subject to normal manufacturing tolerances.



## Individual and Overall Shielded Moisture Resistant Instrumentation Cables per NEC 725

### APPLICATIONS

- For cable tray installation in intrinsically safe environment.
- For transmission of analog or digital signals designed for process control
- For direct burial installations

### STANDARDS

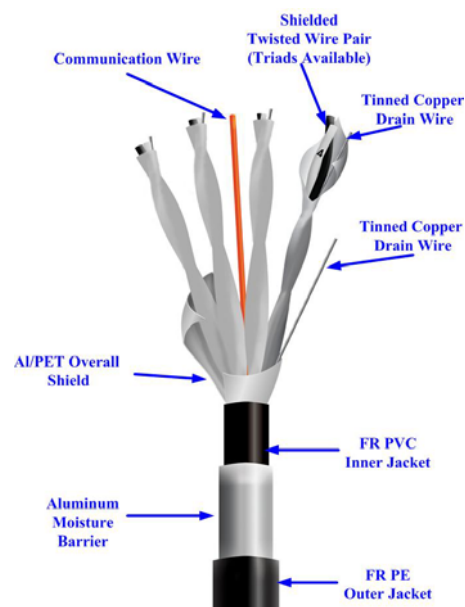
- **NEC 725** Class 1, division 2 Hazardous Areas
- IEC-60332-1
- UL 1581 VW-1

### CONSTRUCTION

<b>Conductor:</b>	7-strand concentric bare copper Class B
<b>Insulation:</b>	FR PVC complying with BS 6746 Type 5
<b>Pairs/Triads:</b>	Two or three cores are twisted into Pairs or Triads, in nominal lays of 50 to 60 mm
<b>Color Code:</b>	<ul style="list-style-type: none"> <li>- Pairs: Black white with successive numbers</li> <li>- Triads: Black red white with successive numbers</li> </ul>
<b>Individual Shielding:</b>	Each pair/triad is individually shielded with a polyester/aluminum (AL/PET) foil, aluminum side facing inwards; 100% coverage
<b>Pair/Triad Drain Wire:</b>	7-strand tinned copper having a diameter of 20AWG or 22 AWG depending on core size
<b>Communication Wire:</b>	<ul style="list-style-type: none"> <li>- 22 AWG tinned copper, 7-strand conductor</li> <li>- Orange colored PVC insulated</li> </ul>
<b>Cabling:</b>	Pairs or triads and communication wire are cabled into a cable core
<b>Overall Shielding:</b>	Shielded with a polyester/aluminum (AL/PET) foil, aluminum side facing inwards. 100% coverage.
<b>Overall drain wire:</b>	7-strand tinned copper having the same size as the conductor
<b>Inner jacket</b>	Black FR PVC complying with BS 6746 Type 9
<b>Moisture barrier</b>	Sealed aluminum tape
<b>Outer jacket:</b>	Black flame retardant (FR) PE

### RATING

- Operating temperature range -10°C to 90°C
- 300 Vrms 90°C
- Fire retardancy per IEC 60332-1, UL-1581 VW-1



### ELECTRICAL PROPERTIES

- **Max. DC Resistance @ 200C**
  - 16 AWG - 13.9 Ohm/km
  - 18 AWG - 22.0 Ohm/km
  - 20 AWG - 35.9 Ohm/km
- **Mutual capacitance @25°C/1kHz**
  - 16 AWG - 185 pF/m
  - 18 AWG - 170 pF/m
  - 20 AWG - 145 pF/m
- **Dielectric Strength**
  - Insulation - 2000 Vdc/ 1 min. between conductors
  - Sheath 5000 Vdc /1 min

### MARKING

Cables are marked as follows:

**TELDOR CABLES --- Part No. --- Description (e.g. 4x2x16AWG) --- RoHS --- Meter Marking (optional)** or per customer request.

### ORDERING

Consult the standard cable part numbers table next page. Standard packaging: 500 and 1000 meters on suitable drums. Other packaging options, constructions and materials may be available. Please contact the Teldor Cables Marketing Staff listed on page 2.

## Individual and Overall Shielded Moisture Resistant Instrumentation Cables per NEC 725

### Cable Part Numbers, Construction, Dimensions and Weights

Part No.	Size AWG	Pairs = P Triads = T	No. of Pairs /Triads	Inner Jacket Thickness mm	Outer Jacket Thickness mm	Cable Nominal Diameter mm	Cable Nominal Weight kg/km
627001-D	20	P	1	0.50	0.80	7.6	92
611825-D	20	P	2	1.30	1.30	14.4	175
612053-D	20	P	4	1.30	1.30	15.3	215
642006-D	20	P	6	1.30	1.30	17.4	305
642008-D	20	P	8	1.30	1.30	18.6	351
642010-D	20	P	10	1.30	1.65	21.1	435
642012-D	20	P	12	1.55	1.65	22.2	520
642016-D	20	P	16	1.55	1.65	24.1	630
642024-D	20	P	24	1.80	1.65	28.3	820
626001-D	18	P	1	0.50	0.80	8.1	97
641004-D	18	P	4	1.30	1.30	16.8	295
641008-D	18	P	8	1.30	1.30	20.0	495
641012-D	18	P	12	1.55	1.65	23.8	665
641016-D	18	P	16	1.55	1.65	26.3	805
641024-D	18	P	24	1.80	1.65	30.7	1130
605485-D	16	P	1	0.50	0.80	8.7	105
640002-D	16	P	2	1.30	1.30	16.3	255
640004-D	16	P	4	1.30	1.30	18.0	350
640008-D	16	P	8	1.30	1.30	21.6	550
640012-D	16	P	12	1.55	1.65	25.1	770
640016-D	16	P	16	1.55	1.65	28.3	995
640024-D	16	P	24	1.80	1.65	33.5	1430
630901-D	20	T	1	0.50	0.80	7.9	95
645004-D	20	T	4	1.30	1.30	16.9	285
645008-D	20	T	8	1.55	1.65	24.3	525
645012-D	20	T	12	1.55	1.65	24.9	645
645016-D	20	T	16	1.55	1.65	27.1	785
629001-D	18	T	1	0.50	0.80	8.4	105
644004-D	18	T	4	1.30	1.30	18.6	365
644012-D	18	T	12	1.55	1.65	27.8	850
644016-D	18	T	16	1.55	1.65	30.4	1045
604680-D	16	T	1	0.50	0.80	9.0	110
643004-D	16	T	4	1.30	1.30	19.5	425
643008-D	16	T	8	1.55	1.55	28.5	790
643012-D	16	T	12	1.55	1.65	29.5	1025
643016-D	16	T	16	1.55	1.65	32.2	1275

All cable dimensions and weights are subject to normal manufacturing tolerances.

## Overall Shielded Armored Cables per NEC 725

### APPLICATIONS

- For cable tray installation in intrinsically safe environment.
- For transmission of analog or digital signals designed for process control
- For direct burial installations where resistance to crush and rodent damage is needed
- For pulling into ducts

### STANDARDS

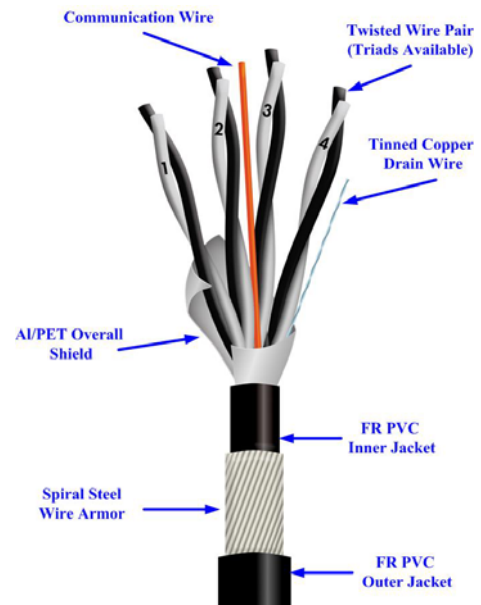
- **NEC 725** Class 1, division 2 Hazardous Areas
- IEC-60332-1
- UL 1581 VW-1

### CONSTRUCTION

<b>Conductor:</b>	7-strand concentric bare copper Class B
<b>Insulation:</b>	FR PVC complying with BS 6746 Type 5
<b>Pairs/Triads:</b>	Two or three cores are twisted into Pairs or Triads, in nominal lays of 50 to 60 mm
<b>Color Code:</b>	<ul style="list-style-type: none"> <li>- Pairs: Black white with successive numbers</li> <li>- Triads: Black red white with successive numbers</li> </ul>
<b>Communication Wire:</b>	<ul style="list-style-type: none"> <li>- 22 AWG tinned copper, 7-strand conductor</li> <li>- Orange colored PVC insulated</li> </ul>
<b>Cabling:</b>	Pairs or triads and communication wire are cabled into a cable core
<b>Overall Shielding:</b>	Shielded with a polyester/aluminum (AL/PET) foil, aluminum side facing inwards. 100% coverage.
<b>Drain wire:</b>	7-strand tinned copper having the same size as the conductor
<b>Inner jacket</b>	Black FR PVC complying with BS 6746 Type 9
<b>Aarmor</b>	Spirally applied soft galvanized steel wires
<b>Outer jacket:</b>	Black FR PVC complying with BS 6746 Type 9.

### RATING

- Operating temperature range -10°C to 90°C
- 300 Vrms 90°C
- Fire retardancy per IEC 60332-1, UL-1581 VW-1
- Cables meeting IEC-60332-3C are available
- Cables meeting IEEE 383 Cl. IE and UL-1666 are available



### ELECTRICAL PROPERTIES

- **Max. DC Resistance @ 200C**
  - 16 AWG - 13.9 Ohm/km
  - 18 AWG - 22.0 Ohm/km
  - 20 AWG - 35.9 Ohm/km
- **Dielectric Strength**
  - Insulation - 2000 Vdc/ 1 min. between conductors
  - Sheath 5000 Vdc /1 min

### MARKING

Cables are marked as follows:

**TELDOR CABLES --- Part No. --- Description (e.g. 4x2x16AWG) --- RoHS --- Meter Marking (optional)**  
 or per customer request.

### ORDERING

Consult the standard cable part numbers table next page.  
 Standard packaging: 500 and 1000 meters on suitable drums. Other packaging options, constructions and materials may be available. Please contact the Teldor Cables Marketing Staff listed on page 2.

## Overall Shielded Armored Cables per NEC 725

### Cable Part Numbers, Construction, Dimensions and Weights

Part No.	Size AWG	Pairs = P Triads = T	No. of Pairs / Triads	Inner Jacket Thickness mm	Outer Jacket Thickness mm	Cable Nominal Diameter mm	Cable Nominal Weight kg/km
648001-D	20	P	1	0.90	0.90	8.8	128
648002-D	20	P	2	1.30	1.30	13.4	365
648004-D	20	P	4	1.30	1.30	14.6	430
648008-D	20	P	8	1.30	1.30	17.8	705
648012-D	20	P	12	1.30	1.30	19.9	865
648016-D	20	P	16	1.55	1.55	23.4	1225
648024-D	20	P	24	1.55	1.55	26.4	1530
649001-D	18	P	1	0.90	0.90	9.7	220
649004-D	18	P	4	1.30	1.30	15.2	475
649008-D	18	P	8	1.30	1.30	19.2	780
649012-D	18	P	12	1.30	1.30	21.6	970
649016-D	18	P	16	1.55	1.55	25.3	1370
649024-D	18	P	24	1.55	1.55	29.6	1950
646001-D	16	P	1	0.90	0.90	10.1	185
646004-D	16	P	4	1.30	1.30	17.5	660
646008-D	16	P	8	1.55	1.55	21.7	980
646012-D	16	P	12	1.55	1.30	25.1	1380
646016-D	16	P	16	1.55	1.55	27.4	1610
646024-D	16	P	24	1.55	1.55	32.2	2300
657001-D	20	T	1	0.90	0.90	9.4	215
657004-D	20	T	4	1.30	1.30	17.1	630
657012-D	20	T	12	1.55	1.55	25.3	1335
657016-D	20	T	16	1.55	1.55	27.4	1545
651001-D	18	T	1	0.90	0.90	10.0	240
651004-D	18	T	4	1.30	1.30	18.4	705
651012-D	18	T	12	1.55	1.55	27.6	1520
651016-D	18	T	16	1.55	1.55	30.8	2025
647001-D	16	T	1	0.90	0.90	10.5	265
655004-D	16	T	4	1.30	1.30	19.7	805
655008-D	16	T	8	1.55	1.55	30.1	1825
655012-D	16	T	12	1.55	1.55	30.8	2050
655016-D	16	T	16	1.55	1.55	33.5	23.85

All cable dimensions and weights are subject to normal manufacturing tolerances.

## Individual and Overall Shielded Armored Instrumentation Cables per NEC 725

### APPLICATIONS

- For cable tray installation in intrinsically safe environment.
- For transmission of analog or digital signals designed for process control
- For direct burial installations where resistance to crush and rodent damage is needed
- For pulling into ducts

### STANDARDS

- **NEC 725** Class 1, division 2 Hazardous Areas
- IEC-60332-1
- UL 1581 VW-1

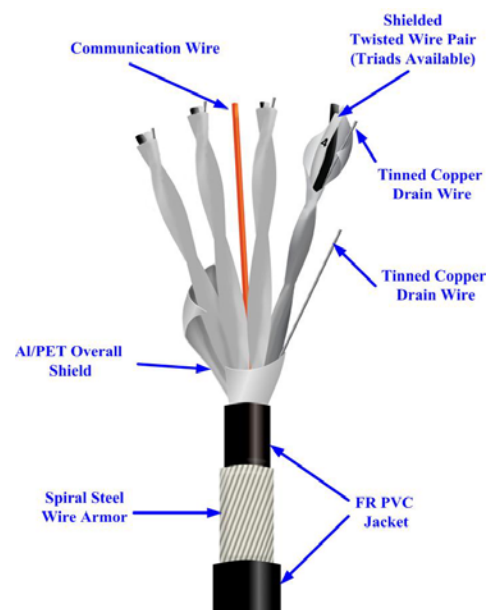
### CONSTRUCTION

<b>Conductor:</b>	7-strand concentric bare copper Class B
<b>Insulation:</b>	FR PVC complying with BS 6746 Type 5
<b>Pairs/Triads:</b>	Two or three cores are twisted into Pairs or Triads, in nominal lays of 50 to 60 mm
<b>Color Code:</b>	<ul style="list-style-type: none"> <li>- Pairs: Black white with successive numbers</li> <li>- Triads: Black red white with successive numbers</li> </ul>
<b>Individual Shielding:</b>	Each pair/triad is individually shielded with a polyester/aluminum (AL/PET) foil, aluminum side facing inwards; 100% coverage
<b>Pair/Triad Drain Wire:</b>	7-strand tinned copper having a diameter of 20AWG or 22 AWG depending on core size
<b>Communication Wire:</b>	<ul style="list-style-type: none"> <li>- 22 AWG tinned copper, 7-strand conductor</li> <li>- Orange colored PVC insulated</li> </ul>
<b>Cabling:</b>	Pairs or triads and communication wire are cabled into a cable core
<b>Overall Shielding:</b>	Shielded with a polyester/aluminum (AL/PET) foil, aluminum side facing inwards. 100% coverage.
<b>Overall drain wire:</b>	7-strand tinned copper having the same size as the conductor
<b>Inner jacket</b>	Black FR PVC complying with BS 6746 Type 9
<b>A armor:</b>	Spirally applied soft galvanized steel wires
<b>Outer jacket:</b>	Black FR PVC complying with BS 6746 Type 9

### RATING

- Operating temperature range -10°C to 90°C

- 300 Vrms 90°C
- Fire retardancy per IEC 60332-1, UL-1581 VW-1
- Cables meeting IEC-60332-3C are available
- Cables meeting IEEE 383 Cl. IE and UL-1666 are available



### ELECTRICAL PROPERTIES

- **Max. DC Resistance @ 200C**
  - 16 AWG - 13.9 Ohm/km
  - 18 AWG - 22.0 Ohm/km
  - 20 AWG - 35.9 Ohm/km
- **Mutual capacitance @25°C/1kHz**
  - 16 AWG - 185 pF/m
  - 18 AWG - 170 pF/m
  - 20 AWG - 145 pF/m
- **Dielectric Strength**
  - Insulation - 2000 Vdc/ 1 min. between conductors
  - Sheath 5000 Vdc /1 min

### MARKING

Cables are marked as follows:

**TELDOR CABLES --- Part No. --- Description (e.g. 4x2x16AWG) --- RoHS --- Meter Marking (optional)** or per customer request.

### ORDERING

Consult the standard cable part numbers table next page. Standard packaging: 500 and 1000 meters on suitable drums. Other packaging options, constructions and materials may be available. Please contact the Teldor Cables Marketing Staff listed on page 2.

## Individual and Overall Shielded Armored Instrumentation Cables per NEC 725

### Cable Part Numbers, Construction, Dimensions and Weights

Part No.	Size AWG	Pairs = P Triads = T	No. of Pairs /Triads	Inner Jacket Thickness mm	Outer Jacket Thickness mm	Cable Nominal Diameter mm	Cable Nominal Weight kg/km
648001-D	20	P	1	0.90	0.90	8.8	130
660002-D	20	P	2	1.30	1.30	13.9	350
660004-D	20	P	4	1.30	1.30	15.6	440
660006-D	20	P	6	1.30	1.30	17.9	635
660008-D	20	P	8	1.30	1.55	19.6	740
660012-D	20	P	12	1.55	1.55	23.2	1080
660016-D	20	P	16	1.55	1.55	25.1	1250
660024-D	20	P	24	1.80	1.80	30.3	1840
649001-D	18	P	1	0.90	0.90	9.7	220
659004-D	18	P	4	1.30	1.30	17.4	615
659008-D	18	P	8	1.30	1.60	21.2	880
659012-D	18	P	12	1.55	1.60	25.1	1270
659016-D	18	P	16	1.55	1.60	28.1	1680
659024-D	18	P	24	1.80	1.80	32.8	2200
646001-D	16	P	1	0.90	0.90	10.1	185
658002-D	16	P	2	1.30	1.30	16.1	450
658004-D	16	P	4	1.30	1.30	18.5	695
658008-D	16	P	8	1.30	1.30	22.8	1105
658012-D	16	P	12	1.55	1.60	26.9	1405
658016-D	16	P	16	1.55	1.60	30.2	1950
658024-D	16	P	24	1.80	1.80	35.9	2700
657001-D	20	T	1	0.90	0.90	9.4	147
650004-D	20	T	4	1.30	1.30	17.4	595
650012-D	20	T	12	1.55	1.55	25.9	1240
650016-D	20	T	16	1.55	1.55	29.0	1650
651001-D	18	T	1	0.90	0.90	10.0	170
656004-D	18	T	4	1.30	1.55	19.2	730
656012-D	18	T	12	1.55	1.55	29.0	1760
656016-D	18	T	16	1.55	1.80	31.9	2090
647001-D	16	T	1	0.90	0.90	10.5	210
647004-D	16	T	4	1.30	1.30	20.0	805
647012-D	16	T	12	1.55	1.55	31.3	2050
647016-D	16	T	16	1.55	1.55	34.6	2550

All cable dimensions and weights are subject to normal manufacturing tolerances.



## Individual and Overall Shielded Instrumentation Cables per BS 5308 Part 1 Type 1

### APPLICATIONS

- For cable tray installation in intrinsically safe environment.
- For transmission of analog or digital signals designed for process control

### STANDARDS

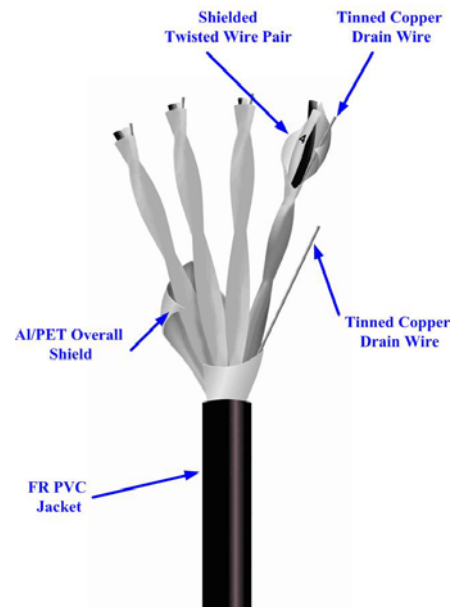
- BS 5308 Part 1, Type 1
- IEC-60332-1
- UL 1581 VW-1

### CONSTRUCTION

<b>Conductor:</b>	Stranded annealed bare copper complying with BS 5308 Part 1
<b>Insulation:</b>	Polyethylene complying with BS 6234 Type 03 with a radial thickness of 0.6 mm
<b>Pairs:</b>	Two cores are twisted into pairs in nominal lays of 50 to 60 mm
<b>Color Code:</b>	Black / white with successive numbers, or per color code conforming to BS 5308 Part 1
<b>Individual Shielding:</b>	Each pair is individually shielded with a polyester/aluminum (AL/PET) foil, aluminum side facing inwards; 125% coverage
<b>Pair drain Wire:</b>	0.5 mm <sup>2</sup> tinned copper
<b>Cabling:</b>	The pairs are cabled into a cable core
<b>Overall Shielding:</b>	Shielded with a polyester/aluminum (AL/PET) foil, aluminum side facing inwards. 100% coverage.
<b>Overall drain wire:</b>	0.5 mm <sup>2</sup> tinned copper
<b>Outer jacket:</b>	Black FR PVC complying with BS 6746 Type 6 or Type TM1

### RATING

- Operating temperature range -10°C to 90°C
- 300 Vrms 90°C
- Fire retardancy per IEC 60332-1, UL-1581 VW-1
- Cables meeting IEC-60332-3C are available



### ELECTRICAL PROPERTIES

- **Max. DC Resistance @ 20°C:**
  - 0.5 mm<sup>2</sup> - 39.7 Ohm/km
  - 0.75 mm<sup>2</sup> - 26.5 Ohm/km
  - 1.0 mm<sup>2</sup> - 18.5 Ohm/km
  - 1.5 mm<sup>2</sup> - 12.3 Ohm/km
- **Mutual capacitance @ 25°C/1kHz:** 115 pF/m
- **Dielectric Strength:**
  - Insulation - 2000 Vdc / 1 min. between conductors
  - Sheath - 5000 Vdc / 1 min

### MARKING

Cables are marked as follows:

**TEL DOR CABLES --- Part No. --- Description (e.g. 4x2x0.5) --- RoHS --- Meter Marking (optional)**  
or per customer request.

### ORDERING

Consult the standard cable part numbers table next page. Standard packaging: 500 and 1000 meters on suitable drums. Other packaging options, constructions and materials may be available. Please contact the Teldor Cables Marketing Staff listed on page 2.

## *Individual and Overall Shielded Instrumentation Cables per BS 5308 Part 1 Type 1*

### Cable Construction, Dimensions and Weights

Sequential No.	Size mm <sup>2</sup>	Pairs = P Triads = T	No. of Pairs / Triads	Radial Thickness Sheath mm	Cable Nominal Diameter mm	Cable Nominal Weight kg/km
1	0.5	P	1	0.9	6.4	52
2	0.5	P	2	1.1	11.2	103
3	0.5	P	5	1.2	14.5	193
4	0.5	P	10	1.3	20.3	340
5	0.5	P	15	1.5	23.8	488
6	0.5	P	20	1.5	26.5	613
7	0.5	P	24	1.7	29.9	746
8	0.75	P	1	0.9	6.8	59
9	0.75	P	2	1.1	12.0	118
10	0.75	P	5	1.2	15.6	225
11	0.75	P	10	1.3	22.0	403
12	0.75	P	15	1.5	25.8	583
13	0.75	P	20	1.7	29.1	763
14	0.75	P	24	2.0	33.0	940
15	1.0	P	1	0.9	7.2	66
16	1.0	P	2	1.1	12.7	132
17	1.0	P	5	1.2	16.5	258
18	1.0	P	10	1.3	23.3	467
19	1.0	P	15	1.5	27.3	675
20	1.0	P	20	1.7	30.8	887
21	1.0	P	24	2.0	35.0	1092
22	1.5	P	1	0.9	7.8	80
23	1.5	P	2	1.2	14.1	167
24	1.5	P	5	1.3	18.3	327
25	1.5	P	10	1.5	26.1	610
25	1.5	P	15	1.7	30.5	880
27	1.5	P	20	1.7	34.0	1225
28	1.5	P	24	2.0	38.6	1380

All cable dimensions and weights are subject to normal manufacturing tolerances.



## Individual and Overall Shielded Armored Instrumentation Cables per BS 5308 Part 1 Type 2

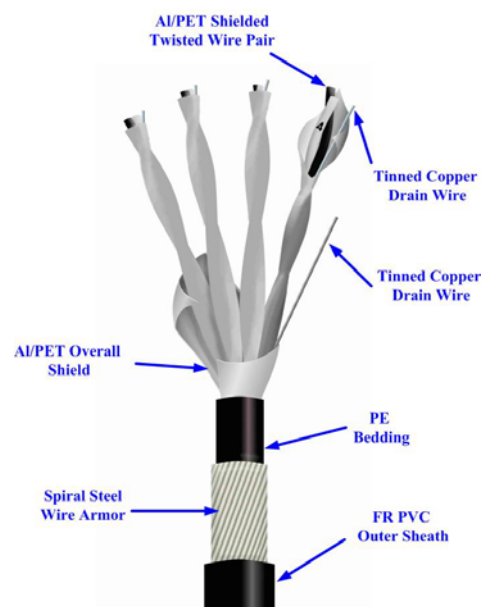
### APPLICATIONS

- For cable tray installation in intrinsically safe environment.
- For transmission of analog or digital signals designed for process control

### STANDARDS

- BS 5308 Part 1, Type 2
- IEC-60332-1
- UL 1581 VW-1

### CONSTRUCTION



<b>Conductor:</b>	Stranded annealed bare copper complying with BS 5308 Part 1
<b>Insulation:</b>	Polyethylene complying with BS 6234 Type 03 with a radial thickness of 0.6 mm
<b>Pairs:</b>	Two cores are twisted into pairs in nominal lays of 50 to 60 mm
<b>Color Code:</b>	Black / white with successive numbers, or per color code conforming to BS 5308 Part 1
<b>Individual Shielding:</b>	Each pair is individually shielded with a polyester/aluminum (AL/PET) foil, aluminum side facing inwards; 125% coverage
<b>Pair drain Wire:</b>	0.5 mm <sup>2</sup> tinned copper
<b>Cabling:</b>	The pairs are cabled into a cable core
<b>Overall Shielding:</b>	Shielded with a polyester/aluminum (AL/PET) foil, aluminum side facing inwards. 125% coverage.
<b>Overall drain wire:</b>	0.5 mm <sup>2</sup> tinned copper
<b>Inner bedding:</b>	Black polyethylene in appropriate radial thickness complying with BS 6234 Type 2Cor Type 03
<b>Aarmor:</b>	Spirally applied soft galvanized steel wires
<b>Outer jacket:</b>	Black FR PVC complying with BS 6746 Type TM1

### RATING

- Operating temperature range -10°C to 90°C
- 300 Vrms 90°C
- Fire retardancy per IEC 60332-1, UL-1581 VW-1
- Cables meeting IEC-60332-3C are available

### ELECTRICAL PROPERTIES

- **Max. DC Resistance @ 20°C:**
  - 0.5 mm<sup>2</sup> - 39.7 Ohm/km
  - 0.75 mm<sup>2</sup> - 26.5 Ohm/km
  - 1.0 mm<sup>2</sup> - 18.5 Ohm/km
  - 1.5 mm<sup>2</sup> - 12.3 Ohm/km
- **Mutual capacitance @ 25°C/1kHz:** 115 pF/m
- **Dielectric Strength:**
  - Insulation - 2000 Vdc / 1 min. between conductors
  - Sheath - 5000 Vdc / 1 min

### MARKING

Cables are marked as follows:

**TELDOR CABLES --- Part No. --- Description (e.g. 4x2x0.5) --- RoHS --- Meter Marking (optional)** or per customer request.

### ORDERING

Consult the standard cable part numbers table next page. Standard packaging: 500 and 1000 meters on suitable drums. Other packaging options, constructions and materials may be available. Please contact the Teldor Cables Marketing Staff listed on page 2.

## Individual and Overall Shielded Armored Instrumentation Cables per BS 5308 Part 1 Type 2

### Cable Construction, Dimensions and Weights

Sequential No.	Size mm <sup>2</sup>	Pairs = P Triads = T	No. of Pairs / Triads	Radial Thickness		Cable Nominal Diameter mm	Cable Nominal Weight kg/km
				Inner Sheath mm	Outer Sheath mm		
1	0.5	P	1	0.8	1.3	10.6	220
2	0.5	P	2	1.1	1.5	16.0	403
3	0.5	P	5	1.2	1.6	20.2	680
4	0.5	P	10	1.3	1.8	27.1	1175
5	0.5	P	15	1.5	1.8	30.6	1460
6	0.5	P	20	1.5	1.9	33.5	1703
7	0.5	P	24	1.5	1.9	36.5	1930
8	0.75	P	1	0.8	1.3	11.0	232
9	0.75	P	2	1.1	1.5	16.8	432
10	0.75	P	5	1.2	1.6	21.3	750
11	0.75	P	10	1.3	1.8	28.8	1315
12	0.75	P	15	1.5	1.9	32.8	1650
13	0.75	P	20	1.7	2.0	37.1	2008
14	0.75	P	24	2.0	2.2	41.4	2605
15	1.0	P	1	0.8	1.3	11.4	252
16	1.0	P	2	1.1	1.5	17.5	466
17	1.0	P	5	1.2	1.6	22.2	810
18	1.0	P	10	1.3	1.6	30.1	1422
19	1.0	P	15	1.5	1.9	34.3	1788
20	1.0	P	20	1.7	2.0	38.8	2400
21	1.0	P	24	2.0	2.2	43.4	2855
22	1.5	P	1	0.8	1.3	12.7	203
23	1.5	P	2	1.2	1.6	19.8	345
24	1.5	P	5	1.3	1.7	24.9	585
25	1.5	P	10	1.5	1.9	33.1	807
25	1.5	P	15	1.7	2.0	38.5	1182
27	1.5	P	20	1.7	2.1	42.2	1305
28	1.5	P	24	2.0	2.5	48.6	1884

All cable dimensions and weights are subject to normal manufacturing tolerances.

## Individual and Overall Shielded Instrumentation Cables per BS 5308 Part 2 Type 1

### APPLICATIONS

- For cable tray installation in intrinsically safe environment.
- For transmission of analog or digital signals designed for process control

### STANDARDS

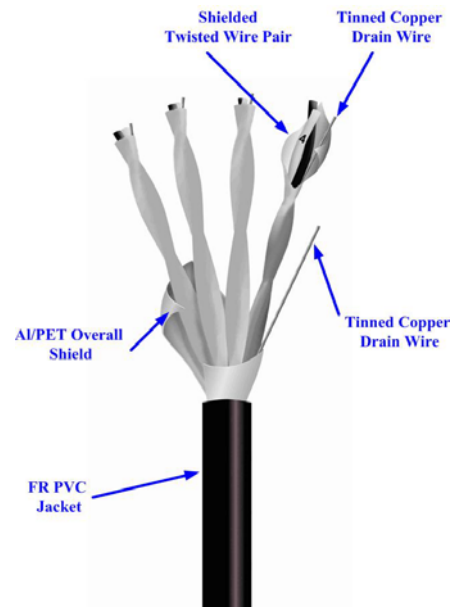
- BS 5308 Part 2, Type 1
- IEC-60332-1
- UL 1581 VW-1

### CONSTRUCTION

<b>Conductor:</b>	Stranded annealed bare copper complying with BS 5308 Part 2
<b>Insulation:</b>	PVC per BS 6746 Type T11, radial thickness 0.6 mm
<b>Pairs:</b>	Two cores are twisted into pairs in nominal lays of 50 to 60 mm
<b>Color Code:</b>	Black / white with successive numbers, or per color code conforming to BS 5308 Part 2
<b>Individual Shielding:</b>	Each pair is individually shielded with a polyester/aluminum (AL/PET) foil, aluminum side facing inwards; 125% coverage
<b>Pair drain Wire:</b>	0.5 mm <sup>2</sup> tinned copper
<b>Cabling:</b>	The pairs are cabled into a cable core
<b>Overall Shielding:</b>	Shielded with a polyester/aluminum (AL/PET) foil, aluminum side facing inwards. 125% coverage.
<b>Overall drain wire:</b>	0.5 mm <sup>2</sup> tinned copper
<b>Outer jacket:</b>	Black FR PVC complying with BS 6746 Type TM1

### RATING

- Operating temperature range -10°C to 90°C
- 300 Vrms 90°C
- Fire retardancy per IEC 60332-1, UL-1581 VW-1
- Cables meeting IEC-60332-3C are available



### ELECTRICAL PROPERTIES

- **Max. DC Resistance @ 20°C:**
  - 0.5 mm<sup>2</sup> - 39.7 Ohm/km
  - 0.75 mm<sup>2</sup> - 26.5 Ohm/km
  - 1.0 mm<sup>2</sup> - 18.5 Ohm/km
  - 1.5 mm<sup>2</sup> - 12.3 Ohm/km
- **Dielectric Strength:**
  - Insulation - 2000 Vdc / 1 min. between conductors
  - Sheath - 5000 Vdc / 1 min

### MARKING

Cables are marked as follows:

**TELDOR CABLES --- Part No. --- Description (e.g. 4x2x0.5) --- RoHS --- Meter Marking (optional)**  
 or per customer request.

### ORDERING

Consult the standard cable part numbers table next page. Standard packaging: 500 and 1000 meters on suitable drums. Other packaging options, constructions and materials may be available. Please contact the Teldor Cables Marketing Staff listed on page 2.

## Individual and Overall Shielded Instrumentation Cables per BS 5308 Part 2 Type 1

### Cable Construction, Dimensions and Weights

Sequential No.	Size mm <sup>2</sup>	Pairs = P Triads = T	No. of Pairs / Triads	Radial Thickness Sheath mm	Cable Nominal Diameter mm	Cable Nominal Weight kg/km
1	0.5	P	1	0.8	6.2	53
2	0.5	P	2	1.1	11.2	109
3	0.5	P	5	1.2	14.5	205
4	0.5	P	10	1.3	20.3	365
5	0.5	P	15	1.5	23.8	528
6	0.5	P	20	1.5	26.5	668
7	0.5	P	24	1.7	29.9	813
8	0.75	P	1	0.8	6.6	60
9	0.75	P	2	1.1	12.0	125
10	0.75	P	5	1.2	15.6	241
11	0.75	P	10	1.3	22.0	436
12	0.75	P	15	1.5	25.8	630
13	0.75	P	20	1.7	29.1	827
14	0.75	P	24	2.0	33.0	1015
15	1.0	P	1	1.0	7.4	74
16	1.0	P	2	1.2	12.9	147
17	1.0	P	5	1.3	16.7	283
18	1.0	P	10	1.5	23.8	525
19	1.0	P	15	1.7	27.8	756
20	1.0	P	20	1.7	31.0	957
21	1.0	P	24	2.0	35.1	1178
22	1.5	P	1	1.0	8.0	88
23	1.5	P	2	1.2	14.1	176
24	1.5	P	5	1.3	18.3	349
25	1.5	P	10	1.5	26.1	654
25	1.5	P	15	1.7	30.5	945
27	1.5	P	20	1.7	34.0	1207
28	1.5	P	24	2.0	38.6	1480

All cable dimensions and weights are subject to normal manufacturing tolerances.

## Individual and Overall Shielded Armored Instrumentation Cables per BS 5308 Part 2 Type 2

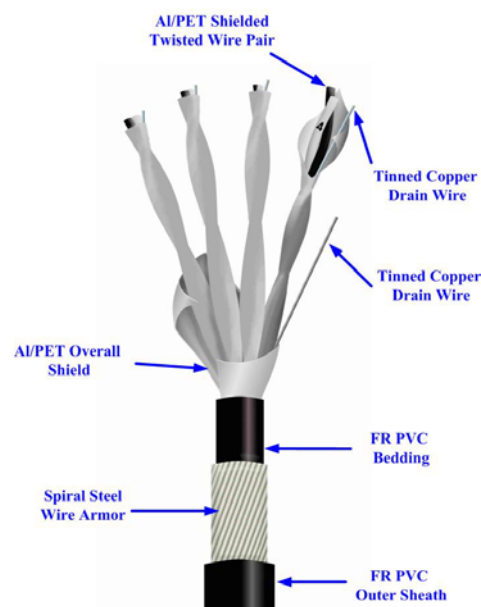
### APPLICATIONS

- For cable tray installation in intrinsically safe environment.
- For transmission of analog or digital signals designed for process control

### STANDARDS

- BS 5308 Part 2, Type 2
- IEC-60332-1
- UL 1581 VW-1

### CONSTRUCTION



<b>Conductor:</b>	Stranded annealed bare copper complying with BS 5308 Part 2
<b>Insulation:</b>	PVC per BS 6746 Type T11, radial thickness 0.6 mm
<b>Pairs:</b>	Two cores are twisted into pairs in nominal lays of 50 to 60 mm
<b>Color Code:</b>	Black / white with successive numbers, or per color code conforming to BS 5308 Part 2
<b>Individual Shielding:</b>	Each pair is individually shielded with a polyester/aluminum (AL/PET) foil, aluminum side facing inwards; 125% coverage
<b>Pair drain Wire:</b>	0.5 mm <sup>2</sup> tinned copper
<b>Cabling:</b>	The pairs are cabled into a cable core
<b>Overall Shielding:</b>	Shielded with a polyester/aluminum (AL/PET) foil, aluminum side facing inwards. 125% coverage.
<b>Overall drain wire:</b>	0.5 mm <sup>2</sup> tinned copper
<b>Inner bedding:</b>	Black FR PVC complying with BS 6746 Type TM1
<b>Aarmor:</b>	Spirally applied soft galvanized steel wires
<b>Outer jacket:</b>	Black FR PVC complying with BS 6746 Type TM1

### RATING

- Operating temperature range -10°C to 90°C
- 300 Vrms 90°C
- Fire retardancy per IEC 60332-1, UL-1581 VW-1
- Cables meeting IEC-60332-3C are available

### ELECTRICAL PROPERTIES

- **Max. DC Resistance @ 20°C:**
  - 0.5 mm<sup>2</sup> - 39.7 Ohm/km
  - 0.75 mm<sup>2</sup> - 26.5 Ohm/km
  - 1.0 mm<sup>2</sup> - 18.5 Ohm/km
  - 1.5 mm<sup>2</sup> - 12.3 Ohm/km
- **Dielectric Strength:**
  - Insulation - 2000 Vdc / 1 min. between conductors
  - Sheath - 5000 Vdc / 1 min

### MARKING

Cables are marked as follows:

**TELDOR CABLES --- Part No. --- Description (e.g. 4x2x0.5) --- RoHS --- Meter Marking (optional)**  
 or per customer request.

### ORDERING

Consult the standard cable part numbers table next page.  
 Standard packaging: 500 and 1000 meters on suitable drums. Other packaging options, constructions and materials may be available. Please contact the Teldor Cables Marketing Staff listed on page 2.

## Individual and Overall Shielded Armored Instrumentation Cables per BS 5308 Part 2 Type 2

### Cable Construction, Dimensions and Weights

Sequential No.	Size mm <sup>2</sup>	Pairs = P Triads = T	No. of Pairs / Triads	Radial Thickness		Cable Nominal Diameter mm	Cable Nominal Weight kg/km
				Inner Sheath mm	Outer Sheath mm		
1	0.5	P	1	0.9	1.1	10.4	222
2	0.5	P	2	1.1	1.5	16.0	407
3	0.5	P	5	1.2	1.6	20.2	695
4	0.5	P	10	1.3	1.8	27.1	1200
5	0.5	P	15	1.5	1.8	30.6	1502
6	0.5	P	20	1.5	1.9	33.5	1755
7	0.5	P	24	1.7	2.1	38.1	2309
8	0.75	P	1	0.9	1.3	11.2	247
9	0.75	P	2	1.1	1.5	16.8	439
10	0.75	P	5	1.2	1.6	21.3	765
11	0.75	P	10	1.3	1.8	28.8	1345
12	0.75	P	15	1.5	1.9	32.8	1696
13	0.75	P	20	1.7	2.0	37.1	2269
14	0.75	P	24	2.0	2.2	41.4	2679
15	1.0	P	1	0.9	1.3	11.6	260
16	1.0	P	2	1.2	1.6	18.6	585
17	1.0	P	5	1.3	1.7	23.3	982
18	1.0	P	10	1.5	1.9	30.8	1508
19	1.0	P	15	1.7	2.0	35.8	2137
20	1.0	P	20	1.7	2.1	39.2	2511
21	1.0	P	24	2.0	2.4	44.9	3322
22	1.5	P	1	0.9	1.3	12.2	288
23	1.5	P	2	1.2	1.6	19.8	651
24	1.5	P	5	1.3	1.7	24.9	1107
25	1.5	P	10	1.5	1.9	33.1	1721
25	1.5	P	15	1.7	2.0	38.5	2448
27	1.5	P	20	1.7	2.1	42.2	2885
28	1.5	P	24	2.0	2.4	48.4	3843

All cable dimensions and weights are subject to normal manufacturing tolerances.

## *Unshielded Fire Alarm Cables*

### APPLICATIONS

- For fire-alarm systems – indoor and outdoor use
- For cable tray installation in intrinsically safe environment.
- For transmission of analog or digital signals designed for process control

### STANDARDS

- IS 1220 Fire Alarm Systems
- Israeli Fire Fighting Regulations
- All NYY cables are recognized by the Standards Institute of Israel
- IEC-60332-1
- UL 1581 VW-1

### CONSTRUCTION

<b>Conductor:</b>	Solid annealed bare or tinned copper Class B
<b>Insulation:</b>	FR PVC
<b>Color Code:</b>	Up to 10 cores: red, black, white, blue, pink, brown, gray, orange, purple, turquoise. Cables having more than 10 cores are produced in pairs
<b>Pairs/Triads:</b>	Are per appropriate table. Each two or three cores are twisted into a Pair/Triad, in nominal lays of 50 to 60 mm
<b>Cabling:</b>	Singles, pairs or triads are cabled into a cable core
<b>Inner jacket:</b>	Red FR PVC
<b>Outer jacket:</b>	Red UV-resistant FR PVC (single jacket cables are also available)
<b>Rip-cord:</b>	Available upon request
<b>Armor:</b>	A corrugated steel armor is available for double jacket cables

### RATING

- Operating temperature range -10°C to 90°C
- 300 Vrms 90°C
- Fire retardancy per IEC 60332-1, UL-1581 VW-1
- Cables meeting IEC-60332-3C are available

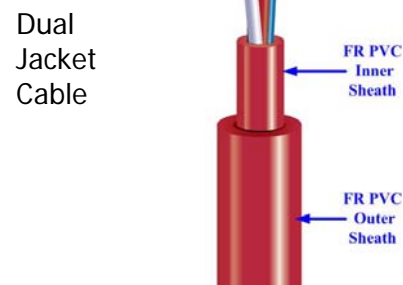
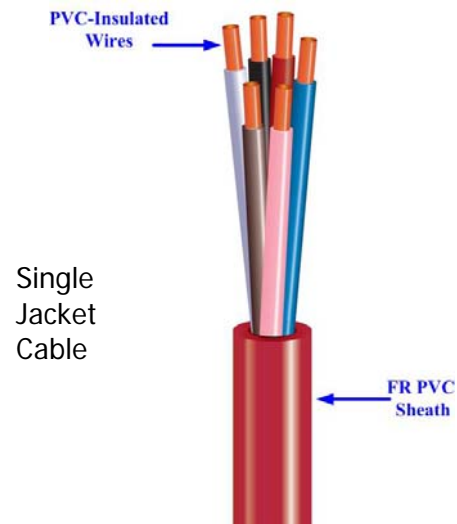
### ELECTRICAL PROPERTIES

- **Max. DC Resistance @ 20°C:**

Conductor diameter 0.8 mm:	35.7 Ohm/km
Conductor diameter 1.0 mm:	22.8 Ohm/km
Conductor diameter 1.4 mm:	12.0 Ohm/km

#### **Dielectric Strength:**

Insulation - 1500 Vdc / 1 min. between conductors  
 Jacket - 3000 Vdc / 1 min



### MARKING

Cables are marked as follows:

**TEL DOR CABLES --- Part No. --- Description (e.g. 10x2x0.8) --- RoHS --- Meter marking every 50 cm**

or per customer request.

### ORDERING

Consult the standard cable part numbers table next page. Standard packaging: 500 and 1000 meters on suitable drums. Other packaging options, constructions and materials may be available. Please contact the Teldor Cables Marketing Staff listed on page 2.



## Unshielded Fire Alarm Cables

### Cable Part Numbers, Construction, Dimensions and Weights

Teldor Part Number	Single/Double Sheath	Size (mm)	Singles = S Pairs = P Triads = T	No. of Singles/ Pairs/ Triads	Overall Sheath Thickness (mm)	Cable Nominal Diameter (mm)	Cable Nominal Weight (kg/km)
<b>Standard Type</b>							
407020-D	Single	0.8	S	2	0.5	3.8	21
4070202-D	Single	0.8	S	2	0.8	5.3	26
407022-D	Single	0.8	S	4	0.5	4.5	33
4070203-D	Single	0.8	S	4	0.8	5.8	54
4070220-D	Single	0.8	S	6	0.8	5.8	54
407026-D	Single	0.8	S	8	0.9	7.3	73
407025-D	Single	0.8	S	10	0.9	7.3	85
4070251-D	Single	0.8	S	12	0.9	7.5	98
4070253-D	Single	0.8	S	16	0.9	8.2	125
4070256-D	Single	0.8	S	24	1.0	10.2	183
4070201-D	Single	0.8	P	1	0.55	3.8	21
407300-D	Single	0.8	P	2	0.6	6.0	39
4073010-D	Single	0.8	P	4	0.75	7.3	71
407310-D	Single	0.8	P	5	0.75	8.1	85
407311-D	Single	0.8	P	6	0.9	8.7	103
407312-D	Single	0.8	P	8	0.95	9.6	133
407255-D	Single	0.8	P	10	1.0	10.9	163
407257-D	Single	0.8	P	20	1.0	13.2	290
407021-D	Single	1.0	P	1	0.8	4.9	33
4070213-D	Single	<sup>(1)</sup> 1.0	P	1	0.8	4.9	33
4070218-D	Single	1.4	P	1	0.8	6.8	60
4070210-D	Single	1.0	S	4	0.75	5.5	52
4070215-D	Single	1.0	P	2	0.75	7.2	58
40702182-D	Single	1.4	P	2	0.75	10.6	111
40702181-D	Single	1.4	S	4	0.75	10	95
<b>NYT Type<sup>(2)</sup></b>							
407032-D	Double	0.8	S	2	1.8	7.8	68
407033-D	Double	0.8	S	4	1.8	8.5	89
407036-D	Double	0.8	S	6	1.8	9.7	115
407034-D	Double	0.8	S	8	1.8	11.6	148
407037-D	Double	0.8	S	10	1.8	11.7	165
407039-D	Double	0.8	S	12	1.8	12.0	184
407040-D	Double	0.8	S	16	1.8	13.1	226
4070401-D	Double	0.8	S	24	1.8	15.7	313
407131-D	Double	0.8	P	1	1.8	7.8	68
407132-D	Double	0.8	P	2	1.8	10.7	108
407134-D	Double	0.8	P	4	1.8	12.1	152
407135-D	Double	0.8	P	5	1.8	13.3	178
407136-D	Double	0.8	P	6	1.8	13.7	199
407138-D	Double	0.8	P	8	1.8	14.9	242
4070383-D	Double	0.8	P	10	1.8	16.7	284
407038-D	Double	0.8	P	20	1.8	20.1	482
4070230-D	Double	1.0	S	2	1.8	8.6	86
4073025-D	Double	1.0	S	4	1.8	8.8	105
4070232-D	Double	1.0	P	1	1.8	8.6	76
4070214-D	Double	1.0	P	1	1.8	8.6	88
407021801-D	Double	1.4	P	1	1.8	10.5	131

(1) All conductors are made of BC except those designated with (1) which are made of TPC.

(2) All NYT cables are recognized by the Standards Institute of Israel

All cable dimensions and weights are subject to normal manufacturing tolerances.



## Shielded Fire Alarm Cables

### APPLICATIONS

- For fire-alarm systems – indoor and outdoor use
- For cable tray installation in intrinsically safe environment.
- For transmission of analog or digital signals designed for process control

### STANDARDS

- IS 1220 Fire Alarm Systems
- Israeli Fire Fighting Regulations
- IEC-60332-1
- UL 1581 VW-1

### CONSTRUCTION

<b>Conductor:</b>	Solid annealed bare copper Class B
<b>Insulation:</b>	FR PVC
<b>Color Code:</b>	Up to 10 cores: red, black, white, blue, pink, brown, gray, orange, purple, turquoise. Cables having more than 10 cores are produced in pairs
<b>Pairs/Triads:</b>	Are per appropriate table. Each two or three cores are twisted into a Pair/Triad, in nominal lays of 50 to 60 mm
<b>Cabling:</b>	Singles, pairs or triads are cabled into a cable core
<b>Overall Shielding:</b>	Polyester/aluminum (AL/PET) foil, aluminum side facing inwards. 100% coverage
<b>Drain wire:</b>	0.5 mm <sup>2</sup> tinned copper
<b>Inner jacket:</b>	Red FR PVC
<b>Outer jacket:</b>	Red UV-resistant FR PVC (single jacket cables are also available)
<b>Rip-cord:</b>	Available upon request
<b>Armor:</b>	A corrugated steel armor is available for double jacket cables

### RATING

- Operating temperature range -10°C to 90°C
- 300 Vrms 90°C
- Fire retardancy per IEC 60332-1, UL-1581 VW-1
- Cables meeting IEC-60332-3C are available
- Cables meeting IEEE 383 Cl. IE and UL-1666 are available

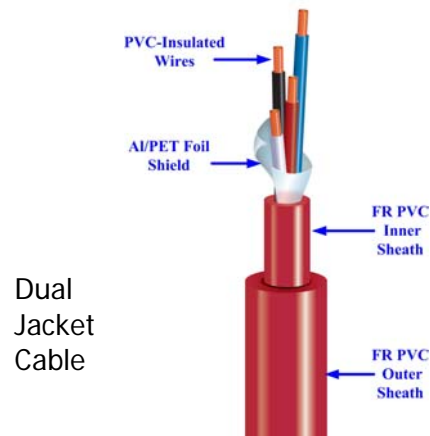
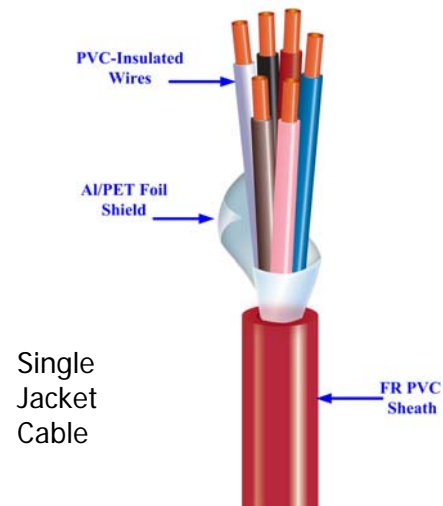
### ELECTRICAL PROPERTIES

- **Max. DC Resistance @ 20°C:**

Conductor diameter 0.8 mm:	35.7 Ohm/km
Conductor diameter 1.0 mm:	22.8 Ohm/km
Conductor diameter 1.4 mm:	12.0 Ohm/km

### Dielectric Strength:

Insulation - 1500 Vdc / 1 min. between conductors  
 Jacket - 3000 Vdc / 1 min



### MARKING

Cables are marked as follows:

**TELDOR CABLES --- Part No. --- Description (e.g. 10x2x0.8) --- RoHS --- Meter marking every 50 cm**

or per customer request.

### ORDERING

Consult the standard cable part numbers table next page. Standard packaging: 500 and 1000 meters on suitable drums. Other packaging options, constructions and materials may be available. Please contact the Teldor Cables Marketing Staff listed on page 2.

## Shielded Fire Alarm Cables

### Cable Part Numbers, Construction, Dimensions and Weights

Teldor Part Number	Single/ Double Sheath	Size (mm)	Singles=S Pairs = P Triads = T	No. of Singles/ Pairs/ Triads	Overall Sheath Thickness (mm)	Cable Nominal Diameter (mm)	Cable Nominal Weight kg/km
4073020-D	Single	0.8	S	2	0.65	4.2	26
4070202-D	Single	0.8	S	2	0.7	5.2	27
40730206-D	Single	0.8	S	4	0.6	4.7	38
40730207-D	Single	0.8	S	4	1.8	9.6	84
40760208-D	Single	0.8	S	6	0.8	5.8	56
40730209-D	Single	0.8	S	8	0.9	7.4	77
40730210-D	Single	0.8	S	10	0.9	7.4	89
40730212-D	Single	0.8	S	12	0.9	7.6	102
40730215-D	Single	0.8	S	16	0.9	8.3	127
40730218-D	Single	0.8	S	24	1.0	10.3	185
40730260-D	Single	0.8	P	1	0.9	5.4	35
4073026-D	Single	0.8	P	2	0.9	6.7	51
4073023-D	Single	0.8	P	4	0.9	7.7	81
4073030-D	Single	0.8	P	5	0.9	8.5	94
4073031-D	Single	0.8	P	6	0.9	8.7	106
4073034-D	Single	0.8	P	10	1.0	11.0	168
4073038-D	Single	0.8	P	20	1.0	13.3	295
40702130-D	Single	1.0	P	1	0.8	5.2	37
40730243-D	Single	1.0	S	10	1.3	12.2	255
4073024-D	Single	1.0	S	4	0.8	5.5	58
4070219-D	Single	1.4	P	1	0.8	6.9	65
4073034-D	Single	0.8	P	10	1.2	11.3	175
4070382-D	Double	0.8	P	10	1.8	17	331
4073050-D	Double	0.8	S	4	1.2	14	288

All cable dimensions and weights are subject to normal manufacturing tolerances.

## Outdoor Control Cables

### APPLICATIONS

- For low frequency control
- For outdoor installations (NYY design)

### STANDARDS

- UL-1581 VW-1
- IEC 60332-1

### CONSTRUCTION

<b>Conductor:</b>	Solid annealed bare copper, 0.8 mm diameter
<b>Insulation:</b>	FR PVC, 1.35 mm diameter
<b>Color Code:</b>	See Table below
<b>Cabling:</b>	Insulated conductors are cabled into a cable core
<b>Core Wrapping:</b>	A polyester foil helically wrapped around the core with an overlap
<b>Inner jacket:</b>	Grey PVC, 0.8 mm nominal thickness
<b>Outer jacket:</b>	Black UV-resistant, FR PVC, 1.8 mm nominal thickness
<b>Rip-cord:</b>	Under the inner jacket

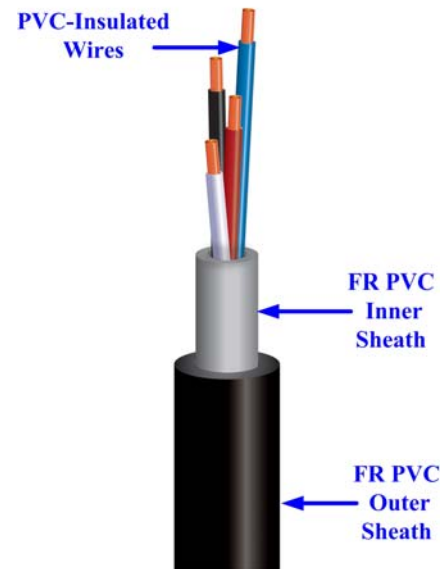
### COLOR CODE

1	<b>Red</b>	13	<b>White/Blue</b>
2	<b>Blue</b>	14	<b>White/Yellow</b>
3	<b>Yellow</b>	15	<b>White/Green</b>
4	<b>Green</b>	16	<b>White/Black</b>
5	<b>Black</b>	17	<b>White/Brown</b>
6	<b>White</b>	18	<b>White/Orange</b>
7	<b>Pink</b>	19	<b>White/Grey</b>
8	<b>Brown</b>	20	<b>Yellow/Red</b>
9	<b>Grey</b>	21	<b>Yellow/Blue</b>
10	<b>Natural</b>	22	<b>Yellow/Green</b>
11	<b>Violet</b>	23	<b>Yellow/Black</b>
12	<b>White/Red</b>	24	<b>Yellow/Brown</b>

**Bold type** - Basic color; Regular type – Ring color

### RATING

- Operating temperature range -15°C to 80°C
- 300 Vrms 90°C
- Fire retardancy per IEC 60332-1, UL-1581 VW-1



### ELECTRICAL PROPERTIES

- Max. DC Resistance @ 20°C: 35.7 Ohm/km
- Dielectric Strength Insulation 1500 Vdc/1 Min (between cores)
- Dielectric Strength Jacket: 3000 Vdc/1 Min (between cores and outer jacket)

### MARKING

Cables are marked as follows:

**TEL DOR CABLES --- Part No. --- Description --- RoHS --- Meter marking every 100 cm (optional)** or per customer request.

### ORDERING

Consult the standard cable part numbers table next page. Standard packaging: 1000 meters on suitable drums. Other packaging options, constructions and materials may be available. Please contact the Teldor Cables Marketing Staff listed on page 2.

## Outdoor Control Cables

### Cable Part Numbers, Construction, Dimensions and Weights

Teldor Part Number	Single/Double Sheath	Conductor Dia. (mm)	Singles=S Pairs = P	No. of Singles/ Pairs	Cable Nominal Diameter (mm)	Cable Nominal Weight (kg/km)
<b>Standard Type</b>						
407350-D	Single	0.8	S	2	7.5	66
407351-D	Single	0.8	S	4	8.3	88
407352-D	Single	0.8	S	6	9.3	112
407353-D	Single	0.8	S	8	9.6	128
407354-D	Single	0.8	S	10	10.6	150
407355-D	Single	0.8	S	12	10.8	167
407356-D	Single	0.8	S	16	11.6	200
407357-D	Single	0.8	S	24	12.6	270
<b>NY Y Type<sup>(*)</sup></b>						
4072560-D	Double	0.8	P	1	7.8	71
4072562-D	Double	0.8	P	2	8.9	94
4072564-D	Double	0.8	P	4	10.4	147
4072565-D	Double	0.8	P	5	11.0	169
4072566-D	Double	0.8	P	6	11.5	187
4072568-D	Double	0.8	P	8	12.5	219
4072570-D	Double	0.8	P	10	13.4	255
4072575-D	Double	0.8	P	20	16.7	406

(\*) All NY Y cables are recognized by the Standards Institute of Israel

All cable dimensions and weights are subject to normal manufacturing tolerances.

## Multicore Cables

The cables described below are only a few of many configurations that can be designed with different materials and according to various specifications or customer needs.

### Conductors:

Conductors may be solid, stranded or bunched wires. Bare copper is most common; however tinned, silvered or other types of metallized copper can be supplied.

### Groups and Minicables (Units):

Any combinations of insulated conductors of same or different gauges may form a group or a subgroup. Different groups may form one minicable.

### Shield:

Any insulated conductor or group or minicable may be shielded. There are two main ways of shielding:

**Foil Shield:** The insulated conductor, group or minicable is wrapped with a metallic foil

**Braided Shield:** The insulated conductor, group or minicable is covered with braided metal wires (usually tinned copper) to a specified coverage.

### Cabling:

The cable core may contain shielded and/or unshielded insulated conductors, groups or minicables.

### Jacket:

Materials used for jackets include PVC, Halogen-Free Flame-Retardant compound (HFFR), Teflon<sup>(\*)</sup> (FEP), Tefzel<sup>(\*)</sup> (ETFE), polyethylene and polyurethane. Cables may be ordered with a single or dual jacket: an inner jacket and an outer jacket. The material of both jackets may be the same or different (e.g. PVC+PVC, HFFR+PVC etc.)

### Approvals:

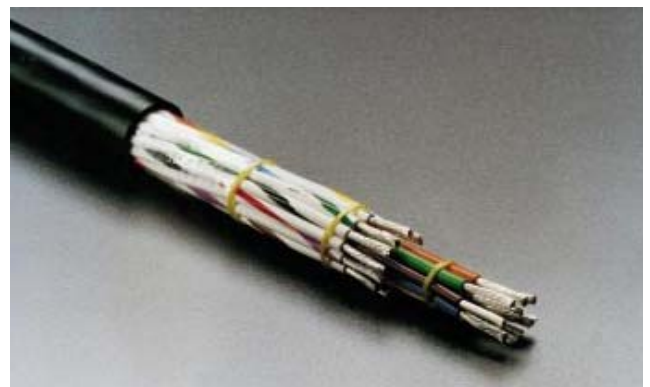
Single conductors may be QPL Listed or UL styles recognized, the jacket may be UL style.

### Engineering Design:

Please contact Teldor Cables Marketing staff for technical support and information on custom designed cables.

### Cable Examples:

On this page you may find some illustrations of combined cables that may be produced per customer requirements.



(\*) Teflon and Tefzel are registered trade marks of E.I. DuPont

## Unshielded Multicore Cables

### APPLICATIONS

- For installation in ducts or in portable instruments for Audio and Signal Transmission

### STANDARDS

- Insulated conductors comply with MIL-W-76 Type LW
- IEC-60332-1
- UL 1581 VW-1

### CONSTRUCTION

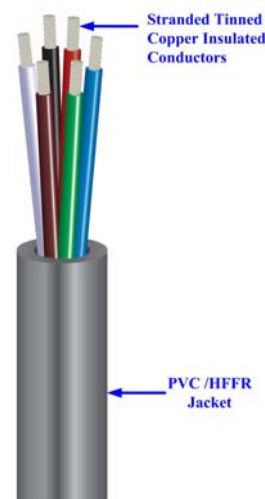
<b>Conductor:</b>	22 AWG (0.355 mm <sup>2</sup> ) stranded tinned copper conductors (7x30 AWG - 7x0.254 mm). Other sizes are available upon request.
<b>Insulation:</b>	80°C rated PVC Radial thickness 0.010" (0.254 mm)
<b>Color code:</b>	See Table A
<b>Cabling:</b>	Insulated conductors are cabled with alternating directions in successive layers to form the cable core
<b>Inner / single jacket:</b>	80°C rated PVC or HFFR. Jacket color: gray (may be black if used as inner jacket)
<b>Outer jacket:</b>	80°C rated PVC or HFFR. Jacket color: Black
<b>Rip-cords:</b>	Under each jacket, available upon request

### RATING

- 300 Vrms
- Temperature Range : -20°C to +80°C
- Fire Retardancy per FR IEC-60332-1 and UL-1581 VW-1

### ELECTRICAL PROPERTIES

- Nominal DC Resistance @ 20°C: 56 Ω/km
- Dielectric strength between conductors: 1500 Vrms/1Min
- Nominal Normalized Velocity of Propagation: 45%



### MARKING

Cables are marked as follows:

**TELDOR CABLES --- Part No. --- Cable Description (e.g. 10x2x0.8) UNSHIELDED --- FR IEC-60332-1 --- UL 1581 VW-1 ---- RoHS ---- Meter marking** or per customer request.

### ORDERING

Consult the standard cable part numbers table. Standard packaging: 500 and 1000 meters on suitable drums. Other packaging options, constructions and materials may be available. Please contact the Teldor Cables Marketing Staff listed on page 2.

## *Unshielded Multicore Cables*

### Representative Cable Part Numbers, Construction, Dimensions and Weights

Many other cable constructions are available. Contact the Teldor Cables Marketing staff

Catalog Number	Number of Conductors	Nominal Jacket Thickness	Nominal Outer Diameter	Nominal Weight
		mm	mm	kg/km
22 AWG Stranded Conductors, PVC Jacket				
600104-D	2	0.70	4.0	20
600105-D	3	0.70	4.2	26
600106-D	4	0.80	4.8	32
600100-D	5	0.80	5.2	38
600107-D	6	0.80	5.7	47
600109-D	8	0.80	6.4	62
600110-D	10	0.90	7.2	76
611409-D	12	0.90	7.3	80
611410-D	15	0.90	8.1	96
600102-D	18	0.90	8.4	111
611411-D	20	0.90	8.9	126
22 AWG Stranded Conductors, PVC Double Jacket (NYY)				
6001040-D	2	0.70+1.3	6.6	50
6001050-D	3	0.70+1.3	6.8	60
6001060-D	4	0.80+1.3	7.4	68
6001000-D	5	0.80+1.5	8.2	85
6001070-D	6	0.80+1.5	8.7	95
6001090-D	8	0.80+1.5	9.4	116
6001100-D	10	0.90+1.5	10.2	136
6114090-D	12	0.90+1.6	10.5	145
6114100-D	15	0.90+1.6	11.3	167
6001020-D	18	0.90+1.6	11.6	184
6114110-D	20	0.90+1.6	12.1	203
22 AWG Stranded Conductors, HFFR Jacket				
6001041-D	2	0.70	4.0	20
6001061-D	4	0.80	4.8	32
6001071-D	6	0.80	5.7	47
6001091-D	8	0.80	6.4	62
6001101-D	10	0.90	7.2	76
6114091-D	12	0.90	7.3	80
6114101-D	15	0.90	8.1	96
6114111-D	20	0.90	8.9	126

All cable dimensions and weights are subject to normal manufacturing tolerances.



## Overall Shielded Multicore Cables

### APPLICATIONS

- For installation in ducts or in portable instruments for Audio and Signal Transmission

### STANDARDS

- Insulated conductors comply with MIL-W-76 Type LW
- IEC-60332-1
- UL 1581 VW-1

### CONSTRUCTION

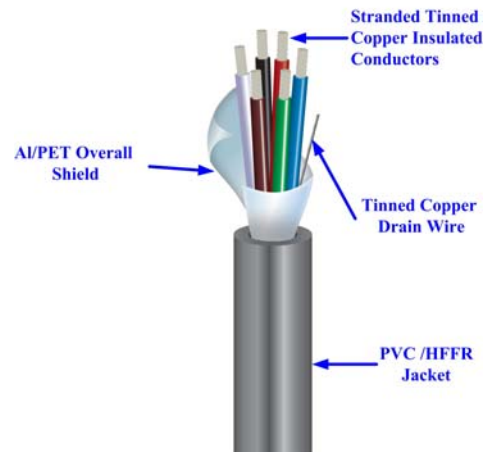
<b>Conductor:</b>	22 AWG (0.355 mm <sup>2</sup> ) stranded tinned copper conductors (7x30 AWG - 7x0.254 mm). Other sizes are available upon request.
<b>Insulation:</b>	80°C rated PVC Radial thickness 0.010" (0.254 mm)
<b>Color Code:</b>	See Table A
<b>Cabling:</b>	Insulated conductors are cabled with alternating directions in successive layers to form the cable core
<b>Overall Shielding:</b>	Polyester/aluminum (AL/PET) foil, aluminum side facing inwards. 100% coverage
<b>Drain wire:</b>	22 AWG stranded tinned copper
<b>Inner / single jacket:</b>	80°C rated PVC or HFFR. Jacket color: gray (may be black if used as inner jacket)
<b>Outer jacket:</b>	80°C rated PVC. Jacket color: Black
<b>Rip-cords:</b>	Under each jacket, available upon request

### RATING

- 300 Vrms
- Temperature Range : -20°C to +80°C
- Fire Retardancy per FR IEC-60332-1 and UL-1581 VW-1

### ELECTRICAL PROPERTIES

- Nominal DC Resistance @ 20°C: 56 Ω/km
- Dielectric strength between conductors: 1500 Vrms/1Min
- Nominal Normalized Velocity of Propagation: 45%



### MARKING

Cables are marked as follows:

**TELDOR CABLES --- Part No. --- Cable Description**  
**(e.g. 10x2x22 AWG) SHIELDED ---**

**FR IEC-60332-1 --- UL-1581 VW-1 --- RoHS ----**

**Meter marking**

or per customer request.

### ORDERING

Consult the standard cable part numbers table. Standard packaging: 500 and 1000 meters on suitable drums. Other packaging options, constructions and materials may be available. Please contact the Teldor Cables Marketing Staff listed on page 2.



## Overall Shielded Multicore Cables

### Representative Cable Part Numbers, Construction, Dimensions and Weights

Many other cable constructions are available. Contact the Teldor Cables Marketing staff

Catalog Number	Number of Conductors	Nominal Jacket Thickness	Nominal Outer Diameter	Nominal Weight
		mm	mm	kg/km
22 AWG Stranded Conductors, PVC Jacket				
600007-D	2	0.60	4.0	24
600004-D	3	0.80	4.6	34
600003-D	4	0.80	4.9	39
611565-D	5	0.80	5.3	43
600005-D	6	0.80	5.8	54
601111-D	8	0.90	6.7	70
601118-D	10	0.90	7.3	79
601124-D	12	0.90	7.4	86
601133-D	15	0.90	8.1	108
600010-D	18	0.90	8.6	122
604515-D	20	0.90	8.9	141
611408-D	25	0.90	9.8	160
22 AWG Stranded Conductors, PVC Double Jacket (NYY)				
6000070-D	2	0.60+1.3	6.6	55
6000040-D	3	0.80+1.3	7.2	69
6000030-D	4	0.80+1.3	7.5	76
6115650-D	5	0.80+1.3	7.9	82
6000050-D	6	0.80+1.3	8.4	96
6011110-D	8	0.90+1.3	9.3	118
6011180-D	10	0.90+1.5	10.3	139
6011240-D	12	0.90+1.5	10.4	147
6011330-D	15	0.90+1.6	11.3	173
6000100-D	18	0.90+1.6	11.8	196
6045150-D	20	0.90+1.6	12.1	213
6114080-D	25	0.90+1.8	13.0	255
22 AWG Stranded Conductors, HFFR Jacket				
6000071-D	2	0.60	4.0	24
6000031-D	4	0.80	4.0	4.9
6000051-D	6	0.80	5.8	54
6011111-D	8	0.90	6.7	70
6011181-D	10	0.90	7.3	79
6011241-D	12	0.90	7.4	86
6011331-D	15	0.90	8.1	108
6045151-D	20	0.90	8.9	141

All cable dimensions and weights are subject to normal manufacturing tolerances.

## *Unshielded Multipair Cables*

### **APPLICATIONS**

- For installation in ducts or in portable instruments for Audio and Signal Transmission

### **STANDARDS**

- Insulated conductors comply with MIL-W-76 Type LW
- IEC-60332-1
- UL 1581 VW-1

### **CONSTRUCTION**

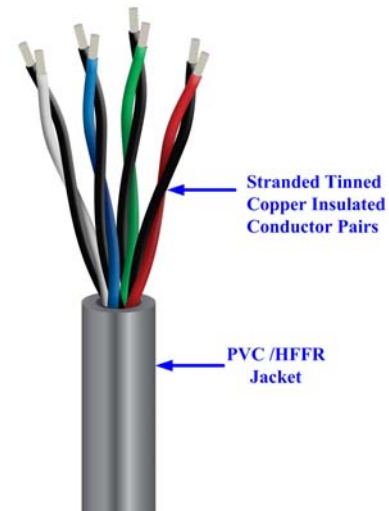
<b>Conductor:</b>	22 AWG (0.355 mm <sup>2</sup> ) stranded tinned copper conductors (7x30 AWG - 7x0.254 mm). Other sizes are available upon request.
<b>Insulation:</b>	80°C rated PVC Radial thickness 0.010" (0.254 mm)
<b>Pairs:</b>	The insulated conductors are twisted into pairs
<b>Color Code:</b>	See Table B
<b>Cabling:</b>	The pairs are cabled with alternating directions in successive layers to form the cable core
<b>Inner / single jacket:</b>	80°C rated PVC or HFFR. Jacket color: gray (may be black if used as inner jacket)
<b>Outer jacket:</b>	80°C rated PVC. Jacket color: Black
<b>Rip-cords:</b>	Under each jacket, available upon request

### **RATING**

- 300 Vrms
- Temperature Range : -20°C to +80°C
- Fire Retardancy per FR IEC-60332-1 and UL-1581 VW-1

### **ELECTRICAL PROPERTIES**

- Nominal DC Resistance @ 20°C: 56 Ω/km
- Dielectric strength between conductors: 1500 Vrms/1 Min
- Nominal Normalized Velocity of Propagation: 45%



### **MARKING**

Cables are marked as follows:

**TELDOR CABLES --- Part No. --- Cable Description  
 (e.g. 10x2x22 AWG) UNSHIELDED ---  
 FR IEC-60332-1 --- UL-1581 VW-1 --- RoHS ---  
 Meter marking**

or per customer request.

### **ORDERING**

Consult the standard cable part numbers table. Standard packaging: 500 and 1000 meters on suitable drums. Other packaging options, constructions and materials may be available. Please contact the Teldor Cables Marketing Staff listed on page 2.

## *Unshielded Multipair Cables*

### Representative Cable Part Numbers, Construction, Dimensions and Weights

Many other cable constructions are available. Contact the Teldor Cables Marketing staff

Catalog Number	Number of Pairs	Nominal Jacket Thickness	Nominal Outer Diameter	Nominal Weight
		mm	mm	kg/km
22 AWG Stranded Conductors, PVC Jacket				
611429-D	2	0.7	6.2	38
610699-D	3	0.7	6.4	48
610848-D	4	0.7	7.0	58
600122-D	5	0.8	8.1	80
600117-D	6	0.8	8.2	82
600118-D	8	0.9	9.15	107
611346-D	10	0.9	10.5	133
600123-D	11	0.9	10.6	150
611434-D	12	0.9	10.9	160
611348-D	13	0.9	11.0	170
611435-D	15	1.0	12.0	205
611350-D	16	1.0	12.4	210
611437-D	20	1.2	13.4	266
600119-D	27	1.3	15.6	348
22 AWG Stranded Conductors, PVC Double Jacket (NYY)				
6114290-D	2	0.7+1.3	8.8	82
6106990-D	3	0.7+1.3	9.0	93
6108480-D	4	0.7+1.3	9.6	106
6001220-D	5	0.8+1.5	11.1	145
6001170-D	6	0.8+1.5	11.2	148
6001180-D	8	0.9+1.5	12.15	180
6113460-D	10	0.9+1.5	13.5	215
6001230-D	11	0.9+1.6	13.8	238
6114340-D	12	0.9+1.6	14.1	250
6113480-D	13	0.9+1.6	14.2	260
6114350-D	15	1.0+1.8	15.6	306
6114370-D	20	1.2+1.8	16.0	381
6001190-D	27	1.3+1.8	19.2	490
22 AWG Stranded Conductors, HFFR Jacket				
6114291-D	2	0.7	6.2	38
6106991-D	3	0.7	6.4	48
6108481-D	4	0.7	7.0	58
6001171-D	6	0.8	8.2	82
6001181-D	8	0.9	9.15	107
6113461-D	10	0.9	10.5	133
6113471-D	12	0.9	10.9	160
6114351-D	15	1.0	12.0	205

All cable dimensions and weights are subject to normal manufacturing tolerances.

## Overall Shielded Multipair Cables

### APPLICATIONS

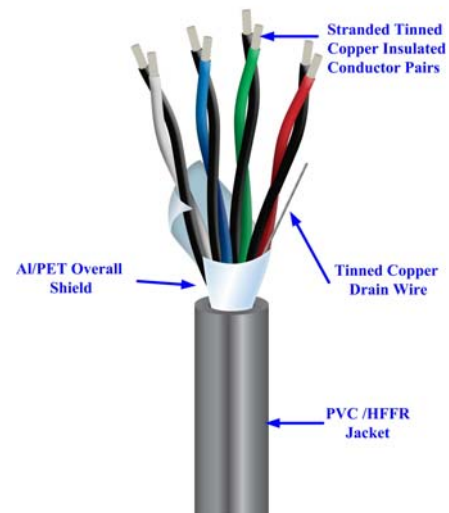
- For installation in ducts or in portable instruments for Audio and Signal Transmission

### STANDARDS

- Insulated conductors comply with MIL-W-76 Type LW
- IEC-60332-1
- UL 1581 VW-1

### CONSTRUCTION

<b>Conductor:</b>	22 AWG (0.355 mm <sup>2</sup> ) stranded tinned copper conductors (7x30 AWG - 7x0.254 mm). Other sizes are available upon request.
<b>Insulation:</b>	80°C rated PVC Radial thickness 0.010" (0.254 mm)
<b>Pairs:</b>	The insulated wires are twisted into Pairs
<b>Color Code:</b>	See Table B
<b>Cabling:</b>	The pairs are cabled with alternating directions in successive layers to form the cable core
<b>Overall Shielding:</b>	Polyester/aluminum (AL/PET) foil, aluminum side facing inwards. 100% coverage
<b>Drain wire:</b>	22 AWG stranded tinned copper
<b>Inner / single jacket:</b>	80°C rated PVC or HFFR. Jacket color: gray (may be black if used as inner jacket)
<b>Outer jacket:</b>	80°C rated PVC. Jacket color: Black
<b>Rip-cords:</b>	Under each jacket, available upon request



### MARKING

Cables are marked as follows:

**TELDOR CABLES --- Part No. --- Cable Description**  
**(e.g. 10x2x22 AWG) SHIELDED --- FR IEC-60332-1**  
**---- UL-1581 VW-1 --- RoHS ---- Meter marking**  
 or per customer request.

### ORDERING

Consult the standard cable part numbers table. Standard packaging: 500 and 1000 meters on suitable drums. Other packaging options, constructions and materials may be available. Please contact the Teldor Cables Marketing Staff listed on page 2.

### RATING

- 300 Vrms
- Temperature Range : -20°C to +80°C
- Fire Retardancy per FR IEC-60332-1 and UL-1581 VW-1

### ELECTRICAL PROPERTIES

- Nominal DC Resistance @ 20°C: 56 Ω/km
- Dielectric strength between conductors: 1500 Vrms/1Min
- Nominal Normalized Velocity of Propagation: 45%

## Overall Shielded Multipair Cables

### Cable Part Numbers, Construction, Dimensions and Weights

Many other cable constructions are available. Contact the Teldor Cables Marketing staff

Catalog Number	Number of Pairs	Nominal Jacket Thickness	Nominal Outer Diameter	Nominal Weight
		mm	mm	kg/km
22 AWG Stranded Conductors, PVC Jacket				
	1	0.70	4.4	27
601263-D	2	0.70	6.2	44
601270-D	3	0.70	6.8	54
601296-D	4	0.70	7.0	66
611421-D	6	0.80	8.4	94
611422-D	8	0.80	9.2	113
611155-D	10	0.90	10.8	144
601301-D	12	0.90	11.2	160
611423-D	15	1.00	12.0	210
611424-D	16	1.00	12.6	225
611425-D	20	1.20	13.4	272
22 AWG Stranded Conductors, PVC Double Jacket (NYY)				
6012630-D	2	0.70+1.3	8.8	89
6012700-D	3	0.70+1.3	9.4	102
6012960-D	4	0.70+1.3	9.6	114
6114210-D	6	0.80+1.5	11.4	158
6114220-D	8	0.80+1.5	12.2	183
6111550-D	10	0.90+1.6	14.0	228
6013010-D	12	0.90+1.6	14.4	256
6114230-D	15	1.00+1.8	15.6	313
6114240-D	16	1.00+1.8	16.2	335
6114250-D	20	1.20+1.8	17.0	397
22 AWG Stranded Conductors, HFFR Jacket				
6012631-D	2	0.70	6.2	44
6012701-D	3	0.70	6.8	54
6012961-D	4	0.70	7.0	66
6114211-D	6	0.80	8.4	94
6114221-D	8	0.80	9.2	113
6111551-D	10	0.90	10.8	144
6013011-D	12	0.90	11.2	160
6114231-D	15	1.00	12.0	210

All cable dimensions and weights are subject to normal manufacturing tolerances.

## *Individually Shielded Multipair Cables*

### APPLICATIONS

- For installation in ducts or in portable instruments for Audio and Signal Transmission

### STANDARDS

- Insulated conductors comply with MIL-W-76 Type LW
- IEC-60332-1
- UL 1581 VW-1

### CONSTRUCTION

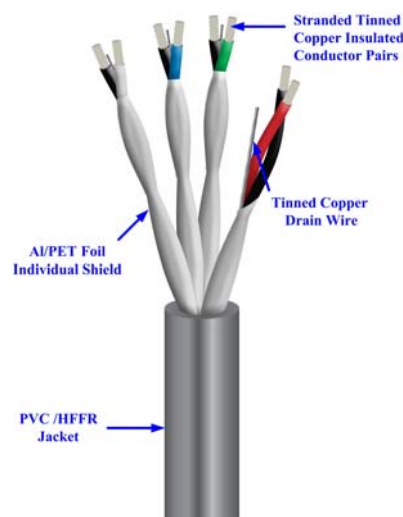
<b>Conductor:</b>	22 AWG (0.355 mm <sup>2</sup> ) stranded tinned copper conductors (7x30 AWG - 7x0.254 mm). Other sizes are available upon request.
<b>Insulation:</b>	80°C rated PVC Radial thickness 0.010" (0.254 mm)
<b>Pairs:</b>	The insulated wires are twisted into pairs
<b>Color Code:</b>	See Table B
<b>Individual Shielding:</b>	Each pair is individually shielded with a polyester/aluminum (AL/PET) foil, aluminum side facing inwards; 125% coverage
<b>Pair drain Wire:</b>	22 AWG stranded tinned copper
<b>Cabling:</b>	The shielded pairs are cabled with alternating directions in successive layers to form the cable core
<b>Inner / single jacket:</b>	80°C rated PVC or HFFR. Jacket color: gray (may be black if used as inner jacket)
<b>Outer jacket:</b>	80°C rated PVC Jacket color: Black
<b>Rip-cords:</b>	Under each jacket, available upon request

### RATING

- 300 Vrms
- Temperature Range : -20°C to +80°C
- Fire Retardancy per FR IEC-60332-1 and UL-1581 VW-1

### ELECTRICAL PROPERTIES

- Nominal DC Resistance @ 20°C: 56 Ω/km
- Dielectric strength between conductors: 1500 Vrms/1Min
- Nominal Normalized Velocity of Propagation: 45%
- Nominal Mutual Capacitance between conductors: 178 pF/m



### MARKING

Cables are marked as follows:

**TELDOR CABLES --- Part No. --- CABLE DESCRIPTION (e.g. 10x2x22 AWG) ---- Individual Foil Shielded --- FR IEC-60332-1 --- UL-1581 VW-1 --- RoHS ---Meter marking**  
 or per customer request.

### ORDERING

Consult the standard cable part numbers table. Standard packaging: 500 and 1000 meters on suitable drums. Other packaging options, constructions and materials may be available. Please contact the Teldor Cables Marketing Staff listed on page 2.

## *Individually Shielded Multipair Cables*

### Cable Part Numbers, Construction, Dimensions and Weights

Many other cable constructions are available. Contact the Teldor Cables Marketing staff

Catalog Number	Number of Pairs	Nominal Jacket Thickness mm	Nominal Outer Diameter mm	Nominal Weight kg/km
<b>22 AWG Stranded Conductors, PVC Jacket</b>				
601213-D	2	0.8	6.5	49
611494-D	3	0.8	7.3	68
601217-D	4	1.2	7.9	91
601219-D	6	1.2	9.7	132
610716-D	8	1.2	10.1	156
611405-D	12	1.2	12.0	221
611406-D	15	1.2	14.00	267
601227-D	16	1.2	13.97	280
<b>22 AWG Stranded Conductors, PVC Double Jacket (NYY)</b>				
6012130-D	2	0.8+1.3	9.1	96
6114940-D	3	0.8+1.5	10.3	129
6012170-D	4	1.2+1.6	11.1	161
6012190-D	6	1.2+1.8	13.3	228
6107160-D	8	1.2+1.8	13.7	254
6114050-D	12	1.2+1.8	15.6	336
6114060-D	15	1.2+1.8	17.6	400
6012270-D	16	1.2+1.8	17.6	410
<b>22 AWG Stranded Conductors, HFFR Jacket</b>				
6012131-D	2	0.8	6.5	49
6126701-D	3	0.8	7.3	68
6012171-D	4	1.2	7.9	91
6012191-D	6	1.2	9.7	132
6107161-D	8	1.2	10.1	156
6112331-D	10	1.2	11.0	188
6114051-D	12	1.2	12.0	221
6114061-D	15	1.2	14.00	267

All cable dimensions and weights are subject to normal manufacturing tolerances.

## Signal and Audio Cables

### APPLICATIONS

- For installation in ducts or in portable instruments for Audio and Signal Transmission

### STANDARDS

- Insulated conductors comply with MIL-W-76 Type LW
- IEC-60332-1
- UL 1581 VW-1

### CONSTRUCTION

<b>Conductor:</b>	0.5 mm solid bare copper or 24AWG (0.20 mm <sup>2</sup> ) stranded tinned copper conductors. Other sizes are available upon request.
<b>Insulation:</b>	80°C rated PVC Nominal thickness 0.13 mm
<b>Color Code:</b>	See Table below
<b>Cabling:</b>	Insulated conductors are assembled together to form the cable core
<b>Inner jacket</b> (NYY type) <b>Outer Jacket</b> (non NYY):	80°C rated PVC color: white
<b>Outer jacket:</b> (NYY Type)	80°C rated PVC. color: Black
<b>Rip-cord:</b>	Available upon request

### COLOR CODE

1	<b>Blue</b>	9	<b>Yellow</b>
2	<b>Orange</b>	10	<b>Grey</b>
3	<b>Green</b>	11	<b>Turquoise</b>
4	<b>Brown</b>	12	<b>Pink</b>
5	<b>White</b>	13	<b>Blue/White</b>
6	<b>Black</b>	14	<b>Orange/White</b>
7	<b>Red</b>	15	<b>Green/White</b>
8	<b>Violet</b>	16	<b>Brown/White</b>

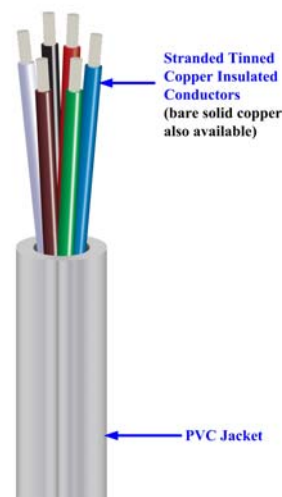
**Bold type** - Basic color; Regular type – Ring color

### RATING

- 60 Vrms
- Temperature Range : -20°C to +80°C
- Fire Retardancy per IEC-60332-1 and UL-1581 VW-1

### ELECTRICAL PROPERTIES

- Nominal DC Resistance @ 20°C: 95 Ω/km for solid conductors; 92 Ω/km for stranded conductors
- Dielectric strength between conductors: 500 Vrms/1Min
- Nominal Normalized Velocity of Propagation: 45%



### MARKING

Cables are normally not marked. Marking is available per customer request.

### ORDERING

Consult the standard cable part numbers table. Standard packaging: 500 and 1000 meters on suitable drums. Other packaging options, constructions and materials may be available. Please contact the Teldor Cables Marketing Staff listed on page 2.



## Signal and Audio Cables

### Representative Cable Part Numbers, Construction, Dimensions and Weights

Catalog Number	Number of Conductors	Nominal Jacket Thickness mm	Nominal Outer Diameter mm	Nominal Weight kg/km
<b>24 AWG Solid Bare Copper</b>				
407041-D	2	0.5	2.6	9.5
407045-D	4	0.5	3.0	14.0
407046-D	5	0.5	3.3	17.5
407042-D	6	0.5	3.4	20.0
407047-D	8	0.5	4.0	25.5
407043-D	10	0.5	4.0	30.0
407048-D	12	0.5	4.5	34.5
407044-D	16	0.5	4.8	43.5
<b>24 AWG Stranded Tinned Copper</b>				
4070410-D	2	0.5	2.8	11.0
4070414-D	4	0.5	3.2	17.0
4070415-D	5	0.5	3.5	19.5
4070416-D	6	0.5	3.7	23.0
4070418-D	8	0.5	4.6	30.0
4070420-D	10	0.5	4.6	35.0
4070422-D	12	0.5	4.8	40.5
4070424-D	16	0.5	5.3	51.5
<b>24 AWG Stranded Tinned Copper (NYY Type)</b>				
4070419-D	8	0.5 +1.5	7.6	71.5
4070423-D	12	0.5 +1.5	7.8	83.5

All cable dimensions and weights are subject to normal manufacturing tolerances.

## ***RG Coaxial Cables per MIL-DTL-17H***

### **APPLICATIONS**

- For transmission of high frequency signals for video and cable television
- For microwave and wireless communication systems
- For a variety of research and development applications

### **STANDARDS**

- MIL-DTL-17H or UL-1354
- IEC-60332-1 (PVC jacket only)
- UL 1581 VW-1 (PVC jacket only)

### **CONSTRUCTION**

<b>Conductor:</b>	Solid or stranded bare, tinned or silvered copper wires
<b>Insulation:</b>	Solid or air-spaced polyethylene
<b>Shield I:</b>	A braid as specified in MIL-DTL-17H
<b>Shield II:</b>	Aluminum foil or a braid as specified in MIL-DTL-17H
<b>Outer jacket:</b>	Non-contaminating PVC or PE

### **RATING**

- Max. working Voltage: see Electrical Properties table next page
- Max. working frequency: 0.4 GHz or 1 GHz
- Temperature range: -30°C to +85°C

### **ELECTRICAL PROPERTIES**

See Electrical Properties table next page.

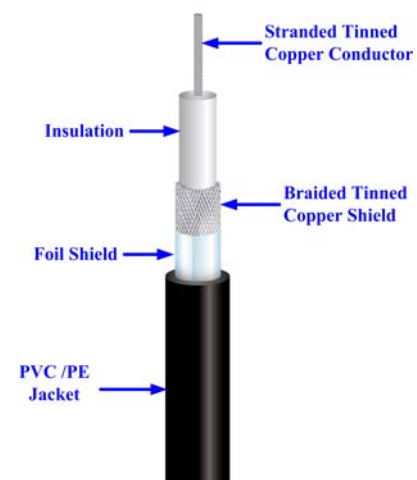
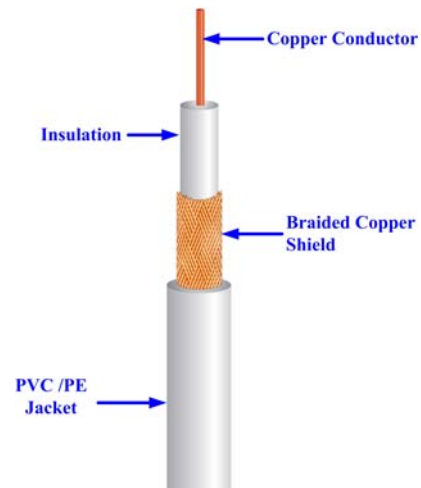
### **MARKING**

Cables are marked as follows:

**TEL DOR CABLES --- Part No. --- RG type --- RoHS -**  
**-- Meter marking every 50 cm**  
 or per customer request.

### **ORDERING**

Consult the cable part numbers table next page. Standard packaging: 500 and 1000 meters on suitable drums. Other packaging options, constructions and materials may be available. Please contact the Teldor Cables Marketing Staff listed on page 2.



## RG Coaxial Cables per MIL-DTL-17H

### Cable Part Numbers, Construction, Dimensions and Weights

(See code explanation below)

Catalog Number	RG Type	US Govmnt PN	Conductor			Insulation		Shield Material	Jacket		Nominal Weight
			Material	No. of Strands and Diameter of Strand	Outer Diam.	Material	Outer Diam.		Material	Outer Diam.	
				mm	mm		mm			mm	Kg/km
602386-D	RG 11 A/U	M17/6-RG 11	TPC	7x0.404	1.21	PE	7.24	BC	PVC	10.3	136
612054-D	RG 11	M17/181-00001	TPC	7x0.404	1.21	PE	7.24	TPC+MA	HFFR	10.3	140
600017-D	RG 58 A/U	UL1354	TPC	19x0.18	0.90	PE	2.95	TPC	PVC	5.0	37
612437-D	RG 59 Type	UL1354	TPC	7x0.25	0.76	CPE	3.71	TPC	PVC	6.1	52
600011-D	RG 213/U	M17/163-00001	BC	7x0.75	2.25	PE	7.24	BC	PVC	10.3	160
611922-D	RG 213/U	M17/189-00001	BC	7x0.75	2.25	PE	7.24	BC+MA	HFFR	10.3	170

All cable dimensions and weights are subject to normal manufacturing tolerances.

### Electrical Properties Table

Catalog Number	RG Type	Nominal Impedance	Max. Attenuation @ 400 MHz	Max. Attenuation @ 1 GHz	Max. Working Voltage	Max. Capacitance	Max. DC Resistance
		$\Omega$	dB/100m	dB/100m	Vrms	pF/m	$\Omega$ /km
602386-D	RG 11 A/U	75	17.1	30.8	3200	72	21.66
612054-D	RG 11	75	17.1	30.8	3200	72	21.66
600017-D	RG 58 A/U	50	55.8	NA	1400	105	40.7
612437-D	RG 59 Type	75	32	NA	1700	72	56.2
600011-D	RG 213/U	50	15.5	NA	3700	105	5.8
611922-D	RG 213/U	50	15.5	29.5	3700	105	5.8

### Codes:

Conductor/Shield Types	Insulation Materials	Jacket Materials
<b>SPC:</b> Silver Plated Copper	<b>PE:</b> Polyethylene Solid	<b>PVC:</b> Polyvinylchloride
<b>BC:</b> Bare Copper	<b>CPE:</b> Polyethylene Cellular	<b>HFFR:</b> Halogen Free Flame Retardant
<b>TPC:</b> Tin Plated Copper		
<b>MA:</b> Aluminum Foil Shield		

## *Insulated Conductors Color Codes*

**Table A: Color Code of single insulated conductors**

Core No.	Color	Core No.	Color	Core No.	Color
1	<b>Black</b>	11	<b>White</b> /Black	21	<b>White</b> /Black/Green
2	<b>Red</b>	12	<b>White</b> /Red	22	<b>White</b> /Black/Yellow
3	<b>Green</b>	13	<b>White</b> /Green	23	<b>White</b> /Black/Blue
4	<b>White</b>	14	<b>White</b> /yellow	24	<b>White</b> /Black/Brown
5	<b>Brown</b>	15	<b>White</b> /Blue	25	<b>White</b> /Black/Orange
6	<b>Blue</b>	16	<b>White</b> /Brown	26	<b>White</b> /Black/Gray
7	<b>Orange</b>	17	<b>White</b> /Orange	27	<b>White</b> /Black/Purple
8	<b>Yellow</b>	18	<b>White</b> /Gray	28	<b>White</b> /Red/Green
9	<b>Purple</b>	19	<b>White</b> /Purple	29	<b>White</b> /Red/Brown
10	<b>Grey</b>	20	<b>White</b> /Black/Red	30	<b>White</b> /Red/Blue

**Note:** bold print represents basic color; light print represents a second color applied by stripes or rings

**Table B: Color Code of pairs**

Pair No.	Colors	Pair No.	Colors	Pair No.	Colors
1	Black+Red	11	Red+Yellow	21	White+Brown
2	Black+White	12	Red+Brown	22	White+Orange
3	Black+Green	13	Red+Orange	23	Blue+Yellow
4	Black+Blue	14	Green+White	24	Blue+Brown
5	Black+Yellow	15	Green+Blue	25	Blue+Orange
6	Black+Brown	16	Green+Yellow	26	Brown+Yellow
7	Black+Orange	17	Green+Brown	27	Brown+Orange
8	Red+White	18	Green+Orange	28	Orange+Yellow
9	Red+Green	19	White+Blue	29	Purple+Orange
10	Red+Blue	20	White+Yellow	30	Purple+Red

Note: All colors are basic solid colors (no stripes or rings)

## ***Solid Conductors Dimensions, Resistance and Weights***

### **American Wire Gauge**

The American Wire Gauge (AWG) system is defined by pinning the value of 36 AWG to 0.005 inch. All the other AWG values are derived from this definition. A useful way to estimate a wire dimension and resistance is by noting that an increase of 3 AWG units halves the wire cross-section area and doubles the resistance.

AWG	Diameter mm	Cross Section mm	Ohms per km at 20°C	kg per km	m per kg
8	3.264	8.368	2.061	74.38	13.45
9	2.906	6.633	2.600	58.96	16.96
10	2.588	5.262	3.277	46.77	21.38
11	2.304	4.168	4.134	37.05	26.99
12	2.052	3.309	5.217	29.46	33.94
13	1.829	2.626	6.562	23.36	42.80
14	1.628	2.084	8.268	18.45	54.19
15	1.450	1.652	10.43	14.69	68.09
16	1.290	1.309	13.19	11.62	86.04
17	1.151	1.039	16.57	9.241	108.2
18	1.024	0.826	20.96	7.321	136.6
19	0.912	0.652	26.41	5.804	172.3
20	0.813	0.519	33.14	4.613	216.8
21	0.724	0.412	41.99	3.661	273.2
22	0.643	0.325	53.15	2.887	346.4
23	0.574	0.259	66.60	2.307	433.5
24	0.511	0.205	84.32	1.815	550.8
25	0.455	0.163	106.3	1.443	692.8
26	0.404	0.128	134.5	1.138	878.4
27	0.361	0.102	168.8	0.908	1,102.0
28	0.320	0.0807	214.2	0.716	1,397.0
29	0.287	0.0645	266.4	0.576	1,736.0
30	0.254	0.0506	341.2	0.451	2,218.0
31	0.226	0.0401	429.8	0.357	2,800.0
32	0.203	0.0325	531.5	0.289	3,464.0
33	0.180	0.0255	675.9	0.228	4,392.0
34	0.160	0.0201	856.3	0.179	5,600.0
35	0.142	0.0159	1086.0	0.141	7,081.0
36	0.127	0.0127	1362.0	0.113	8,877.0
37	0.114	0.0103	1680.0	0.0912	10,960.0
38	0.102	0.00813	2126.0	0.0720	13,880.0
39	0.0889	0.00621	2779.0	0.0552	18,110.0
40	0.0787	0.00487	3543.0	0.0433	23,090.0
41	0.0711	0.00397	4331.0	0.0353	28,350.0
42	0.0635	0.00317	5446.0	0.0281	35,560.0
43	0.0559	0.00245	7021.0	0.0219	45,710.0
44	0.0508	0.00203	8497.0	0.0180	55,540.0

## Stranded Conductors Construction, Dimensions and Weights

AWG	Construction No. * mm	Diameter mm	Resist. @20C Ohm/Km	Weight Kg/km
8	19x7x0.287	4.20	2.15	79.0
10	37x0.404	2.80	3.94	44.4
10	105x0.254	3.20	3.90	49.3
12	19x0.450	2.25	6.10	28.1
12	19x0.450	2.25	6.10	28.1
12	63x0.254	2.35	5.92	29.0
12	63x0.254	2.35	5.92	29.0
14	19x0.361	1.80	9.61	17.7
14	19x0.361	1.80	9.61	17.7
14	19x0.361	1.80	9.61	17.7
14	41x0.254	1.80	9.10	18.9
14	41x0.254	1.80	9.10	18.9
16	19x0.287	1.43	15.2	11.2
16	19x0.287	1.43	15.2	11.2
16	19x0.287	1.43	15.2	11.2
16	25x0.254	1.53	14.9	11.5
16	25x0.254	1.53	14.9	11.5
18	7x0.404	1.22	22.0	8.2
18	7x0.404	1.22	22.0	8.2
18	7x0.404	1.22	22.0	8.2
18	19x0.254	1.27	19.7	8.8
18	16x0.254	1.27	25.8	7.4
18	16x0.254	1.27	25.8	7.4
20	7x0.320	0.96	33.2	5.2
20	7x0.320	0.96	33.2	5.2
20	7x0.320	0.96	33.2	5.2
20	19x0.203	1.01	31.0	5.6
20	10x0.254	1.02	37.3	4.6
20	10x0.254	1.02	37.3	4.6
20	10x0.254	1.02	37.3	4.6
22	7x0.254	0.76	53.3	3.3
22	7x0.254	0.76	53.3	3.3
22	7x0.254	0.76	53.3	3.3
22	19x0.160	0.80	49.5	3.5
24	7x0.203	0.61	83.4	2.1
24	7x0.203	0.61	83.4	2.1
24	7x0.203	0.61	83.4	2.1
24	19x0.127	0.63	78.5	2.2
26	7x0.160	0.48	134.1	1.28
26	19x0.102	0.50	121.6	1.42
28	7x0.127	0.38	212.9	0.81
28	19x0.079	0.39	208.0	0.82
30	7x0.102	0.31	330.1	0.52

## Temperature Dependence of Copper Resistance

### Temperature Correction Factor (F) for Copper Resistance

To calculate resistance at temperature  $t^{\circ}\text{C}$  multiply the resistance at  $20^{\circ}$  by the factor F given below

$^{\circ}\text{C}$	Correction Factor F	$^{\circ}\text{C}$	Correction Factor F	$^{\circ}\text{C}$	Correction Factor F	$^{\circ}\text{C}$	Correction Factor F
0	0.921						
1	0.925	11	0.965	21	1.004	31	1.043
2	0.929	12	0.969	22	1.008	32	1.047
3	0.933	13	0.972	23	1.012	33	1.051
4	0.937	14	0.976	24	1.016	34	1.055
5	0.941	15	0.980	25	1.020	35	1.059
6	0.945	16	0.984	26	1.024	36	1.063
7	0.949	17	0.988	27	1.028	37	1.067
8	0.953	18	0.992	28	1.031	38	1.071
9	0.957	19	0.996	29	1.035	39	1.075
10	0.961	20	1.000	30	1.039	40	1.079

### Resistance Formulas

Conductor resistance, R ( $\Omega$ ):

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

where  $\rho$  is copper resistivity ( $=1.0001122 (\Omega \cdot \text{mm}^2)/\text{m}$ )  
 L is the conductor length in m  
 A is the conductor cross-section area in  $\text{mm}^2$

A general expression for the resistance as a function of temperature is

$$R_t = R_{20} [1 + \alpha(t - 20)] \quad \text{where}$$

$R_t$  is the resistance at temperature  $t^{\circ}\text{C}$   
 $R_{20}$  is the resistance at temperature  $20^{\circ}\text{C}$   
 $\alpha$  is 0.00393 for copper  
 $t$  is the conductor temperature in  $^{\circ}\text{C}$