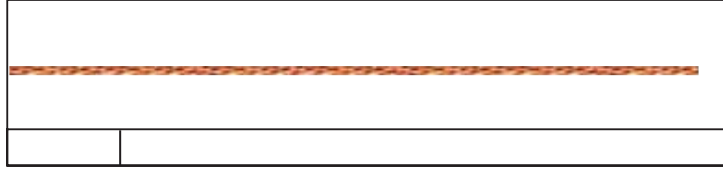


## SOFT/HARD DRAWN BARE COPPER CONDUCTORS



- Applications : 1) Soft Drawn : These conductors are used for earthing electrical systems where high conductivity is required.  
2) Hard Drawn : These conductors are used for overhead electrical transmission and distribution systems.

### Construction

- 1) Soft Drawn : As per Class 2 of IEC-60228.
- 1) Hard Drawn : As per BS-125 & DIN 48201

### Soft Drawn

| Order No. | MESC CODE              | SIZE mm <sup>2</sup> | Strand X Diameter No.Xmm | Approx. O. D. mm | Approx. Weight Kg/Km | Max. D.C. Resistance $\Omega$ / Km |
|-----------|------------------------|----------------------|--------------------------|------------------|----------------------|------------------------------------|
| 92001     | 9210-01C00100-U0008-00 | 1.0                  | 7 X 0.43                 | 1.29             | 9                    | 18.1                               |
| 92002     | 9210-01C00150-U0008-00 | 1.5                  | 7 X 0.53                 | 1.59             | 14                   | 12.1                               |
| 92003     | 9210-01C00250-U0008-00 | 2.5                  | 7 X 0.67                 | 2.01             | 22                   | 7.41                               |
| 92004     | 9210-01C00400-U0008-00 | 4.0                  | 7 X 0.85                 | 2.55             | 36                   | 4.61                               |
| 92005     | 9210-01C00600-U0008-00 | 6.0                  | 7 X 1.04                 | 3.12             | 53                   | 3.08                               |
| 92006     | 9210-01C01000-U0008-00 | 10                   | 7 X 1.35                 | 4.05             | 90                   | 1.83                               |
| 92007     | 9210-01C01600-U0008-00 | 16                   | 7 X 1.70                 | 5.10             | 143                  | 1.15                               |
| 92008     | 9210-01C02500-U0008-00 | 25                   | 7 X 2.14                 | 6.42             | 226                  | 0.727                              |
| 92009     | 9210-01C03500-U0008-00 | 35                   | 7 X 2.52                 | 7.56             | 314                  | 0.524                              |
| 92010     | 9210-01C05000-U0008-00 | 50                   | 19 X 1.78                | 8.9              | 426                  | 0.387                              |
| 92011     | 9210-01C07000-U0008-00 | 70                   | 19 X 2.14                | 10.7             | 616                  | 0.268                              |
| 92012     | 9210-01C09500-U0008-00 | 95                   | 19 X 2.52                | 12.6             | 854                  | 0.193                              |
| 92013     | 9210-01C12000-U0008-00 | 120                  | 37 X 2.03                | 14.2             | 1080                 | 0.153                              |
| 92014     | 9210-01C15000-U0008-00 | 150                  | 37 X 2.25                | 15.81            | 1326                 | 0.124                              |
| 92015     | 9210-01C18500-U0008-00 | 185                  | 37 X 2.52                | 17.61            | 1665                 | 0.0991                             |

### Hard Drawn



| Order No. | MESC CODE              | SIZE mm <sup>2</sup> | Strand X Diameter No.Xmm | Approx. O. D. mm | Approx. Weight Kg/Km | Calculated Breaking Load KN |
|-----------|------------------------|----------------------|--------------------------|------------------|----------------------|-----------------------------|
| 91001     | 9110-01C01000-U0008-00 | 10                   | 7 X 1.35                 | 4.1              | 90                   | 4.02                        |
| 91002     | 9110-01C01600-U0008-00 | 16                   | 7 X 1.7                  | 5.1              | 143                  | 6.37                        |
| 91003     | 9110-01C02500-U0008-00 | 25                   | 7 X 2.1                  | 6.3              | 218                  | 9.72                        |
| 91004     | 9110-01C03500-U0008-00 | 35                   | 7 X 2.5                  | 7.5              | 309                  | 13.78                       |
| 91005     | 9110-01C05000-U0008-00 | 50                   | 19 X 1.8                 | 9.0              | 439                  | 19.39                       |
| 91006     | 9110-01C07000-U0008-00 | 70                   | 19 X 2.1                 | 10.5             | 597                  | 26.39                       |
| 91007     | 9110-01C09500-U0008-00 | 95                   | 19 X 2.5                 | 12.5             | 847                  | 37.40                       |
| 91008     | 9110-01C12000-U0008-00 | 120                  | 19 X 2.8                 | 14.0             | 1062                 | 46.91                       |
| 91009     | 9110-01C15000-U0008-00 | 150                  | 37 X 2.25                | 15.8             | 1336                 | 58.99                       |
| 91010     | 9110-01C18500-U0008-00 | 185                  | 37 X 2.5                 | 17.5             | 1649                 | 72.83                       |

Packing : Delivered in standard length of 500/1000 meters on wooden reels.

## PVC INSULATED NON SHEATHED SINGLE CORE CABLE

H05V-U, H07V-U, H07V-R                      NYA                      IEC-60227 -1  
H07V2-U, H07V2-R(90°C)

Specification : BS-6004, IEC-60227 -3

|   |   |
|---|---|
|  |   |
|   | CU/PVC (NYA) 120 MM2 450 /750 V MESC 2005 |
|  |   |
|   | H07V2-R 2.5 MESC 2005                     |

**Application:** These cables are used for the purpose of lighting in residential and commercial building in surface mounted or embedded conduits. Suitable for voltages upto 1000 AC or up to 750 to earth DC when used for fixed installation inside appliances, switchgear and controlgear.

### Construction

- **Conductor** : Plain annealed copper solid as per class 1 of IEC-60228 or stranded as per class 2 of IEC-60228. H05V-U and H07V-U correspond to solid conductor. H07V-R corresponds to stranded conductor.
- **Insulation** : PVC type TI 1 as per BS-7655 (H05V-U, H07V, H07V2-R)  
PVC type TI 3 as per BS-7655 (H07V2, H07V2-R)

### Technical Data

- **Temperature range** : H05V-U, H07V-R(70°C). H07V2-U, H07V2-R(90°C)
- **Working voltage** : 300500 / V. upto 1.0 mm<sup>2</sup>, 450 /750 V. for 1.5 mm<sup>2</sup> and above.
- **Conductor resistance** : As per class 1 or 2 of IEC-60228
- **Flame retardance** : IEC-60332 -1

### Current carrying capacity at 30°C in free air.

| Area (mm <sup>2</sup> ) | One Phase (A) | Three Phase (A) | Area (mm <sup>2</sup> ) | One Phase (A) | Three Phase (A) |
|-------------------------|---------------|-----------------|-------------------------|---------------|-----------------|
| 1.0                     | 17            | 16              | 35                      | 145           | 130             |
| 1.5                     | 21            | 20              | 50                      | 175           | 160             |
| 2.5                     | 30            | 26              | 70                      | 220           | 200             |
| 4                       | 40            | 36              | 95                      | 270           | 240             |
| 6                       | 50            | 45              | 120                     | 310           | 280             |
| 10                      | 68            | 61              | 150                     | 355           | 320             |
| 16                      | 90            | 81              | 185                     | 405           | 365             |
| 25                      | 118           | 106             |                         |               |                 |

### Correction factors for ambient temperature.

|                     |      |      |      |      |      |      |      |
|---------------------|------|------|------|------|------|------|------|
| Ambient temperature | 35   | 40   | 45   | 50   | 55   | 60   | 65   |
| Correction factor   | 0.94 | 0.87 | 0.79 | 0.71 | 0.61 | 0.50 | 0.35 |

Packing : Upto sizes 35 mm<sup>2</sup> shrunk wrapped coils of 100 yards. For 50 mm<sup>2</sup> and above 500/ 1000 Meter on Wooden drums.



**MES C**  
SPECIALIZED CABLES

## PVC INSULATED NON SHEATHED SINGLE CORE CABLE

H05V-U, H07V-U, H07V-R(70°C)

NYA

IEC-60227-01

| Order No. | MESC CODE                | SIZE<br>Sq. mm | STRAND X<br>DIA<br>NO. X mm | INSULATION<br>THICKNESS<br>mm | APPROX.<br>O. D.<br>mm | APPROX.<br>WEIGHT<br>KG/KM |
|-----------|--------------------------|----------------|-----------------------------|-------------------------------|------------------------|----------------------------|
| 71001     | 7161 -01C00050-U0BK1 -00 | 0.5            | 1 X 0.8                     | 0.6                           | 2.1                    | 9                          |
| 71002     | 7161 -01C00075-U0BK1 -00 | 0.75           | 1 X 0.98                    | 0.6                           | 2.2                    | 11                         |
| 71003     | 7161 -01C00100-U0BK1 -00 | 1              | 1 X 1.13                    | 0.6                           | 2.4                    | 14                         |
| 71004     | 7161 -01C00150-U0BK1 -00 | 1.5            | 1 X 1.38                    | 0.7                           | 2.9                    | 21                         |
| 71005     | 7111 -01C00150-U0BK1 -00 | 1.5            | 7 X 0.53                    | 0.7                           | 3.1                    | 22                         |
| 71006     | 7161 -01C00250-U0BK1 -00 | 2.5            | 1 X 1.78                    | 0.8                           | 3.5                    | 33                         |
| 71007     | 7111 -01C00250-U0BK1 -00 | 2.5            | 7 X 0.67                    | 0.8                           | 3.7                    | 34                         |
| 71008     | 7161 -01C00400-U0BK1 -00 | 4              | 1 X 2.25                    | 0.8                           | 3.9                    | 48                         |
| 71009     | 7111 -01C00400-U0BK1 -00 | 4              | 7 X 0.85                    | 0.8                           | 4.2                    | 51                         |
| 71010     | 7161 -01C00600-U0BK1 -00 | 6              | 1 X 2.76                    | 0.8                           | 4.4                    | 67                         |
| 71011     | 7111 -01C00600-U0BK1 -00 | 6              | 7 X 1.04                    | 0.8                           | 4.8                    | 71                         |
| 71012     | 7111 -01C01000-U0BK1 -00 | 10             | 7 X 1.35                    | 1.0                           | 6.2                    | 119                        |
| 71013     | 7111 -01C01600-U0BK1 -00 | 16             | 7 X 1.7                     | 1.0                           | 7.2                    | 179                        |
| 71014     | 7111 -01C02500-U0BK1 -00 | 25             | 7 X 2.14                    | 1.2                           | 8.9                    | 281                        |
| 71015     | 7111 -01C03500-U0BK1 -00 | 35             | 7 X 2.52                    | 1.2                           | 10.1                   | 379                        |
| 71016     | 7111 -01C05000-U0BK8 -00 | 50             | 19 X 1.78                   | 1.4                           | 11.8                   | 509                        |
| 71017     | 7111 -01C07000-U0BK8 -00 | 70             | 19 X 2.14                   | 1.4                           | 13.6                   | 717                        |
| 71018     | 7111 -01C09500-U0BK8 -00 | 95             | 19 X 2.52                   | 1.6                           | 16.0                   | 990                        |
| 71019     | 7111 -01C12000-U0BK8 -00 | 120            | 37 X 2.03                   | 1.6                           | 17.6                   | 1227                       |
| 71020     | 7111 -01C15000-U0BK8 -00 | 150            | 37 X 2.25                   | 1.8                           | 19.5                   | 1510                       |
| 71021     | 7111 -01C18500-U0BK8 -00 | 185            | 37 X 2.52                   | 2.0                           | 21.8                   | 1892                       |

For colours other than Black, please replace BK in the code by "BL" for Blue, "BN" for brown, "GN" for Green, "GY" for Grey, "OR" for Orange, "PK" for Pink, "RD" for Red, "TR" for Turquoise, "VT" for Violet, "WT" for White, "YG" for Yellow/green and "YL" for Yellow.

## H05V-U, H07V-U, H07V2-R(90°C)

| Order No. | MESC CODE                | SIZE<br>Sq. mm | STRAND X<br>DIA<br>NO. X mm | INSULATION<br>THICKNESS<br>mm | APPROX.<br>O. D.<br>mm | APPROX.<br>WEIGHT<br>KG/KM |
|-----------|--------------------------|----------------|-----------------------------|-------------------------------|------------------------|----------------------------|
| 71022     | 7C61 -01C00150-U0BK1 -00 | 1.5            | 1x1.38                      | 0.7                           | 2.9                    | 21                         |
| 71023     | 7C11 -01C00150-U0BK1 -00 | 1.5            | 7x0.53                      | 0.7                           | 3.1                    | 22                         |
| 71024     | 7C61 -01C00250-U0BK1 -00 | 2.5            | 1x1.78                      | 0.8                           | 3.5                    | 33                         |
| 71025     | 7C11 -01C00150-U0BK1 -00 | 2.5            | 7x0.67                      | 0.8                           | 3.7                    | 34                         |
| 71026     | 7C11 -01C00400-U0BK1 -00 | 4              | 7x0.85                      | 0.8                           | 4.2                    | 51                         |
| 71027     | 7C11 -01C00600-U0BK1 -00 | 6              | 7x1.04                      | 0.8                           | 4.8                    | 71                         |
| 71028     | 7C11 -01C01000-U0BK1 -00 | 10             | 7x1.35                      | 1.0                           | 6.2                    | 119                        |
| 71029     | 7C11 -01C01600-U0BK1 -00 | 16             | 7x1.7                       | 1.0                           | 7.2                    | 179                        |
| 71030     | 7C11 -01C02500-U0BK1 -00 | 25             | 7x2.14                      | 1.2                           | 8.9                    | 281                        |
| 71031     | 7C11 -01C03500-U0BK1 -00 | 35             | 7x2.52                      | 1.2                           | 10.1                   | 379                        |
| 71032     | 7C11 -01C05000-U0BK8 -00 | 50             | 19x1.78                     | 1.4                           | 11.8                   | 509                        |
| 71033     | 7C11 -01C07000-U0BK8 -00 | 70             | 19x2.14                     | 1.4                           | 13.6                   | 717                        |
| 71034     | 7C11 -01C09500-U0BK8 -00 | 95             | 19x2.52                     | 1.6                           | 16.0                   | 990                        |
| 71035     | 7C11 -01C12000-U0BK8 -00 | 120            | 37x2.03                     | 1.6                           | 17.6                   | 1227                       |
| 71036     | 7C11 -01C15000-U0BK8 -00 | 150            | 37x2.25                     | 1.6                           | 19.5                   | 1510                       |



## PVC INSULATED NON SHEATHED SINGLE CORE CABLE

H05V-K, H07V-K(70°C)  
H07V2-K(90°C)

NYAF

IEC-60227 -2

Specification : BS-6500, BS-6004 & IEC-60227 -3

|   |  |
|---|--|
|  |  |
|   | CU/PVC (NYAF) 50 MM2 450/750 V MESC 2005 |
|  |  |
|   | H07V2-K 2.5 MESC 2005                    |

**Application:** These cables are used for the purpose of lighting in residential and commercial building in surface mounted or embedded conduits. Suitable for voltages upto 1000 AC or upto 750 to to earth DC when used for fixed installation inside appliances, switchgear and controlgear.

### Construction

- **Conductor** : Plain annealed flexible copper stranded as per class 5 of IEC-60228.
- **Insulation** : PVC type TI 1 as per BS-7655 (H05V-K, H07V-K)  
PVC type TI 3 as per BS-7655 (H07V2-K)

### Technical Data

- **Temperature range** : H05V-K, H07V-K(70°C). H07V2-K.(90°C)
- **Working voltage** : 300 /500 V. upto 1.0 mm<sup>2</sup>, 450 /750 V. for 1.5 mm and above.
- **Conductor resistance** : As per class 5 of IEC-60228.
- **Flame retardance** : IEC-60332 -1

### Current Carrying Capacity at 30°C in free air

| Area (mm <sup>2</sup> ) | One Phase (A) | Three Phase (A) | Area (mm <sup>2</sup> ) | One Phase (A) | Three Phase (A) |
|-------------------------|---------------|-----------------|-------------------------|---------------|-----------------|
| 1.0                     | 17            | 16              | 35                      | 145           | 130             |
| 1.5                     | 21            | 20              | 50                      | 175           | 160             |
| 2.5                     | 30            | 26              | 70                      | 220           | 200             |
| 4                       | 40            | 36              | 95                      | 270           | 240             |
| 6                       | 50            | 45              | 120                     | 310           | 280             |
| 10                      | 68            | 61              | 150                     | 355           | 320             |
| 16                      | 90            | 81              | 185                     | 405           | 365             |
| 25                      | 118           | 106             |                         |               |                 |

|                     |      |      |      |      |      |      |      |
|---------------------|------|------|------|------|------|------|------|
| Ambient temperature | 35   | 40   | 45   | 50   | 55   | 60   | 65   |
| Correction factor   | 0.94 | 0.87 | 0.79 | 0.71 | 0.61 | 0.50 | 0.35 |

Packing: Upto sizes 35mm<sup>2</sup> shrunk wrapped coils of 100 Yards. For 50mm<sup>2</sup> and above 500 /1000 Meter on wooden drum.



**M E S C**  
SPECIALIZED CABLES

## PVC INSULATED NON SHEATHED SINGLE CORE CABLE

H05V-K, H07V-K

NYAF

IEC-60227- 2

| Order No. | MESC CODE                | SIZE (Sq. mm) | STRANDX DIA NO. X MM | INSULATION THICKNESS (mm) | APPROX. O. D. (mm) | APPROX WEIGHT Kg / Km |
|-----------|--------------------------|---------------|----------------------|---------------------------|--------------------|-----------------------|
| 51001     | 5181 -01C00050-U0BK1 -00 | 0.5           | 16 X 0.2             | 0.6                       | 2.2                | 9                     |
| 51002     | 5181 -01C00075-U0BK1 -00 | 0.75          | 24 X 0.2             | 0.6                       | 2.4                | 12                    |
| 51003     | 5181 -01C00100-U0BK1 -00 | 1.0           | 32 X 0.2             | 0.6                       | 2.6                | 15                    |
| 51004     | 5181-01C00150-U0BK1-00   | 1.5           | 30 X 0.25            | 0.7                       | 3.0                | 21                    |
| 51005     | 5181 -01C00250-U0BK1 -00 | 2.5           | 50 X 0.25            | 0.8                       | 3.6                | 33                    |
| 51006     | 5181 -01C00400-U0BK1 -00 | 4             | 56 X 0.3             | 0.8                       | 4.2                | 49                    |
| 51007     | 5181 -01C00600-U0BK1 -00 | 6             | 84 X 0.3             | 0.8                       | 4.8                | 69                    |
| 51008     | 5181 -01C01000-U0BK1 -00 | 10            | 80 X 0.4             | 1.0                       | 6.1                | 116                   |
| 51009     | 5181 -01C01600-U0BK1 -00 | 16            | 126 X 0.4            | 1.0                       | 7.1                | 173                   |
| 51010     | 5181 -01C02500-U0BK1 -00 | 25            | 196 X 0.4            | 1.2                       | 8.8                | 266                   |
| 51011     | 5181 -01C03500-U0BK1 -00 | 35            | 276 X 0.4            | 1.2                       | 10.0               | 364                   |
| 51012     | 5181 -01C05000-U0BK8 -00 | 50            | 396 X 0.4            | 1.4                       | 11.9               | 520                   |
| 51013     | 5181 -01C07000-U0BK8 -00 | 70            | 360 X 0.5            | 1.4                       | 13.9               | 756                   |
| 51014     | 5181 -01C09500-U0BK8 -00 | 95            | 475 X 0.5            | 1.6                       | 15.9               | 996                   |
| 51015     | 5181 -01C12000-U0BK8 -00 | 120           | 608 X 0.5            | 1.6                       | 17.6               | 1257                  |
| 51016     | 5181 -01C15000-U0BK8 -00 | 150           | 760 X 0.5            | 1.8                       | 19.7               | 1572                  |
| 51017     | 5181 -01C18500-U0BK8 -00 | 185           | 950 X 0.5            | 2.0                       | 21.9               | 1964                  |

For colours other than Black, please replace BK in the code by "BL" for Blue, "BN" for brown, "GN" for Green, "GY" for Grey, "OR" for Orange, "PK" for Pink, "RD" for Red, "TR" for Turquoise, "VT" for Violet, "WT" for White, "YG" for Yellow/green and "YL" for Yellow.

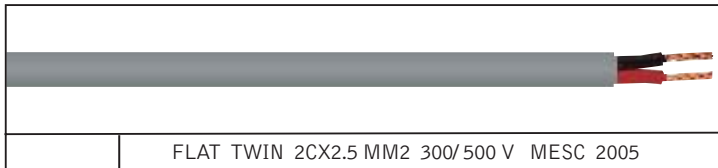
### H07V2-K (90°C)

| Order No. | MESC CODE                | SIZE (Sq. mm) | STRANDX DIA NO. X MM | INSULATION THICKNESS (mm) | APPROX. O. D. (mm) | APPROX WEIGHT Kg / Km |
|-----------|--------------------------|---------------|----------------------|---------------------------|--------------------|-----------------------|
| 51018     | 5C81 -01C00150-U0BK1 -00 | 1.5           | 30x0.25              | 0.7                       | 3.0                | 21                    |
| 51019     | 5C81 -01C00250-U0BK1 -00 | 2.5           | 50x0.25              | 0.8                       | 3.6                | 33                    |
| 51020     | 5C81 -01C00400-U0BK1 -00 | 4             | 56x0.3               | 0.8                       | 4.2                | 49                    |
| 51021     | 5C81 -01C00600-U0BK1 -00 | 6             | 84x0.3               | 0.8                       | 4.8                | 69                    |
| 51022     | 5C81 -01C01000-U0BK1 -00 | 10            | 80x0.4               | 1.0                       | 6.1                | 116                   |
| 51023     | 5C81 -01C01600-U0BK1 -00 | 16            | 126x0.4              | 1.0                       | 7.1                | 173                   |
| 51024     | 5C81 -01C02500-U0BK1 -00 | 25            | 196x0.4              | 1.2                       | 8.8                | 266                   |
| 51025     | 5C81 -01C03500-U0BK1 -00 | 35            | 276x0.4              | 1.2                       | 10.0               | 364                   |
| 51026     | 5C81 -01C05000-U0BK8 -00 | 50            | 396x0.4              | 1.4                       | 11.9               | 520                   |
| 51027     | 5C81 -01C07000-U0BK8 -00 | 70            | 360x0.5              | 1.4                       | 13.9               | 756                   |
| 51028     | 5C81 -01C09500-U0BK8 -00 | 95            | 475x0.5              | 1.6                       | 15.9               | 996                   |
| 51029     | 5C81 -01C12000-U0BK8 -00 | 120           | 608x0.5              | 1.6                       | 17.6               | 1257                  |
| 51030     | 5C81 -01C15000-U0BK8 -00 | 150           | 760x0.5              | 1.8                       | 19.7               | 1572                  |
| 51031     | 5C81 -01C18500-U0BK8 -00 | 185           | 950x0.5              | 2.0                       | 21.9               | 1964                  |

Packing: upto Sizes 35mm<sup>2</sup> Shrunk wrapped coils of 100 yards. for 50m<sup>2</sup> and above 500/ 1000 meter on wooden drums.

## PVC INSULATED PVC SHEATHED CABLE FLAT TWIN AND THREE CORE

Specification: **BS - 6004.**



**Application:** These cables are used in dry or damp locations for fixed installation. Suitable for installation in walls, on boards or embedded in plaster.

### Construction

- **Conductor** : Plain annealed copper as per class 1 or class 2 of IEC-60228.
- **Insulation** : PVC Type TI1 of BS- 7655, Two or Three insulated cores laid parallel and sheathed.
- **Colour code** : Twin core : Red & Black.  
Three core : Red, Yellow (Centre core) and Blue.
- **Sheath** : PVC Type 6 of BS-7655. Our standard colour is Grey. White can be supplied on request. For white sheath replace "GY" by "WT" in MES C cable code.

### Technical Data

- **Temperature range** : - 25°C to + 70°C.
- **Working voltage** : 300 /500 V. R.M.S.
- **Conductor resistance** : As per class 1 or 2 of IEC - 60228.

| Order No. | MES C CODE               | Size No. X Sq. mm | Strands X Dia No. X mm | Insulation Thickness mm | Sheath Thickness mm | Approx. O. D. mm | Approx. Weight Kg / Km |
|-----------|--------------------------|-------------------|------------------------|-------------------------|---------------------|------------------|------------------------|
| 75001     | 7561 -02C00100-U0GY1 -00 | 2 X 1.0           | 1 X 1.13               | 0.6                     | 0.9                 | 6.8X4.4          | 53                     |
| 75002     | 7561 -02C00150-U0GY1 -00 | 2 X 1.5           | 1 X 1.38               | 0.7                     | 0.9                 | 7.7X4.8          | 70                     |
| 75003     | 7511 -02C00150-U0GY1 -00 | 2 X 1.5           | 7 X 0.53               | 0.7                     | 0.9                 | 8.1X5.0          | 76                     |
| 75004     | 7561 -02C00250-U0GY1 -00 | 2 X 2.5           | 1 X 1.78               | 0.8                     | 0.9                 | 8.9X5.4          | 100                    |
| 75005     | 7511 -02C00250-U0GY1 -00 | 2 X 2.5           | 7 X 0.67               | 0.8                     | 1.0                 | 9.5X5.9          | 110                    |
| 75006     | 7561 -02C00400-U0GY1 -00 | 2 X 4             | 1 X 2.25               | 0.8                     | 1.0                 | 10.1X6.1         | 139                    |
| 75007     | 7511 -02C00400-U0GY1 -00 | 2 X 4             | 7 X 0.85               | 0.8                     | 1.0                 | 10.7X6.4         | 148                    |
| 75008     | 7561 -02C00600-U0GY1 -00 | 2 X 6             | 1 X 2.76               | 0.8                     | 1.0                 | 11.1X6.6         | 185                    |
| 75009     | 7511 -02C00600-U0GY1 -00 | 2 X 6             | 7 X 1.04               | 0.8                     | 1.1                 | 12.0X7.2         | 201                    |
| 75010     | 7511 -02C01000-U0GY1 -00 | 2 X 10            | 7 X 1.35               | 1.0                     | 1.2                 | 14.9X8.8         | 319                    |
| 75011     | 7511 -02C01600-U0GY1 -00 | 2 X 16            | 7 X 1.7                | 1.0                     | 1.3                 | 17.3X10.1        | 461                    |
| 75012     | 7561 -03C00100-U0GY1 -00 | 3 X 1.0           | 1 X 1.13               | 0.6                     | 0.9                 | 9.2X4.4          | 76                     |
| 75013     | 7561 -03C00150-U0GY1 -00 | 3 X 1.5           | 1 X 1.38               | 0.7                     | 0.9                 | 10.5X4.8         | 102                    |
| 75014     | 7561 -03C00250-U0GY1 -00 | 3 X 2.5           | 1 X 1.78               | 0.8                     | 1.0                 | 12.6X5.7         | 152                    |
| 75015     | 7511 -03C00400-U0GY1 -00 | 3 X 4             | 7 X 0.85               | 0.8                     | 1.1                 | 15.1X6.7         | 224                    |
| 75016     | 7511 -03C00600-U0GY1 -00 | 3 X 6             | 7 X 1.04               | 0.8                     | 1.1                 | 16.8X7.2         | 296                    |
| 75017     | 7511 -03C01000-U0GY1 -00 | 3 X 10            | 7 X 1.35               | 1.0                     | 1.2                 | 21.1X8.8         | 474                    |
| 75018     | 7511 -03C01600-U0GY1 -00 | 3 X 16            | 7 X 1.7                | 1.0                     | 1.3                 | 24.5X10.1        | 686                    |

**Packing:** Shrinked wrapped coils of 100 yards.

## THHN / THWN

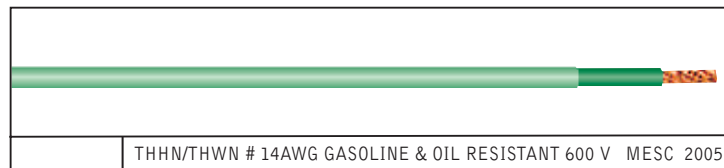
90°C Dry

600 Volts

UL 83

75°C Wet, VW-1

### Specification : UL 83



**Application:** Widely used in new constructions. Suitable for lighting and power purposes in Industrial, Commercial and Residential Buildings. Also suitable for Control Circuits, machine Tools and Appliances. Nylon jacket provides mechanical ruggedness and is resistant to Acids, Alkalis, Oils, Gasoline and Chemicals

### Construction:

- **Conductor** : Solid as per ASTM B 3, Class C as per ASTM B 8 or 19 wire combination unilay (for sizes 6 AWG onwards) as per UL 1581.
- **Insulation** : Polyvinyl Chloride meets all the performance requirement as per UL83. UL rated VW1 conductors. PVC insulation also meets the UL758 requirements for 105°C appliance wiring material.
- **Jacket** : Nylon meets all the requirements of UL 83.

| Order No. | MES C CODE               | Size AWG | Strand X Dia No. X mm | Insulation Thickness mm | Jacket Thickness mm | Approx. O. D. mm | Approx. Weight Kg/Km | Ampacity * |           |
|-----------|--------------------------|----------|-----------------------|-------------------------|---------------------|------------------|----------------------|------------|-----------|
|           |                          |          |                       |                         |                     |                  |                      | 90°C THHN  | 75°C THWN |
| 64001     | 6166 -01C14AWG-U0BK5 -00 | 14       | 1 X 1.63              | 0.38                    | 0.11                | 2.7              | 24                   | 25 **      | 20 **     |
| 64002     | 6166 -01C12AWG-U0BK5 -00 | 12       | 1 X 2.05              | 0.38                    | 0.11                | 3.2              | 36                   | 30 **      | 25 **     |
| 64003     | 6166 -01C10AWG-U0BK5 -00 | 10       | 1 X 2.588             | 0.51                    | 0.11                | 4.0              | 57                   | 40 **      | 35 **     |
| 64004     | 6166 -01C08AWG-U0BK5 -00 | 8        | 1 X 3.263             | 0.76                    | 0.13                | 5.2              | 92                   | 55         | 50        |
| 64005     | 61A6 -01C14AWG-U0BK5 -00 | 14       | 19 X 0.373            | 0.38                    | 0.11                | 3.0              | 25                   | 25 *       | 20 *      |
| 64006     | 61A6 -01C12AWG-U0BK5 -00 | 12       | 19 X 0.47             | 0.38                    | 0.11                | 3.5              | 37                   | 30 *       | 25 *      |
| 64007     | 61A6 -01C10AWG-U0BK5 -00 | 10       | 19 X 0.593            | 0.51                    | 0.11                | 4.4              | 59                   | 40 *       | 35 *      |
| 64008     | 61A6 -01C08AWG-U0BK5 -00 | 8        | 19 X 0.747            | 0.76                    | 0.13                | 5.7              | 96                   | 55         | 50        |

| Order No. | MES C CODE                | SIZE AWG | Large Strand No. X mm | Small Strand No. X mm | Insulation Thickness mm | Jacket Thickness mm | Approx. O. D. mm | Approx. Weight Kg/Km | Ampacity * |           |
|-----------|---------------------------|----------|-----------------------|-----------------------|-------------------------|---------------------|------------------|----------------------|------------|-----------|
|           |                           |          |                       |                       |                         |                     |                  |                      | 90°C THHN  | 75°C THWN |
| 64009     | 61U6 -01C06AWG-U0BK5 -00  | 6        | 13 X 1.02             | 6 X 0.75              | 0.76                    | 0.13                | 6.5              | 148                  | 75         | 65        |
| 64010     | 61U6 -01C04AWG-U0BK5 -00  | 4        | 13 X 1.28             | 6 X 0.94              | 1.02                    | 0.15                | 8.2              | 237                  | 95         | 85        |
| 64011     | 61U6 -01C02AWG-U0BK7 -00  | 2        | 13 X 1.62             | 6 X 1.19              | 1.02                    | 0.15                | 9.7              | 363                  | 130        | 115       |
| 64012     | 61U6 -01C01AWG-U0BK7 -00  | 1        | 13 X 1.82             | 6 X 1.33              | 1.27                    | 0.18                | 11.2             | 465                  | 150        | 130       |
| 64013     | 61U6 -01C10/AW-U0BK 7 -00 | 10       | 13/ X 2.04            | 6 X 1.50              | 1.27                    | 0.18                | 12.2             | 576                  | 170        | 150       |
| 64014     | 61U6 -01C20/AW-U0BK 7 -00 | 20       | 13/ X 2.30            | 6 X 1.68              | 1.27                    | 0.18                | 13.3             | 715                  | 195        | 175       |

\* Not more than three current carrying conductors in raceway or cable or earth (Directly Buried), based on ambient temperature of 30°C, as per NEC 310 -16.

\*\* Unless otherwise specifically permitted in the NEC, the overcurrent protection shall not exceed 15 ampere for 14 AWG, 20 ampere for 12 AWG and 30 ampere for 10 AWG after correction factors for ambient temperature and number of conductors have been applied.

For colours other than Black, please replace BK in the code by "BL" for Blue, "BN" for brown, "GN" for Green, "GY" for Grey, "OR" for Orange, "PK" for Pink, "RD" for Red, "TR" for Turquoise, "VT" for Violet, "WT" for White, "YG" for Yellow/green and "YL" for Yellow.

Packing: Sizes upto 4 AWG plastic Reels of 500 ft. Sizes 2 AWG and above on Wooden Reels of 1000 Ft.

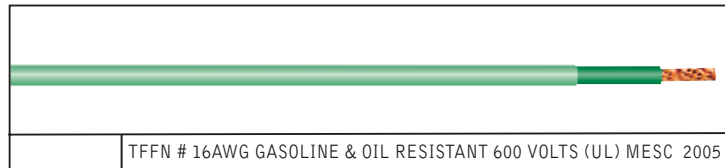
TFFN

90°C

600 Volts

UL62

### Specification: UL62 For Fixture Wire



**Application** : These wires are used in Industrial and Commercial application where resistance to mechanical abuse is required. The Nylon Jacket has excellent resistance to Gasoline, Oils and Chemicals.

### Construction

- **Conductor** : Bare annealed copper stranded as per UL62.
- **Insulation** : PVC rated 90°C as per UL62.
- **Jacket** : Nylon overall jacket as per UL62.

| Order No. | MESC CODE                    | Size AWG | Strand X Dia. No.Xmm | Insulation Thickness mm | Jacket Thickness mm | Approx. O. D. mm | Approx. Weight Kg/Km | Ampacity (A) |
|-----------|------------------------------|----------|----------------------|-------------------------|---------------------|------------------|----------------------|--------------|
| 65001     | 6586 -01 C 18 AWG-U0BK5 -00  | 18       | 16 X0.254            | 0.38                    | 0.1                 | 2.3              | 12                   | 6            |
| 65002     | 6586 - 01 C 16 AWG-U0BK5 -00 | 16       | 26 X0.254            | 0.38                    | 0.1                 | 2.6              | 17                   | 8            |

**Note** : 1. Standard packing 500 Ft. Reel.  
 2. For colours other than Black, please replace BK in the code by "BL" for Blue, "BN" for brown, "GN" for Green, "GY" for Grey, "OR" for Orange, "PK" for Pink, "RD" for Red, "TR" for Turquoise, "VT" for Violet, "WT" for White, "YG" for Yellow/green and "YL" for Yellow.



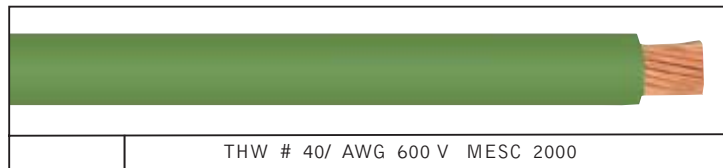
**THW**

**75°C**

**600 Volts**

**UL83**

**Specification : UL83**



**Application** : Used for Lighting and Power in Residential, Commercial or Industrial Buildings for Circuits not exceeding 600 Volts.

### Construction

- **Conductor** : Plain Copper as per ASTM B3, stranded to Class B as per ASTM B8.
- **Insulation** : Polyvinyl Chloride meets the performance requirement of UL83.

| Order No. | MESC CODE                | Size<br>AWG/MCM | Strand X<br>Dia.<br>No. x mm | Insulation<br>Thickness<br>mm | Approx.<br>O.D.<br>mm. | Approx.<br>Weight<br>Kg/Km | Ampacity*<br>Conductor |
|-----------|--------------------------|-----------------|------------------------------|-------------------------------|------------------------|----------------------------|------------------------|
| 67001     | 6711 -01C14AWG-U0BK1 -00 | 14              | 7X0.615                      | 1.14                          | 4.2                    | 37                         | 20**                   |
| 67002     | 6711 -01C12AWG-U0BK1 -00 | 12              | 7X0.775                      | 1.14                          | 4.7                    | 51                         | 25**                   |
| 67003     | 6711 -01C10AWG-U0BK1 -00 | 10              | 7X0.978                      | 1.14                          | 5.3                    | 73                         | 35**                   |
| 67004     | 6711 -01C08AWG-U0BK1 -00 | 8               | 7X1.23                       | 1.52                          | 6.9                    | 118                        | 50                     |
| 67005     | 6711 -01C06AWG-U0BK1 -00 | 6               | 7X1.56                       | 1.52                          | 7.9                    | 174                        | 65                     |
| 67006     | 6711 -01C04AWG-U0BK1 -00 | 4               | 7X1.96                       | 1.52                          | 9.1                    | 256                        | 85                     |
| 67007     | 6711 -01C02AWG-U0BK1 -00 | 2               | 7X2.47                       | 1.52                          | 10.6                   | 384                        | 115                    |
| 67008     | 6711 -01C01AWG-U0BK8 -00 | 1               | 19X1.69                      | 2.03                          | 12.7                   | 505                        | 130                    |
| 67009     | 6711 -01C10/AW-U0BK8 -00 | 10              | 19/X1.89                     | 2.03                          | 13.7                   | 614                        | 150                    |
| 67010     | 6711 -01C20/AW-U0BK8 -00 | 20              | 19/X2.13                     | 2.03                          | 14.9                   | 761                        | 175                    |
| 67011     | 6711 -01C40/AW-U0BK8 -00 | 40              | 19/X2.68                     | 2.03                          | 17.7                   | 1158                       | 230                    |
| 67012     | 6711 -01C250MC-U0BK8 -00 | 250             | 37X2.09                      | 2.41                          | 19.7                   | 1383                       | 255                    |
| 67013     | 6711 -01C300MC-U0BK8 -00 | 300             | 37X2.29                      | 2.41                          | 21.1                   | 1636                       | 285                    |

\* Based on not more than three conductors in raceway or cable or earth (Directly Buried).

\*\* Unless otherwise specifically permitted in the NEC, the overcurrent protection for conductor shall not exceed 15 ampere for 14 AWG, 20 ampere for 12 AWG and 30 ampere for 10 AWG after correction factors for ambient temperature and number of conductors have been applied.

**Packing:** Upto 2 AWG shrunk wrapped coils of 100 yards. For 1 AWG and above wooden drums of 500 /1000 meter.

For colours other than Black, please replace BK in the code by "BL" for Blue, "BN" for brown, "GN" for Green, "GY" for Grey, "OR" for Orange, "PK" for Pink, "RD" for Red "TR" for Turquoise, "VT" for Violet, "WT" for White, "YG" for Yellow/green and "YL" for Yellow.

## XHHW

90 °C Dry /75 °C Wet

600 Volts

UL 44

Specification : UL44



**Application:** Widely used for Control, Switch Boards, Lighting and Power Circuits in residential and commercial buildings. Also used for industrial plants and utility substations.

### Construction

- **Conductor** : Plain copper to ASTM B 3 stranded to class B of ASTM B 8.
- **Insulation** : XLPE as per ICEA S -66 -524. UL Type XHHW conductors. Any required colour can be provided.

| Order No. | MESC CODE                 | Size AWG/MCM | Strand X Dia. No. X mm | Insulation Thickness mm | Approx. O. D. mm | Approx. Weight Kg/Km. | Ampacity * |
|-----------|---------------------------|--------------|------------------------|-------------------------|------------------|-----------------------|------------|
| 66001     | 6614 -01C 14AWG-U0BK1 -00 | 14           | 7X0.615                | 0.76                    | 3.4              | 26                    | 25**       |
| 66002     | 6614- 01C 12AWG-U0BK1 -00 | 12           | 7X0.775                | 0.76                    | 3.9              | 38                    | 30**       |
| 66003     | 6614 -01C 10AWG-U0BK1 -00 | 10           | 7X0.978                | 0.76                    | 4.5              | 58                    | 40**       |
| 66004     | 6614 -01C 08AWG-U0BK1 -00 | 8            | 7X1.23                 | 1.14                    | 6.1              | 95                    | 55         |
| 66005     | 6614 -01C 06AWG-U0BK1 -00 | 6            | 7X1.56                 | 1.14                    | 7.1              | 146                   | 75         |
| 66006     | 6614 -01C 04AWG-U0BK1 -00 | 4            | 7X1.96                 | 1.14                    | 8.3              | 222                   | 95         |
| 66007     | 6614 -01C 02AWG-U0BK1 -00 | 2            | 7X2.47                 | 1.14                    | 9.8              | 343                   | 130        |
| 66008     | 6614- 01C 01AWG-U0BK8 -00 | 1            | 19X1.69                | 1.40                    | 11.4             | 438                   | 150        |
| 66009     | 6614 -01C 10/AW-U0BK8 -00 | 1 /0         | 19X1.89                | 1.40                    | 12.4             | 541                   | 170        |
| 66010     | 6614 -01C 20/AW-U0BK8 -00 | 2 /0         | 19X2.13                | 1.40                    | 13.6             | 679                   | 195        |
| 66011     | 6614 -01C 40/AW-U0BK8 -00 | 4 /0         | 19X2.68                | 1.40                    | 16.3             | 1056                  | 260        |
| 66012     | 6614 -01C 250MC-U0BK8 -0  | 250          | 37X2.09                | 1.65                    | 18.1             | 1253                  | 290        |
| 66013     | 6614 -01C 300MC-U0BK8 -00 | 300          | 37X2.29                | 1.65                    | 19.5             | 1495                  | 320        |

- \* Based on not more than three conductors in raceway or cable or earth (Directly Buried)
- \* Unless otherwise specifically permitted in the NEC, the overcurrent protection for conductor shall not exceed 15 ampere for 14 AWG, 20 ampere for 12 AWG and 30 ampere for 10 AWG after correction factors for ambient temperature and number of conductors have been applied.

**Packing:** Upto 2 AWG shrunk wrapped coils of 100 yards. For 1 AWG and above wooden drums of 500/ 1000 meter.

For colours other than Black, please replace BK in the code by "BL" for Blue, "BN" for brown, "GN" for Green, "GY" for Grey, "OR" for Orange, "PK" for Pink, "RD" for Red, "TR" for Turquoise, "VT" for Violet, "WT" for White, "YG" for Yellow/green and "YL" for Yellow.

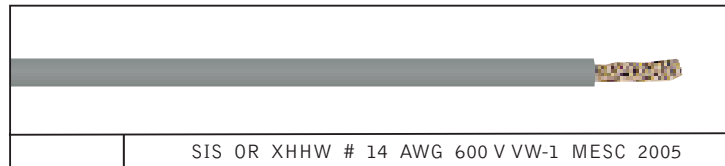
SIS

90 °C

600 Volts

UL44

Specification : UL44



**Application:** For switch board and control panel wiring. Resistant to flame, heat, oil, moisture and corrosive gases.

## Construction

- **Conductor** : Tinned copper to ASTM B 33 stranded to ASTM Class K.
- **Insulation** : Grey coloured XLPE to ICEA S-66 -524. UL Type XHHW conductor rated VW-1.

| Order No. | MESC CODE                 | Size AWG/MCM | Strand X Dia. No. X mm | Insulation Thickness mm | Approx. O. D. mm | Approx. Weight Kg/Km. | Ampacity * |
|-----------|---------------------------|--------------|------------------------|-------------------------|------------------|-----------------------|------------|
| 58001     | 5894 -01C 16AWG-U0GY5 -00 | 16           | 26 X 0.254             | 0.76                    | 3.1              | 3.2                   | 24         |
| 58002     | 5894 -01C 14AWG-U0GY5 -00 | 14           | 41 X 0.254             | 0.76                    | 3.5              | 4.4                   | 35**       |
| 58003     | 5894 -01C 12AWG-U0GY5 -00 | 12           | 65 X 0.254             | 0.76                    | 4.1              | 6.4                   | 40**       |
| 58004     | 5894 -01C 10AWG-U0GY5 -00 | 10           | 104 X 0.254            | 0.76                    | 4.8              | 9.6                   | 55**       |

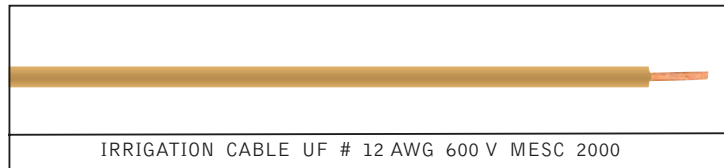
\* Based on ambient temperature of 30°C in free air for single insulated conductors. (NEC 310 -17)

\*\* Unless otherwise specifically permitted in the NEC, the overcurrent protection for these conductors shall not exceed 15 amperes for 14 AWG, 20 ampere for 12 AWG and 30 ampere for 10 AWG conductors.

**Packing:** 500 Ft. Reel.

## UF - DIRECT BURIAL IRRIGATION WIRE

Specification : UL493



**Application** : Single conductor type UF wire is employed for direct burial use in commercial sprinkler and irrigation systems, Golf courses, Public parks, Plantations and commercial produce farms.

### Construction

- **Conductor** : Solid annealed copper conductor as per ASTM B3.
- **Insulation** : Solid extruded PVC rated 60°C.

### Technical Data

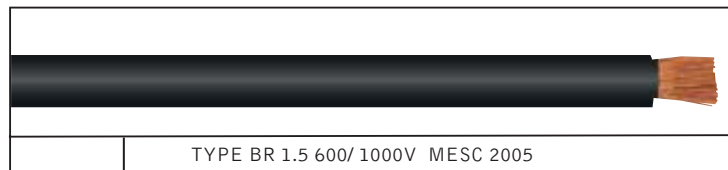
|                       |                  |
|-----------------------|------------------|
| Working voltage       | 600 Volts.       |
| Operating temperature | 60°C             |
| Conductor resistance  | As per ASTM B 3. |

| Order No. | MESC CODE                | Size AWG | Strand X Dia. No. X mm | Insulation Thickness mm | Approx. O. D. mm | Approx. Weight Per 2500 FT. KG. |
|-----------|--------------------------|----------|------------------------|-------------------------|------------------|---------------------------------|
| 62001     | 6261 -01C14AWG-U0BK7 -00 | 14       | 1 X 1.63               | 1.6                     | 5.0              | 35                              |
| 62002     | 6261 -01C12AWG-U0BK7 -00 | 12       | 1 X 2.05               | 1.6                     | 5.4              | 45                              |
| 62003     | 6261- 01C10AWG-U0BK7 -00 | 10       | 1 X 2.59               | 1.6                     | 6.0              | 62                              |

**Packing:** 2500 Ft. on Plywood Reels.

**Colours:** For other colours than Black, please replace BK in the code by "BL" for Blue, "BN" for brown, "GN" for Green, "GY" for Grey, "OR" for Orange, "PK" for Pink, "RD" for Red, "TR" for Turquoise, "VT" for Violet, "WT" for White, "YG" for Yellow/green and "YL" for Yellow.

## TYPES BU AND BR PVC INSULATED CABLES BS 6231



**Application:** These cables are useful for use in domestic premises, kitchens, offices for light duties for light portable appliances. These cables can be used in applications where extra flexibilities is required provided there is no danger of damage. Not suitable for cooking or heating appliances.

### Construction

- **Conductor** : Plain annealed copper solid as per class 1 of BS 6360 (Type BU) or stranded as per class 2 of BS 6360 (Type BR).
- **Insulation** : PVC type T11 as per BS 7655. Black, blue, brown, gray, red, white, yellow & green/yellow colours can be manufactured.

### Technical Date :

- **Temperature range** : -25°C to +70°C
- **Working voltage** : 600 / 1000 Volts.
- **Conductor resistance** : As per class 1 or 2 of BS 6360
- **Flame retardance** : IEC 60332 -1
- **Printing Legend Example** : TYPE BR 1.5 600 / 1000V MES C 2005

### Dimensional Details

| Order No. | MES C CODE               |    | Cores X Size No.XSq.mm | Strand X Diameter No.X mm | Insulation Thickness mm | Approx. O. D mm. | Approx. Weight Kg/Km |
|-----------|--------------------------|----|------------------------|---------------------------|-------------------------|------------------|----------------------|
| 71042     | 7A61 -01C00100-U0BK1 -00 |    | 1.0                    | 1X1.13                    | 0.8                     | 2.8              | 17                   |
| 71043     | 7A61 -01C00150-U0BK1 -00 | BU | 1.5                    | 1X1.38                    | 0.8                     | 3.1              | 22                   |
| 71044     | 7A61 -01C00250-U0BK1 -00 |    | 2.5                    | 1X1.78                    | 0.8                     | 3.5              | 33                   |
| 71045     | 7A11 -01C00100-U0BK1 -00 |    | 1.0                    | 7X0.43                    | 0.8                     | 3.0              | 18                   |
| 71046     | 7A11 -01C00150-U0BK1 -00 |    | 1.5                    | 7X0.53                    | 0.8                     | 3.3              | 24                   |
| 71047     | 7A11 -01C00250-U0BK1 -00 |    | 2.5                    | 7X0.67                    | 0.8                     | 3.7              | 35                   |
| 71048     | 7A11 -01C00400-U0BK1 -00 |    | 4                      | 7X0.85                    | 0.8                     | 4.2              | 51                   |
| 71049     | 7A11 -01C00600-U0BK1 -00 |    | 6                      | 7X1.04                    | 0.8                     | 4.8              | 72                   |
| 71050     | 7A11 -01C01000-U0BK1 -00 |    | 10                     | 7X1.35                    | 1.0                     | 6.2              | 120                  |
| 71051     | 7A11 -01C01600-U0BK1 -00 | BR | 16                     | 7X1.7                     | 1.0                     | 7.2              | 180                  |
| 71052     | 7A11 -01C02500-U0BK1 -00 |    | 25                     | 7X2.14                    | 1.2                     | 8.9              | 283                  |
| 71053     | 7A11 -01C03500-U0BK1 -00 |    | 35                     | 7X2.52                    | 1.2                     | 10.1             | 382                  |
| 71054     | 7A11 -01C05000-U0BK8 -00 |    | 50                     | 19X1.78                   | 1.4                     | 11.8             | 514                  |
| 71055     | 7A11 -01C07000-U0BK8 -00 |    | 70                     | 19X2.14                   | 1.4                     | 13.6             | 723                  |
| 71056     | 7A11 -01C09500-U0BK8 -00 |    | 95                     | 19X2.52                   | 1.6                     | 16.0             | 999                  |
| 71057     | 7A11 -01C12000-U0BK8 -00 |    | 120                    | 37X2.03                   | 1.6                     | 17.6             | 1238                 |
| 71058     | 7A11 -01C15000-U0BK8 -00 |    | 150                    | 37X2.25                   | 1.8                     | 19.5             | 1523                 |

**Packing:** Upto sizes 35 Sq.mm-shrunked wrapped coils of 100Yards. For 50mm<sup>2</sup> and above 500 /1000 Meter on wooden drums.

**Colors** : For other colours than black, please replace "BK" in the MES C code by "BL" for blue "BN" for brown, "GY" for Gray, "RD" for red. "WR" for white "YL" for Yellow and "YG" for Green/Yellow.

## TYPES CU AND CR PVC INSULATED CABLES BS 6231



**Application:** These cables are used for wiring of switch, control, metering, relay and instrument panels of power switchgear and for internal connections in rectifier equipment, motor starters and controllers.

### Construction

- **Conductor** : Plain annealed copper solid as per class 1 of BS 6360 (Type CU) or stranded as per class 2 of BS 6360 (Type CR).
- **Insulation** : PVC type T13 as per BS 7655. Black, blue, brown, gray, red, white, yellow & green/yellow colours can be manufactured.

### Technical Data :

- **Temperature range** : -25°C to +90°C
- **Working voltage** : 600 / 1000 Volts.
- **Conductor resistance** : As per class 1 or 2 of BS 6360
- **Flame retardance** : IEC 60332 -1
- **Printing Legend Example** : TYPE CR 1.5 HEAT RESISTING 90 600 /1000V MES C 2005

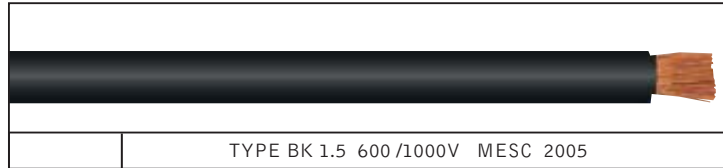
### Dimensional Details

| Order No. | MES C CODE               |    | Cores X Size No.XSq.mm | Strand X Diameter No.X mm | Insulation Thickness mm | Approx. O. D mm. | Approx. Weight Kg/Km |
|-----------|--------------------------|----|------------------------|---------------------------|-------------------------|------------------|----------------------|
| 71059     | 7B61 -01C00100-U0BK1 -00 |    | 1.0                    | 1X1.13                    | 0.8                     | 2.8              | 17                   |
| 71060     | 7B61 -01C00150-U0BK1 -00 |    | 1.5                    | 1X1.38                    | 0.8                     | 3.0              | 22                   |
| 71061     | 7B61 -01C00250-U0BK1 -00 | CU | 2.5                    | 1X1.78                    | 0.8                     | 3.5              | 33                   |
| 71062     | 7B11 -01C00100-U0BK1 -00 |    | 1.0                    | 7X0.43                    | 0.8                     | 3.0              | 18                   |
| 71063     | 7B11 -01C00150-U0BK1 -00 |    | 1.5                    | 7X0.53                    | 0.8                     | 3.3              | 24                   |
| 71064     | 7B11 -01C00250-U0BK1 -00 |    | 2.5                    | 7X0.67                    | 0.8                     | 3.7              | 35                   |
| 71065     | 7B11 -01C00400-U0BK1 -00 |    | 4                      | 7X0.85                    | 0.8                     | 4.2              | 51                   |
| 71066     | 7B11 -01C00600-U0BK1 -00 |    | 6                      | 7X1.04                    | 0.8                     | 4.8              | 72                   |
| 71067     | 7B11 -01C01000-U0BK1 -00 |    | 10                     | 7X1.35                    | 1.0                     | 6.2              | 120                  |
| 71068     | 7B11 -01C01600-U0BK1 -00 | CR | 16                     | 7X1.7                     | 1.0                     | 7.2              | 180                  |
| 71069     | 7B11 -01C02500-U0BK1 -00 |    | 25                     | 7X2.14                    | 1.2                     | 8.9              | 283                  |
| 71070     | 7B11 -01C03500-U0BK1 -00 |    | 35                     | 7X2.52                    | 1.2                     | 10.1             | 382                  |
| 71071     | 7B11 -01C05000-U0BK1 -00 |    | 50                     | 19X1.78                   | 1.4                     | 11.8             | 514                  |
| 71072     | 7B11 -01C07000-U0BK8 -00 |    | 70                     | 19X2.14                   | 1.4                     | 13.8             | 723                  |
| 71073     | 7B11 -01C09500-U0BK8 -00 |    | 95                     | 19X2.52                   | 1.6                     | 16.0             | 999                  |
| 71074     | 7B11 -01C12000-U0BK8 -00 |    | 120                    | 37X2.03                   | 1.6                     | 17.6             | 1238                 |
| 71075     | 7B11 -01C15000-U0BK8 -00 |    | 150                    | 37X2.25                   | 1.8                     | 19.5             | 1523                 |

**Packing:** Upto sizes 35 Sq.mm-shrunked wrapped coils of 100Yards.  
For 50mm<sup>2</sup> and above 500 /1000 Meter on wooden drums.

**Colors :** For other colours than black, please replace "BK" in the MES C code by "BL" for blue "BN" for brown, "GY" for Gray, "RD" for red. "WT" for white "YL" for Yellow and "OR" for orange, "PK" for pink, "VT" for violet, "TR" for Turquoise, "GN" for Green and "YG".

## TYPES BK AND BR PVC INSULATED CABLES BS 6231



**Application:** These cables are used for wiring of switch, control, metering, relay and instrument panels of power switchgear and for internal connections in rectifier equipment, motor starters and controllers.

### Construction

- **Conductor** : Plain annealed copper flexible as per class 5 of BS 6360.
- **Insulation** : PVC type T11 as per BS 7655. Black, blue, brown, gray, red, white, yellow & green/yellow colours can be manufactured.

### Technical Date :

- **Temperature range** : -25°C to+70°C
- **Working voltage** : 600 / 1000 Volts.
- **Conductor resistance** : As per class 1 or 2 of BS 6360
- **Flame retardance** : IEC 60332 -1
- **Printing Legend Example** : TYPE BK 1.5 600 / 1000V MESC 2005

### Dimensional Details

| Order No. | MESC CODE                | Cores X Size No.XSq.mm | Strand X Diameter No.X mm | Insulation Thickness mm | Approx. O. D mm. | Approx. Weight Kg/Km |
|-----------|--------------------------|------------------------|---------------------------|-------------------------|------------------|----------------------|
| 51035     | 5B81 -01C00050-U0BK1 -00 | 0.5                    | 16X0.2                    | 0.8                     | 2.6              | 13                   |
| 51036     | 5B81 -01C00075-U0BK1 -00 | 0.75                   | 24X0.2                    | 0.8                     | 2.8              | 17                   |
| 51037     | 5B81 -01C00100-U0BK1 -00 | 1.0                    | 32X0.2                    | 0.8                     | 3.0              | 20                   |
| 51038     | 5B81 -01C00150-U0BK1 -00 | 1.5                    | 30X0.25                   | 0.8                     | 3.2              | 24                   |
| 51039     | 5B81 -01C00250-U0BK1 -00 | 2.5                    | 50X0.25                   | 0.8                     | 3.7              | 35                   |
| 51040     | 5B81 -01C00400-U0BK1 -00 | 4                      | 56X0.3                    | 0.8                     | 4.2              | 51                   |
| 51041     | 5B81 -01C00600-U0BK1 -00 | 6                      | 84X0.3                    | 0.8                     | 4.8              | 71                   |
| 51042     | 5B81 -01C01000-U0BK1 -00 | 10                     | 80X0.4                    | 1.0                     | 6.2              | 119                  |
| 51043     | 5B81 -01C01600-U0BK1 -00 | 16                     | 126X0.4                   | 1.0                     | 7.9              | 179                  |
| 51044     | 5B81 -01C02500-U0BK1 -00 | 25                     | 196X0.4                   | 1.2                     | 9.7              | 277                  |
| 51045     | 5B81 -01C03500-U0BK1 -00 | 35                     | 276X0.4                   | 1.2                     | 11.1             | 375                  |
| 51046     | 5B81 -01C05000-U0BK8 -00 | 50                     | 396X0.4                   | 1.4                     | 13.1             | 535                  |
| 51047     | 5B81 -01C07000-U0BK8 -00 | 70                     | 360X0.5                   | 1.4                     | 15.7             | 774                  |
| 51048     | 5B81 -01C09500-U0BK8 -00 | 95                     | 475X0.5                   | 1.6                     | 17.9             | 1022                 |
| 51049     | 5B81 -01C12000-U0BK8 -00 | 120                    | 608X0.5                   | 1.6                     | 19.8             | 1284                 |
| 51050     | 5B81 -01C15000-U0BK8- 00 | 150                    | 760X0.5                   | 1.8                     | 22.1             | 1604                 |

**Packing:** Upto sizes 35 Sq.mm-shrunked wrapped coils of 100Yards.  
For 50mm<sup>2</sup> and above 500 /1000 Meter on wooden drums.

**Colors** : For other colours than black, please replace "BK" in the MESC code by "BL" for blue "BN" for brown, "GY" for Gray, "RD" for red. "WT" for white "YL" for Yellow and "YG" for Green/Yellow.

## TYPE CK PVC INSULATED FLEXIBLE CABLE BS 6231



**Application:** These cables are used for wiring of switch, control, metering, relay and instrument panels of power switchgear and for internal connections in rectifier equipment, motor starters and controllers.

### Construction

- **Conductor** : Plain annealed copper flexible as per class 5 of BS 6360.
- **Insulation** : PVC type T13 as per BS 7655. Black, blue, brown, gray, red, white, yellow & green/yellow colours can be manufactured.

### Technical Data :

- **Temperature range** : -25°C to +90°C
- **Working voltage** : 600 / 1000 Volts.
- **Conductor resistance** : As per class 1 or 2 of BS 6360
- **Flame retardance** : IEC 60332- 1
- **Printing Legend Example** : TYPE CK 1.5 HEAT RESISTING 90 600 / 1000V MESC 2005

### Dimensional Details

| Order No. | MESC CODE                | Cores X Size No.XSq.mm | Strand X Diameter No.X mm | Insulation Thickness mm | Approx. O. D mm. | Approx. Weight Kg/Km |
|-----------|--------------------------|------------------------|---------------------------|-------------------------|------------------|----------------------|
| 51051     | 5781 -01C00050-U0BK1 -00 | 0.5                    | 16X0.2                    | 0.8                     | 2.6              | 13                   |
| 51052     | 5781 -01C00075-U0BK1 -00 | 0.75                   | 24X0.2                    | 0.8                     | 2.8              | 17                   |
| 51053     | 5781 -01C00100-U0BK1 -00 | 1.0                    | 32X0.2                    | 0.8                     | 3.0              | 20                   |
| 51054     | 5781 -01C00150-U0BK1 -00 | 1.5                    | 30X0.25                   | 0.8                     | 3.2              | 24                   |
| 51055     | 5781 -01C00250-U0BK1 -00 | 2.5                    | 50X0.25                   | 0.8                     | 3.7              | 35                   |
| 51056     | 5781 -01C00400-U0BK1 -00 | 4                      | 56X0.3                    | 0.8                     | 4.2              | 51                   |
| 51057     | 5781 -01C00600-U0BK1 -00 | 6                      | 84X0.3                    | 0.8                     | 4.8              | 71                   |
| 51058     | 5781 -01C01000-U0BK1 -00 | 10                     | 80X0.4                    | 1.0                     | 6.2              | 119                  |
| 51059     | 5781 -01C01600-U0BK1 -00 | 16                     | 126X0.4                   | 1.0                     | 7.9              | 179                  |
| 51060     | 5781 -01C02500-U0BK1 -00 | 25                     | 196X0.4                   | 1.2                     | 9.7              | 277                  |
| 51061     | 5781 -01C03500-U0BK1 -00 | 35                     | 276X0.4                   | 1.2                     | 11.1             | 375                  |
| 51062     | 5781 -01C05000-U0BK8 -00 | 50                     | 396X0.4                   | 1.4                     | 13.1             | 535                  |
| 51063     | 5781 -01C07000-U0BK8 -00 | 70                     | 360X0.5                   | 1.4                     | 15.7             | 774                  |
| 51064     | 5781 -01C09500-U0BK8 -00 | 95                     | 475X0.5                   | 1.6                     | 17.9             | 1022                 |
| 51065     | 5781 -01C12000-U0BK8 -00 | 120                    | 608X0.5                   | 1.6                     | 19.8             | 1284                 |
| 51066     | 5781 -01C15000-U0BK8 -00 | 150                    | 760X0.5                   | 1.8                     | 22.1             | 1604                 |

**Packing:** Upto sizes 35 Sq.mm-shrunked wrapped coils of 100Yards.  
For 50mm<sup>2</sup> and above 500 /1000 Meter on wooden drums.

**Colors** : For colours other than black, please replace "BK" in the MESC code by "BL" for blue "BN" for brown, "GY" for Gray, "RD" for red. "WT" for white "YL" for Yellow and "YG" for Green/Yellow.