

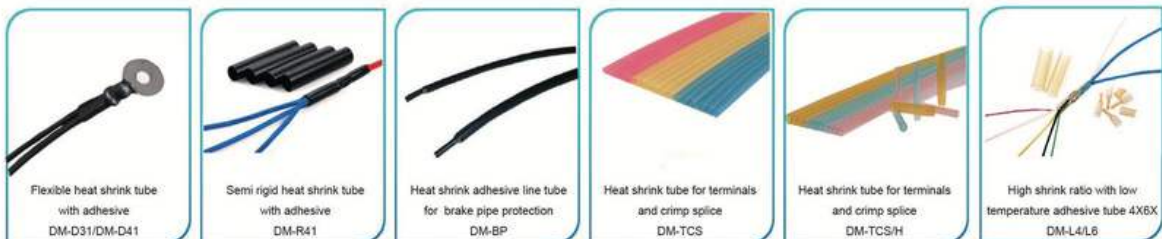


# CATALOGUE

Mechanical & Thermal Protection



## DUAL WALL TUBING



## MEDIUM & HEAVY WALL TUBING



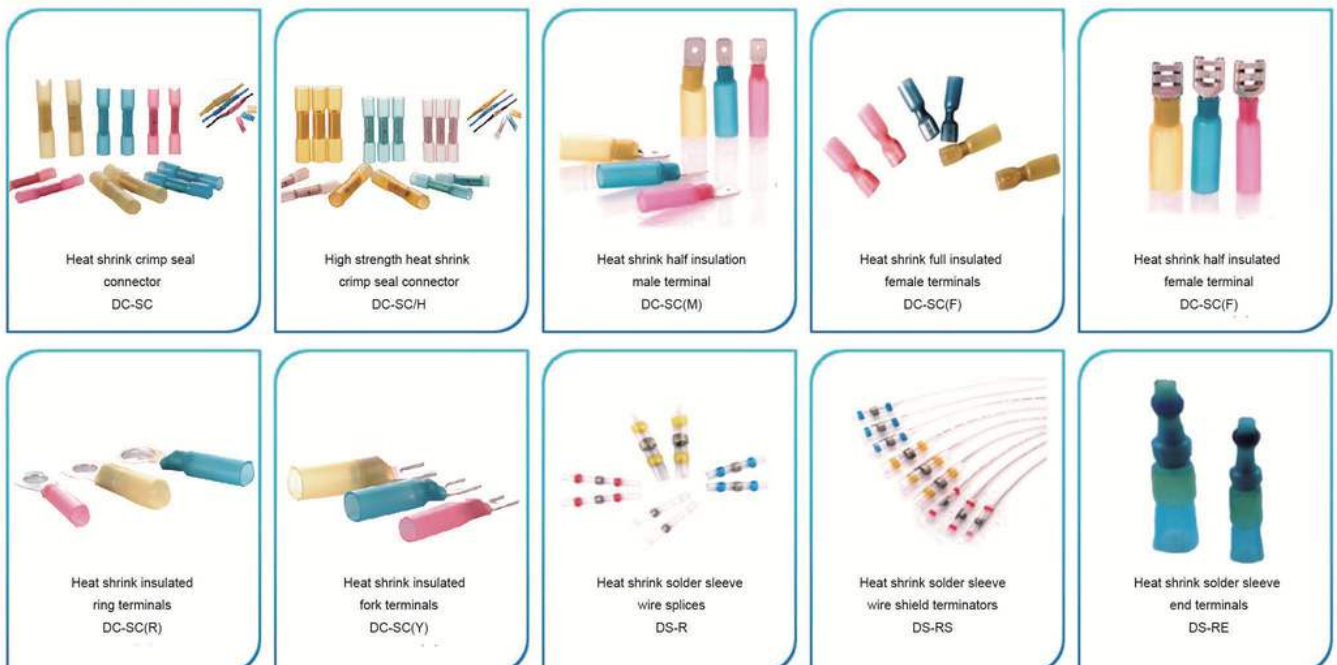
## MEDIUM VOLTAGE TUBING



## MOULDED PARTS



## SPECIAL PRODUCTS



## MECHANICAL & THERMAL PROTECTION



## OTHER PRODUCTS



# Products Application



Application for electronics, electric, insulation and waterproof, anti-corrosion, automobile, mechanical protection and thermal protection and other fields.





Heat Shrinkable  
Products



Braided Sleeves



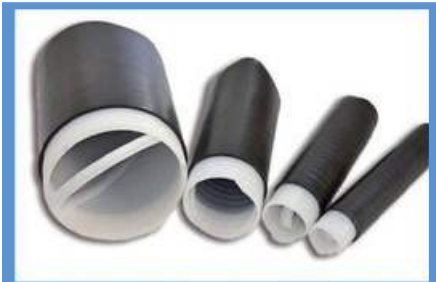
Cable Identification  
Systems



Connection Systems



Mechanical & Thermal  
Protective Sleeves



Cold Shrink Tubes

DP-ET

MECHANICAL & THERMAL PROTECTION

Expandable polyester braid sleeve

Applications

It is suitable for protection of pipes, hoses and cable harnesses used within the automotive and industrial sectors.

Features

It offers a continuous working temperature of -50°C to +150°C, which have a good resistance to abrasion and a high expansion rate.

Various

Standard color: Black., grey, other color available on request.



Technical Data

| Property |                             | Test Method                 | Values                       |
|----------|-----------------------------|-----------------------------|------------------------------|
| Physical | Peak temperature            | -                           | +175°C                       |
|          | Melting point               | -                           | +250°C                       |
|          | Flammability smoke toxicity | FMVSS 302                   | Self extinguishing           |
|          |                             | D45 1333                    | Type B                       |
|          |                             | UL94 on compound            | V-2                          |
|          |                             | NF F 16-101 & 102           | I2- F1                       |
|          |                             | EN 45 545-2                 | R22 & R23                    |
|          |                             | -                           | Halogen free                 |
|          | Abrasion resistance         | S21 5101 & D44 1959 PSA/RSA | CAT B                        |
| Chemical | Fluid resistance            | D47 1924                    | Unaffected by most chemicals |

Size Selection Chart

| Inch   | Flat width (mm) | MIN. (mm) | MAX. (mm) | Ingot | Single Ingot yarn number | Single yarn diameter (mm) | Braided density (mesh) | packaging |
|--------|-----------------|-----------|-----------|-------|--------------------------|---------------------------|------------------------|-----------|
| 1/8"   | 3±1             | 2.0       | 7         | 24    | 3                        | 0.20                      | 9                      | 500m/roll |
| 1/4"   | 6±1             | 3.0       | 9         | 32    | 3                        | 0.20                      | 8                      | 500m/roll |
| 5/16"  | 8±2             | 5.0       | 13        | 40    | 3                        | 0.20                      | 8                      | 500m/roll |
| 3/8"   | 10±2            | 6.0       | 16        | 48    | 3                        | 0.20                      | 8                      | 500m/roll |
| 1/2"   | 12±2            | 7.0       | 19        | 56    | 3                        | 0.20                      | 8                      | 500m/roll |
| 5/8"   | 15±2            | 9.0       | 22        | 48    | 3                        | 0.25                      | 8                      | 250m/roll |
| 3/4"   | 18±2            | 12        | 25        | 56    | 3                        | 0.25                      | 8                      | 250m/roll |
| 1"     | 25±3            | 16        | 32        | 72    | 3                        | 0.25                      | 8                      | 250m/roll |
| 1-1/4" | 30±3            | 20        | 43        | 96    | 3                        | 0.25                      | 8                      | 100m/roll |
| 1-1/2" | 40±3            | 25        | 48        | 96    | 4                        | 0.25                      | 7                      | 100m/roll |
| 1-3/4" | 50±5            | 30        | 60        | 120   | 4                        | 0.25                      | 7                      | 100m/roll |
| 2"     | 60±5            | 40        | 70        | 120   | 5                        | 0.25                      | 6                      | 100m/roll |
| 2-1/2" | 70±5            | 45        | 80        | 120   | 6                        | 0.25                      | 5                      | 50m/roll  |
| 3"     | 80±5            | 50        | 90        | 120   | 7                        | 0.25                      | 5                      | 50m/roll  |



**DP-ET025**  
**MECHANICAL & THERMAL PROTECTION**

High abrasion expandable polyester braid sleeve

**Applications**

It is suitable for protection of pipes, hoses and harnesses where high abrasion resistance characteristics are required. Used widely within the automotive sectors.

**Features**

DP-ET025 is a self extinguishing, halogen free, Polyester 0.25mm monofilament expandable braided sleeve. It offers a continuous working temperature of - 50°C to +150°C, which have an outstanding abrasion resistance and a high expansion rate.

**Various**

Standard color: Black., grey, other color available on request.

**Technical Data**

| Property |                     | Test Method                 | Values                       |
|----------|---------------------|-----------------------------|------------------------------|
| Physical | Peak temperature    | -                           | +175°C                       |
|          | Melting point       | -                           | +250°C                       |
|          | Flammability        | FMVSS 302                   | Self extinguishing           |
|          |                     | D45 1333                    | Type B                       |
|          |                     | UL94 on compound            | V-2                          |
|          | Smoke toxicity      | -                           | Halogen free                 |
|          | Abrasion resistance | S21 5101 & D44 1959 PSA/RSA | CAT C                        |
|          |                     | 34-04-166(RSA)              | CAT 8                        |
| Chemical | Fluid resistance    | D47 1924                    | Unaffected by most chemicals |

| As Supplied (mm) | Range of use (mm) | Standard Packing (m/roll ) |
|------------------|-------------------|----------------------------|
| 3.0              | 1-4               | 2000                       |
| 4.0              | 2-6               | 2000                       |
| 5.0              | 3-7               | 2000                       |
| 6.0              | 4-9               | 2000                       |
| 8.0              | 5-11              | 1000                       |
| 10.0             | 7-14              | 1000                       |
| 12.0             | 8-16              | 1000                       |
| 15.0             | 10-20             | 1000                       |
| 20.0             | 14-25             | 1000                       |
| 25.0             | 18-30             | 500                        |
| 30.0             | 20-40             | 500                        |
| 40.0             | 30-52             | 250                        |
| 50.0             | 40-65             | 250                        |
| 65.0             | 45-105            | 100                        |
| 76.0             | 64-120            | 100                        |

\*special spool lengths or cut pieces available on request.

DC-BS  
MECHANICAL & THERMAL PROTECTION

Expandable polyester braided sleeving

Applications

The expandable sleeving offers an excellent protection in many industrial applications and also can provide an agreeable personalization and identification of the brand.

Features

Material of Polyester braided sleeve. It offers a continuous working temperature of - 50°C to +150°C, which have a good resistance to abrasion and a high expansion rate.

Various

It's possible to realize a wide range of patterns and colors upon request.



Technical data

| Test Method     | Values     |
|-----------------|------------|
| Material        | Polyester  |
| Operating range | 50°C±150°C |
| Melt point      | 240±10°C   |
| Flammability    | VW-1       |

Dimensions

| Inside diameter     |                   | Expanded range mm |               | Standard package<br>m/roll |
|---------------------|-------------------|-------------------|---------------|----------------------------|
| Nominal size (inch) | Nominal size (mm) | Min inner Dia     | Max outer Dia |                            |
| 1/8"                | 3                 | 1                 | 6             | 1000 m                     |
| 1/4"                | 6                 | 3                 | 9             | 500 m                      |
| 5/16"               | 8                 | 5                 | 16            | 350 m                      |
| 3/8"                | 10                | 7                 | 19            | 350 m                      |
| 1/2"                | 12                | 8                 | 24            | 300 m                      |
| 5/8"                | 16                | 10                | 27            | 250 m                      |
| 3/4"                | 19                | 14                | 30            | 200 m                      |
| 1"                  | 25                | 18                | 35            | 200 m                      |
| 1 1/4"              | 30                | 20                | 50            | 150 m                      |
| 1 1/2"              | 40                | 30                | 60            | 100 m                      |
| 1 3/4"              | 45                | 35                | 75            | 100 m                      |
| 2"                  | 50                | 40                | 80            | 100 m                      |
| 2 1/2"              | 64                | 45                | 105           | 100 m                      |
| 3"                  | 76                | 64                | 120           | 100 m                      |

\*special spool lengths or cut pieces available on request.

# Products Range

## DP-A MECHANICAL & THERMAL PROTECTION

Expandable PA6.6 braid sleeve

### Applications

It is suitable for the protection of pipes, hoses and cable harnesses where high abrasion resistance characteristics are required.

### Features

DP-A is a self extinguishing, halogen free, Polyamide 6.6 (Nylon™) 0.25mm monofilament, expandable braided sleeve. It offers a continuous working temperature of - 60°C up to +150°C, which have an outstanding abrasion resistance and a good expansion rate.

### Various

Standard color: Black, grey, other color available on request.

### Technical Data

| Property |                     | Test Method                 | Values                       |
|----------|---------------------|-----------------------------|------------------------------|
| Physical | Peak temperature    | -                           | +160°C                       |
|          | Melting point       | -                           | +250°C                       |
|          | Flammability        | FMVSS 302                   | Self extinguishing           |
|          |                     | D45 1333                    | Type B                       |
|          |                     | UL94 on compound            | V-2                          |
|          |                     | NF F 16-101 & 102           | I2-F1                        |
|          |                     | EN 45 545-2                 | R22 & R23                    |
|          | Smoke toxicity      | -                           | Halogen free                 |
|          | Abrasion resistance | S21 5101 & D44 1959 PSA/RSA | CAT C                        |
|          |                     | 34-04-166(RSA)              | CAT 8                        |
| Chemical | Fluid resistance    | D471924                     | Unaffected by most chemicals |

| As Supplied (mm) | Recommended Range of Use(mm) |
|------------------|------------------------------|
| 3.0              | 3 - 6                        |
| 4.0              | 4 - 8                        |
| 5.0              | 5 - 10                       |
| 6.0              | 6 - 13                       |
| 8.0              | 8 - 14                       |
| 10.0             | 10 - 18                      |
| 12.0             | 12 - 21                      |
| 14.0             | 14 - 23                      |
| 16.0             | 16 - 25                      |
| 20.0             | 20 - 29                      |
| 25.0             | 25 - 36                      |
| 30.0             | 30 - 46                      |
| 40.0             | 40 - 65                      |
| 50.0             | 50 - 76                      |
| 60.0             | 60 - 87                      |
| 65.0             | 65 - 99                      |
| 76.0             | 76 - 114                     |



**DM-PPS**  
**MECHANICAL & THERMAL PROTECTION**

High temperature expandable Polyphenylene Sulfide braided sleeve

**Applications**  
DM-PPS is a self extinguishing, Polyphenylene Sulfide 0,25mm monofilament, expandable braided sleeve.  
DM-PPS offers a continuous working temperature of -50°C up to +200° C, an excellent mechanical abrasion resistance as well as a low level of flammability and a high resistance to most automotive fluids.

**Features**  
It is suitable for protecting cables, pipes and hoses situated within harsh environments. Used within the automotive, aerospace and military sectors. Product available upon request.  
Standard color : Black, natural.

Technical data

| Property                   | Values                       | Test Methods |
|----------------------------|------------------------------|--------------|
| Working temperature        | -50°C to +200°C              | -            |
| Peak temperature           | +240°C                       | -            |
| Melting point              | +250°C                       | -            |
| Chemical ;Fluid resistance | Unaffected by most chemicals | D47 1924     |
| Flammability               | Self extinguishing           | FMVSS 302    |
|                            | Type B                       | D45 1333     |

Dimensions

| Nominal size | Expanded range |
|--------------|----------------|
| (mm)         | (mm)           |
| 3.2          | 2.4-6.4        |
| 6.4          | 3.2-9.5        |
| 9.5          | 4.7-15.9       |
| 12.7         | 6.4-19.1       |
| 15.9         | 9.5-25.4       |
| 19.1         | 12.7-31.8      |
| 31.8         | 19.1-44.5      |
| 44.5         | 31.8-69.8      |
| 50.8         | 38.1-76.2      |
| 63.5         | 44.5-92.0      |

Available in spool, coils or cut pieces (on request).  
Other packaging or diameter available upon request

**DH-AR**  
**MECHANICAL & THERMAL PROTECTION**

High abrasion, multifilament expandable polyester braid sleeve

**Applications**

It is suitable for the protection of pipes, hoses and harnesses where high abrasion resistance characteristics are required. Used widely within the automotive sector.

**Features**

DH-AR is a self extinguishing, halogen free, polyester monofilament, expandable braided sleeve. It offers a continuous working temperature of - 50°C up to +150°C, which have an outstanding abrasion resistance and a tight construction of pipe, hoses and harness.

**Various**

Standard color: Black, other color available on request.



Technical data

| Property |                             | Test Method                 | Values                       |
|----------|-----------------------------|-----------------------------|------------------------------|
| Physical | Peak temperature            | -                           | +175°C                       |
|          | Melting point               | -                           | +250°C                       |
|          | Flammability smoke toxicity | FMVSS 302                   | Self extinguishing           |
|          |                             | D45 1333                    | Type B                       |
|          |                             | -                           | Halogen free                 |
|          | Abrasion resistance         | S21 5101 & D44 1959 PSA/RSA | CAT D                        |
| Chemical | Fluid resistance            | D47 1924                    | Unaffected by most chemicals |

Dimensions

| As Supplied (mm) | Recommended Range of Use (mm) |
|------------------|-------------------------------|
| 8.0              | 6-8                           |
| 10.0             | 9-10                          |
| 12.0             | 11-12                         |

\*special spool lengths or cut pieces available on request  
\*other sizes available on request..



**DS-FT**  
**MECHANICAL & THERMAL PROTECTION**

Nylon textile protective sleeve

**Applications**

It is widely used to protect hydraulic pipes, rubber hose ,plastic pipes, wire harness from damage, this kind of sleeve can also be used in industrial and construction fields where outstanding hose productions are needed.

**Features**

Nylon textile protective sleeve consists of nylon multifilament. This kind of tublar sleeves are uniquely designed and ideal for protecting people, environment and machinery against any possible hydraulic hose oil leakage or spill. The tight woven construction can provide excellent abrasion resistance and high degree of burst resistance.

**Certification :** MSHA

Specification

| Model | Flat Width (mm) | Diameter Max. (mm) | Standard length<br>m/spool |
|-------|-----------------|--------------------|----------------------------|
| DS-FT | 20              | 12                 | 50                         |
|       | 25              | 15                 |                            |
|       | 30              | 18                 |                            |
|       | 35              | 21                 |                            |
|       | 40              | 24                 |                            |
|       | 45              | 28                 |                            |
|       | 50              | 31                 |                            |
|       | 60              | 37                 |                            |
|       | 70              | 44                 |                            |
|       | 80              | 50                 |                            |
|       | 90              | 56                 |                            |
|       | 100             | 62                 |                            |
|       | 115             | 72                 |                            |
|       | 145             | 90                 |                            |
|       | 176             | 110                |                            |

\*special spool lengths or cut pieces available on request.

DM-HPT

MECHANICAL&THERMALPROTECTION

Heat Protection Sleeve

Applications

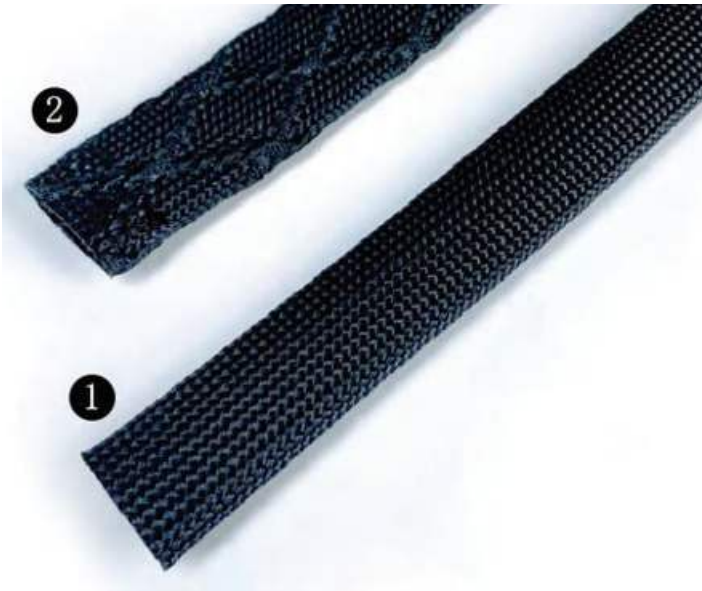
Heat protection sleeve is a thick wall braided fiberglass sleeving coated with a special formulation that allows it to be used in high temperature environments. It is especially suitable for protecting high temperature hoses like EGR tubes, oil conduits and hot gas channels. The braiding design deployed for this product, makes it possible to be expanded and fitted onto bended conduits and tubes with sectional or diameter extensions. To avoid ends from fraying, we have also versions where the ends are dip coated with a proprietary glue formulation.

Features

- Abrasion resistance: very good
- Appearance: Black (standard), Silver also possible.
- Operating temperature: -55°C+500°C
- Softening point: +700°C
- Melting point: +1100°C

Types

- DM-HPT(S)- Standard ①
- DM-HPT(R)- With Ribs ②



Dimensions

| Inner Diameter (mm) | Packing                      |
|---------------------|------------------------------|
| 9.50                | Stick or Roll pack available |
| 12.70               | Stick or Roll pack available |
| 15.90               | Stick or Roll pack available |
| 19.00               | Stick or Roll pack available |
| 22.20               | Stick or Roll pack available |
| 25.40               | Stick or Roll pack available |

\*Other colors on request



**DM-GBS**  
**MECHANICAL & THERMAL PROTECTION**

Cross-tread snakeskin woven sleeving

**Applications**  
Applied to a variety of high-grade automotive wiring harness insulation protection (can effectively block or avoid car electronic circuit due to modification, aging or other reasons short circuit, rubber natural car natural phenomena).

**Features**  
The patterned pipe is made of high temperature resistant quartz glass fiber yarn mixed with technical volcanic rock fiber yarn, and then coated with soft self-extinguishing high temperature resistant resin after special processing and high professional drying at 200°C.

Technical Data

| Property                     | Technical Data                                                         |
|------------------------------|------------------------------------------------------------------------|
| Material                     | Quartz glass fiber + volcanic glass fiber                              |
| Rated voltage                | 600V                                                                   |
| Breakdown resistance voltage | 7000V                                                                  |
| Authentication               | UL1441 VW-1                                                            |
| Color                        | Natural cross pattern color<br>(other colours on request)              |
| After heating                | No cracking or detachment of the coating<br>after 8 hours at 200°C.    |
| Low temperature              | No cracking or detachment of the coating<br>after 60 minutes at -60°C. |
| Flame propagation            | Max 10 sec(According to ULVW-1)                                        |

Dimensions

| Inside Diameter (mm) | Inside Diameter Tolerance (mm) | Wall Thickness and Tolerance (mm)<br>GBS-2500V | Wall Thickness and Tolerance (mm)<br>GBS-4000V | Wall Thickness and Tolerance (mm)<br>GBS-7000V |
|----------------------|--------------------------------|------------------------------------------------|------------------------------------------------|------------------------------------------------|
| 1.0-3.5              | +0.2-0                         | 0.36±0.15                                      | 0.43±0.15                                      | 0.50±0.15                                      |
| 4.0-10.0             | +0.3-0                         | 0.45±0.15                                      | 0.50±0.15                                      | 0.55±0.15                                      |
| 12-18                | +0.4-0                         | 0.55±0.20                                      | 0.60±0.20                                      | 0.68±0.20                                      |
| 20-30                | +0.5-0                         | 0.75±0.25                                      | 0.80±0.25                                      | 0.95±0.25                                      |
| 32-50                | +0.7-0                         | 0.85±0.30                                      | 1.0±0.30                                       | 1.20±0.30                                      |

\*Inside diameter indetails:  
1.0~5.5 progressive increase: 1.0/1.5/2.0/2.5/3.0/3.5/4.0/4.5/5.0/5.5  
6.0~19.0 progressive increase: 6.0/7.0/8.0/9.0/10.0/11.0/12.0/13.0/14.0/15.0/16.0/17.0/18.0/19.0  
20.0~50.0 progressive increase: 20.0/25.0/30.0/35.0/40.0/45.0/50.0  
\*special spool lengths or cut pieces available on request.

**DM-CB**  
**MECHANICAL & THERMAL PROTECTION**

Carbon Sleeve

**Applications**  
Carbon sleeve consist of exceptional carbon fiber yarn that allows an amazing strength, high thermal resistance and extreme lightweight. Our carbon fiber sleeving will forms itself to accommodate uneven or asymmetrical surfaces while providing full radial stability and torsional strength.

**Features**  
Providing a tough ,durable protection for wires, wire bundles and harnesses, cable assemblies ,flat ribbon cable, tubing and hoses in aerospace, military and other hightech application.



Technical Data

| Property              | Values        |
|-----------------------|---------------|
| Material              | Carbon fiber  |
| Operating temperature | -269°C-+650°C |
| Melting point         | Does not melt |
| Standard color        | Black         |
| Flammability          | VW-1          |
| Cutting tool          | Scissors      |
| Certificate           | Rohs          |
| Other features        | Conductive    |
|                       | Character     |

Dimensions

| Nominal size | Expanded range | Packing  |
|--------------|----------------|----------|
| (mm)         | (mm)           | (m/roll) |
| Φ3           | 1.0-4.0        | 500      |
| Φ6           | 5.0-8.0        | 300      |
| Φ8           | 6.0-10.0       | 250      |
| Φ10          | 7.0-13.0       | 250      |
| Φ12          | 8.0-16.0       | 200      |
| Φ15          | 10.0-20.0      | 200      |
| Φ20          | 14.0-26.0      | 150      |
| Φ25          | 18.0-33.0      | 150      |
| Φ30          | 20.0-39.0      | 100      |
| Φ40          | 30.0-52.0      | 100      |
| Φ50          | 40.0-65.0      | 100      |



**DM-MK**  
**MECHANICAL & THERMAL PROTECTION**

Kevlar Sleeve

Applications

Kevlar is famous for its excellent characters of thermal stability and outstanding tensile strength, it is up to 20 times stronger than steel wire in same diameter .It is made of this kind of fiber yarn that offers great chemical resistance and heat resistance , will protect your cables or hoses in even the most extreme environments.

Features

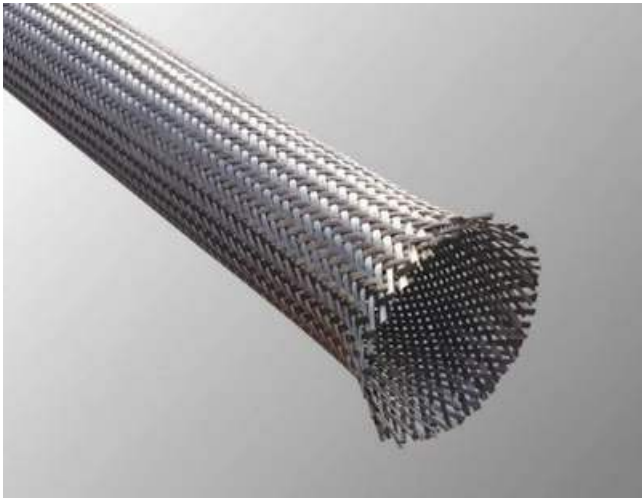
The sleeving is not only widely used in military for bullet proof vest due to its excellent tensible strength, but also used for protection of cable or hose in aerospace and other high tech fields.

Technical data

| Property              | Values               |
|-----------------------|----------------------|
| Material              | Kevlar fiber         |
| Operating temperature | -170°C+250°C         |
| Melting point         | Does not melt        |
| Standard color        | Yellow               |
| Flammability          | UL94V-0              |
| Cutting tool          | Scissors             |
| Certificate           | Rohs                 |
| Other features        | Conductive character |

Dimensions

| Nominal size (mm) | Expanded range (mm) | Packing (m/roll) |
|-------------------|---------------------|------------------|
| Φ3                | 1-4                 | 500              |
| Φ6                | 5-8                 | 500              |
| Φ8                | 6-10                | 350              |
| Φ10               | 7-13                | 350              |
| Φ12               | 8-16                | 300              |
| Φ15               | 10-20               | 250              |
| Φ20               | 14-26               | 200              |
| Φ25               | 18-33               | 200              |
| Φ30               | 20-39               | 150              |
| Φ40               | 30-52               | 100              |
| Φ50               | 40-65               | 100              |



*DM-BT*  
*MECHANICAL & THERMAL PROTECTION*

Basalt Sleeve

Applications

Basalt braided sleeving has outstanding property of electric insulation, high temperature resistance, chemical-corrosion resistance , excellent tenacity that make it to be the best insulating and protecting solution in extreme working environment where service ability is required.

Features

Widely used in metallurgy, chemical industry and aviation for protecting hoses, oil tubes, cables or as a cover.

Technical data

| Property              |                                    |
|-----------------------|------------------------------------|
| Material              | Basalt fiber                       |
| Operating temperature | -269°C+650°C                       |
| Melting point         | 1400°C                             |
| Standard color        | Brown                              |
| Flammability          | 94V-0                              |
| Cutting tool          | Shears                             |
| Certificate           | Rohs                               |
|                       | Durability to the attack           |
|                       | of water, salts, alkalis and acids |

Dimensions

| Nominal size | Expanded range | Packing  |
|--------------|----------------|----------|
| (mm)         | (mm)           | (m/roll) |
| Φ3           | 1-4            | 500      |
| Φ6           | 5-8            | 300      |
| Φ8           | 6-10           | 250      |
| Φ10          | 7-13           | 250      |
| Φ12          | 8-16           | 200      |
| Φ15          | 10-20          | 200      |
| Φ20          | 14-26          | 150      |
| Φ25          | 18-33          | 150      |
| Φ30          | 20-39          | 100      |
| Φ40          | 30-52          | 100      |
| Φ50          | 40-65          | 100      |



**DM-NO**  
**MECHANICAL & THERMAL PROTECTION**

NOMEX Braid Sleeve

**Applications**

DM-NO is consist of 100% continuous nomex fibre. Although its soft feel and smooth appearance. Nomex sleeving is extremely tough and provides cables with both thermal protection and high abrasion-resistance.

**Features**

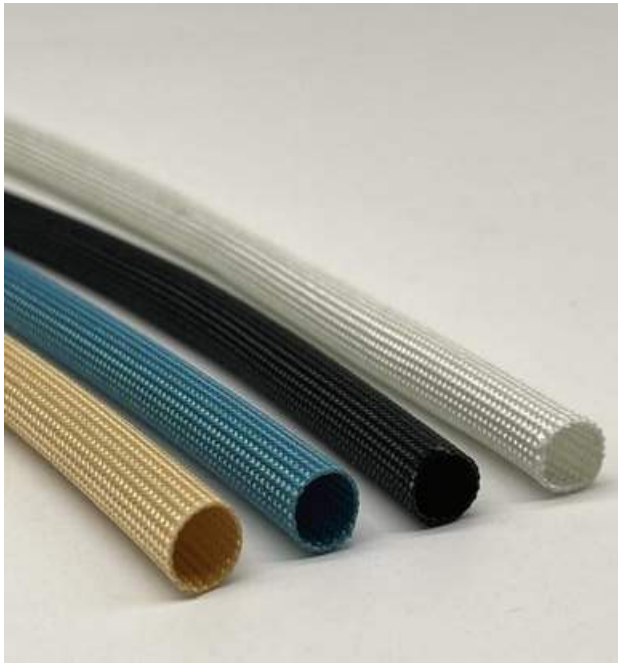
Used for a wide range of applications such as military, aerospace, race car, fire department to protect the cable and wire from the dangers that come with working in and around intense flame and heat.  
NOMEX® multifilament  
Good abrasion resistance  
Color: green or white

Technical Data

| Property         | Typical Data  |
|------------------|---------------|
| Operating range  | -196°C-+350°C |
| Peak temperature | +310°C        |
| Melting point    | Does not melt |
| Carbonization    | Above 370°C   |
| Flammability     | UL94V-0       |
| Smoke toxicity   | Halogen free  |
| Fluid resistance | PASS          |

Dimensions

| Model | Folded W. |    | Spread Rng. |      | Pack. ( m/roll) |
|-------|-----------|----|-------------|------|-----------------|
|       | IN        | mm | Min.        | Max. |                 |
| 003   | 1/8"      | 3  | 1           | 4    | 500             |
| 004   | 5/32"     | 3  | 2           | 7    | 500             |
| 006   | 1/4"      | 6  | 5           | 8    | 500             |
| 008   | 5/16"     | 8  | 6           | 10   | 350             |
| 010   | 3/8"      | 10 | 7           | 13   | 350             |
| 012   | 1/2"      | 12 | 8           | 16   | 300             |
| 015   | 19/32     | 15 | 10          | 20   | 250             |
| 020   | 51/64     | 20 | 14          | 26   | 200             |
| 025   | 1"        | 25 | 18          | 33   | 200             |
| 030   | 1-3/8"    | 30 | 20          | 39   | 150             |
| 040   | 1-19/32"  | 40 | 30          | 52   | 100             |
| 050   | 2"        | 50 | 40          | 65   | 100             |



**DM-HTG**  
**MECHANICAL&THERMALPROTECTION**

High temperature fiberglass sleeves

**Applications**  
Used for electrical insulation and thermal insulation of wiring harnesses in industrial motors and electrical equipment, high-temperature thermal protection of internal conductors in home appliances and lighting fixtures, as well as safety insulation and protection of oil and gas piping systems and complex wiring harness assemblies in high-speed railway and conventional railway trains within the transportation sector.

**Technical Parametersr**

- Material: Alkali-Free Fine E-Glass Fiber Yarn + High-Temperature Resistant Resin
- Operating Temperature Range: -50°C to +550°C (Peak Temperature: +600°C)
- Key Features: Ultra-High Temperature Resistance, Structural Stability, Excellent Protective Performance, Compliance with International Environmental Protection Standards
- Coating: Small Amount of Special High-Temperature Resistant Resin or Silane Binder
- Breakdown Voltage: Approx. 1.0 kV at Room Temperature
- Flame Retardant Rating: VW-1 / Self-Extinguishing Upon Removal of Flame
- Standard Colors: White (Default), Black, Red, Brown, etc.

Specification Dimensions

| Nominal ID (mm) | Tolerance (mm) | Pack Length (m/roll) |
|-----------------|----------------|----------------------|
| Φ 0.5 - Φ 1.0   | ± 0.20         | 200                  |
| Φ 1.5 - Φ 4.0   | ± 0.25         | 200                  |
| Φ 5.0 - Φ 10.0  | ± 0.30         | 100                  |
| Φ 12.0 - Φ 20.0 | ± 0.50         | 50                   |
| Φ 25.0 - Φ 40.0 | ± 1.00         | 25                   |

**Application Recommendations**

- Cutting: It is recommended to cut directly with sharp scissors. No special treatment is required to maintain a neat and even cut edge.
- Storage: Please store in a well-ventilated and dry place, away from direct sunlight and chemically corrosive environments.



**DM-ES**  
**MECHANICAL&THERMALPROTECTION**

Copper foil shielding sleeving

**Applications**

It is widely used for communication system ,electronic medical equipments , military equipments as well .

**Features**

DM-ES copper foil shielding sleeving is woven with copper foil filament, it is used for various electrical and industrial fields where EMI shielding, excellent protection and light weight are required. It is lighter and more flexible than tinned cooper braided sleeving, it is a perfect combination of economy and durability, it can be used as connectors with highly flexible and easily to install.

Technical data

| Test Item       | Typical Value                         |
|-----------------|---------------------------------------|
| Material        | Copper filament                       |
| Operating range | -40°C-+150°C                          |
| Standard color  | Tinned color                          |
| Certificate     | ROHS                                  |
| Cutting tool    | Scissors                              |
| Other features  | Resists gasoline and engine chemicals |

Dimensions

| Nominal size (mm) | Expanded range (mm) | Packing(m/roll) |
|-------------------|---------------------|-----------------|
| Φ4                | 3.0---7.0           | 300             |
| Φ6                | 4.0---9.0           | 200             |
| Φ8                | 6.0---12.0          | 200             |
| Φ10               | 7.0---16.0          | 150             |
| Φ12               | 8.0---20.0          | 100             |
| Φ15               | 10.0---23.0         | 100             |
| Φ20               | 13.0---28.0         | 100             |
| Φ25               | 18.0---32.0         | 100             |
| Φ30               | 20.0---40.0         | 100             |
| Φ40               | 30.0---50.0         | 50              |
| Φ50               | 40.0---60.0         | 50              |

\*The inner diameter, thickness and length can be customised

**DM-SWS**  
**MECHANICAL&THERMALPROTECTION**  
*Self-Closing Braided sleeve*



**Applications**

Its open structure facilitates reinstallation, maintenance and inspection of wires. This product is widely used in high-speed rail, automotive, automated equipment, computer wiring and other fields, and is especially suitable for protecting connecting wires in heat-dissipating working environments.

**Features**

DM-SWS self-wrapping braided sleeve is a new type of cable protection sleeve. It is woven from polyester monofilaments and multifilaments, featuring excellent heat dissipation, flame resistance, abrasion resistance and easy installation.

**Color** : Black, orange, white



**Technical data**

|                        |                                    |
|------------------------|------------------------------------|
| Material               | PET monofilament and multifilament |
| Operating range        | -40℃~150℃                          |
| Melt point             | 240±10℃                            |
| Flame Retardant Rating | UL94-V2                            |
| Overlap Ratio          | 25%-50%                            |
| Certifications         | ROHS ,Halogen free                 |

**Dimensions**

| Model No.     | Flat W. (mm) | Nominal ID D (mm) | Recommended Application Range(mm) | Packaging (m/roll) |
|---------------|--------------|-------------------|-----------------------------------|--------------------|
| DM-SWS - ϕ 3  | 17±3         | 3                 | 3.0 - 4.0                         | 100                |
| DM-SWS- ϕ 5   | 25±3         | 5                 | 5.0 -6.0                          | 100                |
| DM-SWS- ϕ 8   | 35±3         | 8                 | 8.0 - 9.0                         | 100                |
| DM-SWS - ϕ 10 | 47±3         | 10                | 10.0 - 12.0                       | 100                |
| DM-SWS- ϕ 13  | 60±5         | 13                | 13.0 - 15.0                       | 100                |
| DM-SWS- ϕ 16  | 80±5         | 16                | 16.0 - 20.0                       | 100                |
| DM-SWS- ϕ 19  | 90±5         | 19                | 19.0 - 23.0                       | 50                 |
| DM-SWS- ϕ 25  | 135±10       | 25                | 25.0 - 34.0                       | 50                 |
| DM-SWS- ϕ 29  | 145±10       | 29                | 29.0 - 37.0                       | 50                 |
| DM-SWS- ϕ 32  | 160±10       | 32                | 32.0 - 41.0                       | 50                 |
| DM-SWS- ϕ 38  | 185±10       | 38                | 38.0 - 47.0                       | 25                 |
| DM-SWS- ϕ 50  | 240±10       | 50                | 50.0 - 61.0                       | 25                 |



**DM-SMS**  
**MECHANICAL&THERMALPROTECTION**  
Self-Closing Textile sleeve

**Applications**  
Its open structure enables easy modification, reassembly, maintenance and inspection of internal wiring harnesses. This product is widely used for circuits, cables, harnesses and hoses in communication, high-speed rail, automotive, automated equipment and instrumentation, and is especially suitable for wiring harnesses with irregular shapes.

**Features**  
self-rolling textile sleeve is woven of polyester monofilaments and multifilaments. It features flame resistance, wear resistance, softness, dustproof property and easy and quick operation.

**Color:** black and orange

Technical data

|                        |                                          |
|------------------------|------------------------------------------|
| Material               | Polyester monofilament and multifilament |
| Operating temperature  | -40°C~150°C                              |
| Melting point          | 240±10°C                                 |
| Flame retardant rating | UL94-V2                                  |
| Certification          | ROHS Halogen free                        |

Dimensions

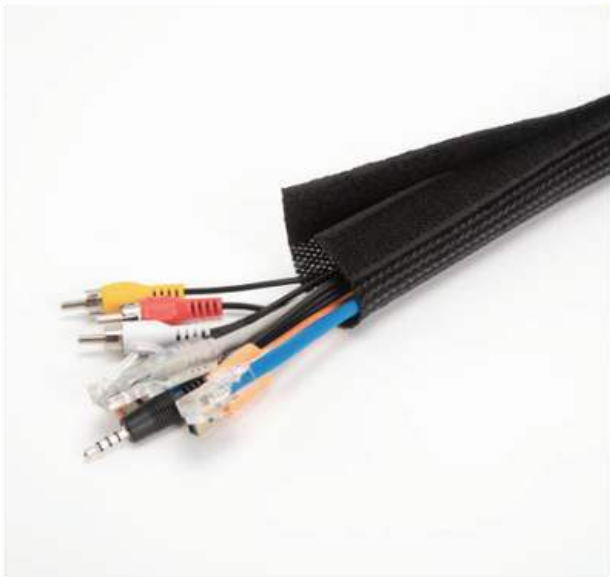
| Model No.     | Flat W. (mm) | Nominal ID D (mm) | Recommended Application Range(mm) | Packaging (m/roll) |
|---------------|--------------|-------------------|-----------------------------------|--------------------|
| DM-SMS - ϕ 3  | 17±3         | 3                 | 3.0 - 4.0                         | 100                |
| DM-SMS- ϕ 5   | 25±3         | 5                 | 5.0 -6.0                          | 100                |
| DM-SMS- ϕ 8   | 35±3         | 8                 | 8.0 - 9.0                         | 100                |
| DM-SMS - ϕ 10 | 47±3         | 10                | 10.0 - 12.0                       | 100                |
| DM-SMS- ϕ 13  | 60±5         | 13                | 13.0 - 15.0                       | 100                |
| DM-SMS- ϕ 16  | 80±5         | 16                | 16.0 - 20.0                       | 100                |
| DM-SMS- ϕ 19  | 90±5         | 19                | 19.0 - 23.0                       | 50                 |
| DM-SMS- ϕ 25  | 135±10       | 25                | 25.0 - 34.0                       | 50                 |
| DM-SMS- ϕ 29  | 145±10       | 29                | 29.0 - 37.0                       | 50                 |
| DM-SMS- ϕ 32  | 160±10       | 32                | 32.0 - 41.0                       | 50                 |
| DM-SMS- ϕ 38  | 185±10       | 38                | 38.0 - 47.0                       | 25                 |
| DM-SMS- ϕ 50  | 240±10       | 50                | 50.0 - 61.0                       | 25                 |

**DM-VW**  
**MECHANICAL & THERMAL PROTECTION**

Velcro braided wrap sleeve

**Applications**  
DM-VW Velcro braided wrap can help to create a tidy and well-regulated environment. It can be easily wrapped and closed over the cables. It can be reopened rapidly to manage cables to be added or removed, and breakouts can be made simply by bringing cables out through velcro. Open weave design easily conforms to many irregular shapes.

**Features**  
Velcro braided wrap is widely used for management of V/V cables and power cord in home theater, computer,TV support and so on.  
Standard Color :Black



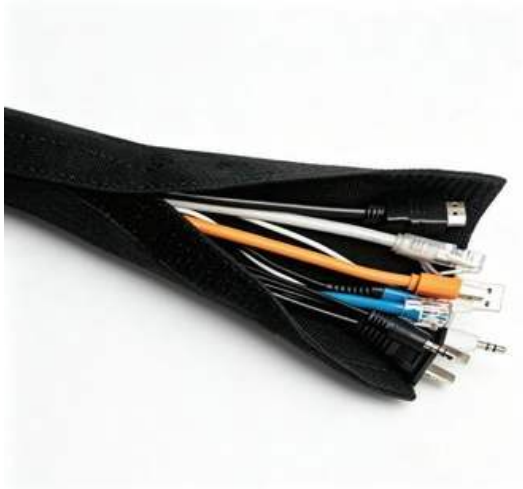
Technical Data

|                 |                                          |
|-----------------|------------------------------------------|
| Wrap Material   | Polyester monofilament and multifilament |
| Velcro material | Polyamide                                |
| Operating range | -50°C~+150°C                             |
| Melt point      | 230±5°C                                  |
| Fammability     | VW-1                                     |
| Certificate     | ROHS,Halogen free                        |
| Cutting tool    | Hot knife                                |

Dimensions

| As Supplied(mm) | Velcro width | Spread width | Standeard length |
|-----------------|--------------|--------------|------------------|
| I.D• Min)       | mm           | mm           | m/roll           |
| 12              | 15           | 53           | 25               |
| 16              | 15           | 64           | 25               |
| 20              | 20           | 85           | 25               |
| 25              | 20           | 98           | 25               |
| 30              | 20           | 112          | 25               |
| 40              | 20           | 125          | 25               |

\*special spool lengths or cut pieces available on request.



**DM-VM**  
**MECHANICAL&THERMALPROTECTION**

Velcro textile sleeving

Applications

Widely used for cable management and protection in industries such as industrial equipment, marine vessels, automobiles, high-speed rail, and office environments.

Features

Velcro sleeving offers dustproof, noise-reducing, wear-resistant, and flame-retardant performance, with easy operation and reusability.

Technical Data

|                 |                                           |
|-----------------|-------------------------------------------|
| Wrap Material   | Polyester/Nylon tape with hook & loop     |
| Velcro material | PES                                       |
| Operating range | -40'C-150°C                               |
| Melt point      | 240°C±10                                  |
| Fammability     | Customizable as per customer requirements |
| Certificate     | ROHS,                                     |
| Cutting tool    | Hot knife                                 |

Dimensions

| Model     | ID I (mm) | Max Harness Dia. I (mm) | Flat W. W (mm) | Hook & Loop Width (mm) | Pack (L)  |
|-----------|-----------|-------------------------|----------------|------------------------|-----------|
| DM-VM-016 | 16        | 17                      | 68 ± 5mm       | 16mm                   | 25 m/roll |
| DM-VM-020 | 20        | 21                      | 85 ± 5mm       | 16mm                   | 25 m/roll |
| DM-VM-025 | 25        | 26                      | 98 ± 5mm       | 20mm                   | 25 m/roll |
| DM-VM-030 | 30        | 31                      | 114 ± 5mm      | 20mm                   | 25 m/roll |
| DM-VM-035 | 35        | 36                      | 130 ± 5mm      | 20mm                   | 25 m/roll |
| DM-VM-040 | 40        | 41                      | 146±5mm        | 20mm                   | 25 m/roll |
| DM-VM-045 | 45        | 46                      | 162±5mm        | 20mm                   | 25 m/roll |
| DM-VM-050 | 50        | 51                      | 177±5mm        | 20mm                   | 25 m/roll |
| DM-VM-060 | 60        | 61                      | 210±5mm        | 20mm                   | 25 m/roll |
| DM-VM-065 | 65        | 66                      | 225±5mm        | 20mm                   | 25 m/roll |
| DM-VM-070 | 70        | 71                      | 225±5mm        | 20mm                   | 25 m/roll |
| DM-VM-080 | 80        | 81                      | 272±5mm        | 20mm                   | 25 m/roll |
| DM-VM-090 | 90        | 91                      | 305±5mm        | 20mm                   | 25 m/roll |
| DM-VM-100 | 100       | 101                     | 335±5mm        | 20mm                   | 25 m/roll |
| DM-VM-110 | 110       | 111                     | 365±5mm        | 20mm                   | 25 m/roll |
| DM-VM-120 | 120       | 121                     | 397±5mm        | 20mm                   | 25 m/roll |
| DM-VM-130 | 130       | 131                     | 397±5mm        | 20mm                   | 25 m/roll |
| DM-VM-140 | 140       | 141                     | 397±5mm        | 20mm                   | 25 m/roll |



DM-VM(E)

MECHAWMCAL & THERMAL PROTECTON

Velcro elastic woven wrap sleeve

**Applications**  
The DM-VM(E) Velcro elastic woven wrap sleeve is widely used in industrial equipment, electrical appliances, shipbuilding, railway tracks, and aviation fields.  
It can be applied to both motor vehicles and commercial vehicles.

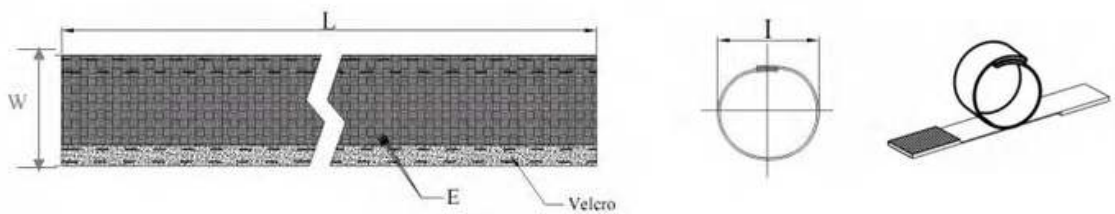
**Features**  
The design of the textile sleeve with Velcro is beneficial for the installation of the sleeve.  
It can provide excellent wear protection for hoses and wires in harsh environments.

Standard Color: Black, other color available on request.



Technical Data

|                 |                                    |
|-----------------|------------------------------------|
| Wrap Material   | Polyester multifilament with nylon |
| Operating range | -50°C-+150°C                       |
| Fammability     | UL94 V-2                           |
| Certificate     | ROHS                               |



Dimensions

| MODEL  | As Supplied(mm)     |                 |                          |                          | Standard Length (L) |
|--------|---------------------|-----------------|--------------------------|--------------------------|---------------------|
|        | Inside diameter (I) | Expansion width | Minimum harness diameter | Maximum harness diameter | m/roll              |
| VME010 | 10                  | 48±10           | 3                        | 15                       | 25                  |
| VME015 | 15                  | 63±10           | 10                       | 20                       | 25                  |
| VME020 | 20                  | 88±10           | 15                       | 30                       | 25                  |
| VME025 | 25                  | 102±10          | 20                       | 40                       | 25                  |
| VME030 | 30                  | 120±10          | 25                       | 50                       | 25                  |

\*special spool lengths or cut pieces available on request.



**DM- ZW**  
**MECHANICAL&THERMALPROTECTION**

Zipper braided wrap

**Application**

Most commonly used over wires, wire bundles and harnesses, cable assemblies, flat ribbon cable, tubing and hoses to provide a tough, durable protection in home, office, railway.

Technical data

|                 |                    |
|-----------------|--------------------|
| Material        | Polyester          |
| Operating range | -50 °C -150 °C     |
| Melt point      | 230 °C ±5          |
| Standard colour | black              |
| Flammability    | VW-1               |
| Certificate     | ROHS, Halogen free |

Dimensions

| Part No. | Nominal size(W) | Flat W. |
|----------|-----------------|---------|
| DM-ZW-16 | 16mm            | 53      |
| DM-ZW-20 | 20mm            | 64      |
| DM-ZW-25 | 25mm            | 85      |
| DM-ZW-30 | 30mm            | 98      |
| DM-ZW-35 | 35mm            | 112     |
| DM-ZW-40 | 40mm            | 125     |
| DM-ZW-45 | 45mm            | 140     |

\*Special packages,sizes and colours can be supplied upon request.

**DM-ZMW**  
**MECHANICAL&THERMALPROTECTION**

Zipper multifilament cable wrap

**Application**

Most commonly be used on wires, wire bundles and harnesses, computer power cords, tubes and hoses to provide a tough, durable protection in several industrial fields.



Technical data

|                 |                         |
|-----------------|-------------------------|
| Wrap material   | Polyester multifilament |
| Operating range | - 50 C - +150 C         |
| Melt point      | 240±10 C                |
| Flammability    | VW-1                    |
| Standard color  | Black                   |
| Certificate     | RoHS                    |

Dimensions

| Part No.   | I.D. (I) | Spread width | Packing(m) |
|------------|----------|--------------|------------|
| DM-ZMW-16  | 16       | 50mm ± 5mm   | On request |
| DM-ZMW-20  | 20       | 63mm ± 5mm   |            |
| DM-ZMW-25  | 25       | 79mm ± 5mm   |            |
| DM-ZMW-30  | 30       | 95mm ± 5mm   |            |
| DM-ZMW-35  | 35       | 110mm ± 5mm  |            |
| DM-ZMW-40  | 40       | 126mm ± 5mm  |            |
| DM-ZMW-45  | 45       | 141mm ± 5mm  |            |
| DM-ZMW-50  | 50       | 157mm ± 5mm  |            |
| DM-ZMW-60  | 60       | 188mm ± 5mm  |            |
| DM-ZMW-65  | 65       | 204mm ± 5mm  |            |
| DM-ZMW-70  | 70       | 220mm ± 5mm  |            |
| DM-ZMW-80  | 80       | 251mm ± 5mm  |            |
| DM-ZMW-90  | 90       | 283mm ± 5mm  |            |
| DM-ZMW-100 | 100      | 314mm ± 5mm  |            |
| DM-ZMW-110 | 110      | 345mm ± 5mm  |            |
| DM-ZMW-120 | 120      | 377mm ± 5mm  |            |
| DM-ZMW-130 | 130      | 410mm ± 5mm  |            |
| DM-ZMW-140 | 140      | 440m ± 5mm   |            |

\*Special packages, sizes and colors can be supplied upon request.



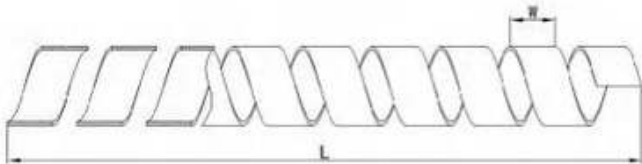
**DM-SW**  
**MECHANICAL & THERMAL PROTECTION**

PE Spiral Wrap Sleeve

**Applications**  
Spiral wrap is economical way for cable management. It can be easily applied to wire harnesses, cables and wire bundles keep all your wires tidy and beautiful. It also serves as protection from damage.

**Technical data**  
Material: PE  
Operating range:-40°C~ 200°C  
Color: Black, Natural, white

**Features**  
Simply fix one end by hand first ,then wrapped around the cable in a clockwise direction and tighten it up .



Dimensions

| Nominal size<br>OD (mm) | Wrapping range<br>(mm) | Packing<br>(m/bag) |
|-------------------------|------------------------|--------------------|
| Φ4                      | 1-10                   | 10                 |
| Φ6                      | 4-50                   | 10                 |
| Φ8                      | 6-60                   | 10                 |
| Φ10                     | 7-60                   | 10                 |
| Φ12                     | 9-65                   | 10                 |
| Φ14                     | 9-70                   | 10                 |
| Φ16                     | 12-75                  | 10                 |
| Φ18                     | 15-85                  | 10                 |
| Φ20                     | 15-100                 | 10                 |
| Φ22                     | 15-110                 | 10                 |
| Φ25                     | 20-130                 | 10                 |
| Φ28                     | 22-140                 | 10                 |
| Φ30                     | 26-150                 | 10                 |

**DM-SWP**  
**MECHANICAL & THERMAL PROTECTION**

Slit Harness Wrap

**Applications**

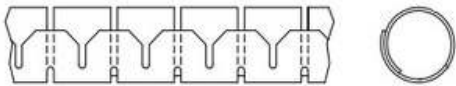
Spiral protector provides maximum protection against abrasion and has a high resistance against ultraviolet weathering in a wide temperature range. It can installs easily without removing connectors or terminals. Dramatically increases serviceable life and reduces costly repairs and down time.

**Technical data:**

Material: Modified Polypropylene  
Operating range:-10°C -->+105°C  
Color: Black, other color is available

**Features**

Simply fix one end by hand first ,then wrapped around the cable in a clockwise direction and tighten it up .



Dimensions

| Size      | As Supplied (mm)         | Detail  |           | Applied for hose | Standard length m/spool |
|-----------|--------------------------|---------|-----------|------------------|-------------------------|
| Inch. (D) | Inside Diameter Min. (D) | OD (mm) | Wall (mm) |                  |                         |
| 5/16      | 8                        | 10.4    | 1.2       | 8-10             | 2m/pcs                  |
| 3/8       | 10                       | 13      | 1.5       | 10-12            | 2m/pcs                  |
| 1/2       | 12                       | 15      | 1.5       | 12-14            | 2m/pcs                  |
| 3/5       | 14                       | 17      | 1.5       | 14-16            | 2m/pcs                  |
| 5/8       | 16                       | 20      | 2         | 16-18            | 2m/pcs                  |
| 3/4       | 18                       | 22      | 2         | 18-20            | 2m/pcs                  |
| 4/5       | 20                       | 24      | 2.2       | 20-22            | 2m/pcs                  |
| 9/10      | 22                       | 26      | 2.2       | 22-25            | 2m/pcs                  |
| 1         | 25                       | 29      | 2.2       | 25-28            | 2m/pcs                  |
| 1-1/10    | 28                       | 32      | 2.2       | 28-30            | 2m/pcs                  |
| 1-1/5     | 30                       | 35      | 2.2       | 30-32            | 2m/pcs                  |
| 1-1/4     | 32                       | 37      | 2.5       | 32-35            | 2m/pcs                  |
| 1-2/5     | 35                       | 40      | 2.5       | 35-38            | 2m/pcs                  |
| 1-1/2     | 38                       | 44      | 2.5       | 38-42            | 2m/pcs                  |
| 1-3/5     | 42                       | 49      | 3         | 42-45            | 2m/pcs                  |
| 1-4/5     | 45                       | 52      | 3.5       | 45-50            | 2m/pcs                  |
| 2         | 50                       | 57      | 3.5       | 50-60            | 2m/pcs                  |
| 2-1/2     | 60                       | 68      | 3.5       | 60-74            | 2m/pcs                  |
| 2-3       | 74                       | 83      | 4         | 74-80            | 2m/pcs                  |
| 3-3/20    | 80                       | 89      | 4.5       | 80-88            | 2m/pcs                  |
| 3-1/2     | 88                       | 98      | 4.5       | 88-100           | 2m/pcs                  |
| 4         | 100                      | 110     | 5         | 100-130          | 2m/pcs                  |
| 5         | 130                      | 140     | 5         | 130-150          | 2m/pcs                  |
| 6         | 150                      | 162     | 5         | 150-200          | 2m/pcs                  |
| 7-8       | 200                      | 212     | 6         | 200-250          | 2m/pcs                  |



**DM-CF**  
**MECHANICAL & THERMAL PROTECTION**  
Corrugated Flexible Conduit Sleeve

**Applications**  
This product is widely applied across a broad range of industries, including automotive wiring harnesses, machine tools, mechanical engineering, shipbuilding, communication lines, power engineering, electronics and electrical appliances, rail transit, and industrial automation, among others.  
Material: PE, PA also available

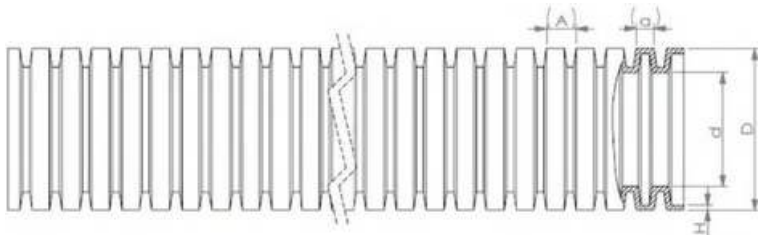
Technical Data

| No. | Item                      | Spec. & Requirements                               | Standard                                                                                                                                   |
|-----|---------------------------|----------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| 1   | Appearance                | Corrugation intact and defect-free                 | Visual inspection                                                                                                                          |
| 2   | Tensile Strength (MPa)    | ≥ 22                                               | ISO 527 - 1:2012                                                                                                                           |
| 3   | Elongation at Break (%)   | ≥ 200                                              | ISO 527 - 2:2012                                                                                                                           |
| 4   | Low-temp Impact           | No cracks or brittle fracture                      | -40°C* 4h, 300g steel ball, 100mm drop height impact                                                                                       |
| 5   | Low-temp Bending          | No cracks or brittle fracture                      | -40°C* 4h, wrap once around a mandrel of 4 times the diameter                                                                              |
| 6   | High-temp Deformation     | Deformation rate ≤ 10%                             | Thermal deformation temperature * 24h                                                                                                      |
| 7   | Heat resistance           | No embrittlement and no pulverization              | Thermal aging temperature *240h                                                                                                            |
| 8   | Aging performance         | No embrittlement or chalking                       | Operating temperature *3000h                                                                                                               |
| 9   | Flame retardant property  | Vertical Burning - V0, Horizontal Burning - HB     | GB/T 2408-2021                                                                                                                             |
| 10  | Burning rate              | ≤100mm/min                                         | GB 8410-2006                                                                                                                               |
| 11  | Chemical resistance       | No abnormal appearance and no cracks after bending | Weak acid or weak base (10% concentration)                                                                                                 |
| 12  | Oil resistance            | No abnormal appearance, no cracks upon bending     | Soak in gasoline, diesel oil, engine oil, hydraulic oil, transmission oil and engine coolant at room temperature for 20 hours respectively |
| 13  | Environmental performance | Compliant with RoHS 2.0                            | IEC 62321                                                                                                                                  |

Reminder: PP corrugated pipes are available in three temperature grades: 105°C, 125°C and 135°C. Please select as required.

Temperature Resistance Grade Comparison Table

| Temperature rating            | A(black) | B(orange) | C       |
|-------------------------------|----------|-----------|---------|
| Operatingtemperature(°C)      | -40~105  | -40~125   | -40~135 |
| Heatdeflectiontemperature(°C) | 120±3    | 140±3     | 150±3   |
| Heatdeflectiontestduration    | 24h      | 24h       | 24h     |
| Thermalagingtemperature(°C)   | 105±3    | 125±3     | 135±3   |
| Thermalagingtestduration      | 3000h    | 3000h     | 3000h   |
| Thermalagingtemperature(°C)   | 125±3    | 150±3     | 150±3   |
| Thermalagingtesttime          | 240h     | 240h      | 500h    |



Specification List

| Specifications | Inner diameter<br>D(mm) | Outer diameter<br>D (mm) | Wall thickness<br>H (mm) | Wave pitch A<br>(mm) | Wave width<br>a (mm) | Packing<br>specification<br>(M/roll) |
|----------------|-------------------------|--------------------------|--------------------------|----------------------|----------------------|--------------------------------------|
| Φ3.7*5.8       | 3.7±0.3                 | 5.8±0.3                  | 0.22±0.05                | (2. 1)               | (1.4)                | 400                                  |
| Φ4.2*7         | 4.2±0.3                 | 7.1±0.3                  | 0.25±0.05                | (2.0)                | (1.3)                | 400                                  |
| Φ4.5*7         | 4.6±0.3                 | 7.0±0.3                  | 0.25±0.05                | (2.1)                | (1.45)               | 400                                  |
| Φ4.8*7         | 5.0±0.3                 | 7.0±0.3                  | 0.25±0.05                | (2.1)                | (1.45)               | 400                                  |
| Φ5.2*7.2       | 5.2±0.3                 | 7.4±0.3                  | 0.25±0.05                | (2.1)                | (1.45)               | 400                                  |
| Φ5.5*8         | 5.5±0.3                 | 8.0±0.3                  | 0.27±0.05                | (2.1)                | (1.45)               | 400                                  |
| Φ6*9           | 6.0±0.3                 | 9.0±0.3                  | 0.27±0.05                | (2. 5)               | (1.75)               | 200                                  |
| Φ6.5*10        | 6.5±0.3                 | 10.0±0.3                 | 0.27±0.05                | (2.85)               | (1.95)               | 200                                  |
| Φ6.8*10        | 6.8±0.3                 | 10.0±0.3                 | 0.27±0.05                | (3. 0)               | (1.95)               | 200                                  |
| Φ7*10          | 7.0±0.3                 | 10.2±0.3                 | 0.27±0.05                | (2.85)               | (1.95)               | 200                                  |
| Φ7.5*10.5      | 7.7±0.3                 | 10.7±0.3                 | 0.27±0.05                | (2. 7)               | (1.8)                | 200                                  |
| Φ8.5*11.5      | 8.5±0.3                 | 11.7±0.3                 | 0.30±0.06                | (2.7)                | (1.95)               | 200                                  |
| Φ9*12          | 9.2±0.3                 | 12.2±0.3                 | 0.30±0.06                | (2. 7)               | (1.95)               | 200                                  |
| Φ9.3*12.7      | 9.3±0.3                 | 12.7±0.3                 | 0.30±0.06                | (2.65)               | (1.9)                | 200                                  |
| Φ10*13         | 10.2±0.3                | 13.0±0.3                 | 0.30±0.06                | (2.7)                | (1.95)               | 200                                  |
| Φ10.7*14.1     | 10.7±0.3                | 14.1±0.3                 | 0.30±0.06                | (2.7)                | (1.5)                | 200                                  |
| Φ11*14         | 11.2±0.3                | 14.0±0.3                 | 0.30±0.06                | (2.7)                | (1.95)               | 200                                  |
| Φ12*15.8       | 12.0±0.3                | 15.8±0.3                 | 0.30±0.06                | (3. 2)               | (2. 3)               | 200                                  |
| Φ12.6*16.1     | 12.6±0.3                | 16.1±0.3                 | 0.30±0.06                | (3.5)                | (2.1)                | 200                                  |
| Φ12.9*15.9     | 12.9±0.3                | 15.9±0.3                 | 0.30±0.06                | (3. 2)               | (2.15)               | 200                                  |
| Φ13*17         | 13.2±0.3                | 17.0±0.3                 | 0.35±0.08                | (3. 2)               | (2.3)                | 200                                  |
| Φ13.2*17.5     | 13.2±0.3                | 17.5±0.3                 | 0.35±0.08                | (3. 5)               | (1.9)                | 200                                  |
| Φ14*18         | 14.0±0.4                | 18.0±0.4                 | 0.35±0.08                | (3. 1)               | (2.1)                | 200                                  |
| Φ14.3*18.5     | 14.5±0.4                | 18.5±0.4                 | 0.35±0.08                | (3. 2)               | (2.3)                | 200                                  |
| Φ15.1*19.7     | 15.1±0.4                | 19.7±0.4                 | 0.35±0.08                | (3. 2)               | (2.3)                | 200                                  |
| Φ15.2*18.7     | 15.2±0.4                | 18.7±0.4                 | 0.35±0.08                | (3. 2)               | (2. 25)              | 200                                  |
| Φ16*20         | 16.0±0.4                | 20.0±0.4                 | 0.35±0.08                | (3. 2)               | (2.3)                | 200                                  |
| Φ17*21.2       | 17.0±0.5                | 21.2±0.5                 | 0.35±0.08                | (3. 6)               | (2.45)               | 200                                  |
| Φ18*22         | 18.1±0.5                | 21.8±0.5                 | 0.40±0.08                | (3. 2)               | (2.15)               | 200                                  |
| Φ18.3*21.5     | 18.3±0.5                | 21.5±0.5                 | 0.40±0.08                | (3. 25)              | (2.25)               | 200                                  |
| Φ19*23.5       | 19.0±0.5                | 23.5±0.5                 | 0.40±0.08                | (3. 35)              | (2.3)                | 200                                  |
| Φ19.5*24.3     | 19.5±0.5                | 24.3±0.5                 | 0.40±0.08                | (3. 5)               | (2.3)                | 200                                  |
| Φ20*25         | 20.5±0.5                | 25.0±0.5                 | 0.40±0.08                | (3. 1)               | (2. 35)              | 100                                  |
| Φ21*25.5       | 21.5±0.5                | 25.0±0.5                 | 0.40±0.08                | (3. 3)               | (2.3)                | 100                                  |
| Φ21.7*25.5     | 21.7±0.5                | 25.5±0.5                 | 0.40±0.08                | (3. 7)               | (2.2)                | 100                                  |
| Φ22*26         | 22.0±0.5                | 26.0±0.5                 | 0.40±0.08                | (3.4)                | (2.3)                | 100                                  |
| Φ22*26.8       | 22.0±0.5                | 26.8±0.5                 | 0.40±0.08                | (3. 1)               | (2.3)                | 100                                  |
| Φ23*28.5       | 23.2±0.5                | 28.5±0.5                 | 0.40±0.08                | (3. 2)               | (2.3)                | 100                                  |
| Φ25*30         | 25.0±0.5                | 30.0±0.5                 | 0.40±0.08                | (3.9)                | (2.75)               | 100                                  |
| Φ25*32         | 25.5±0.5                | 32.0±0.5                 | 0.40±0.08                | (4.5)                | (2. 75)              | 100                                  |
| Φ26*31         | 26.0±0.5                | 31.0±0.5                 | 0.45±0.10                | (3. 1)               | (2.3)                | 50                                   |
| Φ27*32         | 27.3±0.5                | 32.0±0.5                 | 0.45±0.10                | (4.7)                | (3.1)                | 100                                  |
| Φ29*34.5       | 29.0±0.6                | 34.5±0.6                 | 0.45±0.10                | (3. 5)               | (2. 35)              | 50                                   |
| Φ32*37         | 32.0±0.6                | 37.0±0.6                 | 0.45±0.10                | (3. 3)               | (2. 35)              | 50                                   |
| Φ36*42.5       | 36.0±0.6                | 42.5±0.6                 | 0.45±0.10                | (4.15)               | (2.8)                | 50                                   |
| Φ40*45         | 39.8±0.6                | 44.5±0.6                 | 0.45±0.10                | (4.15)               | (2.85)               | 50                                   |
| Φ46*53.5       | 46.3±0.6                | 53.5±0.6                 | 0.50±0.15                | (6. 0)               | (4.3)                | 25                                   |
| Φ48*54.5       | 48.0±0.8                | 54.5±0.8                 | 0.50±0.15                | (4.3)                | (3.0)                | 25                                   |
| Φ56*67         | 56.0±1.0                | 67.0±1.0                 | 0.70±0.20                | (6. 7)               | (4.0)                | 25                                   |
| Φ69*80         | 67.0±1.0                | 80.0±1.0                 | 0.85±0.20                | (8. 5)               | (5. 0)               | 25                                   |
| Φ91*106        | 91.0±1.0                | 106.0±1.0                | 1.00±0.25                | (8.5)                | (5.2)                | 20                                   |

Remarks: 1)Wave pitch A and wave width a are for reference only.  
2)Standard colors are black and orange. Custom colors, slitting and cutting services are available.



**DS-CH**  
**MECHANICAL & THERMAL PROTECTION**

Silicon coated fiber glass sleeve for high temperature

**Applications**  
It is suitable for electric cable bundling and protection of wires, cables and pipes.  
This sleeve is used in the steel industry in foundries, glassworks, chemicals, petrochemical plants, the shipbuilding, railway and aerospace industries.

**Features**  
DS-CH is a fiberglass braid sleeve coated with silicone rubber .  
DS-CH offers a continuous working temperature of - 60°C up to +260°C with short term temperature up to 1500°C  
It also offers good resistance to flame and projections( melting, particles, vapors and fluids )

**Various**  
Standard color: Brick red, other color available on request.

Technical data

| Property |                                | Test Method | Values             |
|----------|--------------------------------|-------------|--------------------|
|          | Working temperature            | -           | - 60°C +260°C      |
|          | Peak temperature(30min)        | -           | +800°C             |
|          | Peak temperature(15min)        | -           | +1100°C            |
|          | Peak temperature(1min)         | -           | +1500°C            |
|          | Flammability smoke toxicity    | FMVSS 302   | Self extinguishing |
|          |                                | D45 1333    | Type B             |
|          |                                | EN 45 545-2 | R22 & R23          |
|          |                                | -           | Halogen free       |
|          | Flexibility at low temperature | -           | Excellent          |
|          | UV resistance                  | -           | Good               |
| Chemical | Hydrocarbons                   | -           | Slight swelling    |

Dimensions

| Inside diameter (mm) | Nominal wall thickness (mm) |
|----------------------|-----------------------------|
| 8.0                  | 2.0                         |
| 10.0                 | 2.0                         |
| 13.0                 | 2.2                         |
| 16.0                 | 2.2                         |
| 19.0                 | 2.5                         |
| 22.0                 | 2.6                         |
| 25.0                 | 2.6                         |
| 32.0                 | 3.0                         |
| 38.0                 | 3.5                         |
| 45.0                 | 3.5                         |

Dimensions

| Inside diameter (mm) | Nominal wall thickness (mm) |
|----------------------|-----------------------------|
| 51.0                 | 3.6                         |
| 57.0                 | 3.8                         |
| 64.0                 | 4.0                         |
| 70.0                 | 4.0                         |
| 76.0                 | 4.0                         |
| 80.0                 | 4.3                         |
| 89.0                 | 4.5                         |
| 102.0                | 4.6                         |

\*special spool lengths or cut pieces available on request.



**DS-CF**  
**MECHANICAL&THERMAL PROTECTION**

Black Silicone coated Fiberglass sleeve

**Applications**  
It is a tubular braided fiberglass sleeve coated with a silicone elastomer. It offers a high degree of flexibility under working temperatures ranging from -40°C up to +200°C. It is suitable for heat and mechanical protection of wires, cables and pipes in contact with or close to a heat source. Used widely within the automotive sector for the thermal protection of fuel lines, pipes, hoses and within the electrical industry as an insulation sleeve.

Standard colors: Black

Technical data

| Property   |                        | Test Method | Values                       |
|------------|------------------------|-------------|------------------------------|
| Physical   | Working temperature    |             | -40°C to +200°C              |
|            | Short term temperature |             | +250°C                       |
|            | Thermal classification | IEC 60085   | Class 180(Class H)           |
|            | Flammability           | FMVSS 302   | Selfextinguishing            |
|            |                        | D451333     | Type B                       |
|            | Humidity               |             | Good                         |
|            | Ozone resistance       |             | Good                         |
|            | JV resistance          |             | Good                         |
| Chemical   | Fluid resistance       | D471924     | Unaffected by most chemicals |
| Electrical | Dielectric strength    | IEC 60085   | Up to 7 kV                   |

Dimensions

| Reference | Recommended Range of Use(mm) | Wallthickness |
|-----------|------------------------------|---------------|
| DS-CF     |                              | (mm)          |
| 50        | 50                           | 60            |
| 60        | 60                           | 60            |
| 80        | 80                           | 60            |
| 100       | 100                          | 60            |
| 120       | 120                          | 80            |
| 140       | 140                          | 80            |
| 160       | 160                          | 80            |
| 180       | 180                          | 80            |
| 200       | 200                          | 100           |
| 220       | 220                          | 100           |
| 250       | 250                          | 100           |
| 290       | 290                          | 100           |

**Cutting**

The products can be cut to length.

**Packaging**

Available in spool, coils or cut pieces (on request).  
Other packaging or diameter available upon request.

DE-BS  
MECHANCAL&THERMAL PROTECTION

Silver coated Fiberglass sleeve

Applications

It is a tubular braided fiberglass sleeve coated with a reflective silicone elastomer compound. It offers high flexibility under working temperatures ranging from - 40°C up to +200°C.It is suitable for heat and mechanical protection of wires, cables and hoses in con tact with or close to a heat source. Used widely within the automotive sector for the thermal protection of fuel lines, pipes, hoses and harnesses.

Standard colors: Silver grey



Technical data

| Property   |                        | Test Method | Values                       |
|------------|------------------------|-------------|------------------------------|
| Physical   | Working temperature    |             | -40°C to +200°C              |
|            | Shortterm temperature  |             | +250°C                       |
|            | Thermal classification | IEC 60085   | Class 180 (Class H)          |
|            | Flammability           | FMVSS 302   | Self extinguishing           |
|            |                        | D45 1333    | Type B                       |
| Chemical   | Fluid resistance       | D47 1924    | Unaffected by most chemicals |
| Electrical | Dielectric strength    | IEC 60084-2 | Up to 2,5 kV                 |

Dimensions

| Reference | Recommended range of use (mm) | Wall thickness |
|-----------|-------------------------------|----------------|
| DE-BS     |                               | (mm)           |
| 005,0     | 05,0                          | 0,60           |
| 006,0     | 06,0                          | 0,60           |
| 008,0     | 08,0                          | 0,80           |
| 010,0     | 10,0                          | 0,80           |
| 012,0     | 12,0                          | 0,80           |
| 014,0     | 14,0                          | 0,80           |
| 016,0     | 16,0                          | 1,00           |
| 018,0     | 18,0                          | 1,00           |
| 020,0     | 20,0                          | 1,00           |
| 022,0     | 22,0                          | 1,00           |
| 025,0     | 25,0                          | 1,00           |
| 029,0     | 29,0                          | 1,00           |

Cutting

The products can be cut to length.

Packaging

Available in spool, coils or cut pieces (on request).  
Other packaging or diameter available upon request.



**DS-CT**  
**MECHANICAL & THERMAL PROTECTION**

Silicone coated fiberglass sleeving

**Application**

DS-CT series insulating sleeving is manufactured via thermal processing technology. The fiberglass substrate is fully impregnated with silicone rubber, available in four standard dielectric voltage grades: DS-CT-1.5KV, DS-CT-2.5KV,DS-CT-4KV and DS-CT-7KV. Benefiting from special thermal treatment and customized rubber/resin formulation, the tubing features outstanding softness & elasticity, superior high-temperature resistance and reliable dielectric breakdown strength.

**Standard stock colours:** Black, Brick Red;  
Custom colours available upon customer request.

**Technical indicators:**volume resistance:10<sup>10</sup>Ωcm self-extinguishing time:10 seconds

| Model No. | Compliance Standards | Flame Resistance Rating | Operating Temperature Range | Breakdown Voltage Rating | Average Withstand Voltage |
|-----------|----------------------|-------------------------|-----------------------------|--------------------------|---------------------------|
| DS-CT-15  | UL 1441              | UL VW-1                 | -50°C ~ +200°C              | C2                       | 1.5KV                     |
| DS-CT-25  | UL 1441              | UL VW-1                 | -50°C ~ +200°C              | C1                       | 2.5KV                     |
| DS-CT-40  | UL 1441              | UL VW-1                 | -50°C ~ +200°C              | B                        | 4KV                       |
| DS-CT-70  | UL 1441              | UL VW-1                 | -50°C ~ +200°C              | A                        | 7KV                       |

Property

| Test Item                         | Standard Performance Indicators                                     |
|-----------------------------------|---------------------------------------------------------------------|
| Thermal Aging Test                | No cracking or detachment of the coating after 8 hours at 220°C.    |
| Cold Bend Test                    | No cracking or detachment of the coating after 60 minutes at -50°C. |
| Vertical Flammability Test (VW-1) | Max 10 sec (According to UL VW-1).                                  |
| Volume Resistivity                | • 10 <sup>10</sup> Ω·cm                                             |

Product specifications

| Inner diameter<br>(mm) | Wall Thickness |           |                                     |                                    | Packing (m/roll) |
|------------------------|----------------|-----------|-------------------------------------|------------------------------------|------------------|
|                        | 1.5KV          | 2.5KV     | 4KV<br>(Fiber inside outer plastic) | 7KV<br>(Fiber inside outerplastic) |                  |
| Φ1.0                   | 0.25±0.05      | 0.25±0.08 | 0.30±0.08                           | 0.45±0.08                          | 200              |
| Φ1.5                   | 0.25±0.05      | 0.25±0.08 | 0.35±0.08                           | 0.50±0.08                          | 200              |
| Φ2.0                   | 0.35±0.05      | 0.35±0.08 | 0.35±0.08                           | 0.50±0.08                          | 200              |
| Φ2.5                   | 0.35±0.05      | 0.35±0.08 | 0.40±0.08                           | 0.50±0.08                          | 200              |
| Φ3.0                   | 0.35±0.05      | 0.35±0.08 | 0.40±0.08                           | 0.50±0.08                          | 200              |
| Φ3.5                   | 0.35±0.05      | 0.35±0.08 | 0.40±0.08                           | 0.50±0.08                          | 200              |
| Φ4.0                   | 0.35±0.05      | 0.35±0.08 | 0.45±0.08                           | 0.50±0.08                          | 200              |
| Φ4.5                   | 0.35±0.05      | 0.35±0.08 | 0.45±0.08                           | 0.55±0.08                          | 100              |
| Φ5.0                   | 0.35±0.05      | 0.4±0.08  | 0.50±0.08                           | 0.55±0.08                          | 100              |
| Φ5.5                   | 0.35±0.05      | 0.4±0.08  | 0.50±0.08                           | 0.55±0.08                          | 100              |
| Φ6.0                   | 0.35±0.05      | 0.45±0.08 | 0.50±0.08                           | 0.60±0.08                          | 100              |
| Φ7.0                   | 0.35±0.05      | 0.45±0.08 | 0.50±0.08                           | 0.65±0.08                          | 100              |
| Φ8.0                   | 0.35±0.05      | 0.45±0.08 | 0.55±0.08                           | 0.65±0.08                          | 100              |
| Φ9.0                   | 0.40±0.05      | 0.45±0.08 | 0.60±0.08                           | 0.70±0.08                          | 100              |
| Φ10.0                  | 0.40±0.05      | 0.45±0.08 | 0.60±0.08                           | 0.70±0.08                          | 100              |
| Φ11.0                  | 0.40±0.05      | 0.45±0.08 | 0.60±0.08                           | 0.70±0.08                          | 100              |
| Φ12.0                  | 0.40±0.05      | 0.45±0.08 | 0.60±0.08                           | 0.70±0.08                          | 100              |
| Φ13.0                  | 0.40±0.05      | 0.45±0.08 | 0.60±0.08                           | 0.70±0.08                          | 100              |
| Φ14.0                  | 0.40±0.05      | 0.45±0.08 | 0.60±0.08                           | 0.70±0.08                          | 100              |
| Φ15.0                  | 0.40±0.05      | 0.45±0.08 | 0.60±0.08                           | 0.70±0.08                          | 100              |
| Φ16.0                  | 0.40±0.05      | 0.45±0.08 | 0.60±0.08                           | 0.70±0.08                          | 100              |
| Φ17.0                  | 0.62±0.05      | 0.62±0.08 | 0.70±0.08                           | 0.75±0.08                          | 50               |
| Φ18.0                  | 0.62±0.05      | 0.62±0.08 | 0.70±0.08                           | 0.75±0.08                          | 50               |
| Φ19.0                  | 0.62±0.05      | 0.62±0.08 | 0.70±0.08                           | 0.75±0.08                          | 50               |
| Φ20.0                  | 0.72±0.05      | 0.75±0.08 | 0.80±0.08                           | 0.80±0.08                          | 50               |
| Φ25.0                  | 0.82±0.05      | 0.85±0.08 | 0.90±0.08                           | 0.95±0.08                          | 50               |
| Φ30.0                  | 1.0±0.05       | 1.05±0.08 | 1.15±0.08                           | 1.20±0.08                          | 50               |



**DA-CC**  
**MECHANICAL & THERMAL PROTECTION**

Acrylic coated Fiberglass sleeve

**Applications**

Acrylic sleeving is a fiberglass sleeve impregnated with an acrylic(AC) resin. It's belong to F-155°C thermal class. Standard breakdown voltage is : 1500volt - 2500volt-4000volt-7000volt. It is widely used as mechanical protection for cables in the electrical motor's market.

**Thermal Class:** F-155°C random peaks at 165°C.

**Colour:** Yellow(standard), black, blue, red, white, green.

Technical data

| Properties        | Results                                                                                                   |
|-------------------|-----------------------------------------------------------------------------------------------------------|
| After heating     | No cracking or detachment of the varnish film. It maintains its flexibility after several hours at 160°C. |
| Chemicals         | Good resistance to benzene.                                                                               |
| Breakdown voltage | 1500volt / 2500volt / 4000volt / 7000volt                                                                 |

Dimensions

| Inside Diameter | Wall thickness | Packing (m/roll) |
|-----------------|----------------|------------------|
| Φ0.5            | 0.40±0.10      | 200              |
| Φ1.0            | 0.40±0.10      | 200              |
| Φ1.5            | 0.40±0.10      | 200              |
| Φ2.0            | 0.40±0.10      | 200              |
| Φ2.5            | 0.40±0.10      | 200              |
| Φ3.0            | 0.45±0.10      | 200              |
| Φ3.5            | 0.45±0.10      | 200              |
| Φ4.0            | 0.45±0.10      | 200              |
| Φ5.0            | 0.52±0.10      | 100              |
| Φ5.5            | 0.52±0.10      | 100              |
| Φ6.0            | 0.52±0.10      | 100              |
| Φ7.0            | 0.52±0.10      | 100              |
| Φ8.0            | 0.52±0.10      | 100              |
| Φ9.0            | 0.60±0.15      | 100              |
| Φ10.0           | 0.60±0.15      | 100              |
| Φ11.0           | 0.60±0.15      | 100              |
| Φ12.0           | 0.60±0.15      | 100              |
| Φ14.0           | 0.80±0.15      | 100              |
| Φ16.0           | 0.80±0.15      | 50               |
| Φ18.0           | 1.00±0.20      | 50               |
| Φ19.0           | 1.00±0.20      | 50               |
| Φ20.0           | 1.00±0.20      | 50               |
| Φ25.0           | 1.00±0.20      | 50               |
| Φ30.0           | 1.00±0.20      | 50               |

**DM-PURT**  
**MECHANICAL & THERMAL PROTECTION**

Polyurethane fiberglass sleeving

Application:

Polyurethane sleeving series is a glassfiber sleeving coated with a Polyurethane resin. After a heat treatment the resin changes its mechanical and thermal characteristics: the result of this treatment is a final product that belongs to F class (155 °C). Main characteristics are good wall resistance, excellent electrical properties and good elasticity. Widely used as electrical insulation for connections in the electrical motors field.



Technical data

| Properties        | Results                                                                 |
|-------------------|-------------------------------------------------------------------------|
| Heat resistance   | No cracking, bending after heat treatment after several hours at 160°C. |
| Chemicals         | Good resistance to benzene and oils.                                    |
| Breakdown voltage | 4000Volt.                                                               |

Dimensions

| Inside Diameter | Wall thickness | Packing (m/roll) |
|-----------------|----------------|------------------|
| Φ0.5            | 0.45±0.15      | 200              |
| Φ1.0            | 0.45±0.15      | 200              |
| Φ1.5            | 0.45±0.15      | 200              |
| Φ2.0            | 0.45±0.15      | 200              |
| Φ2.5            | 0.45±0.15      | 200              |
| Φ3.0            | 0.45±0.15      | 200              |
| Φ3.5            | 0.55±0.15      | 200              |
| Φ4.0            | 0.55±0.15      | 200              |
| Φ5.0            | 0.55±0.15      | 100              |
| Φ5.5            | 0.55±0.15      | 100              |
| Φ6.0            | 0.55±0.15      | 100              |
| Φ7.0            | 0.55±0.15      | 100              |
| Φ8.0            | 0.55±0.15      | 100              |
| Φ9.0            | 0.55±0.15      | 100              |
| Φ10.0           | 0.65±0.15      | 100              |
| Φ11.0           | 0.65±0.15      | 100              |
| Φ12.0           | 0.65±0.15      | 100              |
| Φ14.0           | 0.65±0.15      | 100              |
| Φ16.0           | 0.65±0.15      | 50               |
| Φ18.0           | 0.80±0.20      | 50               |
| Φ19.0           | 0.80±0.20      | 50               |
| Φ20.0           | 0.80±0.20      | 50               |
| Φ25.0           | 0.80±0.20      | 50               |
| Φ30.0           | 0.80±0.20      | 50               |



**DT-A**  
**MECHANICAL & THERMAL PROTECTION**

**Features**  
DT-A is flexible, tubular sleeve made of fiberglass and polyester monofilament covered with an aluminum foil. DT-A offers a continuous working temperature of - 40°C up to +200°C. Its smooth and reflective outer surface provides an effective barrier to radiant heat.

**Various**  
Standard color: Reflective aluminum.

Technical data

| Property |                                          | Test Method                    | Values             |
|----------|------------------------------------------|--------------------------------|--------------------|
|          | Working temperature                      | -                              | - 40°C +200°C      |
|          | Heat shock 6h @ 200°C                    | Oven aging                     | No delamination    |
|          | Thermal endurance - Radiation 6h @ 550°C | 25mm above radiant heat source | No delamination    |
|          | Low temperature flexibility 4h @ -40°C   | -                              | No delamination    |
|          | Flammability                             | FMVSS 302                      | Self extinguishing |
|          |                                          | D45 1333                       | Type B             |
| Chemical | Fluid resistance                         | D47 1924                       | No delamination    |

Dimensions

| As Supplied (mm) | Recommended range of use (mm) |
|------------------|-------------------------------|
| 6.4              | 4-6                           |
| 9.5              | 7-9                           |
| 12.7             | 10-12                         |
| 15.8             | 13-15                         |
| 19.1             | 16-19                         |
| 22.2             | 20-22                         |
| 25.4             | 23-25                         |
| 31.8             | 26-31                         |
| 38.1             | 32-38                         |

\*special spool lengths or cut pieces available on request.

**DF-A**  
**MECHANICAL & THERMAL PROTECTION**

Flat aluminum & fiberglass sleeve

**Applications**

It is suitable for the protection of cable assemblies ,hoses and pipes from a heat source.  
Used within the automotive sector.

**Features**

DF-A is Flexible sleeve made of fiberglass braid covered with an aluminum foil.  
DF-A offers a continuous working temperature of - 40°C up to +200°C.Its smooth and reflective outer surface provides a very effective barrier to radiant heat. It is a fully tubular sleeve designed to eliminate conventional "sewn" alternatives.

**Various**

Standard color: Reflective aluminum.  
Exists also with polyester instead of fiberglass(- 40°C to 150°C)



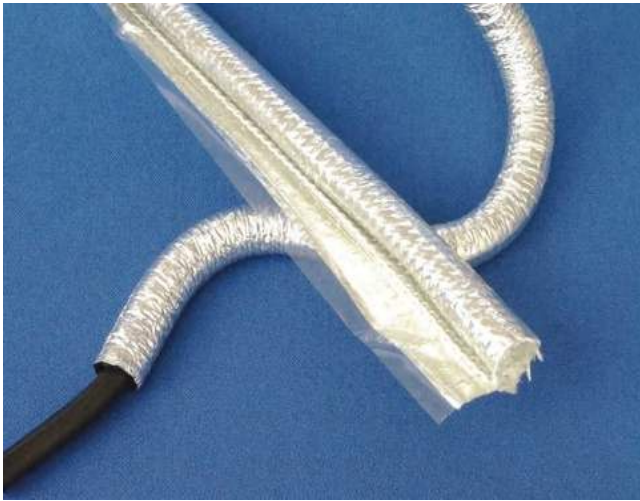
Technical data

| Property |                                          | Test Method                    | Values             |
|----------|------------------------------------------|--------------------------------|--------------------|
| Physical | Working temperature                      | -                              | - 40°C +200°C      |
|          | Thermal endurance - Radiation 6h @ 550°C | 25mm above radiant heat source | No delamination    |
|          | Thermal endurance - Aging 1000h @ 200°C  | Oven aging                     | No delamination    |
|          | Low temperature flexibility 4h @ -40°C   | -                              | No delamination    |
|          | Flammability                             | FMVSS 302                      | Self extinguishing |
|          |                                          | D45 1333                       | Type B             |
| Chemical | Fluid resistance                         | D47 1924                       | No delamination    |

Dimensions

| As Supplied (mm) | Recommended range of use (mm) |
|------------------|-------------------------------|
| 6.4              | 4-6                           |
| 9.5              | 7-9                           |
| 12.7             | 10-12                         |
| 15.8             | 13-15                         |
| 19.1             | 16-19                         |
| 22.2             | 20-22                         |
| 25.4             | 23-25                         |
| 31.8             | 26-31                         |
| 38.1             | 32-38                         |
| 50.8             | 40-50                         |
| 76.2             | 66-76                         |
| 101.6            | 92-101                        |

\*special spool lengths or cut pieces available on request.



**DW-A**  
**MECHANICAL & THERMAL PROTECTION**

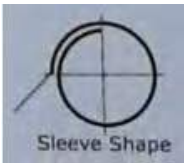
Wrap-around aluminum, polyester & fiberglass sleeve

**Applications**

It is suitable for the protection of cable assemblies ,hoses and pipes from a heat source.  
Used within the automotive sector.

**Features**

DW-A is flexible, self-wrapping sleeve made of fiberglass and polyester monofilament covered with an aluminum foil.  
DW-A offers a continuous working temperature of - 40°C up to +200°C.Its overlapping sides and a self sealing adhesive reinforcement allow for permanent and seamless closure.  
Its smooth and reflective outer surface provides an effective barrier to radiant heat.



Technical data

| Property |                                          | Test Method                    | Values             |
|----------|------------------------------------------|--------------------------------|--------------------|
| Physical | Working temperature                      | -                              | - 40°C +200°C      |
|          | Heat shock 6h @ 200°C                    | Oven aging                     | No delamination    |
|          | Thermal endurance - Radiation 6h @ 550°C | 25mm above radiant heat source | No delamination    |
|          | Low temperature flexibility 4h @ -40°C   | -                              | No delamination    |
|          | Flammability                             | FMVSS 302                      | Self extinguishing |
| Chemical | Fluid resistance                         | D45 1333                       | Type B             |
|          |                                          | D47 1924                       | No delamination    |

Dimensions

| As Supplied (mm) | Recommended range of use (mm) |
|------------------|-------------------------------|
| 6.4              | 4-6                           |
| 9.5              | 7-9                           |
| 12.7             | 10-12                         |
| 15.8             | 13-15                         |
| 19.1             | 16-19                         |
| 22.2             | 20-22                         |
| 25.4             | 23-25                         |
| 31.8             | 26-31                         |
| 38.1             | 32-38                         |

\*special spool lengths or cut pieces available on request.

DM-PVC  
THIN WALL TUBING

Flexible, general purpose flame retardant tubing

Features

General-purpose polyvinyl chloride (PVC) sleeves are made of general purpose polyvinyl chloride (PVC) colloidal particles, dried, heated and melted by an extruder, compressed to form, cooled with cold water, and rolled up. Has good flexibility, mechanical properties, dielectric properties, flame retardancy, etc. Meet the environmental standards. Widely used electrical appliances, motors, transformers lead wire insulation, wiring harnesses, insulating sleeve protection for electronic components, gas, liquid circulation pipes and so on.

Various

- 1.Flame retardant, environmental protection
- 2.Operating temperature : -20°C to +105°C
- 3.Environmental standards : RoHS
- 4.Standard Color :White ,Black. Other colors available on request.
- 5.Voltage level:1.5KV,2.5KV,4.0KV,7.0KV
- 6.Material:Polyvinyl Chloride

Technical Data

| Property          |              | Test Method                   | Typical Data  |
|-------------------|--------------|-------------------------------|---------------|
| Shore Hardness    |              | Hardness Tester               | 60P(80A±2A)   |
| Voltage level     |              | Withstand voltage tester      | 600V          |
| Temperature Range |              | Heat Aging Oven               | -30 C - 105 C |
|                   | Before aging | 23 C                          | 2500V/60sec   |
|                   | After aging  | 136 C 168hr                   | 2500V/60sec   |
|                   | Before aging | 23 C                          | ≥10.4 Mpa     |
|                   | After aging  | 136 C 168hr                   | ≥7.3 Mpa      |
|                   | Before aging | 23 C                          | ≥100%         |
|                   | After aging  | 136 C 168hr                   | ≥100%         |
| Flexibility       |              | 136 C 168hr                   | No cracks     |
| Cold bend         |              | -30 C No cracks the same hard | -30 C 1hr     |
| Copper stability  |              | 136 C 168hr                   | No eroding    |
| Flame resistance  |              | UL224                         | VW-1          |

Dimension

| Size | Inside Diameter<br>(mm) | Wall Thickness(mm) |           | Standard length<br>m/spool |
|------|-------------------------|--------------------|-----------|----------------------------|
|      |                         | 300V               | 600V      |                            |
| 3/64 | 1.2±0.15                | 0.30±0.05          | 0.45±0.05 | 305                        |
| 1/16 | 1.5±0.15                | 0.30±0.05          | 0.45±0.05 | 305                        |
| 3/32 | 2.4±0.2                 | 0.30±0.05          | 0.45±0.05 | 305                        |
| 1/8  | 3.2±0.2                 | 0.40±0.05          | 0.50±0.05 | 305                        |
| 3/16 | 4.8±0.3                 | 0.45±0.05          | 0.55±0.05 | 305                        |
| 1/4  | 6.4±0.3                 | 0.45±0.05          | 0.55±0.05 | 152                        |
| 5/16 | 8.0±0.35                | 0.45±0.05          | 0.55±0.05 | 152                        |
| 3/8  | 9.5±0.35                | 0.50±0.05          | 0.55±0.05 | 152                        |
| 7/16 | 11.1±0.35               | 0.55±0.10          | 0.65±0.10 | 152                        |
| 1/2  | 12.7±0.35               | 0.55±0.10          | 0.65±0.10 | 152                        |
| 9/16 | 14.3±0.4                | 0.65±0.10          | 0.75±0.10 | 76                         |
| 5/8  | 16.0±0.4                | 0.65±0.10          | 0.75±0.10 | 76                         |
| 3/4  | 19.0±0.4                | 0.65±0.10          | 0.75±0.10 | 76                         |
| 7/8  | 22.0±0.5                | 0.75±0.15          | 0.85±0.15 | 76                         |
| 1    | 25.0±0.5                | 0.75±0.15          | 0.85±0.15 | 76                         |



DM-TFE(N)  
MECHANICAL & THERMAL PROTECTION

Non-thermal shrinkage PTFE tube



**Applications**  
Suitable for insulation and mechanical protection in harsh chemical and thermal environments, especially for contamination and corrosion prevention of hydraulic pipes and probe heads. Good mechanical strength and very low coefficient of friction minimize damage to precision components such as stressed shafts, its unique high-frequency resistance is widely used in the communications market and field.

**Features**  
High flame retardancy, High heat resistance and High insulation performance;  
High frequency resistance;  
Excellent resistance to chemical reagents;  
RoHS, REACH environmental standards compliant.

Technical Data

| Property                      | TestMethod                 | TechnicalData |
|-------------------------------|----------------------------|---------------|
| Specificgravity               | ASTMD792                   | 2.16g/cm³     |
| Tensilestrength               | ASTMD638                   | 24.5MPa       |
| Ultimateelongation            | ASTMD638                   | 350%          |
| Modulusofelasticity           | ASTMD790                   | 490MPa        |
| Impactstrength                | ASTMD256/23°C~54°CJ/m      | Nocracking    |
| Hardness                      | ASTMD2240                  | 55ShoreD      |
| Flammability                  | UL-224                     | VW-1          |
| Dielectricconstantat10³~10⁶Hz | ASTMD150                   | 2.1           |
| Lossfactorat10⁶Hz             | ASTMD150                   | 0.0002        |
| Anti-tracing                  | ASTMD495                   | >300S         |
| Volumeresistivity             | ASTMD257                   | >1.0×10¹⁸Ω·cm |
| Weatherresistance             | “ Weather-O-Meter” (2000h) | Nocracking    |
| Solventresistance             | ASTMD543                   | Excellent     |
| Chemicalresistance            | ASTMD543                   | Excellent     |

Dimensions

| AWG | Inside Diameter (mm) | S-TYPE              |                     | T-TYPE              |                     | L-TYPE              |                     | PackingLength (Meter/Roll) |        |        |
|-----|----------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|----------------------------|--------|--------|
|     |                      | Wall Thickness (mm) | Outer Diameter (mm) | Wall Thickness (mm) | Outer Diameter (mm) | Wall Thickness (mm) | Outer Diameter (mm) | S-TYPE                     | T-TYPE | L-TYPE |
| 30  | 0.30±0.05            | 0.23±0.05           | 0.76±0.05           | 0.23±0.05           | 0.76±0.10           | 0.15±0.04           | 0.60±0.10           | 305                        | 305    | 305    |
| 28  | 0.38±0.05            |                     | 0.84±0.05           |                     | 0.84±0.10           |                     | 0.68±0.10           | 305                        | 305    | 305    |
| 26  | 0.46±0.05            |                     | 0.92±0.05           |                     | 0.92±0.10           |                     | 0.76±0.10           | 305                        | 305    | 305    |

## Dimensions

| AWG | Inside Diameter (mm) | S-TYPE              |                     | T-TYPE              |                     | L-TYPE              |                     | PackingLength (Meter/Roll) |        |        |
|-----|----------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|----------------------------|--------|--------|
|     |                      | Wall Thickness (mm) | Outer Diameter (mm) | Wall Thickness (mm) | Outer Diameter (mm) | Wall Thickness (mm) | Outer Diameter (mm) | S-TYPE                     | T-TYPE | L-TYPE |
| 24  | 0.56±0.05            | 0.30±0.06           | 1.16±0.05           | 0.25±0.06           | 1.06±0.10           | 0.15±0.04           | 0.86±0.10           | 305                        | 305    | 305    |
| 23  | 0.66±0.05            |                     | 1.26±0.05           |                     | 1.16±0.10           |                     | 0.96±0.10           | 305                        | 305    | 305    |
| 22  | 0.71±0.05            |                     | 1.31±0.05           |                     | 1.21±0.10           |                     | 1.01±0.10           | 305                        | 305    | 305    |
| 21  | 0.81±0.05            |                     | 1.41±0.05           |                     | 1.31±0.10           |                     | 1.11±0.10           | 305                        | 305    | 305    |
| 20  | 0.86±0.05            | 0.40±0.07           | 1.66±0.05           | 0.30±0.06           | 1.46±0.10           | 0.15±0.04           | 1.16±0.10           | 305                        | 305    | 305    |
| 19  | 0.96±0.05            |                     | 1.76±0.05           |                     | 1.56±0.10           |                     | 1.26±0.10           | 305                        | 305    | 305    |
| 18  | 1.07±0.05            |                     | 1.87±0.05           |                     | 1.67±0.10           |                     | 1.37±0.10           | 305                        | 305    | 305    |
| 17  | 1.19±0.05            |                     | 1.99±0.05           |                     | 1.79±0.10           |                     | 1.49±0.10           | 305                        | 305    | 305    |
| 16  | 1.34±0.05            |                     | 2.14±0.05           |                     | 1.94±0.10           |                     | 1.64±0.10           | 153                        | 305    | 305    |
| 15  | 1.50±0.05            |                     | 2.30±0.05           |                     | 2.10±0.10           |                     | 1.80±0.10           | 153                        | 153    | 305    |
| 14  | 1.68±0.08            | 0.40±0.07           | 2.48±0.08           | 0.30±0.06           | 2.28±0.13           | 0.20±0.05           | 2.08±0.13           | 153                        | 153    | 153    |
| 13  | 1.93±0.08            |                     | 2.73±0.08           |                     | 2.53±0.13           |                     | 2.33±0.13           | 153                        | 153    | 153    |
| 12  | 2.16±0.08            |                     | 2.96±0.08           |                     | 2.77±0.13           |                     | 2.56±0.13           | 153                        | 153    | 153    |
| 11  | 2.41±0.08            |                     | 3.21±0.08           |                     | 3.01±0.13           |                     | 2.81±0.13           | 100                        | 153    | 153    |
| 10  | 2.69±0.08            |                     | 3.49±0.08           |                     | 3.29±0.13           |                     | 3.09±0.13           | 100                        | 100    | 153    |
| 9   | 3.30±0.08            | 0.50±0.07           | 4.00±0.08           | 0.38±0.07           | 3.76±0.13           | 0.20±0.05           | 3.40±0.13           | 100                        | 100    | 100    |
| 8   | 3.38±0.08            |                     | 4.38±0.08           |                     | 4.14±0.13           |                     | 3.78±0.13           | 50                         | 50     | 100    |
| 7   | 3.76±0.08            |                     | 4.76±0.08           |                     | 4.52±0.13           |                     | 4.16±0.13           | 50                         | 50     | 50     |
| 6   | 4.22±0.08            | 0.50±0.07           | 5.22±0.08           | 0.38±0.07           | 4.98±0.13           | 0.25±0.06           | 4.72±0.13           | 50                         | 50     | 50     |
| 5   | 4.72±0.10            |                     | 5.72±0.10           |                     | 5.48±0.15           |                     | 5.22±0.15           | 50                         | 50     | 50     |
| 4   | 5.28±0.10            |                     | 6.28±0.10           |                     | 6.04±0.15           |                     | 5.78±0.15           | 100                        | 100    | 100    |
| 3   | 5.94±0.10            |                     | 6.94±0.10           |                     | 6.70±0.15           |                     | 6.44±0.15           | 100                        | 100    | 100    |
| 2   | 6.68±0.10            |                     | 7.68±0.10           |                     | 7.44±0.15           |                     | 7.18±0.15           | 100                        | 100    | 100    |
| 1   | 7.46±0.10            |                     | 8.46±0.10           |                     | 8.22±0.15           |                     | 7.96±0.15           | 100                        | 100    | 100    |
| 0   | 8.38±0.10            |                     | 9.38±0.10           |                     | 9.14±0.15           |                     | 8.88±0.15           | 100                        | 100    | 100    |

\*special spool lengths or cut pieces available on request.



DM-NT  
OTHER PRODUCTS

Net Protection Tubing

Applications

Standard Net tubing for protection

Yarn Diameter: 1mm

Working Temperature: -20℃~60℃

Dimensions

| Model               | Color | Diameter range | Kgs/roll | M/roll | Rolls/carton |
|---------------------|-------|----------------|----------|--------|--------------|
| PE-15-15-60(11)     | any   | 8-15MM         | 5kg      | 330M   | 4            |
| PE-18-18-80(15)     | any   | 15-25MM        | 5kg      | 275M   | 4            |
| PE-30-30-120(25)    | any   | 25-40MM        | 5kg      | 165M   | 4            |
| PE-40-40-160(30)    | any   | 40-50MM        | 2.5kg    | 62M    | 8            |
| PE-50-50-250(50)    | any   | 50-80MM        | 2.5kg    | 50M    | 8            |
| PE-80-80-300(80)    | any   | 80-120MM       | 5kg      | 62M    | 4            |
| PE-80-80-380(90)    | any   | 120-160MM      | 5kg      | 62M    | 4            |
| PE-80-80-460(100)   | any   | 160-200MM      | 5kg      | 62M    | 4            |
| PE-72-120-550(120)  | any   | 200-280MM      | 6.3kg    | 52M    | 3            |
| PE-72-130-650(150)  | any   | 280-350MM      | 6.3kg    | 48M    | 3            |
| PE-72-150-800(180)  | any   | 350-420MM      | 10kg     | 66M    | 2            |
| PE-72-160-1050(300) | any   | 420-500MM      | 10kg     | 62M    | 2            |

Other Type

1. Rose protection net tubing

PE-36-8-80(11)

2. Bottle net tubing

PE-100-8.5-180(35) PE-110-5.5-180(25)

Net Tubina Technical standards

1. : PE - 00- 00- 00 (00)

Material —Mesh Number—Gram / m—Max Folded Dia Width

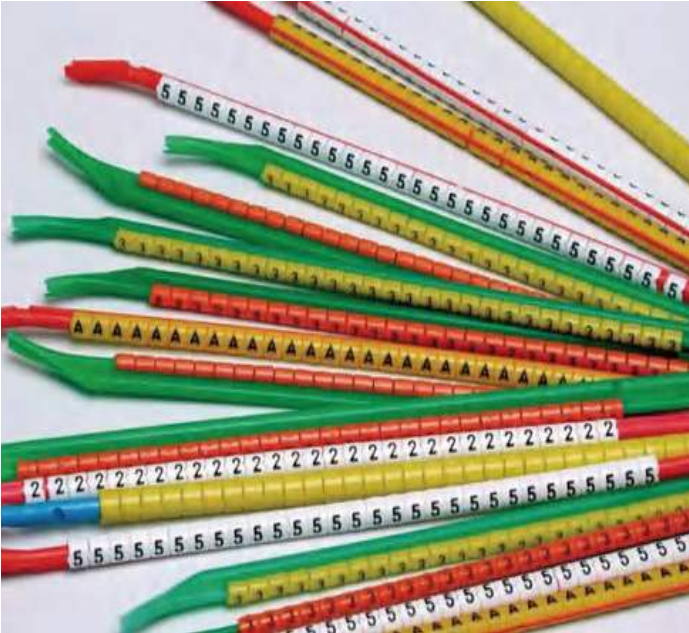
2. Comply with RoHS standards, (Testing report available)

3. Special Size and colors can be produced as customer request. Free sample

DM-CO  
OTHER PRODUCTS

Clip On Cable Markers

**Applications**  
Clip On cable markers have high flexing ability to grip the wire marker tightly without sliding. Push the Slip-On wire marker forward with the thumb, and the marker snaps on, firmly gripping the electrical wiring. The temperature range for Snap-On wire markers is from -30°C to 100°C



Technical data & Dimensions

| Range         | Detail |     | L (mm) | Qty          |
|---------------|--------|-----|--------|--------------|
| mm²           | Φ 1    | Φ 2 |        | pcs/stick    |
| 0.9 (0.8-1.0) | 0.9    | 2.5 | 3      | 30pcs/stick  |
| 2.0 (1.6-1.8) | 1.6    | 2.8 | 3      | 30/pcs/stick |
| 3.0 (2.8-3.2) | 2.7    | 3.9 | 3      | 30/pcs/stick |
| 4.0 (3.4-4.2) | 3.2    | 4.6 | 3.4    | 30/pcs/stick |
| 6.0 (4.6-5.9) | 4.4    | 5.8 | 3.5    | 30/pcs/stick |



DM-CT  
OTHER PRODUCTS

Nylon cable Tie

**Applications**  
DM-CT series could be used in any electrical cabinet, electrical and electronic harnesses to secure wire & cable bundles.

**Features**  
P.A.6.6 - General Purpose nylon is suitable for use in most practical applications at a continuous temperature from -40°C up to 85°C.

Standard Color: black/natural. Other colors available as well.

Dimensions

| Item No. | Length    |     | Thickness (mm) | Wide Bundle Diameter<br>• mm • | Extent Bundle Diameter<br>• mm • | Tensile Strength |     |
|----------|-----------|-----|----------------|--------------------------------|----------------------------------|------------------|-----|
|          | inch      | mm  |                |                                |                                  | lbs              | kgs |
| 2.5*80   | 3 3/16"   | 80  | 1.1            | 2.5                            | 2-16                             | 18               | 8   |
| 2.5*100  | 4"        | 100 | 1              |                                | 2-22                             |                  |     |
| 2.5*120  | 4 3/4"    | 120 | 1.1            |                                | 2-30                             |                  |     |
| 2.5*150  | 6"        | 150 | 1.05           |                                | 2-35                             |                  |     |
| 2.5*160  | 6 1/4"    | 160 | 1.05           |                                | 2-40                             |                  |     |
| 2.5*200  | 8"        | 200 | 1.1            |                                | 2-50                             |                  |     |
| 3.2*120  | 4 3/4"    | 120 | 1.1            | 3.2                            | 3-30                             | 40               | 18  |
| 3.2*150  | 6"        | 150 | 1.1            |                                | 3-35                             |                  |     |
| 3.6*140  | 5 1/2"    | 140 | 1.2            | 3.6                            | 3-33                             | 40               | 18  |
| 3.6*150  | 6"        | 150 | 1.2            |                                | 3-35                             |                  |     |
| 3.6*180  | 7"        | 180 | 1.2            |                                | 3-42                             |                  |     |
| 3.6*200  | 8"        | 200 | 1.2            |                                | 3-50                             |                  |     |
| 3.6*250  | 10"       | 250 | 1.25           |                                | 3-65                             |                  |     |
| 3.6*280  | 11"       | 280 | 1.25           |                                | 3-70                             |                  |     |
| 3.6*300  | 11 5/8"   | 300 | 1.3            |                                | 3-80                             |                  |     |
| 3.6*370  | 14 3/5"   | 370 | 1.35           |                                | 3-105                            |                  |     |
| 4.8*120  | 4 3/4"    | 120 | 1.25           | 4.8                            | 3-30                             | 50               | 22  |
| 4.8*150  | 6"        | 150 | 1.25           |                                | 3-35                             |                  |     |
| 4.8*160  | 6 1/4"    | 160 | 1.25           |                                | 3-37                             |                  |     |
| 4.8*180  | 7"        | 180 | 1.25           |                                | 3-42                             |                  |     |
| 4.8*190  | 7 1/2"    | 190 | 1.22           |                                | 3-46                             |                  |     |
| 4.8*200  | 8"        | 200 | 1.3            |                                | 3-50                             |                  |     |
| 4.8*250  | 10"       | 250 | 1.3            |                                | 3-65                             |                  |     |
| 4.8*280  | 11"       | 280 | 1.3            |                                | 3-70                             |                  |     |
| 4.8*300  | 11 5/8"   | 300 | 1.3            |                                | 3-82                             |                  |     |
| 4.8*350  | 13 3/4"   | 350 | 1.3            |                                | 3-90                             |                  |     |
| 4.8*370  | 14 3/5"   | 370 | 1.3            |                                | 3-98                             |                  |     |
| 4.8*380  | 15"       | 380 | 1.3            |                                | 3-102                            |                  |     |
| 4.8*400  | 15 3/4"   | 400 | 1.3            |                                | 3-105                            |                  |     |
| 4.8*430  | 17"       | 430 | 1.35           |                                | 3-110                            |                  |     |
| 4.8*450  | 17 3/4"   | 450 | 1.35           |                                | 3-130                            |                  |     |
| 4.8*500  | 19 11/16" | 500 | 1.4            |                                | 3-150                            |                  |     |
| 4.8*550  | 21 1/16"  | 550 | 1.4            |                                | 3-160                            |                  |     |

# Products Range



| Item No. | Length    |      | Thickness (mm) | Wide Bundle Diameter (mm) | Extent Bundle Diameter (mm) | Tensile Strength |     |
|----------|-----------|------|----------------|---------------------------|-----------------------------|------------------|-----|
|          | inch      | mm   |                |                           |                             | lbs              | kgs |
| 7.2*150  | 6"        | 150  | 1.55           | 7.2                       | 3-33                        | 120              | 55  |
| 7.2*200  | 8"        | 200  | 1.55           |                           | 3-50                        |                  |     |
| 7.2*250  | 10"       | 250  | 1.55           |                           | 4-63                        |                  |     |
| 7.2*300  | 11 5/8"   | 300  | 1.6            |                           | 4-82                        |                  |     |
| 7.2*350  | 13 3/4"   | 350  | 1.5            |                           | 4-90                        |                  |     |
| 7.2*370  | 14 3/5"   | 370  | 1.5            |                           | 4-98                        |                  |     |
| 7.2*380  | 15"       | 380  | 1.5            |                           | 4-100                       |                  |     |
| 7.2*400  | 15 3/4"   | 400  | 1.5            |                           | 4-105                       |                  |     |
| 7.2*450  | 17 3/4"   | 450  | 1.6            |                           | 4-110                       |                  |     |
| 7.2*500  | 19 11/16" | 500  | 1.6            |                           | 4-150                       |                  |     |
| 7.2*550  | 21 1/16"  | 550  | 1.6            |                           | 4-160                       |                  |     |
| 7.6*200  | 8"        | 200  | 1.5            | 7.6                       | 3-50                        | 120              | 55  |
| 7.6*250  | 10"       | 250  | 1.5            |                           | 4-63                        |                  |     |
| 7.6*300  | 11 5/8"   | 300  | 1.5            |                           | 4-82                        |                  |     |
| 7.6*350  | 13 3/4"   | 350  | 1.5            |                           | 4-90                        |                  |     |
| 7.6*360T | 14.2"     | 360  | 1.7            |                           | 4-94                        |                  |     |
| 7.6*380  | 15"       | 380  | 1.55           |                           | 4-100                       |                  |     |
| 7.6*400  | 15 3/4"   | 400  | 1.5            |                           | 4-105                       |                  |     |
| 7.6*450  | 17 3/4"   | 450  | 1.5            |                           | 4-118                       |                  |     |
| 7.6*500  | 19 11/16" | 500  | 1.5            |                           | 4-150                       |                  |     |
| 7.6*550  | 21 1/16"  | 550  | 1.5            |                           | 4-160                       |                  |     |
| 7.6*750  | 29 9/16"  | 750  | 1.6            |                           | 4-220                       |                  |     |
| 9*400    | 15 3/4"   | 400  | 1.8            | 9                         | 4-105                       | 175              | 80  |
| 9*450    | 17 3/4"   | 450  | 1.8            |                           | 8-118                       |                  |     |
| 9*500    | 19 11/16" | 500  | 1.9            |                           | 8-150                       |                  |     |
| 9*550    | 21 1/16"  | 550  | 1.9            |                           | 8-160                       |                  |     |
| 9*600    | 23 5/8"   | 600  | 1.8            |                           | 8-170                       |                  |     |
| 9*650    | 25 9/6"   | 650  | 1.8            |                           | 8-190                       |                  |     |
| 9*700    | 27 1/2"   | 700  | 1.9            |                           | 10-205                      |                  |     |
| 9*750    | 29 9/16"  | 750  | 1.9            |                           | 10-220                      |                  |     |
| 9*800    | 31 1/2"   | 800  | 1.9            |                           | 10-230                      |                  |     |
| 9*920    | 36 1/4"   | 920  | 1.9            |                           | 10-265                      |                  |     |
| 9*1020   | 40 1/6"   | 1020 | 1.95           |                           | 10-295                      |                  |     |
| 9*1200   | 47 1/4"   | 1200 | 1.95           |                           | 10-340                      |                  |     |
| 12*600   | 23 5/8"   | 600  | 2.15           | 12                        | 14-170                      | 200              | 91  |
| 12*650   | 25 9/6"   | 650  | 2.15           |                           | 14-190                      |                  |     |
| 12*700   | 27 1/2"   | 700  | 2.15           |                           | 14-205                      |                  |     |
| 12*1000  | 39 3/8"   | 1000 | 2.15           |                           | 14-275                      |                  |     |