



SMART PROTECTIONS
FOR FLEXIBLE HOSES
RIGID PIPES AND
ELECTRIC CABLES

PNEUMATIC TUBING
AND RECOILS



PROTECTIONS TUBING AND RECOILS







PROTECTIONS

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TEXSLEEVE® TEXTILE PROTECTIVE SLEEVE FOR HIGH PRESSURE FLEXIBLE HOSES

Texsleeve® is a continuous tubular sleeve made of polyamide fibers. Specially treated in order to withstand an abrasion resistance of over 200.000 cycles (according to ISO 6945). Texsleeve® is the perfect anti diffusion sleeve able to contain pin hole occurrences at high pressure.

Standard colour:

Black - Other colours are available on request

Standard print:

TEXSLEEVE

Possibility of custom printing and screen-print in colours

Temperature range:

-40°C to +100°C (-40°F to +212°F)

UV Resistance certified according to EN13758-1



MSHA approval for mining applications n. IC207/01

Complies with Australian spec MDG-41

Complies with UN-EN 1501-1, EN 982, EN 3457



TEXSLEEVE® is available in the following range:

| Part. Nr. |  |  | Quantity per box m | Availability |
|-----------|---|---|--------------------|--------------|
| | Flat I.D. mm | Round diameter mm | | |
| TEXS17 | 27 | 17 | 500 | Stock |
| TEXS20 | 31 | 20 | 500 | Stock |
| TEXS23 | 36 | 23 | 400 | Stock |
| TEXS25 | 39 | 25 | 400 | Stock |
| TEXS27 | 42 | 27 | 300 | Stock |
| TEXS31 | 49 | 31 | 300 | Stock |
| TEXS33 | 52 | 33 | 300 | Stock |
| TEXS36 | 54 | 36 | 250 | Stock |
| TEXS40 | 63 | 40 | 250 | Stock |
| TEXS44 | 69 | 44 | 200 | Stock |
| TEXS47 | 74 | 47 | 200 | Stock |
| TEXS53 | 83 | 53 | 200 | Stock |
| TEXS55 | 86 | 55 | 200 | Stock |
| TEXS60 | 94 | 60 | 150 | Stock |
| TEXS66 | 104 | 66 | 150 | Stock |
| TEXS73 | 115 | 73 | 150 | Stock |
| TEXS85 | 133 | 85 | 100 | Stock |
| TEXS93 | 146 | 93 | 100 | Stock |
| TEXS112 | 176 | 112 | 100 | Stock |
| TEXS127 | 202 | 127 | 100 | Stock |

PACKAGING AND ACCESSORIES

Rolls of 50 meters.

Special scissors available on request.

TEXWRAP® TEXTILE WRAPPING SLEEVE FIELD ASSEMBLING, RESISTANT TO OIL SPILLS, ABRASION AND HIGH TEMPERATURES

Texwrap® is a foldable sleeve made of polyamide fibers coated on one side with UV-resistant PU. The exclusive locking system, made of highly resistant VCO (Velcro) allows to obtain a tubular protection of endless length and easy to assemble.

Texwrap® can be supplied in customized versions: cut to size and stitched, with the addition of eyelets and locking catch to improve tear resistance.

Standard colour:

Black - Other colours are available on request

Temperature range:

-40°C to +180°C

(-40°F to +356°F)

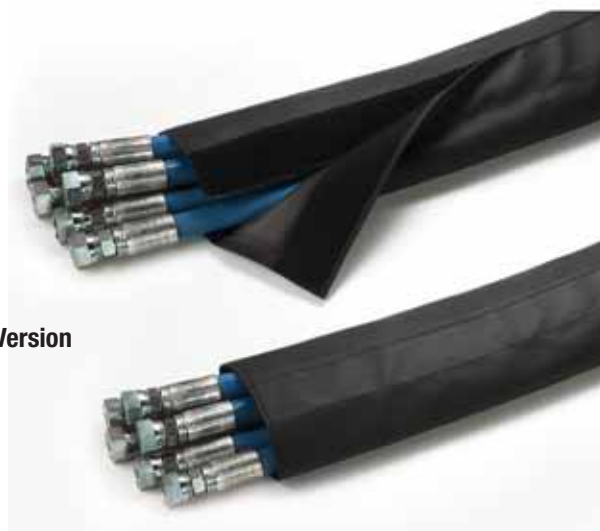
MSHA approval for mining applications n. IC207/02

Volume resistivity
(applied voltage 500V) $\Omega \cdot m$
 $5,9 \cdot 10^{12}$ according to CEI 15-23

Surface resistivity (applied voltage 500V) $\Omega \cdot 1,4 \cdot 10^{16}$
according to CEI 15-23




Special version with eyelets



Standard Version

TEXWRAP® is available in the following range:

| Part. Nr. |  | Coil lenght in m | Quantity per box m | Availability |
|-----------|---|---------------------|-----------------------|--------------|
| | Diameter mm | | | |
| TEXW-50 | 50 | 50 | 150 | Stock |
| TEXW-75 | 75 | 50 | 100 | Stock |
| TEXW-100 | 100 | 50 | 50 | Stock |
| TEXW-125 | 125 | 50 | 50 | Stock |
| TEXW-150 | 150 | 50 | 50 | Stock |
| TEXW-175 | 175 | 50 | 50 | Stock |
| TEXW-200 | 200 | 50 | 50 | Stock |

Other sizes and colours available on request.

ACCESSORIES

Special stainless steel scissors for sharp cut, on request.

TEXSTRIP® SELF LOCKING TEXTILE BELTS TO CONTAIN OR HANG MULTIPLE HOSES OR CABLES, ABRASION RESISTANT, FOR ASSEMBLING ON SITE

Texstrip® are made of polyamide fibers and stainless steel AISI 316 locking rings. They are designed for heavy duty industrial applications. They are easy to assemble and can be dismantled and reassembled more than one time.

Texstrip® are available in two versions, without eyelet or with eyelet, which offers a strong point of attachment to any part of the machinery.

Standard colour:

Black - Other colours are available on request

Temperature range:

-40°C to +100°C
(-40°F to +212°F)

MSHA approval for mining applications n. IC207/04



Versions without eyelets and with eyelets

TEX S0

TEX C0

TEXSTRIP® is available in the following range:

| Approximate diameter of the bundle mm | Circumference mm | Part. Nr. without eyelet | Part. Nr. with eyelet | Pieces per bag |
|---------------------------------------|------------------|--------------------------|-----------------------|----------------|
| 31-33 | 102 | TEX-04-SO | TEX-04-CO | 10 |
| 47-49 | 152 | TEX-06-SO | TEX-06-CO | 10 |
| 63-67 | 203 | TEX-08-SO | TEX-08-CO | 10 |
| 79-83 | 254 | TEX-10-SO | TEX-10-CO | 10 |
| 95-99 | 305 | TEX-12-SO | TEX-12-CO | 10 |
| 111-115 | 356 | TEX-14-SO | TEX-14-CO | 10 |
| 127-131 | 406 | TEX-16-SO | TEX-16-CO | 10 |
| 144-148 | 457 | TEX-18-SO | TEX-18-CO | 10 |
| 160-164 | 508 | TEX-20-SO | TEX-20-CO | 10 |
| 176-180 | 560 | TEX-22-SO | TEX-22-CO | 10 |
| 192-196 | 610 | TEX-24-SO | TEX-24-CO | 10 |
| 208-212 | 660 | TEX-26-SO | TEX-26-CO | 10 |

Other sizes available on request.

PACKAGING AND DELIVERY

Polyethylene bags.

TEXLITE® ECONOMICAL AND VERSATILE SLEEVE FOR HIGH PRESSURE FLEXIBLE HOSES

Texlite® is a continuous tubular sleeve made of polyester fibers. Specially treated in order to withstand an abrasion resistance of over 200.000 cycles (according to ISO 6945).

Texlite® is a good anti diffusion sleeve and offers very good safety features at a more convenient price. Ideal solution on agricultural machinery.

Standard colour:

Black - Other colours are available on request

Standard print: TEXLITE

Possibility of custom printing and screen-print in colours

Temperature range:

-36°C to +100°C (-33°F to +212°F)



UV Resistance certified according to EN13758-1

MSHA approval for mining applications n. IC207/07

Complies with UN-EN 1501-1, EN 982, EN 3457



TEXLITE® is available in the following range:

| Part. Nr. |  |  | Quantity per box m | Availability |
|-----------|---|---|--------------------|--------------|
| | Flat I.D. mm | Round diameter mm | | |
| TEXL17 | 27 | 17 | 500 | Stock |
| TEXL20 | 31 | 20 | 500 | Stock |
| TEXL25 | 39 | 25 | 400 | Stock |
| TEXL31 | 49 | 31 | 300 | Stock |
| TEXL36 | 57 | 36 | 250 | Stock |
| TEXL40 | 63 | 40 | 250 | Stock |
| TEXL44 | 69 | 44 | 200 | Stock |
| TEXL53 | 83 | 53 | 200 | Stock |
| TEXL60 | 94 | 60 | 150 | Stock |
| TEXL66 | 104 | 66 | 150 | Stock |
| TEXL73 | 115 | 73 | 150 | Stock |
| TEXL85 | 133 | 85 | 100 | Stock |
| TEXL93 | 146 | 93 | 100 | Stock |

PACKAGING AND ACCESSORIES

Rolls of 50 meters.

Special scissors available on request.

TEXGUARD® THE ULTIMATE BURST RETAINER FOR TOTAL SAFETY AND PROTECTION

Texguard® is a double-layer tubular textile sleeve in continuous polyamide fibres : an inner sleeve of strong nylon and an outer sleeve of textured nylon specifically designed for high abrasion and weather resistance.

Burst rating:

Pin hole test: 6 minutes at 350 bar
(at a temperature of 120°C)
Burst test: 350 bar
(at a temperature of 120°C)

Standard colour:

Black - Other colours are available on request

Temperature range:

-40°C to +100°C (-40°F to +212°F)

MSHA approval for mining applications n. IC207/06


Abrasion resistance - complies with ISO 6945

Electrical conductivity - complies with ISO 8031

Complies with UNI-EN 1501-1, EN 982, EN 3457



TEXGUARD® is available in the following range:

| Part. Nr. |  | Availability |
|-----------|---|--------------|
| | Diameter mm | |
| TEXG20 | 20 | Stock |
| TEXG27 | 27 | Stock |
| TEXG40 | 40 | Stock |

Hose match:

| Hose diameter | Hose 1 SN | Hose 2 SN | Hose 4SP |
|---------------|-----------|-----------|----------|
| DN6 | TEXG20 | TEXG20 | - |
| DN8 | TEXG20 | TEXG20 | - |
| DN10 | TEXG27 | TEXG27 | TEXG27 |
| DN12 | TEXG27 | TEXG27 | TEXG27 |
| DN16 | TEXG27 | TEXG27 | TEXG40 |
| DN20 | TEXG40 | TEXG40 | TEXG40 |
| DN25 | TEXG40 | TEXG40 | - |

ACCESSORIES

Special stainless steel scissors for sharp cut, on request.

SHILTEK® HOSE AND CABLE FIRE RESISTANT SLEEVE

Shiltek® consists of a fiberglass braid, coated with a silicone rubber layer, compounded to assure compatibility to solvents and lubricants.

Standard colour:

Iron oxide red colour - Other colours are available on request

Standard print:

SHILTEK
Possibility of custom printing

Temperature range:

-54°C to +260°C (-65°F to +500°F)


MSHA approval for mining applications n. IC207/03

Construction of the sleeve complies with SAE aerospace standard AS 1072 Type 2

Flame retardant according to AFNOR E48-084



SHILTEK LG® is available in the following range:

| Part. Nr. |  Diameter mm | Coil length m | Quantity per box m | Availability |
|-----------|--|------------------|-----------------------|--------------|
| | | | | |
| SHL06 | 6 | 15 | 90 | Stock |
| SHL08 | 8 | 15 | 90 | Stock |
| SHL10 | 10 | 15 | 90 | Stock |
| SHL13 | 13 | 15 | 75 | Stock |
| SHL16 | 16 | 15 | 75 | Stock |
| SHL19 | 19 | 15 | 75 | Stock |
| SHL22 | 22 | 15 | 75 | Stock |
| SHL25 | 25 | 15 | 60 | Stock |
| SHL29 | 29 | 15 | 60 | Stock |
| SHL32 | 32 | 15 | 45 | Stock |
| SHL35 | 35 | 15 | 45 | Stock |
| SHL38 | 38 | 15 | 45 | Stock |
| SHL41 | 41 | 15 | 45 | Stock |
| SHL44 | 44 | 15 | 30 | Stock |
| SHL51 | 51 | 15 | 30 | Stock |
| SHL57 | 57 | 15 | 30 | Stock |
| SHL64 | 64 | 15 | 30 | Stock |
| SHL70 | 70 | 15 | 30 | Stock |
| SHL76 | 76 | 15 | 15 | Stock |
| SHL83 | 83 | 15 | 15 | Stock |
| SHL89 | 89 | 15 | 15 | Stock |
| SHL95 | 95 | 15 | 15 | Stock |
| SHL102 | 102 | 15 | 15 | Stock |

Coils of 15 m, with maximum 1 join.

Possibility of custom-branding and different lengths.

SHILCUT® FIBERGLASS, SILICONE COATED CLOTH “FLAME CUTTING”

Shilcut® is a fiberglass cloth coated on one side with silicone.

Standard colour:
Iron oxide red colour

Width: 1000 mm.

Weight: 3300 g/m2

Temperature range:
-54°C to +260°C (-65°F to +500°F)



SHILTAPE® FIELD WRAPPING FIBERGLASS, SILICONE COATED TAPE

Shiltape® is a fiberglass knitted, non adhesive ribbon coated on one side with high resistant silicone rubber. It can be manually wrapped around any diameter of hose or cable.

Standard colour:
Iron oxide red colour

Temperature range:
-54°C to +260°C (-65°F to +500°F)



SHILTAPE® is available in the following range:

| Part. Nr. | Width mm | Coil lenght in mm |
|-----------|----------|-------------------|
| KT02512A1 | 25 | 50 |
| KT05012A1 | 50 | 50 |
| KT07512A1 | 75 | 50 |
| KT10012A1 | 100 | 50 |

KOVERTEC PSA® THE GLOBAL PROTECTION FOR HIGH PRESSURE HOSES

Kovertec PSA® is a plastic protective spiral wrap made of Cellulose Acetate. Specially designed with a round shape, **Kovertec PSA®** offers the best protection even at the lowest bending radius.

Kovertec PSA® has a very good resistance to fuel, lubricant, mineral oil and water.

Standard colour:

Black - Other colours are available on request

Temperature range:

-20°C to +85°C (-4°F to +185°F) with peaks up to +95°C (+203°F)

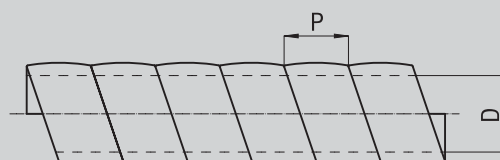


Dispenser pack



KOVERTEC PSA® is available in the following range:

| Part. Nr. | Inside diameter (D) mm | Pitch (P) mm | Quantity per box m | Availability | Available in dispenser pack of below specified length |
|------------|------------------------|--------------|--------------------|--------------|---|
| PSA06MP06 | 6,35 | 6,35 | 240 | On demand | |
| PSA06MP07 | 7,5 | 6,35 | 240 | Stock | |
| PSA06MP09 | 9,5 | 6,35 | 240 | Stock | 24 m |
| PSA13MP12 | 12,7 | 13 | 240 | Stock | 24 m |
| PSA13MP16 | 16 | 13 | 240 | Stock | 24 m |
| PSA16MP19 | 19 | 16 | 240 | Stock | 24 m |
| PSA16MP25 | 25,4 | 16 | 240 | Stock | 24 m |
| PSA16MP28 | 28 | 16 | 120 | Stock | 24 m |
| PSA17MP35 | 35 | 17 | 120 | Stock | 24 m |
| PSA20MP45 | 45 | 20 | 60 | Stock | 12 m |
| PSA20MP47 | 47,5 | 20 | 60 | Stock | |
| PSA35M65 | 65 | 35 | 36 | Stock | |
| PSA35MP80 | 80 | 35 | 24 | Stock | |
| PSA35MP90 | 90 | 35 | 12 | Stock | |
| PSA50MP100 | 100 | 50 | 12 | Stock | |
| PSA50MP140 | 140 | 50 | 6 | Stock | |



KOVERTEC HT® THERMOPLASTIC PROTECTIVE WRAP FOR HIGH TEMPERATURES

Kovertec HT® is a plastic protective spiral wrap made of polyamide 12. Specially designed with a round shape, **Kovertec HT®** offers the best protection even at the lowest bending radius.

Kovertec HT® has a very good resistance to fuel, lubricant, mineral oil.

Standard colour:

Black - Other colours are available on request

Temperature range:

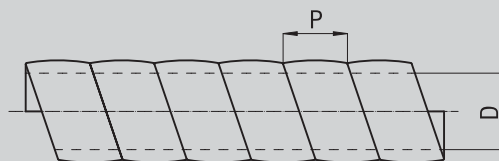
-40°C to +125°C (-40°F to +257°F)
with peaks up to +140°C (+284°F)

MSHA approval for mining applications n. IC207/05



KOVERTEC HT® is available in the following range:

| Part. Nr. | Inside diameter (D) mm | Pitch (P) mm | Quantity per box m | Availability |
|------------|------------------------|--------------|--------------------|--------------|
| PSHTAL16Z1 | 9,5 | 6,9 | 240 | Stock |
| PSHTAA16Z1 | 12,7 | 13 | 240 | Stock |
| PSHTAF16Z1 | 16 | 13 | 240 | Stock |
| PSHTAB16Z1 | 19 | 16 | 240 | Stock |
| PSHTAC16Z1 | 25,4 | 16 | 240 | Stock |
| PSHTAE16Z1 | 28 | 16 | 120 | Stock |
| PSHTAD16Z1 | 35 | 16 | 120 | Stock |
| PSHTAN16Z1 | 50 | 35 | 60 | On demand |
| PSHTAP16Z1 | 60 | 35 | 36 | On demand |



KOVERTEC HD® HEAVY DUTY THERMOPLASTIC WRAP

Kovertec HD® is the classic plastic protective spiral wrap made of HD PE.

Shape is flat with smooth edges.

Kovertec HD® has a very good resistance to acids, oils and solvents.

Standard colours:

Black and yellow - Other colours are available on request

Temperature range:

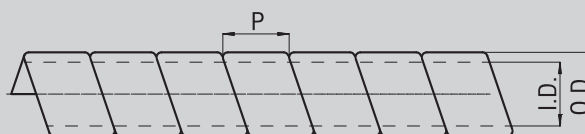
-60°C to +60°C (-76°F to +140°F)
with peaks up to +90°C (+194°F)



KOVERTEC HD® is available in the following range:

| Part. Nr. | Inside diam. (I.D.) mm | Outside diam. (O.D.) mm | Pitch (P) mm | Quantity per box m | Availability |
|------------|---------------------------|----------------------------|-----------------|-----------------------|--------------|
| PSP09MP09 | 9 | 12 | 9 | 50 | Stock |
| PSP12MP13 | 12,8 | 16 | 12 | 50 | Stock |
| PSP14MP16 | 16 | 20 | 14,5 | 50 | Stock |
| PSP21MP21 | 20,6 | 25 | 21,5 | 50 | Stock |
| PSP22MP27 | 27 | 32 | 22 | 50 | Stock |
| PSP24MP35 | 34,6 | 40 | 24 | 50 | Stock |
| PSP30MP43 | 43,2 | 50 | 30 | 20 | Stock |
| PSP37MP56 | 55,6 | 63 | 37 | 20 | Stock |
| PSP42MP66 | 66,2 | 75 | 42 | 20 | Stock |
| PSP45MP80 | 80,2 | 90 | 45 | 20 | Stock |
| PSP50MP99 | 99 | 110 | 50 | 12 | Stock |
| PSP55MP113 | 113 | 125 | 55 | 12 | Stock |

Other sizes and colours available on request.



FLEXWRAP® LIGHT THERMOPLASTIC SPIRAL WRAP

Flexwrap® is a thermoplastic, light, flat protective wrap. It is the ideal solution for bundling tubing or cables and to protect them from shocks and general rubbing.

Flexwrap® can be produced with different thermoplastic materials:

- **Polyamide 12:** for applications from -40°C +80°C with peaks at 100 °C (-40°F to +176°F with peaks at 212 °C)
- **Polyamide 6:** for applications from 20°C to +120°C (-4°F to +248°F)
- **LDPE:** for applications from -60°C to +60°C (-76°F to +140°F)

Product is manufactured only upon customer's demand.

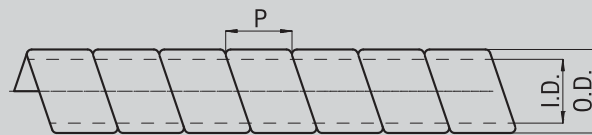
Inside diameter size range:
from 6 mm. to 25 mm.

Pitch and thickness according to customer's specification.



FLEXWRAP® Technical Specifications:

Standard section:



Inside diameter (I.D.): from 3 to 25 mm (1/8" to 1").

Pitch, thickness and inside diameter will be according to customer's specifications.



TUBING AND RECOILS

TUBES IN POLYAMIDE 12 FLEXIBLE GRADE

Flexible tubing with good thermal features: it can be used up to 80°C with peaks at 100 °C and has a good impact resistance even at -40°C.

Very good resistance to chemical agents. Water absorption and gas permeability are very low. Good elastic properties end resistant to abrasion. Internal surface is smooth permitting very good flow. All tubes are normally light and heat stabilised. For extended outdoor use we recommend a black tubing.

Our tubes are manufactured according to DIN 73378, DIN 74324.

Standard coil length:

100 m.

Standard colours:

Natural - Blue - Black

For availability of other coil lengths or colours, please contact our sales department.

Main applications:

Pneumatics, gas and fluid flow, lubrication and fuel lines



PA12 is available in the following range:

| Part. Nr. | I.D. mm | O.D. mm | W.P. Bar | Bending Radius mm. | Weight per Coils of 100 m./ Kg. |
|-----------|------------|------------|-------------|-----------------------|------------------------------------|
| TG5064 | 2 | 4 | 40 | 20 | 1,000 |
| TG5063 | 2,7 | 4 | 24 | 20 | 0,700 |
| TG5051 | 3 | 5 | 30 | 25 | 1,300 |
| TG5010 | 4 | 6 | 25 | 30 | 1,700 |
| TG5012 | 6 | 8 | 18 | 40 | 2,300 |
| TG5015 | 8 | 10 | 14 | 60 | 3,000 |
| TG5019 | 10 | 12 | 11 | 60 | 3,600 |
| TG5018 | 9 | 12 | 17 | 75 | 5,200 |
| TG5054 | 8 | 12 | 25 | 80 | 6,600 |
| TG5022 | 12 | 14 | 9 | 90 | 4,300 |
| TG5021 | 11 | 14 | 14 | 85 | 6,200 |
| TG5023 | 12 | 15 | 14 | 90 | 6,700 |
| TG5077 | 12 | 16 | 18 | 95 | 9,200 |
| TG5029* | 16 | 20 | 14 | 130 | 6,000 |

*coil of 50 m.

Tolerances on I.D.: +/-0,1 mm.

Tolerances on O.D.: Up to dia. 12 mm. +/-0,1 mm. Larger sizes +/-0,2

Pa 12 tube is also available in rigid and semi-rigid grades

Other colours and sizes are available on request – possibility of custom-marking

TUBES IN POLYURETHANE 98 SHORE A

Very flexible tubing with good elastic properties even at low temperatures. Good chemical, abrasion and ageing resistance.

Temperature range:

-40°C to + 60°C. We recommend a black tubing for outdoors applications.

Standard product has a hardness of 98 SHORE A but we have the possibility to supply softer grades and special types for contact with water or flame retardant.

Standard coil length:

100 m.

Standard colour:

Blue

For availability of other coil lengths or colours, please contact our sales department.

Main applications:

Pneumatics and controls, robotics, agriculture, powder paints.



PUR is available in the following range:

| Part. Nr. | I.D. mm | O.D. mm | W.P. Bar | Bending Radius mm. | Weight per Coils of 100 m./ Kg. |
|-----------|------------|------------|-------------|-----------------------|------------------------------------|
| PU5044 | 2,5 | 4 | 9 | 10 | 0,950 |
| PU5064 | 2 | 4 | 10 | 10 | 1,150 |
| PU5051 | 3 | 5 | 10 | 15 | 1,550 |
| PU5010 | 4 | 6 | 8 | 18 | 1,900 |
| PU5012 | 6 | 8 | 6 | 22 | 2,700 |
| PU5014 | 5,5 | 8 | 8 | 20 | 3,300 |
| PU5015 | 8 | 10 | 5 | 25 | 3,450 |
| PU5052 | 7 | 10 | 8 | 25 | 4,900 |
| PU5018 | 9 | 12 | 6 | 35 | 6,000 |

Tolerances on inside diameter: +/-0,1 mm.

Tolerances on outside diameter: up to dia. 8 +/-0,1 mm. **Bigger sizes** +/-0,15 mm.

Other colours and sizes are available on request - possibility of custom branding

BLACK POLYAMIDE 12 TUBES FOR AIR BRAKE AND LUBRICATION LINES DIN 74324

Tubing in Pa 12 produced according to DIN 73378 and DIN 74324.

Specifically indicated for automotive application, including air brake and lubrication lines for trucks and vehicles in general.

Temperature range:

-40 to + 80°C with peaks at 100°C

It has a good resistance to chemical agents, very low water absorption and gas permeability.

Good elastic properties and resistant to abrasion. Light and heat stabilised.

Standard product is in flexible grade but there are also rigid and semi-rigid grades in relation to the desired flexibility and pressure rating.

Standard coil length:

100 m.

Standard colour:

Black

For availability of other coil lengths or colours, please contact our sales department.

Main applications:

Pneumatic brake lines, lubrication and fuel lines.



BRAKE is available in the following range:

| Part. Nr. | I.D. mm | O.D. mm | W.P. Bar | Bending Radius mm. | Weight per Coils of 100 m./ Kg. |
|-----------|------------|------------|-------------|-----------------------|------------------------------------|
| TG5064 | 2 | 4 | 40 | 20 | 1,000 |
| TG5010 | 4 | 6 | 25 | 30 | 1,700 |
| TG5139 | 3 | 6 | 40 | 25 | 2,200 |
| TG5012 | 6 | 8 | 18 | 40 | 2,300 |
| TG5111 | 5 | 8 | 28 | 40 | 3,200 |
| TG5341 | 4 | 8 | 40 | 30 | 3,900 |
| TG5015 | 8 | 10 | 14 | 60 | 3,000 |
| TG5052 | 7 | 10 | 22 | 60 | 4,100 |
| TG5123 | 6 | 10 | 30 | 55 | 5,200 |
| TG5019 | 10 | 12 | 11 | 60 | 3,600 |
| TG5018 | 9 | 12 | 17 | 75 | 5,200 |
| TG5054 | 8 | 12 | 25 | 80 | 6,600 |
| TG5022 | 12 | 14 | 9 | 90 | 4,300 |
| TG5021 | 11 | 14 | 14 | 85 | 6,200 |
| TG5023 | 12 | 14 | 15 | 90 | 6,700 |
| TG5072 | 11 | 15 | 17 | 110 | 8,400 |
| TG5077 | 12 | 16 | 18 | 95 | 9,200 |
| TG5029* | 16 | 20 | 14 | 130 | 6,000 |

*coil of 50 m.

Tolerances on I.D.: +/-0,1 mm.

Tolerances on O.D.: Up to dia. 12 mm. +/-0,1 mm. **Larger sizes** +/-0,2

These tubes can be also available in rigid and semi-rigid grades

Colour is black - Other colours are available upon request

TUBES IN LOW DENSITY POLYETHYLENE

Flexible and economical tubing for low pressure and temperature with good resistance to chemicals and solvents. Very good dimensional stability and almost no water absorption.

Temperature range:

-60°C to + 60°C.

Material is FDA approved and can be used in contact with food and beverages. For applications outdoors we recommend the use of a black tubing.

Standard coil length:

100 m.

Standard colour:

Natural

For availability of other coil lengths or colours, please contact our sales department.

Main applications:

Pneumatics and instrumentation, beverages, cable guides.



LDPE is available in the following range:

| Part. Nr. | I.D. mm | O.D. mm | W.P. Bar | Bending Radius mm. | Weight per Coils of 100 m./ Kg. |
|-----------|------------|------------|-------------|-----------------------|------------------------------------|
| HP5010 | 4 | 6 | 10 | 36 | 1,500 |
| HP5012 | 6 | 8 | 9 | 48 | 2,100 |
| HP5015 | 8 | 10 | 7 | 60 | 2,700 |
| HP5019 | 10 | 12 | 6 | 75 | 3,300 |

Tolerances on I.D.: +/-0,1 mm.

Tolerances on O.D.: up to dia. 8 +/-0,1 mm. **Larger sizes** +/-0,2 mm.

Other colours and sizes are available on request - possibility of custom-marking

PA6 TUBES IN POLYAMIDE 6 “NYLON”

Semi-rigid tubing with high mechanical features. Excellent resistance to shock and abrasion. Pa 6 absorbs more humidity than Pa 12 and this makes it more flexible in time. It's light and has very good chemical resistance. In humid environment the product can develop anti-static properties.

There is a possibility of having more flexible grades of Pa 6 by adding plasticizers in order to achieve a smaller bending radius.

Working temperature range is -20°C up to +85°C.

Standard coil length:

100 m.

Standard colour:

Natural

For availability of other coil lengths or colours, please contact our sales department.

Main applications:

Cable controls and sleeving in automotive applications.
Pneumatics, lubrication.



PA6 is available in the following range:

| Part. Nr. | I.D. mm | O.D. mm | W.P. Bar | Bending Radius mm. | Weight per Coils of 100 m./ Kg. |
|-----------|------------|------------|-------------|-----------------------|------------------------------------|
| T45010 | 4 | 6 | 33 | 45 | 1,800 |
| T45012 | 6 | 8 | 24 | 65 | 2,500 |
| T45015 | 8 | 10 | 18 | 80 | 3,200 |
| T45019 | 10 | 12 | 15 | 100 | 3,750 |

Tolerance on I.D.: +/-0,1 mm.

Tolerance on O.D.: +/-0,1 mm.

Natural colour. Other colours and sizes are available on request - possibility of custom-marking

RECOILS IN POLYAMIDE 12

Recoiled version of the standard Pa 12 tubing. In addition to the standard features of Pa 12, the elastic recoiling allows the tube to be self storing and therefore to save a lot of room at working stations.

Temperature range:
from -40°C up to +80°C
with peaks at 100°C

Standard version is 30 meters
(linear length of tubing) without tails

Standard colour:
Blue

For customized versions with different lengths and axial or radial ends, or for other colours please contact our sales department.

Main applications:
Air distribution lines with pneumatic tools, spray guns and compressors.



SPIR PA is available in the following range:

| Part. Nr. | I.D. mm | O.D. mm | Length in mt | I.D. of coils mm | Quantity for box | Colours |
|-----------------|------------|------------|-----------------|---------------------|---------------------|---------|
| S1XX5063W005896 | 2,7 | 4 | 30 | 40 | 40 | B |
| S1XX5010W005896 | 4 | 6 | 30 | 60 | 20 | B |
| S1XX5012W005896 | 6 | 8 | 30 | 70 | 20 | B |
| S1XX5015W005896 | 8 | 10 | 30 | 90 | 10 | B |
| S1XX5019W005896 | 10 | 12 | 30 | 120 | 10 | B |

Colour chart: B=blu

Other colours, sizes and lengths are available on request - possibility of custom-marking

RECOILS IN PU

Made with a special water and bacteria resistant type of PU tubing, these self storing recoils are very good in contact with Ozone and oxidation.

Max working pressure at room temperature is 10 Bar.

Temperature range:
from -40°C up to + 60°C.

Standard version of all articles has axial tails of 100 and 500 mm.

Standard colour:
Blue and Yellow

For customized versions with different lengths and radial ends, or for other colours please contact our sales department.

Main applications:

Air distribution lines with pneumatic tools, spray guns for powder painting, gardening, car washing equipments.



SPIR PU is available in the following range:

| Part. Nr. | I.D. mm | O.D. mm | Length in mt | I.D. of coil mm | Quantity for box | Colours |
|------------|------------|------------|-----------------|--------------------|---------------------|---------|
| SECC5111C5 | 5 | 8 | 2,5 | 25 | 40 | B-Y |
| SECC5111E0 | 5 | 8 | 4 | 25 | 20 | B-Y |
| SECC5111F0 | 5 | 8 | 5 | 25 | 20 | B-Y |
| SECC5111H5 | 5 | 8 | 7,5 | 25 | 20 | B-Y |
| SECC5111K0 | 5 | 8 | 10 | 25 | 20 | B-Y |
| SECC5111M5 | 5 | 8 | 12,5 | 25 | 20 | B-Y |
| SECC5287C5 | 6,5 | 10 | 2,5 | 30 | 40 | B-Y |
| SECC5287F0 | 6,5 | 10 | 5 | 30 | 20 | B-Y |
| SECC5287F5 | 6,5 | 10 | 7,5 | 30 | 20 | B-Y |
| SECC5287K0 | 6,5 | 10 | 10 | 30 | 20 | B-Y |
| SECC5287EC | 6,5 | 10 | 15 | 30 | 20 | B-Y |
| SECC5054C5 | 8 | 12 | 2,5 | 40 | 40 | B-Y |
| SECC5054F0 | 8 | 12 | 5 | 40 | 20 | B-Y |
| SECC5054H5 | 8 | 12 | 7,5 | 40 | 20 | B-Y |
| SECC5054K0 | 8 | 12 | 10 | 40 | 20 | B-Y |
| SECC5054O0 | 8 | 12 | 15 | 40 | 20 | B-Y |
| SECC5480C5 | 11 | 16 | 2,5 | 70 | 40 | B-Y |
| SECC5480F0 | 11 | 16 | 5 | 70 | 40 | B-Y |
| SECC5480H5 | 11 | 16 | 7,5 | 70 | 20 | B-Y |
| SECC5480K0 | 11 | 16 | 10 | 70 | 20 | B-Y |
| SECC5480O0 | 11 | 16 | 15 | 70 | 20 | B-Y |

Colour chart: B=blue Y=yellow.

Other colours, sizes and lengths are available on request - possibility of custom-marking.

MULTILAYER BUNDLE

MULTILAYER CO-EXTRUDED TUBES

Smart Protections has the technology to manufacture tubing with different layers (up to 5 layers) providing a combination of different materials with their specific properties to each component layer in the same tube.

This product is made upon customer's specifications depending on the application. Many different combinations of polymers are possible

Please contact our sales department for enquiries



BUNDLE THERMOPLASTIC TUBES PROTECTED BY A PU OR PE SLEEVE

Smart Protections manufactures small bundles of tubing with standard configurations of 2 or 3 Tubes (in Pa 12 or LDPE) in a PU or LDPE jacket.

General applications in greasing equipments for lubrication or in welding equipments.

This product is made upon customer's specifications depending on the application. Other materials and configurations are possible

Please contact our sales department for enquiries



TUFT ANTISTATIC THERMOPLASTIC TUBES FOR TUFTING

Smart Protections' **TUFT** tubing combines excellent anti-static properties with high friction resistance. Leading every single yarn from its reel on the creel onto its needle on the tufting loom, this product is the best solution for producers of "tufted" technical fabrics including floor carpets, bathroom and kitchen mats, doormats and man-made grass.

Standard sizes:

6x8 - 8x10 - 10x12 in natural colour

Please contact our sales department for enquiries



MAFLEX FULL CORE RODS

MAFLEX indicates Smart Protections' productions of:

- Full cores in various materials such as polyester, polyamide and polypropylene, mainly used as mandrels in the production cycle of rubber hoses.
- Tubing with small ID in polyester, POM and polyethylene or polypropylene for the chains of conveyor belts in the packaging sector

These products are made upon customer's specifications depending on the application.

Please contact our sales department for enquiries



SMART PROTECTIONS

SMART PROTECTIONS Srl

Born as a “spin off” of an historical Italian manufacturer, leader in the extrusion of thermoplastic tubing and owned by a Canadian Group, Smart Protections started its manufacturing operations in March 2015 and moved to its current location in January 2016.

Smart Protections is a leading company in manufacturing high technical thermoplastic extrusion products & hydraulic protections. The technical background, the built-in know-how acquired by Smart Protections, with particular focus to quality, manufacturing capability and internal R&D testing lab, are some of the strengths of this “aged” startup.

Internal laboratory, computer aided tests and a real-time product and process control, assure the compliance with the main national and international standards, offering to the End Users the best available solutions to Customer's requirements.



OUR MISSION:

To become one of the market leaders in extruded thermoplastic and protection products within the Hydraulic & Fluid Power Market.

Smart Protections constant focus is to meet Customers' needs in a very unique and customized manner through a continuous information exchange and whenever possible personalized services. Our strong commitment in Research and Development is to better help the market to develop new products.

SMART PROTECTIONS
is operating with a quality system ISO 9001



