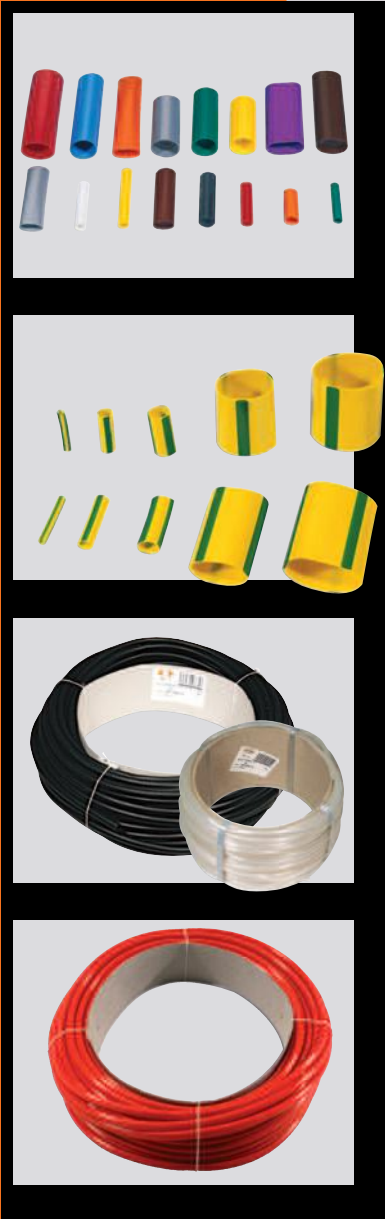




A3

Insulating sleeving and sleeves





Insulating sleeving is used for the protection and the insulation of electric cables.

It is available in different colours and 3 materials:

- **PVC:** this material is available in different colours, has a good resistance to light and is used for the marking of cables. Resistant to ozone, ageing and acids, the PVC sleeving is specially used for the isolation of electric cables, mechanical protection, the transport of fluids with low pressure at room temperature (except special aggressive products).
- **TPE:** this material looks like rubber and is used for applications that need a good resistance to high and low temperatures. Furthermore. It offers more elasticity and flexibility than PVC.
- **Silicone:** specially used for electrical insulation, this halogene free material has a good resistance to high temperatures.

All the sleeving are available in sleeves upon request.

page	type	material	temperature	standard colours	particularity
• A3/1	PLIO-SUPER	PVC 9923	-20 to +90°C	black - white - blue yellow - red transparent	general use
• A3/3	PLIO-SUPER bicolor	PVC 9923	-20 to +90°C	green/yellow	general use
• A3/5	PLIO HT LF PLIO BT LF	PVC 9862 PVC 9863	-40 to +105°C -55 to +70°C	black transparent	high temperatures low temperatures
• A3/7	PLIO thick walled tube	PVC 9832	-20 to +60°C	transparent	thick walled
• A3/8	PLIO-industrial	PVC 9836	-20 to +90°C	black - white - blue yellow - red	long length and flexibility
• A3/10	PLIOPRENE TPE	TPE	-40 to +125°C	black	halogenfree
• A3/20	SILA-SUPER	silicone	-50 to +200°C	transparent	halogenfree



This tubing quality can be produced as special manufacture in other colours.
Availability details upon request.

PLIO-SUPER insulating sleeving in PVC



PLIO-SUPER



PLIO-SUPER

Material:	PVC quality 9923
Operating temperatures:	-20 to +90°C
Shore A hardness:	90 ±5
Tensile strength at break:	20 MPa
Ultimate elongation:	300 %
Dielectric strength:	20 kV/mm
Volume resistivity:	3x10 ¹² Ω.cm
Flame resistance:	V2 UL94 (internal test)
Specificity:	Standards NF C 93 641; DIN 40.621 & VSM 11930
Specification:	good resistance to ozone, aging, acids and friction.
Application:	protection and insulation.




Standard colours:



Example for order:

code group	detail article	code colour
0801	XXXXXX	XXXX

type	article number		internal Ø mm	external Ø mm	wall thickness mm	 m
	black 010	colours XXX				
PLIO-SUPER 0,5x1,3	0801 0034 010	0801 0034 ***	0,5	1,3	0,4	50
PLIO-SUPER 1,0x1,8	0801 0001 010	0801 0001 ***	1	1,8	0,4	50
PLIO-SUPER 1,5x2,3	0801 0002 010	0801 0002 ***	1,5	2,3	0,4	50
PLIO-SUPER 2,0x2,8	0801 0003 010	0801 0003 ***	2	2,8	0,4	50
PLIO-SUPER 2,5x3,3	0801 0004 010	0801 0004 ***	2,5	3,3	0,4	50
PLIO-SUPER 3,0x3,8	0801 0005 010	0801 0005 ***	3	3,8	0,4	50
PLIO-SUPER 3,5x4,3	0801 0006 010	0801 0006 ***	3,5	4,3	0,4	50
PLIO-SUPER 4,0x5,0	0801 0007 010	0801 0007 ***	4	5	0,5	50
PLIO-SUPER 4,5x5,5	0801 0008 010	0801 0008 ***	4,5	5,5	0,5	25
PLIO-SUPER 5,0x6,0	0801 0009 010	0801 0009 ***	5	6	0,52	25
PLIO-SUPER 6,0x7,1	0801 0010 010	0801 0010 ***	6	7,1	0,55	25
PLIO-SUPER 7,0x8,2	0801 0011 010	0801 0011 ***	7	8,2	0,60	25
PLIO-SUPER 8,0x9,2	0801 0012 010	0801 0012 ***	8	9,2	0,62	25
PLIO-SUPER 9,0x10,3	0801 0013 010	0801 0013 ***	9	10,3	0,67	25
PLIO-SUPER 10,0x11,4	0801 0014 010	0801 0014 ***	10	11,4	0,7	25
PLIO-SUPER 12,0x13,5	0801 0016 010	0801 0016 ***	12	13,5	0,75	25
PLIO-SUPER 14,0x15,6	0801 0018 010	0801 0318 ***	14	15,6	0,8	25
PLIO-SUPER 16,0x17,6	0801 0020 010	0801 0320 ***	16	17,6	0,8	25
PLIO-SUPER 18,0x19,6	0801 0022 010	0801 0322 ***	18	19,6	0,8	25
PLIO-SUPER 20,0x21,6	0801 0024 010	0801 0324 ***	20	21,6	0,8	25
PLIO-SUPER 22,0x24,0	0801 0025 010	0801 0325 ***	22	24	1	25
PLIO-SUPER 24,0x26,0	0801 0026 010	0801 0326 ***	24	26	1	25
PLIO-SUPER 26,0x28,0	0801 0027 010	0801 0327 ***	26	28	1	25
PLIO-SUPER 28,0x30,0	0801 0028 010	0801 0328 ***	28	30	1	25
PLIO-SUPER 30,0x32,0	0801 0029 010	0801 0329 ***	30	32	1	25
PLIO-SUPER 32,0x34,0	0801 0030 010	0801 0330 ***	32	34	1	25
PLIO-SUPER 34,0x36,0	0801 0031 010	0801 0331 ***	34	36	1	25
PLIO-SUPER 36,0x38,0	0801 0032 010	0801 0332 ***	36	38	1	25
PLIO-SUPER 40,0x42,0	0801 0033 010	0801 0333 ***	40	42	1	25
PLIO-SUPER 50,0x53,0	0801 0035 010	-	50	53	1,50	25
PLIO-SUPER 60,0x63,0	0801 0036 010	-	60	63	1,50	25



PLIO-SUPER insulating sleeving in PVC

Semi-standard colours



PLIO-SUPER



PLIO-SUPER

Material:	PVC quality 9923
Operating temperatures:	-20 to +90°C
Shore A hardness:	90 ±5
Tensile strength at break:	20 MPa
Ultimate elongation:	300 %
Dielectric strength:	20 kV/mm
Volume resistivity:	3x10 ¹² Ω.cm
Flame resistance:	V2 UL94 (internal test)
Specification:	good resistance to ozone, aging, acids and friction.
Application:	protection and insulation.



Semi-standard colours (manufactured only upon request)

003	005	006	008	013
green	orange	brown	purple	grey

Example for order:

code group	detail article	code colour
0801	XXXXXX	XXXX

type	artide number colours	internal Ø mm	external Ø mm	wall thickness mm	m
	XXX				
PLIO-SUPER 0,5x1,3	0801 0334 ***	0,5	1,3	0,4	50
PLIO-SUPER 1,0x1,8	0801 0301 ***	1	1,8	0,4	50
PLIO-SUPER 1,5x2,3	0801 0302 ***	1,5	2,3	0,4	50
PLIO-SUPER 2,0x2,8	0801 0303 ***	2	2,8	0,4	50
PLIO-SUPER 2,5x3,3	0801 0304 ***	2,5	3,3	0,4	50
PLIO-SUPER 3,0x3,8	0801 0305 ***	3	3,8	0,4	50
PLIO-SUPER 3,5x4,3	0801 0306 ***	3,5	4,3	0,4	50
PLIO-SUPER 4,0x5,0	0801 0307 ***	4	5	0,5	50
PLIO-SUPER 4,5x5,5	0801 0308 ***	4,5	5,5	0,5	25
PLIO-SUPER 5,0x6,0	0801 0309 ***	5	6	0,52	25
PLIO-SUPER 6,0x7,1	0801 0310 ***	6	7,1	0,55	25
PLIO-SUPER 7,0x8,2	0801 0311 ***	7	8,2	0,6	25
PLIO-SUPER 8,0x9,2	0801 0312 ***	8	9,2	0,62	25
PLIO-SUPER 9,0x10,3	0801 0313 ***	9	10,3	0,67	25
PLIO-SUPER 10,0x11,4	0801 0314 ***	10	11,4	0,7	25
PLIO-SUPER 12,0x13,5	0801 0316 ***	12	13,5	0,75	25
PLIO-SUPER 14,0x15,6	0801 0318 ***	14	15,6	0,8	25
PLIO-SUPER 16,0x17,6	0801 0320 ***	16	17,6	0,8	25
PLIO-SUPER 18,0x19,6	0801 0322 ***	18	19,6	0,8	25
PLIO-SUPER 20,0x21,6	0801 0324 ***	20	21,6	0,8	25
PLIO-SUPER 22,0x24,0	0801 0325 ***	22	24	1	25
PLIO-SUPER 24,0x26,0	0801 0326 ***	24	26	1	25
PLIO-SUPER 26,0x28,0	0801 0327 ***	26	28	1	25
PLIO-SUPER 28,0x30,0	0801 0328 ***	28	30	1	25
PLIO-SUPER 30,0x32,0	0801 0329 ***	30	32	1	25
PLIO-SUPER 32,0x34,0	0801 0330 ***	32	34	1	25
PLIO-SUPER 34,0x36,0	0801 0331 ***	34	36	1	25
PLIO-SUPER 36,0x38,0	0801 0332 ***	36	38	1	25
PLIO-SUPER 40,0x42,0	0801 0333 ***	40	42	1	25



PLIO-SUPER

Material:	PVC quality 9923
Operating temperatures:	-20 to +90°C
Shore A hardness:	90 ±5
Tensile strength at break:	20 MPa
Ultimate elongation:	300 %
Dielectric strength:	20 kV/mm
Volume resistivity:	3x10 ¹² Ω.cm
Flame resistance:	V2 UL94 (internal test)
Available lengths:	< 180 mm for longer lengths please consult us



Standard colours:



Semi-standard colours:



PLIO-SUPER sleeves are not on stock.

Prices are based on quantities, sizes, colours (standard or semi-standard), and lengths.
It is important that these details appear on the inquiries.

In general, the optimal amounts depending on the sizes and lengths are as follows:


Sizes	Minimum quantity	
Ø 0,5 mm to Ø 4 mm	50 m	equal to the number of sleeves cut using a standard skein of material
Ø 4,5 mm to Ø 40 mm	25 m	

PLIO-SUPER J/V

Material:	PVC quality 9923
Colours:	yellow/green
Operating temperatures:	-20 to +90°C
Shore A hardness:	90 ±5
Tensile strength at break:	20 MPa
Ultimate elongation:	300 %
Dielectric strength:	20 kV/mm
Volume resistivity:	3x10 ¹² Ω.cm
Flame resistance:	V2 UL94 (internal test)



• **PLIO-SUPER earth sleeving bicolor yellow/green**

type	article number	internal Ø mm	external Ø mm	wall thickness mm	 m
PLIO-SUPER J/V 2x2,8	0837 0001 060	2	2,8	0,4	50
PLIO-SUPER J/V 4x5,0	0837 0002 060	4	5	0,5	50
PLIO-SUPER J/V 6x7,1	0837 0003 060	6	7,1	0,55	25
PLIO-SUPER J/V 8x9,2	0837 0004 060	8	9,2	0,62	25
PLIO-SUPER J/V 10x11,4	0837 0005 060	10	11,4	0,7	25
PLIO-SUPER J/V 12x13,5	0837 0006 060	12	13,5	0,75	25
PLIO-SUPER J/V 14x15,6	0837 0007 060	14	15,6	0,8	25
PLIO-SUPER J/V 16x17,6	0837 0008 060	16	17,6	0,8	25
PLIO-SUPER J/V 20x21,6	0837 0010 060	20	21,6	0,8	25

• **Special colours and PLIO-SUPER green/yellow earth sleeves**

Special colours:

Bi-coloured PLIO-SUPER insulating sleeves can be specially manufactured in other colour compositions. Prices, delivery time and minimum quantity upon request.

Sleeves and sleeving sections:

Prices and delivery of sleeves depend on quantities, sizes and lengths.

Special deliveries only upon the following minimum quantities:

sizes	min. quantities
Ø 2 mm to Ø 4 mm	50 m quantity of sleeves = 1 reel of standard insulating sleeving
Ø 6 mm to Ø 20 mm	25 m quantity of sleeves = 1 reel of standard insulating sleeving

PLIO insulating sleeving
for high temperature
for low temperature




PLIO H.T. LF
PLIO B.T. LF



PLIO H.T. LF

Material: PVC quality 9862 lead free
Colour: black
Operating temperatures: -40 to +105°C
+135°C short time
Shore A hardness: 80 ±5
Tensile strength at break: > 15 MPa
Ultimate elongation: 250 %
Dielectric strength: > 20 kV/mm
Flame resistance: V0 UL94 (internal test)
Specification: according to Norm
NF C 93 641
DIN 40.621 & VSM 11930




type	article number	Ø i.d. mm	Ø o.d. mm	wall thickness mm	 m
PLIO H.T. 1,0x1,8	0817 0001 010	1	1,8	0,4	50
PLIO H.T. 1,5x2,5	0817 0002 010	1,5	2,5	0,5	50
PLIO H.T. 2,0x2,8	0817 0003 010	2	2,8	0,4	50
PLIO H.T. 3,0x3,9	0817 0004 010	3	3,9	0,45	50
PLIO H.T. 4,0x5,0	0817 0005 010	4	5	0,5	50
PLIO H.T. 5,0x6,0	0817 0006 010	5	6	0,52	25
PLIO H.T. 6,0x7,1	0817 0007 010	6	7,1	0,55	25
PLIO H.T. 8,0x9,2	0817 0008 010	8	9,2	0,62	25
PLIO H.T. 10,0x11,4	0817 0009 010	10	11,4	0,7	25
PLIO H.T. 12,0x13,5	0817 0010 010	12	13,5	0,75	25
PLIO H.T. 14,0x15,6	0817 0011 010	14	15,6	0,8	25
PLIO H.T. 16,0x17,6	0817 0012 010	16	17,6	0,8	25
PLIO H.T. 20,0x21,6	0817 0014 010	20	21,6	0,8	25

PLIO B.T. LF

Material: PVC quality 9863 lead free
Colour: translucent/transparent
Operating temperatures: -55 to +70°C
Shore A Hardness: 75 ±5
Tensile strength at break: > 15 MPa
Ultimate elongation: 400 %
Dielectric strength: > 20 kV/mm
Specification: according to Norm
NF C 93 641
DIN 40.621 & VSM 11930




type	article number	Ø i.d. mm	Ø o.d. mm	wall thickness mm	 m
PLIO B.T. 1,0x1,8	0818 0001 011	1	1,8	0,4	50
PLIO B.T. 1,5x2,5	0818 0002 011	1	2,5	0,5	50
PLIO B.T. 2,0x2,8	0818 0003 011	2	2,8	0,4	50
PLIO B.T. 3,0x3,9	0818 0004 011	3	3,9	0,45	50
PLIO B.T. 4,0x5,0	0818 0005 011	4	5	0,5	50
PLIO B.T. 5,0x6,0	0818 0006 011	5	6	0,52	25
PLIO B.T. 6,0x7,1	0818 0007 011	6	7,1	0,55	25
PLIO B.T. 8,0x9,2	0818 0008 011	8	9,2	0,62	25
PLIO B.T. 10,0x11,4	0818 0009 011	10	11,4	0,7	25
PLIO B.T. 6,0x17,6	0818 0012 011	16	17,6	0,8	25

PLIO sleeving

Material: PVC quality 9832-11
Colours: transparent colourless
Operating temperatures: -20 to +60°C
Shore A Hardness: 85 ±5
Tensile strength at break: 20 MPa
Ultimate elongation: 300 %
Dielectric strength: > 20 kV/mm
Volume resistivity: 1x10¹³ Ω.cm
Application: these sleeveings are not reinforced and can only be used to supply a flow of air, water or other low pressure fluids. Please consult us for special use.



type	article number	Ø i.d. mm	Ø o.d. mm	wall thickness mm	 m
Sleeving PLIO Indus. 2,5x5,5	0803 0001 011	2,5	5,5	1,5	50
Sleeving PLIO Indus. 3,5x6,0	0803 0003 011	3,5	6	1,2	50
Sleeving PLIO Indus. 4,0x7,0	0803 0005 011	4	7	1,5	25
Sleeving PLIO Indus. 4,5x7,5	0803 0006 011	4,5	7,5	1,5	25
Sleeving PLIO Indus. 5,0x8,0	0803 0007 011	5	8	1,5	25
Sleeving PLIO Indus. 6,0x9,0	0803 0008 011	6	9	1,5	25
Sleeving PLIO Indus. 8,0x11,0	0803 0010 011	8	11	1,5	25
Sleeving PLIO Indus. 10,0x13,5	0803 0012 011	10	13,5	1,7	25
Sleeving PLIO Indus. 15,0x19,0	0803 0023 011	15	19	2	25

“PLIO-Industrial” insulating sleeving in PVC

in industrial packs



PLIO-industriel



PLIO-Industrial - 9836 LF

Material:	PVC quality 9836 lead free
Operating temperatures:	-20 to +90°C
Hardness shore A:	85 ±5
Tensile strength:	15 MPa
Tensile strength at break:	250 %
Volume resistivity:	20 kV/mm
Flame resistance:	V0 UL94
Specifications:	DIN 40.621 VSM 11930

Application: protection and insulation of electric cables in the Industry. Answers the new requirements of the automobile market.



Standard colour:


010
black

Semi-standard colours: minimum 5 reels per type and colour

001 **002** **004** **007**
white blue yellow red

Example for order:

code group	detail article	code colours
0801	xxxx	xxxx

Typ	article number	Ø i.d. mm	Ø o.d. mm	wall thickness mm	 m
PLIO-indus 2,0	0801 0402 ***	2	2,8	0,4	800
PLIO-indus 3,0	0801 0403 ***	3	3,8	0,4	500
PLIO-indus 4,0	0801 0404 ***	4	5	0,5	500
PLIO-indus 5,0	0801 0405 ***	5	6	0,5	500
PLIO-indus 6,0	0801 0406 ***	6	7	0,5	500
PLIO-indus 7,0	0801 0407 ***	7	8,7	0,5	500
PLIO-indus 8,0	0801 0408 ***	8	9,4	0,7	400
PLIO-indus 9,0	0801 0409 ***	9	10,4	0,7	400
PLIO-indus 10,0	0801 0410 ***	10	11,4	0,7	300
PLIO-indus 12,0	0801 0412 ***	12	13,4	0,7	200
PLIO-indus 14,0	0801 0414 ***	14	15,4	0,7	200
PLIO-indus 16,0	0801 0416 ***	16	17,6	0,8	150
PLIO-indus 18,0	0801 0418 ***	18	19,6	0,8	150
PLIO-indus 20,0	0801 0420 ***	20	21,6	0,8	75
PLIO-indus 22,0	0801 0422 ***	22	24	1	75
PLIO-indus 24,0	0801 0424 ***	24	26	1	50
PLIO-indus 26,0	0801 0426 ***	26	28,4	1,2	50

The sleeving is inflated and sealed at both ends so that they retain their profile.

Upon request sleeving can be delivered on cardboard reels (see below).

Other types or colours: Prices and delivery time upon request.



standard packing



cardboard (upon request)

“PLIO-Industrial” insulating sleeving

in PVC

in small lengths



PLIO-industriel




PLIO-industrial - 9836 LF

Material:	PVC quality 9836 LF
Colour:	black
Operating temperatures:	-20 to +90°C
Density:	1,43 g/cm ³
Hardness Shore A:	85 ±5
Tensile strength:	15 MPa
Tensile strength at break:	250 %
Flame resistance:	V0 UL94 (internal test)
Packing:	roll
Specifications:	DIN 40.621 VSM 11930

Applications: protection and insulation of electric cables in the Industry.
Answers the new requirements of the automobile market.



Typ	Art. Nr.	Ø i.d. mm	Ø o.d. mm	wall thickness mm	 m
PLIO-indus 2,0 RLX 50	0801 0652 010	2	2,8	0,4	50
PLIO-indus 3,0 RLX 50	0801 0653 010	3	3,8	0,4	50
PLIO-indus 4,0 RLX 50	0801 0654 010	4	5	0,5	50
PLIO-indus 5,0 RLX 25	0801 0655 010	5	6	0,5	25
PLIO-indus 6,0 RLX 25	0801 0656 010	6	7	0,5	25
PLIO-indus 7,0 RLX 25	0801 0657 010	7	8,7	0,5	25
PLIO-indus 8,0 RLX 25	0801 0658 010	8	9,4	0,7	25
PLIO-indus 9,0 RLX 25	0801 0659 010	9	10,4	0,7	25
PLIO-indus 10,0 RLX 25	0801 0660 010	10	11,4	0,7	25
PLIO-indus 12,0 RLX 25	0801 0662 010	12	13,4	0,7	25
PLIO-indus 14,0 RLX 25	0801 0664 010	14	15,4	0,7	25

Other types: Prices and delivery time upon request.


PLIOPRENE TPE

Material:	Polypropylene + EPDM irradiated
Colour:	black
Operating temperatures:	-40 to +125°C +150°C (peak)
Shore A hardness:	75±5
Tensile strength:	8 Mpa
Ultimate elongation:	> 400 %
Volume resistivity:	9x10 ¹⁴ Ωxcm
Dielectric strength:	35 kV/mm
Flame resistance:	HB UL94
Specifications:	FMVSS302 / ISO3795 DIN75200 / FAR25.853 halogen free



Properties:

Plioprene TPE is a thermoplastic elastomer, based on a mixture of Polypropylene and irradiated EPDM. This product has high thermal characteristics and a good resistance to ozone and weather. It is highly elastic and offers a high degree of abrasion. This material has moderate resistance to oil and hydrocarbons, but it has very good resistance to water, aqueous salt solutions, detergents and acids.

type	article number	Ø i.d. mm	Ø o.d. mm	wall thickness mm	 m
PLIOPRENE TPE 2	0207 0002 010	2	2,8	0,4	50
PLIOPRENE TPE 3	0207 0003 010	3	3,8	0,4	50
PLIOPRENE TPE 4	0207 0004 010	4	5	0,5	50
PLIOPRENE TPE 5	0207 0005 010	5	6,1	0,5	50
PLIOPRENE TPE 6	0207 0006 010	6	7,2	0,6	25
PLIOPRENE TPE 8	0207 0008 010	8	9,3	0,65	25
PLIOPRENE TPE 10	0207 0010 010	10	11,4	0,7	25
PLIOPRENE TPE 12	0207 0012 010	12	13,6	0,8	25
PLIOPRENE TPE 14	0207 0014 010	14	15,6	0,8	25



SILA-SUPER

Material:	silicone
Colour:	transparent / colourless
Operating temperatures:	-50 to +200°C +250°C (peak)
Shore A hardness:	70±5
Tensile strength:	10 N/mm ²
Ultimate elongation:	350 %
Volume resistivity:	10 ¹⁵ Ω.cm
Dielectric strength:	25 kV/mm
Specifications:	halogon-free




Properties:


Our SES silicone rubber is an elastomer with very good thermal and electrical properties.

It can be used between -50°C and 200°C and short periods until 250°C.

Excellent resistance to hot air, oxygen, weather, light and U.V.

Radiation up to 10MRad. is well supported.

type	article number	Ø i.d. mm	Ø o.d. mm	wall thickness mm	 m
SILA-SUPER 4	0214 0004 011	4	4,8	0,4	50
SILA-SUPER 6	0214 0006 011	6	7	0,5	25
SILA-SUPER 8	0214 0008 011	8	9,2	0,6	25
SILA-SUPER 10	0214 0010 011	10	11,4	0,7	25
SILA-SUPER 12	0214 0012 011	12	13,6	0,8	25

 For any application needing an inner diameter below 4mm please use our standard sleeving Silavia Grade 2412 on catalogue page A2/2-01.