



SHEATHS

Metallic or polyethylene sheaths represent the most economical means to create voids in post-tensioned elements. They provide a good secondary protection against corrosion and a good connection between cables and concrete. The primary protection against corrosion is provided by the grouting alkalinity and by concrete itself, the secondary one by the sheath and its protective barrier to the cable.

"ST" metallic sheaths



ST metallic sheaths are available in different versions. They are made of crimped sheet EN 10139 - 1999. They can be galvanized. Sheaths are available in bars having a length of 5.8 m. They are all provided with a sleeve screwed onto each bar.

ST metallic sheaths are available in the following types:

- **STB-CE** according to the CE marking to comply with EN 523-524,
- **STA** corrugated with a thickness of 0.3 mm.
- **STC** corrugated with a thickness of 0.4 mm.
- **STD** corrugated with a thickness of 0.5 mm.
- **STE** corrugated with a thickness of 0.6 mm.

"SL" metallic sheaths



SL metallic sheaths are available in different versions. They are made of crimped sheet EN 10139 - 1999. They can be galvanized. Sheaths are available in bars having a length of 5.8 m. They are not all provided with a sleeve screwed onto each bar obtaining their connection by overlapping.

SL metallic sheaths are available in the following types:

- **SL-CE** corrugated with a thickness of 0.3 mm.

"SP" polyethylene sheaths



SP polyethylene sheaths are available in several versions. They are made of extruded H.D.P.E. according to the FIB Specification, in bars with a length from 5.8 m. to 11.8 m. They are blue with a heat-shrinking sleeve on each connection.

SP metallic sheaths are available in the following types:

- **SPA** corrugated with a thickness of 2.00 mm.
- **SPB** corrugated with a thickness of 2,50 mm.
- **SPB** corrugated with a thickness of 3.00 mm.
- **SPD** corrugated with a thickness of 3.50 mm.

"SPE" polyethylene flat sheaths



SPE-78x25x2 mm. polyethylene sheaths are made of extruded H.D.P.E. according to the FIB Specification, in bars with a length from 5.8 m. to 11.8 m. They are blue with a heat-shrinking sleeve on each connection.

SPE metallic sheaths are available in the following types:

- **SPE** corrugated with a thickness of 2.00 mm.



Heat-shrinking joint

The connection between polyethylene sheaths consists in heat-shrinking joints for the installation by specialized operators according to operating instructions.

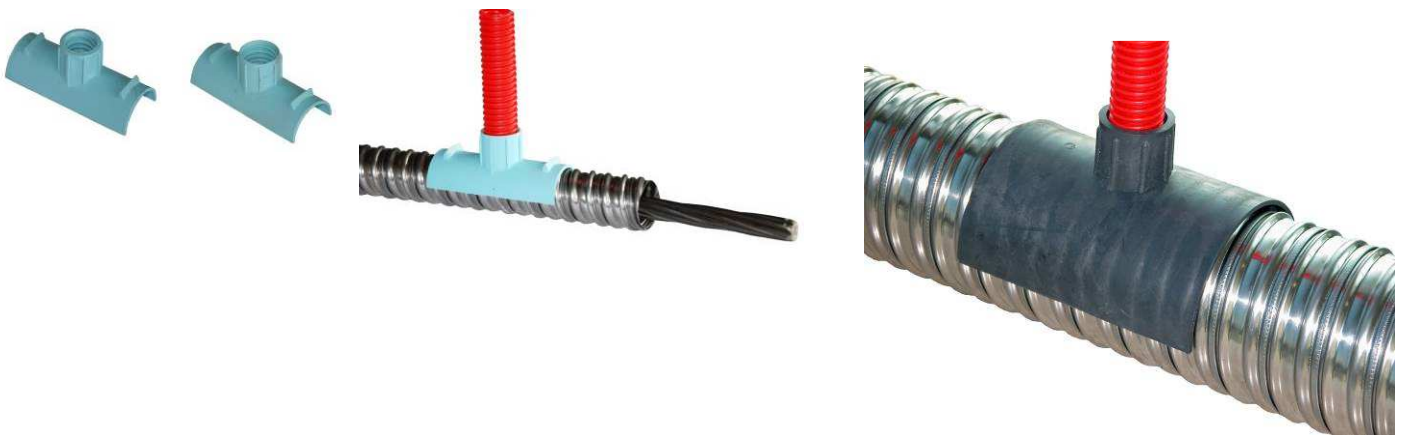
Vents on corrugated sheaths



DD-1001 vent cover

The positioning of vents on corrugated on polyethylene sheaths allows to guarantee the correct discharge of air from tubes while grouting. They must be installed on every part of the cable where an air pocket may form while grouting.

The **DD-1001** cover is made of soft material to allow use with sheaths of every measure. It must be positioned with soft PVC.



T 50x25 soft PVC tapes



The **T 50x25** adhesive tape made of soft PVC allows a high-level sealing of the interested parts and allows to cover surfaces by respecting their characteristics. The tape also offers a high resistance to temperature variations and to abrasion.

Diameter of corrugated sheaths suggested for use with T15 and T15S wire strands

Number of strands	Inside diameter	Grouting	Cement	Straight part after bending	Minimum radius
	(mm)	Litres/meter	Cement Kg/meter	Minimum (mm)	Minimum (mm)
4	45	1,2	1,9	500	3.000
7	62	2,3	3,6	700	3.500
9	72	2,8	4,5	800	4.000
12	80	3,6	5,8	1.000	4.000
15	85	3,8	6,1	1.100	4.500
19	95	4,7	7,5	1.200	5.000
22	100	5,2	8,4	1.300	5.000
27	110	6,2	9,9	1.300	5.000
37	130	8,6	13,8	1.500	6.000

Type	Internal Diameter	External Diameter	Thickness
STB-45x50x0,25_CE	45	50	0,25
STB-48x53x0,30_CE	48	53	0,30
STB-51x56x0,30_CE	51	56	0,30
STB-54x59x0,30_CE	54	59	0,30
STB-57x62x0,30_CE	57	62	0,30
STB-59x64x0,30_CE	59	64	0,30
STB-62x67x0,30_CE	62	67	0,30
STB-65x70x0,30_CE	65	70	0,30
STB-69x74x0,35_CE	69	74	0,35
STB-72x77x0,35_CE	72	77	0,35
STB-75x80x0,35_CE	75	80	0,35
STB-80x85x0,35_CE	80	85	0,35
STB-85x90x0,35_CE	85	90	0,35
STB-88x93x0,35_CE	88	93	0,35
STB-90x99x0,40_CE	90	99	0,4
STB-95x104x0,40_CE	95	104	0,4
STB-100x109x0,40_CE	100	109	0,4
STB-105x114x0,40_CE	105	114	0,4
STB-110x119x0,40_CE	110	119	0,4
STB-115x124x0,40_CE	115	124	0,4
STB-120x129x0,40_CE	120	129	0,4
STB-125x134x0,40_CE	125	134	0,4
STB-130x139x0,40_CE	130	139	0,4

CIRCULAR AND FLAT CORRUGATED PLASTIC DUCTS

Type circular	Internal Diameter	External Diameter	Thickness (mm)
SPA-36x46x2	36	46	2
SPA-60x74x2	60	74	2
SPA-70x84x2	70	84	2
SPA-77x91x2	77	91	2
SPA-87x101x2	87	101	2
SPB-35x46x2,5	35	46	2,5
SPB-59x74x2,5	59	74	2,5
SPB-69x84x2,5	69	84	2,5
SPB-76x91x2,5	76	91	2,5
SPB-86x101x2,5	86	101	2,5
SPB-101x116x2,5	101	116	2,5
SPB-107x123x2,5	107	123	2,5
SPB-116x131x2,5	116	131	2,5
SPB-131x146x2,5	131	146	2,5
SPC-100x116x3	100	116	3
SPC-106x123x3	106	123	3
SPC-115x131x3	115	131	3
SPC-130x146x3	130	146	3
SPC-151x167x3	151	167	3
SPD-99x116x3,5	99	116	3,5
SPD-105x123x3,5	105	123	3,5
SPD-114x131x3,5	114	131	3,5
SPD-129x146x3,5	129	146	3,5
SPD-150x167x3,5	150	167	3,5

Type flat	length	width	Thickness
SPE-78x25x2	68-78	29-40	2
SPE-90x25x2	80-90	29-40	2