



Heat shrink joints



### Application

Outer heat shrink plastic joints SVCZ for connection of 4-core plastic insulated cables type AYKY, CYKY etc., up to 0,6/1 kV.

### Marking

Identification marking consists of a letter symbol SVCZ, followed by a number indicating phase core cross-section. In case a joint kit has compression cable connectors suitable for both aluminum and copper conductors, a letter symbol S Al, or S Cu is added (depending whether compression cable connectors are made of aluminum (Al), or copper (Cu)).

Marking example: SVCZ 35 is a heat shrink joint for cable AYKY (CYKY) 4x35 (without compression cable connectors). SVCZ 120 S Al is a heat shrink joint for cable AYKY 3x120 + 70 with 3 pcs of compression cable connectors for 120 mm<sup>2</sup> cores and 1pc for 70 mm<sup>2</sup> core.

Packaging: joint kits SVCZ are supplied in PE bags, containing 1pc of a heat shrinkable tube for outer protection, 4pcs of core insulation tubes and 4pcs of compression cable connectors.

### Specifications

The joint kit is used for jointing cables with plastic insulation and plastic outer sheath. The kit is suitable for 4 to 4 core and 3+1 core cables. It consists of 4 (or 3+1) pcs of heat shrinkable insulation tubes in order to create insulation surrounding in the place of core connection via compression cable connectors and 1 pc of heat shrinkable tube for outer protection. Both insulation and heat shrinkable tubes are covered by hot melt adhesive, covering the whole inner side length, for guaranteeing excellent sealed connection properties. Tubes are manufactured from cross-linked PE (properties displayed in the Tab. 1).

**Tab. 1 Material properties (cross-linked PE)**

<b>Tensile strength</b>	[MPa]	min. 13
<b>Elongation at break</b>	[%]	min. 350
<b>Shrink temperature</b>	[°C]	150 - 200
<b>Operating temperature</b> - long-term - short-term	[°C]	100 150
<b>Volume resistivity</b>	[Ω.m]	10 <sup>13</sup>
<b>Dielectric strength</b>	[kV/mm]	12


**Tab. 2 Dimensions of heat shrink joints SVCZ**

Code	No/Core cross-section [pcs x mm <sup>2</sup> ]	Insulation tube			Sheath tube			Compression cable connectors		
		d <sub>1</sub> /d <sub>2</sub>	L <sub>i</sub>	QTY	d <sub>1</sub> /d <sub>2</sub>	L <sub>p</sub>	QTY	For core cross-section	Inner diameter	QTY
		[mm]	[mm]	[pcs]	[mm]	[mm]	[pcs]	[mm <sup>2</sup> ]	[mm]	[pcs]
SVCZ 10	4 x 10	12/4	100	4	40/16	400	1	10	4,5	4
SVCZ 16	4 x 16	12/4	150	4	40/16	500	1	16	5,5	4
SVCZ 25	4 x 25	17/5	150	4	50/18	500	1	25	6,5	4
SVCZ 35	4 x 35	17/5	200	4	50/18	800	1	35	8	4
SVCZ 50	4 x 50	17/5	200	4	55/25	800	1	50	9,5	4
SVCZ 70	4 x 70	25/10	250	4	65/27	800	1	70	11	4
SVCZ 95	3 x 95+70	25/10	250	4	80/32	800	1	95 70	13 11	3 1
SVCZ 120	3 x 120+70	30/10 25/10	250 250	3 1	80/32	1000	1	120 70	14,5 11	3 1
SVCZ 150	3 x 150+70	40/16 25/10	250 250	3 1	80/32	1000	1	150 70	16 11	3 1
SVCZ 185	3 x 185+95	40/16 25/10	250 250	3 1	100/42	1000	1	185 95	18 13	3 1
SVCZ 240	3 x 240+120	40/16 30/10	280 280	3 1	100/42	1000	1	240 120	21 14,5	3 1

L<sub>i</sub>, L<sub>p</sub> - Lengths of tubes (expanded as supplied)

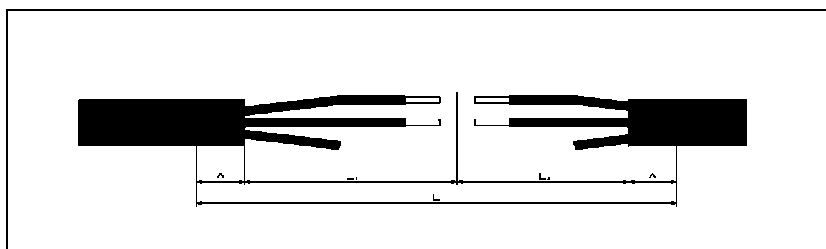
d<sub>1</sub> - Expanded as supplied Ø d<sub>1</sub> min

d<sub>2</sub> - Fully recovered Ø d<sub>2</sub> max

LKS - Compression cable connectors

**Tab. 3 Positioning of cables in joint and dimensions for assembly**

Code	No/Core cross-section [pcs x mm <sup>2</sup> ]	Dimensions			
		L <sub>1</sub> [mm]	L <sub>2</sub> [mm]	A [mm]	L [mm]
SVCZ 10	4 x 10	130	70	100	400
SVCZ 16	4 x 16	200	100	100	500
SVCZ 25	4 x 25				
SVCZ 35	4 x 35	300	130	185	800
SVCZ 50	4 x 50				
SVCZ 70	4 x 70				
SVCZ 95	3 x 95+70	370	210	210	1000
SVCZ 120	3 x 120+70				
SVCZ 150	3 x 150+70				
SVCZ 185	3 x 185+95				
SVCZ 240	3 x 240+120				

**Fig. 1**


Heat shrink joints SVCZ are supplied in PE bags (1 kit).