



Saves Your Energy



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Ensto Cold Shrink Solutions

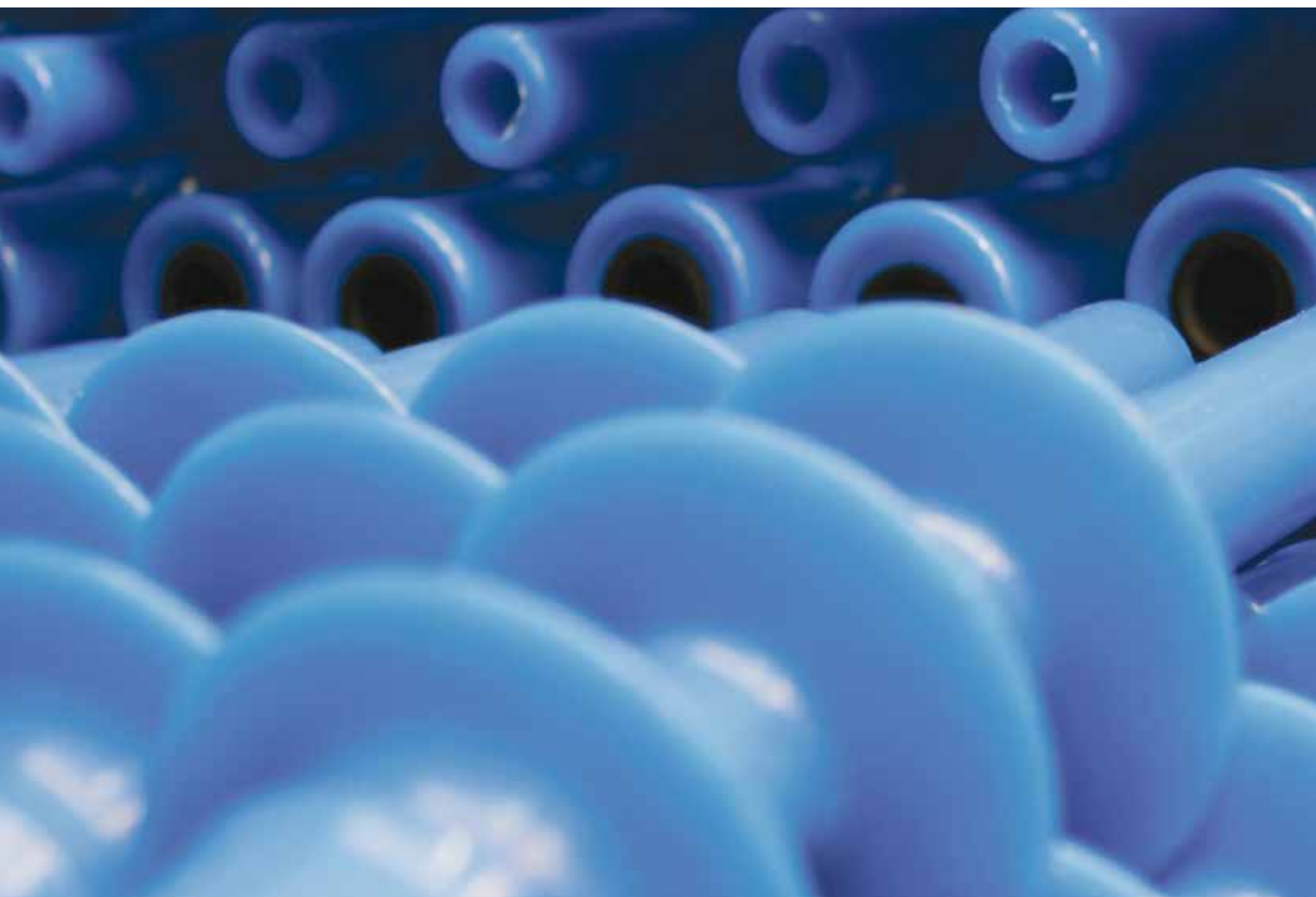
No flame required



Building a secure foundation

Ensto Underground

Both heat and cold shrink accessories



Ensto's product selection for underground cable networks covers both heat- and cold shrink joints and terminations as well as hybrid joints. Our 50 years' thorough experience in building electricity distribution networks guarantees safe and truly installer-friendly products.



The cold shrink accessories are made of highly durable silicon rubber which ensures their reliability and durability. The products are easy to install and after the installation, the need of maintenance is in minimum - we save your time and money.

Wide usage area

Ensto's cold shrink elements are pre-expanded on a spiral in production. This makes the installation work light and easy and you can rely on getting a superb assembly every time. Moreover, the structure enables a wide usage area: with only a few products, area as wide as 10-1000 mm² / 24 and 42 kV can be covered.

Reliable products, uniform installation quality

All the vital parts of our cold shrink products are integrated. For instance in termination, the geometric stress control, anti-tracking tube and rain sheds are all integrated into one piece.

Because of the compact structure, the quality of the installation is always uniform which minimizes the possibility of mistakes.

Also, no special tools are needed in installation. Our cold shrink accessories can be used in demanding environments and they endure large temperature shifts. The products are ready to be used immediately after the installation.

Tested quality

We perform continuous testing with follow-up in production. This includes, for example, material analysis, voltage tests and partial discharge measurements. Our cold shrink products are tested according to standard HD 629.



Top-of-the-art manufacturing

Our modern molding machines, multi-base cavity tool and liquid silicon material enable an effective production. We have factories in Estonia and Italy and product development units in Finland and Italy – together these ensure the innovativeness of our products.

Excellent silicon material

We have chosen silicon material because of its superb features. It endures difficult weather conditions, such as rain, snow, cold and UV rays, as well as dust, pollution and chemicals. The silicon also retains its natural flexibility and constant pressure against the cable in various temperatures.

Manufacturing steps

The manufacturing of cold shrink components can be broken down to phases. For instance, the manufacturing of terminations includes the following steps:

1. Molding of the stress cone
2. Loading the stress cone to cavity tool
3. Over molding
4. Stabilizing molded part in oven
5. Mechanical grinding of termination
6. Spiral manufacturing
7. Loading molded termination to spiral

The quality of each product is ensured in careful quality checks.

Ensto Pro – training for professionals

In addition to our high-quality products, we offer our customers thorough training. Ensto Pro training program contains, for example, information on the construction of an underground cable network and the effective utilization of Ensto's innovative solutions. The training includes both theory based information and practical installation work. Moreover, we train our customers with clear and animated usage instructions. For more information on the training, please contact your local sales representative. www.ensto.com/wheretobuy



We save your energy, time and money:



Easy to install

- Spiral technology makes the products easy to install
- Mistakes are made nearly impossible
- Uniform and superb assembly every time



No fire needed

- Fewer tools
- Less effort
- Silicon material is very durable



Compact and reliable solution

- Integrated structure and less components
- Kits include all needed components



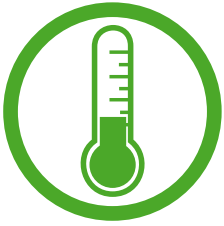
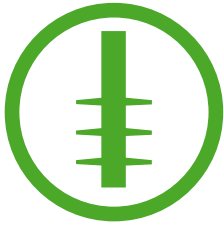
Solid foundation

- We help you to build a solid and secure foundation



Ensto Cold Shrink

- Cold is for quality



We help to build a solid and secure foundation for your electricity network:

- In-house design & manufacturing
- Simple and clear installation instructions
- Top-of-the-art product design
- Complete kits - no additional kits needed
- Tested products

Ensto service is included in the price:

- Extensive Ensto Pro training
 - face-to-face
 - in local language
- Extensive production capacity – reliable deliveries

Cold shrink joints

Two outer jackets - different features

CJ = total cold shrink solution with silicon outer jacket	CJH = hybrid solution with heat shrink outer jacket
<ul style="list-style-type: none"> suitable also when installing in cold good for places where hot work is not allowed 	<ul style="list-style-type: none"> durable heat shrink outer jacket needs flame no limitations with warehousing or assembly temperature

CJH11 hybrid joint kits 1 core XLPE with Cu wire shield with heat shrink outer sheat

The joint kit is used for jointing of max. 24 kV cables with XLPE insulation and copper wire shield. The kit is suitable for single core cables, containing the components for one core.

Product code	EAN	Conductor size mm ² 12 kV	Conductor size mm ² 24 kV	Conductor size mm ² 42 kV	Min. diameter on the insulation mm
24 kV with connectors (Al/Cu)					
CJH11.2402C	6438100307110	35-95	10-95		13,2
CJH11.2403C	6438100307066	70-240	70-240		17,6
CJH11.2404C	6438100307189	240-300	185-300		24,2
42 kV with connectors (Al/Cu)					
CJH11.4202C	6438100308162			10-95	19,8
CJH11.4203C	6438100308186			70-240	24,2
CJH11.4204C	6438100308209			120-300	24,2



CJWH hybrid joint kits AHXAMK-W with heat shrink outer sheat

The joint kit is used for jointing of max. 24 kV cables with XLPE insulation and copper wire shield. The kit is suitable for AHXAMK-W cable, containing the components for three cores.

Product code	EAN	Conductor size mm ² 12 kV	Conductor size mm ² 24 kV	Min. diameter on the insulation mm
24 kV with connectors (Al/Cu)				
CJWH11.2402C	6438100304447	35-95	10-95	13,2
CJWH11.2403C	6438100304454	95-240	70-240	17,6
CJWH11.2404C	6438100304461	240-300	185-300	24,2



CJH11-ALS joint kits 1 core XLPE with Al tape shield with heat shrink outer sheat

The joint kit is used for jointing of max. 24 kV cables with XLPE insulation and aluminium tape shield. The kit is suitable for single core cables, containing the components for one core.

Product code	EAN	Conductor size mm ² 12 kV	Conductor size mm ² 24 kV	Min. diameter on the insulation mm
24 kV with connectors (Al/Cu)				
CJH11.2402C-ALS	6438100307578	35-95	10-95	13,2
CJH11.2403C-ALS	6438100307592	70-240	70-240	17,6
CJH11.2404C-ALS	6438100307615	240-300	185-300	24,2



CJH33 hybrid joint kits 3 core XLPE with Cu wire shield with heat shrink outer sheat

The joint kit is used for jointing of max. 24 kV cables with XLPE insulation and copper wire shield. The kit is suitable for three core cables, containing the components for all three cores.

Product code	EAN	Conductor size mm ² 12 kV	Conductor size mm ² 24 kV	Min. diameter on the insulation mm
24 kV with connectors (Al/Cu)				
CJH33.2402C	6438100307462	35-95	10-95	13,2
CJH33.2403C	6438100307486	70-240	70-240	17,6

Cold shrink joints

CJ11 joint kits 1 core XLPE with Cu wire shield with silicon shrink outer sheat

The joint kit is used for jointing of max. 24 kV cables with XLPE insulation and copper wire shield. The kit is suitable for single core cables, containing the components for one core.

Product code	EAN	Conductor size mm ² 12 kV	Conductor size mm ² 24 kV	Min. diameter on the insulation mm
24 kV with connectors (Al/Cu)				
CJ11.2402C	6438100301095	35-95	10-95	13,2
CJ11.2403C	6438100300548	70-240	70-240	17,6
CJ11.2404C	6438100302979	240-300	185-300	24,2



CJW11 joint kits AHXAMK-W with silicon shrink outer sheat

The joint kit is used for jointing of max. 24 kV cables with XLPE insulation and copper wire shield. The kit is suitable AHXAMK-W cable, containing the components for three cores.

Product code	EAN	Conductor size mm ² 12 kV	Conductor size mm ² 24 kV	Min. diameter on the insulation mm
24 kV with connectors (Al/Cu)				
CJW11.2402C	6438100304386	35-95	10-95	13,2
CJW11.2403C	6438100304393	70-240	70-240	17,6
CJW11.2404C	6438100304409	240-300	185-300	24,2



CJ11-ALS joint kits 1 core XLPE with Al tape shield with silicon shrink outer sheat

The joint kit is used for jointing of max. 24 kV cables with XLPE insulation and aluminium tape shield. The kit is suitable for single core cables, containing the components for one core.

Product code	EAN	Conductor size mm ² 12 kV	Conductor size mm ² 24 kV	Min. diameter on the insulation mm
24 kV with connectors (Al/Cu)				
CJ11.2402C-ALS	6438100301101	35-95	10-95	13,2
CJ11.2403C-ALS	6438100300531	70-240	70-240	17,6
CJ11.2404C-ALS	6438100302993	240-300	185-300	24,2



Cold shrink terminations

NOTE! When the Ensto termination kits include a shear head cable lug, the types are marked with L (e.g. CIT1.2402L).

CIT1 indoor termination kits 1 core XLPE with Cu wire shield

The termination kit is used for indoor terminating of XLPE insulated medium voltage cables with wire shield. The kit is suitable for single core cables, containing components for three cores.

Product code	EAN	Conductor size mm ² 12 kV	Conductor size mm ² 24 kV	Termination length mm	Shed diameter mm	No of sheds per phase	Min. diameter on the insulation mm
24 kV without lugs							
CIT1.2402	6438100302825	35-95	10-95	265	62	3	13,2
CIT1.2403	6438100300494	70-240	50-240	270	62	3	17,6
CIT1.2404	6438100302849	240-300	185-300	310	62	3	24,2
CIT1.2405	6438100304706	400-630	400-630	370	62	3	29,7
CIT1.2406	6438100304713	630-1000	630-1000	440	62	3	35,2
24 kV with lugs (Al/Cu)							
CIT1.2402L	6438100301132	35-95	10-95	265	62	3	13,2
CIT1.2403L	6438100300524	70-240	70-240	270	62	3	17,6
CIT1.2404L	6438100302856	240-300	185-300	310	62	3	24,2
CIT1.2405L	6438100304744	400-630	400-630	370	62	3	29,7
CIT1.2406L	6438100312329	630-1000	630-1000	440	62	3	35,2
Additional core sheathing kits							
STE16	6438100306588	70-240	70-240				



Product code	EAN	Conductor size mm ² 36 / 42 kV	Termination length mm	Shed diameter mm	No of sheds per phase	Min. diameter on the insulation mm
42 kV without lugs						
CIT1.4202	6438100304768	10-95	345	100	3	13,2
CIT1.4203	6438100300470	50-300	350	100	3	17,6
CIT1.4204	6438100304775	120-400	390	100	3	24,2
CIT1.4205	6438100304782	400-630	450	100	3	29,7
CIT1.4206	6438100304799	630-1000	520	100	3	35,2
42kV with lugs (Al/Cu)						
CIT1.4202L	6438100304805	10-95	345	100	3	13,2
CIT1.4203L	6438100300500	70-240	350	100	3	17,6
CIT1.4204L	6438100304812	120-300	390	100	3	24,2
CIT1.4205L	6438100304829	400-630	450	100	3	29,7
CIT1.4206L	6438100312381	630-1000	520	100	3	35,2



COT1 outdoor termination kits 1 core XLPE with Cu wire shield

The termination kit is used for outdoor terminating of XLPE insulated medium voltage cables with wire shield. The kit is suitable for single core cables, containing components for three cores.

Product code	EAN	Conductor size mm ² 12 kV	Conductor size mm ² 24 kV	Termination length mm	Shed diameter mm	No of sheds per phase	Min. diameter on the insulation mm
24 kV without lugs							
COT1.2402	6438100302887	35-95	10-95	345	100	3	17,6
COT1.2403	6438100300425	70-240	50-240	350	100	3	24,2
COT1.2404	6438100302900	240-300	185-300	390	100	3	29,7
COT1.2405	6438100304720	400-630	400-630	450	100	3	29,7
COT1.2406	6438100304737	630-1000	630-1000	520	100	3	35,2
24 kV with lugs (Al/Cu)							
COT1.2402L	6438100301118	35-95	10-95	345	100	3	13,2
COT1.2403L	6438100300463	70-240	70-240	350	100	3	17,6
COT1.2404L	6438100302917	240-300	185-300	390	100	3	24,2
COT1.2405L	6438100304751	400-630	400-630	450	100	3	29,7
COT1.2406L	6438100312336	630-1000	630-1000	520	100	3	35,2
Additional core sheathing kits							
STE16	6438100306588	70-240	70-240				



Product code	EAN	Conductor size mm ² 36-42 kV	Termination length mm	Shed diameter mm	No of sheds per phase	Min. diameter on the insulation mm
42 kV without lugs						
COT1.4202	6438100304836	10-95	610	100	6	17,6
COT1.4203	6438100300449	50-300	620	100	6	24,2
COT1.4204	6438100304843	120-400	800	100	6	29,7
COT1.4205	6438100304850	400-630	800	100	6	29,7
COT1.4206	6438100304867	630-1000	800	100	6	35,2
42 kV with lugs (Al/Cu)						
COT1.4202L	6438100304874	10-95	610	100	6	13,2
COT1.4203L	6438100300432	70-240	620	100	6	17,6
COT1.4204L	6438100304881	120-300	800	100	6	24,2
COT1.4205L	6438100304898	400-630	800	100	6	29,7
COT1.4206L	6438100312398	630-1000	800	100	6	35,2



Cold shrink terminations

CIT1-ALS indoor termination kits 1 core XLPE with Al tape shield

The termination kit is used for indoor terminating of max. 24 kV cables with XLPE insulation and aluminium tape shield. The kit is suitable for single core cables, containing the components for three cores.

Product code	EAN	Conductor size mm ² 12 kV	Conductor size mm ² 24 kV	Termination length mm	Shed diameter mm	No of sheds per phase	Min. diameter on the insulation mm
24 kV without lugs							
CIT1.2402-ALS	6438100302832	35-95	10-95	265	62	3	13,2
CIT1.2403-ALS	6438100300487	70-240	50-240	270	62	3	17,6
CIT1.2404-ALS	6438100302863	240-400	185-300	310	62	3	24,2
24 kV with lugs (Al/Cu)							
CIT1.2402L-ALS	6438100301149	35-95	10-95	265	62	3	13,2
CIT1.2403L-ALS	6438100300517	70-240	70-240	270	62	3	17,6
CIT1.2404L-ALS	6438100302870	240-300	185-300	310	62	3	24,2



COT1-ALS outdoor termination kits 1 core XLPE with Al tape shield

The termination kit is used for outdoor terminating of XLPE insulated medium voltage cables with aluminium tape shield shield. The kit is suitable for single core cables, containing components for three cores.

Product code	EAN	Conductor size mm ² 12 kV	Conductor size mm ² 24 kV	Termination length mm	Shed diameter mm	No of sheds per phase	Min. diameter on the insulation mm
24 kV without lugs							
COT1.2402-ALS	6438100302894	35-95	10-95	345	100	3	13,2
COT1.2403-ALS	6438100300418	70-240	50-240	350	100	3	17,6
COT1.2404-ALS	6438100302924	240-300	185-300	390	100	3	24,2
24 kV with lugs (Al/Cu)							
COT1.2402L-ALS	6438100301125	35-95	10-95	345	100	3	13,2
COT1.2403L-ALS	6438100300456	70-240	70-240	350	100	3	17,6
COT1.2404L-ALS	6438100302931	240-300	185-300	390	100	3	24,2



CITW indoor terminations AHXAMK-W

The termination kit is used for indoor terminating of XLPE insulated medium voltage cables with aluminium tape shield (AHXAMK-W). The kit is suitable for single core cables, containing components for three cores.

Product code	EAN	Conductor size mm ² 12 kV	Conductor size mm ² 24 kV	Termination length mm	Shed diameter mm	No of sheds per phase	Min. diameter on the insulation mm
24 kV without lugs							
CITW1.2402	6438100304157	35-95	10-95	265	62	3	13,2
CITW1.2403	6438100304164	70-240	50-240	270	62	3	17,6
CITW1.2404	6438100304171	240-300	185-300	310	62	3	24,2
24 kV with lugs (Al/Cu)							
CITW1.2402L	6438100304225	35-95	10-95	265	62	3	13,2
CITW1.2403L	6438100304232	70-240	70-240	270	62	3	17,6
CITW1.2404L	6438100304249	240-300	185-300	310	62	3	24,2



COTW outdoor terminations AHXAMK-W

The termination kit is used for outdoor terminating of XLPE insulated medium voltage cables with aluminium tape shield (AHXAMK-W). The kit is suitable for single core cables, containing components for three cores.

Product code	EAN	Conductor size mm ² 12 kV	Conductor size mm ² 24 kV	Termination length mm	Shed diameter mm	No of sheds per phase	Min. diameter on the insulation mm
24 kV without lugs							
COTW1.2402	6438100304294	35-95	10-95	345	100	3	13,2
COTW1.2403	6438100304300	70-240	50-240	350	100	3	17,6
COTW1.2404	6438100304317	240-300	185-300	390	100	3	24,2
24 kV with lugs (Al/Cu)							
COTW1.2402L	6438100304324	35-95	10-95	345	100	3	13,2
COTW1.2403L	6438100304331	70-240	70-240	350	100	3	17,6
COTW1.2404L	6438100304348	240-300	185-300	390	100	3	24,2



Cold shrink terminations

CITH3 indoor termination kits 3 core XLPE

The termination kit is used for indoor terminating of XLPE insulated medium voltage cables with wire shield. The kit is suitable for three core cables, containing components for three cores.

Product code	EAN	Conductor size mm ² 12 kV	Conductor size mm ² 24 kV	Termination length mm	Shed diameter mm	No of sheds per phase	Min. diameter on the insulation mm
24 kV without lugs							
CITH3.2402	6438100307516	35-95	10-95	500-1100	62	3	16
CITH3.2403	6438100307073	70-240	70-240	500-1100	62	3	20
24 kV with lugs (Al/Cu)							
CITH3.2402L	6438100307523	35-95	10-95	500-1100	62	3	16
CITH3.2403L	6438100307080	70-240	70-240	500-1100	62	3	20



COTH3 outdoor termination kits 3 core XLPE

The termination kit is used for outdoor terminating of XLPE insulated medium voltage cables with wire shield. The kit is suitable for three core cables, containing components for three cores.

Product code	EAN	Conductor size mm ² 12 kV	Conductor size mm ² 24 kV	Termination length mm	Shed diameter mm	No of sheds per phase	Min. diameter on the insulation mm
24 kV without lugs							
COTH3.2402	6438100307530	35-95	10-95	500-1100	100	3	16
COTH3.2403	6438100307097	70-240	50-240	500-1100	100	3	20
24 kV with lugs (Al/Cu)							
COTH3.2402L	6438100307547	35-95	10-95	500-1100	100	3	16
COTH3.2403L	6438100307103	70-240	70-240	500-1100	100	3	20





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