

Cable accessories for shipbuilding and off-shore units

The security on ships and off-shore units demand for high reliability. Therefore, Cellpack presents system solutions for all kind of electrical cables. The system for superior security



Systems For Professionals

CELLPACK
Electrical Products

a BBC GROUP company

SMH

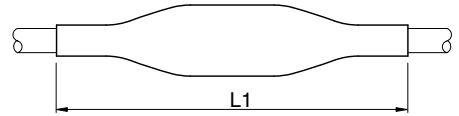
Heat-shrinkable straight-through joint

for unarmoured polymeric cables and conductors



Universal applications to connect low voltage plastic insulated cables or conductors insulated with PVC, PE and XLPE, for example MGG, MSK(H), MPRX. Suitable for compression connectors on aluminium and copper conductors.

Dimensions



Characteristics

- Compact dimensions
- Wide conductor and cross-section range
- Resistant to chemical agents
- Resistant to alkaline earth elements
- UV-resistant
- Free from paint-wetting inhibiting substances
- Transversely waterproof
- High electrical insulating values
- High mechanical strength

Application

- Indoor
- Outdoor
- Underground
- Water
- Installation ducts
- Ductwork
- Areas with increased fire safety requirements

Scope of delivery

- Outer sleeve
- Inner sleeves

Note

- Connectors not included

Tests

- CENELEC HD 623 (VDE 0278 part 623)

Storage conditions/Shelf life

- Unlimited shelf life

Type	Nominal cross section per conductor Polymeric cable mm ²		L1 mm	Art.-No.
	3x	4x		
U₀/U (U_m) 0.6/1 (1.2) kV				
SMH3/4	1.5-4 LR/GL-BV	1.5 – 4	350	145409
	6-16 LR/GL-BV	6 – 16	500	145410
	25-35 LR/GL-BV	25 – 35	550	145411
	50-120 LR/GL-BV	50 – 120	700	145412

Appropriate connectors must be ordered separately.

Approvals

- Shipbuilding license, Det Norske Veritas, LV-Furnitures, Certificate-No. E-9379
- Shipbuilding license, Lloyd's Register, LV-Tubes/Furnitures, Certificate-No. 96/20024
- Shipbuilding license, Germanischer Lloyd, LV-Furnitures, Certificate-No. 98 732 - 96 HH
- Shipbuilding license, American Bureau of Shipping, LV-Tubes/Furnitures, Certificate-No. 07-HG271120-PDA
- Shipbuilding license, Bureau Veritas, LV-Furnitures Certificate-No. 07649/C0 BV

SMHC...

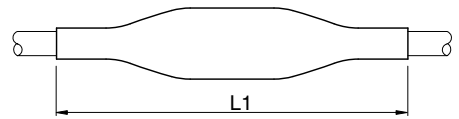
Heat-shrinkable straight-through joint

for polymeric cable with concentric conductor



Universal applications to connect low voltage plastic insulated cables or conductors insulated with concentric conductor and PVC, PE and XLPE (e.g. MGCG, MSK(H)C, K1XCX, MPRXCX).

Dimensions



Characteristics

- High electrical insulating values
- Transversely waterproof
- Halogen-free
- Free from paint-wetting inhibiting substances
- High mechanical strength
- Resistant to chemical agents
- Resistant to alkaline earth elements
- UV-resistant
- Wide conductor and cross-section range
- Compact dimensions
- Unlimited shelf life

Application

- Indoor
- Outdoor
- Underground
- Water
- Installation ducts
- Ductwork
- Areas with increased fire safety requirements

Scope of delivery

- Outer sleeve
- Inner jacket sleeve
- Inner sleeves
- Copper braid tape
- Assembly instructions

Note

- Connectors not included

Storage conditions/Shelf life

- Unlimited shelf life

Type	Nominal cross section per conductor mm ²			L1 mm	Art.-No.
U₀/U (U_m) 0.6/1 (1.2) kV					
SMHC3/4	1.5-4 LR/GL	1.5/1.5 – 4/4	1.5/1.5 – 4/4	350	145413
	6-16 LR/GL	6/6 – 16/16	6/6 – 16/16	500	145414
	25-35 LR/GL	25/25 – 35/35	25/25 – 35/35	550	145415
	50-120 LR/GL	50/50 – 150/150	50/50 – 150/120	700	145416

Appropriate connectors must be ordered separately.

Approvals

- Shipbuilding license, American Bureau of Shipping, LV-Tubes/Furnitures, Certificate-No. 07-HG271120-PDA
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SMHV

Heat-shrinkable straight-through joint

for control cable and signal cable



Universal applications to connect control cables and signal cables (e.g.: MGCG, MSK(H)C, K1KCX, MPRXCX).

Characteristics

- Compact dimensions
- Resistant to chemical agents
- Resistant to alkaline earth elements
- UV-resistant
- Free from paint-wetting inhibiting substances
- Transversely waterproof
- High electrical insulating values
- High mechanical strength

Application

- Indoor
- Outdoor
- Underground
- Water
- Installation ducts
- Ductwork
- Areas with increased fire safety requirements

Scope of delivery

- Outer sleeve
- Inner jacket sleeve
- Inner sleeves
- Copper braid tube
- Pressure springs
- Assembly instructions

Type	Number of conductors Control and signal cable		Nominal cross section mm ²	L1 mm	Art.-No.	
	1.5 mm ²	2.5 mm ²				
U₀/U (U_m) 0.6/1 (1.2) kV						
SMHV	5/10 1,5-2,5 LR/GL	10	5	1.5 - 2.5	400	145417
	12/16 1.5-2.5 LR/GL	16	12	1.5 - 2.5	550	145418
	19/24 1.5-2.5 LR/GL	24	19	1.5 - 2.5	550	145419
	26/38 1.5-2.5 LR/GL	38	26	1.5 - 2.5	550	145420

Approvals

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SMHF ... LR/GL

Heat-shrinkable straight-through joint

for unarmoured polymeric cables and conductors, flame-retardant



Universal applications to connect control cables and signal cables (e.g.: FMGCG, FMK(H)Ce, TCX(C), MPRXCX).

Characteristics

- Compact dimensions
- Resistant to chemical agents
- Resistant to alkaline earth elements
- UV-resistant
- Free from paint-wetting inhibiting substances
- Waterproof and moisture-resistant
- High electrical insulating values

Application

- Indoor
- Outdoor
- Underground
- Water
- Installation ducts
- Ductwork
- Areas with increased fire safety requirements

Storage conditions/Shelf life

- Unlimited shelf life

Type		Number of twisted pairs Control and signal cable d = 0.8mm	Number of conductors Control and signal cable 0.75 mm ²	Art.-No.
SMHF	1 LR/GL	7	8	145425
	2 LR/GL	19	28	145426
	3 LR/GL	48	48	145427

Conductor connectors and branching assembly kits must be ordered separately.
Separate MSFA assembly kit required for each branch.

Approvals

- Shipbuilding license, Det Norske Veritas, LV-Furnitures, Certificate-No. E-9379
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SRFH2

Medium wall heat shrink tubing

self-extinguishing, shrinkage ratio 3:1, with or without hot melting adhesive



Characteristics

- Medium-walled
- Easy to mark
- Resistant to chemical agents
- UV-resistant
- Free from paint-wetting inhibiting substances
- Non-corrosive
- Infusible
- Superior electrical properties
- High tensile strength
- Resistant to cold flow (thermally stable)
- Self-extinguishing

Application

- Insulating
- Protection against moisture and pressure
- Particularly suitable for heat-shrink joints and terminations used in shipbuilding

Material

- Cross-linked polyolefin
 - Free of lead and cadmium
- Colour(s)**
- black

Type	L m	Internal diameter D		Recovered wall thickness mm	Art.-No.	
		before shrinkage mm	after shrinkage mm			
without adhesive, 1m pieces, authorisation for shipbuilding						
SRF2	12-4	1	12	4	2.60	144487
with adhesive, 1m pieces, authorisation for shipbuilding						
SRFH2	8-2.5	1	8	2.5	2.00	156847
	12-4	1	12	4	2.60	144493
	21-7	1	21	7	2.60	144498

Other lengths available to order.

Approvals

- Shipbuilding license, American Bureau of Shipping, LV-Tubes/Furnitures, Certificate-No. 07-HG271120-PDA
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- Shipbuilding license, Germanischer Lloyd, LV-Furnitures, Certificate-No. 98 732 - 96 HH
- Shipbuilding license, Lloyd's Register, LV-Tubes/Furnitures, Certificate-No. 96/20024

SRF3, SRFH3

Thick wall heat-shrink tubing

self-extinguishing, shrinkage ratio 3:1, with or without hot melting adhesive



Characteristics

- Thick-walled
- Easy to mark
- Resistant to chemical agents
- UV-resistant
- Free from paint-wetting inhibiting substances
- Non-corrosive
- Infusible
- Superior electrical properties
- High tensile strength
- Resistant to cold flow (thermally stable)
- Self-extinguishing

Application

- Insulating
- Protection against moisture and pressure
- Particularly suitable for heat-shrink joints and terminations used in shipbuilding

Material

- Cross-linked polyolefin
 - Free of lead and cadmium
- Colour(s)**
- black

Type	Internal diameter D		Recovered wall thickness mm	L m	Art.-No.	
	before shrinkage mm	after shrinkage mm				
without adhesive, 1m pieces, authorisation for shipbuilding						
SRF3	30-8	30	8	3.50	1	144504
	40-13	40	13	3.50	1	144507
	48-15	48	15	3.80	1	144514
	65-21	65	21	3.80	1	144517
	80-26	80	26	3.80	1	144521
with adhesive, 1m pieces, authorisation for shipbuilding						
SRFH3	30-8	30	8	3.50	1	144527
	40-13	40	13	3.50	1	144536
	65-21	65	21	3.80	1	144552
	80-26	80	26	3.80	1	144559

Other lengths available to order.

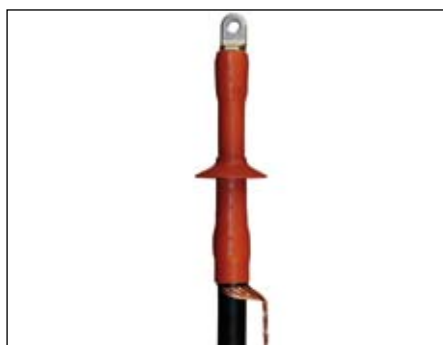
Approvals

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- Shipbuilding license, Lloyd's Register, LV-Tubes/Furnitures, Certificate-No. 96/20024

CHE-I

Single-core indoor termination

for all polymeric single-core cables



Type CHE-I terminations are suitable for all single-core plastic-insulated cables (PVC, PE, XLPE, EPR) with different types of semi-conducting layers (graphite-coated or strippable) and screening (copper wire or tape).

Dimensions



L = Length
Ø S = Diameter of shed

Characteristics

- Flexible silicone stress control elements ensure reliable stress control under all operating conditions
- Combination of slip-on and heat-shrink components
- Compatible with all cable lugs
- Wide cross-section range
- Quick, safe and easy assembly
- Ready for immediate operation

Application

- Indoor

Note

- Cable lugs not included
- 12 kV terminations must be used for 7.2 kV cables (Check minimum diameter over conductor insulation). Each unit contains materials for one set of three terminations.

Scope of delivery

- Tracking-resistant heat-shrink tubing
- Silicone stress-control elements
- Silicone sheds
- Sealing tape
- Assembly instructions
- 1 Set for 3 phases

Tests

- CENELEC HD 629.1 (DIN VDE 0278, part 629-1)

Type	insulated diameter after removal of the outer conducting layer mm	Number of sheds per phase	Ø S mm	Nominal cross section mm ²		L mm	Art.-No.	
				12kV	17.5kV			
U₀/U (U_m) 6/10 (12)kV - 6.35/11 (12)kV								
CHE-I 12kV	10-25	9.9			10 - 25	300	193414	
	25-95	12.6			25 - 95	300	193416	
	95-240	17.3			95 - 240	300	194017	
	150-400	19.9			150 - 400	300	194018	
	240-500	23.1			240 - 500	300	194019	
	400-800	27.3			400 - 800	300	194030	
	800-1000	36.8			800 - 1,000	300	194031	
U₀/U (U_m) 8.7/15 (17.5)kV								
CHE-I 17kV	16-50	12.6	1	80		16 - 50	300	194033
	70-240	17.3	1	85		70 - 240	300	194034
	120-300	19.9	1	85		120 - 300	300	194035
	185-400	23.1	1	85		185 - 400	300	194036
	300-630	27.3	1	115		300 - 630	300	194037
	630-1000	36.8	1	123		630 - 1,000	300	194038

Appropriate cable lugs must be ordered separately.

Type EGA earthing kit for cables with tape screen must be ordered separately.

Approvals

- Shipbuilding license, American Bureau of Shipping, MV-Terminations, Certificate-No. 07-HG270834-PDA
- Shipbuilding license, Det Norske Veritas, MV-Terminations, Certificate-No. E-9380
- Shipbuilding license, Germanischer Lloyd, MV-Terminations, Certificate-No. 15 598 - 00 HH
- Shipbuilding license, Lloyd's Register, MV-Terminations, Certificate-No. 03/20066

CAE-I

Single-core indoor termination

for all polymeric single-core cables



Type CAE-I terminations are suitable for all single-core plastic-insulated cables (PVC, PE, XLPE, EPR) with different types of semi-conducting layers (graphite-coated or strippable) and screening (wire or tape screen). Suitable for compression cable lugs.

Dimensions



L = Length
Ø S = Diameter of shed

Characteristics

- Wide cross-section range
- Silicone slip-on components for quick, safe and easy assembly
- Ready for immediate operation

Application

- Indoor

Note

- Compression cable lugs not included
- 12 kV terminations must be used for 7.2 kV cables (Check minimum diameter over conductor insulation).

Scope of delivery

- 3 one-piece slip-on silicone terminations with integrated stress control element
- Sealing tape
- Assembly instructions

Tests

- CENELEC HD 629.1 (DIN VDE 0278, part 629-1)

Type	insulated diameter after removal of the outer conducting layer mm	Number of sheds per phase	Ø S mm	Nominal cross section mm ²		L mm	Art.-No.
				12kV	17.5kV		
U₀/U (U_m) 6/10 (12)kV - 6.35/11 (12)kV							
CAE-I 12kV	95-240	17.3	1	87	95 - 240	270	199151
	150-400	19.9	1	90	150 - 400	270	199152
	240-500	23.1	1	93	240 - 500	270	199154
	300-800	27.3	1	97	300 - 800	270	199155
U₀/U (U_m) 8.7/15 (17.5)kV							
CAE-I 17kV	50-185	17.3	1	87		50 - 185	270 199157
	95-240	19.9	1	90		95 - 240	270 199158
	150-400	23.1	1	93		150 - 400	270 199159

Appropriate cable lugs must be ordered separately.

Accessories for cables with tape screen must be ordered separately.

Approvals

- Shipbuilding license, American Bureau of Shipping, MV-Terminations, Certificate-No. 07-HG270834-PDA

CHE-3I(B)

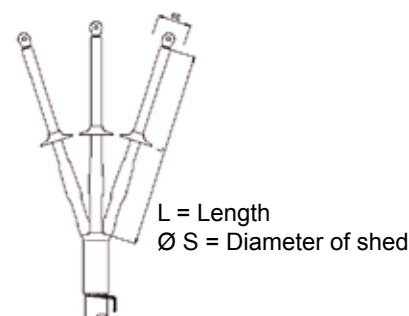
Three-core indoor termination

for all 3-core polymeric cables



Type CHE-3I(B) terminations are suitable for all three-core plastic-insulated cables (PVC, PE, XLPE, EPR) with different types of semi-conducting layers (graphite-coated or strippable) and screening (copper wire or tape).

Dimensions



Characteristics

- Flexible silicone stress control elements ensure reliable stress control under all operating conditions
- Combination of slip-on and heat-shrink components
- Wide cross-section range
- Quick, safe and easy assembly
- Ready for immediate operation

Application

- Indoor

Note

- Cable lugs not included
- 12 kV terminations must be used for 7.2 kV cables (Check minimum diameter over conductor insulation).

Scope of delivery

- Tracking resistant spreader cap
- Tracking-resistant heat-shrink tubing
- Silicone stress-control elements
- Silicone sheds
- Pressure spring
- Assembly accessories
- Sealing tape
- Assembly instructions

Tests

- CENELEC HD 629.1 (DIN VDE 0278, part 629-1)

Type	insulated diameter after removal of the outer conducting layer mm	Nominal cross section mm ²		L mm	Art.-No.
		12kV	17.5kV		
U₀/U (U_m) 6/10 (12)kV - 6.35/11 (12)kV					
CHE-3I(B) 12kV	10-25	9.9	10 - 25	350	184796
	25-95	12.6	25 - 95	350	173134
	95-240	17.3	95 - 240	350	173132
	150-400	19.9	150 - 400	350	180522
U₀/U (U_m) 8.7/15 (17.5)kV					
CHE-3I(B) 17kV	25-50	12.6	25 - 50	400	182731
	70-240	17.3	70 - 240	400	182732
	150-300	19.9	150 - 300	400	182733
	185-400	23.1	185 - 400	400	182734

Appropriate cable lugs must be ordered separately.

Type EGA earthing kit for cables with tape screen must be ordered separately.

Approvals

- Shipbuilding license, American Bureau of Shipping, MV-Terminations, Certificate-No. 07-HG270834-PDA
- Shipbuilding license, Det Norske Veritas, MV-Terminations, Certificate-No. E-9380
- Shipbuilding license, Germanischer Lloyd, MV-Terminations, Certificate-No. 15 598 - 00 HH
- Shipbuilding license, Lloyd's Register, MV-Terminations, Certificate-No. 03/20066

CAE-3I

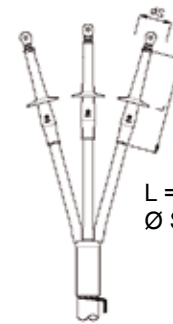
Three-core indoor termination

for all 3-core polymeric cables



Type CAE-3I terminations are suitable for all three-core plastic-insulated cables (PVC, PE, XLPE, EPR) with different types of semi-conducting layers (graphite-coated or strippable) and screening (wire or tape screen).

Dimensions



L = Length
Ø S = Diameter of shed

Characteristics

- Wide cross-section range
- Silicone slip-on components for quick, safe and easy assembly
- Ready for immediate operation

Application

- Indoor

Note

- Compression cable lugs not included
- 12 kV terminations must be used for 7.2 kV cables (Check minimum diameter over conductor insulation).

Scope of delivery

- 3 one-piece slip-on silicone terminations with integrated stress control element
- Silicone tube
- Silicone cold-shrink spreader cap
- Assembly accessories
- Sealing tape
- Assembly instructions

Type	insulated diameter after removal of the outer conducting layer mm	Number of sheds per phase	Ø S mm	Nominal cross section mm ²		L mm	Art.-No.
				12kV	17.5kV		
U₀/U (U_m) 6/10 (12)kV - 6.35/11 (12)kV							
CAE-3I 12kV	95-240	17.3	1	87	95 - 240	270	199170
	150-400	19.9	1	90	150 - 400	270	199171
U₀/U (U_m) 8.7/15 (17.5)kV							
CAE-3I 17kV	50-185	17.3	1	87		50 - 185	199173
	95-240	19.9	1	90		95 - 240	199174
	150-400	23.1	1	93		150 - 400	199175

Appropriate compression cable lugs must be ordered separately.
Type EGA earthing kit for cables with tape screen must be ordered separately.

Approvals

- Shipbuilding license, American Bureau of Shipping, MV-Terminations, Certificate-No. 07-HG270834-PDA

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