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



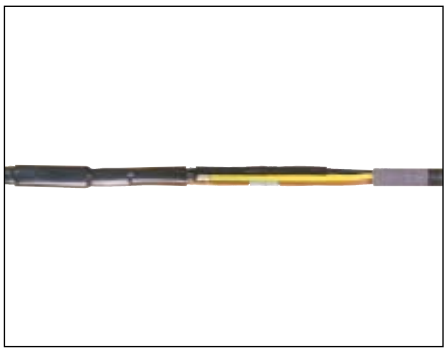
Systems For Professionals

CELLPACK
Electrical Products

a BBC GROUP company

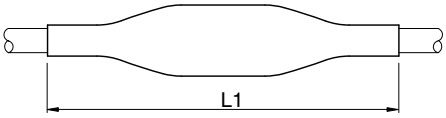
D787 • 0411

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)

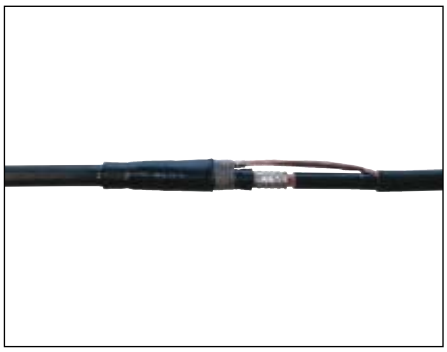
Storage conditions/Shelf life
- Unlimited shelf life

Type		Nominal cross section per conductor Polymeric cable mm²		L1 mm	Art.-No.
		3x	4x		
U_0/U (U_m) 0.6/1 (1.2) kV					
SMH3/4	1.5-4 LR/GL-BV	1.5 – 4	1.5 – 4	350	**145409**
	6-16 LR/GL-BV	6 – 16	6 – 16	500	**145410**
	25-35 LR/GL-BV	25 – 35	25 – 35	550	**145411**
	50-120 LR/GL-BV	50 – 120	50 – 120	700	**145412**

Appropriate connectors must be ordered separately.

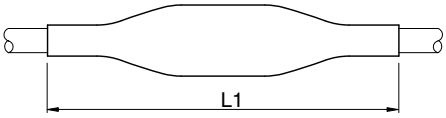
Approvals
- Shipbuilding license, Det Norske Veritas, LV-Furnitures, Certificate-No. E-9379
- Shipbuilding license, Lloyd's Register, LV-Tubes/Furnitures, Certificate-No. 96/20024
- Shipbuilding license, Germanischer Llyod, LV-Furnitures, Certificate-No. 98 732 - 96 HH
- Shipbuilding license, American 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

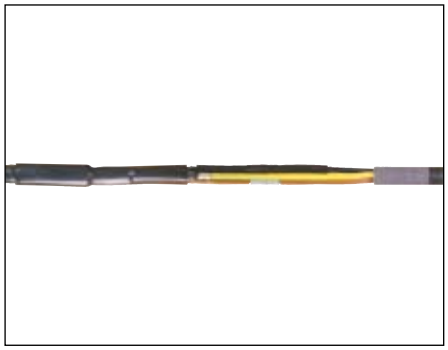
Storage conditions/Shelf life
- Unlimited shelf life

Type		Nominal cross section per conductor mm²		L1 mm	Art.-No.
U_0/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
- Shipbuilding license, Det Norske Veritas, LV-Furnitures, Certificate-No. E-9379
- Shipbuilding license, Germanischer Llyod, LV-Furnitures, Certificate-No. 98 732 - 96 HH
- Shipbuilding license, Lloyd's Register, LV-Tubes/Furnitures, Certificate-No. 96/20024
- Shipbuilding license, Bureau Veritas, LV-Furnitures Certificate-No. 07649/C0 BV

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 mm²	L1 mm	Art.-No.
		1.5 mm²	2.5 mm²			
U_0/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
- Shipbuilding license, American Bureau of Shipping, LV-Tubes/Furnitures, Certificate-No. 07-HG271120-PDA
- Shipbuilding license, Germanischer Llyod, LV-Furnitures, Certificate-No. 98 732 - 96 HH
- Shipbuilding license, Lloyd‘s Register, LV-Tubes/Furnitures, Certificate-No. 96/20024
- Shipbuilding license, Det Norske Veritas, LV-Furnitures, Certificate-No. E-9379
- Shipbuilding license, Bureau Veritas, LV-Furnitures Certificate-No. 07649/C0 BV

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 mm²	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
- Shipbuilding license, Lloyd's Register, LV-Tubes/Furnitures, Certificate-No. 96/20024
- Shipbuilding license, Germanischer Llyod, 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

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
- Shipbuilding license, Det Norske Veritas, LV-Tubes, Certificate-No. E-9378
- Shipbuilding license, Germanischer Llyod, 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
- Shipbuilding license, American Bureau of Shipping, LV-Tubes/Furnitures, Certificate-No. 07-HG271120-PDA
- Shipbuilding license, Det Norske Veritas, LV-Tubes, Certificate-No. E-9378
- Shipbuilding license, Germanischer Llyod, LV-Furnitures, Certificate-No. 98 732 - 96 HH
- 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

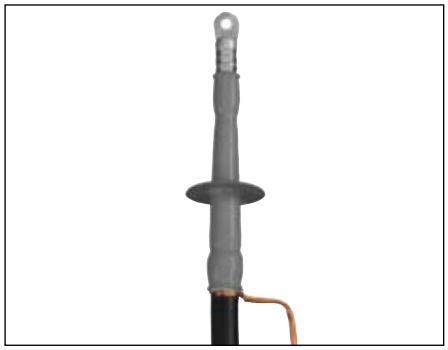
Tests
- CENELEC HD 629.1 (DIN VDE 0278, part 629-1)

Type		insulated diameter after removal of the outer conducting layer mm	Number of sheds per phase	Ø S mm	Nominal cross section mm²		L mm	Art.-No.
					12kV	17.5kV		
U_0/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**
U_0/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 Llyod, 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 mm²		L mm	Art.-No.
					12kV	17.5kV		
U_0/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**
U_0/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.

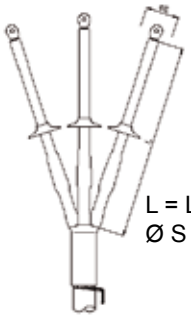
Approvals
- Shipbuilding license, American Bureau of Shipping, MV-Terminations, Certificate-No. 07-HG270834-PDA

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



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
- 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 mm²		L mm	Art.-No.
			12kV	17.5kV		
U_0/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**
U_0/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.

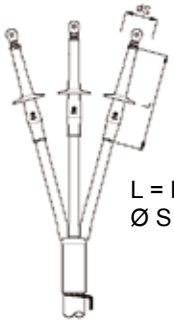
Approvals
- Shipbuilding license, American Bureau of Shipping, MV-Terminations, Certificate-No. 07-HG270834-PDA
- Shipbuilding license, Det Norske Veritas, MV-Terminations, Certificate-No. E-9380
- Shipbuilding license, Germanischer Llyod, MV-Terminations, Certificate-No. 15 598 - 00 HH
- Shipbuilding 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 mm²		L mm	Art.-No.
					12kV	17.5kV		
U_0/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**
U_0/U (U_m) 8.7/15 (17.5)kV								
CAE-3I 17kV	50-185	17.3	1	87		50 - 185	270	**199173**
	95-240	19.9	1	90		95 - 240	270	**199174**
	150-400	23.1	1	93		150 - 400	270	**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

Electropar Preformed Line Products
35 Lady Ruby Drive, East Tamaki, Manukau 2013
Tel. +64 9 274 2000 | Fax +64 9 274 2001
sales@electropar.co.nz

