

Market Specific Products

PRODUCT NAME	SHRINK RATIO	DESCRIPTION	OPERATING TEMPERATURE °C		TYPICAL APPLICATIONS
			MAX	MIN	
→ CCAP	3:1	PE End Caps	100	-55	Sealing of cables against moisture
→ CCB	various	Cable breakouts PE	100	-55	Sealing of cable & conduit breakouts
→ CCBA & CCB-Con	various	Anti-track medium voltage breakouts & Conductive breakouts	100	-55	Sealing of cable & conduit breakouts
→ CEC	various	PE End Caps	100	-55	Sealing of cables against moisture
→ CFSP	3:1	Fiber Optic Splice Protection + Support Sleeve	60	-20	Protection of optical fiber splices
→ CGEL 596/711	-	Gel filled PE Drop Cable Splice Enclosure	80	-40	Waterproof coaxial cable joint
→ CBTM	3:1	Medium wall anti-track tube	125	-40	Insulation of medium voltage busbars up to 25kV
→ CBTH	3:1	Heavy wall anti-track tube	125	-40	Insulation of medium voltage busbars up to 36 kV
→ DERAY®-KSF	>2:1	Heavy wall anti-track tube	135	-40	Insulation of medium voltage busbars up to 36 kV
→ CNTT	>2:1	Medium wall anti-track tube	125	-55	Insulation of medium voltage joints & terminations up to 36kV, in- and outdoor
→ CRDW	various	Railed Wraparound Sleeve	45	-15	Cable jacket repair & splicing applications
→ CRLS	3:1	RAIL-LESS® Repair Sleeve	110	-55	Cable repair & splicing applications where tubing cannot be used
→ LV Kits	-	Individually to combine	-	-	Joining multi-core, polymeric insulated energy cables in the low voltage range.
→ Signal Kits	-	Individually to combine	-	-	Particularly suitable for connecting screened signal cables in industry, rail and mass transit
→ Terminations	-	Individually to combine	-	-	Suitable for terminations and joints up to 36 kV for XLPE, PVC, PILC and PE medium voltage cables

→ Heat Shrink Tubing Products



Market Specific Products

Specialty product lines have grown as DSG-Canusa continues with its commitment to be a full service and product supplier to key markets.

Examples include:

- Solutions for the Electrical/Utility market including break-out boots, end caps and RAIL-LESS® sleeves
- Automotive products including wire harness solutions, hose & pipe solutions and a wide variety of shrink appliances
- Products for Electronics applications ranging from high performance tubing for the industrial user to tube kits for the tradesman.
- Communications industry solutions including fiber optic splice protectors and splice closures

→ **Product Selection Chart**

CCAP

Heat shrinkable end caps provide a simple yet effective method for sealing cable ends, pipe conduit, or other similar objects

Features

- Superior resistance to weathering, moisture contamination and adverse environmental conditions
- Resistant to common fluids and solvents
- Optional adhesive liner provides complete environmental protection and insulation
- Heat indicating lines
- Valved end cap available for pressurized applications
- Continuous Operating Temperature: -55°C to 110°C
- Shrink Temperature: 120°C



Dimensions

ORDER REF. NO.	EXPANDED		RECOVERED			GENERAL USE DIAMETER
	INTERNAL DIAMETER (MIN)	LENGTH*	INTERNAL DIAMETER (MAX)	LENGTH**	WALL THICKNESS (NOM)	
	D	mm	D	mm	W	
0400	10,20	76,20	3,8	63,50	2,00	4,5 - 8,5
0750	19,10	88,90	5,6	63,50	2,00	6,0 - 16,5
1100	27,90	101,60	10,2	76,20	2,00	11,5 - 25,0
1300	33,00	101,60	10,2	76,20	2,00	11,5 - 30,0
1500	38,10	114,30	12,7	82,50	2,00	14,0 - 35,0
1700	43,20	114,30	12,7	82,50	2,00	14,0 - 40,0
2050	52,10	114,30	19,0	88,90	2,00	21,0 - 45,0
2750	69,80	127,00	25,4	101,60	2,00	30,0 - 63,0
3500	88,90	127,00	30,0	114,30	2,40	33,0 - 83,8
4700	119,40	165,10	39,9	139,70	2,70	40,6 - 114,3

* Length is measured from shoulder to open end of cap ** Recovery dimensions ±6 mm

Technical Data

Physical

Property	Test Method	Typical Performance
Tensile Strength	ASTM-D 412, ISO 37	14,5 MPa
Elongation	ASTM-D 412, ISO 37	550%
Specific Gravity	ASTM-D 792, A-1	1,1 g/cm ³ max.
Elongation after Heat Aging (168 hrs at 150°C)	ASTM-D 2671	500%
Heat Shock (4 hrs at 225°C)	ASTM-D 2671	no cracking or flowing
Low Temperature Flexibility	ASTM-D 2671	does not break at -55°C
Hardness (Shore D)	ASTM-D 2240	50D

Electrical

Property	Test Method	Typical Performance
Dielectric Strength	ASTM-D 149	20 kV/mm
Dielectric Voltage Withstand (2500 V, 60Hz, 1min)	UL 486D	no breakdown
Volume Resistivity	ASTM-D 257	10 ¹⁶ Ω x cm

Standard Colours	Special Colours
black ■	On Request

Printability	Hot stamp	Ink jet	Offset
	good	good	good

Seal Integrity

Property	Test Method	Typical Performance
Room Temperature (23°C)	168 hrs/ 40psi	no leaks
Temp. Cycling (-40°C to 60°C)	50 cycles	maintains seal
Burst Pressure		0,70 MPa
Adhesive Lap Shear (1in./min at 23°C)	ASTM-D 1002	130 psi (0,91 MPa)
Softening Point	ASTM-E 28	92°C/-5°C
Adhesive Peel Strength (300mm/min at 23°C)	ASTM-D 1000	35 pli 20 pli
> to steel, aluminium, P.E > to PVC		
Adhesive Blocking (30°C)	ASTM-D 1146	no blocking
Water Penetration	STM 706	no penetration after 236 hrs. of continuous immersion

Chemical

Property	Test Method	Typical Performance
Corrosive Action	ASTM-D 2671 Meth. A	non-corrosive
Copper Compatibility	ASTM-D 2671 Meth. B	non-corrosive
Fluid Resistance	MIL-DTL-23053	good to excellent
Water Absorption	ASTM-D 570	0,10%
Fungus Resistance	ASTM-G 21	no growth

Ordering: **Specify the product name** plus each of the following options: 1) Size 2) Colour 3) Total Quantity 4) Printing Options 5) Lining Options 6) Valve Options For example: CCAP 0400 black, 1.600 pcs., unprinted, lined, unvalved

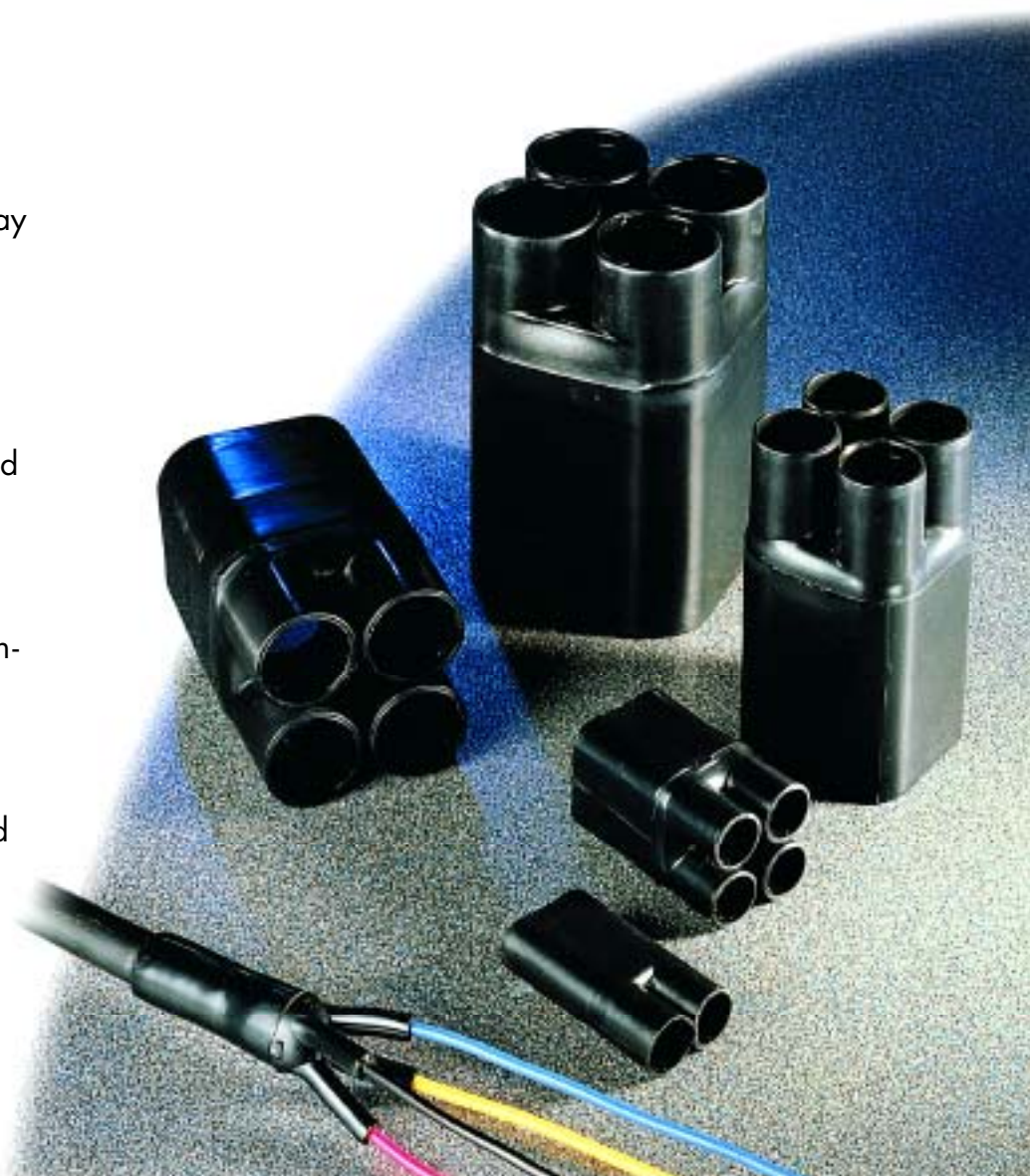
→ **Product Selection Chart**

CCB

Heat shrinkable boots seal and protect multi-conductor cable and conduit breakouts

Features

- Boots for 2, 3, 4, 5 and 6 way cable breakouts
- Strain relief and mechanical protection
- Resistant to common fluids and solvents
- Thermoplastic adhesive liner provides complete environmental protection and insulation
- Also available as anti-track medium voltage breakouts and as conductive breakouts
- Continuous Operating Temperature: -55°C to 100°C
- Shrink Temperature: 135°C



Dimensions

CCB Low Voltage Breakouts						
ORDER REF. NO.	EXPANDED		RECOVERED		RECOVERED FULL LENGTH	RECOVERED FINGER LENGTH
	BREAKOUT MAIN DIAMETER (MIN) mm	FINGER DIAMETER (MIN) mm	BREAKOUT MAIN DIAMETER (MAX) mm	FINGER DIAMETER (MAX) mm	± 10% mm	± 10% mm
CCB2 - Two Core Breakouts						
CCB2 33/14	33,0	14,0	10,0	3,00	90,00	20,0
CCB2 50/21	50,0	21,0	22,9	7,50	119,00	34,0
CCB2 87/43	87,0	43,0	38,0	13,0	141,00	42,0
CCB3 - Three Core Breakouts						
CCB3 38/11	38,0	11,0	14,0	4,00	110,0	20,0
CCB3 60/24	60,0	24,0	22,0	8,00	185,0	45,0
CCB3 80/36	80,0	36,0	33,0	16,0	210,0	50,0
CCB3 110/48	110,0	48,0	47,0	20,0	260,0	75,0
CCB3 125/55	125,0	55,0	47,0	20,0	260,0	75,0
CCB4 - Four Core Breakouts						
CCB4 38/11	38,0	11,0	14,0	4,0	110,0	20,0
CCB4 55/20	55,0	20,0	22,0	8,5	190,0	45,0
CCB4 72/25	72,0	25,0	22,0	8,5	190,0	45,0
CCB4 100/35	100,0	35,0	33,0	14,0	215,0	50,0
CCB4 125/54	125,0	54,0	47,0	22,0	245,0	72,0
CCB5 - Five Core Breakouts						
CCB5 60/30	60,0	30,0	24,0	7,5	180,0	30,0
CCB6 - Six Core Breakouts						
CCB6 61/21	61,0	20,5	37,0	9,0	137,0	51,0

Technical Data

Physical

Property	Test Method	Typical Performance
Tensile Strength	ASTM-D 638 (M)	10,0 MPa min.
Elongation	ASTM-D 638 (M)	300% min.
Hardness	Internal	40 Shore D min.
Tensile Strength after thermal aging (120°C, 168 hrs)	ISO - 188	9 Mpa min.
Elongation after thermal aging (120°C, 168 hrs)	ISO - 188	250% min.
Water absorption	ISO - 62	1% max.
Dielectric Strength	IEC - 243	12 kV/mm
Dielectric Constant	IEC - 250/ASTM-D 150	5 max.
Resistance to tracking	ASTM-D 2303	N/A
Volume Resistivity	IEC 93	10 ¹² Ω x cm
Flammability	ESI 09-13	Non flame retardant

Raw Material

Property	Test Method	Typical Performance
Tensile Strength	ASTM-D 638 (M)	10 MPa min.
Elongation	ASTM-D 638 (M)	300% min.
Hardness	ASTM-D 2240	40 Shore D min.

Standard Colours		Special Colours	
CCB	black	On Request	

Printability	Hot stamp	Ink jet	Offset
	excellent	excellent	excellent

Delivery Units on request

Ordering: **Specify the product name** and the number of cores plus each of the following options:

- 1) Size 2) Colour 3) Total Quantity 4) Printing Options
For example: CCB3 38/11 black, 2.000 pcs., unprinted

→ **Product Selection Chart**

CCBA & CCB-Con

Heat shrinkable boots seal and protect multi-conductor cable and conduit breakouts

CCBA = Anti-track medium voltage breakouts

CCB-Con = Conductive breakouts

Features

- Strain relief and mechanical protection
- Resistant to common fluids and solvents
- Thermoplastic adhesive liner provides complete environmental protection and insulation
- Continuous Operating Temperature: -55°C to 100°C
- Shrink Temperature: 135°C



Dimensions

CCBA Anti-Track Medium Voltage Breakouts - Three Core Breakouts only

ORDER REF. NO.	EXPANDED		RECOVERED		RECOVERED FULL LENGTH	RECOVERED FINGER LENGTH
	BREAKOUT MAIN DIAMETER (MIN)	FINGER DIAMETER (MIN)	BREAKOUT MAIN DIAMETER (MAX)	FINGER DIAMETER (MAX)	± 10%	± 10%
	mm	mm	mm	mm	mm	mm
CCBA 60/24	60,0	24,0	22,0	8,0	185,0	45,0
CCBA 80/36	80,0	36,0	33,0	16,0	210,0	50,0
CCBA 110/48	110,0	48,0	47,0	20,0	260,0	75,0
CCBA 125/55	125,0	55,0	47,0	20,0	260,0	75,0

CCB-Con Conductive Breakouts - Three Core Breakouts only

ORDER REF. NO.	EXPANDED		RECOVERED		RECOVERED FULL LENGTH	RECOVERED FINGER LENGTH
	BREAKOUT MAIN DIAMETER (MIN)	FINGER DIAMETER (MIN)	BREAKOUT MAIN DIAMETER (MAX)	FINGER DIAMETER (MAX)	± 10%	± 10%
	mm	mm	mm	mm	mm	mm
CCB-CON 60/24	60,0	24,0	22,0	8,0	185,0	45,0
CCB-CON 80/36	80,0	36,0	33,0	16,0	210,0	50,0
CCB-CON 110/48	110,0	48,0	47,0	20,0	260,0	75,0
CCB-CON 125/55	125,0	55,0	47,0	20,0	260,0	75,0

Technical Data

Product

Property	Test Method	Typical Performance CCBA	Typical Performance CCB-Con
Tensile Strength	ASTM-D 638 (M)	7,0 MPa min.	12,0 MPa min.
Elongation	ASTM-D 638 (M)	300% min.	300% min.
Hardness	Internal	32 Shore D min.	40 Shore D min.
Tensile Strength after thermal aging (120°C, 168 hrs)	ISO - 188	6 Mpa min.	10 Mpa min.
Elongation after thermal aging (120°C, 168 hrs)	ISO - 188	250% min.	250% min.
Water absorption	ISO - 62	1% max.	1% max.
Dielectric Strength	IEC - 243	12 kV/mm	Conductive
Dielectric Constant	IEC - 250/ASTM-D 150	5 max.	Conductive
Resistance to tracking	ASTM-D 2303	no failure by tracking after 1 hour at 2.5 kV, 1 hour at 2.75 kV, 1 hour at 3.0 kV, 20 minutes at 3.25 kV	N/A
Volume Resistivity	IEC 93	10 ¹⁴ Ω x cm	2*10 ⁴ Ω x cm
Flammability	ESI 09-13	non burning	Non flame retardant

Standard Colours		Special Colours	
CCBA	reddish-brown		
CCB-Con	black		Not Available

Raw Material

Property	Test Method	Typical Performance coloured	Typical Performance clear
Tensile Strength	ASTM-D 638 (M)	7 MPa min.	12 MPa min.
Elongation	ASTM-D 638 (M)	300% min.	300% min.
Hardness	ASTM-D 2240	32 Shore D min.	40 Shore D min.

Printability	Hot stamp	Ink jet	Offset
	Excellent	Excellent	Excellent

Ordering: **Specify the product name** and the number of cores plus each of the following options:

1) Size 2) Colour 3) Total Quantity 4) Printing Options

For example: CCBA 60/24, reddish-brown, 2.000 pcs., unprinted

→ **Product Selection Chart**

CEC

Adhesive-lined heat shrinkable end cap which enables easy protection and sealing of unused cables from environmental effects

Features

- Unaffected by ultraviolet light
- Good chemical and solvent resistance
- Unlimited storage life
- Thermoplastic liner provides complete environmental seal
- Continuous Operating Temperature: -55°C to 100°C
- Shrink Temperature: 120°C



Dimensions

ORDER REF. NO.	EXPANDED	RECOVERED			GENERAL USE DIAMETER mm
	INTERNAL DIAMETER* (MIN) A mm	INTERNAL DIAMETER* (MAX) A mm	LENGTH (MIN) B mm	WALL THICKNESS (MIN) T mm	
CEC 15/4,5	15,0	4,5	44,0	1,0	5,0 - 12,0
CEC 25/9	25,0	9,0	69,0	2,7	10,0 - 22,0
CEC 36/15	36,0	15,0	93,0	2,8	17,0 - 30,0
CEC 55/25	55,0	25,0	107,0	3,3	28,0 - 47,0
CEC 80/24	80,0	24,0	127,0	4,7	28,0 - 70,0
CEC 80/40	80,0	40,0	127,0	3,6	45,0 - 70,0
CEC 102/60	102,0	60,0	152,0	3,6	68,0 - 90,0
CEC 124/60	124,0	60,0	152,0	3,6	75,0 - 110,0
CEC 148/57	148,0	57,0	152,0	4,5	80,0 - 135,0

* Internal diameter without adhesive coating

Technical Data

Physical

Property	Test Method	Typical Performance
Tensile Strength	ASTM-D 638 M	12,0 MPa min.
Elongation	ASTM-D 638 M	300% min.
Water Absorption	ISO - 62	1,0% max.
Shore Hardness	ASTM-D 2240	45 Shore D min.

Thermal

Property	Test Method	Typical Performance coloured
Shrink temperature		> 130°C
Tensile Strength after Heat Aging (168 hrs at 120°C)	ISO - 188	10,0 MPa min.
Elongation after Heat Aging (168 hrs at 120°C)	ISO - 188	250% min.

Electrical

Property	Test Method	Typical Performance
Dielectric Strength	IEC - 243	12 kV/mm min.
Volume Resistivity	IEC - 93	10 ¹¹ Ω x cm

Printability	Hot stamp	Ink jet	Offset
	good	good	good

Standard Colours	Special Colours
black 	On request

Ordering: **Specify the product name** plus each of the following options: 1) Size 2) Colour 3) Total Quantity 4) Printing Options
For example: CEC 36/55 black, 1.075 pcs., unprinted

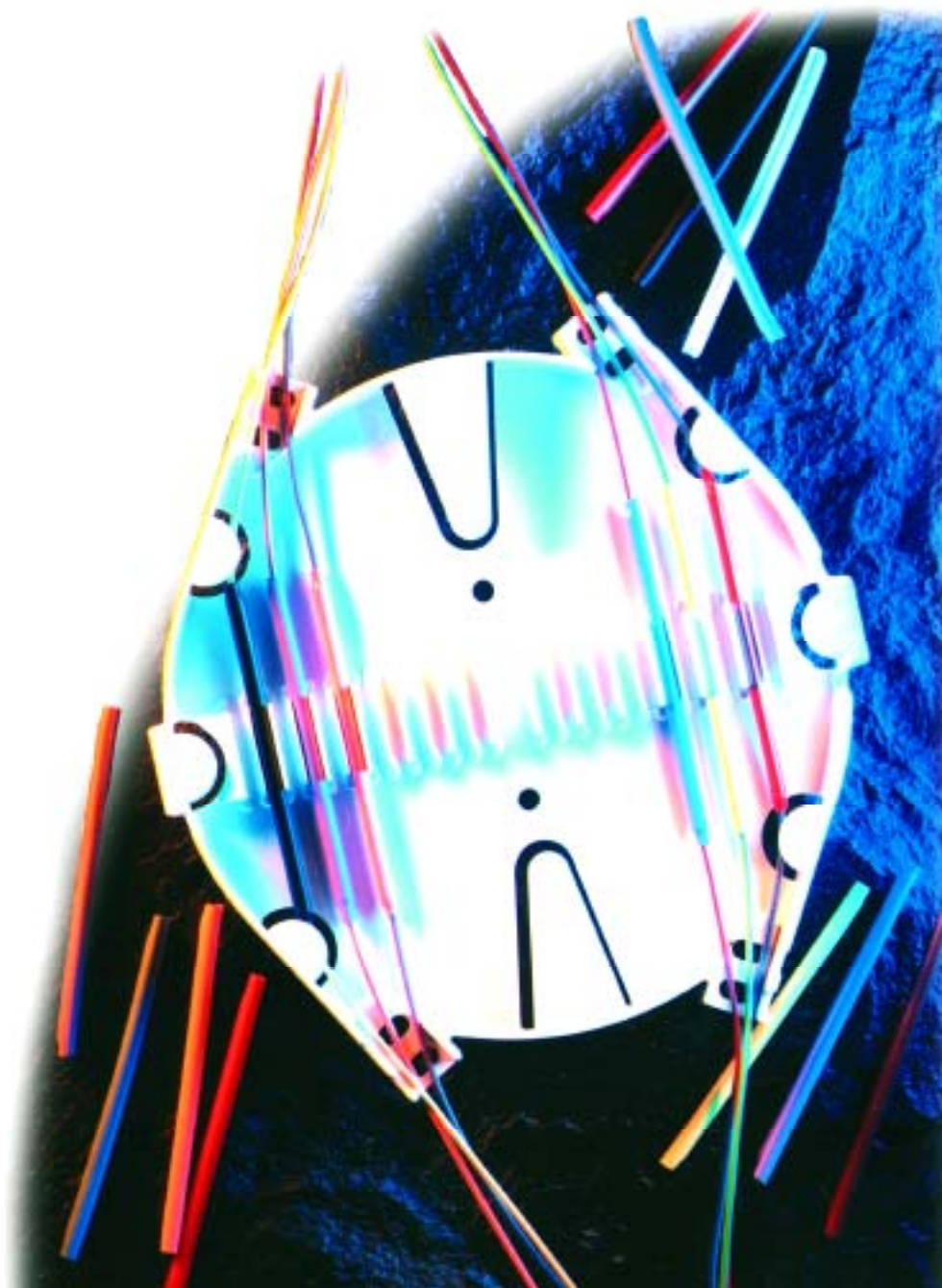
→ **Product Selection Chart**

CFSP

A specially designed crosslinked polyolefin tubing system, with melt-able liner, providing strength and protection to optical fibre splices

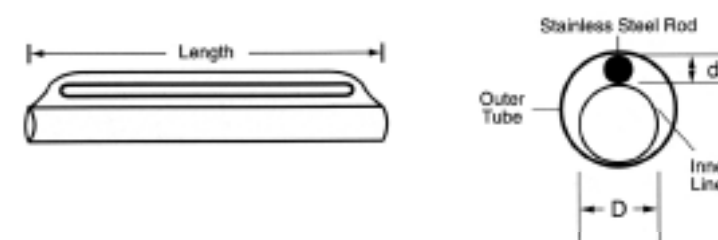
Features

- Single holed (preshrunk) ends eliminates improper fibre threading
- Smooth, deburred stainless steel reinforcing member ends decrease the risk of fibre damage during installation
- Extended liner length prevents contact between the fibre and the backbone
- Clear sleeve design permits easy centering of splice before heating
- Continuous Operating Temperature: -20°C to 60°C
- Shrink Temperature: 90°C



Dimensions

Nominal Sleeve Length	Inside Diameter of Inner Liner (MIN)	Nominal Steel Diameter	DELIVERY UNITS
mm	mm	mm	pcs.
61,0	1,5	1,2	100
45,0	1,5	1,2	100
23,0	1,5	1,2	100



Technical Data

Physical

Property	Test Method	Typical Performance
Tensile Strength	ASTM-D 2671, ISO R527	25 MPa
Density	ISO R1183D	0,94
Vicat Softening Point	ISO R306	66°C
Ultimate Elongation	ISO 37	400%
Longitudinal Change	ASTM-D 2671	±5%
Dielectric Strength	IEC 243	20 kV/mm

Standard Colours	Special Colours
clear 	On request

Ordering: **Specify the product name** plus each of the following options: 1) Size 2) Colour 3) Total Quantity
For example: CFSP 45,0 mm clear, 2.000 pcs.

→ **Product Selection Chart**

CGEL 596 / CGEL 711

Gel filled closure provides complete environmental protection for coaxial drop splices in burial and aerial applications

Features

- Single piece, clam shell design, requires no additional tools for installation
- Gel filled for complete waterproof protection
- Expansion chambers prevent gel overflow
- Accommodates a wide range of standard F type and environmentally sealed coaxial connectors
- Accommodates all coaxial cable types including quad shielded cable
- Fully re-enterable
- Channel provided for retaining messenger cable
- Tough outer shell withstands impact testing to 5 ft-lbs force
- Meets SCTE IPS-TP-013 requirements for water immersion and temperature cycling



Dimensions

CGEL	NOMINAL DIAMETER (MIN)	STANDARD LENGTH	DELIVERY UNITS
	mm	mm	pcs.
596	25,4	116,0	12
711	30,48	165,0	12

Technical Data

Gel Properties

Physical

Property	Test Method	Typical Performance
Cone Penetration	ASTM-D 1824	121,0 mm
Surface Tack		3,0 sec
Elongation		> 1.200%
Specific Gravity	ASTM-D 70	0,98 g/cm ³ max.

Environmental

Property	Test Method	Typical Performance
Heat Aging 60°C for 30 days		passed all tests
Long Term Life		properties retained for 20 years
Hydrophobic Properties		HLB<2

Electrical

Property	Test Method	Typical Performance
Dielectric Constant	ASTM-D 150	3.3 max at 1kHz 3.0 max at 100 kHz
Power Factor	ASTM-D 150	0.03 max at 1 kHz 0.03 max at 100 kHz

Ordering: Specify: CGEL 596 or CGEL 711 + Total Quantity

Application Ranges

Cables:

- 596: All 59 & 6 series coaxial cables including quad shield with messengers
- 711: All RG 7 & RG 11 series coaxial cables including quad shield with messengers

CGEL	596	711
	59 & 6 series coaxial connectors	RG 7 & RG 11 series coaxial connectors
Digicon:	Type 2 series, S series, 6 splice series	S series, RG 11 series
Augat:	F series, SNS series, environmentally sealed SNS	F series, SNS series
Gilbert:	GF, GFW and GF 360 F type, ultraseal series	GAF, GF 11S, GAF 360 type 7 & 11

Closure Properties

Material Property	Test Method	Typical Performance
Tensile Strength	ASTM-D 638	27 MPa
Notched Izod Impact at 23°C	ASTM-D 256A	2.0 ft-lbs/in
Drop Weight Impact Strength at -29°C	Montell	21 ft-lbs
Specific Gravity	ASTM-D 792	0,90 g/cm ³ max.

Electrical

Property	Test Method	Typical Performance
Moisture Migration	SCTE IPS-TP-013	no moisture migration
Impact Strength	Canusa-AH-01 5 ft-lbs, -18°C, 38°C	no cracking or opening of closure

Standard Colours	Special Colours
black 	Not Available

→ **Product Selection Chart**

CBTM

Medium wall anti-track heat shrinkable tubing specifically designed for insulating medium voltage bus bars

Features

- Flame Retardant
- Reduces bus bar clearance requirements
- Protects against accidental flashover
- Anti-track
- Halogen free
- Tested to ANSI C37.20.2 standards for medium voltage switchgear applications to 25 kV
- UL recognized component
- Continuous Operating Temperature: -40°C to 125°C
- Shrink Temperature: 120°C



Dimensions

CBTM - for services to 25 kV on unbolted bus bar

EXPANDED	RECOVERED		APPLICATION RANGES				DELIVERY UNITS
	INTERNAL DIAMETER (MIN) D	INTERNAL DIAMETER (MAX) D	WALL THICKNESS (NOM) w	RECTANGULAR BUS BARS (MIN) (MAX)		ROUND BUS BARS (MIN) (MAX)	
mm	mm	mm	mm	mm	mm	mm	m
19,0	5,5	2,70	6,4	6,4	6,8	15,2	15
33,0	10,1	3,00	12,7	28,5	12,4	27,9	15
52,0	19,0	2,80	31,5	50,8	22,3	43,1	15
69,8	25,4	2,90	44,4	76,2	29,7	58,4	15
88,9	29,9	3,10	57,1	101,6	35,8	73,6	15
119,3	39,9	3,20	73	142,8	47,7	101,6	15
170,1	58,4	3,20	114,3	203,2	69,5	144,7	15
228,6	76,9	3,30	-	-	91,9	190,5	15

Rectangular bus bars have thickness of 1/4 to 5/8 inch.

Application ranges noted above selected to obtain minimum insulation thickness required to meet ANSI C37.20.2 withstand requirements at bus bar spacing noted below. These spacings were determined from a limited number of test configurations. Due to the wide variety of bus bar configurations, these spacings should not be employed without actual testing by the user.

Clearances with Insulation

SYSTEM VOLTAGE	BIL kV	CBTM Medium Wall Tubing	
		p to p (mm)	p to g (mm)
15 kV	95	86,0	106,0
25 kV	125	114,0	152,0
36 kV	150	165,0	203,0

p to p: Phase to Phase orientation
p to g: Phase to Ground orientation
Spacing based on metal to metal dimension prior to insulation
Spacing based on insulation wall thickness per application range of above table

Technical Data

Physical

Property	Test Method	Typical Performance
Tensile Strength	ASTM-D 412, ISO 37	8,3 MPa
Elongation	ASTM-D 412, ISO 37	370%
Heat Aging (7 days at 175°C)		
Tensile Strength	ASTM-D 2671	10 Mpa
Elongation	ASTM-D 2671	200%
Heat Shock (4 hrs at 225°C)	ASTM-D 2671	no cracking or flowing
Low Temp. Flexibility (4 hrs at -25°C)	ASTM-D 2671	no cracking
Flammability	ANSI C37.20, ASTM-D 2671	passed

Standard Colours	Special Colours
red 	Not Available

Electrical

Property	Test Method	Typical Performance
Dielectric Strength	ASTM-D 149	20 kV/mm
Surface Resistivity	ASTM-D 257	510 x 10 ⁹ Ω
Volume Resistivity	ASTM-D 257	1.9 x 10 ¹⁶ Ω cm
Dielectric Constant	ASTM-D 150	3.4
Tracking Resistance (2500 V, 300 min)	ANSI C37.20, ASTM-D 2303	non-tracking
Weathering	ASTM-G 53	non-tracking after 6000 hours

Chemical

Property	Test Method	Typical Performance
Corrosive Action	ASTM-D 2671	non-corrosive
Fluid Resistance	MIL-DTL-23053/15	good to excellent
Water Absorption	ASTM-D 570	0,25%

Ordering: **Specify the product name** plus each of the following options: 1) Size 2) Colour 3) Total Quantity + Delivery Unit

For example: CBTM 52/19 red, 1.500 mtr., 15m-spool

→ **Product Selection Chart**

CBTH

Heavy wall anti-track heat shrinkable tubing specifically designed for insulating medium voltage bus bars

Features

- Flame Retardant
- Reduces bus bar clearance requirements
- Protects against accidental flash-over
- Anti-track
- Halogen free
- Tested to ANSI C37.20.2 standards for medium voltage switchgear applications to 36 kV
- UL recognized component
- Continuous Operating Temperature: -40°C to 125°C
- Shrink Temperature: 120°C



Dimensions

CBTH - for services to 36 kV on unbolted bus bar

EXPANDED	RECOVERED		APPLICATION RANGES				DELIVERY UNITS
	INTERNAL DIAMETER (MIN) D	INTERNAL DIAMETER (MAX) D	WALL THICKNESS (NOM) w	RECTANGULAR BUS BARS (MIN) (MAX)		ROUND BUS BARS (MIN) (MAX)	
mm	mm	mm	mm	mm	mm	mm	m
27,9	8,9	3,90	9,5	12,7	10,6	17,7	15
50,8	16	4,10	25,4	34,9	19,3	33,0	15
68,0	22,1	4,10	34,9	50,8	26,1	43,1	15
89,9	29,9	4,10	50,8	76,2	35,8	58,4	15
119,9	39,9	4,20	69,8	111,1	47,7	81,2	15
167,6	58,4	4,20	107,9	177,8	69,5	124,4	15

Rectangular bus bars have thickness of 1/4 to 5/8 inch.

Application ranges noted above selected to obtain minimum insulation thickness required to meet ANSI C37.20.2 withstand requirements at bus bar spacing noted below. These spacings were determined from a limited number of test configurations. Due to the wide variety of bus bar configurations, these spacings should not be employed without actual testing by the user.

Clearances with Insulation

SYSTEM VOLTAGE	BIL kV	CBTM Medium Wall Tubing	
		p to p (mm)	p to g (mm)
15 kV	95	55,0	66,0
25 kV	125	71,0	101,0
36 kV	150	142,0	190,0

p to p: Phase to Phase orientation
p to g: Phase to Ground orientation
Spacing based on metal to metal dimension prior to insulation
Spacing based on insulation wall thickness per application range of above table

Technical Data

Physical

Property	Test Method	Typical Performance
Tensile Strength	ASTM-D 412, ISO 37	8,3 MPa
Elongation	ASTM-D 412, ISO 37	370%
Heat Aging (7 days at 175°C)		
Tensile Strength	ASTM-D 2671	10 Mpa
Elongation	ASTM-D 2671	200%
Heat Shock (4 hrs at 225°C)	ASTM-D 2671	no cracking or flowing
Low Temp. Flexibility (4 hrs at -25°C)	ASTM-D 2671	no cracking
Flammability	ANSI C37.20, ASTM-D 2671	passed

Standard Colours	Special Colours
red 	Not Available

Electrical

Property	Test Method	Typical Performance
Dielectric Strength	ASTM-D 149	20 kV/mm
Surface Resistivity	ASTM-D 257	510 x 10 ⁹ Ω
Volume Resistivity	ASTM-D 257	1.9 x 10 ¹⁶ Ω cm
Dielectric Constant	ASTM-D 150	3.4
Tracking Resistance (2500 V, 300 min)	ANSI C37.20, ASTM-D 2303	non-tracking
Weathering	ASTM-G 53	non-tracking after 6000 hours

Chemical

Property	Test Method	Typical Performance
Corrosive Action	ASTM-D 2671	non-corrosive
Fluid Resistance	MIL-DTL-23053/15	good to excellent
Water Absorption	ASTM-D 570	0,25%

Ordering: **Specify the product name** plus each of the following options: 1) Size 2) Colour 3) Total Quantity + Delivery Unit

For example: CBTH 50/16 red, 300 mtr., 15m-spool

→Product Selection Chart

DERAY®-KSF

Heavy wall anti-track heat shrinkable tubing specifically designed for insulating medium voltage bus bars

Features

- Reduces bus bar clearance requirements
- Protects against accidental flash-over
- Anti-track
- Halogen free
- Continuous Operating Temperature: -40°C to 135°C
- Shrink Temperature: 125°C



Dimensions

EXPANDED	RECOVERED		DELIVERY UNITS
INTERNAL DIAMETER (MIN) D	INTERNAL DIAMETER (MAX) D	WALL THICKNESS (NOM) w	RED
mm	mm	mm	m
19,0	6,0	2,00	50
25,0	10,0	4,10	50
32,0	12,0	2,80	50
38,0	12,0	2,80	50
43,0	19,0	3,50	25
45,0	16,0	4,10	25
52,0	19,0	3,50	25
58,0	19,0	3,50	25
68,0	25,0	3,50	25
76,0	32,0	3,50	15
100,0	40,0	4,10	10

Technical Data

Physical

Property	Test Method	Typical Performance
Tensile Strength	IEC 60684-2	14 MPa
Elongation	IEC 60684-2	500%
Longitudinal Change	ASTM-D 2671	6% ± 3% max.
Secant Modulus	ASTM-D 882	30 MPa max.
Specific Gravity	ASTM-D 792, A-1	1,2 g/cm ³ max.
Elongation after Heat Shock (4 hrs at 200°C)	IEC 811-1-2	450%
Tensile Strength after Heat Shock (4 hrs at 200°C)	IEC 811-1-3	11 MPa
Low Temperature Flexibility	ASTM-D 2671 Meth. C	does not break at -40°C
Flammability	FMVSS 302	passed

Standard Colours	Special Colours
red 	Not Available

Electrical

Property	Test Method	Typical Performance
Dielectric Strength	VDE 0303 Part 2	20 kV/mm
Volume Resistivity	VDE 0303 Part 3	10 ¹⁴ Ω x cm
Comparative Tracking Index	IEC 112	CTI 600<0,1

Chemical

Property	Test Method	Typical Performance
Corrosive Action	ASTM-D 2671 Meth. A	non-corrosive
Copper Compatibility	ASTM-D 2671 Meth. B	non-corrosive
Water Absorption	VDE 0472	0,20%

Ordering: **Specify the product name** plus each of the following options: 1) Size 2) Colour 3) Total Quantity + Delivery Unit
For example: DERAY®-KSF 19/6, red, 500 mtr., 50 m-spool, unprinted

→ **Product Selection Chart**

CNTT

Medium wall heat shrinkable non tracking tubing for use in MV joints & terminations up to 36kV

Features

- Non Tracking
- UV stabilised
- Flame retardant
- Exceptional electrical and weathering properties
- Suitable for outdoor & indoor terminations
- Continuous Operating Temperature: -55°C to 125°C
- Shrink Temperature: 120°C



Dimensions

EXPANDED	RECOVERED		DELIVERY UNITS
INTERNAL DIAMETER (MIN) D	INTERNAL DIAMETER (MAX) D	WALL THICKNESS (NOM) w	SPOOL LENGTH
mm	mm	mm	m
33,0	10,0	2,80	15
45,0	15,0	2,80	15
60,0	19,0	3,10	15
70,0	25,0	2,90	15

Technical Data

Physical

Property	Test Method	Typical Performance
Tensile Strength	ASTM-D 412, ISO 37	11,2 MPa
Elongation	ASTM-D 412, ISO 37	370%
Longitudinal Change	ASTM-D 2671	-5% max.
Specific Gravity	ISO/R 1183 (A) / ASTM-D 1505	1,31 g/cm ³
Heat Shock (30 min at 200°C)	ESI-0913	no cracking or flowing
Elongation after Heat Shock (500 hrs at 120°C)	ASTM-D 412, ISO 37	310%
Tensile Strength after Heat Shock (500 hrs at 120°C)	ASTM-D 412, ISO 37	8,56 MPa
Low Temperature Flexibility	ASTM-D 2671	does not break at -40°C
Flammability	ASTM-D 2671 (B)	passed

Standard Colours	Special Colours
red ■	Not Available

Electrical

Property	Test Method	Typical Performance
Dielectric Strength	ASTM-D 149	779 V/mil
Surface Resistance	ASTM-D 257	154x10 ⁹ Ω
Volume Resistivity	ASTM-D 257/IEC-93	2.5*10 ¹¹ Ω cm
Dielectric Constant	ASTM-D 150/IEC-250	2,0 min.
Tracking Resistance (2500 V, 300 min)	ASTM-D 2303-96	no tracking after 12 hrs

Chemical

Property	Test Method	Typical Performance
Corrosive Action	ASTM-D 2671	non-corrosive
Environmental Salt fog test	IEC 1109	no tracking after 1000 hrs
Chemical Resistance (Transformer Oil)	ISO-175/ISO-37	passed
Water Absorption	ASTM-D 570/ ISO-62	0,11% min., 0,28 max.%

Ordering: **Specify the product name** plus each of the following options: 1) Size 2) Colour 3) Total Quantity + Delivery Unit
For example: CNTT 45/15, red-brown, 150 mtr. 15 mtr.-reel

→ **Product Selection Chart**

CRDW

Adhesive-lined, heat shrinkable wrap-around sleeve with a flexible stainless steellocking channel. Used for general re-jacketing and sealing applications, protection of damaged cable or as outer jacket on XLPE Cu Telecom cable joints from 10 pair to 2000 pair cable

Features

- Provides water tight seal upon recovery
- Excellent mechanical strength
- Application procedure is quick, simple and clean
- Covered with thermochromatic paint that changes colour upon achieving correct shrink temperature
- Sleeve can be cut to suit shorter application requirements
- Stainless steel channel provides permanent closure system
- Easy to install in situ over live cable without cutting the cable or shutting down power
- Installation temperature range: -15°C to +45°C



Dimensions

EXPANDED	RECOVERED		DELIVERY UNITS
INTERNAL DIAMETER (MIN) D mm	INTERNAL DIAMETER (MAX) D mm	WALL THICKNESS (NOM) w mm	BLACK LENGTHS m
43,0	8,0	2,30	1,0 or 1,5
68,0	15,0	2,30	1,0 or 1,5
93,0	25,0	2,30	1,0 or 1,5
137,0	34,0	2,30	1,0 or 1,5
160,0	48,0	2,30	1,0 or 1,5
200,0	48,0	2,30	1,0 or 1,5

Technical Data

Physical

Property	Test Method	Typical Performance
Tensile Strength	DIN 53455/ISO R527	17,0 MPa min.
Elongation	DIN 53455/ISO R527	350% min.
Tensile Strength after Heat Aging (168 hrs at 150°C)	DIN 53455/ISO R527	14 MPa min.
Elongation after Heat Aging (168 hrs at 150°C)	DIN 53455/ISO R527	300% min.
Carbon Black Content for UV Resistance	VDE 0472	2% min.
Low Temperature Flexibility	DIN 53453	no cracking at -40°C
Longitudinal Shrinkage		10% max.

Electrical

Property	Test Method	Typical Performance
Dielectric Strength	DIN 53481/IEC 243	12 kV/mm min.

Ordering: **Specify the product name** plus each of the following options: 1) Size 2) Colour 3) Total Quantity + Delivery Unit
For example: CRDW 93/25 black, 1.000 pcs., 1,0 mtr.-length

→ **Product Selection Chart**

CRLS

A superior wraparound insulation product that easily installs in repair and splice applications and provides excellent insulation and protection for cable jackets

Features

- Shut down of system not required for repair
- High shrink ratio covers even irregular shapes
- Simple RAIL-LESS®* installation with clamshell design
- Thermoplastic adhesive liner provides complete environmental protection and insulation
- Meets ICEA and NEMA insulation thickness specifications
- Continuous Operating Temperature: -55°C to 110°C
- Shrink Temperature: 120°C

* RAIL-LESS® is a registered trademark of Shawcor



Dimensions

EXPANDED	RECOVERED		DELIVERY UNITS
INTERNAL DIAMETER (MIN) D	INTERNAL DIAMETER (MAX) D	WALL THICKNESS (NOM) w	BLACK LENGTHS*
mm	mm	mm	
30,0	6,0	2,00	1
46,0	14,0	2,00	1
68,0	24,0	2,00	1
91,0	33,0	2,00	1
126,0	47,0	2,00	1
171,0	67,0	2,00	1

* Standard lengths are: 152 mm, 203 mm, 305 mm, 610 mm, 914 mm

Technical Data

Physical

Property	Test Method	Typical Performance
Tensile Strength	ASTM-D 638	19 MPa
Elongation	ASTM-D 638	600%
Heat Shock (4hrs at 225°C)	ASTM-D 2671	no cracking or flowing
Air Oven Aging (7 days at 150°C)		
Tensile Strength	ASTM-D 638	14,5 MPa
Elongation	ASTM-D 638	540%
Specific Gravity	ASTM-D 792	0,94 g/cm ³
Hardness (Shore D)	ASTM-D 2240	50 D

Electrical

Property	Test Method	Typical Performance
Dielectric Strength	ASTM-D 2671	28 kV/mm min.
Volume Resistivity	ASTM-D 257	1,9x10 ¹⁸ Ω x cm
Dielectric Constant (1 KHZ)	ASTM-D 150	4,05

Chemical

Property	Test Method	Typical Performance
Fluid Resistance	MIL-DTL-23053/15	good to excellent
Hydraulic Fluid (MIL H5606C)		
Tensile Strength	MIL-DTL-23053/15 ASTM-D 638, ISO 37	17 MPa
Elongation	ASTM-D 638, ISO 37	600%
Lubricating Oil (MIL L7808G)		
Tensile Strength	MIL-DTL-23053/15 ASTM-D 638, ISO 37	16 MPa
Elongation	ASTM-D 638, ISO 37	600%
Diesel Fuel		
Tensile Strength	MIL-DTL-23053/15 ASTM-D 638, ISO 37	14,5 MPa
Elongation	ASTM-D 638, ISO 37	600%
Corrosive Action	ASTM-D 2671	non-corrosive
Fungus Resistance	ASTM-G 21	no growth
Water Absorption	ASTM-D 570	0,1% max.

Ordering: **Specify the product name** plus each of the following options: 1) Size 2) Length 3) Colour 4) Total Quantity
For example: CRLS 68/24, 203 mm, black, 100 pcs.

→ **Product Selection Chart**

Low Voltage Kits

LVJUAC, LVJUAM and LVJUAS connecting (cable-jointing) sleeves are perfectly suitable for joining multi-core, polymeric insulated energy cables in the low voltage range.

- LVJUAM Multi-region joint sleeve for screw connectors
- LVJUAC Multi-region joint sleeve for crimp connectors
- LVJUAS Joint kits for screened polymeric cable
- CJK/CTK Joint and termination kits for armoured cables

Features

- Quick, simple installation
- Exceptionally good electrical insulation
- Good mechanical load-bearing ability
- No maintenance time necessary
- Usable immediately
- Unlimited storage life
- Tested to DIN 47632/VDE 0278/HD623 part 1 and 3
- Available with the following interior coatings
 A = hot-melt adhesive
 S = sealing composition



Dimensions

Joint kits for plastic-insulated 0.6/1kV cables

DESCRIPTION	CROSS SECTION OF CONDUCTORS DIN 47632	CABLE TYPE E.G.
For Screw Connectors		
LVJUAM 4X1.5-4X16	4X1.5-4X16	NYY, NXY, NYX, NXX with Round (r) or sectorial (s), solid (e) or stranded (m), aluminium (Al) or Copper (cu) conductor
LVJUAM 5X1.5-5X16	5X1.5-5X16	
LVJUAM 4X6-4X25	4X6-4X25	
LVJUAM 4X16-4X50	4X16-4X50	
LVJUAM 5X16-5X50	5X16-5X50	
LVJUAM 4X25-4X95	4X25-4X95	
LVJUAM 4X35-4X150	4X35-4X150	
LVJUAM 4X95-4X300	4X95-4X300	

For Crimp Connectors		
LVJUAC 4 X 2.5 - 16	4 X 2.5 - 16	NYY, NXY, NYX, NXX with Round (r) or sectorial (s), solid (e) or stranded (m), aluminium (Al) or Copper (cu) conductor
LVJUAC 5 X 2.5 - 16	5 X 2.5 - 16	
LVJUAC 4 X 6 - 35	4 X 6 - 35	
LVJUAC 5 X 6 - 35	5 X 6 - 35	
LVJUAC 4 X 16 - 50	4 X 16 - 50	
LVJUAC 4 X 35 - 150	4 X 35 - 150	
LVJUAC 4 X 120 - 240	4 X 120 - 240	
LVJUAC 4 X 185 - 300	4 X 185 - 300	

Joint kits for screened-insulated 0.6/1kV cables

DESCRIPTION	CROSS SECTION OF CONDUCTORS DIN 47632	CABLE TYPE E.G.
For Crimp Connectors		
LVJUAS 4X1.5-4X16	4X1.5-4X16	NYCY, NYCWV, NHXH with Round (r) or sectorial (s), solid (e) or stranded (m), aluminium (Al) or Copper (cu) conductor
LVJUAS 5X1.5-5X16	5X1.5-5X16	
LVJUAS 4X6-4X25	4X6-4X25	
LVJUAS 4X16-4X50	4X16-4X50	
LVJUAS 5X16-5X50	5X16-5X50	
LVJUAS 4X25-4X95	4X25-4X95	
LVJUAS 4X35-4X150	4X35-4X150	
LVJUAS 4X95-4X300	4X95-4X300	

Standard Contents

- 1 outer sleeve
- 3,4 or 5 inner sleeves
- Cleaning cloth
- Abrasive cloth
- Installation instructions
- Screen continuity where applicable

Ordering: Specify the product referring to above dimension chart

Joint kit for armoured cables

CODE	CORE SIZE
CJK 4	4 x 1.5-4 mm ²
CJK16	4 x 6 - 16 mm ²
CJK 50	4 x 25 - 50 mm ²
CJK 95	4 x 70 - 120 mm ²
CJK 240	4 x 150 - 240 mm ²

Earth and Armour continuity included in all kits. Connectors not included in kit contents.

Termination kit for armoured cables

CODE	CORE SIZE
CTK16	4 x 6 - 16 mm ²
CTK 50	4 x 25 - 50 mm ²
CTK 95	4 x 70 - 120 mm ²
CTK 240	4 x 150 - 240 mm ²

N.B. Table is for four core cable only. Kits for two and three core cables including CNE cable available on request. Earthing kits available as optional extra. Cable Lugs not included.

Standard Contents

On request the sleeves can also be supplied in different lengths and/or diameters.

→ **Product Selection Chart**

Signal Kits

CSK-B signal kits are particularly suitable for connecting screened signal cables in industry, rail and mass transit.

Individual splices can be supplied as separate kits to cover a wide range of sizes with minimal stock

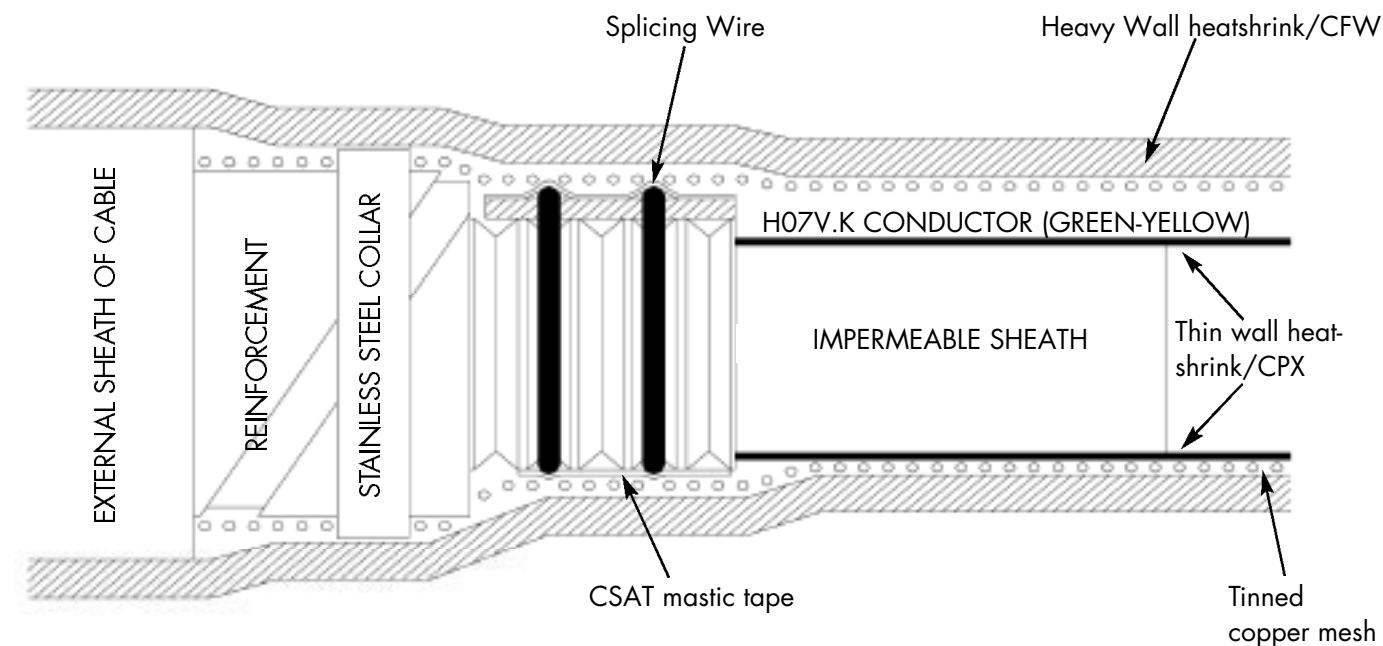
Features

- Quick, easy installation
- Exceptionally good electrical insulation
- Good mechanical load-bearing ability
- No maintenance time necessary
- Usable immediately
- Include components for continuing electrical earth and shield
- Various connection options
 - crimpseal
 - dual wall heat shrink tubing with crimp connector



DSG-Canusa Signal Kits

Suitable for 1.5-2.5 mm² copper conductor
Types YSLCY, LSYCvY, ZPFU, SZRMtk VM-J 0.6/1kV armoured.



CFTV - high shrink ratio tubing with thermochromatic paint and high performance adhesive gives excellent mechanical and environmental protection

Braid - tinned copper non corroding for continuation of screen

Roll spring - gives good mechanical and electrical contact with no insulation damage

CSAT - mastic designed to perform even during flexing and vibration

CPX300 - heat shrink tubing to replace inner insulation layer and continue waterproof seal

KIT NAME	CABLE RANGE (NO. OF PAIRS)
CSKB - 1	4 - 7
CSKB - 2	10 - 22
CSKB - 3	28 - 32

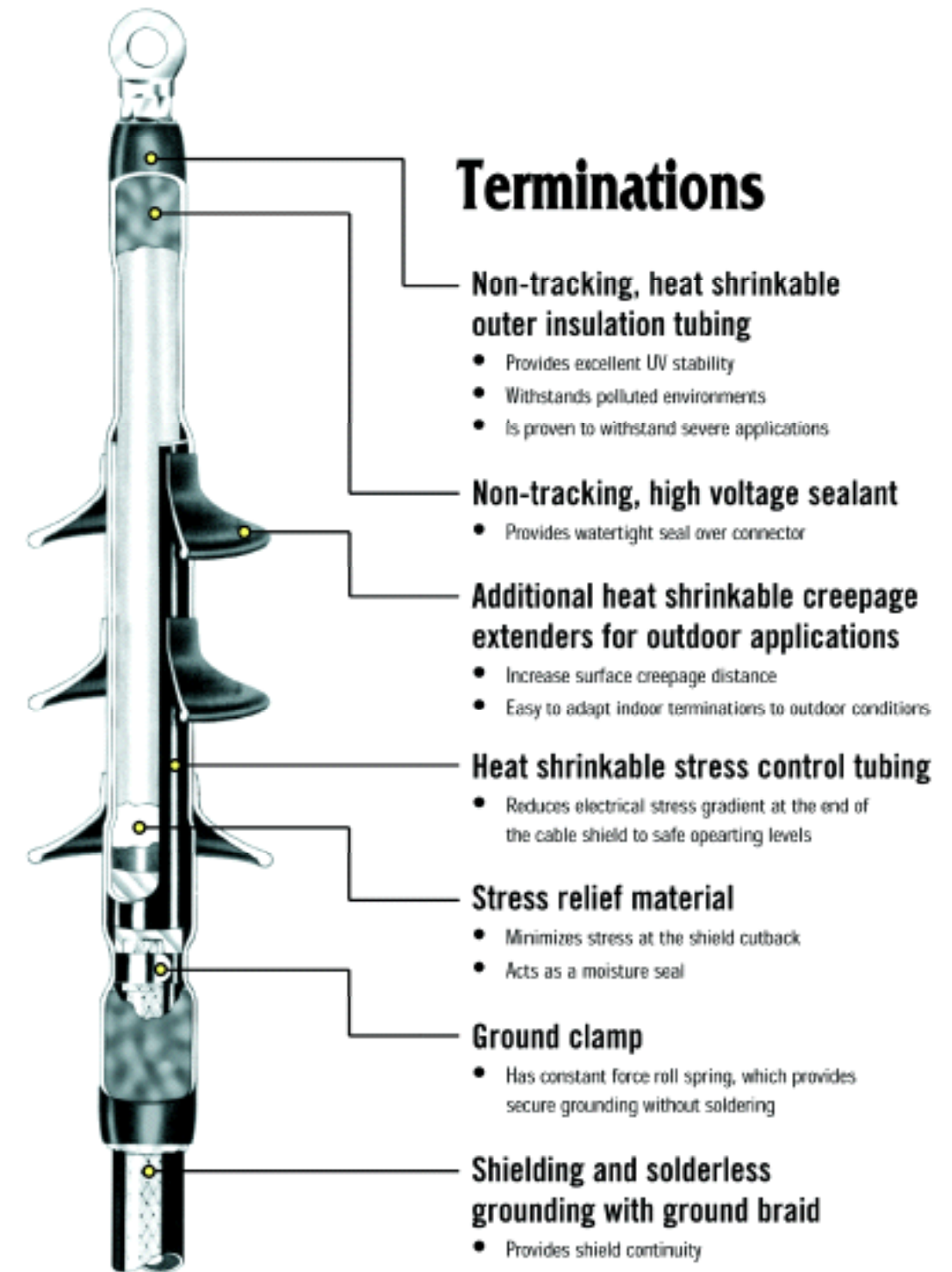
→ **Product Selection Chart**

Medium Voltage Terminations

Heat shrinkable power cable terminations consist of a non-tracking, weather resistant heat shrinkable protective tubing, heat shrinkable stress control tube and mastic. Each termination consists of appropriate tubes, rainsheds, cable breakouts, sealing materials, hardware and installation instructions

Benefits of DSG-Canusa components

- Suitable for 1 & 3 core cable
- Range includes kits for XLPE & PILC cables for a wide range of conductor cross sections
- Kits are available for both armoured & unarmoured cable
- Indoor & outdoor applications
- Excellent stress control properties
- Excellent moisture sealing
- Exceptional insulation characteristics
- Very high tracking resistance, good long term weather performance
- Easy to install, even at low temperatures
- Simple cable preparation - no sanding, no grease
- Fully sealed against water ingress
- Unsurpassed performance in polluted environments



→ **Product Selection Chart**

Medium Voltage Joint Kits

Heat shrinkable power cable joints consist of high voltage insulation tubing, stress control to smoothen the electrical field over the connector and screen ends, a conductive heat shrink sleeve to ensure a flawless bond between insulation and screen, copper mesh to ensure continuity of the connect shield, and an outer sealing jacket consisting of a heavy wall heat shrinkable sleeve, internally coated with adhesive resulting a moisture and corrosion barrier on the cable oversheath.

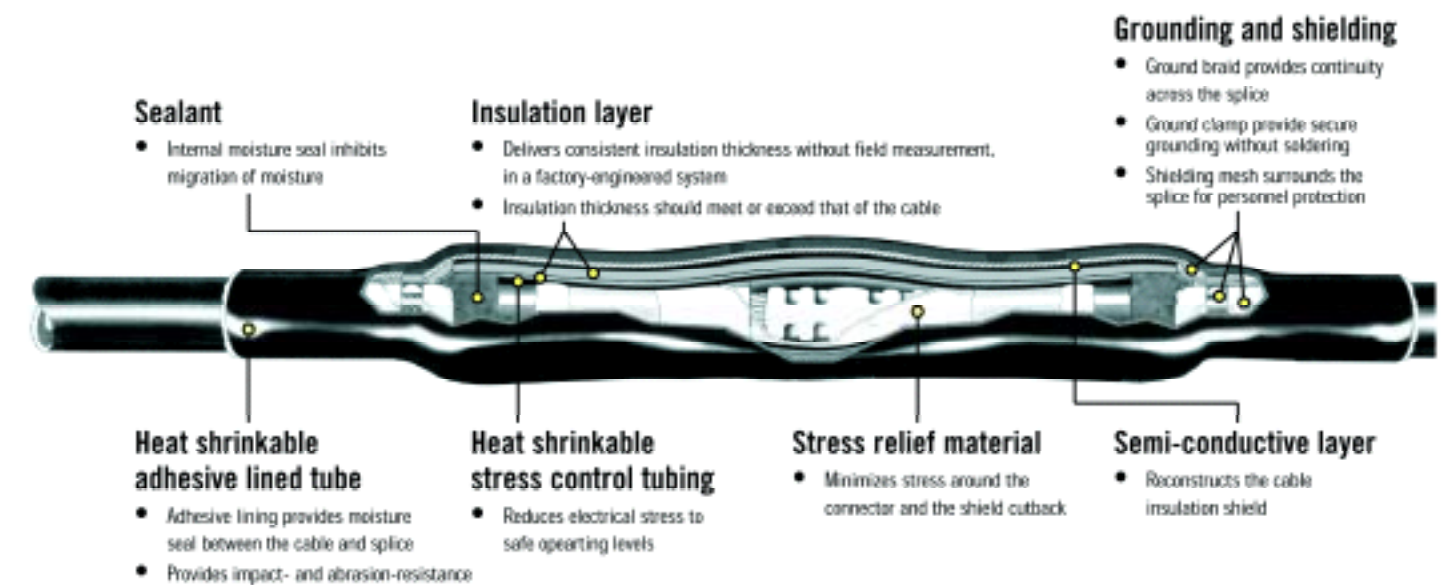
Benefits of DSG-Canusa components

Rebuild each layer of the cable at the connector and screen cutback:

- Electrical stress control
- Insulation layer
- Semi-conductive layer
- Shielding and grounding
- Environmental sealing
- Mechanical protection



Cable Joints



→Product Selection Chart

Automotive Wire Harness Solutions

In addition to the standard heat shrink tubing product line, DSG-Canusa provides solutions that are designed specifically for the demanding requirements of automotive wire harnesses.

For insulation of ground connections, splices or for longitudinal water sealing of cable harnesses, DSG-Canusa delivers tailor-made products of optimum quality.



DERAY®-Splicemelt

Crimped and ultrasonically welded parallel and end splices often require longitudinal water proof sealing as well high resistance against thermal, chemical and mechanical influences. Different sealing applications have these requirements, especially in the automotive sector. DERAY®-SPlicemelt, a specially modified heat shrinkable sleeve with an inner thermoplastic adhesive, fulfils the requirements of these harsh environments. During the shrink process the hot melt adhesive flows into all the voids within the area to be sealed. The result is a corrosion and water proof seal. Due to its simple and fast installation the two-in-one shrink tube can be used in continuous production. In general the processing of DERAY®-SPlicemelt is possible on each of the following shrink machines: DERAY®-Spliceman, DERAY®-Spliceman IR, DERAY®-Dockman jr., DERAY®-KST and DERAY®-FST

=> DERAY®-Splicemelt is the premier SPlice SEALING system which satisfies most automotive applications.



DERAY®-Splicemelt-Cap

In addition to the DERAY®-Splicemelt the longitudinal water proof sealing of end splices can easily be effected with the DERAY®-Splicemelt-Cap. Available in black and clear and in 4 standard sizes, this product provides an economical and reliable sealing.



DERAY®-Pressmelt

DERAY®-Pressmelt is a specially modified sealing system that consists of a modified heat shrinkable sleeve with an inner adhesive and a push-on profile of thermoplastic adhesive. This system guarantees within wide temperature differences absolute sealing and functionality of all sealed cables. It is available for 85°C or 105°C operating temperatures. DERAY®-Pressmelt can be processed using the following shrink devices: DERAY®-Dockman, DERAY®-Workman, DERAY®-KST
 => DERAY®-Pressmelt system provides efficient LONGITUDINAL WATER BLOCKING IN SMALL CABLE BUNDLES.



DERAY®-Duomelt

DERAY®-Duomelt is the evolution of DERAY®-Pressmelt system, combining DERAY®-Duomelt adhesive strips with DERAY®-IAKT or DERAY®-IHKT heat shrink tubing. The adhesive strips are lined with a strip of butyl rubber to ensure that the adhesive is evenly distributed throughout the bundle and to assist with the installation. DERAY®-Duomelt can be processed by standard heat shrink appliances; however DSG-Canusa suggests the DERAY®-Workman for bench applications and the DERAY®-Dockman for wiring board applications.
 => DERAY®-Duomelt is ideal for providing WATER BLOCKING IN SMALL AND MEDIUM CABLE BUNDLES.



DERAY®-Coldmelt I

As some insulating materials are very sensitive to heat, DSG-Canusa designed DERAY®-Coldmelt I which uses minimal heat during the installation process and thus ensures that individual bundle components are not damaged during installation. The DERAY®-Coldmelt I system consists of DERAY®-Coldmelt butyl rubber strips to provide a tight seal between the individual harness components and a DERAY®-CS heat shrink tubing to encase the installation. DERAY®-Coldmelt I is processed optimally by the DERAY®-Sealman.
 => DERAY®-Coldmelt I is specifically designed to provide LONGITUDINAL WATER BLOCKING IN LARGE CABLE BUNDLES (UP TO 150 WIRES).



DERAY®-Coldmelt II

DERAY®-Coldmelt II is based on the reliable, well-known and extensively used DERAY®-Coldmelt I system. This system substitutes a custom designed grommet for the DERAY®-CS heat shrink tubing. The grommet is made up of two half shells which consist of a sealing component from polyamide (PA) and a moulded part (e.g. socket) from TPE. The special shape of the moulded part guarantees perfect sealing in the area of the car body feedthroughs. The special advantage of this new system is the possibility to operate the sealing of the cable bundle or wiring and the car body feedthroughs at the same time. Processing of DERAY®-Coldmelt II is done by the DERAY®-Coldmelt II processor.
 => DERAY®-Coldmelt II is likewise specifically designed to provide LONGITUDINAL WATER BLOCKING IN LARGE CABLE BUNDLES (UP TO 150 WIRES).

You will find further information about DERAY® shrink appliances on pages 110-111

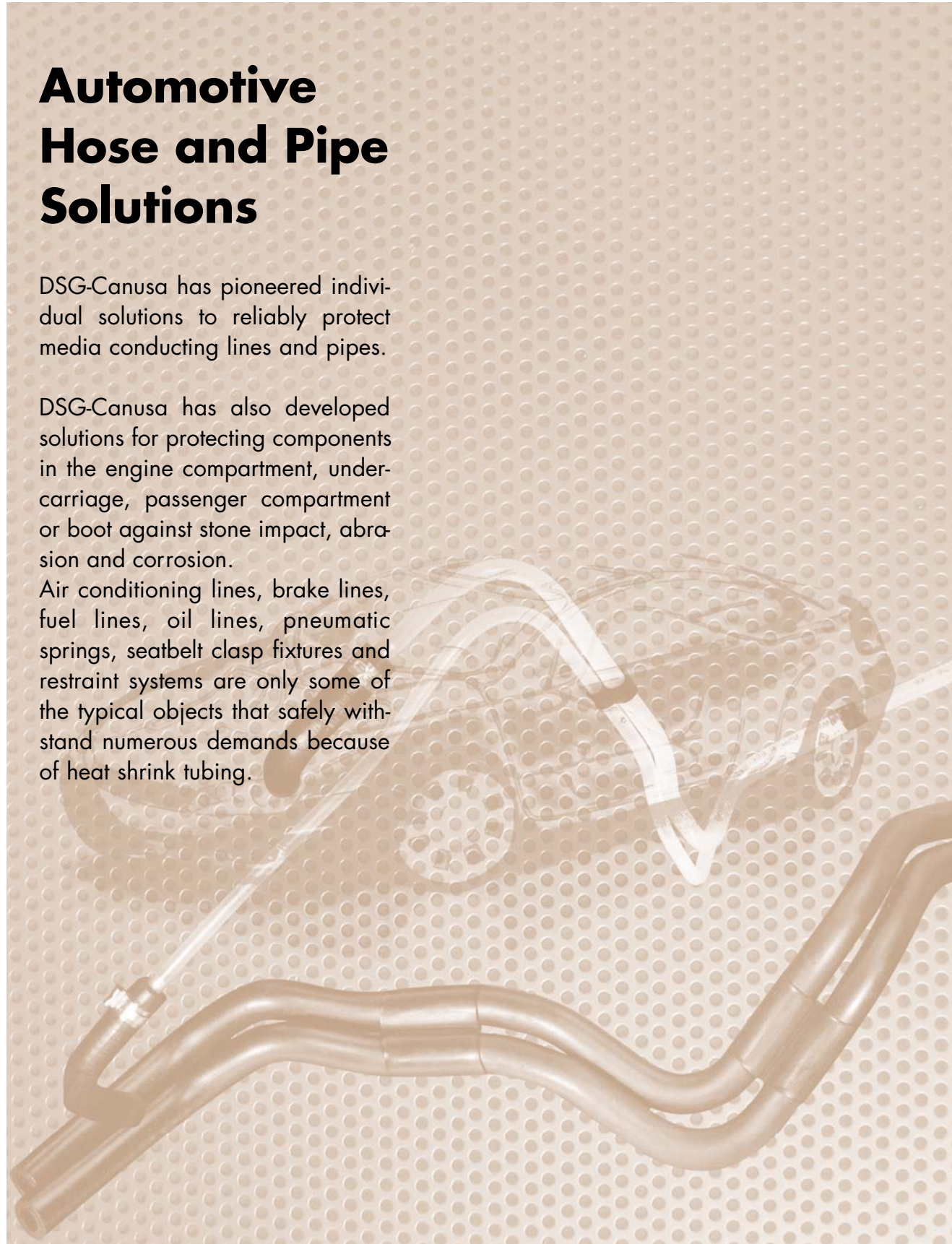
→Product Selection Chart

Automotive Hose and Pipe Solutions

DSG-Canusa has pioneered individual solutions to reliably protect media conducting lines and pipes.

DSG-Canusa has also developed solutions for protecting components in the engine compartment, under-carriage, passenger compartment or boot against stone impact, abrasion and corrosion.

Air conditioning lines, brake lines, fuel lines, oil lines, pneumatic springs, seatbelt clasp fixtures and restraint systems are only some of the typical objects that safely withstand numerous demands because of heat shrink tubing.



DERAY®-IAKT NS, DERAY®-MDKT NS, DERAY®-IBKT

This range of adhesive lined heat shrinkable tubes, available in either black or clear, is an ideal solution to prevent corrosion and to protect against stone and gravel damage. Its tough outer jacket also prevents damage to the substrate during installation, fixing or clamping, and servicing. Additionally, it will not separate from the substrate during bending operations. The continuous operating temperature of this product range is from -55°C to 105°C.

=> DERAY®-IAKT NS, DERAY®-MDKT NS, DERAY®-IBKT are most suitable for BRAKE PIPES.



DERAY®-HBNS

DERAY®-HBNS is a heat shrinkable, polyolefin tube specifically designed to adhere to aluminium pipes in automotive applications. The wall material adheres to aluminium during bending operations. DERAY®-HBNS provides superior corrosion protection, protects against stone and gravel damage and eliminates noise and vibration. It has a continuous operating temperature from -55°C to 135°C.

=> This tube provides effective protection of AIR CONDITIONING PIPES.



DERAY®-INS

Superior abrasion protection, under extreme temperature, is the primary feature of DERAY®-INS. This tube provides excellent adhesion properties and shrinks rapidly in order to avoid damage to the substrate during processing. The tough material of DERAY®-INS gives effective reduction of vibration and noise. With an operating temperature from -55°C to 135°C is DERAY®-INS the ideal solution for protecting PRESSURIZED RUBBER HOSES.



DERAY®-KWS

Deray®-KWS is a heat shrinkable (> 2:1) polyolefin tubing with excellent abrasion resistance. The DERAY®-KWS provides bubble and fold-free shrinkage on manifolds with an extreme radius. It gives a smooth appearance and shrinks snugly on curves on the substrate during processing. The continuous operating temperature of DERAY®-KWS is between -55°C and 135°C.

=> DERAY®-KWS is specifically designed to protect COOLING AND HEATING WATER HOSES in automotive applications.



DERAY®-DKI

Deray®-DKI is a double chamber heat shrinkable polyolefin tube specifically designed for bundling. DERAY®-DKI provides excellent abrasion resistance as well as noise and vibration reduction. Additionally, DERAY®-DKI connects tubes at temperature up to 135°C and is resistant against vibrations. The continuous operating temperature of DERAY®-DKI is from -55°C to 135°C.

=> This product is ideal for BUNDLING OF RUBBER HOSES in automotive applications.



DERAY®-HB

Deray®-HB is an economical solution for protecting and colour matching of special components. This heat shrinkable tube is characterized by its good abrasion resistance and its customisable colour to match the interior of the car. The continuous operating temperature of DERAY®-HB is between -55°C and 105°C.

=> The DERAY®-HB is the ideal solution for the protection and colour matching of SEAT BELT STALKS.

You will find further information about DERAY® shrink appliances on pages 110-111

→Product Selection Chart

Shrink Appliances

In addition to the standard heat shrink tubing product line, DSG-Canusa also provides a full range of technically advanced shrink appliances. Years of experience in processing heat shrink materials have resulted in the creation of a variety of processing devices, from a simple heat gun to high performance shrink tunnels. Beyond the numerous standard machines, DSG-Canusa can construct custom machines for unique applications.



DERAY®-WorkMan 2000

DERAY®-WorkMan 2000 is a process controlled heat shrink appliance designed for general purpose shrink applications at a work bench. It is equipped with separate temperature and time settings. The device is most often used for the installation of all DERAY® standard tubes and DERAY®-Duomelt, DERAY®-Pressmelt, DERAY®-Coldmelt Lite sealing systems. Special versions for specific customers demands are also possible.



DERAY®-Board WorkMan

DERAY®-Board WorkMan is a process controlled heat shrink appliance specifically designed for DERAY®-Splicemelt applications such as parallel splices, end splices and ring terminals on the wiring board. It is equipped with a separate temperature control and three time pre-settings with start buttons on the working head.



DERAY®-DockMan

DERAY®-DockMan is a process controlled heat shrink appliance designed for general purpose shrink applications on a wiring board. It is equipped with separate temperature and time settings. The device is most often used for the installation of all DERAY® standard tubes and DERAY®-Duomelt, DERAY®-Pressmelt, DERAY®-Coldmelt Lite sealing systems.



DERAY®-DockMan Endsplices

DERAY®-DockMan Endsplices is a process controlled heat shrink appliance specifically designed for DERAY®-Splicemelt applications on end splices on a wiring board. It is equipped with separate temperature control and three time pre-settings with start buttons on the working head.



DERAY®-SealMan

DERAY®-SealMan is a process controlled heat shrink appliance specifically designed for DERAY®-Coldmelt I applications on a wiring board. Similar to other equipment, it is equipped with separate temperature and time settings. A unique feature for the DERAY®-Coldmelt I system is its automatic compression mechanism for the sealing area. All three DERAY®-Sealman sizes (35 / 53 / 70) are also available in a bench mount version.



DERAY®-SpliceMan IR

DERAY®-SpliceMan IR is a process controlled heat shrink appliance specifically designed for sealing parallel splices with DERAY®-Splicemelt at a work bench. It features a Controller menu with 18 pre-adjustable shrink times, and a noise reduced shrinking process. After finishing process the parallel splice is automatically ejected.



DERAY®-FST 165/600

DERAY®-FST 165/600 is a small process controlled shrink tunnel to process heat shrinkable tubing for the insulation or sealing of small cable bundles. The shrink processor can be used as an individual working station as well as in series production. The continuously adjustable belt speed control enables consistent quality to be maintained.



DERAY®-KST 100/1000

DERAY®-KST 100/1000 is a small tunnel oven specifically designed for processing wire splices, and all kinds of small cable applications, in industrial serial production utilising heavy duty infrared heaters. It is equipped with separate adjustable temperature and belt speed settings. It can be fitted with extension belts in order to work on long or heavy items.



DERAY®-HST 35 100 and HST 40 170

DSG-CANUSA also offers a standard selection of tunnel ovens for hose and pipe applications. These high performance industrial tunnel ovens have been designed for economical series production and are outfitted with the following features:

- High performance fan
- Ni-CR heating elements for continuous operations hermetically embedded in stainless steel tubes
- Rod chain conveyor with teflonized fibreglass fabric tape
- High quality heat insulation
- Very economical energy costs



Custom shrink equipment can also be designed and installed for more specialised applications.

→ **Product Selection Chart**

Distribution Sets & Kits - Customizing

Distribution Sets & Kits - Customizing

DSG-Canusa has developed a range of specially configured kits designed to reduce field installation time and improve installation effectiveness.

Custom Kitting, Tailored Packaging, ready-to-use Sets, and Blister packs are only a few products in the broad DSG-Canusa range for distributors, craftsmen and do-it-yourselfers.



Distribution Sets & Kits - Customizing



DERAY®-Set Six, DERAY®-Set 1000

The DSG-Canusa way to have a wide variety of different sizes, diameters and colours of heat-shrink without stocking large quantities.



DERAY®-Set 2000 + refill bag

The DERAY®-Set 2000 combines the advantages of DERAY®-Set Six and DERAY®-Set 1000 with the possibility to refill any emptied compartment with the DERAY®-Tube refill system.



DERAY®-Box

The DERAY®-Box, with four different types of DERAY®-tube, gives the do-it-yourselfer a convenient (and environmentally friendly) package for a wide variety of tasks.



DERAY®-Display

The DERAY®-Display makes an attractive in-store display when filled with a range of DSG-Canusa products. The layout and the contents of this cardboard display can be customized according to your requirements.



DERAY®-Blister

DERAY®-Blister packs with holder creates an eye-catching display of DERAY®-pack + holder tubes. The range of colours and sizes in convenient small quantities can be proudly displayed on shop counters or on racks in do-it-yourself markets.



DERAY®-Crimpseal + crimp tool

DERAY-Crimpseal and crimp tool ensure a water-tight connection for cables up to 6 mm

If you need further information about these products don't hesitate to contact us at: info-DE@dsgcanusa.shawcor.com