

SuperCase™ CSC-XP

Advanced Joint Casing System for Pre-Insulated Pipelines

CSC-XP, the latest generation of Canusa's SuperCase technology, has been engineered based on Canusa's Hybrid-PEX™ technology, which combines the advantages of cross-linked and uncross-linked polyethylene in a single product. The revolutionary design of this product results in the most versatile pre-insulated pipe joint protection system on the market. The patented CSC-XP Casing can be installed with adhesive sealing and /or using electro-fusion welding with Canusa-CPS' IntelliFUSE™ system.

HybridPEX™ Technology*

- Cross-linked polyethylene outer layer **maintains hoop stress** on the pipe over the design life and **resists premature recovery** in hot climates
- Uncross-linked polyethylene inner layer of the casing allows for **effective welding (IntelliFUSE™)*** of the material to the mainline PE jacket pipe
- Advanced grade of high density bimodal polyethylene offers **enhanced resistance to abrasion, impact, penetration and cracking**, especially at low temperatures

Proven and Reliable Joint Protection

- CSC-XP system far exceeds the stringent requirements of EN 489 Standard and allows for **100% inspection** through **pressure testing**
- Structural integrity of the CSC-XP Casing system results in **robust and reliable joint protection** with **class leading resistance to soil stress**, moisture ingress and temperature cycling effects

Engineered for Maximum Efficiency

- Innovative CSC-XP design offers **simple and forgiving installation**, thus reducing cycle time and installed cost of the joint
- Combined with Canusa-CPS' IntelliFUSE™*, the system offers **industry leading installation speed** with automated quality control and traceability features

*Patent Pending



Applications



Pre-Insulated Pipes



Foam-In-Place



Pre-Foamed Joints



IntelliFUSE™



CSC-XP Installation Flexibility



1. CSC-XP Application Methods:

- High Shear and Peel Strength Adhesive
- Electro-fusion with metal mesh bands

2. HybridPEX™ Technology

- Maintains hoop stress
- Resists premature recovery in hot climates
- Fast installation times
- Enhanced resistance to abrasion, impact, penetration and crack resistance
- Allows for adhesive and fusion based application method

Other Key Advantages / Options

IntelliFUSE™ System



- Portable, easy to use system
- Automation reduces human error
- Built in quality control
- Fast cycle time

Air Pressure Testable



- Non-destructive, on-site quality control measure
- Verifies correctness of installation
- Allows for 100% inspection

Fast & Reliable Application



- Flexible application methods
- Robust, reliable and repeatable
- Unmatched speed of installation
- Reduced installed cost

System Components and Sizing Guidelines

CSC-XP System: Ordering Information and Standard Dimensions												
CSC-XP Casing								Accessory Materials (Kit)				
Pipe	Ordering Info		Diameter (Supplied)	Diameter (Recovered)	Thickness (Supplied)	Thickness ¹ (Recovered)	Length ² (Supplied)	Ordering Info (Kit)		Adhesive Strips Length	Metal Strips Length	Spacers Qty & Size
Ø (mm)			Ø (mm)	Ø (mm)	(mm)	(mm)	(mm)			(mm)	(mm)	(L, XL)
90	CSC-XP 90-750 BK		100	80	2.5	3.4	750	CSC-XP Kit 90		2 x 315	-	-
110	CSC-XP 110-750 BK		130	99	2.5	3.4	750	CSC-XP Kit 110		2 x 380	-	-
125	CSC-XP 125-750 BK		140	110	2.5	3.4	750	CSC-XP Kit 125		2 x 430	-	-
140	CSC-XP 140-750 BK		160	121	2.5	3.4	750	CSC-XP Kit 140		2 x 480	-	-
160	CSC-XP 160-750 BK		185	140	2.5	3.4	750	CSC-XP Kit 160		2 x 545	-	-
180	CSC-XP 180-750 BK		205	155	3.5	4.5	750	CSC-XP Kit 180		2 x 610	-	-
200	CSC-XP 200-750 BK		225	170	3.5	4.5	750	CSC-XP Kit 200		2 x 680	-	-
225	CSC-XP 225-750 BK		255	193	3.5	4.5	750	CSC-XP Kit 225		2 x 760	-	-
250	CSC-XP 250-750 BK		280	215	3.5	4.5	750	CSC-XP-F Kit 250		2 x 845	790	-
280	CSC-XP 280-750 BK		315	235	3.5	4.5	750	CSC-XP-F Kit 280		2 x 940	885	-
315	CSC-XP 315-750 BK		385	290	3.5	4.5	750	CSC-XP-F Kit 315		2 x 1060	1000	-
355	CSC-XP 355-750 BK		390	295	4.5	5.5	750	CSC-XP-F Kit 355		2 x 1185	1125	4 x L
400	CSC-XP 400-750 BK		445	330	4.5	5.5	750	CSC-XP-F Kit 400		2 x 1335	1265	4 x L
450	CSC-XP 450-750 BK		495	370	4.5	5.5	750	CSC-XP-F Kit 450		2 x 1500	1430	4 x L
500	CSC-XP 500-750 BK		555	410	4.5	5.5	750	CSC-XP-F Kit 500		2 x 1665	1585	4 x L
520	CSC-XP 520-750 BK		575	425	4.5	5.5	750	CSC-XP-F Kit 520		2 x 1730	1650	4 x L
560	CSC-XP 560-750 BK		615	455	4.5	5.5	750	CSC-XP-F Kit 560		2 x 1860	1770	4 x L
630	CSC-XP 630-750 BK		690	510	4.5	5.5	750	CSC-XP-F Kit 630		2 x 2090	2000	4 x L
670	CSC-XP 670-750 BK		735	540	4.5	5.5	750	CSC-XP-F Kit 670		2 x 2225	2125	4 x L
710	CSC-XP 710-750 BK		775	570	4.5	5.5	750	CSC-XP-F Kit 710		2 x 2355	2255	4 x L
800	CSC-XP 800-750 BK		875	645	5.5	6.5	750	-	CSC-XP-F Kit 800	-	2540	4 x XL
860	CSC-XP 860-750 BK		935	690	5.5	6.5	750	-	CSC-XP-F Kit 860	-	2730	4 x XL
900	CSC-XP 900-750 BK		980	720	5.5	6.5	750	-	CSC-XP-F Kit 900	-	2860	4 x XL
1000	CSC-XP 1000-750 BK		1090	800	5.5	6.5	750	-	CSC-XP-F Kit 1000	-	3175	4 x XL
1100	CSC-XP 1100-750 BK		1195	875	5.5	6.5	750	-	CSC-XP-F Kit 1100	-	3480	4 x XL
1200	CSC-XP 1200-750 BK		1300	950	5.5	6.5	750	-	CSC-XP-F Kit 1200	-	3800	4 x XL
Special Orders												
XXX	CSC-XP XXX-YYY BK		XXX - PE Size (mm)	YYY - Nominal Casing Length (mm)			YYY - 750	CSC-XP Kit XXX	CSC-XP-F Kit XXX			

¹ Recovered thickness represents thickness after full (free) recovery ²Standard length shown, optional CSC-XP lengths are available.

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Adhesive Properties	Test Method	Typical Values
Softening Point	ASTM E28	100°C
Lap Shear	EN 12068	300 N/cm ²
Casing Properties		
Tensile Strength	ASTM D638	30 MPa
Elongation	ASTM D638	600
Hardness	ASTM 2240	60 Shore D
Abrasion Resistance	ASTM D1044	35 mg
System Properties		
Adhesion Strength @ 23°C*	EN 12068	140 N/cm
Water Absorption	ASTM D570	< 0.05 %
Low Temp. Flexibility	ASTM D2671	-30°C
Heat Aging @ 150°C, 14 days (Tensile Strength)	ISO R57	95%
Heat Aging @ 150°C, 14 days (Tensile Elongation)	ISO R57	95%
Soil Box & Pressure Vessel Test** (Adhesive Method)	EN 489	300 cycles, 18kN/m ² (1m) sand overfill, 30 kPa @ 30°C for 24 h
Soil Box & Pressure Vessel Test*** (IntelliFUSE™ Method)	EN 489	Pass-Weld Stress Crack Resistance
EN 489 Sand Box Test – 300 Cycles Casing completely intact on both sides. Easily Exceeds EN 489 Requirements  Prior to testing  After testing		
IntelliFUSE™		
Please contact Canusa representative for more information.		

*Tested using 1mm thick HSS backing

**Tested with adhesive application method

***Tested with electrofusion IntelliFUSE™ application method

Since 1967, Canusa-CPS has been a leading developer and manufacturer of specialty pipeline coatings for the sealing and corrosion protection of pipeline joints and other substrates. Canusa-CPS high performance products are manufactured to the highest quality standards and are available in a number of configurations to accommodate many specific project applications.

The product information shown here is intended as a guide for standard products.

Consult your Canusa representative for specific projects or unique applications.



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Canusa-CPS is registered to ISO 9001:2008

Canusa warrants that the product conforms to its chemical and physical description and is appropriate for the use stated on the product data sheet when used in compliance with Canusa's written instructions. Since many installation factors are beyond our control, the user shall determine the suitability of the products for the intended use and assume all risks and liabilities in connection therewith. Canusa's liability is stated in the standard terms and conditions of sale. Canusa makes no other warranty either expressed or implied. All information contained in this data sheet is to be used as a guide and is subject to change without notice. This data sheet supersedes all previous data sheets on this product. E&OE

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