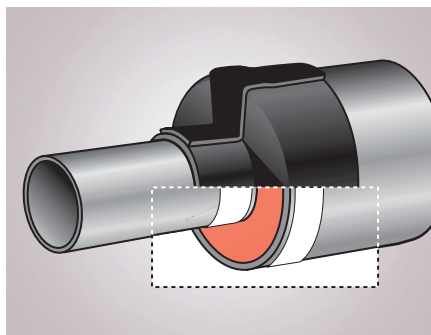


District Heating end cap for sealing the pipe ends of pre-insulated pipes.



Product description

CCS-DHEC pre-insulated pipe end seal.

Adhesive: High temperature high viscosity sealant strips coating at the edges.

Backing: Heat-shrinkable, radiation cross-linked, high density polyethylene with fibre glass reinforcement.

CCS-DHEC is a heat-shrinkable pipe end seal preventing water ingress in the pipe insulation between casing and service pipe resp. photo degradation during transport, storage and construction of the pipelines. CCS-DHEC is used for pre-insulated pipes carrying fluids at continuous operating temperatures of up to 110°C (230°F). It is the perfect end seal at all house connections and man holes protecting the integrity of the thermal insulation end.

CCS-DHEC is zipper-closed, its wrap-around design allows installation after welding or repairing similar applications. The fibre glass reinforced woven structure generates a high expansion ratio to accommodate the diameters of jacket and service pipe. The elastomeric adhesive is specially designed for performance at high temperature conditions. The uncoated edges prevent the sleeve from slipping off the casing pipe during installation.

The installation is carried out directly on the prepared and preheated pipe surface. CCS-DHEC is wrapped around the transition and zipper-closed. Heating with a regular gas torch lets the high shrink ratio backing shrink and tightly fit one outlet onto the pipe jacket and the other onto the service pipe. During recovery, the adhesive softens and flows to form an intimate bond, providing and maintaining a waterproof seal between the sleeve and both jacket and service pipe.

Product features/benefits

- **High shrink ratio backing**
Copes easily with the transition of jacket and service pipe. Accommodates easily to dimensional variations and pipe ovality. One product covering several different pipe sizes---simple inventory & logistics.
- **High performance against water ingress**
In case of transport, storage and construction: assures permanent waterproof seal keeping thermal insulation intact all time long!

In case of leakage: limits insulation degradation to one pipe length---reduces repair costs!

- **Wrap-around system with zipper closure**
Allows for installation after welding of service pipes ("just-in-time"). Simple and fast installation---minimizes costs!
- **No special equipment required**
Keeps installation costs low.

Product selection guide

	CCS-DHEC
Max. operating temperature	110°C
Compatible	PE outer jacket Steel, Copper
Min. preheat temperature	60°C
Recommended pipe preparation	Cleaning & Abrading
Soil stress restrictions	None

Product thickness

	CCS-DHEC
Backing (as supplied)	0.051 in. (1.3 mm)
Backing (fully free recovered)	0.128 in. (3.25 mm)
Adhesive (as supplied)	0.039 in. (1.0 mm)

Product properties: CCS-DHEC District Heating End Cap

Property	Test method	Typical Value
Backing		
Bursting strength	ISO 3303	2500 N
Cold crack	ISO 4675	-60°C
Thermal ageing	ISO 188	
Followed by bursting strength	@ 150°C, 7 days ISO 3303	> 2000 N
Adhesive		
Softening point	ASTM E-28	150°C
Shear strength	ASTM D-1002 @ 50 mm/min	30 N/cm ²
Peel strength	ASTM D-1000 @ 50 mm/min	30 N/cm
Sleeve		

Special functional tests are described in the technical specification RUD 6050.

Ordering information

CCS-DHEC type products are available:

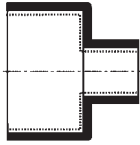
- as Uni-sleeve (pre-cut sleeve with pre-attached patch & zipper closure)

Example: CCS-DHEC-128-48

CCS-DHEC-..	Product type	Standard Ordering options
128-48	Recovery ratio (supplied Ø in mm - recovered Ø in mm)	CCS-DHEC 110-26, 128-48, 163-60, 186-70, 200-76, 225-89, 250-108, 280-133, 315-168, 400-219, 560-273, 710-355, 900-457, 1200-610

APPLICATION TABLE

Selection of CCS-DHEC depending on the service pipe and the casing pipe



Service pipe OD (mm)	Casing Pipe OD (mm)															
	90	95	110	125	128	140	150	163	180	186	200	225	250	266	280	
27	110/26*															
34	110/26*															
42	110/26*															
48			128/48													
54			128/48													
60						163/60										
70						163/60										
76						163/60										
89								186/70								
108									186/70							
114											200/76					
133												225/89				
139													250/108			
168															280/133	
193															280/133	

* CCS-DHEC-110/26: conical cut sleeve, needs special installation instruction CCS-DHEC/C

Service pipe OD (mm)	Casing Pipe OD (mm)														
	297	315	334	355	400	450	500	560	630	710	800	900	1000	1200	
168	315/168														
193	315/168														
219	315/168														
273			400/219												
324			400/219												
355			400/219												
406						560/273									
457						560/273									
508									710/355						
610											900/457				
813													1200/610		
1016													1200/610		

For proper product installation, see latest installation instruction.

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



Local Distributor / Representative:

For contact details of local Distributors / Representatives
Please visit www.berrycpg.com.

Headquarters : Berry Plastics Tapes & Coatings Division, Franklin MA, USA

Franklin, MA, USA
Tel: +1 508 918 1714
US Toll Free: +1 800 248 0149
Fax: +1 508 918 1910
CPG@berryplastics.com

Houston, TX, USA
Tel: +1 713 676 0085
US Toll Free: 01 888 676 7202
Fax: +1 713 676 0086
CPGH@berryplastics.com

Tijuana, Mexico
Tel USA +1 858 633 9797
Fax US: +1 858 633 9740
Tel Mexico: +52 664 647 4397
Fax Mexico: +52 664 647 4370
CPGTJ@berryplastics.com

Aarschot, Belgium
Tel: +32 16 55 36 00
Fax: +32 16 55 36 74
CPGE@berryplastics.com

Baroda, India
Tel: +91 2667 264721
Fax: +91 2667 264724
CPGIN@berryplastics.com