

DHEC

Product Information

Product description: Covalence® DHEC is a District Heating End Cap for sealing the pipe ends of pre-insulated pipes carrying fluids at various operating temperatures up to 120°C and occasionally with a peak temperature up to 140°C.

Construction: Two-layer system

- **Adhesive:** High temperature, high viscosity sealant strips.
- **Backing:** Radiation cross-linked, polyethylene.

DHEC is a molded part with different outlet diameters on each end to accommodate the diameters on both casing and service pipe.

DHEC *Single* is designed for pre-insulated pipes having one service pipe. DHEC *Twin* has two outlets and is designed for pre-insulated pipes with two service pipes.

The elastomeric adhesive is specially designed for high temperature performance. 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, DHEC is slid over service and casing pipe and positioned in place. The DHEC is then heated with a regular gas torch. The high shrink ratio backing shrinks and forms a tight fit onto the pipe and casing. During recovery, the adhesive softens and flows to form a waterproof seal.

Features:

- High shrink ratio backing offering optimum conformability to transitions and variations.
- One product covering several different pipe sizes.
- High performance against water ingress.
- Tubular mold system (just "slide over & shrink").
- No special equipment required.

Benefits:

- Easily adapts to dimensional variations and pipe ovality.
- Reduces inventory costs. Simplifies logistics.
- Thermal insulation remains functional.
- Easy and fast installation---minimizes costs;

Product selection guide

Max operating temperature	120°C (with occasional peaks up to 140°C)
Compatible line coatings	PE outer jacket, Steel, Copper
Min. preheat temperature	60°C
Recommended pipe preparation	Cleaning & abrading
Soil stress restrictions	None

Product thickness

	DHEC
Backing as supplied (mm)	0.5 – 1.65*
Backing fully free recovered (mm)	2.5
Adhesive as supplied (mm)	1.0

* Backing thickness is function of the product diameter

Product properties

Property	Test method	Typical value
Backing		
Tensile strength at break	ISO 37 @ 50 mm/min	20 MPa
Elongation at break	ISO 37 @ 50 mm/min	> 400 %
Hardness, Shore D	ASTM D-2244	54
Water absorption	ISO 62, 24 hrs	0.1 %
Thermal ageing	ISO 188 150°C, 7 days	
Followed by elongation	ISO 37 @ 50 mm/min	350%
Adhesive		
Softening Point	ASTM E-28	155°C
Lap shear	ISO 21809-3	0.13 N/mm ²
Installed sleeve		
Peel strength	ISO 21809-3	0.7 N/mm
Low temperature flexibility	ASTM D-2671, C	-40°C

Note: The typical values in this data sheet are based on lab prepared samples. Values shown are not to be interpreted as product specifications.

Ordering information

Single Outlet DHEC		
Example	DHEC-2200	
	Designation	Standard ordering options
2200	Size code	2000, 2060, 2100, 2200, 2300, 2340, 2400, 2500, 2600, 2630, 2700, 2800, 2900, 3000
Double Outlet DHEC		
Example	DHEC-3280	
	Designation	Standard ordering options
3280	Size code	3200, 3250, 3250-P604, 3280, 3300, 3350-01, 3350-02, 3350-03, 3350-05, 3360-01

General information

Product dimension	For proper product selection, see latest application table AT-DHEC.
Installation guide	For proper product installation, see latest application guideline.
Handling	Handle with care. Keep boxes upright.
Storage	To ensure maximum performance, store Covalence products in a dry, ventilated area. Keep products sealed in original boxes and avoid exposure to direct sunlight, rain, snow, dust or other adverse environmental elements. Avoid prolonged storage temperatures above 40°C or below -10°C. Unlimited shelf life.
Documentation	Extensive information is available on our website. Application instructions and other documentation can be obtained by contacting our head office, from our local distributor or by sending email to rorkald@rorkald.dk
Certified staff	Application of the described coating system shall be carried out by certified personnel.