

COVALENCE® CPSM

Product Information

Product description: Covalence® CPSM is a heat-shrinkable, tubular sleeve with high shrink ratio allowing irregular shapes to be coated easily. It is specifically useful for corrosion prevention and sealing of screw or other mechanical couplers in gas distribution networks. CPSM is typically used for small diameters and high percentage transitions. It can also be used on small diameters riser bends and as protection of anchor tie rods. This mechanically strong and flexible tubular is compatible with most standard pipeline coatings and outer jackets.

Construction: Two-layer system

- *First layer:* visco-elastic low pre-heat mastic sealant
- *Second layer:* thick wall, radiation-cross-linked, high density polyethylene

The installation is carried out directly on the cleaned and dried (preheated) coupler & pipe surface without any primer being required. CPSM is positioned on the pipes prior to coupling them together and, after installation of the coupler, slid centrally over the joint to be protected. When heated the CPSM shrinks and the sealant melts, encapsulating mechanical couplings and straight pipes with a strong impervious seal. While the sleeve conforms to the shape of the coupling or pipe, the melted sealant is forced into all surface irregularities providing a permanent environmental seal.

Features:

- No primer required
- Low preheat sensitivity & proven functionality
- No special equipment or skills required
- Mechanically strong & resists abrasion, impact and penetration.
- Self-healing effect. Sealing adhesive automatically flows and repairs minor mechanical damages.

Benefits:

- No drying time and easy application
- Trustful as CPSM resist bending, impact, abrasion, penetration, corrosive gases or fluids, disbonding and long-term storage.
- Remains user friendly (even at low temperatures)
- Makes installation fast and easy. Keeps installation costs low

Product selection guide

Max operating temperature	65°C
Compatible line coatings	PE, PP, FBE, Tape, Coal tar & Asphalt
Min. preheat temperature	60°C
Recommended pipe preparation	ST 2 ^{1/2} ST 3 or SA 2 ^{1/2} Clean, dry and free of grease
Soil stress restrictions	None
Performance	EN 12068 class C30

Product thickness

Backing as supplied	0.70 – 1.20 mm*
Backing fully free recovered	2.0 – 3.20 mm*
Adhesive as supplied	0.70 mm

*Backing thickness depends on tubing diameter

Product properties

Backing

Property	Test method	Typical value
Tensile strength at break	EN 60684-2	14 MPa min.
Elongation at break	EN 60684-2	350% min.
Dielectric strength	EN 60684-2	10 kV/mm min.
Hardness, Shore D	ISO 868	55

Adhesive

Property	Test method	Typical value
Softening Point	ASTM E-28	134°C
Shear strength	EN 12068 @ 10 mm/min	0.1 N/mm ²

Installed sleeve

Property	Test method	Typical value
Peel to Steel	EN 12068, 10 mm/min	1.1 N/mm
Cathodic disbondment	ISO 21809-3 @ 65°C, 30 days	< 10 mm radius
Impact resistance	EN 12068	> 15 J
Indentation resistance	EN 12068 class C30 (10 N/mm ²)	> 0.6 mm remaining thickness

Note: Typical values in this data sheet are based on lab prepared samples. Values shown are not to be interpreted as product specifications. All properties are at 23°C unless otherwise specified.

Product order information

Covalence® CPSM type products are available

- As ready-to-size tubular sleeve

Example CPSM-C30-95/29-1000

	Designation	Standard ordering option
C30	Performance EN class	C30
95/29	Recovery ratio (mm)	50/16 75/22 95/29 140/42 180/60 245/80
1000	Tubing length (mm)	330 500 1000 mm

*Take into account a 15% shrinkage of tubular width during installation, when calculating the minimum required width after installation.

General information

Installation guide	For proper product installation, see latest installation instruction.
Handling	Handle with care. Keep boxes upright.
Storage	Store indoor, clean and dry, sealed in original boxes and away from direct sunlight in a cool place below +50°C. Unlimited shelf life.

Information

Documentation	Extensive information is available on our web-site. Application instructions and other documentation can be obtained by contacting our head office, from our local distributor or by sending an email to info@sealforlife.com
Certified staff	Application of the described coating system should be carried out by certified personnel.

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