



**One-piece heat-shrinkable sleeve for corrosion protection of girth weld joints on various types of piping systems.**

### Product description

#### TPS

**Construction:** two-layer system:

**first layer:** visco-elastic mastic sealant.

**second layer:** thick-walled, radiation-cross-linked, high density polyethylene.

TPS(M) are heat-shrinkable, tubular sleeves which prevent corrosion of welded pipe joints in distribution lines for sizes up to 8.625"/DN200. For larger sizes, the use of the Raychem wraparound sleeve, WPC, is recommended. This mechanically strong and flexible sleeve is compatible with all standard pipeline coatings and outer jackets.

The installation is carried out directly on the cleaned and dried (pre-heated) pipe surface without primer. Heat is applied to the sleeve, which shrinks to form a tight fit around the joint. While shrinking, the visco-elastic sealant homogeneously flows to cover the complete surface and fills in all surface irregularities.

### Product features/benefits

- **Dimpled backing (TPS) provides a "Permanent Change Indicator" (PCI) for application of heat**  
Ensures correct application of heat & allows easy post-heat inspection. Reliable inspectability at any time.
- **No primer required**  
Saves installation time.
- **Low preheat sensitivity & proven functionality**  
Allows easy application combined with high functional performance. Saves installation time.
- **Mechanically strong & resists abrasion, impact and penetration**  
Reliable and tough. Remains user-friendly (even at low temperatures).
- **Specially formulated sealants**  
Ensures a strong bond & a tight seal. Provides high peel and shear values after installation.
- **Sealing adhesive automatically flows and repairs minor mechanical damages**  
"Self-healing effect". Saves time
- **No special equipment or skills required**  
Makes installation fast and easy. Keeps installation costs low.

### Product selection guide

	TPS/11
<b>Max operating temperature</b>	30°C (86°F)
<b>Compatible line coatings</b>	PE, FBE, Tape, Coal tar and Asphalt
<b>Min preheat temperature</b>	60°C (140°F)
<b>Recommended pipe preparation</b>	Clean, dry and free of grease
<b>Soil stress restrictions</b>	moderate
<b>Performance</b>	EN12068 class B30

### Product thickness

	TPS
Backing (as supplied)	0.030 in. (0.75 mm)
Backing (fully free recovered)	0.039 in. (1.0 mm)
Adhesive (as supplied)	0.030 in. (0.75 mm)

### Product properties: TPS -TPSM/87 - TPSM-C30

		TPS
Property	Test method	
<b>Backing</b>		
Tensile strength	ASTM D-638	3000 psi 20 MPa
Elongation	ASTM D-638	580%
Hardness, Shore D	ASTM D-2240	55
Shrink force	ASTM D-638	40 psi
	150°C (302°F)	
Water absorption	ISO 62	0.05%

Adhesive		
Softening point	ASTM E-28	90°C (194°F)
Shear strength	ASTM D-1002	35 psi
	EN12068 @ 10 mm (0.4")/min.	0.22 N/mm <sup>2</sup>
Sleeve		
Peel strength	ASTM D-1000	14 lbs/in.width
	EN12068 @ 10 mm (0.4")/min.	1.6 N/mm
Impact resistance	ASTM G-14	50 in-lbs
	EN12068	> 8 Nm
Penetration resistance	EN12068	
	class B30 (1N/mm <sup>2</sup> )	> 0,6 mm *
	class C30 (10N/mm <sup>2</sup> )	
Cathodic disbondment	EN12068	8 mm radius
	30 days	

\* Remaining thickness

## Ordering information

### TPS(M) type products are available:

- as ready-to-size tubular sleeves

Drawing sleeve width, pipe diameter

Take a 10% shrinkage during installation of sleeve width into account when calculating the minimum sleeve width.

### Example: TPS-4500x18 / TPSM-150/104-450/87 / TPSM-C30-DN100-500

#### TPS

C30	Performance classification	
	Nominal pipe diameter	2.375 (DN50) -
4500	In mils	20.000 (DN400)
DN100	In DN	
150/104	Recovery ratio in mm (supplied diameter / recovered diameter)	
	Sleeve width	
18	In inches	18" (460 mm)
450	In mm	
500	In mm	

\* For pipe sizes exceeding DN200, the use of wraparound WPC sleeves is recommended.

*Tyco Adhesives 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 Tyco Adhesives' 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. Tyco Adhesives' liability is stated in the standard terms and conditions of sale. Tyco Adhesives 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.*