

## PREMIER™ 80 ST HEAT SHRINK SLEEVE With Thermal Indicator

### Description

Premier™ 80 ST Heat Shrink Sleeve (with indicator) consists of a crosslinked and stabilised polyethylene backing, coated with a butyl rubber adhesive.

### Uses

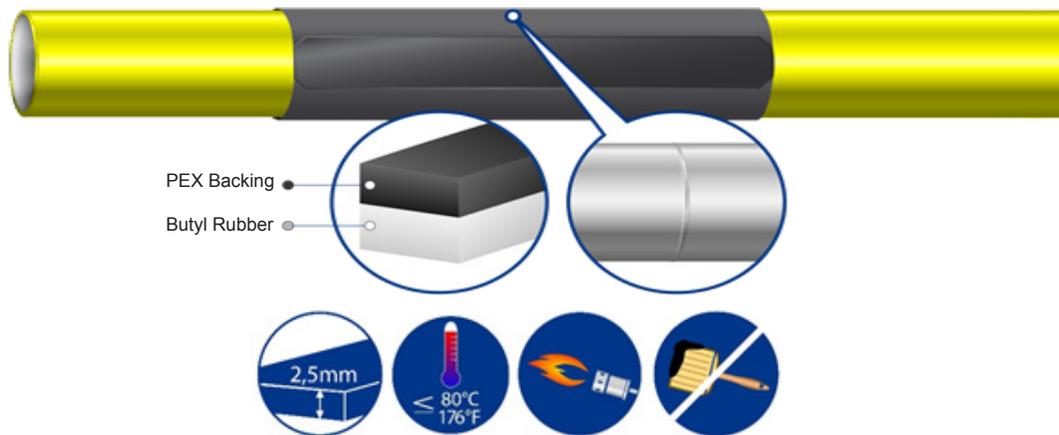
Used for the protection of welded seams on buried or immersed pipelines of low alloy ferrous material and can be applied on site. Other site applications include the repair of mechanical defects in PE or PP factory coatings.

### Features

- Compliant to ISO 21809-3:2016 (Type 14A-2)
- Warm-applied.
- Low water vapour and oxygen permeability.
- Compatible with factory coatings of polyethylene, polypropylene, epoxy resin, polypropylene, epoxy resin, polyurethane and bitumen.
- The surface pattern of the sleeve is a thermal indicator. With sufficient heat, the surface becomes smooth.

### Application

Refer to Premier™ 80 ST Heat Shrink Sleeve Application Instructions.



# Premier™ 80 ST Heat Shrink Sleeve

## Property Specifications

PROPERTIES	TEST METHOD	VALUE
Maximum Service Temperature		80°C
Backing Thickness		≥ 1.0 mm
Butyl Adhesive Thickness		≥ 1.5 mm
Total Thickness		≥ 2.5 mm
Break Strength	DIN EN 12068	40 N/mm, 40 MPa
	ASTM D1000	43 N/mm, 43 MPa
Elongation at Break	DIN EN 12068	600%
	ASTM D1000	790%
Hardness of the PE Foil	DIN 53505 / ISO 868	53 Shore D
Water Absorption	DIN EN ISO 62 / ASTM D570	< 0.05%
UV Resistance	DIN EN 60811-4-1	UV resistant due to carbon black content
	VDE 0473-811-4-1:2005	black ≥ 2%
Shrinking Rate	15 min, 180°C free shrinking	≥ 25%
Chemical Resistance	24 h Storage at 23°C	0.1 N NaOH 0.1 N Na <sub>2</sub> SO <sub>4</sub> 0.1 N H <sub>2</sub> SO <sub>4</sub> 0.1 N HCl
Impact Resistance	AS 4822	15 J
	DIN EN 12068 / ISO 21809-3	16 J
Indentation Resistance at 23°C	DIN EN 12068 / ISO 21809-3	10 N/mm <sup>2</sup> (pressure) 0.6 mm (residual thickness)
Indentation Resistance at 80°C	DIN EN 12068 / ISO 21809-3	10 N/mm <sup>2</sup> (pressure) ≥ 0.6 mm (residual thickness)
	ISO 21809-3, AS 4822	
Specific Electrical Insulation Resistance	DIN EN 12068	>10 <sup>10</sup> ohm.m <sup>2</sup>
Dielectric Breakdown	ASTM D149	44 kV/mm
Cathodic Disbondment, 28 days	DIN EN 12809-3 / ISO 21809-3	≤ 20 mm (80°C)
Cathodic Disbondment, 28 days	AS 4822 / AS 4352:2005	≤ 20 mm (65°C)
Peel Strength, Layer to Layer @ 100 mm/min	ISO 12068-3	8.5 N/mm (23°C), 0.09 N/mm (80°C)
Peel Strength, Layer to Layer @ 300 mm/min	ASTM D1000	4.0 N/mm (23°C), 0.15 N/mm (80°C)
Peel Strength		
On Pipe Surface @ 10 mm/min	ISO 21809-3	3.5 N/mm (23°C), 0.1 N/mm (80°C)
On Pipe Surface @ 100 mm/min	AS 4822	3.4 N/mm (23°C), 0.7 N/mm (80°C)
On Factory Coating @ 10 mm/min	ISO 21809-3	3.5 N/mm (23°C), 0.1 N/mm (80°C)
On Pipe Surface @ 300 mm/min	ASTM D1000	3.0 N/mm (23°C), 1.0 N/mm (80°C)
Lap Shear Strength		
On Steel @ 10 mm/min	DIN EN 12068 / ISO 21809-3	≥ 0.1 N/mm <sup>2</sup> (23°C), ≥ 0.05 N/mm <sup>2</sup> (80°C)
On Factory Coating @ 10 mm/min	DIN EN 12068 / ISO 21809-3	≥ 0.1 N/mm <sup>2</sup> (23°C), ≥ 0.05 N/mm <sup>2</sup> (80°C)
On Factory Coating @ 1.3 mm/min	ASTM D1002	≥ 0.1 N/mm <sup>2</sup> (23°C), ≥ 0.02 N/mm <sup>2</sup> (80°C)

**Storage Temperature:** +5 to 35°C. Store in a dry, well ventilated place in original packaging.



**DENSO (AUSTRALIA) PTY LTD**

77 - 95 National Boulevard  
Campbellfield, VIC 3061  
Tel: +61 3 9356 7600  
Fax: +61 3 9356 7699

www.densoaustralia.com.au

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# PRODUCT DATA SHEET

## Packaging

Premier™ 80 ST Heat Shrink Sleeve is available in 30 m length roll with a width of 450 mm and 600 mm.

Roll Dimension	Box Dimension (mm)	Area per Roll (m <sup>2</sup> )	Weight per Roll (kg)
450 mm x 30 m	360 x 360 x 460	13.5	39
600 mm x 30 m		18.0	51

Prepared on nominal width (from DN 80 to DN 1000), with separate or fixed closing strip, width 450 mm, 600 mm and 750 mm. Content and weight of selected sizes are as below.

Pipe Diameter (Dimension of Sleeve)	No. of Shrinkable Sleeves in box (Dimension of Box in mm)	Weight per Box (kg)
DN 80 (450 x 410 mm)	12 (490 x 330 x 230) 80 (770 x 570 x 350 x 300)	7.0 47
DN 100 (450 x 475 mm)	12 (490 x 330 x 230) 70 (770 x 570 x 350 x 300)	8.0 47
DN 150 (450 x 655 mm)	12 (490 x 330 x 230) 70 (770 x 570 x 350 x 300)	11 63
DN 200 (450 x 800 mm)	10 (490 x 330 x 230) 63 (770 x 570 x 350 x 300)	11 69
DN 250 (450 x 975 mm)	8 (490 x 330 x 230) 56 (770 x 570 x 350 x 300)	11 74
DN 300 (450 x 1140 mm)	8 (490 x 330 x 230) 50 (770 x 570 x 350 x 300)	13 77
DN 400 (450 x 1440 mm)	8 (490 x 330 x 230) 48 (770 x 570 x 350 x 300)	16 92
DN 500 (450 x 1810 mm)	6 (490 x 330 x 230) 40 (770 x 570 x 350 x 300)	15 97
DN 600 (450 x 2100 mm)	6 (490 x 330 x 230) 35 (770 x 570 x 350 x 300)	17 98
DN 700 (450 x 2410 mm)	5 (490 x 330 x 230) 30 (770 x 570 x 350 x 300)	16 96
DN 800 (450 x 2730 mm)	4 (490 x 330 x 230) 28 (770 x 570 x 350 x 300)	15 102
DN 900 (450 x 3050 mm)	4 (490 x 330 x 230) 24 (770 x 570 x 350 x 300)	17 98
DN 1000 (450 x 3370 mm)	4 (490 x 330 x 230) 24 (770 x 570 x 350 x 300)	18 107



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