

LPSM

**Heat-shrinkable corrosion
protection sleeves
for metal poles**



Raychem

LPSM

**Heat-shrinkable corrosion
protection sleeves
for metal poles**





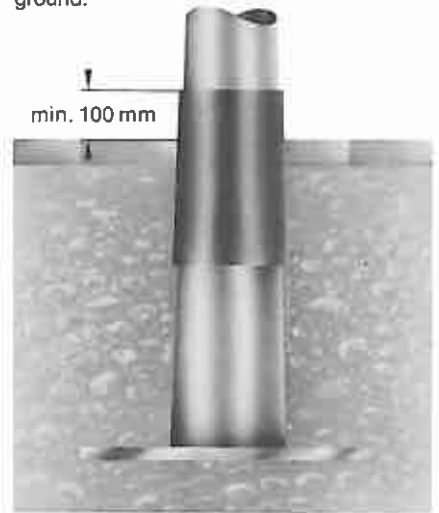
The life of metal poles used for street lighting, traffic signals and electric power is considerably shortened by corrosion from salted roads, aggressive soils and liquids. It has been found that corrosion is most severe in the pole section just below ground level, where moisture, mineral salts and atmospheric oxygen are all present, and many methods of reducing corrosion in this zone have been tried.

To combine tough, durable corrosion protection with fast and reliable installation, Raychem developed LPSM corrosion protection sleeves. Based on the well-proven Raychem technology of heat-shrinkable materials, these sleeves are installed in the factory or on site before erecting the poles, shrinking in diameter on heating to fit a range of diameters and easily accommodating tolerances in pole manufacture.

The heat also causes a special high-tacky corrosion resistant sealant, supplied already pre-coated inside the sleeve, to melt and flow under the shrinking action. Together with the chemically inert polyolefin sleeve material, this results in optimum abrasion-, impact- and corrosion-resistant protection.

LPSM sleeves are one product of Raychem's wide experience in the corrosion protection of steel pipe joints in the gas and oil industries, and have demonstrated their reliability and efficiency throughout the field of electricity supply.

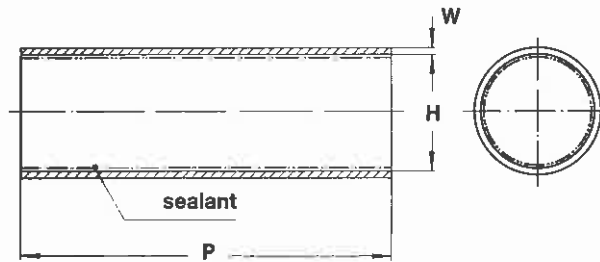
For installation, LPSM should be positioned on the pole by reference to the final street level. This provides maximum protection in the critical transition zone between air and ground.



LPSM Properties	Test Method	Typical Data	
Tensile Strength	ISO 37	20 MPa	
Ultimate Elongation	ISO 37	500 %	
Density	ISO/R 1183 Method A	1.06 g/cm ³	
Hardness	ISO 868	60 D	
Accelerated Ageing	168 hours at 150°C ± 2°C	ISO 188	
	Tensile Strength	ISO 37	19 MPa
	Ultimate Elongation	ISO 37	480 %
Thermal Endurance*	IEC 216	120°C	
Low Temperature Flexibility	4 hours at -40 ± 3°C	ASTM D2671 Procedure C	No cracking
Volume Resistivity	IEC 93	8 × 10 ¹³ Ω cm	
Water Absorption	ISO 62 Method 1	< 0.1 % after 336 hours at 23°C ± 2°C	
Resistance to Fungi	ASTM G21	Pass Rating 1	
Weathering	The material from which LPSM is manufactured contains carbon black to protect it from ultra-violet light.		
Additional Properties	Further details are given in Raychem specification PPS 3010/9. Sealant characteristics are detailed in PPS 3012/26.		

*based on ultimate elongation

Dimensions

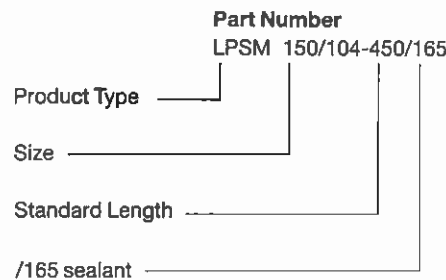


Part Number	Application Range (diameter)	H a min	b max	W a* nom	b nom	P a ±15
LPSM 61/37	-450/165 45- 58	61	37	0.9	1.0	Standard length for all sizes: 450mm
LPSM 80/55	-450/165 58- 75	80	55	0.8	1.2	
LPSM 92/67	-450/165 70- 85	92	67	0.9	1.2	
LPSM 109/81	-450/165 85-100	109	81	0.9	1.3	
LPSM 124/93	-450/165 100-110	124	93	0.9	1.3	
LPSM 150/104	-450/165 110-140	150	104	0.9	1.3	
LPSM 165/127	-450/165 135-155	165	127	1.0	1.3	
LPSM 196/140	-450/165 145-175	196	140	1.0	1.4	
LPSM 255/150	-450/165 165-240	255	150	1.0	1.8	
LPSM 300/210	-450/165 220-290	300	210	1.0	1.5	

Notes:

- Dimensions in millimeters
a = as supplied
b = after free recovery
* = at minimum supplied diameter
- Max. longitudinal change after free recovery: -10 %

Ordering Example



Raychem LPSM sleeves are supplied complete with detailed installation instructions.

For further details on this or any other Raychem products please contact your local Raychem sales engineer.

Raychem and LPSM are trade-marks of Raychem Corporation.

All the above information, including drawings, illustrations and graphic displays, reflects our present understanding and is to the best of our knowledge and belief correct and reliable. It does, however, under no circumstance constitute an assurance of any particular qualities. Such an assurance is only provided in the context of our product specifications.

Our liability for this product is set forth in our standard terms and conditions of sale.