tyco Electronics

Energy Division

Heat-shrinkable Cable Caps for the Electrical Power Industry

Wherever power cables are transported or installed, electrical engineers must contend with the risk of moisture and contamination. The methods they use to reduce these risks are often as long-established as cable technology itself.

But even the most tried and tested engineering practices can be suddenly rendered obsolete by new technological advances. One such example is Raychem Cable Caps, a technique based on heat-shrinkable materials which has brought unprecedented simplicity and reliability to the problem of protecting and sealing cable ends.

Raychem Cable Caps shrink when heated to tightly fit a range of cable sizes and constructions. At the same time a special adhesive also melts and flows under the shrinking action, gripping the cable and ensuring a high-integrity moisture seal.

Cable Caps, however, are far more than an exceptionally effective sealing system. Our advances in materials science ensure that these crosslinked polymer products also provide high-quality electrical insulation while at the same time resisting abrasion, weathering, and chemical attack.

Backed up, like all Raychem products, with comprehensive customer support and specialist technical service, millions of Raychem Cable Caps are in use throughout the world, helping to set ever higher standards of efficiency, economy and reliability in the field of power engineering.

The Energy Division of Tyco Electronics is one of the world's leading producers of heat-shrinkable materials and one of the largest cable accessory makers. Raychem components can be installed over variously-shaped objects to make a tight, rugged and fluid-resistant cover with excellent electrical performance.

Available in a wide range of materials, Raychem cable accessory kits, tubings and mouldings are developed to meet the exacting demands of the growing world of energy.

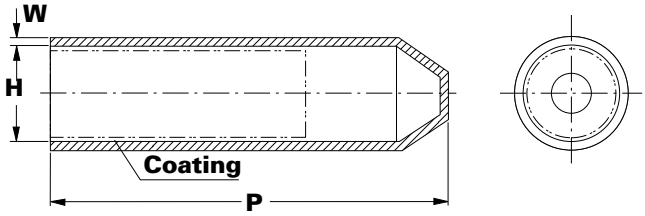
Raychem

Cable Caps

Properties and Ordering Information

Material Properties		Test Method	Requirement
Tensile Strength		ISO 37	12 MPa
Ultimate Elongation		ISO 37	200%
Specific Gravity		ISO 1183 Method A	0.9-1.2 g/cm³
Hardness		ISO 868	50-70 D
Accelerated	7 days at 150°C ±2°C	ISO 188	
Ageing	Tensile Strength	ISO 37	12 MPa
	Ultimate Elongation	ISO 37	200%
Low Temperature Flexibility	4 hours at -40°C	ASTM D2671 Procedure C	No cracking
Water Absorption		ISO 62 Method 1	0.5% max. at 23°C ± 2°C after 24 hours
Weathering	The material from which Cable Caps are made contains carbon black to protect it from ultra-violet radiation.		
Additional Properties	Further details are given in Raychem specification PPS 3011/6 and PPS 3011/25. Adhesive characteristics are detailed in PPS 3012/70.		

Ordering Information



Product/Size	Embossed (Number)	H a min	H b max	P b +15/-10%	W b ± 20%
102L011/S	1	10	4	38	2.0
102L022/S	2	20	7.5	55	2.8
102L027/S	none	29	13	93	2.5
102L033/S	3	35	15	90	3.2
102L044/S	4	55	25	143	3.9
102L048/S	none	75	32	150	3.3
102L050/S	none	93	38	142	4.4
102L055/S	5	100	45	162	3.8
102L066/S	6	120	70	145	3.8

Notes

1. Dimensions in millimeters
   a = as supplied
   b = after free recovery
2. Drawing depicts typical part.

Material and Coatings

Material

Cable Caps are made from materials specially formulated for sealing applications for all commonly used cables and cable sheath materials. Please consult your local sales engineer about other applications and Cable Caps made from other materials.

Coatings

The adhesive can be used on plastic, rubber and paper insulated cables.

Raychem Cable Caps are supplied with installation instructions.

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