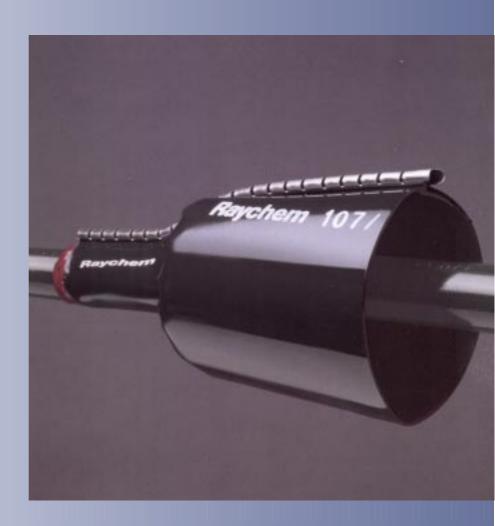
Raychem

CRSM
Heat-shrinkable wraparound
system for plastic or
metal sheathed cable repair



## Heat-shrinkable wraparound system for plastic or metal sheathed cable repair

CRSM wraparounds are a fast and permanent cable repair and sealing system. The repair sleeve is quickly fitted in place by means of its rail and channel closure. A moisture-proof, insulating and tight-fitting repair is then obtained in one step by heating, which makes the sleeve diameter shrink and the adhesive coating melt and flow into interstices. Because of its heatshrinkability, each CRSM size will fit several different cable diameters. The adhesive exhibits excellent bonding and sealing characteristics to all materials commonly used in the various cable and sheath constructions, such as plastic, rubber, lead and aluminium. CRSM wraparounds are made of an abrasion and corrosion resistant semi-rigid material, and are one result of Raychem's extensive capability in materials technology. As the world's leading maker of heat-shrinkable materials, Raychem offers a wide range of tubings and moulded parts for any application where a tight, insulating or fluid resistant cover is required over uniform or irregularly shaped objects. These products are available in a wide range of formulations to meet the demands of the growing world of energy.



1 CRSM wraparounds are used in a railway goods yard in Germany to restore the insulating, sealing and mechanical protection functions of damaged cable oversheaths.

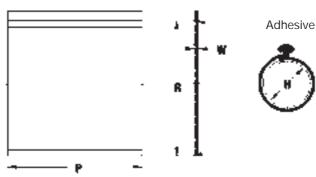


Labour-saving installation. Fitting and sealing all in one step. Abrasion and corrosion resistant. Each size covers a range of cable sizes.

Raychem's distinctive closure system, which incorporates a stainless steel channel slid over rails on the sleeve, keeps the wraparound in place during installation but can be easily removed when the adhesive has set.

Material Properties		Test Method		Requirement	
Tensile Strength		ISO 37		17 MPa	
Ultimate Elongation		ISO 37		350% min.	
Density		ISO 1183 N	Method A	1.0 – 1.2 g/cm <sup>3</sup>	
Hardness		ISO 868		50 – 70 D	
Accelerated Ageing	7 days at 150 °C ± 2 °C	ISO 188			
	Tensile Strength	ISO 37		14 MPa min.	
	Ultimate Elongation	ISO 37		3000 min.	
Thermal Endurance		IEC 216		120 °C	
Low Temperature Flexib	ility4 hours at -30 °C ± 3 °C	ASTM D2671F	Procedure C	No cracking	
Electric Strength		IEC 243		1 mm 180 kV/cm min. 3.5 mm 120 kV/cm min.	
Volume Resistivity		IEC 93		1 x $10^{12} \Omega$ cm min.	
Dielectric Constant		IEC 250		5 max.	
Water Absorption	14 days at 23 °C ± 2 °C	ISO 62 Metho	d 1	0.5% max.	
Resistance to Liquids	7 days in transformer oil	ISO 1817			
	at 23 °C ± 2 °C (VDE 0370)				
	Tensile Strength	ISO 37		14 MPa min.	
	Ultimate Elongation	ISO 37		300% min.	
Resistance to Fungi		ASTM G21		Pass Rating 1	
Weathering		The material from which CRSM is manufactured, contains carbon black to protect it from ultra-violet radiation.			
Additional Properties		Adhesive characteristics are detailed in Raychem specification PPS 3012/70. Further details are given in Raychem specification PPS 3010/9.			

## **Dimensions**



Product/Size	Application Range	<b>H</b> a min.	b max.	<b>R</b> a min.	b max.	<b>W</b> a min.*	b min.	Р
CRSM 34/10	11 – 21	35	9	110	35	0.3	2.4	all sizes are
CRSM 53/13	17 – 32	54	15	170	49	0.3	2.0	available
CRSM 84/20	24 - 50	86	21	270	69	0.3	2.0	in lengths of 250,
CRSM 107/29	31 – 65	108	27	340	90	0.3	2.0	500, 750, 1000
CRSM 143/36	33 - 86	144	28	455	119	0.3	1.8	and 1500 mm
CRSM 198/55	56 –120	203	50	640	172	0.3	2.1	
CRSM 250/98	103 –150	257	91	810	314	0.4	1.7	

Notes:

1. Dimensions in millimetres

a = as supplied

b = after free recovery

\* = at minimum supplied width

2. Max. longitudinal change after free recovery: – 0 – +10%

## **Ordering Example**

Product Type
Size
Standard Length
239 = Adhesive

Raychem CRSM wraparounds are supplied complete with detailed installation instructions.

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

At Raychem we are committed to continuous quality improvement in every aspect of our business.

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. Raychem is a trademark of Raychem Corporation.

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