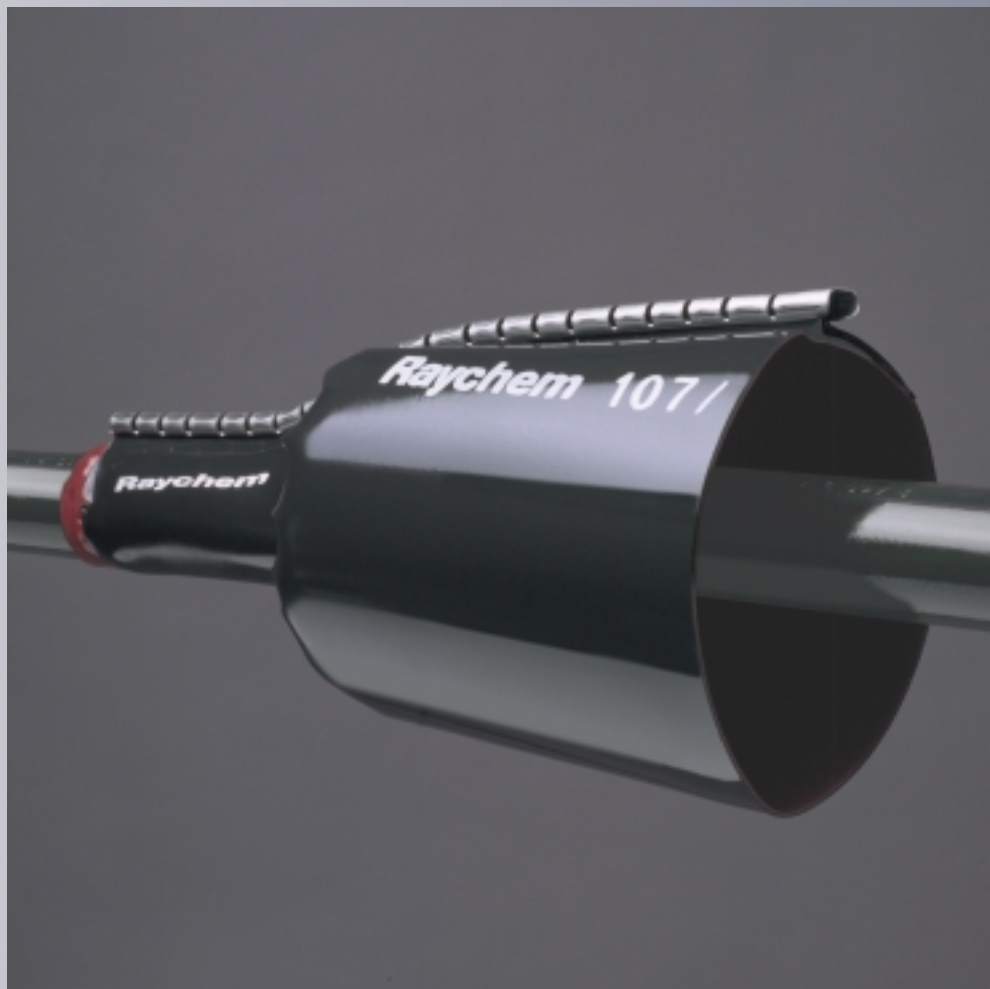


tyco

Electronics

Energy Division

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



Raychem

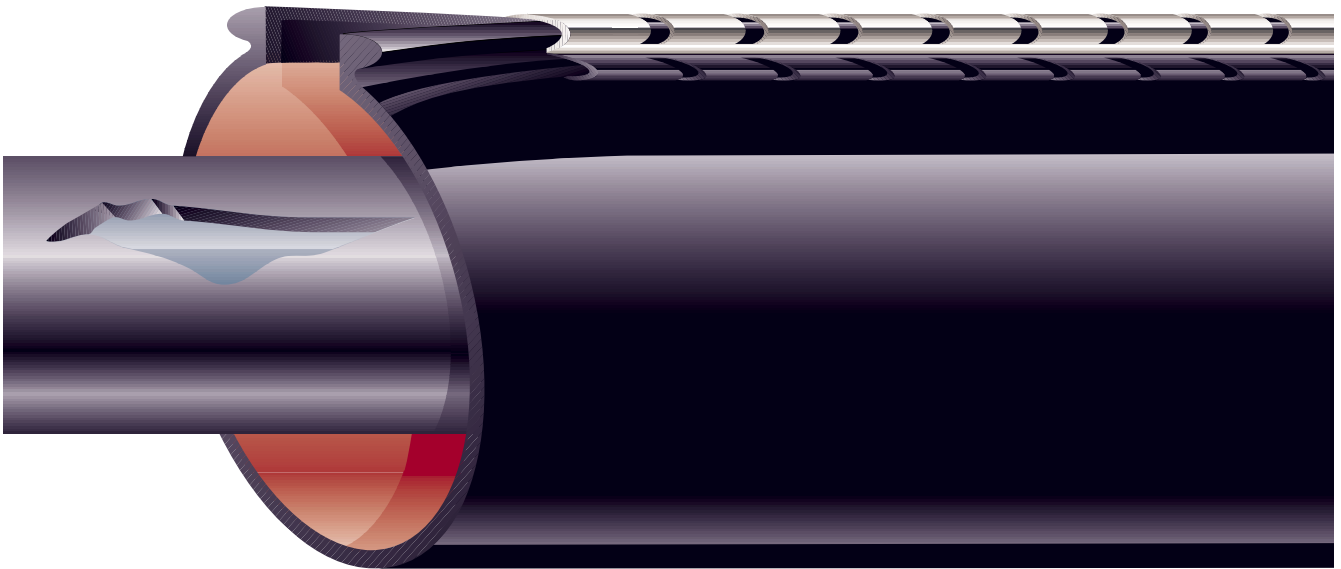
CRSM

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 heat-shrinkability, 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 our extensive capability in materials technology. As the world's leading maker of heat-shrinkable materials, we offer 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.



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

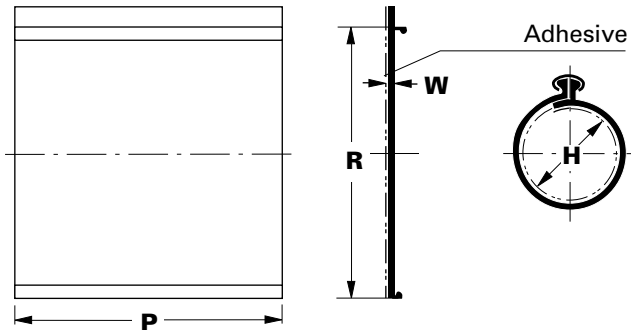


Labour-saving installation.
Fitting and sealing all in one step.
Abrasion and corrosion resistant.
Each size covers a range of cable sizes.

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	Method A	1.0 – 1.2 g/cm ³
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		300% min.
Thermal Endurance		IEC 60216		120°C
Low Temperature Flexibility	4 hours at -30°C ± 3°C	ASTM D2671	Procedure C	No cracking
Electric Strength		IEC 60243		1 mm 180 kV/cm min. 3.5 mm 120 kV/cm min.
Volume Resistivity		IEC 60093		1 x 10 ¹² Ω cm min.
Dielectric Constant		IEC 60250		5 max.
Water Absorption	14 days at 23°C ± 2°C	ISO 62	Method 1	0.5% max.
Resistance to Liquids	7 days in transformer oil at 23°C ± 2°C (VDE 0370)	ISO 1817		
	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



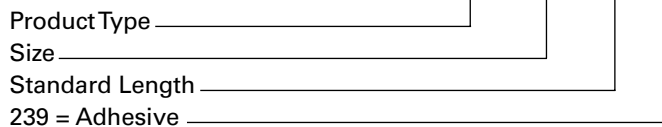
Product/Size	Application Range	H		R		W		P
		a min.	b max.	a min.	b max.	a min.*	b min.	
CRSM 34/10	11- 21	35	9	110	35	0.3	2.4	all sizes are available in lengths of 250, 500, 750, 1000 and 1500 mm
CRSM 53/13	17- 32	54	15	170	49	0.3	2.0	
CRSM 84/20	24- 50	86	21	270	69	0.3	2.0	
CRSM 107/29	31- 65	108	27	340	90	0.3	2.0	
CRSM 143/36	33- 86	144	28	455	119	0.3	1.8	
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:

- Dimensions in millimetres
a = as supplied
b = after free recovery
* = at minimum supplied width
- Max. longitudinal change after free recovery: - 0 - +10%

Ordering Example

Part Number
CRSM 53-13-1500/239



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 sales representative.

All of the above information, including drawings, illustrations and graphic designs, reflects our present understanding and is to the best of our knowledge and belief correct and reliable. Users, however, should independently evaluate the suitability of each product for the desired application. Under no circumstances does this constitute an assurance of any particular quality or performance. Such an assurance is only provided in the context of our product specifications or explicit contractual arrangements. Our liability for these products is set forth in our standard terms and conditions of sale.
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