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102L

Heat Shrinkable Halogen Free Cable Caps

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

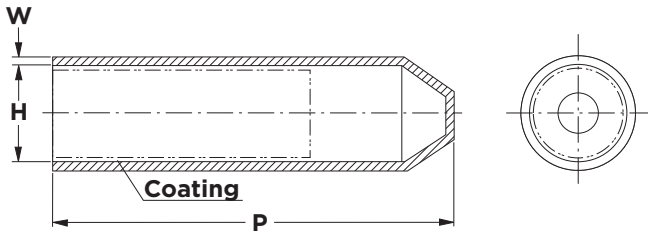
Cable Caps, however, are far more than an exceptionally effective sealing system. Our advances in materials science ensure that these crosslinked halogen free polymer products also provide high quality electrical insulation while at the same time resisting abrasion, weathering, and chemical attack.

Material

Cable Caps are made from materials specially formulated for sealing applications for all commonly used cables and cable sheath materials. The material from which Cable Caps are made contains carbon black to protect it from ultra violet radiation. Please consult your local sales engineer about other applications and Cable Caps made from other materials.

Coating

The sealant can be used on plastic, rubber and paper insulated cables. These Cable Caps are also available uncoated.



Catalogue Reference	H		P	W
	a	b	b	b
	min	max	+15/-10%	320%
102L011/S	10	4	38	2.0
102L022/S	20	7.5	55	2.8
102L027/S	29	13	93	2.5
102L033/S	35	15	90	3.2
102L044/S	55	25	143	3.9
102L048/S	75	32	150	3.3
102L050/S	93	38	142	4.4
102L055/S	100	45	162	3.8
102L066/S	120	70	145	3.8

Notes:

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

Change from /S to /U for Uncoated Cable Caps

Push on End Caps (Clear)

JOR

Silicone Rubber Cable End Caps

Cable end caps are used to protect cable ends against humidity during transportation and storage. They have high elasticity and toughness against crack propagation. They are weatherproof and resistant against UV rays.

Catalogue Reference	Cable Diameter	Cable Cross Section
	mm	mm ²
GURO-CEC-11/16	11 - 16	4x1, 5 - 5x2, 5
GURO-CEC-16/22	16 - 22	4x16, 5x10 - 5x6
GURO-CEC-20/26	20 - 26	4x4, 4 - 10, 5x16
GURO-CEC-23/30	23 - 30	5x16 - 4x25
GURO-CEC-30/38	30 - 38	4x50 - 4x70
GURO-CEC-38/48	38 - 48	4x95 - 4x120
GURO-CEC-44/54	44 - 54	4x150 - 4x185



Heat Shrinkable Halogen Free Cable Breakouts

302/402/502

Raychem low voltage breakouts are an easily installed, light weight insulation for sealing the crutches of plastic, paper and rubber insulated cables up to 1 kV. Raychem cable breakouts offer savings in weight, space and time over conventional methods and make overhead installation and cable transport easier.

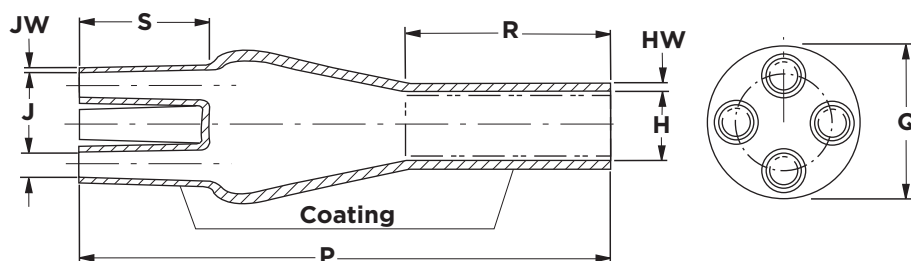
Requiring no special tools or skills, installation is completed within minutes by simply heating the breakout. The diameter then reduces to tightly grip the outer jacket and the cores. At the same time, the precoated sealant melts and reliably seals the cable crutch against moisture and the environment.

The heat shrinkable feature also means smaller inventories, as each breakout size will shrink to fit several different sizes and types of

cables. Made from semi-rigid cross linked halogen free polyolefin, these medium wall breakouts also offer resistance to abrasion, weathering, and atmospheric pollution.

As one of the world's leading manufacturers of heat shrinkable materials, we offer a wide range of tubings and moulded parts for any application where a sealed, protective, insulating or fluid resistant cover is required over uniform or irregularly shaped objects.

Our products are available in a wide variety of materials to meet the demands of the modern electrical power industry.



Catalogue Reference	Number of Cores	H		J		P	R	S	Q	HW	JW
		a	b	a	b	b	b	b	b	b	b
		min	max	min	max	310%	310%	310%	310%	320%	320%
302K333/S	2	28	9.2	15	4.1	90	-	25	15	3.2	1.6
302K224/S	2	48	32	22	7	172	-	70	34	2.0	2.0
302K466/S	2	86	42	40	17	200	-	75	45	2.5	2.5
402W533/S	3	38	13	16	4.2	103	45	28	22	2.7	1.5
402W516/S	3	63	22	26	9	180	85	40	35	3.5	1.5
402W520/S	3	70	25	27	9.5	159	107	52	32	4.0	2.0
402W525/S	3	85	33	32	12	180	130	50	38	3.0	2.5
402W530/S	3	90	43	38	16.2	180	130	50	46	2.7	2.7
402W526/S	3	95	28	44	13	205	90	45	42	3.5	2.5
402W248/S	3	115	45	52	22	240	100	60	64	4.0	2.5
402W545/S	3	124	60	51	24	239	188	51	65	3.0	3.2
402W439/S	3	170	60	60	30	252	90	66	85	4.2	2.6
502S013/S	4	23	9.5	7	2	60	-	17	13	2.0	1.2
502K033/S	4	45	16.5	14	3.4	98	71	25	-	2.5	1.9
502K046/S	4	45	19	20	7	165	75	40	45	3.5	2.0
502K016/S	4	75	25	25	9	217	100	44	50	3.5	2.0
502K020/S	4	80	25	27	9	217	100	44	50	3.5	2.0
502K026/S	4	100	31	40	13.5	223	103	51	50.4	3.5	2.5
502R810/S	3 + 1*	170	60	50*	23*	255	90	65	109	4.0	3.5
*One of 4 outlets dim = 43/19											

Notes:

- Dimensions in millimeters
a = as supplied
b = after free recovery
- Drawing depicts typical part.
- The recommended application range is from 20% above the recovered diameter to 20% below the expanded diameter.

Flexible Cable Repair Kit

CRPS

Raychems CRPS repair strip is a high quality replacement jacket for low and high voltage flexible mining cables. It is a tool free, flexible, flame retardant elastomeric strip that has been specially formulated to provide excellent resistance to abrasion, tearing, and cutting.

- Precoated with a thermoplastic sealant that provides an excellent seal against moisture and corrosive elements
- MSHA approved (No. P-137-13-MSHA)
- Tool-free, flexible, flame retardant elastomeric strip for jacket repair on mining and other flexible cables



Catalogue Reference	Standard Pack	Strip Length	Strip Width
		mm	mm
CRPS-248	20	1219	51
CRPS-260	20	1524	51
CRPS-290	15	2286	51
CRPS-2120	10	3048	51

Recommended coverage area includes 3 inches on either side of damaged area.

Heat Shrinkable Wraparound Reinforced Sleeves for Cable Repair and Corrosion Protection

CWRT

The CWRT repair sleeve is wraparound and heat-shrinkable.

It is closed by a slide-on flexible stainless steel channel and installed with a standard joiner's torch.

Sleeve

The sleeve material is a reinforced composite laminate.

Its outer surface is treated with a temperature indicating system to facilitate uniform heating during installation.

In addition, white lines are painted on the flat side of the rails which become visible through the channel openings as installation is completed.

The sleeve has a flap which is designed to seal longitudinal seam during installation. Both the sleeve

and the flap are pre-coated with hot melt adhesive which provides a tenacious bond to the cable under repair.

Channels

One or more flexible channel(s) are provided to slide onto the rails of the sleeve prior to installation.

If necessary spring-type underclips are also supplied to align the two channels.

Lengths

All sizes are available in lengths of:

- 250mm
- 500mm
- 750mm
- 1000mm
- 1500mm



Catalogue Reference	H	F	W
	Nom	Min	Min
CWRT-43/8	180	20	1.1
CWRT-53/12	215	20	1.1
CWRT-75/15	270	20	1.1
CWRT-100/25	365	20	1.1
CWRT-125/30	435	20	1.1
CWRT-146/38	515	20	1.1
CWRT-164/42	560	20	1.1
CWRT-200/50	690	20	1.1

Notes:

1. Dimensions in millimetres
2. Drawing Key
 1. Reinforced heat-shrinkable material
 2. Temperature-indicating paint
 3. Hot-melt adhesive
 4. White paint

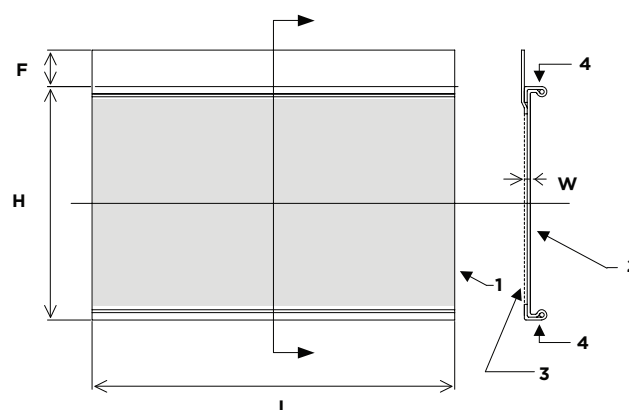
CWRT-43/8-1500/239

Product type

Size

Standard length

/239 - sealant

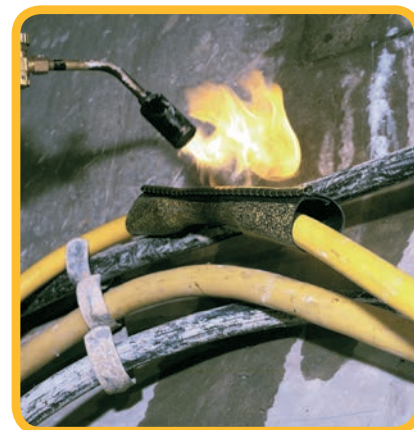


Heat Shrinkable Wraparound System for Rubber Sheathed Cable Repair

MRSM

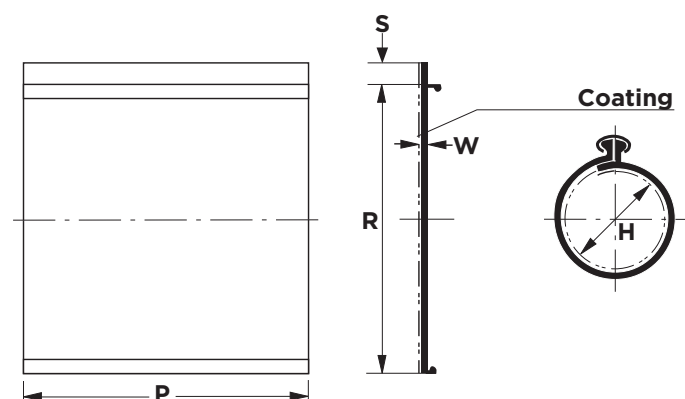
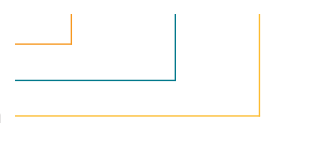
Raychem wraparounds MRSM are a fast, versatile and permanent repair for damaged flexible cable oversheaths. Since they are heat shrinkable, several cable sizes and types can be repaired by any one size of Raychem MRSM wraparound. This one step installation method ensures a tight, moisture-proof and insulating seal which is reliable and repeatable. Each wraparound is supplied complete with precise instructions for use.

High abrasion resistance, flexibility and insulating properties are combined in the tough modified polyolefin material from which Raychem wraparounds MRSM are made. Quickly fitted in place by means of its rail and channel closure, heating above 125°C causes the repair sleeve to shrink in diameter to fit the cable. At the same time the adhesive liner melts and seals against fluids and dirt, thus completing the job.



MRSM-50/23-250/239

Product type
Size
Standard length
/239 - adhesive



Catalogue Reference	Application Range	H		R		S	W		P
		a	b	a	b	a	a	b	315
		min	max	min	max		min	max	mm
MRSM-50/23	25 - 40	50	23	159	72	25	0.8	1.8	250/600
MRSM-73/38	40 - 58	73	38	230	119	25	0.5	1.8	300/600/750
MRSM-100/51	58 - 89	100	51	320	161	25	0.5	1.8	250/600/750

Notes:

- Dimensions in millimetres
a = as supplied
b = after free recovery
* = at minimum supplied width
- Max. longitudinal change after free recovery: – 310%
- Other lengths and sizes on request

Fibre Reinforced Repair Sleeve

KL-RFSM

The fibre reinforced wraparound KL-RFSM is used for fast and reliable cable repairs in applications where high mechanical resistance is required. The wraparound is supplied with an adhesive coating. The KL-RFSM wraparounds can also be used as an outer sheath for low and medium voltage joints.



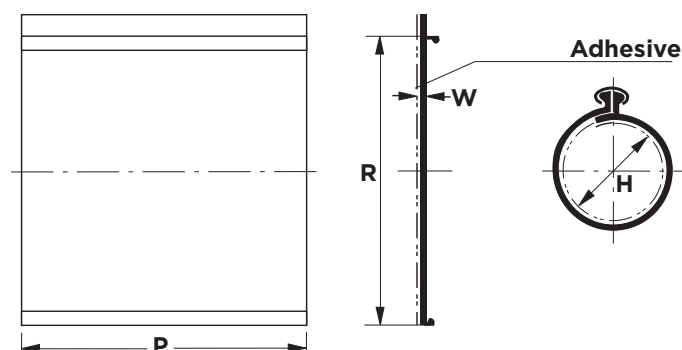
KL-RFSM-45/15-500/123

Product type

Size

Standard length

/123 - adhesive



Catalogue Reference	Application Range	H		R		P
		a	b	a	b	315
		min	max	min	max	mm
KL-RFSM-45/15-500/123	15 - 45	50	13	1.5	2.5	500
KL-RFSM-45/15-750/123	15 - 45	50	13	1.5	2.5	750
KL-RFSM-65/20-500/123	20 - 65	71	18	1.5	2.5	500
KL-RFSM-65/20-1000/123	20 - 65	71	18	1.5	2.5	1000
KL-RFSM-95/30-750/123	30 - 95	103	27	1.5	2.5	750
KL-RFSM-95/30-1000/123	30 - 95	103	27	1.5	2.5	1000
KL-RFSM-95/30-1500/123	30 - 95	103	27	1.5	2.5	1500
KL-RFSM-125/40-750/123	40 - 125	135	36	1.5	2.5	750
KL-RFSM-125/40-1000/123	40 - 125	135	36	1.5	2.5	1000
KL-RFSM-125/40-1500/123	40 - 125	135	36	1.5	2.5	1500
KL-RFSM-165/55-750/123	55 - 165	178	50	1.5	2.5	750
KL-RFSM-165/55-1500/123	55 - 165	178	50	1.5	2.5	1500
KL-RFSM-205/65-750/123	65 - 205	222	59	1.5	2.5	750
KL-RFSM-205/65-1500/123	65 - 205	222	59	1.5	2.5	1500
KL-RFSM-205/65-2500/123	65 - 205	222	59	1.5	2.5	2500

Notes:

- Dimensions in millimetres
a = as supplied
b = after free recovery

Fast Splicing Tape Wrap

FSTW

Raychem's FSTW is a thermoplastic rubber tape combined with a butyl rubber sealant specially formulated for underground applications. FSTW is ideal for repairing cable jackets, sealing low voltage splices, and re-jacketing MV cable splices.

Saves Time and Money

FSTW provides a complete re-jacketing solution in one pass as opposed to the multi-layer construction required when using traditional tape products. It's quick to install. There is no need for separate sealing mastic and tape as it combines sealant and rubber tape in one convenient product.

Tough Protection

FSTW rubber tape is made 13mm

thick, which offers strong puncture resistance from underground material and debris. FSTW is rated for use on 90°C rated cables, in underground use in acid or caustic soils, and saltwater environments. It is UV resistant and rated for aerial exposure. Splices made with FSTW qualify to ANSI C119.1.

Environmental Seal

FSTW provides a complete watertight seal for use in submersible applications.

Easy Removal

Mastic is in contact with cable surface only at ends which allows for easy removal.



Catalogue Reference	Standard Length	Width	Thickness
	mm	mm	mm
CPGI-FSTW-2-1-4	1200	51	13
FSTW-2-1-6	1800	51	13

Wrap-around Splice Cover (1000V)

GELWRAP

Raychem's GelWrap closure sleeves quickly and conveniently insulate and seal buried electrical connections rated up to 1000 volts. The robust, yet compact, design is engineered to handle the harsh environments of direct burial and manhole applications. GelWrap sleeves are equally well suited for insulation and jacket repair.

Features

- Installers will appreciate the simple wraparound design and dependable gel sealing performance. Simply wrap and snap the sleeve on any cable in the use range. The gel in the sleeve seals on contact. Installation is literally a snap.
- The factory cured silicone gel sealant in the GelWrap sleeve completely encapsulates the

connection. Moisture cannot enter the splice.

- PowerGel sealing gel was specifically developed for the electrical power industry. PowerGel sealing gel is hydrophobic and provides an excellent moisture seal over a wide operating temperature range (-40°C to 95°C).

It is compatible with solid dielectric cable insulations.

Other common uses for GelWrap sleeves

- LV cable repair sleeves
- MV cable jacket repair
- MV splice re-jacketing
- Elbow sealing sleeve



Catalogue Reference	Application Range	Sleeve Length	Conductor Size	Max Connector Opening
	mm	mm	mm ²	mm
GELWRAP-18/4-100	4 - 18	100	4 - 95	25
GELWRAP-18/4-150	4 - 18	150	4 - 95	75
GELWRAP-18/4-200	4 - 18	200	4 - 95	125
GELWRAP-18/4-250	4 - 18	250	4 - 95	175
GELWRAP-18/4-300	4 - 18	300	4 - 95	225
GELWRAP-33/10-150	10 - 33	150	35 - 240	50
GELWRAP-33/10-200	10 - 33	200	35 - 240	100
GELWRAP-33/10-250	10 - 33	250	35 - 240	150
GELWRAP-33/10-300	10 - 33	300	35 - 240	200
GELWRAP-33/10-350	10 - 33	350	35 - 240	250
GELWRAP-50/20-200	20 - 38	200	250 - 750 (120 - 400)	50
GELWRAP-50/20-250	20 - 38	250	250 - 750 (120 - 400)	100
GELWRAP-50/20-300	20 - 38	300	250 - 750 (120 - 400)	150
GELWRAP-50/20-350	20 - 38	350	250 - 750 (120 - 400)	200
GELWRAP-50/20-400	20 - 38	400	250 - 750 (120 - 400)	250

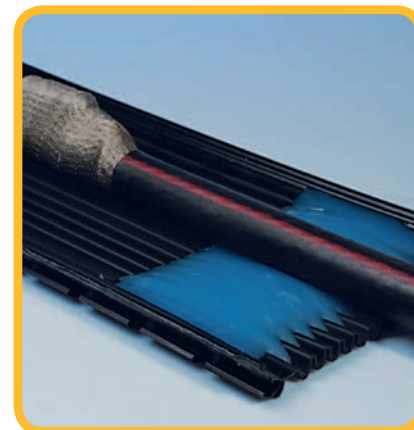
Gel Wraparound Rejacketing Sleeves (up to 35kV)

GWRS

Cold-applied Gel Wraparound Rejacketing Sleeves quickly and conveniently seal and protect medium voltage cable splices up to 35 kV. GWRS rejacketing closure sleeves can also be used to repair cables with jacket damage. GWRS closure sleeves are designed for manhole, direct buried, or weather exposed applications.

The GWRS closure sleeves can be used over all types and brands of push-on and cold-applied splices when a water-tight cover is required.

The wraparound design reduces installation space because it is not required to position a tube to the side while installing the splice. The result is easier installation in cramped manholes and less digging for direct buried applications.



Catalogue Reference	Application Range	Splice Diameter Use Range	Length	Max Jacket Opening
	mm	mm	mm	mm
GWRS-75/25-750	25 - 55	25-75	750	510
GWRS-75/25-850	25 - 55	25-75	850	610
GWRS-75/25-1050	25 - 55	25-75	1050	810
GWRS-100/40-1050	40 - 70	40-100	1050	810

Note: Add X at the end of the catalog number (e.g. GWRS-100/40-1050x) for external earthing, this kit includes gel strips for sealing neutrals or earth wire exits.