

SECTION 6

CABLE JOINTING



6



6.1 ALCO HEATSHRINK AND ACCESSORIES

6.1.1 HEATSHRINK TUBING RANGE - THIN, MEDIUM AND THICK WALL

Purpose:

Heatshrink is ideally used for heavy duty and general purpose use ie electrical insulation, termination, splicing, bundling, cable protection and strain relief

Applications:

Thick wall: suitable for major cable joints and terminations

Medium wall: suitable for waterproof cable joints and terminations

Thin wall: suitable for insulation colour-coding and cable terminations

Features

- Low shrink temperature and flame retardant
- Flexible and UV resistant
- Glue lined and waterproof for greater mechanical strength (medium and thick wall only)

Shrink Temperature:

Above 110°C

Shrink Ratio:

Radial Shrinking Ratio:

> 50%

Longitudinal Shrinking Ratio:

< 10%

Tensile Strength:

15.5 MPa

Elongation at Break:

580%

Operating Temperature:

-55°C to +125°C



Specifications					
Part No	Diameter as supplied (mm)	Fully recovered diameter after heating (mm)	Fully recovered wall thickness (mm)	Colour	Length (m)
Thin Wall Heatshrink					
HSTNW1.5/0.75BK	1.5	0.65	0.28	black	1.2
HSTNW1.5/0.75BL	1.5	0.65	0.28	blue	1.2
HSTNW1.5/0.75CL	1.5	0.65	0.28	clear	1.2
HSTNW1.5/0.75RD	1.5	0.65	0.28	red	1.2
HSTNW1.5/0.75WH	1.5	0.65	0.28	white	1.2
HSTNW1.5/0.75YG	1.5	0.65	0.28	yellow/ green	1.2
HSTNW2.0/1.0BK	2.5	1.0	0.35	black	1.2
HSTNW2.0/1.0BL	2.5	1.0	0.35	blue	1.2
HSTNW2.0/1.0CL	2.5	1.0	0.35	clear	1.2
HSTNW2.0/1.0RD	2.5	1.0	0.35	red	1.2
HSTNW2.0/1.0WH	2.5	1.0	0.35	white	1.2
HSTNW2.0/1.0YG	2.5	1.0	0.35	yellow/ green	1.2
HSTNW2.5/1.25BK	3.0	1.5	0.40	black	1.2
HSTNW2.5/1.25BL	3.0	1.5	0.40	blue	1.2
HSTNW2.5/1.25CL	3.0	1.5	0.40	clear	1.2
HSTNW2.5/1.25RD	3.0	1.5	0.40	red	1.2
HSTNW2.5/1.25WH	3.0	1.5	0.40	white	1.2
HSTNW2.5/1.25YG	3.0	1.5	0.40	yellow/ green	1.2
HSTNW5.0/2.5BK	5.5	2.5	0.55	black	1.2
HSTNW5.0/2.5BL	5.5	2.5	0.55	blue	1.2
HSTNW5.0/2.5CL	5.5	2.5	0.55	clear	1.2
HSTNW5.0/2.5RD	5.5	2.5	0.55	red	1.2
HSTNW5.0/2.5WH	5.5	2.5	0.55	white	1.2
HSTNW5.0/2.5YG	5.5	2.5	0.55	yellow/ green	1.2
HSTNW7.0/3.55BK	7.5	3.5	0.55	black	1.2
HSTNW7.0/3.55BL	7.5	3.5	0.55	blue	1.2
HSTNW7.0/3.55CL	7.5	3.5	0.55	clear	1.2
HSTNW7.0/3.55RD	7.5	3.5	0.55	red	1.2
HSTNW7.0/3.55WH	7.5	3.5	0.55	white	1.2
HSTNW7.0/3.55YG	7.5	3.5	0.55	yellow/ green	1.2
HSTNW10.0/5.0BK	10.5	5.0	0.60	black	1.2
HSTNW10.0/5.0BL	10.5	5.0	0.60	blue	1.2
HSTNW10.0/5.0CL	10.5	5.0	0.60	clear	1.2
HSTNW10.0/5.0RD	10.5	5.0	0.60	red	1.2
HSTNW10.0/5.0WH	10.5	5.0	0.60	white	1.2
HSTNW10.0/5.0YG	10.5	5.0	0.60	yellow/ green	1.2
HSTNW13/6.5BK	13.5	6.5	0.65	black	1.2
HSTNW13/6.5BL	13.5	6.5	0.65	blue	1.2
HSTNW13/6.5CL	13.5	6.5	0.65	clear	1.2
HSTNW13/6.5RD	13.5	6.5	0.65	red	1.2
HSTNW13/6.5WH	13.5	6.5	0.65	white	1.2
HSTNW13/6.5YG	13.5	6.5	0.65	yellow/ green	1.2
HSTNW18/9BK	19.0	9.0	0.80	black	1.2
HSTNW18/9BL	19.0	9.0	0.80	blue	1.2
HSTNW18/9CL	19.0	9.0	0.80	clear	1.2
HSTNW18/9RD	19.0	9.0	0.80	red	1.2
HSTNW18/9WH	19.0	9.0	0.80	white	1.2
HSTNW18/9YG	19.0	9.0	0.80	yellow/ green	1.2
HSTNW22/11BK	24.0	11.0	0.80	black	1.2
HSTNW22/11BL	24.0	11.0	0.80	blue	1.2
HSTNW22/11CL	24.0	11.0	0.80	clear	1.2
HSTNW22/11RD	24.0	11.0	0.80	red	1.2
HSTNW22/11WH	24.0	11.0	0.80	white	1.2
HSTNW22/11YG	24.0	11.0	0.80	yellow/ green	1.2
HSTNW40/20BK	41.5	20.0	1.00	black	1.2
HSTNW40/20BL	41.5	20.0	1.00	blue	1.2
HSTNW40/20CL	41.5	20.0	1.00	clear	1.2
HSTNW40/20RD	41.5	20.0	1.00	red	1.2

6.1 ALCO HEATSHRINK AND ACCESSORIES

6.1.1 HEATSHRINK TUBING RANGE - THIN, MEDIUM AND THICK WALL

Part No	Specifications				
	Diameter as supplied (mm)	Fully recovered diameter after heating (mm)	Fully recovered wall thickness (mm)	Colour	Length (m)
HSTNW40/20WH	41.5	20.0	1.00	white	1.2
HSTNW40/20YG	41.5	20.0	1.00	yellow/ green	1.2
HSTNW50/25BK	51.0	25.0	1.00	black	1.2
HSTNW50/25BL	51.0	25.0	1.00	blue	1.2
HSTNW50/25CL	51.0	25.0	1.00	clear	1.2
HSTNW50/25RD	51.0	25.0	1.00	red	1.2
HSTNW50/25WH	51.0	25.0	1.00	white	1.2
HSTNW50/25YG	51.0	25.0	1.00	yellow/ green	1.2
HSTNW70/35BK	70.0	36.0	1.30	black	1.2
HSTNW70/35BL	70.0	36.0	1.30	blue	1.2
HSTNW70/35CL	70.0	36.0	1.30	clear	1.2
HSTNW70/35RD	70.0	36.0	1.30	red	1.2
HSTNW70/35WH	70.0	36.0	1.30	white	1.2
HSTNW70/35YG	70.0	36.0	1.30	yellow/ green	1.2
HSTNW100/50BK	100.0	51.0	1.46	black	1.2
HSTNW100/50BL	100.0	51.0	1.46	blue	1.2
HSTNW100/50CL	100.0	51.0	1.46	clear	1.2
HSTNW100/50RD	100.0	51.0	1.46	red	1.2
HSTNW100/50WH	100.0	51.0	1.46	white	1.2
HSTNW100/50YG	100.0	51.0	1.46	yellow/ green	1.2
HSTNW120/60BK	120.0	61.0	1.56	black	1.2
HSTNW120/60BL	120.0	61.0	1.56	blue	1.2
HSTNW120/60CL	120.0	61.0	1.56	clear	1.2
HSTNW120/60RD	120.0	61.0	1.56	red	1.2
HSTNW120/60WH	120.0	61.0	1.56	white	1.2
HSTNW120/60YG	120.0	61.0	1.56	yellow/ green	1.2
HSTNW150/75BK	150.0	76.0	1.56	black	1.2
HSTNW150/75BL	150.0	76.0	1.56	blue	1.2
HSTNW150/75CL	150.0	76.0	1.56	clear	1.2
HSTNW150/75RD	150.0	76.0	1.56	red	1.2
HSTNW150/75WH	150.0	76.0	1.56	white	1.2
HSTNW150/75YG	150.0	76.0	1.56	yellow/ green	1.2
HSTNW200/100BK	200.0	100.0	1.56	black	1.2
HSTNW200/100BL	200.0	100.0	1.56	blue	1.2
HSTNW200/100CL	200.0	100.0	1.56	clear	1.2
HSTNW200/100RD	200.0	100.0	1.56	red	1.2
HSTNW200/100WH	200.0	100.0	1.56	white	1.2
HSTNW200/100YG	200.0	100.0	1.56	yellow/ green	1.2
Medium Wall Heatshrink					
HSMWGL10/3L	10.0	3.0	1.75	black	1.2
HSMWGL16/5L	16.0	5.0	1.90	black	1.2
HSMWGL25/8L	25.0	8.0	2.45	black	1.2
HSMWGL35/12L	35.0	10.0	2.70	black	1.2
HSMWGL50/16L	52.0	16.0	2.80	black	1.2
HSMWGL85/25L	85.0	25.0	3.30	black	1.2
HSMWGL115/34L	115.0	34.0	3.70	black	1.2
HSMWGL140/42L	140.0	42.0	3.70	black	1.2
Thick Wall Heatshrink					
HSTKWGL13/4	13.0	4.0	2.75	black	1.2
HSTKWGL19/6	20.0	6.0	2.90	black	1.2
HSTKWGL28/9	28.0	9.0	2.90	black	1.2
HSTKWGL38/12	38.0	12.0	4.00	black	1.2
HSTKWGL51/16	51.0	16.0	5.00	black	1.2
HSTKWGL68/22	70.0	21.0	5.00	black	1.2
HSTKWGL90/30	105.0	30.0	5.10	black	1.2
HSTKWGL130/36	140.0	42.0	5.10	black	1.2



6.1 ALCO HEATSHRINK AND ACCESSORIES

6.1.2 HEATSHRINK STRAIGHT THROUGH JOINTS

Voltage Level:

- U_o/U (U_m) 0.6/1 (1.2) kV

Applications:

- Indoor
- Underground
- Outdoor
- Cable trays

Product Supplied with:

- Inner tubes
- Cleaning tissue
- Fire resistant tubes
- Emery cloth
- Outer tube
- Easy-to-follow illustrated mounting instructions

Features

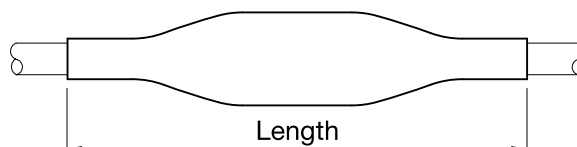
- For fire-resistant cable
- Halogen-free
- Compact dimensions
- Silicone-free
- Watertight
- Unlimited shelf life
- Resistant to UV-radiation, alkaline earths and chemical agents
- Low smoke emission
- High electrical insulation values




Approvals:

- DIN VDE 0472, part 814 (FE 180)
- IEC 331 – 332
- DIN 4102, part 12, concept February 1996 (E90)



Suitable for connecting fire-resistant cables, wherever required.
(e.g. power plants, chemical plants, buildings, airports, tunnels,
fire alarm systems, escape ways etc.)



Specifications					
Part No	Type	Length (mm)	Max Cross Section per Conductor (mm ²)		
			Plastic Insulated Cable		Concentric Conductor
			 4x	 5x	 4x
HSJP4X1.5-4	SMH4 1.5-4 E90	350	1.5-4	—	—
HSJP4X06-10	SMH4 6-10 E90	380	6-10	—	—
HSJP4X16-25	SMH4 16-25 E90	470	16-25	—	—
HSJP4X35-50	SMH4 35-50 E90	500	35-50	—	—
HSJP4X70-95	SMH4 70-95 E90	600	70-95	—	—
HSJP4X120-150	SMH4 120-150 E90	600	120-150	—	—
HSJP4X185-240	SMH4 185-240 E90	750	185-240	—	—
HSJP5X1.5-4	SMH5 1.5-4 E90	350	—	1.5-4	—
HSJP5X06-10	SMH5 6-10 E90	380	—	6-10	—
HSJP5X16-25	SMH5 16-25 E90	470	—	16-25	—
HSJC4X1.5-4	SMHC4 1.5-4 E90	350	—	—	1.5-4
HSJC4X06-10	SMHC4 6-10 E90	380	—	—	6-10
HSJC4X16-25	SMHC4 16-25 E90	470	—	—	16-25
HSJC4X35-50	SMHC4 35-50 E90	500	—	—	35-50
HSJC4X70-95	SMHC4 70-95 E90	600	—	—	70-95
HSJC4X120-150	SMHC4 120-150 E90	600	—	—	120-150
HSJC4X185-240	SMHC4 185-240 E90	750	—	—	185-240

Note: Connectors must be ordered separately. Lead times apply.

6.1 ALCO HEATSHRINK AND ACCESSORIES

6.1.3 HEATSHRINK REPAIR SLEEVES

Features

- Medium wall
- Silicone-free and UV-resistant
- Non-corrosive and suitable for quick sealing and cable repairs
- Halogen-free
- Excellent chemical and electrical properties
- Flame retardant, resistant to cold flow
- High tensile strength
- Maximum internal pressure 1.5 bar
- With hot melting adhesive and stainless steel channel

Material

- Cross-linked polyolefin
- Free of lead and cadmium

Colour

- Black

Specifications							
Part No	Type	Length (mm)	Internal Diameter (mm)		Application (mm)		Recovered Wall Thickness (mm)
			Before Shrinkage	After Shrinkage	Min Shrinkage	Max Shrinkage	
HSRS28-10	SRMAHV 28-10	500	32	10	10	28	2.3
HSRS43-12	SRMAHV 43-12	500	52	12	12	43	3.4
HSRS72-18	SRMAHV 72-18	500	82	18	18	72	3.4
HSRS93-26	SRMAHV 93-26	500	105	26	26	93	3.4
HSRS115-30	SRMAHV 115-30	500	130	30	30	115	2.3
HSRS125-32	SRMAHV 125-32	500	143	32	32	125	2.3
HSRS150-50	SRMAHV 150-50	500	180	50	50	150	2.3



Suitable for quick sealing and cable repair

Technical Data	Value	Test Method
Physical properties		
Density	~ 1.05 g/cm³	DIN 53 479
Hardness	< 50 Shore D	DIN 53 505
Elongation at break	300%	EN ISO 527–2
Tensile strength	13 MPa	EN ISO 527–2
Longitudinal shrinkage	< 10%	CP–PM 1013*
Shrink ratio	> 3:1	–
Thermal properties		
Operating temperature range	–40°C to +120°C	DIN 53 446
Shrinking temperature	> 125°C	CP–PM–1004*
Burning behaviour	non self–extinguishing	ASTM–D 876
Flexibility at low temperatures	–40°C	ASTM 2671 C
Thermal ageing (168hrs at 150°C)	350%	EN ISO 527–2
Elongation at break	14 MPa	
Tensile strength		
Electrical properties		
Dielectric strength	12 kV/mm	DIN VDE 0303 P.2
Volume resistivity	10 ¹⁴ Ω x cm	DIN VDE 0303 P.3
Dielectric constant	~ 5	DIN VDE 0303 P.3
Chemical properties		
Corrosion	none	ASTM 2671
Water absorption	< 0.15%	DIN 53 495 1L
Resistance to fungus and decay	Ratio 1	ISO 846 Meth. A

6.1 ALCO HEATSHRINK AND ACCESSORIES

6.1.4 LOW VOLTAGE JOINT KITS FOR UNARMoured CABLE

Features

- Designed to perform cable joints on PVC, XLP or rubber insulated cable up to 0.6/1kV
- Each kit is supplied with 5 small pieces of thin wall heatshrink and 2 larger pieces of thin and thick wall heatshrink
- Also supplied with sealing mastic tape, sanding cloth and solvent wipe

Part No	OD Cable Range (mm)	Specifications			
		Suitable Cable (mm ²)			
		Two Core	Three Core	Four Core	Four Core & Earth
ALCLVKIT0	1.5-6	-	-	-	-
ALCLVKIT1	8-25	1.5-95	1.5-50	1.5-35	1.5-25
ALCLVKIT2	15-32	6-120	6-70	4-50	4-35
ALCLVKIT3	20-44	35-185	16-150	16-120	10-70
ALCLVKIT4	20-55	95-300	70-240	35-185	35-150
ALCLVKIT5	30-80	150-300	120-300	95-300	70-240

Note: kits not supplied with copper links, need to be ordered separately (see page 69)



6.1.5 LOW VOLTAGE JOINT KITS FOR ARMoured CABLE

Features

- Designed to perform cable joints on PVC, XLP or rubber insulated cable up to 0.6/1kV
- Each kit is supplied with 5 small pieces of thin wall heatshrink and 2 larger pieces of thin and thick wall heatshrink
- Also supplied with copper braid tape, sanding cloth, pressure spring and solvent wipe

Part No	Underbedding Diameter (mm)	Specifications			
		Suitable Cable (mm ²)			
		Two Core	Three Core	Four Core	Four Core & Earth
ALCLVAKIT1	18	6-16	-	-	-
ALCLVAKIT2	25	25-38	16-35	16-25	16-25
ALCLVAKIT3	40	-	50-95	35-70	35-70
ALCLVAKIT4	50	-	120-150	95-120	95-120
ALCLVAKIT5	60	-	185-240	185-240	185-240

Note: kits not supplied with copper links, need to be ordered separately (see page 69)



6.1.6 PHASE IDENTIFICATION KITS

Features

- Designed to identify phases and termination lugs
- Ready made identification kits
- Low shrink temperature and UV resistant

Part No	Lug Size (mm)	Length (mm)	Specifications				
			Suitable Heatshrink				
			Black	Blue	Red	White	Yellow/Green
ALCPHIKIT6	6	16	HSTNW7.0/3.5BK	HSTNW7.0/3.5BL	HSTNW7.0/3.5RD	HSTNW7.0/3.5WH	HSTNW7.0/3.5YG
ALCPHIKIT10	10	18	HSTNW10.0/5.0BK	HSTNW10.0/5.0BL	HSTNW10.0/5.0RD	HSTNW10.0/5.0WH	HSTNW10.0/5.0YG
ALCPHIKIT35	16-35	32	HSTNW13/6.5BK	HSTNW13/6.5BL	HSTNW13/6.5RD	HSTNW13/6.5WH	HSTNW13/6.5YG
ALCPHIKIT95	50-95	40	HSTNW18/9BK	HSTNW18/9BL	HSTNW18/9RD	HSTNW18/9WH	HSTNW18/9YG
ALCPHIKIT150	120-150	45	HSTNW22/11BK	HSTNW22/11BL	HSTNW22/11RD	HSTNW22/11WH	HSTNW22/11YG
ALCPHIKIT240	185-240	50	HSTNW40/20BK	HSTNW40/20BL	HSTNW40/20RD	HSTNW40/20WH	HSTNW40/20YG
ALCPHIKIT630	300-630	80	HSTNW50/25BK	HSTNW50/25BL	HSTNW50/25RD	HSTNW50/25WH	HSTNW50/25YG
ALCPHIKIT1200	800-1200	140	HSTNW70/35BK	HSTNW70/35BL	HSTNW70/35RD	HSTNW70/35WH	HSTNW70/35YG

Note: kits not supplied with copper links, need to be ordered separately (see page 69)



6.1 ALCO HEATSHRINK AND ACCESSORIES

6.1.7 GENERAL PURPOSE HEATSHRINK KIT

Features

- 229 piece thin wall heatshrink kit in assorted colours
- All pieces are thin wall heatshrink

Specifications

Part No: ALCHSKIT1



Contents of Kit			
Part No	Length	Colour	Qty
HSTNW2.5/1.25BK	55mm	black	21pcs
HSTNW2.5/1.25	55mm	assorted	21pcs
HSTNW5.0/2.5BK	55mm	black	42pcs
HSTNW5.0/2.5	55mm	assorted	42pcs
HSTNW7.0/3.55BK	55mm	black	21pcs
HSTNW7.0/3.55	55mm	assorted	21pcs
HSTNW10.0/5.0BK	55mm	black	21pcs
HSTNW10.0/5.0	55mm	assorted	21pcs
HSTNW13/6.5BK	55mm	black	6pcs
HSTNW13/6.5	55mm	assorted	7pcs
HSTNW18/9BK	250mm	black	2pcs
HSTNW18/9	250mm	assorted	2pcs
HSTNW22/11BK	250mm	black	2pcs

6.1.8 MULTI PURPOSE HEATSHRINK KIT

Features

- 202 piece thin and medium wall heatshrink kit in assorted colours
- Medium wall range is 250mm in length and thin wall range is 55mm in length

Specifications

Part No: ALCHSKIT2



Contents of Kit			
Part No	Length	Colour	Qty
HSTNW2.5/1.25BK	55mm	black	21pcs
HSTNW2.5/1.25	55mm	assorted	21pcs
HSTNW5.0/2.5BK	55mm	black	21pcs
HSTNW5.0/2.5	55mm	assorted	21pcs
HSTNW7.0/3.55BK	55mm	black	21pcs
HSTNW7.0/3.55	55mm	assorted	21pcs
HSTNW10.0/5.0BK	55mm	black	21pcs
HSTNW10.0/5.0	55mm	assorted	21pcs
HSTNW13/6.5BK	55mm	black	7pcs
HSTNW13/6.5	55mm	assorted	7pcs
HSTNW18/9BK	55mm	black	3pcs
HSTNW18/9	55mm	assorted	3pcs
HSTNW22/11BK	55mm	black	3pcs
HSTNW22/11	55mm	assorted	3pcs
HSMWGL10/3	250mm	black	4pcs
HSMWGL25/8	250mm	black	4pcs

6.1.9 HEAT GUN KIT

Features

- 2000W powered heat gun with six piece accessory set
- 2 heat settings: 350°C and 550°C
- 240V, 50Hz input power
- Hanging ring
- Conveniently stored in plastic carry case
- Kit includes heat gun, cone nozzle, glass protector nozzle, reflector nozzle, fish tail nozzle, handle and scraping head

Specifications

Part No: WATHGK

Weight: 1720g (including case)



6.1.10 MINI GAS TOOL KIT

Features

- Portable heat source with blow torch, solder tips and hot knife
- Cordless and lightweight with adjustable flame control
- Butane gas powered and furnished with rugged aluminium body
- With safety ON/OFF control lock and protective cap
- Contents includes solder head, spare tips and hot knife

Specifications

Part No: WATSCL-2000K

Size: 23 x 160mm with 11ml gas tank capacity

Accessories	
Part No.	Description
WATSCL-07	Spare Needle Soldering Tip
WATSCL-08	Spare Single Flat Soldering Tip
WATSCL-09	Spare Double Flat Soldering Tip
WATSCL-10	Spare Hot Knife
WATSCL-TIP	Spare Soldering Head



6.1 ALCO HEATSHRINK AND ACCESSORIES

6.1.11 MICRO GAS TORCH

Features

- Ideal for situations where a high volume of portable heat source is required for soldering, brazing and heatshrinking
- Suitable for automotive, plumbing and working with plastic
- Butane gas powered with safety lock and instant electronic ignition
- Refillable cordless and portable
- Adjustable flame control
- 1300°C heating temperature

Specifications

Part No: WATRK2121
Dimensions: 186mm (L) x 115mm (W) x 45mm diameter
Working Time: 60mins approx on full tank



6.1.12 HEATING TORCH KIT

Features

- Ideal for home, workshop, mobile repairs and hobby and crafts
- Adjustable flame control
- Designed for use with propane LPG gas
- With 1/4" BSP thread inlet hose connection
- Accessories include; pinpoint burner (for brazing, soft soldering and small heating jobs), 25mm flame burner (for heatshrinking, loosening bolts and larger heating jobs) and flame spreader (for paint stripping)

Specifications

Part No: WATGTK



6.1.13 FLAMELESS HEAT BLOWER GAS TOOL

Features

- Piezo electronic automatic ignition system
- For general heating and drying purposes
- Suitable for heatshrink tubing and sleeves
- Activates adhesives and potting compounds
- Also used for thawing frozen locks and stretching vinyls
- Non-skid cap can be used as a stand
- Refillable

Specifications

Part No: WATTH1602
Size: 115mm (L) x 35mm (W) x 20mm diameter
Weight: 51g
Temperature: Up to 450°C
Capacity: 6ml
Operating Time: Approx 20 minutes on medium setting



6.2 CAST RESIN

6.2.1 OVERVIEW



Alco's cast resin is ideal for single or multi-core cable networks. We offer a number of resin systems such as straight through cable joints, branch off joints and two part resin packs.

Resin joints can be used in applications where cables are buried directly in the ground, submerged in water or under maintenance. The standard moulds used are made from thermoplastic materials that provide excellent mechanical stability and high resistance to water and termites. The moulds are transparent allowing you to see the cable connection during casting. All resin joints comply with VDE standards and are watertight, ideal for water-submerged applications. No other insulation of the cable joint is necessary (eg heatshrink, tapes etc). The cast resin is all that is required.

The resin is supplied in a two-chamber mixing bag that allows it to be poured easily after it is mixed. The bags are made from a three-layer aluminium plastic laminate material. One of the key features of the mixing bag is the quick pull off parting rail which, when removed, allows the hardener and resin to be mixed in the one bag, eliminating external dirt or foreign materials. After pouring, the bag can be disposed of safely in any household rubbish bin.

PRACTICAL TWO CHAMBER MIXING BAG



6.2 CAST RESIN

6.2.2 CAST RESIN JOINTS - TYPE M (STRAIGHT THROUGH JOINT)

Voltage Level:

- U_0/U (U_m) 0.6/1 (1.2) kV

Applications:

- Indoor
- Underground
- Outdoor
- Cable trays
- Water

Product Supplied with:

- Transparent mould
- Lid and spacer plate
- Sealing tape
- Gloves
- Illustrated easy-to-follow mounting instructions
- Hydrolysis resistant PUR type EG cast-resin, containing the correct volume needed ready for mixing, in handy two chamber mixing bag

Features

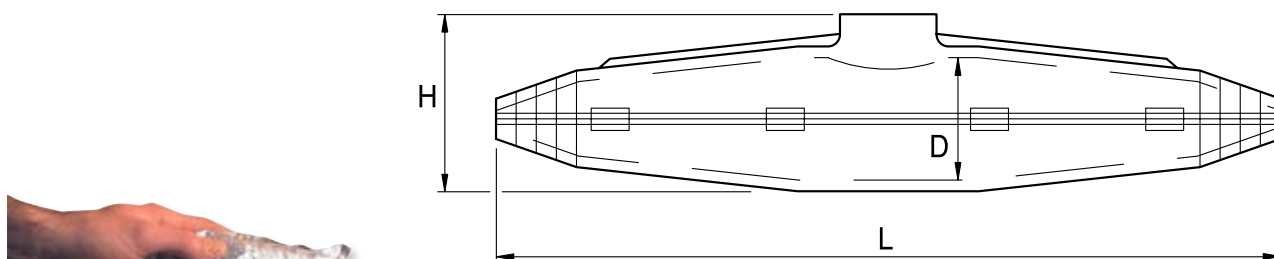
- Large insertion opening for easy casting
- High electrical insulation value
- Watertight
- Compact size
- High mechanical strength
- Standard resin can be stored for up to 40 months
- High quality, transparent and shockproof plastic mould
- Visible splice position before casting
- Extremely quick and easy to use, saving time and money
- Resistant to UV-radiation, alkaline earths and chemical agents
- Ready for immediate use

Approvals:

- DIN VDE 0278 part 1 and 3
- DIN VDE 0278 part 393
- EN 50393 as well as CENELEC HD 623 (VDE 0278, part 623)

TYPE M

Part No	Type	Cable Diameter (mm)	Specifications					
			Dimensions (mm)			Max Cross Section per Conductor (mm ²)		
			L	D	H	Plastic Insulated Cable 4x	Concentric Conductor 3x	Armoured 4x
ALC124M11	M 11	7-26	190	36	50	10	10/10	—
ALC124M12	M 12	14-34	260	47	63	25	25/25	—
ALC124M13	M 13	21-43	360	55	75	50	50/50	35
ALC124M14	M 14	26-48	400	70	95	95	95/95	70
ALC124M15	M 15	35-63	530	100	120	150	150/150	120
ALC124M16	M 16	48-81	700	125	160	240	240/120	240



TYPE M11–M16



Suitable for connecting low-voltage plastic insulated cables or PVC, PE, VPE and EPR insulated conductors.

6.2 CAST RESIN

6.2.3 CAST RESIN JOINTS - TYPE MZ (STRAIGHT THROUGH JOINT)

Voltage Level:

- $U_0/U (U_m)$ 0.6/1 (1.2) kV

Applications:

- Indoor
- Underground
- Outdoor
- Cable trays
- Water

Product Supplied with:

- Transparent mould
- Funnel
- Sealing tape
- Gloves
- Illustrated easy-to-follow mounting instructions
- Hydrolysis resistant PUR type EG cast-resin, containing the correct volume needed ready for mixing, in handy two chamber mixing bag

Features

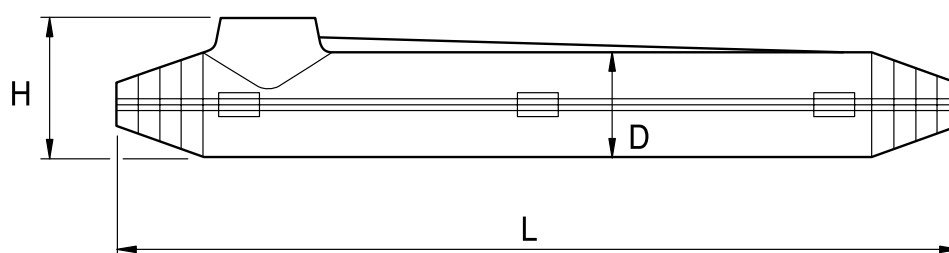
- Large insertion opening for easy casting
- High electrical insulation value
- Watertight
- Compact size
- High mechanical strength
- Standard resin can be stored for up to 40 months
- High quality, transparent and shockproof plastic mould
- Visible splice position before casting
- Extremely quick and easy to use, saving time and money
- Resistant to UV-radiation, alkaline earths and chemical agents
- Ready for immediate use

Approvals:

- DIN VDE 0278 part 1 and 3
- DIN VDE 0278 part 393
- EN 50393 as well as CENELEC HD 623 (VDE 0278, part 623)

TYPE MZ

Specifications										
Part No	Type	Cable Diameter (mm)	Dimensions (mm)			Wire Diameter (mm)				
			L	D	H	0.4	0.6	0.8	1.5	2.5
						No of Pairs			No of conductors	
ALC124MZ00	MZ00	20	180	23	35	10–15	5–10	5–10	7	5
ALC124MZ0	MZ0	25	250	35	55	15–30	10–20	10–20	15	10



TYPE MZ00–MZ0



Suitable for connecting low-voltage plastic insulated cables or PVC, PE, VPE and EPR insulated conductors.

6.2 CAST RESIN

6.2.4 CAST RESIN JOINTS - TYPE Y (BRANCH OFF JOINT)

Voltage level:

- $U_0 / U (U_m)$ 0.6/1 (1.2) kV

Applications:

- Indoor
- Outdoor
- Underground
- Water
- Cable trays

Product Supplied with:

- Sealing tape
- Transparent moulds
- Illustrated easy-to-follow mounting instructions
- Filling in funnel
- Air release funnel (except Type Y00)
- Gloves
- Closing stops
- Hydrolysis resistant PUR type EG cast-resin, containing the correct volume needed ready for mixing, in handy two chamber mixing bag

Features

- Watertight
- High electrical insulation values
- High mechanical strength
- Compact size
- Standard resin can be stored for up to 40 months
- Large insertion opening for easy casting
- High quality transparent and shockproof plastic mould
- Visible splice position before casting
- Extremely quick and easy to use, saving time and money
- Resistant to UV-radiation, alkaline earths and chemical agents
- Ready for immediate use

Approvals:

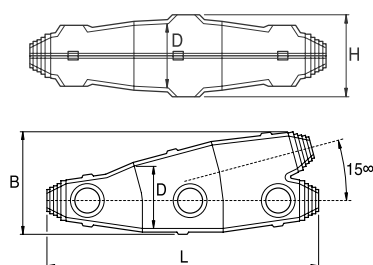
- DIN VDE 0278 part 1 and 3
- DIN VDE 0278 part 393
- EN 50393 as well as CENELEC HD 623 (VDE 0278, part 623)

Note:

- For joint sizes Y3 and above, branch-off ring connectors can be used



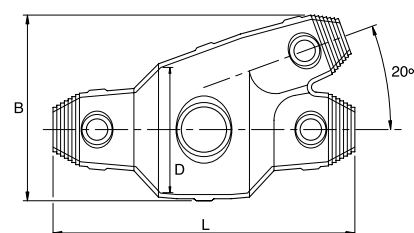
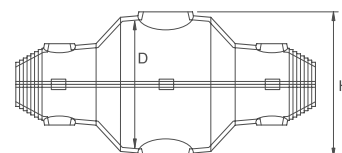
Y00-Y2, Y3 1/2, Y5, Y6







Suitable for connecting low-voltage plastic insulated cables or PVC, PE, VPE and EPR insulated conductors.



Y3, Y4, Y4 1/2



Part No	Type	Specifications						Max Cross Section per Conductor (mm ²)					
		Dimensions				Cable Diameter							
		L (mm)	B (mm)	D (mm)	H (mm)	main cable (mm)	branch cable (mm)	Plastic Insulated Cable				Concentric Conductor	
								 5x	 3x	 4x		 3x	
								main cable	branch cable	main cable	branch cable	main cable	branch cable
ALC133Y00	Y 00	150	75	38	50	23	23	2.5	2.5	—	—	—	—
ALC133Y0	Y 0	185	80	45	55	17	17	4	4	4	4	4/4	4/4
ALC133Y1	Y 1	240	110	60	70	22	22	6	6	10	4	10/10	10/10
ALC133Y2	Y 2	285	120	65	75	37	33	—	—	35	16	16/16	10/10
ALC133Y3	Y 3	240	145	100	110	42	37	—	—	50	35	25/25	16/16
ALC133Y3.5	Y 3 1/2	300	150	110	120	54	38	—	—	50	35	35/35	25/25
ALC133Y4	Y 4	285	170	110	120	53	37	—	—	95	50	70/70	25/25
ALC133Y4.5	Y 4 1/2	335	193	120	130	56	42	—	—	150	70	120/120	95/95
ALC133Y5	Y 5	382	220	140	150	62	52	—	—	240	95	150/150	95/95
ALC133Y6	Y 6	570	275	180	190	90	80	—	—	300	185	240/120	185/95

6.2 CAST RESIN

6.2.5 CAST RESIN - TYPE EG (NON-REMOVABLE TYPE)

Features

- Suitable for low voltage plastic or paper insulated cables rated up to 1kV, and telecommunications and signal plastic or paper insulated cables
- Suitable for mechanical protection and water-sealing on medium voltage cables
- Halogen-free, unfilled two-component polyurethane (PUR) cast-resin
- Specially developed for cable joints
- Non-toxic emission during mixing and casting
- Excellent hydrolytic resistance
- No cracks during electrical and mechanical stress
- Low hardening temperature and excellent flow properties
- Fast hardening and good adherence to all cable materials
- Packed in practical and easy-to-use two-chamber mixing bags

Approvals:

- Governmental Material Test Laboratory Darmstadt: DIN VDE 0291
- KEMA, Nederland: Report on the MAK value, which lies well below the maximum value of 0.01 ppm, allowed by law

Storage conditions:

- Store at optimum temperature of +15°C to +35°C for up to 40 months in original aluminium bag



Type 'EG' 2-component PUR Resin				
Features	Value	Requirements for cast-resins according to DIN VDE 0291, part 2 (draft 1997)		
		GNW/RLS	GMW/RMS	GFW/RTS
Cast-resin component / open cup flash point	> 200°C	> 100°C	—	> 100°C
Reactant / open cup flash point	> 200°C	> 55°C	—	> 55°C
Processing time (potlife), preparation 300 ml 5°C 23°C 35°C	35 minutes 20 minutes 15 minutes	conformity to manufacturer's data (± 30%)		
Gel time for 300 ml at 23°C Bag < 1000 ml Bag > 1000 ml	17 minutes 26 minutes	conformity to manufacturer's data (± 10%)		
Maximum reaction temperature	98°C/371 K	conformity to manufacturer's data (± 10K)		
Total volume contraction during hardening	6%	max 6.5%		
Density	1.1 g/cm ³	—		
Impact strength	> 10 kJ/m ²	> 10 kJ/m ²		
Hardness	54 Shore D	min. 20 Shore D		
Thermal expansion coefficient in the temperature range of 20–50°C	5.9 x 10 ⁻⁴ K ⁻¹	conformity to manufacturer's data (± 15%)		
Thermal conductivity	0.2 W x M ⁻¹ x K ⁻¹	conformity to manufacturer's data (± 20%)		
Combustibility	class IIC	according to DIN VDE 0304, part 3		
Water absorption in warm water (42 days at 50°C)	350 mg	max 600 mg	max 400 mg	max 600 mg
Electrolytic corrosion	A1	< A1.4	—	< A1.4
1 minute test voltage at 23°C at 80°C	— > 20 kV > 10 kV	no breakdown at test voltage		
		10 kV 10 kV	20 kV 20 kV	10 kV —
Dielectric dissipation factor at 23°C and 50 Hz at 23°C and 1 kHz	0.07 0.05	— —	max 0.1 —	— < 0.05
Relative permittivity at 23°C and 50 Hz at 23°C and 1 kHz	5 5.1	— —	< 6 —	— max 6
Tracking resistance	KA 3c	min KA 3b	min KA 3c	—
Hydrolysis resistance after water immersion (28 days at 90°C)	8.2 N/mm ²	≥ 65% of initial value		
Tensile strength	60%	≥ 65% of initial value		
Elongation at break	47 Shore D	≥ 80% of initial value		
Hardness				



Specifications		
Part No	Type	Volume (ml)
ALC124EG80	EG 80	80
ALC124EG143	EG 143	143
ALC124EG286	EG 286	286
ALC124EG370	EG 370	370
ALC124EG464	EG 464	464
ALC124EG730	EG 730	730
ALC124EG1000	EG 1000	1000
ALC124EG1150	EG 1150	1150
ALC124EG1500	EG 1500	1500
ALC124EG2000	EG 2000	2000

6.2 CAST RESIN

6.2.6 CAST RESIN - TYPE KG (REMOVABLE TYPE)

Features

- Suitable for isolating cable connections in cable branch-off cabinets, connection boxes, communication cables etc
- Favourable flow properties
- Halogen-free, unfilled two-component polyurethane (PUR) cast-resin
- Resin remains transparent after hardening and can be released at any time by simply removing the resin
- Good adherence to all cable materials
- Transparent resin allows sight control of the connection after filling
- Low hardening temperature and excellent flow properties
- Non-toxic emission during mixing and casting
- Excellent hydrolytic resistance and no cracks during electrical stress
- Packed in practical and easy-to-use two-chamber mixing bags

Approvals:

- According to DIN VDE 0291 part 2 (draft 6/97)

Storage conditions:

- Store at optimum temperature of +15°C to +35°C for up to 24 months in the original aluminium bag



Specifications		
Part No	Type	Volume (ml)
ALC125KG143	KG 143	143
ALC125KG286	KG 286	286
ALC125KG730	KG 730	730

Type 'KG' 2-component PUR Resin (Removable Crumbly Type)	
Features	Value
Reactive mass	
Viscosity (20°C)	1000 mPa x s
Processing time (20°C)	ca. 1hr
Maximum temperature	< 40°C
Cast-resin moulding material	
Density	1 g/cm³
Hardness	10 Shore A
Spec. volume resistance	2 x 10 ¹⁰ Ω x cm
Tensile strength	7 N/cm²
Elongation at break	10%
Water absorption in cold water (24hrs at 23°C)	30 mg
Water absorption in warm water (42days at 50°C)	188 mg
1 minute test voltage at 23°C	> 20 kV
at 80°C	> 10 kV



6.3 CAST RESIN ACCESSORIES

6.3.1 SEALING KITS SELECTION CHART

IDEAL FOR REPAIRING CABLE



Specifications					
Removable PUR Resin Sealing Kits					
Part No	Quickbox/Junction Box Part No	Removable Filler		Insulputty	
		Part No	Qty	Part No	Qty
ALCQJR161	ALCJB161	ALC125KG143	1	ALCIP38	1
ALCQJR162	ALCJB162	ALC125KG143	1	ALCIP38	1
ALCQJR163	ALCJB163	ALC125KG143	1	ALCIP38	1
ALCQJR164	ALCJB164	ALC125KG143	1	ALCIP38	1
ALCQJR201	ALCJB201	ALC125KG143	1	ALCIP38	1
ALCQJR201D	ALCJB201D	ALC125KG286	1	ALCIP38	1
ALCQJR202	ALCJB202	ALC125KG143	1	ALCIP38	1
ALCQJR202A	ALCJB202A	ALC125KG143	1	ALCIP38	1
ALCQJR202D	ALCJB202D	ALC125KG286	1	ALCIP38	1
ALCQJR202DA	ALCJB202DA	ALC125KG286	1	ALCIP38	1
ALCQJR203	ALCJB203	ALC125KG143	1	ALCIP38	1
ALCQJR203D	ALCJB203D	ALC125KG286	1	ALCIP38	1
ALCQJR204	ALCJB204	ALC125KG143	1	ALCIP38	1
ALCQJR204D	ALCJB204D	ALC125KG286	1	ALCIP38	1
ALCQJR251	ALCJB251	ALC125KG143	1	ALCIP38	1
ALCQJR251D	ALCJB251D	ALC125KG286	1	ALCIP38	1
ALCQJR252	ALCJB252	ALC125KG143	1	ALCIP38	1
ALCQJR252A	ALCJB252A	ALC125KG143	1	ALCIP38	1
ALCQJR252D	ALCJB252D	ALC125KG286	1	ALCIP38	1
ALCQJR252DA	ALCJB252DA	ALC125KG286	1	ALCIP38	1
ALCQJR253	ALCJB253	ALC125KG143	1	ALCIP38	2
ALCQJR253D	ALCJB253D	ALC125KG143	1	ALCIP38	2
ALCQJR254	ALCJB254	ALC125KG143	1	ALCIP38	2
ALCQJR254D	ALCJB254D	ALC125KG286	1	ALCIP38	2
ALCQJR321	ALCJB321	ALC125KG286	1	ALCIP38	1
ALCQJR322	ALCJB322	ALC125KG286	1	ALCIP38	2
ALCQJR323	ALCJB323	ALC125KG286	1	ALCIP38	3
ALCQJR324	ALCJB324	ALC125KG286	1	ALCIP180	1
ALCQJRRER25	ALCJB25	ALC125KG143	1	-	0
ALCQJRWQB0	ALCWQB-0	ALC125KG286	2	ALCIP180	1
ALCQJRWQB1	ALCWQB-1	ALC125KG286	2	ALCIP180	1
ALCQJRWQB2	ALCWQB-2	ALC125KG286	3	ALCIP180	1
ALCQJRWQB3	ALCWQB-3	ALC125KG730	2	ALCIP180	2
ALCQJRWQB4	ALCWQB-4	ALC125KG730	2	ALCIP180	2

Specifications					
Non-Removable PUR Resin Sealing Kits					
Part No	Quickbox/ Junction Box Part No	Non-removable Filler		Insulputty	
		Part No	Qty	Part No	no. req
ALCQJN161	ALCJB161	ALC124EG143	1	ALCIP38	1
ALCQJN162	ALCJB162	ALC124EG143	1	ALCIP38	1
ALCQJN163	ALCJB163	ALC124EG143	1	ALCIP38	1
ALCQJN164	ALCJB164	ALC124EG143	1	ALCIP38	1
ALCQJN201	ALCJB201	ALC124EG680	1	ALCIP38	1
ALCQJN201D	ALCJB201D	ALC124EG286	1	ALCIP38	1
ALCQJN202	ALCJB202	ALC124EG680	1	ALCIP38	1
ALCQJN202A	ALCJB202A	ALC124EG680	1	ALCIP38	1
ALCQJN202D	ALCJB202D	ALC124EG286	1	ALCIP38	1
ALCQJN202DA	ALCJB202DA	ALC124EG286	1	ALCIP38	1
ALCQJN203	ALCJB203	ALC124EG680	1	ALCIP38	1
ALCQJN203D	ALCJB203D	ALC124EG286	1	ALCIP38	1
ALCQJN204	ALCJB204	ALC124EG680	1	ALCIP38	1
ALCQJN204D	ALCJB204D	ALC124EG286	1	ALCIP38	1
ALCQJN251	ALCJB251	ALC124EG143	1	ALCIP38	1
ALCQJN251D	ALCJB251D	ALC124EG286	1	ALCIP38	1
ALCQJN252	ALCJB252	ALC124EG143	1	ALCIP38	1
ALCQJN252A	ALCJB252A	ALC124EG143	1	ALCIP38	1
ALCQJN252D	ALCJB252D	ALC124EG286	1	ALCIP38	1
ALCQJN252DA	ALCJB252DA	ALC124EG286	1	ALCIP38	1
ALCQJN253	ALCJB253	ALC124EG143	1	ALCIP38	2
ALCQJN253D	ALCJB253D	ALC124EG143	1	ALCIP38	2
ALCQJN254	ALCJB254	ALC124EG143	1	ALCIP38	2
ALCQJN254D	ALCJB254D	ALC124EG286	1	ALCIP38	2
ALCQJN321	ALCJB321	ALC124EG286	1	ALCIP38	1
ALCQJN322	ALCJB322	ALC124EG286	1	ALCIP38	2
ALCQJN323	ALCJB323	ALC124EG286	1	ALCIP38	3
ALCQJN324	ALCJB324	ALC124EG286	1	ALCIP180	1
ALCQJNER25	ALCJB25	ALC124EG680	1	-	0
ALCQJNWB0	ALCWQB-0	ALC124EG464	1	ALCIP180	1
ALCQJNWB1	ALCWQB-1	ALC124EG464	1	ALCIP180	1
ALCQJNWB2	ALCWQB-2	ALC124EG1000	1	ALCIP180	1
ALCQJNWB3	ALCWQB-3	ALC124EG1500	1	ALCIP180	2
ALCQJNWB4	ALCWQB-4	ALC124EG1500	1	ALCIP180	2

6.3.2 UNIVERSAL CABLE REPAIR KIT

Features

- 305 piece universal cable repair kit
- For repairing cable
- Non-insulated copper crimp links also included
- Supplied in an orange Rolacase storage box

Specifications

Part No: ALCRESKIT 1



Contents of Kit		
Part No	Description	Qty
WATMH4NW	Ratchet Crimping Tool	1
ALC124M11	Type M11 Cast Resin	4
ALCLK2.5	2.5mm ² Crimp Link	100
ALCLK4	4.0mm ² Crimp Link	100
ALCLK6	6.0mm ² Crimp Link	50
ALCLK10	10.0mm ² Crimp Link	50

6

CABLE JOINTING

6.4 ELECTRICAL AND SPECIALTY TAPE

6.4.1 50M CAUTION TAPE

Features

- Bright yellow reflective tape for vibrant daytime visibility
- Printed 'CAUTION – TEMPORARY CONSTRUCTION WIRING'
- Suitable for outdoor use
- Tape has aggressive adhesive that sticks to any clean, dry surface
- Yellow colour

Specifications

Part No: WATCTAPE
Size: 38mm x 50m



6.4.2 100M UNDERGROUND MARKING TAPE

Features

- Bright non-adhesive PVC underground identification tape
- Printed 'CAUTION – ELECTRICAL CABLE BELOW'
- Acts as a warning for dangerous situations and great for trench identification
- Eye catching large letters printed on non-adhesive tape
- Bright orange reflective tape for vibrant daytime visibility
- Orange colour

Specifications

Part No: WATUMT100
Size: 150mm x 100m



6.4.3 500M UNDERGROUND MARKING TAPE

Features

- Bright non-adhesive PVC underground identification tape
- Printed 'CAUTION – ELECTRICAL CABLE BELOW'
- Acts as a warning for dangerous situations and great for trench identification
- Eye catching large letters printed on non-adhesive tape
- Bright reflective tape for vibrant daytime visibility
- Orange colour

Specifications

Part No: WATPVCUMT
Size: 150mm x 500m



6.4 ELECTRICAL AND SPECIALTY TAPE

6.4.4 250M UNDERGROUND MARKING TAPE

Features

- Non-adhesive PVC underground identification tape with wire tracer
- Printed 'CAUTION – BURIED COMMUNICATIONS BELOW'
- Acts as a warning for dangerous situations and great for trench identification
- Eye catching large letters printed on non-adhesive tape
- White colour

Specifications

Part No: WATUMTW250
Size: 150mm x 250m



6.4.5 PVC DUCT TAPE

Features

- PVC sealing and joining tape
- Coated with pressure-sensitive adhesive
- Suitable for joining flexible duct
- Moisture, corrosion and weather resistant tape
- Provides excellent protection
- Grey colour

Specifications

Part No: WATPVCDT
Size: 0.13mm x 48mm x 30m



6.4.6 WIDE PVC DUCT TAPE

Features

- PVC sealing and joining tape
- Coated with pressure-sensitive adhesive
- Suitable for joining flexible duct
- Moisture, corrosion and weather resistant tape
- Provides excellent protection
- Grey colour

Specifications

Part No: WATPVCDTW
Size: 0.125mm x 75mm x 30m



6.4 ELECTRICAL AND SPECIALTY TAPE

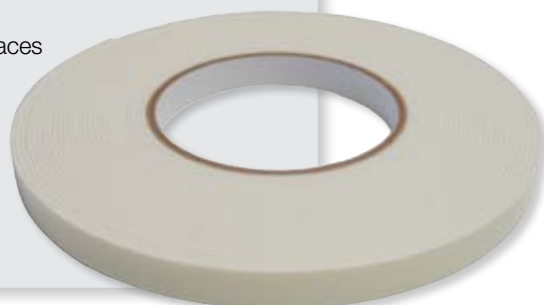
6.4.7 DOUBLE SIDED TAPE

Features

- Provides excellent protection
- Multipurpose double sided tape
- Thicker double sided adhesive for greater adhesion to irregular surfaces
- Excellent for general purpose mounting and joining applications

Specifications

Part No	Thickness (mm)	Width (mm)	Length (m)
WATDST12	1.7	12	10
WATDST18	1.7	18	10
WATDST24	1.7	24	10



6.4.8 PVC ELECTRICAL INSULATION TAPE

Features

- For superior insulation of electrical cables
- Self-adhesive tape for bundling cables and wires
- Safe and easy to use
- Highly flexible low temperature tape
- Temperature range: -10°C to +80°C

Specifications

Part No	Colour	Thickness (mm)	Width (mm)	Length (m)
WATPVCBLALT	Black	0.18	18	20
WATPVCBLULT	Blue	0.18	18	20
WATPVCBRLT	Brown	0.18	18	20
WATPVCGLT	Green	0.18	18	20
WATPVCGYLT	Yellow/Green	0.18	18	20
WATPVCOLT	Orange	0.18	18	20
WATPVCRLT	Red	0.18	18	20
WATPVCWLT	White	0.18	18	20
WATPVCRP	Rainbow Pack	0.18	18	20

Rainbow pack contains 3 x black, 2 x blue, 2 x red, 2 x white and 1 x yellow/green rolls



6.4.9 PROFESSIONAL GRADE VINYL ELECTRICAL TAPE

Features

- High quality PVC coated tape with an aggressive rubber-resin adhesive
- For sealing, insulating and bundling cable and reinforcing cable joints and splices
- Good dielectric features and extremely weatherproof
- High life cycle (12 month shelf life)
- Flame retardant and heat resistant
- Temperature range: -18°C to +105°C
- Black colour

Specifications

Part No: WATVETIC6P

Size: 0.18mm x 18mm x 20m



Technical Data	Value	Test Method
Tensile strength	7.3kg/inch	ASTM D 1000
Elongation at break	285% @ 23°C 112% @ -18°C	ASTM D 1000
Dielectric strength	7KV	ASTM D 1000
Voltage rating	600V	UL510
Insulation resistance	> 1 x 10 ⁶ megohms	CNS2064
Flammability	1 sec 4 sec	UL510 ASTM D 1000
Accelerated aging	80%	ASTM D 1000
Telescoping	24 hrs @ 50°C < 0.1 inch	ASTM D 1000
Flagging	< 0.1 inch	ASTM D 1000
Adhesion to steel	500g/inch @ 23°C 830g/inch @ -18°C	ASTM D 1000
Adhesion to backing	550g/inch @ 23°C 950g/inch @ -18°C	ASTM D 1000

6.4 ELECTRICAL AND SPECIALTY TAPE

6.4.10 HIGH VOLTAGE INSULATION TAPE

Features

- For insulation of plastic cable conductors up to 69kV
- Superior electrical, mechanical and thermal properties
- High life cycle and operating security
- Good dielectric features and extremely weatherproof
- Self-amalgamating and fully removable
- Very good adhesive properties to a wide range of materials

Specifications

Part No	Thickness (mm)	Width (mm)	Length (m)
WAT125HVT60	0.50	19	10
WAT125HVT62	0.75	19	10



6.4.11 CONDUCTING TAPE

Features

- Highly conformable to any shape and retains conductivity when stretched
- High life cycle and security with good dielectric and physical properties
- High heat resistance, self-amalgamating and extremely ductile
- Welds quickly to a homogeneous mass without cavities
- Printed "CAUTION – SEMI-CONDUCTING TAPE"
- Black colour

Specifications

Part No: WAT125CONT61
Size: 0.75mm x 19mm x 5m



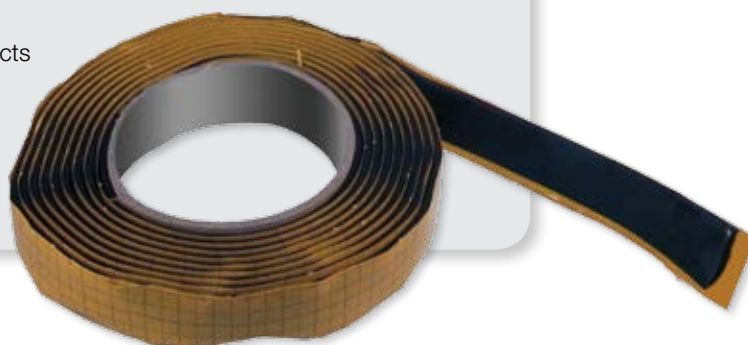
6.4.12 SEALING MASTIC TAPE

Features

- Good adhesion and sealing characteristics to metals, glass, rubber and plastic
- Improves the sealing zone for heatshrink products and cable terminations
- Good dielectric and physical properties
- Durable
- Also seals terminations of ceander cables
- Quick and easy insulation and sealing of objects
- Black colour

Specifications

Part No: WAT127SMT
Size: 3.0mm x 20mm x 3m



6.4 ELECTRICAL AND SPECIALTY TAPE

6.4.13 PRESSURE TAPE

Features

- For sealing cast resin joints
- Transparent in colour

Specifications

Part No	Thickness (mm)	Width (mm)	Length (m)
WAT125PT711	0.15	25	33
WAT125PT712	0.15	38	33

Technical Data	Value
Tensile strength	12 N/mm ²
Elongation at break	400%
Temperature resistance	+100°C
Dielectric strength	78 kV/mm
Volume resistivity	10 ¹³ Ω x cm



6.4.14 REPAIR TAPE

Features

- Self-amalgamating
- For repairing damaged sheaths of plastic/rubber insulated cables and connectors
- Very good electrical properties
- Excellent tensile strength
- 100% waterproof
- Black colour

Specifications

Part No: WAT125RT72
Size: 0.75mm x 25mm x 10m



Technical Data	Value	Test Method
Tensile strength	2 N/mm ²	ASTM D 412
Elongation at break	600%	ASTM D 412
Temperature resistance	+90°C	—
Dielectric strength	40 kV/mm	ASTM D 149
Volume resistivity	10 ¹⁵ Ω x cm	ASTM D 257
Water absorption (24hrs)	0.4%	ASTM D 570
Dielectric constant (50 Hz)	2.5 A x s/V x m	ASTM D 150
Loss factor (50 Hz)	0.0014	ASTM D 150

6.4.15 SEALING TAPE

Features

- Excellent adhesion to metals, glass, rubber and plastic
- Self-amalgamating and good dielectric and physical properties
- Provides weatherproof sealing and protection against dust, humidity and corrosion
- Suitable for connections with acrylic and epoxy resin compound
- Permanently elastic and ideal for sealing and repairing cables
- Black colour

Specifications

Part No: WAT125ST64
Size: 3.2mm x 38mm x 1.5m



Technical Data	Value
Water absorption	0.1%
Dielectric strength	16 kV/mm
Dielectric constant (50 Hz)	3.1 A x s/V x m
Power factor (50 Hz)	0.025
Volume resistivity (20°C)	2 x 10 ¹⁰ Ω x m
Temperature range	-30°C to +80°C
Elongation at break	> 1000%
Tensile strength	0.12 N/mm

6.4 ELECTRICAL AND SPECIALTY TAPE

6.4.16 COPPER BRAID TAPE

Features

- Braided tinned copper wire
- Extremely flexible and break resistant
- Suitable for earthing transfer and interconnecting electrostatic shielding and conducting connections
- Fits all contours without folds
- Ideal for shielding and protecting cable

Specifications

Part No	Thickness (mm)	Width (mm)	Length (m)
WAT126CBT631	0.5	25	5
WAT126CBT633	0.5	60	5



6.4.17 FIBREGLASS TEXTILE TAPE

Features

- Self-adhesive fibreglass reinforced tape suitable for marking
- Easy to print on and extremely tear resistant
- Ideal for insulating electrical components which become very hot during operation
- Provides protective wrapping against heat ie protects cable during welding
- Coated with warm hardening silicone adhesive and heat resistant up to +130°C
- White colour

Specifications

Part No: WAT223FT583
Size: 0.18mm x 19mm x 33m



6.5 CLEANERS / DEGREASERS

6.5.1 MULTIPURPOSE CLEANER / DEGREASER WIPE

Features

- Two individually sealed towelettes; one wipe is lightly saturated while the other wipe is dry
- For multipurpose industrial and maintenance needs
- Low level of toxicity and does not form vapours quickly
- Ideal for all electrical cleaning needs, no wasted solvent or need for rags
- Suitable for cleaning and degreasing industrial grimes, greases, silicone, tars, adhesives etc
- Contains no CFC's, HCFC's, or other ozone depleting solvents, not recommended for use on energised equipment

Specifications

Part No: WATHP-P158ID
Size: 127 x 203mm (5" x 8")



Technical Data	Value	Test Method
Dielectric Strength	>40KV	
Relative Evaporation Rate	Medium	
Residue	>100 ppm	ASTM D 2369
Flashpoint	>60.5°C	ASTM D 56
Initial Boiling Point	185°C	
Specific Gravity	0.79	
Percent Aromatics	<1%	
Propellant (aerosol only)	CO ₂	
Cleaning strength	Excellent	
KB value	33	
Water content	<50 ppm	ASTM D 153313

6.5 CLEANERS / DEGREASERS

6.5.2 MULTIPURPOSE CLEANER / DEGREASER TRIGGER SPRAYER

Features

- Suitable for cleaning and degreasing, one cleaner for all electrical cleaning needs
- For multipurpose industrial and maintenance needs
- Low level of toxicity and does not form vapours quickly
- Ideal for all electrical cleaning needs, no wasted solvent or need for rags
- Suitable for cleaning and degreasing industrial grimes, greases, silicone, tars, adhesives etc
- Contains no CFC's, HCFC's, or other ozone depleting solvents, not recommended for use on energised equipment

Specifications

Part No: WATHP-35LR

Size: 950ml

Technical Data	Value	Test Method
Dielectric Strength	> 40KV	
Relative Evaporation Rate	Medium	
Residue	> 100 ppm	ASTM D 2369
Flashpoint	> 60.5°C	ASTM D 56
Initial Boiling Point	185°C	
Specific Gravity	0.79	
Percent Aromatics	< 1%	
Propellant (aerosol only)	CO ₂	
Cleaning strength	Excellent	
KB value	33	
Water content	< 50 ppm	ASTM D 153813



6.5.3 CLEANER / DEGREASER SOLVENT WIPE

Features

- Pre-saturated solvent wipes sealed in foil pouch
- Non-conductive and compatible with most materials
- Fast evaporating and non-flammable cleaner with excellent solvency properties
- Durable and non-linting wipes ideal for field use
- Does not contain chlorinated solvents, limits vapour exposure
- Eliminates spill and splash hazards

Specifications

Part No: WATTR-1

Size: 127x 203mm (5" x 8")



6.5.4 SANDING CLOTH

Features

- Sanding cloth for cable cleaning
- Non-conductive aluminium oxide sanding cloth
- Removes semi-conducting shield residue, jacket polymers and other contaminating materials
- Easy to use and eliminates waste
- Conveniently packed as roll for easy storage
- Durable and resists shredding

Specifications

Part No: WATSPROLL

Size: 25mm x 45m

