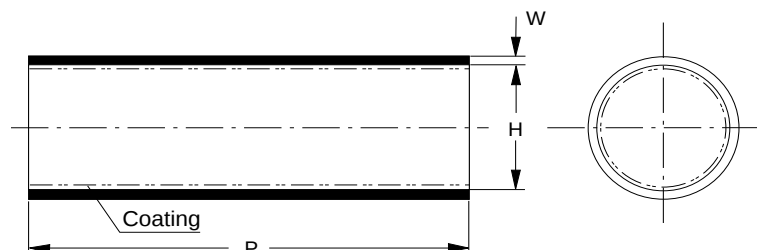


Product group **Extrusions – Low Voltage Insulation Tubes**
Product name **MWTM**
Document **Product guide datasheet and Material datasheet**

Typical application

The **MWTM** is a general-purpose medium wall tubing supplied with (coex) or without (mono) adhesive coating. It is used for cable insulation replacement, sealing and corrosion protection or uncoated as insulation material or protective cover. It is also an integral part of Raychem low voltage terminations and joints. Colour = Black



Product Size	Application range		H		W				
	from mm	to mm	a min	b max	a nom	b min			
MWTM 10/3	3.5	9.0	10	3	0.3	1.0			
MWTM 16/5	5.5	14.5	16	5	0.3	1.4			
MWTM 25/8	9.0	22.5	25	8	0.4	2.0			
MWTM 35/12	13.0	31.5	35	12	0.4	2.0			
MWTM 50/16	18	45	50	16	0.5	2.0			
MWTM 63/19	21	57	63	19	0.6	2.4			
MWTM 75/22	24	68	75	22	0.6	2.7			
MWTM 85/25	28	77	85	25	0.6	2.8			
MWTM 95/29	32	86	95	29	0.7	3.1			
MWTM 115/34	37	104	115	34	0.7	3.1			
MWTM 140/42	46	126	140	42	0.7	3.1			
MWTM 160/50	55	144	160	50	0.7	3.2			
MWTM 180/60	66	162	180	60	0.7	3.2			
MWTM 245/80 *	88	220	245	80	n.a.	2.4			
MWTM 285/135 *	149	255	285	135	n.a.	1.4			

* uncoated only

Notes

- Dimensions in mm
- Tube expansion/shrink ratio
Tube application range ratio
- Max. longitudinal change after free recovery
- Eccentricity expanded max:
Eccentricity fully recovered max.:
- Cut Length Tolerances:
- Printing
- Packaging
- Labelling

a = as supplied. **b** = after free recovery
 $\geq 3 : 1$
 $\geq 2,5 : 1$
+ 5% to - 10% for all sizes
 $\leq 45\%$
 $\leq 10\%$
 $\leq 200 \text{ mm} \pm 6\text{mm}; > 200 \text{ mm} \pm 9\text{mm}$
 $> 300 \text{ mm} \pm 12\text{mm}; > 450 \text{ mm} \pm 15\text{mm}$
 $\geq 1000 \text{ mm} - 0 \text{ mm to } + 40 \text{ mm}$

/S (coated): Raychem - MWTM - Size - Batch-No.
/U (uncoated): Raychem - MWTM - Size -U - Batch-No.
Cut lengths: xxx pieces + 1 Installation Instruction in a polybag
Quantity Description Batch-No.

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Product Characteristics:

- Heat shrinkable polyolefin based tubes
- Electrically insulating
- Halogen- and Silicon-free
- Compliant to RoHS / REACH
- UV resistant because of free carbon black content

Typical Material Properties			
Physical characteristics	Measuring Unit	Measuring values/ Requirements	Relevant test standards
Hardness shore-D	Shore-D	~ 50	ISO 868
Tensile Strength	MPa	≥ 13	EN 60684-2
Ultimate Elongation	%	≥ 350	EN 60684-2
Water Absorption (336 h at 23 ± 3 °C)	%	≤ 0.25	EN 60684-2
Thermal characteristics	Measuring Unit	Measuring values/ Requirements	Relevant test standards
Accelerated Heat Aging (168 h @ 150 ± 3 °C)			EN 60684-2
Tensile Strength	MPa	≥ 12	EN 60684-2
Ultimate Elongation	%	≥ 300	EN 60684-2
Low Temperature Flexibility (4 h @ -40 ± 3 °C)		No cracking or break	EN 60684-2
Electrical characteristics	Measuring Unit	Measuring values/ Requirements	Relevant test standards
Dielectric strength (measured on shrunk product)	kV/mm	≥ 10	EN 60684-2
Volume resistivity	Ohm*cm	≥ 1 * 10 ¹²	TE Standard
Chemical characteristics	Measuring Unit	Measuring values/ Requirements	Relevant test standards
Corrosion effect		No corrosion	ASTM D2671

Product group Extrusions – Low Voltage Insulation Tubes
Product name MWTM
Document Product guide datasheet and Material datasheet

Characteristics – Sealant, Hot melt adhesive:

- Electrically insulating
- Halogen- and Silicon-free
- Compliant to RoHS / REACH

Typical Material Properties - Sealant, Hot melt adhesive			
Physical characteristics	Measuring Unit	Measuring values/ Requirements	Relevant test standards
Water Absorption (24 h at 23 ± 3 °C)	%	≤ 1.0	EN 60684-2
Dielectric strength	kV/mm	≥ 10	EN 60684-2
Volume resistivity	Ohm*cm	≥ 1 * 10 ¹⁰	TE Standard
Thermal characteristics	Measuring Unit	Measuring values/ Requirements	Relevant test standards
Softening Point	°C	~ 110	
Low Temperature Flexibility (4 h @ -30 ± 3°C)		No cracking or break	EN 60684-2