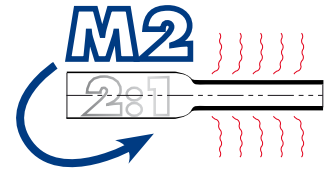


TERMO-ROLL M2
Heat-shrinkable tubing on reel
for Rolly2000 thermal transfer printers
with appropriate ribbon



Description:

M2 type heat-shrinkable tubing is used to provide highly legible and resistant identification of cables, pipes, conduits, etc within a minimum space.

Halogen-free composition provides flame retardancy and low smoke emission characteristics suitable for many types of application requiring more restrictive safety standards to be met.

Technical:

Property	Test method	Typical value
Tensile strength	GB/T1040	≥ 10.4MPa
Elongation at break	GB/T1040	≥ 200%
Longitudinal change	UL224	± 5%

Electrical:

Property	Test Method	Typical value
Dielectric strength	GB/T1408	15 kV/mm

Chemical :

Property	Test Method	Typical value
Chemical resistance	AMS-DTL-23053/5	Good
Copper corrosion	UL 224	No corrosion
Copper stability	UL 224	No corrosion

Thermal :

Property	Test Method	Typical value
Heat shock (250°C x 4h)	ASTM D 2671	No dripping, cracking or flowing
Heat ageing (158°C x 168h)	ASTM D 638	Min. 100%
Flammability	UL 224	Pass >>Flame retardant

Material:

- Irradiated Polyolefin
- 2:1 shrinkage ratio
- Flame retardant
- Halogen free
- Low Smoke Emission
- Good resistance to fluids & solvents

Minimum shrinkage temperature:

- 70°C

Operating temperature range:

- -40°C ÷ 125°C

Standard colours:

- White and yellow

Storage:

- Store in original packaging
- Use within 3 years of the date of manufacture printed on the reel

Temperature range:

- 10°C ÷ 25°C

Relative humidity range:

- 45÷55%

Fire performance requirements for use on railway vehicles as per CEN/TS 45545-1

Requirement	R23		
Test methods	EN ISO 4589-2 LOI(%)	EN ISO 5659-2 (25kW/m ² -Flaming) Ds max	NF X 70-100-1/-2 CIT_{NLP}
Typical value	33.5	49.5 (Flaming)	CIT _{NLP} : 0.10
Acceptance limits	for HL1: ≥ 28% HL2: ≥ 28% HL3: ≥ 32%	for HL1: ≤ 600 HL2: ≤ 300 HL3: ≤ 150	for HL1: ≤ 1.2 HL2: ≤ 0.9 HL3: ≤ 0.75

Indelibility of printed marking:

- **MIL-M 81531 AS (SAE-AS81531-1998), point n4.6.2 (Adherence)**

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Prepared by Marketing dept.

Date: 23/05/2012

M2

HEAT-SHRINKABLE TUBING

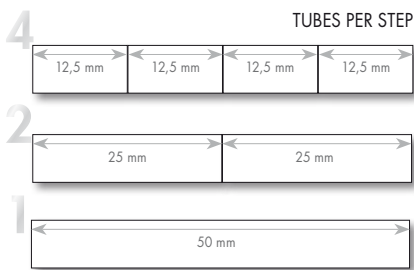
ladder-printable on one side only

LADDER

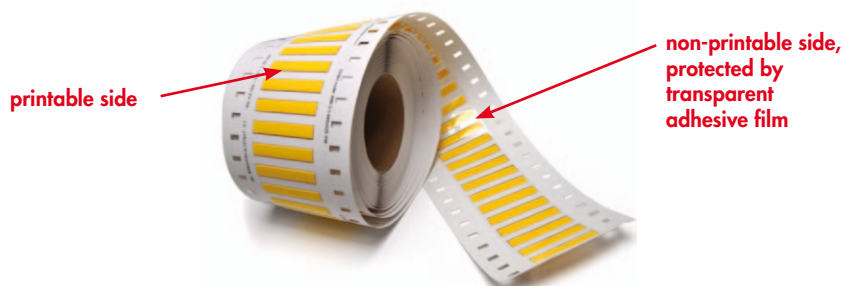
with **ROLLY** 990980 printer and black ribbon TRR-055 842121.



Colour	Internal Ø before shrinking mm	Pre-cut length mm	Code	Tubes per step	Quantity	GENIUSPRO Code
M2-32 Cable ext. Ø range 1,8 ÷ 2,8 mm Cable c.s.a range 0,5 ÷ 1 mm ²						
□ white	3,2	12,5	M2-32-12.5-WH1	4	4.000	4810
	3,2	25	M2-32-25-WH1	2	2.000	4812
	3,2	50	M2-32-50-WH1	1	1.000	4814
■ yellow	3,2	12,5	M2-32-12.5-YE1	4	4.000	4810
	3,2	25	M2-32-25-YE1	2	2.000	4812
	3,2	50	M2-32-50-YE1	1	1.000	4814
M2-48 Cable ext. Ø range 2,8 ÷ 4,2 mm Cable c.s.a range 1 ÷ 2,5 mm ²						
□ white	4,8	12,5	M2-48-12.5-WH1	4	4.000	4820
	4,8	25	M2-48-25-WH1	2	2.000	4822
	4,8	50	M2-48-50-WH1	1	1.000	4824
■ yellow	4,8	12,5	M2-48-12.5-YE1	4	4.000	4820
	4,8	25	M2-48-25-YE1	2	2.000	4822
	4,8	50	M2-48-50-YE1	1	1.000	4824
M2-64 Cable ext. Ø range 4,2 ÷ 5,8 mm Cable c.s.a range 4 ÷ 6 mm ²						
□ white	6,4	12,5	M2-64-12.5-WH1	4	4.000	4830
	6,4	25	M2-64-25-WH1	2	2.000	4832
	6,4	50	M2-64-50-WH1	1	1.000	4834
■ yellow	6,4	12,5	M2-64-12.5-YE1	4	4.000	4830
	6,4	25	M2-64-25-YE1	2	2.000	4832
	6,4	50	M2-64-50-YE1	1	1.000	4834
M2-95 Cable ext. Ø range 5,8 ÷ 8 mm Cable c.s.a range 10 ÷ 16 mm ²						
□ white	9,5	12,5	M2-95-12.5-WH1	4	2.000	4840
	9,5	25	M2-95-25-WH1	2	1.000	4842
	9,5	50	M2-95-50-WH1	1	500	4844
■ yellow	9,5	12,5	M2-95-12.5-YE1	4	2.000	4840
	9,5	25	M2-95-25-YE1	2	1.000	4842
	9,5	50	M2-95-50-YE1	1	500	4844
M2-127 Cable ext. Ø range 8 ÷ 11 mm Cable c.s.a range 25 ÷ 35mm ²						
□ white	12,7	50	M2-127-50-WH1	1	500	4854
■ yellow	12,7	50	M2-127-50-YE1	1	500	4854
M2-190 Cable ext. Ø range 11 ÷ 17 mm Cable c.s.a range 35 ÷ 50 mm ²						
□ white	19,1	25	M2-190-25-WH1	1		4862
	19,1	50	M2-190-50-WH1	1	500	4864
■ yellow	19,1	25	M2-190-25-YE1	1		4862
	19,1	50	M2-190-50-YE1	1	500	4864
M2-254 Cable ext. Ø range 17 ÷ 23 mm Cable c.s.a range 50 ÷ 120mm ²						
□ white	25,4	50	M2-254-50-WH1	1	300	4874
■ yellow	25,4	25	M2-254-25-YE1	1		4872
	25,4	50	M2-254-50-YE1	1	300	4874



It is advisable to select the tubing size based on the actual external diameter of the cable rather than its indicative c.s.a, due to variations in insulation thickness and conductor format.




M2

HEAT-SHRINKABLE TUBING

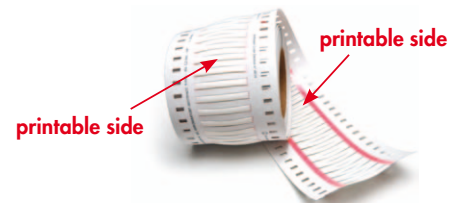
LADDER

ladder-printable on both sides

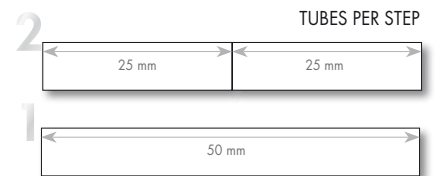
with **ROLLY**  990981 printer and black ribbon TRR-055 842121.



front
back



Colour	Internal Ø before shrinking mm	Pre-cut length mm	Code	Tubes per step	Quantity	Advance LABEL
M2-24 Cable ext. Ø range 1,6 ÷ 2 mm Cable c.s.a range 0,25 ÷ 0,5 mm ²						
□ white	2,4	25	M2-24-25-WH2	2	2.000	•
	2,4	50	M2-24-50-WH2	1	1.000	•
■ yellow	2,4	25	M2-24-25-YE2	2	2.000	•
	2,4	50	M2-24-50-YE2	1	1.000	•
M2-32 Cable ext. Ø range 1,8 ÷ 2,8 mm Cable c.s.a range 0,5 ÷ 1 mm ²						
□ white	3,2	25	M2-32-25-WH2	2	2.000	•
	3,2	50	M2-32-50-WH2	1	1.000	•
■ yellow	3,2	25	M2-32-25-YE2	2	2.000	•
	3,2	50	M2-32-50-YE2	1	1.000	•
M2-48 Cable ext. Ø range 2,8 ÷ 4,2 mm Cable c.s.a range 1 ÷ 2,5 mm ²						
□ white	4,8	25	M2-48-25-WH2	2	2.000	•
	4,8	50	M2-48-50-WH2	1	1.000	•
■ yellow	4,8	25	M2-48-25-YE2	2	2.000	•
	4,8	50	M2-48-50-YE2	1	1.000	•
M2-64 Cable ext. Ø range 4,2 ÷ 5,8 mm Cable c.s.a range 4 ÷ 6 mm ²						
□ white	6,4	25	M2-64-25-WH2	2	2.000	•
	6,4	50	M2-64-50-WH2	1	1.000	•
■ yellow	6,4	25	M2-64-25-YE2	2	2.000	•
	6,4	50	M2-64-50-YE2	1	1.000	•
M2-95 Cable ext. Ø range 5,8 ÷ 8 mm Cable c.s.a range 10 ÷ 16 mm ²						
□ white	9,5	25	M2-95-25-WH2	2	1.000	•
	9,5	50	M2-95-50-WH2	1	500	•
■ yellow	9,5	25	M2-95-25-YE2	2	1.000	•
	9,5	50	M2-95-50-YE2	1	500	•
M2-127 Cable ext. Ø range 8 ÷ 11 mm Cable c.s.a range 25 ÷ 35 mm ²						
□ white	12,7	25	M2-127-25-WH2	2	1.000	•
	12,7	50	M2-127-50-WH2	1	500	•
■ yellow	12,7	25	M2-127-25-YE2	2	1.000	•
	12,7	50	M2-127-50-YE2	1	500	•
M2-190 Cable ext. Ø range 11 ÷ 17 mm Cable c.s.a range 35 ÷ 50 mm ²						
□ white	19,1	25	M2-190-25-WH2	2	1.000	•
	19,1	50	M2-190-50-WH2	1	500	•
■ yellow	19,1	25	M2-190-25-YE2	2	1.000	•
	19,1	50	M2-190-50-YE2	1	500	•
M2-254 Cable ext. Ø range 17 ÷ 23 mm Cable c.s.a range 50 ÷ 120 mm ²						
□ white	25,4	25	M2-254-25-WH2	2	600	•
	25,4	50	M2-254-50-WH2	1	300	•
■ yellow	25,4	25	M2-254-25-YE2	2	600	•
	25,4	50	M2-254-50-YE2	1	300	•
M2-381 Cable ext. Ø range 23 ÷ 36 mm Cable c.s.a range 120 ÷ 240 mm ²						
□ white	38,1	25	M2-381-25-WH2	2	100	•
	38,1	50	M2-381-50-WH2	1	200	•
■ yellow	38,1	25	M2-381-25-YE2	2	100	•
	38,1	50	M2-381-50-YE2	1	200	•



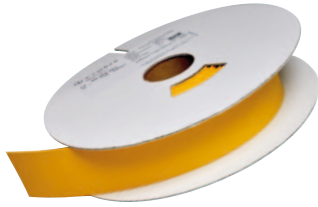
It is advisable to select the tubing size based on the actual external diameter of the cable rather than its indicative c.s.a., due to variations in insulation thickness and conductor format.

M2

HEAT-SHRINKABLE TUBING


continuous-printable on both sides

CONTINUOUS



printable:

on one side with **ROLLY**  TRR 990980 printer and black ribbon TRR-055 842121;

on both sides with **ROLLY**  TRR 990981 printer and black ribbon TRR-055 842121.

Colour	Internal Ø before shrinking mm	Cable ext. Ø range mm (in.)	Cable c.s.a range mm ² (AWG)	Code	Continuous length m	Quantity	GENIUSPRO Code
☐ white	2,4	1,6 ÷ 2	0,25 ÷ 0,5	M2-24-WH3	20	1	7000
				M2-24-WH3-100	100	1	7000
	3,2	1,8 ÷ 2,8	0,5 ÷ 1	M2-32-WH3	20	1	7010
				M2-32-WH3-100	100	1	7010
	4,8	2,8 ÷ 4,2	1 ÷ 2,5	M2-48-WH3	20	1	7020
				M2-48-WH3-100	100	1	7020
	6,4	4,2 ÷ 5,8	4 ÷ 6	M2-64-WH3	20	1	7030
				M2-64-WH3-100	100	1	7030
	9,5	5,8 ÷ 8	10 ÷ 16	M2-95-WH3	15	1	7040
				M2-95-WH3-100	100	1	7040
	12,7	8 ÷ 11	25 ÷ 35	M2-127-WH3	15	1	7050
				M2-127-WH3-100	100	1	7050
	19,1	11 ÷ 17	35 ÷ 50	M2-190-WH3	15	1	7060
				M2-190-WH3-100	100	1	7060
	25,4	17 ÷ 23	50 ÷ 120	M2-254-WH3	15	1	7070
				M2-254-WH3-100	100	1	7070
38,1	19,8 ÷ 37	120 ÷ 240	M2-381-WH3	15	1	7080	
			M2-381-WH3-60	60	1	7080	
50,8	26 ÷ 49	240 ÷ 400	M2-508-WH3	15	1	7090	
			M2-508-WH3-60	60	1	7090	
☐ yellow	2,4	1,6 ÷ 2	0,25 ÷ 0,5	M2-24-YE3	20	1	7000
				M2-24-YE3-100	100	1	7000
	3,2	1,8 ÷ 2,8	0,5 ÷ 1	M2-32-YE3	20	1	7010
				M2-32-YE3-100	100	1	7010
	4,8	2,8 ÷ 4,2	1 ÷ 2,5	M2-48-YE3	20	1	7020
				M2-48-YE3-100	100	1	7020
	6,4	4,2 ÷ 5,8	4 ÷ 6	M2-64-YE3	20	1	7030
				M2-64-YE3-100	100	1	7030
	9,5	5,8 ÷ 8	10 ÷ 16	M2-95-YE3	15	1	7040
				M2-95-YE3-100	100	1	7040
	12,7	8 ÷ 11	25 ÷ 35	M2-127-YE3	15	1	7050
				M2-127-YE3-100	100	1	7050
	19,1	11 ÷ 17	35 ÷ 50	M2-190-YE3	15	1	7060
				M2-190-YE3-100	100	1	7060
	25,4	17 ÷ 23	50 ÷ 120	M2-254-YE3	15	1	7070
				M2-254-YE3-100	100	1	7070
38,1	23 ÷ 36	120 ÷ 240	M2-381-YE3	15	1	7080	
			M2-381-YE3-60	60	1	7080	
50,8	27 ÷ 49	240 ÷ 400	M2-508-YE3	15	1	7090	
			M2-508-YE3-60	60	1	7090	

ROLLY200TR2
to print
on both sides

ROLLY200TRI
to print
on one side

