3M Cushion-Mount[™] **Plus Plate Mounting Tapes**1720M, 1015M, 1020M, 1015, 1020, 1020R 1920M, 1115, 1120

Technical Data June 2017

Product Description

3M™ Cushion-Mount™ Plus Plate Mounting Tapes are designed for mounting flexographic print plates to cylinders or sleeves. This family of foam mounting tapes provides excellent print quality for process, combination, and solid printing.

Features

- Offers a complete range of foam densities providing excellent print quality from process to combination to solid printing.
- Consistent caliper control allows the printer to use multiple foam densities on a print job to optimize print quality.
- The adhesive on the linered side (plate side) of the tape is designed for mounting of photopolymer plates, excellent holding power on-press and clean plate removal when demounting.
- The adhesive on the non-linered side (cylinder side) of the tape is designed for mounting to flexographic printing cylinders or sleeves, providing easy application at mounting and clean removability when demounting.

3M[™] Cushion-Mount[™] Plus Plate Mounting Tapes 1720M • 1015M • 1020M • 1015 • 1020 • 1020R • 1920M • 1115 • 1120

Typical Physical Properties and Performance Characteristics

Note: The following technical information and data should be considered representative or typical only and should not be used for specification purposes.

		3M™ Cushion-Mount™ Plus Medium Firm Combination Plate Mounting Tape	3M [™] Cushion-Mount [™] Plus Standard Combination Plate Mounting Tapes		3M™ Cushion-Mount™ Plus Standard Combination Plate Mounting Tapes	
Product		1720M	1015M	1020M	1015	1020
Adhesive		Differential Acrylate	Differential Acrylate		Differential Acrylate	
Polyethylene Carrier		Medium Firm Teal Foam	Standard White Foam		Standard White Foam	
Type of Printing		Combination of solid and line with tone reproduction and fine reverses	Combination of solid and line with tone reproduction and fine reverses		Combination of solids and tone reproduction where solids and process are equally important	
Application Thickness	in (mm)	0.020 (0.508)	0.015 (0.381)	0.020 (0.508)	0.015 (0.381)	0.020 (0.508)
Thickness		·		, ,		
Tape	in (mm)	0.022 (0.559)	0.017 (0.432)	0.022 (0.559)	0.017 (0.432)	0.022 (0.559)
Paper Liner	in (mm)	0.0045 (0.114)	0.0045 (0.114)	0.0045 (0.114)	0.0045 (0.114)	0.0045 (0.114)
Lot to Lot Tolerance	in (mm)	±0.0015 (±0.038)	±0.0015 (±0.038)	±0.0015 (±0.038)	±0.0015 (±0.038)	±0.0015 (±0.038)
Typical Application Area Caliper Variation	in (mm)	±0.0004 (±0.010)	±0.0004 (±0.010)	±0.0004 (±0.010)	±0.0004 (±0.010)	±0.0004 (±0.010)
Roll Length	yd (m)	25 (22.9)	25 (22.9)	25 (22.9)	25 (22.9)	25 (22.9)
Maximum Width	in	54 (1371.6)	54 (1371.6)	54	54	54 (1371.6)
Minimum Width	(mm) in	2	2	(1371.6)	(1371.6)	2
Slitting Tolerance	(mm) in	(50.8) ±1/32	(50.8) ±1/32	(50.8) ±1/32	(50.8) ±1/32	(50.8) ±1/32
Density	(mm) Ib/ft³	(±0.794)	(±0.794)	(±0.794)	(±0.794)	(±0.794)
	(kg/m³)	(480)	(450)	(450)	(450)	(450)
Compression Deflection						
10% Compression	lb/in² (kPa)	30 (207)	15 (103)	15 (103)	15 (103)	15 (103)
25% Compression	Ib/in² (kPa)	50 (345)	30 (207)	30 (207)	30 (207)	30 (207)
Durometer ASTM-D2240 Shore A		68	65	65	65	65
Peel Adhesion (Modified ASTM-D3330)						
Non-linered side - Stainless Steel	oz/in (N/100mm)	55 (60)	55 (60)	55 (60)	55 (60)	55 (60)
Non-linered side - Composite Sleeve	oz/in (N/100mm)	65 (71)	65 (71)	65 (71)	65 (71)	65 (71)
Non-linered side - Polyester	oz/in (N/100mm)	60 (66)	60 (66)	60 (66)	60 (66)	60 (66)
Non-linered side - Urethane - A	oz/in (N/100mm)	70 (77)	70 (77)	70 (77)	70 (77)	70 (77)
Non-linered side - Urethane - B	oz/in (N/100mm)	60 (66)	55 (60)	55 (60)	55 (60)	55 (60)
Peel Adhesion (Modified AST	ГМ-D3330)					
Linered side - Photopolymer	oz/in (N/100mm)	65 (71)	65 (71)	65 (71)	80 (87)	80 (87)
Linered side - Rubber	oz/in (N/100mm)	NA	NA	NA	NA	NA
Solvent Resistance	. , ,					
Water		Excellent	Excellent	Excellent	Excellent	Excellent
Alkanes		Excellent	Excellent	Excellent	Excellent	Excellent
Alcohols		Good	Good	Good	Good	Good
Acetates	٥.	Fair	Fair	Fair	Fair	Fair
Heat Resistance	°F (°C)	120 (49)	120 (49)	120 (49)	120 (49)	120 (49)

3M[™] Cushion-Mount[™] Plus Plate Mounting Tapes

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Typical Physical Properties and Performance Characteristics

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Product Adhesive Diffe		Plate Mounting Tape	3M™ Cushion-Mount™ Plus Soft Process Plate Mounting Tape	
Adhesive Diffe	1020R	1920M	1115	1120
7 tariouto Dine	rential Acrylate	Differential Acrylate	Differential	Acrylate
Polyethylene Carrier Stand	lard White Foam	Medium Soft Pink Foam	Soft Tan Foam	
tone r solid:	nation of solids and eproduction where and process are ually important	Combination of solids and tone reproduction where process printing is important	Tone reproduction where process printing is important	
Application Thickness in (mm)	0.020	0.020	0.015	0.020
	(0.508)	(0.508)	(0.381)	(0.508)
Thickness				
Tape in (mm)	0.022	0.022	0.017	0.022
	(0.559)	(0.559)	(0.432)	(0.559)
Paper Liner in (mm)	0.0045	0.0045	0.0045	0.0045
	(0.114)	(0.114)	(0.114)	(0.114)
Lot to Lot Tolerance in (mm)	±0.0015	±0.0015	±0.0015	±0.0015
	(±0.038)	(±0.038)	(±0.038)	(±0.038)
Typical Application Area in	±0.0004	±0.0004	±0.0004	±0.0004
Caliper Variation (mm)	(±0.010)	(±0.010)	(±0.010)	(±0.010)
Roll Length yd (m)	25	25	25	25
	(22.9)	(22.9)	(22.9)	(22.9)
Maximum Width in (mm)	54	54	54	54
	(1371.6)	(1371.6)	(1371.6)	(1371.6)
Minimum Width in (mm)	2	2	2	2
	(50.8)	(50.8)	(50.8)	(50.8)
Slitting Tolerance in (mm)	±1/32	±1/32	±1/32	±1/32
	(±0.794)	(±0.794)	(±0.794)	(±0.794)
Density Ib/ft³ (kg/m³)	28	26	24	24
	(450)	(416)	(384)	(384)
Compression Deflection				
10% Compression Ib/in² (kPa)	15	10	5	5
	(103)	(70)	(35)	(35)
25% Compression Ib/in² (kPa)	30	20	10	10
	(207)	(138)	(70)	(70)
Durometer ASTM-D2240 Shore A	65	60	55	55
Peel Adhesion (Modified ASTM-D3330)				
Non-linered side - oz/in	55	30	42	42
Stainless Steel (N/100mm)	(60)	(33)	(46)	(46)
Non-linered side - oz/in	65	28	70	70
Composite Sleeve (N/100mm)	(71)	(31)	(77)	(77)
Non-linered side - oz/in	60	35	35	35
Polyester (N/100mm	(66)	(39)	(39)	(39)
Non-linered side - oz/in Urethane - A (N/100mm)	70	35	35	35
	(77)	(39)	(39)	(39)
Non-linered side - oz/in	55	30	24	24
Urethane - B (N/100mm)	(60)	(33)	(27)	(27)
Peel Adhesion (Modified ASTM-D3330)				
Linered side - oz/in Photopolymer (N/100mm)	68	65	65	65
	(74)	(71)	(71)	(71)
Linered side - oz/in Rubber (N/100mm)	30 (33)	NA	NA	NA
Solvent Resistance				
Water	Excellent	Excellent	Excellent	Excellent
Alkanes	Excellent	Excellent	Excellent	Excellent
Alcohols	Good	Good	Good	Good
Acetates	Fair	Fair	Good Fair	Fair
Heat Resistance °F (°C)	120	120	120	120
	(49)	(49)	(49)	(49)

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Storage

Store under normal conditions of 60° to 80°F (16° to 27°C) and 40 to 60% relative humidity in the original carton.

Shelf Life

To obtain best performance, use all products, except 3M[™] Cushion-Mount[™] Plus Plate Mounting Tapes 1040 and 1060, within two years from date of manufacture. For 3M[™] Cushion-Mount[™] Plus Plate Mounting Tapes 1040 and 1060 use within one year from date of manufacture.

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