

Brushes

Overview

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Offers Bar type, Strip Brush and Roll Brush, which are well suited for various industrial applications such as parts leveling, dusting and washing. Additionally, MISUMI original attachment bracket are provided.

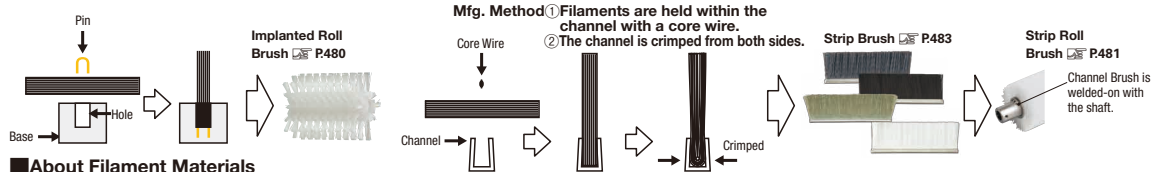


Features of Implanted Roll Brush / Strip Brush

There are 2 ways to manufacture brush: "Implanted Roll Brush" which plant the filaments and "Strip Brush" which arrange the filaments arranged on a straight line. "Implanted Roll Brush" has the property which causes less clogging. "Strip Brush" has the property which enables more filament and less subject to falling-out.

Implanted Roll Brush Mfg. Method

Strip Brushes / Strip Roll Brush Mfg. Method



About Filament Materials

Filament Material	Feature
Nylon 6	Good wear resistance, fatigue resistance, and resiliency characteristics suitable for long term operation. Suitable for food processing. Maximum temp limit for the filaments is 100°C. Care should be taken since Nylon 6 dissolves in strong hydrochloric acid, sulfuric acid, formic acid, and phenolic acid.
Thunderon®	The organic conductive fiber made by copper sulfide chemically bonded to acrylic fiber has static neutralizing functionality. Flexible and has excellent wear resistant characteristics in spite of its low specific density. Thunderon® is a registered trademark of Nihon Sanmo Dyeing Co., Ltd.
Conductive Nylon Mono-Eight®	Carbon is compounded with nylon so that it is antistatic even if directly contacting with workpiece. Use conditions conform to Nylon 6. Has thicker filament diameter than Thunderon. Resilient filament is usable for anti-static measures. Mono-Eight® is a registered trademark of TORAY MONOFILAMENT Co., Ltd.
Nylon with Abrasive Grain	Abrasive particles are compounded with nylon so that it is more resistant to breakage and burrs than Nylon 6. Uses Alumina #320.

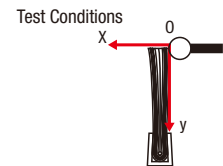
Filament Diameter of Channel Brush (for 30mm)

Channel Width	5mm				3mm				
	Nylon 6		Conductive Nylon Mono-Eight®	Nylon with Abrasive Grain	Nylon 6		Thunderon®	Conductive Nylon Mono-Eight®	
Filament Dia.	0.2	0.3	0.5	0.3	0.6	0.2	0.3	0.075	0.3
Photo									
Strip Brush	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Roll Brush	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

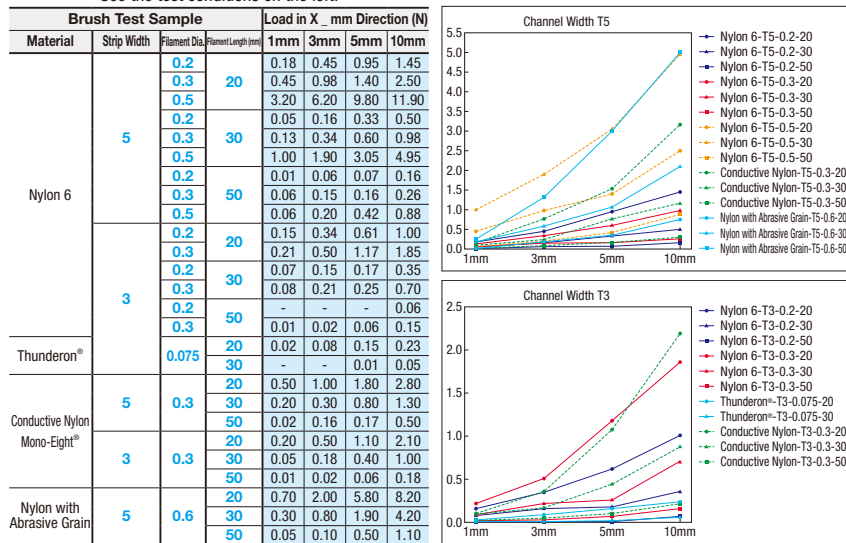
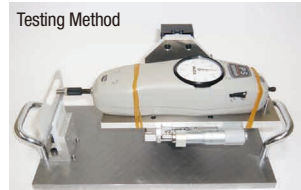
Filament Material	Filament Diameter	Feature
Nylon 6	0.2	Feel of Tooth Brush (Normal)
	0.3	Feel of Bathtub Brush. Harder than Tooth Brush (Hard)
	0.5	Hard. Feel of Deck Brush
Thunderon®	0.075	Diameter and Feel of Average Human Hair.
Conductive Nylon Mono-Eight®	0.3	Feel of Bathtub Brush. Harder than Tooth Brush (Hard)
Nylon with Abrasive Grain	0.6	Harder and more resilient than Nylon 6, 0.5.

Elasticity Test of Strip Brush

See the test conditions on the left.



Loads are measured while the filament tip (y0 ~ 1mm) is pushed in X direction to cause the leaning of 1, 3, 5, and 10mm. Measured values are not guaranteed values but an example of measured values.



Values are for reference only, not guaranteed.

Precaution for Use

- Brush's service life will vary depending on usage conditions and frequency. Pulling off some filaments may cause entire falling-out.
- Maximum temp limit for the filaments is 100°C. The filaments will melt and fall off at above 100°C.
- Nylon 6 dissolves in strong hydrochloric acid, sulfuric acid, formic acid, and phenolic acid.
- Brush press contact length should be 2mm or less. Do not press further than necessary.
- Do not bend the channel brush.
- The Strip Brush has ±2mm bow/bend per L100mm.

Precaution for Use and Storage

- For storage, take care so that the filaments are not plastically deformed. If the brush is left in contact with workpiece while in storage, the filaments may be deformed permanently. Additionally, avoid filament tips from contacts when storing the brush by itself.
- Dry before storage.
- Remove any foreign objects from the brush.
- Do not use in high temp. environment or near fire.

Roll Brush

Implanted Roll Brush

Brush Body

Type	Type	Material	Pipe
Brush Body	Fixed	URBSN	Nylon 6
	Configurable	URBSNF	Nylon 66 (Filament Dia. No. 0.1) Nylon 6 (Filament Dia. No. 0.2-0.5)
		URBSMF	Conductive Nylon Mono-Eight®
Dedicated Shaft Collar		URBSSC	304 Stainless Steel

Dedicated Shaft Collar

Dedicated Shaft Collar Construction Diagram

Fixed by interlocking concave-convex surface.

Use the brush at less than 1000rpm. Note that maximum rotational speed varies depending on mounting method, brush length, brush O.D. or the number of connected brush.

Brush Fixed

Part Number	Type	D	L	Filament Dia. No.	d			D1	V	H	Proper Motor Power (Unit: kW) Reference Value	Unit Price	
					Filament Dia.	d	d					L50	L100
URBSN	80	100	50	0.3	0.3	0.295	35	15	22.5	0.4			
							40	20	30.0				
							40	20	55.0				
URBSMF	150	100	100	0.3	0.3	0.295	35	15	22.5	0.75			
							40	20	30.0				
							40	20	55.0				

Brush Configurable

Part Number	Type	D1	D 5mm Increment	L	Filament Dia. No.	V	H (H=(D-D1)/2)		Proper Motor Power (Unit: kW) Reference Value
							H	H	
URBSNF	35	40	60-80	50	0.1	15	12.5	22.5	0.4
							10	55	
							10	55	
URBSMF	35	40	60-80	50	0.15	15	12.5	22.5	0.4
							10	55	
							10	55	

Dedicated Shaft Collar (Concave-Convex at Both Sides, 2 pcs.)

Part Number	Type	D1	V	Accessories	Unit Price
URBSSC	35	15	15	Hex Socket Set Screw (Flat End) MSF55-8 (304 Stainless Steel)	

Select the same size as the brush body D1.



Brush Fixed
Part Number - L - Filament Dia.
URBSN80 - 50 - 0.3

Dedicated Shaft Collar
Part Number
URBSSC35

Brush Configurable
Part Number - D - L - Filament Dia.
URBSNF40 - 105 - 50 - 0.5



Configure Online



Configure Online

Brush Configurable

Part Number	Type	D1	D	L	Filament Dia.			
					0.1	0.2	0.3	0.5
URBSNF	35	40	60-80	50				
	35	40	60-80	100				

Part Number	Type	D1	D	L	Filament Dia.	
					0.15	0.3
URBSMF	35	40	60-80	50		
	35	40	60-80	100		



Example

Advantages

- Can be lengthen by interlocking
- Only have to replace the worn parts.
- Can be positioned only on the required parts.

