

# Low Friction Rubber Sheets

Nitrile Rubber Sheets, Silicon Rubber Sheets

Rubber sheets with high sliding property and are slippery to the touch. Suitable for use on portions that tend to stick to workpieces such as jaws.

A Selectable Type		A, B Configurable Type		Material	Hardness	Color
No Adhesive	Adhesive	No Adhesive	Adhesive			
LRBNM	LRBNMA	LRBNMF	LRBNMFA	Low Friction Nitrile Rubber	Shore A70	Black
LRBSM	LRBSMA	LRBSMF	LRBSMFA	Low Friction Silicon Rubber	Shore A70	Light Gray
LRBAM	LRBAMA	LRBAMF	LRBAMFA	Low Friction Silicon Rubber	Shore A50	Milky White

Accuracy Standards  
 • T Dimension Tolerance ±0.2  
 • Dimensional Tolerances of A and B  
 200mm or Less ±1.0 201~300 ±1.5 301~500 ±2.0

Adhesive thickness is 0.14 ~ 0.2mm.  
 For details on the seal material and adhesive strength data, see Low Friction Nitrile Rubber (ADTR) and Low Friction Silicone Rubber (ADTS).  
 See P. 2-391 for rubber properties.

**A Selectable Type**  
 Square Type (No Adhesive) (Adhesive)  
 Band Type (No Adhesive) (Adhesive)

**A, B Configurable Type**  
 Square Type (No Adhesive) (Adhesive)  
 Band Type (No Adhesive) (Adhesive)

The price of this product is the unit price shown in the table multiplied by material multiplier.

(Ex.) Part Number - A - B >> (Unit Price) x (Material Multiplier) = Standard Type Unit Price  
 LRBSMFA0.5 - 300 - 200

## A Selectable - Square

Part Number	A Selection	Unit Price	
		LRBNM, LRBNMA	LRBSM, LRBSMA, LRBAM, LRBAMA
No Adhesive LRBNM (x1.0) LRBSM (x1.0) LRBAM (x1.0)	0.5	300	
Adhesive LRBNMA (x1.2) LRBSMA (x1.2) LRBAMA (x1.2)	500		

## A Selectable - Band

Part Number	A Selection	Unit Price								
		A								
No Adhesive LRBNM (x1.0) Adhesive LRBNMA (x1.2)	0.5	3	5	10	20	30	40	50	80	100
No Adhesive LRBSM (x1.0) LRBAM (x1.0) Adhesive LRBSMA (x1.2) LRBAMA (x1.2)		30	40	50	80	100				

## A, B Configurable Type

Part Number	A Selection	1mm Increment	
		A	B
LRBNMF LRBSMF LRBAMF LRBNMFA LRBSMFA LRBAMFA	0.5	10~500	10~500

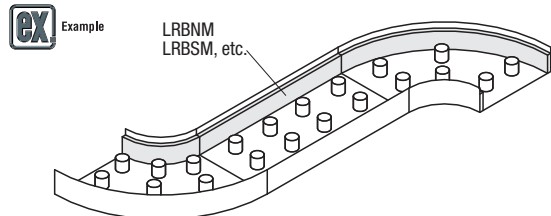
## A, B Configurable Type

Part Number	A Selection	Unit Price				
		B				
No Adhesive LRBNMF (x1.0) Adhesive LRBNMFA (x1.2)	0.5	10~100	-	-	-	-
No Adhesive LRBSMF (x1.0) LRBAMF (x1.0) Adhesive LRBSMFA (x1.2) LRBAMFA (x1.2)		101~200	-	-	-	-
		201~300	-	-	-	-
		301~400	-	-	-	-
		401~500	-	-	-	-

Please specify dimensions A and B as A ≥ B.

Ordering Example  
 Part Number - A  
 LRBNM0.5 - 300  
 LRBAMA0.5 - 100

A, B Configurable Type  
 Part Number - A - B  
 LRBNMF0.5 - 395 - 201



Can be used to prevent curved parts of a conveyor from sticking with workpieces.

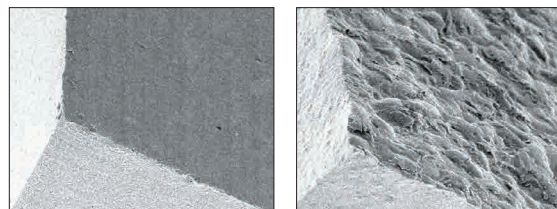
**Features of Low Friction Rubber Sheets** Chemical Resistance Data See P.391  
 By making only one side of rubber surface coarse, the friction is reduced without changing other properties of the material.  
 Can be used on the surface of a sliding plate, robotic chuck and etc. that can stick with workpieces.

### Comparison of Dynamic Friction Coefficient

	Nitrile Rubber (Shore A70)	Silicon Rubber (Shore A70)	Silicon Rubber (Shore A50)
Low Friction	1.22	0.48	0.3
Regular	3.32	-	-

Measurement Method: JIS K7125

\* Silicon rubber is not measurable because it is self-adhesive.



Regular

Low Friction

# Resin Sheets, Fluororesin Tapes (Sliding, Dust-proof)

Fluororesin, Ultra High-Molecular-Weight Polyethylene

Resin sheets and tapes with high sliding property and are slippery to the touch. Suitable for enhancing the sliding of workpieces.

A Selectable Type/A, B Selectable		Material	Adhesive
PTFETT	PTFETS	Fluororesin	Silicon
ULTT	ULTS	Ultra High-Molecular-Weight Polyethylene	Acrylic

**A Selectable - Band**  
 Band Type: 500 ±2.0  
 Backing Paper, Adhesive, Seal

**A, B Selectable**  
 Backing Paper, Adhesive, Seal

Accuracy Standards  
 • T Dimension Tolerance ±0.02  
 • Dimensional Tolerances of A and B  
 200mm or Less ±1.0 300 ±1.5 400, 500 ±2.0

## A Selectable - Band

Part Number	T	A Selection	Unit Price									
			A3	A5	A10	A20	A30	A40	A50	A80	A100	
PTFETT	0.23	3, 5, 10, 20, 30										
ULTT	0.12	40, 50, 80, 100										

L dimension is 500mm.

## A, B Selectable

Part Number	T	A Selection	B Selection	Unit Price				
				B100	B200	B300	B400	B500
PTFETS	0.23	100	100	-	-	-	-	-
		200	100	-	-	-	-	-
		300	100	-	-	-	-	-
		400	100	-	-	-	-	-
		500	100	-	-	-	-	-
ULTS	0.12	100	500	-	-	-	-	-
		200	500	-	-	-	-	-
		300	500	-	-	-	-	-
		400	500	-	-	-	-	-
		500	500	-	-	-	-	-

Ordering Example  
 Part Number - A - B  
 PTFETT0.23 - 30  
 ULT0.12 - 5  
 PTFETS0.23 - 100 - 100  
 ULTS0.12 - 500 - 100

## Features of Fluororesin and Ultra High-Molecular-Weight Polyethylene

• Fluororesin • Ultra High-Molecular-Weight Polyethylene

Low friction coefficient, and excellent chemical resistance and heat resistance. Although its friction coefficient and heat resistance are inferior to those of fluororesin, the price is relatively inexpensive. Also, it has excellent durability.

### Comparison of Dynamic Friction Coefficient

Material	Dynamic Friction Coefficient
Fluororesin	0.08
Ultra High-Molecular-Weight Polyethylene	0.14
Nitrile Rubber	3.32

JIS K 7125

### Characteristic Values

Material	Adhesive Strength (N/25mm Wide)	Tensile Strength (N/25mm Width)	Elongation %	Heat Resistance °C	Chemical Resistance					
					Oil	Water	Acid	Alkali	Ether	Ketone
Fluororesin	12	184	350	180	○	○	○	○	○	○
Ultra High-Molecular-Weight Polyethylene	10	93	300	100	○	○	○	○	○	○

○ - Excellent ○ - Good △ - Acceptable × - Not Acceptable

## Fluororesin Tapes (Sliding, Dust-proof)

PTFET

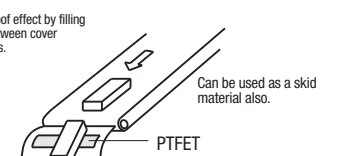
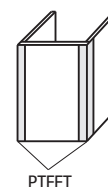
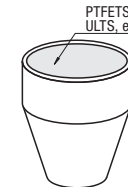
Material  
 ① Fluororesin Film  
 ② Adhesives (Silicon Type)

Part Number	No.	W Selection (mm)	T (mm)	① Fluorine Film Thickness	Adhesive Strength (N/25mm Wide)	Tensile Strength (N/25mm Width)	Elongation %	Dielectric Breakdown kV	W13		W25		W50	
									Unit Price	Volume Discount Rate	Unit Price	Volume Discount Rate	Unit Price	Volume Discount Rate
PTFET	1	13	0.08	0.05	6.13	49.0	200	4.5						
	2	25	0.13	0.08	9.32	56.4	250	7.5						
	3	50	0.18	0.13	10.79	122.6	340	8.2						
	4		0.23	0.18	11.52	149.6	360	9.0						

Ordering Example  
 Part Number - W  
 PTFET2 - 13

Example

Can be used inside of hoppers, etc.



PTFET

Dust-proof effect by filling gaps between cover materials.

Can be used as a skid material also.