

# 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	Low Friction Nitrile Rubber	Shore A70	Black
LRBNM	LRBNMA	LRBNMF	LRBNMFA	Low Friction Silicon Rubber	Shore A70	Light Gray
LRBSM	LRBSMA	LRBSMF	LRBSMFA	Low Friction Silicon Rubber	Shore A50	Milky White
LRBAM	LRBAMA	LRBAMF	LRBAMFA			

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).

**A Selectable Type**  
 Square Type (No Adhesive) (Adhesive) Backing Paper Seal  
 Band Type (No Adhesive) (Adhesive) Backing Paper Seal

**A, B Configurable Type**  
 (No Adhesive) (Adhesive) Backing Paper Seal

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

## A Selectable - Band

Part Number	Type	T	Unit Price									
			A Selection									
No Adhesive LRBNM (x1.0) Adhesive LRBNMA (x1.2)	0.5	300	3	5	10	20	30	40	50	80	100	
No Adhesive LRBSM (x1.0) Adhesive LRBSMA (x1.2)												
No Adhesive LRBAM (x1.0) Adhesive LRBAMA (x1.2)												

## A, B Configurable Type

Part Number	Type	T	1mm Increment	
			A	B
LRBNMF LRBSMF LRBAMF LRBNMFA LRBSMFA LRBAMFA	0.5	300	10~500	10~500

## A, B Configurable Type

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

Ordering Example  
 Part Number - A - B  
 LRBNM0.5 - 300 - 200

## A Selectable Type

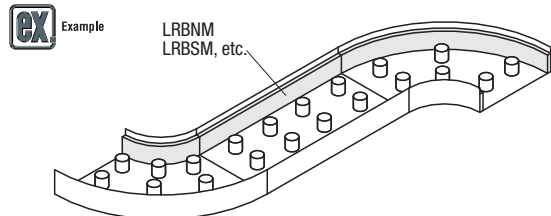
Part Number - A - B

LRBNM0.5 - 300 - 200

## A, B Configurable Type

Part Number - A - B

LRBNMF0.5 - 395 - 201



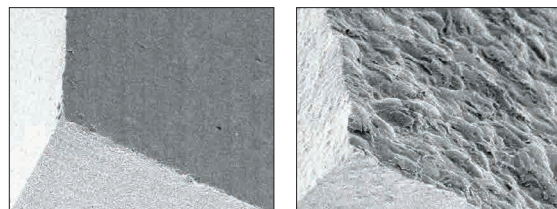
**Features of Low Friction Rubber Sheets** Chemical Resistance Data See P.391  
 By making only one side of rubber surface coarse, the friction is reduced without changing other properties of the material. Can be used on the surface of a sliding plate, robotic chuck and etc. that can stick with workpieces.

### 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.



# 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	Type	T	Unit Price						
			A Selection						
PTFETT	0.23	300	3	5	10	20	30	40	50
ULTT			40	50	80	100			

L dimension is 500mm.

## A, B Selectable

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

Ordering Example  
 Part Number - A - B  
 PTFETT0.23 - 30 - 30  
 ULTT0.12 - 5 - 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 Legend:  
 ① Fluororesin Film  
 ② Adhesives (Silicon Type)

Part Number	Type	No.	W Selection (mm)	T (mm)	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.

