


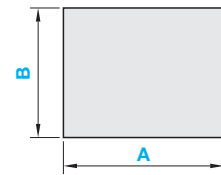
# Felt Sheets

A wide variety of felt materials (w/ or w/o adhesive backings) is available in 10mm increment. Most suitable for cushion, liquid application and grinding media.

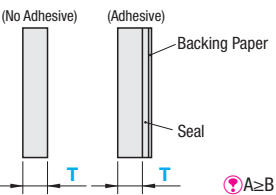


No Adhesive	Adhesive	Material	Density (g/cm <sup>3</sup> )	Color	Allowable Temperature
FELP	FELPA	Polyester Felt	0.2 (0.18 for 5.5mm)	White	0 ~ 120°C
FELPET	FELPETA	Polyester Felt (with Binder)	0.32	Gray	0 ~ 80°C
FELH	FELHA	Polyamide Felt	0.2 (0.27 for 1mm)	White	-50 ~ 250°C
FELWL	FELWLA	Sheep Wool Felt (Rayon, PET blended)	0.25	Ivory	-10 ~ 60°C
FELW	FELWA	Sheep Wool Felt	0.6		

Adhesive thickness is 0.06 ~ 0.10mm.



(No Adhesive)



(Adhesive)

Dimensional Tolerances of A and B

20~200	210~400	410~1000
±2	±4	±6

Part Number	T Selection	10mm Increment	
		A	B
FELP FELPA	1 3 5.5	20~1000	20~950
FELPET FELPETA	5		
FELH FELHA	1 4 6	20~500	20~500
FELWL FELWLA	2 5 10		
FELW FELWA			

Ordering Example: Part Number - A - B  
**FELP3 - 500 - 350**

Part Number	Type	T	A (10mm Increment)	Unit Price				
				B (10mm Increment)				
No Adhesive FELP Adhesive FELPA (x1.3) (Material Multiplier)	1		20~200					
			210~400					
			410~600					
			610~800					
			810~1000					
			20~200					
	3		210~400					
			410~600					
			610~800					
			810~1000					
			20~200					
			410~600					
5.5		210~400						
		410~600						
		610~800						
		810~1000						
		20~200						
		410~600						

The price of this product is the unit price shown in the table multiplied by material multiplier:  
 Part Number - A - B >> (Unit Price) x (Material Multiplier) = Standard Type Unit Price  
**FELPA3 - 600 - 600**

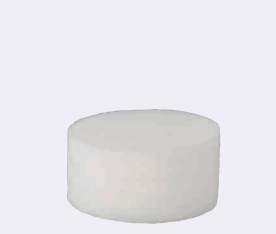
Part Number	Type	T	A (10mm Increment)	Unit Price				
				B (10mm Increment)				
No Adhesive FELPET Adhesive FELPETA (x1.2)	5		20~100					
			110~200					
			210~300					
			310~400					
			410~500					
			20~100					
	1		110~200					
			210~300					
			310~400					
			410~500					
			20~100					
			110~200					
No Adhesive FELH Adhesive FELHA (x1.1) (Material Multiplier)	4		210~300					
			310~400					
			410~500					
			20~100					
			110~200					
			210~300					
	6		210~300					
			310~400					
			410~500					
			20~100					
			110~200					
			210~300					

Part Number	Type	T	A (10mm Increment)	Unit Price				
				B (10mm Increment)				
No Adhesive FELWL Adhesive FELWLA (x1.1) (Material Multiplier)	2		20~100					
			110~200					
			210~300					
			310~400					
			410~500					
			20~100					
	5		210~300					
			310~400					
			410~500					
			20~100					
			110~200					
			210~300					
No Adhesive FELW Adhesive FELWA (x1.1) (Material Multiplier)	10		210~300					
			310~400					
			410~500					
			20~100					
			110~200					
			210~300					
	2		210~300					
			310~400					
			410~500					
			20~100					
			110~200					
			210~300					

# Felt Bumpers

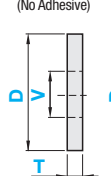
## Washers, Bumpers

Felt material typically used for oil applicators and air-tight gaskets are offered as bumpers and washers.

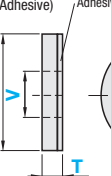


Type	No Adhesive	Adhesive	Material	Density (g/cm <sup>3</sup> )	Color	Allowable Temperature
Washer	WFEP	WFEPA	Polyester Felt	0.2	White	0 ~ 120°C
	WFEH	WFEHA	Polyamide Felt			-50 ~ 250°C
Bumper	BFEL	BFELA	Polyester Felt	Refer to the following		-10 ~ 60°C

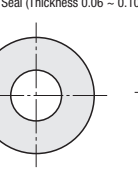
Allowable temperature for adhesive is 0 ~ 80°C.



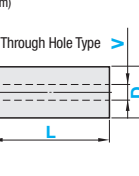
(No Adhesive)



(Adhesive)



Adhesive Seal (Thickness 0.06 ~ 0.10mm)



Through Hole Type

L	Density (g/cm <sup>3</sup> )
10	0.12
20	0.08
30	0.07

### Washer Type

Part Number	Type	D	V Selection				T Selection	Unit Price				
			WFEP	WFEPA	WFEH	WFEHA						
No Adhesive WFEP WFEH		8	0	3		3 (WFEP WFEPA)						
		10	0	4								
		12	0	4	6							
	Adhesive WFEPA WFEHA (x1.1)		15	0	4		6	8				
			20	0	6		8	10	12			
			25	0	6		8	10	12	16	20	
( ) Material Multiplier		30	0	6	8	10	12	16	20			

\*T dimension for Polyester Felt is 3mm, for Polyamide Felt is 4mm.

### Bumper Type (L dimensions indicate the length of felt base materials. The values are for reference only.)

Part Number	Type	D	L Selection	V	Unit Price			
					L10	L20	L30	
No Adhesive BFEL Adhesive BFELA (x1.1) ( ) Material Multiplier		20	10 20 30	0				
				10				
				30	0			
					10			

\*This product, especially L dimension 20 and 30, may be deformed during delivery.

Ordering Example: Part Number - V - T  
**WFEP10 - 4 - 3**

Part Number - L - V  
**BFEL20 - 10 - 10**

### Features of Materials

Material	Details of Material	Application Example
Polyester Felt (Sheet)	Felt made of 100% polyester Soft with Density of 0.18 ~ 0.2. General-purpose Product.	Applicable to general purpose use as oil / water absorption, cushioning materials, etc.
Polyester Felt (with Binder)	PET : PET Binder (Bonding Material) =9:1 Fibers bonded together by the binder provides high morphological stability.	Protection material and bumper for portions exposed to high impact.
Polyamide Felt	Felt made of 100% polyamide Excellent heat/flame resistances. UL Std. Test V-0 Equivalent.	Heat Resistant / Flame Retardant Bumpers
Sheep Wool Felt (Rayon, PET)	Felt made of 60 % sheep wool and 40% PET. JIS-R25W2 Standard Product. Excellent in oil/water retention ability.	Cushion Material, Liquid Application (Oiling), Spacer
Sheep Wool Felt	Felt made of 100% sheep wool Gives less damage to mating materials.	For Buffing
Polyester Felt (Bumper Type)	Density may vary depending on L dimensions.	Oil Application to Workpieces

\*The application examples above are references not guaranteed.

### Characteristics of Felt

- Excellent in weather resistance. (Affected by alkaline solution.)
- Excellent in oil absorbability. It has the property of soaking up oil by capillary action.
- Excellent in oil absorbability. It can absorb up to approx. 80% of its total volume.
- Has good polishing characteristics. Provides high polishing characteristics as it precipitates foreign materials within its tissue.