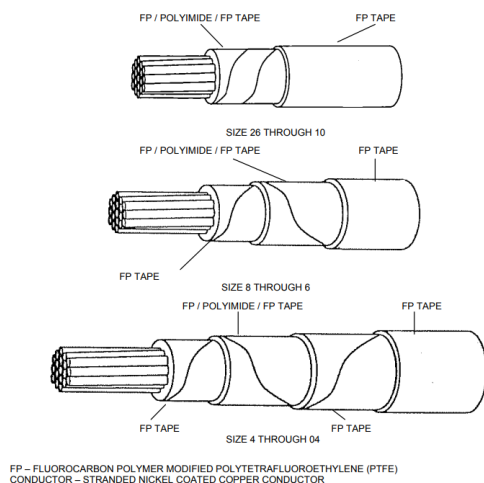




## SKIVED PTFE Tape

SKIVED PTFE Tape is a PTFE tape made by cutting cylindrical PTFE blanks at a specified thickness. It is mainly used for aviation installation cables, such as FP(SKIVED) FP- (PTFE) in SAE AS22759/80~92.



FP – FLUOROCARBON POLYMER MODIFIED POLYTETRAFLUOROETHYLENE (PTFE)  
CONDUCTOR – STRANDED NICKEL COATED COPPER CONDUCTOR

TABLE 2 – WIRE INSULATION MATERIAL 1/

TAPE CODE	THICKNESS (NOM)	MATERIAL
1	0.002	0.0005 (FP)/0.0010 (POLYIMIDE)/0.0005 (FP)
2	0.001	FP (SKIVED)
3	0.002	FP (SKIVED)
4	0.002	FP (UNSINTERED)
5	0.0025	FP (UNSINTERED)
6	0.003	FP (UNSINTERED)

1/ PHYSICAL PROPERTIES OF THE FP TAPES (SKIVED AND UNSINTERED) SHALL BE IN ACCORDANCE WITH AS22759 REQUIREMENTS.

### Features

- Big temperature range (-200°C~+260°C)
- Corrosion and weather resistance (with excellent chemical inertness)
- Strength (high strength-to-weight ratio)
- Lowest coefficient of friction among solids, non-adhesion
- Biological adaptability
- Low dielectric constant
- Insulation performance: It has excellent insulation performance





## Applications

- Aerospace cables
- 5G high-frequency copper clad laminate industry
- LCD screen
- Liner seals and lubricating materials working in various media
- Electrical insulators used at various frequencies

## Product Family

PRODUCT FAMILY	TENSILE STRENGTH (MPA)	BROKEN STRETCHING STRAIN (%)
CS-SKFM-1 (DIRECTIONAL)	≥50	≥60
CS-SKFM-2 (SEMI-DIRECTIONAL)	≥30	≥80
CS-SKFM-3 (NON-DIRECTIONAL)	≥20	≥100

## Diversity

- PTFE tape can be added with a variety of modified materials to meet different use requirements.
- The contrast can be adjusted according to customer requirements.

## Precautions

- Store in a cool, dry warehouse in the form of packaging, with a temperature of  $25 \pm 10^{\circ}\text{C}$  and a humidity of  $\leq 75\%$ ;
- It is recommended to store at room temperature  $25^{\circ}\text{C}$  for 4h before use.

## Specification

PRODUCT FAMILY	THICKNESS (mm)	WIDTH (mm)	LENGTH (mm)
CS-SKFM-1	0.01~1.0	5.0~1500	Designed by customer's requirement
CS-SKFM-2			
CS-SKFM-3			



## Performance

Performance	Project	Test Method	Unit	Value
<b>Physical Properties</b>	Tensile strength	D638	MPa	14.4~35
	Elongation		%	200~400
	Specific gravity	D792	-	2.13~2.2
	Hardness (Shore)	D2240	-	D50~55
	Flexural modulus of elasticity	D790	GPa	0.50~0.55
	Tensile modulus	D638	GPa	0.45~0.55
	Compressive strength	D695	MPa	11.8
	Coefficient of dynamic friction	0.93MPa{7kgf/cm <sup>3</sup> } 3m/min	-	0.10
	Impact strength	D256	J/M	160
	Coefficient of friction (static)	-	-	0.065
	Coefficient of friction (dynamic)	-	-	0.1
	Water absorption rate (24 hours)	D570	%	0.01
	Oxygen index	D2863	-	> 95
	3.2 mm thick flammability	UL 94	-	V-0
<b>Thermal Performance</b>	Maximum operating temperature	-	°C	≤260
	Minimum operating temperature	-	°C	≥-200
	Melting point	-	°C	327
	Thermal conductivity	C177	W/m-K	0.25
	specific heat	DIN 52612	J/(°C.g)	1.05
	Temperature heat deflection ratio 1.81MPa{18.5kgf/cm <sup>2</sup> }	D648	°C	55
	Temperature heat deflection ratio 0.45MPa{4.6kgf/cm <sup>2</sup> }			121
	Coefficient of thermal expansion	25~100°C MD	X 10 <sup>-5</sup> /°C	11
		25~100°C CD		10
		25~150°C MD		12
		25~150°C CD		11
		25~200°C MD		14
		25~200°C CD		12
25~250°C MD		17		
25~250°C CD		16		
<b>Electrical Performance</b>	DK 60HZ {relative DK}	D150	pF/m	< 18.6 { < 2.1 }
	Factor 60HZ		-	0.0002
	Break-through strength (short-term)	D149	MV/m	19
	Arc resistance	D495	sec	> 300
	Volume resistivity	D257	Ω·CM	> 10 <sup>18</sup>