

PVC Sheets / Sheet Holders

Standard, Anti-Static, Anti-Static with Grid Lines

PVC Sheets

HPEMT (Standard Type)
HPERT (Anti-Static Type)
HPEVT (Anti-Static with Grid Lines)

***HPEVT** (Grid Interval 100x100mm)

Type	Material	Color	Heat Resistance Temperature
① HPEMT	Vinyl Chloride (PVC)	Transparent	0 ~ 60°C
② HPERT		Transparent (with Carbon Print)	
③ HPEVT		Transparent (with Carbon Print)	

For Transparency, refer to the Transparency Comparison Photo below.

Part Number	Length L (m)	Thickness	Width W (m)	Mass (kg)*			L1		L10		L50	
				L1	L10	L50	Unit Price	Volume Discount Rate	Unit Price	Volume Discount Rate	Unit Price	Volume Discount Rate
Type	T (Nominal)						1 ~ 9 sheet(s)	10 ~ 50	1 ~ 9 sheet(s)	10 ~ 50	1 ~ 9 sheet(s)	10 ~ 50
HPEMT	0.2	1 10 50	0.2	1.2	0.3	4.2	16.2					
HPERT												
HPEVT												

*Specified in meter increments. * The mass includes paper cores (Except for L1).

Ordering Example: Part Number - L
 HPEMT0.2 - 50

Film Property

Item	Direction	Value	
		HPEMT (Standard Type)	HPERT, HPEVT (Anti-Static, Anti-Static with Grid Lines)
Tensile Strength	Vertical	300kgf/cm ²	290kgf/cm ²
	Horizontal	265kgf/cm ²	260kgf/cm ²
Tear Strength	Vertical	1520gf	1500gf
	Horizontal	1430gf	1450gf
Heat Resistance	-	60°C	60°C
Surface Resistivity	-	10 ¹⁶ Ω	10 ¹² Ω

Item	HPEMT (Standard Type)	HPERT (Anti-Static Type)	HPEVT (Anti-Static with Grid Lines)
	Oil	○	○
Acid	○	△	×
Alkali	○	○	×
Solvent (Toluene, Acetone, Ethyl Acetate)	×	×	×

○=Good, △=Acceptable, ×=Not Acceptable. *HPEVT is not chemically resistant because the color of the ink on the grid might change or degrade.
 *Not flame resistant. (However, Vinyl Chloride has self-extinguishing property).
 *Not suitable for a clean room due to a large quantity of phthalate compounds as plasticizer.

Sheet Holders

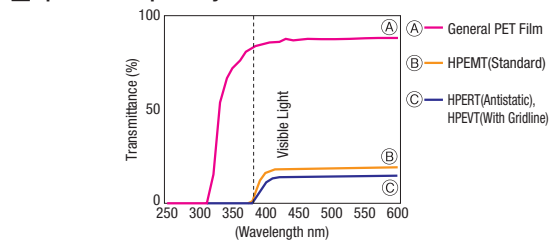
HRLCS5 **HRLCS6** **HRLCS8**

Material: Polypropylene (Light Gray)

Part Number	No.	Length 1mm Increment	Mass kg/m	Extrusion (Series)	Unit Price/m
					1 ~ 70 pcs(s).
HRLCS	5	50~2000	0.045	HFS5	25
	6			HFS6	
	8			HFS8	
			0.072	HFS8-45	50

Ordering Example: Part Number - Length
 HRLCS5 - 500

Optical Transparency



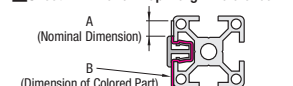
Transparency Comparison Photo (Sheet - Subject Distance: 50mm)



Features

*Used when fixing PVC sheets and non-PVC sheets onto extrusion frames.

Sheet T Dim. and Wrap Margin Reference



Part Number	Extrusion Used	A(mm)	B(mm)
HRLCS5	HFS5-2020	3 or more	25
HRLCS6	HFS6-3030	3 or more	35
HRLCS8	HFS8-4040	5 or more	45
	HFS8-4545	5 or more	50

Non-PVC Sheets

Standard, Anti-Static, High-Grade Anti-Static, Light-Shielding, UV Protection

Non-PVC Sheets

HPEFT (Standard Type)
HPEDT (Anti-Static Type)
HPEGT (High-Grade Anti-Static Type)
HPEHT (Light-Shielding Type)
HPELT (UV Protection Type)

Type	Material	Color	Heat Resistance Temperature
① HPEFT	Polyethylene (PE), Ethylene Vinyl Acetate (EVA)	Transparent	-20°C~110°C
② HPEDT	Polyethylene (PE)	Transparent	
③ HPEGT	Polypropylene (PP)	Transparent (Green)	
④ HPEHT	Polyethylene (PE), Nylon (NY), Aluminum (Aλ)	Silver	-20°C~80°C
⑤ HPELT	Polyester (PET)	Transparent	

For Transparency, refer to the Transparency Comparison Photo below. *HPEHT (Light-Shielding Type) has 99.9% rate of shading.

Part Number	Length L (m)	Thickness	Width W (m)	Mass (kg)*			L1		L10		L50	
				L1	L10	L50	Unit Price	Volume Discount Rate	Unit Price	Volume Discount Rate	Unit Price	Volume Discount Rate
Type	T (Nominal)						1 ~ 9 sheet(s)	10 ~ 50	1 ~ 9 sheet(s)	10 ~ 50	1 ~ 9 sheet(s)	10 ~ 50
HPEFT	0.2	1 10 50	0.2	1.2	0.4	4.2	13.1					
HPEDT												
HPEGT			0.22	1.1	0.3	2.6	12.7					
HPEHT			0.18	1.2	0.3	2.5	12.6					
HPELT			0.19	0.82	0.2	2.4	12.0					

*Specified in meter increments. * The mass includes paper cores (Except for L1).

Ordering Example: Part Number - L
 HPEHT0.2 - 10

Film Property

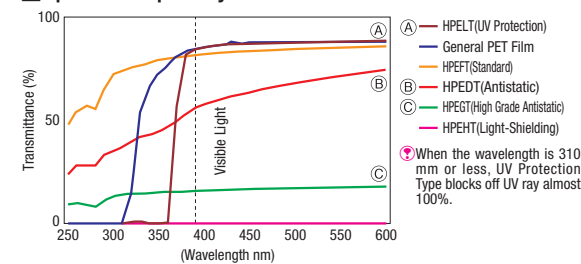
Item	Direction	Value				
		Standard Type	Anti-Static Type	High-Grade Anti-Static Type	Light-Shielding Type	UV Protection Type
Tensile Strength	Vertical	343kgf/cm ²	242kgf/cm ²	360kgf/cm ²	463kgf/cm ²	714kgf/cm ²
	Horizontal	329kgf/cm ²	225kgf/cm ²	380kgf/cm ²	433kgf/cm ²	670kgf/cm ²
Tear Strength	Vertical	99gf	536gf	1400gf	144gf	1490gf
	Horizontal	100gf	704gf	1200gf	154gf	1400gf
Heat Resistance	-	110°C	80°C	80°C	80°C	80°C
Surface Resistivity	-	10 ¹⁴ Ω	10 ¹² Ω	10 ¹⁰ Ω	-	-

Outgas Testing Result of Anti-Static and High-Grade Anti-Static Type

Sheet	Measuring Method	SIM Method	SIM Method	SIM Method	SIM Method
Anti-Static Type	Outgas 60°C 60min. Detection Limit	Diethyl Malonate	Ethyl Acetate	Dibutyl Phthalate	Diocyl Phthalate
		Below Detection Limit	Below Detection Limit	Below Detection Limit	Below Detection Limit
High-Grade Anti-Static Type	Outgas 85°C 16hr Detection Limit	Total amount of hydrocarbon compound will be 167µg/g in 85°Cx16hr.			Diocyl Phthalate
					Below Detection Limit

SIM: Stands for "Select Ion Monitoring" (one type of Gas Chromatography Analysis). Measures pre-registered molecular weight substance only in high accuracy.

Optical Transparency



Transparency Comparison Photo (Sheet - Subject Distance: 50mm)



*When the wavelength is 310 mm or less, UV Protection Type blocks off UV ray almost 100%.