



Holography Films

PRODUCT FEATURES

- ▲ Transmission & reflection holograms
- ▲ High resolving power
- ▲ Different wavelengths
- ▲ CW or pulsed lasers

APPLICATIONS

- ▲ Educational experiments at schools and universities
- ▲ Holographic interferometry

PFG-01, RED SENSITIVE

The triacetate film substrates (thickness 180 μm) are coated with an emulsion. They are available in formats 63x63 mm up to 1 m width (available formats on request). These films can be used with CW or pulsed lasers (i.e. HeNe or laser diodes) and are suitable for transmission as well as for reflection holograms.

VRP-M, GREEN SENSITIVE

The triacetate film substrates (thickness 180 μm) are coated with an emulsion. They are available in formats 63x63 mm up to 1 m width (available formats on request). These films can be used with CW or pulsed lasers (i.e. Argon, Nd:YAG lasers or laser diodes) and are suitable for transmission as well as for reflection holograms.

PFG-03C, PANCHROMATIC PLATES

The material PFG-03C has smaller grain (8 – 12 nm) than PFG-01 material (40 nm), a high resolution of >5000 lines/mm and allows realizing full color holograms. Luminance is better due to small scattered light, but high exposure power is required. The fine grain emulsion is suitable in particular for reflection holograms. This material is designed for the production of full-color reflection holograms using CW laser radiation in the blue (457nm - Argon laser), green (514nm - Argon laser) and red (633nm - HeNe laser).

SPECIFICATIONS

Material	PFG-01	VRP-M	PFG-03C
Holographic sensitivity			
@ 457 nm CW, $\mu\text{J}/\text{cm}^2$	-	-	2000
@ 488 nm CW, $\mu\text{J}/\text{cm}^2$	-	-	-
@ 514.5 nm CW, $\mu\text{J}/\text{cm}^2$	-	75	3000
@ 526.5 nm, $\mu\text{J}/\text{cm}^2$ *	-	75	-
@ 633 nm, $\mu\text{J}/\text{cm}^2$	80	-	3000
Maximum density on characteristic curve (D_{max})	<4.0	<4.0	<4.0
Resolving power (R), mm^{-1}	3000	3000	5000
Maximum spectral sensitivity, nm	633	530	457/514/633
Swollen emulsion layer strength after chemical processing, H (gm force)	900	900	>50
Deformation temperature of emulsion layer in water (T_{def})	>90°C	>90°C	>35°C
Emulsion layer thickness, μm	7 - 8	6 - 7	9 - 10

* 30 ns pulse with latensification

STANDARD FILM SIZES

Article No. *	Type	Size	Films/Box
F-PFG01-1012-50 **	PFG-01	102 x 127 mm ²	50
F-VRPM-1012-50 **	VRP-M	102 x 127 mm ²	50

* Other sizes available on request. **Short delivery time.