

# IMAGO 320

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***BLACK AND WHITE FILM  
TECHNICAL INFORMATION***

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# IMAGO 320

## BLACK AND WHITE FILM



IMAGO 320 is a Black and White Film nominally rated at ISO 320 speed. It can be used both indoors and outdoors with different light conditions. IMAGO 320 is a versatile fine-grain film with a very high sharpness and a wide exposure latitude. It is a panchromatic film, up to 680nm, coated on acetate base and compatible with most of available developers.

- ISO 320, pushable up to ISO 800
- Fine Grain
- High Sharpness
- Wide exposure latitude
- Available in 135 and 120 format Resolving power: 120 lp/mm
- Granularity RMS (x1000): 14

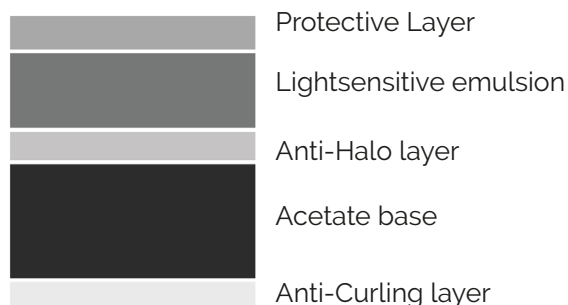
### Film size

- 135 size on a 120 microns acetate base.
- 120 size on a 100 microns acetate base.

### Film reciprocity compensation

1/1000 - 1/2": No adjustment needed  
1" - 7" : +1 Stop Compensation  
8" - 15" : +2 Stop Compensation  
16" - 25" : +3 stop Compensation

### Film structure



### Filter correction

IMAGO 320 can be used with all standard types of filters. (No infrared). Filter manufacturers do usually indicate what correction factor will be needed.

### Storage and handling

Load and unload your camera in subdued light. Storage in the fridge at 8°C / 46.4°F doubles the expiry date.

For best results, process film as soon as possible after exposure. Please avoid storage temperatures over 40°C / 104°F.

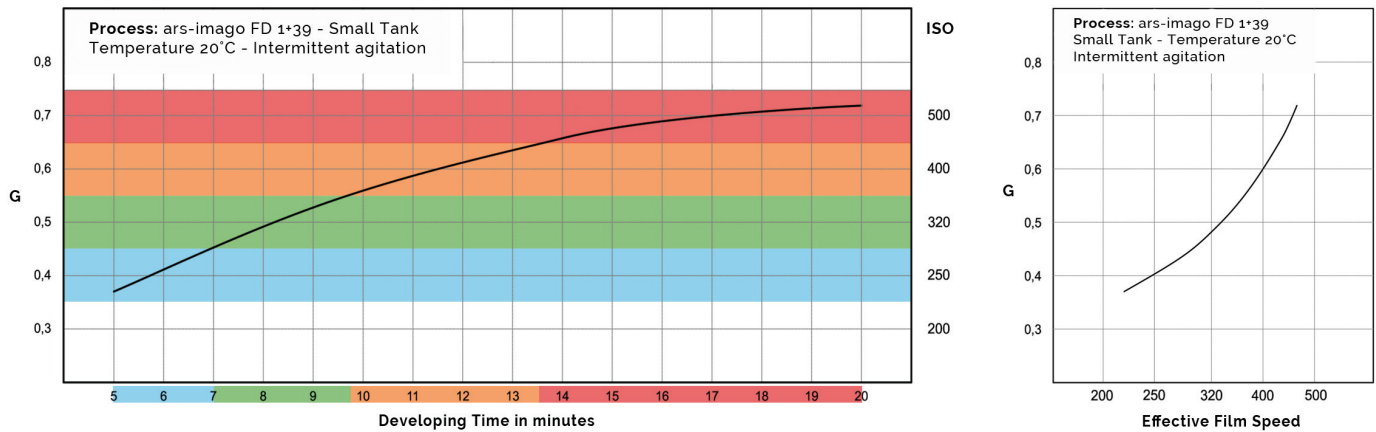
### Developing times - Manual processing

The developing times are based on intermittent agitation in small tanks: first 30" continuous, then 2-3 gentle inversions every minute.

DEVELOPER	ISO	TIME	DILUTION
<i>ars-imago FD</i>	320	8'30"	1+39 at 20°
	640	17'00"	1+39 at 20°
<i>ars-imago FE</i>	320	7'30"	1+1 at 20°
	320	11'30"	1+3 at 20°
<i>ars-imago MB</i>	320	8'00"	Stock at 20°
<i>Caffenol</i>	320	10'00"	Stock at 20°
<i>Bergger Berspeed</i>	320	10'30"	1+1 at 20°
<i>Rodinal, R09, R9</i>	320	7'30"	1+25 at 20°
	320	13'00"	1+50 at 20°
<i>Ilford ID-11</i>	320	7'00"	Stock at 20°
	320	11'30"	1+1 at 20°
<i>Ilford Microphen</i>	320	6'30"	Stock at 20°
	320	11'00"	1+1 at 20°
<i>Kodak D-76</i>	320	7'00"	Stock at 20°
	320	12'00"	1+1 at 20°
<i>Kodak HC-110 (B)</i>	320	5'30"	1+31 at 20°
<i>Kodak T-Max</i>	320	6'00"	1+4 at 20°
<i>Kodak X-Tol</i>	320	8'00"	Stock at 20°
	320	10'00"	1+1 at 20°

### Imago 320 - FD (1+39)

This graph shows how the actual sensitivity and the gradient contrast (G) of the film change depending on developing times. The four colors highlight the four different kinds of contrast for each pairing ISO (exposure) - Time (development).



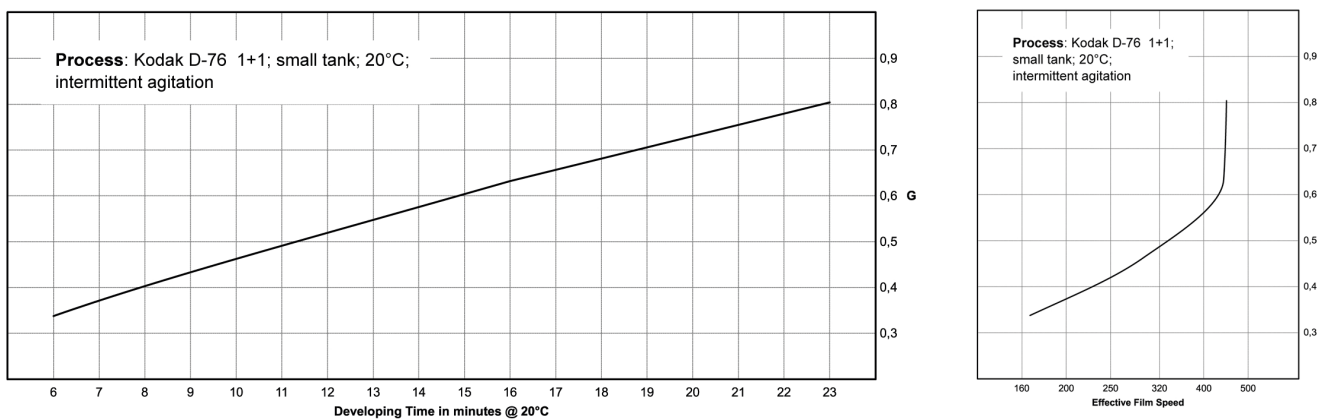
**LOW-CONTRAST NEGATIVE**  
G 0.35-0.45 - Exposed at 250 ASA and developed between 5-7 min. at 20°C  
*Recommended for high-contrast scenes and condenser enlargers.*

**MID-CONTRAST NEGATIVE**  
G 0.45-0.55 - Exposed at 320 ASA and developed between 7.15-9.45 min. at 20°C  
*Recommended for best results with the majority of scenes and all types of enlargers or scanners.*

**HIGH-CONTRAST NEGATIVE**  
G 0.55-0.65 - Exposed at 400 ASA and developed between 10-13.30 min. at 20°C  
*Recommended for low-contrast scenes and diffuser enlargers.*

**VERY HIGH-CONTRAST NEGATIVE**  
G 0.65-0.75 - Exposed at 500 ASA and developed between 14-20 min. at 20°C  
*Recommended for very low-contrast scenes or for graphic results.*

### Imago 320 - D-76 (1+1)

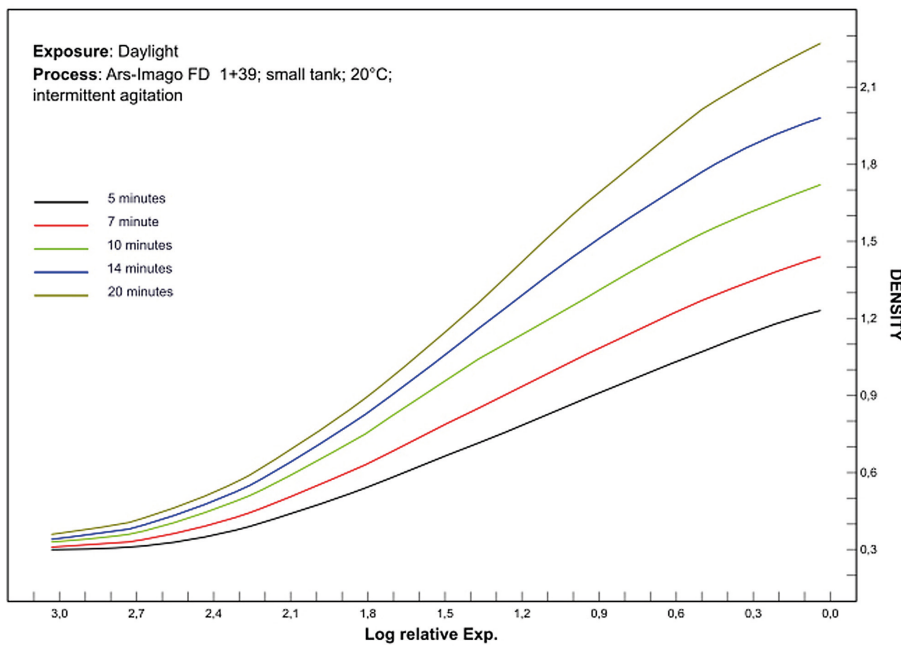


# IMAGO 320

## CHARACTERISTIC CURVES

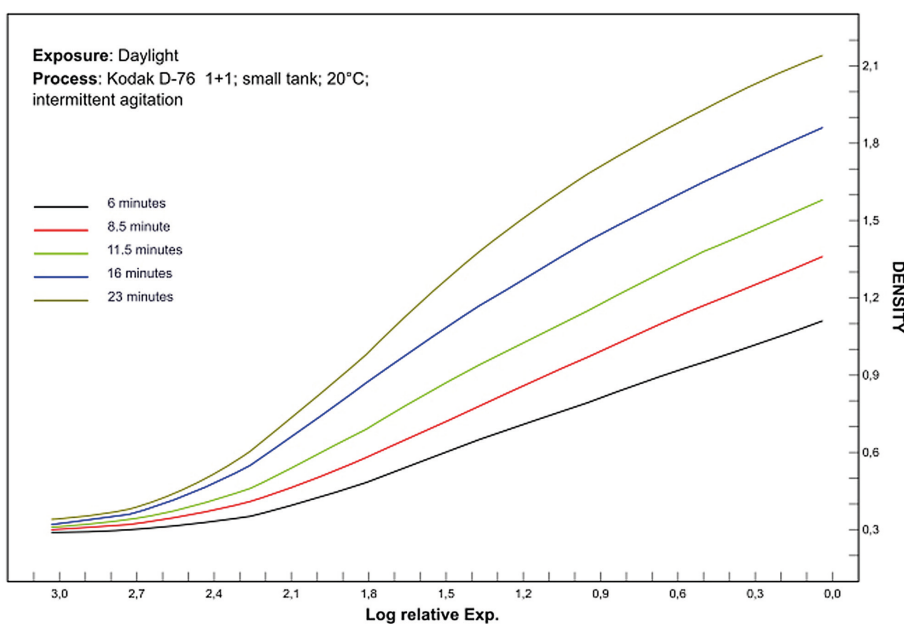
IMAGO 320 is a Black and White Film nominally rated at ISO 320 speed. It can be used both indoors and outdoors with different light conditions. IMAGO 320 is a versatile fine-grain film with a very high sharpness and a wide exposure latitude. It is a panchromatic film, up to 680nm, coated on acetate base and compatible with most of available developers.

### IMAGO 320 - ars-imagò FD (1+39)



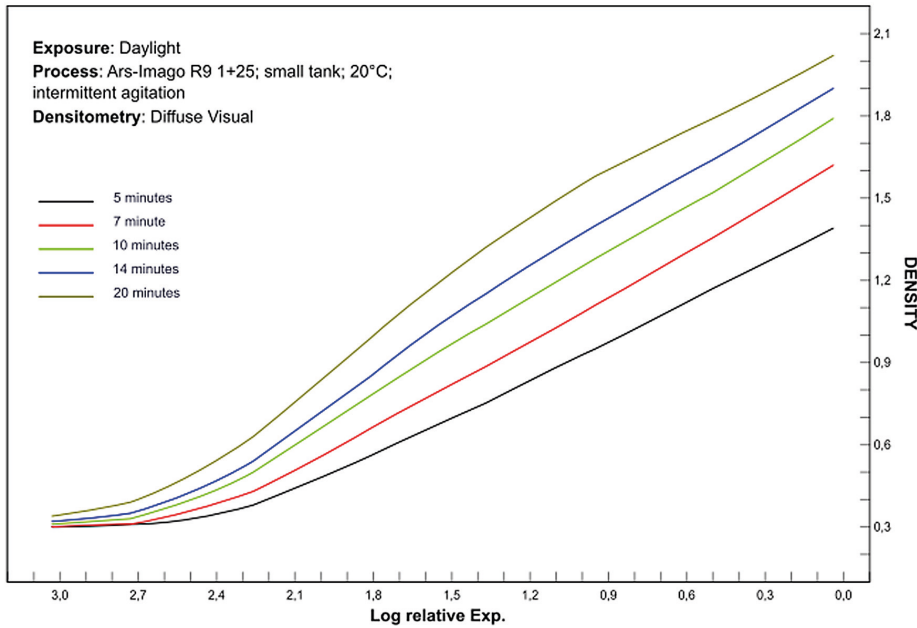
Sinuuous-looking curve, with an extended toe that lessens the effects of underexposure yet generally giving back deep shadows and good details, especially when working with a slight overexposure. The image's overall tone is balanced with particular emphasis on darker tones.

### IMAGO 320 - Kodak D-76 (1+1)



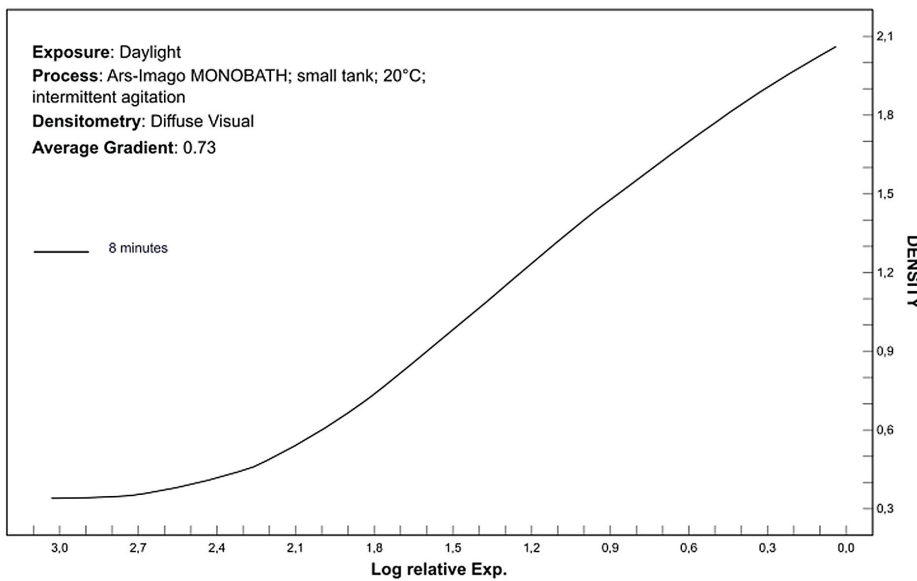
This curve is characterised by a short toe and a good contrast if exposed correctly. The portion tends to raise, emphasizing the midtones and the mid-high tones that are through slightly lighter tones than normal and returning images that tend to be more open and airy.

### IMAGO 320 - ars-imagio R9 (1+25)



Rectilinear curve with a short toe and without a hint of a shoulder on the lights; excellent tone separation both on the tone scale extremes and on the midtones, with a highly linear contrast reproduction.

### IMAGO 320 - ars-imagio MB Monobath



The curve trend is regular and rectilinear, indicating a good and firm tone separation. Contrast on the negative is generally high; a good print can be obtained by using a multigrade contrast filter n. 1.



**IMAGO  
320**

*ars-imago FD 1+39 - 8.30 min. @20°*



**IMAGO  
320**

*ars-imago FD 1+39 - 8.30 min. @20°*



**IMAGO**  
**320**  
*Caffenol kit 11.00 min. @20°*



**IMAGO**  
**320**  
*Caffenol kit 11.00 min. @20°*