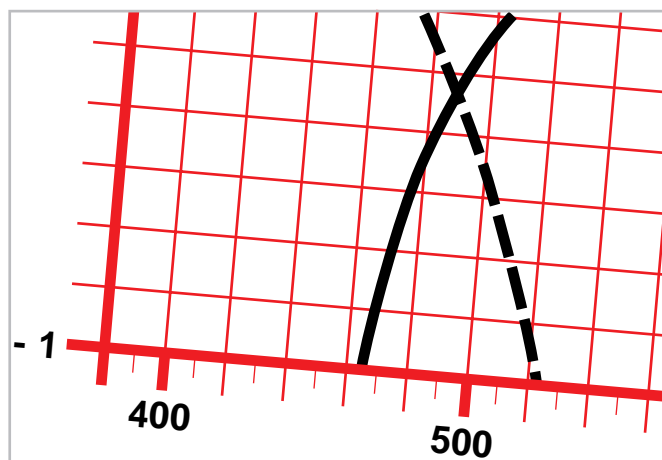


TECHNICAL DATA



AGFA SCALA 200x

PROFESSIONAL

Black and white reversal film

(for the AGFA SCALA process)

Applications:

- Architecture
- Fashion
- Advertising
- Reporting
- Sport and stage photography
- Available-light photography
- Documentation
- Reproduction
- Duplicates of BW negatives and BW transparencies
- Long-term archiving of processed transparency material

Features:

- Superb sharpness and granularity
- Practical standard speed (ISO 200/24°)
- Variable speed (processing pushed and pulled from ISO 100/21° to ISO 1600/33°)
- Contrast matched to AGFACHROME RSX 100 (basis ISO 200/24°)
- Variable contrast (pushed/pulled processing)
- Neutral-black print tone
- Extreme image stability against environmental effects

Further applications:

- Printing original (printing direct from transparency)
- Projection

AGFA 

AGFA SCALA 200x PROFESSIONAL

Speed

With the standard SCALA process: ISO 200/24°.

The speed of the AGFA SCALA 200x can be varied in steps by pushing or pulling the process. The contrast, maximum density and granularity simultaneously vary in comparison to the standard process.

Step	Push 1	Push 2	Push 3	Pull 1
Speed (ISO)	400/27°	800/30°	1600/33°	100/21°
Contrast	increasingly steeper			flatter
Maximum density	decreasing			increasing
Granularity	increasingly coarse-grained			finer

Applications

Varying the speed and the contrast is useful in many fields.

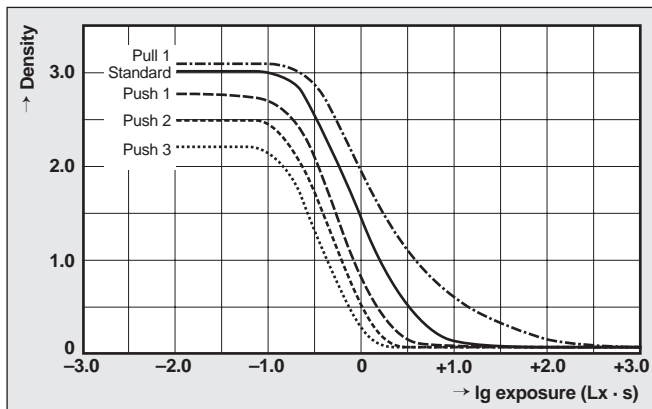
Pushed processing

- a) To increase the speed:
 - with poor lighting / available light
 - with lenses with long focal lengths and / or low power
 - with fast-moving subjects
- b) To steepen the contrast:
 - for dramatic effects

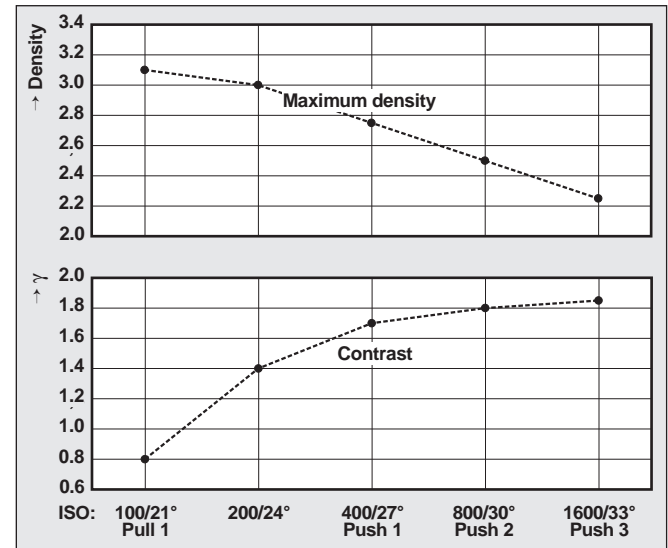
Pulled processing

- a) To decrease the speed:
 - for higher maximum density
 - for finer granularity (- 10 % at ISO 100/21°)
- b) To flatten the contrast:
 - for reproductions of X-rays
 - for duplicates of BW negatives and original SCALA transparencies

Density curve



Contrast/maximum density with pushed/pulled processing



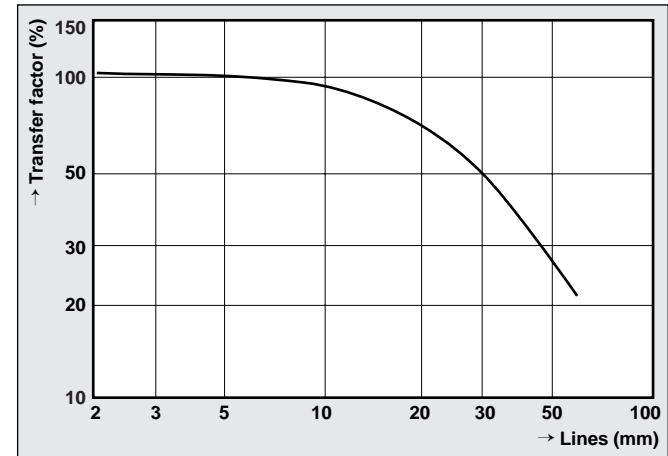
Sharpness

Modulation transfer function (MTF)

Densitometry: visual filter

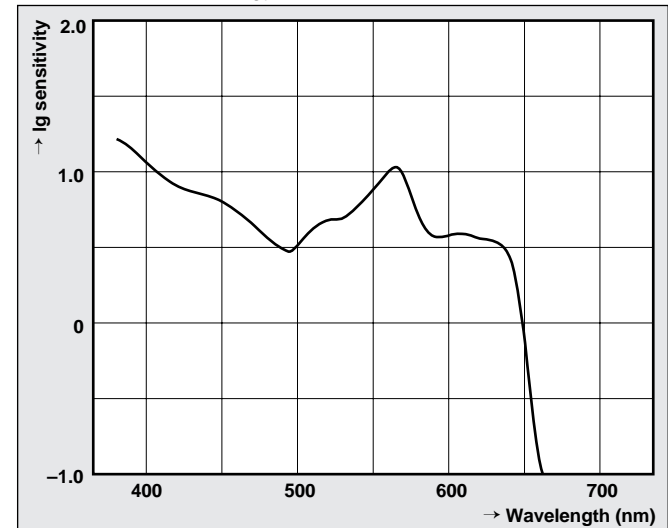
Exposure: daylight

Reference: ISO 200/24 °



Spectral sensitivity

(related to equal-energy spectrum)



Anti-halo layer

35 mm: Clear base with AHU layer which is decolorised in the developer.
Roll and sheet film: AHU layer and dark green gelatine back which is also decolorised in the developer.

Resolving power (reference: ISO 200/24°)

Contrast 1000:1 120 lines/mm
Contrast 1,6:1 50 lines/mm

Granularity (reference: ISO 200/24 °)

Diffuse RMS granularity (x 1000) = 11
(only in SCALA process)

Measured at diffuse density of 1.0 and with visual filter (V_{λ}) with a 48 μ m aperture. This value is equivalent to a 12-fold magnification.

Reciprocity effect

Measured exposure time (s)	1/10000 to 1/2	1	10	100
Exposure correction (f-stops)	none	+ 1/2	+ 1	+ 2

Exposure latitude

The exposure latitude depends on the speed chosen.
ISO 200/24° to ISO 1600/33° \pm 1/2 stop
ISO 100/21° \pm 1 stop

Emulsion design

Film base: safety film (acetyl cellulose) to DIN 15551

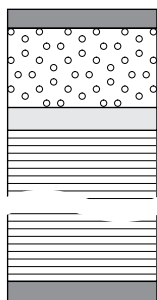
Thickness:

35 mm film: 120 μ m

Rollfilm: 95 μ m

Sheet film (polyester base): 175 μ m

On the roll and sheet films there is an extra NC layer on the backs.



1. Retouchable gelatine supercoat
2. Emulsion layer
3. AHU layer
4. Film base
5. Retouchable gelatine backing (roll and sheet films)

Total thickness: 12 μ m

Further instructions

Filters

For the AGFA SCALA 200x PROFESSIONAL all the standard correction filters can be used. Examples:

- a **yellow filter** for contrasty cloud rendition
- an **orange filter** for clear distant views
- a **red filter** for a dramatic atmosphere

To compensate the loss of speed caused by contrast filters, the relevant lengthening factors given by the filter manufacturers must be applied.

DX code

Cartridge bar code:



000 24 4 = 135-36

000 24 4

Notching of the sheet films



Margin marks

For all versions: film type and emulsion number.

Frame numbering

- On 35 mm film
After two blank frames consecutive numbering starting with 1, 1A up to 36A
- On rollfilm
Consecutive frame numbering on bottom film margin from 1 to 12 top film margin from 41 to 61

Processing

The SCALA films can be processed only by professional labs offering the special SCALA process. Roll and sheet films can be retouched on both sides.

Image stability

The AGFA SCALA 200x emulsions are designed to produce especially stable images with the new SCALA process (which is installed in all authorised SCALA labs). The system is the crucial factor: the SCALA emulsion and the original SCALA process – this is the only combination that will ensure the significantly enhanced image stability.

Storage

Unexposed films should be kept cool and dry in the original pack (temperatures below +20 °C). Deep freezing (below -10 °C) can keep the photographic properties stable for a lengthy period. Cold-stored films should be left for about two hours to come up to room temperature before opening the original pack. Otherwise condensation will form on the film.

Process exposed films as soon as possible. If exposed films are stored for some time, they may suffer a loss in speed caused by fading of the latent image – particularly in adverse climatic conditions.

Versions

135-36 MP5* / 120 MP5* / 10.2 x 12.7 cm (10 sheets)

* 5-film multi-pack

Note:

The information given here is based on the evaluation of typical products at the time when this technical data was printed. Slight variations are possible, due to production tolerances. Agfa-Gevaert make every effort to improve their products, and therefore reserve the right to change product specification as necessary. Agfa, the Agfa rhombus, AGFACHROME and SCALA are registered trademarks of Agfa-Gevaert AG, Leverkusen, Germany.

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5th edition

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