## Rollei RPX 25



# Low-sensitivity, high-resolution, panchromatic black and white film, ISO $25/15^{\circ}$

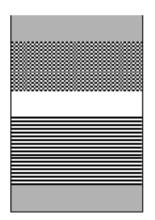
Rollei RPX 25 is a panchromatic B&W film with a nominal sensitivity of ISO 25/15°, which is cast on a modern crystal clear, synthetic carrier.

This film is characterized by its high resolution at fine grain and high edge sharpness. Rollei RPX 25 behaves perfectly in *over- or under-exposure* due to its optimum sensitivity reserve of *up to 2 stops*. Depending on the developer, the film compensates critical lightning situations.

The  $5\mu$  film - silver-rich-panchromatic sensitized Rollei RPX 25 is poured into a crystal-clear polyester carrier of  $100\mu$ .

## **Main Features in Brief**

- Low sensitive panchromatic film at ISO 25/15°
- Resolution Contrast Ratio 1000: 1 = 260 lines / mm
- RMS granularity (x1000) = 8
- Exposure range (between 12 and 50 ISO)
- Good pull-push characteristics
- Good rendering of tones
- Very good maximum blackness; [covering?]
- Transparent = optimal for scanning and as slide
- Optimum flatness thanks to anti-curling layer



- ← Protective layer
- ← Emulsion layer
- ← Anti-halation (light protection) layer
- ← Document PET
- ← Backing coat (Anti-curling) layer

**Layer Structure** 

## **Format**





135-36 DX 30,5m

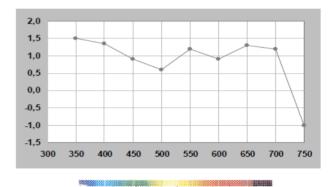
Rollfilm 120 35mm x

## **Notes**

Since this film emulsion is on a modern synthetic base, there is a risk that there may be a pre-exposure (grey horizontal stripes) whilst handling the cartridge during loading and unloading in daylight. Therefore, we recommend handling "protected from light", but not in the dark.

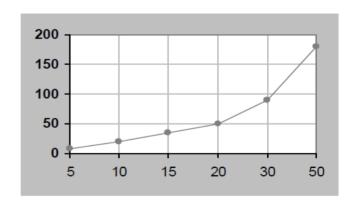
# **Recording Specifications**

Spectral sensitivity



# Reciprocity / Black Shield Effect

. , , ,		
From	Effective Exposure	
1/1000 – 1"		
2"	3"	
10"	20"	
20"	50"	
50"	180"	



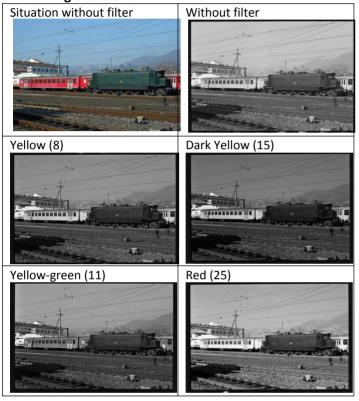
## **Behaviour during Long Exposures**

The RPX 25 does not require any correction for exposure times between 1 and 1/10000s, because it responds to the reciprocity law in this area. Due to the reciprocity effect, for longer exposure times than 1s, this film (like other films) needs a longer exposure time than what the light meter may indicate. Determine in such cases, the required long exposure with the help of the curve from the measured value and the reciprocity effect table.

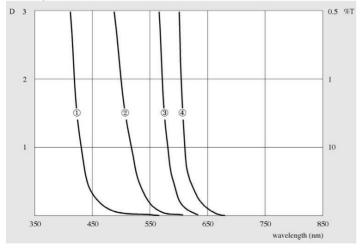
#### **Filter Factors**

Filter	Aperture	Filter		
	Value	Factor		
Yellow (8)	1.5	0.5		
Yellow Dark (15)	3	1.5		
Yellow-green (11)	2	1		
Orange (22)	3	2		
Red (25)	4	2.25		
Red dark (29)	8	3		

**Recording Situations** 



# **Absorption Curves of Filters**



1. Yellow (8); 2. Orange (22); 3. Red (25); 4. Red dark (29)

# Developer (Normal process at 20° C)

The development result is well known not only dependent on time, temperature and type, but also on the development method (tank, bowl, and processor). In order to achieve reproducible results, the following points should be noted.

- For processing in the tank agitate constantly for the first minute and then agitate (tilt) every 30 seconds. *Avoid development times below three minutes*!
- For processing in drums (rotary development), the rotational speed should be greater than 30U / min (changing the direction of rotation). Development times of less than three minutes should be avoided.

# **Development Times**

The development times given below are guidelines only and are based on an average contrast of  $\gamma = 0.65$ . Depending on the individual processing conditions, deviations are possible.

Developer	Dilution	Time
R09 One Shot (Rodinal)	1 + 25	6:00
R09 One Shot (Rodinal)	1 + 50	11:00
R09Spezial/Studional	1 + 15	5:30
R09Spezial/Studionial	1 + 31	7:00
Rollei Supergrain	1 + 12	5:00
Rollei RLS (ISO 100/21°)	1 + 4	12:00 (24°C)
Ilford Ilfosol 3	1+3	5:00
Illord ID-11 / Kodak D-76	1 +1	8:00
Ilford Perceptol	1+1	10:00
Kodak HC-110	Dil. B (1+31)	5:00
Kodak X-TOL	1+1	8:00
Paterson/Adox FX-39	1+9	8:00
Tetenal Ultrafin Plus	1 + 4	5:00
SPUR Acurol-N (@ISO 20)1	1+70	11:00
SPUR HRX (@ ISO 20, and ISO 50²)	1+20	10:00

#### Stop Bath

The stop bath and fixer prevents development between:

- A post-development



- The contamination of the fixer with alkaline developer

<sup>&</sup>lt;sup>1</sup>Taken from datasheets of SPUR developers

<sup>&</sup>lt;sup>2</sup> Ronald Puhle, cf. <a href="http://spur-photo.com/beispielbilder-rollei-rpx-25-in-spur-hrx/">http://spur-photo.com/beispielbilder-rollei-rpx-25-in-spur-hrx/</a> . See Heribert's response as well.

Maco Ecostop 1 + 19 for 1 minute

Rollei Citrin Stop 1 + 19 for 1 minute

#### **Fixer Bath**

The fixer clarifies, the layer, removes sensitive silver saltfrom the unexposed and undeveloped areas and stabilizes the image (the ideal completion of the operation is done with the final rinse, then where the sparingly soluble silver salts are definitely removed).

As a guide, it takes twice the time of developing for proper fixing. Normally, with a standard fixer bath, a fixing takes between 3-5 minutes.

#### **Final Rinse**

The final wash with a wetting agent provides a uniform drainage of the water so that no droplets, stains or, strips appear. Some wetting agents also provide protection against fungal and bacterial growth. The high dilutions (from 1+100 to 1+1000), together with a moderate movement, are necessary to minimize the formation of foam, because this would lead to unsatisfactory drying.

## Some hints for films based on polyester

Films with polyester layer, are especially prone to the direct light, like an optical fibre, and induce the risk of fogging the first few frames of a film roll (135, 120). Roll films (format 120) have the tendency to unwind the film. To prevent light penetrating from the edge of the spool we recommend to follow these rules:

- Do not load and unload the 120/220/135 roll film at full light. Use your body as shadow whilst loading, or, load the film in the camera in subdued light ratio magazine.
- In case of the 120 roll film, the film are kept light-sealed whilst in the magazine, or camera inserts, and when discharged, instantly stick the "Exposed" label.

The films based on polyester ensure a perfect flatness, but are softer than films on triacetate base. This can lead to curl tendency, so you have to insert carefully the filmstrip to enlarger, or scanner. In order to improve the flatness-we recommend to use a photographic wetting agent and thendry the films in cold or slightly tempered air. We recommend further the usage of negative sleeves made from pergamin (glassine) paper or PP.

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