

# Technical Data Sheet

## Dokumental® IF 43xx Ink Followers

### Ink Followers for ball pen inks and gel inks

#### General Information

The ink followers of Dokumental® IF 43xx series are suitable for Dokumental® ball pen inks and gel inks. They are optimized for different tube diameters and are used to avoid back leaking in the refill and to optimize the shelf life of the finished pen.

#### Applicable Standards & Regulations on Request

#### Physical Data

Type	Colour	Application	Refill Diameter	Viscosity at 20°C mPas	Filling Height
Dokumental® IF 4302	colourless	gel inks	< 3.0 mm	10,500 ± 1,500	4 x inner diameter of refill tube
Dokumental® IF 4303.1	colourless	gel inks	3.0 to 5.0 mm	10,000 ± 2,000	2–3 x inner diameter of refill tube
Dokumental® IF 4310	white	ball pen inks	4.5 to 6.0 mm	31,000 ± 2,000	1–2 x inner diameter of refill tube
Dokumental® IF 4311	white	ball pen inks	3.5 to 4.5 mm	24,000 ± 2,000	1–2 x inner diameter of refill tube
Dokumental® IF 4312	colourless	ball pen inks	< 2.0 mm	3,850 ± 450	1–2 x inner diameter of refill tube

#### Technical Advice

It is mandatory to approve the compatibility of the ink follower and the components as well as the performance of the writing system.

Refills must be centrifuged sufficiently in order to remove air bubbles.

After written empty, the refills should still contain about 1/3 of the initial amount of follower.

#### Storage, Handling & Transportation

Before use of our product the filling station has to be maintained and cleaned carefully. The ink followers are sensitive to any kind of contamination. Horizontal storage of the refills is recommended in order to get the maximum shelf life.

Store our product frost protected and avoid direct sunlight. The recommended storage temperature is between 10°C and 30°C. Storage temperatures of above 30°C for several days bear the risk of a reduced shelf life of the ink follower. Demixing might occur when ink followers are stored at temperatures below 0°C.

After usage the drums have to be closed again tightly.

The shelf life of the ink followers in original sealed containers and under optimal storage conditions is 18 months.

#### Packaging

standard packaging (further packaging units on request):

Dokumental® IF 4302: 20kg plastic canister

Dokumental® IF 4303.1: 17 kg steel pail

Dokumental® IF 4310, IF 4311, & IF 4312: 25 kg plastic drum

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