

**Humidity
Breakthrough Indicator
Inline
Humidity BTI Inline**

(PN: 615)



SPECIFICATIONS



1. Application

The In-line Humidity indicator, BTI Inline, (PN: 615) is qualitative (yes/no) colorimetric indicator for the end-of-service life of filters. It is designed to provide real-time indication of the breakthrough of water vapor.

2. Specifications

- a. Weight: 28g (1.0oz)
- b. Inlet & outlet dimensions: 3/4" MNPT
- c. Operating temperature: 0°C to 65°C (32°F to 149°F)
- d. Minimum detectable limit: 15µg/cm³ (50%RH at 23°C) in 20 minutes at 30cm/min air flow*
- e. Color change: See figure 1
- f. Storage temperature: 4°C to 25°C, (39°F to 77°F)
- g. Shelf life: 1 years at 4°C to 25°C, (39°F to 77°F)
- h. Service life: 1 year
- i. Light effect: None

* At certain percentage relative humidity (%RH), absolute humidity (µg/cm³) varies significantly with temperature and accordingly the indicator response time. For example, at 50% RH and 10°C, absolute humidity is 4.7µg/cm³. Accordingly, it takes the indicator 46 minutes to show noticeable color change, whereas at 50% RH and 35°C, absolute humidity is 19.7µg/cm³. Accordingly, it takes the indicator 10 minutes to show noticeable color change.

Cross interferences: No interferences are known.

3. Operating Instructions

- a. Ensure that packaging pouch is intact.
- b. Open packaging pouch by tearing off the top part from one of side notches.
- c. Remove the Breakthrough Indicator from the packaging pouch.
- d. Remove the 1/4" threaded plugs from inline tubing.
- e. Remove the protective red plugs to activate the breakthrough indicator.
- f. Thread the Breakthrough Indicator into the 1/4" threaded inline tubing.



- g. Replace filter when the Breakthrough Indicator changes color to pink (Figure 1).

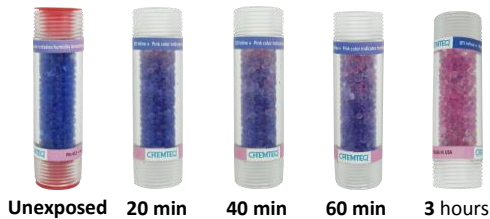


Figure 1: Exposures to 15µg/cm³ water vapor