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PFER BECK

ITEM NUMBER
ETS1430

USER MANUAL

BDpro Venting test

Indicators for routine control of large steam sterilizers according to DIN EN ISO 11140-1 TYPE 2 and DIN EN ISO 11140-4

Contents

1 BDpro test specimen with serial number and stainless steel holder

250 indicators in 10 blocks of 25 strips 6-step indicators # 15306

1 Leak test kit

Advantages

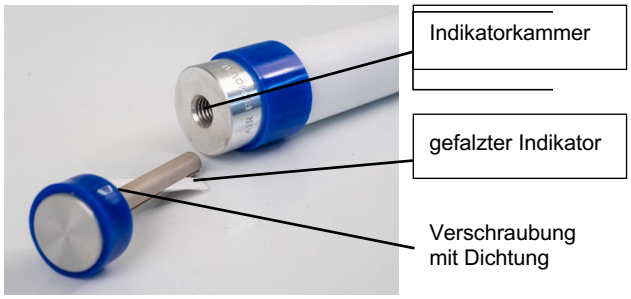
- Easy handling
- Robust construction
- Constructive design based on hollow body instruments
- Carrying out leak tests
- Long service life
- Reliable results

Area of application

The BDpro system is a venting test system for steam sterilizers in the healthcare sector that comply with the DIN EN 285 standard and are vented via fractionated pre-vacuum stages. Based on the DIN EN ISO 11140-4 standard, the BDpro system's task is to perform complete venting and thus steam penetration as an alternative to the BD test required daily. The indicator changes color when exposed to steam. The color change to black occurs at a temperature-time combination of 134 °C and 3.5 min when a sufficient amount of saturated steam has condensed.

Fitting the BDpro test specimen to the indicator system

The indicators are supplied as a block of 25 pre-punched indicator strips. An indicator is cut out at the perforated narrow sides. The indicator holder capsule of the BDpro is unscrewed. The indicator is folded together at the crease with the printed side facing inwards and pushed into the gap, see the following picture. The test specimen is screwed together and placed near the door and in the lower part of the empty chamber.



At the end of the program, the indicator is removed from the test specimen and the color change is assessed. The indicator is self-adhesive. To do this, the backing layer is peeled off at the perforation on the back and the indicator is glued in for documentation.

Notes on the evaluation of the indicators and information on possible sources of error

When exposed to saturated water vapor, the indicator changes color from ochre to gray-brown to black depending on the time.

Appearance of the indicator	Notes on the assessment
uniformly light yellow	Indicators in the initial state
uniformly black	Proper course of the sterilization process
Color gradation	The gradient can occur in different color intensities. It occurs when the indicator has been exposed to no or too little steam, i.e. the test specimen is not completely free of inert gases, e.g. air. There are many possible causes, e.g. leaks, insufficient ventilation, insufficient steam quality, overheating.
uniformly gray	The test specimen was fully vented, but a lack of steam condensation on the indicator leads to a lack of color depth and indicates overheated steam or too short a holding time.
uniform yellow	No steam has reached the indicator. Possible cause: No or insufficient ventilation, too high a proportion of inert gases, e.g. over 3 % residual air.

General information

- The 4 level indicators 15306 and the BDpro form the indicator system.
- Before each use, the test specimen must be visually inspected to ensure that the seal is intact and in place.
- Tightness must be checked every 500 cycles. The instructions are enclosed.
- To prevent the indicator from being unnecessarily affected by environmental influences, it should only be removed from the packaging immediately before use. The indicator blocks must be kept sealed in the pressure seal bag and not near a heat source, e.g. on the sterilizer.

Storage conditions

see product labeling

Warranty

The robust design ensures a very long service life. However, if changes are detected, e.g. displacement of the locking disks, we will provide the user with a free replacement. Mechanical or other changes or manipulations are excluded.