

# **WIPE TEST COUNTERS**



WIPE TEST COUNTER WITH PLASTIC SCINTILLATION DETECTORS



## WIPE TEST COUNTERS

If tools, measuring devices or parts of installations have to leave controlled areas, for example to be repaired or recycled, they have to be checked for contamination first. A wipe test sample is taken to carry out this check. Designed for wipe test and air sample paper counting, our wipe test counters are ideal instruments for contamination control whilst working with open radioactive material.

### BENEFITS

- No gas-filled or gas-flushed detector
- 2 in 1 instrument:  $\alpha$  and  $\beta$ -/ $\gamma$  contamination measurement with only one detector
- For wipe test samples and air sample filters from 60 to 220 mm diameter
- The sample can remain on the wipe test paper during measurement
- Integrated calibration software
- Easy maintenance
- Optional DIN ISO 11929 integration

## HIGHLIGHTS

13 models

3 sample sizes

up to 10 detectors

## WIPE TEST COUNTERS

#### WITH PLASTIC SCINTILLATION DETECTOR

The wipe test counter is able to evaluate wipe test samples (swabs, screening tests) or air sample filters with a diameter of 60 to 220 mm, measuring  $\alpha$ and  $\beta$ -/ $\gamma$ -radiation separately. A major

advantage of our WIMP wipe test counters is the innovative thin-layer plastic scintillation detectors with ZnS coating. This means no requirements for gas-filled or gas-flushed detectors.



WIMP 220 MC

### **PRODUCT SPECS**

- · Thin-layer, ZnS-coated plastic scintillation detector with integrated photomultiplier and detector electronics
- Simultaneous, selective  $\alpha$  and  $\beta$ -/ $\gamma$ measurement
- State-of-the-art design with large LC display, illuminated
- · Microcontroller- or PC-based measuring electronics
- Display of measurement results as count rate (cps) or activity (Bq, Bq/cm<sup>2</sup>, Bq/m<sup>3</sup>)

- · Calculation and display of detection limits, also available according to DIN ISO 11929
- · Calibration according to DIN ISO 7503 or DIN 25482
- Automatic background compensation
- · Series of several measurements possible
- · User-friendly interface, operation by means of function keys and/or touch-screen
- · Database with reference nuclides, easily extendible by the user

- · User management with passwords and access rights
- Measuring chamber shielding 12.5 – 50 mm
- Easy decontamination and maintenance

### SOFTWARE ON PC AND MICROCONTROLLER BASIS

Our wipe test counters WIMP 60, WIMP 120 and WIMP 220 are available in 3 versions:

- · with microcontroller-based measuring electronics (version MC)
- with external PC-based measuring electronics (version PC)
- · with internal PC-based measuring electronics (version PCI)

The optional WIMP software makes it possible to:

- · read out and administrate stored data from MC versions
- use MC versions also as a PC-based version (direct data transmission)
- combine up to 10 WIMP single wipe test counters for use as a multiple counter



WIMP 120 PCI



WIMP 120 MC



### **BASIC VERSIONS**

### **WIMP 60**

for up to 60 mm filter diameter:

- WIMP 60 MC with microcontroller electronics
- WIMP 60 PC with external PC
- WIMP 60 PCI with internal PC
- WIMP 60 M as a mobile, portable wipe test counter

#### **WIMP 120**

for up to 120 mm filter diameter:

- WIMP 120 MC with microcontroller electronics
- WIMP 120 PC with external PC
- · WIMP 120 PCI with internal PC

#### **WIMP 220**

for up to 220 mm filter diameter or screening filter:

- WIMP 220 MC with microcontroller electronics
- WIMP 220 PC with external PC
- · WIMP 220 PCI with internal PC

#### Multiple wipe test counters

- WIMP 60 x 6 for up to 6 wipe test samples simultaneously
- WIMP 60 x 8 for up to 8 wipe test samples simultaneously
- WIMP 60 x 10 for up to 10 wipe test samples simultaneously
- All systems for 60 mm filter diameter version
- $\cdot~$  All with internal PC







WIMP 120 PCI

WIMP 220 PC



Multiple wipe test counter



The shielded wipe test counter can be easily opened for maintenance and service. The drawer can be easily removed, for example, for decontamination. The detector foil can be replaced in no time.



| Technical data of the wipe test counters |  |                 |                 |                 |  |
|--|--|-----------------|-----------------|-----------------|--|
| Technical data                           | WIMP 60  | WIMP 60 M       | WIMP 120        | WIMP 220        | WIMP 60 x 6/8/10                       |
| Detector type                            | Thin-layer plastic scintillator with ZnS coating   |                 |                 |                 |  |
| Integrated<br>lead shielding             | 30 mm Pb   | 12.5 mm Pb      | 50 mm Pb        | 30 mm Pb        | 30 mm Pb each                          |
| Background (γ)                           | approx. 3 cps  | approx. 2 cps   | approx. 7 cps   | approx. 15 cps  | approx. 2 cps                          |
| Typical efficiencies                     |  |                 |                 |                 |  |
| Co-60                                    | approx. 25 %   | approx. 25 %    | approx. 25 %    | approx. 23 %    | approx. 25 %                           |
| Cs-137                                   | approx. 35 %   | approx. 40 %    | approx. 35 %    | approx. 36 %    | approx. 35 %                           |
| Sr-90/Y-90 (based on Sr-90)              | approx. 43 %   | approx. 42 %    | approx. 45 %    | approx. 42 %    | approx. 43 %                           |
| Am-241(α)                                | approx. 24 %   | approx. 24 %    | approx. 20 %    | approx. 20 %    | approx. 24 %                           |
| Weight                                   | approx. 30 kg  | approx. 8 kg    | approx. 85 kg   | approx. 120 kg  | approx. 180/250 kg                     |
| Dimensions in mm (W x H x D)             | 290 x 280 x 320  | 255 x 145 x 220 | 410 x 350 x 385 | 500 x 400 x 450 | 850-1120 x 700 x<br>1120 (incl. table) |
| Temperature                              | + 10° C to + 40° C WIMP 60 M: - 20° C to +40° C  |                 |                 |                 |  |
| Power supply                             | General: 100/240 V, 50-60 Hz, also with internal batteries (only for PC and MC Versions) |                 |                 |                 |  |

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