

Workstation Fluid-PermCell NW50-liquid

Determination of resistance to permeation by liquid test chemicals with continuous contact to the protective- clothing-material-sample and a liquid collection medium.

The test of resistance of protective-clothing-materials against permeation is described in the standards Normen EN 16523-1 (for EN 374-3), ASTM F-739 and DIN EN ISO 6529. The temperature-controlled permeation Fluid-PermCell NW50-liquid has a closed collection chamber (closed loop system) for the liquid collecting medium. The liquid collecting is mixed thoroughly with a magnetic stirrer and the concentration of permeated test-chemicals as a function of time is measured by a conductivity- or pH-sensor "in situ". The readings are stored in the data logger Multi3410 (= Hand-held Conductivity and pH-Meter). The evaluation of the measured data can be done via spreadsheet on a PC. In addition to the DIN EN ISO 6529 recommended test-chemicals (caustic soda 30%, sulfuric acid 0.6% and 1.6% nitric acid) also organic acids and bases with an aqueous collecting medium. The "Fluid-PermCell NW50-liquid" with a thermostated-jacket of DURAN® laboratory glass are thermostated with a digital Peltierthermostat (thermostated-liquid: water) at the test-temperature of 23°C (±1°C). Optionally other test-temperatures such as 33°C is possible (max. +35°C and min. +13°C)! The sample material to be tested is placed in a convenient sample holder made of PTFE (PTFE-jig).



The workstation: „Fluid-PermCell NW50-liquid“ consisting of:



Part-Nr.: 777680 Fluid-PermCell NW 50-liquid

Permeation-Measuring-Cell for liquid chemicals and liquid collecting medium in closed or open loop according to EN 16523-1 (for EN 374-3), ASTM F-739 and DIN EN ISO 6529.

- Glass cells (Borosilicatglass 3.3) jacketed and tube-outlets
- Cell top with socket NS14, inclined
- Cell lower part:
 - a) GL25 screwthread for pH or conductivity sensors -at the side
 - b) GL18 screwthread for filling the liquid collecting medium
- Frame with stand, 4 x Special-Quick-Screwnuts (M6) and holding plates of aluminum, glassbead-blasted
- PTFE-clamping device in accordance with DIN EN ISO 374-3 for the NW50 permeation measuring cell for clamping films, protective gloves etc. made from PTFE with sided centering collar and 3 x FEP-coated VQM O-rings
- 45°-Transition piece, DURAN® and Water hose with quick couplings and shut-off valve

Part-Nr.: 777688 Digital Peltier-Thermostat PT31.

The electronic water bath thermostat with Peltier element is a versatile and powerful device used to control the temperature of refractometers, polarimeters etc. It is extremely robust, compact and easy to operate. Saves space in the lab due to its small size.

- Temperature: 8 - 40 °C (continuously variable)
- Temperature accuracy: ±0.2 °C
- Resolution: 0.1 °C
- Heating output: 30 W
- Cooling efficiency: 15 W
- Power supply: 115 - 230 ~
- Pump pressure: 2000 Pa
- Pump capacity: 20 l/h
- Dimensions (W x D x H): 140 x 80 x 210 mm
- Weight: 1.5 kg





Part-Nr.: 777685 Conductivity- and pH-Meter Multi3410

Multi-parameter measuring instrument incl. Sensoren: TetraCon® 925* and SenTix® 940** fit to Fluid-PermCell NW50. A single channel meter for pH, ORP, conductivity measurement. It is particularly aimed at those users measuring one parameter but occasionally having requirements for measuring a second or third. One waterproof sensor input for IDS sensors (digital) allows to measure pH or Conductivity sequentially Waterproof (IP67), rugged and easy-to-clean meter, with brilliant graphic display. Keypad with tangible key click for operation even with gloves. Large memory for 10,000 records Output to USB memory stick or PC.

*TetraCon® 925, Robust, general purpose 4-electrode conductivity cell with graphite electrodes incorporating integral temperature sensor Memory for 10 calibrations, stored serial number, measuring range 10 µS/cm to 2000 mS/cm ±0.5% of value, 0.0 to 100.0°C ±0.2°C with 1.5 m cable.

**SenTix® 940 Low maintenance combined pH-electrode with ATC QSC suitable, Memory for 10 calibrations, Stored serial number pH 0.000 to 14.000 (±0.004 pH), Temperature range 0.0 to 80.0°C ±0.2°C, with 1.5 m cable.

***Multi3410 has two data storage: Manual Memory: up to 500 records, Automatic memory: max. 10000 records, Variable setting the recording interval, recording each measured value and temperature for each record

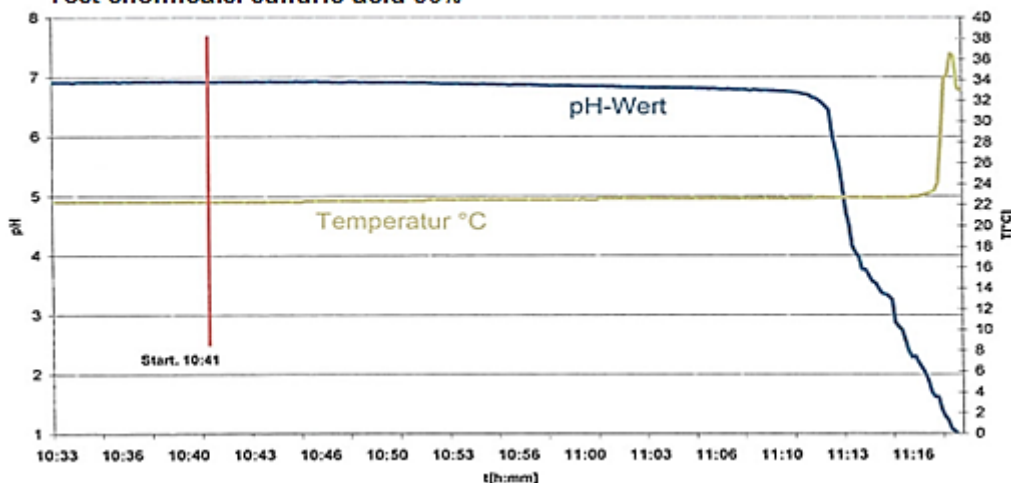
****Software update via internet: (www.wtw.de/downloads-support/software/multiliner.html)!



Part-Nr.: 777869 Elektronisch-magnetischer Rührer, MIX130001

- Ultra flat, wear-free magnetic stirrer, Magnetic stirring bars, oval, PTFE Encapsulated, 20 x 10 mm
- Dimensions (W x D x H): 188 x 238 x 38 mm
- Speed range: 100 - 2.000 rpm
- Stirring - - Power: 5/10/15/20 W (4-steps)
- Material housing: Stainless steel
- Electrical data: 100-240 V / 50-60 Hz / 0.7 A
- Protection category: IP 64
- Weight (gross): approx. 4 kg

Sample: glove [redacted]
 Test-chemicals: sulfuric acid 96%



Permeationmeasuring with continuous sample contact and the collecting medium water!