

# AQUARIUS AMZ

A moisture tester for the pocket



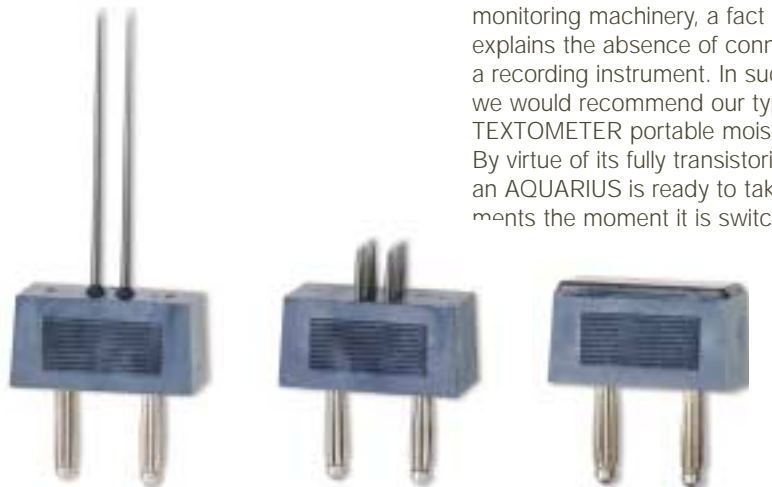
A handy moisture content meter finds everywhere its place – for providing a rapid survey of the on-the-spot distribution of moisture in your fabrics!

The AQUARIUS pocket-sized moisture meter measures the textile material's electrical conductivity, the latter being very closely related to the degree of moisture content, and displays the reading directly in % H<sub>2</sub>O. As the relationship between conductivity and moisture content somewhat in accordance with the

type of fibre, a wide range of easily exchangeable, calibrated scales are available for the most common types of material. A reading is obtained by balancing the conductivity circuitry with the rotatable, graduated dial, the actual point of alignment being indicated by two light-emitting diodes.

The instrument is supplied with three distinct types of plug-in electrode, which link the commodity to the AQUARIUS. The meter is powered by a 9 volt battery with a life expectancy of a good twelve months with average usage. The unit cannot however be employed for continuous measurement, or for temporarily monitoring machinery, a fact which also explains the absence of connections for a recording instrument. In such cases, we would recommend our type DMB TEXTOMETER portable moisture meter. By virtue of its fully transistorized circuitry an AQUARIUS is ready to take measurements the moment it is switched on.

The day-to-day state of the battery may be checked at any time by referring to a test range on each graduated dial. Air humidity and ambient temperature within normal limits, or possible electrostatic charges have a negligible effect on the unit's performance. The electrical measuring accuracy of the AQUARIUS lies within  $\pm 3\%$  of the value displayed, but the measuring principle applied gives rise to additional inaccuracies, consequently the overall error under normal conditions is approx.  $\pm 10\%$  of the value displayed, and a further  $\pm 0,5\%$  absolute H<sub>2</sub>O.



Medium pronged electrode, prong length 54 mm, intended for cheeses raw fibre, fleece, hank yarn and woven fabric

Short pronged electrode, prong length 10 mm, intended for spinning bobbins, weaving pirns, or similar

Surface contact electrode for woven knitted fabric

#### Scope of delivery

Each Aquarius is supplied as standard with

- 1 pocket-sized moisture meter
- 3 dual-sided, calibrated dials according to choice
- 1 short pronged electrode (11 mm)
- 1 medium pronged electrode (54 mm)
- 1 surface-contact electrode
- 1 protective sleeve for electrodes
- 1 type 6 F 22 battery
- 1 instructional manual

Measurement

Control

Automation

## AQUARIUS AMZ Graduated dials

The graduated dials have a calibrated scale on both sides, and are available in the following combinations (\* = included, as standard, with the meter):

Material			Part No.
cotton	100-90%		* X 854
cotton	80-60% / synthetic	20-40%	
polyester	40-60% / cotton	60-40%	* X 858
polyester	60-80% / cotton	40-20%	
viscose	90-70% / cotton	10-30%	X 859
viscose	70-50% / cotton	30-50%	
viscose	50-30% / cotton	50-70%	X 853
viscose	30-10% / cotton	70-90%	
viscose	100-90%		X 861
viscose	80-60% / synthetic	20-40%	
linen	100-90%		X 852
linen	80-60% / synthetic	20-40%	
polynosic acetate	100%		X 851
wool	100-90%		* X 855
wool	80-60% / synthetic	20-40%	
polyester	40-60% / wool	60-40%	X 857
polyester	60-80% / wool	40-20%	
polyamide	40-60% / wool	60-40%	X 856
polyamide	60-80% / wool	40-20%	
polyacryl	40-60% / wool	60-40%	X 860
polyacryl	60-80% / wool	40-20%	
linear differential scale	- 100 ... 0 ... +100		X 850
logarithmic conductance scale	1 Pico - 100 µS		

## AQUARIUS AMZ Technical data

Measuring principle	measurement of electrical conductivity
Calibration	calibrated in percentage of moisture, relative to the dry weight
Scales	detachable, graduated dials; 2 scales on each side of the dial; dials available for standard materials
Electrodes	prong type electrode 11 mm (Part No. 2011) prong type electrode 54 mm (Part No. 2054) surface-contact electrode (Part No. 2018) detachable
Power supply	battery 9 V, IEC 6 F 22
Permissible temperatures	unit: +15 ... +35° C, commodity: +15 ... +25° C
Perm. ambient humidity	maximum of 85% relative humidity
Dimensions	25 mm x 70 mm x 145 mm
Weight	185 g

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