

TQC DIGITAL RESISTIVITY METER FOR COATINGS

LD5950

MANUAL

1 SAFETY PRECAUTIONS

- Not suitable to be put in the sun or in the high light
- Avoid using it in over-high or over-low temperature environment
- Avoid humidity

2 PRODUCT DESCRIPTION

2.1 Specifications

Range	100 Kohm – 20.000 Kohm (20 Mohm)
Precision	0.1 – 0.5 MΩ = ± 3% 0.5 – 5.0 MΩ = ± 1 % 5.0 – 10.0 MΩ = ± 2 % 10.0 – 20.0 MΩ = ± 3%
Display	LCD Display
Dimensions Equipm.	100 x 200 x 30 mm
Probe	230 mm φ 42 mm
Battery	1 x 9 V battery
Measuring signal	45 V
Model	Digital
Low batt. indicator	Yes



2.2 Details

This equipment which consist of a digital meter and dip probe is specially developed to measure the resistivity of paints, varnishes and liquids in a fast and precise way and therefore indispensable for the correct functioning of electrostatic paint installations.

3 STANDARDS

ASTM D 5682-95. Look up the appropriate standard for a correct execution of the test

4 PERFORM A MEASUREMENT

- Switch the instrument on by pressing the "ON/OFF" button for 1 second.
- Immerse the probe into the paint or liquid to be measured.
- Do not cover the grooves and holes in the probe with liquid.
- Press the measuring button "START", after about 10 seconds the resistance value is shown on the display. The instrument has an internal auto-scaling, which allows all resistance measurements without changing the scale of grading in the procedure.
- The reading is displayed in Mega ohm.
- Dismantle the outer tube of the probe to clean everything carefully.
- Improper cleaning of the probe may lead to measurement errors.

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Equipment equivalents in electrostatic applications

NESAG Megaohms	STRATON-SAMES Megaohms	VOLSTATIC HURSANT Megaohms	RANSBURG K-OHMS
0,2	0,6	0,04	9
0,5	1,5	0,2	22
0,7	2,1	0,3	31
1	3	0,4	44
1,5	4,5	0,6	66
1,7	5	0,7	74
2	6	0,8	88
3	9	1,2	131
4	12	1,6	175
5	15	2	219
6	18	2,4	263
7	21	2,8	306
8	24	3,2	350
9	27	3,6	394
10	30	4	438
10,3	30,9	4,1	450
11	33	4,4	481
12	36	4,8	525
12,5	37,5	5	547
13	39	5,2	569
14	42	5,6	613
15	45	6	656
16	48	6,4	700
16,7	50	6,7	731
17	51	6,8	744
18	54	7,2	788
18,2	54,6	7,3	800
19	57	7,6	831
20	60	8	875

5 CALIBRATION / ADJUSTMENT

Adjustment of the instrument

The instrument could be adjusted (by a skilled technician) by using a known electronic resistor and through a potentiometer which is inserted underneath a lateral hole at the left site of the instrument.

Take away the white cover and use a small screwdriver to adjust the linearity. The readings are increased by turning the potentiometer anticlockwise and decreased by turning it clockwise.



6 MAINTENANCE

- Though robust in design, this instrument is precision-machined. Never drop it or knock it over
- Always clean the instrument after use.
- Clean the instrument using a soft dry cloth. Never clean the instrument by any mechanical means such as a wire brush or abrasive paper. This may cause, just like the use of aggressive cleaning agents, permanent damage.
- Do not use compressed air to clean the instrument.
- Always keep the instrument in its case when not in use.
- We recommend annual calibration

7 DISCLAIMER

The right of technical modifications is reserved.

The information given in this manual is not intended to be exhaustive and any person using the product for any purpose other than that specifically recommended in this manual without first obtaining written confirmation from us as to the suitability of the product for the intended purpose does so at his own risk. Whilst we endeavour to ensure that all advice we give about the product (whether in this manual or otherwise) is correct we have no control over either the quality or condition of the product or the many factors affecting the use and application of the product. Therefore, unless we specifically agree in writing to do so, we do not accept any liability whatsoever or howsoever arising for the performance of the product or for any loss or damage (other than death or personal injury resulting from our negligence) arising out of the use of the product. The information contained in this manual is liable to modification from time to time in the light of experience and our policy of continuous product development.