

ProTech

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WARRANTY CARD

\$1

"ProTech" company seems a Warranty Card to the device under the trade name

"AquaMETER - flow meter V7-SERIES" (version 7.R)

\$2

The device is covered by 12 months warranty from time of sale

\$3

Device manufacturer, the company "ProTech" ensure the exchange of the defective unit for a new during the warranty period.

\$4

This card is issued for each product with the serial number shown on the lead sealing placed on the device. Break the warranty seal will void the warranty.

\$5

The manufacturer undertakes to provide new / repaired equipment to 21 working days from receipt of the defective device.

\$6

Each device reported as defective will be subject to inspection to determine the cause of the damage. In case of damage resulting from improper installation or use of the device misused warranty service will not be respected.

Sale Date and legible signature SELLER
S/N device
Version Hardware / Software / Flow / Power supply

DEALERS STAMP

USER MANUAL / INSTALLATION NOTICE / CONFIG / SET MANUAL

The "AquaMETR" flow meters series are electronic devices enabling determination of measurement instantaneous flow per unit of time (Result expressed in liters / minute, L / min) and, depending on the version of the software, in other units. In addition, measures allow an indication of the total flow medium by the sensor from the inclusion / deletion. Version B / C also have the ability to control external circuits for dispensing fluid.

MAIN TECHNICAL PARAMETERS:

ACCURACY OF CALCULATIONS DECREASES WITH DECLINE OF

NORMALL POWER SUPPLY: MAX. POWER SUPPLY: POWER CONSUMPTION: MEASUREMENT RANGE (FLOW): MEASUREMENT RANGE (TOTAL) OWN MEASUREMENT ACCURACY: OPERATING TEMPERATURE RANGE: COVER PROTECTION STANDARD:

10...24V D.C. 09 30V D C 120mA@12V 01 4999 L/mir 01 9999T 1% -5...+50 st.C **IP-54**



INPULSES FLOW IN LITRE (SMALL PULSE FACTOR IN LITRE WITH FLOWMETER MEANS MORE ERRORS OF REFERENCE

PREPARING TO WORK / OPERATION / CYCLE / RESULTS:

1- AS DESCRIPTION ON THE REAR PANEL CONNECT THE PULSE FLOW METER. POWER SUPPLY OF THE DEVICE TO THE GND CONTACTS (SUPPLY GND) AND +VCC (PLUS POWER SUPPLY) FLOW SENSORS ARE CONNECTED TO THE CONTACTS: -SEN (+SV, GAD SENSORS TO WHE GAD SENSORS TO THE GAD SENCONTACT, AND PLASE SIGNALS TO THE SIG / SIG2 CONTACTS, IN CASE OF WORKING WITH ULDS FILOW METERS WITHOUT REQUIRED FOWER (WITH BULL-IN FOTENTIAL-FREE PULSES), CONNECT THE PULSES SIGNALS TO THE SIG / SIG2 CONTACTS, IN CASE OF WORKING WITH ULDS FILOW METERS AND SENSORS SIGNALS AND AND PULSE SIGNALS TO REAL SENSORS TO THE SIGN / SIG2 CONTACT, AND AND PULSE SIGNALS TO THE SIG / SIG2 CONTACTS, IN CASE OF WORKING WITH ULDS FILOW METERS

CALCULATED PULSE IS THE UNE IN WHICH THE PULSE SHORT THE STATT SEQUENCE, OWN SOURCE (SUBJECT, OWNERT OWNER DEVICE, THE MEREN WILL LIGHT UP ESTART SEQUENCE, OWN SOURCE (SUBJECT, OWNERT OWNER DEVICE), THE STATT SEQUENCE, OWN SOURCE (SUBJECT, OWNERT OWNER DEVICE), THE STATT SEQUENCE, OWN SOURCE (SUBJECT, OWNERT OWNER DEVICE), THE STATT SEQUENCE, OWN SOURCE (SUBJECT, OWNERT OWNER DEVICE), THE STATT SEQUENCE, OWN SOURCE (SUBJECT, OWNERT OWNER), SUBJECT, OWNERT OWNER DEVICE, THE STATT SEQUENCE, OWN SOURCE (SUBJECT, OWNERT OWNER), SUBJECT, OWNERT OWNER, SUBJECT, SUBJECT,

FLOW SENSOR

16.07 studies. 6. OBSERVE THE CORRECT DIRECTION OF MEDIUM FLOW IN THE SENSOR. A WRONG INSTALLATION CAN SIGNIFICANTLY INCREASE THE TOTAL ERROR OF THE DEVICE'S MEASUREMENT. 7. MAXIMUM CURRENT OF ALARM CIRCUITS 1 AND 2 MUST NOT EXCEED 0.5 A T 50V FOR BOTH ALARM CHANNEL, RELI-A-RELI B IS CHANNEL 1 ALARM. INTERNAL RELAY CONTACT NO, (NORMALLY OPEN) WILL BE CLOSED WHEN THE PROGRAMMED TOTAL FLOW LIMITS REACH AND DEXCEDT THE PROGRAMMED TOTAL FLOW ALARM VALUES. RELI-A-RELI B IS CHANNEL 2 ALARM. SAME AS ABOVE BUT FOR MOMENTARY FLOW

5 ACTIVATION OF CONTACTS (CONTROLLED CHANNEL STATUS) ILLUSTRATED BY LED INDICATORS ON THE FRONT PANEL OF THE DEVICE (FIG. 1). LEDI will turn ON WHEN THE TOTAL FLOW CHANNEL

8- ACTIVATION OF CONTACTS (CONTROLLED CHANNEL STATUS) ILLUSTRATED BY LED INDICATORS ON THE FRONT PANEL OF THE DEVICE (FIG. 1), LED will um ON WHEN THE TOTAL FLOW CHANNEL EXCEEDS THE PROGRAMMED LINT
9- VERSION OF THE METER WITHOUT MECHANICAL MINIATURE RELAYS CONTAINS CONTROL TRANSISTORS ON PRIVINE VECEDS THE PROGRAMMED LINT
9- VERSION OF THE METER WITHOUT MECHANICAL MINIATURE RELAYS CONTAINS CONTROL TRANSISTORS OF NPN TYPE IN "OPEN COLLECTOR" CONFIGURATION, LE, SO YOU CAN CONTROL E.g.
MINIATURE EXTERNAL RELAYS WHICH ARE POWERED PERMANENTLY WITH A PLUS AND THE GROUND IS SUPPLIED FROM THE OUTOT OT THE METER ROWTHEN CHANNEL. CENTROL TRANSISTORS OF NPN TYPE IN "OPEN COLLECTOR" CONFIGURATION, LE, SO YOU CAN CONTROL E.g.
MINIATURE EXTERNAL RELAYS WHICH ARE POWERED PERMANENTLY WITH A PLUS AND THE GROUND IS SUPPLIED FROM THE OUTOT OT THE METER ROWTHEN CHANNEL. 'DE NDICATOR - LED3
FLASHES, SIGNALING REGISTRATION OF IMPULSES FROM THE FLOWMETER, WHICH MEANS ITS ROTATION AND SUGGESTS CORRECT OPERATION, A MOMENTARY FLASH OCCURS USUALLY EVERY 100
ILO FLOW (DEPENDING ON DEVICES OFTWARE VERSION), LED FLASHES EVERY 55COND DURING NORMAL OPERATION AND FLASHES EVERY 55COND SUPPLICE. KEY 1 ALSO APPROVES THE ENTERED PARAMETERS DURING ITS CONFIGURATION OF
THE TYPE / TYPE / INVEMBER OF IMPULSES FROM THE PLOWMETER, HER FLOWMETER, JETTER PLOSE FOR ROCRAMMING THE TYPE OFTER FLOWMETER CONVECTING INTO CONFIGURATION OF
THE TYPE / TYPE / NUMBER OF IMPULSES FREM I LITERS OF FLOW INTO THE FLOWMETER, JETTER PLOSE FRE INTER FLOWMETER INTO THE DEVICE (CONFIGURATION OF
THE SUBCE ON BE CONFIGURATE TO DOSENATE TO THE STUDE OF OR PROCRAMMING INTE OR LITERS PLASHED. THE UNIT OF MEASUREMENT IS POSSIBLE TO BE
DETERMINED, NUTLE ON THAT SWEE CONVERTED BY NUTLE INTO THE PRODE THE PLOW IS STRALLSHED. THE UNIT OF MEASUREMENT IS POSSIBLE TO BE
DETERMINED, NUTLE ON THE RUNT OF MEASUREMENT IS POSSIBLE TO BE
DETERMINED, NUTLE ON THER WITHS RECONVERTED BY NUTLE THERS PLASHED. TH

DASING CICLE WILLSTAN FAUNTS, JUITING CONFORMATION STEE, TO CAN DE LEXNING WHETHEN HE BRIEFE STRUCTURE BAGET THE MEADADED FLOW BAD ADDRIV (REFLIEL TEXNO MEDSANG). TYES IS SELECTED AFTER REACHING THE FROGRAMMED ACTIVATION THRESHOLD, THE INTERNAL RELAY WILL BE ACTIVATED (RELA-RELIB CONTACTS WILL BE (COLORD) OR THE OCTAVITY OF RESIDENCE OF AND ADDRIV (REFLIE) TO STRUCTURE OF ADDRIVES AND ADDRIVES AND ADDRIV (REFLIE) TO STRUCTURE OF ADDRIVES AND ADDRIVES AND ADDRIV (REFLIE) TO STRUCTURE OF ADDRIVES AND ADD REDUCIVINGE THE ADAMCEDATE LED OCCT THE RECEIPTION THE ROOMAND AND THE ROOMAND AND THE ADAMCED AND THE DEVICE OUNT OF A ROAD AND A DEVICE ON THE ROOMAND AND A DEVICE ON THE ROAD AND A DEVICE THE ROAD AND A DEVICE ON THE R

12 WESSING KEY 3 WHILE PROGRAMMING LIMING VALUES (SET TOTAL') SET FLOW") ALSO CAUSES EXIT THESE MODES WITHOUT SAVING THE CHANGES MADE. 13- DURING THE NORMAL COUNTING CYCLE, PRESSING KEY 3 ALLOWS TO CONFIGURE THE TOTAL VALUE (TOTAL FLOW PROGRAMMING), AFTER EXCEEDING WHICH CHANNEL 1 ALARM WILL OCCUR =

15 DORING THE NORMAL CONTING CT LE, PRESSING RET 3 ALLOWS 10 CONFIGURE 10 ALL VALUE SETTING OF THE TOTAL VALUE ONCE (IN THE SET FLOW/ SET TOTAL MODE. THE DEVICE FIRST WAITS FOR SETTING AND CONFIRMING THE TOTAL VALUE AND AFTER ACCEPTANCE. THE DEVICE WAITS TO ENTER OF FRACTIONAL NUMBER AND ACCEPTANCE OF THIS, PLEASE REMEMBER THAT THE THRESHOLD VALUE ENTERED AS THE CHANNEL SWITCH LIMIT APPLIES TO THE SELECTED MEASLRING. UNIT WITH WHICH THE DEVICES SHOLD WORK, LE 5 MEANING THAT WHICH WORKING WITH UNITS OF LITERS PER MINUTE, THE SWITCH WHICH REACHING SA THE CHANNEL SWITCH LIMIT APPLIES TO THE SELECTED MEASLRING. MIN TO THE WOUNDED INDIVIDUAL.

AIL OF DRING OPERATION, THERE IS A POSSIBILITY OF TURNING OFF THE DEVICES OPERATION (HOW TO HOLD THE KEYI (OK:CPOWER) - THE COUNT WILL BE TURNED OFF, THE WORK CYCLE IS STOPPED, THE LED INDICATORS WILL TURN OFF AND THE INTERNAL RELAYS WILL OPEN EXTERNAL "AquaMER" METER ("O.C." AND "OL" OL" ON OPEN COUNT WILL ALSO STOP FORCING GND. SLEEP STATE IS SIGNALED PERIODICALLY (very 5 SECONDS) by SAFORT FLASH OF LEDA'T THE METER WILL REBOOT AFTER RESSING KEY 1. A CITY E VEN IN SLEEP MOLE WIT O EVABLE REGISTRATION OF THE FLOW AND

AUTOMATIC START OF THE DEVICE AFTER DETECTION - IN SPECIAL SOFTWARE VERSIONS) 15- DURING A NORMAL WORKING CYCLE, THE DEVICE MAKES MEASUREMENTS AND CALCULATING IN A ONE-SECOND CYCLE. THE CALCULATED RESULT IS DISPLAYED ON THE LCD DISPLAY. 16- DEPENDING ON THE SOFTWARE VERSION, THE DEVICE MAY DISPLAY THE RESULTS IN DIFFERENT UNITS OF FLOW, VOLUME, MASS, TOTAL ETC. DESCRIPTION / SYMBOL ON LCD INFORMS ABOUT CURRENTLY CONVERTED UNITS

CONCENTED CONTRACTOR OWNERS. TO SERVICE A DAMAGE AND A DA

18-WITH A LARGE NUMBER OF PULCES AND A HIGH FLOW. THE SENSOR LED MAY FLASH SO FAST THAT IT WILL NOT BE VISIBLE

19- TO EXTEND THE CABLE FROM THE SENSOR TO THE METER, WE RECOMMEND SHIELDED CABLES, CONNECT THE SHIELD TO GND.

IF THE DEVICE DOESN'T WORK PROPERLY:

I- CHECK THE CORRECTNESS OF POWER SUPPLY POLARITY, SUPPLY VOLTAGE, CONTACT OF THE WIRES IN THE BLOCK ON THE REAR PANEL. THAT THE WIRES ARE NOT SHORT 1-CHECK THE CORRECTINESS OF FOWER SUFFLI FOLIANTI, SUFFLI VOLLAGE, CONTACTOF THE WRES IN THE BLOCK ON THE REAR FAMEL, HAT TH 2- INSPECT THE METER - HIGH HOUSING TEMPERATURE OR VISIBLE THERMAL DAMAGES OF HOUSING MATERIAL MAY INDICATE INTERNAL FAILURE 4- MAKE SURE THE DEVICE HAS NOT BEEN FLOODED.

5 TURN ON THE DEVICE AND OBSERVE THE MESSAGES ON THE LCD DISPLAY. ERROR MESSAGES OF THE ATHODIAGNOSIS PROCESS DURING SWITCH ON REPORT TO THE MANUFACTURER 6 NEW FLOWMETER CONSTANT ('SET SENSOR' FUNCTION) CAUSES THE DEVICES NON-VOLATED MEMORY TO memorize the number of pulses coming from the cooperating flow metric. THE ACTION SHOLLD BE CARRED OUT ONLY NONVING THE CONSTANT OF THIS FLOW METRE N. THE CASE OF WRONG SETTING OF THIS VALUE, THE DEVICES WILL NOT CALLULATE THE MEMORY ENDERGY CORRECTLY! 7-POWER CABLES AND FLOW SINNOR CABLES CAN BE EXTENDED, BUT IT IS RECOMMENDED TO USE SHELDED CABLES ABOVE 5M. RECOMMENDED MAXIMUM LENGTH OF CABLES FROM THE FLOW METER TO THE DEVICE SHOLD NOT EXCEED 30M.

FINAL REMARKS:

TIGHTNESS CLASS: IP54. EXTREMELY LOW OPERATING TEMPERATURES MAY STOP THE MEASURING CYCLE (-20 °C). USE NON-AGGRESSIVE DETERGENT DILUTED WITH WATER. AVOID ANY LIQUID FLOORING ON THE BOUNDARIES OF THE FRONT MASKING COVER - THIS MAY RESULT IN LATER PEELING OFF. WITH RAPID CHANGES IN THE AMBIENT TEMPERATURE, CONDENSATION OF WATER VAPOR MAY OCCUR. THE DEVICE IS NOT WATERREPOOP. THE MERPROOT. THE RONT COVER IS NOT RESISTANT TO SOLVENTS, STRONG ALKALINES, FUEL AND MECHANICAL DAMAGES. IN CASE OF PROLONGED EXPOSURE TO STRONG SUNLIGHT, THE FRONT COVER MAY BE DISCOLORED OR PEELING OFF