

## Milking Machine Control Products Catalogue



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June, 2007

Dear customer,

We are pleased sending you our products and service catalogue.

As you probably knows, Medition is the only company dedicated full time to products and services of milking machine measurement. Pulsatortesters, airflowmeters and vacuumeters are our day a day.

Tell us, please, your needs and we will try to fullfil quickly and with effectiveness.

Our repairs and calibration service knows perfectly all these tools, and we will give solution to the breakdown, or to the most frequent demands on calibration and certification.

Thus we hope this catalogue helps you, and any question don't hesitate contact us, we will deal with pleasure.

Best regards,

Javier Pérez Portero Medition Precision S.L Manager





### 1. PT-IV Pulsatortester

The extremely successful forerunner of the PT-V is a measurement instrument that has unquestionably proved itself in practice. A built-in miniprinter allows direct display of, among other results, the pulsation curve and the vacuum fluctuations within the milking system.

PT-IV standard program:

**#**: 01.01.0001



### 2. AFM 3000 Flowmeter.

Airflowmeter, with two scales, with high ressistance, precision and field experience.

Range 0-3000 L/min (with by-pass it reachs 5000-7000 L)

AFM 3000 Flowmeter

**#**: 10.02.0000



### 3. DVPM-01 Digital Vacuum meter

This handly digital vacuum meter measures both under and over pressures. The DVPM-01 is a low cost and user friendly way of rapidly measuring vacuum levels. A built-in battery allows you to perform measurements with the DVPM-01 virtually anywhere. Its moisture-proof design, high level of accuracy and compact size, make the DVPM-01 an indispensable and reliable measurement tool.

DVPM-01 Digital Vacuum meter:

#: 01.01.0026



## 4. Airflowmeter By-pass 2000 I/min

By-pass to join to the mouth of flowmeter. Their holes allow 2000 L/m of air entrance. Thus the all open flowmeter reach 5000 L/min

**#**: 01.01.0006



## 5. Conection adapters for flowmeter.

With different inner diameters 46,38,31.5 mm to connect your flowmeter to the milking machine

46/46 mm, €#: 01.01.0007 46/38 mm, €#: 01.01.0008 46/31,5 mm, €#: 01.01.0009



### 6. Rotameter AGL-14.

According to ISO norm their air entrance in the cluster must be between 4-12 L/ min (that basically should enter by the cluster hole). The rotemeter allows us measuren this figure, ensuring the correct milk flux towards the milking tube, and avoiding long milking times.

**#**: 05.03.0001



### 7. Flowmeter AFM-3000 ISO Kit

This package include:

- AFM 3000 Flowmeter
- 3 conection adapters 50/40/30
- Flowmeter by-pass 2000 L
- Digital vacuum meter
- Protection suitcase
- Rotameter optional

**#**: 10.02.0018







### 8. PT-V Pulsator tester

The Medition pulsotester PTV is remarkable for its multifuntionality. No longuer are differents instruments required for the monitoring of a milking parlour.

The PTV combines a vacuum gauge, a pulsator tester and an airflowmeter in a single instrument, besides performing dynamic measurements. Moreover, it has installed ISO and UNE protocol.

The pulsatortester PT-V will be delivered in a standar box including the mentioned accesories #: 01.01.0003

- Memory capacity 0,1 Mb (50 measurements)
- Backlight display
- Main adapter 100 230V / 50 60Hz
- Car adapter 12V
- Nylon Protection bag
- Bag with 20 filters
- Reportgenerator and user manual on CD-ROM
- Cable zero-modem

#: 01.01.0004 Increased price for bigger memory capacity 0,5 Mb (290 pulsator measurement without download to PC)



# 9. AFM-V Flowmeter 200 3000 l/min

This is an airflowmeter that reads in the PTV screen, because both are conected by jeans of a cable. Easy to use, it allows measure vacuum pump flor, reserves, and ISO and another protocols.

Range uo to 3000 L, and with 1 or 2 by-pass up to 5000 y 7000 L/min.

Not the noisy disturbances of another flowmeters.

**#**: 01.01.0005

### Modern tools



## 10. Stainless steel external transducer.

The basic pulsatortester model comes with two vacuum entrantes. If we want 4 entrances we should add two of these transducers. Ideal for dynamic measurements and ISO protocol (rubber tube coming from pump, regulator and end unit), tus it can be done everything without leaving the end unit.

**#**: 01.01.0010



### 11. Printer.

Several comercial printer can be connected to the PT-V. Alternativelly we offer a total solution by mean of this portable printer, that can be used to print in the farm, or then form the memory in the office.

DPU 414 Printer include main adapter, serial cable and rechargeable batery

**#**: 01.01.0018



#### 12. NOP Needle

For measuring during milking time with the PT-V or V (measure vacuum in the liner punching this), a NOP needle is available, which is fitted with a sliding mechanism so that the rubber particles created during insertion of the needle can be removed because they disturb the measurement.

Besides there is a fluid trap to avoid the milk arrives to the PT.

#: 01.01.0023







### 13. Small suitcase.

To carry the PT-V carefully we can offer two different protection cases. These protection cases carries the airflow meter, external transducers, and accessories.

**#**: 01.01.0021



### 14. Big suitcase

To carry the PT-V carefully we can offer two different protection cases. These protection cases carries the airflow meter, external transducers, accessories and printer.

**€** #: 01.01.0022



### 15. Flowmeter suitcase

To carry the AFM 3000, the vacuum meter and another accesories carefully, we offer protection suitcases.

**#**: 01.02.0029



### Consumables



**PT-IV Paper roll €** #: 01.02.0029

**Filtres** 

**#**: 01.02.0029



PT-IV and V batteries

**€**#: 01.02.0029



**Liner Top** 

**€** #: 01.02.0029



PT main adapters

**€**#: 01.02.0029



**Car adapter** 

**€** #: 01.02.0029

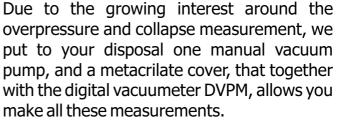


**DVPM Protection** 

**€**#:01.02.0029





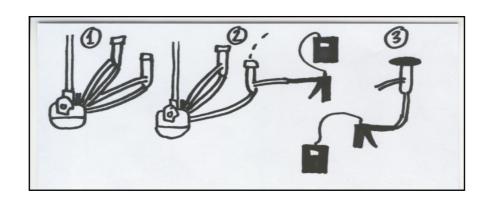


Here we insert informative draws to know how and where measure these two parameters:



- 1. Milking unit in normal situation.
- 2. Overpressure Measurement- manual vacuum pump (joint to vacuum meter) in short pulsation tube. Cow/sheep/goat in milking position. We work the manual pump as far as milk flows. At this moment we write vacuum Kpa of these liner.
- 3. Collapse measurement- manual vacuum pump (joint to vacuum meter) in short milk tube or in liner. We measure in the office or in the farm (not with animal), metacrilate in the mouth of the liner. We work the pump and see in which Kpa point the liner walls touch them.







### Report and graphics of PT-V

#### PULSATOR MEASUREMENT

PtV Test Report for Farm: LUCAA 09:42 12/22/2006

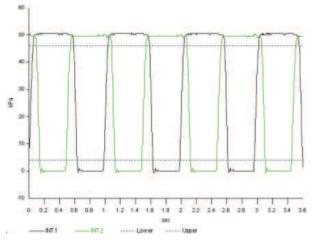
index: A012, 06/15/2006 09:56 FARM: LUCAA TESTER: AB

CURVE MEASUREMENT

LABEL:

Vacuum value in kPa

SENSOR INT.1 SENSOR	VACUUM 50.6	PRESSURE 0.8	55	539	45	D 349 35.3	594	394	0	PULSE 988 60.7
INT.2 SENSOR	49.9	0.8	55 5 6			349 35 3			-	988 60 7



MADE TO MEASURE PROTOCOL

PT-V have installed several protocols (ISO, NMC, UNE, another countries). Optionally we can prepare for you your own protocol inside PT-V (16  $\,$ measurement lines). Here it is an example

index: A003, 09/05/2007 13:40 FARM: SMITH TESTER: A

ISO 6690 MEASUREMENT

LABEL:

Vacuum value in kPa

INSTALATION VACUUM METER	kPa	:	42.0
TECHNICAL VACUUM METER	kPa	:	41.7
FINAL LINE VACUUM	kPa	:	41.8
VACUUM SENSITIVITY	kPa		_
R.P.M.	KL G	:	899
		•	
CORRECTION FACTOR		:	1.00
PUMP CAP.50kPa WITHOUT CORR.	L/M	:	2093
PUMP CAPACITY AT 50 kPa	L/M	:	2093
PUMP CAPACITY AT WORKING VAC	L/M	:	2470
VACUUM LINE	L/M	:	2419
MILK LINE	L/M	:	2295
METERS	L/M	:	2295
CLUSTERS SHUT OFF	L/M	:	2218
MILKING UNITS	L/M	:	2145
PULSATORS	L/M	:	1988
MANUAL RESERVE	L/M	:	2195
EFFECTIVE RESERVE	L/M	:	2195
aire line leakeages	L/M	:	51
milk line leakeages	L/M	:	124
meters leakeages	L/M	:	0
cluster shut off leakeages	L/M	:	77
milking units leakeages	L/M	:	73
pulsator leakeages	L/M	:	157
regulator leakeages	L/M	:	0



#### CONSTANT VACUUM IN LINER

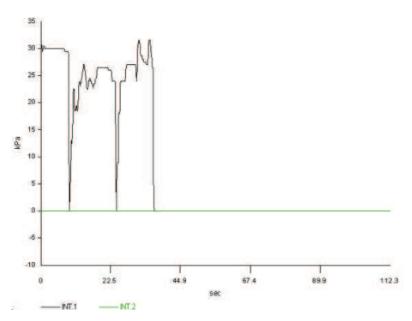
index: A015, 06/23/2006 12:54

FARM: LUCAA TESTER: AB CONSTANT MEASUREMENT

LABEL:

Vacuum value in kPa

SENSOR	TYPE	WORKVAC.	AVG.VAC.	MAX.VAC.	MIN.VAC.	VAC.+	VAC
VAC.DROP INT.1 SENSOR	MEDICION TIPO	:LE49.0	25.3	31.9	0.1	6.6	25.2
23.7 INT.2 SENSOR	MEDICION TIPO	:LE49.0	0.0	0.1	0.0	0.1	0.0
49.0							



## Repairs And Calibration Services.

For all these tools with have technical service, that will asist you in possible necessary repairs, and also in calibrations and certifications for your tools.

For that you must phone or e-mail us. We will tell you where to send your tool, well package. In few days it will be returned to you, repaired and with calibration certificate.



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