# InnovAg **NVG Dairy** Vacuum Gauge

**User Manual** 

Part No. DR51-0044-03

## **Installation**

#### DVG is supplied with:

- 1. 3/8" BSP for replacement of an existing vacuum gauge.
- 2. Hose barb for connection of flexible tubing if wall mounting.
- 3. A roll of sealing tape for fitting of the adaptors.
- 4. Metal brackets for wall mounting.
- 5. Two 'AA' alkaline batteries.

#### To install DVG:

- 1. Mount DVG as required.
- 2. Select kPa or inHg using the jumper above the battery holder.
- 3. Install the two AA batteries.
- 4. The display will first show a test screen, then 0.0 and the set units.



The round black sticker on the side of DVG is an expensive waterproof air vent that allows the case to 'breath'. It should NOT be removed

## **Using DVG**

- DVG will automatically start when vacuum rises above 20kPa, and shut down 20 minutes after the vacuum is turned off.
- Readings are damped to prevent constant movement of the digits with minor fluctuations in dairy vacuum.
- A battery symbol will appear when the batteries need replacing.

## Fast (Technician) Mode

Slow response to vacuum changes can be inconvenient when performing an equipment test. DVG includes a FAST mode which temporarily makes the unit respond faster to vacuum changes:

- 1. Press and hold the internal 'FAST' button until the software version number is shown, e.g. v03.
- 2. If the unit is in FAST mode the units (e.g. kPa) symbol will flash.
- 3. Normal mode will automatically return after 20 minutes or if the button is pressed again.

#### **Maintenance & Calibration**

DVG requires little maintenance for years of accurate operation. If the vacuum readings appear to be incorrect replace the small dust filter in the silicone tube connected to the vacuum sensor.

DVG is factory-calibrated with a traceable Swiss reference vacuum gauge ( $\pm 0.015$ kPa). To ensure highest accuracy the calibration should be checked every two years. Many vacuum gauges (both dial <u>AND</u> digital) can have an error of 2kPa or more. Even a well-maintained mercury manometer can easily have an error of  $\pm 0.5$ kPa. If checking DVG be careful that the other meter you are using is reliably accurate and the vacuum is perfectly stable.

DVG can be returned to InnovAg for recalibration. Contact InnovAg or your local distributor for the latest calibration prices.

# **Specifications**

Pressure Range: 0 to 80 kPa Vacuum

Accuracy:  $\pm$  0.3 kPa typical,  $\pm$  0.6 kPa max

Repeatability:  $\pm$  0.3 kPa

Resolution: 0.1 kPa

Response time: 30s (Normal), 3s (Fast)

Operating Temperature: -5 to 40°C

Storage Temperature: -20 to 80°C

Automatic turn-off time: 20 minutes.

Battery life (typical): 1 year with *good quality* Alkaline cells.

Batteries: Two 1.5V 'AA' Alkaline cells.

(NiCd/NiMH rechargeable cells selfdischarge within a few months and are therefore not recommended for use with

DVG).

Specifications are subject to change without notice.

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