

LPG dispenser model "LPG6000CP" with electronic calculator CPTH02



## AISI 304 stainless steel frame



petrolmeccanica srl – Via Tolara di Sopra 51 – 40064 Ozzano Emilia (BO) ITALY Tel. +39051794611 fax +39051797819 – e-mail : info@petrolmeccanica.it WEB : www.petrolmeccanica.it LPG dispenser type "LPG6000CP" is designed with an horizontal and ventilated separation grid between the processing area and the electronic devices area. If compared with other PetroImeccanica models is characterized by compact overall dimensions and external frame made only in AISI 304 stainless steel. Single or dual flow , one side view or two sides view. The dual flow version can be produced with one degassing unit , also called "system ODD".

**METER** – Type Petrolmeccanica LPG6000WA, four pistons, four cylinders with stainless steel treatment. MPE 0,6 %. Total displacement meter 0,5 liters. Electronic calibration.

**DIFFERENTIAL VALVE** – Piston type in a ground cylinder. A filling pressure gauge is directly fitted on the valve body. The valve balances the pressure in the meter ,damping the water hammer. It stops the filling in case of pressure lower than the vapour phase pressure or if the vapour return pipeline is closed.

**DEGASSING MONOBLOCK** – composed by the following elements :

- Stainless steel filter 200 mesh ( available finer filtration rating )
- Inlet check valve increases the safety and improves the separation efficiency
- Outlet check valve ( mandatory by Legal metrology to prevent the backflow of the LPG ) equipped with a special backpressure valve to prevent liquid traps in case of overpressure.
- Removable flanged degassing body ,easy maintenance and total inspection ( capacity 2 litres )
- Overpressure value (  $\Delta p$  filling /vapour pressure : 11 bar ) , redirects the flow back to the vapour pipeline
- Vapour pressure gauge directly fitted on the degassing unit
- The standard dual flow dispenser is produced with a system called "ODD", i.e. with one degassing unit and it shall be connected with one pumping unit.

**SOLENOID VALVE**– double coil solenoid valve, electrically supplied by the electronic calculator. It slows-down and stops accurately the liquid to an amount or volume preselected by the keyboard or by a self-service device. This is not a servo-controlled valve, it means can operate also with a  $\Delta p$  equal to zero bar.

**STAINLESS STEEL BALL VALVE** – Useful for service to minimize LPG losses between meter and degassing unit in case of maintenance.

**PRESSURE GAUGES** – all the pressure gauges , filled with glycerine to damp pulsations , are fitted on the internal components to reduce the risks of leakages and to extend their lifetime.

PULL-AWAY VALVE - Type ARK19, reconnectable hose pull-away valve ( in conformity with EN14678-1 ).

**DELIVERY HOSE** – suitable for LPG, reinforced with two high resistence wire braiding ( in conformity with EN1762-1)

**DELIVERY NOZZLE** – Available in several models, in accordance with National Standards for car-connectors.OPW , ZVA LPG GROUP nozzles are available in the standard version with DISH-connector or bayonet or threaded connector.

**FRAME** - AISI 304 brushed stainless steel - Parallelepided type with upper housing containing CPU, display, electric terminals, buttons and keyboard. Designed with horizontal vapour barrier to separate the process hydraulic frame. The removable upper panels are equipped with anti dust locks allowing the service inspection. The lower hydraulic housing is made with no-welded frames, properly ventilated and protected by panels with anti dust locks. The nozzle boot is positionned in the lateral frame.

**PULSER** – fitted on the top of the meter. Transmits 1 impulse each centiliter on two separated channels. It's properly sealed to prevent manipulations.

**ELECTRONIC CALCULATOR** – CPTH02 with serial interface type RS485 or RS422 for remote connections,compatible with protocols DART,Nuovo Pignone,IFSF-LON or Two wire Gilbarco.Equipped with back-lit display.Diagnostic system to detect errors or malfunctions. Totals and price change can be performed by means of a proper keyboard or by the remote controller.

**DISPLAY** – three 6-digits H1" backlit LCD displays , to visualize unit price , volume and total amount. ( on demand US gallon or UK gallon can be programmed instead of liter ). By means of the display can be also visualized error codes , diagnostic state and programming parameters during the setup operation.

**KEYBOARD** - alphanumeric 12 keys or 4 keys model to enter any input to the electronic calculator. ( i.e. preselection of amount or volume , change of the unit price , totals query , setup and programming of parameters )

**ELECTRIC TERMINAL BOXES** – All the electric boxes installed in ZONE 1 are selected for the suitable Group and Category. In this model the main electrical terminals are fitted inside of the upper non hazardous area , electric cables shall be easily passed through the cable glands of the horizontal vapour barrier.

**TEMPERATURE COMPENSATION** – (option) on demand it can be equipped with PT100 sensor and temperature compensation software.



## MAIN HYDRAULIC COMPONENTS ( example of a dual flow dispenser )

- 1 Pressure gauge
- 2 Differential valve
- 3 Meter
- 4 Solenoid valve
- 5 Electric box (if used)
- 6 PT100 sensor (option)
- 7 Ball valve
- 8 Degassing un. type "ODD"
- 9 Removable Filter
- 10 Meter check-valve
- 11 Vapour return pipe

RECONNECTABLE HOSE BREAK-AWAY ARK 19



sample of a preset keyboard





## **TECHNICAL FEATURES**

ELECTRIC SUPPLY : 230 VAC ± 10%

FREQUENCY: 50 ÷ 60 Hz

POWER: < 150 VA

WEIGHT WITH STD PACKAGE : Single 130kg. / Dual with system ODD 160 kg.

DESIGN PRESSURE : 25 bar

MAX OPERATING PRESSURE : 18 bar ( recommended to achieve the best performance and a long life of the components ).

AMBIENT TEMPERATURE: -25 C° + 55 C° from MID Certificate , ATEX Temperature : STD

ACCURACY: Dispenser Class 1 ; meter MPE 0,6%

EU DIRECTIVES CERTIFICATIONS

ATEX DIRECTIVE : Type certification MID DIRECTIVE : Type Certification

FTZÚ 10 ATEX 0175X Category EX II 2G IIA T3 T10107

Petrolmeccanica reserves the right to modify at any time without notice the informations contained in this brochure. The above informations are not binding for Petrolmeccanica. The selling contract shall be considered the document valid to claim any difformity of the goods.