



### Issuing Authority

Name: SP Technical Research Institute of Sweden  
Address: PO Box 857, SE-501 15 Borås, Sweden  
Person responsible: Lennart Aronsson

### Applicant

Name: Dresser Wayne AB  
Address: Hanögatan 10, SE-211 24 Malmö, Sweden

### Manufacturer of the certified type:

the applicant or

Name: Dresser Wayne Brazil  
Address: 126 Estrada Timbó Higienópolis, 2106-280 Rio de Janeiro, Brazil

### Identification of the certified type

One or two sided fuel pumps/dispensers for motor vehicles type, further characteristics see page 2-4.

- Wayne Helix 2000 Fuel dispenser
- Wayne Helix 4000 Fuel dispenser
- Wayne Helix 5000 Fuel dispenser
- Wayne Helix 6000 Fuel dispenser

This Certificate attests the conformity of the above identified type (represented by the samples identified in the associated OIML Basic Type Evaluation Report) with the requirements of the following Recommendation of the International Organization of Legal Metrology (OIML):

OIML R 117            Edition: 1995 (E)  
OIML R 118            Edition: 1995 (E)

for accuracy class: **0.5**

This Certificate relates only to the metrological and technical characteristics of the type of instrument covered by the relevant OIML Recommendation identified above. This Certificate does not bestow any form of legal international approval. The conformity was established by the results of tests and examinations provided in the associated OIML Basic Type Evaluation Report:

No. 3P02046 dated July 3, 2013 that includes 21 pages

### Certificate history

| Issue No | Date         | Description of modification |
|----------|--------------|-----------------------------|
| 1        | July 3, 2013 |                             |

Date: July 3, 2013

The OIML Issuing Authority

**SP Technical Research Institute of Sweden  
Certification**

Lennart Aronsson  
Product Certification Manager

Kerstin Mattiasson  
Certification Officer



**1002**

**EN 45 011**

### SP Technical Research Institute of Sweden

|                 |                  |             |                   |
|-----------------|------------------|-------------|-------------------|
| Postal address  | Phone / Fax      | Reg.number  | E-mail / Internet |
| SP              | +46 10-516 50 00 | 556464-6874 | info@sp.se        |
| Box 857         | +46 33-13 55 02  |             | www.sp.se         |
| SE-501 15 Borås |                  |             |                   |
| SWEDEN          |                  |             |                   |



## Description of the certified type

The models are one or two sided fuel pumps/dispensers for motor vehicles for one customer per side. The pumps/dispensers can be equipped with a built-in payment terminal (Wayne iXPay™ secure payment platform) for cards and a preset function may be installed. A display, Wayne iX™ Media platform, may be installed, at the same position as the payment terminal. The pumps/dispensers may be equipped with vapour recovery system with vapour pump, regulating proportional valves and an electronic board (for example VR Driver board WM029182-0001) connected to the iGEM CPU board. The vapour flow is controlled by the electronic board or the iGEM CPU board. Optionally also a vapour recovery monitoring system consisting of a Vapour meter and belonging Intrinsic safe barrier may be used. Means for vapour recovery must not influence the accuracy of measurements such that the maximum permissible error is exceeded.

## Measuring system (fuel dispenser) description

A complete measuring system consists of one electronic module and one to four hydraulic modules in the same housing. If one pump and air separator is serving more than one nozzle simultaneously the total maximum flow rate through these nozzles is limited by the air separator (90 l/min per air separator) and the volume sensor (according to "Volume sensor flowrate range" under "Data"). For higher flow rate another hydraulic module have to serve the same nozzle. For further information see block diagram, page 3.

## Module function description

### Electronic module function

(iGEM) is an electronic subsystem and it consists mainly of: calculator, indicating device, and keyboard with preset. This module can handle up to 4 motors, 4 pulse transmitters (each handling a single equipped or a duplex volume sensor), 8 nozzles and 10 solenoid valves. The module is able to serve up to two customers at a time.

## Hydraulic function modules

Measurement transducer function is a hydraulic subsystem and it consists mainly of: volume sensor (single equipped side A, single equipped side B or duplex) and pulse transmitter.

Pump and air separator function is a hydraulic subsystem and it consists mainly of: Compact Pumping Unit (CPU) including air separator, motor and non-return valve.

Regulating function is a hydraulic subsystem and it consists mainly of: solenoid valves for flow rate regulation, blending and on/off.

Delivery function is a hydraulic subsystem and it consists mainly of: hoses, nozzles and nozzle switch, this includes also satellite function.

Central pump function is a hydraulic subsystem and it consists mainly of: delivery of air free liquid according to OIML R117, item 5.1.3 and security valve.

If the measuring system is equipped with a central pump (an additional "R") an external (central) pump is used instead of an internal pump. The external system must comply with OIML 117, item 5.1.3 (i.e. it shall be equipped with an arrangement that prevents air to come into the system).

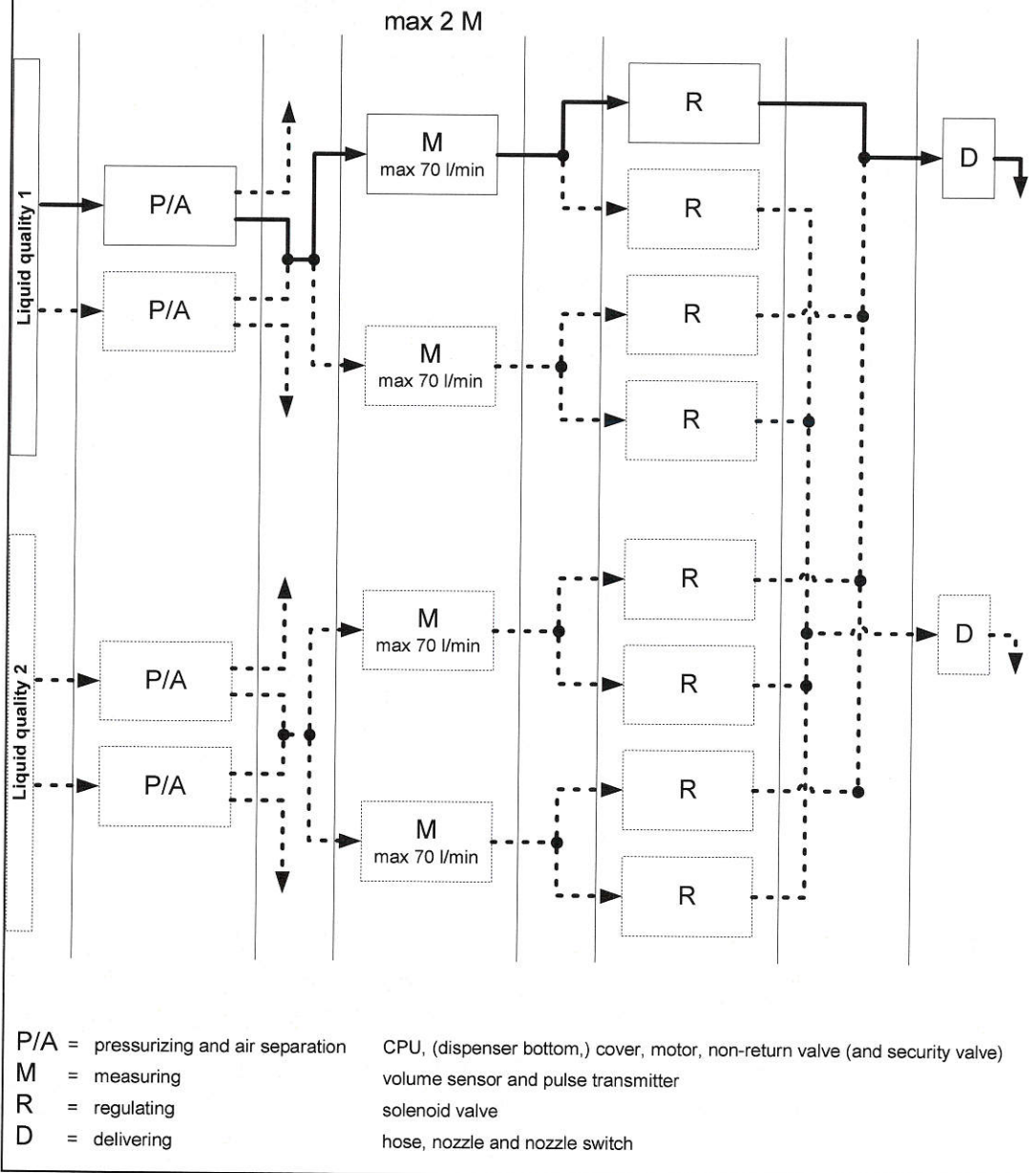
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|-----------------|------------------|-------------|-------------------|
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| SP              | +46 10-516 50 00 | 556464-6874 | info@sp.se        |
| Box 857         | +46 33-13 55 02  |             | www.sp.se         |
| SE-501 15 Borås |                  |             |                   |
| SWEDEN          |                  |             |                   |

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Block diagram describing permitted ways, and some restrictions, to produce one delivery product for one customer. Each such configuration shall be a subset of the diagram. To produce multiple delivery products for a customer the block diagram is used several times.





# OIML BASIC CERTIFICATE OF CONFORMITY

OIML Member State  
**SWEDEN**

OIML Certificate No.  
**R117/1995-SE1-13.01**



## Data

|  |  |
|--|--|
| Maximum flow rate ( $q_{max}$ )  | 40 to 130 l/min  |
| Minimum flow rate ( $q_{min}$ )  | $\geq 0,2$ l/min   |
| Minimum measured quantity (mmq)  | 2,0 l or 5,0 l   |
| Scale interval, volume display   | 0,01 l   |
| Maximum volume (6 digits)  | 9 999,00 l (programmable)  |
| Maximum price (7 digits)   | 99 990,00 Price (programmable)   |
| Maximum unit price (5 digits)  | 999,99 Price/l (programmable)  |
| Pressure range   | 0,12 - 0,3 MPa   |
| Liquid temperature range   | -30°C to +55°C,<br>-25°C to +55°C only for FAME/RME                        |
| Ambient temperature range  | -40°C to +60°C   |
| Type of liquids,<br>volume sensor iMeter and Xflo™   | Petrol, kerosene, diesel, ethanol or<br>FAME/RME                           |
| Volume sensor flow rate range,<br>iMeter Duplex (each meter) and Single  | 0,2 to 70 l/min<br>4 to 70 l/min only for FAME/RME                         |
| Xflo™ Duplex (each meter) and Single   | 4 to 80 l/min<br>4 to 70 l/min only for FAME/RME                           |
| Mixture conditions, two liquids  | 5% to 95% (designation only<br>e g 92, 95, 98 octane not 50/50, 70/30 etc) |
| The ratio between maximum and minimum flow rate should be at least 10 for single quality and 5 for blending quality. |  |

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