

THE NETHERLANDS  
(N E D E R L A N D)

## COMMUNICATION

Concerning <sup>(1)</sup>:

- ~~approval granted~~
- approval extended
- ~~approval refused~~
- ~~approval withdrawn~~
- ~~production definitively discontinued~~

of a type of CNG/LNG component pursuant to Regulation number 110.

**Approval number: E4\*110R05/00\*0516\*01**

1. CNG/LNG component considered:

- ~~Container(s) or cylinder(s)~~<sup>(+)</sup>
- ~~Tank(s) or vessel(s)~~<sup>(+)</sup>
- ~~CNG accumulator(s)~~<sup>(+)</sup>
- ~~Pressure indicator~~<sup>(+)</sup>
- ~~Pressure relief valve~~<sup>(+)</sup>
- ~~Automatic valve(s)~~<sup>(+)</sup>
- ~~Excess flow valve~~<sup>(+)</sup>
- ~~Gas tight housing~~<sup>(+)</sup>
- ~~Pressure regulator(s)~~<sup>(+)</sup>
- ~~Non return valve(s) or check valve(s)~~<sup>(+)</sup>
- ~~Pressure relief device (PRD)(temperature triggered)~~<sup>(+)</sup>
- ~~Manual valve~~<sup>(+)</sup>
- ~~Flexible fuel lines~~<sup>(+)</sup>
- ~~Filling unit or receptacle~~<sup>(+)</sup>
- ~~Gas injector(s)~~<sup>(+)</sup>
- ~~CNG Compressor~~<sup>(+)</sup>
- ~~Gas flow adjuster~~<sup>(+)</sup>
- ~~Gas/air mixer~~<sup>(+)</sup>
- ~~Electronic control unit~~<sup>(+)</sup>
- ~~Pressure and temperature sensor(s)~~<sup>(+)</sup>
- ~~CNG filter(s)~~<sup>(+)</sup>
- ~~PRD (pressure triggered)~~<sup>(+)</sup>
- ~~Fuel rail~~<sup>(+)</sup>
- ~~Heat exchanger(s)/vaporizer(s)~~<sup>(+)</sup>
- ~~Natural gas detector(s)~~<sup>(+)</sup>

- LNG filling receptacle(s)<sup>(1)</sup>
- ~~LNG pressure control regulator(s)<sup>(+)</sup>~~
- ~~LNG pressure and/or temperature sensor(s)<sup>(+)</sup>~~
- ~~LNG manual valve(s)<sup>(+)</sup>~~
- ~~LNG automatic valve(s)<sup>(+)</sup>~~
- ~~LNG non-return valve(s)<sup>(+)</sup>~~
- ~~LNG pressure relief valve(s)<sup>(+)</sup>~~
- ~~LNG excess flow valve(s)<sup>(+)</sup>~~
- ~~LNG fuel pump(s)<sup>(+)</sup>~~
- 

2. Trade name or mark : LNG Receptacle MFR5000
3. Manufacturer's name and address : Engineered Controls International LLC  
100 RegO Drive 27244  
Elon, North Carolina  
United States of America
4. If applicable, name and address of manufacturer's representative : N.A.
5. Submitted for approval on : 17-01-2019
6. Technical service responsible for conducting approval tests : Kiwa Nederland B.V.  
P.O. Box 137  
7300 AC Apeldoorn  
The Netherlands
7. Date of report issued by that service : 23-01-2023
8. Number of report issued by that service : 180700265\_P000277097
9. Approval : ~~granted/refused/extended/withdrawn~~<sup>(1)</sup>
10. Reason(s) of extension (if applicable) : The currently homologated LNG Receptacle MFR5000 is updated to the latest Revision of the ECE Regulation 110
11. Place : Zoetermeer
12. Date : 07 February 2023
13. Signature :   
R.F.R. Clement
14. The documents filed with the application or extension of approval can be obtained upon request.

<sup>(1)</sup> Strike out what does not apply.

ADDENDUM

1. Additional information concerning the type approval of a type of CNG/LNG components pursuant to Regulation number 110.
  - 1.1. Natural Gas Storage System
    - 1.1.1. Container(s) or cylinder(s) (for CNG system)
      - 1.1.1.1. Dimensions :
      - 1.1.1.2. Material :
    - 1.1.2. Tank(s) or vessel(s) (for LNG system)
      - 1.1.2.1. Capacity :
      - 1.1.2.2. Material :
  - 1.1.3. CNG accumulator
    - 1.1.3.1. Dimensions :
    - 1.1.3.2. Material :
    - 1.1.3.3. Capacity :
  - 1.2. Pressure indicator
    - 1.2.1. Working pressure(s) <sup>(2)</sup> :
    - 1.2.2. Material :
  - 1.3. Pressure relief valve (discharge valve)
    - 1.3.1. Working pressure(s) <sup>(2)</sup> :
    - 1.3.2. Material :
  - 1.4. Automatic valve(s)
    - 1.4.1. Working pressure(s) <sup>(2)</sup> :
    - 1.4.2. Material :
  - 1.5. Excess flow valve
    - 1.5.1. Working pressure(s) <sup>(2)</sup> :
    - 1.5.2. Material :
  - 1.6. Gas-tight housing
    - 1.6.1. Working pressure(s) <sup>(2)</sup> :
    - 1.6.2. Material :
  - 1.7. Pressure regulator(s)
    - 1.7.1. Working pressure(s) <sup>(2)</sup> :
    - 1.7.2. Material :
  - 1.8. Non-return valve(s) or check valve(s)
    - 1.8.1. Working pressure(s) <sup>(2)</sup> :
    - 1.8.2. Material :
  - 1.9. Pressure relief device (temperature triggered)
    - 1.9.1. Working pressure(s) <sup>(2)</sup> :
    - 1.9.2. Material :
  - 1.10. Manual valve
    - 1.10.1. Working pressure(s) <sup>(2)</sup> :
    - 1.10.2. Material :



|         |                                    |                                           |
|---------|------------------------------------|-------------------------------------------|
| 1.11.   | Flexible fuel lines                |                                           |
| 1.11.1. | Working pressure(s) <sup>(2)</sup> | :                                         |
| 1.11.2. | Material                           | :                                         |
| 1.12.   | Filling unit or receptacle         |                                           |
| 1.12.1. | Working pressure(s) <sup>(2)</sup> | :                                         |
| 1.12.2. | Material                           | :                                         |
| 1.13.   | Gas injector(s)                    |                                           |
| 1.13.1. | Working pressure(s) <sup>(2)</sup> | :                                         |
| 1.13.2. | Material                           | :                                         |
| 1.14.   | Gas flow adjuster                  |                                           |
| 1.14.1. | Working pressure(s) <sup>(2)</sup> | :                                         |
| 1.14.2. | Material                           | :                                         |
| 1.15.   | Gas/air mixer                      |                                           |
| 1.15.1. | Working pressure(s) <sup>(2)</sup> | :                                         |
| 1.15.2. | Material                           | :                                         |
| 1.16.   | Electronic control unit            |                                           |
| 1.16.1. | Basic software principles          | :                                         |
| 1.17.   | Pressure and temperature sensor(s) |                                           |
| 1.17.1. | Working pressure(s) <sup>(2)</sup> | :                                         |
| 1.17.2. | Material                           | :                                         |
| 1.18.   | CNG filter(s)                      |                                           |
| 1.18.1. | Working pressure(s) <sup>(2)</sup> | :                                         |
| 1.18.2. | Material                           | :                                         |
| 1.19.   | PRD (pressure triggered)           |                                           |
| 1.19.1. | Working pressure(s) <sup>(2)</sup> | :                                         |
| 1.19.2. | Material                           | :                                         |
| 1.20.   | Fuel rail(s)                       |                                           |
| 1.20.1. | Working pressure(s) <sup>(2)</sup> | :                                         |
| 1.20.2. | Material                           | :                                         |
| 1.21.   | Heat Exchanger(s)/Vaporizer(s)     |                                           |
| 1.21.1. | Working pressure(s) <sup>(2)</sup> | :                                         |
| 1.21.2. | Material                           | :                                         |
| 1.22.   | Natural gas detector(s)            |                                           |
| 1.22.1. | Working pressure(s) <sup>(2)</sup> | :                                         |
| 1.22.2. | Material                           | :                                         |
| 1.23.   | LNG filling receptacle(s)          |                                           |
| 1.23.1. | Working pressure(s) <sup>(2)</sup> | : 3.8 MPa (38 Bar)                        |
| 1.23.2. | Material                           | : See report 180700265 and its extensions |
| 1.24.   | LNG pressure control regulator(s)  |                                           |
| 1.24.1. | Working pressure(s) <sup>(2)</sup> | :                                         |
| 1.24.2. | Material                           | :                                         |



- 1.25. LNG pressure and/or temperature sensor(s)
  - 1.25.1. Working pressure(s) <sup>(2)</sup> :
  - 1.25.2. Material :
- 1.26. LNG manual valve(s)
  - 1.26.1. Working pressure(s) <sup>(2)</sup> :
  - 1.26.2. Material :
- 1.27. LNG automatic valve(s)
  - 1.27.1. Working pressure(s) <sup>(2)</sup> :
  - 1.27.2. Material :
- 1.28. LNG non-return valve(s)
  - 1.28.1. Working pressure(s) <sup>(2)</sup> :
  - 1.28.2. Material :
- 1.29. LNG pressure relief valve(s)
  - 1.29.1. Working pressure(s) <sup>(2)</sup> :
  - 1.29.2. Material :
- 1.30. LNG excess flow valve(s)
  - 1.30.1. Working pressure(s) <sup>(2)</sup> :
  - 1.30.2. Material :
- 1.31. LNG fuel pump(s)
  - 1.31.1. Working pressure(s) <sup>(2)</sup> :
  - 1.31.2. Material :
- 1.32. CNG Compressor
  - 1.32.1. Working pressure(s) <sup>(2)</sup> :
  - 1.32.2. Material :

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<sup>(2)</sup> Specify the tolerance

