

THE NETHERLANDS
(N E D E R L A N D)**EC TYPE-APPROVAL CERTIFICATE**

Communication concerning:

- EC type-approval⁽¹⁾
 - ~~extension of EC type-approval⁽¹⁾~~
 - ~~refusal of EC type-approval⁽¹⁾~~
 - ~~withdrawal of EC type-approval⁽¹⁾~~
- } of a type of
hydrogen component

with regard to Regulation (EC) number 79/2009, as implemented by Regulation (EU) number 406/2010.

EC type-approval number : **e4*79/2009*406/2010*00064*00 Corr 01**Reason for extension : Correction on initial report.
On the EC type-approval certificate page 4 of 4
point 4. Remarks Approval mark e4 00 00046 is
changed to e4 00 00064.

SECTION I

- 0.1. Make (trade name of manufacturer) : AUTO438
- 0.2. Type : AUTO438-5-X-20-V-X-X
See Product variation overview in Appendix 6 of
Report 200200739
- 0.3. Means of identification of type, if
marked on the component⁽²⁾ : AUTO438-5-X-20-V-X-X
- 0.3.1. Location of that marking : As indicated on drawing.
- 0.5. Name and address of manufacturer : Pressure Tech Limited
Unit 24, Graphite Way
SK13 1QH, Hadfield, Derbyshire
United Kingdom
- 0.7. In the case of components and separate
technical units, location and method of
affixing of the EC approval mark : Direct part marking in areas as indicated on
drawing.

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- 0.8. Name(s) and address(es) of assembly plant(s) : Pressure Tech Limited
Unit 24, Graphite Way
SK13 1QH, Hadfield, Derbyshire
United Kingdom
- 0.9. Name and address of manufacturer's representative (if any) : Hold Tech Files Ltd., Mr Derek Coulson
Dun Iseal, Newtown, Gaulsmills, Ferrybank,
Waterford, X91F638, Ireland

SECTION II

1. Additional information (where applicable) : Limited lifetime of 10 years. see Addendum
2. Technical service responsible for carrying out the tests : Kiwa Nederland B.V.
P.O. Box 137
7300AC Apeldoorn
The Netherlands
3. Date of test report : 28-03-2022
4. Number of test report : 200200739 Corr 01
5. Remarks (if any) : see Addendum
6. Place : Zoetermeer
7. Date : 28 September 2021
8. Signature :



R.F.R. Clement

- Attachments:
- Information package.
 - Test report.

⁽¹⁾ Delete where not applicable.

⁽²⁾ If the means of identification of type contains characters not relevant to describe the vehicle, component or separate technical unit types covered by this information document, such characters shall be represented in the documentation by the symbol '?' (e.g. ABC??123??).

ADDENDUM

to EC type-approval certificate number: e4*79/2009*406/2010*00064*00 Corr 01

relating to EC component type-approval of a hydrogen component or system

1. Additional information
 - 1.1. ~~Hydrogen system designed to use liquid hydrogen/Hydrogen system designed to use compressed (gaseous) hydrogen/Hydrogen component designed to use liquid hydrogen/Hydrogen component designed to use compressed (gaseous) hydrogen~~⁽¹⁾
2. Specifications and test results
 - 2.1. ~~Containers designed to use compressed (gaseous) hydrogen~~
 - 2.1.1. ~~Container material specifications~~

Material specifications	Applicable to material						Details
	Steel	Aluminium-alloy	Plastic-liner	Fibre	Resin	Coating	
Material manufacturer	√	√	√	√	√		
Type of material	√	√	√	√	√		
Material identification	√	√	√	√	√		
Heat treatment definition	√	√					
Chemical composition	√	√					
Cold or cryoforming procedure	√						
Welding procedure definition	√	√					

- 2.1.2. ~~Container material test results~~

Material test	Applicable to material						Specified material value	Test value
	Steel	Aluminium-alloy	Plastic-liner	Fibre	Resin	Coating		
Tensile test	√	√	√					
Charpy impact test	√							
Bend test	√	√						
Macroscopic examination	√							



Material test	Applicable to material						Specified material value	Test value
	Steel	Aluminium-alloy	Plastic-liner	Fibre	Resin	Coating		
Corrosion test		√						
Sustained load cracking test		√						
Softening temperature test			√					
Glass transition temperature test					√			
Resin shear strength test					√			
Coating test						√		
Hydrogen compatibility test	√	√	√	√	√			

2.1.3. Container test results

Container test	Specified design value	Test result
Burst Test		
Ambient Temperature Pressure Cycle Test		
LBB Performance Test		
Bonfire test		
Penetration Test		
Chemical Exposure Test		
Composite Flaw Tolerance Test		
Accelerated Stress Rupture Test		
Extreme Temperature Pressure Cycle Test		
Impact Damage Test		
Leak Test		
Permeation Test		
Boss Torque Test		
Hydrogen Gas Cycling Test		

3. Restriction of use of the device (if any) : Component is tested for a limited lifetime of 10 years.

4. Remarks : Approval mark e4 00 00064

⁽¹⁾ Delete where not applicable.

