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**Changes to legislation:** There are outstanding changes not yet made to Regulation (EC) No 79/2009 of the European Parliament and of the Council. Any changes that have already been made to the legislation appear in the content and are referenced with annotations. (See end of Document for details) View outstanding changes

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## ANNEX I

### List of hydrogen components to be type-approved

Where fitted to a hydrogen-powered vehicle, the following hydrogen components must be type-approved:

- (a) components designed to use liquid hydrogen:
  - 1. container;
  - 2. automatic shut-off valve;
  - 3. check valve or non-return valve (if used as a safety device);
  - 4. flexible fuel line (if upstream of first automatic shut-off valve or other safety devices);
  - 5. heat exchanger;
  - 6. manual or automatic valve;
  - 7. pressure regulator;
  - 8. pressure relief valve;
  - 9. pressure, temperature and flow sensors (if used as a safety device);
  - 10. refuelling connection or receptacle;
  - 11. hydrogen leakage detection sensors;
- (b) components designed to use compressed (gaseous) hydrogen with a nominal working pressure of over 3,0 MPa:
  - 1. container;
  - 2. automatic shut-off valve;
  - 3. container assembly;
  - 4. fittings;
  - 5. flexible fuel line;
  - 6. heat exchanger;
  - 7. hydrogen filter;
  - 8. manual or automatic valve;
  - 9. non-return valve;
  - 10. pressure regulator;
  - 11. pressure relief device;
  - 12. pressure relief valve;
  - 13. refuelling connection or receptacle;
  - 14. removable storage system connector;

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15. pressure, temperature, hydrogen and flow sensors (if used as a safety device);
16. hydrogen leakage detection sensors.

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**Changes and effects yet to be applied to the whole legislation item and associated provisions**

- Signature words omitted by [S.I. 2022/1273 reg. 52\(8\)](#)
- Art. 2(1) words substituted by [S.I. 2022/1273 reg. 52\(2\)](#)
- Art. 11(1)(a) words omitted by [S.I. 2022/1273 reg. 52\(4\)\(a\)\(iv\)](#)
- Art. 11(3)(a) words omitted by [S.I. 2022/1273 reg. 52\(4\)\(c\)\(iv\)](#)
- Art. 12(e) word omitted by [S.I. 2022/1273 reg. 52\(5\)\(b\)](#)