

EC CERTIFICATE



Czech

Reg. No. 00.946.007/09/05/04/0

No. 1017 – 012/2009

of EC type approval - design variant

issued in accordance with
 Directive 1999/36/EC (Decree of Government 42/2003 Code Cz in valid wording)
 and RID/ADR agreement (module B)
 to producer:

ARMOTECH s.r.o.
U Habrovky 247
CZ - 140 00 Praha 4
Ident. No.: 276 04 951

to transportable pressure equipment:

Name of cylinder: **composite pressure vessel
type BMKx-99-300**

Drawing: **BMKx-99-300.00.000AS**

Design Standard: **EN 12245:2009**

Manufacturing plant: **Composite Steel, s.r.o., Kamenný Újezd, ČR**

at which a certification has been executed by Directive 1999/36/EC (Decree of Government 42/2003 Code Cz in valid wording).
 We hereby testify conformity of properties of subject sample with basic requirements of

Directive 1999/36/EC
(Decree of Government 42/2003 Code Cz in valid wording)
and RID/ADR agreement

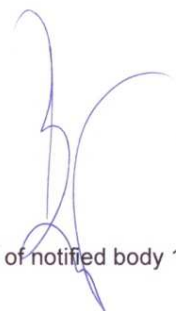
This certificate is set for official use of issue of Declaration of conformity, which confirms above-mentioned specification.

Details of classification together with the list of important sheets of technical documentation are listed in the report of assessment No. 965/20/09/AW/IZ/A, which is integral part of this certificate.

Conditions and rules of a use of this certificate are in the rear page of the certificate.



Prague 12.11.2009


 on behalf of notified body 1017

1. Range of validity

Type of cylinder: BMKx-99-300

Design Life: 15 years

Underwater: Yes

Finished cylinder

Capacity: 0,8; 1,1; 1,5; 2; 3 L

Test

Pressure: 450 bar

Diameter:

Internal: 99,0 ± 0,05 mm

External: 111,0 ± 1,0 mm

Total length: (155,3 ÷ 450,0) ± 1,0 mm

Thread: 17E (W 19,8)

M 18 x 1,5

5/8"-18 UNF

Weight: (0,70; 0,80; 1,01; 1,15; 1,42) ± 0,1 kg

Liner

Material: stainless steel

Quality: 1.4301
EN 10088

Yield strength: 190 / 225 MPa

Tensile strength: 500 ÷ 700 MPa

Elongation: > 20 %

Min. thickness: 0,45 mm

Composite material

Fiber: carbon

Plat Tensile Strength: 1,0 ÷ 1,2 N/tex

Fiber Modulus: 230 ÷ 240 GPa

Matrix Components: Epoxy resin
Hardener
Accelerant
Diluent

Shear Strength: 50 ÷ 60 MPa

Elongation: 1,5 ÷ 1,7 %

Thickness: 2,8 ÷ 5,5 mm

Metal End Boss:

Material: 1.4313 EN 10088

Yield Strength: 590 / 620 MPa

Tensile Strength: 750 ÷ 820 MPa

Elongation: > 15 %

2. Acceptance conditions

Durability (expiration limit) of the certificate is 10 years and that can be reconstituted on a call.

Notify body must get any all information about any alterations to the certified type. The fact can affect a continuity of the certificate validity, which depends on supplemental assessment of conformity.

Each product must be equipped with indispensable manuals of operating and assembly instructions.

Each product must have clean reference of producer or importer and type designation. That to allow to learn identity of type and commissioned devices.

3. Rules of certificate use

The certificate is allowed to use only for products, that specification is listed in the front page. The same condition keeps at a use of promotion and trade act and papers.

The certificate is allowed to copy but en bloc only. There prohibits any change or a complement of the certificate.

Unauthorized or deceiving use causes sanctions (§19 of Law 22/1997 of Code CZ).

Any use of certificate is prohibited to any product, which change influence conformity with listed used regulations.

The certificate is issued for its owner and the products and manufacturing plants that the certificate defines. The shift of the certificate, by its owner to another body, is illegal so as use of the certificate by another person. Only notified body can shift that to other body.

If any circumstance or non-mentioned state exists, Valid general conditions, concerning products certification, to use.

