

EU TYPE-EXAMINATION CERTIFICATE

Application of the

MSBFS 2011:3 (The European Parliament and the Council Directive 2010/35/EU of 16 June 2010 on Transportable Pressure Equipment)

CERTIFICATE NO.: **12-466227-06**, **Rev. 2**This Certificate consists of two (2) pages

THIS IS TO CERTIFY THAT THE EQUIPMENT

Cylinder Valves

WITH THE TYPE DESIGNATION/EQUIPMENT DESCRIPTION

SMV

MANUFACTURED BY

GCE, s.r.o., CZ-583 81 Chotebor, Czech Republic

is found to comply with the requirements in § 1, chapter 2 (Article 12) and EN ISO 10297:2014, EN ISO 15996:2017.

The equipment has been examined with respect to the procedure of conformity assessment as described in the MSBFS 2011:3 (Directive 2010/35/EU) and the current edition of ADR at the time of issuing this certificate.

APPLICATIONS

Design Pressure min/max: *) 0/200 bar(g)

Design Temp. range: -20/+65 °C

Further details of the product and conditions for the certification are given overleaf.

This Certificate is valid until: 2022-07-31

MALMÖ, 2021-04-21

Kiwa Inspecta AB

Notified Body No.: 0409

Ölof Pedersen

Senior Design Review Engineer

Notice: The certificate is subject to terms and conditions, if any, overleaf. Any significant changes in design or construction of the product, the quality system or amendments to the MSBFS 2011:3 (Directive 2010/35/EU) or Standards referenced above may render this certificate invalid. The product liability rests with the manufacturer or his representative in accordance with the MSBFS 2011:3 (Directive 2010/35/EU), as amended.

Kiwa Inspecta AB - Box 7178 170 07 Solna Sweden Phone: (+46) 10 479 3000 www.kiwa.se

Kontroll ISO/IEC 17020 (A)



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LIMITATIONS

- *) Max working pressure 200 bar(g).
- This certificate is valid for "Model No" according to list stamped by Kiwa Inspecta AB and for following gases: O2, CO2 and Air.
- This EU Type Examination Certificate replaces certificate No. 12-466227-06 Revision 1 issued 2019-08-15.
- The valve is to be marked with π 0409.

TYPE APPROVAL DOCUMENTATION

- See list stamped by Kiwa Inspecta AB.

SUPPORTING DOCUMENTATION

- Risk analysis, Doc. No.: TF01-DFMEA-Cylinder Valves Rev. 10 3 Draft (date 9.3.2021).
- Instructions for use, Doc. No.: 548234A19270.; DOI: 2021-03-04; Rev.: 11.

TESTS CARRIED OUT

- Technical Report 2015-259 (Endurance test of operating mechanism).
- Technical Report 2008-3564 (Oxygen shock testing).
- Technical Report 2015-107 (Resistance against excessive torque).
- Technical Report 2015-106 and 2019-34_TR1 (Hydraulic pressure test).
- Technical Report 2008-124 (Fire exposure test for valve operating mechanism)
- Test Report No 2020-52_TR1 (Strength test of the non-return function in the reverse direction; Verification of opening pressure and closing-off pressure; Endurance test; Leak tightness test in the reverse direction),
- Test Report No 2020-53_TR1 (Resistance to ignition test),
- Test Report No 2020-204_TR1 (Resistance to ignition test),
- Test Report No 2020-206_TR1 (Strength test of the non-return function in the reverse direction for type 1 RPDs, Verification of opening pressure and closing-off pressure, RPV Endurance test, Leak tightness test in the reverse direction, Visual examination),
- Test Report No 2021-9_TR1 (Resistance to ignition test),
- Test Report No 2021-32_TR1 (Leakage test, Endurance test of valve operating mechanism, Visual examination),
- BAM Test Report, Ref.: 15019785 IE,
- BAM Report II-1959/2003 and II-971/2004 (Type testing of cylinder valves of series "rotating design", incl. oxygen test).
- BAM Report DG-05-054 VI(RPV) (Type testing of residual pressure valve (RPV) as additional equipment for cylinder valves).

MALMÖ, 2021-04-21

Kiwa Inspecta AB

Olof Pedersen

Senior Design Review Engineer