



# 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.: **16-1008709-100, Rev. 5**

This Certificate consists of four (4) pages

THIS IS TO CERTIFY THAT THE EQUIPMENT

**Safety Relief Valves**  
(Reference number see pages 2/4 to 4/4)

WITH THE TYPE DESIGNATION/EQUIPMENT DESCRIPTION

**SP, LCV, VRVD, VRV, VRVR and VRVS**

MANUFACTURED BY

**Generant Company Inc.**  
**1865 Route 23 South, PO Box 768,**  
**Butler, NJ 07405**  
**United States of America**

is found to comply with the requirements in § 1, chapter 2 (Article 12) and the standards  
EN 13648-1 and EN ISO 4126-1 (for full variants list refer to Generant TPED Type Approval file).

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 (1.8.7.2) at the time of issuing this  
certificate.

APPLICATIONS

Design Pressure min/max: See page 2/4 to 4/4

Design Temp. range: See page 2/4 to 4/4

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

This Certificate is valid until: **22nd April, 2026**

STOCKHOLM , 2019-08-27

**Kiwa Inspecta AB**

Notified Body No.: 0409

Thierry Tielemans



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.



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### LIMITATIONS

The manufacturer is allowed to fix the  $\pi$  mark followed by the Notified Body N° 0409 to the approved equipment's referred as follow:

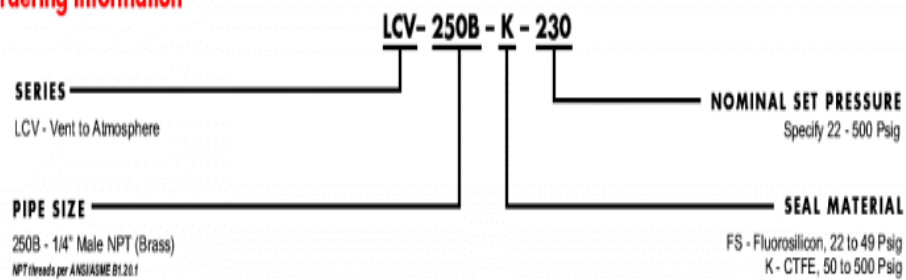
#### - Liquid Cylinder Valves – Serie LCV:

Design pressure: 1.5-34.5 bar

Design temperature: Seal material dependent (FS: -65°C to 176°C, K-PCTFE: -196°C to 74°C)

Fluids: Inert gases, Oxygen and all gases with OP > 21% compatible with approved material (Group 1 – Only Gas)

### Ordering Information



**PROPER COMPONENT SELECTION** - When specifying a component, the total system design must be considered to ensure safe and trouble-free performance. Intended component function, materials compatibility, pressure ratings, installation, environment and maintenance are the responsibility of the system designer.

Approval valid until: 22.04.2026

Continued on next page



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Reference	Fluids	Maximum working pressure	Applicable Standard	Approval valid until
SP - 9709	Inert gases, Oxygen and all gases with OP > 21% compatible with approved material	0,5 to 10,35 bar(g) (7,25 – 150,11 psig)	EN 13648-1 EN ISO 4126-1	22-04-2026
VRVD – 2004B – N -30	Inert gases, Oxygen and all gases with OP > 21% compatible with approved material	2.07 bar(g) +/- 0.1 bar(g) (30 psig +/- 1.45 psig)	EN 13648-1 EN ISO 4126-1	06-03-2029
VRVD – 2005B – N -70	Inert gases, Oxygen and all gases with OP > 21% compatible with approved material	0,5 to 10,35 bar(g) (7,25 – 150,11 psig)	EN 13648-1 EN ISO 4126-1	22-04-2026
VRV-41SAEA-N-30	Inert gases, Oxygen and all gases with OP > 21% compatible with approved material	2.07 bar(g) +/- 0.1 bar(g) (30 psig +/- 1.45 psig)	EN 13648-1 EN ISO 4126-1	06-03-2029
VRV-61SAEB-N-30	Inert gases, Oxygen and all gases with OP > 21% compatible with approved material	2.07 bar(g) +/- 0.1 bar(g) (30 psig +/- 1.45 psig)	EN 13648-1 EN ISO 4126-1	06-03-2029
VRV-61SAEB-N-65	Inert gases, Oxygen and all gases with OP > 21% compatible with approved material	4.48 bar(g) +/- 3% bar(g) (65.0 psig +/- 3% psig)	EN 13648-1 EN ISO 4126-1	06-03-2029
VRV – 1010A-N-80	Inert gases, Oxygen and all gases with OP > 21% compatible with approved material	0,5 to 10,35 bar(g) (7,25 – 150,11 psig)	EN 13648-1 EN ISO 4126-1	22-04-2026
VRV-1001A-30	Inert gases, Oxygen and all gases with OP > 21% compatible with approved material	0,5 to 10,35 bar(g) (7,25 – 150,11 psig)	EN 13648-1 EN ISO 4126-1	22-04-2026
VRV – 1004A - 45	Inert gases, Oxygen and all gases with OP > 21% compatible with approved material	0,5 to 10,35 bar(g) (7,25 – 150,11 psig)	EN 13648-1 EN ISO 4126-1	22-04-2026
VRVR-126A-N-30	Inert gases, Oxygen and all gases with OP > 21% compatible with approved material	2.07 bar(g) +/- 0.1 bar(g) (30 psig +/- 1.45 psig)	EN 13648-1 EN ISO 4126-1	06-03-2029
VRVS – 430-N-30 VRVS – 431-N-30	Inert gases, Oxygen and all gases with OP > 21% compatible with approved material	2.07 bar(g) +/- 0.1 bar(g) (30 psig +/- 1.45 psig)	EN 13648-1 EN ISO 4126-1	22-04-2026



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Reference	Fluids	Maximum working pressure	Applicable Standard	Approval valid until
VRV-018	Inert gases, Oxygen, all gases with OP > 21% compatible with approved material	2.07 bar(g) +/- 0.1 bar(g) (30 psig +/- 1.45 psig)	EN 13648-1 EN ISO 4126-1	19-09-2027
VRV-020	Inert gases, Oxygen, all gases with OP > 21% compatible with approved material	1.52 bar(g) +/- 5% bar(g) (22 psig +/- 5% psig)	EN 13648-1 EN ISO 4126-1	19-09-2027
VRV-021	Inert gases, Oxygen, all gases with OP > 21% compatible with approved material	2.07 bar(g) +/- 0.1 bar(g) (30 psig +/- 1.45 psig)	EN 13648-1 EN ISO 4126-1	19-09-2027
VRV-421	Inert gases, Oxygen, all gases with OP > 21% compatible with approved material	1.45 bar(g) +/- 5% bar(g) (21 psig +/- 5% psig)	EN 13648-1 EN ISO 4126-1	19-09-2027

- Design temperature ranges (working temperatures): -220°C to +205°C (-364°F to 401°F) depending on the elastomer.  
T: -23°C to 190°C, B&N: -40°C to 121°C, EP: -54°C to 148°C, FS: -62°C to 176°C, S: -54°C to 205°C, T: -220°C to 205°C.
- The manufacturer is allowed to affix the "π" mark followed by the Notified Body number 0409 (Inspecta Sweden AB) to the approved equipment described in the chapter 3 of the TPED Directive (2010/35/EU).

#### TYPE APPROVAL DOCUMENTATION

Technical files SP, LCV, VRV, VRVD, VRVR and VRVS in last approved revision.

#### TESTS CARRIED OUT

Tests reports according to EN 13648-1 and EN ISO 4126-1 are referred into the technical file of each approved type.

STOCKHOLM , 2019-08-27

**Kiwa Inspecta AB**

Thierry Tielemans  
Senior Auditor