



Italia

CERTIFICATO DI ESAME DI TIPO TYPE EXAMINATION CERTIFICATE

Certificate No.: DCI 005/1

Name and address of the owner: Hydronic Lift S.p.A.
Via R. Sanzio, 2/D
21013 Gallarate (VA) – Italy

Date of application: 20/12/2013

Name and address of the manufacturer: Hydronic Lift S.p.A.
Via R. Sanzio, 2/D
21013 Gallarate (VA) – Italy

Product, type: Part of an hydraulic system against the uncontrolled downwards movement of the cabin with open doors
HSV-150; HM-SV 150
HSV-440; HM-SV 440

Standards of reference: EN 81-2: 1998 + A3:2009, 9.13.5, 9.13.6

Testing laboratory: TÜV Italia S.r.l.
Via Carducci, 125
20099 - Sesto San Giovanni (MI)

Test report date and number: 13/10/2011 TR DCI 005
11/02/2014 TR DCI 005/1

Result: The examined device, connected to a suitable identification and stopping device, mounted and used according to the Manufacturer's instructions, complies with the standard requirements.

This certificate is valid only if accompanied by the relevant annex



SGO N° 049A SSI N° 005G PRD N° 081B
SGAN N° 018D ITX N° 001L ISP N° 057E
SCR N° 009F PRSN° 077C LAB N° 0076

Membro degli Accordi di Mutuo Riconoscimento
EA, IAF e ILAC
Signatory of EA, IAF and ILAC Mutual Recognition
Agreements



Place, date:
Sesto San Giovanni, 11/02/2014

Alberto Corrà
Real Estate Business Line Manager
TUV Italia S.r.l.
Notified Body number 0948

This type examination certificate cancels and replaces the DCI 005 of 13/10/2011



Italia

Annex to the type examination certificate

No. DCI 005/1

1. Scope

| Series and model | Minimum working pressure | Maximum response time | Maximum working pressure | Nominal flow rate |
|----------------------|--------------------------|-----------------------|--------------------------|-------------------|
| | [bar] | [ms] | [bar] | [l/min] |
| HSV - 150; HM-SV 150 | 10 | 490 | 50 | 50 - 150 |
| HSV - 440; HM-SV 440 | 10 | 300 | 50 | 150 - 440 |

Table 1

| | |
|---|---------------------------------|
| Test speed: | coincides with inspection speed |
| Temperature limits: | 5 – 60 °C |
| Humidity limits: | 20 – 90 % |
| Viscosity limits of hydraulic oil: | 25 - 200 cSt |
| Maximum distance from the plane of the identification device: | 250 |

2. Conditions

- 2.1 Regarding the uncontrolled downward movement, a sample of each one of the two devices listed in Table 1 has undergone the tests defined in F.8 of EN 81-2: 1998 + A3: 2009 and, in compliance with the mentioned standard and the limits described in Table 1, it complies with points 9.13.5 (with the limits described in 2.2), 9.13.6 and 9.13.12 (first paragraph). The mentioned devices are applicable to direct (1:1) or indirect (2:1) hydraulic elevators with pressing piston. Since they do not maintain the cabin stationary during the normal operation, if they are mounted according to the Manufacturer's instructions, they do not require redundancy and/or monitoring.
- 2.2 Combination of the identification device and the stop element of the device: this type examination only covers a part of the requirements for the protection against the uncontrolled movement of the cabin required by EN 81-2: 1998 + A3: 2009, paragraph 9.13. The braking device described in Table 1 must be activated by a device identifying the uncontrolled movement of the cabin. This stopping device must have interfacing characteristics with the braking device and response times compatible with what is indicated by the Manufacturer in the instructions M-00-019 for the models HSV-150 and HSV-440, and M-00-031 for the models HM-SV 150 and HM-SV 440. In particular, it must comply with what is provided for in 9.13.7, 9.13.8, 9.13.9 (excluded the redundancy monitoring) of EN 81-2: 1998 + A3: 2009.
- 2.3 The installation of the device must be carried out by strictly respecting the instructions provided by the Manufacturer, with particular attention to the interfacing between the device itself and the identification and stopping device. The protection against the uncontrolled upward movement of the cabin must be transferred to a device being part of the complete system.
- 2.4 During the final inspection, the operation of the device against the uncontrolled movement of the cabin must be controlled by applying the procedures indicated in EN 81-2: 1998 + A3: 2009, appendix D, point zc. The correct interfacing between the device detecting the uncontrolled movement and the device stopping the movement must also be checked.



Annex to the type examination certificate

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3. Notes

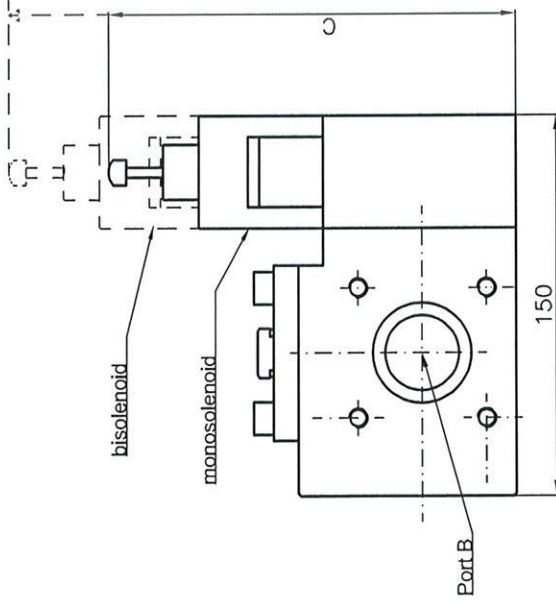
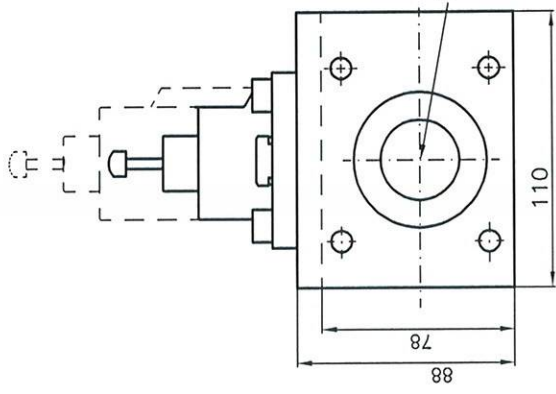
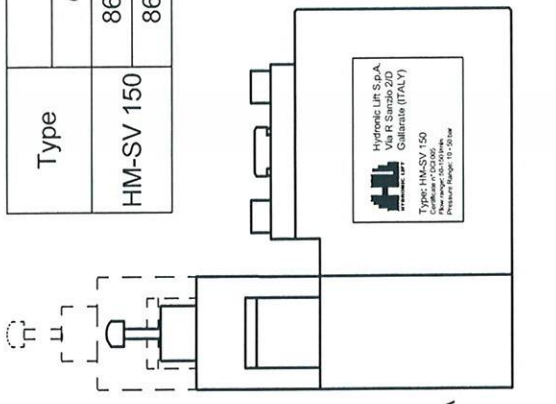
- 3.1 Any changes to the safety device compared to the device under the type examination must be promptly reported in writing to the Notified Body which has to decide if and which additional tests are needed.
- 3.2 The number assigned to the certificate cannot be used for products other than the one under examination.
- 3.3 In order to enable the identification of the product, to provide information on its functioning and on the whole project, and to show which parts have been tested, the overall drawings n. 2227-B and n. 2228-B are integrated in this Annex. The procedures of installation and interfacing with the device detecting the uncontrolled movement are described in a separate document, provided by the manufacturer of the device.
- 3.4 Even if the device is not specifically mentioned in the Annex IV of D/A 95/16/CE, a prerequisite for the validity of this certificate is that the requirements set out in the Lift Directive 95/16/CE, Annex XI (random control of production) for the marketing of safety components, are respected (doc. NB-L/POS 1/007 vs. 04 2010-10-22 page 5/6).

Sesto San Giovanni, 11/02/2014

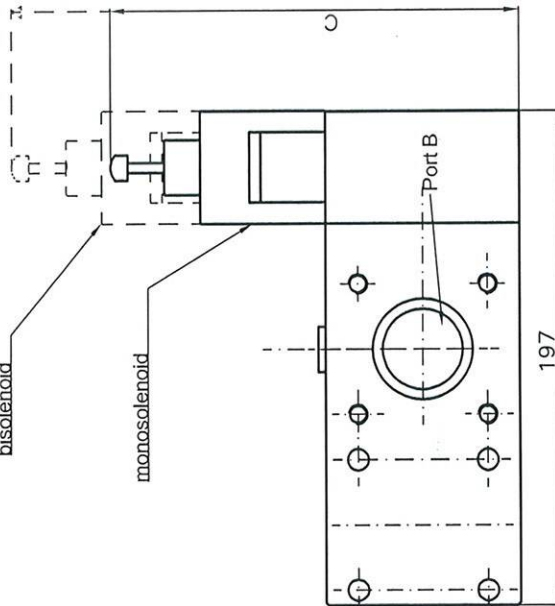
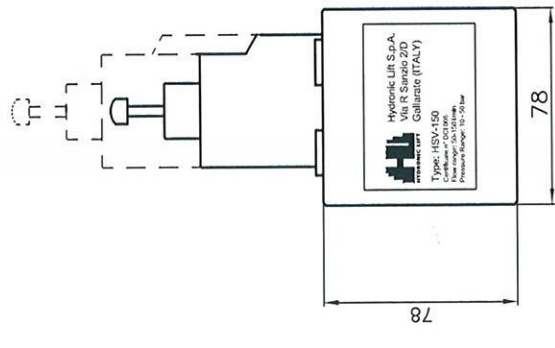
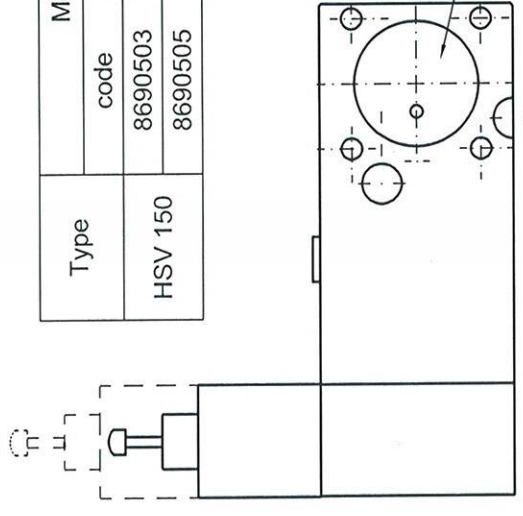


| | | |
|------------|--|------|
| Mod. 10 | 11 | 12 |
| 15/12/2011 | modifica dimensione corpo | S.B. |
| 20/12/2013 | Aggiunto nuovo corpo con diversa interfaccia mecc. | I.B. |

| Type | Model | | C |
|-----------|---------|--------------|--------|
| | code | Description | |
| HM-SV 150 | 8690507 | monosolenoid | 163 mm |
| | 8690509 | Bisolenoid | 203mm |

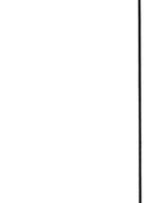


| Type | Model | | C |
|---------|---------|--------------|--------|
| | code | Description | |
| HSV 150 | 8690503 | monosolenoid | 163 mm |
| | 8690505 | Bisolenoid | 203mm |



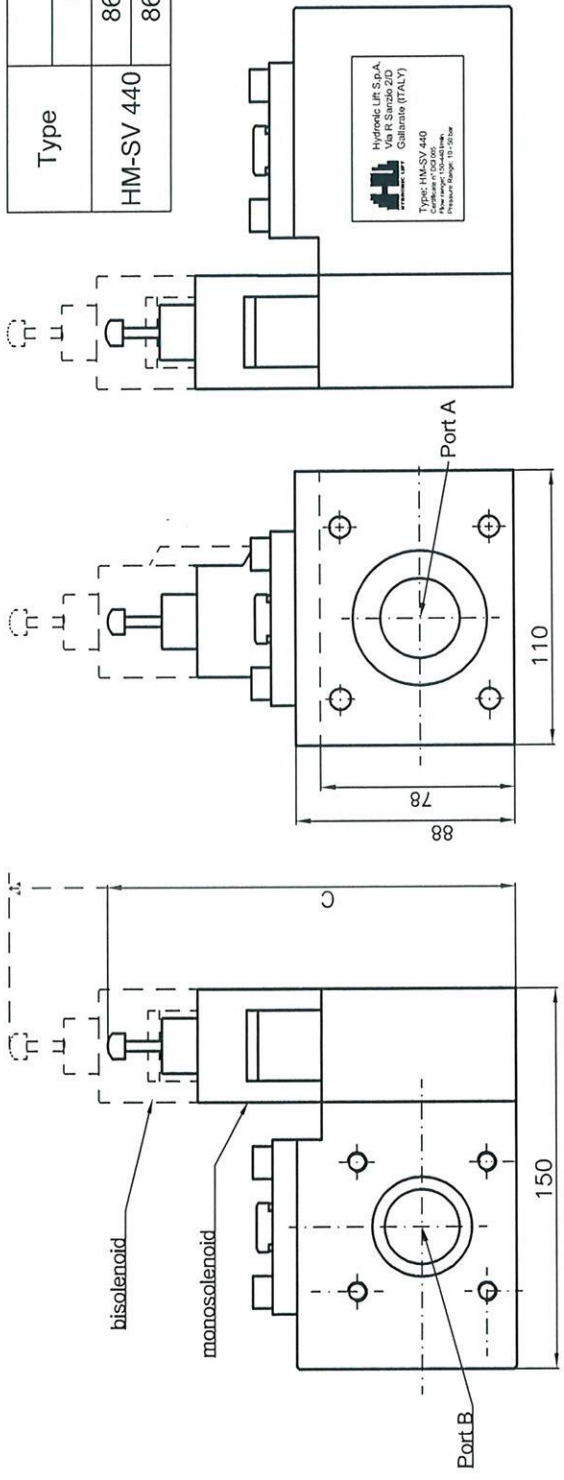
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| 15/10/2011 | | |
| Dimensioni generali HSV 150 | | |
| 2227 | | |

GENERAL TOLERANCE ISO 2768-MK
TOLERANZE GENERALI ISO 2768-MK

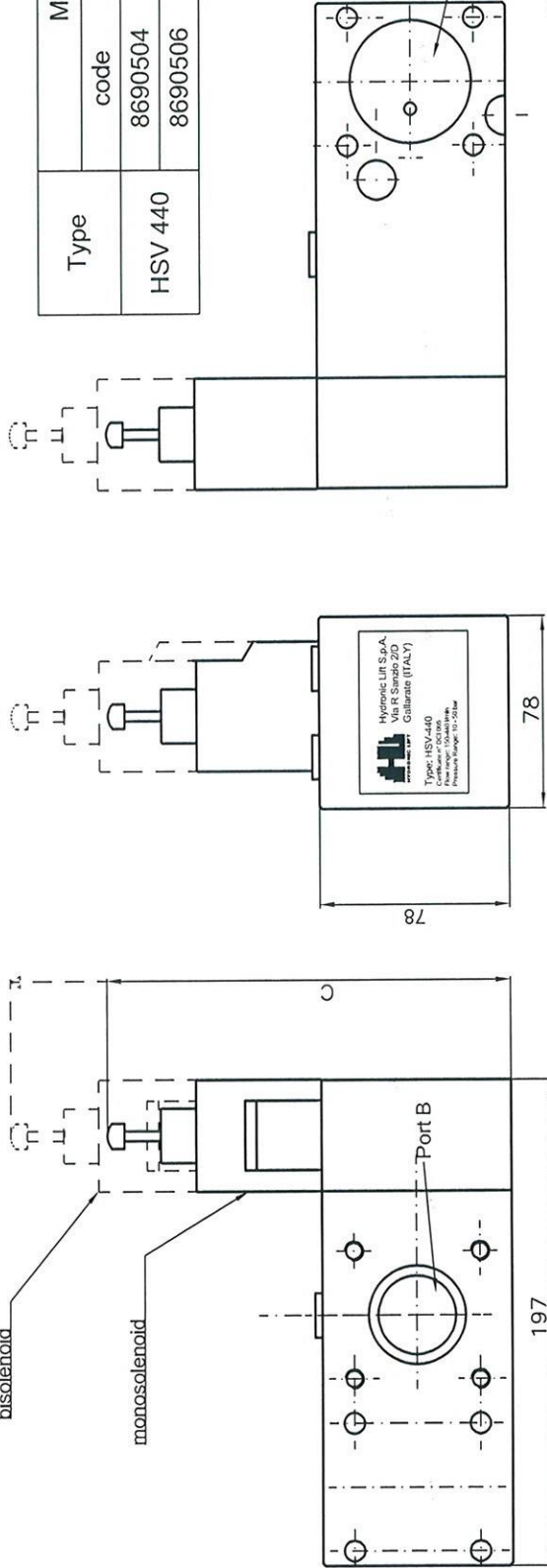


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| 12 | 11 | 10 | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <table border="1"> <tr> <td>Mod. 15/12/2011</td> <td>15/12/2011</td> <td>15/12/2011</td> <td>15/12/2011</td> <td>15/12/2011</td> <td>15/12/2011</td> <td>15/12/2011</td> <td>15/12/2011</td> <td>15/12/2011</td> <td>15/12/2011</td> <td>15/12/2011</td> <td>15/12/2011</td> </tr> <tr> <td>A</td> <td>B</td> <td>C</td> <td>D</td> <td>E</td> <td>F</td> <td>G</td> <td>H</td> <td>I</td> <td>J</td> <td>K</td> <td>L</td> </tr> <tr> <td colspan="12"> modifica dimensione corpo S.B.E. Aggiunta nuovo corpo con diversa interfaccia mecoz I.B. </td> </tr> </table> | | | | | | | | | | | | Mod. 15/12/2011 | 15/12/2011 | 15/12/2011 | 15/12/2011 | 15/12/2011 | 15/12/2011 | 15/12/2011 | 15/12/2011 | 15/12/2011 | 15/12/2011 | 15/12/2011 | 15/12/2011 | A | B | C | D | E | F | G | H | I | J | K | L | modifica dimensione corpo S.B.E. Aggiunta nuovo corpo con diversa interfaccia mecoz I.B. | | | | | | | | | | | |
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| A | B | C | D | E | F | G | H | I | J | K | L | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| modifica dimensione corpo S.B.E. Aggiunta nuovo corpo con diversa interfaccia mecoz I.B. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| Type | Model | | C |
|-----------|---------|--------------|--------|
| | code | Description | |
| HM-SV 440 | 8690508 | monosolenoid | 163 mm |
| | 8690510 | Bisolenoid | 203mm |



| Type | Model | | C |
|---------|---------|--------------|--------|
| | code | Description | |
| HSV 440 | 8690504 | monosolenoid | 163 mm |
| | 8690506 | Bisolenoid | 203mm |



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TOLLERANZE GENERALI ISO 2768-MK

Dimensioni generali HSV 150
2228

HYDRAULIC LIST

15/12/2011

Dimensioni generali HSV 150
2228