



EBRO Armaturen Gebr. Bröer GmbH

Office: Hamburg

Date: 19 October 2018

This Certificate is issued to the above client to certify that a surveyor to Lloyd's Register did, at their request, attend the undermentioned manufacturer for the purpose of inspecting and witnessing tests on the product listed below.

FLAME – RESISTANCE TEST CERTIFICATE
Butterfly Valve HP111/HP111-E, HP112, HP114/HP114-E/HP114-C/HP114-K3
Seat Inconel
DN 50 (2") and below to DN 200 (8") and above

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|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Test requirements: | DIN EN ISO 10497:2010 API 607, 7 th edition |
| Tested sizes of butterfly valve: | 1.) HP111 DN 50 class150 2.) HP111 DN 125 class150 3.) HP111 DN 125 class150 – Body 1.4408 4.) HP111 DN 200 class150 |
| Body material: | 1.0619 and 1.4408 |
| Seat material: | Inconel |
| Drawing nos.: | to 1.) DPH-050-0068-00, rev. 0, dated 18.09.2018 to 2. and 3.) DPH-125-0109-00, rev. 0, dated 20.09.2018 to 4.) DPH-200-0348-00, rev. 0, dated 20.09.2018 |
| Part list nos.: | to 1.) 6008581 to 2.) 6112074 to 3.) 6008592 to 4.) 4090022 |
| Qualified Sizes: | DN 50 (2") and below to DN 200 (8") and above |
| Qualified Pressure Ratings: | Class150, Class 300 PN10, PN16, PN25, PN40 |
| Test procedure and results: | as per test reports IBB-2088, IBB-2096, IBB-2098 and IBB-2100 dated 16.10.2018 and 17.10.2018 |

The following examinations were carried out with satisfactory results in accordance with the above specification:

- Reviewed test specification and accepted test facilities.
- Verified selected butterfly valve against drawing and visual inspection to compliance to above stated type.
- Checked calibration status of used test gauges.
- Witnessed of flame-resistance tests, results: OK.
- Reviewed and endorsed documentation.

For further details please refer to attached documentation.



M. Di Blasi
Surveyor to Lloyd's Register EMEA

a member of the Lloyd's Register group.

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