

# Inspection Certificate



Certificate No **968/INS 913.00/25**

Client / Certificate Owner Crane Instrumentation & Sampling PFT Corp. dba HOKE, Inc.  
405 Centura Ct.  
Spartanburg, SC 29303  
USA

Product Poppet Check Valve

Type designation Hoke CVH  
1/4", 3/8", 1/2", 3/4", 1"

Standards applied for inspection IEC 61508 parts 1-2:2010 EN 17955:2024 (non accred.)

Inspection Results The function of the check valves is to shut-off the valve and block the reverse flow of the fluid. Neither an external force nor an actuator is required to perform this function.

The check valves can be used in safety-related systems in low demand mode with a systematic capability of SC 3 as part of a final element / actuator assembly.

The instructions of the associated Installation, Operating and Safety Manual shall be considered.

Summary of test results see back side of this certificate

Inspection Period 2025-01-01 - 2025-04-01

Cologne, 2025-04-11

TÜV Rheinland Industrie Service GmbH  
Am Grauen Stein,  
51105 Cologne - Germany

Dipl.-Ing. (FH) Wolf Rückwart

**TÜV Rheinland Industrie Service GmbH**  
Bereich Automation  
Funktionale Sicherheit  
Am Grauen Stein, 51105 Köln

Inspection Body of TÜV Rheinland Industrie Service GmbH, Automation - Functional Safety, [www.tuvasi.com](http://www.tuvasi.com)  
The issue of this inspection certificate is based upon an inspection in accordance with the Inspection Program INS FSP1 V3.0:2023 in its actual version, whose results are documented in Report No. 968/INS 913.00/25 dated 2025-04-01. Issued by the inspection body accredited by DAkkS according to DIN EN ISO/IEC 17020. The accreditation is only valid for the scope listed in the annex to the accreditation certificate D-IS-11052-04-03.

**Holder:** Crane Instrumentation & Sampling PFT Corp. dba  
 HOKE, Inc.  
 405 Centura Ct.  
 Spartanburg, SC 29303  
 United States of America

**Product tested:** Poppet Check Valve  
 Type: Hoke CVH

### Results of Assessment

Route of Assessment	$2_H / 1_S$
Type of Sub-system	Type A
Mode of Operation	Low Demand Mode
Hardware Fault Tolerance	HFT = 0
Systematic Capability	<b>SC 3</b>

### Close on Demand and External Tightness

Dangerous Failure Rate	$\lambda_D$	1.01 E-07 / h	<b>101 FIT</b>
------------------------	-------------	---------------	----------------

### Close on Demand and Blocking of Reverse Flow of the Media

Dangerous Failure Rate	$\lambda_D$	1.33 E-07 / h	<b>133 FIT</b>
------------------------	-------------	---------------	----------------

### Blocking of Reverse Flow of the media

Dangerous Failure Rate	$\lambda_D$	1.26 E-07 / h	<b>126 FIT</b>
------------------------	-------------	---------------	----------------

### Origin of failure rates

The stated failure rates for low demand are the result of an FMEDA with tailored failure rates for the design and manufacturing process. Furthermore the results have been verified by field-feedback data. Failure rates include failures that occur at a random point in time and are due to degradation mechanisms such as ageing. The stated failure rates do not release the end-user from collecting and evaluating application-specific reliability data.

### Periodic Tests and Maintenance

The given values require periodic tests and maintenance as described in the Safety Manual. The operator is responsible for the consideration of specific external conditions (e.g. ensuring of required quality of media, max. temperature, time of impact), and adequate test cycles.