

TYPE EXAMINATION CERTIFICATE



- [1]
- [2] **Equipment or Protective System intended for use
in Potentially Explosive Atmospheres
Directive 94/9/EC**
- [3] Type Examination Certificate Number: **DEMKO 13 ATEX 1206U Rev. 1**
- [4] Component: **Flowserve Bearing Gard**
- [5] Manufacturer: **Flowserve**
- [6] Address: **2100 Factory Street, Kalamazoo, MI 49001 USA**
- [7] This Component and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.
- [8] UL International Demko A/S certifies that this equipment has been found to comply with the Essential Health and Safety Requirements that relate to the design of **Category 2** equipment, which is intended for use in potentially explosive atmospheres. These Essential Health and Safety Requirements are given in Annex II to the European Union Directive 94/9/EC of 23 March 1994.
- The examination and test results are recorded in confidential report number **1761962.333751**
- [9] Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule of this certificate, has been assessed by reference to Standards:
- EN 13463-1:2009** **EN 13463-5:2011**
- [10] The sign "U" placed after the certificate number indicates that this certificate must not be mistaken for a certificate intended for an equipment or protective system. This partial certification may be used as a basis for certification of an equipment or protective.
- [11] This Type examination certificate relates only to the design of the specified component, and not to specific items of equipment subsequently manufactured.
- [12] The marking of the equipment or protective system shall include the following:

II 2 GD c

I M2 c

Certification Manager
Jan-Erik Storgaard

This is to certify that the sample(s) of the Equipment described herein ("Certified Equipment") has been investigated and found in compliance with the Standard(s) indicated on this Certificate, in accordance with the ATEX Equipment Certification Program Requirements. This certificate and test results obtained apply only to the equipment sample(s) submitted by the Manufacturer. UL did not select the sample(s) or determine whether the sample(s) provided were representative of other manufactured equipment. UL has not established Follow-Up Service or other surveillance of the equipment. The Manufacturer are solely and fully responsible for conformity of all equipment to all applicable Standards, specifications, requirements or Directives. The test results may not be used, in whole or in part, in any other document without UL's prior written approval.

Date of issue: 2014-03-06

Re-issued: 2014-08-04

Certification Body

UL International Demko A/S, Borupvang 5A, 2750 Ballerup, Denmark
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Schedule
TYPE EXAMINATION CERTIFICATE No.
DEMKO 13 ATEX 1206U Rev. 1
Report: 1761962.333751

[15]

Description of Component:

The Bearing Gard is a permanent, non-wearing bearing protection device used to replace lip seals and simple labyrinth seals in bearing housings for pumps, motors, gearboxes and other pieces of rotating equipment. Its main purpose is to retain lubrication in the bearing housing and prevent the ingress of contamination as this can lead to premature failure of the lubrication and bearings. The Flowserve Bearing Gard consists of a rotor, stator and O-rings. The rotor and stator are made out of bronze and the O-rings are made out of a fluoroelastomer. The rotor is to be installed on the shaft of the equipment and held in place by an O-ring. The stator is press fit in the equipment housing. The rotor and stator are constructed to maintain a clearance between the moving parts.

Temperature range

The rated service temperature range is -18 °C to +180 °C.

Installation instructions

See drawing no. FIS225

Mounting instructions

Refer to "Instructions".

Routine tests

None required

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Descriptive Documents

Project Report No.: 1761962.333751(Hazardous Location Testing)

Documents:

Description:	Document No.:	Rev. Level:	Date:
Bearing Gard	D0196147	-	2014-01-21
Installation Operation and Maintenance Instructions	FIS225	-	N/A

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Schedule of limitations:

- The Bearing Gard shall be protected from mechanical impact in service by location or suitable guarding.
- The Bearing Gard stator and rotor have clearances between them and are not electrically bonded together. The effects of circulating currents between them, in particular the shaft potential with respect to ground shall be considered when the Bearing Gard is installed to motors.
- Temperature Test must be conducted on end product to establish the maximum surface temperature with the limitation given in EN 13463-1:2009. In addition the testing should ensure that the O-ring temperature does not exceed 180°C at the maximum ambient temperature range.

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Essential Health and Safety Requirements

Concerning ESRs this Schedule verifies compliance with the Annex III of ATEX directive only. By placing the product on the market, the manufacturer declares compliance with other relevant Directives, and all other safety related requirements including those of Annex II of this Directive.

Additional information

The Flowserve Bearing Isolator has in addition passed the tests for Ingress Protection to IP 66 in accordance with EN 60529:1991+A1:2000 and EN 60034-5: 2001/A1: 2007 respectively.

The manufacturer shall inform the notified body concerning all modifications to the technical documentation as described in ANNEX III to Directive 94/9/EC of the European Parliament and the Council of 23 March 1994.

