



## Type Approval Certificate Extension

This is to certify that Certificate No. 10/60003 for the undernoted products is extended and renumbered as shown.

This certificate is issued to:

<b>PRODUCER</b>	Swagelok Company 29500 Solon Road Solon, Ohio 44139 United States of America ( USA)
<b>PLACE OF PRODUCTION</b>	Swagelok Company 29500 Ambina Drive Solon, OH 44139 United States of America ( USA)
<b>DESCRIPTION</b>	Process Interface Valves
<b>TYPE</b>	VB03 and VB04
<b>SIZE</b>	VB03 - 1, 1 $\frac{1}{2}$ and 2 inches ( 25, 38 and 50 mm) VB04 - $\frac{3}{8}$ , $\frac{1}{2}$ , and $\frac{3}{4}$ inches (9.5, 14 and 20 mm)
<b>APPLICATION</b>	Process Instrumentation and piping products to enable smooth transition from process piping to instrumentation
<b>DESIGN CODE</b>	LR Rules and Regulations for the Classification of Naval Ships LR Rules and Regulations for the Classification of Ships LR Rules and Regulations for the Classification of Offshore Units  ASME B 31.3

<b>Certificate No.</b>	15/60004
<b>Issue Date</b>	6 April 2015
<b>Expiry Date</b>	5 April 2020
<b>Sheet</b>	1 of 3

Gopal Nair  
Lloyd's Register North America Inc.

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1330 Enclave Parkway, Suite 200, Houston, Texas, 77077*

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## Ratings

ASME B 16.5 Flange rating - Class 150, 300, 600, 900, 1500 and 2500

Temperature -58 to 400 °F (-50 to 204 °C) for Stainless steel and duplex valve assemblies

Temperature -50 to 400 °F (-46 to 204 °C) for carbon steel valve assemblies

## OTHER CONDITIONS

1. VB03 and VB04 valves are intended to enable smooth transition from process piping to instrumentation and applications are limited to such process instrumentation, tapping, block and bleed, sampling etc.
2. Where intended for any other applications consult the local Lloyd's Register design support or plan verification offices with product literature information.
3. Valve ratings will be governed by material class of flange rating as per ASME B 16.5
4. Where fire tested valves are required for process, the seats are to be made out of Peek with body material combination of ASTM 182 F316/F316L or ASTM 350 LF2 or ASTM F182 F51 as stated in the product literature.
5. Where end fittings employ compression fittings they are to be in accordance with Lloyd's Register type approved certificate 01/00062 or extension of the referenced certificate.

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<b>Sheet</b>	2 of 3

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*"This Certificate is not valid for equipment, the design, ratings or operating parameters of which have been varied from the specimen tested. The manufacturer should notify Lloyd's Register North America Inc. of any modification or changes to the equipment in order to obtain a valid certificate."*

*The attached Design Appraisal Document No.15/60004 and its supplementary Type Approval Terms and Conditions form part of this Certificate*

**Supplementary Type Approval Terms and Conditions**

*Type Approval certifies that a representative sample of the product(s) referred to herein have been found to meet the applicable design criteria for the use specified herein. It does not mean or imply approval for any other use, nor approval of any product(s) designed or manufactured otherwise than in strict conformity with the said representative sample.*

*Type Approval is based on the understanding that the manufacturer's recommendations and instructions and any relevant requirements of the Rules and Regulations are complied with. Type Approval does not eliminate the need for normal inspection and survey procedures required by the Rules and Regulations.*

*Lloyd's Register North America, Inc. reserves the right to cancel or withdraw this Type Approval Certificate in accordance with the Lloyd's Register Type Approval System Procedure.*

Certificate No.	15/60004
Issue Date	6 April 2015
Expiry Date	5 April 2020
Sheet	3 of 3

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Page 1 of 1
Document number 15/60004
Issue number 0

DESIGN APPRAISAL DOCUMENT

Date 26 March 2015	Please quote the document number on all future communications. 15/60004
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**LLOYD'S REGISTER TYPE APPROVAL SYSTEM, 2014**

**Issued to:** Swagelok Company

**For:** Process Interface Valves

**Types:** VB03 and VB04

**TYPE APPROVAL CERTIFICATE No. 15/60004**

The undernoted documents have been reviewed for compliance with the requirements of the Lloyd's Register Type Approval System, 2014 and this Design Appraisal Document forms part of the Certificate.

APPROVAL DOCUMENTATION

Process Interface valve Product Catalogue February 2013  
BSI Quality Management System Certificate of Registration ISO 9001- 2008  
Swagelok Company SQS Quality System Manual DCN#12-031190 Revisions K

Also all the documentation listed on Design Appraisal Documents associated with Type Approval Certificate No. 10/60003(E1).

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**Part 1A**  
**Subject: Valves**  
**Product: Pipe Fittings (Part 1A)**

Producer/Licence No.	Description of Product				Cert. No.
	Type	Details of Approval	Application	Remarks	
Swagelok Company 29500 Solon Road Solon, Ohio 44139 United States of America (USA)  Place of Production  Swagelok Company 29500 Ambina Drive Solon, OH 44139 United States of America (USA)	Process Interface Valves  VB03 and VB04	VB03 - 1, 1½ and 2 inches ( 25, 38 and 50 mm)  VB04 - ¾, 1½, and ¾ inches (9.5, 14 and 20 mm)  ASME B 16.5 Flange rating - Class 150, 300, 600, 900, 1500 & 2500  Temperature -58 to 400 °F (-50 to 204 °C)for SS and duplex valve assemblies  Temperature -50 to 400 °F (-46 to 204 °C)for carbon steel valve assemblies	Process Instrumentation and piping products to enable smooth transition from process piping to instrumentation  Refer to Certificate 10/60003(E1) for limitations.	Expires: 5 April 2020	15/60004