



Alfa Laval LKH UltraPure Service Kit

Equipment documentation

Doc. ID No.: 9614-0616-01, Alfa Laval Q-doc LKH UltraPure Service Kit 1, Page 1 of 4
Revision: 6

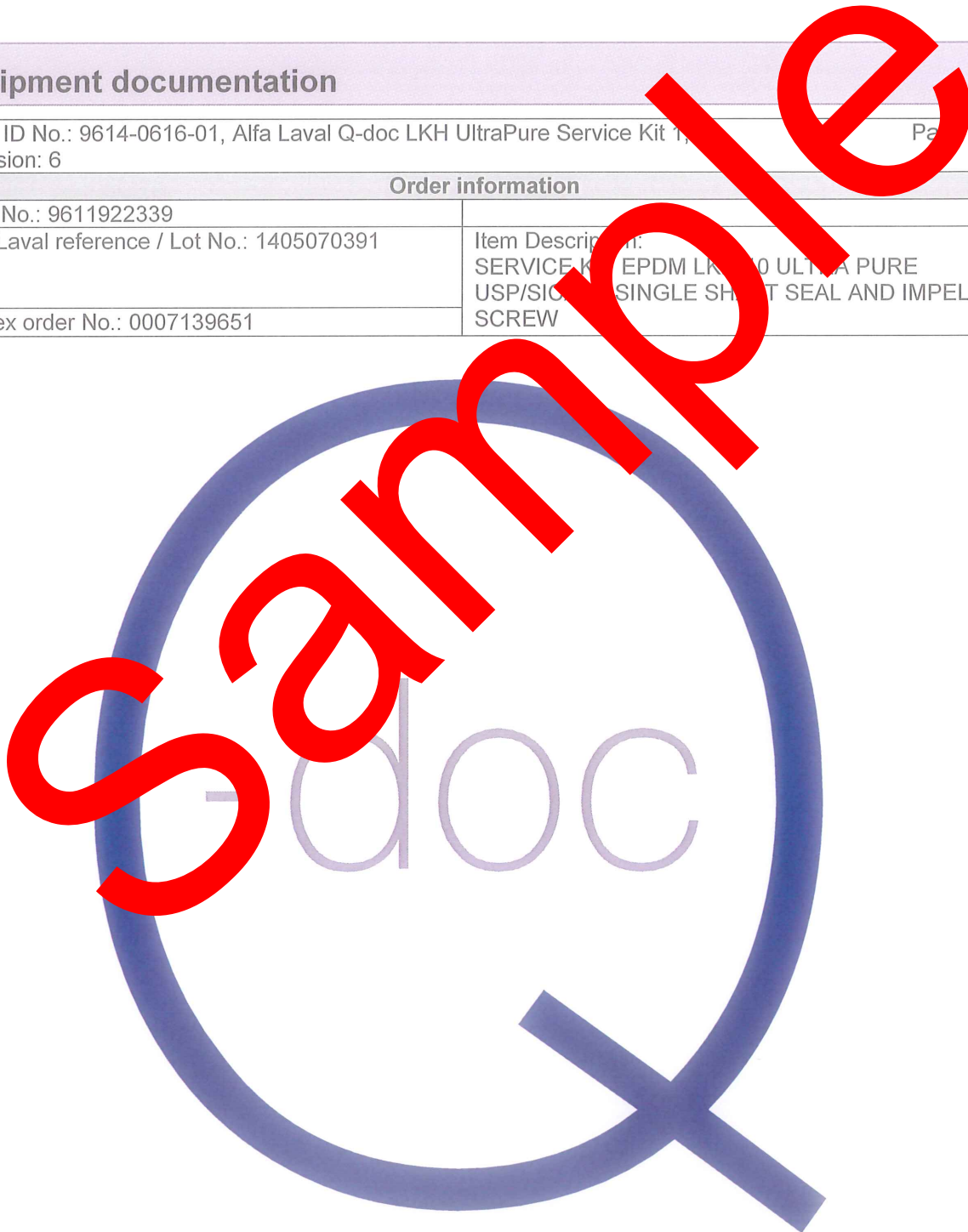
Order information

Item No.: 9611922339

Alfa Laval reference / Lot No.: 1405070391

Item Description:
SERVICE KIT EPDM LKH 40 ULTRA PURE
USP/SIC SINGLE SHIM SEAL AND IMPELLER
SCREW

Movex order No.: 0007139651





Equipment Documentation

LKH UltraPure Service Kit

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Declaration of Compliance

Supplier

Alfa Laval Kolding A/S
Albuen 31, DK-6000 Kolding, Denmark
Phone: +45 7932 2200
E-mail: info@alfalaval.com

Traceability

We as supplier hereby guarantee and certify that the materials and/or parts of the above mentioned equipment(s) have been manufactured in accordance to and comply with the Regulation (EC) No. 1831/2004 of the European Parliament and of the Council of 27 October 2004 on "materials and articles intended to come into contact with food" regarding traceability.

Compliance to EN 10204 type 3.1 (MTR) *

We as supplier hereby guarantee and certify that our steel parts, stated in the Product wetted steel parts table in this document, complies with the European Standard EN 10204 of October 2004, Inspection certificate 3.1.

Compliance to the U.S. Food & Drug Administration CFR 21 § 177.2600

We as supplier hereby guarantee and certify that our compound(s), stated in the Product wetted elastomer parts table in this document, complies with the U.S. Food & Drug Administration (FDA) Code of Federal Regulations, Title 21, part 177.2600. FDA Declarations from our suppliers can be forwarded upon request.

Compliance to the U.S. Food & Drug Administration CFR 21 § 177.2600

We as supplier hereby guarantee and certify that our Silicon Carbide seal face compound(s), stated in the product wetted elastomer parts table in this document, are accepted by U.S. Food & Drug Administration (FDA) Code of Federal Regulations to be used in contact with food and are in compliance with the FDA Code of Federal Regulations 21 Part 21.101(a) – Equipment construction.

Compliance to the United States Pharmacopoeia (USP)**

We as supplier hereby guarantee and certify that our compound, stated in the compound table below, has been tested and certified by an independent laboratory to be in compliance with the criteria of the U.S. Pharmacopoeia, Class VI chapter 6 and 85 with extraction temperature of 121°C (version 22 or higher). Test results can be forwarded upon request.

TSE (Transmissible Spongiform Encephalopathy) Declaration

We as supplier hereby declare under our sole responsibility, that the above stated equipment has never been in contact with any compound derived from animal sources. Consequently this equipment does not contain Specific Risk Materials (SRM's) associated with risk of TSE. TSE Declaration from our suppliers can be forwarded upon request.

Surface finish Declaration

In accordance with Alfa Laval quality procedures we as supplier hereby declare that the equipment wetted surfaces finish have a surface finish characteristics $\leq Ra 0,4 \mu m$ in accordance with the specification of the equipment.

* 3.1 certificates (MTR's) are attached to this document

** EPDM only

Equipment Documentation

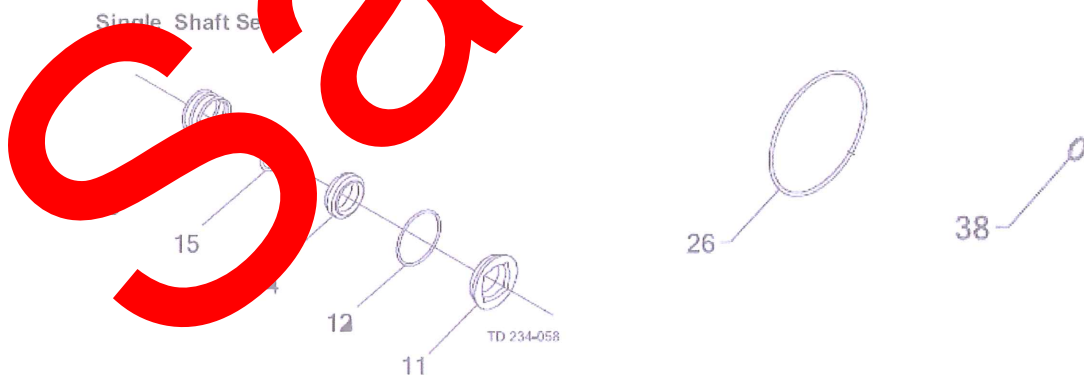
LKH UltraPure Service Kit

Doc. ID No.: 9614-0616-01, Alfa Laval Q-doc LKH UltraPure Service Kit 1, Revision: 5

Order information	
Item No.: 9611922339	Item Description: SERVICE KIT EPDM LKH-10 ULTRA PURE USP/SIC/SIC SINGLE SHAFT SEAL AND IMPELLER SCREW
Alfa Laval reference / Lot No.: 1405070391	
Movex order No.: 0007139651	

Product wetted Service Kit parts, Compound ID tracking

Parts	Pos no.	Material	Heat no. /Compound ID	Lot no.
Stat. seal ring	11	-	290290	140425017
	11.1	1.4462 (329)	258959	140425017
	11.2	SIC	R37-1	1404250170
O-ring Static seal ring ø58	12	EPDM	R47-1	1404250170
External spring	13	1.4310 (AISI 302)	Not product wetted	1404250170
Rot. seal ring	14	-	1312	1404250170
	14.1	SIC	R37-1	1404250170
O-ring for rot. seal ring ø31	15	EPDM	R47-1	1404250170
Casing O-ring ø196	26	EPDM	EPDM - 68065	1403060009
Impeller screw O-ring ø31	38	EPDM	70 EPDM 291	1402270333



Responsibilities (for internal use only)	
The responsible person from each department who has performed test or entered data to this document must approve and sign. By signing this document the responsible person hereby declares that the instructions are followed and the requirements are in the appropriate SOP's of this document.	
Planning / date + initials	Signature
2014-05-13 / CFN	



Equipment Documentation LKH UltraPure Service Kit

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Declaration of compliance to Alfa Laval internal quality system

We as supplier hereby declares, under our sole responsibility, that the above stated unique equipment is manufactured, tested and inspected under controlled conditions established by our ISO 9001:2008 Quality System, and complies to the above selected documents and procedures.

Kolding, Denmark, 13 May 2014

A handwritten signature in black ink, appearing to read "Annie Dahl".

Annie Dahl, Quality Manager, Alfa Laval

Sample

131289

10-1109/6

Roplan AB
 Skyttbrinksvägen 20
 SE-147 39 Tumba
 SWEDEN

Tel: +46-8-449 99 00

www.roplan.com
info@roplan.com



DECLARATION OF COMPLIANCE

Total No of pages: 8
 No of attachment pages: 4

Customer: Alfa Laval Kolding A/S
 Manufacturing Centre
 Albuen 31
 6000 Kolding
 Denmark

Alfa Laval Kolding A/S Part No: 9612604605
 Roplan Part No: 131274
 Description: LKH Ø31,75 mm Ultra Pure Single Seal
 SiC/EPDM Ra 0,8

Alfa Laval Kolding A/S PO No: 529261
 Alfa Laval Kolding A/S PO Line: 1
 Quantity: 12

Cert incl.

Static Holder (1.4462) Heat No: 58959

	Compound ID	Batch No
Static Face Insulator (SiC)	R37-1	1307447
Static Urethane	N/A	290290
Rotary Face (SiC)	R37-1	1312927
Rotary Face Ring (EPDM)	R47-1	j000291360_0
Static Face O-ring (EPDM)	R47-1	j000293395_0

This certificate and the related material certificates should be sent as per Alfa Laval Supplier Pharma Manual via e-mail to certificates.kolding@alfalaval.com. This documentation should be stored with the order documentation.

Detta certifikat samt tillhörande materialcertifikat skall även skickas i enlighet med Alfa Laval Supplier Pharma Manual per e-mail till certificates.kolding@alfalaval.com. Denna dokumentation sparas tillsammans med orderunderlag.

131289

10-1109/6

Roplan AB hereby guarantee and certify:

- The materials and/or parts of the above specified product have been manufactured, tested and inspected under controlled conditions established by our quality system and conforms to the specifications of the purchase order and the Alfa Laval Supplier Pharma Manual.
- The materials and/or parts of the above specified product are traceable back to the original test certificate and the initial heat or compound.
- Under the intended conditions of use, the wetted materials of the above specified products are non-reactive, non-additive and non-absorptive and, hence, satisfies the requirements of the United States Code of Federal Regulations 21 Part 211.65(a) – Equipment construction¹.
- The wetted materials and/or parts of the above specified product have been manufactured in accordance to and comply with the regulation (EC) No 1935/2004 of the European Parliament and of the Council of October 27th 2004 on “Materials and articles intended to come into contact with food” regarding traceability.
- The wetted metal surface on the above specified product have a surface finish characteristic in accordance with the specification on the Alfa Laval Kolding A/S order.
- Wetted parts of the product specified above do not contain and are not derived from materials of animal origin. Furthermore, no products of animal origin have been used in the manufacturing of the wetted parts of the above product.
- The materials of the product do not contain Melamine or Mercury.
- The regulatory status of material grade R37-1 as a food contact material has been properly assessed in accordance with the United States code of Federal Regulation title 21¹.
- Material grade R37-1 meets the requirements of the United States Pharmacopeia chapter <87> (Edition 22 or higher). The test report which proves the above was performed by Geneva Laboratories and recognized by test identification JN11E0710.
- Material grade R47-1 has been evaluated according to the test procedures contained in the USP standard chapter 88 (version 22 or higher). Extraction test was performed at 121°C. The test report which proves the above was performed by Toxikon Corporation and recognized by project number 08-1020-N1.
- Material grade R47-1 has been evaluated according to the test procedures contained in the USP standard chapter 87 (version 22 or higher). The test report which proves the above was performed by Toxikon Europe N.V. and recognized by project number TR0795.
- Material grade R47-1 complies with the U.S. Food & Drug Administration (FDA) Code of Federal Regulations for rubber and rubber-like materials under title 21. Paragraph 177.2600.
- Material grade R47-1 has been evaluated according to the test procedures contained in the 3-A Sanitary Standards for Multiple Use Rubber-like Materials used as product contact surfaces in dairy equipment, number 18-03. The compound is covered by the scope and applicable definitions in these standards. According to the results R47-1 is compatible with rubber class II for products containing 8% fat or less. The test report that proves the above was performed by Rapra Technology and recognized by project number GL0106/3FR.

¹ It is the user's responsibility to ensure the suitability of process contact materials for the application.

Signature:

Annika Slegth
Quality Inspection

Date: 2014-04-17

YYYY-MM-DD

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Detta certifikat samt tillhörande materialcertifikat skall även skickas i enlighet med Alfa Laval Supplier Pharma Manual per e-mail till certificates.kolding@alfalaval.com. Denna dokumentation sparas tillsammans med orderunderlag.

Acciaierie Valbruna S.p.A.



QUALITY MANAGEMENT SYSTEM
CERTIFIED BY LLOYD'S REGISTER

CERTIFICATO DI COLLAUDO ABNAHMEPRUEFZEUGNIS INSPECTION CERTIFICATE CERTIFICAT DE RECEPTION EN 10204 (2004) , 3.1

36100 VICENZA (Italia) - Viale della scienza, 25 z.i.
Stab.: 39100 BOLZANO (Italia) - Via A. Volta, 4

Cliente / Besteller/Purchaser/Client
VALBRUNA NORDIC AB
LOVARTSGATAN 7
65221-KARLSTAD - SWEDEN-SE

Produttore: ACCIAIERIE VALBRUNA S.P.A.
Hersteller/Item/Usine productrice

Avviso di Spedizione: D-VI13008312
Lieferanzelge/Packing list/BL.

Ordine nr: R21341
Bestell/Your order/Commande

Certificato nr: MEST320370/2013/
Prüfung/Test/Essal

Conferma ordine nr: E112005686
Werks/Our Order/Ref nr.

Marchio di Fabbrica:
Zeichen des Lieferwerkes
Trade mark
Sigle de l'usine productrice



Stato di fornitura: - Annealed Peeled
Lieferzustand/Delivery state/Etat de livraison

Tipo di Elaborazione: E+AOD
Erschmelzungsart/Melting process/Mode d'elaboration

Punzone del Collaudatore:
Stempel des Werksachverständigen
Inspector's stamp/Poinçon de l'assesseur

Specifiche:
Anforderungen / Requirements / Exigences

MS-RB-4462 6 1.4462 A
ASTM A182 2011A S32205 A (2)
ASTM A479 2011 S31803 A
EN 10272 2007 1.4462 A

MDS D47 3 S31803/S32205 A (0)
ASTM A276 2010 S31803 A
ASTM A479 2011 S32205 A
NACE MR0175 2009 S31803 A (3)

ASTM A182 2011 S31803 A
ASTM A276 2010 S32205 A
ASTM G48 2011

- (0) In accordance with M-650 rev.3
- (2) For products machined directly from bar refer to ASTM A479.
- (3) Technical circular 1:2011 Published 2011-06-14

- (1) For products machined directly from bar refer to ASTM A479.
- (3) ANSI/NACE MR0175/ISO 15156 second edition 2009-10-15

Qualità: 1.4462/S31803/S32205
Werkstoff/Grade/Nuance

Pos. nr. Item nr. Nr. de poste	Oggetto Gegenstand Product description Descrip. du produit	Dimensioni - mm Abmessungen Dimension Dimension	Lunghezza - mm Länge Length Longueur	Colata Schmelze Heat Coulée	Pezzi Stückzahl Pieces Pièces	Peso - KG Gewicht Weight Poids	Lotto nr. Losnr. Lot nr. Lot nr.
0020	Round	65,000	650	77		1620,0	218601840

TEST ALLO STATO DI FORNITURA / Test on delivery condition / Prüfung auf Lieferbereitschaft / a l'état de fourniture / a sobre entrega / a l'estat com entregado

TEST	Provetta/Probetalb Specimen/Éprouvette Larg. diam. Spess. Breite Diam. Dicke Width Diam. Thickness Larg. diam. épais mm	Posiz. Saggio Probenlage Location Empplacement °C	Snervamento Streckgrenze Yield Stress Limite élastique Rp 0,2% N/mm2	Snervamento Streckgrenze Yield Stress Limite élastique	Resistenza Zugfestigkeit Tensile strength Résistance à traction Rm N/mm2	Allungamento Bruchdehnung Elongation Élongement A5 % E 4d %	Strizione Einschnürung Reduction of area Striction Z % RA %	Resilienza Kerbschlagarbeit Impact Value Resilience KV J	Durezza Härte Hardness Dureté HB
	Valori richiesti 1 Anforderungen/Required values Valeurs demandées	min max	485	-	775	25 25	- 45	100	- 270
A	10	20 L	500	-	775	38 41	77 77	267 260 255	243

TEST	min	max
A HRC	28,0	24,2
TEST	min	max
A Delt A We A rrite A loss	35	55 5,00 0,06 g/m2

TEST	Provetta/Probetalb Specimen/Éprouvette Larg. diam. Spess. Breite Diam. Dicke Width Diam. Thickness Larg. diam. épais mm	Posiz. Saggio Probenlage Location Empplacement °C	Resilienza Kerbschlagarbeit Impact Value Resilience KV J	Espansione laterale Lateral Expansion	Shear Shear
	Valori richiesti 1 Anforderungen/Required values Valeurs demandées	min max	45	45	45
B	10X10	-46 L	227	220	212

1)L=longitudinale/längs, T=trasversale/quer, Q=Tangenziale/tangentiel

Ferrite content tested according to ASTM E562.

Vicenza, 13/03/13 VCQ008 (Mod. MCE2)	Il collaudatore di stabilimento / der Werkssachverständige / Works inspector / L'agent d'usine M. Rizzotto	Pagina - 1 di 2
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Acciaierie Valbruna S.p.A.



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Lieferanzeige/Packing list/V.L.

Ordine nr: R21341
Bestell/Your order/Commande

Certificato nr: MEST320370/2013/
Prüfung/Tes/Essai

Conferma ordine nr: E112005686
Werks/Our Order/Ref nr.

Marchio di Fabbrica:
Zeichen des Lieferwerkes
Trade mark
Sigla de l' usine productrice



Punzone del Collaudatore:
Stempel des Werksachverständigen
Inspector's stamp/Pointon de l' assayeur



Stato di fornitura: - Annealed Peeled
Lieferzustand/Delivery state/Etat de livraison

Tipo di Elaborazione: E+AOD
Erschmelzungsart/Melting process/Mode d' elaboration

Analisi chimica

Chemische Zusammensetzung/Chemical Analysis/Analyse chimique

Colata /Heat Schmelze/Coulée	min 31,0 max 38,0	- 0,030	- 1,00	- 2,00	22,00 23,00	3,00 3,50	-	4,50 6,50	-	- 0,0	0,015 0	-	-	-	-
258959	PRE	C %	Si %	Mn %	Cr %	Mo %	Cu %	Ni %	W %	P %	S %				
	35,4	0,020	0,42	1,53	22,27	3,11	0,25	5,78	0,0077	0,030	0,01	0,			

Corrosion test per ASTM G48 PRACTICE A(25C/24hrs):NO PITTING

Grain boundary carbides and intermetallic phases: free.

Annealing temperature 1070°C for 2 h/water.

I.Korrosion nach EN ISO 3651-2A Sensibilisierung : T1 : OK

Corrosion test per EN ISO 3651-2A sensitized T1 : OK

ALLEGATI Anlagen Enclosure P.i. :

ME13000153

Sono state soddisfatte tutte le condizioni richieste
Die gestellten Anforderungen sind it. Anlage erfüllt
The material has been furnished in accordance with the requirements
Le matériel a été trouvé conforme aux exigences

Controllo antimiscelanza: OK
Verwechslungsprüfung: spektralanalytisch durchgeführt
Antimixing testing performed: OK
Contrôle antimélange fait

Controlli visivo e dimensionale: soddisfa le esigenze
Beurteilung und Ausmessung: ohne Beanstandung
Visual inspection and dimensional checks: satisfactory
Contrôle des dimensions: satisfaisant

Melted and manufactured in Italy No welding or weld repair Material free from radioactive contamination

We declare that the finished product is checked for radioactive contamination through Portal Monitor when it leaves the production plant.

The Quality Management System is Certified acc. Pressure Equipment Directive [97/23/EC] Annex 4.3 by TUEV and LLOYD'S

Any act of tampering, modification, alteration, counterfeiting and/or falsification and/or any other act which modifies the contents of this test certificate shall constitute a violation of applicable civil and criminal laws. Acciaierie Valbruna shall protect its rights and interests before any competent court, authority and jurisdiction.

The supplied product conforms to requirements expressly demanded by the purchaser and conforms to requirements specified by certified norms and standards. Should the product be used for more severe, critical and/ or in applications where the material is generally intended for, any different and/or supplementary requirements shall be specifically demanded, at least upon order. Product by the purchaser. Acciaierie Valbruna SpA shall not be responsible for any improper use of the Products.

Sample