



Design Appraisal Document

Lloyd's Register EMEA
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Date
09 September 2016

Please quote this reference number on all future communications
HPC1461050/34963-16/TS

**THE LLOYD'S REGISTER'S TYPE APPROVAL SYSTEM, 2014
ISSUED TO: KRONE FILTER SOLUTIONS GMBH
FOR: SINGLE, DUPLEX AND AUTOMATIC FILTER
TYPES: KSF, KMF, KDF-K, KDF-V, KAF, KRF
TYPE APPROVAL CERTIFICATE NO. 16/20086**

The undernoted documents have been reviewed for compliance with the requirements of the Lloyd's Register's Type Approval System Procedure TA14 and this Design Appraisal Document forms part of the Certificate.

APPROVAL DOCUMENTATION

-	Application Form to LR Type Approval	26.11.2014
-	Product Catalogue / general Data sheets for types KSF, KMF, KDFK, KDFV, KDF and KRF	2014
	KSF	2016
KSF LR Data sheet, Rev. 4	AW 613 PN16 DN80 incl. Parts list	22.04.2008
KSF080.04.16.00.01, Rev. 0	Body DN80 GR4	10.03.2006
KSF80.04.16.01.01, Rev. 1	Cover GR5	25.03.2009
KSF000.05.16.02.01, Rev. 0		2016
KMF LR Data sheet, Rev. 4	KMF	2016
KMF000.03.05.16.00.01, Rev 0	KMF GR3 incl. Parts list	22.11.2013
KMF000.03.05.16.01.01, Rev 0	Body KMF GR3 / GR1 ½" – G2"	22.11.2013
KSF000.03.05.16.02.01, Rev.1	KSF Cover GR3	24.11.2011
KDFK LR Data sheet, Rev. 4	KDFK	2016
KDFK080.06.05.10.00.01, Rev. 0	KDFK DN 80 PN10 incl. Parts list	24.02.2011
KDFK080.04.05.10.01.02, Rev.2	KDFK Body GR4 DN80 PN10 JIS 10K	20.03.2014
KSF000.06.10.02.01, Rev. 0	Cover GR6	31.03.2009
KDFV LR Data sheet, Rev. 2	KDFV	2016
KDFV150.07.05.10.00.20, Rev 1	KDFV GR7 DN150 incl. Parts list	12.07.2012
KDFV150.07.05.10.01.20, Rev 1	KDFV Body GR7 DN150	27.04.2012
KDFV150.07.05.16.08.20, Rev 4	KDFV Body Change Over GR7 DN150	12.07.2012
KSF000.07.05.10.02.01, Rev. 0	Cover GR7	24.02.2011

FINAL ACCEPTANCE OF ACTUAL ITEM(S) DEPEND(S) ON SATISFACTORY SURVEY AND TESTING

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APPROVAL DOCUMENTATION, cont.

KAF LR Data sheet, Rev. 0	KAF	2016
KAF150.01.16.05.00.01, Rev. 0	KAF DN150 PN5 JIS B 2220 K5 FF incl. Parts list	16.05.2014
KAF150.00.05.05.01.02, Rev. 0	Body KAF DN150 PN5	16.05.2014
KAF150.00.16.05.01.02, Rev. 0	Body KAF DN150 PN5 rubber lined incl. Parts list	16.05.2014
KAF150.00.05.10.02.01, Rev. 0	KAF Cover DN150 PN 19 / DNC-50	12.12.2013
KAF150.00.16.10.02.01, Rev. 0	KAF Cover DN150 PN 19 / DNC-50 incl. Parts list	12.12.2013
KRF LR Data sheet, Rev. 4	KRF-BF	2016

TEST REPORTS

HPC1461050/01	LR Works Inspection including hydrostatic burst pressure tests at 100 bar for type KSF: DN 50, size 2; KSF: DN 80, size 4 and KSF: DN 100, size 8	14.12.2015
HPC1461050/02	hydrostatic burst pressure tests at 100 bar for type KMF: 2 ½" size 4; type KDF-K : DN 80, size 6 and KDF-K: DN 20, size 2 witnessed by LR Surveyor at Krone in Oyten	17.12.2015
HPC1461050/03	hydrostatic burst pressure tests at 40 bar for type KAF: DN 200, PN 10 and at 64 bar for type KDF-V: DN 150, size 7, PN 16 witnessed by LR Surveyor at Krone in Oyten	21.12.2015
HPC1461050/04	Visit of an existing installation with function test of KAF self-cleaning automatic filter at 'Elbphilharmonie Hamburg'	11.01.2016



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LR031.1.2015.12
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Supplementary Type Approval Terms and Conditions

Type Approval certifies that a representative sample of the product(s) referred to herein has/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 EMEA reserves the right to cancel or withdraw this Type Approval Certificate in accordance with the LR Type Approval System Procedure.

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