



Lloyd's
Register

Type Approval Certificate Extension

This is to certify that Certificate No. 16/ 00080(E3) for the undernoted products is extended and renumbered as shown.

This certificate is issued to:

PRODUCER	Parker Hannifin Manufacturing Limited
PLACE OF PRODUCTION	Dukesway Team Valley Trading Estate, Gateshead Tyne & Wear NE11 0PZ United Kingdom
DESCRIPTION	OIL-X Die-cast Filter Range
FILTRATION GRADE	AA High Efficiency Coalescing and Dry Particulate Filters
TYPE	Die-cast: P010, P015, P020, P025, P030, P035, P040, P045, P050, P055 & P060
APPLICATION	Filters for compressed air, nitrogen and all relevant Group 2 gases
STANDARD	ISO12500-1:2007 Filters for Compressed Air – Test Methods – Oil Aerosols ISO8573-1:2010 Contaminant and Purity Classes ISO8573-2:2018 Contaminant measurement - Oil aerosol content ISO8573-4:2019 Contaminant measurement - Particle content
RATINGS	Class 2 for oil as defined by ISO8573-1:2010 Class 1 for particulates as defined by ISO8573-1:2010

“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 EMEA of any modification or changes to the equipment in order to obtain a valid certificate.”

Certificate No.	16/ 00080(E4)
Issue Date	4 March 2019
Expiry Date	28 March 2023
Sheet	1 of 2

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The die-cast, coalescing filter models described above and in Table 1 have been tested at ISO reference conditions and challenged with 10mg/ m³ of oil aerosol, in accordance with the requirements of ISO12500-1.

The measured residual oil content downstream of the test filters averaged <0.01mg/ m³, resulting in a downstream air purity equal to Class 2 for oil as defined by ISO8573-1. The initial dry differential pressure measured across each AA filter tested did not exceed 70mbar (1psi) and the initial saturated differential pressure did not exceed 125mbar (1.8psi).

The filter models described above have also been tested in accordance with the requirements of ISO8573-4 and achieved a downstream air purity of Class 1 for particulates, as defined by ISO 8573-1, when challenged with an upstream air purity of Class 3 for particulates.

Details of the equipment, methodology and results are contained within the Technical Documentation File COV1527423/ TDF.

The Design Appraisal Documents COV1613518 O-32811/DH, COV1713761 O-34016/DH and COV1713837 O-34723/DH in conjunction with all supplementary Type Approval Terms and Conditions form part of this Certificate

Table 1 : OIL-X Die-Cast Filter Range

AA - High Efficiency Coalescing and Dry Particulate Filters

Test No.	LR Cert Reference	Issue	Standard	Inlet Oil Aerosol Challenge	Remaining Oil Content	Saturated Pressure Drop mbar (PSI)	Filter Grade	Models	Diecast - DC
1	COV0413801/1	6	ISO8573-2	10 mg/m ³	<0.01 mg/m ³	<125 mbar (1.8 psi)	AA	(1)	DC
2	COV1527423/1	1	ISO12500-1	10 mg/m ³	<0.01 mg/m ³	<125 mbar (1.8 psi)	AA	(2)	DC
Test No.	LR Cert Reference	Issue	Standard	Inlet Particulate Challenge	Remaining Particulate Content	Initial Dry Pressure Drop (*) mbar (PSI)	Filter Grade	Models	Diecast - DC
3	COV0413801/4	3	ISO8573-4	Class 3	Class 1	<70 mbar (1 psi)	AA	(3)	DC
Models	(1) P010,P015,P020,P025,P030,P035,P040,P045,P050 & P055 (2) P010,P015,P020,P025,P030,P035,P040,P045,P050,P055 & P060 (3) P010,P015,P020,P025,P030,P035,P040,P045,P050 & P055								
Standards	ISO8573-2 Contaminant measurement - Oil aerosol content ISO8573-4 Contaminant measurement - Particle content ISO12500-1 Filters for Compressed Air - Test Methods - Part 1 Oil Aerosols (*) Defined as the maximum differential pressure for a new dry particulate filter								

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