

Type Approval Certificate

This is to certify that the undernoted product(s) has/have been tested with satisfactory results in accordance with the relevant requirements of the Lloyd's Register Type Approval System.

Manufacturer	Parker Hannifin Manufacturing Ltd
Address	Dukesway Team Valley Trading Estate, Gateshead, Tyne & Wear, NE11 0PZ, United Kingdom
Type	Air filters
Description	OIL-X Die-cast Filter Range Filtration Grade AO: General Purpose Coalescing Filter & General Purpose Dry Particulate Filter
Trade Name	AO : PX010,PX015,PX020,PX025,PX030,PX035,PX040,PX045,PX050,PX055,PX060
Application	Filters for compressed air, nitrogen and all relevant Group 2 gases.
Specified Standard	ISO12500-1:2007 Filters for Compressed Air – 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 3 for oil as defined by ISO8573-1:2010 Class 2 for particulates as defined by ISO8573-1:2010

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Other Conditions

The die-cast coalescing filter models described above are rebranded versions of the models tested and listed in table 1, tested at ISO reference conditions and challenged with 40mg/m³ of oil aerosol, in accordance with the requirements of ISO12500-1.

The measured residual oil content downstream of the test filters averaged <0.5mg/m³, resulting in a downstream air purity equal to Class 3 for oil as defined by ISO8573-1. The initial dry differential pressure measured across each AO filter tested did not exceed 70mbar (1psi) and the initial saturated differential pressure did not exceed 125mbar (1.8psi).

The filter models listed in Table 1 have also been tested in accordance with the requirements of ISO8573-4 and achieved a downstream air purity of Class 2 for particles, as defined by ISO 8573-1, when challenged with an upstream air purity of Class 3 for particles.

Refer to Table 1 in the appendix for the filter range.

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.

The Design Appraisal Document COV1613518 O-32811/DH & PRJ11100313926 O-38018/PT and its supplementary Type Approval Terms and Conditions form part of this Certificate.

Appendix

Table 1 : OIL-X Die-Cast Filter Range

AO - General Purpose 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	40 mg/m ³	<0.5 mg/m ³	<125 mbar (1.8 psi)	AO	(1)	DC
2	COV1527423/1	1	ISO12500-1	40 mg/m ³	<0.5 mg/m ³	<125 mbar (1.8 psi)	AO	(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)	AO	(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								