

FILTER ELEMENT – DH OIL-X (GEN 1)

Alternative filter elements for Domnick Hunter

Series: Oil-x Evolution

DESCRIPTION

These filter elements have been developed for high efficient removal of solid particles, oil aerosols, water, hydrocarbons, vapours and odours from compressed air.



FILTER ELEMENT RATING ACCORDING TO ISO 8573-1

Filtration grade	Solid particles class	Water class	Oil class
AR	3	/	3
AO	2	/	2
AA	1	/	1
ACS	1*	/	0/1

Validated according to ISO12500-1, ISO12500-2 and ISO12500-3

* Valid if "XS" filter cartridge is installed upstream

TECHNICAL SPECIFICATION

	AR	AO	AA	ACS
Operating temperature	1,5 - 65 °C/ 35 - 149 °F	1,5 - 65 °C/ 35 - 149 °F	1,5 - 65 °C/ 35 - 149 °F	1,5 - 45 °C/ 35 - 113 °F
Operating pressure	0 - 16 barg/ 0 - 232 psi	0 - 16 barg/ 0 - 232 psi	0 - 16 barg/ 0 - 232 psi	0 - 16 barg/ 0 - 232 psi
Differential pressure (dry)	20 mbar/ 0,290 psi	50 mbar/ 0,725 psi	80 mbar/ 1,160 psi	60 mbar/ 0,870 psi
Differential pressure (wet)	40 mbar/ 0,580 psi	120 mbar/ 1,740 psi	190 mbar/ 2,756 psi	/
Particle retention (nominal)	99,9999% (1 µm)	99,9999% (0,1 µm)	99,9999% (0,01 µm)	/
Particle retention rate ISO ⁽³⁾	99,8 %	99,98 %	99,998 %	/
Residual oil content ⁽⁴⁾	/	< 0,1mg/m ³	< 0,01mg/m ³	< 0,005mg/m ³
Flow Direction	INSIDE to OUTSIDE	INSIDE to OUTSIDE	INSIDE to OUTSIDE	INSIDE to OUTSIDE
Capacity (ISO12500-2) ⁽⁵⁾	/	/	/	20 min

⁽³⁾Tested according to ISO12500-3, 1bar(a), nominal flow, 06050 R, M, S, MPPS-(0,3µm)

⁽⁴⁾Tested according to ISO12500-1, 06050 M, S Oil aerosol viscosity 32mm²/s, inlet concentration 10mg/m³

⁽⁵⁾Tested according to ISO12500-2, 06050 A, tested with n-Hexane, test concentration 100mg/kg, 80% Saturation

CORRECTION FACTORS

To calculate the correct capacity of a given filter based on actual operating conditions, multiply the nominal flow capacity by the appropriate correction factor(s). CORRECTED CAPACITY = NOMINAL FLOW CAPACITY x C_{OP}

OPERATING PRESSURE

[bar]	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
[psi]	29	44	58	72	87	100	115	130	145	160	174	189	203	218	232
C _{OP}	0,38	0,5	0,63	0,75	0,88	1	1,13	1,25	1,38	1,50	1,63	1,75	1,88	2,00	2,13

MATERIALS

	AR	AO	AA	ACS
Filter media	Borosilicate micro fibers	Borosilicate micro fibers	Borosilicate micro fibers	Borosilicate micro fibers
Protection media	Polyester fleece	Polyester fleece	Polyester fleece	Polyester fleece
Drainage media	Polyester needle felt	Polyester needle felt	Polyester needle felt	/
Adsorption media	/	/	/	Activated carbon granulate
Support (inner-outer)	Stainless steel 1.4301	Stainless steel 1.4301	Stainless steel 1.4301	Stainless steel 1.4301
Bonding	Polyurethane	Polyurethane	Polyurethane	Polyurethane
Endcaps	PA6 with 30% glass fibers	PA6 with 30% glass fibers	PA6 with 30% glass fibers	PA6 with 30% glass fibers
Sealing	NBR	NBR	NBR	NBR

SIZES

Model*	Diameter [mm]	Height [mm]	Flow Capacity [Nm ³ /h]	Flow Capacity [scfm]	Fits into filter housing
005	37	43	22	13	005
010	37	70	36	21	010
015	48	91	72	42	015
020	48	111	108	64	020
025	68	131	216	127	025
030	68	220	396	233	030
035	90	268	576	339	035
040	90	305	792	466	040
045	90	358	1188	699	045
050	108	458	1548	911	050
055	108	648	2232	1314	055
060	86	635	3600	2119	060
100	86	412			100
150	114	415	1548	911	150
200	114	635	2232	1314	200

*Filter cartridge names consist of cartridge size and filtration grade. Place filtration grade designation after filter size (e.g. 005 AR).

MAINTENANCE

AR, AO, AA - Replace filter element at least once per year or when pressure drop reaches 350mbar ACS -

Replace filter element at least every 6 months