



OIL-X EVOLUTION WS Water Separators have been designed for the efficient removal of bulk liquid contamination from compressed air.

Today, many products are offered for the removal of bulk liquid from compressed air, however, these are often selected only upon their initial purchase cost, with little or no regard for the separation efficiency they provide or the cost of operation throughout their life.

domnick hunter OIL-X EVOLUTION WS Water Separators have been designed from the ground up with the key design focus concentrated in critical areas such as air flow management, separation efficiency at all flow conditions, minimal pressure losses and independently validated performance.

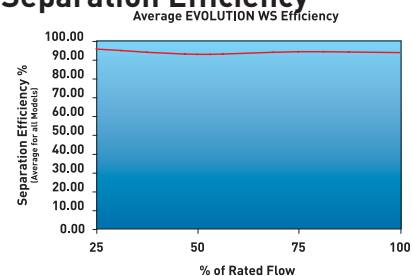
Benefits

- Tested in accordance with ISO 8573.9
- Third party independent performance validation (Lloyds Register)
- Excellent liquid removal efficiencies at all flow conditions
- Low pressure losses for low operational costs
- Choice of port sizes for a given flow rate provides increased flexibility during installation
- Ideal for variable flow compressors
- Suitable for all types of compressor and compressor condensate
- Low maintenance
- 10 Year Housing Guarantee

Typical Applications

- Bulk liquid removal at any point in a compressed air system
- Protection of refrigeration and adsorption dryer pre-filtration
- Liquid removal from compressor inter-coolers / after-coolers
- Liquid separation within refrigeration dryers

Separation Efficiency



Tested with an Inlet challenge concentration of (33 ml/m³hr) and in accordance with ISO 8573.9. Performance shown is an average for all models in range. Individual model performance available on request.



INTERNATIONAL APPROVALS



Product Selection & Technical Data

Model	Pipe Size	scfm	L/s	Nm³/min	Nm³/hr	Max Operating Pressure		Max Operating Temperature		Min Operating Temperature	
						psi g	bar g	°F	°C	°F	°C
WS010AN□X	1/4"	21	10	0.6	36	232	16	176°F	80°C	35°F	1.5°C
WS010BN□X	3/8"	21	10	0.6	36	232	16	176°F	80°C	35°F	1.5°C
WS010CN□X	1/2"	21	10	0.6	36	232	16	176°F	80°C	35°F	1.5°C
WS015BN□X	3/8"	85	40	2.4	144	232	16	176°F	80°C	35°F	1.5°C
WS020CN□X	1/2"	85	40	2.4	144	232	16	176°F	80°C	35°F	1.5°C
WS020DN□X	3/4"	85	40	2.4	144	232	16	176°F	80°C	35°F	1.5°C
WS020EN□X	1"	85	40	2.4	144	232	16	176°F	80°C	35°F	1.5°C
WS025DN□X	3/4"	233	110	6.6	396	232	16	176°F	80°C	35°F	1.5°C
WS030EN□X	1"	233	110	6.6	396	232	16	176°F	80°C	35°F	1.5°C
WS030FN□X	1 1/4"	233	110	6.6	396	232	16	176°F	80°C	35°F	1.5°C
WS030GN□X	1 1/2"	233	110	6.6	396	232	16	176°F	80°C	35°F	1.5°C
WS035FN□X	1 1/4"	742	350	21	1260	232	16	176°F	80°C	35°F	1.5°C
WS040GN□X	1 1/2"	742	350	21	1260	232	16	176°F	80°C	35°F	1.5°C
WS045HN□X	2"	742	350	21	1260	232	16	176°F	80°C	35°F	1.5°C
WS055IN□X	2 1/2"	1695	800	48	2880	232	16	176°F	80°C	35°F	1.5°C
WS055JN□X	3"	1695	800	48	2880	232	16	176°F	80°C	35°F	1.5°C

Stated flows are for operation at 100 psi g (7 bar g) with reference to 68°F (20°C), 1 bar (a), 0% relative water vapor pressure.

Line Pressure		Correction Factor
psi g	bar g	
15	1	0.25
29	2	0.38
44	3	0.50
58	4	0.63
73	5	0.75
87	6	0.88
100	7	1.00
116	8	1.06
131	9	1.12
145	10	1.17
160	11	1.22
174	12	1.27
189	13	1.32
203	14	1.37
218	15	1.41
232	16	1.46

When ordering a WS water separator for pressures above 232 psi g (16 bar g), use manual drain. Replace F with M in product code. E.g. WS010ANFX now WS010ANMX.

247	17	1.50
261	18	1.54
275	19	1.58
290	20	1.62

Product Coding and Selection

GRADE	MODEL	PIPE SIZE	CONNECTION TYPE	DRAIN OPTION	MONITOR
WS	3 digit code shown above	Letter denotes pipe size	N = NPT B = BSPT	F = Float M = Manual N = No Drain	X = Non Available
WS	010	A	N	F	X

WS models are supplied with a float drain as standard. For Pressures of 232 to 290 psi g (16 to 20 bar g) the manual drain or no drain option must be used. The no drain option supplied with 1/2" drain connection.

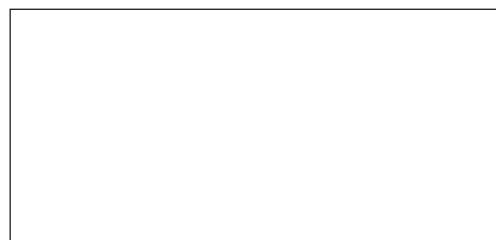
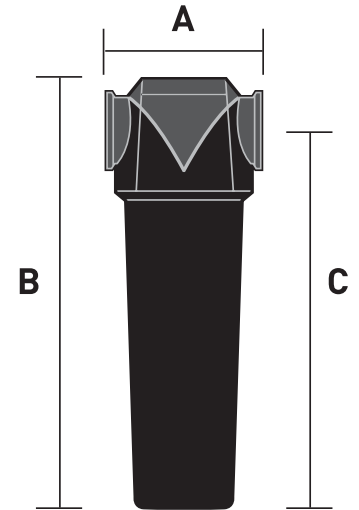
Selecting a Water Separator model to match a system flow rate and pressure.

Example: System flow 618 scfm (1050 Nm³/hr) at a pressure of 116 psi g (8 bar g) (8 bar g)

- Obtain pressure correction factor from table.
Correction factor for 116 psi g (8 bar g) = 1.06
- Divide system flow by correction factor to give equivalent flow rate at 100 psi g (7 bar g) 618 scfm (1050 Nm³/hr) ÷ 1.06 = 579 scfm (984 Nm³/hr) (at 100 psi g (7 bar g))
- Select a filter model from the above table with a flow rate above or equal to 579 scfm (984 Nm³/hr). Suitable Water Separator models: 035 or 040
- Select pipe connection & Thread type
System uses 1 1/2" piping and NPT threads : Model WS040GN
- Select drain type
Pressure is below 232 psi g (16 bar g), automatic float drain fitted as standard. Model WS040GNFX

Weights and Dimensions

Model	Pipe Size	A		B		C		Weight	
		ins	mm	ins	mm	ins	mm	lbs	kg
WS010AN□X	1/4"	3	76	7.2	181.5	6	153	1.3	0.6
WS010BN□X	3/8"	3	76	7.2	181.5	6	153	1.3	0.6
WS010CN□X	1/2"	3	76	7.2	181.5	6	153	1.3	0.6
WS015BN□X	3/8"	3.8	97.5	9.3	235	7.9	201	2.4	1.1
WS020CN□X	1/2"	3.8	97.5	9.3	235	7.9	201	2.4	1.1
WS020DN□X	3/4"	3.8	97.5	9.3	235	7.9	201	2.4	1.1
WS020EN□X	1"	3.8	97.5	9.3	235	7.9	201	2.4	1.1
WS025DN□X	3/4"	5.1	129	10.8	275	9.2	232.5	4.8	2.2
WS030EN□X	1"	5.1	129	10.8	275	9.2	232.5	4.8	2.2
WS030FN□X	1 1/4"	5.1	129	10.8	275	9.2	232.5	4.8	2.2
WS030GN□X	1 1/2"	5.1	129	10.8	275	9.2	232.5	4.8	2.2
WS035FN□X	1 1/4"	6.7	170	17	432.5	15	382.5	11.2	5.1
WS040GN□X	1 1/2"	6.7	170	17	432.5	15	382.5	11.2	5.1
WS045HN□X	2"	6.7	170	17	432.5	15	382.5	11.2	5.1
WS055IN□X	2 1/2"	8.1	205	19.9	505	17.5	444.5	22	10
WS055JN□X	3"	8.1	205	19.9	505	17.5	444.5	22	10



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