

WVM Large Flow Vacuum Low Energy Adsorption Dryers

The new WVM Generation 5 will replace the existing WVM range in Q1 2020. Please contact Parker for product selection. Information on these pages refers to WVM Generation 4.

Dryer Performance

Dryer Models	Dewpoint (Standard)		ISO8573-1:2010 Classification (Standard)	Dewpoint (Option 1)		ISO8573-1:2010 Classification (Option 1)
	°C	°F		°C	°F	
WVM	-40	-40	Class 2.2.2	-20	-4	Class 2.3.2

ISO8573-1 Classifications when used with OIL-X pre / post filtration

Technical Data

Dryer Models	Minimum Operating Pressure		Maximum Operating Pressure		Minimum Operating Temperature		Maximum Operating Temperature		Maximum Ambient Temperature		Electrical Supply (Standard)	Electrical Supply (Optional)	Thread Type	Noise Level dB(A)
	bar g	psi g	bar g	psi g	°C	°F	°C	°F	°C	°F				
WVM	4	58	10	145	5	41	40	104	40	104	400V 3ph 50Hz	N/A	DIN Flange	<75

Flow Rates

Model	Pipe Size	Inlet Flow Rate				Average Power kW
		L/s	m³/min	m³/hr	cfm	
WVM 40	DN 40	117	7.00	420	247	3
WVM 50	DN 40	142	8.50	510	300	4
WVM 65	DN 50	178	10.67	640	377	5
WVM 85	DN 50	236	14.17	850	500	7
WVM 120	DN 80	328	19.67	1180	695	8
WVM 150	DN 80	417	25.00	1500	883	11
WVM 200	DN 80	550	33.00	1980	1165	12
WVM 235	DN 100	653	39.17	2350	1383	16
WVM 300	DN 100	814	48.83	2930	1725	20
WVM 355	DN 100	986	59.17	3550	2090	24
WVM 410	DN 150	1139	68.33	4100	2413	28
WVM 475	DN 150	1317	79.00	4740	2790	30
WVM 525	DN 150	1458	87.50	5250	3090	32
WVM 620	DN 150	1725	103.50	6210	3655	44
WVM 710	DN 150	1972	118.33	7100	4179	47
WVM 800	DN 200	2222	133.33	8000	4709	56
WVM 920	DN 200	2556	153.33	9200	5415	63
WVM 1080	DN 200	3000	180.00	10800	6357	72
WVM 1230	DN 250	3417	205.00	12300	7240	84
WVM 1450	DN 250	4028	242.67	14500	8535	98

Stated flows are for operation at 7 bar (g) (102 psi g) with reference to 20°C, 1 bar (a), 0% relative water vapour pressure. For flows at other pressures, apply the correction factors shown below.

Product Selection & Correction Factors

For correct operation, compressed air dryers must be sized using for the maximum (summer) inlet temperature, maximum (summer) ambient temperature, minimum inlet pressure, required outlet dewpoint and maximum flow rate of the installation.

Example: Outlet dewpoint required -40°C. Maximum inlet flow = 4095 m³/hr, at a minimum pressure of 9 bar g, and a maximum inlet temperature of 30 °C: The correction factor for those parameters (from the table below = 0.85) should be applied to the maximum inlet flow.

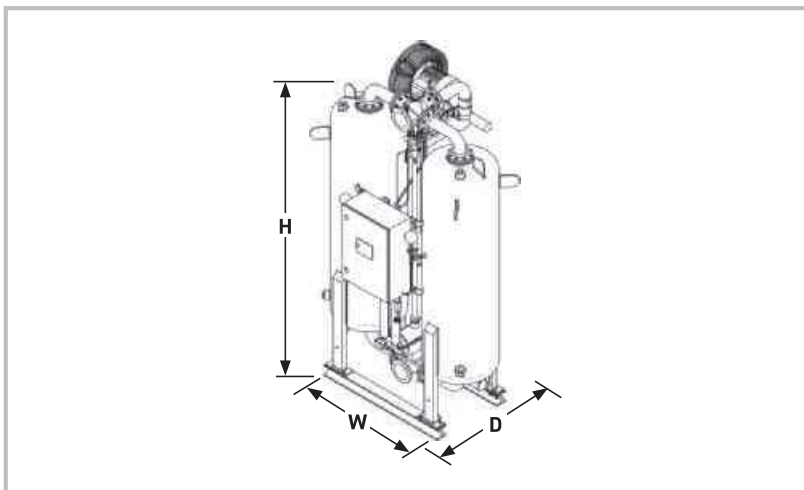
$$4095 \text{ m}^3/\text{hr} \times 0.85 = 3481 \text{ m}^3/\text{hr}.$$

Using the flow rates table above, select a dryer model with a flow rate equal to or greater than 3481 m³/hr.

Model selected = WVM 355

Correction Factors

	4 bar g (58 psi g)	5 bar g (73 psi g)	6 bar g (87 psi g)	7 bar g (102 psi g)	8 bar g (116 psi g)	9 bar g (131 psi g)	10 bar g (145 psi g)
30°C (86°F)	1.45	1.25	1.11	0.98	0.94	0.85	0.78
35°C (95°F)	2.27	1.61	1.25	1.00	0.95	0.86	0.78
40°C (104°F)	3.57	2.38	1.69	1.43	1.27	1.14	1.04



Weights & Dimensions

Model	Dimensions (Dryer Only)						Weight (Dryer Only)	
	Height (H)		Width (W)		Depth (D)		kg	lbs
	mm	ins	mm	ins	mm	ins		
WVM 40	2230	87.8	1140	44.9	990	39.0	770	1698
WVM 50	2230	87.8	1140	44.9	990	39.0	770	1698
WVM 65	2300	90.6	1260	49.6	1110	43.7	800	1764
WVM 85	2300	90.6	1260	49.6	1110	43.7	800	1764
WVM 120	2690	105.9	1460	57.5	1160	45.7	1150	2535
WVM 150	2700	106.3	1540	60.6	1200	47.2	1300	2866
WVM 200	2750	108.3	1605	63.2	1405	55.3	1650	3638
WVM 235	2870	113.0	2025	79.7	1490	58.7	2000	4409
WVM 300	2890	113.8	2050	80.7	1565	61.6	2250	4960
WVM 355	2960	116.5	2160	85.0	1750	68.9	2650	5842
WVM 410	3230	127.2	2430	95.7	1710	67.3	3250	7165
WVM 475	3260	128.3	2490	98.0	1710	67.3	3650	8047
WVM 525	3265	128.5	2550	100.4	1775	69.9	4050	8929
WVM 620	3540	139.4	2570	101.4	1865	73.4	4700	10362
WVM 710	3560	140.2	2635	103.7	1900	74.8	5050	11133
WVM 800	3625	142.7	3085	121.5	2110	83.1	6450	14220
WVM 920	3645	143.5	3125	123.0	2235	88.0	7500	16535
WVM 1080	3710	146.1	3225	127.0	2285	90.0	8700	19180
WVM 1230	4050	159.4	3475	136.8	2350	92.5	11900	26235
WVM 1450	4200	165.4	3500	137.8	2380	93.7	15870	34987

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Recommended Filtration

Model	Pipe Size	Dryer Inlet		Dryer Outlet		
		General Purpose Pre-filter	High Efficiency Filter	Oil Vapour Reduction Filter	General Purpose Dry Particulate Filter	High Efficiency Dry Particulate Filter
WVM 40	DN 40	AOP035GGFX	AAP035GGFX	-	AOP035GGMX	-
WVM 50	DN 40	AOP035GGFX	AAP035GGFX	-	AOP035GGMX	-
WVM 65	DN 50	AOP040HGFX	AAP040HGFX	-	AOP040HGMX	-
WVM 85	DN 50	AOP045IGFX	AAP045IGFX	-	AOP045IGMX	-
WVM 120	DN 80	AO065NDFX	AA065NDFX	-	AO065NDMX	-
WVM 150	DN 80	AO065NDFX	AA065NDFX	-	AO065NDMX	-
WVM 200	DN 80	AO065NDFX	AA065NDFX	-	AO065NDMX	-
WVM 235	DN 100	AO070ODFX	AA070ODFX	-	AO070ODMX	-
WVM 300	DN 100	AO070ODFX	AA070ODFX	-	AO070ODMX	-
WVM 355	DN 100	AO070ODFX	AA070ODFX	-	AO070ODMX	-
WVM 410	DN 150	AO075PDFX	AA075PDFX	-	AO075PDMX	-
WVM 475	DN 150	AO075PDFX	AA075PDFX	-	AO075PDMX	-
WVM 525	DN 150	AO075PDFX	AA075PDFX	-	AO075PDMX	-
WVM 620	DN 150	AO075PDFX	AA075PDFX	-	AO075PDMX	-
WVM 710	DN 150	AO080PDFX	AA080PDFX	-	AO080PDMX	-
WVM 800	DN 200	AO085QDFX	AA085QDFX	-	AO085QDMX	-
WVM 920	DN 200	AO085QDFX	AA085QDFX	-	AO085QDMX	-
WVM 1080	DN 200	AO085QDFX	AA085QDFX	-	AO085QDMX	-
WVM 1230	DN 250	AO090RDFX	AA090RDFX	-	AO090RDMX	-
WVM 1450	DN 250	AO090RDFX	AA090RDFX	-	AO090RDMX	-

Parker Catalogue Numbers

Model	Catalogue Number Standard Dryer with Dewpoint Control	Catalogue Number Plus Vessel Insulation
WVM 40	W40/10VM4-F400CT	W40/10VM4-F400CT/I
WVM 50	W50/10VM4-F400CT	W50/10VM4-F400CT/I
WVM 65	W65/10VM4-F400CT	W65/10VM4-F400CT/I
WVM 85	W85/10VM4-F400CT	W85/10VM4-F400CT/I
WVM 120	W120/10VM4-F400CT	W120/10VM4-F400CT/I
WVM 150	W150/10VM4-F400CT	W150/10VM4-F400CT/I
WVM 200	W200/10VM4-F400CT	W200/10VM4-F400CT/I
WVM 235	W235/10VM4-F400CT	W235/10VM4-F400CT/I
WVM 300	W300/10VM4-F400CT	W300/10VM4-F400CT/I
WVM 355	W355/10VM4-F400CT	W355/10VM4-F400CT/I
WVM 410	W410/10VM4-F400CT	W410/10VM4-F400CT/I
WVM 475	W475/10VM4-F400CT	W475/10VM4-F400CT/I
WVM 525	W525/10VM4-F400CT	W525/10VM4-F400CT/I
WVM 620	W620/10VM4-F400CT	W620/10VM4-F400CT/I
WVM 710	W710/10VM4-F400CT	W710/10VM4-F400CT/I
WVM 800	W800/10VM4-F400CT	W800/10VM4-F400CT/I
WVM 920	W920/10VM4-F400CT	W920/10VM4-F400CT/I
WVM 1080	W1080/10VM4-F400CT	W1080/10VM4-F400CT/I
WVM 1230	W1230/10VM4-F400CT	W1230/10VM4-F400CT/I
WVM 1450	W1450/10VM4-F400CT	W1450/10VM4-F400CT/I