

# MX Large Flow Heatless Adsorption Dryers

## Dryer Performance

Dryer Models	Dewpoint (Standard)		ISO8573-1:2010 Classification (Standard)	Dewpoint (Option 1)		ISO8573-1:2010 Classification (Option 1)	Dewpoint (Option 2)		ISO8573-1:2010 Classification (Option 2)
	°C	°F		°C	°F		°C	°F	
<b>MXS DS</b>	-40	-40	Class 2.2.2	-70	-100	Class 2.1.2	-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				
<b>MXS102CDS - MXS108DS</b>	4	58	13	190	5	41	50	122	55	131	85 - 265V 1ph 50/60Hz	N/A	BSPP or NPT	<75

## Flow Rates (Single Banks)

Model	Pipe Size	Inlet Flow Rate			
		L/s	m <sup>3</sup> /min	m <sup>3</sup> /hr	cfm
<b>MXS102CDS</b>	2"	113	6.81	408	240
<b>MXS103CDS</b>	2"	170	10.22	612	360
<b>MXS103DS</b>	2"	213	12.75	765	450
<b>MXS104DS</b>	2½"	283	17	1020	600
<b>MXS105DS</b>	2½"	354	21	1275	750
<b>MXS106DS</b>	2½"	425	26	1530	900
<b>MXS107DS</b>	2½"	496	30	1785	1050
<b>MXS108DS</b>	2½"	567	34	2040	1200

## Flow Rates (Multi-Banked)

Model	Pipe Size	Inlet Flow Rate			
		L/s	m <sup>3</sup> /min	m <sup>3</sup> /hr	cfm
<b>2 x MXS105DS</b>	2½"	708	43	2550	1500
<b>2 x MXS106DS</b>	2½"	850	51	3060	1800
<b>2 x MXS107DS</b>	2½"	992	60	3570	2100
<b>2 x MXS108DS</b>	2½"	1133	68	4080	2400
<b>3 x MXS106DS</b>	2½"	1275	77	4590	2700
<b>3 x MXS107DS</b>	2½"	1488	89	5355	3150
<b>3 x MXS108DS</b>	2½"	1700	102	6120	3600

**For Higher Flow Capacities - Contact Parker**

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.

To select a dryer, first calculate the MDC (Minimum Drying Capacity) using the formula below then select a dryer from the flow rate table above with a flow rate equal to or above the MDC.

Minimum Drying Capacity = System Flow x CFMIT x CFMAT x CFMIP x CFOD

### CFMIT - Correction Factor Maximum Inlet Temperature

Maximum Inlet Temperature	°C	25	30	35	40	45	50
	°F	77	86	95	104	113	122
<b>Correction Factor</b>		1.00	1.00	1.00	1.04	1.14	1.37

### CFMAT - Correction Factor Maximum Ambient Temperature

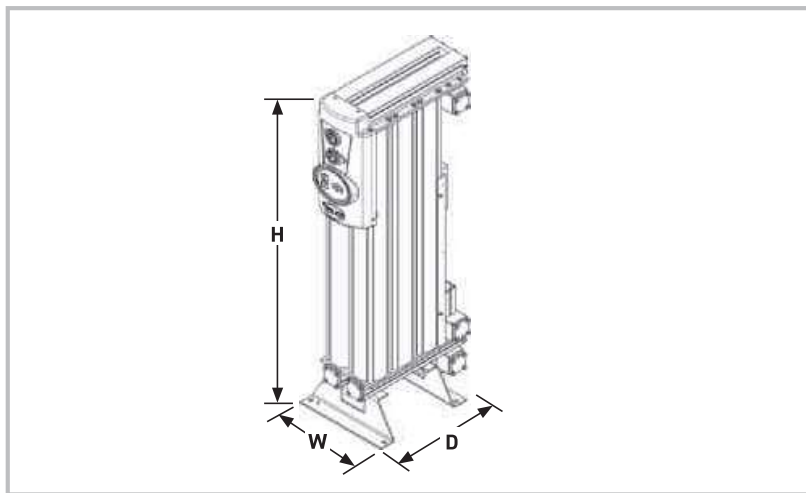
Maximum Ambient Temperature	°C	25	30	35	40	45	50
	°F	77	86	95	104	113	122
<b>Correction Factor</b>		1.00	1.00	1.00	1.00	1.00	1.00

### CFMIP - Correction Factor Minimum Inlet Pressure

Minimum Inlet Pressure	bar g	4	5	6	7	8	9	10	11	12	13
	psi g	58	73	87	100	116	131	145	160	174	189
<b>Correction Factor</b>		1.60	1.33	1.14	1.00	0.89	0.80	0.73	0.67	0.62	0.57

### CFOD - Correction Factor Outlet Dewpoint

Outlet Dewpoint	°C	-20	-40	-70
	°F	-4	-40	-100
<b>Correction Factor</b>		0.91	1.00	1.43



### Weights & Dimensions

Model	Dimensions						Weight	
	Height (H)		Width (W)		Depth (D)			
	mm	ins	mm	ins	mm	ins	kg	lbs
MXS102CDS	1647	64.8	687	27.0	550	21.7	235	518
MXS103CDS	1647	64.8	856	33.7	550	21.7	316	696
MXS103DS	1892	74.5	856	33.7	550	21.7	355	782
MXS104DS	1892	74.5	1025	40.3	550	21.7	450	992
MXS105DS	1892	74.5	1194	47.0	550	21.7	543	1197
MXS106DS	1892	74.5	1363	53.6	550	21.7	637	1404
MXS107DS	1892	74.5	1532	60.3	550	21.7	731	1611
MXS108DS	1892	74.5	1701	67.0	550	21.7	825	1818

### Recommended Filtration

Model	Pipe Size BSPP or NPT	Dryer Inlet		Oil Vapour Reduction Filter	Dryer Outlet	
		General Purpose Pre-filter	High Efficiency Filter		General Purpose Dry Particulate Filter	High Efficiency Dry Particulate Filter
MXS102CDS	2"	AOP040H	AAP040H	Technically 'Oil Free Air' to ISO8573-1:2010 Class 0 (<0.003 mg/m³) for total oil can be easily achieved by selecting an optional OIL-X OVR grade filter.	AOP040H	-
MXS103CDS	2"	AOP040H	AAP040H		AOP040H	-
MXS103DS	2"	AOP040H	AAP040H		AOP040H	-
MXS104DS	2½"	AOP045I	AAP045I		AOP045I	-
MXS105DS	2½"	AOP050I	AAP050I		AOP050I	-
MXS106DS	2½"	AOP050I	AAP050I		AOP050I	-
MXS107DS	2½"	AOP055I	AAP055I		AOP055I	-
MXS108DS	2½"	AOP055I	AAP055I		AOP055I	-

### Parker Catalogue Numbers

Model	Catalogue Number -20°C PDP / -40°C PDP	Catalogue Number -70°C PDP
MXS102CDS	MXS102CDS-40BP	MXS102CDS-70BP
MXS103CDS	MXS103CDS-40BP	MXS103CDS-70BP
MXS103DS	MXS103DS-40BP	MXS103DS-70BP
MXS104DS	MXS104DS-40BP	MXS104DS-70BP
MXS105DS	MXS105DS-40BP	MXS105DS-70BP
MXS106DS	MXS106DS-40BP	MXS106DS-70BP
MXS107DS	MXS107DS-40BP	MXS107DS-70BP
MXS108DS	MXS108DS-40BP	MXS108DS-70BP

**Dryer catalogue number does not include filtration - Please order filters separately**

#### Important Notes Regarding the Ordering of MXS dryers

Please note that when ordering MXS heatless dryers, the following items must also be ordered separately.

- Dryer Model
- Inlet / Outlet Flange kit (BSPP or NPT)
- Pre / Post Filtration (Grades AO / AA/ A0)
- FCD (Flow Control Device) - only required for multi-bank installations
- QRV - Part Number 608203833 for operation 9 bar g