



COMPRESSED AIR AND GAS TREATMENT

2018 Catalogue



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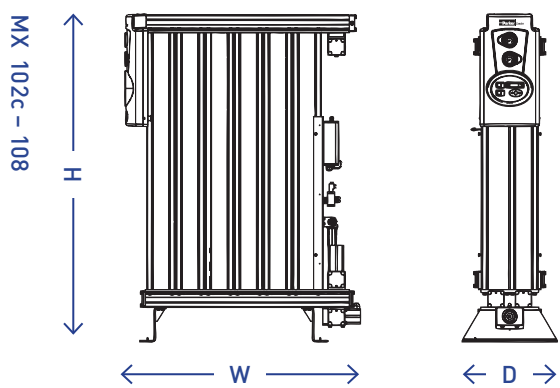
PNEUDRI MX Large Flow Heatless Compressed Air Dryer

Large flow modular compressed air dryers providing pressure dewpoints of -70°C and -40°C with flow rates up to 2040 m³/hr @ 7 bar g, even greater flow rates can be achieved by multi-banking the dryers.

PNEUDRI MX heatless compressed air dryers provide clean, oil-free and dry compressed air in accordance with all editions of ISO8573-1, the international standard for compressed air quality. They are energy efficient and use a modular construction making them less than half the size of conventional dryers.

The PNEUDRI MX's modular construction allows greater flexibility, it can be multi-banked to provide extra compressed air drying capacity should demand increase. This distinctive feature allows 100% stand by at a fraction of the cost of a traditional twin tower dryer and also allows individual dryers to be easily isolated for routine service work, whilst maintaining the plants clean, dry air supply.

Diagrams:



Dryer Performance

Model	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	
MX	-40	-40	Class 2.2.1	-70	-100	Class 2.1.1	-20	-4	Class 2.3.1

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

Technical Data

Model	Min. Operating Pressure		Max. Operating Pressure		Min. Operating Temperature		Max. Operating Temperature		Max. Ambient Temperature		Electrical Supply (Standard)	Electrical Supply (Optional)	Filter Thread Connections	Noise Level dB(A)
	bar g	psi g	bar g	psi g	°C	°F	°C	°F	°C	°F				
MX102c - 108	4	58	13	190	5	41	50	122	55	131	85 - 265 V 1ph 50/60Hz	N/A	BSPP or NPT	<75

Flow Rates

Model	Port Connection	Inlet Flow Rate			
		L/s	m³/min	m³/hr	cfm
MX □ 102C	2"	113	6.81	408	240
MX □ 103C	2"	170	10.22	612	360
MX □ 103	2"	213	12.78	795	450
MX □ 104	2 1/2"	283	17	1020	600
MX □ 105	2 1/2"	354	21	1275	750
MX □ 106	2 1/2"	425	26	1530	900
MX □ 107	2 1/2"	496	30	1785	1050
MX □ 108	2 1/2"	567	34	2040	1200
2 x MX □ 105	2 1/2"	708	43	2550	1500
2 x MX □ 106	2 1/2"	850	51	3060	1800
2 x MX □ 107	2 1/2"	992	60	3570	2100
2 x MX □ 108	2 1/2"	1133	68	4080	2400
3 x MX □ 106	2 1/2"	1275	77	4590	2700
3 x MX □ 107	2 1/2"	1488	89	5355	3150
3 x MX □ 108	2 1/2"	1700	102	6120	3600

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 and Correction Factors

For correct operation, compressed air dryers must be sized using for the minimum pressure, maximum temperature 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 CFIT x CFAT x CFP x CFD

CFIT - Correction Factor Maximum Inlet Temperature

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

CFAT - Correction Factor Maximum Ambient Temperature

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

CFP - Correction Factor Minimum Inlet Pressure

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

CFD - Correction Factor Dewpoint

Maximum Inlet Temperature	°C	-20	-40	-70
	°F	-4	-40	-100
Correction Factor		0.91	1	1.43

Controller Functions

Model	Controller Function							
	Power On Indication	Visual Fault Indication	Dewpoint Display	EST - Energy Saving Technology	Filter Service Indicator	Dryer Service Indicator	Fault Relay: Power Loss Dewpoint Alarm Sensor Failure	4-20mA Dewpoint Re-transmission
MXS	•					•		
MXS DS	•	•	•			•		Option
MXA	•	•	•	•	•	•	•	•

Important notes regarding the ordering of PNEUDRI MX dryers

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

- Dryer model
- Inlet / outlet flange kit (BSPP or NPT)
- Pre / post filtration (grades A0 / AA/ A0)
- FCD (flow control device) - only required for multi-bank installations
- QRV - quick repressurisation valve part number 608203833 is required for operating pressures above 9 bar g

Required Filtration

Model	Port Connection BSPP or NPT	Inlet General Purpose Pre-filter	Inlet High Efficiency Filter	Oil Vapour Removal Filter	Outlet Dust Filter
MX □ 102C	2"	AOP040HGFX	AAP040HGFX	*	AOP040HGMX
MX □ 103C	2"	AOP040HGFX	AAP040HGFX	*	AOP040HGMX
MX □ 103	2"	AOP040HGFX	AAP040HGFX	*	AOP040HGMX
MX □ 104	2½"	AOP045IGFX	AAP045IGFX	*	AOP045IGMX
MX □ 105	2½"	AOP050IGFX	AAP050IGFX	*	AOP050IGMX
MX □ 106	2½"	AOP050IGFX	AAP050IGFX	*	AOP050IGMX
MX □ 107	2½"	AOP055IGFX	AAP055IGFX	*	AOP055IGMX
MX □ 108	2½"	AOP055IGFX	AAP055IGFX	*	AOP055IGMX

*Note: 'Technically Oil Free Air' to ISO8573-1:2010 Class 0 (<0.003mg/m³) for Total Oil can be easily achieved by selecting an optional OIL-X OVR grade filter (refer to pages 7-8 of this document).

Weights and Dimensions

Model	Port Connection	Dimensions							
		Height (H)		Width (W)		Depth (D)		Weight	
		mm	ins	mm	ins	mm	ins	kg	lbs
MX □ 102C	2"	1647	64.8	687	27.0	550	21.7	235	518
MX □ 103C	2"	1647	64.8	856	33.7	550	21.7	316	696
MX □ 103	2"	1892	74.5	856	33.7	550	21.7	355	782
MX □ 104	2½"	1892	74.5	1025	40.3	550	21.7	450	992
MX □ 105	2½"	1892	74.5	1194	47.0	550	21.7	543	1197
MX □ 106	2½"	1892	74.5	1363	53.6	550	21.7	637	1404
MX □ 107	2½"	1892	74.5	1532	60.3	550	21.7	731	1611
MX □ 108	2½"	1892	74.5	1701	67.0	550	21.7	825	1818

Part Numbers

-20 and -40 MX	-20 and -40 MX DDS	-20 and -40 MX Advanced	-20 and -40 MXP Pneumatic
MXS102C-40BP	MXS102CDS-40BP	MXA102C-40	MXP102C-40-ATEX
MXS103C-40BP	MXS103CDS-40BP	MXA103C-40	MXP103C-40-ATEX
MXS103-40BP	MXS103DS-40BP	MXA103-40	MXP103-40-ATEX
MXS104-40BP	MXS104DS-40BP	MXA104-40	MXP104-40-ATEX
MXS105-40BP	MXS105DS-40BP	MXA105-40	MXP105-40-ATEX
MXS106-40BP	MXS106DS-40BP	MXA106-40	MXP106-40-ATEX
MXS107-40BP	MXS107DS-40BP	MXA107-40	MXP107-40-ATEX
MXS108-40BP	MXS108DS-40BP	MXA108-40	MXP108-40-ATEX
-70	-70	-70	-70
MXS102C-70BP	MXS102CDS-70BP	MXA102C-70	MXP102C-70-ATEX
MXS103C-70BP	MXS103CDS-70BP	MXA103C-70	MXP103C-70-ATEX
MXS103-70BP	MXS103DS-70BP	MXA103-70	MXP103-70-ATEX
MXS104-70BP	MXS104DS-70BP	MXA104-70	MXP104-70-ATEX
MXS105-70BP	MXS105DS-70BP	MXA105-70	MXP105-70-ATEX
MXS106-70BP	MXS106DS-70BP	MXA106-70	MXP106-70-ATEX
MXS107-70BP	MXS107DS-70BP	MXA107-70	MXP107-70-ATEX
MXS108-70BP	MXS108DS-70BP	MXA108-70	MXP108-70-ATEX