Clean, Dry Compressed Air

K-MT 1 - 8



Adsorption Dryers

Whether a compressed air user wants to control the growth of micro-organisms (essential for direct and in-direct contact applications in the food, beverage & pharmaceutical industries), ensure air used for critical applications / instrumentation is free from water contamination or has external piping where low ambient temperature can cause condensation, adsorption dryers are the go to dryer technology.

There are many different adsorption dryer technologies available and whilst they all reduce water from the compressed air in the same way, they differ in the way they regenerate the desiccant material.

Heatless Adsorption Dryers

The simplest and most common method used to regenerate the adsorbent desiccant material is the 'heatless' method (so called as it does not use heat for desiccant regeneration).

Using a proportion of the clean, dry process air for regeneration, heatless dryers typically have the lowest capital costs of all adsorption dryer types (due to the simplicity of the heatless design).

Being very robust and having fewer components, they typically have the lowest maintenance cost of all the adsorption technologies.

Heatless dryers are available to suit all compressed air flow rates from small to large, whereas the more complicated regeneration methods are often only available for higher flow rates due to cost and complexity of the designs.



Advantages

- Parker K-MT dryers provide a constant outlet dewpoint in accordance with ISO8573-1 classes 1, 2 or 3 for water vapour
- Parker K-MT dryers provide an outlet dewpoint which inhibits the growth of micro-organisms (allowing their efficient reduction using filtration)
- Parker K-MT dryers use clean, dry purge air for regeneration, eliminating any risk of damage to the adsorption bed or re-contamination of the downstream compressed air
- No heat is used for regeneration; therefore, no insulation is required and loss of dewpoint on column changeover due to inefficient cool down is eliminated
- Parker K-MT dryers include Parker OIL-X High Efficiency Coalescing prefiltration and General Purpose Dry Particulate post filtration as standard
- Fitted with Parker Multitronic electronic control with the option of dewpoint display and dewpoint switching Energy Saving Technology



Dryer Performance

Dryer Models	Dewpoint (Standard)		ISO8573-1:2010 Classification		point ion 1)	ISO8573-1:2010 Classification		Dewpoint Option 2)	ISO8573-1:2010 Classification
	°C		(Standard)	°C	°F	(Option 1)	°C	°F	(Option 2)
K-MT 1 - 8	-40	-40	Class 2.2.2	-70	-100	Class 2.1.2	-25	-13	Class 2.3.2

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

Technical Data

Dryer Models	Ope	Minimum Operating Pressure		mum ating ssure	Oper	mum rating erature		mum ating erature	Aml	imum pient erature	Electrical Supply (Standard)	Electrical Supply (Optional)	Thread Type	Noise Level
	bar g	psi g	bar g	psi g	°C	°F	°C	°F	°C	°F	(Stanuaru)	(Optional)		dB(A)
K-MT 1 - 8	4	58	16	232	5	41	50	122	50	122	230V 1ph 50/60Hz	115V 1ph 50/60Hz or 24V DC	BSPP	65-86

Flow Rates

Model	Pipe Size	Inlet Flow Rate							
Model	BSP	L/s	m³/min	m³/hr	cfm				
K-MT 1	G 1/4	2	0.13	8	5				
K-MT 2	G 1/4	4	0.25	15	9				
K-MT 3	G 1/4	7	0.42	25	15				
K-MT 4	G 1/4	10	0.58	35	21				
K-MT 6	G 1/2	16	0.93	56	33				
K-MT 7	G 1/2	20	1.2	72	42				
K-MT 8	G 3/4	24	1.43	86	51				

Inlet flow rate relating to 1 bar(a) and 20 °C; relating to the suction performance of the compressor, compression at 7 bar(g) and 35 °C dryer inlet temperature, at 25 °C ambient temperature, 60 % relative humidity.

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 CFIT x CFAT x CFMIP x CFOD

CFIT - Correction Factor Maximum Inlet Temperature

Maximum Inlat Tampayatuwa	°C	25	30	35	40	45	50
Maximum Inlet Temperature	°F	77	86	95	104	113	122
Correction Factor		0.94	0.95	1.00	1.15	1.22	1.28

CFAT - Correction Factor Maximum Ambient Temperature

Maximum Ambient	°C	25	30	35	40	45	50
Temperature	°F	77	86	95	104	113	122
Correction Factor		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	14	15	16
Willimum met Pressure	psi g	58	73	87	100	116	131	145	160	174	189	203	218	232
Correction Factor		1.60	1.33	1.12	1.00	0.88	0.79	0.76	0.74	0.67	0.62	0.59	0.56	0.53

CFOD - Correction Factor Outlet Dewpoint

Outlet Dewpoint	°C	-25	-40	-70
Outlet Dewpoint	°F	-13	-40	-100
Correction Factor		1.00	1.00	2.00

Controller Functions

	Controller Function										
Dryer Models	Power On Indication	Visual Fault Indication	Dewpoint Display	DDS - Energy Saving Technology	Filter Service Indicator	Dryer Service Indicator	Fault Relay: Power Loss Dewpoint Alarm Sensor Failure	4-20mA Dewpoint Re- transmission			
K-MT 1 - 8	•					•					
Optional Dewpoint Sensor	•		•	•		•	•	Optional			

Included Filtration

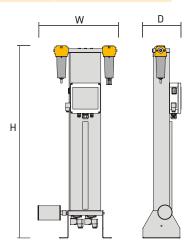
	Dryer Inlet		Dryer Outlet	
Model	High Efficiency Filter	General Purpose Dry Particulate Filter	Oil Vapour Reduction Filter (Option)	High Efficiency Dry Particulate Filter (Option)
K-MT 1	AAPX010A	AOPX010A	ACSPX010A	AAPX010A
K-MT 2	AAPX010A	AOPX010A	ACSPX010A	AAPX010A
K-MT 3	AAPX010A	AOPX010A	ACSPX010A	AAPX010A
K-MT 4	AAPX010A	AOPX010A	ACSPX010A	AAPX010A
K-MT 6	AAPX015C	AOPX015C	ACSPX015C	AAPX015C
K-MT 7	AAPX015C	AOPX015C	ACSPX015C	AAPX015C
K-MT 8	AAPX020D	AOPX020D	ACSPX020D	AAPX020D

Filtration Performance

	High Efficiency Filter	General Purpose Dry Particulate Filter	Oil Vapour Reduction Filter	High Efficiency Dry Particulate Filter
Filtration Grade	Grade AA	Grade AO	Grade ACS	Grade AA
Filtration Type	Coalescing	Dry Particulate	Oil Vapour Reduction	Dry Particulate
Particle Reduction (inc water & oil aerosols)	Down to 0.01 micron	Down to 1 micron	N/A	Down to 0.01 micron
Maximum Remaining Oil Aerosol Content at 21°C	≤0.01 mg/m³ (≤0.01 ppm(w))	N/A	0.003 mg/m ³ 0.003 ppm(w)	N/A
Maximum Remaining Oil Vapour Content at System Temperature	N/A	N/A	N/A	N/A
Filtration Efficiency	99.9999%	99.925%	N/A	99.9999%

Weights & Dimensions

Model	Pipe Size BSPP	Heigl	ht (H)	Widt	h (W)	Dept	th (D)	Wei	ight
	20	mm	ins	mm	ins	mm	ins	kg	lbs
K-MT 1	1/4"	403	16	345	14	210	8	11.5	25
K-MT 2	1/4"	578	23	345	14	210	8	15.5	34
K-MT 3	1/4"	828	33	345	14	210	8	20.0	44
K-MT 4	1/4"	1078	42	345	14	210	8	25.0	55
K-MT 6	1/2"	1133	45	446	18	300	12	48.0	106
K-MT 7	1/2"	1358	53	446	18	300	12	56.5	125
K-MT 8	3/4"	1558	61	446	18	300	12	62.5	138



Quality Assurance / IP Rating / Pressure Vessel Approvals

Development / Manufacture	ISO 9001 / ISO 14001					
Ingress Protection Rating	IP65 Indoor and frost free installation only					
EU Pressure vessel approved for fluid group 2 in accordance with the Pressure Equipment Directive 2014/68/EU						
USA Approval to ASME VIII Div. 1 not required						
Approval to AS1210 not required						
Russia TR (formerly GOST-R)						
For use with Compressed Air Only						



Service & underhåll

En viktig del i vårt koncept som totalleverantör och partner, är att kunna erbjuda kvalificerad specialisthjälp för tillsyn, service och underhåll av kompressorer, tryckluftsanläggningar och gasgeneratorer. Genom att teckna serviceavtal med oss, kommer kvalificerad service, rätta reservdelar, effektiva rutiner och löpande dokumentation att garantera en säkrare drift och användning för att distribuera ren tryckluft och rätt kvävgaskvalitet.





ISO 14001

Granzow service är certifierad enligt ISO 14001 vilket medför att kvalitets- och miljötänkande är naturliga faktorer i vårt arbete. Vi ser som en avvåra uppgifter att hålla våra kunders tryckluftsproduktion igång ochsamtidigt utföra uppdraget med utgångspunkt från högt ställda kvalitets- och miljö-krav.



Rätt kapacitet



Rätt kvalité



Rätt tryck



Rätt service



svensk tryckluftspartner

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