PRODUCT CATALOGUE

TWIN TOWER DRYER RANGES K(A)-MT10-95/KE-MT120-600

GSFE Division

CONTAMINANTS IN COMPRESSED AIR

For over 100 years, compressed air has been recognised as a safe and reliable power source and is widely used throughout industry. Known as the 4th utility, around 90% of all manufacturing companies use compressed air in some aspect of their operations.

Unlike other utilities such as gas, water and electricity which is supplied to site by a utility supplier and to strict tolerances and quality specifications, compressed air is generated on-site. The quality of the compressed air and the cost of producing this powerful utility is therefore the responsibility of the user.

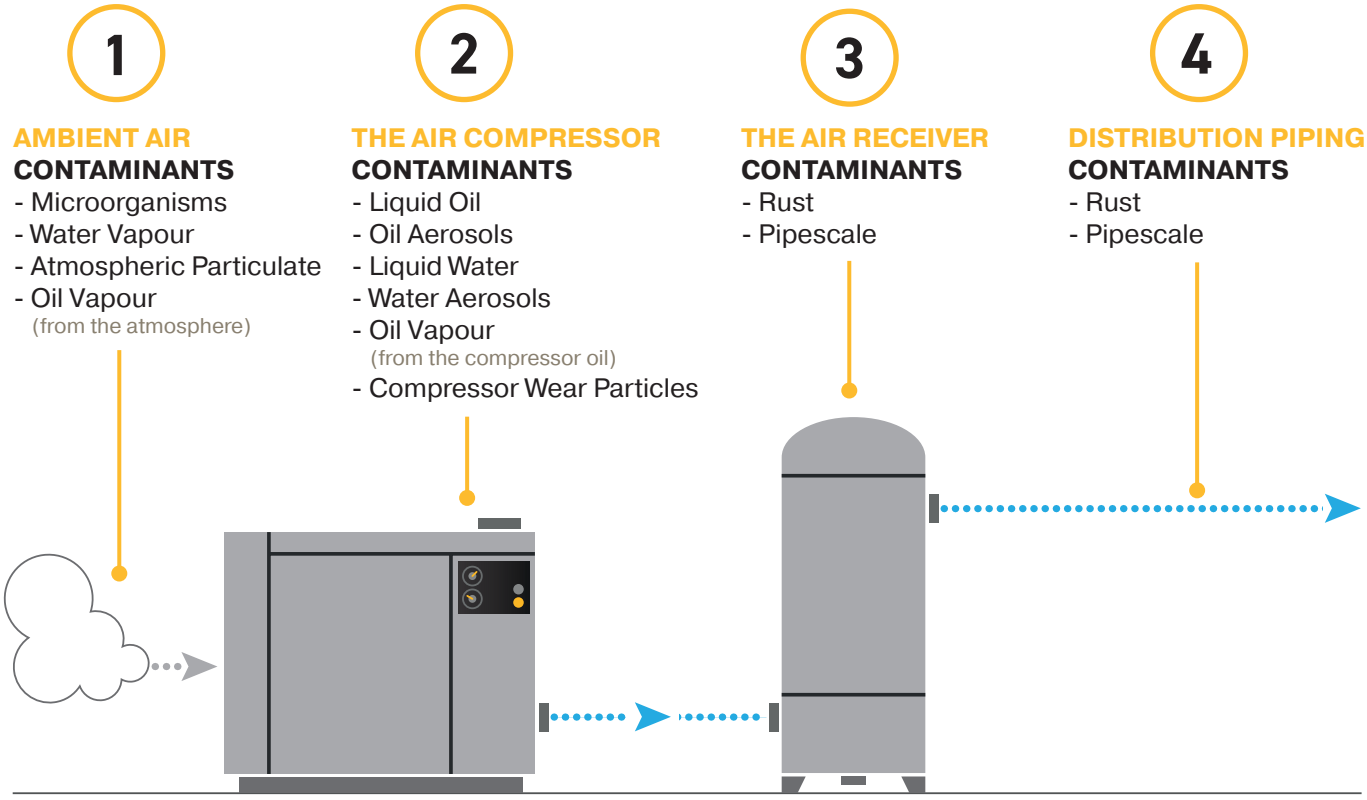
The Problem with Compressed Air

Compressed air systems inherently suffer from performance and reliability issues and almost all of the problems associated with the compressed air system and many manufacturing related quality issues can be directly attributed to contamination found in the compressed air.

Compressed Air Contamination and its Sources

Unknown to many compressed air users, the compressed air system contains a large array of both visible and invisible contamination which actually originate from four different sources.

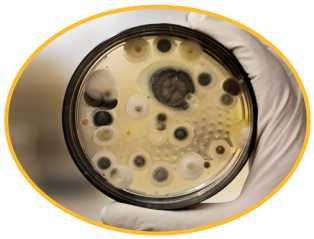
To provide clean, dry, oil-free compressed air there are a minimum of **TEN** contaminants originating from **FOUR** different sources that must be treated.



Contaminant Type	The Ten Main Contaminants in Compressed Air		
Biological	Microorganisms (Viable and Non-Viable Particles)		
Chemical	Oil Vapour	Liquid Oil	Oil Aerosols
Physical	Water Vapour	Liquid Water	Water Aerosols
	Atmospheric Particles	Compressor Wear Particles	Rust and Pipescale

In order to supply the manufacturing facility with compressed air, the air compressor must constantly move and compress large volumes of ambient air.

Microorganisms



Ambient air can contain up to 100 million microorganisms per cubic metre. Due to their small size, bacteria, viruses, fungi, yeasts, moulds and spores will pass through the intake filter and into the compressed air system. Tests carried out by the Danish Technological Institute proved that microorganisms can survive in compressed air systems up to 400 bar, where the warm moist environment inside the air receiver and distribution piping provides an ideal environment for their rapid growth.

Water Vapour

Water enters the compressed air system as a vapour (gas). The ability of air to hold water vapour is dependent upon its pressure and its temperature. The higher the temperature, the more water vapour that can be held by the air, the higher the pressure, a greater amount of water vapour is squeezed out.

As ambient air is compressed, the temperature of the air increases significantly allowing the heated air to easily retain all of the water vapour entering the compressor.

Oil Vapour

Vehicle emissions and inefficient industrial processes lead to oil vapour contamination in the ambient air. Typical concentrations in ambient air can seem low (between 0.05 and 0.5mg per cubic metre), however values measured in compressed air increase significantly after compression when contaminants become concentrated. Once in a compressed air system, oil vapour can taint ingredients, finished products and packaging with an oily smell. Cooling also causes oil vapour to condense into liquid oil and form oil aerosols.

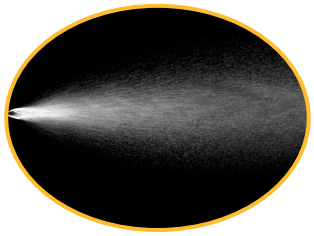
Atmospheric Particulate

Ambient air in industrial and urban environments will typically contain between 140 and 150 million dirt particles in every cubic metre.

As 80% of these particles are less than 2 microns in size, they are therefore too small to be captured by the compressor air intake filter and will travel unrestricted into the compressed air system.

Once in the compressed air system, many of the contaminants found in ambient air change phase, leading to the creation of additional contaminants. The air compressor, air receiver and distribution also add to the problem.

Liquid Water and Water Aerosols



After compression, compressed air is cooled to a usable temperature by an aftercooler. This cooling reduces the air's ability to retain water vapour, resulting in condensation of water vapour into liquid water. The presence of liquid water also causes aerosols to be formed.

Aftercoolers typically incorporate a water separator to reduce the amount of liquid entering the compressed air system (these do not remove 100% of the condensed liquid and have no effect on aerosols).

The air leaving the aftercooler and entering the compressed air system is now 100% saturated with water vapour.

Any further cooling of the compressed air will result in more water vapour condensing into liquid water and the generation of more aerosols.

Condensation occurs at various stages throughout the system as the air is cooled further by the air receiver, the distribution piping and the expansion of air in valves, cylinders, production equipment.

Liquid Oil and Oil Aerosols

As with water, oil vapour drawn in with the ambient air is cooled and condensed within the after-cooler leading to the formation of liquid oil and oil aerosols (even with oil-free compressors) which carry downstream. The majority of air compressors in use today use oil in their compression stage for sealing, lubrication and cooling. Even though the oil is in direct contact with the air as it is compressed, due to the efficiency of modern air/oil separators built into the compressor, only a small proportion of this lubricating oil is carried over into the compressed air system as a liquid or aerosol (typically no more than 5mg/m³ for a well maintained screw compressor) or as oil vapour.

Rust and Pipescale

Rust and pipescale can be directly attributed to the presence of water in the compressed air system and is usually found in air receivers and distribution piping. Over time, the rust and pipescale breaks away to cause damage or blockage in production equipment which can also contaminate final product and processes.

Rust and pipescale problems often increase for a period of time after the installation of dryers into older piping systems which were previously operated with inadequate or no purification equipment.

POOR QUALITY COMPRESSED AIR

To operate any compressed air system safely and cost effectively, contamination must be reduced to acceptable limits. The importance of reducing contamination is increased significantly when compressed air is used for critical parts of the manufacturing process.

Poor compressed air quality and failure to control contamination can cause numerous problems for a manufacturer, many of which are not immediately associated with contaminated compressed air.

Product
- Contaminated products or packaging.
- Reworked products.
- Spoiled or damaged products.

Manufacturer
- Potential for brand damage.
- Financial loss.
- Reputation for poor quality.

Manufacturing Process
- Inefficient production processes.
- Reduced production efficiency.
- Increased manufacturing costs.

Compressed Air System
- Corrosion within storage vessels and the distribution system.
- Contaminated / damaged production equipment.
- Blocked or frozen valves and cylinders.
- Premature unplanned desiccant changes for adsorption dryers.
- High operational and maintenance costs.

COMPRESSED AIR MUST BE TREATED

Compressed air contamination must be treated to ensure the safe, reliable operation of the compressed air system. Correctly treated compressed air not only protects the manufacturing equipment using the compressed air, it also protects products or processes contacted by the compressed air.

Ensuring effective control of compressed air contamination, requires a number of purification technologies.

It is often stated that only three contaminants are present in compressed air (dirt/water/oil), however as those contaminants can be found in different phases, they require a specific purification technology for efficient reduction.

The table below highlights the individual filtration and drying technologies that are required to treat each contaminant.

Purification Technologies	Contaminants								
	Atmospheric Particles	Rust and Pipescale	Micro-organisms	Liquid Water	Water Aerosol	Water Vapour	Liquid Oil	Oil Aerosol	Oil Vapour
Liquid Separator				●			●		
Coalescing Filters	●	●	●		●			●	
Adsorption Filter									●
Dryer						●			
Dry Particulate Filters		●	●						
Sterile Filter			●						

CLEAN, DRY AND OIL-FREE COMPRESSED AIR

For general industrial manufacturing, the uses of compressed air differ greatly, and therefore so does the purity (quality) of compressed air required.

ISO 8573-1 is the international standard for compressed air purity (quality). It provides an easy to use classification method that allows a manufacturing facility to specify the compressed air purity (quality) they require.

Unfortunately, the ISO 8573-1 standard does not provide any guidance as to which air purity classifications are recommended for a particular industry or application.

To assist in the selection of a suitable compressed air purity classification, Parker have produced a number of industry specific documents which provide a recommended air purity (quality) for specific industries and applications, plus suitable compressed air treatment technologies to meet or exceed those air purity recommendations.

Compressed Air Purity Recommendations by Industry Sector					
	General Industrial Manufacturing (Inc Automotive)	**Electronics Manufacturing and Semiconductor Production**	**Food and Beverage Manufacturing**	**Pharmaceutical Manufacturing**	**Oil and Gas**
Typical Applications	**General Industrial Compressed Air (Internal Piping System)**	CDA (Clean Dry Air) Semiconductor	Food and Beverage Grade Air Direct Contact Applications (Control over Microbial Growth)	Pharmaceutical Grade Air Direct Contact Applications (Control over Microbial Growth)	General Air (Safe Areas)
	General Industrial Compressed Air (External Piping System)	Instrument Air	Food and Beverage Grade Air In-direct Contact Applications (Control over Microbial Growth)	Pharmaceutical Grade Air In-direct Contact Applications (Control over Microbial Growth)	General Air (Zoned Areas)
	General Industrial 'Technically' Oil-Free Compressed Air	General Air	General Air Non-Contact Applications	General Air Non-Contact Applications	Instrument Air (Safe Areas)
	Spray Painting	Respiratory Protection		Respiratory Protection	Instrument Air (Zoned Areas)
	Respiratory Protection				Respiratory Protection
Parker Reference Documents					
	This Document and Parker BAS	Parker EMS and Parker BAS	Parker FBP	Parker FBP and Parker BAS	Parker OAG and Parker BAS

Recommended Minimum Air Quality Classifications

General Industrial Manufacturing (Inc. Automotive)		
Application	**Recommended ISO 8573-1:2010 Purity (Quality) Classifications**	**Pressure Dewpoint (PDP) Band**
General Industrial Compressed Air (Internal Piping System)	ISO 8573-1:2010 Class 2:5:2	+4°C to +7°C
General Industrial Compressed Air (External Piping System)	ISO 8573-1:2010 Class 2:2:2 ISO 8573-1:2010 Class 2:1:2 ISO 8573-1:2010 Class 2:3:2	-69°C to -40°C -80°C to -70°C -39°C to -20°C
General Industrial 'Technically' Oil-Free Compressed Air	ISO 8573-1:2010 Class 2:2:1 ISO 8573-1:2010 Class 2:1:1	-69°C to -40°C -80°C to -70°C
Spray Painting	ISO 8573-1:2010 Class 2:2:1	-69°C to -40°C
Respiratory Protection	EN 12021	⩽-40°C PDP

PARKER TWIN TOWER CARBON STEEL ADSORPTION DRYER RANGES FOR COMPRESSED AIR UP TO 16 BAR G

The Parker K-MT, KA-MT, KE-MT series of adsorption dryers are of twin tower, carbon steel construction and utilise the heatless PSA method for regeneration.

K-MT 10-95

KA-MT 10-95

KE-MT 250-600

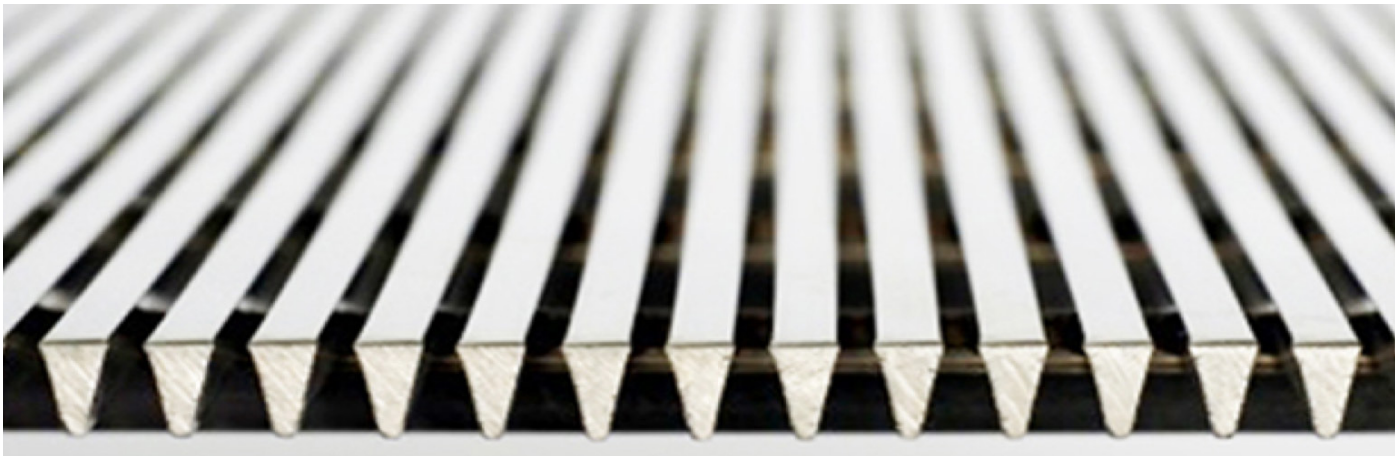
- Parker K-MT / KA-MT / KE-MT / dryers all provide a constant outlet dewpoint in accordance with ISO 8573-1 classes 1, 2 or 3 for water vapour
- Air purity is complemented by installing Parker OIL-X General Purpose & High Efficiency Coalescing pre-filtration and General Purpose Dry Particulate post filtration
- Parker K-MT / KA-MT / KE-MT dryers use clean, dry purge air for regeneration
- Parker K-MT / KA-MT / KE-MT dryers do not use heat for regeneration; therefore, no insulation is required and loss of dewpoint on column changeover due to inefficient cool down is eliminated
- Parker KA-MT dryers include a 3rd column for oil vapour reduction as standard
- Fitted with Parker Multitronic electronic controller with the option of dewpoint display and Dewpoint Switching energy saving technology

		Filtration: Included with Dryer or Requires Ordering Separately				
	Dryer	OIL-X WS Die-cast or SFH Fabricated Water Separator	OIL-X Filter Grade AO General Purpose Coalescing Filter	OIL-X Filter Grade AA High Efficiency Coalescing Filter	AK Adsorption Filter	OIL-X Filter Grade AO(M) General Purpose Dry Particulate Filter
Clean Dry Air System	**K-MT 10-95**	**Required**	**Required**	Included	Not Required	Included
	KE-MT 250-600	**Required**	**Required**	Included	Not Required	Included
Oil Free Air System	**KA-MT 10-95**	**Required**	**Required**	Included	Included	Included
	KE-MT 250-600	**Required**	**Required**	Included	**Required**	Included

PARKER TWIN TOWER CARBON STEEL DRYERS

Manufactured from welded carbon steel, Parker K-MT, KA-MT and KE-MT adsorption dryer ranges may look similar to other dryer ranges, however they include many innovative features.

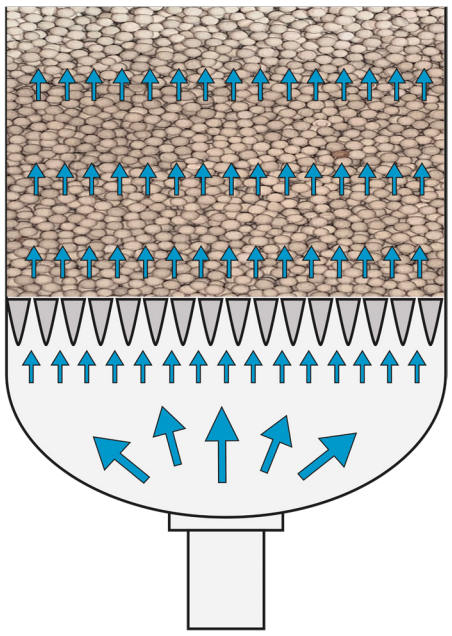
High Quality Wedge Wire Desiccant Support Screen



- Manufactured from 304 Stainless Steel
- Supports desiccant in drying columns
- Extremely robust design
- Self-cleaning function via triangular cross sectional design
- Eliminates desiccant saturation (wet spots) caused by jetting of compressed air
- Provides even flow distribution of compressed air into the desiccant bed
- Maximises contact with all of the desiccant material in the vessel
- Lower pressure drop compared to the more traditional mesh cartridge designs used on alternative twin tower dryers

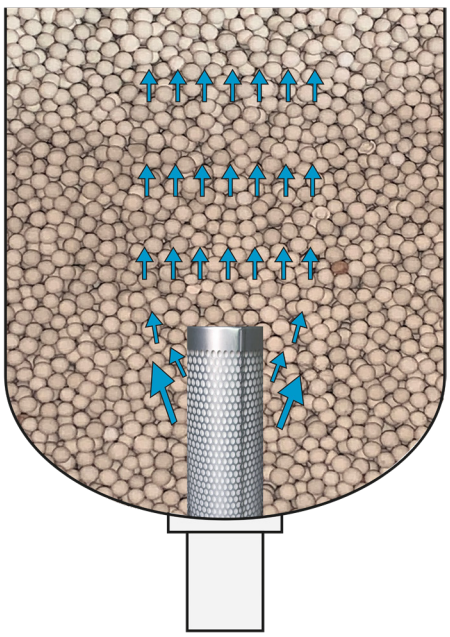
Parker Twin Tower Dryer with Wedge Wire

Even Flow Distribution of Compressed Air



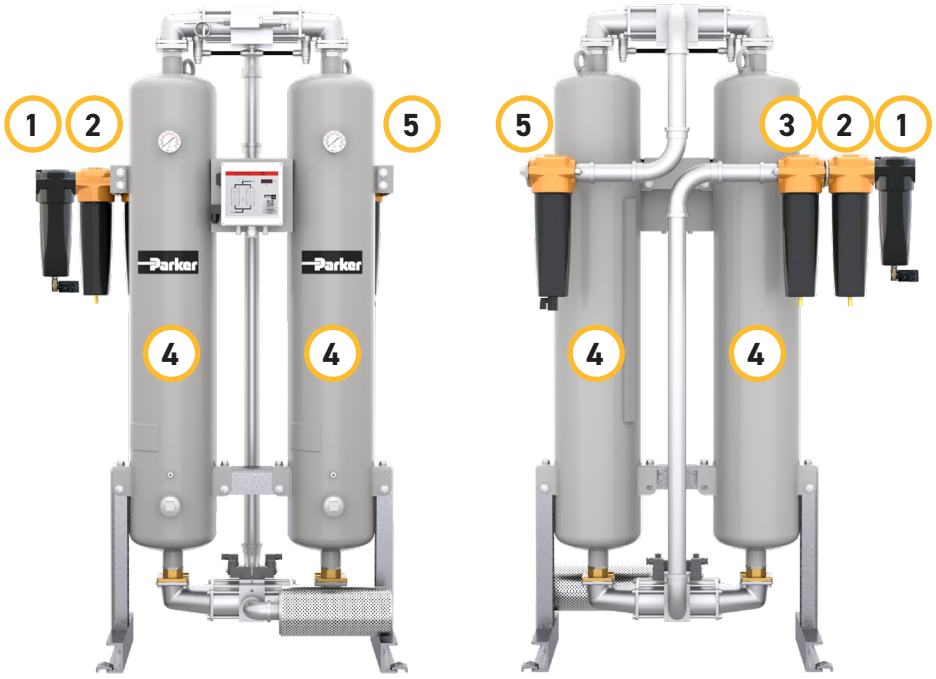
Alternative Dryer WITHOUT Wedge Wire

Jetting of Compressed Air bypassing Desiccant



CLEAN, DRY, COMPRESSED AIR FOR GENERAL INDUSTRIAL MANUFACTURING & AUTOMOTIVE APPLICATIONS

K-MT 10-95 & filtration provides 5 stages of purification, treating 9 contaminants found in a compressed air system*



Front **Back**

Representative of Models K-MT 10-95
With Additional Grade WS Liquid Separator and AO Grade Pre-filter

1

Liquid Separator

REDUCES:
Liquid Water and Liquid Oil
Separation Efficiency 92-100%

2

General Purpose Coalescing Filter

REDUCES:
Particulate down to 1 micron
Water & Oil Aerosols
down to 0.5 mg/m³

3

High Efficiency Coalescing Filter

REDUCES:
Particulate down to 0.01 micron
Water and Oil Aerosols
down to 0.01 mg/m³

4

Adsorption Dryer

REDUCES:
Water Vapour - PDP ⩽-40°C

5

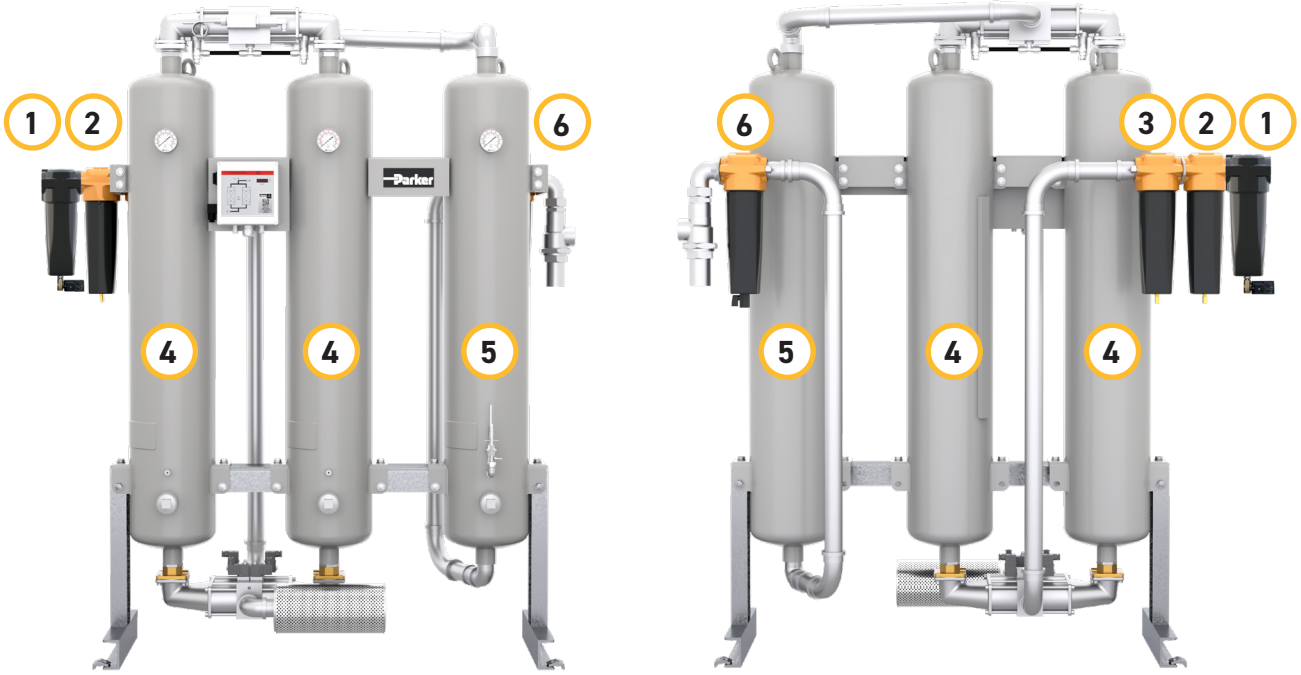
General Purpose Dry Particulate Filter

REDUCES:
Particulate down to 1 micron

***Important Note:** Stages 1 & 2 are required and must be ordered separately

CLEAN, DRY, COMPRESSED AIR FOR GENERAL INDUSTRIAL MANUFACTURING & AUTOMOTIVE APPLICATIONS

KA-MT 10-95 & filtration provides 6 stages of purification, treating 10 contaminants found in a compressed air system*



Front **Back**

Representative of Models KA-MT 10-95
With Additional Grade WS Liquid Separator and AO Grade Pre-filter

1
Liquid Separator

REDUCES:
Liquid Water and Liquid Oil
Separation Efficiency 92-100%

2
General Purpose Coalescing Filter

REDUCES:
Particulate down to 1 micron
Water & Oil Aerosols
down to 0.5 mg/m³

3
High Efficiency Coalescing Filter

REDUCES:
Particulate down to 0.01 micron
Water and Oil Aerosols
down to 0.01 mg/m³

4
Adsorption Dryer

REDUCES:
Water Vapour - PDP ⩽-40°C

5
Activated Carbon Filter

REDUCES:
Oil vapours down to ⩽0.003 mg/m³

6
General Purpose Dry Particulate Filter

REDUCES:
Particulate down to 1 micron

***Important Note:** Stages 1 & 2 are required and must be ordered separately

CLEAN, DRY, COMPRESSED AIR FOR GENERAL INDUSTRIAL MANUFACTURING & AUTOMOTIVE APPLICATIONS

KE-MT 120-600 & filtration provides 5 stages of purification, treating 9 contaminants found in a compressed air system*

Representative of KE-MT 120-600 dryer and minimum recommended filtration for the treatment of 9 contaminants

1

Liquid Separator

REDUCES:

Liquid Water and Liquid Oil Separation Efficiency 92-100%

2

General Purpose Coalescing Filter

REDUCES:

PParticulate down to 1 micron
Water & Oil Aerosols down to 0.5 mg/m³

3

High Efficiency Coalescing Filter

REDUCES:

Particulate down to 0.01 micron
Water and Oil Aerosols down to 0.01 mg/m³

4

Adsorption Dryer

REDUCES:

Water Vapour - PDP ⩽-40°C

5

General Purpose Dry Particulate Filter

REDUCES:

Particulate down to 1 micron

***Important Note:** Stages 1 & 2 are required and must be ordered separately

PARKER OIL-X LIQUID SEPARATORS, COALESCING & DRY PARTICULATE FILTERS

Die-cast Aluminium & Fabricated Carbon Steel to suit all flow ranges

Parker filtration products included / required to achieve ISO 8573-1:2010 Classifications.

Parker OIL-X Grade WS
Die-Cast
Liquid Separators

Parker OIL-X Grade AO & AA
Die-Cast
Coalescing &
Dry Particulate Filers

Parker Grade SFH
Fabricated
Liquid Separators

Parker OIL-X Grade AO & AA
Fabricated
Coalescing & Dry
Particulate Filers

ISO 8573-1:2010 Classifications for OIL-X Grades

ISO 8573-1:2010 CLASS	Solid Particulate		Water	Oil
	Wet Particulate	Dry Particulate	Vapour	Total Oil (aerosol liquid and vapour)
1	OIL-X Grades AO + AA	OIL-X Grades AO (M) + AA (M)	Dryer sized for ⩽-70°C PDP	OIL-X Grades AO + AA + OVR OIL-X Grades AO + A A +AK
2	OIL-X Grade AO	OIL-X Grade AO (M)	Dryer sized for ⩽-40°C PDP	OIL-X Grades AO + AA
3	OIL-X Grade AO	OIL-X Grade AO (M)	Dryer sized for ⩽-20°C PDP	OIL-X Grades AO
4	OIL-X Grade AO	OIL-X Grade AO (M)	Dryer sized for ⩽+3°C PDP	OIL-X Grades AO
5	OIL-X Grade AO	OIL-X Grade AO (M)	Dryer sized for ⩽+7°C PDP	–
6	–	–	Dryer sized for ⩽+10°C PDP	–

Environmentally Friendly

Reduced CO_2 Emissions

Many countries worldwide are looking closely at their manufacturing industries in an effort to reduce the amount of harmful greenhouse gases released into the atmosphere.

The use of electricity has a direct impact on the generation and release of CO_2. By reducing energy consumption, efficient filtration helps to reduce the carbon footprint of a manufacturing facility and protects the environment.

Parker OIL-X #1 in Filtration

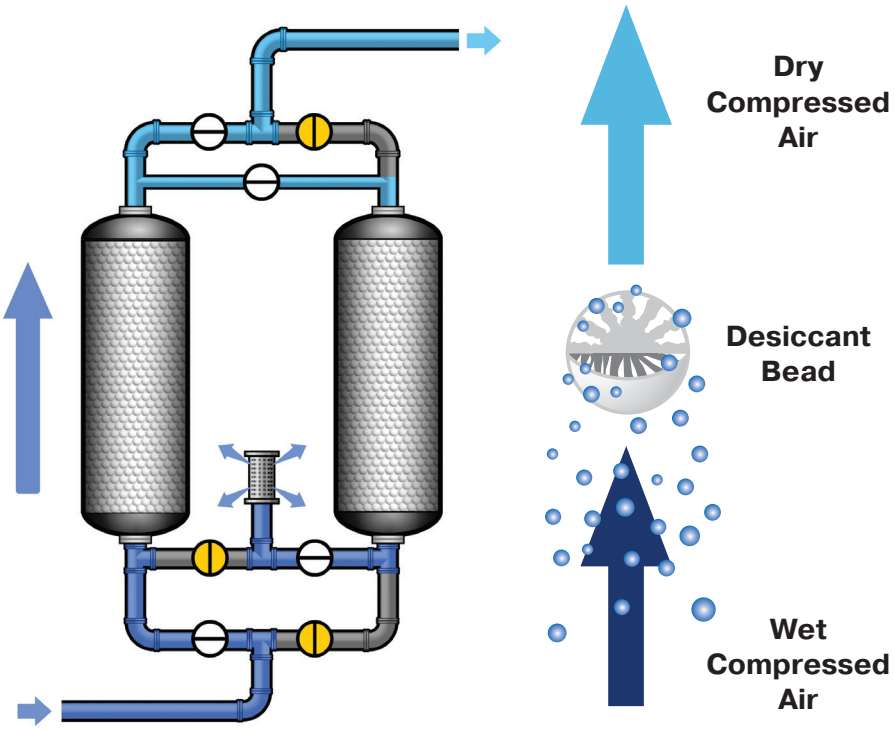
At Parker we continually develop our filtration ranges to ensure that every compressed air filter we deliver offers the right balance between filtration performance and energy consumption, resulting in a reliable compressed air system with low total cost of ownership.

HOW IT WORKS - K-MT / KA-MT / KE-MT

At the heart of K-MT / KA-MT / KE-MT is a heatless Pressure Swing Adsorption (PSA) desiccant dryer.

K-MT / KA-MT / KE-MT - Heatless Dryer Operation
Drying Cycle (5 Minutes)

The pre-filtered process air enters the dryer through the inlet and is directed into the online drying column via the inlet valves. The compressed air passes over the adsorbent desiccant material, reducing the water vapour content of the compressed air as it contacts the desiccant. The dried process air then exits the dryer via the outlet check valves.



K-MT / KA-MT / KE-MT - Heatless Dryer Operation
Regeneration Cycle (5 Minutes)

At the start of the regeneration cycle, the exhaust valves of the dryer is closed and the offline columns are at full line pressure.

The air in the offline columns has a dewpoint equal to the air leaving the dryer.

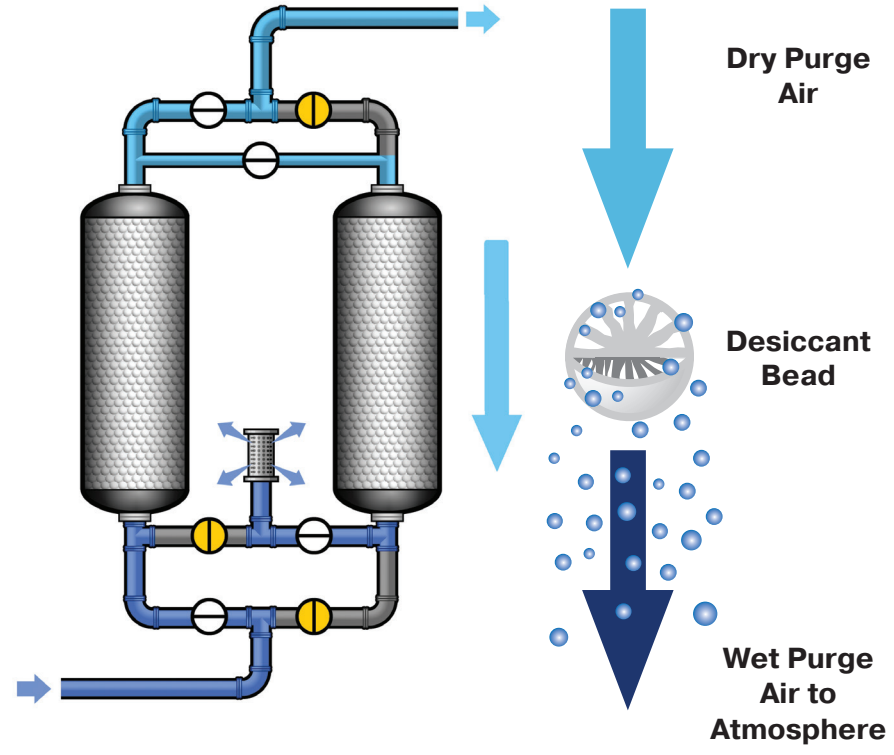
The exhaust valve is then opened and the dry air within the columns expands rapidly as it leaves the dryer via the exhaust silencer, forcing water from the desiccant material.

Once the offline columns have depressurised, a continuous bleed of dried process air is directed into the off-line desiccant bed for regeneration purposes.

This regeneration air is also known as purge air.

With the exhaust valve open, the purge air expands from line pressure to atmospheric pressure and flows downwards over the offline desiccant material.

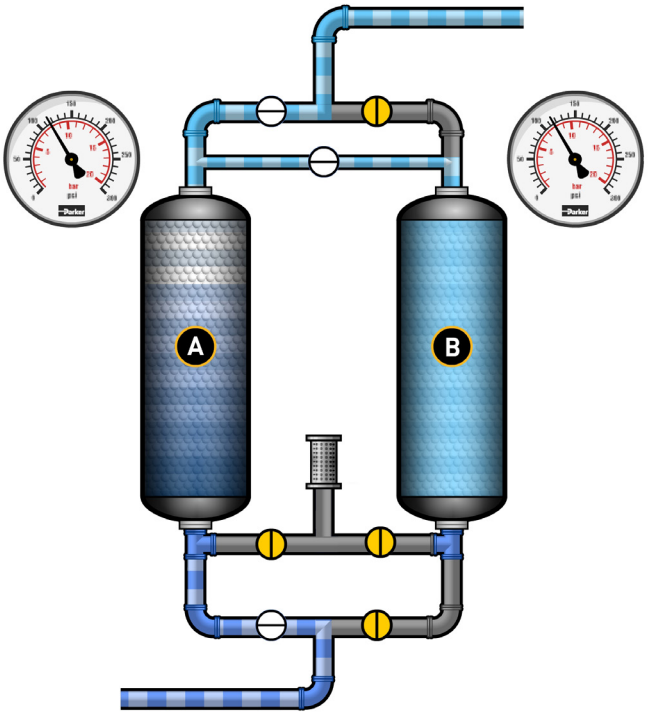
As the purge air at line pressure contains a fixed amount of water vapour, allowing it to expand means the purge air becomes even drier, increasing its capacity to remove water from the saturated desiccant bed.



K-MT / KA-MT / KE-MT
Heatless Dryer Operation
Repressurisation (1 Minutes)

Before the on-line (drying) and off-line (regenerating) columns change over, the dryer exhaust valve, is closed, allowing the purge air to repressurise the offline columns.

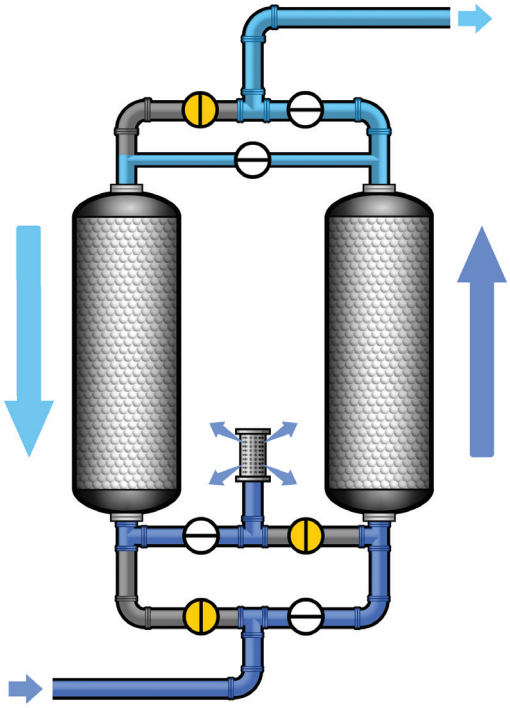
This ensures a consistent downstream pressure and dewpoint when the drying columns change over.



K-MT / KA-MT / KE-MT
Heatless Dryer Operation
Changeover Following changeover

When operating on a fixed timing cycle, the drying columns will proceed to changeover after the 5 minute regeneration and repressurisation period.

The recently regenerated column is brought online to dry the incoming compressed air and the opposite column (now saturated, will undergo the full regeneration cycle).



The Importance of a Selecting a Constant Outlet Dewpoint Dryer

A constant outlet dewpoint dryer is 'sized' to match worst case inlet and ambient conditions of the user's site. This ensures the dryer has enough drying capacity (adsorbent material) to handle the maximum water vapour loading of the system, whilst being able to deliver a consistent outlet dewpoint.

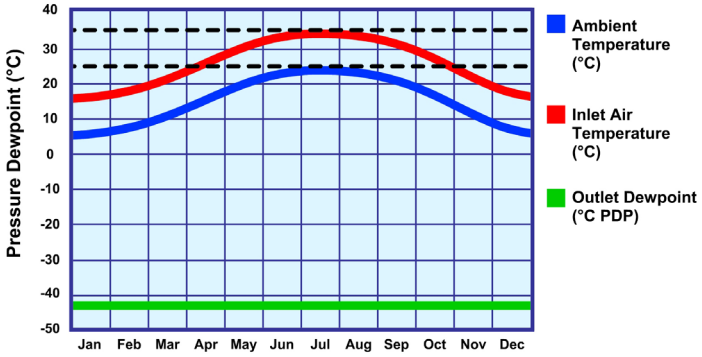
A dryer delivering a constant outlet dewpoint will see small fluctuations, but always deliver the minimum pressure dewpoint it was sized for.

For example, if an adsorption dryer is sized to deliver a ≤-40°C PDP, then -40°C PDP will be the worst dewpoint delivered.

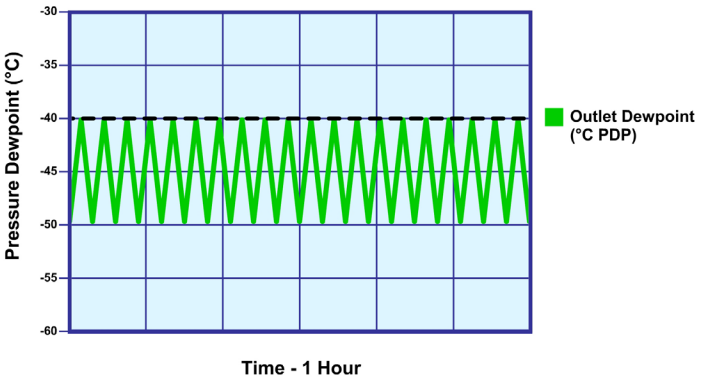
Typically, the outlet dewpoint will fluctuate between say -50°C and -40°C due to the way the adsorption dryer operates.

All Parker adsorption dryers are designed to deliver a constant outlet pressure dewpoint in accordance with ISO 8573-1:2010 Classifications.

Effect of ambient temperature, inlet temperature & variable flow on the outlet dewpoint of a -40°C PDP adsorption dryer



Effect of column change over to outlet dewpoint of a -40°C PDP adsorption dryer



K-MT

KA-MT

KE-MT

MULTITRONIC CONTROLLER

The Multitronic controller fitted as standard to all K-MT / KA-MT / KE-MT dryers includes a single voltage, single frequency power supply feeding a bespoke PCB with LED status indicators.

Housed in an IP65 rated enclosure, a 7 segment display is available to display outlet dewpoint if the optional dewpoint hygrometer is fitted.

Energy Saving Technologies

When the optional dewpoint hygrometer is installed and connected to the multitronic controller, K-MT / KA-MT / KE-MT dryers are equipped with not one, but two Energy Saving Technologies, Compressor Synchronisation and Dewpoint Switching.

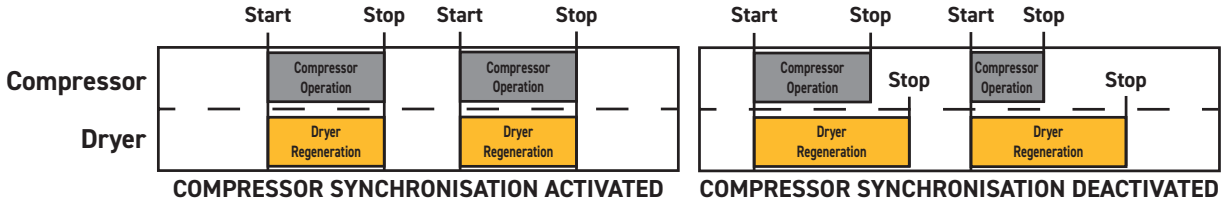
Compressor Synchronisation (Standard Feature)

The dryer controller is fitted as standard with a digital input which synchronises the dryer regeneration cycle with the operation of the compressor. Compressor Synchronisation is designed to stop the dryer regeneration cycle when the compressor goes off load. It uses a signal from the compressor to stop the dryer regeneration cycle and close the exhaust valve.

This prevents unnecessary use of purge air during periods of no demand, saving compressed air, energy and money.

Once the system pressure drops due downstream air demand, the compressor re-starts and the normal drying cycle will be resumed.

Compressor Synchronisation compliments the Dewpoint Switching energy saving technology and allows for additional energy savings to be made when the compressor is off-load.



DEWPOINT SWITCHING - ENERGY SAVING TECHNOLOGY

(Optional Feature - Select MT Variants)

The energy required to regenerate the off-line desiccant bed of an absorption dryer is constant, and based upon the assumption that the dryer is operating at full capacity and the desiccant bed requiring regeneration has been fully saturated.

In reality, a dryer is rarely operating at full capacity all of the time, for example during shift work and periods of low demand.

Daily and seasonal fluctuations in ambient temperature and humidity also change the moisture loading placed upon the dryer.

Standard Operation (Fixed Cycle)

At the end of the regeneration cycle, and prior to column changeover, the fully regenerated offline column is repressurised, thus ensuring no loss of system pressure on changeover.

Under such conditions, at the point in the drying cycle where the air flow is switched from one drying chamber to the other, there is the potential for drying capacity to remain in the desiccant material about to undergo regeneration.

As the energy used to regenerate this partially saturated bed is based upon the assumption that the bed is fully saturated, more energy (purge air) is consumed than is actually necessary.

With the Dewpoint Switching function activated, the regeneration cycle remains unchanged, however, the Dewpoint Switching function overrides the fixed drying cycle to fully utilise the drying capacity of the desiccant material.

After re-pressurisation, all drying columns will be at full line pressure, no purge air is being used for regeneration and the dryer is in a state of zero energy consumption.

Dewpoint Switching Operation (Variable Cycle)

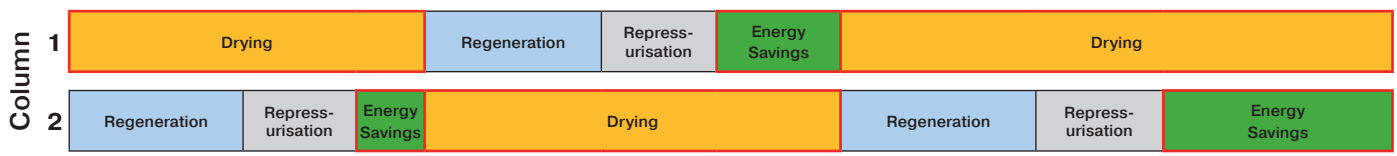
Under standard operation, the drying chambers would now proceed to change over automatically, however with the optional dewpoint hygrometer installed and the variable cycle activated the controller now monitors the pressure dewpoint of the compressed air leaving the dryer.

If the dewpoint of the compressed air exiting the dryer is lower than the pre-set minimum dewpoint level, the Dewpoint Switching function will override the standard control cycle. The drying columns will change over, however the drying cycle is now extended by 1 minute. During this cycle extension period, no purge air is consumed and the dryer is in a state of zero energy consumption.

After the cycle extension period has elapsed, the dryer will change over and if the outlet dewpoint is again below the pre-set minimum dewpoint at the point of changeover, an additional minute will be added to the already extended drying cycle.

The cycle extension will continue until the outlet dewpoint matches the pre-set minimum dewpoint or the drying cycle extension has reached a maximum of 60 minutes.

During the extension of the drying cycle (up to 60 minutes), no system air (purge air) is consumed, saving compressed air, saving energy and saving money.



Technical Specifications - KMT 10-95

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	
KMT 10-95	-40	-40	Class 2:2:2	-70	-100	Class 2:1:2	-25	-13	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
	bar g	psi g	bar g	psi g	˚C	˚F	˚C	˚F	˚C	˚F				dB(A)
KMT 10-95	5	73	16	232	5	41	50	122	50	122	230V 1ph 50Hz/60Hz	115V 1ph 50Hz/60Hz or 24V DC	BSPP	65-86

Flow Rates

Model	Pipe Size	Inlet Flow Rate			
		L/s	m³/min	m³/hr	cfm
K-MT 10	1"	30	1,8	105	62
K-MT 15	1"	40	2,4	145	85
K-MT 20	1"	56	3,3	200	118
K-MT 25	1½"	70	4,3	255	150
K-MT 35	1½"	97	5,8	350	206
K-MT 45	1½"	117	7	420	247
K-MT 60	2"	172	10,3	620	365
K-MT 75	2"	208	12,5	750	441
K-MT 95	2½"	261	15,7	940	553

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 inlet temperature, maximum 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
Correction Factor		0.94	0.95	1.00	1.15	1.22	1.28

CFMAT - 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

CFMIP - Correction Factor Minimum Inlet Pressure

Minimum Inlet Pressure	bar g	4	5	6	7	8	9	10	11	12	13	14	15	16
	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
	˚F	-13	-40	-100
Correction Factor		1.00	1.00	2.00

Controller Functions

Dryer Models	Controller Function							
	Power On Indication	Visual Fault Indication	Dewpoint Display	Dewpoint Switching Energy Saving Technology	Filter Service Indicator	Dryer Service Indicator	Fault Relay	4-20mA Dewpoint Re-transmission
KMT 10 - 95	●	●	*MT Variant Only	*MT Variant Only		●	●	Option

Filter Grades Included / Required / Optional

Included / Required	Required - To be ordered separately	Included with Dryer
OIL-X Grade WS Liquid Separator	●	
OIL-X Grade AO General Purpose Coalescing Filter	●	
OIL-X Grade AA High Efficiency Coalescing Filter		●
K-MT Adsorption Dryer		●
Oil Vapour Reduction Filter		
OIL-X Grade AO General Purpose Dry Particulate Filter		●

Filter Models Required* / Included / Optional

Model	Filter Connections BSPP or NPT	Dryer Inlet			Dryer Outlet	
		Required		Included	Not Applicable	Included
		Liquid Separator	General Purpose Coalescing Filter	High Efficiency Coalescing Filter	Oil Vapour Reduction Filter	General Purpose Dry Particulate Filter
K-MT 10	1"	WSPX025E T1X	AOPX025E	AAPX025E	Use KA-MT Dryer Variant	AOPX025E
K-MT 15	1"	WSPX025E T1X	AOPX025E	AAPX025E	Use KA-MT Dryer Variant	AOPX025E
K-MT 20	1"	WSPX025E T1X	AOPX025E	AAPX025E	Use KA-MT Dryer Variant	AOPX025E
K-MT 25	1½"	WSPX030G T1X	AOPX030G	AAPX030G	Use KA-MT Dryer Variant	AOPX030G
K-MT 35	1½"	WSPX030G T1X	AOPX030G	AAPX030G	Use KA-MT Dryer Variant	AOPX030G
K-MT 45	1½"	WSPX035G T1X	AOPX035G	AAPX035G	Use KA-MT Dryer Variant	AOPX035G
K-MT 60	2"	WSPX040H T1X	AOPX040H	AAPX040H	Use KA-MT Dryer Variant	AOPX040H
K-MT 75	2"	WSPX040H T1X	AOPX040H	AAPX040H	Use KA-MT Dryer Variant	AOPX040H
K-MT 95	2 ½"	WSPX045I T1X	AOPX045I	AAPX045I	Use KA-MT Dryer Variant	AOPX045I

Filtration Performance

	Liquid Separator	General Purpose Coalescing Filter	High Efficiency Coalescing Filter	Oil Vapour Reduction Filter	General Purpose Dry Particulate Filter
Filtration Grade	Grade WS	Grade AO	Grade AA	-	Grade AO
Filtration Type	Liquid Separator	Coalescing	Coalescing	-	Dry Particulate
Particle Reduction (inc water & oil aerosols)	N/A	Down to 1 micron	Down to 0.01 micron	-	Down to 1 micron
Maximum Remaining Oil Aerosol Content at 21oC	N/A	⩽0.5 mg/m³ (⩽0.5 ppm(w))	⩽0.01 mg/m³ (⩽0.01 ppm(w))	-	N/A
Maximum Remaining Oil Vapour Content at System Temperature	N/A	N/A	N/A	-	N/A
Filtration Efficiency	>92%	99.925%	99.9999%	-	99.925%

Required in addition to dryer above - To be ordered separately

	KMT 10 - KMT 95
OIL-X Grade WS Liquid Separator (Required to protect coalescing filters from bulk liquid condensate)	●
OIL-X Grade AO General Purpose Coalescing Filter (Required - to meet ISO 8573-1:2010 Classifications Stated)	●
Inlet / Outlet Piping (Parker Transair aluminium piping recommended)	●

Technical Specifications - KA-MT 10-95

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	
KA-MT 10-95	-40	-40	Class 2:2:2	-70	-100	Class 2:1:2	-25	-13	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
	bar g	psi g	bar g	psi g	˚C	˚F	˚C	˚F	˚C	˚F				dB(A)
KA-MT 10-95	5	73	16	232	5	41	50	122	50	122	230V 1ph 50Hz/60Hz	115V 1ph 50Hz/60Hz or 24V DC	BSPP	65-86

Flow Rates

Model	Pipe Size	Inlet Flow Rate			
		L/s	m³/min	m³/hr	cfm
KA-MT 10	30	1,8	105	62	62
KA-MT 15	40	2,4	145	85	85
KA-MT 20	56	3,3	200	118	118
KA-MT 25	70	4,3	255	150	150
KA-MT 35	97	5,8	350	206	206
KA-MT 45	117	7	420	247	247
KA-MT 60	172	10,3	620	365	365
KA-MT 75	208	12,5	750	441	441
KA-MT 95	261	15,7	940	553	553

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 inlet temperature, maximum 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
Correction Factor		0.94	0.95	1.00	1.15	1.22	1.28

CFMAT - 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

CFMIP - Correction Factor Minimum Inlet Pressure

Minimum Inlet Pressure	bar g	4	5	6	7	8	9	10	11	12	13	14	15	16
	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
	˚F	-13	-40	-100
Correction Factor		1.00	1.00	2.00

Controller Functions

Dryer Models	Controller Function							
	Power On Indication	Visual Fault Indication	Dewpoint Display	Dewpoint Switching Energy Saving Technology	Filter Service Indicator	Dryer Service Indicator	Fault Relay	4-20mA Dewpoint Re-transmission
KA-MT 10 - 95	●		*MT Variant Only	*MT Variant Only		●	●	Option

Filter Grades Included / Required / Optional

Included / Required	Required - To be ordered separately	Included with Dryer
OIL-X Grade WS Liquid Separator	●	
OIL-X Grade AO General Purpose Coalescing Filter	●	
OIL-X Grade AA High Efficiency Coalescing Filter		●
KA-MT Adsorption Dryer		●
Oil Vapour Reduction Filter		●
OIL-X Grade AO General Purpose Dry Particulate Filter		●

Filter Models Required* / Included / Optional

Model	Filter Connections BSPP or NPT	Dryer Inlet			Dryer Outlet	
		Required		Included	Included	
		Liquid Separator	General Purpose Coalescing Filter	High Efficiency Coalescing Filter	Oil Vapour Reduction Filter	General Purpose Dry Particulate Filter
KA-MT 10	1"	WSPX025E T1X	AOPX025E	AAPX025E	Included	AOPX025E
KA-MT 15	1"	WSPX025E T1X	AOPX025E	AAPX025E	Included	AOPX025E
KA-MT 20	1"	WSPX025E T1X	AOPX025E	AAPX025E	Included	AOPX025E
KA-MT 25	1½"	WSPX030G T1X	AOPX030G	AAPX030G	Included	AOPX030G
KA-MT 35	1½"	WSPX030G T1X	AOPX030G	AAPX030G	Included	AOPX030G
KA-MT 45	1½"	WSPX035G T1X	AOPX035G	AAPX035G	Included	AOPX035G
KA-MT 60	2"	WSPX040H T1X	AOPX040H	AAPX040H	Included	AOPX040H
KA-MT 75	2"	WSPX040H T1X	AOPX040H	AAPX040H	Included	AOPX040H
KA-MT 95	2½"	WSPX045I T1X	AOPX045I	AAPX045I	Included	AOPX045I

Filtration Performance

	Liquid Separator	General Purpose Coalescing Filter	High Efficiency Coalescing Filter	Oil Vapour Reduction Filter	General Purpose Dry Particulate Filter
Filtration Grade	Grade WS	Grade AO	Grade AA	AKM	Grade AO
Filtration Type	Liquid Separator	Coalescing	Coalescing	Adsorption	Dry Particulate
Particle Reduction (inc water & oil aerosols)	N/A	Down to 1 micron	Down to 0.01 micron	N/A	Down to 1 micron
Maximum Remaining Oil Aerosol Content at 21oC	N/A	⩽0.5 mg/m3 (⩽0.5 ppm(w))	⩽0.01 mg/m3 (⩽0.01 ppm(w))	⩽0.003 mg/m3 (⩽0.003 ppm(w))	N/A
Maximum Remaining Oil Vapour Content at System Temperature	N/A	N/A	N/A	N/A	N/A
Filtration Efficiency	>92%	99.925%	99.9999%	N/A	99.925%

Required in addition to dryer above - To be ordered separately	KA-MT 10 - KA-MT 95
OIL-X Grade WS Liquid Separator (Required to protect coalescing filters from bulk liquid condensate)	●
OIL-X Grade AO General Purpose Coalescing Filter (Required - to meet ISO 8573-1:2010 Classifications Stated)	●
Inlet / Outlet Piping (Parker Transair aluminium piping recommended)	●

Technical Specifications - KE-MT 120-600

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	
KE-MT 120-600	-40	-40	Class 2:2:2	-70	-100	Class 2:1:2	-25	-13	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
	bar g	psi g	bar g	psi g	°C	°F	°C	°F	°C	°F				dB(A)
KE-MT 120-600	4	58	10*	145	5	41	50	122	50	122	230V 1ph 50Hz/60Hz	115V 1ph 50Hz/60Hz or 24V DC	Flange	< 120

*Higher operating pressures on request

Flow Rates

Model	Pipe Size	Inlet Flow Rate			
		L/s	m³/min	m³/hr	cfm
KE-MT 120	DN 50	333	20	1200	706
KE-MT 150	DN 65	430	26	1550	912
KE-MT 200	DN 65	556	33	2000	1177
KE-MT 250	DN 80	695	42	2500	1472
KE-MT 300	DN 80	833	50	3000	1766
KE-MT 380	DN 100	1056	63	3800	2237
KE-MT 500	DN 100	1347	81	4850	2855
KE-MT 600	DN 125	1695	102	6100	3590

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.

Dryers for smaller flows are available on request.

Product Selection & Correction Factors

For correct operation, compressed air dryers must be sized using for the maximum inlet temperature, maximum 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
Correction Factor		0.94	0.95	1.00	1.15	1.22	1.28

CFMAT - 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

CFMIP - Correction Factor Minimum Inlet Pressure

Minimum Inlet Pressure	bar g	4	5	6	7	8	9	10
	psi g	58	73	87	100	116	131	145
Correction Factor		1.60	1.33	1.12	1.00	0.88	0.79	0.76

CFOD - Correction Factor Outlet Dewpoint

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

Controller Functions

Dryer Models	Controller Function							
	Power On Indication	Visual Fault Indication	Dewpoint Display	Dewpoint Switching Energy Saving Technology	Filter Service Indicator	Dryer Service Indicator	Fault Relay	4-20mA Dewpoint Re-transmission
KE-MT 120-600	●		*MT Variant Only	*MT Variant Only		●	●	Option

Filter Grades Included / Required / Optional

Included / Required	Required - To be ordered separately	Included with Dryer
OIL-X Grade WS Liquid Separator	●	
OIL-X Grade AO General Purpose Coalescing Filter	●	
OIL-X Grade AA High Efficiency Coalescing Filter	●	
KA-MT Adsorption Dryer		●
Oil Vapour Reduction Filter	Optional	
OIL-X Grade AO General Purpose Dry Particulate Filter	●	

Filter Models Required* / Included / Optional

Model	Liquid Separator/ Filtration Connections	Dryer Inlet			Dryer Outlet	
		Required			Optional	Required
		Liquid Separator	General Purpose Coalescing Filter	High Efficiency Coalescing Filter	Oil Vapour Reduction Filter	General Purpose Dry Particulate Filter
KE-MT 120	2½"/2½"	WSPX050I T1X	AOPX050I	AAPX050I	A120	AOPX050I
KE-MT 150	2½"/2½"	WSPX050I T1X	AOPX050I	AAPX050I	A160	AOPX050I
KE-MT 200	2½"/ 2½"	WSPX050I T1X	AOPX055I	AAPX055I	A200	AOPX055I
KE-MT 250	DN 100 / DN 100	SFH037	AO070O	AA070O	A250	AO070O
KE-MT 300	DN 125 / DN 100	SFH066	AO070O	AA070O	A300	AO070O
KE-MT 380	DN 125 / DN 100	SFH066	AO070O	AA070O	A380	AO070O
KE-MT 500	DN 150 / DN 150	SFH088	AO075P	AA075P	A500	AO075P
KE-MT 600	DN 200 / DN 200	SFH097	AO075P	AA075P	A600	AO075P

*KE-MT are supplied as a dryer only and do not include filtration. WS / SFH liquid separators, AO / AA Coalescing filters and AO Dry Particulate filters are mandatory and must be ordered separately. Note: Liquid separator and filtration matched to dryer flow rates (Pipe connections may not match exactly).

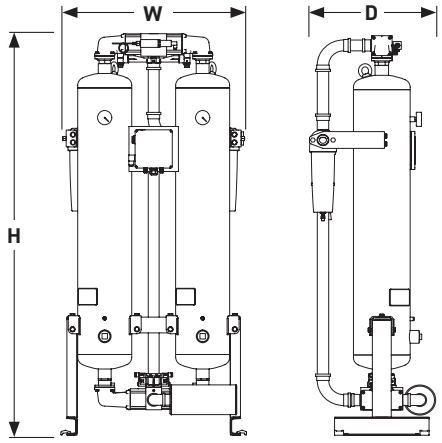
Filtration Performance

	Liquid Separator	General Purpose Coalescing Filter	High Efficiency Coalescing Filter	Oil Vapour Reduction Filter	General Purpose Dry Particulate Filter
Filtration Grade	Grade WS of SFH	Grade AO	Grade AA	AKM	Grade AO
Filtration Type	Liquid Separator	Coalescing	Coalescing	Adsorption	Dry Particulate
Particle Reduction (inc water & oil aerosols)	N/A	Down to 1 micron	Down to 0.01 micron	N/A	Down to 1 micron
Maximum Remaining Oil Aerosol Content at 21oC	N/A	⩽0.5 mg/m³ (⩽0.5 ppm(w))	⩽0.01 mg/m³ (⩽0.01 ppm(w))	⩽0.003 mg/m³ (⩽0.003 ppm(w))	N/A
Maximum Remaining Oil Vapour Content at System Temperature	N/A	N/A	N/A	N/A	N/A
Filtration Efficiency	>92%	99.925%	99.9999%	N/A	99.925%

Required in addition to dryer above - To be ordered separately	KE-MT 120-600
OIL-X Grade WS or SFH Liquid Separator (Required to protect coalescing filters from bulk liquid condensate)	●
OIL-X Grade AO General Purpose Coalescing Filter (Required - to meet ISO 8573-1:2010 Classifications Stated)	●
OIL-X Grade AA High Efficiency Coalescing Filter (Required - to meet ISO 8573-1:2010 Classifications Stated)	●
OIL-X Grade AO General Purpose Dry Particulate Filter (Required - to meet ISO 8573-1:2010 Classifications Stated)	●
Inlet / Outlet Piping (Parker Transair aluminium piping recommended)	●

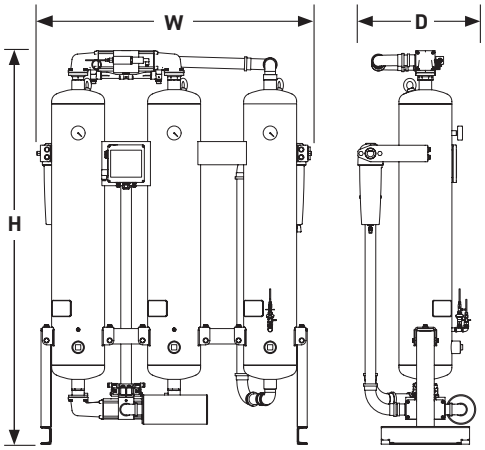
Weights & Dimensions - K-MT 10-95

Model	Pipe Size BSPP	Dimensions						Weight	
		Height (H)		Width (W)		Depth (D)			
		mm	ins	mm	ins	mm	ins	kg	lbs
K-MT 10	1"	1411	56	814	32	466	18	120	264
K-MT 15	1"	1740	69	814	32	466	18	138	304
K-MT 20	1"	1515	60	645	25	466	18	143	315
K-MT 25	1½"	1735	68	623	25	506	20	173	381
K-MT 35	1½"	1783	70	778	31	534	21	210	463
K-MT 45	1½"	1808	71	807	32	555	22	249	549
K-MT 60	2"	1847	73	857	34	607	24	277	610
K-MT 75	2"	1980	78	952	37	628	25	408	899
K-MT 95	2½"	2001	79	998	39	658	26	510	1125



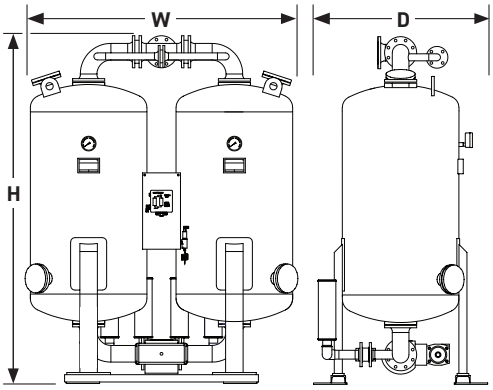
Weights & Dimensions - KA-MT 10-95

Model	Pipe Size BSPP or NPT	Dimensions						Weight	
		Height (H)		Width (W)		Depth (D)			
		mm	ins	mm	ins	mm	ins	kg	lbs
KA-MT 10	1"	1411	56	1118	44	466	18	161	355
KA-MT 15	1"	1739	68	1118	44	466	18	193	425
KA-MT 20	1"	1515	60	949	37	466	18	193	425
KA-MT 25	1½"	1735	68	926	36	506	20	234	516
KA-MT 35	1½"	1783	70	1213	47	534	21	283	624
KA-MT 45	1½"	1808	71	1245	49	555	22	334	736
KA-MT 60	2"	1859	73	1292	51	607	24	428	944
KA-MT 75	2"	1980	78	1447	57	628	25	555	1224
KA-MT 95	2½"	2001	79	1493	59	658	26	698	1539



Weights & Dimensions - KE-MT 120-600

Model	Pipe Size	Dimensions						Weight	
		Height (H)		Width (W)		Depth (D)			
		mm	ins	mm	ins	mm	ins	kg	lbs
KE-MT 120	DN 50	2080	82	1060	42	840	33	640	1411
KE-MT 150	DN 65	2120	83	1270	50	900	35	830	1830
KE-MT 200	DN 65	2160	85	1350	53	990	39	955	2106
KE-MT 250	DN 80	2210	87	1530	60	1040	41	1075	2370
KE-MT 300	DN 80	2255	88	1600	62	1100	43	1500	3307
KE-MT 380	DN 100	2385	93	1875	73	1200	47	1990	4388
KE-MT 500	DN 100	2660	104	1925	76	1250	49	2410	5314
KE-MT 600	DN 125	2816	111	2155	85	1304	51	2700	5953



Quality Assurance / IP Rating / Pressure Vessel Approvals - K-MT 10-95 / KA-MT 10-95 / KE-MT 120-600

Development / Manufacture	ISO 9001 / ISO 14001
Ingress Protection Rating	IP65 Indoor and frost free installation only
EU/UK	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
AUS	Approval to AS1210 not required
For use with Compressed Air Only	

PRODUCT IMAGES

K-MT 10-95

Left Angle View

Front

Back

Left Angle View

KA-MT 10-95

Left Angle View

Front

Back

Left Angle View

KE-MT 120-600

Left Angle View

Front

Back

Left Angle View

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US Product Information Centre
Toll-free number: 1-800-27 27 537

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