COMPRESSED AIR AND GAS TREATMENT

2018 Catalogue

Parker

ENGINEERING YOUR SUCCESS.

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INTRODUCTION

FOCUSED ON offering the best solutions for compressed air and gas treatment

Parker engineer a comprehensive range of filtration and separation, refrigeration and adsorption technology, covering every aspect of every compressed air and gas treatment system.

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As global leaders, our goal is always to provide our customers with the ideal solution – combining effectiveness, efficiency and lowest total lifetime cost.

FOCUSED ON TECHNOLOGY

Within our European gas separation and filtration business, we bring together more than 165 years' combined experience, concentrated in three centres of excellence and each focused on a specific technology: Parker domnick hunter - focused on filtration and separation; Parker Hiross - focused on refrigeration and cooling; and Parker Zander - focused on adsorption. It is this expert focus that enables us to engineer superior performance for end-users.

We offer a comprehensive range, with a class-leading product for every key application. Designed to provide customers with the best equipment for their requirement, our portfolio includes: compressed air filters, elements and accessories; compressed air and gas oil and water separators; gas generators; heatless dryers; high pressure dryers; refrigeration dryers and chillers; and tandem dryers.

FOCUSED ON IMPROVING PERFORMANCE

Every Parker solution is developed with a combination of specialist engineering expertise, continual investment in research and technology, and a deep understanding of our customers' needs. We provide outstanding products for a world of industries and markets including industrial and manufacturing, food and beverage, analytical gas, laser cutting, and biogas treatment. And wherever we operate, our focus is always on providing operators with the solutions they need for success – creating value through innovation, energy efficient technology, improved productivity and profitability, reduced lifetime cost, expert service and support, and straightforward product choice.

This catalogue presents our complete, current product portfolio. Organised by technology and product range, it provides all the information you need to select the appropriate equipment for every compressed air challenge.

As world leaders in compressed air and gas treatment, Parker deliver solutions you can trust for outstanding performance, quality, and efficiency.

INTERNATIONAL STANDARDS ORGANISATION COMPRESSED AIR STANDARDS

The International Standards Organisation (ISO) is the world's largest developer of internationally recognised standards.

As a non-governmental organisation the ISO network has members from across 159 countries, with the General Secretariat in Geneva, Switzerland. The organisation bridges relations between the public and private sectors.

As a key member of national governing bodies such as the British Compressed Air Society, the German VDMA and CAGI in the USA; Parker directly contributes to the development of standards for compressed air quality and test methods.

Currently there are three standards directly related to compressed air quality and testing:

ISO12500 Series
This standard is used to benchmark and verify the performance of compressed air filters.

ISO07183
Similar to ISO12500, this standard is used to validate the performance of compressed air dryers.

ISO8573 Series
Consisting of nine parts, ISO8573 specifies the quality of compressed air and the test methods to identify contaminations.

ISO8573-1 is the principal document in this series, it stipulates the amount of contamination allowed in each cubic metre of compressed air. Listed as three main contaminants (solid particulate, water and oil), each contaminant is detailed into a different class.

ISO8573-1:2010 CLASS	Solid Particulate				Water		Oil
	Maximum Number of Particulates per m³			Mass Concentration mg/m³	Vapour Pressure Dewpoint	Liquid g/m³	Total Oil (aerosol liquid and vapour) mg/m³
	0.1 - 0.5 micron	0.5 - 1 micron	1 - 5 micron				
0	As specified by the equipment user or supplier and more stringent than Class 1						
1	⩽ 20,000	⩽ 400	⩽ 10	–	⩽ -70°C	–	0.01
2	⩽ 400,000	⩽ 6,000	⩽ 100	–	⩽ -40°C	–	0.1
3	–	⩽ 90,000	⩽ 1,000	–	⩽ -20°C	–	1
4	–	–	⩽ 10,000	–	⩽ +3°C	–	5
5	–	–	⩽ 100,000	–	⩽ +7°C	–	–
6	–	–	–	⩽ 5	⩽ +10°C	–	–
7	–	–	–	5 - 10	–	⩽ 0.5	–
8	–	–	–	–	–	0.5 - 5	–
9	–	–	–	–	–	5 - 10	–
X	–	–	–	> 10	–	> 10	> 10

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OPTIMISED SYSTEM DESIGN

From general purpose ring main to critical point of use air, the extensive range of purification equipment available from Parker means that a system can be designed to meet any need.

In many cases treatment of compressed air at the point of generation is not enough to meet specific ISO classes, while 'over treatment' at the point of generation can become a costly mistake when considering system running costs. Parker aims to work with its partners to develop the most efficient system available for the application.

ISO8573-1:2010 Compliant Equipment

ISO8573-1:2010 CLASS	Solid Particulate		Water	Oil
	Wet Particulate	Dry Particulate	Vapour	Total Oil (aerosol liquid and vapour)
0	–	–	–	OIL-X Grade AO + AA + OVR
1	OIL-X Grade AO + AA	OIL-X Grade AO (M) + AA (M)	Dryer sized for -70°C PDP	OIL-X Grade AO + AA + OVR OIL-X Grade AO + AA +ACS
2	OIL-X Grade AO	OIL-X Grade AO (M)	Dryer sized for -40°C PDP	OIL-X Grade AO + AA
3	OIL-X Grade AO	OIL-X Grade AO (M)	Dryer sized for -20°C PDP	OIL-X Grade AO
4	OIL-X Grade AO	OIL-X Grade AO (M)	Dryer sized for +3°C PDP	OIL-X Grade AO
5	OIL-X Grade AO	OIL-X Grade AO (M)	Dryer sized for +7°C PDP	–
6	–	–	Dryer sized for +10°C PDP	–

UNDERSTANDING ISO8573-1:2010 CLASS 0

A number of compressor manufacturers claim that their oil-free compressors deliver air in accordance with Class 0 for total oil and that little to no purification is required downstream.

Class 0 does not mean zero contamination, solid particulate and water vapour would still need to be reduced to acceptable levels to achieve ISO8573-1:2010 standards, meaning additional purification equipment is essential.

Typically, for critical applications in the medical and food industries guidelines state that ISO8573-1:2010 2.2.1 is acceptable, but in rare cases where the application has to meet Class 0 with respect to total oil, the remaining acceptable oil concentration has to be agreed in writing and tested in-line with parts 2-9 of ISO8573-1:2010 to be in accordance with Class 0 standards.

PERFORMANCE VALIDATION

All Parker filters are designed to provide compressed air that meets the classification set out in ISO8573-1 and when applicable are tested in accordance with ISO12500-1, ISO7183 and the related parts of ISO8573-1:2010, this is always third party witnessed and validated by Lloyds Register.

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FOCUSED ON FILTRATION AND SEPARATION

Parker is world-renowned for compressed air filtration and separation. Having invented modern filter technology, we remain at the forefront of filtration and separation innovation, fully committed to the development of more efficient and effective treatment.

Our comprehensive range of filtration and separation systems includes: compressed air filters, elements and accessories; compressed air drains and exhaust silencers; compressed air and gas water separators and oil/water separators, as well as CO_2 incident protection systems and industrial nitrogen gas generators.

Offering superior compressed air and gas purity, product quality, technological excellence and global support, our solutions lead the way in air filtration and separation. And with the largest range of filter types and configurations on the market, we can optimise operations in almost every industry, on every continent, including transportation/mobile equipment, industrial/plant equipment, food and beverage, life sciences, process industries, marine and power generation.

Parker

FILTRATION AND SEPARATION

NITROSource

COMPRESSED AIR AND GAS – WATER SEPARATORS

Compressed Air and Gas – Water Separators

Designed to protect coalescing filters from bulk liquid contamination, Parker's comprehensive range of water separators work to the highest standard of separation efficiency.

Our water separators provide high liquid removal efficiencies at all flow conditions, increasing the reliability and effectiveness of your compressed air and gas systems.

COMPRESSED AIR AND GAS – WATER SEPARATORS

Parker

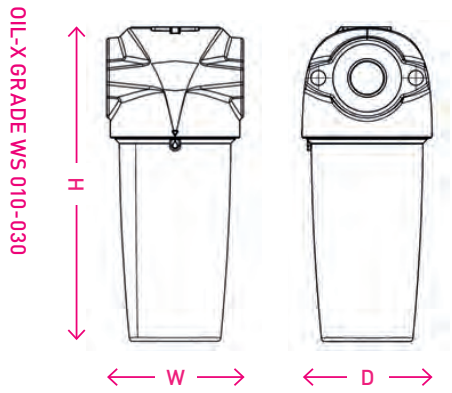
OIL-X Grade WS

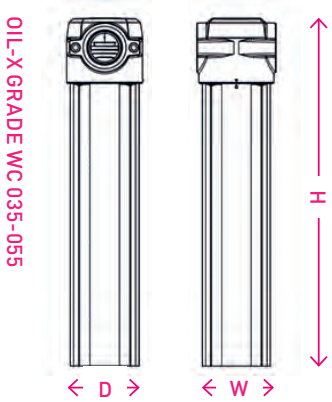
Die cast aluminium and fabricated carbon steel water separators for the efficient removal of bulk liquid contamination from a compressed air supply, providing flow rates up to 25920 m³/h @ 7 bar g.

Bulk water which exists in all compressed air systems causes problems – corrosion of piping, permanent damage to valves, cylinders, pneumatic tools, machinery and reducing the effectiveness of aftercoolers/heat exchangers.

Over 99% of bulk water can be easily and economically removed by installing a Parker domnick hunter OIL-X Grade WS high efficiency water separator. Now, your compressed air system will operate much more efficiently with reduced downtime and maintenance costs. Grade WS technology will also improve the effectiveness of aftercoolers, refrigerant dryers, filters and other downstream equipment.

Diagrams:





Technical Data

Grade	Water Separator Models	Min Operating Pressure		Max Operating Pressure		Min Operating Temp		Max Operating Temp	
		bar g	psi g	bar g	psi g	°C	°F	°C	°F
WS	P010A ☐ FX – P055J ☐ FX	1	15	16	232	2	35	80	176
WS	P060K ☐ FX	1	15	16	232	2	35	66	150

Flow Rates

Model	Port Connection	L/S	m³/min	m³/hr	cfm
WSP010A ☐ FX	¼"	10	0.6	36	21
WSP010B ☐ FX	⅜"	10	0.6	36	21
WSP010C ☐ FX	½"	10	0.6	36	21
WSP015C ☐ FX	½"	40	2.4	144	85
WSP020D ☐ FX	¾"	40	2.4	144	85
WSP025D ☐ FX	¾"	110	6.6	396	233
WSP025E ☐ FX	1"	110	6.6	396	233
WSP030G ☐ FX	1½"	110	6.6	396	233
WSP035G ☐ FX	1½"	350	21	1260	742
WSP040H ☐ FX	2"	350	21	1260	742
WSP045I ☐ FX	2½"	350	21	1260	742
WSP050I ☐ FX	2½"	800	48	2880	1695
WSP055J ☐ FX	3"	800	48	2880	1695
WSP060K ☐ FX	4"	1000	60	3600	2119

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.

Water Separator Coding Example – WS010 – WS055

Grade	Model	Port Connection	Connection Type	Drain Option	Incident Monitor Option
WS	P and 3 digit code denotes filter housing size	Letter denotes pipe size	G = BSPP N = NPT DN = Flanged	F = Float	X = None
			Example code		
WS	P010	A	G	F	X

Note:
Connection options
Models WSP010 - WSP060
G = BSPP / N = NPT.
Models WS800F - WS7200F
DN = flanged.

Product Selection and Correction Factors

To correctly select a separator model, the flow rate of the separator must be adjusted for the minimum operating pressure of the system.

1. Obtain the minimum operating pressure and maximum compressed air flow rate at the inlet of the separator.
2. Select the correction factor for minimum operating pressure from the CFP table (always round down e.g. for 5.3 bar, use 5 bar correction factor)
3. Calculate the minimum filtration capacity. Minimum Filtration Capacity = Compressed Air Flow Rate x CFP
4. Using the minimum filtration capacity, select a separator model from the flow rate tables above (separator selected must have a flow rate equal to or greater than the minimum filtration capacity).

CFP – Correction Factor Minimum Inlet Pressure

Minimum Inlet Pressure																	
	bar g	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	psi g	15	29	44	58	73	87	100	116	131	145	160	174	189	203	218	232
Correction Factor		4.00	2.63	2.00	1.59	1.33	1.14	1.00	0.94	0.89	0.85	0.82	0.79	0.76	0.73	0.71	0.68

For further product information visit **www.parker.com/gsfe**

Weights and Dimensions

Model	Height (H)		Width (W)		Depth (D)		Weight	
	mm	in	mm	in	mm	in	kg	lbs
010A	180	7.09	76	2.99	66	2.60	0.61	1.34
010B	180	7.09	76	2.99	66	2.60	0.61	1.34
010C	180	7.09	76	2.99	66	2.60	0.61	1.34
015C	238.5	9.39	89	3.5	83.5	3.29	1.16	2.58
020C	238.5	9.39	89	3.5	83.5	3.29	1.12	2.47
020D	238.5	9.39	89	3.5	83.5	3.29	1.12	2.47
025D	277	10.9	120	4.72	114.5	4.50	2.21	4.86
025E	277	10.9	120	4.72	114.5	4.50	2.21	4.86
030G	367	14.45	120	4.72	114.5	4.50	2.68	5.91
035G	531	20.9	164	6.46	156	6.10	6.90	15.20
040H	623	24.5	164	6.46	156	6.10	7.30	16.10
045I	623	24.5	164	6.46	156	6.10	7.10	15.65
050I	745	29.3	192	7.56	183	7.20	10.30	22.71
055I	935	36.8	192	7.56	183	7.20	15.30	33.73
055J	935	36.8	192	7.56	183	7.20	15.30	33.73
060K	847	33.3	420	16.54	282	11.10	44.50	98.11

Parker Hiross

Hypersep STH and SFH Series Centrifugal Water Separator

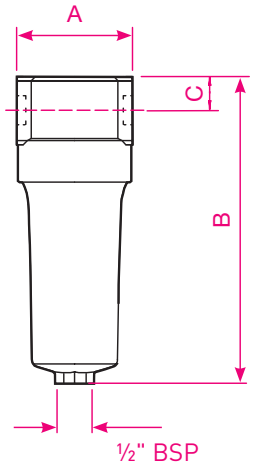
PED approved centrifugal water separators with low pressure drop for the removal of bulk condensate water from compressed air for industrial applications.

Hypersep water separators utilise centrifugal technology for the effective removal of bulk liquid from a compressed air system; providing essential downstream protection as well as the added benefit of improving the performance of other downstream equipment.

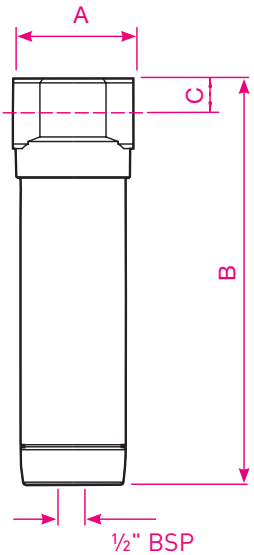
Designed to be maintenance free, Hypersep water separators are available in both threaded and flanged connections and can be installed in horizontal or vertical configuration. Requiring no external power, the easy to install Hypersep features unique Hiroshield surface protection, enabling the water separator to withstand the toughest industrial conditions.

Diagrams:

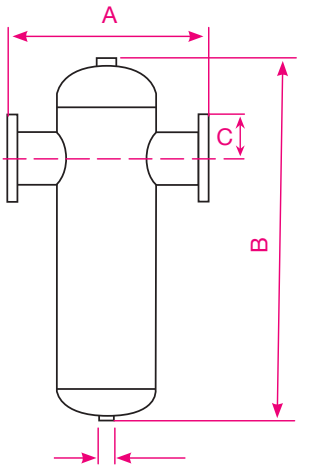
STH 001-021



STH 040-049



SFH 029-209



For further product information visit **www.parker.com/gsfe**

Technical Data

Model	Technical Data								
	Air Flow		Max. Pressure	Air Connections		Dimensions (mm)			Weight
	m^3/h	m^3/min	bar g	In	Out	A	B	C	kg
Threaded models (aluminium)									
STH001N	54	0.9	16	⅜"	⅜"	89	267	24	1.1
STH002N	126	2.1	16	½"	½"	89	267	24	1.1
STH003N	180	3	16	¾"	¾"	89	267	24	1.1
STH006N	330	5.5	16	1"	1"	109	367	34	2.2
STH009N	540	9	16	1¼"	1¼"	109	367	34	2.2
STH013N	750	12.5	16	1½"	1½"	109	367	34	2.2
STH021N	1.260	21	16	2"	2"	150	550	41	4.3
STH040N	2400	40	16	2½"	2½"	188	733	56	12.5
STH046N	2.760	46	16	3"	3"	188	733	56	12.5
Flanged filters									
SFH029N	29,4	1764	16	DN80	DN80	400	720	200	28
SFH030N	30	1800	16	DN100	DN80	400	720	200	29
SFH037N	36,6	2196	16	DN100	DN100	460	880	230	48
SFH038N	38	2280	16	DN125	DN100	460	880	230	49
SFH066N	65,6	3936	16	DN125	DN125	550	980	260	55
SFH067N	67	4020	16	DN150	DN125	550	980	260	56
SFH088N	88,4	5304	16	DN150	DN150	570	1060	290	82
SFH089N	89	5340	16	DN200	DN150	570	1060	290	85
SFH097N	97,1	5826	16	DN200	DN200	660	1160	320	126
SFH142N	141,9	8514	10	DN250	DN200	680	1255	351	148
SFH180N	179,5	10770	10	DN300	DN200	750	1455	390	160
SFH209N	209,1	12546	9	DN350	DN200	830	1655	430	205

Performances refer to air at FAD 20 °C/1 bar, and at the following working conditions: air suction 25 °C / 60%RH, 7 bar(g) working pressure, 35 °C compressed air inlet temperature, 7kPa pressure drop. Separators supplied without condensate drain (see condensate drain models for matching drain).

Performance Overview

STH	Air Flow (m³/h)	Port Connection
STH001N	54	⅜"
STH002N	126	½"
STH003N	180	¾"
STH006N	330	1"
STH009N	540	1¼"
STH013N	750	1½"
STH021N	1260	2"
STH040N	2400	2½"
STH046N	2760	3"
STH001A	54	⅜"
STH003A	180	1½"
STH013A	750	2"
STH001P	54	¾"
STH003P	180	1½"
STH013P	750	2"
STH019P	1140	DN65

SFH	Air Flow (m³/h)	Port Connection	
		In	Out
SFH029N	1764	DN80	DN80
SFH030N	1800	DN100	DN80
SFH037N	2196	DN100	DN100
SFH038N	22280	DN125	DN100
SFH066N	3936	DN125	DN125
SFH067N	4020	DN150	DN125
SFH088N	5304	DN150	DN150
SFH089N	5340	DN200	DN150
SFH097N	5826	DN200	DN200
SFH142N	8514	DN250	DN200
SFH180N	10770	DN300	DN200
SFH209N	12546	DN350	DN200

For further product information visit **www.parker.com/gsfe**

FILTER SELECTION

Coalescing filters are installed to reduce six of the ten most common compressed air contaminants (water aerosols, oil aerosols, atmospheric particulate, rust, pipescale and micro-organisms). Dry particulate filters four of the ten contaminants (atmospheric particulate, rust, pipescale and micro-organisms). To ensure consistent filtration performance, filters must be sized for the maximum flow of compressed air at the minimum system operating pressure (not the discharge pressure of the compressor). Unlike compressed air dryers or adsorption filters, only one correction factor is required.

FILTER SELECTION EXAMPLE

Maximum Inlet Flow Rate	1500 m³/hr
Minimum Inlet Pressure	8.3 bar g
Maximum Temperature	40°C
Minimum Temperature	10°C
Pipe Connections Required	2 ½"
Thread Type Required	BSPP
Filtration Grade Required	Grade AO and grade AA
Incident Monitor Required	No

1. Ensure the maximum and minimum operating temperatures and pressure are within the operational parameters of the filter range

2. Select the correction factor for minimum operating pressure from the CFP table

   Correction factor for 8.3 bar g = 0.94

Line Pressure		Correction Factor Pressure (CFP)
bar g	psi g	
6	87	1.08
7	100	1.00
8	116	0.94
9	131	0.88

Important Notes:
Pressure: Always round down to nearest factor i.e. for 8.3 bar g use correction factor for 8 bar g
Flow: The filter or water separator selected must have a flow rate equal to or greater than the minimum filtration capacity

3. Calculate the minimum filtration capacity

   Minimum filtration capacity =
   Max compressed air flow rate x CFIP

   Minimum filtration capacity =
   1500 m³/hr x 0.94 = 1410 m³/hr

Model	Port	Flow Rates			
		L/s	m³/min	m³/hr	cfm
GRADE P045I ☐ (✳) X	2 ½"	330	19.8	1188	699
GRADE P050I ☐ (✳) X	2 ½"	430	25.9	1548	911
GRADE P055I ☐ (✳) X	2 ½"	620	37.3	2232	1314
GRADE P055J ☐ (✳) X	3"	620	37.3	2232	1314

4. Using the minimum filtration capacity, select a filter model from the literature flow rate tables

   (filter selected must have a flow rate equal to or greater than the minimum filtration capacity)

   Filter model selected = 050 size

5. Select the pipe connections for the filter model selected

   Existing pipe connections are 2 ½" therefore model selected = P050I

6. Select thread type required for the filter model selected

   BSPP threads are required therefore model selected = P050IG

7. Select filtration grade or grades

   Grades AO and AA are required therefore models selected are AOP050IG and AAP050IG

8. Select coalescing or dry particulate use (drain selection or pressures above 16 bar g)

   If grade AO or AA is used as a coalescing filter then a float drain is required (up to 16 bar g). This is signified by using a letter F in the code.

   If grade AO or AA is used as a dry particulate filter or for pressures above 16 bar g then a manual drain is required. This is signified by using a letter M in the code. For ACS, the M for manual drain should be selected.

   As filters are for use as coalescing filters and operating pressure is below 16 bar g, models selected are AOP050IGF and AA050IGF.

9. Is an incident monitor required? (blockage indicator)

   An incident monitor is standard up to 1 ½" and is signified by the letter I. Filters from 2" to 4" are not available with an indicator from the factory (denoted by the letter X).

   Final part numbers for the filters selected are **AOP050IGFX and AAP050IGFX.**

Compressed Air Filters

COMPRESSED AIR FILTERS

Parker sets the standard in compressed air quality – our complete range of filters provide ultimate protection against system contamination.

Our compressed air filters guarantee a continuous supply of high quality compressed air, with up to 99.9999% particle removal efficiency, low operational costs and minimal maintenance.

Parker

Parker domnick hunter

OIL-X Coalescing / Dry Particulate / Oil Vapour Removal Compressed Air Filters

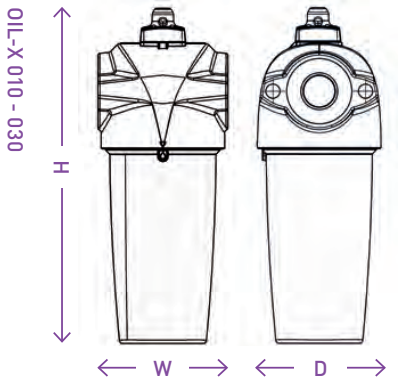
High efficiency coalescing and dry particulate filters with very low pressure drop providing excellent energy savings.

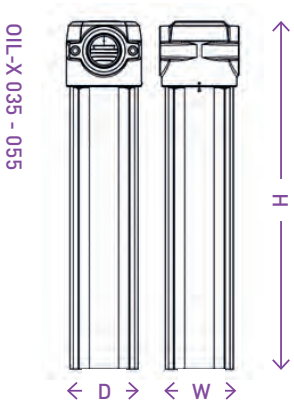
The Parker domnick hunter OIL-X range of die-cast compressed air filters has been designed from the outset to meet the air quality requirements of all editions of ISO8573-1, when validated in accordance with the stringent requirements of ISO12500-1.

An efficient and cost-effective manufacturing process is a major factor in maintaining the profitability and growth of your business. All Parker domnick hunter products are designed to not only minimise the use of compressed air and electrical energy in their operation, but also to significantly reduce the operational costs of the compressor by minimising pressure losses.

OIL-X filters incorporate a number of unique and patented design features to minimise differential pressure and provide a filter and element combination where the differential pressure starts low and stays low to maximise energy savings and provide the lowest lifetime costs without compromising air quality.

Diagrams:





Filtration Performance

Filtration Grade	Filter Type	Particle Removal (inc water and oil aerosols)	Max Remaining Oil Content at 21°C (70°F)	Filtration Efficiency	Initial Dry Differential Pressure	Initial Saturated Differential Pressure	Change Element Every	Precede with Filtration Grade
AO	Coalescing and Dry Particulate	Down to 1 micron	0.5 mg/m³ 0.5 ppm(w)	99.925%	<70 mbar (1psi)	<125 mbar (1.8psi)	12 months	WS (for bulk liquid)
AA	Coalescing and Dry Particulate	Down to 0.01 micron	0.01 mg/m³ 0.01 ppm(w)	99.9999%	<70 mbar (1psi)	<125 mbar (1.8psi)	12 months	AO
ACS	Oil Vapour Removal	N/A	0.003 mg/m³ 0.003 ppm(w)	N/A	<140 mbar (2psi)	N/A	When oil vapour is detected	AO+AA

Parker

Technical Data

Filter Grade	Filter Models	Min Operating Pressure		Max Operating Pressure		Min Operating Temp		Max Operating Temp	
		bar g	psi g	bar g	psi g	°C	°F	°C	°F
AO/AA	P010 – P055 (Float Drain)	1	15	16	232	2	35	80	176
AO/AA	P010 – P055 (Manual Drain)	1	15	20	290	2	35	80	176
AO/AA	P060 (Float Drain)	1	15	16	232	2	35	66	150
AO/AA	P060 (Manual Drain)	1	15	20	290	2	35	100	212
ACS	P010 – P055 (Manual Drain)	1	15	20	290	2	35	50	122
ACS	P060 (Manual Drain)	1	15	20	290	2	35	50	122

Flow Rates

Model	Port Connection	L/S	m^3/min	m^3/hr	cfm	Replacement Element kit	No.
GRADE P010A □□I	¼"	10	0.6	36	21	P010 GRADE	1
GRADE P010B □□I	3/8"	10	0.6	36	21	P010 GRADE	1
GRADE P010C □□I	½"	10	0.6	36	21	P010 GRADE	1
GRADE P015C □□I	½"	20	1.2	72	42	P015 GRADE	1
GRADE P020C □□I	½"	30	1.8	108	64	P020 GRADE	1
GRADE P020D □□I	¾"	30	1.8	108	64	P020 GRADE	1
GRADE P025D □□I	¾"	60	3.6	216	127	P025 GRADE	1
GRADE P025E □□I	1"	60	3.6	216	127	P025 GRADE	1
GRADE P030G □□I	1½"	110	6.6	396	233	P030 GRADE	1
GRADE P035G □□I	1½"	160	9.6	576	339	P035 GRADE	1
GRADE P040H □□X	2"	220	13.2	792	466	P040 GRADE	1
GRADE P045I □□X	2½"	330	19.8	1188	699	P045 GRADE	1
GRADE P050I □□X	2½"	430	25.9	1548	911	P050 GRADE	1
GRADE P055I □□X	2½"	620	37.3	2232	1314	P055 GRADE	1
GRADE P055J □□X	3"	620	37.3	2232	1314	P055 GRADE	1
GRADE P060K □□X	4"	1000	60	3600	2119	P060 GRADE	3

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.

Filter Coding Examples P010 – P055

Grade	Model	Port Connection	Connection Type	Drain Option	Incident Monitor Option
AO	P and 3 digit code denotes filter housing size	Letter denotes port connection	G = BSPP N = NPT D = Flanged	F = Float M = Manual	I = Indicator X = None
			Example code		
AO	P010	A	G	F	I

Note:
Connection options
Models P010 – P060
G = BSPP / N = NPT.
Models 065 – 095
D = flanged.

Product Selection and Correction Factors

To correctly select a filter model, the flow rate of the filter must be adjusted for the minimum operating pressure of the system.

1. Obtain the minimum operating pressure and maximum compressed air flow rate at the inlet of the filter.
2. Select the correction factor for minimum operating pressure from the CFP table (always round down e.g. for 5.3 bar, use 5 bar correction factor)
3. Calculate the minimum filtration capacity. Minimum Filtration Capacity = Compressed Air Flow Rate x CFP
4. Using the minimum filtration capacity, select a filter model from the flow rate tables above (filter selected must have a flow rate equal to or greater than the minimum filtration capacity).

CFP – Correction Factor Minimum Inlet Pressure

Minimum Inlet Pressure																					
	bar g	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	psi g	15	29	44	58	73	87	100	116	131	145	160	174	189	203	218	232	248	263	277	290
Correction Factor		2.65	1.87	1.53	1.32	1.18	1.08	1.00	0.94	0.88	0.84	0.80	0.76	0.73	0.71	0.68	0.66	0.64	0.62	0.61	0.59

When ordering a filter for pressures above 16 bar g (232 psi g), use a manual drain. Replace F with M in product code. e.g. AOP015BGFX becomes AOP015BGMX. Models 150 – 500 are not suitable for pressures above 16 bar g (232 psi g)

Weights and Dimensions

Model	Height (H)		Width (W)		Depth (D)		Weight	
	mm	in	mm	in	mm	in	kg	lbs
010A	180	7.09	76	2.99	66	2.60	0.61	1.34
010B	180	7.09	76	2.99	66	2.60	0.61	1.34
010C	180	7.09	76	2.99	66	2.60	0.61	1.34
015C	238.5	9.39	89	3.5	83.5	3.29	1.16	2.58
020C	238.5	9.39	89	3.5	83.5	3.29	1.12	2.47
020D	238.5	9.39	89	3.5	83.5	3.29	1.12	2.47
025D	277	10.9	120	4.72	114.5	4.50	2.21	4.86
025E	277	10.9	120	4.72	114.5	4.50	2.21	4.86
030G	367	14.45	120	4.72	114.5	4.50	2.68	5.91
035G	531	20.9	164	6.46	156	6.10	6.90	15.20
040H	623	24.5	164	6.46	156	6.10	7.30	16.10
045I	623	24.5	164	6.46	156	6.10	7.10	15.65
050I	745	29.3	192	7.56	183	7.20	10.30	22.71
055I	935	36.8	192	7.56	183	7.20	15.30	33.73
055J	935	36.8	192	7.56	183	7.20	15.30	33.73
060K	847	33.3	420	16.54	282	11.10	44.50	98.11

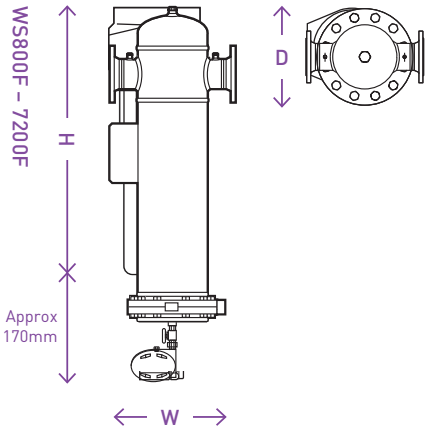
OIL-X Carbon Steel Fabricated Compressed Air Filter

High efficiency compressed air filters for applications requiring large flow rates up to 31248 m³/hr @ 7 bar g with a maximum operating pressure of 16 bar g.

The Parker domnick hunter OIL-X range of fabricated carbon steel compressed air filters combine an innovative filter housing and filter element design to achieve optimum flow characteristics with minimum pressure drop, resulting in considerable cost savings throughout the entire operating lifetime of the filter element.

The filter housing has been designed for ease of maintenance. A low placed service flange, supported by a pivoting hinge joint, enables element replacement to be undertaken by a single individual. A dished housing bottom provides ample space to drain away liquids efficiently. The patented filter element design provides a secure seal to avoid any possibility of contamination bypassing the element.

Diagrams:



For further product information visit **www.parker.com/gsfe**

Coding Example

Grade	Model	Port Connection	Connection Type	Drain Option	Incident Monitor Option
A0	3 digit code denotes filter housing size	Letter denotes port connection	D = Flanged	F = Float M = Manual	X = None
		Example code			
A0	065	P	D	F	X

Product Selection

Model	Port Connection	L/S	m^3/min	m^3/hr	cfm	Replacement Element Kit	No.
GRADE 065ND ☐X	DN80	620	37.2	2232	1312	200 GRADE	1
GRADE 070OD ☐X	DN100	1240	74.4	4464	2625	200 GRADE	2
GRADE 075PD ☐X	DN150	1860	111.6	6696	3938	200 GRADE	3
GRADE 080PD ☐X	DN150	2480	148.8	8928	5251	200 GRADE	4
GRADE 085QD ☐X	DN200	3720	223.2	13392	7877	200 GRADE	6
GRADE 090RD ☐X	DN250	6200	372	22320	13129	200 GRADE	10
GRADE 095SD ☐X	DN300	8680	520.8	31248	18380	200 GRADE	14

Correction Factors

Line Pressure																	
	bar g	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	psi g	15	29	44	58	73	87	100	116	131	145	160	174	189	203	218	232
Correction Factor		4.00	2.63	2.00	1.59	1.33	1.14	1.00	0.94	0.89	0.85	0.82	0.79	0.76	0.73	0.71	0.68

To correctly select a filter model, the flow rate of the filter must be adjusted for the minimum operating pressure of the system.

1. Obtain the minimum operating pressure and maximum compressed air flow rate at the inlet of the filter.
2. Select the correction factor for minimum operating pressure from the CFP table (always round down e.g. for 5.3 bar, use 5 bar correction factor)
3. Calculate the minimum filtration capacity Minimum Filtration Capacity = Compressed Air Flow Rate x CFP
4. Using the minimum filtration capacity, select a model from the flow rate tables above

Weights and Dimensions

Model	Port Connection	Height (H)		Width (W)		Depth (D)		Weight	
		mm	in	mm	in	mm	in	kg	lbs
065ND	DN80	1065	42	440	17.3	340	13.4	70	154
070OD	DN100	1152	45.4	500	19.7	405	16	97	214
075PD	DN150	1256	49.5	600	23.6	520	20.5	148	326
080PD	DN150	1332	52.4	650	25.6	580	22.8	187	412
085QD	DN200	1415	55.7	750	29.5	640	25.2	240	529
090RD	DN250	1603	63.1	1000	39.4	840	33	470	1036
095SD	DN300	1706	67.2	1050	41.3	910	35.8	580	1279

Parker domnick hunter

Hyperfilter Compressed Air Filter

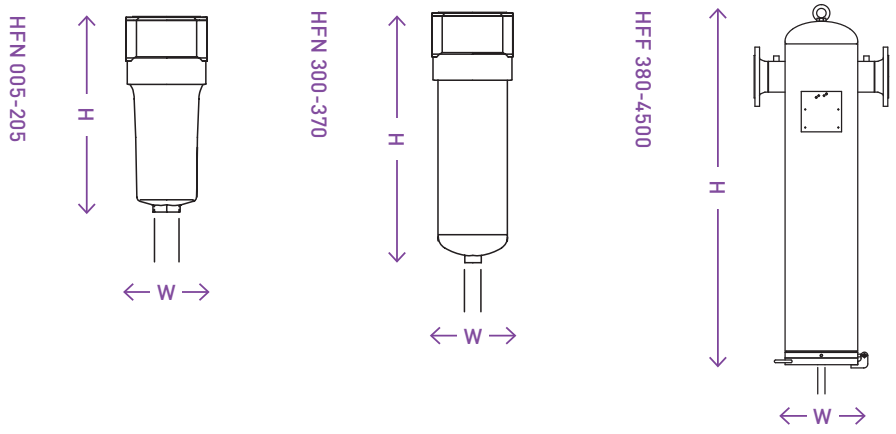
Die cast aluminium and fabricated carbon steel coalescing, dry particulate and oil vapour removal compressed air filters.

Compressed air incorporates a high concentration of dirt, oil, moisture and other impurities. Failure to remove these contaminants will lead to escalating maintenance costs, lengthy downtimes and damaged finished goods.

Hyperfilter coalescing, dry particulate and oil vapour removal filters have been specifically designed to prevent these undesired effects, offering a comprehensive range of compressed air filters covering all industrial needs.

Available in 5 filter grades: Coarse pre-filter, general purpose and high efficiency coalescing filters, dry particulate filter and oil vapour removal filter.

Diagrams:



Filtration Performance

Filtration Grade	Particle Removal (inc water and oil aerosols)	Max Remaining Oil Content at 21°C (70°F)	Change Element Every
D/Q	Down to 3 micron	N/A	12 months
P	Down to 1 micron	0.5mg/m³	12 months
S	Down to 0.01 micron	0.01mg/m³	12 months
C	N/A	0.003 mg/m³	When Oil Vapour is Detected

For further product information visit **www.parker.com/gsfe**

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Technical Data

Filtration Grade	Filter Type	Drain Type	Min. Operating Pressure		Max. Operating Pressure		Min. Operating Temp		Max. Operating Temp	
			bar g	psi g	bar g	psi g	°C	°F	°C	°F
Q	General Purpose	Float	1	15	16	232	2	35	65	149
P	Fine	Float	1	15	16	232	2	35	65	149
S	Ultra Fine	Float	1	15	16	232	2	35	65	149
C	Critical	Manual	1	15	16	232	2	35	65	149
D	Low Dewpoint	Manual	1	15	16	232	2	35	65	149

Flow Rates

Model	Port Connection	Flow Rates				Replacement Element Kit
		L/s	m^3/min	m^3/hr	cfm	
HFN005	¼"	8.8	0.5	31.8	18.7	005-ELZ
HFN010	⅜"	16.7	1.0	60	35.3	010-ELZ
HFN018	½"	30.0	1.8	108	63.6	018-ELZ
HFN022	¾"	36.7	2.2	132	77.7	022-ELZ
HFN030	¾"	50.0	3.0	180	106.0	030-ELZ
HFN045	1"	75.0	4.5	270	159.0	045-ELZ
HFN062	1¼"	103.3	6.2	372	219.0	062-ELZ
HFN072	1½"	120.0	7.2	432	254.3	072-ELZ
HFN122	1½"	203.3	12.2	732	430.8	122-ELZ
HFN135	2"	225.0	13.5	810	477.0	135-ELZ
HFN175	2"	291.7	17.5	1050	618.0	175-ELZ
HFN205	2"	341.7	20.5	1230	724.0	205-ELZ
HFN300	2½"	500.0	30.0	1800	1059.4	300-ELZ
HFN370	3"	611.1	37.0	2220	1295.0	370-ELZ

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.

Correction Factors

Line Pressure																
bar g	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
psi g	15	29	44	58	73	87	100	116	131	145	160	174	189	203	218	232
Correction Factor Pressure (CFP)	2.65	1.87	1.53	1.32	1.18	1.08	1.00	0.94	0.88	0.84	0.80	0.76	0.73	0.71	0.68	0.66

Please apply these correction factors to the flow at pressures other than 7 bar g (102 psi g).

Applying Correction Factors

To correctly select a filter model, the flow rate of the filter must be adjusted for the minimum operating pressure of the system.

1. Obtain the minimum operating pressure and maximum compressed air flow rate at the inlet of the filter.
2. Select the correction factor for minimum operating pressure from the CFP table (always round down e.g for 5.3 bar, use 5 bar correction factor)
3. Calculate the minimum filtration capacity : Minimum Filtration Capacity = Compressed Air Flow Rate x CFP
4. Using the minimum filtration capacity, select a filter model from the flow rate tables above (filter selected must have a flow rate equal to or greater than the minimum filtration capacity)

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Weights and Dimensions

Model	Height (H)		Width (W)		Weight	
	mm	in	mm	in	kg	lbs
HFN005	168	6.6	69	2.7	0.6	1.3
HFN010	267	10.5	89	3.5	1.2	2.6
HFN018	267	10.5	89	3.5	1.2	2.6
HFN022	267	10.5	89	3.5	1.2	2.6
HFN030	367	14.4	109	4.3	2.4	5.3
HFN045	367	14.4	109	4.3	2.4	5.3
HFN062	514	20.2	109	4.3	3.0	6.6
HFN072	514	20.2	109	4.3	3.0	6.6
HFN122	550	21.6	150	5.9	5.2	11.5
HFN135	550	21.6	150	5.9	5.2	11.5
HFN175	928	36.5	150	5.9	6.5	14.3
HFN205	928	36.5	150	5.9	6.6	14.5
HFN300	733	28.8	188	7.4	13.5	29.8
HFN370	933	36.7	188	7.4	16.0	35.3

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Parker domnick hunter

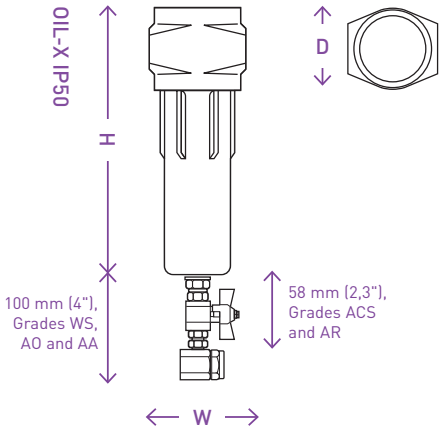
OIL-X IP50 Intermediate Pressure Compressed Air Filter

Compressed air filters for applications requiring operating pressures up to 50 bar g (725 psi g). OIL-X IP50 are ideally suited for food, beverage, pharmaceutical and other P.E.T applications.

The removal of impurities within a compressed air system is vitally important in order to prevent contamination of downstream processes, equipment and products. Parker domnick hunter OIL-X IP50 intermediate pressure filters combine the new energy efficient OIL-Xplus filter elements with specially designed housings to provide high efficiency filtration for applications up to 50 bar g (725 psi g).

Available in various filtration grades and connection sizes, they provide a level of protection tailored to your application. Typical applications: P.E.T. bottling, air blast circuit breakers, shipborne air distribution systems, engine starting and pressure testing of pipelines.

Diagrams:



Filtration Grades

Filtration Grade	Filter Type	Particle Removal (inc water and oil aerosols)	Max. Remaining Oil Content at 21°C (70°F)	Filtration Efficiency	Change Element Every	Precede with Filtration Grade
WS	Bulk Liquid	N/A	N/A	>90%	N/A	N/A
AO	Coalescing	Down to 1 micron	0.6 mg/m³ 0.5 ppm(w)	99.925%	12 months	WS (for bulk liquid)
AA	Coalescing	Down to 0.01 micron	0.01 mg/m³ 0.01 ppm(w)	99.9999%	12 months	AO
AR	Dry Particulate	Down to 1 micron	N/A	99.925%	12 months	N/A
AAR	Dry Particulate	Down to 0.01 micron	N/A	99.9999%	12 months	AR
ACS	Oil Vapour Removal	N/A	0.003 mg/m³ 0.003 ppm(w)	ISO8573-5	when oil vapour or odour is detected	AA

Parker

Technical Data

Model/ Grade	Max. Operating Pressure		Min. Operating Temperature		Max. Operating Temperature		Initial 'Dry' Differential Pressure		Initial 'Wet' Differential Pressure	
	bar g	psi g	°C	°F	°C	°F	m bar	psi	m bar	psi
IP50 – WS	50	725	2.0	35	100	212	–	–	70	1.0
IP50 – AO	50	725	2.0	35	100	212	70	1.0	140	2.0
IP50 – AA	50	725	2.0	35	100	212	140	1.5	200	3.0
IP50 – ACS	50	725	2.0	35	30	86	70	1.0	–	–
IP50 – AR	50	725	2.0	35	100	212	70	1.0	–	–
IP50 - AAR	50	725	2.0	35	100	212	100	1.5	–	–

Recommended Filter Element change: 12 months or 6000 hours
*Not applicable to Grade ACS elements. Grade ACS elements should be changed after 1000 hours operation at 21°C (70°F) or before if odours can be detected.

Filter Selection

Model	Port Connection	L/s	m^3/min	m^3/h	cfm	Replacement Element Code
GRADE IP50 010A G☐X	¼"	30	1.8	108	64	K009 GRADE
GRADE IP50 020B G☐X	⅜"	45	2.7	162	95	K009 GRADE
GRADE IP50 030C G☐X	½"	95	5.7	342	201	K030 GRADE
GRADE IP50 040D G☐X	¾"	145	8.7	522	307	K030 GRADE
GRADE IP50 050E G☐X	1"	285	17.1	1026	604	K145 GRADE
GRADE IP50 060G G☐X	1½"	465	27.9	1674	985	K145 GRADE
GRADE IP50 070H G☐X	2"	965	57.9	3473	2044	K220 GRADE

Connections option G = BSPP. Drains options F = Automatic / M = Manual.

To correctly select a filter model, the flow rate of the filter must be adjusted for the minimum operating pressure of the system.

1. Obtain the minimum operating pressure and maximum compressed air flow rate at the inlet of the filter.
2. Select the correction factor for minimum operating pressure from the CFP table (always round down e.g. for 33 bar, use 30 bar correction factor).
3. Calculate the minimum filtration capacity. Minimum Filtration Capacity = Compressed Air Flow Rate x CFP.
4. Using the minimum filtration capacity, select a filter model from the flow rate tables above. (filter selected must have a flow rate equal to or greater than the minimum filtration capacity).

Correction Factors

Working Pressure								
	bar g	20	25	30	35	40	45	50
	psi g	290	362	435	507	580	652	725
Correction Factor		2.43	1.96	1.65	1.42	1.24	1.11	1.00

Notes: Use the correction factors above for flow rates at other working pressures.

IP50 Coding Examples

AOIP50-010-AGFX
ACSIP50-040-DGMX

Weights and Dimensions

Model	Height (H)		Width (W)		Depth (D)		Weight	
	mm	in	mm	in	mm	in	kg	lbs
GRADE IP50 010A G☐X	175	6.9	78	3.1	68	2.7	1.3	2.9
GRADE IP50 020B G☐X	175	6.9	78	3.1	68	2.7	1.3	2.9
GRADE IP50 030C G☐X	245	9.6	89	3.5	84	3.3	2.0	4.4
GRADE IP50 040D G☐X	245	9.6	89	3.5	84	3.3	2.0	4.4
GRADE IP50 050E G☐X	423	16.6	122	4.8	116	4.6	5.0	11.0
GRADE IP50 060G G☐X	423	16.6	122	4.8	116	4.6	5.0	11.0
GRADE IP50 070H G☐X	480	18.9	170	6.7	162	6.4	10.0	22.0

GH Series High Pressure Compressed Air Filter (for pressures up to 100 bar g)

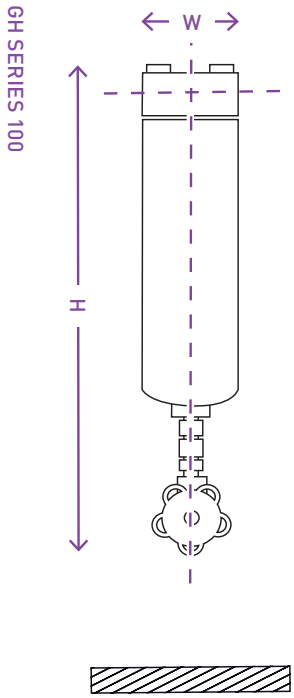
High pressure filters for compressed air applications up to 100 bar g with optimised flow rates and improved housing design for high energy efficiency, maximum reliability and safe operation.

Parker domnick hunter GH series high pressure filters are designed to be ideal for high pressure applications up to 100 bar g. The innovative construction features of the filter housing provide a reliable assembly, as well as simple and safe handling for replacing the filter element. One essential construction feature is the double O-ring seal which protects the housing thread against pollution and humidity and therefore prevents the thread from corrosion. Additionally the second O-ring prevents the filter housing parts from over winding.

By fastening the filter element via its base thread screwed on the tie-rod, this provides the greatest operating safety, even under the pressure pulsations in intermittent operation that are common for high pressure applications.

Highly effective pleated media in four different grades provide an element surface that is four times the size, compared to the conventional wrapped design. The result is a reduced flow speed and efficient separation simultaneously with low pressure drop, thus providing cost reduction during operation with reliable separation performance.

Diagram:



Filtration Grades

Filtration Grade	Filter Type	Particle removal	Max Remaining Oil Content at 20°C	Change Element Every	Precede with Filtration Grade
V	Solid Particulate	Down to 3 micron	N/A	12 months	N/A
ZP	Solid/liquid Particulate	Down to 1 micron	0.5 mg/m³	12 months	Separator (for wall flow)
XP	Solid/liquid Particulate	Down to 0.01 micron	0.01 mg/m³	12 months	ZP
A	Oil Vapour Removal	N/A	0.003 mg/m³	when oil vapour or odour is detected	XP

Technical Data

Model/ Grade	Max. Operating Pressure		Min. Operating Temperature		Max. Operating Temperature		Initial 'Dry' Differential Pressure		Initial 'Wet' Differential Pressure	
	bar g	psi g	°C	°F	°C	°F	m bar	psi	m bar	psi
V	100	1450	1.5	35	80	176	< 300	< 4.35	< 350	< 5.00
ZP	100	1450	1.5	35	80	176	< 300	< 4.35	< 370	< 5.40
XP	100	1450	1.5	35	80	176	< 300	< 4.35	< 400	< 5.80
A	100	1450	1.5	35	80	176	< 300	< 4.35	N/A	N/A

Recommended Filter Element change: 12 months or 6000 hours

*Not applicable to Grade ACS elements. Grade ACS elements should be changed after 1000 hours operation at 21°C (70°F) or before if odours can be detected.

Filter Selection

Model	Port Connection	L/s	m³/min	m³/h	cfm	Replacement Element Code
GH3100 GRADE	½"	52	3.1	188	111	1050 GRADE
GH5100 GRADE	½"	74	4.5	268	158	1070 GRADE
GH7100 GRADE	½"	130	7.8	469	276	1140 GRADE
GH9100 GRADE	¾"	189	11.3	681	401	2010 GRADE
GH11100 GRADE	1"	334	20.0	1203	708	2020 GRADE
GH12100 GRADE	1½"	516	30.9	1857	1093	2030 GRADE
GH13100 GRADE	1½"	724	46.4	2787	1640	2050 GRADE

Correction Factors

Working Pressure	bar g	50	60	70	80	90	100
	psi g	725	870	1015	1160	1305	1450
Correction Factor		1.5	1.4	1.33	1.24	1.14	1.00

Use the correction factors above for flow rates at other working pressures.

Note: To correctly select a filter model, the flow rate of the filter must be adjusted for the minimum operating pressure of the system.

1. Obtain the minimum operating pressure and maximum compressed air flow rate at the inlet of the filter.
2. Select the correction factor for minimum operating pressure from the CFP table (always round down e.g. for 66 bar, use 60 bar correction factor).
3. Calculate the minimum filtration capacity. Minimum Filtration Capacity = Compressed Air Flow Rate x CFP.
4. Using the minimum filtration capacity, select a filter model from the flow rate tables above. (filter selected must have a flow rate equal to or greater than the minimum filtration capacity).

Weights and Dimensions

Model	Height (H)		Width (W)		Weight	
	mm	in	mm	in	kg	lbs
GH3100	355	14.0	80	3.1	2.8	6.2
GH5100	355	14.0	80	3.1	2.8	6.2
GH7100	420	16.5	80	3.1	3.4	7.5
GH9100	455	17.9	116	4.6	18.2	40.1
GH11100	540	21.3	116	4.6	21.9	48.3
GH12100	655	25.8	125	4.9	28.3	62.4
GH13100	910	35.8	125	4.9	39.2	86.4

For further product information visit **www.parker.com/gsfe**

GH Series High Pressure Compressed Air Filter (for pressures up to 350 bar g)

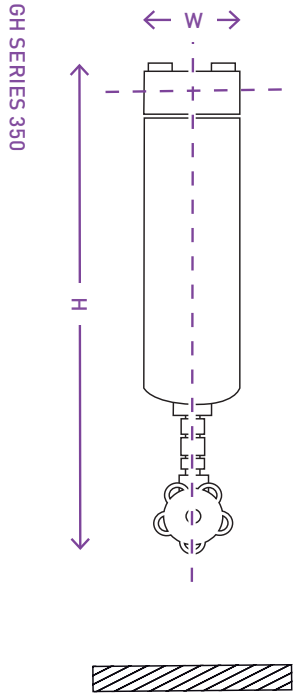
High pressure filters for compressed air applications up to 350 bar g with optimised flow rates and improved housing design for high energy efficiency, maximum reliability and safe operation.

Parker domnick hunter GH series high pressure filters are designed to be ideal for high pressure applications up to 350 bar g. The innovative construction features of the filter housing provide a reliable assembly, as well as simple and safe handling for replacing the filter element. One essential construction feature is the double O-ring seal which protects the housing thread against pollution and humidity and therefore prevents the thread from corrosion. Additionally the second O-ring prevents the filter housing parts from over winding.

By fastening the filter element via its base thread screwed on the tie-rod, this provides the greatest operating safety, even under the pressure pulsations in intermittent operation that are common for high pressure applications.

Highly effective pleated media in four different grades provide an element surface that is four times the size, compared to the conventional wrapped design. The result is a reduced flow speed and efficient separation simultaneously with low pressure drop, thus providing cost reduction during operation with reliable separation performance.

Diagram:



Filtration Grades

Filtration Grade	Filter Type	Particle Removal	Max Remaining Oil Content at 20°C	Change Element Every	Precede with Filtration Grade
V	Solid Particulate	Down to 3 micron	N/A	12 months	N/A
ZP	Solid/liquid Particulate	Down to 1 micron	0.5 mg/m³	12 months	Separator (for wall flow)
XP	Solid/liquid Particulate	Down to 0.01 micron	0.01 mg/m³	12 months	ZP
A	Oil Vapour Removal	N/A	0.003 mg/m³	when oil vapour or odour is detected	XP

Technical Data

Model/ Grade	Max. Operating Pressure		Min. Operating Temperature		Max. Operating Temperature		Initial 'Dry' Differential Pressure		Initial 'Wet' Differential Pressure	
	bar g	psi g	°C	°F	°C	°F	m bar	psi	m bar	psi
V	350	5076	1.5	35	80	176	< 300	< 4.35	< 350	< 5.00
ZP	350	5076	1.5	35	80	176	< 300	< 4.35	< 370	< 5.40
XP	350	5076	1.5	35	80	176	< 300	< 4.35	< 400	< 5.80
A	350	5076	1.5	35	80	176	< 300	< 4.35	N/A	N/A

Recommended Filter Element change:- 12 months or 6000 hours

*Not applicable to Grade ACS elements. Grade ACS elements should be changed after 1000 hours operation at 21°C (70°F) or before if odours can be detected.

Filter Selection

Model	Port Connection	L/s	m³/min	m³/h	cfm	Replacement Element Code
GH3350 GRADE	½"	101	6.1	365	215	1050 GRADE
GH5350 GRADE	½"	139	8.4	501	295	1070 GRADE
GH7350 GRADE	½"	215	12.9	776	457	1140 GRADE
GH9350 GRADE	½"	287	17.3	1035	609	2010 GRADE
GH11350 GRADE	1"	514	30.9	1852	1090	2020 GRADE
GH12350 GRADE	1½"	782	46.9	2816	1657	2030 GRADE
GH13350 GRADE	1½"	1184	71.0	4261	2508	2050 GRADE

Correction Factors

Working Pressure						
	bar g	125	150	175	200	225
	psi g	1813	2175	2538	2901	3263
Correction Factor		1.5	1.48	1.45	1.43	1.37

Working Pressure						
	bar g	250	275	300	325	350
	psi g	3626	3989	4351	4714	5076
Correction Factor		1.3	1.24	1.15	1.07	1

Use the correction factors above for flow rates at other working pressures.

Note: To correctly select a filter model, the flow rate of the filter must be adjusted for the minimum operating pressure of the system.

1. Obtain the minimum operating pressure and maximum compressed air flow rate at the inlet of the filter.
2. Select the correction factor for minimum operating pressure from the CFP table (always round down e.g. for 155 bar, use 150 bar correction factor).
3. Calculate the minimum filtration capacity. Minimum Filtration Capacity = Compressed Air Flow Rate x CFP.
4. Using the minimum filtration capacity, select a filter model from the flow rate tables above. (filter selected must have a flow rate equal to or greater than the minimum filtration capacity).

Weights and Dimensions

Model	Height (H)		Width (W)		Weight	
	mm	in	mm	in	kg	lbs
GH3350	355	14.0	80	3.1	2.8	6.2
GH5350	355	14.0	80	3.1	2.8	6.2
GH7350	420	16.5	80	3.1	3.4	7.5
GH9350	455	17.9	116	4.6	18.2	40.1
GH11350	540	21.3	116	4.6	21.9	48.3
GH12350	655	25.8	125	4.9	28.3	62.4
GH13350	910	35.8	125	4.9	39.2	86.4

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OIL-X OVR Oil Vapour Removal Filter

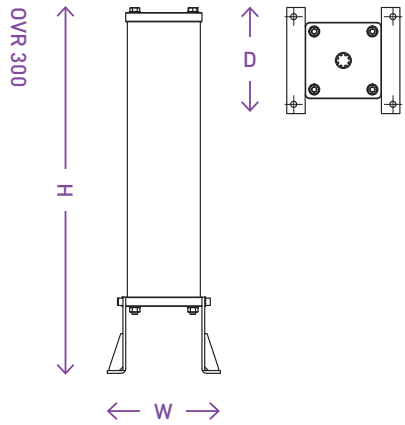
Compact, modular construction oil vapour removal filters designed to reduce oil vapour when industrial applications require compressed air to meet ISO8573-1 Class 0 or Class 1.

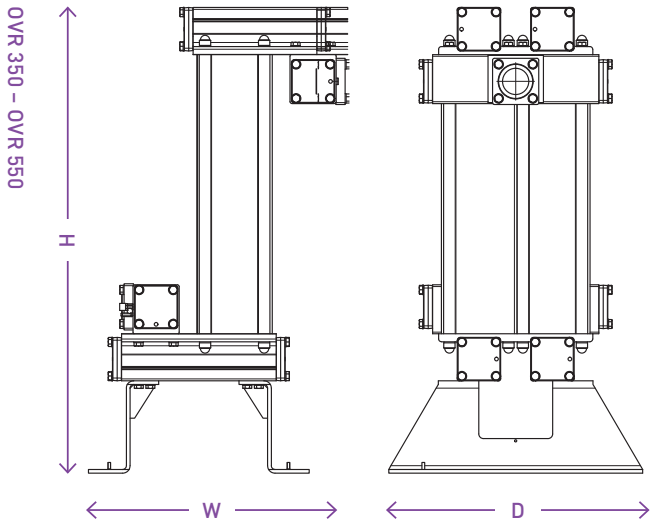
OIL-X OVR Oil Vapour Removal filters are designed to reduce oil vapour and also overcome the issues of traditional loose filled carbon towers. The loose filled beds of carbon towers offer reduced contact time due to unrestricted air channelling, meaning they are prone to movement of the carbon adsorbent during operation; resulting in degrading performance, attrition of the adsorbent material, high particulate generation and blockage of downstream filters.

Manufactured from extruded aluminium, the Parker domnick hunter OIL-X OVR is smaller and lighter than equivalent carbon towers. Compact activated carbon cartridges utilise a unique filling technique to maximise packing density of the adsorbent bed. Retained to prevent movement, 100% of the activated carbon bed is then utilised during operation, guaranteeing performance, whilst the heavy attrition, dusting and blocked particulate filters associated with carbon tower designs is eliminated. The use of cartridges also provides trouble free maintenance, reducing system downtime.

Oil free plant air can be affected by many factors such as pressure, temperature, air flow, oil concentration and humidity. The OIL-X OVR selection process considers all of these factors to ensure consistent outlet air quality over 12 months of continuous operation.

Diagrams:





Filtration Performance

Filtration Grade	Filter Type	Particle Removal (inc water and oil aerosols)	Max Remaining Oil Content	Filtration Efficiency	Test Method Used	Inlet Challenge Concentration	Initial Dry Differential Pressure	Initial Saturated Differential Pressure	Adsorbent Life	Precede with Grade
OVR	Oil Vapour Removal	N/A	0.003 mg/m³ 0.003 ppm (w)	N/A	ISO8573-5	0.05mg/m³	<350 mbar <5 psi	N/A	*12 months	AO + AA

*When corrected to match system conditions

Technical Data

Filter Grade	Filter Models	Min. Operating Pressure		Max. Operating Pressure		Min. Operating Temp		Max. Operating Temp	
		bar g	psi g	bar g	psi g	°C	°F	°C	°F
OVR	300H □ XX – 500I □ XX	1	15	16	232	2	35	50	122

Product Selection

Model	Port Connection	L/s	m³/min	m³/hr	cfm	Replacement Cartridge	No. Required
OVR300H □ XX	2	87	5.2	314	185	300OVR	1
OVR350H □ XX	2	177	10.6	637	375	350OVR	1
OVR400H □ XX	2	354	21.2	1274	750	400OVR	1
OVR450I □ XX	2½	531	31.9	1911	1125	450OVR	1
OVR500I □ XX	2½	708	42.5	2549	1500	500OVR	1
OVR550I □ XX	2½	885	53.1	3186	1875	550OVR	1
2 x OVR550I □ XX	2½	1770	106.2	6371	3750	550OVR	2
3 x OVR550I □ XX	2½	2655	159.3	9557	5625	550OVR	3
4 x OVR550I □ XX	2½	3540	212.4	12743	7500	550OVR	4
5 x OVR550I □ XX	2½	4424	265.5	15928	9375	550OVR	5

□ G=BSPP / N=NPT

Stated flows are for operation at 7 bar g (100 psi g), 35°C (95°F) for flows at other conditions use Correction Factors below.

CFT – Correction Factors Temperature

Oil Lubricated Compressors	°C	25	30	35	40	45	50
	°F	77	86	95	104	113	122
Correction Factor		1.00	1.00	1.00	1.25	1.55	1.90

Oil Free Compressors	°C	25	30	35	40	45	50
	°F	77	86	95	104	113	122
Correction Factor		1.00	1.00	1.00	1.02	1.04	1.05

CFP – Correction Factors Pressure

bar g	3	4	5	6	7	9	9	10	11	12	13	14	15	16
psi g	44	58	73	87	100	116	131	145	160	174	189	203	218	232
Correction Factor	2.00	1.60	1.33	1.14	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

CFD – Correction Factors Inlet Dewpoint

CDD Dewpoint	°C	°F	Correction Factor
Dry	-70 to +3	-100 to +38	1.00
Wet	+3 and above	+38 and above	4.00

It is assumed inlet oil vapour concentration does not exceed 0.05mg/m3 at 35°C (95°F).

For applications with higher oil vapour concentrations, please contact Parker domnick hunter for accurate sizing.

Filter Selection – Grade OVR

To correctly select an OVR oil vapour removal filter, the flow rate of the OVR must be adjusted for the minimum operating pressure, maximum operational temperature and pressure dewpoint of the system.

1. Obtain the minimum operating pressure, maximum inlet temperature, maximum compressed air flow rate and dewpoint of the compressed air at the inlet of the OVR.
2. Select correction factor for maximum inlet temperature from the CFT table to compressor type (always round up e.g. for 37°C use 40°C correction factor).
3. Select correction factor for minimum inlet pressure from the CFP table that corresponds type (always round down e.g. for 5.3 bar use 5 bar correction factor).
4. Select correction factor for pressure dewpoint from the CFD table.
5. Calculate minimum filtration capacity.
   Minimum filtration Capacity = Compressed Air Flow x CFT x CFP x CFD
6. Using the minimum filtration capacity, select an OVR model from the flow rate tables above (OVR selected must have a flow rate equal to or greater than the minimum filtration capacity).

If the minimum filtration capacity exceeds the maximum values of the models shown within the tables, please contact Parker domnick hunter for advice regarding larger multi-banked units.

Weights and Dimensions

Model	Port Size	Height (H)		Width (W)		Depth (D)		Weight	
		mm	in	mm	in	mm	in	kg	lbs
OVR300H ☐ XX	2"	792	31.2	245	9.6	230	9.1	28.5	62.8
OVR350H ☐ XX	2"	1009	39.7	590	23.2	550	21.7	62.5	137.8
OVR400H ☐ XX	2"	1009	39.7	735	28.9	550	21.7	71.5	157.6
OVR450I ☐ XX	2½"	1009	39.7	888	35.0	550	21.7	92.8	204.6
OVR500I ☐ XX	2½"	1009	39.7	1065	41.9	550	21.7	100.6	221.8
OVR550I ☐ XX	2½"	1009	39.7	1234	48.6	550	21.7	122.0	269.0

☐ G=BSPP / N=NPT

Compressed Air Filter Accessories

COMPRESSED AIR FILTER ACCESSORIES

To ensure consistent filtration performance in every application, we offer optional accessories and replacement spare parts for Parker compressed air filters.

Available accessories include incident monitors, fixing clamps, mounting brackets, oil vapour indicators, replacement drains and O-ring kits.

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Tie Rod Kits

Part Number	Filter Model/Number of
TRK1-2	010 x2
TRK2-2	015-020 x2 and 015-020 x3
TRK3-2	025-030 x2 and 025-030 x3
TRK4-2	035-045 x2 and 035-045 x3
TRK5-2	050-055 x2 and 050-055 x3

Filter Wall Mount Brackets (for single filter)

Part Number	Filter Model/Number of
MBK1-1	010 x1
MBK2-1	015-020 x1
MBK3-1	025-030 x1
MBK4-1	035-045 x1
MBK5-1	050-055 x1

Filter Wall Mount Brackets (for 2 or 3 in series)

Part Number	Filter Model/Number of
MBK1-2	010 x2 and x3
MBK2-2	015-020 x2 and x3
MBK3-2	025-030 x2 and x3
MBK4-2	035-045 x2 and x3
MBK5-2	050-055 x2 and x3

Differential Pressure Monitor(s) and Gauge(s)

Part Number	Filter Model/Number of
DPIK	DPI 010-030
ZD90GL	DP Gauge 035-055
ZDE90GL	DP Analogue Gauge 035-055 (Calibrated with Reed contact)
DPM-060	DPM kit 060 G4"
ZD95FL	DPG Analogue for 065-095 Flanged Filter
ZDE95FL	DPG Analogue for 065-095 Flanged Filter with REED contact

Automatic Float and Manual Drains

Part Number	Filter Model/Number of
PD15NO	Float auto 010-055
EM1	Manual drain 010-055 (max op 20 bar g)
HDF120A	Float auto 060
605006470	Manual drain 060

Zero Loss ED Electronic Drain

Part Number	Filter Model/Number of
ED3002-G230	010 to 030
ED3004-G230	035 to 055
ED3007-G230	060
MK-G15-G10I	ED3002 mounting kit G ½"
MK-G25-G15	ED3004-3100 mounting kit G ½"

Unless stated otherwise, all differential pressure monitors, gauges and drains have max operating pressure 16 bar g.

COMPRESSED AIR FILTER ELEMENTS

Compressed Air Filter Elements

As industry leaders in filtration technology, Parker offer a range of highly specialised replacement filter elements, to ensure continuous high quality compressed air.

Over time, the build-up of retained particles can drastically reduce filtration performance, so it's essential to change filter elements at the advised interval.

Parker

OIL-X EVOLUTION

Part Number
005AO
010AO
015AO
020AO
025AO
030AO
035AO
040AO
045AO
050AO
055AO
0200AO
005AA
010AA
015AA
020AA
025AA
030AA
035AA
040AA
045AA
050AA
055AA
0200AA
005ACS
010ACS
015ACS
020ACS
025ACS
030ACS
035ACS

Part Number
040ACS
045ACS
050ACS
055ACS
0200ACS
010AA and 010AC
015AA and 015AC
020AA and 020AC
025AA and 025DAC
025AA and 025EAC
030AA and 030AC
100OVR
300OVR
350OVR
400OVR
450OVR
500OVR
550OVR

OIL-X Plus Advantage

Part Number
K009 (AO)
K017 (AO)
K030 (AO)
K058 (AO)
K145 (AO)
K220 (AO)
K330 (AO)
K430 (AO)
K620 (AO)
K009 (AA)

Part Number
K017 (AA)
K030 (AA)
K058 (AA)
K145 (AA)
K220 (AA)
K330 (AA)
K430 (AA)
K620 (AA)
K006AC
K013AC
K025AC
K040AC
K065AC
K085AC

GL

Part Number
CP1008A
CP1008VL
CP1008ZL
CP1008XL
CP2010A
CP2010VL
CP2010ZL
CP2010XL
CP2020A
CP2020VL
CP2020ZL
CP2020XL
CP3025A
CP3025VL
CP3025ZL

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Part Number
CP3025XL
CP3040A
CP3040VL
CP3040ZL
CP3040XL
CP4040A
CP4040VL
CP4040ZL
CP4040XL
CP4050A
CP4050VL
CP4050ZL
CP4050XL
CP4065A
CP4065VL
CP4065ZL
CP4065XL
CP5065A
CP5065VL
CP5065ZL
CP5065XL
CP5080A
CP5080VL
CP5080ZL
CP5080XL

G/GH/LV/F

Part Number
1030V
1050V
1070V
1140V

Part Number
2010V
2020V
2030V
2050V
3050V
3075V
5060V
5075V
1030ZP
1050ZP
1070ZP
1140ZP
2010ZP
2020ZP
2030ZP
2050ZP
3050ZP
5060ZP
3075ZP
5075ZP
1030XP
1050XP
1070XP
1140XP
2010XP
2020XP
2030XP
2050XP
3050XP
5060XP
3075XP
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3050XP4
5060XP4

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2020A
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5060A
3075A
5075A
1030V/LV
1050V/LV
1070V/LV
1140V/LV
2010V/LV
2020V/LV
2030V/LV
2050V/LV
3050V/LV
3075V/LV
5060V/LV
5075V/LV
1030ZP/LV
1050ZP/LV
1070ZP/LV
1140ZP/LV
2010ZP/LV
2020ZP/LV
2030ZP/LV
2050ZP/LV
3050ZP/LV
3075ZP/LV
5060ZP/LV
5075ZP/LV
1030XP/LV
1050XP/LV
1070XP/LV
1140XP/LV

For further product information visit **www.parker.com/gsfe**

Part Number
2010XP/LV
2020XP/LV
2030XP/LV
2050XP/LV
3050XP/LV
3075XP/LV
5060XP/LV
5075XP/LV
1030A/LV
1050A/LV
1070A/LV
1140A/LV
2010A/LV
2020A/LV
2030A/LV
2050A/LV
3050A/LV
3075A/LV
5060A/LV
5075A/LV
1030ZHTNX
1050ZHTNX
1070ZHTNX
1140ZHTNX
2010ZHTNX
2020ZHTNX
2030ZHTNX
2050ZHTNX
3050ZHTNX/WH
3075ZHTNX/WH
5060ZHTNX/WH
5075ZHTNX/WH
1030XHTNX
1050XHTNX
1070XHTNX
1140XHTNX
2010XHTNX
2020XHTNX
2030XHTNX
2050XHTNX
3050XHTNX/WH
3075XHTNX/WH

Part Number
5060XHTNX/WH
5075XHTNX/WH
1030ZHTCR/V
1050ZHTCR/V
1070ZHTCR/V
1140ZHTCR/V
2010ZHTCR/V
2020ZHTCR/V
2030ZHTCR/V
2050ZHTCR/V
3050ZHTCR/VWH
3075ZHTCR/VWH
5060ZHTCR/VWH
5075ZHTCR/VWH
1030XHTCR/V
1050XHTCR/V
1070XHTCR/V
1140XHTCR/V
2010ZXHTCR/V
2020XHTCR/V
2030XHTCR/V
2050XHTCR/V
3050XHTCR/VWH
3075XHTCR/VWH
5060XHTCR/VWH
5075XHTCR/VWH

For further product information visit **www.parker.com/gsfe**

Compressed Air Drains

Parker compressed air drains are the best way to protect and extend the life of compressed air equipment such as gaskets and hoses.

We offer a full range of compressed air drains to remove condensation from the air system. This includes our timer and zero loss air drains, engineered to ensure a constant air flow in critical system applications.

Parker

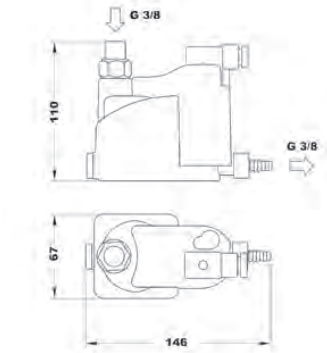
Ecodrain ED3000 Series Electronic Level Sensing Condensate Drains

Automatic zero air loss condensate drains for industrial compressed air treatment applications.

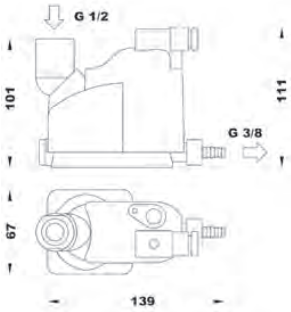
When the control of a condensate drain is not level controlled but exclusively time-based, it employs preset values for valve operating times and intervals. However, since the amount of condensate in a compressed air system changes constantly (e.g. summer/winter, maximum/part load) this can sometimes cause problems for time-controlled condensate drains. ED3000 Series level sensing condensate drains use internal sensors to determine the exact moment to discharge condensate. This results in a minimised number of switching cycles and thus a maximum service life of the drain valve.

Diagrams:

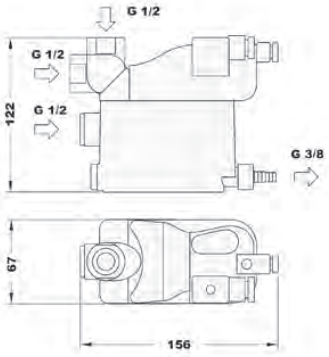
ED3002 - 0,5KG



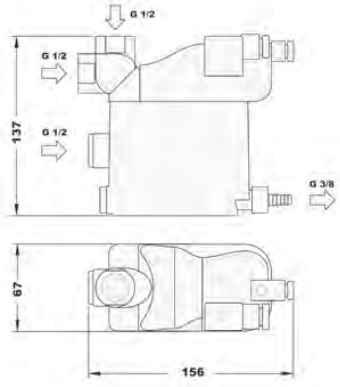
ED3004 - 0,5KG



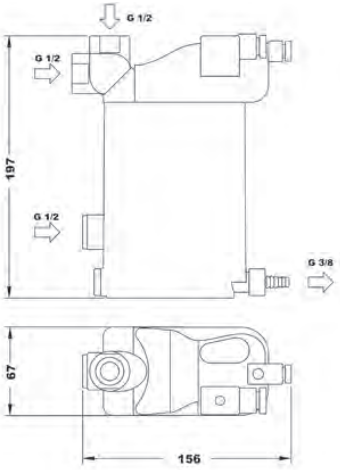
ED3007 - 1,0KG



ED3030 - 1,1KG



ED3100 - 1,5KG



Technical Data

Model	Capacity Compressor[1] m³/h	Capacity Dryer[1] m³/h	Capacity Filter[1,2] m³/h	Max. Pressure bar	Power Supply	Connection DIN ISO228
ED3002-G230	-	-	720	16	230 V, 50-60 Hz	G3/8
ED3004-G230	240	480	2,400	16	230 V, 50-60 Hz	1xG1/2
ED3007-G230	420	840	4,200	16	230 V, 50-60 Hz	2xG1/2
ED3030-G230	1,800	3,600	18,000	16	230 V, 50-60 Hz	2xG1/2
ED3100-G230	6,000	12,000	60,000	16	230 V, 50-60 Hz	2xG1/2
ED3007-G24D	420	840	4,200	16	24 V DC	2xG1/2
ED3030-G24D	1,800	3,600	18,000	16	24 V DC	2xG1/2
ED3100-G24D	6,000	12,000	60,000	16	24 V DC	2xG1/2

[1] Calculated at 1 bar(a) and 20°C, compressed to 50 bar working pressure, compressor inlet 25°C, at 60% r.H., compressor discharge temperature 35°C, dewpoint fridge dryer 3°C

[2] Condensate from aftercooler or refridgeration dryer already removed

Standard version with BSP thread (G) for 230V/50 - 60Hz supply voltage (230).
Alternatively, versions with NPT thread (N) or 115 V/50 - 60Hz (115) or 24 V/50-60Hz (024) are available.

Service Kits

Model	Description
SKED3000	ED3000 service kit

Parker Zander

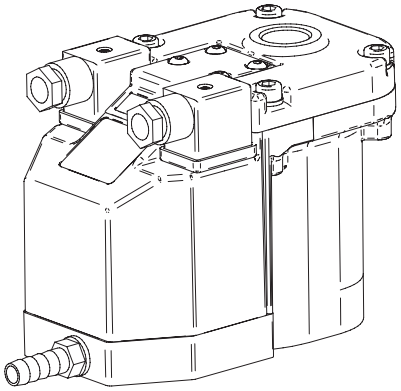
ED4100 Series Electronic Level Sensing Condensate Drains

Automatic zero air loss level sensing condensate drains for industrial compressed air treatment applications up to 50 bar g.

The safe and reliable removal of large amounts of condensate, especially at critical installation points, such as compressor aftercoolers, storage vessels, and separators (where approximately 70 to 80% of condensate arises) really make Parker Zander's ED4100 range of condensate drains stand out. The ED4100's integrated dirt filter, large valve cross-section, direct controlled 2/2-way solenoid valve and capacitive level sensing allows for the safe, reliable, and economical removal of condensate, whilst simultaneously preventing any loss of compressed air.

Diagrams:

ED3002 - 0,5KG



Technical Data

Model	Capacity Compressor[1] m³/h	Capacity Dryer[1] m³/h	Capacity Filter[1,2] m³/h	Max. Pressure bar	Power Supply	Connection
ED4100/50-G230	6,000	12,000	60,000	50	230 V, 50-60 Hz	G1/2
ED4100/50-N115	6,000	12,000	60,000	50	115 V, 50-60 Hz	NPT1/2"
ED4100/50-G24D	6,000	12,000	60,000	50	24 VDC	G1/2

[1] Calculated at 1 bar(a) and 20°C, compressed to 50 bar working pressure, compressor inlet 25°C, at 60% r.H., compressor discharge temperature 35°C, dewpoint fridge dryer 3°C

[2] Condensate from aftercooler or refridgeration dryer already removed

Model	Description
EHT-ED4100-G230	Heater PN30, G 1/2, 230 VAC
EHT-ED4100-N115	Heater PN30, G 1/2, 115 VAC

Parker

Parker Hiross

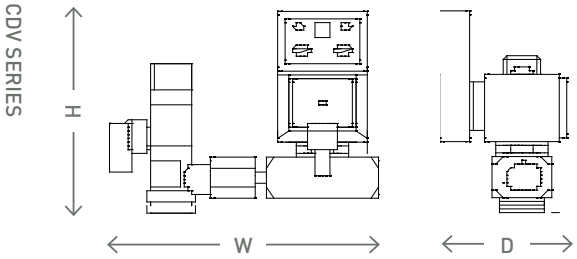
CDV Series Time Controlled Condensate Drains

Automatic time controlled condensate drains for industrial compressed air treatment applications.

The Parker Hiross CDV range of time controlled drains are designed to remove condensate from compressed air systems. They use a solenoid valve in combination with an electronic timer.

The drains are compact and can be installed on all compressed air system components like compressors, aftercoolers, dryers, filters and pressure vessels, regardless of their size or capacity. CDV condensate drains are ready to use directly from installation and after adjusting the interval and discharge times accordingly. Any further manual drainage can be omitted.

Diagrams:



Technical Data

Model	Construction Materials			Air/Gas Flow Without Dryer		Connections		Max p.	Power Supply
	Body	Float	Lever	m³/h	m³/min	In	Out	bar g	
CDV12024	plastic / brass			9.000	150	½"	⅜"	16	24/1/50-60
CDV120115	plastic / brass			9.000	150	½"	⅜"	16	115/1/50-60
CDV120230	plastic / brass			9.000	150	½"	⅜"	16	230/1/50-60
CDV120230HP	plastic / brass			9.000	150	½"	⅜"	50	230/1/50-60

Weights and Dimensions

Model	Dimensions (mm)			Weight
	Width (W)	Height (H)	Depth (D)	(kg)
CDV12024	90	110	90	0,7
CDV120115	90	110	90	0,7
CDV120230	90	110	90	0,7
CDV120230HP	90	110	90	0,7

For further product information visit **www.parker.com/gsfe**

Parker Zander

Traptronic TRAP Series Time Controlled Condensate Drains

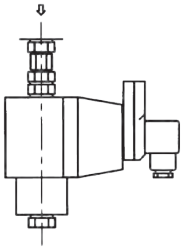
Time controlled condensate drains for industrial compressed air treatment applications.

The Parker Zander Traptronic range of time controlled drains are designed to remove condensate from compressed air systems. They use a solenoid valve in combination with an electronic timer.

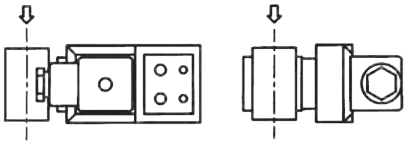
The units are compact and can be installed on all compressed air system components like compressors, aftercoolers, dryers, filters and pressure vessels, regardless of their size or capacity. The condensate drain is ready to use directly after installation and adjusting the interval and discharge times. Any further manual drainage can be omitted.

Diagrams:

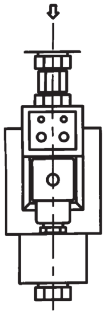
TRAP 2/250 – 2/400



TRAP 22



TRAP 250



Parker

Technical Data

Model	Capacity Compressor[1] (m³/h)	Capacity Dryer[1] (m³/h)	Capacity Filter[1] (m³/h)	Max. Pressure (bar)	Power Supply	Connection DIN ISO 228
TRAP22-G230/J	4,000	8,000	24,000	16	230 V, 50-60 Hz	G3/8
TRAP22-G115/J	4,000	8,000	24,000	16	115 V, 50-60 Hz	G3/8
TRAP22-G24D/J	4,000	8,000	24,000	16	24 V DC	G3/8
TRAP2/100-G230/P	4,000	8,000	24,000	100	230 V, 50-60 Hz	G1/4
TRAP2/100-G115/P	4,000	8,000	24,000	100	115 V, 50-60 Hz	G1/4
TRAP2/100-G24D/P	4,000	8,000	24,000	100	24 V DC	G1/4
TRAP2/350-G230/J	4,000	8,000	24,000	350	230 V, 50-60 Hz	G1/4
TRAP2/350-G115/J	4,000	8,000	24,000	350	115 V, 50-60 Hz	G1/4
TRAP2/350-G24D/J	4,000	8,000	24,000	350	24 V DC	G1/4
TRAP2/400-G230/C	4,000	8,000	24,000	400	230 V, 50-60 Hz	G1/4, G3/8
TRAP2/400-G115/C	4,000	8,000	24,000	400	115 V, 50-60 Hz	G1/4, G3/8
TRAP2/400-G24D/C	4,000	8,000	24,000	400	24 V DC	G1/4, G3/8

[1] Calculated at 1 bar(a) and 20°C at 7 bar working pressure, compressor inlet 25°C, at 60% r.H., compressor discharge temperature 35°C, dewpoint fridge dryer 3°C

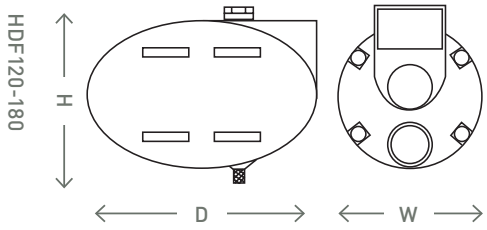
Parker Hiross

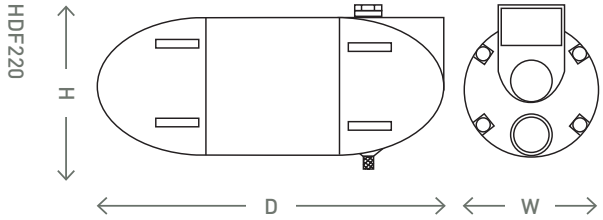
HDF Series Zero Loss Mechanical Float Condensate Drains

Parker Hiross HDF series zero loss mechanical float condensate drains for industrial compressed air treatment applications.

HDF series drains are compact and highly reliable automatic float controlled condensate drains for industrial compressed air treatment applications. Due to the fact that the drain never runs completely dry, no air is lost during the discharge process. HDF series condensate drains therefore reduce the waste of compressed air which has a positive effect on the efficiency of the whole compressed air system.

Diagrams:





Technical Data

Model	Construction Materials			Air/Gas Flow Without Dryer		Connections		Max p.	Power Supply
	Body	Float	Lever	m^3/h	m^3/min	In	Out	bar g	
External float drains (with built-in air vent)									
HDF120A	alumin.	plastic	plastic	5.400	90	½"	½"	16	-
HDF180A	alumin.	plastic	plastic	6.000	100	1"	½"	16	-
HDF220A	alumin.	plastic	plastic	15.000	250	1"	½"	16	-
External float drains (without air vent)									
HDF120	alumin.	plastic	plastic	5.400	90	½"	½"	16	-
HDF180	alumin.	plastic	plastic	6.000	100	1"	½"	16	-
HDF220	alumin.	plastic	plastic	15.000	250	1"	½"	16	-
External float drains (NPT connection – with built in vent)									
HDF120NPTA	alumin.	plastic	plastic	5.400	90	½" NPT	½"	16	-
HDF180NPTA	alumin.	plastic	plastic	6.000	100	1" NPT	½"	16	-
HDF220NPTA	alumin.	plastic	plastic	15.000	250	1" NPT	½"	16	-
External float drains BioEnergy									
HDF220BE	alumin.	plastic/st steel	plastic/st steel	6.500	108	1"	½"	1	-

Parker

Weights and Dimensions

Model	Dimensions (mm)			Weight
	Width (W)	Height (H)	Depth (D)	(kg)
External float drains (with built-in air vent)				
HDF120A	156	111	108	0,9
HDF180A	156	111	108	0,9
HDF220A	266	111	108	1,9
External float drains (without air vent)				
HDF120	156	111	108	0,9
HDF180	156	111	108	0,9
HDF220	266	111	108	1,9
External float drains (NPT connection – with built in vent)				
HDF120NPTA	156	111	108	0,9
HDF180NPTA	156	111	108	0,9
HDF220NPTA	266	111	108	1,9
External float drains BioEnergy				
HDF220BE	266	111	108	1,9

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OIL/WATER SEPARATORS

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Oil/Water Separators

OIL/WATER SEPARATORS

Our environmentally friendly oil/water separators keep you on the right side of waste disposal regulations.

Discharging oil contaminated condensate from your compressed air system can be harmful to the environment and is usually illegal. Parker oil/water separator solutions ensure full compliance through safe and efficient on-site oil disposal.

Parker

ES2000 Series Oil/Water Separators

Providing a simple, economical and environmentally friendly solution for the effective removal of oily condensate from a compressed air system.

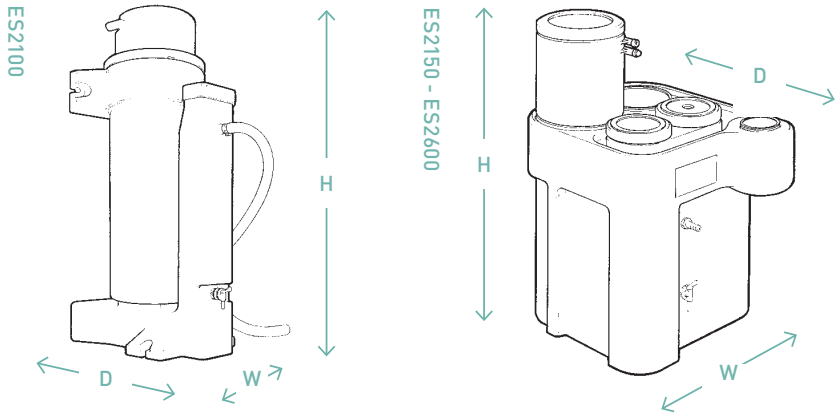
Oil/water separators are installed as part of the compressed air purification system and are designed to reduce the oil concentration in the collected condensate.

The oily condensate that is removed from the compressed air system cannot be discharged directly to the foul sewer without the oil content being reduced to within legal disposal limits.

By reducing the oil concentration in water to permitted levels, discharge can be safely directed to the foul sewer meaning large volumes of clean water, up to 99.9% of the total condensate, can be safely disposed of. This leaves a relatively small amount of concentrated oil to be disposed of legitimately and economically.

Oily condensate from the compressed air system enters the ES2000 series oil/water separator under pressure, and is allowed to expand in the specially designed centrifugal inlet chamber. During a six-stage process, the water and oil are separated, allowing the cleaned water to be safely discharged to the foul sewer through the outlet, whilst the drained oil is collected in an external oil container where it can be disposed of according to legal requirements.

Diagrams:



Technical Data

Model	Inlet Connections	Outlet Hose Connections	Settlement Tank Capacity		Max. Pressure	Min./Max. Temperature °C	Min./Max. Temperature °F	Material (recyclable)
ES210	1 x ½" 1 x ¼"	19mm (¾")	–	–	16 bar g (232 psi g)	5 to 35	41 to 95	Polyethylene
ES2150	1 x ½" 1 x ¼"	25mm (1")	60 litres	16 US G	16 bar g (232 psi g)	5 to 35	41 to 95	Polyethylene
ES2200	1 x ½" 1 x ¼"	19mm (¾")	75 litres	20 US G	16 bar g (232 psi g)	5 to 35	41 to 95	Polyethylene
ES2300	1 x ½" 3 x ¼"	25mm (1")	125 litres	33 US G	16 bar g (232 psi g)	5 to 35	41 to 95	Polyethylene
ES2400	1 x ½" 3 x ¼"	25mm (1")	185 litres	49 US G	16 bar g (232 psi g)	5 to 35	41 to 95	Polyethylene
ES2500	1 x ½" 3 x ¼"	25mm (1")	355 litres	94 US G	16 bar g (232 psi g)	5 to 35	41 to 95	Polyethylene
ES2600	1 x ½" 3 x ¼"	25mm (1")	485 litres	128 US G	16 bar g (232 psi g)	5 to 35	41 to 95	Polyethylene

Weights and Dimensions

Model	Height (H)		Width (W)		Depth (D)		Weight Empty		Weight Full	
	mm	ins	mm	ins	mm	ins	kg	lbs	kg	lbs
ES2100	842	33.1	250	9.8	315	12.4	6	13	24.5	154
ES2150	810	31.9	350	13.8	430	16.9	10	22	78.5	173
ES2200	805	31.7	350	13.8	450	17.7	12	26	93.5	206
ES2300	1195	47.0	500	19.7	800	31.5	27	59	159	350
ES2400	1195	47.0	650	26.6	800	31.5	36	79	217	477
ES2500	1535	60.4	700	27.6	985	38.8	70	154	400	880
ES2600	1535	60.4	1000	39.4	1010	39.8	97	214	550	1210

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Oil/Water Separator Maintenance Kits

Replacement carbon bags and pre-filters for ES/ES2000 and SE Series oil/water separators.

It is recommended to replace an oil/water separator's carbon bags every 3 months or sooner if discharged water quality is equal to or exceeds maximum permitted levels for oil in water allowed by local legislation. Each maintenance kit consists of an activated carbon bag and adsorbent pre-filter.

Discharge water quality should be checked frequently. Oil in water content cannot be accurately determined from visual inspection, laboratory analysis must be used.

Used carbon bags and oil removed must be disposed of in a legal and responsible manner and in accordance with local legislation.

Maintenance Kits

To Suit Separator Models	Quantity Required	Maintenance Kits
ES2100 and ES2100/TI	1	ESMK1
ES2150 and ES2150/TI	1	ESMK1
ES2200 and ES2200/TI	1	ESMK1
ES36	1	ESMK1
ES90	1	ESMK1
SE2010	1	ESMK1
SE2015	1	ESMK1
SE2030/SE2030P	2	ESMK1
ES2300 and ES2300/TI	1	ESMK2
ES125	1	ESMK2
ES2400 and ES2400/TI	2	ESMK2
2ES250	2	ESMK2
ES2500 and ES2500/TI	1	ESMK3
ES500	1	ESMK3
ES2600 and ES2600/TI	2	ESMK3
ES1000	2	ESMK3

Service Kits – Vent Filters

Model	Vent Filter
ES2100	ESV1
ES2150	ESV1
ES2200	ESV1
ES2300	ESV2
ES2400	ESV2
ES2500	ESV2
ES2600	ESV2

Oil/Water Separator Product Selector

There are many factors which play a part in the selection of a static oil/water separator, with ambient conditions of the installation and oil type being the most important. Should the oil/water separator be installed in conditions other than those shown, please contact your local Parker outlet or approved distributor/agent for correct sizing.

Ambient temperature at compressor inlet	25°C (77°F)
Relative humidity	65%
Compressor discharge temperature	35°C (95°F)
Refrigeration dryer dewpoint if fitted	2°C (35°F)
Min. system temp. without refrigeration dryer	30°C (86°F)
System pressure	7 bar g (102 psi g)
Outlet quality	<20mg/l oil in water

No Refrigeration Dryer Installed in System		Oil Type											
		Band A				Band B				Band C			
		Turbine, Additive Free				Mineral, PAO, TMP, PE				Diesters, Triesters, PAG			
Compressor Type	Model	L/s	m^3/min	m^3/hr	cfm	L/s	m^3/min	m^3/hr	cfm	L/s	m^3/min	m^3/hr	cfm
Rotary Screw, Vane	ES2100	20	1.2	74	43	17	1.0	62	36	14	0.9	51	30
	ES2150	59	3.5	211	124	50	3.0	179	106	40	2.4	146	86
	ES2200	90	5.4	325	191	77	4.6	276	162	62	3.7	224	132
	ES2300	127	7.6	456	268	106	6.4	383	225	87	5.2	314	185
	ES2400	252	15.1	909	535	212	12.7	764	450	174	10.5	628	370
	ES2500	501	30.1	1804	1062	425	25.5	1530	900	346	20.8	1247	734
	ES2600	997	59.8	3590	2113	849	51.0	3057	1800	689	41.4	2482	1461

Refrigeration Dryer Installed in System		Oil Type											
		Band A				Band B				Band C			
		Turbine, Additive Free				Mineral, PAO, TMP, PE				Diesters, Triesters, PAG			
Compressor Type	Model	L/s	m^3/min	m3/hr	cfm	L/s	m^3/min	m^3/hr	cfm	L/s	m^3/min	m^3/hr	cfm
Rotary Screw, Vane	ES2100	15	0.9	55	33	13	0.8	46	27	10	0.6	38	22
	ES2150	44	2.6	158	93	37	2.2	134	79	30	1.8	109	64
	ES2200	67	4.1	243	143	57	3.4	207	122	47	2.8	168	99
	ES2300	95	5.7	516	201	79	4.8	286	169	65	3.9	235	138
	ES2400	189	11.3	680	400	159	9.5	572	337	130	7.8	470	277
	ES2500	375	22.5	1351	795	318	19.1	1145	674	259	15.6	934	549
	ES2600	746	44.8	2687	1582	635	38.1	2288	1347	516	31.0	1858	1093

For further product information visit **www.parker.com/gsfe**

COMPRESSED AIR EXHAUST SILENCERS

hymatik

Compressed Air Exhaust Silencers

COMPRESSED AIR EXHAUST SILENCERS

Parker compressed air exhaust silencers are the environmentally friendly and efficient solution to oil mist contamination and noise pollution for pneumatic systems.

Oil mist removal and noise level reduction to accepted safety standards promotes a healthier, cleaner, safer working environment.

Parker

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Mist-X Exhaust Silencer/ Mist Eliminator

Prevents oil mist from exhausted compressed air entering the atmosphere and also reduces excessive exhaust noise to accepted safety standards, providing a healthier working environment.

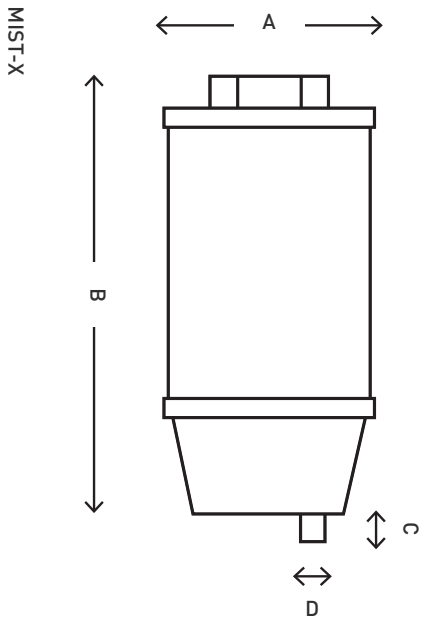
Exhaust air from various pneumatic components, such as valves and cylinders often contains a significant amount of oil mist, which can be harmful to the working environment. Expanding exhaust air also produces both sudden and excessive noise, at levels generally above accepted safety standards which makes the working environment both unpleasant and unsafe.

By using a Parker domnick hunter Mist-X exhaust silencer/mist eliminator, oil mist is removed from the exhaust air and collected, preventing contamination entering the atmosphere. Additionally, noise is also reduced to accepted safety standards, thereby creating a healthier working environment.

During operation, the Mist-X coalesces oil mist which is then collected in an integral translucent oil container. The oil is drained periodically by removing the drain cap or piped away using 6mm (¼") plastic tubing. The coalescing media is specially designed to absorb the sudden shock of exhaust air. By allowing expansion to occur in a controlled manner, noise levels are greatly reduced.

The Mist-X exhaust silencer/mist eliminator is disposable and should be changed when the back pressure becomes excessive for your particular application.

Diagrams:



Technical Data

Model	Port Size BSPP/NPT	Flow Rates 7 bar g (100 psi)		
		l/s	cfm	m^3/hr
MIST-X 25	0.5"	25	53	90
MIST-X 50	1"	50	105	180
MIST-X 150	1.5"	150	315	540

Weights and Dimensions

Model	Dimensions								Weight	
	A		B		C		D			
	mm	ins	mm	ins	mm	ins	mm	ins	g	oz
MIST-X 25	60	2.4	113	4.4	12	0.5	6	0.25	100	3.5
MIST-X 50	60	2.4	161	6.3	12	0.5	6	0.25	140	5
MIST-X 150	86	3.4	206	8.1	12	0.5	6	0.25	370	13

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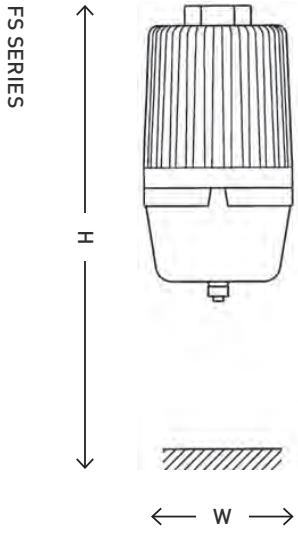
FS Series
Filter Silencers

Filter silencers for noise level reduction and filtration of expanding air.

Parker Zander filter silencers are the result of careful construction and manufacturing. They can be used in all industrial applications where compressed air is released from atmospheric pressure. With this tension release, solid particles, condensation and oil content represent a high burden at workplaces, together with the noise development during expansion. Parker Zander filter silencers reduce the noise level by approx. 40 db(A) and achieve an effective degree of filtration greater than 99.99%. They come ready to use and are applicable for volume flows up to 180m³/h with maximum operating temperatures of 100°C.

Diagrams:



Technical Data

Model	Capacity*	Connection	Max. Pressure
	m³/h	DIN ISO 228	bar
FS3	100	G½	16
FS4	100	G¾	16
FS5	180	G1	16

*Calculated at 1 bar and 20°C

Weights and Dimensions

Model	Dimensions (mm)			Weight
	A	B	D	kg
FS3	90	180	90	1.0
FS4	90	180	90	1.0
FS5	110	252	100	2.5

Spares

Model
LS3/ZR
LS3/ZR
LS5/ZR

Standard Accessories

Element Type	Description
BFH/FS3	Wall bracket for FS3
BFH/FS4	Wall bracket for FS4
BFH/FS5	Wall bracket for FS5

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CO_2 INCIDENT PROTECTION

CO_2 Incident Protection

CO_2 incident protection from Parker is the preferred choice in the global beverage industry, with systems installed in over 150 countries worldwide.

Using multi-layer adsorbent technology, our systems remove a wide range of potential CO_2 impurities, guaranteeing safe, high quality gaseous carbon dioxide for use in sparkling beverage bottling.

CO_2 INCIDENT PROTECTION

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Parker domnick hunter

PCO2 Carbon Dioxide Quality Incident Protection Systems

Guarantees in-plant CO_2 quality so it remains within industry guidelines, preventing accidental product contamination during the sparkling beverage bottling process.

PCO2 Carbon Dioxide Quality Incident Protection Systems from Parker domnick hunter offer a comprehensive solution to preserve and guarantee the quality of gaseous carbon dioxide used in sparkling beverage bottling.

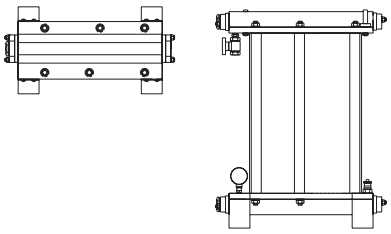
Using multi-layer adsorbent technology, the Parker domnick hunter PCO2 range includes Maxi PCO2 and Mplus PCO2 for plant scale protection.

Operating as a Quality Incident Protection removing a wide range of potential carbon dioxide impurities, the system guarantees the gas quality so it remains within industry and company guidelines, preventing detrimental consequences to the end beverage, producers' reputation and their bottom-line.

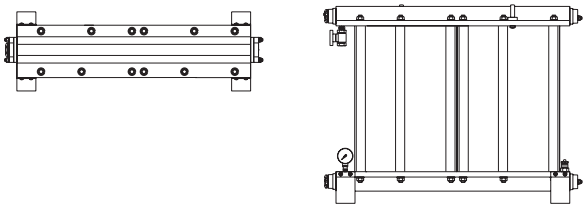
PCO2 is the beverage industry preferred choice and is installed in over 150 countries worldwide.

Diagrams:

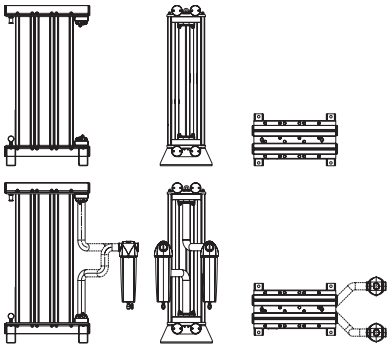
MAXI PCO2 0-1



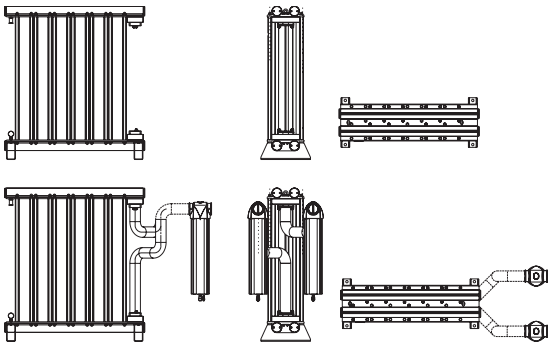
MAXI PCO2 2-3



MPLUS 4000



MPLUS 10000



Parker

Product Selection

Data is based on 20.7 bar g (300 psi g). For flow rates at other pressures, Stated flow rates are at 20.7 bar g (300 psi g). For flows at other pressures apply the correction factors shown below.

Model	Flow Rate	
	kg/h	lb/h
Maxi PCO2 - 0	150	330
Maxi PCO2 - 1	300	661
Maxi PCO2 - 2	600	1322
Maxi PCO2 - 3	900	1980
MPlus PCO2 4000	1814	4000
MPlus PCO2 6000	2722	6000
MPlus PCO2 8000	3629	8000
MPlus PCO2 10000	4537	10000

Technical Data

Model	Max. Operating Pressure		Min. Operating Temperature		Max. Operating Temperature		Inlet CO_2 Quality*
	bar g	psi g	°C	°F	°C	°F	
Maxi PCO2	20.7 (24.1 optional)	300 (350 optional)	-20	-4	40	104	ISBT beverage grade CO_2
MPlus PCO2	20.7 (24.1 optional)	300 (350 optional)	-20	-4	40	104	ISBT beverage grade CO_2

*PCO2 CO_2 Systems are for gaseous CO_2 only

Pressure Correction Factors

Inlet Pressure	bar g	3	4	5	6	7	8	9	10	11	12	13
	psi g	44	58	73	87	102	116	130	145	160	174	189
Correction Factor		0.19	0.23	0.28	0.33	0.38	0.42	0.47	0.52	0.57	0.61	0.66

Inlet Pressure	bar g	14	15	16	17	18	19	20	21	22	23	24
	psi g	203	218	232	247	261	275	290	304	319	333	348
Correction Factor		0.71	0.76	0.80	0.85	0.90	0.95	1	1	1	1	1

Weights and Dimensions

Model	Systems Connections#	Height (H)		Width (W)		Depth (D)		Clearance*		Weight	
		mm	in	mm	in	mm	in	mm	in	kg	lbs
Maxi PCO2 - 0	G1	615	24.2	250	9.8	322	12.7	510	20.0	32	70
Maxi PCO2 - 1	G1	621	24.5	250	9.8	464	18.3	510	20.0	48	106
Maxi PCO2 - 2	G1	621	24.5	250	9.8	788	31.0	510	20.0	92	203
Maxi PCO2 - 3	G1	621	24.5	250	9.8	1113	43.8	510	20.0	130	287
MPlus PCO2 4000	G2†	1390	54.7	450	17.7	741	29.2	1155	45.5	270	596
MPlus PCO2 6000	G2†	1390	54.7	450	17.7	910	35.8	1155	45.5	348	768
MPlus PCO2 8000	G2½†	1390	54.7	450	17.7	1079	42.5	1155	45.5	434	955
MPlus PCO2 10000	G3†	1390	54.7	450	17.7	1270	50.0	1155	45.5	518	1140

#Please specify BSP or NPT †24.1 bar g (350 psi g) versions all 2" connections
*Clearance required for the removal and servicing of cartridges

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Parker domnick hunter

PCO2 Maintenance Kits

Maintenance kits for PCO2 carbon dioxide quality incident protection systems, containing elements for pre and post filter housings, cartridges, seals and instructions. A kit will contain all components required for the recommended service.

The Parker domnick hunter PCO2 range of plant scale Carbon Dioxide Quality Incident Protection Systems comprise of Maxi PCO2 and Mplus PCO2 models. The systems have been designed to incorporate six stages of purification, offering effective quality incident protection against a combination of potential contaminants.

Regular planned maintenance schedules of the PCO2 System's adsorbent cartridges and pre and post filter elements are a major part in ensuring total protection from a quality incident. Complete maintenance should be undertaken every 6 months and each model has a designated maintenance kit part number. Details of the MAK and MAKE kit part numbers can be found within the user guides supplied with each system.

The serial number of the unit will determine which maintenance kit is required, if unsure which please refer to this instruction:

- PCO2 Systems with Oil-Xplus filters – Maxi models (up to serial number PC0766) and Mplus (up to serial number MPC0151)
- PCO2 Systems with Oil-X Evolution filters – Maxi models (from serial number PC0766 to date) and Mplus (from serial number MPC0151 to date)

It is advised that the filter elements are changed during the same planned maintenance schedule that the adsorbent cartridges are replaced. Replacing the elements during the same period will reduce downtime and the amount of time that the PCO2 system is exposed to atmosphere and potential contamination.

Part Number	For Serial Number ABOVE
MAKEPC02-0-20	All
MAKPC02-0-24	All
MAKEPC02-0-20	PC0766
MAKPC02-0-24	All
MAKEPC02-1-20	PC0766
MAKPC02-1-24	All
MAKEPC02-1-20	PC0766
MAKPC02-1-24	All
MAKEPC02-2-20	PC0766
MAKPC02-2-24	All
MAKEPC02-2-20	PC0766
MAKPC02-2-24	All
MAKEPC02-3-20	PC0766
MAKPC02-3-24	All
MAKEPC02-3-20	PC0766
MAKPC02-3-24	All
MAKE-MPLUS4000-20	MPC0151
MAK-MPLUS4000-24	All
MAKE-MPLUS4000-20	MPC0151
MAK-MPLUS4000-24	All
MAKE-MPLUS6000-20	MPC0151
MAK-MPLUS6000-24	All
MAKE-MPLUS6000-20	MPC0151
MAK-MPLUS6000-24	All
MAKE-MPLUS8000-20	MPC0151
MAK-MPLUS8000-24	All
MAKE-MPLUS8000-20	MPC0151
MAK-MPLUS8000-24	All
MAKE-MPLUS10000-20	MPC0151
MAK-MPLUS10000-24	All
MAKE-MPLUS10000-20	MPC0151
MAK-MPLUS10000-24	All

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INDUSTRIAL GAS GENERATORS

INDUSTRIAL GAS GENERATORS

Industrial Gas Generators

Parker is a world-leading supplier of industrial gas generators, enabling a continuous, or on-demand supply of high-purity nitrogen.

Our range of industrial gas generators use proprietary selective permeation membrane and Pressure Swing Adsorption (PSA) technologies to produce high-purity nitrogen from compressed air.

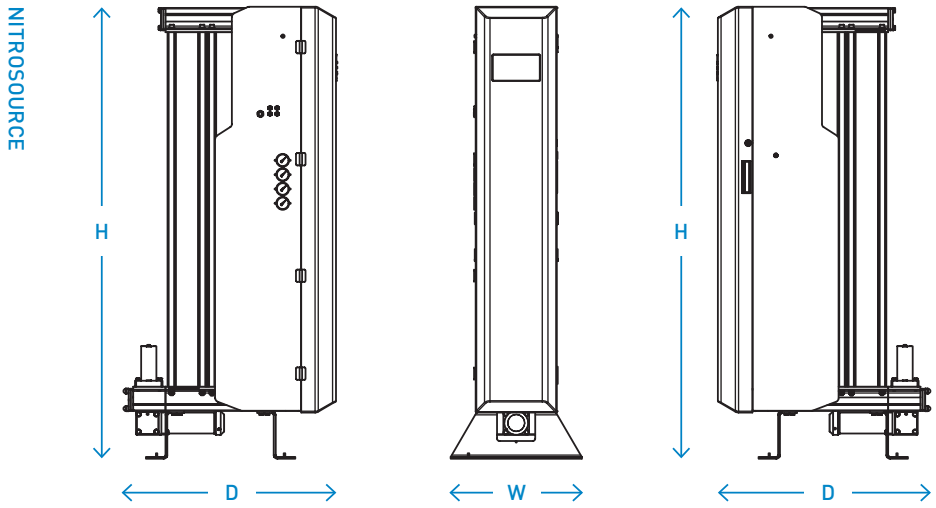
Parker

NITROSource PSA Nitrogen Gas Generator

Advanced technology nitrogen gas generator for industry leading performance; a source of increased productivity, sustainability and profitability. NITROSource provides nitrogen gas of 95% to 99.9995% equivalent nitrogen purity.

The NITROSource nitrogen gas generators' unique design and advanced energy saving technology means less compressed air is needed to generate more nitrogen than any other gas generator currently available. Supported by substantially lower servicing costs, reduced downtime and a longer working life than comparable nitrogen generators, NITROSource offers the most cost-efficient nitrogen supply available; significantly more affordable and safer than traditional delivery methods of supply, such as gas cylinders and mini bulk storage.

Diagrams:



Product Selection

Performance data is based on 7 bar g air inlet pressure and 20°C - 25°C ambient temperature. Consult Parker for performance under specific conditions.

Model	Nitrogen Flow Rates m^3/hr vs Purity (oxygen content)													
	5 ppm	10ppm	50ppm	100ppm	250ppm	500ppm	0.10%	0.40%	0.50%	1%	2%	3%	4%	5%
N2-20P	3.5	4.5	6.7	8.0	9.7	11.1	12.4	16.7	17.7	21.3	25.3	29.8	30.9	33.7
N2-25P	5.3	6.8	10.1	12.0	14.6	16.7	18.6	25.1	26.6	32.0	38.0	44.7	46.4	50.6
N2-35P	7.0	9.0	13.4	16.0	19.4	22.2	24.8	33.4	35.4	42.6	50.6	59.6	61.8	67.4
N2-45P	8.8	11.3	16.8	20.0	24.3	27.8	31.0	41.8	44.3	53.3	63.3	74.5	77.3	84.3
N2-55P	10.5	13.5	20.1	24.0	29.1	33.3	37.2	50.1	53.1	63.9	75.9	89.4	92.7	101.1
N2-60P	11.6	15.0	22.3	26.6	32.3	36.9	41.2	55.5	58.9	70.8	84.1	99.1	102.7	112.1
N2-65P	13.3	17.1	25.5	30.4	36.9	42.2	47.1	63.5	67.3	80.9	96.1	113.2	117.4	128.1
N2-75P	14.5	18.6	27.7	33.1	40.2	46.0	51.3	69.1	73.3	88.2	104.7	123.4	127.9	139.5
N2-80P	16.1	20.7	30.8	36.8	44.6	51.1	57.0	76.8	81.4	98.0	116.4	137.1	142.1	155.0

m^3 reference standard 20°C, 1013 millibar(a), 0% relative water vapour pressure.

Inlet Parameters

Inlet Air Quality	ISO 8573-1: 2010 Class 2.2.2 (2.2.1 with high oil vapour content)
Inlet Air Pressure Range	5-13 bar g

Electrical Parameters

Generator Supply	100 - 240 +/- 10% Vac 50/60Hz
Generator Power	55 W
Fuse	3.15 A (Anti Surge (T), 250v, 5 x 20mm HBC, Breaking Capacity 1500A @ 250v, IEC 60127, UL R/C Fuse)

Port Connections

Air Inlet	G1
N_2 Outlet to Buffer	G1
N_2 Inlet from Buffer	G½
N_2 Outlet	G½

Weights and Dimensions

Model	Height (mm)	Width (mm)	Depth (mm)	Weight (kg)
N2-20P	1894	550	881	299
N2-25P	1894	550	1050	384
N2-35P	1894	550	1219	469
N2-45P	1894	550	1388	553
N2-55P	1894	550	1557	638
N2-60P	1894	550	1726	722
N2-65P	1894	550	1895	807
N2-75P	1894	550	2064	892
N2-80P	1894	550	2233	976

For further product information visit **www.parker.com/gsfe**

Part Numbers - without EST

Part Number	O_2 Purity	Flow
N2-20PBLN	Low Purity (%)	Low Flow
N2-20PALN	High Purity (ppm)	Low Flow
N2-20PXLN	Ultra High Purity (≤10ppm)	Low Flow
N2-25PBLN	Low Purity (%)	Low Flow
N2-25PBMN	Low Purity (%)	Medium Flow
N2-25PALN	High Purity (ppm)	Low Flow
N2-25PXLN	Ultra High Purity (≤10ppm)	Low Flow
N2-35PBLN	Low Purity (%)	Low Flow
N2-35PBMN	Low Purity (%)	Medium Flow
N2-35PALN	High Purity (ppm)	Low Flow
N2-35PXLN	Ultra High Purity (≤10ppm)	Low Flow
N2-45PBLN	Low Purity (%)	Low Flow
N2-45PBMN	Low Purity (%)	Medium Flow
N2-45PALN	High Purity (ppm)	Low Flow
N2-45PXLN	Ultra High Purity (≤10ppm)	Low Flow
N2-55PBLN	Low Purity (%)	Low Flow
N2-55PBMN	Low Purity (%)	Medium Flow
N2-55PBHN	Low Purity (%)	High Flow
N2-55PALN	High Purity (ppm)	Low Flow
N2-55PXLN	Ultra High Purity (≤10ppm)	Low Flow
N2-60PBLN	Low Purity (%)	Low Flow
N2-60PBMN	Low Purity (%)	Medium Flow
N2-60PBHN	Low Purity (%)	High Flow
N2-60PALN	High Purity (ppm)	Low Flow
N2-60PAMN	High Purity (ppm)	Medium Flow
N2-60PXLN	Ultra High Purity (≤10ppm)	Low Flow
N2-65PBLN	Low Purity (%)	Low Flow
N2-65PBMN	Low Purity (%)	Medium Flow
N2-65PBHN	Low Purity (%)	High Flow
N2-65PALN	High Purity (ppm)	Low Flow
N2-65PAMN	High Purity (ppm)	Medium Flow
N2-65PXLN	Ultra High Purity (≤10ppm)	Low Flow
N2-75PBLN	Low Purity (%)	Low Flow
N2-75PBMN	Low Purity (%)	Medium Flow
N2-75PBHN	Low Purity (%)	High Flow
N2-75PALN	High Purity (ppm)	Low Flow
N2-75PAMN	High Purity (ppm)	Medium Flow
N2-75PXLN	Ultra High Purity (≤10ppm)	Low Flow
N2-80PBLN	Low Purity (%)	Low Flow
N2-80PBMN	Low Purity (%)	Medium Flow
N2-80PBHN	Low Purity (%)	High Flow
N2-80PALN	High Purity (ppm)	Low Flow
N2-80PAMN	High Purity (ppm)	Medium Flow
N2-80PXLN	Ultra High Purity (≤10ppm)	Low Flow

Part Numbers - with EST

Part Number	O_2 Purity	Flow
N2-20PBLY	Low Purity (%)	Low Flow
N2-20PALY	High Purity (ppm)	Low Flow
N2-25PBLY	Low Purity (%)	Low Flow
N2-25PBMY	Low Purity (%)	Medium Flow
N2-25PALY	High Purity (ppm)	Low Flow
N2-35PBLY	Low Purity (%)	Low Flow
N2-35PBMY	Low Purity (%)	Medium Flow
N2-35PALY	High Purity (ppm)	Low Flow
N2-45PBLY	Low Purity (%)	Low Flow
N2-45PBMY	Low Purity (%)	Medium Flow
N2-45PALY	High Purity (ppm)	Low Flow
N2-55PBLY	Low Purity (%)	Low Flow
N2-55PBMY	Low Purity (%)	Medium Flow
N2-55PBHY	Low Purity (%)	High Flow
N2-55PALY	High Purity (ppm)	Low Flow
N2-60PBLY	Low Purity (%)	Low Flow
N2-60PBMY	Low Purity (%)	Medium Flow
N2-60PBHY	Low Purity (%)	High Flow
N2-60PALY	High Purity (ppm)	Low Flow
N2-60PAMY	High Purity (ppm)	Medium Flow
N2-65PBLY	Low Purity (%)	Low Flow
N2-65PBMY	Low Purity (%)	Medium Flow
N2-65PBHY	Low Purity (%)	High Flow
N2-65PALY	High Purity (ppm)	Low Flow
N2-65PAMY	High Purity (ppm)	Medium Flow
N2-75PBLY	Low Purity (%)	Low Flow
N2-75PBMY	Low Purity (%)	Medium Flow
N2-75PBHY	Low Purity (%)	High Flow
N2-75PALY	High Purity (ppm)	Low Flow
N2-75PAMY	High Purity (ppm)	Medium Flow
N2-80PBLY	Low Purity (%)	Low Flow
N2-80PBMY	Low Purity (%)	Medium Flow
N2-80PBHY	Low Purity (%)	High Flow
N2-80PALY	High Purity (ppm)	Low Flow
N2-80PAMY	High Purity (ppm)	Medium Flow

Parker domnick hunter

MIDIGAS PSA Nitrogen Gas Generator

The cost-effective, reliable and safe solution for small to medium nitrogen requirements. Utilising PSA technology. MIDIGAS provides nitrogen gas of 95% to 99.999% equivalent nitrogen purity.

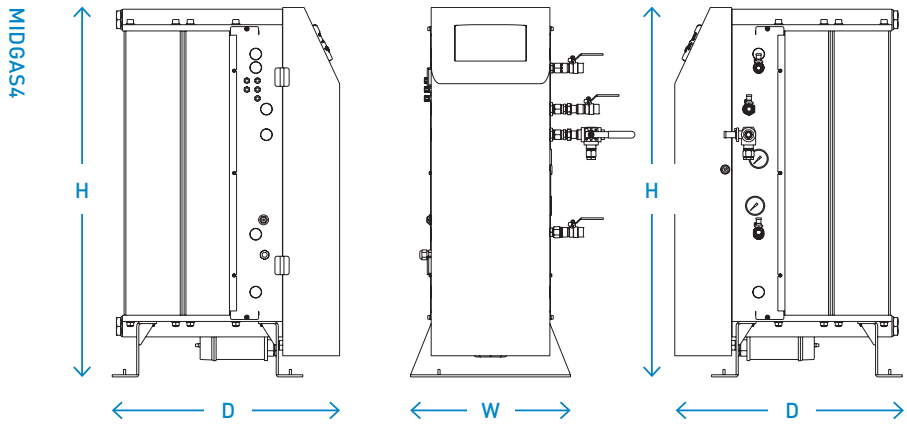
MIDIGAS nitrogen gas generators from Parker domnick hunter produce a totally on-demand nitrogen gas supply from a standard factory compressed air supply; a safe and reliable alternative to delivered gas options. The compact and lightweight modular design provides a consistent and easy to maintain solution for low to medium flow rate on-site gas requirements.

When maintained in-line with Parker domnick hunter's recommendations, MIDIGAS will offer in excess of 10 years service life from the Carbon Molecular Sieve (CMS), the material that is used to separate nitrogen from compressed air.

The MIDIGAS range has been designed to meet multiple industry compliance including CU TR (EAC), CE, UL, CRN and has third party verified FDA Article 21 and European Food and Pharmaceutical approval. MIDIGAS is also exempt from annual PED pressure vessel inspection resulting in minimum disruption to production.

Cascading of the generators (multi-banking) is also an option with MIDIGAS meaning that 100% standby is available with the addition of one extra bank, another benefit when considering production uptime. This option also provides ease of upgrade, as and when nitrogen requirements increase. MIDIGAS is the ideal replacement to delivered nitrogen gas, eliminating the issues of administration, logistics and the potential risk of running out of gas associated with high pressure cylinders, liquid mini tanks or bulk storage vessels.

Diagrams:



For further product information visit **www.parker.com/gsfe**

Product Selection

Performance data is based on 7 bar g (100 psi g) air inlet pressure and 20°C - 25°C (66°F - 77°F) ambient temperature. Consult Parker for performance under other specific conditions.

Model	Unit	Nitrogen Flow Rates m^3/hr vs Purity (oxygen content)										
		10ppm	100ppm	250ppm	500ppm	0.1%	0.5%	1%	2%	3%	4%	5%
MIDIGAS2	m^3/hr	0.55	1.2	1.5	1.9	2.4	3.4	4.3	5.8	7.2	8.4	9.4
	cfm	0.3	0.7	0.9	1.1	1.4	2.0	2.5	3.5	4.2	4.9	5.5
MIDIGAS4	m^3/hr	1.2	2.4	3.2	3.9	4.7	6.9	8.5	11.6	14.3	16.7	18.8
	cfm	0.7	1.4	1.9	2.3	2.8	4.1	5.0	6.8	8.4	9.8	11.1
MIDIGAS6	m^3/hr	1.5	3.2	4.2	5.3	6.5	9.5	11.5	15.2	18.7	21.7	24.5
	cfm	0.9	1.9	2.5	3.1	3.8	5.6	6.8	8.9	11.0	12.8	14.4
Outlet Pressure	bar g	5.6	5.4	5.9	5.7	5.6	5.7	6.0	6.0	5.8	5.7	5.6
	psi g	81	78	86	83	81	83	87	87	84	83	81

m^3 reference standard = 20°C, 1013 millibar(a), 0% relative water vapour pressure.

Inlet Parameters

Inlet Air Quality	ISO 8573-1:2010 Class 2.2.2 (2.2.1 with high oil vapour content)
Inlet Air Pressure Range	6 - 13 bar g 87 - 217 psi g

Electrical Parameters

Supply Voltage	115 / 230 ±10% V ac 50/60Hz
Power	80 W
Fuse	3.15A (Anti Surge (T), 250v, 5 x 20mm HBC, Breaking Capacity 1500A @ 250v, UL Listed)

Port Connections

Air Inlet	G½"
N_2 Outlet to Buffer	G½"
N_2 Inlet from Buffer	G½"
N_2 Outlet	G½"

Weights and Dimensions

Model	Height (H)		Width (W)		Depth (D)		Weight	
	mm	in	mm	in	mm	in	kg	lb
MIDIGAS2	1034	41	450	18	471	19	98	216
MIDIGAS4	1034	41	450	18	640	26	145	320
MIDIGAS6	1034	41	450	18	809	33	196	432

Part Numbers

Model	Part Number
MIDIGAS 2 without analyser ppm	MIDIGAS2NCALN
MIDIGAS 2 O_2 analyser ppm	MIDIGAS2NCALA
MIDIGAS 2 without analyser %	MIDIGAS2NCBLN
MIDIGAS 2 O_2 analyser %	MIDIGAS2NCBLA
MIDIGAS 2 O_2 analyser % high p	MIDIGAS2NCBHA
MIDIGAS 4 O_2 analyser ppm	MIDIGAS4NCALA
MIDIGAS 4 without analyser %	MIDIGAS4NCBLN
MIDIGAS 4 O_2 analyser %	MIDIGAS4NCBLA
MIDIGAS 4 without analyser % high p	MIDIGAS4NCBHN
MIDIGAS 4 O_2 analyser % high p	MIDIGAS4NCBHA
MIDIGAS 6 O_2 analyser ppm	MIDIGAS6NCALA
MIDIGAS 6 without analyser %	MIDIGAS6NCBLN
MIDIGAS 6 O_2 analyser %	MIDIGAS6NCBLA
MIDIGAS 6 O_2 analyser % high p	MIDIGAS6NCBHA

For further product information visit **www.parker.com/gsfe**

SmartFluxx Nitrogen Gas Membrane Modules

SmartFluxx design optimizes highest nitrogen capacity and lowest feed-air consumption, keeping the modules the smallest available on the market. SmartFluxx provides nitrogen gas of 90% to 99.5% equivalent nitrogen purity.

Parker hollow-fibre membrane modules produce nitrogen gas from compressed air to offer a cost-effective, reliable and safe solution to on-site nitrogen gas generation. SmartFluxx nitrogen membrane modules are manufactured with a life-expectancy of over 10 years, with no performance decrease over time due to fibre ageing during the manufacturing process.

More nitrogen per fibre is produced from Parker hollow fibre membranes than any other in the world, together with the lowest module pressure drop, meaning fewer membranes are needed per nitrogen system. Gas is generated via a low pressure standard industrial compressor resulting in operational energy savings.

The correct purity is available instantly as there is no need to heat up the membrane to open the polymer structure, further reducing the energy consumption, resulting in reduced CO_2 emissions. SmartFluxx offers flexible mounting solutions, a small system footprint and no serviceable parts, meaning it operates maintenance free.

Performance Data

Model		Flow Rates m³/hr						Max. Operating Pressure	Min. Temperature		Max. Temperature	
		99.5	99.0	98.0	97.0	96.0	95.0		°C	°F	°C	°F
SA604	bar g	0.44	0.71	1.16	1.49	1.90	2.10	13	2	36	50	122
	psi g	0.26	0.42	0.68	0.88	1.12	1.24	217				
Feed-air Consumption	bar g	3.0	3.3	3.9	4.2	4.8	4.7	13				
	psi g	1.8	1.9	2.3	2.5	2.8	2.8	190				
SA708	bar g	2.11	3.27	4.90	6.46	8.12	9.78	13	2	36	50	122
	psi g	1.24	1.93	2.89	3.8	4.78	5.76	217				
Feed-air Consumption	bar g	14.7	16.2	17.1	18.7	20.8	22.7	13				
	psi g	8.6	9.6	10	11	12.2	13.4	190				
SA1508	bar g	6.1	8.5	12.3	16.5	19.5	24.3	13	2	36	50	122
	psi g	3.6	5	7.2	9.7	11.5	14.3	217				
Feed-air Consumption	bar g	36	38	41	48	50	56	13				
	psi g	21	22	24	28	29	33	190				
SA1508SS	bar g	6.1	8.5	12.3	16.5	19.5	24.3	13	2	36	50	122
	psi g	3.6	5	7.2	9.7	11.5	14.3	217				
Feed-air Consumption	bar g	36	38	41	48	50	56	13				
	psi g	21	22	24	28	29	33	190				
SA15020	bar g	37	53	78	100	125	154	9	2	36	50	122
	psi g	22	31	46	59	74	91	203				
Feed-air Consumption	bar g	202	223	258	281	315	348	9				
	psi g	119	131	152	165	185	205	130.5				

m³/hr refers to conditions at 1013 mbar(a) and 20°C at 7 bar g

Weights, Dimensions and Connections

Model	Connections			Height (H)		Width (W)		Depth (D)		Weight	
	Feed-air	Nitrogen	Oxygen	mm	in	mm	in	mm	in	kg	lbs
SA604	G ⅜"	G ⅜"	G ⅜"	758	29.8	80	3.1	63	2.5	3.2	7
SA708	G ¾"	G ¾"	G1"	782	30.8	114	4.5	114	4.5	5.5	12
SA1508	G ¾"	G ¾"	G1"	1655	65.1	114	4.5	114	4.5	6.8	15
SA1508SS	G ¾"	G ¾"	G1"	1655	65.1	114	4.5	114	4.5	18	40
SA15020	G 2½"	G 2½"	3.9"	1740	68.5	280	11	280	11	46	102

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HiFluxx Nitrogen Gas Membrane Modules

Membrane modules for producing nitrogen gas at pressures up to 13 bar g from a standard compressed air supply. HiFluxx provides nitrogen gas of 95% to 99.5% equivalent nitrogen purity.

Nitrogen is used as a clean, dry, inert gas primarily for removing oxygen from products and/or processes. Parker modules can be built into a custom-made nitrogen generator or can be integrated with your (production) process to provide an on-demand, continuous source of nitrogen gas. This nitrogen gas can be used in a wide range of industries including food, beverage, pharmaceutical, laboratory, chemical, heat treatment, electronics, transportation, oil and gas, mining and marine.

Performance Data

Model		Flow Rates m^3/hr					Max. Operating Pressure	Min. Temperature		Max. Temperature	
		99	98	97	96	95		°C	°F	°C	°F
ST304	bar g	0.29	0.52	0.73	0.93	1.14	13	2	36	50	122
	psi g	4.20	7.54	10.6	13.5	16.5	190				
Feed-air Consumption	bar g	2.02	2.31	2.55	2.79	3.09	13				
	psi g	29.3	33.5	37.0	40.5	44.8	190				
DT304	bar g	0.88	1.39	1.87	2.33	2.84	13	2	36	50	122
	psi g	12.8	20.2	27.1	33.8	41.2	190				
Feed-air Consumption	bar g	5.00	5.70	6.18	6.76	7.37	13				
	psi g	72.5	82.7	89.6	98.0	107	190				

Performance Data

Model		Flow Rates m^3/hr					Max. Operating Pressure	Min. Temperature		Max. Temperature	
		99	98	97	96	95		°C	°F	°C	°F
TT304	bar g	1.37	2.08	2.75	3.41	4.14	13	2	36	50	122
	psi g	19.9	30.2	39.9	49.4	60.0	190				
Feed-air Consumption	bar g	7.53	8.30	9.07	9.90	10.80	13				
	psi g	109	120	131	143	157	190				
ST504	bar g	0.41	0.71	1.01	1.29	1.57	13	2	36	50	122
	psi g	5.95	10.3	14.6	18.7	22.8	190				
Feed-air Consumption	bar g	2.78	3.06	3.54	3.81	4.17	13				
	psi g	40.3	44.4	51.3	55.2	60.5	190				
ST604	bar g	0.72	1.22	1.66	2.10	2.56	13	2	36	50	122
	psi g	10.4	17.7	24.1	30.5	37.1	190				
Feed-air Consumption	bar g	4.44	5.12	5.64	6.08	6.65	13				
	psi g	64.4	74.2	81.8	88.2	96.4	190				
DT604	bar g	2.07	3.11	3.91	5.09	6.15	13	2	36	50	122
	psi g	30.0	45.1	57.0	73.8	89.2	190				
Feed-air Consumption	bar g	11.2	12.5	13.3	14.8	16.0	13				
	psi g	162	181	193	215	232	190				
TT604	bar g	2.81	4.25	5.62	7.02	8.40	13	2	36	50	122
	psi g	40.7	61.6	81.5	102	122	190				
Feed-air Consumption	bar g	15.8	17.4	19.1	20.4	21.8	13				
	psi g	229	252	277	296	316	190				
ST608	bar g	2.49	4.34	5.82	7.56	9.23	13	2	36	50	122
	psi g	36.1	62.9	84.4	110	134	190				
Feed-air Consumption	bar g	16.5	18.7	20.4	22.7	24.0	13				
	psi g	239	271	296	329	348	190				
ST6010	bar g	3.96	6.90	9.35	12.0	14.9	13	2	36	50	122
	psi g	57.4	100	136	174	216	190				
Feed-air Consumption	bar g	26.1	29.7	32.7	35.9	38.8	13				
	psi g	378	431	474	520	563	218				
ST1506	bar g	3.30	5.20	7.20	9.20	11.4	13	2	36	50	122
	psi g	48.0	73.8	104	133	165	190				
Feed-air Consumption	bar g	20.8	22.4	25.2	27.6	29.6	13				
	psi g	302	325	365	400	429	218				
DT1506-8	bar g	8.25	14.2	19.5	24.7	30.0	13	2	36	50	122
	psi g	120	206	283	358	435	190				
Feed-air Consumption	bar g	52.0	61.1	68.3	74.1	78.0	13				
	psi g	754	886	990	1074	1131	190				
ST1508	bar g	6.70	11.0	15.0	20.0	25.0	13	2	36	50	122
	psi g	97.2	159	217	290	362	190				
Feed-air Consumption	bar g	42.2	47.3	52.5	60.0	65.0	13				
	psi g	612	686	761	820	943	218				
ST1508SS	bar g	11.0	19.0	26.0	33.0	40.0	13	2	36	50	122
	psi g	160	275	377	478	580	190				
Feed-air Consumption	bar g	69.3	81.7	91.0	99.0	104	13				
	psi g	1005	1185	1320	1435	1508	218				
ST15020-1	**bar g**	**54.0**	**89.0**	**121**	**161**	**201**	**9**	**2**	**36**	**50**	**122**
	psi g	**783**	**1290**	**1754**	**2334**	**2915**	**131**				
Feed-air Consumption	**bar g**	**340**	**381**	**423**	**483**	**523**	**9**				
	psi g	**4930**	**5524**	**6133**	**7003**	**7583**	**203**				

m^3/hr refers to conditions at 1013 mbar(a) and 20°C at 7 bar g

For further product information visit **www.parker.com/gsfe**

Weights, Dimensions and Connections

Model	Connections			Height (H)		Width (W)		Depth (D)		Weight
	Feed-air	Nitrogen	Vent	mm	inch	mm	inch	mm	inch	kg
ST304	G ⅜"	G ⅜"	G ⅜"	386	15.2	80	3.1	63	2.5	2.3
DT304	G ⅜"	G ⅜"	G ⅜"	386	15.2	145	5.7	63	2.5	4.0
TT304	G ⅜"	G ⅜"	G ⅜"	388	15.3	200	7.9	63	2.5	5.7
ST504	G ⅜"	G ⅜"	G ⅜"	520	20.5	80	3.1	63	2.5	2.6
ST604	G ⅜"	G ⅜"	G ⅜"	757	29.8	80	3.1	63	2.5	3.2
DT604	G ⅜"	G ⅜"	G ⅜"	758	29.8	145	5.7	63	2.5	6.0
TT604	G ⅜"	G ⅜"	G ⅜"	758	29.8	200	7.9	63	2.5	8.3
ST608	G ¾"	G ¾"	G1"	736	29.0	114	4.5	114	4.5	5.3
ST6010	G1"	G1"	G1"	736	29.0	139	5.5	139	5.5	8.1
ST1506	G ¾"	G ¾"	G1"	1655	65.1	100	3.9	100	3.9	5.7
DT1506-8 (<8 bar g)	G ¾"	G ¾"	G1"	1705	67.1	296	11.7	208	8.2	15
DT1506-8 (9-13 bar g)	G ¾"	G ¾"	2x G1"	1732	68.2	296	11.7	208	8.2	15
ST1508	G ¾"	G ¾"	G1"	1655	65.1	114	4.5	114	4.5	6.8
DT1508SS	G ¾"	G ¾"	2x G1"	1734	68.3	296	11.7	145	5.7	39
ST15020-1	G2 ⅜"	G2 ⅜"	100mm	1740	65.5	280	11.0	280	11.0	46

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Piccolo Nitrogen Gas Membrane Module

Small flow nitrogen membrane module, Piccolo provides nitrogen gas of 95% to 98% equivalent nitrogen purity.

Nitrogen is used as a clean, dry, inert gas primarily for removing oxygen from products and/or processes. Parker modules can be built into a custom-made nitrogen generator or can be integrated with your (production) process to provide an on-demand, continuous source of nitrogen gas. This nitrogen gas can be used in a wide range of industries including food, beverage, pharmaceutical, laboratory, chemical, heat treatment, electronics, transportation, oil and gas, mining and marine. Piccolo Nitrogen Gas Membrane Modules are capable of producing nitrogen gas for applications requiring small flow with low purity, 95 to 98%. Flow rates range between 2.5 l/s @ 7 bar g for 98% to 6.5 l/s @ 7 bar g for 95%.

Performance Data

Model	Flow Rates m³/hr				Max. Operating Pressure	Min. Temperature	Max. Temperature
	98.0	97.0	96.0	95.0	bar g	°C	°C
Piccolo 243	0.15	0.28	0.37	0.39	12	2	50

m³/hr refers to conditions at 1013 mbar(a) and 20°C at 7 bar g

Weights, Dimensions and Connections

Model	Connection		Height (H)	Width (W)	Weight
	Inlet	Outlet	mm	mm	kg
Piccolo 243	G ⅛"	G ⅛"	374	40	0.55

Note
Parker membrane systems produce both nitrogen and oxygen enriched air. Nitrogen enriched air can cause suffocation and oxygen enriched air causes increased fire hazards.
The oxygen enriched air is available at ambient pressure and pressure build-up of enriched oxygen at the outlet must be prevented, otherwise a serious (reversible) decrease in performance will result. The nitrogen enriched air produced should be treated as pressurised air.

For further product information visit **www.parker.com/gsfe**

ADSORPTION

FOCUSED ON ADSORPTION

Parker are world leaders in compressed air drying. Our range of adsorption dryers is built on unrivalled engineering expertise, and specified with a host of innovative technology and features.

Our mission is to deliver 100% validated air quality together with world-leading standards of efficiency and cost-effectiveness. Using our advanced desiccant drying process, we offer comprehensive adsorption solutions for every system, from compressor room to in-line and point-of-use applications – providing optimum performance, reliability and ease of use across the range of flow rates and dewpoints.

Equipment includes a complete range of heatless dryers (including oil free) and vacuum regenerated dryers. Whatever the application, Parker adsorption solutions are always designed to deliver maximum productivity, total peace of mind and increased economy for industrial users – all with the reassurance of Parker engineering excellence.

Parker

ADSORPTION

MX Series

DRYER SELECTION

Compressed air dryers are installed to reduce the amount of water vapour in compressed air. To ensure consistent outlet dewpoint, dryers must be sized for the maximum amount of water vapour in the compressed air system (worst case conditions). Water vapour content is highest when system pressure is lowest, system temperature is highest and air flow (usage) is at maximum.

In the first instance, dryer selection should be carried out using the Parker sizing and selection software. If selection software is unavailable, correction factors should be applied to the dryer flow rates shown within this document. Apply correction factors if the minimum operating parameters are different to the reference conditions shown.

DRYER SELECTION EXAMPLE

Maximum Inlet Flow Rate	1500 m³/hr
Minimum Inlet Pressure	8.3 bar g
Maximum Temperature	40°C
Maximum Ambient Temperature	30°C
Dewpoint of Compressed Air	-40°C

Minimum Temperature	10°C
Thread Type Required	BSPP
Controller Required	Smart
Energy Management System Required	Yes

1. Select an appropriate dryer range from the flow rate tables

Dryer ranges providing -20°C PDP / -40°C PDP / -70°C PDP

Heatless	Flows (m³/hr)	Flows (cfm)
MiDAS - DAS	5.1 - 34	3 - 20
MIDI - DME 012	40	24
CDAS HL 50 - 85	55 - 300	32 - 177
OFAS HL 50 - 85	55 - 300	32 - 177
MX 102c - 108	408 - 2040	240 - 1200
K-MT 1 - 4	8 - 35	4.7 - 21
K-MT 180 - 220	2500 - 6100	1472 - 3590

Low Energy Dryers	Flows (m³/hr)	Flows (cfm)
MXLE 102c - 108	408 - 2040	240 - 1200
Antares ATT025 - 0340	150 - 2040	88 - 2040
WVM	420 - 14210	74 - 8364

2. Ensure the maximum and minimum operating temperatures and pressure are within the operational parameters of the dryer range

3. Select the correction factor for maximum inlet temperature from the CFIT table

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

Correction Factor for 40°C = 1.04

4. Select the correction factor for 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

Correction Factor for 30°C = 1.00

5. Select the correction factor for minimum inlet pressure from the CFP table

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

Correction Factor for 8.3 bar g = 0.89

6. Select the correction factor for the required dewpoint from the CFD

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

Correction Factor for -40°C PDP = 1.00

Important notes:

Temperature: Always round up to the next correction factor i.e. for 38°C select the correction factor for 40°C

Pressure: Always round down to nearest factor i.e. for 8.3 bar g select the correction factor for 8 bar g

Flow: The dryer selected must have a flow rate equal to or greater than the minimum filtration capacity

7. Calculate the minimum drying capacity

Minimum drying capacity = Compressed air flow rate x CFIT x CFAT x CFP x CFD

Minimum drying capacity = 1500 m³/hr x 1.04 x 1.00 x 0.89 x 1.00 = 1388 m³/hr

Using the minimum drying capacity, select an MX dryer model from the literature flow rate tables

Model selected = MX106

	Model	Flow m³/hr	Flow cfm
Single Bank	MX ☐ 102C	408	240
	MX ☐ 103C	612	360
	MX ☐ 103	765	450
	MX ☐ 104	1020	600
	MX ☐ 105	1275	750
	MX ☐ 106	1530	900
	MX ☐ 107	1785	1050
	MX ☐ 108	2040	1200

8. Which controller is required?

Smart controller is required therefore model selected = MXS106

9. Is DDS Energy Management System required?

DDS Energy Management system is required therefore model selected = MXS106DS

COMPRESSED AIR REGENERATIVE DESICCANT DRYERS

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Compressed Air Regenerative Desiccant Dryers

COMPRESSED AIR REGENERATIVE DESICCANT DRYERS

Using the adsorption method, Parker regenerative desiccant dryers remove unwanted moisture from compressed air.

Water vapour molecules are attracted and retained when the air is passed over a regenerative desiccant material – a drying process designed to provide reliable and cost-effective water vapour removal.

Parker

PNEUDRI MiDAS Small Flow Heatless Compressed Air Dryer

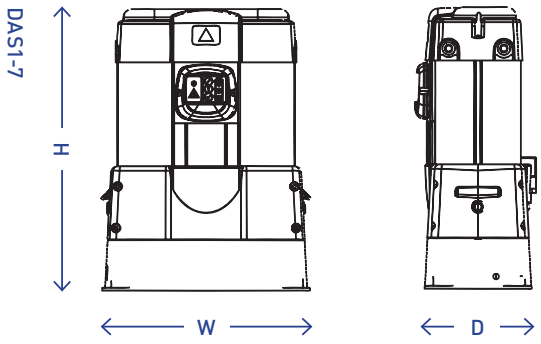
Small flow compressed air dryers providing pressure dewpoints of -70°C and -40°C with flow rates up to 34 m³/hr @ 7 bar g.

Compressed air contamination problems can be simply avoided by installing a Parker domnick hunter PNEUDRI MiDAS high efficiency compressed air dryer package fitted with integrated high efficiency filtration. The packages are suitable for use with any compressor type and are suited to point of use applications.

Parker domnick hunter's PNEUDRI MiDAS 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 can provide pressure dewpoints of -70°C and -40°C with flow rates up to 34 m³/hr @ 7 bar g (100 psi g).

Clean, dry air improves production efficiency and reduces maintenance costs and downtime. Only an adsorption dryer can provide the highest levels of dry compressed air.

Diagrams:



Dryer Performance

Model	Dewpoint (Standard) °C	Dewpoint (Standard) °F	ISO8573-1:2010 Classification (Standard)	Dewpoint (Option 1) °C	Dewpoint (Option 1) °F	ISO8573-1:2010 Classification (Option 1)
MiDAS	-40	-40	Class 2.2.2	-70	-100	Class 2.1.2

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
	bar g	psi g	bar g	psi g	°C	°F	°C	°F	°C	°F				dB(A)
DAS 1 - 7	4	58	12	175	2	35	50	122	55	131	230 / 1ph / 50Hz	115 / 1ph / 60Hz	BSPP or NPT	<75

Flow Rates

Model	Port Connection BSPP or NPT	Inlet Flow Rate			
		L/s	m^3/min	m^3/hr	cfm
DAS 1	3/8	1	0.09	5.1	3
DAS 2	3/8	2	0.14	8.5	5
DAS 3	3/8	3	0.23	13.6	8
DAS 4	3/8	4	0.28	17.0	10
DAS 5	3/8	5	0.37	22.1	13
DAS 6	3/8	6	0.43	25.5	15
DAS 7	3/8	7	0.57	34.0	20

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	4	5	6	7	8	9	10	11	12
	psi g	58	73	87	100	116	131	145	160	174
Correction Factor		1.60	1.33	1.14	1.00	1.03	0.93	0.85	0.78	0.71

CFD - Correction Factor Dewpoint

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

Controller Functions

Model	Controller Function							
	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
DAS	•	•			•	•		

Recommended Filtration

Model	Filter Port Connection BSPP or NPT	Inlet General Purpose Pre-filter	Inlet High Efficiency Filter	Outlet Dust Filter
DAS1	3/8"	AO005B ☐ FX	Integrated*	Integrated*
DAS2	3/8"	AO005B ☐ FX	Integrated*	Integrated*
DAS3	3/8"	AO005B ☐ FX	Integrated*	Integrated*
DAS4	3/8"	AO005B ☐ FX	Integrated*	Integrated*
DAS5	3/8"	AO005B ☐ FX	Integrated*	Integrated*
DAS6	3/8"	AOP0010B ☐ F	Integrated*	Integrated*
DAS7	3/8"	AOP0010B ☐ F	Integrated*	Integrated*

*PNEUDRI MiDAS dryers include integral high efficiency pre and general purpose dust filters.

☐ = B (BSPT) or N (NPT)

Weights and Dimensions

Model	Port Connection	Dimensions						Weight	
		Height (H)		Width (W)		Depth (D)			
		mm	ins	mm	ins	mm	ins	kg	lbs
DAS1	3/8"	422	16.6	289	11.4	149	5.9	11	24.2
DAS2	3/8"	500	19.7	289	11.4	149	5.9	13	28.7
DAS3	3/8"	616	24.2	289	11.4	149	5.9	16	35.3
DAS4	3/8"	692	27.2	289	11.4	149	5.9	18	39.7
DAS5	3/8"	847	33.3	289	11.4	149	5.9	20	44.1
DAS6	3/8"	906	35.7	289	11.4	149	5.9	23	50.7
DAS7	3/8"	1098	43.2	289	11.4	149	5.9	28	61.7

Part Numbers

DAS -40°C 230V /1ph/50Hz	DAS -40°C 115V /1ph/60Hz
DAS1	DAS1-115-60-CSA
DAS2	DAS2-115-60-CSA
DAS3	DAS3-115-60-CSA
DAS4	DAS4-115-60-CSA
DAS5	DAS5-115-60-CSA
DAS6	DAS6-115-60-CSA
DAS7	DAS7-115-60-CSA

For a -70°C PDP application please consult the factory.

Parker Zander

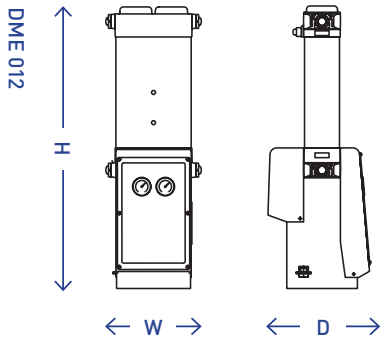
PNEUDRI MIDIplus Medium Flow Heatless Compressed Air Dryer

Medium flow compressed air dryers providing pressure dewpoints of -70°C and -40°C with flow rates up to 299 m³/hr @ 7 bar g.

Compressed air contamination problems can be simply avoided by installing a Parker domnick hunter PNEUDRI MIDIplus high efficiency compressed air dryer package fitted with OIL-X EVOLUTION filtration. The packages are suitable for use with any compressor type and are suited to point-of-use applications.

Parker domnick hunter's PNEUDRI MIDIplus 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 can provide pressure dewpoints of -70°C and -40°C with flow rates up to 299 m³/hr @ 7 bar g (100 psi g). Clean, dry air improves production efficiency and reduces maintenance costs and downtime.

Diagrams:



Dryer Performance

Model	Dewpoint (Standard)		ISO 8573-1:2010 Classification (standard)	Dewpoint (Option 1)		ISO 8573-1:2010 Classification (Option 1)
	°C	°F		°C	°F	
DME	-40	-40	Class 2	-70	-100	Class 1
DMOP	-40	-40	Class 2	-70	-100	Class 1

For further product information visit **www.parker.com/gsfe**

Technical Data

Model	Min. Operating Pressure		Max. Operating Pressure		Min. Operating Temperature		Max. Operating Temperature		Max. Ambient Temperature		Electrical Supply (Standard)	Electrical Supply (Optional)	Thread Connection	Noise Level
	bar g	psi g	bar g	psi g	°C	°F	°C	°F	°C	°F				dB(A)
DME012	4	58	16	232	2	35	50	122	55	131	230V 1ph 50/60Hz	110V 1ph 50/60Hz	BSPP or NPT	<75

Flow Rates

Model	Port Connection[1]	L/S	m³/min	m³/hr	cfm
DME012 / DM0012P	G¾	11	0.68	41	24

Stated flows are for operation at 7 bar g (100 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.
[1] BSPP or NPT threads available. Please state at time of ordering.

CFT – Correction Factor Temperature

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

CFP – Correction Factor 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
	CFP	1.60	1.33	1.14	1.00	0.89	0.80	0.73	0.67	0.62	0.57	0.54	0.5	0.47

CFD – Correction Factor Dewpoint

Required Dewpoint	PDP °C	-40	-70
	PDP °F	-40	-100
	CFD	1.00	1.43

Controller Functions

Controller Options	Function								
	Power On Indication	Fault Indication	Display Fault Condition Values	Service Interval Indication	Service Contdown Timers	Configurable Alarm Settings	Remote Volt Free Alarm Contacts	Filter Service Timer	DDS Energy Management System
DME (Electronic control)	•	•					•		
DME DDS	•	•					•		•
DM0P									

Please state dewpoint at the time of ordering

Recommended Filtration

Model	Filter Port Connection BSPT or NPT	Inlet General Purpose Pre-filter	Inlet High Efficiency Filter	Outlet Dust Filter
DME012 / DM0012P	¾"	--	AAP020D □ FI	AOP020D □ -MI

□ = B (BSPT) or N (NPT)

Weights and Dimensions

Model	Port Connection Inlet / Outlet	Dimensions Height (H)		Width (W)		Depth (D)		Weight	
		mm	ins	mm	ins	mm	ins	kg	lbs
DME012	¾"	837	33.0	284	11.2	302	11.9	32	70

Part Numbers

Part Number
DME012BFK
DME012BFK-70
DME012DSBFK
DME012DSBFK-70
DMP012-ATEX

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Parker Zander

CDAS HL Medium Flow Heatless Compressed Air Dryer System

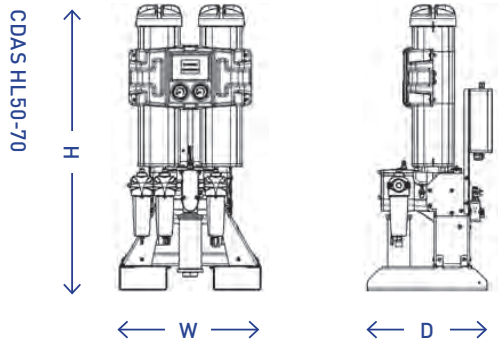
Medium flow compressed air treatment systems providing pressure dewpoints of -70°C, -40°C or -20°C at flow rates up to 300 m³/hr @ 7 bar g. Suitable for all industrial compressed air applications.

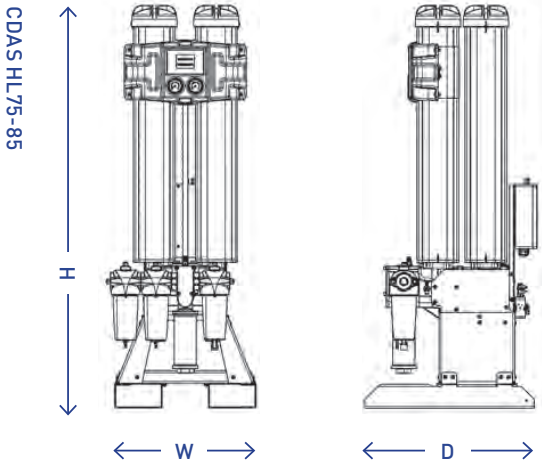
Compressed air contamination problems can be simply avoided by installing a Parker Zander CDAS HL Clean Dry Air System (including OIL-X filtration). The fully integrated heatless compressed air dryer and filtration packages are suitable for use with any compressor type and can be installed in the compressor room or at point-of-use.

Parker Zander's CDAS HL Clean Dry Air Systems provide clean, dry compressed air in accordance with all editions of ISO8573-1, the international standard for compressed air quality. They are energy efficient and can provide pressure dewpoints of -70°C, -40°C or -20°C with flow rates up to 300 m³/hr @ 7 bar g (102 psi g).

Clean, dry air improves production efficiency and reduces maintenance costs and downtime. Many products claim to provide this, however only CDAS HL Clean Dry Air Systems provide the highest levels of dry compressed air with validated performance.

Diagrams:





Dryer Performance

Model	Dewpoint (Standard) °C	Dewpoint (Standard) °F	ISO8573-1:2010 Classification (Standard)	Dewpoint (Option 1) °C	Dewpoint (Option 1) °F	ISO8573-1:2010 Classification (Option 1)	Dewpoint (Option 2) °C	Dewpoint (Option 2) °F	ISO8573-1:2010 Classification (Option 2)
CDAS HL	-40	-40	Class 2.2.2	-70	-100	Class 2.1.2	-20	-4	Class 2.3.2

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

Parker

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
	bar g	psi g	bar g	psi g	°C	°F	°C	°F	°C	°F				dB(A)
CDAS HL 50 - 85	4	58	16	232	5	41	50	122	55	131	85 - 265V 1ph 50/60Hz	24V DC	BSPP or NPT	<75

Flow Rates

Model	Port Connection BSPP or NPT	Inlet Flow Rate			
		L/s	m^3/min	m^3/hr	cfm
CDAS HL 50	1/2"	15	0.92	55	32
CDAS HL 55	1/2"	19	1.17	70	41
CDAS HL 60	1/2"	25	1.50	90	53
CDAS HL 65	1/2"	31	1.84	110	65
CDAS HL 70	3/4"	42	2.51	150	88
CDAS HL 75	1"	51	3.09	185	109
CDAS HL 80	1"	61	3.67	220	129
CDAS HL 85	1 1/2"	83	5.01	300	177

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	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	1.14	1.00	0.89	0.80	0.73	0.67	0.62	0.57	0.53	0.50	0.47

CFD - Correction Factor Dewpoint

Maximum Inlet Temperature	°C	-20	-40	-70
	°F	-4	-40	-100
Correction Factor		0.91	1.00	2.00

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
CDAS HL	•	•	•	•	•	•	•	•

Included Filtration

Model	Port Connection BSPP or NPT	Inlet General Purpose Pre-filter	Inlet High Efficiency Filter	Oil Vapour Removal Filter	Outlet Dust Filter
CDAS HL 50	1/2"	AOP015CGFI	AAP015CGFI	-	AOP015CGMI
CDAS HL 55	1/2"	AOP015CGFI	AAP015CGFI	-	AOP015CGMI
CDAS HL 60	1/2"	AOP020CGFI	AAP020CGFI	-	AOP020CGMI
CDAS HL 65	1/2"	AOP020CGFI	AAP020CGFI	-	AOP020CGMI
CDAS HL 70	3/4"	AOP025DGFI	AAP025DGFI	-	AOP025DGMI
CDAS HL 75	1"	AOP025EGFI	AAP025EGFI	-	AOP025EGMI
CDAS HL 80	1"	AOP025EGFI	AAP025EGFI	-	AOP025EGMI
CDAS HL 85	1 1/2"	AOP030GGFI	AAP030GGFI	-	AOP030GGMI

Weights and Dimensions

Model	Port Connection Inlet / Outlet	Dimensions						Weight		Inlet		Outlet
		Height (H)		Width (W)		Depth (D)						
		mm	ins	mm	ins	mm	ins	kg	lbs	General Purpose Coalescing Filter	High Efficiency Coalescing Filter	General Purpose Dry Particulate Filter
CDAS HL 50	½"	1133	45	559	22	490	19	76	168	AOP015C	AAP015C	AOP015C
CDAS HL 55	½"	1313	52	559	22	490	19	84	185	AOP015C	AAP015C	AOP015C
CDAS HL 60	½"	1510	59	559	22	490	19	93	205	AOP020C	AAP020C	AOP020C
CDAS HL 65	½"	1660	65	559	22	490	19	100	220	AOP020C	AAP020C	AOP020C
CDAS HL 70	¾"	2020	80	559	22	490	19	120	265	AOP025D	AAP025D	AOP025D
CDAS HL 75	1"	1595	63	559	22	682	27	165	364	AOP025E	AAP025E	AOP025E
CDAS HL 80	1"	1745	69	559	22	682	27	180	397	AOP025E	AAP025E	AOP025E
CDAS HL 85	1½"	2105	83	559	22	682	27	210	463	AOP030G	AAP030G	AOP030G

Part Numbers

Model	-20°C PDP / -40°C PDP BSPP	-70°C PDP BSPP
CDAS HL 50	CDASHL050-40G16AE	CDASHL050-70G16AE
CDAS HL 55	CDASHL055-40G16AE	CDASHL055-70G16AE
CDAS HL 60	CDASHL060-40G16AE	CDASHL060-70G16AE
CDAS HL 65	CDASHL065-40G16AE	CDASHL065-70G16AE
CDAS HL 70	CDASHL070-40G16AE	CDASHL070-70G16AE
CDAS HL 75	CDASHL075-40G16AE	CDASHL075-70G16AE
CDAS HL 80	CDASHL080-40G16AE	CDASHL080-70G16AE
CDAS HL 85	CDASHL085-40G16AE	CDASHL085-70G16AE

Parker Zander

OFAS HL Medium Flow Oil Free Heatless Compressed Air Dryer System

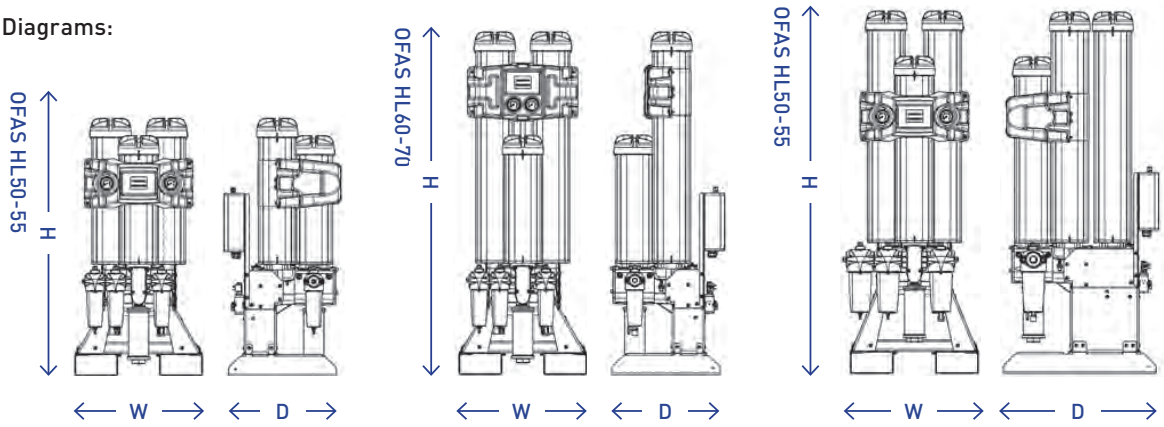
Medium flow compressed air treatment systems with oil vapour removal, providing ISO8573-1 Class 0 air at flow rates up to 300 m³/hr @ 7 bar g. Suitable for all industrial compressed air applications.

Compressed air contamination problems can be simply avoided by installing a Parker Zander OFAS HL Oil Free Air System fitted (including OIL-X filtration). The fully integrated heatless compressed air dryer and filtration packages are suitable for use with any compressor type and can be installed in the compressor room or at point-of-use.

Fitted with a third adsorbent column for oil vapour removal, Parker Zander's OFAS HL Clean Dry Air Systems have been third party validated by Lloyds Register to provide ISO8573-1 Class 0, with respect to total oil from both oil lubricated and oil free compressors, ensuring the highest quality air at the point-of-use for critical applications.

Clean, dry, oil free air improves production efficiency and reduces maintenance costs and downtime. Only OFAS HL Oil Free Air Systems can provide the highest levels of clean, dry, oil free compressed air with validated performance.

Diagrams:



Dryer Performance

Model	Dewpoint (Standard) °C	Dewpoint (Standard) °F	ISO8573-1:2010 Classification (Standard)	Dewpoint (Option 1) °C	Dewpoint (Option 1) °F	ISO8573-1:2010 Classification (Option 1)	Dewpoint (Option 2) °C	Dewpoint (Option 2) °F	ISO8573-1:2010 Classification (Option 2)
CDAS HL	-40	-40	Class 2.2.0	-70	-100	Class 2.1.0	-20	-4	Class 2.3.0

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

For further product information visit **www.parker.com/gsfe**

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
	bar g	psi g	bar g	psi g	°C	°F	°C	°F	°C	°F				dB(A)
OFAS HL 50 - 85	4	58	16	232	5	41	50	122	55	131	85 - 265V 1ph 50/60Hz	24V DC	BSPP or NPT	<75

Flow Rates

Model	Port Connection BSPP or NPT	Inlet Flow Rate			
		L/s	m^3/min	m^3/hr	cfm
OFAS HL 50	1/2"	15	0.92	55	32
OFAS HL 55	1/2"	19	1.17	70	41
OFAS HL 60	1/2"	25	1.50	90	53
OFAS HL 65	1/2"	31	1.84	110	65
OFAS HL 70	3/4"	42	2.51	150	88
OFAS HL 75	1"	51	3.09	185	109
OFAS HL 80	1"	61	3.67	220	129
OFAS HL 85	1 1/2"	83	5.01	300	177

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	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	1.14	1.00	0.89	0.80	0.73	0.67	0.62	0.57	0.53	0.50	0.47

CFD - Correction Factor Dewpoint

Maximum Inlet Temperature	°C	-20	-40	-70
	°F	-4	-40	-100
Correction Factor		0.91	1.00	2.00

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
OFAS HL	•	•	•	•	•	•	•	•

Included Filtration

Model	Port Connection BSPP or NPT	Inlet General Purpose Pre-filter	Inlet High Efficiency Filter	Oil Vapour Removal Filter	Outlet Dust Filter
OFAS HL 50	1/2"	AOP015CGFI	AAP015CGFI	Included	AOP015CGMI
OFAS HL 55	1/2"	AOP015CGFI	AAP015CGFI	Included	AOP015CGMI
OFAS HL 60	1/2"	AOP020CGFI	AAP020CGFI	Included	AOP020CGMI
OFAS HL 65	1/2"	AOP020CGFI	AAP020CGFI	Included	AOP020CGMI
OFAS HL 70	3/4"	AOP025DGFI	AAP025DGFI	Included	AOP025DGMI
OFAS HL 75	1"	AOP025EGFI	AAP025EGFI	Included	AOP025EGMI
OFAS HL 80	1"	AOP025EGFI	AAP025EGFI	Included	AOP025EGMI
OFAS HL 85	1 1/2"	AOP030GGFI	AAP030GGFI	Included	AOP030GGMI

Weights and Dimensions

Model	Port Connection	Dimensions						Weight		Inlet		Outlet
		Height (H)		Width (W)		Depth (D)				General Purpose Coalescing Filter	High Efficiency Coalescing Filter	General Purpose Dry Particulate Filter
	Inlet / Outlet	mm	ins	mm	ins	mm	ins	kg	lbs			
OFAS HL 50	½"	1133	45	559	22	512	20.2	90	198	AOP015C	AAP015C	AOP015C
OFAS HL 55	½"	1313	52	559	22	512	20.2	97	214	AOP015C	AAP015C	AOP015C
OFAS HL 60	½"	1510	59	559	22	496	19.5	106	234	AOP020C	AAP020C	AOP020C
OFAS HL 65	½"	1660	65	559	22	496	19.5	112	247	AOP020C	AAP020C	AOP020C
OFAS HL 70	¾"	2020	80	559	22	496	19.5	132	291	AOP025D	AAP025D	AOP025D
OFAS HL 75	1"	1595	63	559	22	682	27	184	406	AOP025E	AAP025E	AOP025E
OFAS HL 80	1"	1745	69	559	22	682	27	196	432	AOP025E	AAP025E	AOP025E
OFAS HL 85	1½"	2105	83	559	22	682	27	232	511	AOP030G	AAP030G	AOP030G

Part Numbers

Model	-20°C PDP / -40°C PDP BSPP	-70°C PDP BSPP
OFAS HL 50	OFASHL050-40G16AE	OFASHL050-70G16AE
OFAS HL 55	OFASHL055-40G16AE	OFASHL055-70G16AE
OFAS HL 60	OFASHL060-40G16AE	OFASHL060-70G16AE
OFAS HL 65	OFASHL065-40G16AE	OFASHL065-70G16AE
OFAS HL 70	OFASHL070-40G16AE	OFASHL070-70G16AE
OFAS HL 75	OFASHL075-40G16AE	OFASHL075-70G16AE
OFAS HL 80	OFASHL080-40G16AE	OFASHL080-70G16AE
OFAS HL 85	OFASHL085-40G16AE	OFASHL085-70G16AE

Parker Zander

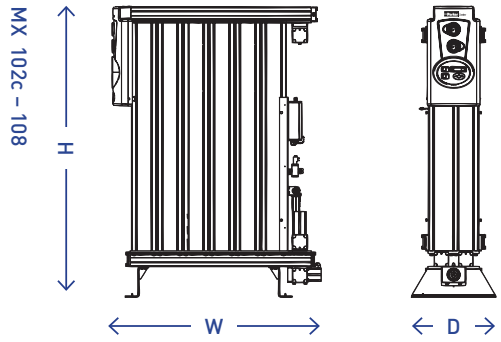
PNEUDRI MX Large Flow Heatless Compressed Air Dryer

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) °C	Dewpoint (Standard) °F	ISO8573-1:2010 Classification (Standard)	Dewpoint (Option 1) °C	Dewpoint (Option 1) °F	ISO8573-1:2010 Classification (Option 1)	Dewpoint (Option 2) °C	Dewpoint (Option 2) °F	ISO8573-1:2010 Classification (Option 2)
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

Parker

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
	bar g	psi g	bar g	psi g	°C	°F	°C	°F	°C	°F				dB(A)
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	m^3/min	m^3/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	2½"	283	17	1020	600
MX ☐ 105	2½"	354	21	1275	750
MX ☐ 106	2½"	425	26	1530	900
MX ☐ 107	2½"	496	30	1785	1050
MX ☐ 108	2½"	567	34	2040	1200
2 x MX ☐ 105	2½"	708	43	2550	1500
2 x MX ☐ 106	2½"	850	51	3060	1800
2 x MX ☐ 107	2½"	992	60	3570	2100
2 x MX ☐ 108	2½"	1133	68	4080	2400
3 x MX ☐ 106	2½"	1275	77	4590	2700
3 x MX ☐ 107	2½"	1488	89	5355	3150
3 x MX ☐ 108	2½"	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

For further product information visit **www.parker.com/gsfe**

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 AO / AA/ AO)
- 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

Tel: +45 63 12 83 00 | Email: ps@hymatik.com | www.hymatik.com | Hvidkaervej 27a, DK-5250 Odense SV, Denmark

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

Parker Zander

PNEUDRI MXLE Large Flow Low Energy Heatless Compressed Air Dryer

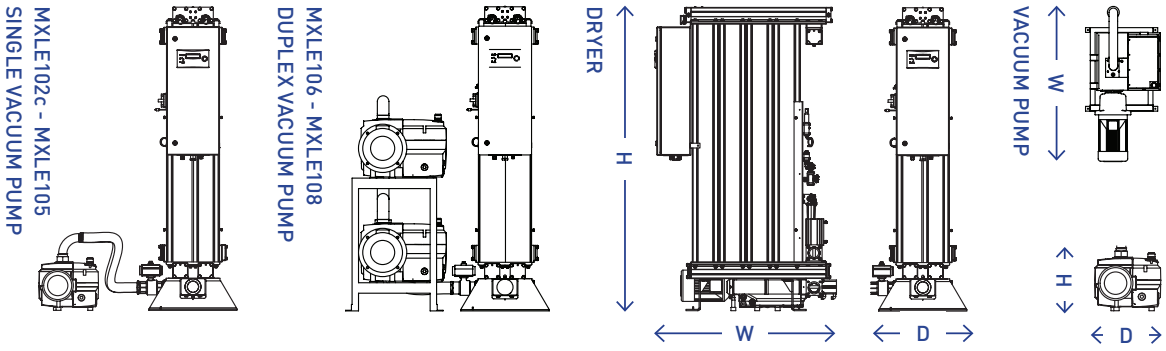
Large flow low energy modular compressed air dryers providing pressure dewpoints of -70°C and -40°C with flow rates up to 2040 m³/hr @ 7 bar g, even greater flow rates can be achieved by multi-banking the dryers.

The PNEUDRI MXLE ADVANTAGE compressed air dryer has been specifically designed to provide all of the benefits of the PNEUDRI MX heatless adsorption dryer with the additional benefits of lower energy costs and lower environmental impact via its vacuum regeneration method, allowing around 17% more of the generated clean, dry compressed air to be used across the plant.

At full load conditions, PNEUDRI MXLE has an average 60% lower energy consumption than a comparative heatless dryer and an average 39% lower energy consumption than a comparative heat regenerative dryer. These energy savings increase in periods of low air demand due to the integrated Energy Management System which is fitted as standard.

The modular construction allows greater flexibility; like PNEUDRI MX, models 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. The PNUEDRI MXLE also offers the extra security of a full back up mode, and in the unlikely event of a fault occurring with the vacuum pump, the dryer can be operated in full heatless mode to keep the plant operational.

Diagrams:



Dryer Performance

Model	Dewpoint (Standard) °C	Dewpoint (Standard) °F	ISO8573-1:2010 Classification (Standard)	Dewpoint (Option 1) °C	Dewpoint (Option 1) °F	ISO8573-1:2010 Classification (Option 1)	Dewpoint (Option 2) °C	Dewpoint (Option 2) °F	ISO8573-1:2010 Classification (Option 2)
MXLE	-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
	bar g	psi g	bar g	psi g	°C	°F	°C	°F	°C	°F				dB(A)
MXLE 102c - 108	5	73	13	190	5	41	50	122	55	131	400V +/-10% 3PH 50Hz	460V +/-10% 3PH 60Hz	BSPP	<75

Flow Rates

Model	Port Connection	Inlet Flow Rate			
		L/s	m^3/min	m^3/hr	cfm
MXLE 102C	2"	113	6.81	408	240
MXLE 103C	2"	170	10.22	612	360
MXLE 103	2"	213	12.78	795	450
MXLE 104	2½"	283	17	1020	600
MXLE 105	2½"	354	21	1275	750
MXLE 106	2½"	425	26	1530	900
MXLE 107	2½"	496	30	1785	1050
MXLE 108	2½"	567	34	2040	1200

Vacuum Pump kW

Model	kW 50Hz Pump	kW 60Hz Pump
MXLE 102C	3	4.8
MXLE 103C	3	4.8
MXLE 103	4	6.5
MXLE 104	5.5	9
MXLE 105	5.5	9
MXLE 106	8	13
MXLE 107	9.5	15.5
MXLE 108	9.5	15.5

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
MXLE	•	•	•	•		•	•	•

Included Filtration

Model	Port Connection BSPP	Inlet General Purpose Pre-filter	Inlet High Efficiency Filter	Oil Vapour Removal Filter	Outlet Dust Filter
MXLE 102C	2"	AOP040HGFX	AAP040HGFX	*	AOP040HGMX
MXLE 103C	2"	AOP040HGFX	AAP040HGFX	*	AOP040HGMX
MXLE 103	2"	AOP040HGFX	AAP040HGFX	*	AOP040HGMX
MXLE 104	2 1/2"	AOP045IGFX	AAP045IGFX	*	AOP045IGMX
MXLE 105	2 1/2"	AOP050IGFX	AAP050IGFX	*	AOP050IGMX
MXLE 106	2 1/2"	AOP050IGFX	AAP050IGFX	*	AOP050IGMX
MXLE 107	2 1/2"	AOP055IGFX	AAP055IGFX	*	AOP055IGMX
MXLE 108	2 1/2"	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	Dryer Dimensions							
		Height (H)		Width (W)		Depth (D)		Weight	
		mm	ins	mm	ins	mm	ins	kg	lbs
MXLE102c	2"	1647	65	794	32	550	22	265	583
MXLE103c	2"	1647	65	963	38	550	22	346	761
MXLE103	2"	1892	75	963	38	550	22	385	847
MXLE104	2 1/2"	1892	75	1132	45	550	22	480	1056
MXLE105	2 1/2"	1892	75	1300	52	550	22	573	1261
MXLE106	2 1/2"	1892	75	1470	58	550	22	667	1467
MXLE107	2 1/2"	1892	75	1642	65	550	22	761	1674
MXLE108	2 1/2"	1892	75	1808	71	550	22	855	1881

Model	Vacuum Pump Dimensions							
	Height (H)		Width (W)		Depth (D)		Weight	
	mm	ins	mm	ins	mm	ins	kg	lbs
MXLE102c	355	14	900	35	531	21	129	284
MXLE103c	355	14	900	35	531	21	129	284
MXLE103	385	15	998	39	531	21	163	359
MXLE104	385	15	1084	43	531	21	178	392
MXLE105	385	15	1084	43	531	21	178	392
MXLE106	1185	47	1100	43	750	30	361	796
MXLE107	1185	47	1100	43	750	30	376	829
MXLE108	1185	47	1100	43	750	30	391	862

Part Numbers

Model	-20°C PDP / -40°C PDP BSPP	-70°C PDP BSPP	50Hz Vacuum Pump	60Hz Vacuum Pump
MXLE102C	MXLE102C0	MXLE102C-70	MXLEP2C-E	MXLEP2C-E-60
MXLE103C	MXLE103C0	MXLE103C-70	MXLEP3C-E	MXLEP3C-E-60
MXLE103	MXLE1030	MXLE103-70	MXLEP3-E	MXLEP3-E-60
MXLE104	MXLE1040	MXLE104-70	MXLEP4-E	MXLEP4-E-60
MXLE105	MXLE105	MXLE105-70	MXLEP5-E	MXLEP5-E-60
MXLE106	MXLE106	MXLE106-70	MXLEP6-E	MXLEP6-E-60
MXLE107	MXLE107	MXLE107-70	MXLEP7-E	MXLEP7-E-60
MXLE108	MXLE108	MXLE108-70	MXLEP8-E	MXLEP8-E-60

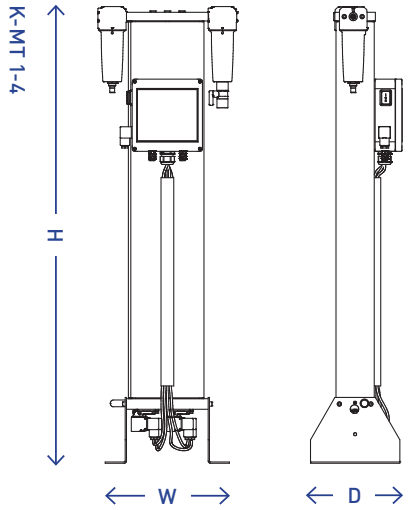
Parker Zander

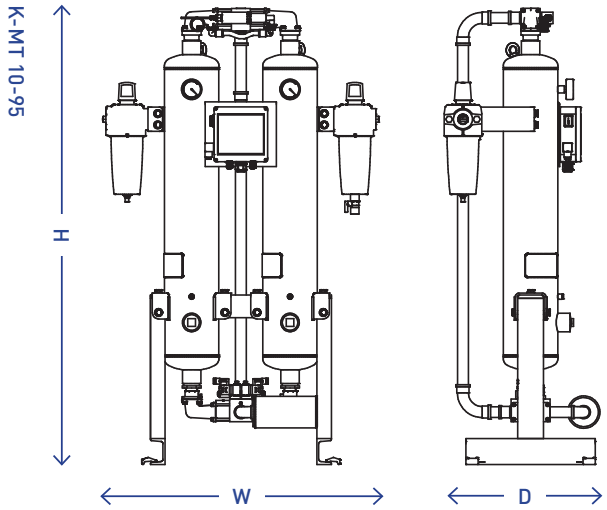
K-MT Series Heatless Compressed Air Dryers

Heatless compressed air dryers for industrial compressed air treatment applications and volume flows up to 940 m³/h and dewpoints of -25°C to -70°C.

The Parker Zander K-MT range of heatless adsorption dryers are designed to dry industrial compressed air reliably and efficiently down to a pressure dewpoint of -70°C. The units are compact and are designed to be installed free-standing. They come equipped with integrated high performance pre and post filtration and are capable of volume flows up to 940 m³/h.

Diagrams:





For further product information visit **www.parker.com/gsfe**

Technical Data

Model	Capacity[1] m³/h	Connection DIN ISO 228	Pressure (bar max)	Part Number[2]	Part Number[3]
K-MT 1	8	1/4"	16	K1/16D2-G230M	K1/16D2-G230MT
K-MT 2	15	1/4"	16	K2/16D2-G230M	K2/16D2-G230MT
K-MT 3	25	1/4"	16	K3/16D2-G230M	K3/16D2-G230MT
K-MT 4	35	1/4"	16	K4/16D2-G230M	K4/16D2-G230MT
K-MT 35	350	1 1/2"	16	K35/16D2-G230M	K35/16D2-G230MT
K-MT 45	420	1 1/2"	16	K45/16D2-G230M	K45/16D2-G230MT
K-MT 60	620	2 "	16	K60/16D2-G230M	K60/16D2-G230MT
K-MT 75	750	2 "	16	K75/16D2-G230M	K75/16D2-G230MT
K-MT 95	940	2 1/2"	16	K95/16D2-G230M	K95/16D2-G230MT

K-MT 1 - K-MT 4 includes pre- and afterfilter of GL series, K-MT 3 - K-MT 4 acc. to PED 97/23/EC, module A.
K-MT 35 - K-MT 95 includes pre- and afterfilter of GL series, K-MT 35 - K-MT 95 acc. to PED 97/23/EC, module B+D.
[1]calculated at 1 bar (abs.) and 20 °C, compressed to 7 bar g and 35 °C inlet temperature, for press. dewpoint - 40 °C.
[2]multitronic plus, retrofittable with dewpoint sensor ZHM100.
[3]Pressure dewpoint control device - multitronic-plus with ZHM100 for reduction in purge-air consumption.

Correction Factors

Pressure (bar)	Temperature (°C)					
	25	30	35	40	45	50
5 bar	0.80	0.79	0.75	0.64	0.61	0.59
6 bar	0.92	0.91	0.89	0.78	0.73	0.67
7 bar	1.03	1.02	1.00	0.91	0.82	0.79
8 bar	1.16	1.15	1.13	1.00	0.94	0.86
9 bar	1.30	1.28	1.26	1.08	1.03	0.99
10 bar	1.37	1.39	1.31	1.16	1.07	1.03
11 bar	1.52	1.49	1.36	1.24	1.10	1.07
12 bar	1.61	1.61	1.49	1.36	1.23	1.18
13 bar	1.75	1.75	1.62	1.47	1.35	1.29
14 bar	1.89	1.89	1.71	1.57	1.46	1.38
15 bar	2.00	2.00	1.79	1.67	1.57	1.46

Conversion factor pressure/temp. for press. dewpoint - 40 °C

Weights and Dimensions

Model	Dimensions (mm)			Weight (kg)
	Width (W)	Height (H)	Depth (D)	
K-MT 1	326	400	216	11.5
K-MT 2	326	575	216	15.5
K-MT 3	326	825	216	20.0
K-MT 4	326	1075	216	25.0
K-MT 35	830	1810	585	210
K-MT 45	860	1820	605	249
K-MT 60	910	1870	635	277
K-MT 75	1020	2000	640	408
K-MT 95	1050	2020	670	510

Parker Zander

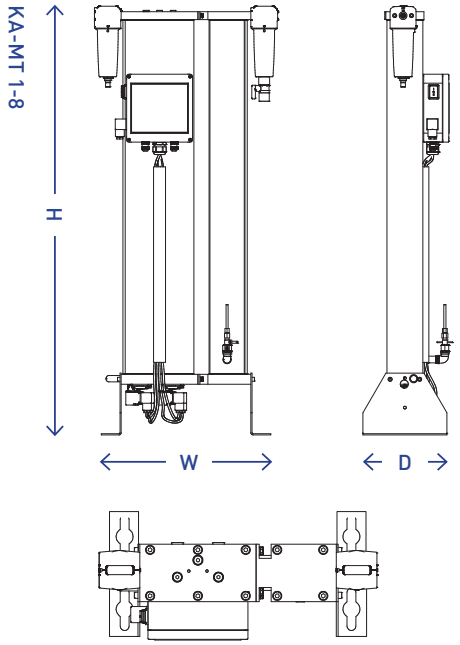
KA-MT Series Compressed Air Adsorption Dryers

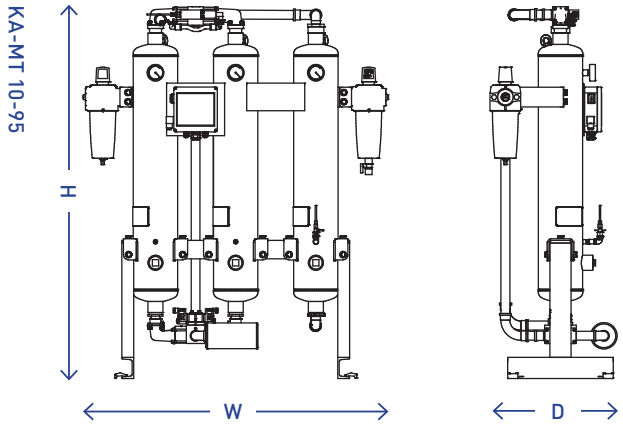
Compact, heatless compressed air adsorption dryers with activated carbon stage for industrial applications and volume flows up to 940 m³/h and dewpoints of -25°C to -70°C.

The Parker Zander KA-MT range of heatless adsorption dryers with integrated activated carbon stage are designed to dry industrial compressed air reliably and efficiently down to a pressure dewpoint of -70°C and to a remaining oil content of 0,003 mg/m³. The units are compact and are designed to be installed free-standing.

Compressed air dryers of the KA-MT series come with an integrated activated carbon stage for the removal of oil vapours and pre and post filtration of the GL series, they are capable of volume flows up to 940 m³/h in a system operating at 7 bar g (100 psi g).

Diagrams:





For further product information visit **www.parker.com/gsfe**

Technical Data

Model	Capacity[1] m³/h	Connection DIN ISO 228	Pressure (bar)	Part Number[2]	Part Number[3]
KA-MT 1	8	1/4"	16	K1/16DA2-G230M	K1/16DA2-G230MT
KA-MT 2	15	1/4"	16	K2/16DA2-G230M	K2/16DA2-G230MT
KA-MT 3	25	1/4"	16	K3/16DA2-G230M	K3/16DA2-G230MT
KA-MT 4	35	1/4"	16	K4/16DA2-G230M	K4/16DA2-G230MT
KA-MT 35	350	1 1/2"	16	K35/16DA2-G230M	K35/16DA2-G230MT
KA-MT 45	420	1 1/2"	16	K45/16DA2-G230M	K45/16DA2-G230MT
KA-MT 60	620	2"	16	K60/16DA2-G230M	K60/16DA2-G230MT
KA-MT 75	750	2"	16	K75/16DA2-G230M	K75/16DA2-G230MT
KA-MT 95	940	2 1/2"	16	K95/16DA2-G230M	K95/16DA2-G230MT

KA-MT 1 - KA-MT 4 includes pre- and afterfilter of GL series.

KA-MT 3 - KA-MT 4 acc. to PED 97/23/EC, module A.

KA-MT 35 - KA-MT 95 includes pre- and afterfilter of GL series.

KA-MT 35 - KA-MT 95 acc. to PED 97/23/EC, module B+D.

[1]Calculated at 1 bar (abs.) and 20 °C, compressed to 7 bar g and 35 °C inlet temperature, for press. dewpoint - 40°C.

[2]Multitronic plus, retrofittable with dewpoint sensor ZHM100.

[3]Pressure dewpoint control device - multitronic-plus with ZHM100 for reduction of purge-air consumption.

Correction Factors

Pressure	Temperature (°C)					
	25	30	35	40	45	50
5 bar	0.80	0.79	0.75	0.64	0.61	0.59
6 bar	0.92	0.91	0.89	0.78	0.73	0.67
7 bar	1.03	1.02	1.00	0.91	0.82	0.79
8 bar	1.16	1.15	1.13	1.00	0.94	0.86
9 bar	1.30	1.28	1.26	1.08	1.03	0.99
10 bar	1.37	1.39	1.31	1.16	1.07	1.03
11 bar	1.52	1.49	1.36	1.24	1.10	1.07
12 bar	1.61	1.61	1.49	1.36	1.23	1.18
13 bar	1.75	1.75	1.62	1.47	1.35	1.29
14 bar	1.89	1.89	1.71	1.57	1.46	1.38
15 bar	2.00	2.00	1.79	1.67	1.57	1.46

Conversion factor pressure/temp. for press. dewpoint - 40 °C

Weights and Dimensions

Model	Dimensions (mm)			Weight (kg)
	Width (W)	Height (H)	Depth (D)	
KA-MT 1	459	400	216	15
KA-MT 2	459	575	216	20
KA-MT 3	459	825	216	28
KA-MT 4	459	1075	216	35
KA-MT 35	1260	1810	585	283
KA-MT 45	1290	1820	605	334
KA-MT 60	1350	1870	635	428
KA-MT 75	1500	2000	635	555
KA-MT 95	1550	2020	670	698

Parker Zander

KE-MT Series Large Flow Heatless Compressed Air Dryer

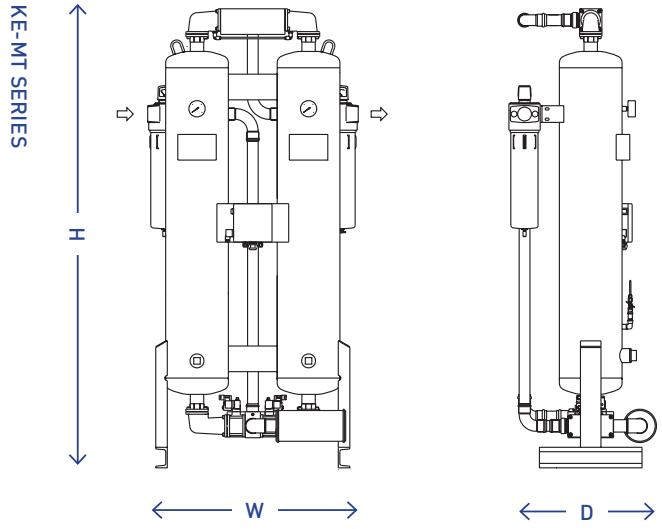
Large flow heatless compressed air dryers with available flow rates up to 6100m³/h @ 7 bar g and pressure dewpoints of -25°C to -70°C, for industrial compressed air treatment applications.

Parker Zander KE-MT Series heatless adsorption dryers are designed to supply high quality dry compressed air reliably and efficiently down to a pressure dewpoint of -70 °C. They are capable of volume flows of up to 6100m³/h at operating conditions of 7 bar g (100 psi g).

The KE-MT Series is offered with energy saving dewpoint dependent switching (DDS) as an option. Where an application calls for a unit able to cope with variations in operating pressure and load, the installation of a dewpoint sensor at the outlet of the dryer is available. In such an operating mode, the changeover cycle between vessels only takes place when required, and is dependent on the required dewpoint being achieved. Only upon reaching this adjustable set dewpoint, does changeover to the regenerated vessel occur. This feature enables the drying phase to be lengthened and thus avoids the unnecessary use of purge air for regeneration and consequently provides significant energy savings.

When there is a further requirement for compressed air to be delivered free from oil vapour and odours, as well as clean and dry, the units can be supplied with an additional third vessel filled with activated carbon, the KEA-MT Series. KEA-MT is ideal for use in laboratory, food, beverage and pharmaceutical applications.

Diagrams:



For further product information visit **www.parker.com/gsfe**

Technical Data

Model	Capacity[1] m³/h	Connection DIN ISO 228	Pressure (bar max)	Part Number[2]	Part Number[3]
KE-MT 120	1200	DN50	10	K120/10D1-F230M	K120/10D1-F230MT
KE-MT 150	1550	DN65	10	K150/10D1-F230M	K150/10D1-F230MT
KE-MT 200	2000	DN65	10	K200/10D1-F230M	K200/10D1-F230MT
KE-MT 250	2500	DN80	10	K250/10D1-F230M	K250/10D1-F230MT
KE-MT 300	3000	DN80	10	K300/10D1-F230M	K300/10D1-F230MT
KE-MT 380	3800	DN100	10	K380/10D1-F230M	K380/10D1-F230MT
KE-MT 500	4850	DN100	10	K500/10D1-F230M	K500/10D1-F230MT
KE-MT 600	6100	DN125	10	K600/10D1-F230M	K600/10D1-F230MT

KE-MT 120 - KE-MT 600 excludes pre- and afterfilters

KE-MT 120 - KE-MT 600 acc. to PED 97/23/EC, module B+D.

[1] calculated at 1 bar (abs.) and 20 °C, compressed to 7 bar g and 35 °C inlet temperature, for press. dewpoint – 40 °C

[2] multitronic plus, retrofittable with dewpoint sensor ZHM100

[3] Pressure dewpoint control device - multitronic-plus with ZHM100 for reduction in purge-air consumption

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	4	5	6	7	8	9	10	11	12	13
	psi g	58	73	87	100	116	131	145	160	174	189
Correction Factor		1.60	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	1.00	1.43

Weights and Dimensions

Model	Dimensions (mm)			Weight (kg)
	Width (W)	Height (H)	Depth (D)	
KE-MT 120	1060	2080	840	640
KE-MT 150	1270	2120	900	770
KE-MT 200	1350	2160	990	955
KE-MT 250	1530	2210	1040	1075
KE-MT 300	1600	2255	1100	1500
KE-MT 380	1875	2385	1200	1990
KE-MT 500	1925	2660	1250	2410
KE-MT 600	2160	2820	1565	2850

Parker Zander

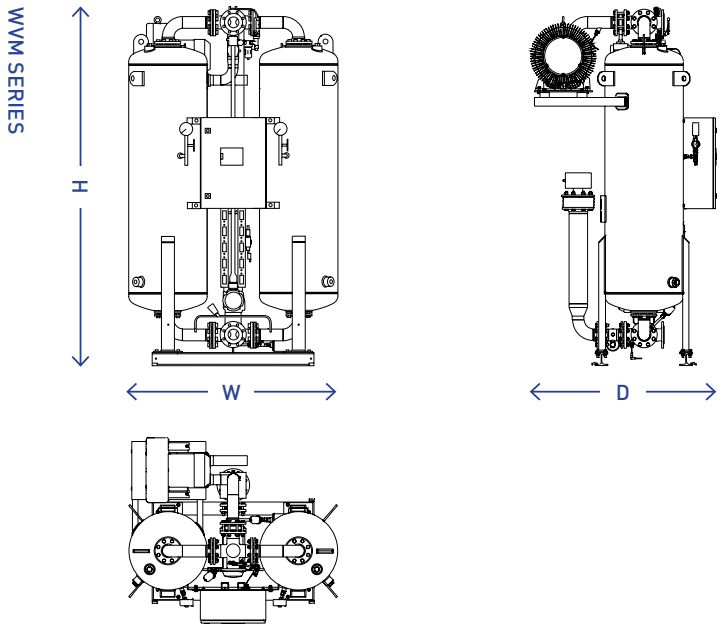
WVM Series Large Flow Low Energy Vacuum Regenerated Compressed Air Dryer

For large flow industrial compressed air applications providing volume flows of up to 14500m³/h and pressure dewpoints down to -70°C, with energy savings of up to 25%.

Parker Zander WVM compressed air dryers provide an energy efficient heat regenerated compressed air drying solution for large scale compressed air applications. Ideal for electronics and automotive production plants but suitable for all general manufacturing industries where typically high volume flows and low pressures are required.

Providing energy savings of up to 25% compared to conventional systems, WVM series compressed air dryers can be equipped with heat exchangers that allow steam or other available process heat sources to be used for heat regeneration. This alternative regeneration process can be employed in addition to or instead of the standard electrical heaters, resulting in even higher energy savings.

Diagrams:



For further product information visit **www.parker.com/gsfe**

Technical Data

Model	Capacity[1,2] m³/h	Connection EN 1092-1	Pressure (bar max)	Power (kW)	Power (kWh/h)	Part Number[3]	Part Number[4]
WVM 40	420	40	10	5.55	3.0	W40/10VM4-F400CT	W40/10VM4-F400CT/I
WVM 50	510	40	10	5.55	3.6	W50/10VM4-F400CT	W50/10VM4-F400CT/I
WVM 65	640	50	10	9.7	4.6	W65/10VM4-F400CT	W65/10VM4-F400CT/I
WVM 85	850	50	10	9.7	6.1	W85/10VM4-F400CT	W85/10VM4-F400CT/I
WVM 120	1180	80	10	13.4	7.9	W120/10VM4-F400CT	W120/10VM4-F400CT/I
WVM 150	1500	80	10	18.2	10.7	W150/10VM4-F400CT	W150/10VM4-F400CT/I
WVM 200	1980	80	10	23.7	11.8	W200/10VM4-F400CT	W200/10VM4-F400CT/I
WVM 235	2350	100	10	36.7	16.0	W235/10VM4-F400CT	W235/10VM4-F400CT/I
WVM 300	2930	100	10	36.7	19.9	W300/10VM4-F400CT	W300/10VM4-F400CT/I
WVM 355	3550	100	10	43.7	23.9	W355/10VM4-F400CT	W355/10VM4-F400CT/I
WVM 410	4100	150	10	43.7	27.8	W410/10VM4-F400CT	W410/10VM4-F400CT/I
WVM 475	4740	150	10	48.7	29.6	W475/10VM4-F400CT	W475/10VM4-F400CT/I
WVM 525	5250	150	10	63.2	31.2	W525/10VM4-F400CT	W525/10VM4-F400CT/I
WVM 620	6210	150	10	73.2	43.2	W620/10VM4-F400CT	W620/10VM4-F400CT/I
WVM 710	7100	150	10	84.2	46.6	W710/10VM4-F400CT	W710/10VM4-F400CT/I
WVM 800	8000	200	10	89.2	55.1	W800/10VM4-F400CT	W800/10VM4-F400CT/I
WVM 920	9200	200	10	114.2	62.3	W920/10VM4-F400CT	W920/10VM4-F400CT/I
WVM 1080	10800	200	10	125.2	71.1	W1080/10VM4-F400CT	W1080/10VM4-F400CT/I
WVM 1230	12300	250	10	151.2	83.3	W1230/10VM4-F400CT	W1230/10VM4-F400CT/I
WVM 1450	14500	250	10	172.2	97.5	W1450/10VM4-F400CT	W1450/10VM4-F400CT/I

[1] Calculated at 1 bar (abs.) and 20°C, compressed to 7 bar g and 35°C inlet temperature, for pressure dewpoint -40°C
[2] Thermal insulation recommended in order to prevent heat and energy loss
[3] Pressure dewpoint control device ZDMC2 with dewpoint-sensor ZHM100
[4] With additional insulation of vessel shell and protection against contact

Correction Factors – Pressure/Temperature

Minimum Operating Pressure (bar)	Inlet Temperature (°C)		
	30	35	40
	For Pressure Dewpoint PDP -25°C/-40°C [1]		
4	1.45	2.27	3.57
5	1.25	1.61	2.38
6	1.11	1.25	1.69
7	0.98	1.00	1.43
8	0.94	0.95	1.27
9	0.85	0.86	1.14
10	0.78	0.78	1.04

[1] Correction factors relating to the respective, nominal performance at PDP -40°C
Example for a maximum suction-side volume flow of 4095m³/h, at a minimum of 9 bar, 30°C inlet temperature:
4095m³/h x 0.85 = 3480.75 m³/h
Model WVM 355 selected for a pressure dewpoint of -40°C

Weights and Dimensions

Model	Dimensions (mm)			Weight (kg)
	Width (W)	Height (H)	Depth (D)	
WVM 40	1140	2230	990	570
WVM 50	1140	2230	990	600
WVM 65	1260	2300	1110	770
WVM 85	1260	2300	1110	800
WVM 120	1460	2690	1160	1150
WVM 150	1540	2700	1200	1300
WVM 200	1605	2750	1405	1650
WVM 235	2025	2870	1490	2000
WVM 300	2050	2890	1565	2250
WVM 355	2160	2960	1750	2650
WVM 410	2430	3230	1710	3250
WVM 475	2490	3260	1710	3650
WVM 525	2550	3265	1775	4050
WVM 620	2570	3540	1865	4700
WVM 710	2635	3560	1900	5050
WVM 800	3085	3625	2110	6450
WVM 920	3125	3645	2235	7500
WVM 1080	3225	3710	2285	8700
WVM 1230	3475	4050	2350	11500
WVM 1450	3500	4200	2380	13500

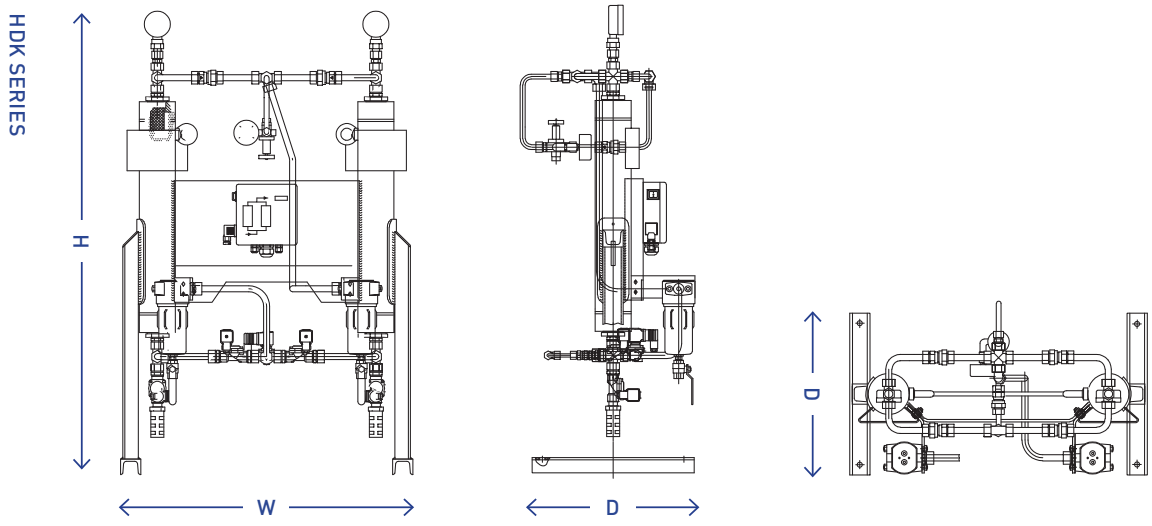
Parker Zander

HDK Series High Pressure Compressed Air Dryers (25 and 50 Bar)

For applications requiring high pressure compressed air or nitrogen gas up to 50 bar with volume flows of up to 1180m³/h and pressure dew points down to -25/-40°C.

The Parker Zander HDK range of high pressure compressed air dryers are designed to dry compressed air and gaseous nitrogen at high pressure levels of up to 50 bar reliably and efficiently down to a pressure dew point of -40°C. HDK series dryers come equipped with integrated pre- and after filtration and are capable of volume flows up to 1180 m³/h.

Diagrams:



Parker

Technical Data

Model	Capacity[1] m³/h	Connection DIN ISO 228	Pressure bar max.	Part Number[2]	Part Number[3]
HDK 18 / 25	25	G 1/2	25	H18/25D0-G230M	H18/25D0-G230MT
HDK 40 / 25	50	G 1/2	25	H40/25D0-G230M	H40/25D0-G230MT
HDK 80 / 25	100	G 1/2	25	H80/25D0-G230M	H80/25D0-G230MT
HDK 120 / 25	125	G 1/2	25	H120/25D0-G230M	H120/25D0-G230MT
HDK 160 / 25	180	G 3/4	25	H160/25D0-G230M	H160/25D0-G230MT
HDK 210 / 25	240	G 3/4	25	H210/25D0-G230M	H210/25D0-G230MT
HDK 360 / 25	390	G 3/4	25	H360/25D0-G230M	H360/25D0-G230MT
HDK 550 / 25	600	G 3/4	25	H550/25D0-G230M	H550/25D0-G230MT
HDK 18 / 50	50	G 1/2	50	H18/50D0-G230M	H18/50D0-G230MT
HDK 40 / 50	100	G 1/2	50	H40/50D0-G230M	H40/50D0-G230MT
HDK 80 / 50	200	G 1/2	50	H80/50D0-G230M	H80/50D0-G230MT
HDK 120 / 50	240	G 1/2	50	H120/50D0-G230M	H120/50D0-G230MT
HDK 160 / 50	360	G 3/4	50	H160/50D0-G230M	H160/50D0-G230MT
HDK 210 / 50	480	G 3/4	50	H210/50D0-G230M	H210/50D0-G230MT
HDK 360 / 50	780	G 3/4	50	H360/50D0-G230M	H360/50D0-G230MT
HDK 550 / 50	1180	G 3/4	50	H550/50D0-G230M	H550/50D0-G230MT

[1] Calculated at 1 bar (abs.) and 20 °C, compressed to nominal pressure and 35 °C inlet temperature for press. dewpoint - 40 °C
[2] Multitronic plus, retrofittable with dewpoint sensor ZHM100
[3] Pressure dewpoint control device - multitronic-plus with ZHM100 for reduction in purge-air consumption.
Higher capacities, operating pressures, inlet temperatures or lower pressure dewpoints on request.

Correction Factors – Pressure/Temperature

For pressure dewpoint - 40 °C

Pressure (bar)	Inlet Temperature (°C)				
	30	35	40	45	50
17	0.69	0.68	0.53	0.41	0.33
21	0.86	0.84	0.66	0.50	0.40
25	1.02	1.00	0.78	0.60	0.48
25	0.53	0.52	0.41	0.31	0.26
38	0.78	0.76	0.59	0.46	0.36
50	1.02	1.00	0.78	0.60	0.48

Weights and Dimensions

Model	Dimensions (mm)			Weight (kg)
	Width (W)	Height (H)	Depth (D)	
HDK 18 / 25	675	925	400	65
HDK 40 / 25	735	1190	400	78
HDK 80 / 25	790	1290	400	104
HDK 120 / 25	786	1489	400	113
HDK 160 / 25	815	1489	400	153
HDK 210 / 25	840	1484	400	182
HDK 360 / 25	890	1576	400	240
HDK 550 / 25	945	1576	400	390
HDK 18 / 50	675	925	400	65
HDK 40 / 50	735	1190	400	78
HDK 80 / 50	790	1290	400	104
HDK 120 / 50	786	1489	400	113
HDK 160 / 50	815	1489	400	153
HDK 210 / 50	840	1484	400	182
HDK 360 / 50	890	1576	400	240
HDK 550 / 50	945	1576	400	390

Parker Zander

HDK-MT Series High Pressure Compressed Air Dryers (100 and 350 Bar)

For applications requiring high pressure compressed air or nitrogen gas up to 350 bar with volume flows of up to 1180m³/h and pressure dew points down to -40°C.

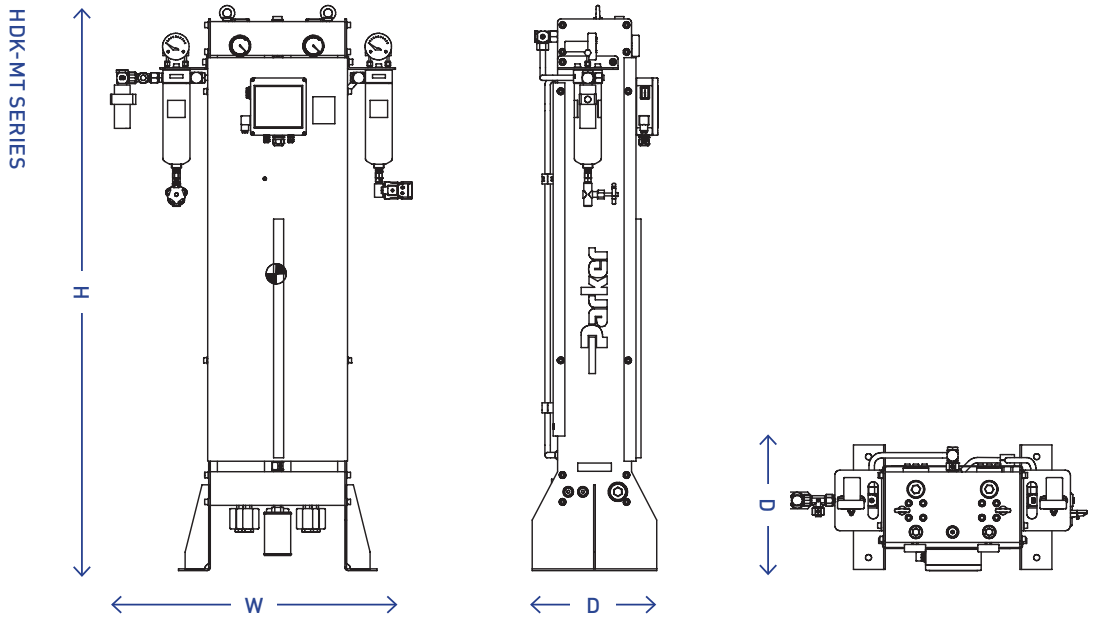
Parker Zander HDK-MT series high pressure dryers are designed for applications requiring high pressure compressed air or nitrogen gas up to 350 bar.

The patent protected HDK-MT concept is unique in its compact design. HDK-MT combines a vibration resistant, torsion rigid dryer unit, made of high precision vessel pipes and valve blocks, with a pre-stressed filling of highly active desiccant beads.

HDK-MT dryers come mounted with GH series filters, incorporating tie-rod fixed filter elements, which provide almost no target for torsional forces and abrasion. This provides a safe, reliable, and robust operation under pressure variations and constant vibration, typical for discontinuous operation in high pressure ranges.

The choice of corrosion resistant materials, like the hard coated aluminium valve blocks, seamless vessels and stainless steel fittings make HDK-MT series dryers ideally suited for harsh environments.

Compact and robust in design HDK-MT dryers are ideally suited for installations in tight spaces, like compressor skids, as well as installations on ships, platforms, and in containers.



Technical Data

Model				Capacity[1] m³/h	Connection DIN ISO 228	Pressure bar max.	Part Number
HDK-MT	15	/	100	120	G1/2	100	H15/100D2-G230MT
HDK-MT	20	/	100	180	G1/2	100	H20/100D2-G230MT
HDK-MT	25	/	100	240	G1/2	100	H25/100D2-G230MT
HDK-MT	30	/	100	300	G1/2	100	H30/100D2-G230MT
HDK-MT	40	/	100	400	G3/4	100	H40/100D2-G230MT
HDK-MT	50	/	100	520	G3/4	100	H50/100D2-G230MT
HDK-MT	70	/	100	650	G3/4	100	H70/100D2-G230MT
HDK-MT	15	/	350	200	G1/2	350	H15/350D2-G230MT
HDK-MT	20	/	350	300	G1/2	350	H20/350D2-G230MT
HDK-MT	25	/	350	400	G1/2	350	H25/350D2-G230MT
HDK-MT	30	/	350	500	G3/4	350	H30/350D2-G230MT
HDK-MT	40	/	350	780	G3/4	350	H40/350D2-G230MT
HDK-MT	50	/	350	940	G3/4	350	H50/350D2-G230MT
HDK-MT	70	/	350	1180	G3/4	350	H70/350D2-G230MT

[1] Calculated at 1 bar (abs.) and 20 °C, compressed to nominal pressure and 35 °C inlet temperature for pressure dewpoint - 40 °C
Higher capacities, operating pressures, inlet temperatures or lower pressure dewpoints on request.

Correction Factors – Temperature (HDK-MT 100 bar)

Temperature °C	30	35	40	45	50	55
Correction Factor	1.00	1.00	1.29	1.67	2.08	2.68

Correction Factors – Pressure (HDK-MT 100 bar)

Pressure bar g	50	75	100
Correction Factor	2.00	1.33	1.00

Correction Factors – Temperature (HDK-MT 350 bar)

Temperature °C	30	35	40	45	50	55
Correction Factor	1.00	1.00	1.32	1.68	2.15	2.8

Correction Factors – Pressure (HDK-MT 350 bar)

Temperature bar g	100	150	200	250	300	350
Correction Factor	3.57	2.33	1.75	1.41	1.16	1.00

Weights and Dimensions

Model	Dimensions (mm)			Weight (kg)
	Width (W)	Height (H)	Depth (D)	
HDK-MT 15 / 100	700	1050	370	160
HDK-MT 20 / 100	700	1250	370	180
HDK-MT 25 / 100	700	1450	370	200
HDK-MT 30 / 100	700	1650	370	220
HDK-MT 40 / 100	770	1650	370	240
HDK-MT 50 / 100	770	1850	450	260
HDK-MT 70 / 100	770	2075	450	280
HDK-MT 15 / 350	700	1050	370	190
HDK-MT 20 / 350	700	1250	370	220
HDK-MT 25 / 350	700	1450	370	250
HDK-MT 30 / 350	700	1650	370	280
HDK-MT 40 / 350	770	1650	370	310
HDK-MT 50 / 350	770	1850	450	340
HDK-MT 70 / 350	770	2075	450	380

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COMPRESSED BREATHING AIR PURIFICATION

COMPRESSED BREATHING AIR PURIFICATION

Compressed Breathing Air Purification

Parker is the industry leader in compressed breathing air purification – we've been providing effective protection from harmful substances for more than 30 years.

Parker compressed breathing air purification products meet all European Pharmacopoeia and other international breathing air standards.

Please see Appendix on page 193 for International Breathing Air Standards

Parker

Breathing Air Purifiers without CO/CO_2

BAF010 – BAF015

The Parker domnick hunter BAF010 and BAF015 two stage point-of-use breathing air filter sets combine high efficiency coalescing pre-filtration with activated carbon oil odour and vapour removal filtration. These filter sets include a pressure regulator/gauge to allow airline pressure adjustment to users' requirements and mounting brackets for ease of installation.

BAP015

To facilitate breathing air applications for three personnel, the Parker domnick hunter BAP015 is a portable breathable air purification package consisting of a high efficiency coalescing filter and an activated carbon filter to remove oil vapour and odours. These sets include a pressure regulator/gauge, all mounted in a lightweight, stable framework.

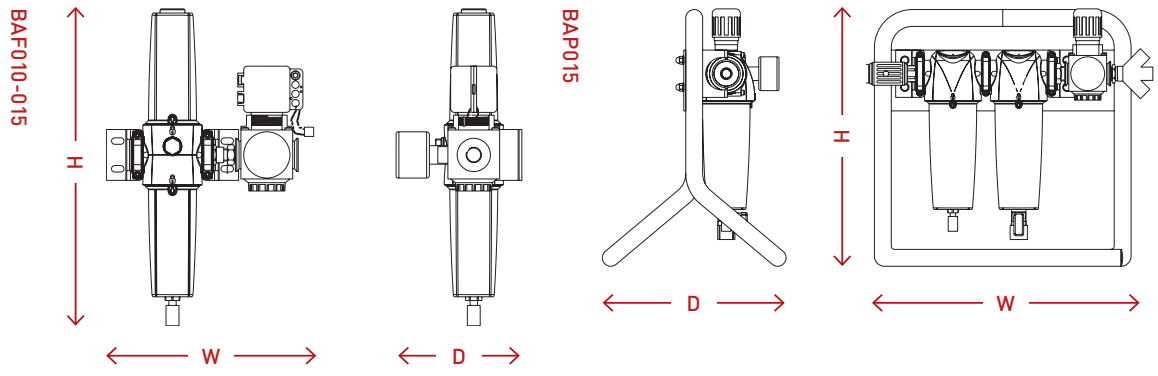
BAS-2010

The Parker domnick hunter BAS-2010 is a very robust and weatherproof portable breathing air purifier. Consisting of a high efficiency coalescing filter and an activated carbon filter to remove oil vapour and odours, this purifier includes a pressure regulator/gauge and can facilitate up to four users simultaneously.

BAS-3015

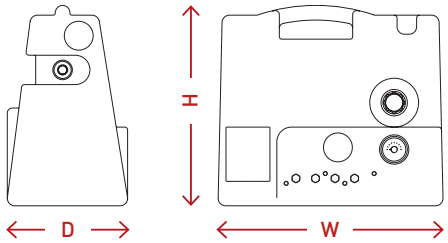
The Parker domnick hunter BAS-3015 is a portable breathing air purifier housed in a compact, weatherproof, impact resistant case. Consisting of a general purpose pre-filter, a high efficiency coalescing filter and an activated carbon filter to remove oil vapour and odours, this purifier includes a pressure regulator/gauge and can facilitate up to five users simultaneously. The BAS-3015 is also available with an optional CO monitor.

Diagrams:

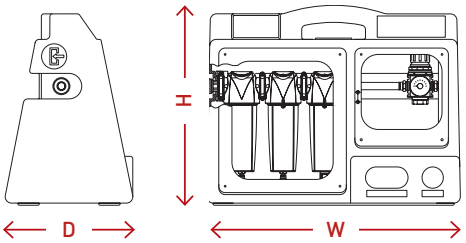


Diagrams:

BAS-2010



BAS-3015



To reduce the following contaminants	Solid Particles	✓	Water Aerosols	✓
	Oil Aerosols	✓	Water Vapour	X
	Oil Vapour	✓	Carbon Monoxide	X
	Odours and Fumes	✓	Carbon Dioxide	X

Technical Specifications

		BAF010, BAF015, BAS3015, BAS2010, BAP015
Operation Pressure	Max.	10 bar g (145 psi g)
	Min.	4 bar g (58 psi g)
Recommended Operating Temperature	Max.	30°C (86°F)
	Min.	1.5°C (35°F)

Corrections Factors

Line 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	1.14	1	0.89	0.80	0.73

Flow Rates

Model	Connections		Flow Rate @ 7 bar g (100 psi g) Inlet	
	Inlet	Outlet	L/s	cfm
BAF010	¼	⅜	6	13
BAF015	⅜	⅜	13	27
BAS2010*	½" Hose safety coupler	4x G¼	10	21
BAS3015*	½" Hose safety coupler	5x G¼	20	42
BAP015*	½" Hose safety coupler	3x ⅜	20	42

Weights and Dimensions

Model	Dimensions Height (H)		Width (W)		Depth (D)		Weight (approx.)	
	mm	ins	mm	ins	mm	ins	kg	lbs
BAF010	343	13.5	207	8.15	136	5.35	1.4	3.1
BAF015	436	17.2	224	8.82	144	5.67	1.9	4.2
BAS2010*	410	16.2	460	18.1	246	9.7	8	18
BAS3015*	470	18.5	600	11.8	300	23.6	10	22
BAP015*	**380**	**15**	**380**	**15**	**272**	**10.7**	**5.45**	**12**

Parker domnick hunter

Breathing Air Purifiers with CO/CO_2

BAC-4015

The Parker domnick hunter BAC-4015 is a fully pneumatic, portable breathing air purifier designed to provide complete protection for up to four personnel. Five purification stages will ensure the highest quality air that is free from particulate dusts, vapours, odours, carbon dioxide (CO_2) and carbon monoxide (CO). The flow rate is easily adjustable from a pressure regulator and monitored by inlet/outlet pressure gauges on the front facia.

The BAC-4015 is housed in an extremely strong and robust lockable case for total security.

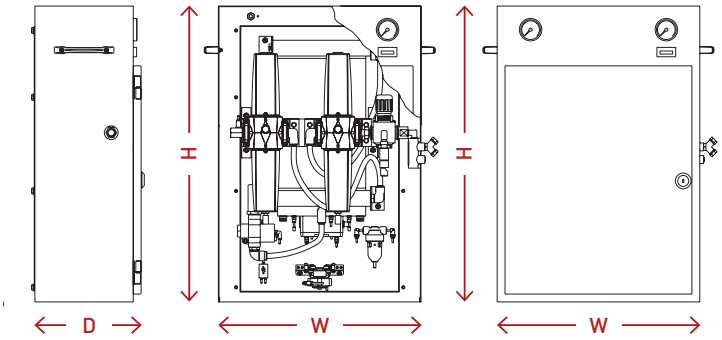
BA-DME12-080E

The Parker domnick hunter BA-DME range of breathing air purifiers is ideal for point-of-use multiple personnel protection at medium flow rates. At the inlet, a general purpose filter removes particles, dirt and aerosols, followed immediately by a second stage high efficiency coalescing filter to reduce oil and water content and a third stage activated carbon filter to remove oil vapour and odours.

The fourth stage adsorption dryer reduces the water vapour content of the compressed air (to -40°C pdp) and CO_2, NO and NO_2 levels to below the legal permissible limits. Downstream of the adsorption dryer, a catalyst converts carbon monoxide to carbon dioxide, again, to below the legal limits. A final dust filter captures any particulates carried over from the adsorption materials.

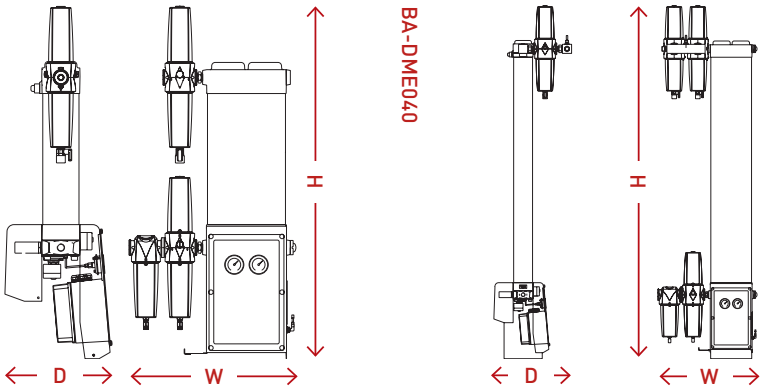
Diagrams:

BAC-4015



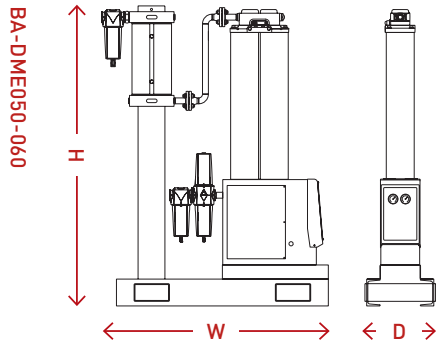
BA-DME12-030

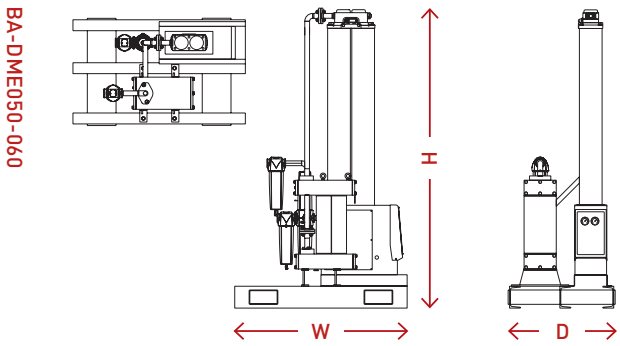
BA-DME040



Parker

Diagrams:





To reduce the following contaminants				
	Solid Particles	✓	Water Aerosols	✓
	Oil Aerosols	✓	Water Vapour	✓
	Oil Vapour	✓	Carbon Monoxide	✓
	Odours and Fumes	✓	Carbon Dioxide	✓

Technical Specifications

Model	Min. Operating Pressure		Max. Operating Pressure		Min. Operating Temp		Max. Operating Temp		Electrical supply (standard)	Thread Connections	Noise Level
	bar g	psi g	bar g	psi g	°C	°F	°C	°F			dB (A)
BAC 4015	4	58	10	145	5	41	30	86	Pneumatic	BSPP	<75
BA DME-012E - BA DME-040E	4	58	16	232	5	41	30	86	230v/1ph/50Hz	BSPP	<75
BA DME-050E - BA DME-080E	4	58	13	188	5	41	30	86	230v/1ph/50Hz	BSPP	<75

For flow rates at other pressures, apply the factor shown

Correction Factors

											MODELS 012E - 040E only		
Line 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	1.14	1	0.89	0.80	0.73	0.67	0.62	0.57	0.54	0.5	0.47

Flow Rates

Model	Connections		Flow Rate @ 7 bar g (100 psi g)			
	Inlet	Outlet	Inlet		Outlet	
			l/s	cfm	L/s	cfm
BA-DME012E	G½"	G⅜"	11	24	9	19
BA-DME015E	G½"	G¾"	15	32	12	25
BA-DME020E	G½"	G¾"	20	42	15	33
BA-DME025E	G½"	G¾"	25	53	20	42
BA-DME030E	G½"	G¾"	31	65	24	52
BA-DME040E	G¾"	G¾"	42	88	33	70
BA-DME050E	G1"	G1"	50	106	40	84
BA-DME060E	G1"	G1"	61	130	49	104
BA-DME080E	G1"	G1"	83	176	66	140
BAC-4015	G½"	G¼"	11	24	9	19

Weights and Dimensions

Model	Dimensions						Weight (approx.)	
	Height		Width		Depth			
	mm	ins	mm	ins	mm	ins	kg	lbs
BA-DME012E	1000	93.4	578	22.8	302	12	37	81.5
BA-DME015E	1197	47.1	480	18.9	302	12	42	93
BA-DME020E	1326	52.2	480	18.9	302	12	47	104
BA-DME025E	1527	60.1	480	18.9	302	12	52	115
BA-DME030E	1693	66.7	511	20.1	302	12	57	126
BA-DME040E	1941	76.4	545	21.5	302	12	74	163
BA-DME050E	1699	66.9	400	15.8	1200	47.2	210	463
BA-DME060E	1831	72.1	400	15.8	1200	47.2	222	490
BA-DME080E	2076	81.7	745	29.3	1200	47.2	279	615
BAC-4015	752	29.6	515	20.3	272	10.7	40	88.2

Parker domnick hunter

Breathing Air Purifiers

Skid mounted, six stage breathing air systems provide purified breathing air with CO/CO_2 reduction for high-capacity multiple personnel breathing air applications.

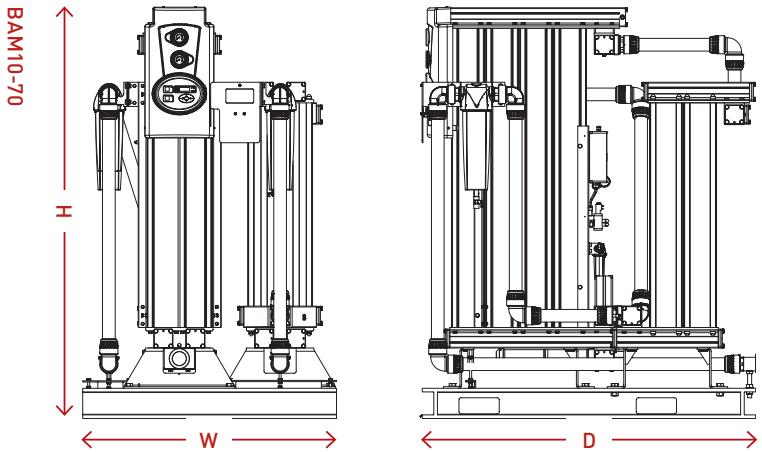
Hazardous vapours, gases and fumes can be released at various stages within manufacturing applications. Whether the risk is from noxious fumes, particulate or contamination from a compressed air system, effective respiratory protection for the user is essential.

In compressed air fed systems, ambient air is drawn into the compressor, therefore any contaminants present in the ambient air, plus those introduced by the compressor itself, will be present unless removed by a purification system.

The Parker domnick hunter BAM breathing air purifiers consist of six purification stages mounted on a portable skid for high-capacity multiple personnel breathing air applications.

At the inlet, a water separator removes bulk water, followed immediately by a high efficiency coalescing filter to reduce oil and water content, an activated carbon filter then removes oil vapour and odours. The fourth stage of purification is an adsorption dryer that reduces the water vapour content of the compressed air (to -40°C pdp) and CO_2 to below the legal permissible limits. Downstream of the adsorption dryer, a catalyst converts carbon monoxide to carbon dioxide, again, to below the legal limits. A final dust filter captures any particulates carried over from the adsorption materials.

Diagrams:



Performance Data

Model	Pressure Dewpoint (Standard)		ISO 8573-1:2010 Water Classification
	°C	°F	(Standard)
All Models	-40	-40	Class 2

ISO 8573-1 classifications apply when the dryer is installed with the filtration supplied

For further product information visit **www.parker.com/gsfe**

Operating Data

Model	Min Operating Pressure		Max Operating Pressure		Min Operating Temp		Max Operating Temp		Electrical Supply (standard)	Thread Connections	Noise Level
	bar g	psi g	bar g	psi g	°C	°F	°C	°F			dB (A)
BAM	4	58	13	188	5	41	30	86	85 - 265 V 1ph 50/60Hz	BSPP	<75

Flow Rates

Model	Connections		Flow Rate @ 7 bar g (100 psi g)			
	Inlet	Outlet	Inlet		Outlet	
			L/s	cfm	l/s	cfm
BAM10	G2"	G2"	113	240	90.4	192
BAM20	G2"	G2"	170	360	136	288
BAM30	G2"	G2"	213	450	170.4	360
BAM40	G2"	G2"	283	600	226.4	480
BAM50	G2½"	G2½"	354	750	283.2	600
BAM70	G2½"	G2½"	496	1050	396.8	840

Stated flows are for operation at 7 bar g (100 psi g / 0.7 MPa g) with reference to 20°C, 1 bar a, 0% relative water vapour pressure.

Weights and Dimensions

Model	Dimensions						Weight (approx.)	
	Height		Width		Depth			
	mm	ins	mm	ins	mm	ins	kg	lbs
BAM10	1797	70.7	1260	49.6	1655	65.2	600	1322.8
BAM20	1797	70.7	1260	49.6	1655	65.2	700	1543.2
BAM30	2042	80.4	1260	49.6	1655	65.2	800	1763.7
BAM40	2042	80.4	1260	49.6	1655	65.2	900	1984.2
BAM50	2042	80.4	1260	49.6	1950	76.8	1100	2425.1
BAM70	2042	80.4	1260	49.6	1950	76.8	1400	3086.5

For further product information visit **www.parker.com/gsfe**

REFRIGERATION AND COOLING

FOCUSED ON REFRIGERATION AND COOLING

For over 50 years, Parker Hiross has been a leader in the development and manufacture of refrigeration and cooling equipment for compressed air and gas treatment.

Featuring outstanding engineering quality, advanced energy saving technology, and low maintenance design, our refrigeration and cooling systems have been engineered to eliminate the risk of contamination, whilst also reducing energy consumption and cost, and delivering maximum up time. Overall, it means that end users can enjoy increased productivity with greater peace of mind, together with lower lifetime cost.

We offer a complete range of solutions for almost every industry application. Our equipment includes refrigeration dryers, chillers, aftercoolers and tandem technology dryers – trusted by thousands of customers around the world.

Starlette

PoleStar

Hyperchill Laser

Parker

REFRIGERATION AND COOLING

Antares

COMPRESSED AIR REFRIGERATED DRYERS

Compressed Air Refrigerated Dryers

With outstanding reliability and incredible system efficiency, our innovative refrigerated dryers are ideal for all industrial compressed air users.

Engineered to provide quality treatment for compressed air, Parker refrigerated dryers combine excellent performance with compact dimensions and weight for a superior drying solution.

COMPRESSED AIR REFRIGERATED DRYERS

Parker

Parker Hiross

Starlette Plus-E Small to Medium Flow Compressed Air Refrigeration Dryers

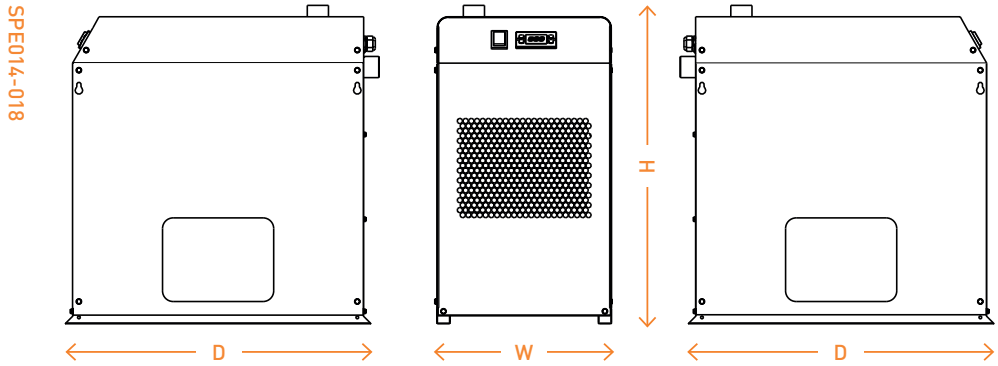
Starlette Plus-E refrigeration dryers ensure effective removal of water vapour (to +3°C pdp) from compressed air at low operating costs. They are dual frequency ready, with volume flows up to 600m³/h (50Hz) or 689m³/hr (60Hz) @ 7 bar g.

Parker Hiross Starlette Plus-E Series refrigerated dryers (SPE) are the perfect solution for the efficient removal of water vapour from compressed air. Starlette Plus-E combines quality and efficiency in a reliable design, providing the least impact on the environment and operating costs.

Thanks to the highly efficient heat exchanger (E-Pack) design, the refrigerant circuit absorbs less power and requires less refrigerant than other comparative dryers, making Starlette Plus-E the refrigerant dryer in the market with the lowest running costs and the most environmentally friendly.

Starlette Plus-E is also available with the additional 'Energy Save' feature, on models from SPE026. When equipped with the Energy Save feature, the SPE models will save additional energy at partial load by cycling the dryer's compressor activity and using the cold reserve stored in the E-Pack mass to cool the inlet air.

Diagrams:



Dryer Performance

Model	Dewpoint (Standard) °C	Dewpoint (Standard) °F	ISO8573-1:2010 Classification (Standard)	Dewpoint (Option 1) °C	Dewpoint (Option 1) °F	ISO8573-1:2010 Classification (Option 1)	Dewpoint (Option 2) °C	Dewpoint (Option 2) °F	ISO8573-1:2010 Classification (Option 2)
SPE	+3	+37	Class 2.4.2	+7	+45	Class 2.5.2	+10	+50	Class 2.6.2

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

Parker

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
	bar g	psi g	bar g	psi g	°C	°F	°C	°F	°C	°F				dB(A)
SPE 004 - 062	2	15	16	232	5	41	65	149	50	122	230V 1ph 50Hz / 60Hz	N/A	BSPP	<75
SPE 080 - 100	2	15	14	203	5	41	65	149	50	122	230V 1ph 50Hz / 60Hz	N/A	BSPP	<75

Flow Rates

Model	Port Connection	Inlet Flow Rate 50Hz				Inlet Flow Rate 60Hz			
		L/s	m³/min	m³/hr	cfm	L/s	m³/min	m³/hr	cfm
SPE 004	1/2"	7	0.4	24	14	8	0.47	28	16
SPE 007	1/2"	12	0.7	42	25	13	0.78	47	28
SPE 009	1/2"	15	0.9	54	32	17	1.00	60	35
SPE 014	3/4"	23	1.4	84	49	27	1.60	96	57
SPE 018	3/4"	30	1.8	108	64	34	2.07	124	73
SPE 026	1"	43	2.6	156	92	49	2.93	176	104
SPE 032	1"	53	3.2	192	113	61	3.63	218	128
SPE 040	1"	67	4.0	240	141	76	4.53	272	160
SPE 052	1 1/2"	87	5.2	312	184	100	6.02	361	212
SPE 062	1 1/2"	103	6.2	372	219	119	7.15	429	253
SPE 080	1 1/2"	133	8.0	480	282	154	9.25	555	327
SPE 100	1 1/2"	167	10.0	600	353	191	11.48	689	406

Absorbed Power

Model	50Hz kW	60Hz kW
SPE 004	0.13	0,16
SPE 007	0.14	0,17
SPE 009	0.15	0,19
SPE 014	0.15	0,18
SPE 018	0.16	0,20
SPE 026	0.29	0,36
SPE 032	0.30	0,37
SPE 040	0.31	0,38
SPE 052	0.46	0,56
SPE 062	0.57	0,69
SPE 080	0.73	0,90
SPE 100	0.74	0,91

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	55	60	65
	°F	77	86	95	104	113	122	131	140	149
Correction Factor	50z	0.83	0.83	1.00	1.30	1.61	2.00	2.33	2.38	2.50
	60Hz	0.85	0.85	1.00	1.32	1.61	2.04	2.56	2.63	2.78

CFAT - Correction Factor Maximum Ambient Temperature

Maximum Ambient Temperature	°C	20	25	30	35	40	45	50
	°F	68	77	86	95	104	113	122
Correction Factor	50z	0.93	1.00	1.02	1.09	1.15	1.22	1.28
	60Hz	0.96	1.00	1.06	1.11	1.18	1.25	1.33

CFP - Correction Factor Minimum Inlet Pressure

Minimum Inlet Pressure	bar g	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	psi g	44	58	73	87	100	116	131	145	160	174	189	203	218	232
Correction Factor		1.35	1.23	1.11	1.06	1.00	0.93	0.85	0.83	0.81	0.79	0.77	0.75	0.73	0.71

CFD - Correction Factor Dewpoint

Pressure Dewpoint	°C	+3	+5	+7
	°F	+37	+41	+45
Correction Factor	50z	1.00	0.78	0.70
	60Hz	1.00	0.79	0.72

For further product information visit **www.parker.com/gsfe**

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
SPE	•	•	•	On E-Saving Models		•	•	On E-Saving Models

Recommended Filtration

Model	Port Connection BSPP	General Purpose Coalesing Filter	High Efficiency Coalesing Filter	Oil Vapour Removal Filter
SPE 004	1/2"	AOP010CGFI	AAP010CGFI	-
SPE 007	1/2"	AOP015CGFI	AAP015CGFI	-
SPE 009	1/2"	AOP015CGFI	AAP015CGFI	-
SPE 014	3/4"	AOP020DGFI	AAP020DGFI	-
SPE 018	3/4"	AOP020DGFI	AAP020DGFI	-
SPE 026	1"	AOP025EGFI	AAP025EGFI	-
SPE 032	1"	AOP025EGFI	AAP025EGFI	-
SPE 040	1"	AOP025EGFI	AAP025EGFI	-
SPE 052	1 1/2"	AOP030GGFI	AAP030GGFI	-
SPE 062	1 1/2"	AOP030GGFI	AAP030GGFI	-
SPE 080	1 1/2"	AOP035GGFX	AAP035GGFX	-
SPE 100	1 1/2"	AOP035GGFX	AAP035GGFX	-

Weights and Dimensions

Model	Dimensions (mm) Width (W)	Height (H)	Depth (D)	Weight (kg)
SPE 004	300	520	400	24
SPE 007	300	520	400	24
SPE 009	300	520	400	25
SPE 014	330	580	550	35
SPE 018	330	580	550	36
SPE 026	400	650	630	46
SPE 032	400	650	630	46
SPE 040	400	650	630	47
SPE 052	400	650	630	53
SPE 062	400	650	630	55
SPE 080	450	840	780	80
SPE 100	450	840	780	80

Part Numbers

Model	Timed Drain	Electronic Drain	Energy Saving
SPE 004	SPE004-A2301DF16TIS	SPE004-A2301DF16EXS	-
SPE 007	SPE007-A2301DF16TIS	SPE007-A2301DF16EXS	-
SPE 009	SPE009-A2301DF16TIS	SPE009-A2301DF16EXS	-
SPE 014	SPE014-A2301DF16TIS	SPE014-A2301DF16EXS	-
SPE 018	SPE018-A2301DF16TIS	SPE018-A2301DF16EXS	-
SPE 026	SPE026-A2301DF16TIS	SPE026-A2301DF16EXS	SPE026-A2301DF16EXSES
SPE 032	SPE032-A2301DF16TIS	SPE032-A2301DF16EXS	SPE032-A2301DF16EXSES
SPE 040	SPE040-A2301DF16TIS	SPE040-A2301DF16EXS	SPE040-A2301DF16EXSES
SPE 052	SPE052-A2301DF16TIS	SPE052-A2301DF16EXS	SPE052-A2301DF16EXSES
SPE 062	SPE062-A2301DF16TIS	SPE062-A2301DF16EXS	SPE062-A2301DF16EXSES
SPE 080	SPE080-A2301DF14TIS	SPE080-A2301DF14EXS	SPE080-A2301DF14EXSES
SPE 100	SPE100-A2301DF14TIS	SPE100-A2301DF14EXS	SPE100-A2301DF14EXSES

Parker Hiross

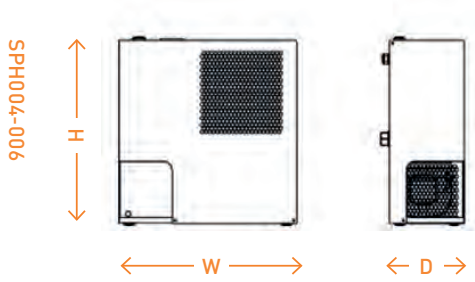
High Pressure Starlette Plus Air Refrigeration Dryers

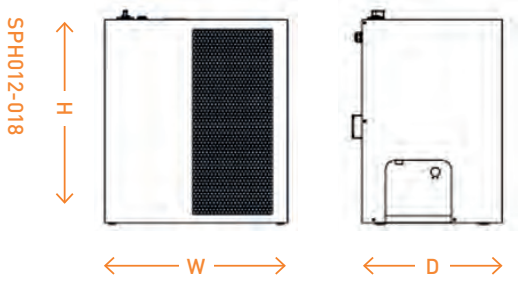
Designed for the efficient removal of water from compressed air in PET molding, but also suitable for any application up to 50bar, Starlette Plus HP (SPH) models feature stainless steel plate heat exchangers and stainless-steel separators and air pipes.

All units are equipped with programmable timed drain and available in 50Hz version (60Hz on request). Low absorbed power and low pressure drops guarantee efficient operations and low running costs.

The refrigerant circuits utilise environmentally friendly refrigerants (R134a) and can cope with wide operating limits up to 50°C ambient and 65°C inlet temperature.

Diagrams:





Dryer Performance

Model	Dewpoint (Standard) °C	Dewpoint (Standard) °F	ISO8573-1:2010 Classification (Standard)	Dewpoint (Option 1) °C	Dewpoint (Option 1) °F	ISO8573-1:2010 Classification (Option 1)	Dewpoint (Option 2) °C	Dewpoint (Option 2) °F	ISO8573-1:2010 Classification (Option 2)
SPH	+3	+37	Class 2.4.2	+7	+45	Class 2.5.2	+10	+50	Class 2.6.2

Technical Data

Model	Max. Operating Pressure bar g	Max. Operating Pressure psi g	Min. Air Inlet Temperature °C	Min. Air Inlet Temperature °F	Max. Air Inlet Temperature °C	Max. Air Inlet Temperature °F	Max. Ambient Temperature °C	Max. Ambient Temperature °F	Electrical Supply (Standard)	Electrical Supply (Optional)	Thread Connections	Noise Level dB(A)
SPH 004 - 018	50	725	5	41	65	149	50	122	230V 1ph 50Hz	60Hz on request	BSPT-F	<55

All units fitted with timed drain. All models are air-cooled.

For further product information visit **www.parker.com/gsfe**

Flow Rates

Model	Port Connection	Inlet Flow Rate			
		L/s	m³/min	m³/hr	cfm
SPH 004	½"	7	0.4	25	15
SPH 006	½"	10	0.6	37	22
SPH 012	½"	21	1.3	75	44
SPH 018	½"	36	2.2	131	77

Absorbed Power kW

Model	kW
SPH 004	0.17
SPH 006	0.17
SPH 012	0.25
SPH 018	0.57

Performances refer to air-cooled model with air suction of FAD 20°C / 1 bar A, and at the following operating conditions: air suction 25°C / 60%RH, 40 bar g working pressure, 25°C cooling air temperature, 35°C compressed air inlet temperature and pressure dewpoint in accordance with ISO8573-1. All indicated data refers to DIN ISO 7183. SPH supplied with refrigerant R134a. All models designed for operation up to 50 bar g. Data refers to 50Hz models.

CFIT - Correction Factor Maximum Inlet Temperature

Maximum Inlet Temperature	°C	25	30	35	40	45	50	55	60	65
	°F	77	86	95	104	113	122	131	140	149
Correction Factor Models		0.85	0.85	1.00	1.15	1.30	1.45	1.61	1.79	2.00

CFAT - Correction Factor Maximum Ambient Temperature

Maximum Ambient Temperature	°C	20	25	30	35	40	45	50
	°F	68	77	86	95	104	113	122
Correction Factor		0.98	1.00	1.02	1.05	1.08	1.11	1.16

CFP - Correction Factor Minimum Inlet Pressure

Minimum Inlet Pressure	bar g	15	20	25	30	35	40	45	50
	psi g	218	290	363	435	508	580	653	725
Correction Factor		1.18	1.10	1.06	1.03	1.01	1.00	0.99	0.99

CFD - Correction Factor Dewpoint

Pressure Dewpoint	°C	+3	+5	+7	+10
	°F	+37	+41	+45	+50
Correction Factor		1.00	0.86	0.80	0.71

Calculate Minimum Drying Capacity = System Flow x CFIT x CFAT x CFP x CFD and select dryer from table above

Controller Functions

Controller	Power On Indication	Dewpoint Indication
SPH	•	•

Weights and Dimensions

Model	Port Connection	Dimensions Height (H)		Width (W)		Depth (D)		Weight	
		mm	ins	mm	ins	mm	ins	kg	lbs
SPH 004	1/2"	430	16.93	450	17.7	210	8.3	19	42
SPH 006	1/2"	430	16.93	450	17.7	210	8.3	19	42
SPH 012	1/2"	600	23.6	555	21.9	425	16.7	40	88
SPH 018	1/2"	600	23.6	555	21.9	425	16.7	42.5	94

Part Numbers

Model	Part Number
SPH004	SPH004-A23015050TXS
SPH006	SPH006-A23015050TXS
SPH012	SPH012-A23015050TXS
SPH018	SPH018-A23015050TXS

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Parker Hiross

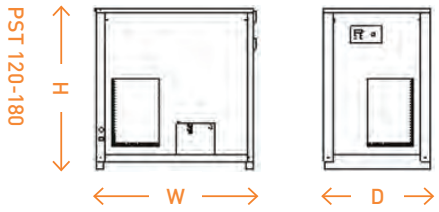
PoleStar Smart Medium to Large Flow Compressed Air Refrigeration Dryers

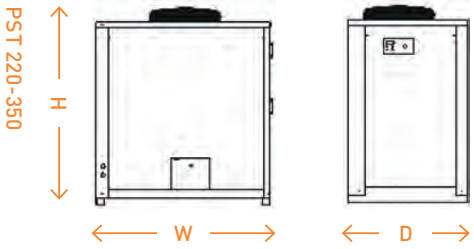
High efficiency, energy saving, refrigeration dryers that provide low pressure drops resulting in lower operational costs. 50 bar high pressure and 60Hz models are available in the range.

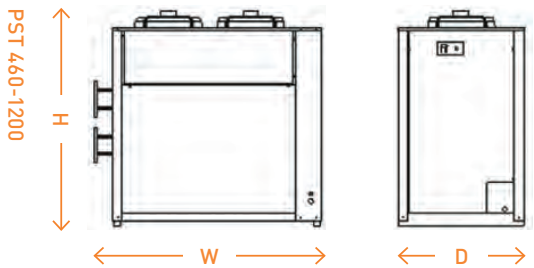
PoleStar Smart refrigeration dryers have been designed for the efficient removal of water from compressed air. Equipped with the patented SmartSave energy-saving feature, PoleStar Smart refrigeration dryers continually and precisely modulates its mode of operation to meet prevailing operating conditions, resulting in accurate dewpoint monitoring with corresponding aligned power consumption.

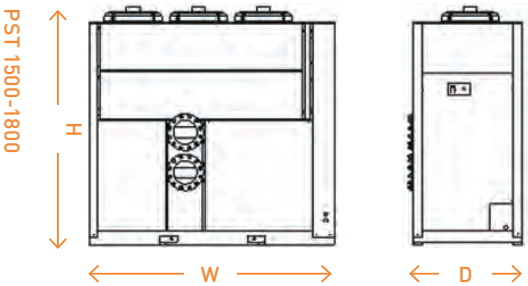
Furthermore, indirect cost savings, reducing the hidden costs of pressure drop are maximised by the use of a patented all-in-one aluminium heat-exchanger-SmartPack. Here the provision of large open channels and no interconnecting pipe-work enables the free, un-interrupted passage of air through the dryer, resulting in pressure drops second to none.

Diagrams:









Parker

Dryer Performance

Model	Dewpoint (Standard) °C	Dewpoint (Standard) °F	ISO8573-1:2010 Classification (Standard)	Dewpoint (Option 1) °C	Dewpoint (Option 1) °F	ISO8573-1:2010 Classification (Option 1)	Dewpoint (Option 2) °C	Dewpoint (Option 2) °F	ISO8573-1:2010 Classification (Option 2)
PST	+3	+37	Class 2.4.2	+7	+45	Class 2.5.2	+10	+50	Class 2.6.2

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

Technical Data

Model	Min. Operating Pressure bar g	Min. Operating Pressure psi g	Max. Operating Pressure bar g	Max. Operating Pressure psi g	Min. Operating Temperature °C	Min. Operating Temperature °F	Max. Operating Temperature °C	Max. Operating Temperature °F	Max. Ambient Temperature °C	Max. Ambient Temperature °F	Electrical Supply (Standard)	Electrical Supply (Optional)	Thread Connections	Noise Level dB(A)
PST 120 - 1800	3	44	14	203	5	41	65	149	50	122	400V 3ph 50Hz	On Request	BSPP and DIN Flange	<75
PST 130 - 1980	3	44	14	203	5	41	65	149	50	122	460V 3ph 60Hz	On Request	NPT and ANSI Flange	<75

Flow Rates - 50Hz Models

Model	Port Connection	Inlet Flow Rate L/s	Inlet Flow Rate m^3/min	Inlet Flow Rate m^3/hr	Inlet Flow Rate cfm
PST 120	2"	200	12	720	424
PST 140	2"	233	14	840	494
PST 180	2"	300	18	1080	636
PST 220	2½"	367	22	1320	777
PST 260	2½"	433	26	1560	918
PST 300	2½"	500	30	1800	1059
PST 350	2½"	583	35	2100	1236
PST 460	DN100	767	46	2760	1625
PST 520	DN100	867	52	3120	1836
PST 630	DN100	1050	63	3780	2225
PST 750	DN150	1250	75	4500	2649
PST 900	DN150	1500	90	5400	3178
PST 1200	DN150	2000	120	7200	4238
PST 1500	DN200	2500	150	9000	5297
PST 1800	DN200	3000	180	10800	6357

Absorbed Power kW

Model	kW
PST 120	1.13
PST 140	1.14
PST 180	1.46
PST 220	1.68
PST 260	2.19
PST 300	2.41
PST 350	3.06
PST 460	3.14
PST 520	3.54
PST 630	4.64
PST 750	5.73
PST 900	7.63
PST 1200	8.92
PST 1500	12.35
PST 1800	15.96

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	55	60	65
	°F	77	86	95	104	113	122	131	140	149
Correction Factor Models		0.81	0.81	1.00	1.19	1.43	1.69	2.00	2.22	2.5

For further product information visit **www.parker.com/gsfe**

CFAT - Correction Factor Maximum Ambient Temperature

Maximum Ambient Temperature	°C	20	25	30	35	40	45	50
	°F	68	77	86	95	104	113	122
Correction Factor		0.94	1.00	1.05	1.11	1.20	1.30	1.39

CFP - Correction Factor Minimum Inlet Pressure

Minimum Inlet Pressure	bar g	3	4	5	6	7	8	9	10	11	12	13	14
	psi g		58	73	87	100	116	131	145	160	174	189	203
Correction Factor		1.35	1.20	1.11	1.04	1.00	0.96	0.93	0.93	0.90	0.89	0.88	0.87

CFD - Correction Factor Dewpoint

Pressure Dewpoint	°C	+3	+5	+7	+10
	°F	+37	+41	+45	+50
Correction Factor		1.00	0.91	0.83	0.71

Controller Functions

Model	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
PST	•	•	•	•		•	•	

Recommended Filtration

Model	Port Connection BSPP / DIN	General Purpose Coalesing Filter	High Efficiency Coalesing Filter	Oil Vapour Removal Filter
PST 120	2"	AOP040HGFX	AAP040HGFX	-
PST 140	2"	AOP040HGFX	AAP040HGFX	-
PST 180	2 1/2"	AOP045IGFX	AAP045IGFX	-
PST 220	2 1/2"	AOP050IGFX	AAP050IGFX	-
PST 260	2 1/2"	AOP055IGFX	AAP055IGFX	-
PST 300	2 1/2"	AOP055IGFX	AAP055IGFX	-
PST 350	2 1/2"	AOP055IGFX	AAP055IGFX	-
PST 460	DN100	AO070ODFX	AO070ODFX	-
PST 520	DN100	AO070ODFX	AA070ODFX	-
PST 630	DN100	AO070ODFX	AA070ODFX	-
PST 750	DN150	AO075PDFX	AA075PDFX	-
PST 900	DN150	AO075PDFX	AA075PDFX	-
PST 1200	DN150	AO080PDFX	AA080PDFX	-
PST 1500	DN200	AO085QDFX	AA085QDFX	-
PST 1800	DN200	AO085QDFX	AA085QDFX	-

Weights and Dimensions

Model	Dimensions (mm)			Weight (kg)
	Width (W)	Height (H)	Depth (D)	
PST120	706	1.064	1.046	145
PST140	706	1.064	1.046	145
PST180	706	1.064	1.046	155
PST220	806	1.316	1.166	230
PST260	806	1.316	1.166	240
PST300	806	1.316	1.166	245
PST350	806	1.316	1.166	250
PST460	1.007	1.690	1.097	470
PST520	1.007	1.723	1.097	490
PST630	1.007	1.722	1.657	580
PST750	1.007	1.722	1.657	670
PST900	1.007	1.722	1.657	690
PST1200	1.007	2.048	1.657	830
PST1500	1.007	2.208	2.257	1.100
PST1800	1.007	2.208	2.257	1.190

Part Numbers – 50Hz Models

Model	Air-cooled with Electronic Drain	Water-cooled with Electronic Drain
PST120	PST120-A40035014EI	n/a
PST140	PST140-A40035014EI	n/a
PST180	PST180-A40035014EI	n/a
PST220	PST220-A40035014EI	PST220-W40035014EI
PST260	PST260-A40035014EI	PST260-W40035014EI
PST300	PST300-A40035014EI	PST300-W40035014EI
PST350	PST350-A40035014EI	PST350-W40035014EI
PST460	PST460-A40035014EI	PST460-W40035014EI
PST520	PST520-A40035014EI	PST520-W40035014EI
PST630	PST630-A40035014EI	PST630-W40035014EI
PST750	PST750-A40035014EI	PST750-W40035014EI
PST900	PST900-A40035014EI	PST900-W40035014EI
PST1200	PST1200-A40035014EI	PST1200-W40035014EI
PST1500	PST1500-A40035014EI	PST1500-W40035014EI
PST1800	PST1800-A40035014EI	PST1800-W40035014EI

Part Numbers – 60Hz Models

Model	Air-cooled with Electronic Drain	Water-cooled with Electronic Drain
PST130	PST130-A46036014EI	n/a
PST150	PST150-A46036014EI	n/a
PST175	PST175-A46036014EI	n/a
PST250	PST250-A46036014EI	PST250 W46036014EI
PST280	PST280-A46036014EI	PST280 W46036014EI
PST340	PST340-A46036014EI	PST340 W46036014EI
PST390	PST390-A46036014EI	PST390 W46036014EI
PST490	PST490-A46036014EI	PST490 W46036014EI
PST560	PST560-A46036014EI	PST560 W46036014EI
PST700	PST700-A46036014EI	PST700 W46036014EI
PST840	PST840-A46036014EI	PST840 W46036014EI
PST1020	PST1020-A46036014EI	PST1020 W46036014EI
PST1320	PST1320-A46036014EI	PST1320 W46036014EI
PST1650	PST1650-A46036014EI	PST1650 W46036014EI
PST1980	PST1980-A46036014EI	PST1980 W46036014EI

Parker Hiross

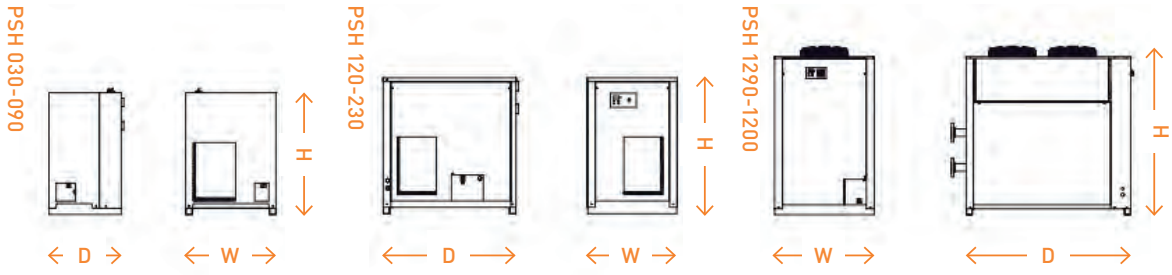
High Pressure PoleStar Smart Air Refrigeration Dryers

Designed for the efficient removal of water from compressed air in PET molding, but also suitable for any application up to 50bar, PoleStar Smart HP (PSH) models feature stainless steel plate heat exchangers and stainless-steel separators and air pipes.

All units are equipped with programmable timed drain and available in 50Hz version (60Hz on request). Low absorbed power and low pressure drops guarantee efficient operations and low running costs.

The refrigerant circuits utilise environmentally friendly refrigerants (R407C) and can cope with wide operating limits up to 50°C ambient and 65°C inlet temperature.

Diagrams:



For further product information visit **www.parker.com/gsfe**

Dryer Performance

Model	Dewpoint (Standard) °C	Dewpoint (Standard) °F	ISO8573-1:2010 Classification (Standard)	Dewpoint (Option 1) °C	Dewpoint (Option 1) °F	ISO8573-1:2010 Classification (Option 1)	Dewpoint (Option 2) °C	Dewpoint (Option 2) °F	ISO8573-1:2010 Classification (Option 2)
PSH	+3	+37	Class 2.4.2	+7	+45	Class 2.5.2	+10	+50	Class 2.6.2

Technical Data

Model	Max. Operating Pressure bar g	Max. Operating Pressure psi g	Min. Air Inlet Temperature °C	Min. Air Inlet Temperature °F	Max. Air Inlet Temperature °C	Max. Air Inlet Temperature °F	Max. Ambient Temperature °C	Max. Ambient Temperature °F	Electrical Supply (Standard)	Electrical Supply (Optional)	Thread Connections	Noise Level dB(A)
PSH 030-090	50	725	5	41	65	149	50	122	230V 1ph 50Hz	60Hz on request	BSPT-F	55
PST 0120-1200	50	725	5	41	65	149	50	122	400V 3ph 50Hz	60Hz on request	BSPT-F and 2½" Flange ANSI 300/600 lb	58

All units fitted with integral timed drain. All models are air-cooled; water cooled available from model PSH290

Flow Rates

Model	Port Connection	Inlet Flow Rate L/s	Inlet Flow Rate m^3/min	Inlet Flow Rate m^3/hr	Inlet Flow Rate cfm
PSH030	1¼"	50	3.0	180	106
PSH045	1¼"	75	4.5	270	159
PSH065	1¼"	108	6.5	390	230
PSH090	1¼"	150	9	540	318
PSH120	1¼"	200	12	720	424
PSH160	1¼"	267	16	960	565
PSH200	1¼"	333	20	1200	706
PSH230	1¼"	383	23	1380	812
PSH290	2½" ANSI	483	29	1740	1024
PSH380	2½" ANSI	633	38	2280	1342
PSH460	2½" ANSI	767	46	2760	1625
PSH630	2½" ANSI	1050	63	3780	2225
PSH800	2½" ANSI	1333	80	4800	2825
PSH1000	2½" ANSI	1667	100	6000	3531
PSH1200	2½" ANSI	2000	120	7200	4238

Absorbed Power kW

Model	kW
PSH030	0.53
PSH045	0.55
PSH065	1.33
PSH090	1.37
PSH120	1.41
PSH160	1.44
PSH200	1.47
PSH230	1.52
PSH290	2.89
PSH380	3.18
PSH460	3.44
PSH630	4.12
PSH800	6.6
PSH1000	6.9
PSH1200	7.3

Performances refer to air-cooled model with air suction of FAD 20°C / 1 bar A, and the following operating conditions: air suction 25°C / 60%RH, 40 bar g working pressure, 25°C cooling air temperature, 35°C compressed air inlet temperature and pressure dewpoint in accordance with ISO8573-1. All indicated data refers to DIN ISO 7183. All models supplied with refrigerant R407c. All models designed for operation up to 50 bar g. Data refers to 50Hz models.

CFIT - Correction Factor Maximum Inlet Temperature

Maximum Inlet Temperature	°C	25	30	35	40	45	50	55	60	65
	°F	77	86	95	104	113	122	131	140	149
Correction Factor Models		0.85	0.85	1.00	1.15	1.30	1.45	1.61	1.79	2.00

CFAT - Correction Factor Maximum Ambient Temperature

Maximum Ambient Temperature	°C	20	25	30	35	40	45	50
	°F	68	77	86	95	104	113	122
Correction Factor		0.98	1.00	1.02	1.05	1.08	1.11	1.16

CFP - Correction Factor Minimum Inlet Pressure

Minimum Inlet Pressure	bar g	15	20	25	30	35	40	45	50
	psi g	218	290	363	435	508	580	653	725
Correction Factor		1.18	1.10	1.06	1.03	1.01	1.00	0.99	0.99

CFD - Correction Factor Dewpoint

Pressure Dewpoint	°C	+3	+5	+7	+10
	°F	+37	+41	+45	+50
Correction Factor		1.00	0.86	0.81	0.71

Calculate Minimum Drying Capacity = System Flow x CFIT x CFAT x CFP x CFD and select dryer from table above

Controller Functions

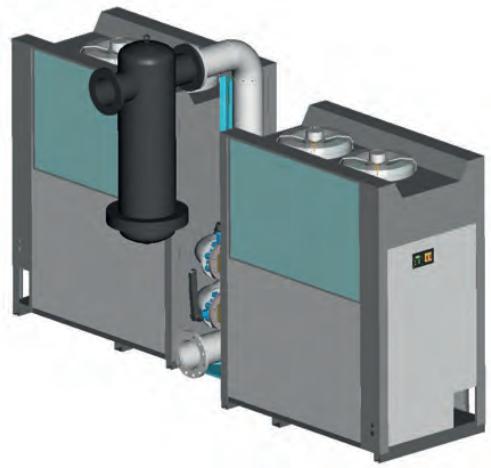
Model	Function				
	Power On Indication Fault Indication	Digital Dewpoint Indicator	Display Fault Condition Values	Configurable Alarm Settings	Remote Volt Free Alarm Contacts
PSH	•	•	From model PSH120	From model PSH120	From model PSH120

Weights and Dimensions

Model	Port Connection	Dimensions						Weight	
		Height (H)		Width (W)		Depth (D)			
		mm	ins	mm	ins	mm	ins	kg	lbs
PSH030	1¼"	945	37.20	703	27.68	562	22.13	83	183
PSH045	1¼"	945	37.20	703	27.68	562	22.13	83	183
PSH065	1¼"	945	37.20	703	27.68	562	22.13	85	187
PSH090	1¼"	945	37.20	703	27.68	562	22.13	85	187
PSH120	1¼"	1064	41.89	706	27.80	1046	41.18	152	335
PSH160	1¼"	1064	41.89	706	27.80	1046	41.18	152	335
PSH200	1¼"	1064	41.89	706	27.80	1046	41.18	152	335
PSH230	1¼"	1064	41.89	706	27.80	1046	41.18	152	335
PSH290	2½" ANSI	1690	66.54	1007	39.65	1097	43.19	356	785
PSH380	2½" ANSI	1690	66.54	1007	39.65	1097	43.19	356	785
PSH460	2½" ANSI	1690	66.54	1007	39.65	1097	43.19	356	785
PSH630	2½" ANSI	1690	66.54	1007	39.65	1657	65.24	455	1003
PSH800	2½" ANSI	1723	67.83	1007	39.65	1657	65.24	610	1345
PSH1000	2½" ANSI	1723	67.83	1007	39.65	1657	65.24	610	1345
PSH1200	2½" ANSI	1723	67.83	1007	39.65	1657	65.24	610	1345

Part Numbers

Model	Air-cooled Version	Water-cooled Version
PSH030	PSH030-A23015050TI	n/a
PSH045	PSH045-A23015050TI	n/a
PSH065	PSH065-A23015050TI	n/a
PSH090	PSH090-A23015050TI	n/a
PSH120	PSH120-A40035050TI	n/a
PSH160	PSH160-A40035050TI	n/a
PSH200	PSH200-A40035050TI	n/a
PSH230	PSH230-A40035050TI	n/a
PSH290	PSH290-A40035050TI	PSH290-W40035050TI
PSH380	PSH380-A40035050TI	PSH380-W40035050TI
PSH460	PSH460-A40035050TI	PSH460-W40035050TI
PSH630	PSH630-A40035050TI	PSH630-W40035050TI
PSH800	PSH800-A40035050TI	PSH800-W40035050TI
PSH1000	PSH1000-A40035050TI	PSH1000-W40035050TI
PSH1200	PSH1200-A40035050TI	PSH1200-W40035050TI



Parker Hiross

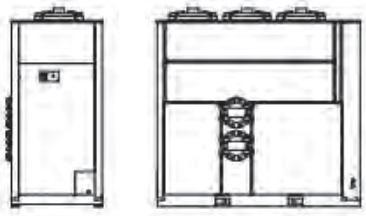
PoleStar Smart Twin Dryers

Large capacity models with PoleStar Smart technology and benefits.

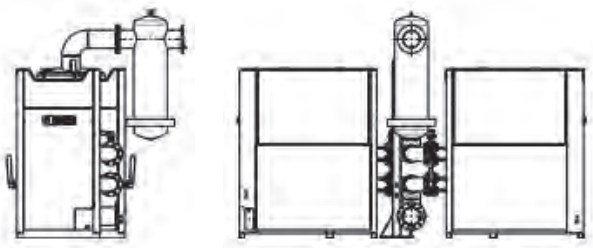
The PoleStar Smart twin dryer models combine the advantages of two individual PST refrigeration dryers operated as one single unit to achieve larger flow rates. One of the two standard PST dryers acts as the master controller of the twin configuration. The twin package includes two PST units, inlet-outlet air manifolds, one pre-filter and one master controller. All the benefits and features of the PoleStar Smart models remain available in the twin configuration.

Diagrams:

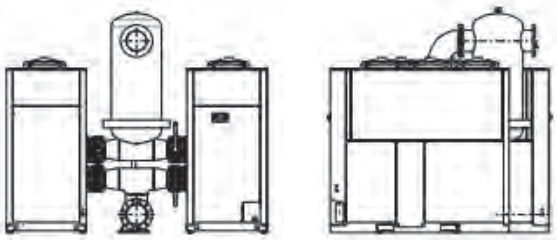
PST1500-1800



PST2400



PST3000-3600



For further product information visit **www.parker.com/gsfe**

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	
PST	+3	+37	Class 2.4.2	+7	+45	Class 2.5.2	+10	+50	Class 2.6.2

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)	Thread Connections	Noise Level
	bar g	psi g	bar g	psi g	°C	°F	°C	°F	°C	°F				dB(A)
PST 2400 - 3600	3	44	14	203	5	41	65	149	50	122	400V 3ph 50Hz	N/A	DIN Flange	<75

Flow Rates

Model	Port Connection	Inlet Flow Rate			
		L/s	m³/min	m³/hr	cfm
PST 2400	DN200	4000	240	14400	8470
PST 3000	DN250	5000	300	18000	10588
PST 3600	DN250	6000	360	21600	12705

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. *Twin models supplied with master controller, electronic integral drains, manifolds, manual valves and a class 3 coarse grade Parker Hiross pre-filter with automatic drain.

Absorbed Power kW

Model	kW
PST 2400	18
PST 3000	25
PST 3600	32

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	55	60	65
	°F	77	86	95	104	113	122	131	140	149
Correction Factor Models		0.81	0.81	1.00	1.19	1.43	1.69	2.00	2.22	2.50

CFAT - Correction Factor Maximum Ambient Temperature

Maximum Ambient Temperature	°C	20	25	30	35	40	45	50
	°F	68	77	86	95	104	113	122
Correction Factor		0.94	1.00	1.05	1.11	1.20	1.30	1.39

CFP - Correction Factor Minimum Inlet Pressure

Minimum Inlet Pressure	bar g	3	4	5	6	7	8	9	10	11	12	13	14
	psi g		58	73	87	100	116	131	145	160	174	189	203
Correction Factor		1.35	1.20	1.11	1.04	1.00	0.96	0.93	0.93	0.90	0.89	0.88	0.87

CFD - Correction Factor Dewpoint

Pressure Dewpoint	°C	+3	+5	+7	+10
	°F	+37	+41	+45	+50
Correction Factor		1.00	0.91	0.83	0.71

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
PST	•	•	•	•		•	•	

Part Numbers

Model	Air-cooled Version	Water-cooled Version
PST2400	PST2400-A40035014EITF	PST2400-W40035014EITF
PST3000	PST3000-A40035014EITF	PST3000-W40035014EITF
PST3600	PST3600-A40035014EITF	PST3600-W40035014EITF

COMPRESSED AIR HYBRID DRYERS

Compressed Air Hybrid Dryers

COMPRESSED AIR HYBRID DRYERS

Parker's Tandem Technology compressed air hybrid dryers integrate the two classic drying principles into a single compact compressed air treatment package.

This unique combination of refrigeration and adsorption boasts a reduction in energy consumption of up to 60% against traditional heatless desiccant dryers.

Parker

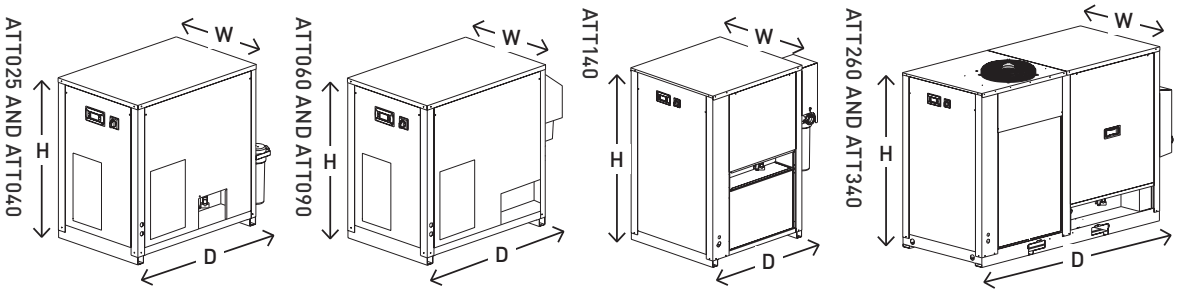
Parker Hiross

Antares Series Low Energy Tandem Technology Compressed Air Dryer

Compact, energy efficient Tandem Technology dryers for compressed air applications in industrial and processing markets. Available for volume flows up to 2040 m³/h @ 7 bar g and dewpoints between plus 3°C to -70°C.

Parker Hiross Antares dryers with Tandem Technology are an innovative family of compressed air dryers for volume flows from 150 to 2040 m³/h @ 7 bar g / PDP -40°C. Tandem Technology from Parker Hiross is a further development of the standard hybrid compressed air drying process. Compared to the conventional hybrid compressed air treatment process which is a simple lining-up of a refrigeration and an adsorption dryer, the Tandem Technology goes one step further and fully integrates the two classic drying principles in a compact compressed air treatment package. This unique combination enables high-quality compressed air to be provided to the end-user at low energy consumption levels when compared to more traditional adsorption dryers.

Diagrams:



Dryer Performance

Model	Dewpoint (Standard) °C	Dewpoint (Standard) °F	ISO8573-1:2010 Classification (Standard)	Dewpoint (Option 1) °C	Dewpoint (Option 1) °F	ISO8573-1:2010 Classification (Option 1)	Dewpoint (Option 2) °C	Dewpoint (Option 2) °F	ISO8573-1:2010 Classification (Option 2)
Antares	-40	-40	Class 2.2.2	-70	-100	Class 2.1.2	-20	-4	Class 2.3.2

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)	Thread Connections	Noise Level
	bar g	psi g	bar g	psi g	°C	°F	°C	°F	°C	°F				dB(A)
ATT 025 - 040	2	29	16	232	5	41	65	149	50	122	230V 1ph 50Hz	N/A	BSPP	<75
ATT 060 - 090	2	29	12	174	5	41	65	149	50	122	230V 1ph 50Hz	N/A	BSPP	<75
ATT 090 - 140	2	29	12	174	5	41	65	149	50	122	400V 3ph 50Hz	N/A	BSPP	<75
ATT 260 - 340	4	58	12	174	5	41	65	149	50	122	400V 3ph 50Hz	N/A	BSPP	<75

Flow Rates

Model	Port Connection	Inlet Flow Rate			
		L/s	m^3/min	m^3/hr	cfm
ATT 025	G 1	42	2.5	150	88
ATT 040	G 1	67	4	240	141
ATT 060	G 1 1/2	100	6	360	212
ATT 090	G 1 1/2	150	9	540	318
ATT 140	G2	233	14	840	494
ATT 260	G 2 1/2	433	26	1560	918
ATT 340	G 2 1/2	567	34	2040	1200

Average Power kW

Model	kW
ATT 025	0.94
ATT 040	1.3
ATT 060	1.27
ATT 090	1.94
ATT 140	2.01
ATT 260	4.02
ATT 340	5.17

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	55	60	65
	°F	77	86	95	104	113	122	131	140	149
Correction Factor 025 - 340		0.82	0.82	1.00	1.23	1.45	1.69	1.92	2.17	2.50

CFAT - Correction Factor Maximum Ambient Temperature

Maximum Ambient Temperature	°C	20	25	30	35	40	45	50
	°F	68	77	86	95	104	113	122
Correction Factor 025 - 060		0.95	1.00	1.06	1.14	1.23	1.33	1.47
Correction Factor 090 - 340		0.94	1.00	1.05	1.11	1.20	1.30	1.39

CFP - 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 025 - 040		1.61	1.33	1.15	1.00	0.93	0.83	0.78	0.75	0.71	0.69	0.67	0.65	0.63
Correction Factor 060 - 340		1.61	1.33	1.15	1.00	0.93	0.83	0.78	0.75	0.71	N/A	N/A	N/A	N/A

CFD - Correction Factor Dewpoint

Pressure Dewpoint	°C	-20	-40	-70
	°F	-4	-40	-100
Correction Factor		1	1	1

For further product information visit **www.parker.com/gsfe**

Controller Functions

Model	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
ATT	•	•	•	•		•	•	

Included Filtration

Model	Port Connection	Refrigeration Circuit Pre-filter "Oil/Water and Particulate"	Desiccant Pre-filter "Oil/Water-aerosol and Particulate"	Desiccant After-filter "particulate"
ATT 025	G 1	GL9ZLP	GL9XLP	GL9ZLP
ATT 040	G 1	GL11ZLP	GL11XLP	GL11ZLP
ATT 060	G 1 1/2	GL11ZLP	GL11XLP	GL11ZLP
ATT 090	G 1 1/2	GL12ZLP	GL12XLP	GL12ZLP
ATT 140	G 2	GL14ZLP	GL14XLP	GL14ZLP
ATT 260	G 2 1/2	GL19ZLP	GL19XLP	GL19ZLP
ATT 340	G 2 1/2	GL19ZLP	GL19XLP	GL19ZLP

Weights and Dimensions

Model	Width (W) mm	Height (H) mm	Depth (D) mm	Weight (kg)
ATT 025	706	1064	1246	180
ATT 040	706	1064	1246	200
ATT 060	806	1214	1416	295
ATT 090	806	1214	1416	335
ATT 140	1007	1586	1345	490
ATT 260	1007	1720	2535	880
ATT 340	1007	1720	2535	950

Part Numbers

Model	Standard Configuration	By-pass
ATT025	ATT025-A23015016TI	n/a
ATT040	ATT040-A23015016TI	n/a
ATT060	ATT060-A23015012TI	ATT060-A23015012TITB
ATT090	ATT090-A23015012TI	ATT090-A23015012TITB
ATT140	ATT140-A40035012EI	ATT140-A40035012EITB
ATT260	ATT260-A40035012EI	ATT260-A40035012EITB
ATT340	ATT340-A40035012EI	ATT340-A40035012EITB

Model	Touch Screen	By-pass and Touch Screen
ATT025	n/a	n/a
ATT040	n/a	n/a
ATT060	n/a	n/a
ATT090	n/a	n/a
ATT140	ATT140-A40035012EITS	ATT140-A40035012EITBTS
ATT260	ATT260-A40035012EITS	ATT260-A40035012EITBTS
ATT340	ATT340-A40035012EITS	ATT340-A40035012EITBTS

Model	External Electronic Drain	External Electronic Drain and By-pass
ATT025	ATT025-A23015016EX	n/a
ATT040	ATT040-A23015016EX	n/a
ATT060	ATT060-A23015012EX	ATT060-A23015012EXTB
ATT090	ATT090-A23015012EX	ATT090-A23015012EXTB
ATT140	n/a	n/a
ATT260	n/a	n/a
ATT340	n/a	n/a

Model	Automatic Amb. Temp. Dependent Dewpoint Setting	Automatic Amb. Temp. Dependent Dewpoint Setting and By-pass
ATT060	ATT060-A23015012TITP	ATT060-A23015012TITBTP
ATT090	ATT090-A23015012TITP	ATT090-A23015012TITBTP
ATT140	ATT140-A40035012EITP	ATT140-A40035012EITBTP
ATT260	ATT260-A40035012EITP	ATT260-A40035012EITBTP
ATT340	ATT340-A40035012EITP	ATT340-A40035012EITBTP

THERMAL AND POWER MANAGEMENT

Aftercoolers

Parker's highly effective aftercoolers reduce maintenance costs, optimise operations and improve the quality of compressed air and gas systems.

Installed immediately downstream of compressors or blowers, Parker's range of aftercoolers eliminate over 80% of water present in the system.

Parker

Parker Hiross

Hypercool Air Cooled Aftercooler

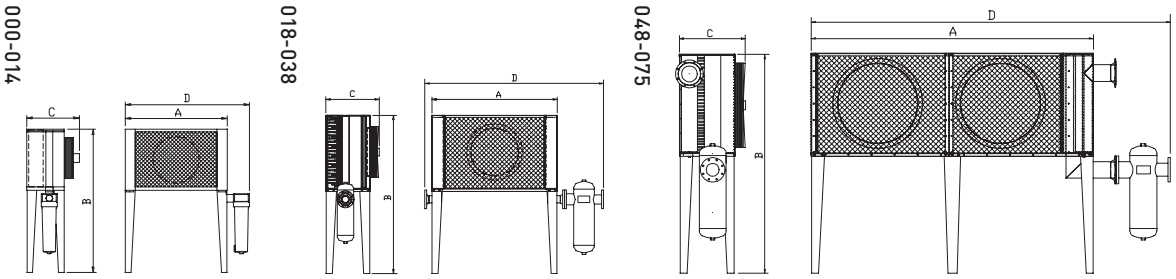
Highly efficient air cooled aftercoolers for the removal of water vapour and cooling of compressed air downstream from compressors and blowers.

The Parker Hiross Hypercool range of air cooled aftercoolers represents a cost-effective solution to easily remove water vapour from compressed air and cool it to safe usable levels for many industrial applications.

Hypercool air cooled aftercoolers can be used when cooling water is not available, limiting costs and plant complexity and will prepare the air for further filtration and drying. The aftercoolers can be installed immediately downstream of compressors or blowers in order to remove up to 80% of the condensate, protecting the entire compressed air system or production process.

A high quality aftercooler, properly sized, is an excellent investment that can help ensure that the compressed air system works efficiently, thereby guaranteeing the quality of the finished product.

Diagrams:



Please note, Hypersep water separator sold separately. Please see page 14.

Technical Data

Model	Air Flow		Design Pressure	Cooler Air	Electrical Supply	Adsorbed Current	Pressure Drop at Nominal Conditions	Noise Level at 10m
	m^3/h	m^3/min	bar g	conn.	V/ph/Hz	A	kPa	dB(A)
ADS000	36	0,6	16	3/4"	230/1/50	0,21	24	33,2
ADS001	72	1,2	16	3/4"	230/1/50	0,21	32	33,2
ADS003	150	2,5	16	1½"	230/1/50	0,36	16	44,1
ADS004	210	3,5	16	1½"	230/1/50	0,36	14	44,1
ADT003	150	2,5	16	1½"	400/3/50	0,27	16	44,1
ADT004	210	3,5	16	1½"	400/3/50	0,27	14	44,1
ADT006	360	9	16	1½"	400/3/50	0,29	22	54,2
ADT009	540	9	16	2"	400/3/50	0,52	13	58,5
ADT014	840	14	16	2"	400/3/50	0,95	22	62,1
ADT018	1,080	18	16	DN 80	400/3/50	1,15	18	62,6
ADT028	1,680	28	16	DN 80	400/3/50	2,70	15	70,3
ADT038	2,160	36	16	DN 100	400/3/50	2,70	16	70,3
ADT048	2,880	48	16	DN 150	400/3/50	5,40	24	73,0
ADT064	3,840	64	16	DN 150	400/3/50	5,40	26	73,0
ADT075	4,500	75	16	DN 150	400/3/50	5,40	24	73,0

Performances refer to models in standard materials, operating with clean cooler, with air at FAD 20 °C / 1 bar A, and at the following working conditions: air suction 25 °C/60 % RH, 7 bar g working pressure, 120 °C compressed air inlet temperature (for water-cooled models), temperature approach between air outlet and water inlet (water-cooled models) or cooling air (air-cooled models) of ca. 10 °C. The performance of models with non standard materials may differ from those quoted above.

Weights and Dimensions

Model	Dimensions (mm)				Weight (kg)
	A	B	C	D	
ADS000	360	794	216	475	14,0
ADS001	430	895	277	545	17
ADS003	550	1.140	303	715	31
ADS004	550	1.140	303	715	37
ADT003	550	1.140	403	715	31
ADT004	550	1.140	403	715	37
ADT006	690	1.315	455	855	58
ADT009	936	1.315	480	1.173	70
ADT014	1.036	1.551	530	1.273	106
ADT018	1.130	1.869	590	1.704	146
ADT028	1.480	1.906	628	2.054	181
ADT038	1.580	1.975	590	2.263	211
ADT048	2.870	2.239	677	3.650	391
ADT064	2.870	2.239	677	3.650	429
ADT075	2.870	2.239	677	3.650	476

Parker Hiross

Hypercool Water Cooled Aftercooler

Highly efficient water cooled aftercoolers for the removal of water vapour and cooling of compressed air and gases downstream from compressors and blowers.

Compressed air and gases contain high levels of liquid water vapour. Effective water removal leads to reduced maintenance costs, enhanced system operation and improved product quality. Hypercool water cooled aftercoolers represent the vital first step in this process, installed immediately downstream of compressors or blowers they eliminate over 80% of the water present within compressed air and gas systems.

Controlled compressed air or gas temperature is essential for many industrial applications for efficient operation. The air or gas temperature can be very high at the compressor outlet. Hypercool water cooled aftercoolers can control this. They have been specifically designed to achieve maximum cooling at minimum cost, within a package designed to withstand the rigors of modern industry.

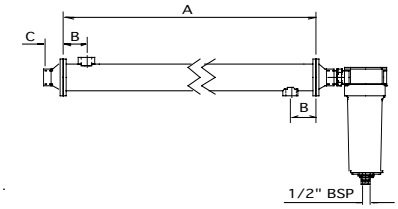
The ribbed tubing design offers high heat exchange efficiency with minimal pressure drops. Hypercool's extensive range of models includes those with fixed and removable aftercoolers, high pressure configurations and versions with special materials for any gas and water quality requirement.

A high quality aftercooler properly sized is an excellent investment that can help ensure that the compressed air or gas system works properly thereby guaranteeing the quality of the finished product.

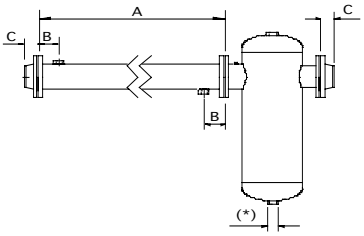
Additional models available upon request

Diagrams:

002-038 (WITH SEPARATOR STH)



022-200 (WITH SEPARATOR SFH)



Please note, Hypersep water separator sold separately. Please see page 14.

Parker

Technical Data - Standard Version

Model	Air Flow		Max. Pressure	Cooler Connections	
	m^3/h	m^3/min	bar g	Air	Water
WFN002	72	1,2	16	¾"	⅜"
WFN004	210	3,5	16	1½"	½"
WFN007	390	6,5	16	1½"	¾"
WFN009	540	9	16	2"	¾"
WFN013	810	13	16	2"	¾"
WFN018	1080	18	12	DN80	1"
WFN027	1.620	27	12	DN100	1¼"
WFN036	2.160	36	12	DN100	1¼"
WFN050	3.000	50	12	DN125	1¼"
WFN060	3.600	60	12	DN150	1¼"
WFN090	5.400	90	12	DN200	1¼"

Weights and Dimensions - Standard Version

Model	Dimensions (mm)			Weight (kg)
	A	B	C	
WFN002	720	78	-	2,5
WFN004	980	85	-	5,5
WFN007	1000	95	-	9
WFN009	1020	105	-	10,5
WFN013	1050	120	-	15
WFN018	900	95	52	13
WFN027	900	115	54	18
WFN036	900	115	54	24
WFN050	1.300	100	58	71
WFN060	1.300	100	58	89
WFN090	1.300	100	65	121

Performances refer to clean Cooler conditions with air at FAD 20°C / 1 bar A, and at the following working conditions: air suction 25°C / 60%RH, 7 bar g working pressure, 120°C compressed air inlet temperature, temperature approach between air outlet and water inlet of ca. 10°C. Maximum air inlet temperature: 200°C (for higher temperatures and other gases contact Parker Sales Companies).

Technical Data - Removable Tube-bundle

Model	Air Flow		Max. Pressure	Cooler Connections	
	m^3/h	m^3/min	bar g	Air	Water
WRN003	180	3	16	DN50	½"
WRN007	420	7	16	DN50	½"
WRN011	660	11	16	DN65	¾"
WRN016	960	16	16	DN80	¾"
WRN022	1.320	22	12	DN100	1"
WRN022	1.320	22	12	DN100	1"
WRN028	1.680	28	12	DN100	1"
WRN028	1.680	28	12	DN100	1"
WRN038	2.280	38	12	DN125	1¼"
WRN038	2.280	38	12	DN125	1¼"
WRN050	3.000	50	12	DN125	1¼"
WRN060	3.600	60	12	DN150	
WRN090	5.400	90	12	DN200	1¼"
WRN130	7.800	130	10	DN250	1½"
WRN170	10.200	170	10	DN300	2"
WRN200	12.000	200	10	DN350	2"
WRN250	15.000	250	10	DN350	DN65
WRN350	21.000	350	10	DN450	DN80
WRN450	27.000	450	10	DN500	DN100
WRN550	33.000	550	10	DN600	DN100

Weights and Dimensions - Removable Tube-bundle

Model	Dimensions (mm)			Weight (kg)
	A	B	C	
WRN003	850	72	77	18
WRN007	1.050	72	77	20
WRN011	1.300	122	82	27
WRN016	1.300	122	92	37
WRN022	1.300	122	55	50
WRN022	1.300	122	55	50
WRN028	1.300	122	55	54
WRN028	1.300	122	55	54
WRN038	1.300	123	58	69
WRN038	1.300	123	58	69
WRN050	1.300	123	58	71
WRN060	1.300	115	58	92
WRN090	1.300	117	65	161
WRN130	1.300	116	71	194
WRN170	1.300	116	71	244
WRN200	1.300	143	71	321
WRN250	1.500	196,5	71	351
WRN350	1.500	148,5	75	400
WRN450	1.500	199,5	78	609
WRN550	1.515	200	83	931

Performances refer to clean Cooler conditions with air at FAD 20°C / 1 bar A, and at the following working conditions: air suction 25°C / 60%RH, 7 bar g working pressure, 120°C compressed air inlet temperature, temperature approach between air outlet and water inlet of ca. 10°C. Maximum air inlet temperature: 200°C (for higher temperatures and other gases contact Parker Sales Companies).

hymatik

THERMAL AND POWER MANAGEMENT

Production Process Water Chillers

The Parker heat exchanger offering is a simple but effective solution to optimise production processes within water usage applications.

As the leading supplier of production process water chillers, Parker implements innovative technology to provide a highly efficient range of compact and configurable fluid coolers.

Parker

Tel: +45 63 12 83 00 | Email: ps@hymatik.com | www.hymatik.com | Hvidkaervej 27a, DK-5250 Odense SV, Denmark

Parker Hiross

Hyperchill Plus Industrial Water Chiller

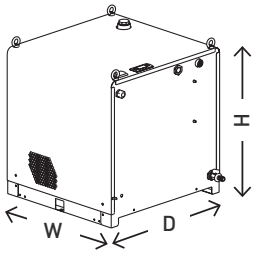
Hyperchill Plus industrial water chillers are designed to provide precise and accurate temperature control of low viscosity industrial cooling fluids for a wide variety of industrial applications, with cooling capacities from 1.7kW to 23.6kW.

Extremely compact and easy to use, Hyperchill Plus is designed for safe and reliable operation in the most varied working conditions, providing precise and accurate control of low viscosity process fluid temperature.

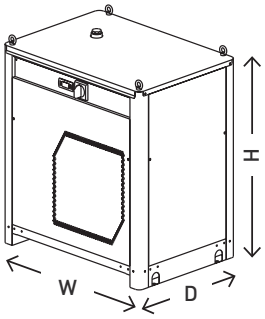
The availability of a wide range of accessories and options makes Hyperchill Plus a very flexible solution that fits the needs of a wide variety of industrial applications. With a non-ferrous hydraulic circuit, Hyperchill Plus is suitable for cooling low viscosity cooling fluids including water and water-glycol mixtures. Hyperchill Plus ensures stable working conditions combined with improved efficiency and productivity of the process. Hyperchill Plus contributes significantly to the reduction of plant downtime and maintenance costs due to inconsistent cooling of low viscosity cooling fluids. Each individual Hyperchill Plus unit is extensively tested to guarantee efficient operation and reliability in most working conditions.

Diagrams:

ICEP 002



ICEP 003-005



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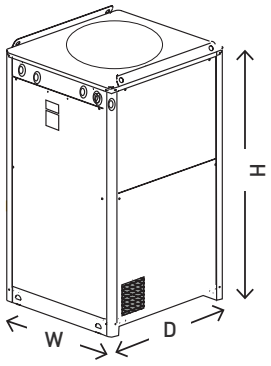

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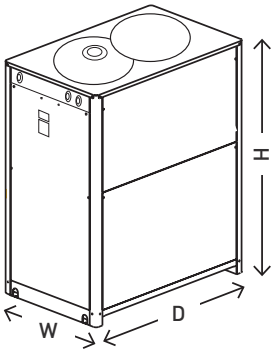

Parker

Technical Data

Model	Cooling Capacity[1] (kW)	Compressor Abs. Power[1] (kW)	Power Supply V/ph/Hz	Protection Index	Refrigerant
ICEP002-W	1,7	0,7	230/1/150	33	R407c
ICEP003-W	3,3	1,3	230/1/150	33	R407c
ICEP005-W	5,2	1,4	230/1/150	33	R407c
ICEP007-W	7,8	1,7	400/3/50	54	R407c
ICEP010-W	10,8	2,5	400/3/50	54	R407c
ICEP014-W	14,6	3,2	400/3/50	54	R407c
ICEP020-W	20,3	4,4	400/3/50	54	R407c
ICEP024-W	23,6	5,4	400/3/50	54	R407c

Technical Data – Compressor

Model	Type	Compressors/Circuits	Max Abs, Power[1] Comp. (kW)
ICEP002-W	hermetic pistons	1/1	0,7
ICEP003-W	hermetic pistons	1/1	1,3
ICEP005-W	hermetic pistons	1/1	1,5
ICEP007-W	scroll	1/1	2,4
ICEP010-W	scroll	1/1	3,8
ICEP014-W	scroll	1/1	4,4
ICEP020-W	scroll	1/1	5,7
ICEP024-W	scroll	1/1	6,6

Technical Data – Axial Fans

Model	Quantity	Max. Abs. Power[1] Fan (kW)	Air Flow m^3/h
ICEP002-W	1	0,07	430
ICEP003-W	1	0,12	1295
ICEP005-W	1	0,12	1295
ICEP007-W	1	0,3	3437
ICEP010-W	1	0,3	3437
ICEP014-W	1	0,4	4337
ICEP020-W	2	0,4	6878
ICEP024-W	2	0,4	6159

Technical Data – Water Cooled Version

Model	Condenser Water Flow m^3/h	Condenser Connections in
ICEP002-W	N/A	N/A
ICEP003-W	N/A	N/A
ICEP005-W	N/A	N/A
ICEP007-W	N/A	N/A
ICEP010-W	N/A	N/A
ICEP014-W	1,5	3/4"
ICEP020-W	2,1	3/4"
ICEP024-W	2,5	3/4"

Technical Data – Pump P30

Model	Max. Abs. Power[1] kW	Water Flow (nom/max)[1] m^3/h	Head Pressure (nom/max)[1] m H_20
ICEP002-W	0,4	0,3/1,9	35/5
ICEP003-W	0,4	0,6/1,9	33/5
ICEP005-W	0,4	0,9/1,9	26/5
ICEP007-W	0,9	1,3/4,8	30/12,8
ICEP010-W	0,9	1,8/4,8	29/12,8
ICEP014-W	1,0	2,5/6	29/21
ICEP020-W	1,3	3,4/9,6	29/17,3
ICEP024-W	1,3	4,9/9,6	28/17,3

Technical Data – Noise

Model	Sound Pressure (axial)[2] dB(A)
ICEP002-W	52
ICEP003-W	52
ICEP005-W	52
ICEP007-W	53
ICEP010-W	53
ICEP014-W	50
ICEP020-W	50
ICEP024-W	50

1) at water in/out temperature 20/15°C, glycol 0%, either 25°C ambient temperature (air-cooled models) or 25°C condenser water inlet temperature with 35°C condensing temperature (water-cooled models)
2) referred to axial fan version in free field conditions at a distance of 10m from until, measured on condenser side, 1m from ground

Weights and Dimensions

Model	Width mm	Depth mm	Height mm	Connections in	Tank Capacity l	Weight (axial) kg	Weight (water cooled) kg
ICEP002-W	520	500	550	1/2"	15	40	-
ICEP003-W	755	535	801	3/4"	15	80	-
ICEP005-W	755	535	801	3/4"	22,5	85	-
ICEP007-W	756	806	1405	3/4"	65	160	-
ICEP010-W	756	806	1405	3/4"	65	165	-
ICEP014-W	756	806	1405	3/4"	65	175	175
ICEP020-W	756	1206	1405	1"	100	220	220
ICEP024-W	756	1206	1405	1"	100	230	230

Correction Factors

Ambient Temperature °C	5	10	15	20	25	30	35	40	45
(f1)	1,05	1,05	1,05	1,05	1	0,94	0,89	0,84	0,80

Water Outlet Temperature °C	5	10	15	20	25
(f2)	0,76	0,87	1	1,04	1,04

Glycol (in weight) %	0	10	20	30	40
(f3)	1	0,99	0,98	0,97	0,96

Condenser Water Inlet Temp. °C	20	25	30	35	40
(f4)	1,05	1	0,95	0,9	0,85

To obtain the required cooling capacity, multiply the value at nominal conditions by the above correction factors (i.e. cooling capacity = Pxf1xf2xf3xf4, where P is the cooling capacity at the water outlet temperature of 15 °C). Hyperchill Plus, in its standard configuration, can operate up to ambient temperatures of max. 48 °C and min. 5 °C and water temperatures of max. 30 °C inlet and min. 0 °C outlet. The above correction s are approximative: for a precise selection, always refer to the software selection programme.

Product Codes

Product Code Example: ICEP007-WATP3T0L20001

Model		Cooling Capacity		-	Fluid To Be Cooled		Condensation		Power Supply		Pumps		Tank	
ICEP	Hyperchill Plus	xxx	kW		W	Water	A	Air Axial	S	230V/1Ph/50Hz	P1	Single pump 1,5 bar	T	With Tank
							W	Water	T	400V/3Ph/50Hz	P3	Single pump 3 bar	0	Without Tank
							T	Tropicalised	E	115V/1Ph/60Hz	P5	Single pump 5 bar		
							B	Air Axial Bioenergy	F	230V/1Ph/60Hz	00	No Pump		
									G	460V/3Ph/60Hz				
									H	380V/3Ph/60Hz				
									L	230V/3Ph/60Hz				
									X	Special				

Control Water Temp		Low Ambient		Low Water		Antifreeze		Fill Kit Mounted		Options	
C	Close control	FS	Fan speed control (Low Ambient -10°C)	LW	Low water	A	With antifreeze	0	Without fill kit	P	Harting Plug for signals
0	No control	L1	Low ambient -10°C (fan step control)	00	No low water	0	Without antifreeze	1	Ambient manual fill kit	S	Siemens Electrical Components
		L2	Low ambient -20°C					2	Ambient automatic fill kit	D	Differential Dynamic set point
		00	No low ambient					3	Pressurised fill kit	C	Control Panel Cover
										F	Water Filter
										1	Manual External By-pass
										(NO DIGIT)	No options

Hyperchill Plus Water Range 50Hz

Hyperchill Plus Axial – Hyperchill Plus Air Axial (open hydraulic circuit with P30 pump)	
Model	**Part Number**
ICEP002-W	ICEP002-WASP3T0000001
ICEP003-W	ICEP003-WASP3T0000001
ICEP005-W	ICEP005-WASP3T0000001

Hyperchill Plus Axial – Hyperchill Plus Air Axial (pressurised closed hydraulic circuit with P30 pump)	
Model	**Part Number**
ICEP005-W	ICEP005-WASP3T0000000
ICEP007-W	ICEP007-WATP3T0000000
ICEP010-W	ICEP010-WATP3T0000000
ICEP014-W	ICEP014-WATP3T0000000
ICEP020-W	ICEP020-WATP3T0L10000
ICEP024-W	ICEP024-WATP3T0L10000

Hyperchill Plus Water Cooled – Hyperchill Plus Air Axial (pressurised closed hydraulic circuit with P30 pump)	
Model	**Part Number**
ICEP014-W	ICEP014-WWTP3T0000000
ICEP020-W	ICEP020-WWTP3T0000000
ICEP024-W	ICEP024-WWTP3T0000000

Hyperchill Plus Water Range 60Hz[1]

Hyperchill Plus Axial – Hyperchill Plus Air Axial (open hydraulic circuit with P30 pump)	
Model	**Part Number**
ICEP002-W	ICEP002-WASP3T0000001
ICEP003-W	ICEP003-WASP3T0000001
ICEP005-W	ICEP005-WASP3T0000001

Hyperchill Plus Axial – Hyperchill Plus Air Axial (pressurised closed hydraulic circuit with P30 pump)	
Model	**Part Number**
ICEP005-W	ICEP005-WASP3T0000000
ICEP007-W	ICEP007-WATP3T0000000
ICEP010-W	ICEP010-WATP3T0000000
ICEP014-W	ICEP014-WATP3T0000000
ICEP020-W	ICEP020-WATP3T0L10000
ICEP024-W	ICEP024-WATP3T0L10000

[1] ICEP002: UL compliant
ICEP003-024: UL listed

Hyperchill Plus Options

	Hyperchill Plus Axial Options			
	ICEP002-W	ICEP003-W	ICEP005-W	ICEP007-W
No water tank				
Water tank	Standard	Standard	Standard	Standard
Differential pressure switch	Standard	Standard	Standard	Standard
Close control	n/a			
Fan speed control (-10°C) – FS	n/a	n/a	n/a	
Low amb. temp. (-10°C with fan step control) – L1	n/a	n/a	n/a	n/a
Low amb. temp. (-20°C with crankcase heater, electrical cabinet heaters and fan speed control) – L2	n/a	n/a	n/a	
Low water temp. (-10°C)	n/a	n/a	n/a	
Anti-freeze heating	n/a	n/a	n/a	
BioEnergy aggressive ambients	n/a	n/a	n/a	
Eyebolts	Standard	Standard	Standard	Standard
Tropicalization (53°C, without ambient fill kit)	n/a	n/a	n/a	n/a
Harting Plug				
Differential dynamic set point	n/a	n/a	n/a	
Siemens electrical components (no control)	On req.	On req.	On req.	On req.
No pump				
P15 pump	n/a	n/a	n/a	
P30 pump	Standard	Standard	Standard	Standard
P50 pump				
Twin P30# pumps	n/a	n/a	n/a	n/a

	Hyperchill Plus Axial Options			
	ICEP010-W	ICEP014-W	ICEP020-W	ICEP024-W
No water tank				
Water tank	Standard	Standard	Standard	Standard
Differential pressure switch	Standard	Standard	Standard	Standard
Close control				
Fan speed control (-10°C) – FS				
Low amb. temp. (-10°C with fan step control) – L1	n/a	n/a	Standard	Standard
Low amb. temp. (-20°C with crankcase heater, electrical cabinet heaters and fan speed control) – L2				
Low water temp. (-10°C)				
Anti-freeze heating				
BioEnergy aggressive ambients				
Eyebolts	Standard	Standard	n/a	n/a
Tropicalization (53°C, without ambient fill kit)	n/a			
Harting Plug				
Differential dynamic set point				
Siemens electrical components (no control)	On req.	On req.	On req.	On req.
No pump				
P15 pump				
P30 pump	Standard	Standard	Standard	Standard
P50 pump				
Twin P30# pumps	n/a	n/a	n/a	n/a

Hyperchill Plus Kits

	Hyperchill Plus Axial Kits			
	ICEP002-W Part Number	ICEP003-W Part Number	ICEP005-W Part Number	ICEP007-W Part Number
Fill kits[1] – ambient manual				
Fill kits[1] – ambient automatic				
Fill kits[1] – pressurised automatic			398H785312	398H785304
Remote control - base	398H785009	398H785009	398H785009	398H785010
Remote control - advanced				398H785307
Wheels	398H785302	398H785301	398H785301	398H785301
Control panel cover[1]				398H785303
Water filter[1]	398H785308	398H785308	398H785308	398H785309
Manual external by-pass[1]		398H785305	398H785305	398H785305

[1]ambient manual and automatic fill kit are supplied already installed; pressurised automatic fill kit, control panel cover, water filter (from mod. ICEP007) and manual external by-pass (from mod. ICEP007) can be supplied already installed or loose.

	Hyperchill Plus Axial Kits			
	ICEP010-W Part Number	ICEP014-W Part Number	ICEP020-W Part Number	ICEP024-W Part Number
Fill kits[1] – ambient manual				
Fill kits[1] – ambient automatic				
Fill kits[1] – pressurised automatic	398H785304	398H785304	398H785304	398H785304
Remote control - base	398H785010	398H785010	398H785010	398H785010
Remote control - advanced	398H785307	398H785307	398H785307	398H785307
Wheels	398H785301	398H785301		
Control panel cover[1]	398H785303	398H785303	398H785303	398H785303
Water filter[1]	398H785309	398H785309	n/a	n/a
Manual external by-pass[1]	398H785305	398H785305	398H785306	398H785306

[1] ambient manual and automatic fill kit are supplied already installed; pressurised automatic fill kit, control panel cover, water filter (from mod. ICEP007) and manual external by-pass (from mod. ICEP007) can be supplied already installed or loose.

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Hyperchill Plus Industrial Oil Chiller

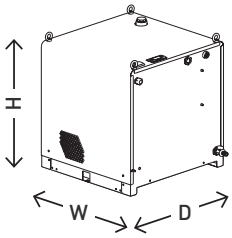
Industrial oil chillers designed to provide precise and accurate temperature control of industrial oils and cutting fluids for a wide variety of industrial applications, with cooling capacities from 1.6kW to 21kW.

Extremely compact and easy to use, Hyperchill Plus is designed for safe and reliable operation in the most varied working conditions, providing precise and accurate control of the oil/ cutting fluid temperature.

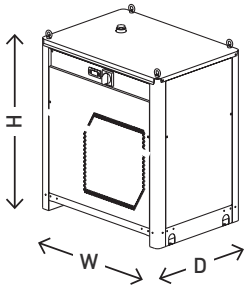
The availability of a wide range of accessories and options makes Hyperchill Plus a very flexible solution that fits the needs of a wide variety of industrial applications. With a stainless steel hydraulic circuit, Hyperchill Plus is suitable for cooling industrial oils or cutting liquids. Hyperchill Plus ensures stable working conditions, combined with improved efficiency and productivity of the process. Hyperchill Plus contributes significantly to the reduction of plant downtime and maintenance costs due to inconsistent cooling of industrial oils and cutting liquids. Each individual Hyperchill Plus unit is extensively tested to guarantee efficient operation and reliability in most working conditions.

Diagrams:

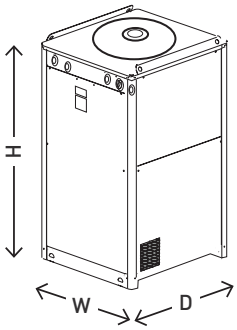
ICEP 002



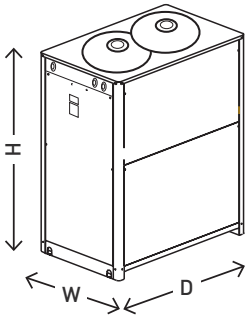
ICEP 003-005



ICEP 007-010-014



ICEP 020-024



For further product information visit **www.parker.com/gsfe**

Technical Data

Model	Cooling Capacity[1] kW	Compressor Abs. Power[1] kW	Power Supply V/ph/Hz	Protection Index	Refrigerant
ICEP002-O	1,6	0,6	230/1/50	33	R407c
ICEP003-O	3,5	1,6	230/1/50	33	R407c
ICEP005-O	4,4	1,6	230/1/50	33	R407c
ICEP007-O	7,3	1,9	400/3/50	54	R407c
ICEP010-O	9,8	2,9	400/3/50	54	R407c
ICEP014-O	13,9	3,6	400/3/50	54	R407c
ICEP020-O	18,2	4,8	400/3/50	54	R407c
ICEP024-O	21	6,0	400/3/50	54	R407c

Technical Data – Compressor

Model	Type	Compressors/Circuit	Max. Abs. Power[1] Compressor kW
ICEP002-O	hermetic pistons	1 / 1	0,7
ICEP003-O	hermetic pistons	1 / 1	1,3
ICEP005-O	hermetic pistons	1 / 1	1,5
ICEP007-O	scroll	1 / 1	2,4
ICEP010-O	scroll	1 / 1	3,8
ICEP014-O	scroll	1 / 1	4,4
ICEP020-O	scroll	1 / 1	5,7
ICEP024-O	scroll	1 / 1	6,6

Technical Data – Axial Fans

Model	Quantity	Max. Abs. Power[1] Fan kW	Air Flow m^3/h
ICEP002-O	1	0,07	430
ICEP003-O	1	0,12	1295
ICEP005-O	1	0,12	1295
ICEP007-O	1	0,3	3437
ICEP010-O	1	0,3	3437
ICEP014-O	1	0,4	4337
ICEP020-O	2	0,4	6878
ICEP024-O	2	0,4	6159

Technical Data – Water Cooled Version

Model	Condenser Water Flow m³/h	Condenser Connections in
ICEP002-O	N/A	N/A
ICEP003-O	N/A	N/A
ICEP005-O	N/A	N/A
ICEP007-O	N/A	N/A
ICEP010-O	N/A	N/A
ICEP014-O	1,5	3/4"
ICEP020-O	2,1	3/4"
ICEP024-O	2,5	3/4"

Technical Data – Noise Level

Model	Sound Pressure (axial)[2] dB(A)
ICEP002-O	52
ICEP003-O	52
ICEP005-O	52
ICEP007-O	53
ICEP010-O	53
ICEP014-O	50
ICEP020-O	50
ICEP024-O	50

[1] At oil in/out temperature 40/30°C, oil ISO VG 32, 32°C ambient temperature (air-cooled models) or 30°C condenser water inlet temperature with 40°C condensing temperature (water-cooled models)
[2] Referred to axial fan version in free field conditions at a distance of 10m from until, measured on condenser side, 1m from ground

Correction Factors

Ambient Temperature °C	5	10	15	20	25	30	35	40
(air cooled models) (f1)	1,18	1,18	1,12	1,07	1,04	1,00	0,97	0,93

Oil Outlet Temperature °C	20	25	30	35
(f2)	0,76	0,85	1	1,1

Oil Type	ISO VG 10	ISO VG 22	ISO VG 32	ISO VG 46	ISO VG 68
(f3)	1,15	1,1	1	0,9	0,82

To obtain the required cooling capacity, multiply the value at nominal conditions by the above correction factors (i.e. cooling capacity = Px f1 x f2 x f3, where P is the cooling capacity at the oil type ISO VG 32, oil outlet temperature of 30 °C, ambient conditions of 32 °C). The above correction factors are approximate: for a precise selection, always refer to the software selection programm.

Weights and Dimensions

Model	Width (W)	Depth (D)	Height (H)	Connections in/out	Weight (axial)	Weight (water cooled)
	mm	mm	mm	in	kg	kg
ICEP002-O	520	500	550	1/2"	30	N/A
ICEP003-O	755	535	801	3/4"	68	N/A
ICEP005-O	755	535	801	3/4"	70	N/A
ICEP007-O	756	806	1405	3/4"	125	N/A
ICEP010-O	756	806	1405	3/4"	130	N/A
ICEP014-O	756	806	1405	3/4"	140	N/A
ICEP020-O	756	1206	1405	1"	175	175
ICEP024-O	756	1206	1405	1"	185	185

Product Codes

Product Code Example: ICEP007-OATP00FS

Model		Cooling Capacity		-	Fluid To Be Cooled		Condensation		Power Supply		Pumps	
ICEP	Hyperchill Plus	xxx	kW		O	Oil	A	Air Axial	S	230V/1Ph/50Hz	P1	Single pump 1,5 bar
							W	Water	T	400V/3Ph/50Hz	P3	Single pump 3 bar
							T	Tropicalised	E	115V/1Ph/60Hz	P5	Single pump 5 bar
									F	230V/1Ph/60Hz	P0	Oil pump
									G	460V/3Ph/60Hz	00	No pump
									H	380V/3Ph/60Hz		
									L	230V/3Ph/60Hz		
									X	Special		

Control Water Temp		Low Ambient		Options	
C	Close control	FS	Fan speed control (Low Ambient -10°C)	P	Harting Plug for signals
0	No control	L1	Low ambient -10°C (fan step control)	S	Siemens Electrical Components
		L2	Low ambient -20°C	D	Differential Dynamic set point
		00	No low ambient	C	Control Panel Cover
				(NO DIGIT)	No options

Hyperchill Plus Oil Range 50Hz

Hyperchill Plus Oil Range Axial – Hyperchill Plus Air Axial Std (without pump and without tank)	
Model	**Part Number**
ICEP002-O	ICEP002-OAS00000
ICEP003-O	ICEP003-OAS00000
ICEP005-O	ICEP005-OAS00000
ICEP007-O	ICEP007-OAT00000
ICEP010-O	ICEP010-OAT00000
ICEP014-O	ICEP014-OAT00000
ICEP020-O	ICEP020-OAT000L1
ICEP024-O	ICEP024-OAT000L1

Hyperchill Plus Oil Range Water Cooled – Hyperchill Plus Air Axial (pressurised closed hydraulic circuit with P30 pump)	
Model	**Part Number**
ICEP014-O	ICEP014-OWT00000
ICEP020-O	ICEP020-OWT00000
ICEP024-O	ICEP024-OWT00000

Hyperchill Plus Oil Range 60Hz[1]

Hyperchill Plus Oil Range Axial – Hyperchill Plus Air Axial Std (without pump and without tank)	
Model	**Part Number**
ICEP002-O	ICEP002-OAF00000
ICEP003-O	ICEP003-OAF00000
ICEP005-O	ICEP005-OAF00000
ICEP007-O	ICEP007-OAG00000
ICEP010-O	ICEP010-OAG00000
ICEP014-O	ICEP014-OAG00000
ICEP020-O	ICEP020-OAG000L1
ICEP024-O	ICEP024-OAG000L1

[1] ICEP002: UL compliant
ICEP003-024: UL listed

Hyperchill Plus Oil Range Options

	Hyperchill Plus Oil Axial Options			
	ICEP002-O	**ICEP003-O**	**ICEP005-O**	**ICEP007-O**
Oil tank	n/a	n/a	n/a	n/a
Close control	n/a			
Fan speed control (-10°C) – FS	n/a	n/a	n/a	
Low amb. temp. (-10°C with fan step control) – L1	n/a	n/a	n/a	n/a
Low amb. temp. (-20°C) – L2	n/a	n/a	n/a	
Eyebolts	Standard	Standard	Standard	Standard
Tropicalization (53°C, without ambient fill kit)	n/a	n/a	n/a	n/a
Harting Plug				
Differential dynamic set point	n/a	n/a	n/a	
Siemens electrical components (no control)	On req.	On req.	On req.	On req.
No pump	Standard	Standard	Standard	Standard
Oil pump	On req.	On req.	On req.	On req.

Hyperchill Plus Oil Range Options

	Hyperchill Plus Oil Axial Options			
	ICEP010-O	ICEP014-O	ICEP020-O	ICEP024-O
Oil tank	n/a	n/a	n/a	n/a
Close control				
Fan speed control (-10°C) – FS				
Low amb. temp. (-10°C with fan step control) – L1	n/a	n/a	Standard	Standard
Low amb. temp. (-20°C) – L2				
Eyebolts	Standard	Standard	n/a	n/a
Tropicalization (53°C, without ambient fill kit)	n/a			
Harting Plug				
Differential dynamic set point				
Siemens electrical components (no control)	On req.	On req.	On req.	On req.
No pump	Standard	Standard	Standard	Standard
Oil pump	On req.	On req.	On req.	On req.

Hyperchill Plus Oil Range Kits

	Hyperchill Plus Oil Axial Kits			
	ICEP002-O Part Number	ICEP003-O Part Number	ICEP005-O Part Number	ICEP007-O Part Number
Remote control - base	398H785009	398H785009	398H785009	398H785010
Remote control - advanced				398H785307
Wheels	398H785302	398H785301	398H785301	398H785301
Control panel cover[1]				398H785303

[1] Control panel cover can be supplied loose or already installed.

	Hyperchill Plus Oil Axial Kits			
	ICEP010-O Part Number	ICEP014-O Part Number	ICEP020-O Part Number	ICEP024-O Part Number
Remote control - base	398H785010	398H785010	398H785010	398H785010
Remote control - advanced	398H785307	398H785307	398H785307	398H785307
Wheels	398H785301	398H785301		
Control panel cover[1]	398H785303	398H785303	398H785303	398H785303

[1] Control panel cover can be supplied loose or already installed.

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Hyperchill Industrial Process Chiller

Extremely compact and easy to use, Hyperchill ensures an accurate control of water temperature. Each model is designed for safe and reliable operation in the most varied working conditions, thanks to the modern technical solutions used and the availability of a wide range of accessories and options. Each individual Hyperchill unit is extensively tested to guarantee efficient operation and reliability in all working conditions.

- Hydraulic circuit: water tank, immersed evaporator, pump with bypass provide a compact and easy to install solution
- Electronic controllers with proprietary software provide access to all the parameters of the units and allow special management for any specific need
- Available with remote monitoring
- Completely configurable with many options and kits to fit many industrial applications needs
- Condenser filters
- Independent condensing plenum
- Full access and easy service design

For further product information visit **www.parker.com/gsfe**

Technical Data

Model	Cooling Capacity[1] kW	Compressor abs. Power[1] kW	Power Supply V/ph/Hz	Protection Index	Refrigerant
ICE029	28,1	5,7	400/3/50 no neutral	54	R407C
ICE039	38,2	7,7	400/3/50 no neutral	54	R407C
ICE046	45,2	10,1	400/3/50 no neutral	54	R407C
ICE057	56,4	12,3	400/3/50 no neutral	54	R407C
ICE076	76,0	15,4	400/3/50 no neutral	54	R407C
ICE090	90,2	20,3	400/3/50 no neutral	54	R407C
ICE116	115,5	24,9	400/3/50 no neutral	54	R407C
ICE150	149,2	30,8	400/3/50 no neutral	54	R407C
ICE183	182,3	40,1	400/3/50 no neutral	54	R407C
ICE230	228	51,4	400/3/50 no neutral	54	R407C
ICE310	309	65	400/3/50 no neutral	54	R407C
ICE360	360	82	400/3/50 no neutral	54	R407C

[1] At water in/out temperature = 20/15 °C, glycol 0 %, either 25 °C ambient temperature (air-cooled models) or 25 °C condenser water inlet temperature with 35°C condensing temperature (water-cooled models)

Technical Data – Compressor

Model	Type	Compressors / Circuit	Max. abs. Power – 1 Comp. kW
ICE029	Ermetic scroll	1/1	7,8
ICE039	Ermetic scroll	1/1	11,1
ICE046	Ermetic scroll	1/1	13,7
ICE057	Ermetic scroll	1/1	16,8
ICE076	Ermetic scroll	2/2	11,1
ICE090	Ermetic scroll	2/2	13,7
ICE116	Ermetic scroll	2/2	16,8
ICE150	Ermetic scroll	4/2	11,1
ICE183	Ermetic scroll	4/2	13,7
ICE230	Ermetic scroll	4/2	16,8
ICE310	Ermetic scroll	4/2	23,3
ICE360	Ermetic scroll	4/2	28,7

Technical Data – Axial Fans

Model	Quantity	Max. abs. Power – 1 Fan kW	Air Flow m^3/h
ICE029	1	0,78	9200
ICE039	2	0,61	12400
ICE046	2	0,61	12000
ICE057	3	0,61	17400
ICE076	3	0,78	25500
ICE090	3	0,78	25000
ICE116	3	0,78	26400
ICE150	2	2	47000
ICE183	2	2	46000
ICE230	3	2	66000
ICE310	4	2	88000
ICE360	4	2	88000

Technical Data – Centrifugal Fans

Model	Quantity	Max. abs. Power – 1 Fan kW	Air Flow m^3/h	Head Pressure Pa
ICE029	2	1,1	9200	200
ICE039	2	1,1	12400	180
ICE046	2	1,1	12000	160
ICE057	3	1,1	17400	200
ICE076	3	1,5	25500	100
ICE090	3	1,5	25000	100
ICE116	3	1,5	26400	100
ICE150	3	3	47000	180
ICE183	3	3	46000	180
ICE230	3	3	66000	130
ICE310	n/a	n/a	n/a	n/a
ICE360	n/a	n/a	n/a	n/a

Technical Data – Water Cooled Version

Model	Condenser Water Flow m^3/h	Condenser Connections in
ICE029	2,4	1 1/4"
ICE039	4,0	1 1/4"
ICE046	5,6	1 1/4"
ICE057	8,0	1 1/4"
ICE076	11,1	1 1/4"
ICE090	11,5	1 1/4"
ICE116	16,6	1 1/4"
ICE150	19,2	1 1/4"
ICE183	31,0	1 1/4"
ICE230	33,0	1 1/2"
ICE310	n/a	n/a
ICE360	n/a	n/a

Technical Data – Pump P30

Model	Max. abs. Power kW	Water Flow (nom/max)[1] m^3/h	Head Pressure (nom/min)[1] m H_20
ICE029	1,3	4,8/9,6	27/17
ICE039	1,3	6,6/9,6	24/17
ICE046	2,3	7,8/18	28/22
ICE057	2,3	9,7/18	27/22
ICE076	2,5	13/31	23/13
ICE090	2,7	15/27	28/16
ICE116	2,7	20/27	25/16
ICE150	4,5	25/50	34/20
ICE183	4,5	30/50	32/20
ICE230	4,5	39/50	26/20
ICE310	8,4	53/90	26/19
ICE360	8,4	62/90	23/19

[1] At water in/out temperature = 20/15 °C, glycol 0 %, either 25 °C ambient temperature (air-cooled models) or 25 °C condenser water inlet temperature with 35°C condensing temperature (water-cooled models)

Technical Data – Noise Level

Model	Sound Pressure (axial)[2] dB(A)
ICE029	53
ICE039	52
ICE046	52
ICE057	56
ICE076	58
ICE090	58
ICE116	58
ICE150	62
ICE183	62
ICE230	64
ICE310	65
ICE360	65

[2] Referred to axial fan version in free field conditions at a distance of 10m from unit, measured on condenser side, 1m from ground.

Correction Factors

Ambient Temp. (air-cooled models) °C	5	10	15	20	25	30	35	40	45
Correction Factor (f1)	1,05	1,05	1,05	1,05	1	0,95	0,89	0,83	0,77

Water Outlet Temperature °C	5	10	15	20	25
Correction Factor (f2)	0,72	0,86	1	1	1

Glycol %	0	10	20	30	40	50
Correction Factor (f3)	1	0,99	0,98	0,97	0,96	0,94

Condenser Water Inlet Temp. (water-cooled models) °C	20	25	30	35	40
Correction Factor (f4)	1,05	1	0,95	0,9	0,85

To obtain the required cooling capacity multiply the value at nominal conditions by the above correction factors (i.e. cooling capacity = Pxf1xf2xf3xf4, where P is the cooling capacity at conditions (1)). Hyperchill, in its standard configuration, can operate up to ambient temperatures of max 45 °C and min. 5 °C and water temperatures of max 30 °C inlet and min. 0 °C outlet. The above correction factors are approximative: for a precise selection always refer to the software selection program.

Weights and Dimensions

Model	Width mm	Depth mm	Height mm	Connections in	Tank Capacity l	Weight (axial) kg	Weight (centrifugal) kg	Weight (water cooled) kg
ICE029	1650	744	1358	1 1/2"	180	380	410	380
ICE039	1650	744	1358	1 1/2"	180	410	450	410
ICE046	1650	744	1358	1 1/2"	250	430	480	430
ICE057	2200	744	1358	1 1/2"	300	520	610	520
ICE076	2200	898	1984	2"	500	800	950	800
ICE090	2200	898	1984	2"	500	900	1050	900
ICE116	2200	898	1984	2"	500	1000	1150	1000
ICE150	3000	1287	2298	2 1/2"	1000	1500	1700	1500
ICE183	3000	1287	2298	2 1/2"	1000	1800	2000	1800
ICE230	3260	1287	2298	2 1/2"	1000	2100	2300	2100
ICE310	4200	1500	2240	4"	400	2900	n/a	n/a
ICE360	4200	1500	2240	4"	400	3100	n/a	n/a

Hyperchill Axial – Hyperchill Air Axial Ferrous Standard Version

Model	Part Number
ICE029	ICE029A4003501P30FF000000
ICE039	ICE039A4003501P30FF000000
ICE046	ICE046A4003501P30FF000000
ICE057	ICE057A4003501P30FF000000
ICE076	ICE076A4003501P30FF000000
ICE090	ICE090A4003501P30FF000000
ICE116	ICE116A4003501P30FF000000
ICE150	ICE150A4003501P30FF000000
ICE183	ICE183A4003501P30FF000000
ICE230	ICE230A4003501P30FF000000
ICE310	ICE310A4003500000F00LA000
ICE360	ICE360A4003500000F00LA000

Hyperchill Centrifugal – Hyperchill Air Centrifugal Ferrous Standard Version

Model	Part Number
ICE029	ICE029C4003501P30FF000000
ICE039	ICE039C4003501P30FF000000
ICE046	ICE046C4003501P30FF000000
ICE057	ICE057C4003501P30FF000000
ICE076	ICE076C4003501P30FF000000
ICE090	ICE090C4003501P30FF000000
ICE116	ICE116C4003501P30FF000000
ICE150	ICE150C4003501P30FF000000
ICE183	ICE183C4003501P30FF000000
ICE230	ICE230C4003501P30FF000000

Hyperchill Water Cooled – Hyperchill Air Centrifugal Ferrous Standard Version

Model	Part Number
ICE029	ICE029W4003501P30FF000000
ICE039	ICE039W4003501P30FF000000
ICE046	ICE046W4003501P30FF000000
ICE057	ICE057W4003501P30FF000000
ICE076	ICE076W4003501P30FF000000
ICE090	ICE090W4003501P30FF000000
ICE116	ICE116W4003501P30FF000000
ICE150	ICE150W4003501P30FF000000
ICE183	ICE183W4003501P30FF000000
ICE230	ICE230W4003501P30FF000000

Hyperchill Options

	Hyperchill Axial Options					
	ICE029	ICE039	ICE046	ICE057	ICE076	ICE090
Water tank	Standard	Standard	Standard	Standard	Standard	Standard
Close control						
"Non-Ferrous"						
Low amb. temp. (-10°C)[1]						
Low amb. temp. (-20°C)[1,2]						
Low water temp. (-10°C)						
Anti-freeze heating						
BioEnergy aggressive ambients[1]						
No pump						
P15 pump						
P30 pump	Standard	Standard	Standard	Standard	Standard	Standard
P50 pump						
Twin P30 pump[3]						

	Hyperchill Axial Options					
	ICE116	ICE150	ICE183	ICE230	ICE310	ICE360
Water tank	Standard	Standard	Standard	Standard		
Close control					n/a	n/a
"Non-Ferrous"					Not available	Not available
Low amb. temp. (-10°C) [1]					Standard	Standard
Low amb. temp. (-20°C) [1,2]					On req.	On req.
Low water temp. (-10°C)					On req.	On req.
Anti-freeze heating					On req.	On req.
BioEnergy aggressive ambients[1]						
No pump					Standard	Standard
P15 pump					On req.	On req.
P30 pump	Standard	Standard	Standard	Standard		
P50 pump						
Twin P30 pump[3]						

[1] Not available for centrifugal and water cooled versions
[2] Low ambient temperature -20°C includes fan speed control, compressor crankcase heater and electrical panel heater
[3] Twin pumps refers to 2 pumps installed in parallel within the chiller itself, with the second pump acting as a reserve for the first. The pumps are controlled automatically.

Hyperchill Kits

	ICE029 Part Number	ICE039 Part Number	ICE046 Part Number	ICE057 Part Number
Fill kits – ambient manual	398H785054	398H785054	398H785054	398H785054
Fill kits – ambient automatic	398H785051	398H785051	398H785051	398H785051
Fill kits – pressurised automatic	398H785055	398H785055	398H785055	398H785055
Remote control – base	398H785010	398H785010	398H785010	398H785010
Remote control - advanced	398H785011	398H785011	398H785011	398H785011
Control panel cover	398H785089	398H785089	398H785089	398H785089

	ICE076 Part Number	ICE090 Part Number	ICE116 Part Number	ICE150 Part Number
Fill kits – ambient manual	398H785054	398H785054	398H785054	398H785053
Fill kits – ambient automatic	398H785051	398H785051	398H785051	398H785052
Fill kits – pressurised automatic	398H785055	398H785055	398H785055	398H785055
Remote control – base	398H785010	398H785010	398H785010	398H785010
Remote control - advanced	398H785011	398H785011	398H785011	398H785011
Control panel cover	398H785089	398H785089	398H785089	398H785089

	ICE183 Part Number	ICE230 Part Number	ICE310 Part Number	ICE360 Part Number
Fill kits – ambient manual	398H785053	398H785053		
Fill kits – ambient automatic	398H785052	398H785052		
Fill kits – pressurised automatic	398H785055	398H785055		
Remote control – base	398H785010	398H785010	398H785010	398H785010
Remote control - advanced	398H785011	398H785011	398H785011	398H785011
Control panel cover	398H785089	398H785089	398H785089	398H785089

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Parker Hiross

Hyperchill Laser Industrial Process Chiller

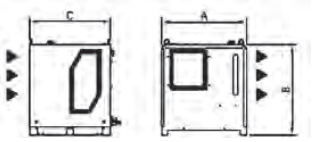
Ideal for the precision cooling of water used typically in laser marking, cutting and welding processes.

The performance of high-powered lasers depends on effective cooling. High-powered lasers generate a significant amount of heat that must be removed from the laser system to avoid overheating critical components. Carbon dioxide (CO_2) lasers, excimer lasers, ion lasers, solid-state lasers, and dye lasers all use liquid cooling to remove excess heat. Laser liquid cooling can help accomplish three goals:

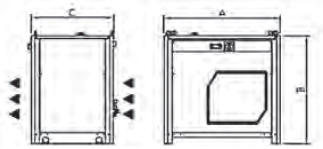
- Maintaining a precise laser wavelength and higher output efficiency
- Achieving desired beam quality
- Reducing thermal stress on a laser system.

Diagrams:

ICEP002



ICEP003-005



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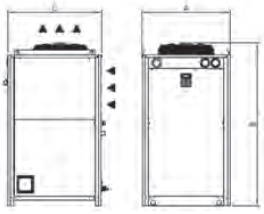
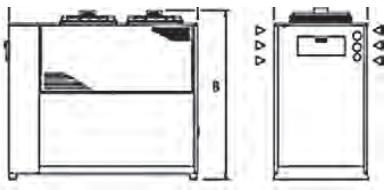


HLS029-116



Parker

Technical Data

Model	Cooling Capacity[1] kW	Compressor Abs. Power[1] kW	Cooling Capacity[2] kW	Compressor Abs. Power[2] kW	Power Supply V/ph/Hz	Protection Index	Refrigerant
HLS029	28,1	5,7	25,6	6,9	400/3/50 no neutral	54	R407c
HLS039	38,2	7,7	34,0	9,4	400/3/50 no neutral	54	R407c
HLS046	45,2	10,1	43,0	12,6	400/3/50 no neutral	54	R407c
HLS057	56,4	12,3	52,9	15,3	400/3/50 no neutral	54	R407c
HLS076	76,0	15,4	67,1	18,7	400/3/50 no neutral	54	R407c
HLS090	90,2	20,3	79,9	24,2	400/3/50 no neutral	54	R407c
HLS116	115,5	24,9	101,3	29,9	400/3/50 no neutral	54	R407c

Technical Data - Compressors

Model	Type	Compressors/Circuits	Max Abs, Power[1] Comp. kW
HLS029	hermetic scroll	1/1	7,8
HLS039	hermetic scroll	1/1	11,1
HLS046	hermetic scroll	1/1	13,7
HLS057	hermetic scroll	1/1	16,8
HLS076	hermetic scroll	2/2	11,1
HLS090	hermetic scroll	2/2	13,7
HLS116	hermetic scroll	2/2	16,8

Technical Data - Axial Fans

Model	Quantity	Max. Abs. Power[1] Fan kW	Air Flow m^3/h
HLS029	2	0,78	9200
HLS039	2	0,61	12400
HLS046	2	0,61	12000
HLS057	3	0,61	17400
HLS076	3	0,78	25500
HLS090	3	0,78	2500
HLS116	3	0,78	26400

Technical Data – Pump P30

Model	Max. Abs. Power[1] kW	Water Flow (nom/max)[1] m^3/h	Head Pressure (nom/min)[1] m H_2O
HLS029	1,3	4,8/9,6	27/17
HLS039	1,3	6,6/9,6	24/17
HLS046	2,3	7,8/18	28/23
HLS057	2,3	9,7/18	27/23
HLS076	2,7	13,1/27	30/18
HLS090	2,7	15,5/27	28/18
HLS116	2,7	19,8/27	25/18

Technical Data – Pump P50

Model	Max Abs. Power kW	Water Flow (nom/max)[1] m^3/h	Head Pressure (nom/min)[1] m H_2O
HLS029	2,6	4,8/9	55/38
HLS039	3,1	6,6/13	48/37
HLS046	3,1	7,8/13	47/37
HLS057	3,7	9,7/13	52/46
HLS076	4,5	13,2/27	47/30
HLS090	4,5	15,5/27	45/30
HLS116	4,5	19,8/27	40/30

Technical Data - Noise

Model	Sound Pressure (axial) dB(A)
HLS029	53
HLS039	52
HLS046	52
HLS057	56
HLS076	58
HLS090	58
HLS116	58

(1) at water inlet/outlet temperature = 20/15 °C, glycol 0 %, ambient temperature 25 °C. Net cooling capacity, without pump heat load.
(2) at water inlet/outlet temperature = 25/20 °C, glycol 0 %, ambient temperature 35 °C. Net cooling capacity, without pump heat load.

Correction Factors

Ambient Temperature °C	5	10	15	20	25	30	35	40	45
(f1)	1,05	1,05	1,05	1,05	1	0,95	0,89	0,84	0,77

Water Outlet Temperature °C	5	10	15	20	25
(f2)	0,72	0,86	1	1	1

Glycol (in weight) %	0	10	20	30
(f3)	1	0,99	0,98	0,97

To obtain the required cooling capacity multiply the value at nominal conditions by the above correction factors (i.e. cooling capacity = Pxf1xf2xf3, where P is the cooling capacity at conditions (1). Hyperchill Laser, in its standard configuration, can operate up to ambient temperatures of max 48 °C for ICEP models, 45 °C for HLS models and min 5 °C and water temperatures of max 30 °C inlet and min. 0 °C outlet. The above correction factors are approximative: for a precise selection always refer to the software selection program.

Weights and Dimensions

Model	Width mm	Depth mm	Height mm	Connections in	Tank Capacity l	Weight (axial) kg
HLS029	1650	748	1358	1"	100	321
HLS039	1650	748	1358	1¼"	100	355
HLS046	1650	748	1358	1¼"	100	375
HLS057	2200	748	1358	1½"	200	500
HLS076	2200	898	1984	2"	300	750
HLS090	2200	898	1984	2"	300	870
HLS116	2200	898	1984	2"	300	960

Product Codes

Product Code Example: ICE029A4003501P15FFC00000

Model		Cooling Capacity		-	Condensation		Power Supply		Pumps		Material	
ICE	Hyperchill	xxx	kW		A	Air Axial	400350	400V/3Ph/50Hz	1P15	Single pump 1,5 bar	FF	Ferrous with tank
HLS	Hyperchill laser				W	Water	460360	460V/3Ph/60Hz	1P30	Single pump 3 bar	NF	Non ferrous with tank
					C	Centrifugal	230360	230V/3Ph/60Hz	2P30	Twin pumps 3 bar	SS	Stainless steel with tank
					B	Air Axial Bioenergy	xxxxxx	Special	1P50	Single pump 5 bar	F0	Ferrous no tank
									0000	No pump		

Control Water Temp		Low Ambient		Low Water		Antifreeze	
C	Close control	LA	Low ambient	LW	Low water	A	With antifreeze
0	No control	00	No low ambient	00	No low water	0	Without antifreeze

Hyperchill Laser Range 50Hz

Model	Part Number
HLS029	HLS029A4003501P30SS000000
HLS039	HLS039A4003501P30SSCLA000
HLS046	HLS046A4003501P30SSCLA000
HLS057	HLS057A4003501P30SSCLA000
HLS076	HLS076A4003501P30SSCLA000
HLS090	HLS090A4003501P30SSCLA000
HLS116	HLS116A4003501P30SSCLA000

Hyperchill Laser Options

	HLS029	HLS039	HLS046	HLS057
Close control		Standard	Standard	Standard
Anti-freeze heating				
Low amb. temp. (-10°C)		Standard	Standard	Standard
P30 pump	Standard	Standard	Standard	Standard
P50 pump				

	HLS076	HLS090	HLS116
Close control	Standard	Standard	Standard
Anti-freeze heating			
Low amb. temp. (-10°C)	Standard	Standard	Standard
P30 pump	Standard	Standard	Standard
P50 pump			

Hyperchill Laser Kits

	HLS029 Part Number	HLS039 Part Number	HLS046 Part Number	HLS057 Part Number
Remote control - base	398H785010	398H785010	398H785010	398H785010
Remote control - advanced	398H785011	398H785011	398H785011	398H785011
Fill kits ambient manual	Standard	Standard	Standard	Standard
Control panel cover	398H785089	398H785089	398H785089	398H785089
Hydraulic by-pass	398H785068	398H785069	398H785069	398H785070
Flow switch	398H785072	398H785073	398H785073	398H785074
Automatic check valves kit	398H780112	398H780113	398H780113	398H780114

	HLS076 Part Number	HLS090 Part Number	HLS116 Part Number
Remote control - base	398H785010	398H785010	398H785010
Remote control - advanced	398H785011	398H785011	398H785011
Fill kits ambient manual	Standard	Standard	Standard
Control panel cover	398H785089	398H785089	398H785089
Hydraulic by-pass	On Request	On Request	On Request
Flow switch	On Request	On Request	On Request
Automatic check valves kit	On Request	On Request	On Request

For further product information visit **www.parker.com/gsfe**

APPENDIX

International Breathing Air Standards

Contaminants	OSHA Grade D	CSA Z180.1	European Pharmacopoeia	Parker domnick hunter BA-DME/BAM Range
Water	-	Pressure dewpoint of 5°C below lowest system temperature	67 ppm (= -45°C atmospheric dewpoint)	14 ppm (= -58°C atmospheric dewpoint)
Oil/Lubricant	5mg/m^3	< 1mg/m^3	0.1 mg/m^3	0.003 mg/m^3
Carbon Dioxide (CO_2)	< 1000 ppm	< 500 ppm	< 500 ppm	< 500 ppm
Carbon Monoxide (CO)	< 10 ppm	<5 ppm	< 5 ppm	< 5 ppm
Nitrogen Oxides (NO + NO_2)	-	-	< 2 ppm	< 2 ppm
Sulphur Dioxide (SO_2)	-	-	< 1 ppm	< 1 ppm

Metric Conversions

Pressure

From	To	Multiply By
atm	bar	1.01325
atm	MPa	0.10132
atm	PSI	14.696
bar	atm	0.98692
bar	MPa	0.1
bar	PSI	14.504
MPa	atm	9.8692
MPa	bar	10
MPa	PSI	145.0
PSI	atm	0.068
PSI	bar	0.0689
PSI	MPa	0.00689

Key:
atm = atmosphere
MPa = mega pascal
PSI = pounds / square inch

Flow

From	To	Multiply By
CFM	l/min	28.32
CFM	l/s	0.472
CFM	m^3/h	1.699
l/min	CFM	0.0353
l/min	l/s	0.0167
l/min	m^3/h	0.06
l/s	CFM	2.119
l/s	l/min	60
l/s	m^3/h	3.6
m^3/h	CFM	0.5886
m^3/h	l/min	16.667
m^3/h	l/s	0.2777

Key:
CFM = cubic feet / minute
m^3/h = cubic metre / hour
l/min = litre / minute
l/s = litre / second

Length

From	To	Multiply By
ft	inch	12
ft	m	0.3048
ft	mm	304.8
inch	ft	0.0833
inch	m	0.0254
inch	mm	25.4
m	ft	3.28083
m	inch	39.3699
m	mm	1000
mm	ft	0.00328
mm	inch	0.0393
mm	m	0.001

Key:
ft = foot
m = metre
mm = millimetre

Mass

From	To	Multiply By
g	kg	0.001
g	lb	0.0022
g	oz	0.0352
kg	g	1000
kg	lb	2.205
kg	oz	35.273
l	g	453.9
lb	kg	0.4539
lb	oz	16
oz	g	28.349
oz	kg	0.0283
oz	lb	0.0625

Key:
g = gram
kg = kilogram
lb = pound
oz = ounce

Volume

From	To	Multiply By
ft^3	gal UK	6.228
ft^3	gal US	7.48
ft^3	l	28.32
ft^3	m^3	0.0283
gal UK	ft^3	0.1605
gal UK	gal US	1.2009
gal UK	l	4.546
gal UK	m^3	0.0045
gal US	ft^3	0.1336
gal US	gal UK	0.8326
gal US	l	3.785
gal US	m3	0.0037
l	ft^3	0.0353
l	gal UK	0.220
l	gal US	0.264
l	m^3	0.001
m^3	ft^3	35.3
m^3	gal UK	219.96
m^3	gal US	264.17
m^3	l	1000

Key:
ft^3 = cubic foot
gal UK = gallon UK
gal US = gallon US
l = litre
m^3 = cubic metere

Force

From	To	Multiply By
lbf	kp	0.454
lbf	N	4.448
kp	lbf	2.205
kp	N	9.806
N	lbf	0.2248
N	kp	0.1020

Key:
lbf = pound force
kp = kilogram force
N = newton

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