



Balston
Membrane Air Dryers

Applications

Low dewpoint instrument air	Analytical instrumentation
Pneumatic equipment	Prevention of freeze-ups
Pressurizing electronic cabinets	Dry air for hazardous areas
	General laboratory air supply

- "We have not had one shutdown due to freeze-ups since the Balston Membrane Dryer was installed."

Peter Vogt
International Filler Corp.

Offer a reliable, efficient, and economical alternative to pressure swing and refrigerant dryer technologies

Require no electricity thus lowering operating costs

Dewpoints as low as -40°F (-40°C) prevent freeze-ups

Explosion proof

Silent operation

No desiccant to change

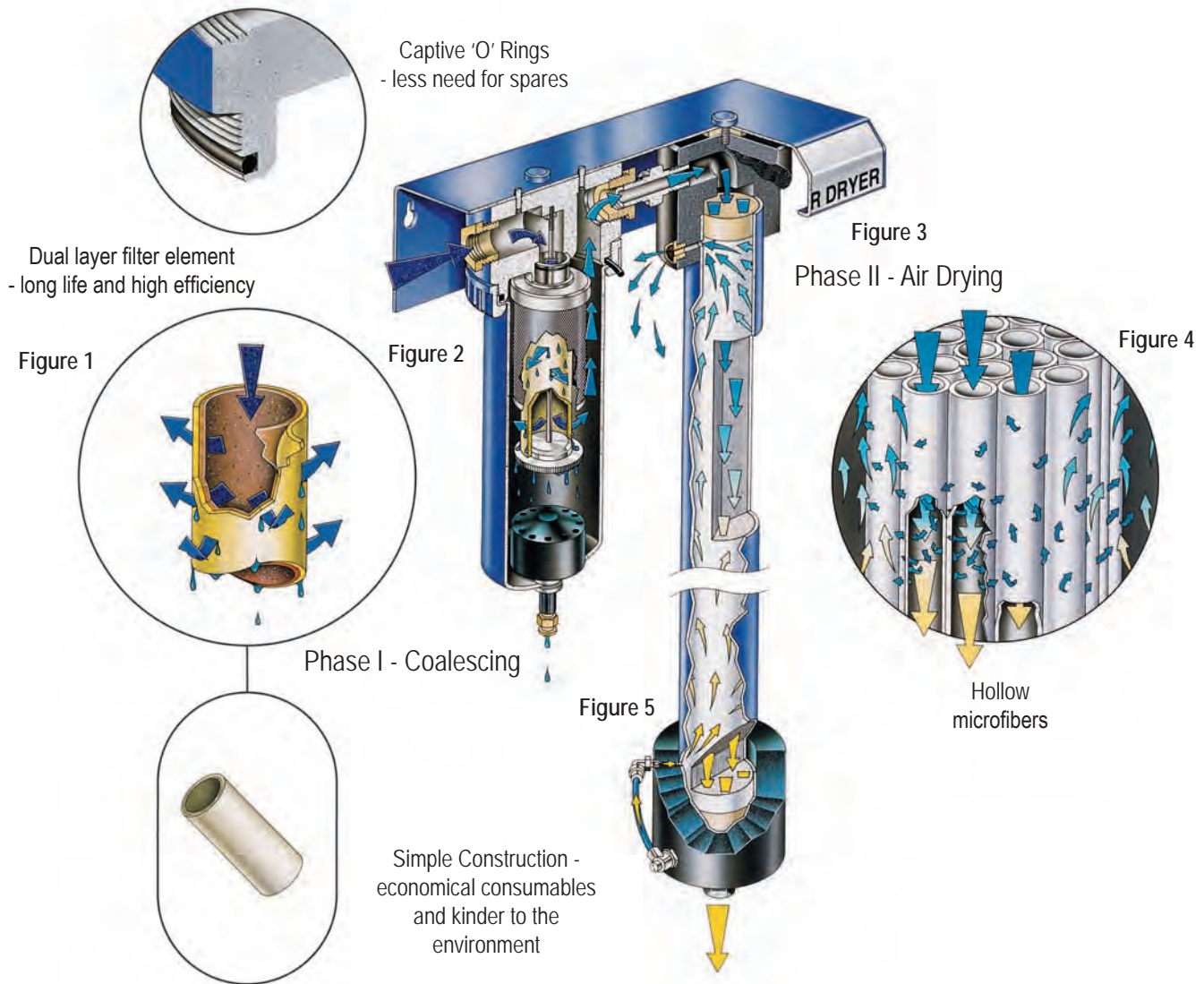
Models 76-01, 76-02, 76-10, 76-20, 76-40,

Balston Membrane Air Dryers combine a superior coalescing technology with a proven, innovative membrane system to supply clean, dry compressed air with dewpoints as low as -40°F (-40°C). The Balston Membrane Dryers are available in 6 different models which can deliver compressed air at flow rates up to 40 SCFM with a -40°F (-40°C) dewpoint. The Balston Membrane Air Dryers are engineered for easy installation, operation, and long term reliability. The dryers incorporate high efficiency coalescing filtration and the highest efficiency membrane available to provide low cost operation and minimal maintenance.

State-of-the-Art Membrane Technology

Water vapor from the compressed air supply passes through the hollow fibers of the membrane. At the same time, a small portion of the dry air product is redirected along the length of the fibers to sweep out the water vapor laden air which has permeated the membrane. The moisture-laden sweep gas is then vented to the atmosphere, and clean, dry air is supplied to the application. The drying power of the membrane is controlled by varying the compressed air flow rate and pressure. The Balston Membrane Air Dryer is designed to operate continuously, 24 hours per day, 7 days per week. The only maintenance required is changing the prefilter cartridge once a year. This annual maintenance takes approximately 5 minutes.

Membrane Air Dryer - Principle of Operation



Phase I - Coalescing Filtration

Prior to entering the membrane drying module, the compressed air passes through a high efficiency coalescing filter to remove oil and water droplets and particulate contamination with an efficiency of 99.99% at 0.01 micron. The liquids removed by the filter cartridge continuously drip from the filter cartridge into the bottom of the housing, where they are automatically emptied by an autodrain assembly (see Fig. 1 and Fig. 2). The air leaving the prefilter, therefore, is laden only with water vapor, which will be removed in the membrane module.

Phase II - Drying

The water vapor in the compressed air is removed by the principle of selective permeation through a membrane (see Fig. 3). The membrane module consists of bundles of hollow membrane fibers (see Fig. 4), each permeable only to water vapor. As the compressed air passes through the center of these fibers, water vapor permeates through the walls of the fiber, and dry air exits from the other end of the fiber. A small portion of the dry air (regeneration flow) is redirected along the length of the membrane fiber to carry away the moisture-laden air which surrounds the membrane fibers. The remainder of the dry air is piped to the application.



Model 76-01



Model 76-02



Model 76-10






Model 76-20



Model 76-40

Flow Rates					
Outlet Flow (SCFM) at Indicated Operating Pressure (psig) for -40°F (-40°C) Atmospheric Dewpoint					
Pressure Dewpoint	60 psig -40°F (-40°C)	80 psig -40°F (-40°C)	100 psig -40°F (-40°C)	120 psig -40°F (-40°C)	140 psig -40°F (-40°C)
Model 76-01	.3	.6	1	1.3	1.7
Model 76-02	.6	1	2	2.4	3.4
Model 76-10	3.0	5	10	13	17
Model 76-20	6.0	10	20	26	34
Model 76-40	12.0	20	40	52	68

Membrane Module Regeneration Flow					
Regeneration Flow (SCFM) at Indicated Operating Pressure (psig) and all dewpoints					
Pressure Dewpoint	60 psig	80 psig	100 psig	120 psig	140 psig
Model 76-01	.2	.2	.3	.3	.3
Model 76-02	.34	.4	.5	.6	.7
Model 76-10	1.7	2.1	2.5	3	3.3
Model 76-20	3.4	4.2	5	6	6.6
Model 76-40	6.8	8.4	10	12	14

Principal Specifications					
Model	76-01	76-02	76-10	76-20	76-40
Max. Flow Rate At -40°F (-40°C) Dewpoint (1)	1 SCFM	2 SCFM	10 SCFM	20 SCFM	40 SCFM
Min/Max Inlet Air Temp. (2)	40°F/120°F (4°C/49°C) 				
Ambient Temp. Range	40°F - 120°F (4°C - 49°C) 				
Min/Max Inlet Pressure	60 psig/150 psig 				
Compressed Air Requirement	Total Air Consumption: Regeneration Flow + Outlet Flow Requirements (see tables on pg.166)				
Max. Pressure Drop (3)	5 psid	5 psid	5 psid	5 psid	5 psid
Wall Mountable	Yes	Yes	Yes	Yes	Yes
Prefilter (included) (4)	Yes	Yes	Yes	Yes	Yes
Inlet/Outlet Port Size	1/4" NPT (female)	1/4" NPT (female)	1/2" NPT (female)	1" NPT (female)	1 1/2" NPT (female)/ 3/4" NPT (female)
Electrical Requirements	None	None	None	None	None
Dimensions	6"W x 22"H x 5"D (15cm x 58cm x 13cm)	6"W x 23"H x 5"D (15cm x 58cm x 13cm)	6"W x 37"H x 5"D (15cm x 94cm x 13cm)	12"W x 37"H x 7"D (30cm x 94cm x 18cm)	19"W x 39"H x 8"D (48cm x 99cm x 21cm)
Shipping Weight	9 lbs. (4 kg)	10 lbs. (5 kg)	18 lbs. (9 kg)	20 lbs. (9 kg)	35 lbs. (16 kg)

Notes:

1 Dewpoint specified for saturated inlet air at 100°F (38°C) and 100 psig. Outlet flows will vary slightly for other inlet conditions.

2 Inlet compressed air dewpoint must not exceed the ambient air temperature.
3 5 psid at -40°F (-40°C) dewpoint operating parameters.

4 If compressed air is extremely contaminated, a Balston Grade DX prefilter should be installed directly upstream from the membrane dryer.

Ordering Information

For Assistance, call toll-free at 1-800-343-4048 8AM to 5PM Eastern Time

Description	Model Number				
Balston Membrane Air Dryer	76-01	76-02	76-10	76-20	76-40
Replacement Prefilter Cartridges	100-12-BX	100-12-BX	100-18-BX	150-19-BX	200-35-BX
Optional Additional Coalescing Prefilter	2004N-1B1-DX	2004N-1B1-DX	2104N-1B1-DX	2008N-1B1-DX	2312N-1B1-DX
Replacement Filter Cartridges for Optional Prefilter	100-12-DX	100-12-DX	100-18-DX	150-19-DX	200-35-DX
Pressure Regulator (0-130 psig) 1/2" NPT Ports	72-130	72-130	72-130	72-130	—

Offer a reliable, efficient, and economical alternative to pressure swing and refrigerant dryer technologies

Require no electricity thus lowering operating costs

Produce +35°F dewpoint, ideal for critical points of use

No moving parts

Silent operation

No desiccant to change



Applications

Food processing and automation

Electronics/Dry Boxes

Coordinate Measurement Machines

Critical Pneumatic Valves

Protection of Pneumatic Instrumentation

Low Dewpoint Instrument Air

Pneumatic Equipment

Pressurizing Electronic Cabinets

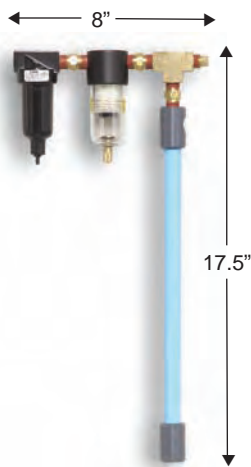
Dry Air for Hazardous Areas

Why Choose a Balston +35°F Membrane Dryer?

There are many variables that will affect the output specification of compressed air. By the time air reaches all its intended point of use, changes in pressure and temperature can contribute to potential contamination. As capital equipment tolerances become tighter and more sensitive to this contamination, maintenance costs will escalate if equipment is not adequately protected. In cases where standard air filtration is not sufficient or where the reliability, performance and operating cost of older dryer technologies is becoming more significant, a Balston Membrane Dryer provides a reliable and economical alternative.

IT Series Point of Use Membrane Dryers

Balston Membrane Air Dryers combine superior coalescing filtration technology with a proven, innovative membrane system to supply clean, dry, +35°F dewpoint compressed air. The Balston Membrane Dryers are available in 8 different models which can deliver compressed air at flow rates up to 50 SCFM with a +35°F dewpoint. The systems are engineered for easy installation, operation, and long term reliability. By incorporating high efficiency coalescing filtration and the highest efficiency membrane available, the systems provide low cost operation with the lowest minimal maintenance.



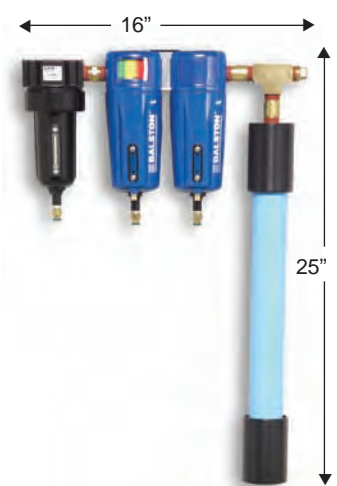
IT0010-35



IT0030-35



IT0080-35



IT0150-35

Easy to Operate and Maintain

Installation consists of simply connecting a standard compressed air line to the inlet and connecting the outlet to your application. The unit is ready for trouble-free operation. This system is designed to operate 24 hours per day, 7 days per week.

Once the system is operating, it requires little monitoring. The only maintenance involves changing the coalescing prefilter cartridges periodically. The membrane module does not require any maintenance.



IT0250-35



IT0500-35

Flow Rates at 35°F (2°C) Pressure Dewpoint (1)

Model Number	IT0010-35	IT0030-35	IT0080-35	IT0150-35	IT0250-3560	IT0250-3500	IT0500-3560	IT0500-3500
Flow @ 100 psig Inlet Pressure (scfm)	1	3	8	15	25	N/A	50	N/A
Flow @ 101-150 psig Inlet Pressure (scfm)	1	3	8	15	N/A	25	N/A	50
Regeneration Flow @ 100 psig (scfm)	0.25	0.5	1.5	2.7	4.5	4.5	9.0	9.0

(1) Dewpoint specified for saturated inlet air at 100°F (38°C) and 100 psig

Principal Specifications

Model Number	IT0010-35	IT0030-35	IT0080-35	IT0150-35	IT0250-3560	IT0250-3500	IT0500-3560	IT0500-3500
Min/Max Inlet Air Temp.	40°F/120°F 4°C/49°C	40°F/120°F 4°C/49°C	40°F/120°F 4°C/49°C	40°F/120°F 4°C/49°C	40°F/120°F 4°C/49°C	40°F/120°F 4°C/49°C	40°F/120°F 4°C/49°C	40°F/120°F 4°C/49°C
Min/Max Ambient Air Temp.	40°F/120°F 4°C/49°C	40°F/120°F 4°C/49°C	40°F/120°F 4°C/49°C	40°F/120°F 4°C/49°C	40°F/120°F 4°C/49°C	40°F/120°F 4°C/49°C	40°F/120°F 4°C/49°C	40°F/120°F 4°C/49°C
Min/Max Inlet Pressure	60/150 psig 4.1/10 barg	60/150 psig 4.1/10 barg	60/150 psig 4.1/10 barg	60/150 psig 4.1/10 barg	60/100 psig 4.1/6.9 barg	100/150 psig 6.9/10 barg	60/100 psig 4.1/6.9 barg	100/150 psig 6.9/10 barg
Compressed Air Requirements	Total Air Consumption: Regeneration Flow + Outlet Flow Requirements							
Max. Pressure Drop (1)	3 psid	3 psid	3 psid	3 psid	5 psid	5 psid	5 psid	5 psid
Wall Mountable	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Mechanical Separator Included	F14F17B	F06F18B	F06F18B	F07F38B	F07F38B	F07F38B	F07F38B	F07F38B
Coalescing Prefilters (2)	8A02N-OB2-BX (2)	2002N-OB1-BX (2)	2002N-OB1-BX (2)	B2004N-1B1-DX B2004N-OB1-BX	2104-1B1-DX 2104-OB1-BX	2104N-1B1-DX 2104-OB1-BX	2208N-1B1-DX 2208N-OB1-BX	2208N-1B1-DX 2208N-OB1-BX
inlet Port Size	1/4" NPT	1/4" NPT	1/4" NPT	1/2" NPT	1/2" NPT	1/2" NPT	1/2" NPT	1/2" NPT
Outlet Port Size	1/4" NPT	1/4" NPT	1/4" NPT	1/2" NPT	1" NPT	1" NPT	1" NPT	1" NPT
Electrical Requirements	None	None	None	None	None	None	None	None
Dimensions (cm)	17.5"Lx8"Wx2.5"D 44.5 x 20.3 x 6.3	18.1"Lx10"Wx4"D 45.2 x 10.5 x 6.3	24"Lx11.1"Wx4"D 61 x 28.2 x 6.3	25"Lx16"Wx4.5"D 63.5 x 40.6 x 11.4	26"Lx18"Wx6"D 66 x 45.7 x 15.2	26"Lx18"Wx6"D 66 x 45.7 x 15.2	39"Lx21"Wx6"D 99 x 53.3 x 15.2	39"Dx21"Wx6"D 99 x 53.3 x 15.2
Shipping Weight	1.62 lbs (.73 kg)	6.68 lbs (3 kg)	6.68 lbs (3 kg)	14.88 lbs (6.75 kg)	24.5 lbs (11.11 kg)	24.5 lbs (11.11 kg)	36.5 lbs (16.55 kg)	36.5 lbs (16.55 kg)

Notes:
1 Total Air Consumption = Regeneration + Outlet Flow.
2 If compressed air is extremely contaminated, a Grade DX prefilter should be installed directly upstream from the membrane dryer.

Ordering Information for assistance call toll free at 800-343-4048, 8AM to 5PM EST

Model Number	IT0010-35	IT0030-35	IT0080-35	IT0150-35	IT0250-3560	IT0250-3500	IT0500-3560	IT0500-3500
Replacement Prefilter Cartridges*								
Stage 1	PS403	PS702	PS702	PS802	PS802	PS802	PS802	PS802
Stage 2 **	---	---	---	5/100-12-DX	5/100-18-DX	5/100-18-DX	5/100-19-DX	5/150-19-DX
Stage 3	5/050-05-BX	5/100-12-BX	5/100-12-BX	5/100-12-BX	5/100-18-BX	5/100-18-BX	5/150-19-BX	5/150-19-BX

Operating costs are 35 - 40% less than a refrigerant air dryer*

No electricity required

State-of-the-art membrane technology

Guaranteed 35°F dewpoint - 13% dryer than refrigerant dryers

Durable - will hold up to the dirtiest compressed air system

No requirement for costly maintenance contracts

Output capacities to 1200 scfm **

Complete system with prefilters, autodrain, and pressure indicators



5000 Series SMART Dryer

The Only Way To Dry Compressed Air!

Now, there is only one sensible way to dry compressed air! High efficiency, durable membrane technology is quickly becoming the standard for drying compressed air. Parker Hannifin is leading the way with membrane technology that consumes the least amount of compressed air for drying.

The SMART Dryer™ utilizes sophisticated technology to monitor system parameters and automatically adjusts the regenerative sweep flow as required. The variable sweep system results in significant energy savings and low operating costs.

The SMART Dryer™ technology offers another advantage over refrigerant air drying technology as it does not produce condensate. An average 100 CFM compressor system can produce up to 1,800 gallons of oily condensate per year! The refrigerant dryer condenses it into an oily/water emulsion which has to be disposed of at a high cost to you! The Balston® Membrane Air Dryer is designed to operate continuously, 24 hours a day, 7 days a week. The only maintenance required is changing the prefilter cartridges twice a year, which take approximately 5 minutes and requires no tools!

*Non-cycling refrigerant air dryer

** Consult Factory

Applications	Benefits
General Compressed Air Mainlines	Easy to install - no electrician required to install or maintain system
Process Controls	No refrigerants or freons - environmentally friendly
HVAC Systems	Complete system with prefilters, auto drains, and pressure gauges
Instrument Cabinets	Compact size
CNC/CMM Machinery	
Fire and Sprinkler Systems	
Pneumatic Controls	
Dry Air for Hazardous Areas	
Chemical Blanketing and Packaging	
Electronics/Dry Boxes	
Laser Optics	

Why buy a Balston SMART Dryer™ instead of a cycling refrigerant air dryer?

The Balston SMART Dryer will save YOU money and offer better performance!

All Balston SMART Dryers require no electricity.

All air dryers are sized based on the maximum capacity output of a compressed air system with inlet conditions assumed to be 100°F inlet temperature, 100 psig inlet pressure and 100°F ambient temperature. In the majority of installations, it is unlikely air dryers will be required to operate under these extreme conditions. Most importantly, the majority of compressed air systems are not operating at the maximum output capacity.

Refrigerant and desiccant air dryers, sized to meet these operating conditions are designed to run continuously regardless of the system's demands, when in fact the actual system conditions are far less.

The result is significant operating costs in wasted energy and wear and tear on refrigerant compressors, cooling systems, drains and other componentry.

In a typical manufacturing plant operating one 8 hour shift with a 100 SCFM compressor system running at 75% capacity (on average over the 8 hour shift), a typical non-cycling refrigerant air dryer would cost \$716 in just electrical costs alone, compared to the Balston SMART Dryer with only \$436 in electrical costs. If you factor in the annual maintenance costs of \$600 for a non-cycling refrigerant dryer compared to \$130 for the Balston SMART Dryer, there is a total annual savings of over \$750.

Recently, refrigerant manufacturers have responded to this issue by developing a cycling air dryer which cools a cold storage heat sink reservoir. Once the reservoir is cooled to the minimum temperature the compressor (refrigerant) is shut off. The compressor cycles back on when the temperature of the storage reservoir reaches a preset upper limit. This reduces the total energy consumption of the dryer however it could produce significant variations in output dewpoints.

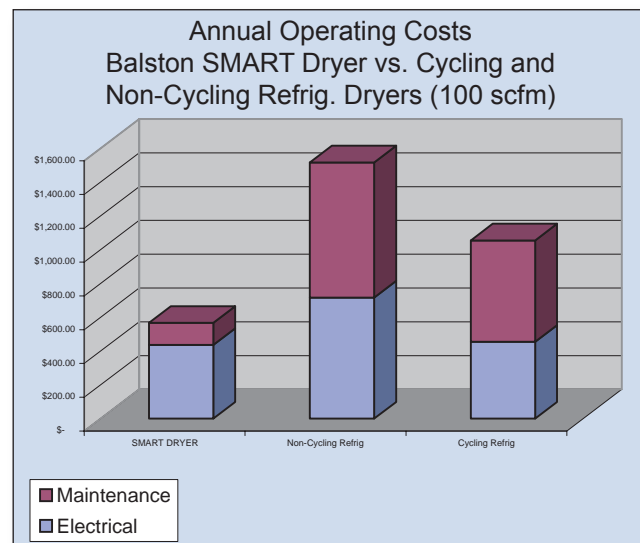
The Balston SMART Dryer does not require refrigerant, compressors, cooling systems or other componentry that carries high operating costs (energy) and maintenance costs. The Balston SMART Dryer utilizes sophisticated technology to monitor the system parameters and automatically adjusts the regenerative sweep flow as required. The variable sweep system results in significant energy savings and low operating costs with no fluctuation in output dewpoints.

In a typical manufacturing plant operating an 8 hour shift with 100 SCFM compressor system running at 75%

capacity (on average over the 8 hour shift), a typical cycling refrigerant air dryer would cost \$454.00 in electrical costs alone, compared to the Balston SMART Dryer with only \$436.00 in electrical costs. If you factor in the annual maintenance cost of \$800 for a cycling refrigerant dryer compared to \$130.00 for the Balston SMART Dryer, there is a total annual savings of over \$685.00

Additionally, there are no moving parts, no freons that need recharging, no compressors to be serviced and no cooling coils to be cored and cleaned.

Most importantly, the Balston SMART Dryer is producing a constant 35°F dewpoint which is 13% dryer than a cycling refrigerant air dryer (ppm weight in air).



Here's What Our Customers Say

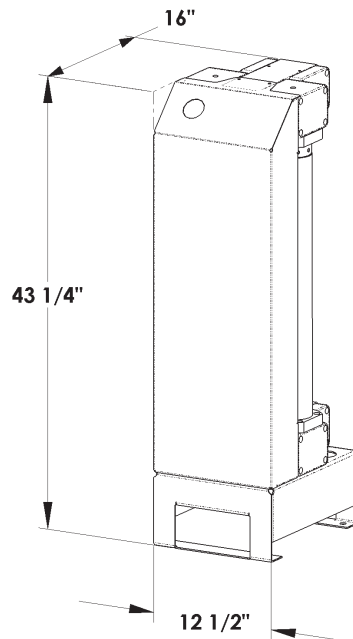
"Our compressed air system is now completely dry and clean at a very reasonable cost. And we gain at least three hours of production time each week by not having to shut down to clean rusted valves..."

Wayne Etchells, Vice President
Melton Corporation, Cranston, R.I.

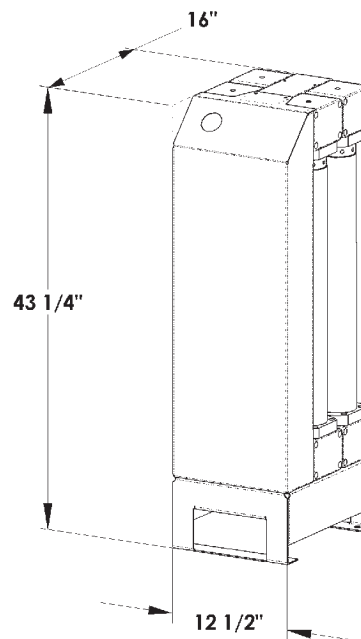
"This new type of membrane dryer was just what we needed to eliminate problems with water building up in compressed air lines...Since the day we installed it, we haven't had a single problem with rust. The time and money we save by not having to repair spindles and air motors pays for the cost of the dryer every few months."

John Napier, Maintenance Engineer
King Machine, Akron, OH

Model SMRT5100
 Front View



Model SMRT5200
 Front View



Principal Specifications

Model Number	Membrane Air Dryers	
	SMRT5100	SMRT5200
Max Flow Rate @35°F dewpoint	100 SCFM	200 SCFM
Dewpoint	35°F (2°C)	35°F (2°C)
Min/Max Inlet Air Temp.	40°F/120°F (4°C/49°C)	40°F/120°F (4°C/49°C)
Ambient Temp. Range	40°F/110°F (4°/43°C)	40°F/110°F (4°/43°C)
Min/Max Inlet Pressure	80 psig/150 psig (5.5 barg/10 barg)	80 psig/150 psig (5.5 barg/10 barg)
Max Dewpoint	120°F PDF	120°F PDF
Max Compressed Air (1) Requirement	113 SCFM	226 SCFM
Max Pressure Drop (2)	10 psi (0.7 bar)	10 psi (0.7 bar)
Inlet/Outlet Port Size	1 1/2"NPT(male)	2"NPT(male)
Physical Dimensions (3)	12.5"w x 43.25"h x 16"d	12.5"w x 43.25"h x 16"d
Shipping Weight	175 lbs(86 kg)	250 lbs(113kg)

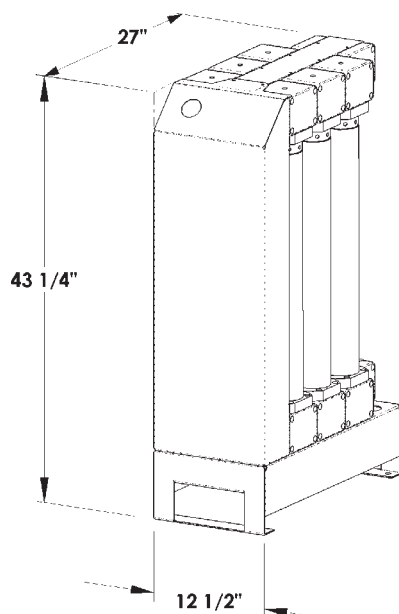
Notes:

- 1 Dewpoint specified for saturated inlet air at 100°F(38°C) and max. flow at 100 psig. Outlet flow and dewpoint will vary for other inlet conditions.
- 2 Max. pressure drop measured at max flow rate @ 100 psig. Pressure drop will increase at lower feed pressures - consult factory.
- 3 Excluding coalescing prefilter assembly.

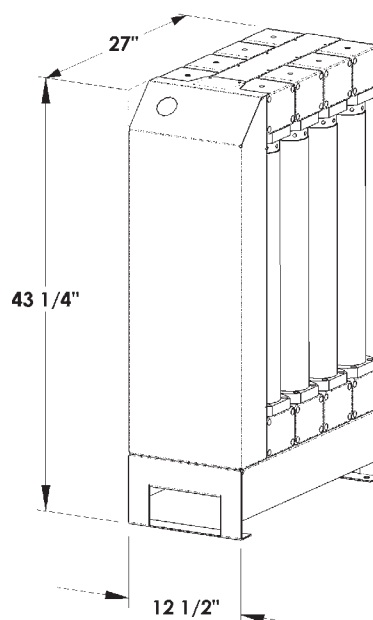
Ordering Information For assistance call 1-800-343-4048

Model Number	SMRT5100	SMRT5200
Coalescing Prefilter Assembly	2312N-1B1-DX 2312N-1B1-BX	A15/80-DX A15/80-BX
Replacement Prefilter Cartridges (every 6 months)	200-35-DX 200-35-BX	200-35-DX 200-35-BX
Membrane Replacement Module	D01-0086	D01-0086
Automatic Drain Kit	21552	21552

Model SMRT5300
Front View



Model SMRT5400
Front View



Principal Specifications

Model Number	Membrane Air Dryers	
	SMRT5300	SMRT5400
Max Flow Rate @35°F dewpoint	300 SCFM	400 SCFM
Dewpoint (1)	35°F (2°C)	35°F (2°C)
Min/Max Inlet Air Temp.	40°F/120°F (4°C/49°C)	40°F/120°F (4°C/49°C)
Ambient Temp. Range	40°F/110°F (4°C/43°C)	40°F/110°F (4°C/43°C)
Min/Max Inlet Pressure	80 psig/150 psig (5.5 barg/10 barg)	80 psig/150 psig (5.5 barg/10 barg)
Max Inlet Dewpoint	120°F PDP	120°F PDP
Max Compressed Air Requirement (1)	339 SCFM	452 SCFM
Max Pressure Drop (2)	10 psi (0.7 bar)	10 psi (0.7 bar)
Inlet/Outlet Port Size	2"NPT(male)	2"NPT(male)
Physical Dimensions (3)	12.5"w x 43.25"h x 27"d	12.5"w x 43.25"h x 27"d
Shipping Weight	300 lbs	375 lbs

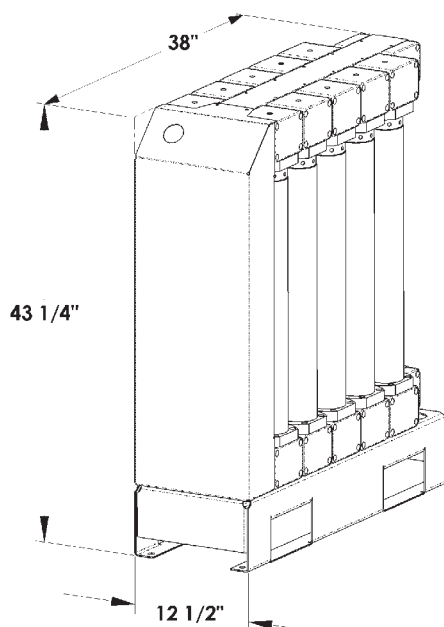
Notes:

- 1 Dewpoint and maximum flow specified for saturated inlet air at 100°F(38°C) at 100 psig. Outlet flow and dewpoint will vary for other inlet conditions.
- 2 Max. pressure drop measured at max flow rate @ 100 psig. Pressure drop will increase at lower feed pressures - consult factory.
- 3 Excluding coalescing prefilter assemblies.

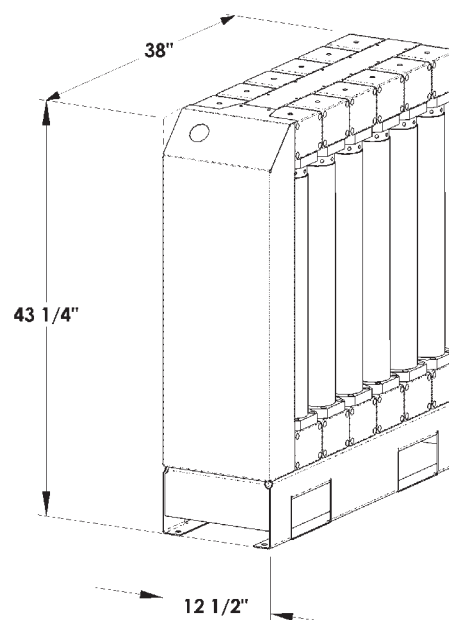
Ordering Information For assistance call 1-800-343-4048

Model Number	SMRT5300	SMRT5400
Coalescing Prefilter Assembly	C02-2356 C02-2357	C02-2358 C02-2359
Replacement Prefilter Cartridges (every 6 months)	210-800-DX 210-800-BX	210-955-DX 210-955-BX
Membrane Module	D01-0086	D01-0086
Automatic Drain Kit	21552	21552

Model SMRT5500
 Front View



Model SMRT5600
 Front View



Principal Specifications

Model Number	Membrane Air Dryers	
	SMRT5500	SMRT5600
Max Flow Rate @35°F dewpoint	500 SCFM	600 SCFM
Dewpoint (1)	35°F (2°C)	35°F (2°C)
Min/Max Inlet Air Temp.	40°F/120°F (4°C/49°C)	40°F/120°F (4°C/49°C)
Ambient Temp. Range	40°F/110°F (4°C/43°C)	40°F/110°F (4°C/43°C)
Min/Max Inlet Pressure	80 psig/150 psig (5.5 barg/10 barg)	80 psig/150 psig (5.5 barg/10 barg)
Max Relative Dewpoint	120°F PDP	120°F PDP
Max Compressed Air Requirement (1)	565 SCFM	678 SCFM
Max Pressure Drop	10 psi (0.7 bar)	10 psi (0.7 bar)
Inlet/Outlet Port Size	2 1/2"NPT	3"NPT
Physical Dimensions	12.5"w x 43.25"h x 38"d	12.5"w x 43.25"h x 38"d
Shipping Weight	475 lbs	550 lbs

Notes:

- 1 Dewpoint and maximum flow specified for saturated inlet air at 100°F(38°C) at 100 psig. Outlet flow and dewpoint will vary for other inlet conditions.
- 2 Max. pressure drop measured at max flow rate @ 100 psig. Pressure drop will increase at lower feed pressures - consult factory.
- 3 Excluding coalescing prefilter assemblies.

Ordering Information For assistance call 1-800-343-4048

Model Number	SMRT5500	SMRT5600
Coalescing Prefilter Assembly	C02-2360 C02-2361	C02-2362 C02-2363
Replacement Prefilter Cartridges (every 6 months)	300-960-DX 300-960-BX	300-960-DX 300-960-BX
Membrane Module	D01-0086	D01-0086
Automatic Drain Kit	21552	21552



Balston
Compressed Air
Dryer

Applications

Pneumatic Tool Stations
HVAC Systems
Purge Electrical Boxes
Air Lines Subject to Sub-Freezing
Temperatures
Blanketing Moisture Sensitive Materials
Spray Painting
Pneumatic Instrumentation
Robotics
Lasers
Dry Boxes

**Reduce the dewpoint of compressed air
to -100°F (-73°C)**

Unattended 24 hour operation

Lightweight and compact

No desiccant to change

Model 75-A20NA

Balston regenerative PSA desiccant dryers reduce the atmospheric dewpoint of compressed air without operator attention. Model 75-A20NA will reduce the dewpoint to -100°F (-73°C). Each dryer is delivered complete and ready for easy installation. Each model has coalescing prefilters, PSA drying towers, automatic drains, a particulate final filter, a moisture indicator, differential pressure indicator, and pretested controls.

Balston regenerative dryers have safe, 12 VDC electrical controls. To install, simply attach the inlet (60 psig minimum) and outlet air lines, plug the electrical transformer into a wall outlet - no electrician required - and the unit is ready for trouble-free operation.

These reliable dryers can be easily installed, operated, and maintained by personnel not trained in instrumentation. In addition to supplying analytical instruments with dry, particulate-free air, the Balston dryers are useful when air comes into contact with moisture-sensitive materials, or when outside compressed air lines are subjected to sub-freezing temperatures.

The 75-A20NA is a wall mountable unit. It has a 10 SCFM/min. capacity (at 100 psig inlet pressure).

Principal Specifications

Model	75-A20NA
Dewpoint (1)	-100°F (-73°C)
Max. Dry (outlet) Air Flow Rate for Specified Dew Point (1)	
Inlet Pressure 125 psig	12.0 SCFM (340 lpm)
Inlet Pressure 100 psig	10.0 SCFM (283 lpm)
Inlet Pressure 80 psig	8.3 SCFM (235 lpm)
Inlet Pressure 60 psig	6.5 SCFM (184 lpm)
Air Loss for Regeneration (2)	2.5 SCFM (71 lpm)
Min/Max Inlet Air Pressure	60 psig/125 psig
Max. Inlet Air Temperature (3)	78°F (25°C)
Pressure Drop at Max. Flow Rate	8 psi
Inlet/Outlet Port Size (female)	1/4" NPT
Electrical Requirements (4)	120 VAC/60 Hz.
Shipping Weight	50 lbs. (23 kg)
Dimensions	15"W X 41"H (38cm X 104cm)

Notes:

1 Dewpoint will be lower than specified at lower air flow.

2 Total air required = air loss for regeneration + process demand (up to max. dry air flow rate).

3 Outlet dewpoint will increase at higher inlet compressed air temperatures.

4 Power consumption - less than 10 watts. Each dryer is shipped with a 12 VDC plug-in transformer to connect to the local electrical supply.

Ordering Information

For Assistance, call toll-free at 1-800-343-4048 8AM to 5PM Eastern Time

Description	Model Number
Balston Compressed Air Dryer	75-A20NA
Replacement Filter Cartridges 1st stage (box of 10)	100-18-DX
Replacement Filter Cartridges 2nd stage (box of 10)	100-18-BX
Maintenance Kit, 1 year supply of filter cartridges	MK7525

Customer Support and Service Network for Balston® Products



Customer Support and Assistance

Balston products are supported by a staff of 70+ highly trained sales and service specialists located throughout North America and Canada.

The Specialists are continuously trained and updated on all Balston branded products and technologies, ensuring prompt, accurate customer service.

When on-site service isn't practical, replacement items are shipped the same day you contact us directly to your facility from one of our near by Stocking Centers or directly from our Manufacturing Plant. We guarantee overnight delivery and we pay the freight!

World Class Manufacturing

All Balston branded products are manufactured within strict guidelines of a total quality management program. Each product incorporates superior workmanship and the best quality components available ensuring long term reliability and trouble free operation. Your complete satisfaction is guaranteed.

Technical Support Staff

If you have technical questions, special product modifications or unique applications, Balston's technical information and support staff are available to assist you with your requirements.

These highly trained application engineers are committed to ensuring your questions are answered accurately, and your special needs are attended to. In addition, they will work closely with you on new and unique applications.

This team of engineers can be contacted at 1-800-343-4048 8AM to 5PM Eastern Time.

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converted or adapted for such manufacture and notwithstanding any charges paid by Buyer. Unless otherwise agreed, Seller shall have the right to alter, discard or otherwise dispose of any special tooling or other property in its sole discretion at any time.

8. **Buyer's Property:** Any designs, tools, patterns, materials, drawings, confidential information or equipment furnished by Buyer or any other items which become Buyer's property, may be considered obsolete and may be destroyed by Seller after two (2) consecutive years have elapsed without Buyer placing an order for the items which are manufactured using such property. Seller shall not be responsible for any loss or damage to such property while it is in Seller's possession or control.

9. **Taxes:** Unless otherwise indicated on the face hereof, all prices and charges are exclusive of excise, sales, use, property, occupational or like taxes which may be imposed by any taxing authority upon the manufacture, sale or delivery of the items sold hereunder. If any such taxes must be paid by Seller or if Seller is liable for the collection of such tax, the amount thereof shall be in addition to the amounts for the items sold. Buyer agrees to pay all such taxes or to reimburse Seller therefore upon receipt of its invoice. If Buyer claims exemption from any sales, use or other tax imposed by any taxing authority, Buyer shall save Seller harmless from and against any such tax, together with any interest or penalties thereon which may be assessed if the items are held to be taxable.

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If a claim is based on information provided by Buyer or if the design for an item delivered hereunder is specified in whole or in part by Buyer, Buyer shall defend and indemnify Seller for all costs, expenses or judgments resulting from any claim that such item infringes any patent, trademark, copyright, trade dress, trade secret or any similar right.

11. **Force Majeure:** Seller does not assume the risk of and shall not be liable for delay or failure to perform any of Seller's obligations by reason of circumstances beyond the reasonable control of Seller (hereinafter 'Events of Force Majeure'). Events of Force Majeure shall include without limitation, accidents, acts of God, strikes or labor disputes, acts, laws, rules or regulations of any government or government agency, fires, floods, delays or failures in delivery of carriers or suppliers, shortages of materials and any other cause beyond Seller's Control.

12. **Entire Agreement/Governing Law:** The terms and conditions set forth herein, together with any amendments, modifications and any different terms or conditions expressly accepted by Seller in writing, shall constitute the entire Agreement concerning the items sold, and there are no oral or other representations or agreements which pertain thereto. This Agreement shall be governed in all respects by the law of the State of Ohio. No actions arising out of the sale of the items sold hereunder or this Agreement may be brought by either party more than two (2) years after the cause of action accrues.