



aerospace
climate control
electromechanical
filtration
fluid & gas handling
hydraulics
pneumatics
process control
sealing & shielding



Racor High Performance Air Dryers

Industry-Leading Protection and Performance
for Compressed Air Systems



ENGINEERING YOUR SUCCESS.

Built to Perform

RACOR AIR DRYERS SET NEW INDUSTRY STANDARDS

FOR PERFORMANCE,
DURABILITY, EASE OF
MAINTENANCE AND
EFFICIENT OPERATION.

Air. Incredibly, it can stop a 20-ton truck descending through a mountain pass. Raise and lower a city bus thousands of times a day. And cushion paramedics speeding to the hospital. Few systems are so integral to safe operation as air systems - making essential the delivery of clean air, free of moisture, oil and particulates.

The twin threats are moisture, which condenses into the airstream during normal daily temperature changes, and oil, which enters the airstream as it blows by compressors. There's no way to prevent it. Over time, it leads to increased maintenance costs, reduced braking efficiency and, potentially, failure in braking systems. Racor Air Dryers effectively remove moisture and oil vapor from the compressed air system, delivering clean, dry air to braking and air suspension systems.



INDUSTRY-LEADING PERFORMANCE IS JUST THE START OF ADVANCED RACOR ENGINEERING.

The integral purge chamber stores clean dry air needed to regenerate the desiccant system at every purge cycle.

At the heart of the system is high performance synthetic zeolite desiccant - the most efficient, most durable on the market.

The unique characteristics of zeolite desiccant also mean longer intervals between changeouts.

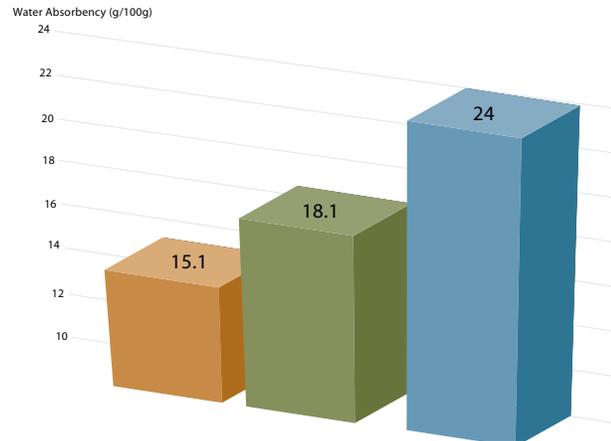
Highly compressed, randomly woven metal mesh screens provide two stages of filtration to enhance desiccant performance in separating moisture and oil from the compressed airstream.

Rugged, durable construction is a Racor trademark, evidenced by the die cast aluminum platform.

The thermostatically-controlled heater engages at 39°F, freeze-proofing the air dryer in cold climates.

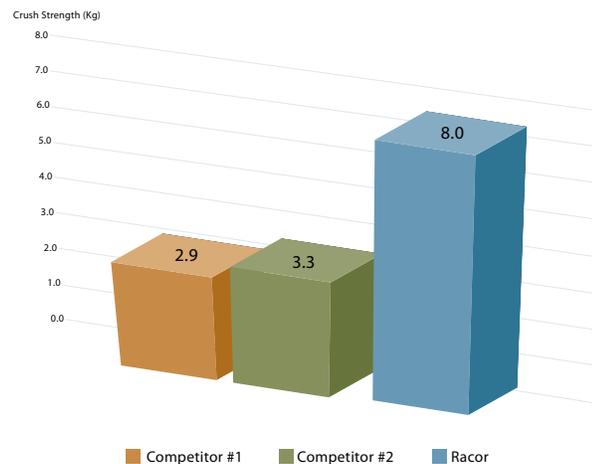
Mesh silencer reduces noise during purge cycle.

Outlet nozzle vents moisture and contamination during purge cycle. Hose barb connection is used for applications requiring routing of the exhaust.



Performance Equals Protection

The ultimate measure of any heavy duty component is performance, and industry-leading statistical performance is a hallmark of Racor filtration products. In extensive testing Racor Air Dryers are between 13% and 33% more efficient in removing moisture, oil mist and solid particulates than competitive air dryers.



Performance Under Pressure - Crush Strength

An air dryer's performance is fundamentally tied to the effectiveness of the desiccant drying material - its ability to remove water and contaminants and then regenerate itself for the next cycle. Durability under pressure and the ability to withstand atmospheric changes and remain efficient are measured by Crush Strength. Racor's proprietary desiccant outperforms competitive offerings by nearly 300%.

Built to Last

Demanding over the road and industrial applications call for durable, reliable, Racor-quality construction. This is especially the case because in many installations air dryers are entirely exposed to the outdoor environment, meaning that components must withstand the corrosive effects of water, salt and road grime. Racor Air Dryers are engineered and built to confidently perform over the long haul.

Integral Purge Chamber.

Highly compressed, randomly woven metal mesh screens provide two stages of oil mist separation and filtration to enhance desiccant performance in removing moisture and oil from the compressed airstream.

Optional integral governor.

Outlet port for exhausting air.



DURABLE, MAINTENANCE-EASING DESIGN AND CONSTRUCTION MAKE THIS THE RACOR OF AIR DRYERS.

Oil Mist Separator Filter

An intricately layered but highly compressed metal mesh is the first stage in separating moisture and oil from the compressed airstream. As contaminated air encounters this randomly woven maze, large water and oil droplets coalesce, or bead up on the metal strands. By removing this free water and oil, the efficiency and life of the desiccant are measurably improved.



Racor Desiccant Makes the Difference

Racor proprietary high performance synthetic zeolite desiccant absorbs up to 33% more moisture and is almost 300% more durable than competitive desiccant. The distinct benefit is better-performing, longer-lasting air systems and less frequent air dryer service intervals.

Desiccant Filter Cartridge

The integrated Desiccant Cartridge is part of a complete service kit including gaskets and the Oil Mist Separator Filter. It makes service fast and easy, which should always be done on a regular schedule to ensure air and braking system integrity.



Racor Air Dryers are the result of a close partnership with Nabtesco, one of the most prominent component research, design and manufacturing companies in Asia. Based in Japan, the seven Nabtesco factories command nearly 85% of the air dryer market throughout Asia, a direct result of its extraordinary efficiency and performance.

Built to Fit

Two distinct features of the Racor Air Dryer series are that the overall efficiency of the units makes them smaller, and easier to locate and service than competitive offerings; and secondly, the breadth of the line enables specification of the exact size and feature set for a wide range of compressed air applications. In short, the efficient size is also the economical size.

**STANDARD
AIR DRYERS**

**INTEGRATED
GOVERNOR
& CHECK VALVE**

**GVW < 16,000 pounds
CLASS 4 AND UNDER**

Purge Chamber Capacity 1.0 L
Desiccant Weight 0.2 kg
Performance 40 L/cycle max



DR-42



DU-4

**16,000 < GVW < 33,000 pounds
CLASS 5 - 7**

Purge Chamber Capacity 1.4 L
Desiccant Weight 0.5 kg
Performance 93 L/cycle max



DU-3

**33,000 < GVW < 55,000 pounds
CLASS 8**

Purge Chamber Capacity 2.7 L
Desiccant Weight 1.1 kg
Performance 160 L/cycle max



DU-5

**44,000 pounds < GVW
CLASS 8**

Purge Chamber Capacity 3.4 L
Desiccant Weight 1.8 kg
Performance 340 L/cycle max



DR-6

Feature Highlights

DR Series

- Conventional-type air dryer.
- No additional purge chamber required.
- Heater is standard.

DU Series

- Pressure governor and check valve are integrated.
- No additional purge chamber required.
- Heater is standard.



Full Replacement Kit

AD-DU4-FKIT
AD-DR42-FKIT
AD-DU3-FKIT
AD-DU3-EXT-FKIT
AD-DU5-FKIT
AD-DR6-FKIT



Cartridge Only Replacement Kit

AD-DU4-CKIT
AD-DR42-CKIT
AD-DU3-CKIT
AD-DU3-EXT-CKIT
AD-DU5-CKIT
AD-DR6-CKIT



Desiccant Replacement Kit

AD-DU4-DKIT
AD-DR42-DKIT
AD-DU3-DKIT
AD-DU3-EXT-DKIT
AD-DU5-DKIT
AD-DR6-DKIT

Model	DR-42	DU-4	DU-3	DU-3 EXT (extended)	DU-5	DR-6
Application	Class 6 and under (also for air suspension, hydraulic brake systems), GVW less than 26,000 lbs	Class 6 and under (also for air suspension, hydraulic brake systems), GVW less than 26,000 lbs	Class 7 GVW From 26,001 to 33,000 lbs	Class 7 GVW From 26,001 to 33,000 lbs	Class 8 GVW From 33,001 to 44,000 lbs	Class 7 GVW greater than 44,001 lbs
Inlet/Outlet Ports	1/2" Rc	1/2" Rc	1/2" Rc	1/2" Rc	1/2" Rc	1/2" Rc
Standard Flow Per Cycle*	3,051 In. ³ (50L)	3,051 In. ³ (50L)	9,459 In. ³ (155L)	6,041 In. ³ (99L)	11,549 In. ³ (190L)	24,409 In. ³ (400L)
Desiccant Weight (1.6mm standard)	0.4 lbs (0.2 kg)	0.4 lbs (0.2 kg)	1.1 lbs (0.5 kg)	1.1 lbs (0.5 kg)	2.4 lbs (1.1 kg)	4.0 lbs (1.8 kg)
Regenerate Time Required	30 seconds	30 seconds	50 seconds	40 seconds	50 seconds	60 seconds
Purge Chamber Capacity	49 In. ³ (0.8L)	49 In. ³ (0.8L)	98 In. ³ (1.6L)	85 In. ³ (1.4L)	165 In. ³ (2.7L)	208 In. ³ (3.4L)
Height	11.0 In. (28 cm)	11.0 In. (28 cm)	11.0 In. (28 cm)	11.0 In. (28 cm)	11.0 In. (28 cm)	11.0 In. (28 cm)
Width	6.32 In. (16.1 cm)	6.32 In. (16.1 cm)	6.32 In. (16.1 cm)	6.32 In. (16.1 cm)	6.32 In. (16.1 cm)	6.32 In. (16.1 cm)
Approximate Weight	6.2 lbs (2.8 kg)	6.2 lbs (2.8 kg)	6.2 lbs (2.8 kg)	6.2 lbs (2.8 kg)	6.2 lbs (2.8 kg)	6.2 lbs (2.8 kg)
Also Included:						
Heater (12v)	Yes (70W)	Yes (70W)	Yes (70W)	Yes (70W)	Yes (70W)	Yes (70W)
Purge Chamber	Yes	Yes	Yes	Yes	Yes	Yes
Pressure Governor	No	Yes	Yes	Yes	Yes	No
Check Valve	No	Yes	Yes	Yes	Yes	No
Silencer	No	No	No	No	No	No
Governor Cut-Out Pressure**	139 PSI*** (9.6 bar)	100 - 129 PSI (6.9 - 8.9 bar)	100 - 129 PSI (6.9 - 8.9 bar)	100 - 129 PSI (6.9 - 8.9 bar)	100 - 139 PSI (6.9 - 9.6 bar)	139 PSI*** (9.6 bar)
Governor Differential Pressure	n/a n/a	14.5 PSI (1.0 bar) 18.8 PSI (1.3 bar)	14.5 PSI (1.0 bar) 18.8 PSI (1.3 bar)	14.5 PSI (1.0 bar) 18.8 PSI (1.3 bar)	14.5 PSI (1.0 bar) 18.8 PSI (1.3 bar)	n/a n/a
Air Reservoir Volume	n/a n/a	13 gal (@14.5 PSI) 10 gal (@18.8 PSI)	40 gal (@14.5 PSI) 31 gal (@18.8 PSI)	26 gal (@14.5 PSI) 20 gal (@18.8 PSI)	50 gal (@14.5 PSI) 36 gal (@18.8 PSI)	n/a n/a
Ambient Temp. Range	-22°F to +158°F (-30°C to +70°C)					
Notes:	*Inlet temperature @ +140°F (+60°C), **Governor cut-out pressure 159.0 PSI (11.0 bar), ***Applicable pressure					
Part No.	AD-DR42	AD-DU4	AD-DU3	AD-DU3-EXT	Call for	Call for

Worldwide Filtration Manufacturing Locations

North America

**Compressed Air Treatment
Filtration & Separation/Balston**
Haverhill, MA
978 858 0505
www.parker.com/balston

**Finite Airtek Filtration
Airtek/donnick hunter/Zander**
Lancaster, NY
716 686 6400
www.parker.com/faf

Finite Airtek Filtration/Finite
Oxford, MI
248 628 6400
www.parker.com/finitefilter

**Engine Filtration &
Water Purification
Racor**
Modesto, CA
209 521 7860
www.parker.com/racor

Holly Springs, MS
662 252 2656
www.parker.com/racor

Beaufort, SC
843 846 3200
www.parker.com/racor

**Village Marine, Sea Recovery,
Horizon Reverse Osmosis**
Carson, CA
310 637 3400
www.parker.com/watermakers

**Hydraulic Filtration
Hydraulic Filter**
Metamora, OH
419 644 4311
www.parker.com/hydraulicfilter

Laval, QC Canada
450 629 9594
www.parkerfarr.com

**Process Filtration
donnick hunter Process Filtration**
Oxnard, CA
805 604 3400
www.parker.com/processfiltration

Madison, WI
608 824 0500
www.scilog.com

Phoenixville, PA
610 933 1600
www.parker.com/processfiltration

**Aerospace Filtration
Velcon Filtration**
Colorado Springs, CO
719 531 5855
www.velcon.com

Europe

**Compressed Air Treatment
donnick hunter Filtration & Separation**
Gateshead, England
+44 (0) 191 402 9000
www.parker.com/dhfn

Parker Gas Separations
Etten-Leur, Netherlands
+31 76 508 5300
www.parker.com/dhfn

Hiross Zander
Padova Business Unit
Padova, Italy
+39 049 9712 111
www.parker.com/hzd

Hiross Zander
Essen Business Unit
Essen, Germany
+49 2054 9340
www.parker.com/hzd

**Engine Filtration &
Water Purification
Racor**
Dewsbury, England
+44 (0) 1924 487 000
www.parker.com/rfde

Racor Research & Development
Stuttgart, Germany
+49 (0)711 7071 290-10
www.parker.com/rfde

**Hydraulic Filtration
Hydraulic Filter**
Arnhem, Holland
+31 26 3760376
www.parker.com/hfde

Urzala Operation
Urzala, Finland
+358 20 753 2500
www.parker.com/hfde

Condition Monitoring Centre
Norfolk, England
+44 (0) 1842 763 299
www.parker.com/hfde

Parker Kittiwake
West Sussex, England
+44 (0) 1903 731 470
www.kittiwake.com

Parker Procal
Peterborough, England
+44 (0) 1733 232 495
www.kittiwake.com

**Process Filtration
donnick hunter Process Filtration**
Birtley, England
+44 (0) 191 410 5121
www.parker.com/processfiltration

Parker Twin Filter BV
Zaandam, Netherlands
+31(0)75 655 50 00
www.twinfilter.com

Asia Pacific

Australia
Castle Hill, Australia
+61 2 9634 7777
www.parker.com/australia

China
Shanghai, China
+86 21 5031 2525
www.parker.com/china

India
Navi Mumbai, India
+91 22 651 370 8185
www.parker.com/india

Parker Fowler
Bangalore, India
+91 80 2783 6794
www.johnfowlerindia.com

Japan
Tokyo, Japan
+81 45 870 1522
www.parker.com/japan

Parker Techno
Osaka, Japan
+81 66 340 1600
www.techno.taiyo-itsd.co.jp

Korea
Hwaseon-City
+82 31 359 0852
www.parker.com/korea

Singapore
Jurong Town, Singapore
+65 6887 6300
www.parker.com/singapore

Thailand
Bangkok, Thailand
+66 2186 7000
www.parker.com/thailand

**Latin America
Parker Comercio Ltda.
Filtration Division**
Sao Paulo, Brazil
+55 12 4009 3500
www.parker.com/br

Pan American Division
Miami, FL
305 470 8800
www.parker.com/panam

Africa

Aeroporto Kempton Park, South Africa
+27 11 9610700
www.parker.com/africa