

Cleanroom-ready Receivers for Conveying Material

Conair MedLine® DuraLoad™ vacuum receivers are the industry standard for trouble-free conveying of plastic pellets and regrinds. With more than 60,000 receivers installed worldwide, the DuraLoad answers the needs of processors who cannot afford to worry about the reliability of their material transfer systems. Available in either a hopper loading configuration with a discharge valve or direct feed models with a glass hopper, every DuraLoad may be outfitted to answer the needs of your operation with ratio loading capability, heavy duty wear plates, a choice of control voltages and many other options are also available.



Model DL-8 Direct Feed
with UTB and anodized base

RAL 9003 (White) Paint or Stainless Steel

Hopper loading models are ideal for filling and maintaining the level of material in machine hoppers, drying hoppers or any other vessel. With our reliable discharge valve, you will be assured efficient, vacuum-tight loading and rapid material discharge with no bridging.

Direct feed models, with their choice of glass reservoir sizes, are designed to feed directly to processing machine throats without the need of interim hoppers. An airtight seal at the machine throat is normally required, but direct feed models can also be fitted with an isolator valve to provide additional application flexibility when needed.

Duraload Receivers are available with a Universal Terminal Box (UTB) or an Easy Loading Control (ELC).

► Built to ISO standards

Standard in RAL 9003 (white) paint to maintain that clean white look, or optional stainless steel, the DuraLoad™ is ready for cleanroom use.

► Direct feed or hopper loading

You choose the material delivery you need. Keep a hopper full or feed directly to the machine throat.

► Thick wall steel construction

Five precision engineered workhorse models are provided as standard with stainless steel and anodized material contact points.

► Built-in sequencing valves

Provide vacuum control from the vacuum pump without additional wiring or remote valving.

► Modular components

No-tools access filter cleaning, screw-in tube stubs, plug-in electrical components, plus dozens of optional accessories.

► Choice of control

Select either the Universal Terminal Box (UTB) or the ELC loading control for your receiver. The standard UTB works with B-32, FLX-128, FLX-128 Plus, or central loading controls. The optional ELC-16 control is a stand-alone loading control based on a receiver integrated CAN open network. *See the Easy Loading Control (ELC) specification sheet for more information.*



Features

Engineered for Long Life

Trouble-free, Continuous Performance For many years, Conair has built DuraLoad vacuum receivers with features and functionality required by demanding plastics processing professionals. They are easy to install, a snap to maintain and are backed by Conair's long-standing tradition of application assistance, eternal customer support and off-the-shelf spare parts. From easy, drop-in filter screens, to extra large discharge throats that eliminate material bridging; to heavy-wall spun construction, these conveying components are thoroughly engineered for long life and trouble-free, continuous performance.

Universal Terminal Box (UTB)



The UTB is perfect for connecting to a B-32 Loading Control, or Conair's popular newer conveying controls like the FLX-128, or FLX-128 Plus.

Using the UTB with either FLX-128 control allows for features such as:

- First In/First Out (FIFO) and Priority loading
- Load and hold loading
- Multi-source/Multi-destination
- Ratio loading, positive discharge, and fill sensor operation
- Pocket and Purge Valve operation

Easy Loading Controls (ELC-16)



DuraLoad receivers can be equipped with Conair's optional Easy Loading Controls (ELC-16). An optional ControlMate pendant can be added to the control.

Integrated Vacuum Sequencing Valve



All DuraLoad series loaders incorporate a vacuum sequencing valve module right in the lid, so there are never wires or extra compressed air lines to install. The lid may be easily removed from the loader with no-tools lid clamps and a quick-release air fitting.

Direct Feed



All direct feed models feature quick disconnect clamps for easy loader release and thorough cleaning. An isolator valve (shown here) may also be provided for non-airtight applications. The isolator valve can also provide demand sensing on 4 and 15 lb. glass hopper.



Options

A Broad Choice of DuraLoad Options Stretch the Value of your Purchase

- **Volume Fill Sensor**

Provides automatic shut-off of the loader's vacuum sequence when the loader is full. Also drives an alarm out-put on most Conair loading controls if not satisfied during the vacuum sequence.



- **Stainless Steel Material Contact**

Provides stainless steel in place of carbon steel. The 304 grade stainless steel is uncoated internally (in material contact areas), but powder coated externally for optimum cosmetic appearance.

- **Remote Demand Sensor**

To trigger the operation of the loader (demand) from a location other than directly below the loader, a remote demand sensor may be employed. Useful on oversized drying hoppers to sense through a window (6 foot cable provided) or when off-loading a granulator (30 foot cable provided). Extension cables also available.

- **Positive Discharge Valve**

Provides a pneumatically driven discharge valve on the bottom of the loader in the event that gravity will not sufficiently open the standard flapper after loading. Useful for very light materials or when high CFM drying hoppers are being loaded.

- **Hopper Venting**

Used to provide relief of displaced air in the receiving vessel below the loader during material discharge.

Material Valves

- **Ratio Valve**

Dual inlet, single outlet material valve allows the loading of a second material (usually regrind) in approximate, layered percentages along with virgin material. May be installed on loader inlet or remotely (ratio signal must be provided from loading control). See Ratio Valve specification sheet for more information.



- **Common Line Valve**

An isolation valve for the material line, typically used for systems employing a common material line connected to multiple loaders. See Common Line Valve specification sheet for more information.



- **High-Performance Valves**

Ratio and Line valves are constructed with both high heat and abrasive resistant materials to withstand the rigors of conveying hot and/or highly abrasive materials.

- **Wear Plates**

Stainless steel plates, installed inside the loader body, radically reduce hopper wear-through when conveying highly abrasive materials like glass filled compounds. May be easily replaced, if ever needed.



- **Magnets**

An airtight, Drawer Magnet may be added below any direct feed DuraLoad to trap ferrous metal. Or, a low cost Grate Magnet may be inserted directly into the glass hopper of the direct feed receiver to save head room.

- **Filter Drawer**

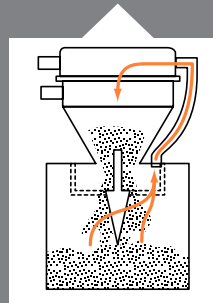
A Conair filter drawer can be added to simplify filter cleaning and changes. Adds 3.5 inches {8.9 mm} to height. See Filter Drawer specification sheet for more information.

- **Screen Protector**

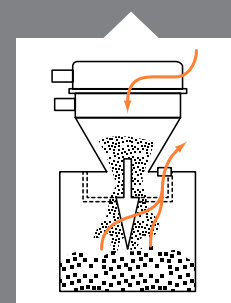
Add an additional layer of protective metal mesh screen to your DuraLoad filter for prolonged life in applications where excessive filter wear is a problem.

Hopper Venting (closed loop vent kit)

Used to provide relief of displaced air in the receiving vessel below the loader during material discharge.



Closed-loop venting to loader lid (recommended for critical drying hopper installations).



Displaced air vented to atmosphere.

- **High-Heat Package**

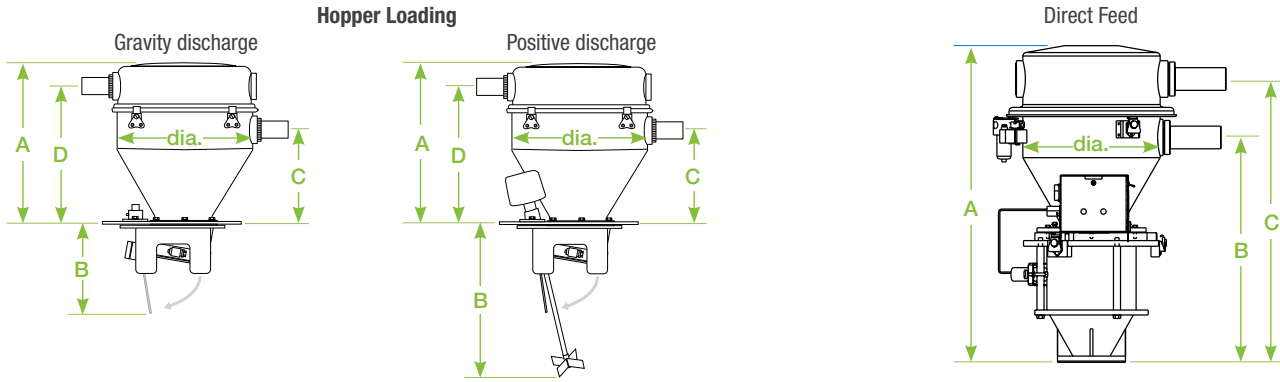
When the loader is exposed to temperatures exceeding 180°F {82.2°C}, this option outfits components in the lid (vacuum sequencing valve, tubing, etc.) with high heat capability to extend operational life in a heated environment. All pieces of the loader are designed for high-heat applications. An oversized vent kit, high temperature level switch, high temperature screen filter, and screen protector are used.

- **Knife Gate – Special**

A knife gate can be added to the DuraLoad to create a tight seal between the hopper and receiver. This is very useful in high-temperature applications.



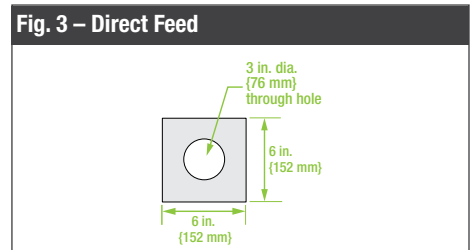
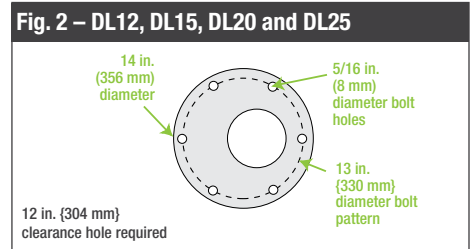
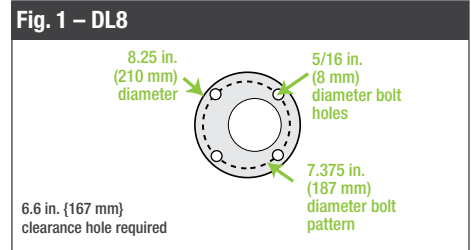
Specifications



DL Series Vacuum Receivers					
Receiver model	DL8	DL12	DL15	DL20	DL25
Receiver diameter inches (mm)	8 {203}	12 {305}	15 {381}	20 {508}	25 {635}
Receiver volume ft ³ {liters}	0.14 {4.0}	0.5 {14.2}	1.0 {28.3}	1.8 {51}	3.0 {85.0}
Material/Vacuum line size range inches (mm)*	1.5-2 {38-51}			2.25-3 {57-76}	
Receiver maximum temperature rating °F {°C}	180 {82}	180 {82}	180 {82}	180 {82}	180 {82}
with high-heat option °F {°C}	350 {177}	350 {177}	350 {177}	350 {177}	350 {177}
Filter type	20 mesh stainless steel disc				
Available voltages (outputs)	120 VAC, 24 VAC and 24 VDC				
Compressed air requirements	Intermittent duty: 1ft ³ /min. @ 80 psi {28.3 liters/min. @ 5.51 bars} NPT fitting: 3/8 in.				

Hopper Loading Configuration					
Receiver model	DL8	DL12	DL15	DL20	DL25
Dimensions inches{mm}					
A - Height above mounting plate	12.19 {310}	17.375 {441}	20.8 {528}	26.19 {665}	33.75 {857}
B - Depth below mounting plate	5.5 {140}	8.375 {213}	8.375 {213}	9.5 {241}	9.5 {241}
with positive discharge	N/A	16.0 {406}	16.0 {406}	16.0 {406}	16.0 {406}
C - Height to center of material inlet	6.19 {157}	9.5 {241}	12.34 {313}	15.9 {404}	21.25 {540}
D - Height to center of vacuum outlet	10 {254}	14.4 {366}	17.5 {445}	22.625 {575}	29.19 {741}
Mounting details	See FIG. 1		See FIG. 2		
Installed weight lb {kg}	22 {10}	41 {19}	49 {22}	69 {31}	99 {45}
Shipping weight lb {kg}	35 {16}	50 {23}	70 {32}	130 {59}	225 {102}

Direct Feed Configuration (glass hopper)									
Receiver model	DL8			DL12			DL15		
Viewing chamber model	4 lb	15 lb	25 lb	4 lb	15 lb	25 lb	4 lb	15lb	25 lb
Viewing chamber capacity lb {kg}†	4 {1.81}	15 {6.8}	25 {11.3}	4 {1.81}	15 {6.8}	25 {11.3}	4 {1.81}	15 {6.8}	25 {11.3}
with isolator valve†	3 {1.36}	11 {4.98}	21 {9.52}	3 {1.36}	11 {4.98}	21 {9.52}	3 {1.36}	11 {4.98}	21 {9.52}
Dimensions inches{mm}									
A - Height above mounting plate	24.0 {609}	29.5 {749}	41.5 {1054}	29.25 {742}	35.0 {889}	47.0 {1193}	32.5 {825}	37.75 {958}	49.75 {1263}
B - Height to center of material inlet	17.75 {450}	23.25 {590}	35.25 {895}	21.25 {539}	27 {685}	39 {990}	23.75 {603}	30.5 {774}	42.5 {1079}
C - Height to center of vacuum outlet	22.75 {577}	27.25 {692}	39.25 {996}	26.5 {673}	32.25 {819}	44.25 {1123}	29.25 {742}	35.0 {880}	47.0 {1193}
add for isolator valve	0	0	0	2.25 {57}	2.25 {57}	2.25 {57}	2.25 {57}	2.25 {57}	2.25 {57}
Mounting details	See FIG. 3								
Installed weight lb {kg}	49 {22}	51 {23}	80 {36}	68 {31}	70 {32}	99 {45}	76 {34}	78 {35}	107 {49}
Shipping weight lb {kg}	77 {35}	79 {36}	108 {49}	96 {44}	98 {44}	127 {58}	104 {47}	106 {48}	135 {61}



Specification Notes

* Outside diameter

† At 35 lbs. per cu. ft.

Specifications may change without notice. Consult with a Conair representative for the most current information.

