

Disposable Filter Units

Ideal for OEM Gas and Liquid Applications

Parker Hannifin Corporation manufactures Balston brand disposable filter units (DFU) which incorporate an extensive media capability with a small, inexpensive, disposable housing. This unique design was introduced to the filtration industry over 20 years ago. Balston DFUs are available standard and custom sizes and configurations. A wide range of filter media is available to configure application specific filtration. We can also design a disposable filter housing that suits your application needs.

Popular features include vapor adsorption models, oil indicating elements and integral barbed connections. Pressure ranges to 8.6 bar g and temperatures to 135°C. These economical filter combine the ease and convenience of disposability with proven Balston filtration technology. Balston DFUs are the perfect complement to instrumentation and equipment sensitive to contamination found in compressed gas and liquids.



Product features:

- Available with liquid drain port and various indicators
- Wide range of filter efficiencies
- Resistant materials of construction
- Pressures up to 8.6 bar g
- Lightweight, cost effective
- Choice of port size and configuration

Ideal for these applications:

- Final filter for air logic devices
- Protection of pneumatic components
- Filtration of portable environmental sampling devices
- Filtration of samples to on-line analysers
- Protection of Pneumatic temperature controls
- Filtration to emissions monitoring devices
- Filtration of medical devices
- Filtration of inkjet printers

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S3.2.446 September 2011
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DFU Cartridge and Housing Selection

General Description

K Type Filter: Designed with integral dye to indicate presence of oil. Polyolifin binder with borosilicate glass fibres. Available in style 9900-05.

LP Filter: Designed to filter liquids with high solids contents. Have an integral prefilter and an external support structure (flow direction is inside to outside). Available in style 7825 only. Polyolifin binder with glass borosilicate fibres.

X-Type Filter: Used for solids and relatively large amounts of suspended liquids in gases. Provide excellent chemical resistance, temperature resistance to 149°C and good mechanical handling properties. These cartridges have thick walls for coalescing efficiency (Fluorocarbon Resin Binder available in style 8833-11 DFUs).

P-Type Filter: Used for less critical applications. 100 Micron nominal rated plastic filter element. Available in style 4433-05 only.

Q-Type Filter: Used for solids and trace amounts of liquids in gases. Similar to X-type cartridges in chemical and temperature resistance. Fluorocarbon Resin Binder. Available in 9922-05, 9922-11 styles.

U Type Filter: Used for solids and trace amounts of liquids in gases. Specifically designed to have same chemical and temperature resistance as nylon, plastic housings. Polyolifin binders with borosilicate glass fibre that produces pure white filter media. Available in styles 4433-05, 9933-05, 9933-11.

DAU Grades: Contain a bed of adsorbent granules. Selectively remove vapours from air and other gases.

Recommended Grade

Filter Grade	Efficiency - Gas	Efficiency - Liquid
A	99.9999+% at 0.9 micron	98% at 0.9 micron
AA	99.99999+% at 0.01 micron	98% at 0.3 micron
B	99.99% at 0.01 micron	98% at 2 micron
C	98% at 0.01 micron	98% at 8 micron
D	93% at 0.01 micron	98% at 25 micron
E	85% at 0.01 micron	Not recommended
95	Absolute to 0.01 micron with Q prefilter	Not recommended
SA	99.9999+% at 0.01 micron Sterile Air	Not recommended

Installation Instructions

Primary flow should be in the direction of the arrow (inside-to-outside of the filter cartridge). Moderate reverse flow can be tolerated without damage, as in a vent or breather application. Slip-on tubing (1/4" ID) may be used for low pressure applications. For high pressure applications, compression tubing fittings recommended by the manufacturers for use with 1/4" OD plastic tubing are satisfactory to 8.6 bar g. Contact Parker's technical support team for information on Parker Hannifin tube fittings, regulators, valves etc.

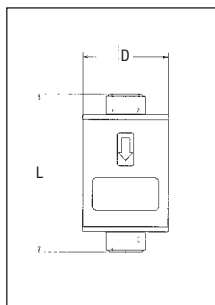
Notes:

1 DFU 9933-05-AQ (or others with Nylon housings) may be sterilised with ethylene oxide or by autoclaving to 110°C. For autoclaving to 135°C, use DFU 9922-05-AQ (or others with PVDF housings).

For connections to pressure pipe or tubing		For connections to low pressure plastic tubing	
Compression fittings for 1/4" O.D. tubing may be obtained from Parker.		Tubing with 1/4" ID may be slipped over the DFU end fittings and held with tubing clamps. Plastic barbs are available to connect the DFU to smaller diameter plastic tubing. The connection is suitable for pressures to 3.4 bar g.	
The following brass fittings seal by o-ring compression and may be completely recovered and reused when changing filters. They may be purchased from Parker.		DFU to 1/16" ID tubing - P/N 14000 (bag of 20 barbs)	
Connector	1/4" tubing to 1/4" NPT, female - P/N 11970	DFU to 1/8" ID tubing - P/N 14001 (bag of 20 barbs)	
Connector	1/4" tubing to 1/4" tubing - P/N 11971	Parker offers a manual drain valve for removal of coalesced liquids from the Type 8833-11-DX.	
Elbow	1/4" tubing to 1/8" NPT female (for manual drain on Type 8833-11) - P/N 11972	Drain Valve	1/8" NPT (male) x 1/8" ID tubing (Requires elbow part 11972) P/N 20125

DFU Cartridge and Housing Selection

General Purpose for Gases - Highest Flow



Specifications

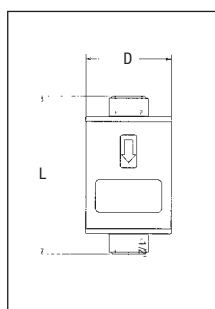
Max. Pressure at 43°C:	8.6 bar g
Max. Temp. at 0 bar g:	52°C (125°F)
Inlet / Outlet Ports:	1/4" FNPT
Drain:	None
Housing Material of Construction:	PolyPropylene
L= Length:	Available 152, 203, 254 or 304mm
D= Diameter:	64mm

Ordering Information

A7825-□□-□□□□ Box of 100 bulkpack
 C7825-□□-□□□□ Box of 500 bulkpack
 Available in Type Q and in the following grades: A, B, C, D. Also available with adsorbents 000, 101, 103, 107. Please consult OEM Technical Support for information on flow rates for these configurations. 3/8" NPT, 3/8" and 1/4" Tube Quick Disconnect are available upon request.

Model 7825

General Purpose for Liquids - Highest Flow



Specifications

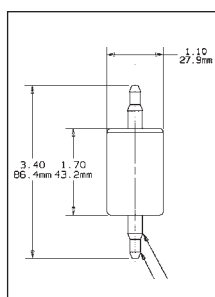
Max. Pressure at 43°C:	8.6 bar g
Max. Temp. at 0 bar g:	52°C (125°F)
Inlet / Outlet Ports:	1/4" FNPT
Drain:	None
Housing Material of Construction:	Polypropylene
L= Length:	Available 152, 203, 254 or 304mm
D= Diameter:	64mm

Ordering Information

A7825-□□-□□□□ Box of 100 bulkpack
 C7825-□□-□□□□ Box of 500 bulkpack
 Available with integral liquid cartridge in grades ranging from 75 micron to 0.22 micron at 80% efficiency rating. Please consult OEM Technical Support for information on flow rates for these configurations. 3/8" NPT, 3/8" and 1/4" Tube Quick Disconnect are available upon request.

Model 7825

General Purpose with Integral Barb Fittings



Specifications

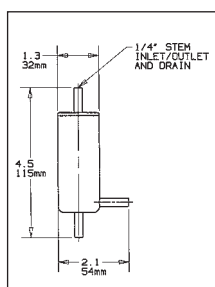
Max. Pressure at 43°C:	8.6 bar g
Max. Temp. at 0 bar g:	110°C (230°F)
Inlet / Outlet Ports:	1st Tier: 1/4" Tube 2nd Tier: 3/8" Tube
Drain:	None
Material of Construction:	Nylon
Internal Volume:	0.01L

Ordering Information

A4433-05-□□ Box of 100 bulkpack
 C4433-05-□□ Box of 500 bulkpack
 Available in Type U and in grades: A, B, C and D

Model 4433-05

General Purpose with Drain Port



Specifications

Max. Pressure at 43°C:	8.6 bar g
Max. Temp. at 0 psig:	110°C (230°F)
Inlet / Outlet Ports:	1/4" Tube
Drain:	1/4" Tube
Housing Material of Construction:	Nylon
Internal Volume:	0.02L

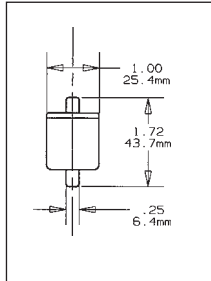
Ordering Information

A8833-11-□□ Box of 100 bulkpack
 C8833-11-□□ Box of 500 bulkpack
 Available in Types U and X and in the following grades: A, B, C, D, S. Also available with adsorbents 000, 101, 103, 107.

Model 8833-11

DFU Cartridge and Housing Selection

Miniature General Purpose



Model 9933-03

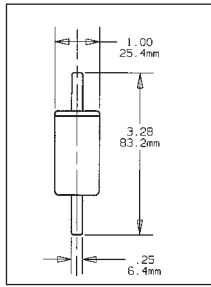
Specifications

Max. Pressure at 43°C:	8.6 bar g
Max. Temp. at 0 bar g:	110°C (230°F)
Inlet / Outlet Ports:	1/4" Tube
Drain:	None
Housing Material of Construction:	Nylon
Internal Volume:	0.004L

Ordering Information

A9933-03-□	Box of 100 bulkpack
C9933-03-□	Box of 500 bulkpack
Available in Type U and grades A, B, C and D.	

General Purpose - Minimal Length



Model 9930-05

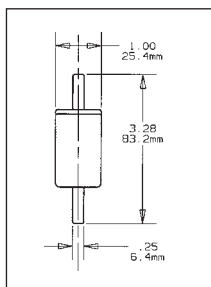
Specifications

Max. Pressure at 43°C:	8.6 bar g
Max. Temp. at 0 bar g:	110°C (230°F)
Inlet / Outlet Ports:	1/4" Tube
Drain:	None
Housing Material of Construction:	Nylon
Internal Volume:	0.01L

Ordering Information

A9930-05-□	Box of 100 bulkpack
C9930-05-□	Box of 500 bulkpack
Available in Type U and in the following grades: A, B, C, D	

General Purpose DFU - Low Flow Gas



Model 9933-05

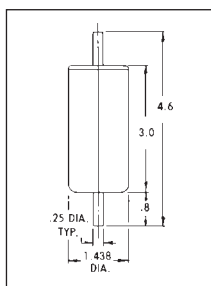
Specifications

Max. Pressure at 43°C:	8.6 bar g
Max. Temp. at 0 bar g:	230°F (110°C)
Inlet / Outlet Ports:	1/4" Tube
Drain:	None
Housing Material of Construction:	Nylon
Internal Volume:	0.01L

Ordering Information

A9933-05-□	Box of 100 bulkpack
C9933-05-□	Box of 500 bulkpack
Available in Type U and in the following grades: A, B, C, D. Also available with adsorbents 000, 101, 103, 107.	

General Purpose DFU - Higher Flow



Model 9933-11

Specifications

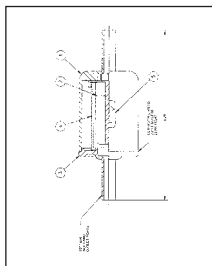
Max. Pressure at 43°C:	8.6 bar g
Max. Temp. at 0 bar g:	110°C (230°F)
Inlet / Outlet Ports:	1/4" Tube
Drain:	None
Housing Material of Construction:	Nylon
Internal Volume:	0.02L

Ordering Information

A9933-11-□	Box of 100 bulkpack
C9933-11-□	Box of 500 bulkpack
Available in Type U and in the following grades: A, B, C, D. Also available with adsorbents 000, 101, 103, 107.	

DFU Cartridge and Housing Selection

Large Capacity High Flow DFU



Model 8800-12

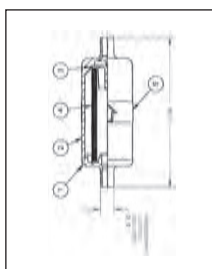
Specifications

Max. Pressure at 43°C:	3.4 bar g
Max. Temp. at 0 bar g:	65°C (150°F)
Inlet / Outlet Ports:	1/2" Tube
Drain:	None
Housing Material of Construction:	Nylon
Internal Volume:	0.138L

Ordering Information

8800-12-□ Box of 1
Available in Types Q and X and in the following grades: A, B, C, D

Large Capacity High Flow DFU Intake Filter



Model 9953-11

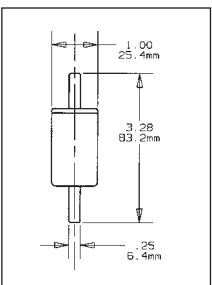
Specifications

Max. Pressure at 43°C:	0.14 bar g
Max. Temp. at 0 bar g:	52°C (125°F)
Inlet / Outlet Ports:	0.032" OD
Drain:	None
Housing Material of Construction:	Polypropylene
Internal Volume:	0.033L

Ordering Information

9953-11-□ Box of 10
Available in Types Q and X and in the following grades: A, B, C, D

High Chemical Resistance - Low Flow



Model 9922-05

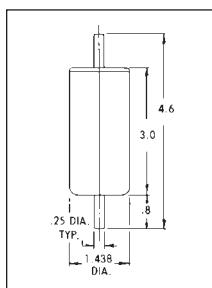
Specifications

Max. Pressure at 43°C:	8.6 bar g
Max. Temp. at 0 bar g:	135°C (275°F)
Inlet / Outlet Ports:	1/4" Tube
Drain:	None
Housing Material of Construction:	PVDF
Internal Volume:	0.01L

Ordering Information

A9922-05-□ Box of 100 bulkpack
C9922-05-□ Box of 500 bulkpack
Available in Type Q and in the following grades: A, B, C, D. Also available with adsorbents 000, 101, 103, 107.

High Chemical Resistance DFU -Higher Flow



Model 9922-11

Specifications

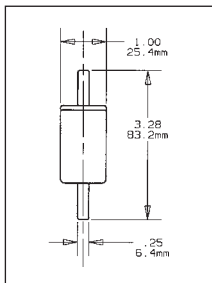
Max. Pressure at 43°C:	8.6 bar g
Max. Temp. at 0 bar g:	135°C (275°F)
Inlet / Outlet Ports:	1/4" Tube
Drain:	None
Housing Material of Construction:	PVDF
Internal Volume:	0.02L

Ordering Information

A9922-11-□ Box of 100 bulkpack
C9922-11-□ Box of 500 bulkpack
Available in Types Q and in the following grades: A, B, C, D

DFU Cartridge and Housing Selection

Oil Indicating DFU



Model 9900-05

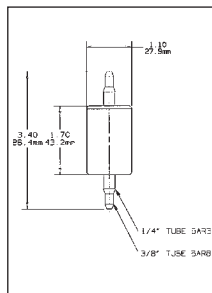
Specifications

Max. Pressure at 43°C:	8.6 bar g
Max. Temp. at 0 bar g:	110°C (230°F)
Inlet / Outlet Ports:	1/4" Tube
Drain:	None
Housing Material of Construction:	Nylon
Internal Volume:	0.01L

Ordering Information

A9900-05-□	Box of 100 bulkpack
C9900-05-□	Box of 500 bulkpack
Available in Type K and in grade B.	

General Purpose with Integral Barb Fittings - For Less Critical Applications



Model 4433-05-10P

Specifications

Max. Pressure at 43°C:	8.6 bar g
Max. Temp. at 0 bar g:	110°C (230°F)
Inlet / Outlet Ports:	1st Tier: 1/4" Tube 2nd Tier: 3/8" Tube
Drain:	None
Material of Construction:	Nylon
Internal Volume:	0.01L

Ordering Information

A4433-05-10P	Box of 100 bulkpack
C4433-05-10P	Box of 500 bulkpack
Retention efficiency of plastic filter element is 100 micron nominal.	

Disposable Adsorption (DAU) Models



Adsorbent Grade Use For

Carbon	000	Compressor oil vapours, C ₅ and heavier hydrocarbons, aromatics, oxygenated hydrocarbons, chlorinated organics, freons, carbon disulphide.
Silica Gel	101	Recommended only for water vapour.
Molecular Sieve Type 13X	103	Most C ₄ and lighter hydrocarbons, ethylene, propylene, acetylene, ethylene oxide, ammonia, mercaptans, sulphur hexafluoride, triethylamine, and smaller amines.
Mixed Sodium & Calcium Hydroxides	107	All acidic gases, including sulphur trioxide, sulphur dioxide, nitrogen dioxide, carbon dioxide, hydrogen sulphide, hydrogen chloride, phosphorus trichloride, boron trifluoride.

Notes:

- 1 Please refer to Ordering Information for complete explanation of nomenclature.
- 2 In DAU 9933-05-107 and DAU 9933-11-107, color indicator turns violet when adsorbent is spent.
- 3 In DAU 9933-05-101 and 9933-11-101, adsorbent turns pink when vapour capacity is reached.
- 4 Maximum operating temperature is 82°C.

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September 2011 / S3.2.446



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