DRYER / FILTERS



..... GETTING BETTER ALL THE TIME

09-13



MASTER PNEUMATIC - DETROIT, INC.

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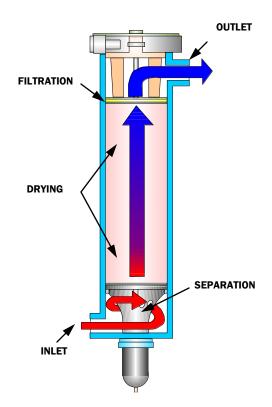
MP FILENCO Point of use Dryer / Filters

Many compressed air systems require **point of use** cleaning and drying to supplement a central system. Filenco Dryer/Filter units succeed where conventional dryers and filters fail by reducing the dew point because of their triple action cleaning process. Where temperatures vary and / or applications are critical, M/P - Filenco **clean air** products are designed to filter air, drop the pressure dew point and remove oil mist.

- Entering air is spun around a stationary cone coalescing water and oil droplets, breaking up brittle scale, and discharging the mixture through the drain mechanism
- Water vapor is removed through the desiccant drying section. Pressure dew points of below zero Farenheit are achieved at most flow rates using MS desiccant. Oil aerosols will be removed by the clay - activated carbon (CD/C) desiccant.
- Particulate scale and other solids are removed through the final filtration steps.A multiple layer disc pack of final filters removes particles to 1 micron in size.

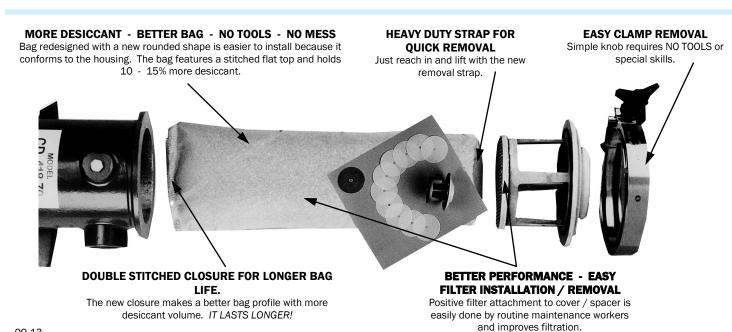
A single housing which saves in three ways:

- 1. The initial cost is reduced with a single housing.
- 2. Installation cost is reduced because only one break needs to be made in the pipeline, saving parts and labor.
- Maintenance is reduced. The dryer/filter is easily serviced with a replacement element kit, restoring all three functions quickly and economically, saving labor and downtime. NO TOOLS REQUIRED.



Filenco Dryer/Filter units are unique and are supported by a nationwide network of distributors:

- 1. System Design Distributors provide the support that will allow you to make quick and economical installations.
- 2. Rapid Service Replacement element kits are available for shipment within twenty-four hours from our distributors or from our factory. In most cases, complete Dryer/Filter units are in stock for shipment within forty eight hours.

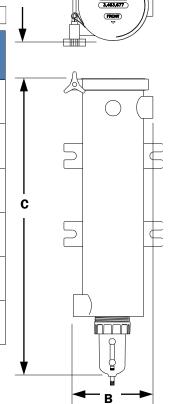


MP FILENCO Dryer / Filters Specifications

DIMENSIONS: INCHES (cm)

With Attached Drain

| Product Number | 'A' | 'B' | 'C' No Drain | 'C' D1, D2, D3, D4 | ʻC' D5 | 'C' D6 | 'C' D7 | 'C' D8 |
|-----------------------------------|-------------------|------------------|--------------------|--------------------------|-------------------|-------------------|--------------------|-------------------|
| CD25-2 MS25-2 CDC25-2 | 3 1/2 (8.89) | 2 5/8 (6.67) | 7 (17.78) | 12 1/4 (31.12) | 9 1/2 (24.13) | 10 1/2 (26.67) | 11 5/8 (29.53) | 9 1/2 (24.13) |
| CD36-3 MS36-3 CDC36-3 | 5 (12.7) | 4 (10.16) | 9 1/2 (24.13) | 13 1/2 (34.29) | 12 3/8 (31.44) | 12 1/4 (31.12) | 13 3/8 (33.97) | 12 3/8 (31.44) |
| CD38-4 MS38-4 CDC38-4 | 5 (12.7) | 4 1/2 (11.43) | 11 1/2 (29.21) | 15 1/2 (13.97) | 14 3/8 (36.52) | 14 1/4 (36.20) | 15 3/8 (39.06) | 14 3/8 (36.52) |
| CD418-8 MS418-8 CDC418-8 | 6 1/2 (16.51) | 6 (15.24) | 20 (50.8) | 24 (60.96) | 22 7/8 (58.11) | 22 3/4 (57.79) | 23 7/8 (60.65) | 22 7/8 (58.11) |
| CD625-12 MS625-12 CDC625-12 | 8 (20.32) | 8 1/2 (21.59) | 21 1/4 (53.98) | 25 1/4 (64.14) | 24 1/8 (61.60) | 24 (60.96) | 25 1/8 (63.82) | 24 1/8 (61.60) |
| CD832-16 MS832-16 CDC832-16 | 10 1/2 (26.67) | 10 (25.4) | 34 (86.36) | 38 (96.52) | 37 5/8 (95.57) | 37 1/2 (95.25) | 39 5/8 (100.65) | 37 5/8 (95.57) |



Maximum Pressure:

150 P.S.I. (10 Bar)

Maximum Temperature: 125 Degree F. (52 Degree C.)

This applies to all M/P Filenco filter / dryers. Consult Factory for products requiring increase in Maximum Pressure.

Not all M/P Filenco dryer/ filters have attached brackets as shown above.

| Lbs. (Kg) | CD25-2 | MS25-2 | CDC25-2 | CD36-3 | MS36-3 | CDC36-3 |
|----------------|-------------|-------------|-------------|------------|------------|------------|
| Approx. Weight | 2.11 (0.96) | 2.11 (0.96) | 2.11 (0.96) | 5 (2.27) | 5 (2.27) | 5 (2.27) |
| | CD38-4 | MS38-4 | CDC38-4 | CD418-8 | MS418-8 | CDC418-8 |
| Approx. Weight | 6.00 (2.7) | 6.00 (2.7) | 6 (2.7) | 15.4 (7.0) | 15.4 (7.0) | 15.4 (7.0) |
| | CD625-12 | MS625-12 | CDC625-12 | CD832-16 | MS832-16 | CDC832-16 |
| Approx. Weight | 27.7 (12.6) | 27.7 (12.6) | 27.7 (12.6) | 63.90 (29) | 63.90 (29) | 63.90 (29) |

| PRODUCT | S.C.F.M. (LPS) | MOISTURE INDICATOR PORT | INLET / OUTLET PORT |
|-----------|----------------|------------------------------------|---------------------|
| CD25-2* | 7 (3.33) | 3/8 NPTF (with Tee handle adaptor) | 1/4 NPTF, BSPP |
| CD36-3* | 18 (8.57) | 3/8 NPTF | 3/8 NPTF, BSPP |
| CD38-4* | 30 (14.28) | 3/8 NPTF | 1/2 NPTF, BSPP |
| CD418-8* | 70 (33.33) | 3/4 NPTF | 1 NPTF, BSPP |
| CD625-12* | 150 (71.42) | 3/4 NPTF | 1-1/2 NPTF, BSPP |
| CD832-16* | 300 (142.85) | 3/4 NPTF | 2 NPTF, BSPP |

 $[\]star$ = if ordering BSPP add suffix 'W'

MP FILENCO Dryer / Filters Specifications

These products are intended for industrial compressed air systems only. Do not use where pressures or temperatures can exceed those listed on the label. Except as otherwise specified by the manufacturer, this product is specifically designed for compressed air service and use with any other fluid (liquid or air) is a misapplication. For example, use with or injection of certain hazardous liquids or gases in the system (such as alcohol or liquid petroleum gas) could be harmful to the unit or result in a combustible condition or hazardous external leakage.

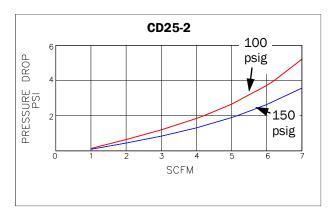
Before using for non-industrial applications, life-support systems, with fluids other than those specified, or other applications not within published specifications, consult the manufacturer for written approval.

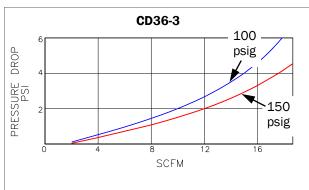
Components used on fluid power system can fail in various modes through misuse, age, inadequate maintenance, or malfunction. The system designer is warned to consider failure modes of all component parts used in fluid power systems and to provide adequate safeguards to prevent personal injury or damage to equipment in the event of such a failure.

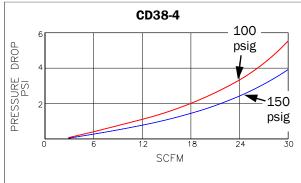
System designers must provide a warning to end users in the instructions if protection against a failure mode cannot be adequately provided.

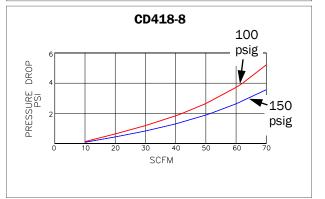
System designers and end users are cautioned to review specific warnings found on product labels and in instruction sheets packed with these products.

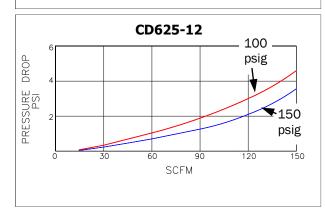
M/P suggests metal bowl drains (option D4) as standard.

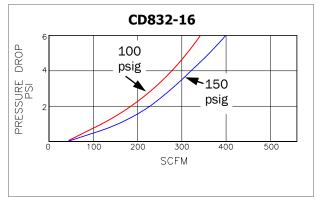












Desiccant Materials

M/P Filenco Dryer / Filters add the ability to drop the pressure dew point preventing the reoccurrence of water in the air system and systematically adsorbing sulfuric acid compounds that form into abrasive gummy varnish or shellac. Three choices of desiccant are available:

CD - CLAY DESICCANT

Effective for both water and oil removal. Requires no coalescing or air preparation. A general purpose desiccant which produces initial dew point depressions (pressure dew points) of 20 to 25 degrees F. Life expectancy is up to three months depending on humidity, flow rate and frequency of operation.

CDC - CLAY DESICCANT WITH ACTIVATED CARBON

A layer of activated carbon following the clay desiccant produces slightly lower initial dew points. It provides better removal of noxious gasses and oil aerosols. It is to be used where a higher degree of purification is required.

MS - MOLECULAR SIEVE DESICCANTS

Highly porous Alumina-silicate complexes produce exceptionally low dew points - as much as a 80 degree F initial pressure dew point depression. Molecular sieve material will be coated with oil passing through the system thereby reducing efficiency and life expectancy. They are generally used with oil less compressors or a coalescing filter is used to remove the oil before the air enters the Filenco Dryer/Filters. The addition of a general purpose filter will extend the life of the coalescing filter element, further reducing Cost. "Always install filters before the MS models".



Photo shown above reflects Master Pneumatic's No: BMFFC70-4 along with MP Filenco No: MS38-4D3M.

Available Options



Manual drain Polycarbonate bowl with plastic bowl guard.



Float drain
Polycarbonate bowl with plastic bowl guard.



Manual Metal Bowl with sight glass.



Float Drain Metal bowl.



Spartan Electronic Controlled drain 110v.



Air poppet (actuator required). Heated drain Temperature controlled 24v.



Air poppet Heated drain Temperature controlled (24v) with fixed cycle electronic timer. (24v).



Warrior electronic Controlled drain 110v.



MOISTURE INDICATORS

Cobalt chloride impregnated paper changes color in three different color coded sections at three different humilities on the MI750 - as the system approaches saturation. The reversible color change occurs at a single humidity on the MI375. Units can be mounted in the body of the dryer / filter or in a tee placed at the exit from the dryer / filter.



Dryer Filter Product Numbering Chart

CD625-12D4M

| CODE | DESCRIPTION |
|------|-------------------------------|
| CD | Clay Desiccant |
| MS | Molecular Sieve |
| CDC | Clay Desiccant with Carbon |

| CODE | S.C.F.M. | PIPE PORT |
|--------|----------|-----------|
| 25-2 | 7 | 1/4 |
| 36-3 | 18 | 3/8 |
| 38-4 | 30 | 1/2 |
| 418-8 | 70 | 1 |
| 625-12 | 150 | 1-1/2 |
| 832-16 | 300 | 2 |

| _ | CODE | DESCRIPTION |
|---|------|---------------------------------------|
| | | Blank for no mois- ture indicator |
| | М | With Moisture Indicator (Standard) |

| CODE | DESCRIPTION | | |
|------|--|--|--|
| | Blank for no filter bowl attachment | | |
| D1 | PGM manual Polycarbonate bowl with plastic bowl guard. | | |
| D2 | PGA Float drain Polycarbonate bowl with plastic bowl guard. | | |
| D3 | MSM Manual Metal Bowl with sight glass. | | |
| D4 | MBA Float Drain Metal bowl. | | |
| D5 | (REPLACES OLD AD-10, AD-10/E550 AND AD-10/E600) Spartan Electronic Controlled drain 110v. | | |
| | NO LONGER AVAILABLE Use Option D8 | | |
| D6 | AD-5 AIR POPPET (ACTUATOR REQUIRED). HEATED DRAIN—TEMPERATURE CONTROLLED. 24v. | | |
| D7 | AD-5/E550 AIR POPPET (24v) WITH FIXED CYCLE ELECTRONIC TIMER. (24v). | | |
| D8 | Warrior Electronic Controlled Drain 110v. | | |

Replacement Element Kits

| KIT NUMBER | DESCRIPTION |
|------------|--|
| CD-25NRE | Clay Desiccant Element Kit for '25' series (Case of 4) |
| CD-36NRE | Clay Desiccant Element Kit for '36' series (Case of 4) |
| CD-38NRE | Clay Desiccant Element Kit for '38' series (Case of 4) |
| CD-418NRE | Clay Desiccant Element Kit for '418' series (Case of 4) |
| CD-625NRE | Clay Desiccant Element Kit for '625' series (Case of 2) |
| CD-832NRE | Clay Desiccant Element Kit for '832' series (Case of 1) |
| MS-25NRE | Molecular Sieve Element Kit for '25' series (Case of 4) |
| MS-36NRE | Molecular Sieve Element Kit for '36' series (Case of 4) |
| MS-38NRE | Molecular Sieve Element Kit for '38' series (Case of 4) |
| MS-418NRE | Molecular Sieve Element Kit for '418' series (Case of 4) |
| MS-625NRE | Molecular Sieve Element Kit for '625' series (Case of 2) |
| MS-832NRE | Molecular Sieve Element Kit for '832' series (Case of 1) |
| | |

| KIT NUMBER | DESCRIPTION |
|------------|---|
| CDC-25NRE | Clay Desiccant / Activated Carbon Element Kit for '25' series. (Case of 4) |
| CDC-36NRE | Clay Desiccant / Activated Carbon Element Kit for '36' series. (Case of 4) |
| CDC-38NRE | Clay Desiccant / Activated Carbon Element Kit for '38' series. (Case of 4) |
| CDC-418NRE | Clay Desiccant / Activated Carbon Element Kit for '418' series. (Case of 4) |
| CDC-625NRE | Clay Desiccant / Activated Carbon Element Kit for '625' series. (Case of 2) |
| CDC-832NRE | Clay Desiccant / Activated Carbon Element Kit for '832' series. (Case of 1) |