

**PRODUCT
DATA**
ACCESS-LINE™
SERIES 12MS
PD-AL12MS-03A
JANUARY 2003

HVAC
ACCESSORY
EQUIPMENT

ACCESS-LINE™ SERIES 12MS

12" MOISTURE SEPARATOR SECTION

Moisture Separator



The Series 12MS is a Moisture Separator Section designed for those applications where removal of excessive water, oil mist, fog or water-like elements from a saturated air stream is necessary. It is particularly useful in systems where saturated air is allowed to condense out, such as downstream of DX, chilled water coils, steam or mist humidifiers.

How It Works...

The housing utilizes 4" deep FILTER-LINE™ Moisture Separator Cells which capture and then separate moisture from the air stream. Applying a compact series of flat, dense, aluminum screening materials, each cell creates over 64 square feet of surface area in the 2" media pack. This enormous amount of surface area forces moisture to condense, bead and accumulate on one of the more than 2,200,000 individual filament intersects. Once collected, the accumulated moisture begins to weep or drip downward where the fluent is pooled and released through a series of drain holes that channel the moisture onto an aluminum extruded slide track. Once collected in the track, the run-off is funneled into a central vertical drain system that brings it directly to a collection pan at the base of the unit. This crossbroke drain pan has at its center and bottom a factory installed pipe coupling, easily accessible for field piping and installation, which completes the collection process in an effective and efficient manner.

CONSTRUCTION FEATURES

- 16 GAUGE ALUMINIZED STEEL CONSTRUCTION
- FACTORY ASSEMBLED
- 2 LIFT-OFF ACCESS DOORS
- VERTICAL DRAIN SYSTEM
- 4" TRACK SYSTEM FOR THE CELLS
- DRAIN HOLES IN TRACK

Rugged Construction

The ACCESS-LINE Series 12MS is manufactured from 16 gauge aluminized steel and equipped with two fully gasketed, lift-off access doors to prevent air or moisture bypass. Complete with extruded aluminum tracks, drain holes, a vertical drain system and a drain pan, this section can also be fabricated from 304 stainless steel.

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We reserve the right to make changes in product design and product specifications without prior notice or obligation.

BLC INDUSTRIES INC.
Breathe Easy, We Have The Line On Air Filtration.

Moisture Separator Section: Options

Double Wall Insulation isolates the 12MS Section, combating vibration, noise and condensation. Weatherproof units for outside installations, Flange Adapters for all commercial and custom air handling units, Epoxy Coating and High Pressure (14 gauge aluminized) constructions are also available as needed. **It is important to note that BLC highly recommends using 304 Stainless Steel construction for both Moisture Separator Sections and Cells. Stainless Steel construction ensures unit and system integrity in the most corrosive environments.**

EQUIPMENT OPTIONS

- DOUBLE WALL INSULATION
- WEATHERPROOFING
- HIGH PRESSURE
- FLANGE ADAPTERS
- SUPPORT LEGS
- HANGER BRACKETS
- STATIC TAPS
- STAINLESS STEEL

These and other specialty options are available, please contact factory for further information.



More than 2,200,000 individual filament intersects force moisture to accumulate in the Moisture Separator Cell



Dimensional Data

HEIGHT CODE (Nominal)	ACTUAL HEIGHT	MODEL EXT.	WIDTH CODE (Nominal)									
			01	02	03	04	05	06	07	08	09	10
			ACTUAL WIDTH									
			11 3/8"	23 3/8"	34 7/8"	46 7/8"	58 3/8"	70 3/8"	81 7/8"	93 7/8"	105 3/8"	117 3/8"
07	85 3/4"	MODEL EXT. CFM @ 500 FPM FILTER QTY.		02X07 7000 1H 3F	03X07 10000 4H ■ 3F	04X07 14000 2H 6F	05X07 17000 5H ■ 6F	06X07 21000 3H 9F	07X07 24000 6H ■ 9F	08X07 28000 4H 12F	09X07 31000 7H ■ 12F	10X07 35000 5H 15F
06	74 1/16"	MODEL EXT. CFM @ 500 FPM FILTER QTY.	01X06 3000 3H	02X06 6000 3F	03X06 9000 3H 3F	04X06 12000 6F	05X06 15000 3H 6F	06X06 18000 9F	07X06 21000 3H 9F	08X06 24000 12F	09X06 27000 3H 12F	10X06 30000 15F
05	62 1/16"	MODEL EXT. CFM @ 500 FPM FILTER QTY.		02X05 5000 1H 2F	03X05 7000 3H ■ 2F	04X05 10000 2H 4F	05X05 12000 4H ■ 4F	06X05 15000 3H 6F	07X05 17000 5H ■ 6F	08X05 20000 4H 8F	09X05 22000 6H ■ 8F	10X05 25000 5H 10F
04	50 3/8"	MODEL EXT. CFM @ 500 FPM FILTER QTY.	01X04 2000 2H	02X04 4000 2F	03X04 6000 2H 2F	04X04 8000 4F	05X04 10000 2H 4F	06X04 12000 6F	07X04 14000 2H 6F	08X04 16000 8F	09X04 18000 2H 8F	10X04 20000 10F
03	38 3/8"	MODEL EXT. CFM @ 500 FPM FILTER QTY.		02X03 3000 1H 1F	03X03 4000 2H ■ 1F	04X03 6000 2H 2F	05X03 7000 3H ■ 2F	06X03 9000 3H 3F	07X03 10000 4H ■ 3F	08X03 12000 4H 4F	09X03 13000 5H ■ 4F	10X03 15000 5H 5F
02	26 11/16"	MODEL EXT. CFM @ 500 FPM FILTER QTY.	01X02 1000 1H	02X02 2000 1F	03X02 3000 1H 1F	04X02 4000 2F	05X02 5000 1H 2F	06X02 6000 3F	07X02 7000 1H 3F	08X02 8000 4F	09X02 9000 1H 4F	10X02 10000 5F
01	14 11/16"	MODEL EXT. CFM @ 500 FPM FILTER QTY.		02X01 1000 1H		04X01 2000 2H		06X01 3000 3H		08X01 4000 4H		10X01 5000 5H

1. H denotes half size filter - 11 3/8 x 23 3/8.
2. F denotes full size filter - 23 3/8 x 23 3/8.
3. ■ denotes unit requires an 11 3/8 x 11 3/8 blank-off panel, which is supplied.
4. Unit depth is 12".

MODEL NUMBER KEY
12MS10x04

Insert model number extension to complete model number.

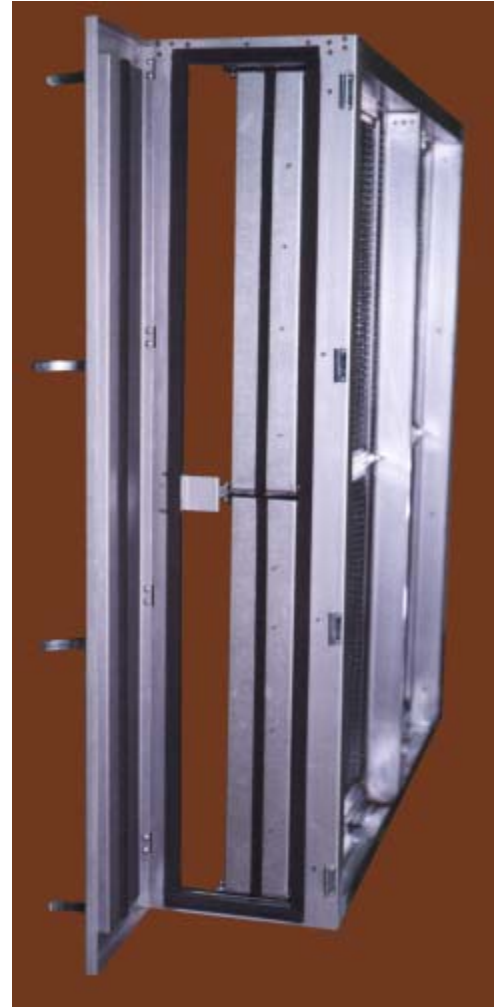
- 12-** 12" Depth
- MS-** Moisture Separator
- 10-** Unit Width
- 04-** Unit Height

Views of the Moisture Separator Section



Front view with 2 Cells only (↑)

Side view showing Cells in tracks (⇒)



Back view with all 4 Cells (↑)

Extruded Tracks and Vertical Drain (⇒)



The Moisture Separator Cells

Used in conjunction with the Moisture Separator Section, the BLC FILTER-LINE Moisture Separator Cell (MSC) loads quickly and efficiently into it. Particularly convenient when accessing for cleaning, these sturdy 4" cells can either be immersed and wet soaked or pressure washed, provided they are not subjected to extraordinarily high pressure flow rates.

Fabricated from 16 gauge aluminized steel, the Moisture Separator Cells are available in full (24 x 24) and half (12 x 24) nominal sizes. The 4" Moisture Separator Cell is equipped with a primary 2" moisture arrestor and a secondary 2" channel collector for the accumulating fluent. Once pooled, the water or fluid is transferred to the equipment section via a series of drain holes that channel the moisture.

PERFORMANCE DATA

When operated at 500 FPM, the MSC is over 99% efficient on droplet sizes of 20 microns or greater. The cell is 91% efficient on droplet sizes of 10 microns or larger, and 58% effective on moistures sized at 4 microns or bigger. Consult FILTER-LINE Series MSC for additional information and performance data on these cells.

FILTER-LINE™ SERIES MSC MOISTURE SEPARATOR CELLS FOR 12" MOISTURE SEPARATOR		
MODEL NUMBER	NOMINAL SIZE	ACTUAL SIZE
FLMSCG41224	12 x 24 x 4	11 3/8 x 23 3/8 x 3 7/8
FLMSCG41620	16 x 20 x 4	15 1/2 x 19 1/2 x 3 7/8
FLMSCG41625	16 x 25 x 4	15 1/2 x 24 1/2 x 3 7/8
FLMSCG42020	20 x 20 x 4	19 1/2 x 19 1/2 x 3 7/8
FLMSCG42025	20 x 25 x 4	19 1/2 x 24 1/2 x 3 7/8
FLMSCG42412	24 x 12 x 4	23 3/8 x 11 3/8 x 3 7/8
FLMSCG42424	24 x 24 x 4	23 3/8 x 23 3/8 x 3 7/8

MODEL NUMBER KEY

FLMSCG42424

Insert model number extension to complete model number.

- FL- FILTER-LINE™
- MSC- Moisture Separator Cell
- G- Side Sealing Gasket
- 4- Cell Depth
- 24- Cell Width
- 24- Cell Height

Notes:

1. Moisture Separator Cells for use in 12" Moisture Separators are supplied with side sealing gasket.
2. See FILTER-LINE™ Series for more Product Data information about Moisture Separator Cells.

PERFORMANCE DATA							
SERIES	INITIAL RESISTANCE						
	@300 FPM	@350 FPM	@400 FPM	@450 FPM	@500 FPM	@550 FPM	@600 FPM
MSC	.08	.12	.17	.21	.25	.29	.34

EFFICIENCY VERSUS DROPLET SIZE										
MICRON SIZE OF DROPLETS										
EFFICIENCY RATING										
1.5	2.0	4.0	6.0	8.0	10.0	12.0	14.0	16.0	18.0	20.0
13%	25%	58%	76%	86%	91%	96%	97%	98%	99%	100%

One Year All Parts Warranty

BLC Industries, Inc. guarantees the ACCESS-LINE 12" Moisture Separator Section to be free from defects in materials of construction or workmanship for a period of one (1) year from the date of shipment, when installed in accordance with equipment instructions and when Moisture Separator Cells are supplied by none other than BLC Industries, Inc.

Within that time, any defective part will be replaced on a "NO CHARGE" basis. Provided the defective part is returned to the factory (freight prepaid by the customer). Replacement parts are F.O.B. Louisville, Kentucky. All returned parts must be accompanied by a Return of Goods Authorization. Please notify BLC Industries, Inc. of intent to return goods.