MARK

LINE FILTERS

from 1 to 40 m^3/min.

TECHNOLOGY YOU CAN TRUST

GB

The filter

Atmospheric air contains already in its origin impurities like: dust, various forms of hydrocarbons and water in form of humidity, which once sucked by the compressor is compressed and delivered to the line together with eventual oily particles.
These polluting agents, interacting among each other, may generate abrasive and corrosive emulsions able to damage the distribution lines, the pneumatic devices and the product itself.

This leads inevitably to:
- Leakages of air in the piping
- Greater maintenance costs for the machine using it
- Production decrease
- Loss in product quality and corporate image

The growing automation of plants, the use of more and more sophisticated devices requires compressed air, which is much more free of those impurities it usually contains.

LINE FILTERS of Mark can hold and remove those polluting agents that can damage the regular operation of the production cycle.

STANDARD COMPONENTS

FIXED BODY
for the assembly on piping, with wide air passage and low load losses.

MOBILE BODY
for containing the cartridge, easily unscrewable, with depressurisation device for a greater use safety and discharge of condensate.

FILTERING ELEMENT
with double supports in stainless steel, with pressure connection to ease the replacement.

AUTOMATIC DISCHARGE
only for FM0, FMM, FPRO, with floating device for the draining of separated liquids.

MANUAL DISCHARGE
for the series FCA

ANTI-CORROSION TREATMENT
with varnishing of the surfaces for a long life of the filter body.

ACCESSORIES UPON REQUEST

DIFFERENTIAL PRESSURE GAUGE
(only for FM0, FMM, FPRO, for) the direct reading of the status of cartridge efficiency.

DEVICE OF CLOGGING INDICATION
(only for FM0, FMM, FPRO) with 360° visibility, to visually signal the need to replace the cartridge.

WALL FASTENING KIT
for an easy fixing of the filter to the wall.

MOUNTING TIE RODS KIT
for a modular installation of battery filters.

FOUR filtrations for any need

The Line Filters of Mark, represent the answer to the need of having advanced compressed air able to ensure a greater efficiency and reliability also of the most sophisticated compressed air equipment.

Series FM0
Filtration 1 µm 0,1 mg/m³
0,1 mg/m³ Residual oil
Green identification colour.

Specifically suitable as pre-filter for dryers by refrigeration, as well as for de-oiling device filters, for preventing the tear of piping, of surface treatments, etc...

Series FMM
Filtration 0,01 µm
0,01 mg/m³ Residual oil
Red identification colour.

Specifically suitable as post-filter for dryers by refrigeration, pre-filter for filters series FCA and dryers by adsorption, pneumatic transports, painting plants, control systems, laser cutting, etc...(*)

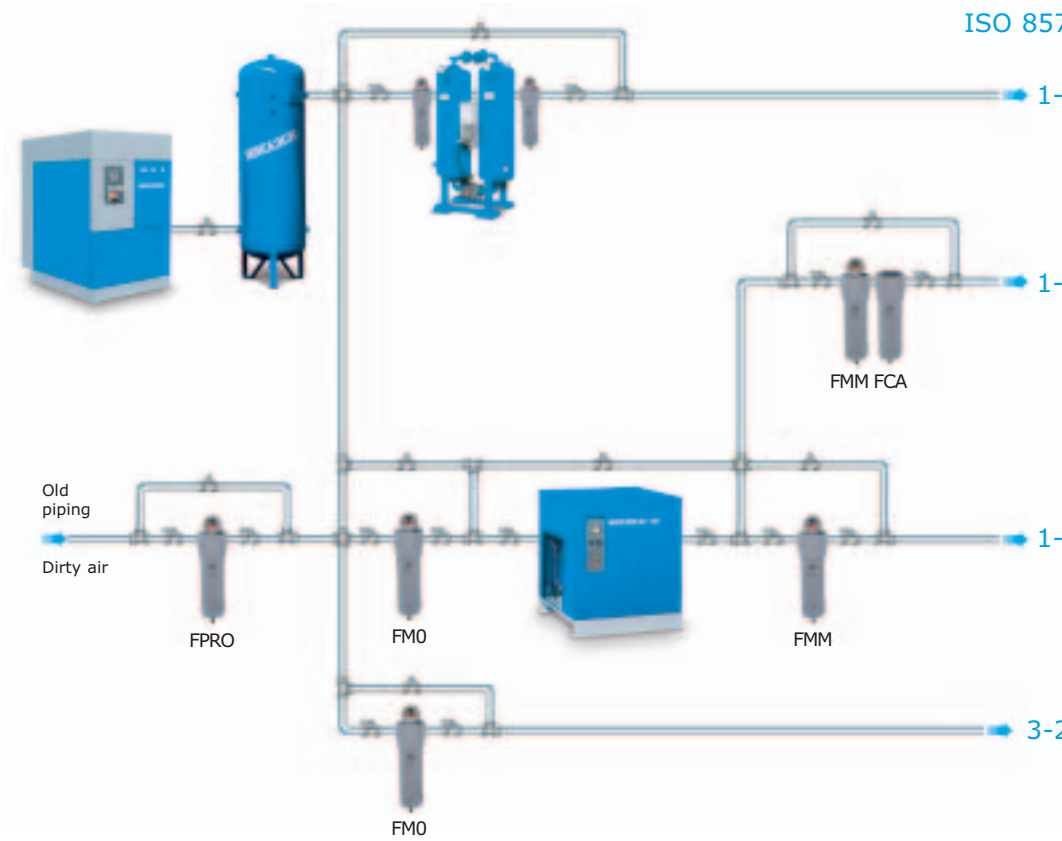
Series FPRO
Filtration 3 µm
Yellow identification colour.

Ideal as protection filter of the line with downstream accessories, in case of compressed air with high contamination of liquids and dust. Usually suggested for rough uses of compressed air in general.

Series FCA
0,005 mg/m³ Residual oil
Silver identification colour.

Activated carbon filter to remove steams, oil and hydrocarbons smells.
Used in the pharmaceutical, foodstuffs, and chemical industry, photography labs, packaging industry, galvanic treatments, quality painting, etc...(*).

THE RIGHT CHOICE FOR A BETTER PRODUCT



ISO 8573-1	DEFINITIONS AND USES
1-1-2	DRY AIR (*) - Instrument systems - Measuring systems - Quality painting - etc...
1-1-4	OIL-LESS AIR (*) - Pharmaceutical, foodstuff, chemical, packaging industry - Galvanic applications - Painting - Photography labs - etc...
1-1-4	OIL-FREE AIR (*) - Pneumatic transports - Industrial painting - Control systems, laser - etc...
3-2-nc	SERVICE AIR - Generic tools - Sandblasting - Building sites in general - etc...

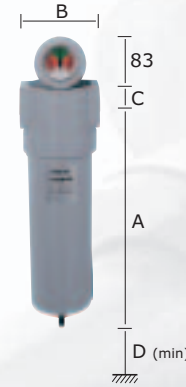
(*) Some applications may require a greater air quality (less humidity, oil or residual dust).
Our offices are at your service for any need.

MARK

DEGREE OF PURITY OF AIR					
ISO 8573-1	OIL	DUST		WATER	
Class	Concentration	Dimension	Concentration	Dew point	Water content
1	0,01 mg/m³	0,1 µm	0,1 mg/m³	- 70 °C	0,003 g/m³
2	0,1 mg/m³	1 µm	1 mg/m³	- 40 °C	0,11 g/m³
3	1,0 mg/m³	5 µm	5 mg/m³	- 20 °C	0,88 g/m³
4	5 mg/m³	15 µm	8 mg/m³	+ 3 °C	6,0 g/m³
5	25 mg/m³	40 µm	10 mg/m³	+ 7 °C	7,8 g/m³
6	-			+ 10 °C	9,4 g/m³

FILTRATION FEATURES							
Series	Filtration µm	Efficiency %	Residual oil ① mg/m³	Loss of initial load mbar	psi	Class ISO 8573-1 ② Oil	Dust
FM0	1	99,9	0,1	30	0,43	2	2
FMM	0,1	99,9999	0,01	90	1,30	1	1
FCA	-	-	0,005	70	1,01	1	-
FPRO	3	99,9	-	20	0,29	4	3

TECHNICAL DATA											
Type	①										
	m³/1′	m³/h	cfm	bar	psi	gas (F)	A	B	C	D	kg
10	1,000	60	35	16	232	3/8″	187	88	21	60	1,1
13	1,300	78	46	16	232	1/2″	187	88	21	60	1,1
20	2,000	120	71	16	232	3/4″	256	88	21	80	1,2
33	3,300	198	117	16	232	1″	262	125	33	100	2,7
60	5,580	335	197	16	232	1″	362	125	33	120	3,2
85	8,500	510	300	16	232	1 1/2″	452	125	33	140	3,7
130	13,000	780	459	16	232	1 1/2″	643	125	33	160	4,8
170	16,600	996	586	16	232	2″	695	163	48	520	8,8
250	25,000	1500	883	16	232	2″	935	163	48	770	13,5
400	40,000	2400	1413	12	174	3″	1070	248	74	780	30,5



① Reference conditions: Pressure 7 bar (100 psi) ; Temperature 20 °C
② The ISO class referred to water is not according to the filter features.
Max. operation temperatures: 65°C for series FM0 – FMM – FPRO ; 35 °C for series FCA

Correction factor of the flow rate when the working pressure changes															
Working pressure (bar)	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Working pressure (psi)	29	43	58	72	87	100	116	130	145	159	174	188	200	217	232
Correction factor	0,38	0,50	0,65	0,75	0,88	1,00	1,13	1,25	1,38	1,50	1,63	1,75	1,88	2,00	2,13

The new flow rate value can be obtained by dividing the real air flow rate by the correction factor related to the working pressure.

The Company reserves the right to make changes, for the purpose of continually improving its products.

UNI EN ISO 9001: 2000

According to

UNI EN ISO 14001

SOLD AT

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