

# Condensate drains Filtering elements

Semi-automatic manual drain; Automatic drain;  
Depressurisation drain; Depressurisation drain, protected  
Ports: 1/8 (without drain)

FUNCTIONING CONDENSATE DRAINS AND FILTERING ELEMENTS



The filters are used to remove impurities in the compressed air, which must then be removed from the pneumatic circuit. The filters can be equipped with different types of drainings of condensate, both automatic and manual. The correct combination and the functioning is reported in the table and in the descriptions on the following pages.

Different requirements of the air quality determine the use of different types of filtering elements, which retain the impurities during their working, thus clogging and reducing the amount of air in the passage. For this reason it is suggested to replace them once a year at least.

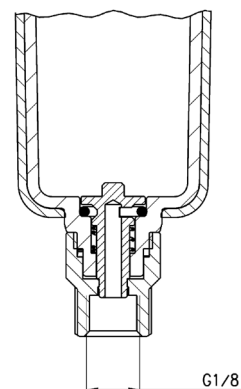
## COMBINATION OF FILTERS / BOWL WITH DRAIN / FILTERING ELEMENT

\* for Series MD the "bowl with drain" is supplied complete with the filtering element

Mod. filter	bowl with semi-automatic manual drain	bowl with automatic drain	bowl with depressurization drain	bowl with depressurization drain, protected	bowl without drain (1/8 port)	closed bowl	filtering element 25 µ	filtering element 5 µ	filtering element 1 µ	filtering element 0.01 µ	activated carbon
N10...-F	N1-F71				N1-F71-1/8		C104-F20/3	C104-F21/3			
N10...-D	N1-F71				N1-F71-1/8		C104-F20/3	C104-F21/3			
N10...-FB	N1-F71				N1-F71-1/8					MX1-F10	
N20...-F	N2-F71		N2-F71/2	N2-F71/1	N2-F71-1/8		C104-F20/3	C104-F21/3			
N20...-D	N2-F71		N2-F71/2	N2-F71/1	N2-F71-1/8		C104-F20/3	C104-F21/3			
N20...-FB	N2-F71		N2-F71/2	N2-F71/1	N2-F71-1/8					MX1-F10	
N20...-FCA						N2-L71					MX1-F11
MC104-F	MC1-F71		MC1-F71/2	MC1-F71/1	MC1-F71-1/8		C104-F20/3	C104-F21/3			
MC104-D	MC1-F71		MC1-F71/2	MC1-F71/1	MC1-F71-1/8		C104-F20/3	C104-F21/3			
MC104-FB	MC1-F71		MC1-F71/2	MC1-F71/1	MC1-F71-1/8					MX1-F10	
MC104-FCA						MC1-L71					MX1-F11
MC202-F	MC2-F71	MC2-F71/3		MC2-F71/1	MC2-F71-1/8		C238-F11/3	C238-F12/3			
MC202-D	MC2-F71	MC2-F71/3		MC2-F71/1	MC2-F71-1/8		C238-F11/3	C238-F12/3			
MC202-FB	MC2-F71	MC2-F71/3		MC2-F71/1	MC2-F71-1/8					MX2-F10	
MC202-FCA						MC2-L71					MX2-F11
MC238-F	MC2-F71	MC2-F71/3		MC2-F71/1	MC2-F71-1/8		C238-F11/3	C238-F12/3			
MC238-D	MC2-F71	MC2-F71/3		MC2-F71/1	MC2-F71-1/8		C238-F11/3	C238-F12/3			
MC238-FB	MC2-F71	MC2-F71/3		MC2-F71/1	MC2-F71-1/8					MX2-F10	
MC238-FCA						MC2-L71					MX2-F11
MX2...-F	MX2-F2-P	MX2-F2/1-P		MX2-F2/3-P	MX2-F2/2-P		C238-F11/3	C238-F12/3			
MX2...FR	MX2-F2-P	MX2-F2/1-P		MX2-F2/3-P	MX2-F2/2-P		C238-F11/3	C238-F12/3			
MX2...-FC	MX2-F2-P	MX2-F2/1-P		MX2-F2/3-P	MX2-F2/2-P				MX2-F9	MX2-F10	
MX2...-FCA						MX2-L2-P					MX2-F11
MX3...-F	MX3-F2-P	MX3-F2/1-P		MX3-F2/3-P	MX3-F2/2-P		MX3-F7	MX3-F8			
MX3...-FR	MX3-F2-P	MX3-F2/1-P		MX3-F2/3-P	MX3-F2/2-P		MX3-F7	MX3-F8			
MX3...-FC	MX3-F2-P	MX3-F2/1-P		MX3-F2/3-P	MX3-F2/2-P				MX3-F9	MX3-F10	
MX3...-FCA						MX3-L2-P					MX3-F11
MD1-F0.. *	MD1-FSP01			MD1-FSP03	MD1-FSP02		C104-F20/3				
MD1-F1.. *	MD1-FSP04			MD1-FSP06	MD1-FSP05			C104-F21/3			
MD1-FR0.. *	MD1-FSP01			MD1-FSP03	MD1-FSP02		C104-F20/3				
MD1-FR1.. *	MD1-FSP04			MD1-FSP06	MD1-FSP05			C104-F21/3			
MD1-FC0.. *	MD1-FCSP01			MD1-FCSP03	MD1-FCSP02					MD1-F10	
MD1-FC1.. *	MD1-FCSP04			MD1-FCSP06	MD1-FCSP05				MD1-F9		
MD1-FCA.. *						MD1-FCASP01					MD1-F11

## Semi-automatic manual drain (Type 0 and 1)

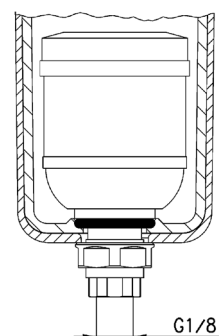
Functioning: with the operator mechanism turned clockwise, each time the pressure falls below 0.3 bar, the draining of condensate will be released; when resetting the pressure, the drain will close again. The release can also be carried out manually; when the bowl is pressurised, the operator mechanism is pushed upwards.



To avoid the discharge of condensate, the drain. the operator mechanism should be turned clockwise to completely close

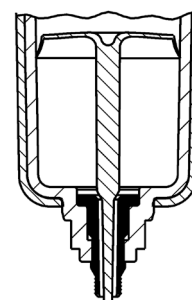
## Automatic drain (Type 3)

Functioning: the presence of liquid inside the bowl raises the float, thus opening the exhaust valve.



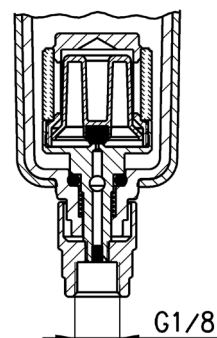
## Depressurisation drain (Type 4)

Functioning: each time air is required from the inlet, a slight difference of pressure is created between the upper part and lower part of the drain that rises, thus opening the exhaust valve.



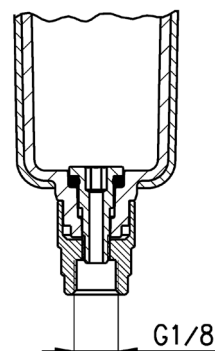
### Depressurisation drain, protected (Type 5)

Solution similar to the Type 4 but requiring a  $\Delta P = 1$  bar.  
Functioning: this version has a filtering element which prevents any impurities from clogging the exhaust hole.



### Bowl without drain (Type 8)

The solution with port G1/8 is used to assemble the items to the bowl which is realized with a through hole of  $\varnothing 3$  mm and a threaded port G1/8.



### Closed bowl

