

## MMFSS Series



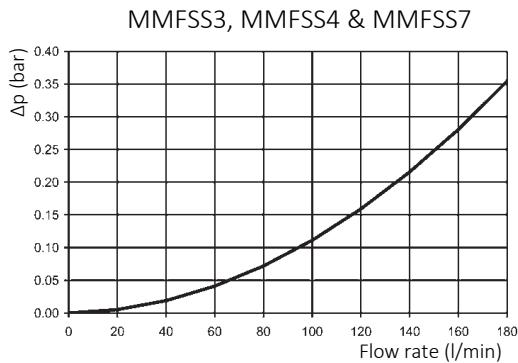
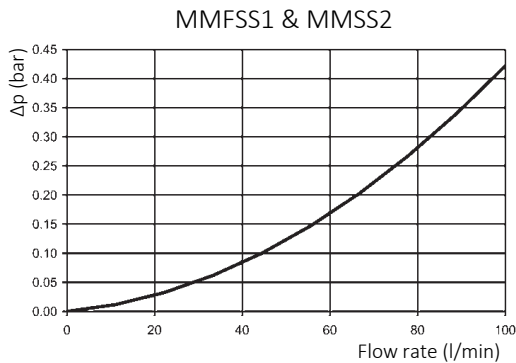
### Technical specification

Application:	Suction line spin-on filter
Port size:	$\frac{3}{4}$ " BSP/NPT & $1\frac{1}{4}$ " BSP/NPT
Flow rate:	max. 120 l/min
Working pressure:	max. 12 bar
Burst pressure:	min. 25 bar
Element collapse pressure:	4 bar
By-pass opening pressure:	$\Delta p$ 0.25 bar $\pm$ 10%
Seals:	Perbunan (NBR, - 10°C to 100° C)
Material:	Aluminium head, steel bowl
Compatibility:	Suitable for mineral oils, lubrication oils, non-flam fluids, synthetic and rapidly biodegradable oils according to ISO2943 (for use with water, please contact our technical dept.)
Tested according to ISO standards:	ISO2941 Collapse/burst resistance ISO2942 Fabrication integrity ISO2943 Material compatibility integrity ISO3723 Method for end load test ISO3724 Flow fatigue characteristics ISO3968 Pressure drop vs. Flow ISO16889 Multi-pass (filtration performance)

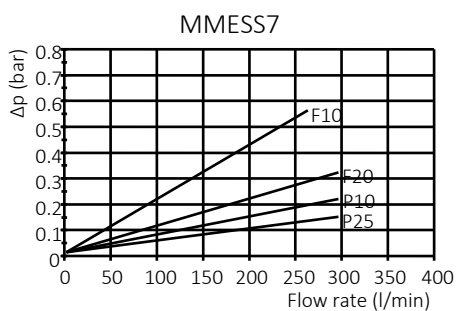
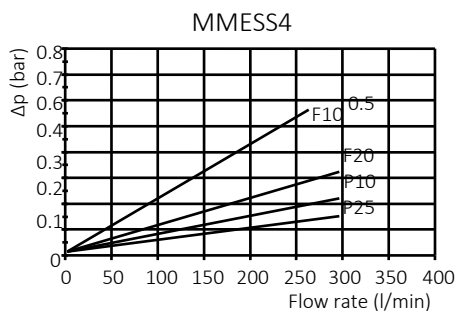
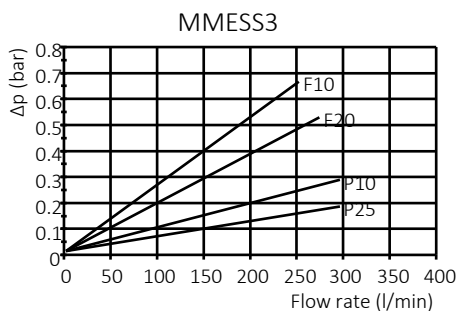
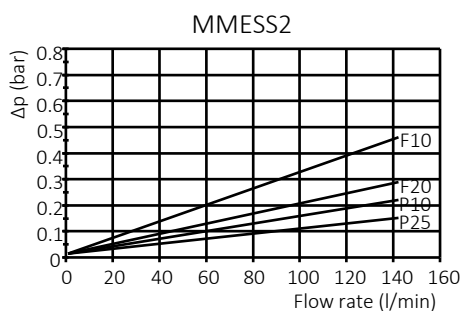
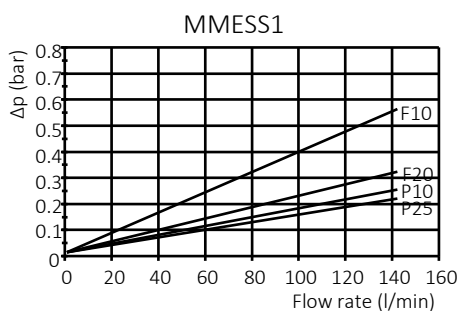
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Pressure drop graphs ( $\Delta p$ )

Pressure drop of filter head (mainly depending on port size)



Pressure drop of clean filter elements (by filter media)

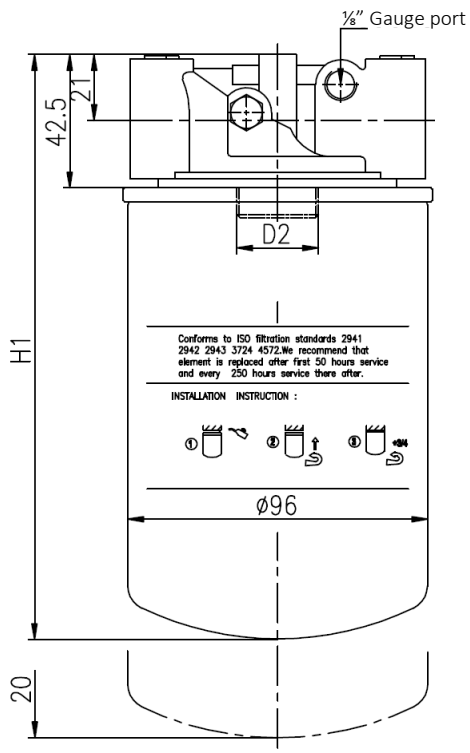


The test fluid has a density of 0.86 kg/dm<sup>3</sup> and a kinematic viscosity of 30 mm<sup>2</sup>/s.

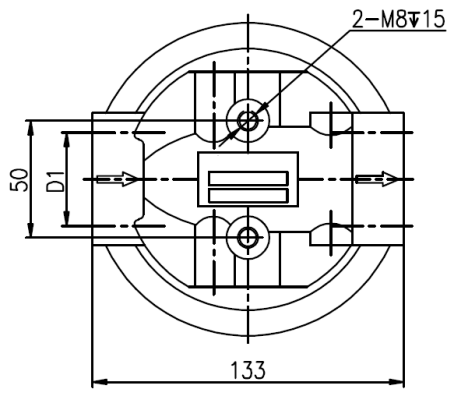
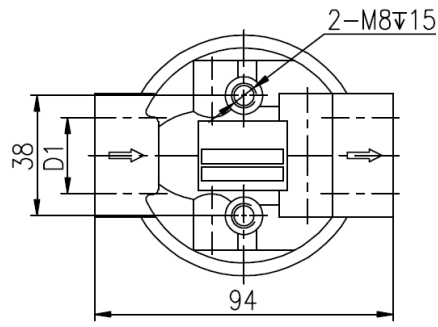
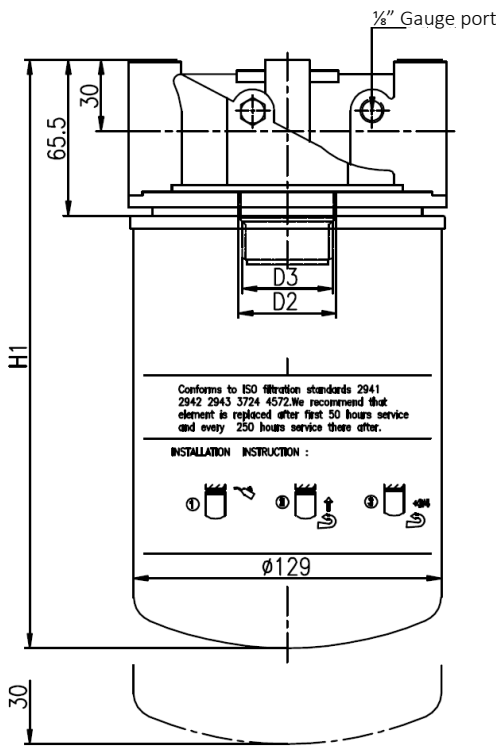
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### Dimensional drawings

MMFSS1 & MMFSS2



MMFSS3, MMFSS4 & MMFSS7



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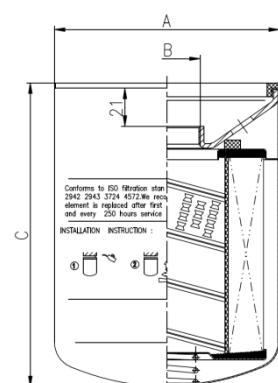
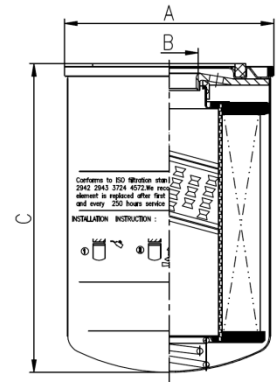
Type	D1	D2	D3	H1
MMFSS1BC	3/4" BSP	3/4" BSP	-	188
MMFSS1NC	3/4" NPT	1" - 12UNF	-	188
MMFSS2BC	3/4" BSP	3/4" BSP	-	234
MMFSS2NC	3/4" NPT	1" - 12UNF	-	234
MMFSS3BE	1 1/4" BSP	1 1/4" BSP	-	248
MMFSS3NE	1 1/4" NPT	-	1 1/2" - 16UN	241
MMFSS4BE	1 1/4" BSP	1 1/4" BSP	-	293
MMFSS4NE	1 1/4" NPT	-	1 1/2" - 16UN	335
MMFSS7BE	1 1/4" BSP	1 1/4" BSP	-	375

### Dimensional drawings

#### Spin-on elements

Type	A	B	C
MMESS1-B	96	¾" BSP	146
MMESS2-B	96	¾" BSP	191
MMESS1-U	96	1" - 12UNF	146
MMESS2-U	96	1" - 12UNF	191
MMESS3-B	129	1¼" BSP	181
MMESS4-B	129	1¼" BSP	226
MMESS7-B	129	1¼" BSP	308

Type	A	B	C
MMESS3-U	128	1½" 16-UN	170
MMESS4-U	128	1½" 16-UN	270



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## Order information

Filter assembly part number

	Housing				Element		Accessories	
	Type	Size	Connection	By-pass	Seal	Media	Gauge	Special
	MMFSS	Table 1	Table 2	Table 3	Table 4	Table 5	Table 6	X
Example	MMFSS	1	BC	1	B	P10	VAR	X

Element part number

	Element				
	Type	Size	Port	Media	Seal
	MMESS	Table 1	See prev. page	Table 5	Table 4
Example	MMESS	2	B (BSP) / U (UN)	P10	B

Tables

Table 1	
Size	Flow rate (l/min)
MMFSS1	30
MMFSS2	35
MMFSS3	90
MMFSS4	110
MMFSS7	120

Table 2				Size
Connection				
BC	NC	BE	NE	
¾" BSP	¾" NPT	1¼" BSP	1¼" NPT	
•	•			MMFSS1
•	•			MMFSS2
		•	•	MMFSS3
		•	•	MMFSS4
		•		MMFSS7

Table 3	
By-pass	Open pressure
00	No by-pass
1	0.25 bar
X	Special

Table 4	
Seal	Material
B	Buna
V	Viton

Table 5			
Media	Material	Filtration	Collapse
P10	Cellulose	10 µm	4 bar
P20	Cellulose	20 µm	4 bar
F10	Fibreglass	10 µm	4 bar
F20	Fibreglass	20 µm	4 bar
W60	Wire mesh	60 µm	4 bar
W90	Wire mesh	90 µm	4 bar
W125	Wire mesh	125 µm	4 bar

Table 6		
Gauge	Pressure	Type
00	-	No
VAR	-1 to 0 bar	Axial vacuum gauge, right
VAL	-1 to 0 bar	Axial vacuum gauge, left
S02R	-0.2 bar	Vacuum switch, right
S02L	-0.2 bar	Vacuum switch, left

Notes

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