

Materials

Head: Aluminium alloy
 Spin-on cartridge: Steel
 Bypass valve: Polyamide
 Seals: NBR Nitrile
 Indicator housing: Brass

Application Example



Return Filter - RC

SPIN-ON FILTERS

Pressure (ISO 10771-1:2002)

Max working: 700 kPa (7 bar)

Test: 1 MPa (10 bar)

Bursting: 2,1 MPa (21 bar)

Collapse, differential for the filter element (ISO 2941): 300 kPa (3 bar)

Bypass Valve

Setting: 170 kPa (1.7 bar) ± 10%

Working Temperature

From -25° to +110° C

Compatibility (ISO 2943:1999)

Full with fluids: HH-HL-HM-HV-HTG (according to ISO 6743/4)

For fluids different than the above mentioned, please contact our Sales Department.

Ordering Codes - Filter

		Type				
		F = Filter Complete	F	F	F	F
		B = Filter Housing	B	B	B	B

R	C			Family, Nominal Size, Length	11	12	21	22
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B		Port Type				
		B = BSP Thread	B	B	B	B

		Port Size				
		06 = 3/4"	06	06	-	-
		12 = 1 1/2"	-	-	12	12

B		Bypass Valve				
		B = 170 kPa (1.7 bar)	B	B	B	B

N		Seals N = NBR Nitrile				
			N	N	N	N

		Filter Media				
		CC = Cellulose 10µm β>2	CC	CC	CC	CC
		CD = Cellulose 25µm β>2	CD	CD	CD	CD
		FB = Fibre 7µm(e) β>1.000	FB	FB	FB	FB
		FC = Fibre 12µm(e) β>1.000	FC	FC	FC	FC
		FD = Fibre 21µm(e) β>1.000	FD	FD	FD	FD

		Clogging Indicator				
		05 = nr. 2 x 1/8" ports, plugged	05	05	05	05
		30 = pressure gauge, rear connection	30	30	30	30
		P1 = SPDT, pressure switch	P1	P1	P1	P1

X	X	Accessories XX = no accessories available			
		X	X	X	X

Return Filter - RC

SPIN-ON FILTERS

Ordering Codes - Element

E	Element							
R	C			Family, Nominal Size, Length	11	12	21	22
N	Seals N = NBR Nitrile				N	N	N	N
		Filter Media						
		CC = Cellulose 10µm β>2	CC	CC	CC	CC	CC	CC
		CD = Cellulose 25µm β>2	CD	CD	CD	CD	CD	CD
		FB = Fibre 7µm(e) β>1.000	FB	FB	FB	FB	FB	FB
		FC = Fibre 12µm(e) β>1.000	FC	FC	FC	FC	FC	FC
		FD = Fibre 21µm(e) β>1.000	FD	FD	FD	FD	FD	FD



RETURN FILTERS

HOUSINGS

Body Size	Connection	Flow Rate Max Lpm	Price £	Price €
FRC11	3/4"	60 LPM	ON REQUEST	
FRC12	3/4"	60 LPM	ON REQUEST	
FRC21	1 1/2"	160 LPM	ON REQUEST	
FRC22	1 1/2"	160 LPM	ON REQUEST	

ELEMENT to be added

Element	Filtration	Size 11	Size 12	Size 21	Size 22
FB	7 micron		ON REQUEST		
FC	12 micron		ON REQUEST		
FD	21 micron		ON REQUEST		
CC	10 micron		ON REQUEST		
CD	25 micron		ON REQUEST		

FOR ELEMENT PART NUMBER

E	- ELEMENT
RC	- FILTER FAMILY SERIES
11	- FILTER HOUSING SIZE
CC	- ELEMENT MEDIA

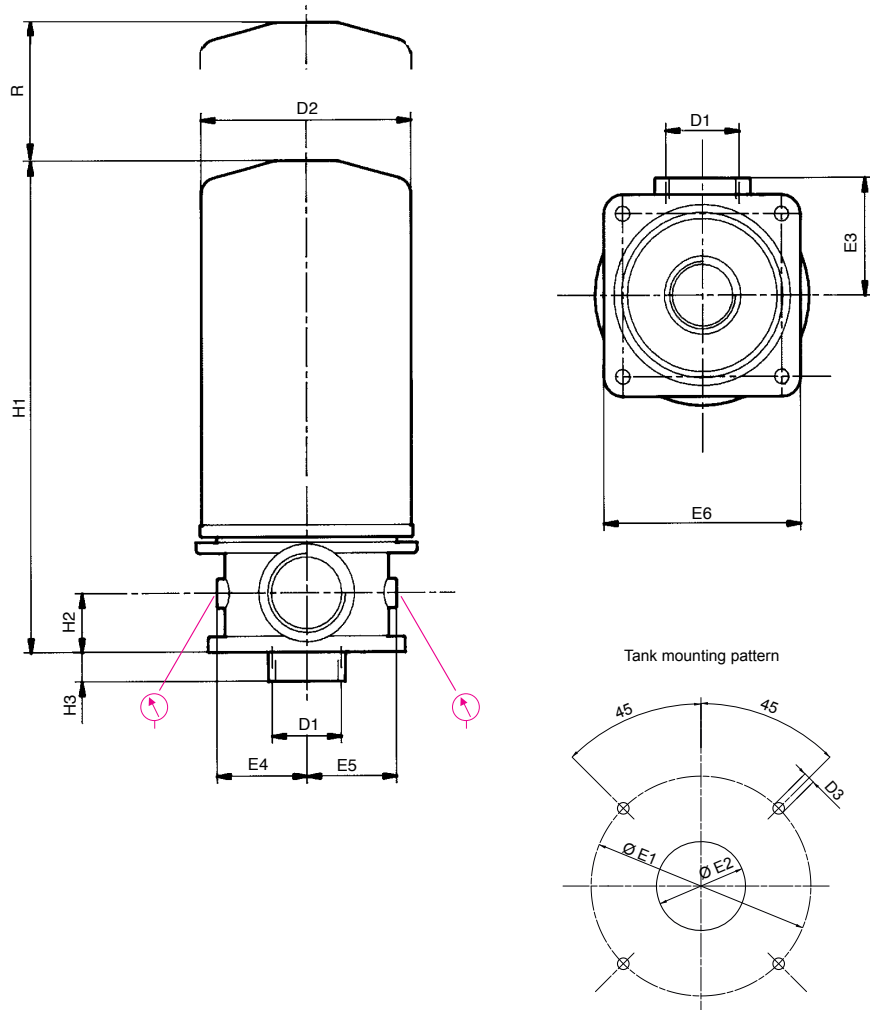
Example:

Part **ERC11CC** : element in 10 micron cellulose media for a size "11" housing

CLOGGING INDICATOR

	Description	Price £	Price €
05	2 off 1/8" ports plugged	ON REQUEST	
30	pressure gauge back entry	ON REQUEST	
P1	pressure switch - electric signal	ON REQUEST	

Return Filter - RC
SPIN-ON FILTERS

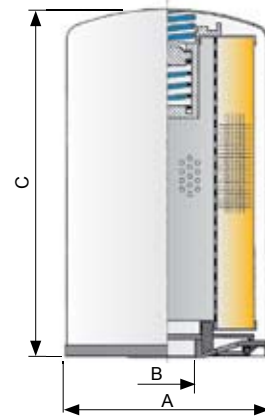


FILTER HOUSING														
	D1	D2	D3	H1	H2	H3	E1	E2	E3	E4	E5	E6	R	kg
FRC11	3/4"	95	7	196	25	18	99	40÷45	50	38	38	90	15	0,3+1,0
FRC12	3/4"	95	7	241	25	18	99	40÷45	50	38	38	90	15	0,3+1,3
FRC21	1" 1/2	130	9	252	36	18	141	65÷70	72	56	56	124	30	0,8+1,3
FRC22	1" 1/2	130	9	297	36	18	141	65÷70	72	56	56	124	30	0,8+1,4

Return Filter - RC

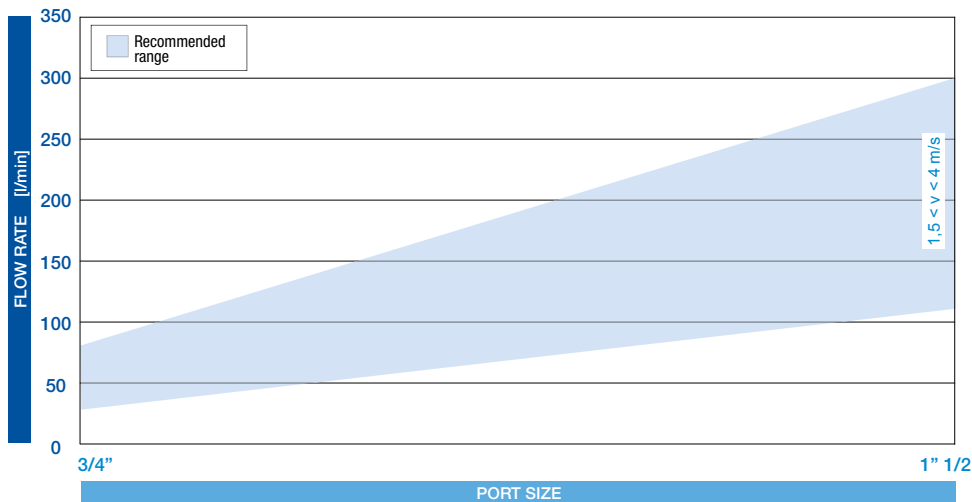
SPIN-ON FILTERS

FILTER ELEMENT						
	A	B	C	kg	Area (cm ²)	
					Media F+	Media C+
ERC11	96,5	3/4" BSP	146	1,00	2.140	3.305
ERC12	96,5	3/4" BSP	191	1,20	3.630	4.745
ERC21	129	1"1/4 BSP	181	1,40	4.450	5.560
ERC22	129	1"1/4 BSP	226	1,50	5.890	7.360



FLUID SPEED

(when selecting the filter size, we suggest to consider also the max recommended fluid speed (in return lines normally $1,5 < v < 4$ m/s))

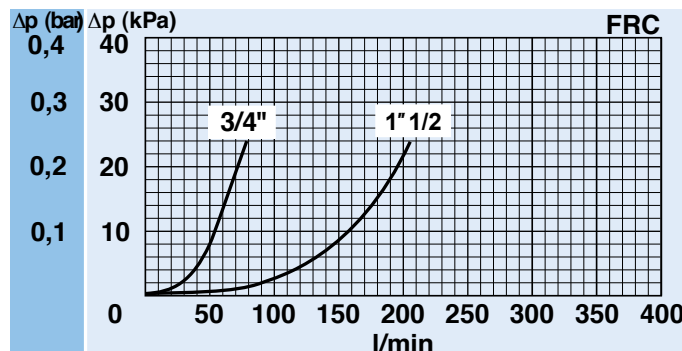


PRESSURE DROP CURVES (Δp)

The "Assembly Pressure Drop (Δp)" is obtained by adding the pressure drop values of the Filter Housing and of the Clean Filter Element corresponding to the considered Flow Rate and it must be lower than 50 kPa (0,5 bar).

FILTER HOUSING PRESSURE DROP

(mainly depending on the port size)



Return Filter - RC

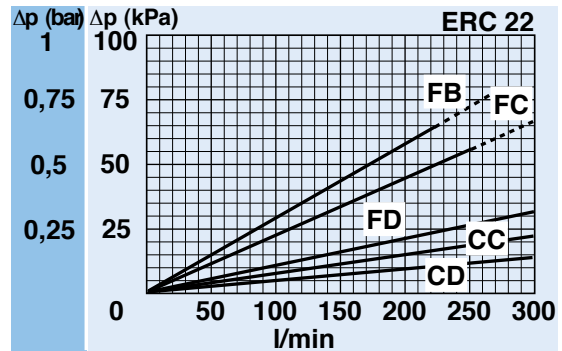
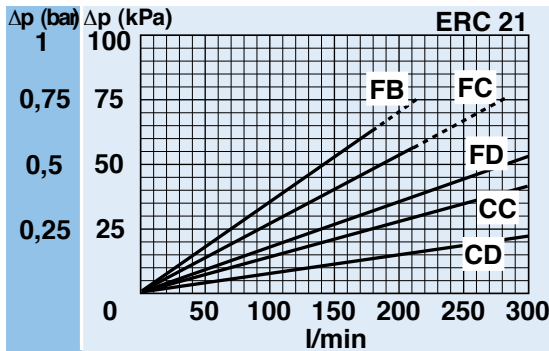
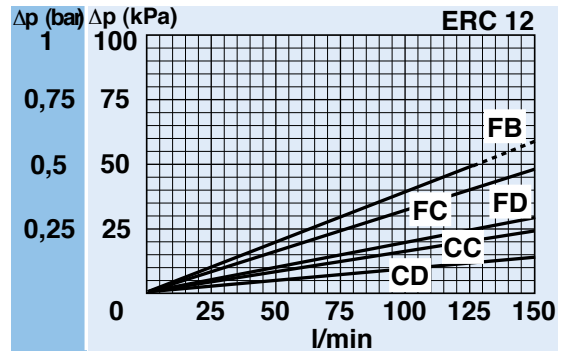
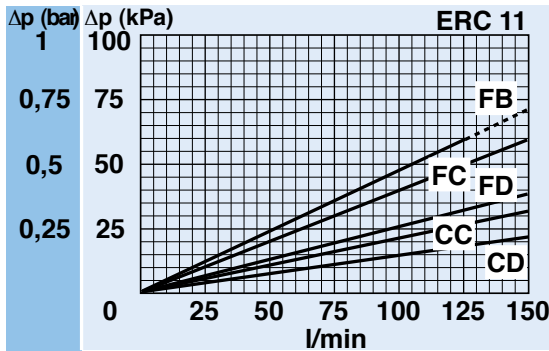
SPIN-ON FILTERS

PRESSURE DROP CURVES (Δp)

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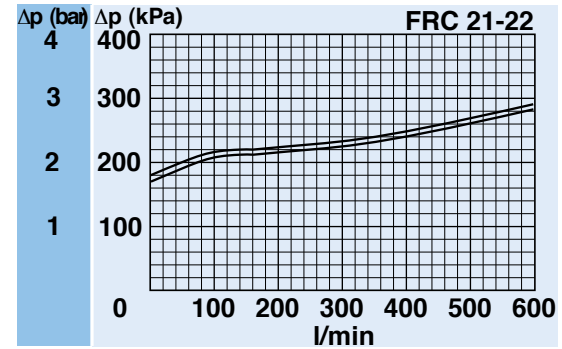
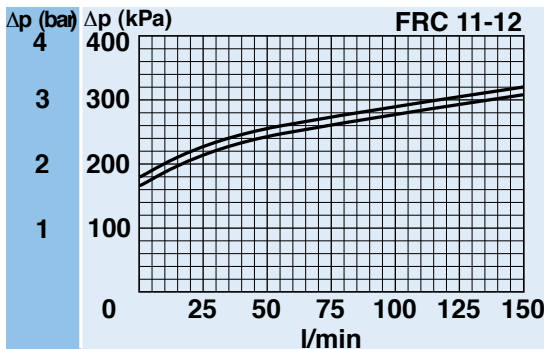
CLEAN FILTER ELEMENT PRESSURE DROP WITH F+ AND C+ MEDIA

(depending both on the internal diameter of the element and on the filter media)



BYPASS VALVE PRESSURE DROP

When selecting the filter size, these curves must be taken into account if it is foreseen that any flow peak is to be absorbed by the bypass valve, it also must be of proper configuration to avoid pressure peaks. The valve pressure drop is directly proportional to fluid specific gravity.



Return Filter - RC

SPIN-ON FILTERS

CLOGGING INDICATOR

A visual or electrical indicator is available as an option and allows monitoring of the element condition. The port for the indicator is a standard feature.

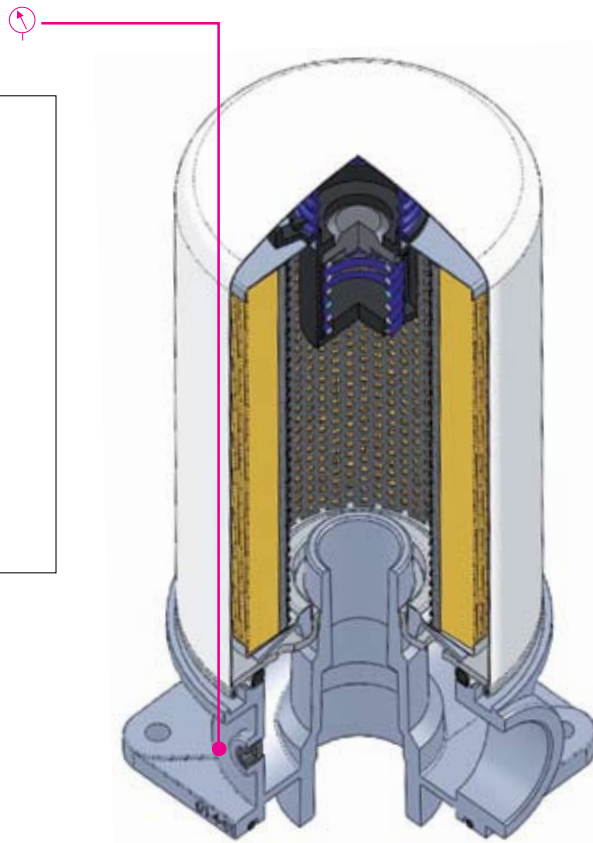
QUICK MAINTENANCE

The spin-on type filter element ensures a quick and easy replacement.

EASY REPLACEMENT

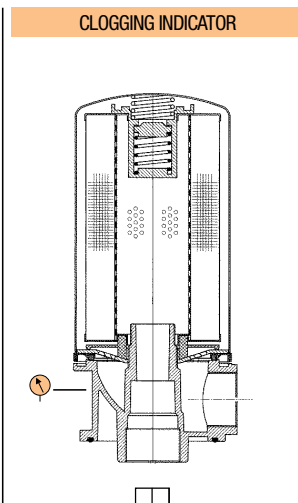
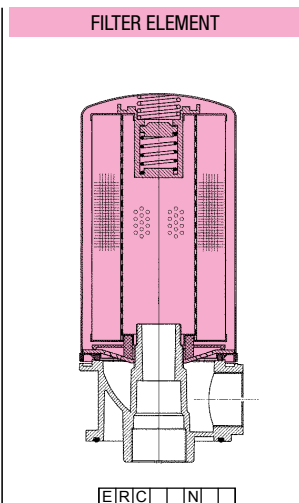
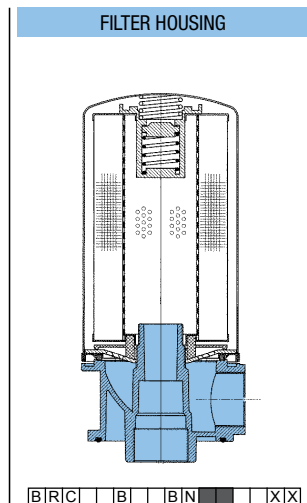
A anti-drain membrane keeps the oil inside the cartridge and avoid oil losses during the replacement.

CLOGGING INDICATOR



SPARE SEAL KIT

NBR	
FRC11	521.0018.2
FRC12	521.0018.2
FRC21	521.0036.2
FRC22	521.0036.2



SPARE PARTS ELEMENTS
(For filling up see table
"Ordering and option chart")