

Filtri flangiabili / Flangible filters

I filtri appartenenti a questa tipologia sono da montarsi sulla linea di ritorno semi immersi nel serbatoio.

Tutti i filtri sono provvisti di valvola by-pass.

These filters are for installation on the return line. Semi-submerged in the tank. All filters are complete with by-pass valve.

Temperatura di esercizio / Operating Temperature	
con guarnizioni in NBR / with NBR seals	-30 ÷ 90° C
Compatibilità con i fluidi secondo ISO 2943 (Norma ISO 6743/4) Fluid compatibility conforming to ISO 2943 (Norm ISO 6743/4)	
oli minerali con guarnizioni in NBR / oil mineral with NBR seals	HH - HL - HM - HR - HV - HG
emulsioni acquose con guarnizioni in NBR / water emulsions with NBR seals	HFAE - HFAS
Pressione / Pressure	
massima di lavoro / working pressure	8 bar
di prova / testing pressure	12 bar
di scoppio / burst pressure	16 bar
di collasso del setto filtrante (secondo ISO 2941) / element collapse pressure rating (conforming to ISO 2941)	10 bar
Valvola di by-pass / By-pass valve	
taratura della pressione differenziale di apertura / by-pass setting	1,7 bar

DEFINIZIONI / DEFINITION

Rapporto " β_x " secondo norma ISO 4572/Ratio " β_x " according to ISO 4572:

$\beta_x \geq$ Numero di particelle a monte del filtro di dimensione "x" μm

Upstream particles with dimensions "x" μm

Numero di particelle a valle del filtro di dimensione "x" μm

Downstream particles with dimensions "x" μm

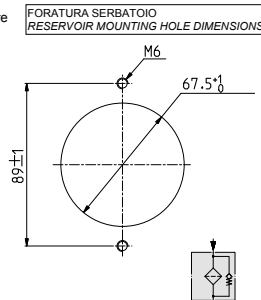
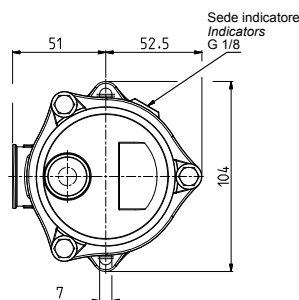
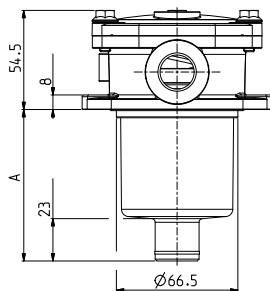
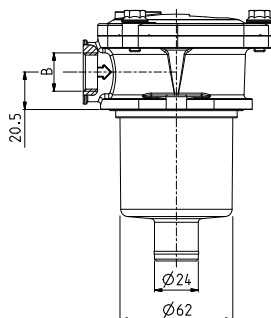
dove "x" è la dimensione di riferimento della particella espressa in μm

where "x" stands for particle size in μm

$$\text{Efficienza \% / Filtration Efficiency} = \frac{(\text{Rapporto/Ratio } \beta - 1)}{(\text{Rapporto/Ratio } \beta)} \times 100$$

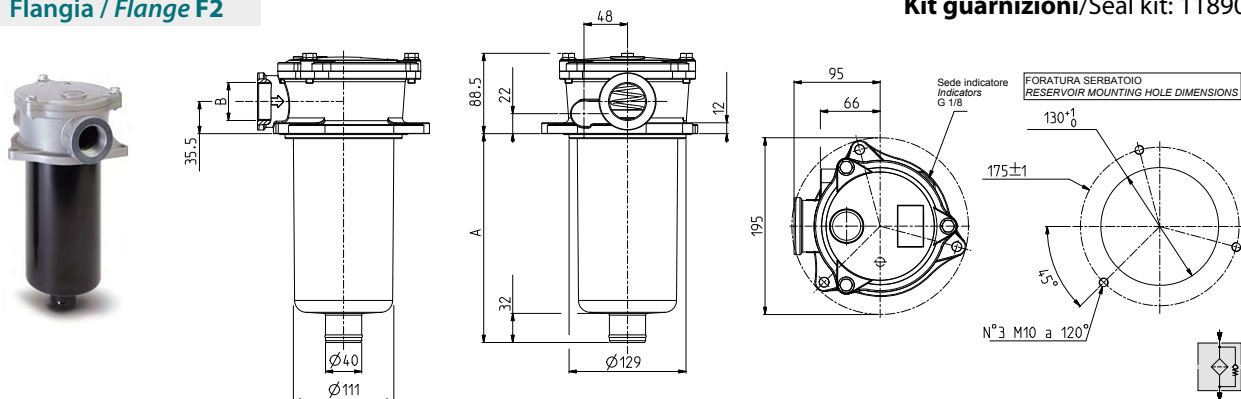
Valori Values	Efficienza Efficiency
" β "	%
≥ 2	50
≥ 20	95
≥ 50	98
≥ 75	98,7
≥ 100	99
≥ 200	99,5

Flangia / Flange F

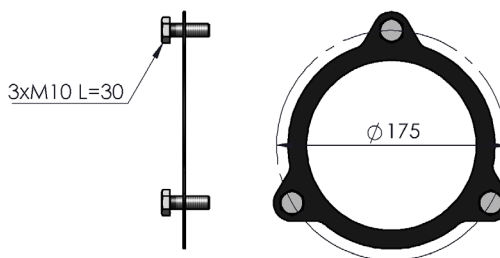
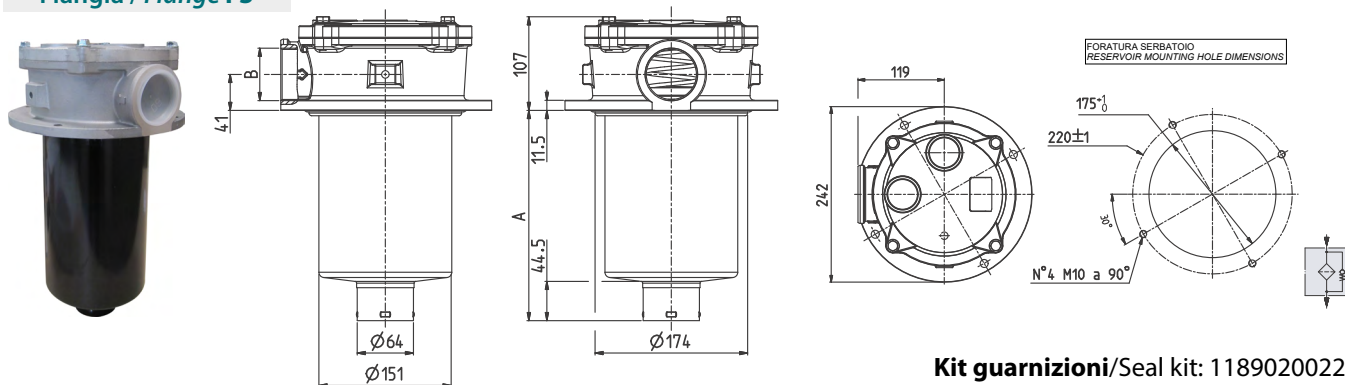


Kit guarnizioni/Seal kit: 118-902-00161

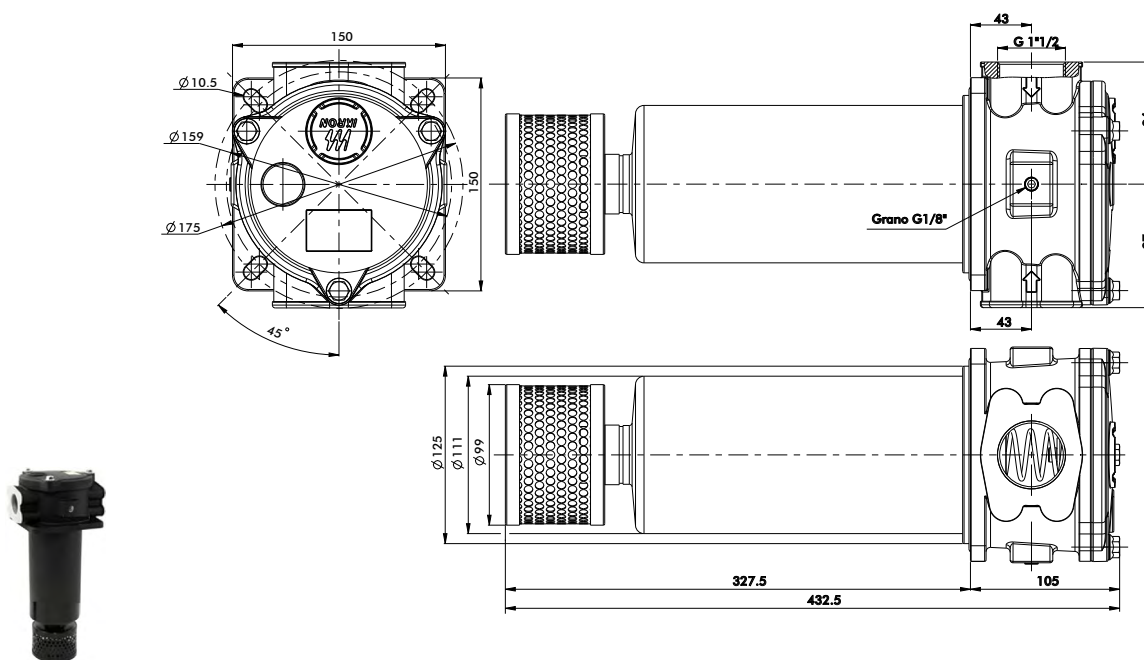
Interasse Distance between the holes	Filtrazione Filter	β	Portata Displacement l/min	Codice Code	A mm	B BSPP	Cartuccia Cartridge
90	Acciaio / Steel 90 μm		55	11800100303	83	G 1/2	11800200302
	Acciaio / Steel 60 μm		45	11800101302			11800201301
	Cellulosa rinforzata / Reinforced cellulose 25 μm	$\beta_{25} > 2$	45	11800102301			11800202300
	Cellulosa rinforzata / Reinforced cellulose 10 μm	$\beta_{10} > 2$	25	11800103300			11800203309
	Microfibra / Micro-fibre glass 25 μm	$\beta_{25} > 200$	25	11800104309			11800204308

Flangia / Flange F2
Kit guarnizioni/Seal kit: 11890200189


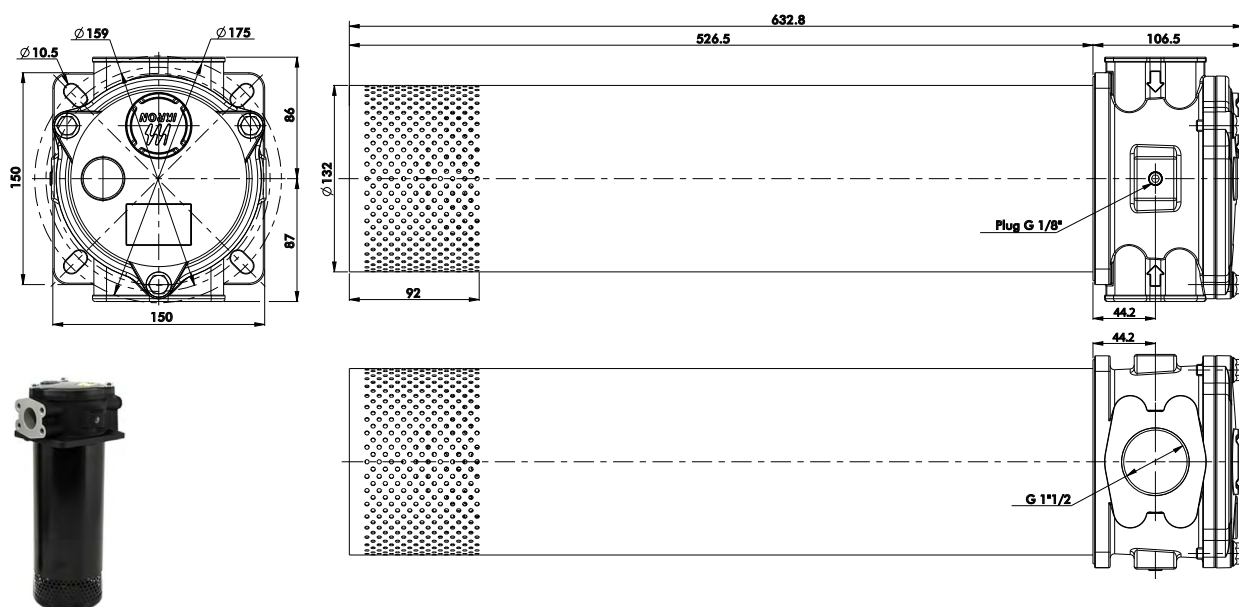
Interasse Distance between the holes	Filtrazione Filter	β	Portata Displacement l/min	Codice Code	A mm	B BSPP	Cartuccia Cartridge
175	Acciaio / Steel 90 μ m		270	11800100509	230	G 1 1/4	11800200508
	Acciaio / Steel 60 μ m		260	11800101508			11800201507
	Cellulosa rinforzata / Reinforced cellulose 25 μ m	$\beta_{25} > 2$	270	11800102507			11800202506
	Cellulosa rinforzata / Reinforced cellulose 10 μ m	$\beta_{10} > 2$	220	11800103506			11800203505
	Microfibra / Micro-fibre glass 25 μ m	$\beta_{25} > 200$	220	11800104505			11800204504

Kit montaggio filtro flangia / Flanged filter mounting kit
11891200025: Kit montaggio filtro flangiato 3x175
Flanged filter mounting kit

Flangia / Flange F3
Kit guarnizioni/Seal kit: 11890200223


Interasse Distance between the holes	Filtrazione Filter	β	Portata Displacement l/min	Codice Code	A mm	B BSPP	Cartuccia Cartridge
220	Cellulosa rinforzata / Reinforced cellulose 25 μ m	$\beta_{25} > 2$	570	11800102605	299	G 2	11800202604



Interasse Distance between the holes	Filtrazione Filter	β	Portata Displacement	Codice filtro Filter code	Guarnizione Gasket	Cartuccia Cartridge
159/175	Microfibrà / Micro-fibre glass 10 μ m	$\beta_{25} > 200$	230 l/min	11800000126	11890200278	11800200071

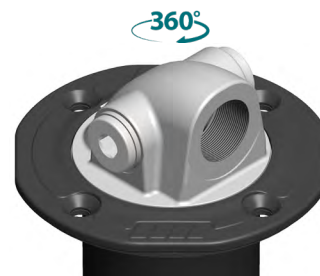
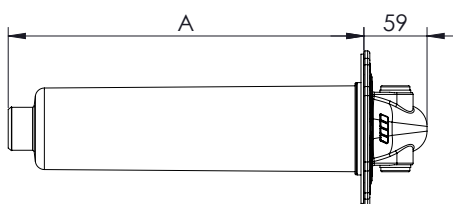
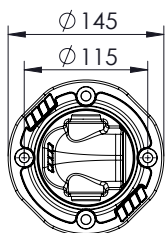
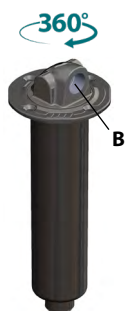


Interasse Distance between the holes	Filtrazione Filter	β	Portata Displacement	Codice filtro Filter code	Guarnizione Gasket	Cartuccia Cartridge
159/175	Microfibrà / Micro-fibre glass 10 μ m	$\beta_{25} > 200$	310 l/min	11800000135	11890200278	11800200080

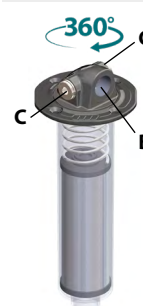
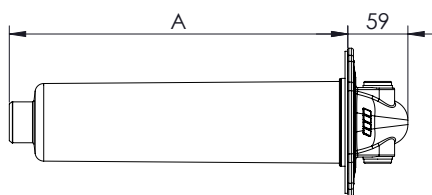
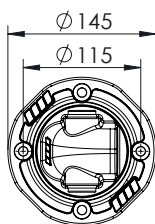
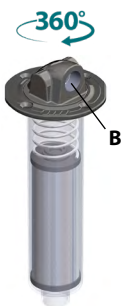
Calotta multifunzione orientabile / Multifunctional adjustable return system cap

La particolarità di questo prodotto è che la bocca da G1, a cui viene collegato il tubo di scarico degli impianti, può essere orientata in qualsiasi posizione sui 360° consentiti.

The peculiarity of this product is that the G1 port to which the return line of the systems is connected, can be oriented in any position of 360° allowed.


CALOTTA SENZA CARTUCCIA FILTRO CAP WITHOUT FILTER CARTRIDGE
Flangia / Flange F4


Codice Code	A	B	C	Ricambi / Spare parts			
				Contenitore Plastic recipient	Calotta Cap	Anello calotta Cap ring	Guarnizione Gasket
13590400341	330	G 1		50900001859	54600250010	49211020010	50600003022
13590400350		G 1	G 1/2		54600250029		
13590400369	165	G1		50900001902	54600250010		
13590400378		G1	G 1/2		54600250029		

CALOTTA CON CARTUCCIA FILTRO CAP WITH FILTER CARTRIDGE
Flangia / Flange F4


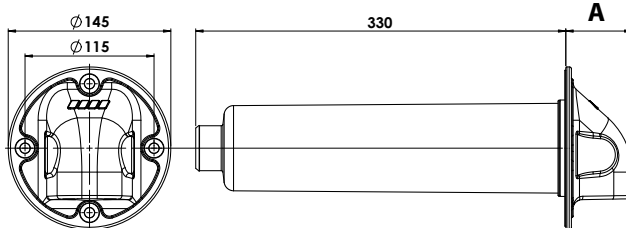
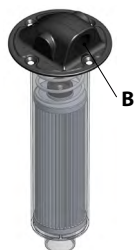
Calotta senza drenaggi Cap without ports	Codice Code	A	B	Ricambi / Spare parts				
Caratteristiche tecniche Technical features				Contenitore Plastic recipient	Cartuccia Cartridge	Calotta Cap	Anello calotta Cap ring	Guarnizione Gasket
60 µm (acciaio/steel) 200 lt	11800125519	330	G 1	50900001859	11800211176	54600250010	49211020010	50600003022
25 µm (cellulosa/cellulose) 160 lt	11800125528				11800212175			
25 µm (fibra/fiber) 160 lt	11800125537				11800212193			
60 µm (acciaio/steel) 90 lt	11800125715	165		50900001902	11800201356			
25 µm (cellulosa/cellulose) 60 lt	11800125724				11800202355			
25 µm (fibra/fiber) 60 lt	11800125733				11800204353			

Calotta con drenaggi Cap with ports	Codice Code	A	B	C	Ricambi / Spare parts				
Caratteristiche tecniche Technical features					Contenitore Plastic recipient	Cartuccia Cartridge	Calotta Cap	Anello calotta Cap ring	Guarnizione Gasket
60 µm (acciaio/steel) 200 lt	11800125546	330	G 1	G 1/2	50900001859	11800211176	54600250029	49211020010	50600003022
25 µm (cellulosa/cellulose) 160 lt	11800125555					11800212175			
25 µm (fibra/fiber) 160 lt	11800125564					11800212193			
60 µm (acciaio/steel) 90 lt	11800125742	11800201356							
25 µm (cellulosa/cellulose) 60 lt	11800125751	50900001902			11800202355				
25 µm (fibra/fiber) 60 lt	11800125760				11800204353				

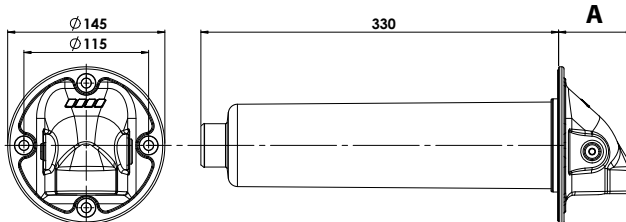
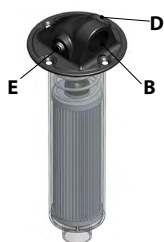
Calotta multifunzione / Multifunctional return system cap

CALOTTA CON CARTUCCIA FILTRO CAP WITH FILTER CARTRIDGE

Flangia / Flange F4



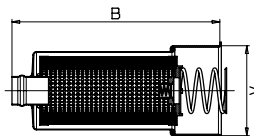
Cartuccia Cartridge	Codice Code	A	B	Ricambi / Spare parts			
				Contenitore Plastic recipient	Cartuccia Cartridge	Calotta Cap	Guarnizione Gasket
60 µm (acciaio/steel) 200 lt	11800120050	69	G 1-1/4	50900001859	11800211176	54600200047V	50600003022
25 µm (cellulosa/cellulose) 160 lt	11800120069				11800212175		
25 µm (fibra/fiber) 160 lt	11800120087				11800212193		



Cartuccia Cartridge	Codice Code	A	B	D	E	Ricambi / Spare parts			
						Contenitore Plastic recipient	Cartuccia Cartridge	Calotta Cap	Guarnizione Gasket
60 µm (acciaio/steel) 200 lt	11800120158	69	G 1-1-4	G 1/2	G 1/8	50900001859	11800211176	54600200056V	50600003022
	11800120201				G 1/2			54600200092V	
10 µm (cellulosa/cellulose) 160 lt	11800120247	69	G 1-1/4		G 1/8		11800212219	54600200092V	
25 µm (cellulosa/cellulose) 160 lt	11800120167				G 1/2		11800212175	54600200056V	
	11800120194				G 1/2			54600200092V	
25 µm (fibra/fiber) 160 lt	11800120185		G 1-1/4	G 1/8		11800212193	54600200056V		

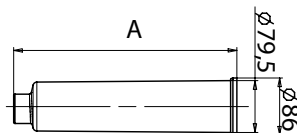
Filtro immerso / Submerged filter

I filtri appartenenti a questa tipologia sono da montarsi su serbatoi con flangia in abbinamento a piastre di montaggio per deviatori.
These filters have to be fitted in combination with flange in combination with mounting plates for diverters.



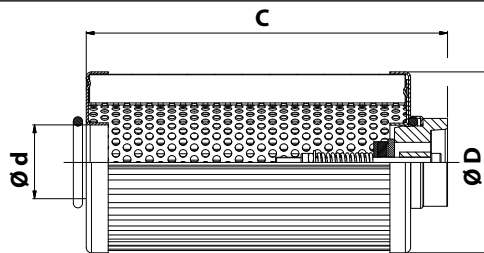
Codice di ordinazione Order code	Tipo flangia Flange type	Portata Displacement l/min	Filtrazione Filter μm	β	Temperatura di esercizio Operating temperature °C	A mm	B mm	Pressione massima di esercizio Max. operating pressure bar	Pressione di collaudo Testing pressure bar	Apertura valvola by-pass By-pass valve opening Δp bar	Pressione di collasso elementi filtranti Filter element collapse pressure bar	Cartuccia di ricambio Spare cartridge
Flangia / Flange F1												
11800111159	115	100	60	25÷110	89	207	3	6	1,5±9%	10	11800201150 acciaio/steel	
11800112158		72	30								2	11800202159 cellulosa rinforzata/reinforced cellulose
11800111186		200	60								2	11800211176 acciaio/steel
11800112185		140	25									11800212175 cellulosa rinforzata/reinforced cellulose
Flangia / Flange F2												
11800111757	175	180	60	-25÷110	127	304	3	6	1,5±9%	10	11800201203 acciaio/steel	
11800112756		130	30								2	11800202202 cellulosa rinforzata/reinforced cellulose

I filtri appartenenti a questa tipologia sono da montarsi su serbatoi con flangia **F4** in abbinamento a piastre di montaggio per deviatori.
These filters have to be fitted in combination with flange **F4** in combination with mounting plates for diverters.



Codice di ordinazione Order code	Tipo flangia Flange type	A	Portata Displacement l/min	Filtrazione Filter µm	25	Temperatura di esercizio Operating temperature °C	Pressione massima di esercizio Max. operating pressure bar	Pressione di collaudo Testing pressure bar	Apertura valvola by-pass By-pass valve opening Δp bar	Pressione di collasso elementi filtranti Filter element collapse pressure bar	Cartuccia di ricambio Spare cartridge
Flangia / Flange F4											
11800111177	115	330	200	60	-25÷110	8	12	1,7±10%	10	11800211176 acciaio/steel	
11800112176			160	25						2	11800212175 cellulosa rinforzata/reinforced cellulose
11800112194			160	25						200	11800212193 microfibra/microfiber
11800111195		162	90	60						11800201356 acciaio/steel	
11800112210			60	25						2	11800202355 cellulosa rinforzata/reinforced cellulose
11800112229			60	25						200	11800204353 microfibra/microfiber

Cartucce / Cartridge



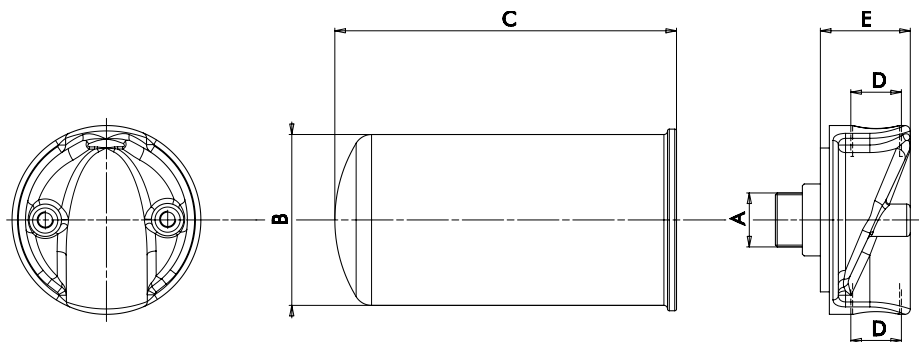
	Idonee per filtri Suitable for filters	Cartuccia Cartridge	Filtrazione Filter	Ø d	Ø D	C	β	Efficienza Efficiency
				mm	mm			
	Interasse Distance between the holes 90	11800200302	Acciaio / Steel 90 µm	26	52	75		
		11800201301	Acciaio / Steel 60 µm					
		11800202300	Cellulosa rinforzata / Reinforced cellulose 25 µm				β ₂₅ >2	50 %
		11800203309	Cellulosa rinforzata / Reinforced cellulose 10 µm				β ₁₀ >2	50 %
		11800204308	Microfibra / Micro-fibre glass 25 µm				β ₂₅ >200	99,5 %
	Interasse Distance between the holes 115 A=108	11800200357	Acciaio / Steel 90 µm	29	70	95		
		11800201356	Acciaio / Steel 60 µm					
		11800202355	Cellulosa rinforzata / Reinforced cellulose 25 µm				β ₂₅ >2	50 %
		11800203354	Cellulosa rinforzata / Reinforced cellulose 10 µm				β ₁₀ >2	50 %
		11800204353	Microfibra / Micro-fibre glass 25 µm				β ₂₅ >200	99,5 %
	Interasse Distance between the holes 115 A=154	11800200400	Acciaio / Steel 90 µm	29	70	140		
		11800201409	Acciaio / Steel 60 µm					
		11800202408	Cellulosa rinforzata / Reinforced cellulose 25 µm				β ₂₅ >2	50 %
		11800203407	Cellulosa rinforzata / Reinforced cellulose 10 µm				β ₁₀ >2	50 %
		11800204406	Microfibra / Micro-fibre glass 25 µm				β ₂₅ >200	99,5 %
	Interasse Distance between the holes 115 A=237	11800201436	Acciaio / Steel 60 µm	41	70	225		
		11800212175	Cellulosa rinforzata / Reinforced cellulose 25 µm				β ₂₅ >2	50 %
	Interasse Distance between the holes 115 A=317	11800201481	Acciaio / Steel 60 µm Passaggio maggiorato / Larger flow	41	70	304		
		11800201454	Acciaio / Steel 60 µm					
		11800202453	Cellulosa rinforzata / Reinforced cellulose 25 µm				β ₂₅ >2	50 %
		11800203452	Cellulosa rinforzata / Reinforced cellulose 10 µm				β ₁₀ >2	50 %
	Interasse Distance between the holes 175	11800200508	Acciaio / Steel 90 µm	41	99	212		
		11800201507	Acciaio / Steel 60 µm					
		11800202506	Cellulosa rinforzata / Reinforced cellulose 25 µm				β ₂₅ >2	50 %
		11800203505	Cellulosa rinforzata / Reinforced cellulose 10 µm				β ₁₀ >2	50 %
		11800204504	Microfibra / Micro-fibre glass 25 µm				β ₂₅ >200	99,5 %
	Interasse Distance between the holes 220	11800202604	Cellulosa rinforzata / Reinforced cellulose 25 µm	65	130	256	β ₂₅ >2	50 %

	Idonee per filtri Suitable for filters	Cartuccia Cartridge	Filtrazione Filter	Ø d	Ø D	C	β	Efficienza Efficiency
				mm	mm			
	Interasse Distance between the holes 115 A=330	11800211176	Acciaio / Steel 60 µm	41	70	225		
		11800212175	Cellulosa rinforzata Reinforced cellulose 25 µm				β ₂₅ >2	50 %
		11800212193	Microfibra Microfiber 25 µm				β ₂₅ >200	99,5 %


ATTENZIONE: cartucce da utilizzarsi solo per ricambi filtri immersi cod. 11800111177 / 11800112176 / 11800112194.

WARNING: cartridge use only with submerged filters cod. 11800111177 / 11800112176 / 11800112194 spares.

Filtri in linea aspirazione e ritorno / Suction and return filters



I filtri di questa famiglia, con cartuccia avvitabile a perdere (spin-on), sono adatti per essere applicati sia in aspirazione che sul ritorno di impianti idraulici e di lubrificazione. Sono inoltre forniti con foro filettato per indicatore di intasamento.

These in-line filters with disposable spin-on cartridge are suitable for use on the suction or return lines of hydraulic and lubrication systems. They are supplied with a tapped hole for a suction line clog indicator.

Temperatura di esercizio Operating temperature	Pressione massima di esercizio Max. operating pressure	Pressione di collaudo Testing pressure	Apertura valvola by-pass By-pass valve opening	Guarnizione Seal	Portata Flow rate	Elementi filtranti Filter Elements	
		bar	Δp bar		l/min	X	Z
-25 ÷ 110 °C	12 bar	5 ISO 2941	1,5 ± 9%	Gomma nitrilica (compatibile con tutti gli oli minerali, emulsione acquose, acqua glicose) Nitril rubber (compatible with all mineral oils aqueous emulsions and glycol water).	17 ÷ 190	Tela metallica Metal cloth	Microfibra inorganica rinforzata Reinforced inorganic microfiber

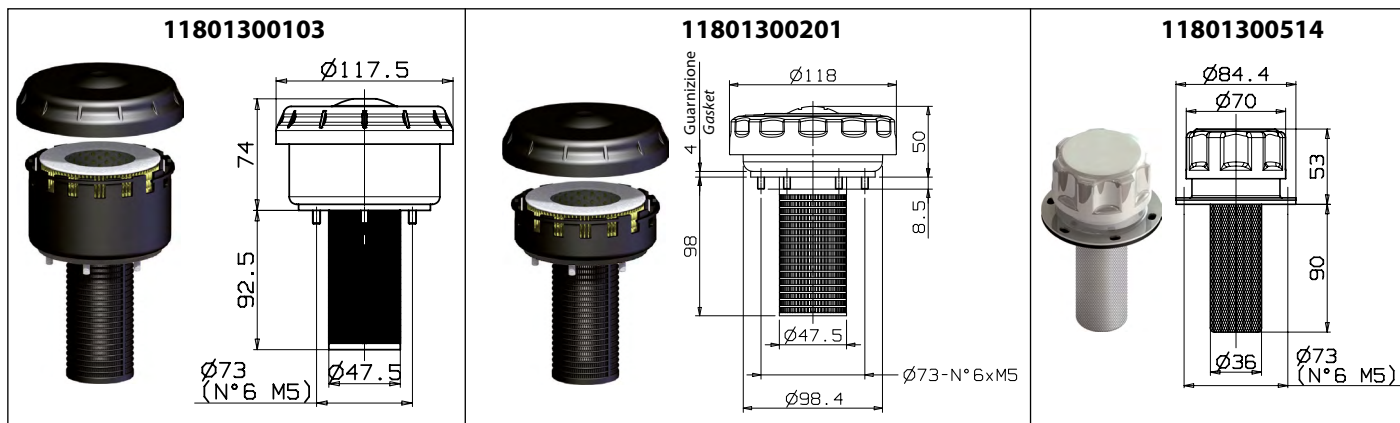
FILTRI di RITORNO / RETURN FILTERS

Codice di ordinazione Order code	Filtrazione Filter		Portata Displacement	Elemento Elements	A	B	C	D	E	cartuccia di ricambio Spare cartridge
	µm	β			G	mm	mm	mm	mm	
11800131057	60	2	80	x	3/4	95	145	3/4	44	11800231056
11800131100			90				195			11800231109
11800131155			190		1 1/4	128	180	1 1/4	60	11800231154
11800131208			205				240			11800231207
11800134054	25	75	65	z	3/4	95	145	3/4	44	11800234053
11800134107			69				195			11800234106
11800134152			125		1 1/4	128	180	1 1/4	60	11800234151
11800134205			133				240			11800234204

FILTRI di ASPIRAZIONE / SUCTION FILTERS

Codice di ordinazione Order code	Filtrazione Filter		Portata Displacement	Elemento Elements	A	B	C	D	E	cartuccia di ricambio Spare cartridge
	µm	β			G	mm	mm	mm	mm	
11800141055	60	2	30	x	3/4	95	145	3/4	44	11800231056
11800141108			35				195			11800231109
11800141153			95		1 1/4	128	180	1 1/4	60	11800231154
11800141206			100				240			11800231207

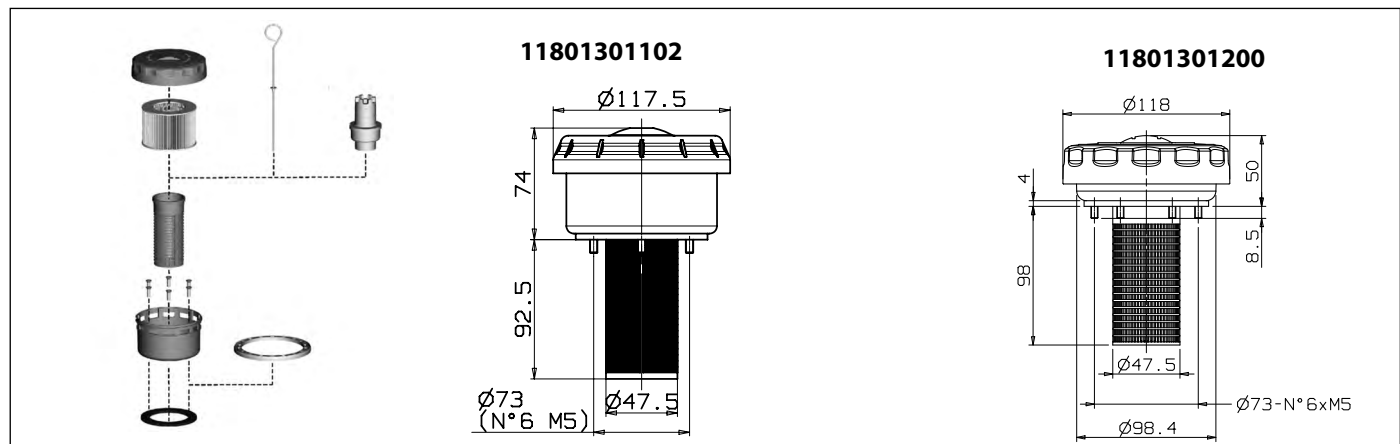
Tappo riempimento / Filler cap



Tappo di riempimento completo di filtro in Carta per un corretto filtraggio dell'aria in ingresso del serbatoio.
Filler cap complete with paper filter to ensure a proper filtration on the air coming into the tank.

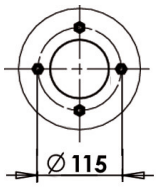
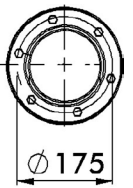
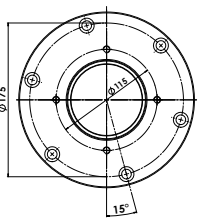
Codice ordinazione Order code	Portata aria Air displacement	Filtrazione Filter	Elementi filtranti Filter Elements	
11801300103	1800 l/min	3 µm	11890200107	Carta / Paper
11801300201	1400 l/min	10 µm	11890200125	
11801300514	480 l/min	40 µm	Rete metallica / Metallic net	

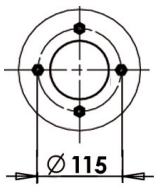
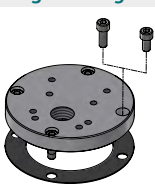
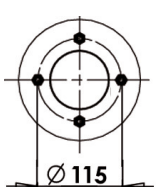
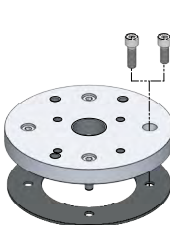
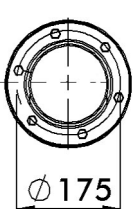
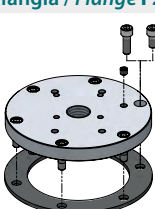
Tappo riempimento con antispruzzo / Filler cap with antisplash



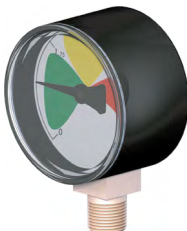
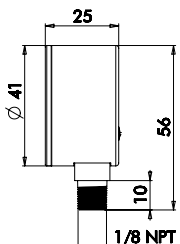
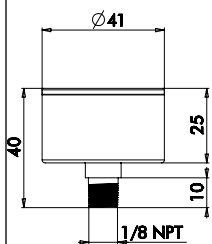
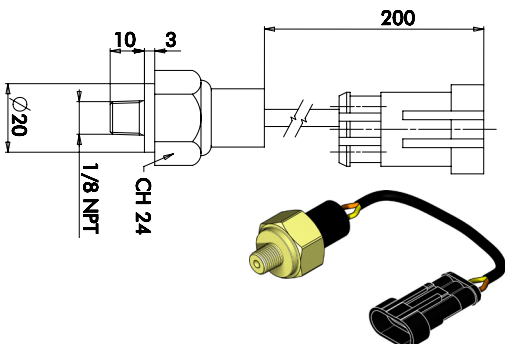
Codice ordinazione Order code	Portata aria Air displacement	Filtrazione Filter	Elementi filtranti Filter Elements	
11801301102	1800 l/min	3 µm	11890200107	Carta / Paper
11801301200	1400 l/min	10 µm	11890200125	

Piastre di chiusura / Flanges

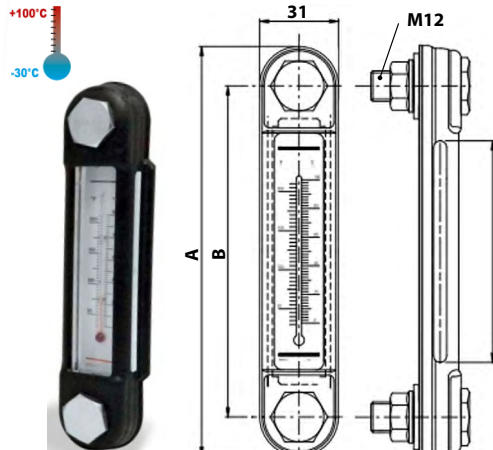
Codice ordinazione Order code	Descrizione prodotto Description	Composizione prodotto Bill of material
Piastre cieche Blank flanges	 Codice/Code 13599020110 (OMFB) 13599020129 (Neutro)	Flangia / Flange F4  4 viti SPEI M8x16 1 piastra in alluminio 1 guarnizione piastra 4 screws SPEI M8x16 1 aluminium plate 1 Gasket
	 Codice/Code 13599020165	Flangia / Flange F2  6 viti SPEI M10x18 1 piastra in alluminio 1 guarnizione piastra 6 screws SPEI M10x18 1 aluminium plate 1 Gasket
Kit adattatore calotta Kit adaptor filter cap	 Codice/Code 13590400234	Flangia / Flange F2  1 piastra 6 viti TCE M10x30 4 viti SPEI M8x20 1 plate 6 screws TCE M10x30 4 screws SPEI M8x20

Codice ordinazione Order code	Descrizione prodotto Description	Composizione prodotto Bill of material
Piastre montaggio deviatori Mounting flanges for tipping valves	 Codice/Code 12199400182	Flangia / Flange F4  4 viti TCE M 8x14 4 viti TCE M 8x20 1 piastra in alluminio 1 guarnizione piastra 4 screw TCE M 8x14 4 screw TCE M 8x20 1 aluminium plate 1 Gasket
	 Codice/Code 12199400226	Flangia / Flange F4  4 viti TCE M 8x25 4 viti TCE M 8x20 1 piastra in alluminio 1 guarnizione piastra 4 screw TCE M 8x25 4 screw TCE M 8x20 1 aluminium plate 1 Gasket
	 Codice/Code 12199400217	Flangia / Flange F2  6 viti TCE M10x20 6 viti TCE M10x30 1 piastra in alluminio 1 guarnizione piastra 1 grano G 1/8 6 screw TCE M10x20 6 screw TCE M10x30 1 aluminium plate 1 Gasket 1 Plug G 1/8

Indicatori di intasamento / Clogging indicators

Codice ordinazione Order code		Descrizione / Description	Prodotto / Products	
Indicatori visivi / Visual indicators	Attacco radiale Radial attachment 11800000073	Manometro scala 0 a 6 bar attacco radiale. <i>Pressure gauge, scale from 0 to 6 bar radial attachment.</i>		
	Attacco posteriore Rear attachment 11800000082	Manometro scala 0 a 6 bar attacco posteriore. <i>Pressure gauge, scale from 0 to 6 bar rear attachment.</i>		
Indicatori elettrici Electric indicators	31200500110	Segnalatore elettrico con sensibilità regola- bile da 0,5 bar a 3 bar. Attacco packard IP65. <i>Adjustable electric indicator from 0.5 bar to 3 bar. IP 65 Packard connection.</i>		

Indicatori di livello / Level indicator

Codice ordinazione Order code		Descrizione / Description	Prodotto / Product		
50900400123		Spia livello in alluminio G 3/4" Aluminium level eye			
50900400105		Spia livello in alluminio G 1" Aluminium level eye			
Indicatori visivi / Visual indicators		LIVELLO OLIO CON PROTEZIONE METALLICA - Temperatura esercizio - 30° + 100° C. - Guarnizione posteriore: NBR 70 Shore. - Coppia serraggio fissaggi: 5 Nm max. VERTICAL LEVEL GAUGES WITH METAL CASING - Max working temperature - 30° + 100° C. - Rear gasket: NBR 70 Shore. - Maximum tightening torque suggested 5 Nm.			
	Vedi tabella See table				
	Codice Code	Termometro/ Thermometer		A	B
	50900400114	no		156	127
	50900400052	si/yes			
	50900400196	no		192	165
	50900400169	no		281	254