



### Mix&Match to Get What You Need

Donaldson's Mix&Match system provides the great performance and functional advantages of custom-engineered filters with the convenience and speedy delivery of in-stock parts. Choose your options and build a filter model that exactly suits your cleanliness requirements.

#### Technical Data

- Operating pressure up to 3000 kPa (30 bar).
- Static pressure testing up to 4500 kPa (45 bar).
- By-pass valve setting 150 kPa (1,5 bar) per ISO 3968.
- Operating temperature -20 +120°C.
- Compatibility with hydraulic fluids per ISO 2943.
- Flow rate and pressure drop per ISO 3968 with oil kinematic viscosity 30 cSt at 40°C and density 0,875 kg/dm<sup>3</sup>.
- Flange per SAE J518: 3000 PSI.

#### Filter Elements

- Wire mesh: 60-90 micron.
- Cellulose media: 36-50 micron, reinforced with wire mesh.
- Synteq® synthetic media: 11-23 micron.
- Collapse resistance 1000 kPa (10 bar) per ISO 2941.
- Replacement element includes spring and O-ring seal.

# Components



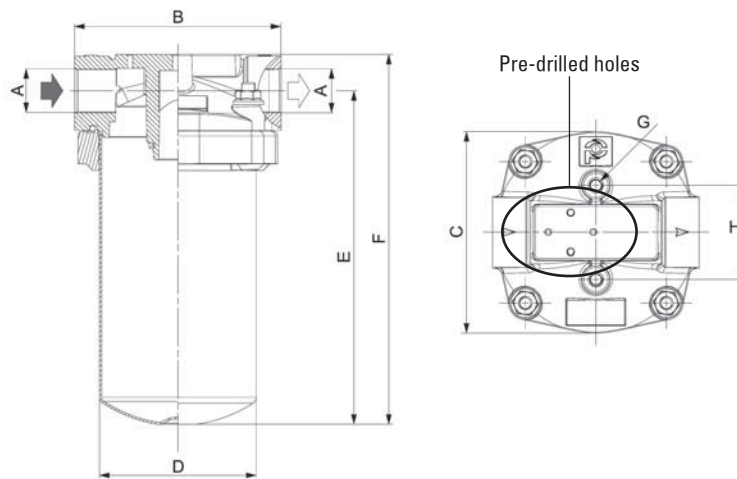
Family	WIRE MESH				CELLULOSE MEDIA				SYNTHETIC MEDIA				CARTRIDGE CODE
	/9		/6		/3		/1		/03		XP10		
	90µm		60µm		$\beta_{50\mu m(e)} \geq 1000$		$\beta_{36\mu m(e)} \geq 1000$		$\beta_{23\mu m(e)} \geq 1000$		$\beta_{11\mu m(e)} \geq 1000$		
	RMF		RMF	RMF		RMF		RMF		RMF			
FLS50	40	P171518	40	P171523	35	P171522	35	P171521	30	P171520	30	P171519	CR50
FLS100	80	P171530	80	P171535	65	P171534	65	P171533	60	P171532	60	P171531	CR100
FLS150	130	P171584	130	P171589	110	P171588	110	P171587	90	P171586	90	P171585	CR125
FLS180	180	P171536	180	P171541	130	P171540	130	P171539	110	P171538	110	P171537	CR180
FLS200	200	P171596	200	P171601	140	P171600	140	P171599	120	P171598	120	P171597	CL200
FLS250	250	P171590	250	P171595	160	P171594	160	P171593	140	P171592	140	P171591	CR220
FLSF250	250	P171590	250	P171595	160	P171594	160	P171593	140	P171592	140	P171591	CR220
FLS330	330	P171560	330	P171565	220	P171564	220	P171563	180	P171562	180	P171561	CR330
FLSF330	330	P171560	330	P171565	220	P171564	220	P171563	180	P171562	180	P171561	CR330
FLS500	500	P171566	500	P171571	400	P171570	400	P171569	350	P171568	350	P171567	CR500
FLSF500	500	P171566	500	P171571	400	P171570	400	P171569	350	P171568	350	P171567	CR500
FLSF800	600	P171578	600	P171583	500	P171582	500	P171581	400	P171580	400	P171579	CR800

RMF = Recommended Maximum Flow in liters/minute with use of standard housing.

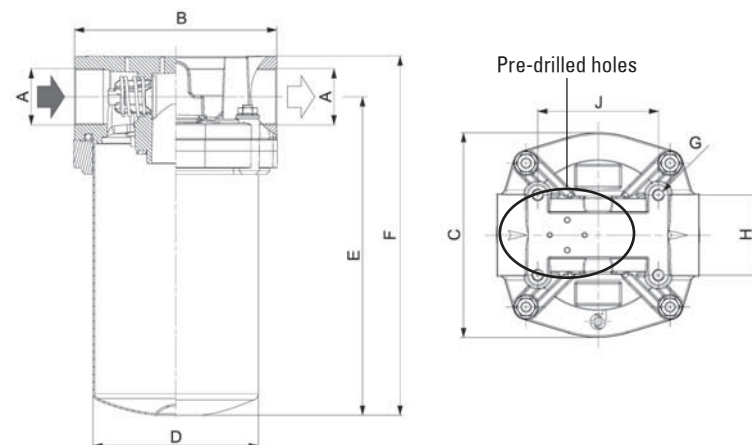
BPV = Bypass Valve Setting.

\* only FLS200 has the Bypass valve installed in the head, for all other sizes the bypass valve is included in the cartridge.

FLS 50-180



FLS 200

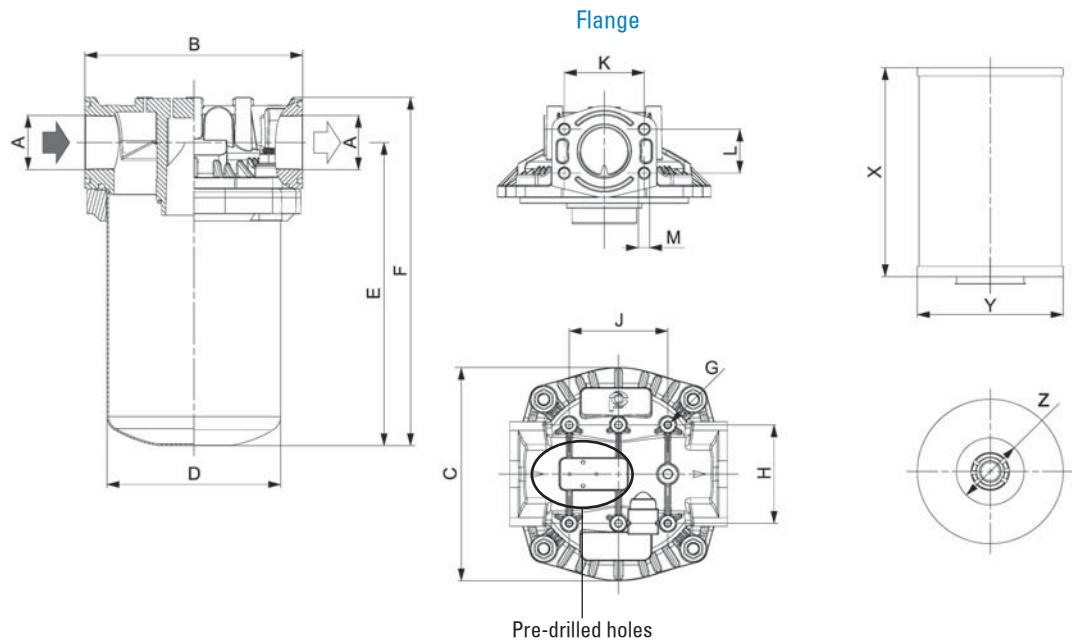




Standard housing with pre-drilled holes without cartridge	Standard housing without pre-drilled holes without cartridge	HOUSING DIMENSIONS														CARTRIDGE DIMENSIONS			POSSIBLE INDICATORS Only applicable if housing is with pre-drilled holes.
		A	B	C	D	E	F	G	H	J	K	L	M	N	BPV	X	Y	Z	
			mm	mm	mm	mm	mm		mm	mm	mm	mm		mm	bar	mm	mm	mm	
P766672	P766995	G1/2	119	116	90	140	161	M8	54	-	-	-	-	-	1,5	75	70	29	P171950 P171961 P171963
P766673	P766996	G3/4	119	116	90	192	213	M8	54	-	-	-	-	-	1,5	128	70	29	
P766671	P766997	G1	140	135	109	246	277	M8	68	-	-	-	-	-	1,5	169	95	41	
P766670	P766998	G1 1/4	140	135	109	284	314	M8	68	-	-	-	-	-	1,5	203	95	41	
P766666	P766999	G1 1/4	151	153	123	238	268	M8	60	90	-	-	-	-	1,5*	180	112	46	
P766667	P767000	G1 1/2	212	208	169	225	269	M8	96	96	-	-	-	-	1,5	136	140	65	
P766663	P767001	Flange 1" 1/2	212	208	169	225	269	M8	96	96	70	36,7	M12	22	1,5	136	140	65	
P766669	P767002	G1 1/2	212	208	169	295	339	M8	96	96	-	-	-	-	1,5	203	140	65	
P766662	P767003	Flange 1" 1/2	212	208	169	295	339	M8	96	96	70	36,7	M12	22	1,5	203	140	65	
P766665	P767004	G2	212	208	169	295	339	M8	96	96	-	-	-	-	1,5	203	140	65	
P766668	P767005	Flange 2"	212	208	169	295	339	M8	96	96	77,8	42,8	M12	22	1,5	203	140	65	
P766664	P767006	Flange 2"	212	208	171	495	539	M8	96	96	77,8	42,8	M12	22	1,5	400	140	65	

If housing with pre-drilled holes selected, you have to install an indicator. Because pre-drilled holes are not plugged.

FLS 250-800



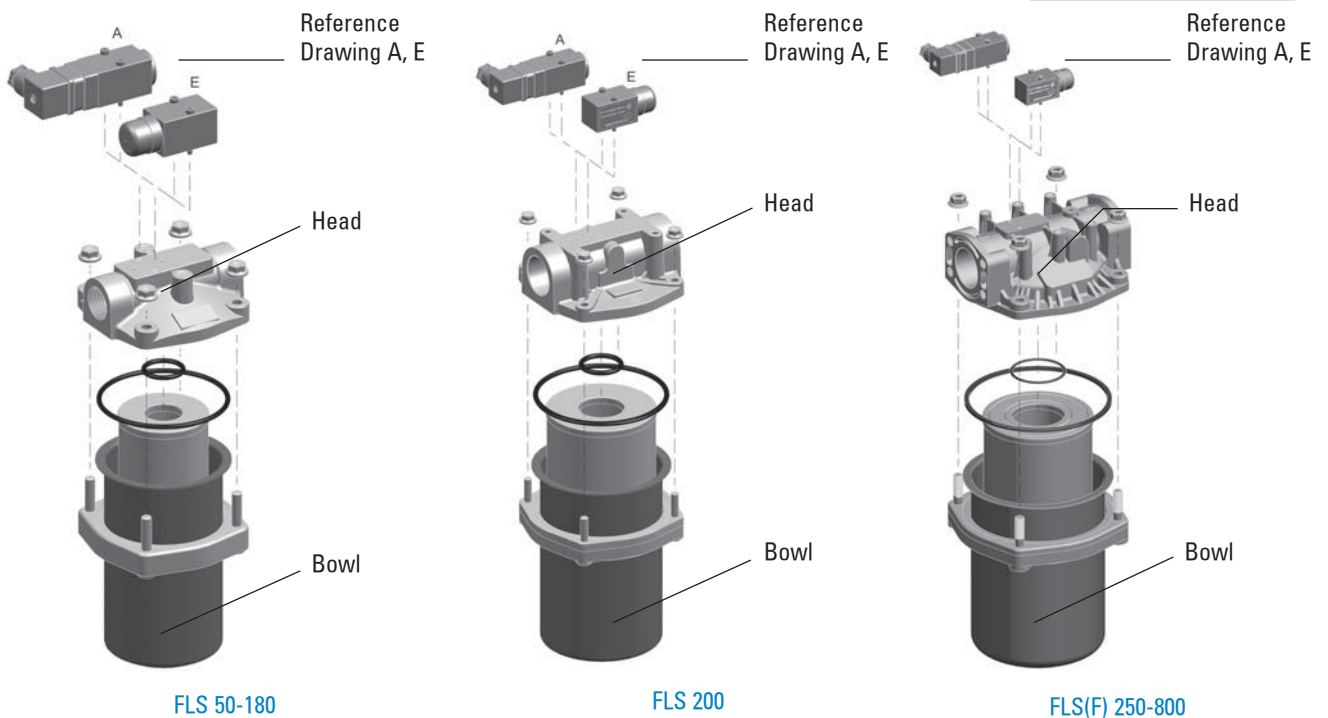
## Indicator Choices

Part	Kind		Reference Drawing	Setting (bar)	Contact	Protection Class	Cable Clamp	Max. Values
P171961	Electrical	Differential	A	1,4	Normally Open	IP65	PG11	30 Vcc/Ac; 0,5 A res. and 0,2 A ind.
P171963	Electrical	Differential	A	1,4	Normally Closed	IP65	PG11	30 Vcc/Ac; 0,5 A res. and 0,2 A ind.
P171950	Visual	Differential	E	1,4				

## Installation & Service Guidelines

**Important**

- Oil the O-Rings before assembly.



## Performance Curves

