



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 1000 kPa (10 bar).
- Static pressure testing up to 1500 kPa (15 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 determined per ISO 3968 with oil kinematic viscosity 30 cSt at 40°C and density 0,875 kg/dm³.

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



RETURN & SUCTION FILTERS IN-TANK

Family	WIRE MESH						CELLULOSE MEDIA						SYNTHETIC MEDIA						CARTRIDGE CODE
	/9			/6			/3			/1			/03			XP10			
	90µm			60µm			β _{90µm(c)} ≥ 1000			β _{36µm(c)} ≥ 1000			β _{23µm(c)} ≥ 1000			β _{11µm(c)} ≥ 1000			
RMF Return	RMF Suction		RMF Return	RMF Suction		RMF Return	RMF Suction		RMF Return	RMF Suction		RMF Return	RMF Suction		RMF Return	RMF Suction			
FIR 30	30	15	P171500	30	15	P171505	20	10	P171504	20	10	P171503	15	8	P171502	15	8	P171501	CR30
FIR 60	60	30	P171524	60	30	P171529	40	20	P171528	40	20	P171527	35	15	P171526	35	15	P171525	CR60
FIR 100	100	50	P171530	100	50	P171535	65	35	P171534	65	35	P171533	60	30	P171532	60	30	P171531	CR100
FIR 180	180	90	P171536	180	90	P171541	120	60	P171540	120	60	P171539	110	55	P171538	110	55	P171537	CR180
FIR 500	500	250	P171566	500	250	P171571	400	200	P171570	400	200	P171569	350	180	P171568	350	180	P171567	CR500

RMF = Recommended Maximum Flow in liters/minute with use of standard head.
Standard head is with predrilled holes for indicator, but plugged.

Indicator Choices

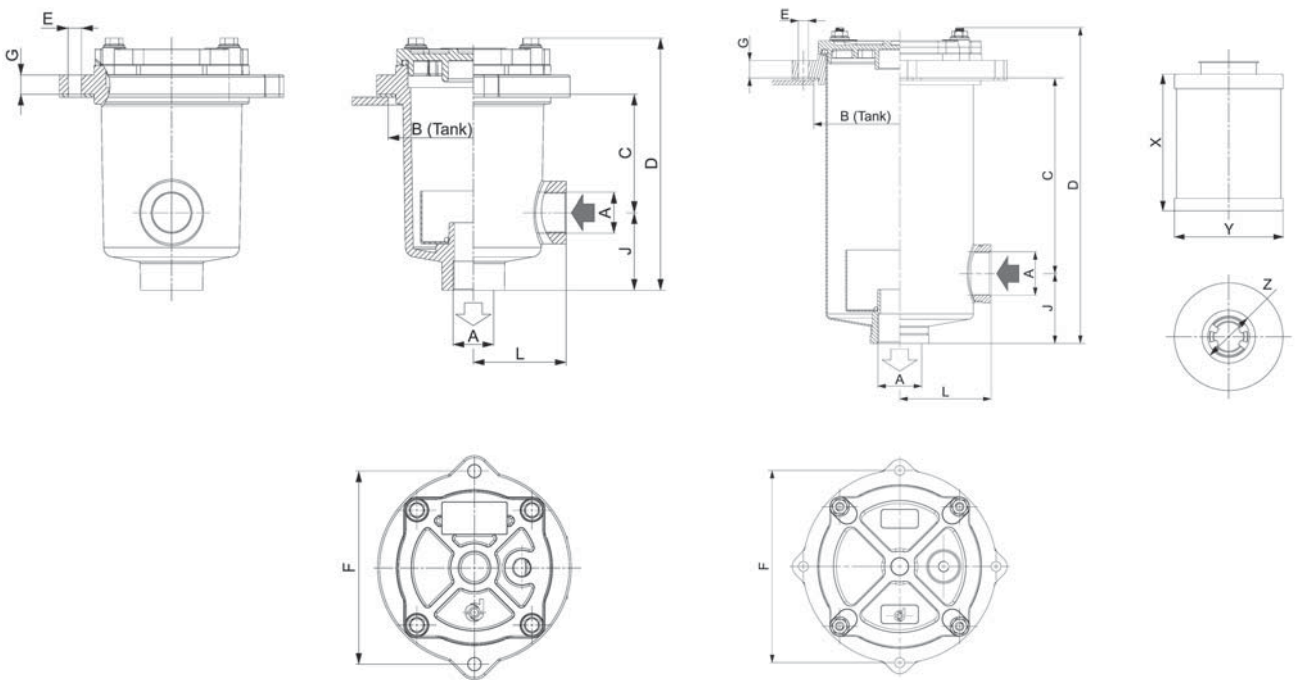
Part	Kind		Reference Drawing	Setting (bar)	Contact	Protection Class	Cable Clamp	Max. Values
P171953	Visual	Vacuum	G	-1/5				
P171958	Visual	Differential	F	1,2				
P171966	Electrical	Differential	C	1,2	Normally Open	IP65	PG7	48 V; 0,5 A res. and 0,2 A ind.
P173104	Electrical	Differential	C	1,2	Normally Closed	IP65	PG7	48 V; 0,5 A res. and 0,2 A ind.

Use indicators only on return line applications!



Standard Housing without Cartridge	DIMENSIONS HOUSING											DIMENSIONS ELEMENT			POSSIBLE INDICATOR
	A	B	C	D	E	F	G	J	L	M	N	X	Y	Z	
		mm	mm	mm	mm	mm	mm	mm	mm	mm	predrilled holes	plugged	mm	mm	
P766679	G1/2	88	61	130	7	100	10	40	48	G1/8	YES	52	67	26	P171953 P171958 P171966 P173104
P766481	G3/4	110	67,5	155	9	126	14,5	52	58	G1/8	YES	70	82	29	
P766482	G1	110	109,5	199	9	126	14,5	56	59	G1/8	YES	70	128	29	
P766678	G1 1/4	156	176	288	9	175	16	64	83	G1/8	YES	95	203	41	
P766483	G2	204	167	297,5	9	220	20	77,5	107	G1/8	YES	140	203	65	

RETURN & SUCTION
FILTERS IN-TANK

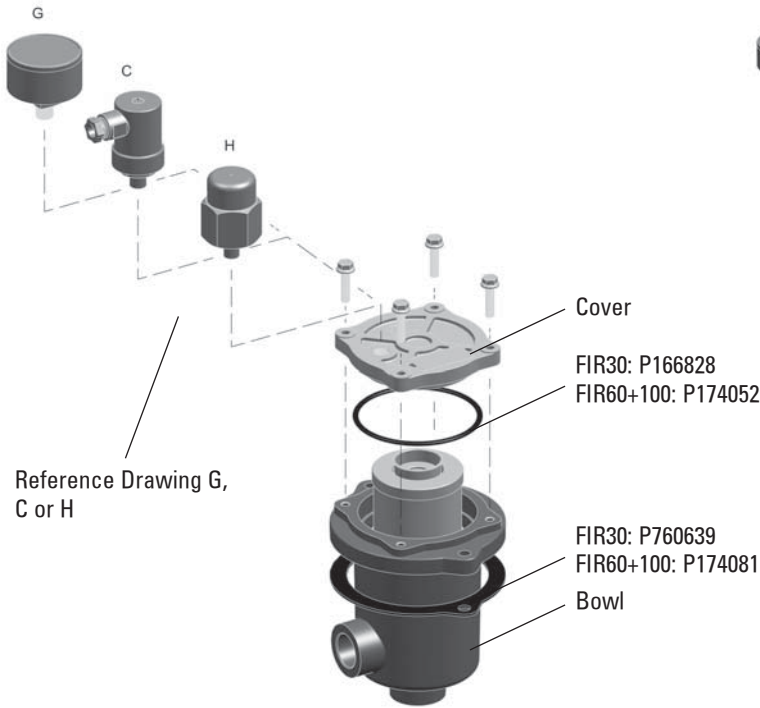


Size 30-100

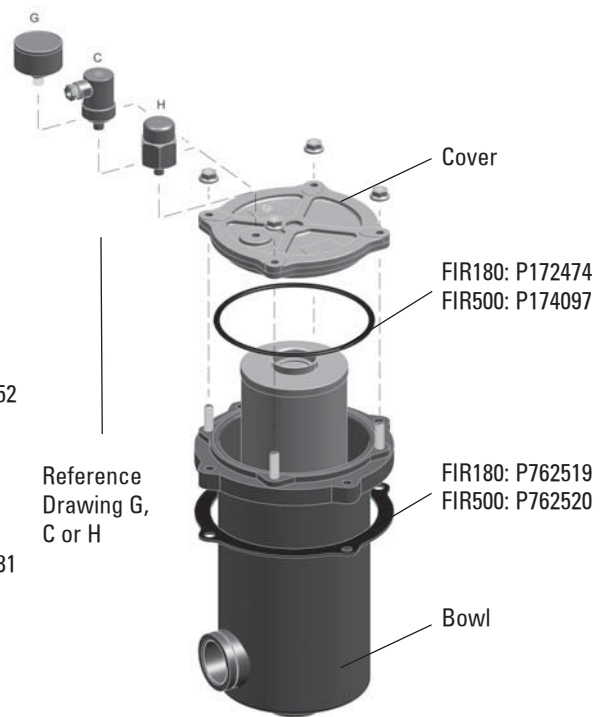
Size 180-500

Installation & Service Guidelines

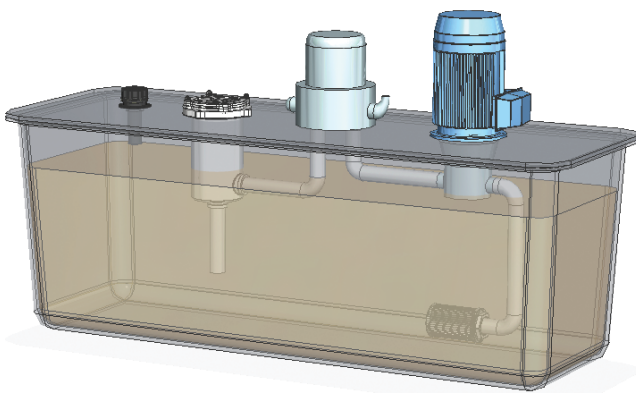
RETURN & SUCTION FILTERS IN-TANK



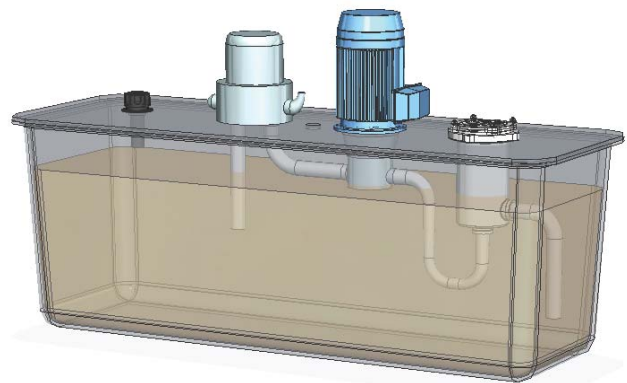
FIR 30-100



FIR 180-500

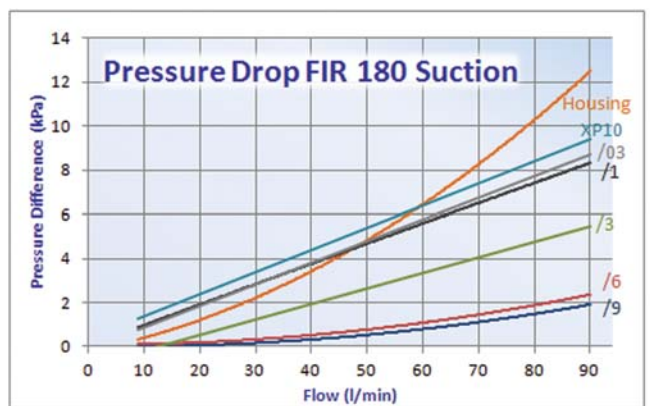
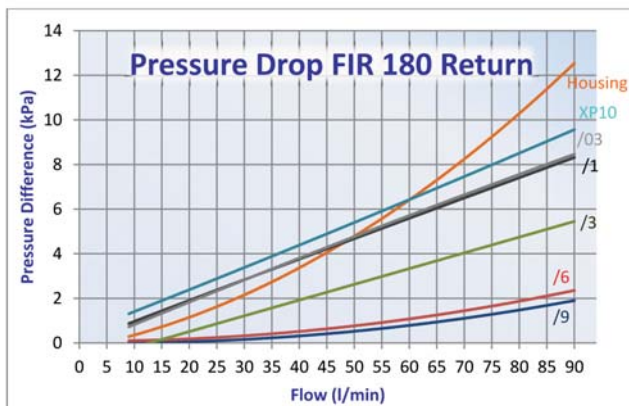
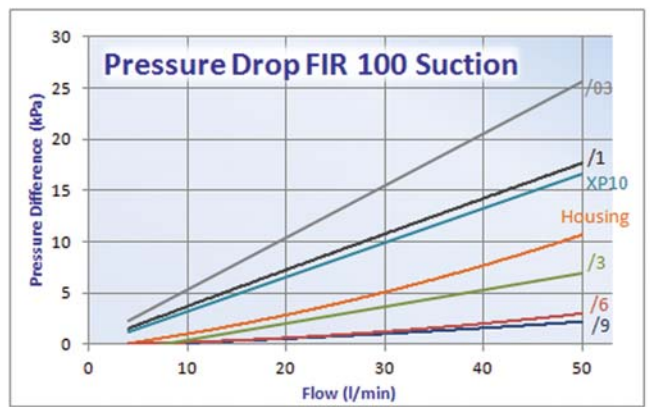
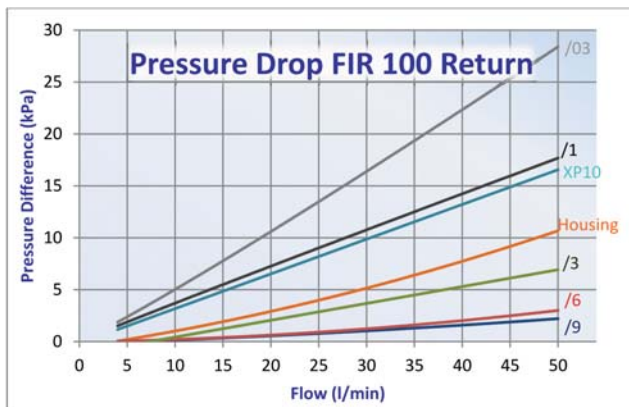
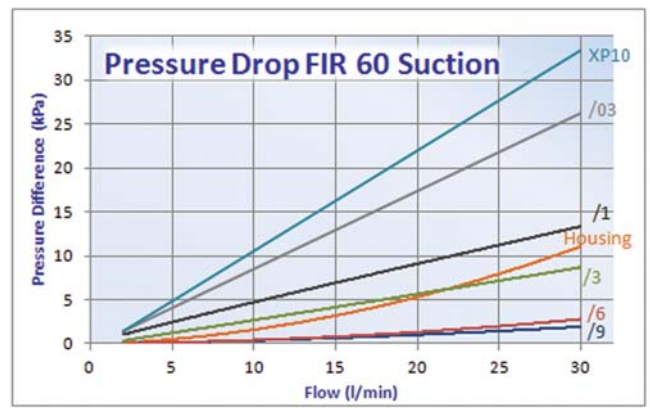
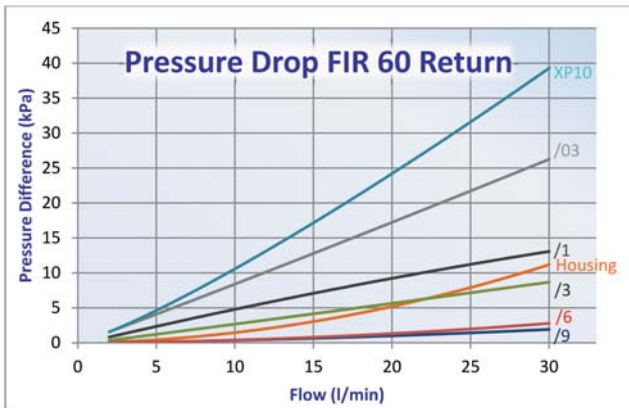
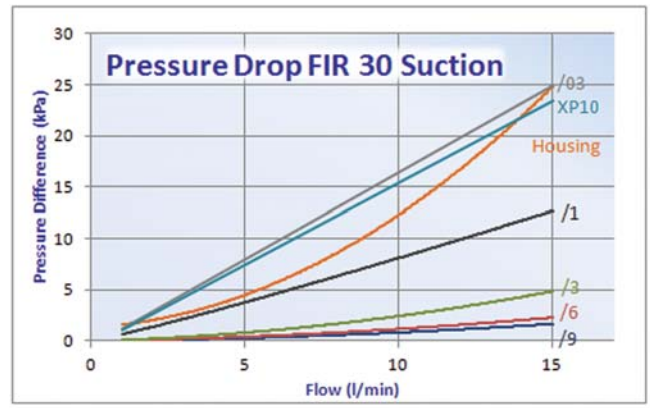
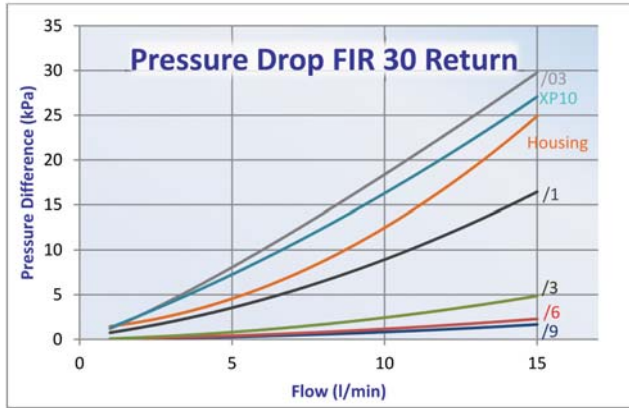


Example of how the filter is mounted in a return flow.



Example of how the filter is mounted in a suction flow.

Performance Curves



RETURN & SUCTION
FILTERS IN-TANK

