

DUPLEX FILTER F311

Application

The Duplex Filter F311 is a multi-purpose filter for liquid media. It is characterized by continuous operation during the cleaning phase as well as a high degree of filtration down to very low microns. As a special feature, the maintenance and strainer access can be optimized by choosing different filter cover solutions.

The degree of contamination can be optionally monitored with various differential pressure indicators. Further options, for example magnetic inserts or the sacrificial anode enable an application-specific customization.

Function

The Duplex Filter consists of two single filters which are connected via a flanged switch-over device (A300) and can be operated alternately or in parallel. The filter size DN65 has an integrated switch-over device. The standard filter design consists of a cast housing and a cover which is fixed either with a clam bloc, lever lock or with stud bolts and nuts. Venting devices in the covers and draining devices in the housing are included in the scope of supply.

The filter is equipped with a basket or ring-type strainer. The medium to be filtered flows through the strainer from the inside to the outside. The strainer is made out of a perforated plate which can be covered optionally with mesh in different mesh sizes. A rotary vane is used to switch between the filters which ensures an easy changeover even for the larger filter sizes. In case the filter is installed on the suction side, the rotary vane shall be equipped with a lock.



Technical Data

In- / outlet:	DN 65 – DN 200
Operating medium:	Fluids
Volume flow:	max. 280 m³/h
Design pressure:	6 bar, 10 bar, 16 bar

Components	Standard	Customized
Strainer:	Basket strainer	Ring-type strainer
Grade of filtration:	80 – 1000 µm (fabric / perforated plate) ≥ 1 mm (perforated plate)	10 – 60 µm acc. customer's specification
Filter cover:	Cover with clamp lock (type F311-BÜ) Cover with lever lock (type F311-HE) Cover with stud bolts and nuts (type F311-S)	
Drainage:	Screw (brass)	Ball valve; acc. customer's specification
Ventilation:	Valve (brass)	Ball valve; acc. customer's specification
Connection:	Flange acc. DIN EN 1092-2	acc. customer's specification

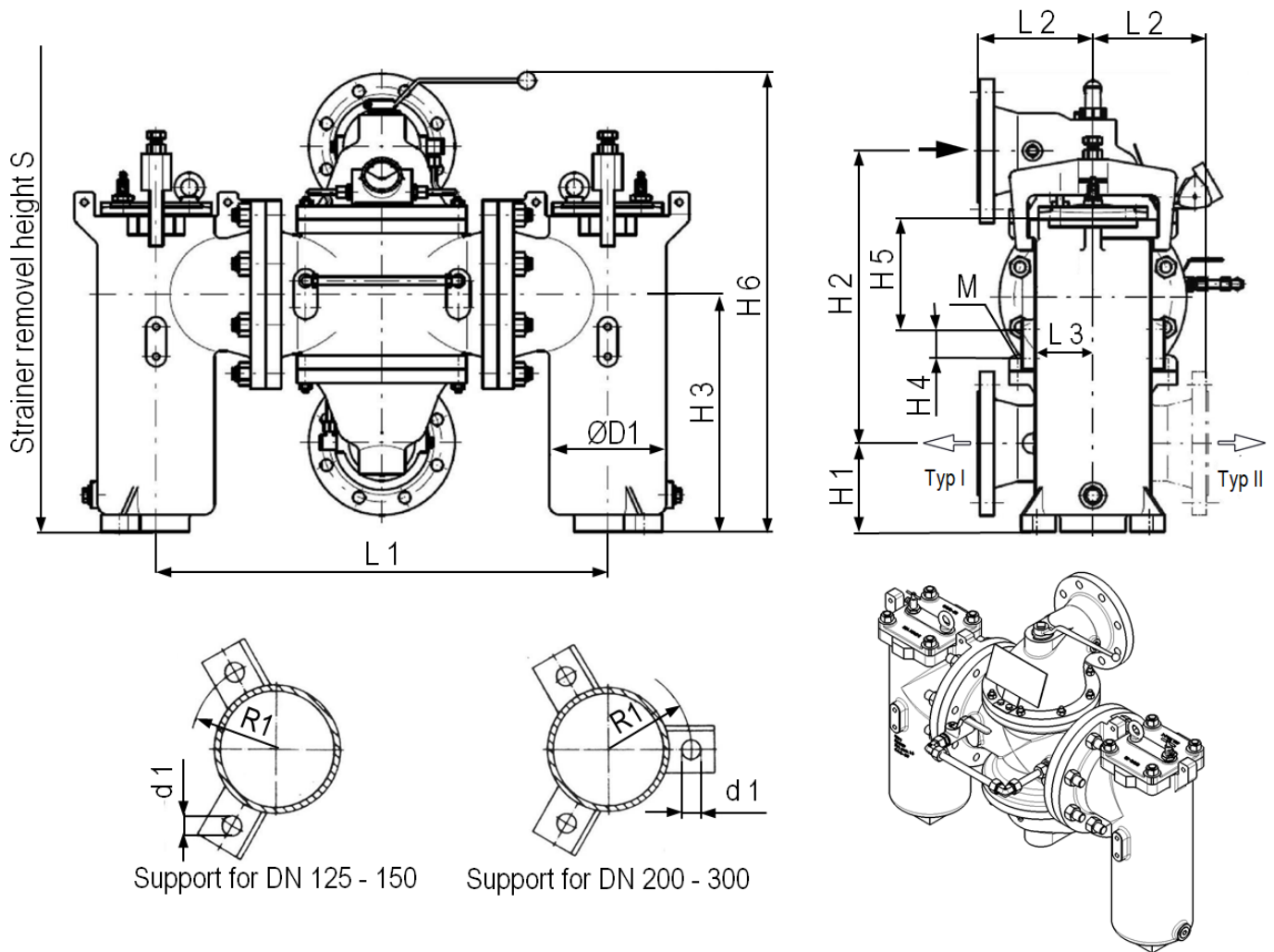
Materials		
Housing and cover:	DN 65, 200-300: GG-25 DN 80-150: GGG50	acc. customer's specification
Cover gasket:	NBR	EPDM, FPM, PTFE, MTQ
Strainer (perforated plate / fabric):	1.4301, 1.4301 / 1.4401	.4571, 1.4571 / 1.4401, brass / Bronze, Hastelloy C4

Surface Treatment		
Housing inside:	GG-25 / GGG50	Corrosion protection primer
Housing outside:	GG-25 / GGG50	Synthetic enamel RAL5018

Options	
Differential pressure indicator (optical / electrical), sacrificial anode, filter support, magnetic insert	

Further options and customer specific solutions are available upon request.

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Support for DN 125 - 150

Support for DN 200 - 300

DN	PN F311			ØD	H1	H2	H3	H4	H5	H6	L1	L2	L3	M	R1	Ød1	S	Volume	Flow capacity	Filter surface		Weight
	BÜ	HE	S																	BS*	RS*	
	bar																			mm	mm	
65	10	16	16	125	158	339	407	45	135	605	420	147	83	M12	-	-	830	3,5	30	650	1020	78
80	10	16	16	176	136	445	479	45	170	730	680	175	108	M12	-	-	940	8,5	45	950	1620	169
100	10	16	16	176	136	445	479	45	170	730	680	175	108	M12	-	-	940	8,5	70	950	1620	173
125	6	10	10	260	196	643	518	-	-	965	926	230	-	-	158	18	1340	30	110	2450	3640	377
150	6	10	10	260	196	643	518	-	-	965	926	230	-	-	158	18	1340	30	160	2450	3640	412
200	-	-	6	322	216	748	833	-	-	1130	1060	285	-	-	195	18	1650	63	280	3280	6100	670

* BS = Basket strainer

* RS = Ring-type strainer

Larger filter sizes, higher operating pressures as well as further customer specific designs and features are available upon request.

The above mentioned flow capacity is valid for inlet velocities of 2,5 m/s in pressure pipes, a viscosity of 1 mPas (water) and a grade of filtration $\geq 80 \mu\text{m}$. For suction pipes we recommend half of the above mentioned flow capacity values.