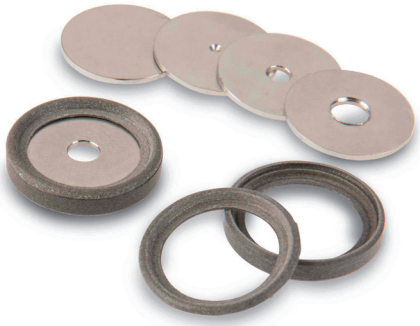
Ultrapharma bv



Removable Steam-Flon®

Steam-Flon®

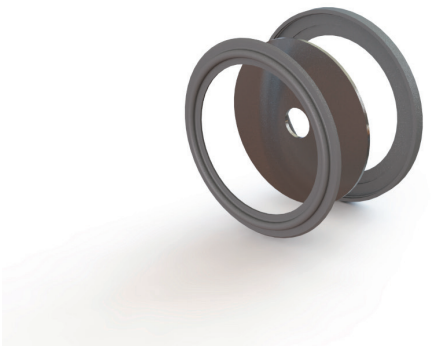
Material

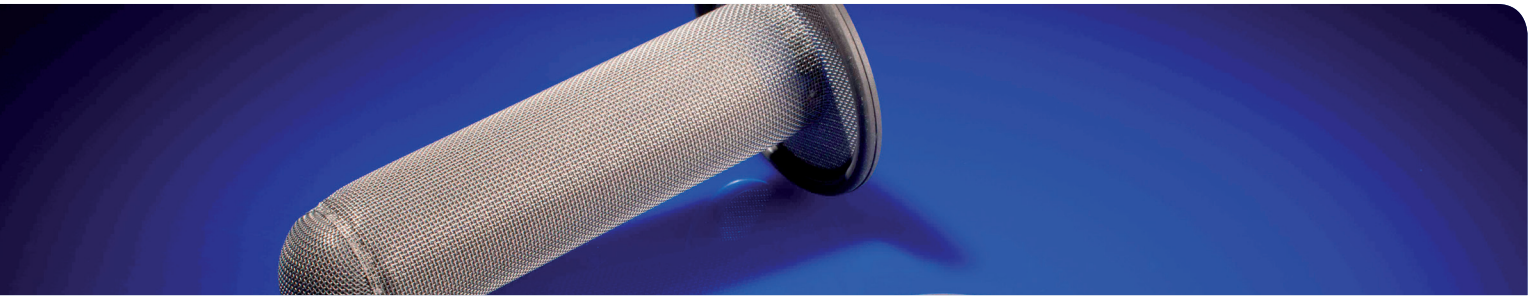
Ultrapharma has developed "Steam-Flon®" for DIN32676, ISO1127, SMS3017 sanitary gaskets and some special products. This material is an unique blend of non pigmented PTFE and 316L stainless steel powder. The mechanical properties of this compound are very interesting, because it eliminates the cold flow problems we experience with for example virgin PTFE. Cold flow is the term we use for movement of plastic under permanent load/stress, a state that is used with static seals. At elevated temperatures cold flow increases. Material of the gasket is slowly moving towards the inside of the fitting and creates a beat. This beat leads to flow restriction and is a potential area for particles/bacterial entrapment. The Steam-Flon® material takes the cold flow out of the equation, creating a very stable seal with no leaks even at large temperature fluctuations.

DIN32676 & ISO1127 (DIN32676 Reihe A, B, C)

Steam-Flon® Biological Compliance:
Material: PTFE/316L Compound number CMD-1019
Color: Brownish
Temperature range -212°C to 288°C
Meets: USP Class VI-121°C
Meets: USP<661>
Meets: EC 10/2011
Meets: FDA CFR 177.1550

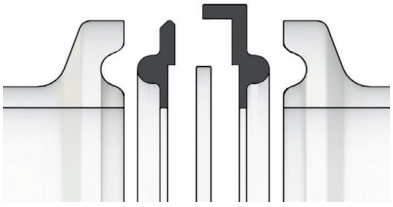
Steam-Flon® is a registered trademark of Ultrapharma BV



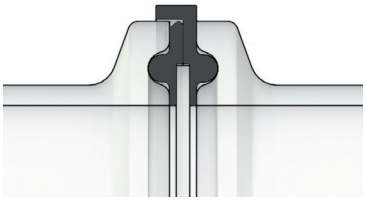


Removable Steam-Flon®

The removable Steam-Flon® is a gasket that we developed because of these unique mechanical properties. The gasket is made out of two mating parts. In between these two parts you can place any kind of product as long as it is not thicker than 1,00 mm. Products like orifice plates, screens and perforated discs can be used.



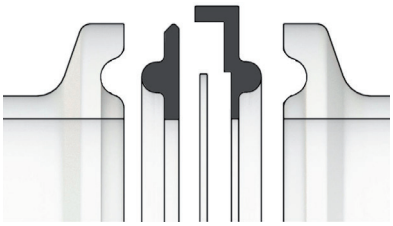
Top part I (0,50) - Plate (1,0) - Bottom part with flange (0,50)



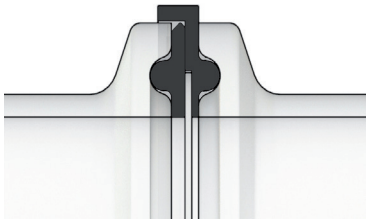
Assembly

If we want to install an orifice plate with a thickness of 1,00 mm we use the above setup with two mating parts with both a 0,50 mm chamber. These two chambers total up to 1,00 mm. Carefully locate the center chamber and place the orifice plate inside and click the two gasket chambers together so they lock. Ready to use.

Some screens are much thinner, a 40 mesh screen is ±0,50 mm thick, therefore we designed a top part with no chamber. See Top Part II above. Same installation.



Top part II (0,0) - Screen (0,5) - Bottom part with flange (0,50)



Assembly

The removable Steam-Flon® gasket can be dismantled after use, cleaned and reassembled again without any problem. Perfect if a screen needs to be cleaned. Orifice plates can be exchanged rapidly. Sock screens which cannot be supplied with PTFE seal can now be equipped with a Steam-Flon® seal. See front page.

Rupture disc gaskets are difficult to replace. With the use of the removable Steam-Flon® (special) gaskets it becomes an easy task to perform. Ask us for available options. Photo below is an example.

Steam-Flon®

Available sizes

The removable Steam-Flon® is available in the following sizes

DN Size	Flange Size				Chamber Ø	Rec. Torque
DN12	25 MM				19 MM	1,5 Nm
DN16	25 MM				19 MM	1,5 Nm
DN18	25 MM				19 MM	1,5 Nm
1/2″	25 MM				19 MM	1,5 Nm
3/4″	25 MM				19 MM	1,5 Nm
DN10 DIN+ISO		34 MM			29 MM	2,5 Nm
DN15 DIN+ISO		34 MM			29 MM	2,5 Nm
DN20 DIN+ISO		34 MM			29 MM	2,5 Nm
DN15 ISO			50,5 MM		44 MM	4,0 Nm
DN20 DIN+ISO			50,5 MM		44 MM	4,0 Nm
DN25 DIN+ISO+SMS			50,5 MM		44 MM	4,0 Nm
DN33,7 SMS			50,5 MM		44 MM	4,0 Nm
DN32 DIN+ISO			50,5 MM		44 MM	4,0 Nm
DN38 SMS			50,5 MM		44 MM	4,0 Nm
DN40 DIN			50,5 MM		44 MM	4,0 Nm
1"			50,5 MM		44 MM	4,0 Nm
1,5"			50,5 MM		44 MM	4,0 Nm
DN32 ISO				64 MM	57 MM	6,0 Nm
DN40 ISO				64 MM	57 MM	6,0 Nm
DN50 DIN				64 MM	57 MM	6,0 Nm
DN51 SMS				64 MM	57 MM	6,0 Nm
2"				64 MM	57 MM	6,0 Nm
DN50 ISO			77,5 MM		72 MM	6,0 Nm
DN63,5 SMS			77,5 MM		72 MM	6,0 Nm
2,5"			77,5 MM		72 MM	6,0 Nm
DN65 DIN+ISO		91 MM			84 MM	12,0 Nm
DN76,1 SMS		91 MM			84 MM	12,0 Nm
3"		91 MM			84 MM	12,0 Nm
DN80 DIN+ISO +SMS	106 MM				97 MM	12,0 Nm

Recommended Torque

The removable Steam-Flon® is a product that we designed to be reused, therefore we recommend the Torque guide line for your convenience: as per the last column in table above.

Supply

We offer removable Steam-Flon® as a complete product, assembled with plate or screen. We can also supply just the removable Steam-Flon® gasket by itself, which means three gasket parts, you can make all possible combinations. The bottom-part with flange and 0,5 mm chamber, the top-part with 0,5 mm chamber and the top-part without the chamber. Typical screens for removable Steam-Flon® are: 10, 20, 40, 60 , 80, 100 mesh in 316SS and 316L on special request. Fine mesh screens down to the 10µm range are so called double mesh screens with a sintered support mesh for strength, these are all 0,80 mm thick.

Orifice plates are supplied in 316L. All metal items can be supplied with EN10204-3.1 certification.

Removable Steam-Flon is also available in DIN11851 series.

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