

SINGLE FILTER F105

Application

The Single Filter F105 is a multi-purpose filter for liquid and gaseous media. It is characterized by high efficiency, a compact footprint as well as quick and easy cleaning. As a special feature the inlet and outlet flange can be arranged in almost every position. Furthermore, the maintenance and strainer access can be optimized by choosing from various 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 standard filter design consists of a welded housing and a cover which is fixed with bolts and nuts. Alternatively, it can be delivered with a clamp, lever or the quick release cross-lock.

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.



Technical Data

| | |
|-------------------|------------------------|
| In- / outlet: | DN15 – DN300 |
| Operating medium: | Fluids, gas |
| Volume flow: | max. 610 m³/h |
| Design pressure: | 10 bar, 16 bar, 25 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 bolts and nuts | Clamp lock DN 25 – 50 Quick acting lever lock DN 50 – 100 Quick-release cross lock DN80 - 150 |
| Drainage and ventilation: | Screw (stainless steel) | Ball valve; acc. customer's specification |
| Connection: | Flange acc. DIN EN 1092-1/11/B1 | acc. customer's specification |

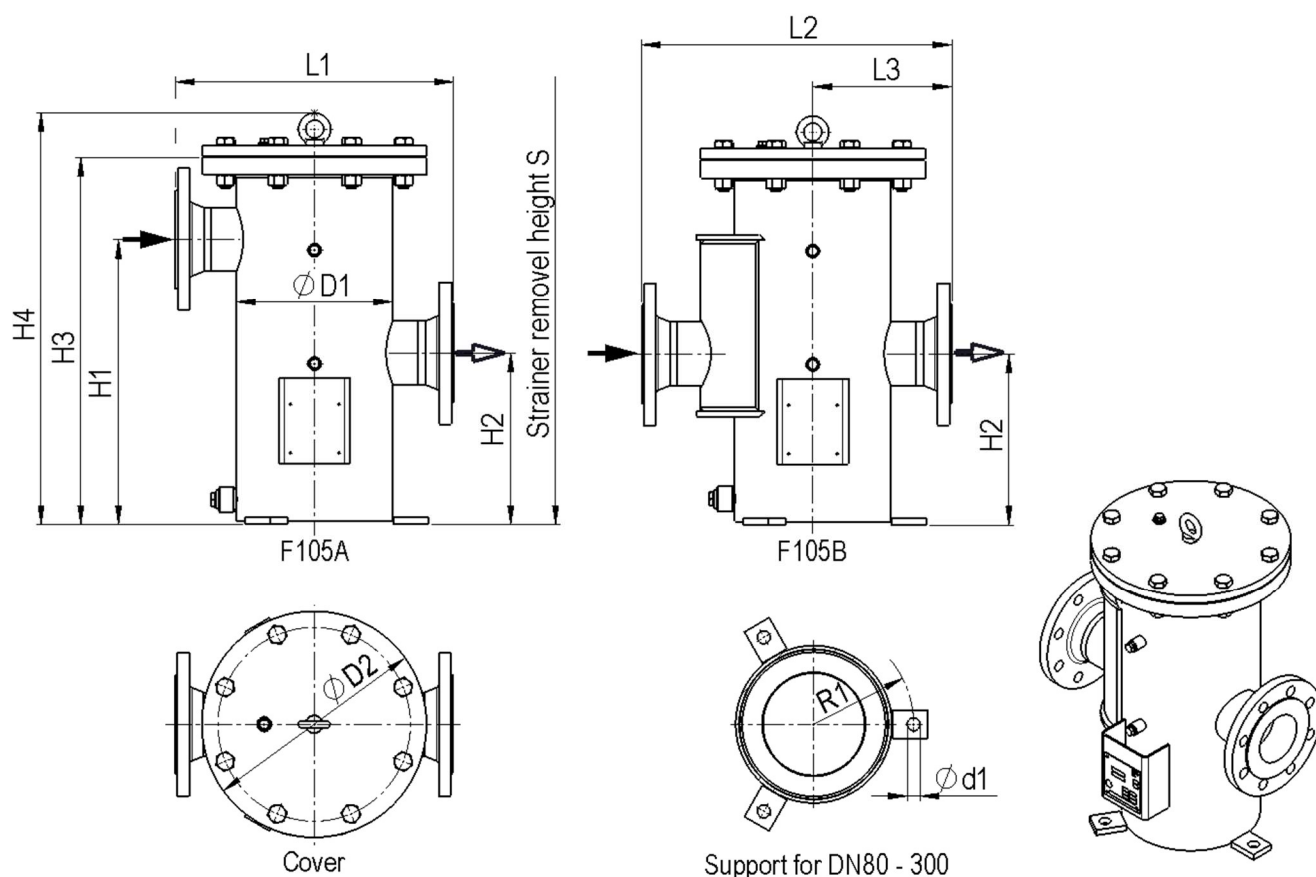
| Materials | | |
|---------------------------------------|-------------------------|--|
| Housing and cover: | 1.4541 / 1.4571 | P235GH / P265GH, 1.4571 |
| Cover gasket: | C4400 | EPDM, FPM, PTFE, NBR |
| Strainer (perforated plate / fabric): | 1.4301, 1.4301 / 1.4401 | 1.4571, 1.4571 / 1.4401, brass / Bronze, Hastelloy C4 |

| Surface Treatment | | | |
|-------------------|-----------------|--|-------------------------------|
| Housing inside: | Stainless steel | Glass bead blasted; primed and passivated | acc. customer's specification |
| | Carbon Steel | Preservative oil | acc. customer's specification |
| Housing outside: | Stainless steel | Glass bead blasted; primed and passivated | acc. customer's specification |
| | Carbon Steel | Synthetic enamel RAL5018 | acc. customer's specification |

| Options | | |
|--|--|--|
| Differential pressure indicator (optical / electrical), sacrificial anode, filter support, magnetic insert, cover lifting device, heating jacket | | |

Further options and customer specific solutions are available upon request.

SINGLE FILTER F105



| DN | PN | ØD1 | ØD2 | H1 | H2 | H3 | H4 | L1 | L2 | L3 | R1 | Ød1 | S | Volume F105 | | Flow capacity | Filter surface | | Weight F105 | |
|-----|-----|-----|-----|------|-----|------|------|-----|-----|-----|-----|-----|------|-------------|-----|---------------|----------------|-------|-------------|------|
| | | | | | | | | | | | | | | A | B | | BS* | RS* | A | B |
| mm | bar | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm | dm³ | | m³/h | cm² | | ca.kg | |
| 15 | 25 | 76 | 165 | 215 | 130 | 309 | 336 | 200 | 210 | 100 | - | - | 635 | 1 | 1 | 1,5 | 180 | - | 11 | 11 |
| 20 | 25 | 76 | 165 | 215 | 130 | 309 | 336 | 200 | 210 | 100 | - | - | 635 | 1 | 1 | 3 | 180 | - | 11,5 | 12 |
| 25 | 25 | 76 | 165 | 215 | 130 | 309 | 336 | 200 | 210 | 100 | - | - | 635 | 1 | 1 | 4,5 | 180 | - | 12 | 12,5 |
| 32 | 25 | 114 | 200 | 245 | 155 | 335 | 397 | 250 | 270 | 125 | - | - | 690 | 3 | 3 | 7 | 380 | 620 | 17 | 18 |
| 40 | 25 | 114 | 200 | 280 | 160 | 375 | 437 | 270 | 290 | 135 | - | - | 760 | 3,5 | 3,5 | 12 | 430 | 690 | 18 | 19 |
| 50 | 25 | 114 | 200 | 305 | 175 | 405 | 467 | 270 | 300 | 135 | - | - | 840 | 4 | 4 | 18 | 500 | 720 | 20 | 20 |
| 65 | 16 | 168 | 260 | 325 | 180 | 414 | 476 | 350 | 360 | 175 | - | - | 850 | 9 | 10 | 30 | 720 | 1120 | 31 | 33 |
| 80 | 16 | 219 | 315 | 400 | 240 | 515 | 577 | 390 | 435 | 195 | 140 | 18 | 1040 | 18 | 20 | 45 | 1180 | 1850 | 48 | 51 |
| 100 | 16 | 219 | 315 | 465 | 280 | 586 | 650 | 390 | 445 | 195 | 140 | 18 | 1170 | 21 | 22 | 70 | 1400 | 2200 | 51 | 55 |
| 150 | 16 | 273 | 365 | 730 | 485 | 880 | 950 | 460 | 570 | 230 | 177 | 23 | 1760 | 50 | 58 | 160 | 3400 | 4900 | 87 | 97 |
| 200 | 10 | 356 | 470 | 750 | 455 | 930 | 1002 | 570 | 710 | 285 | 218 | 23 | 1850 | 90 | 106 | 280 | 4000 | 6800 | 150 | 170 |
| 250 | 10 | 406 | 520 | 1080 | 720 | 1310 | 1404 | 630 | 825 | 315 | 243 | 23 | 2600 | 170 | 200 | 440 | 6850 | 10000 | 255 | 285 |
| 300 | 10 | 508 | 640 | 1175 | 765 | 1429 | 1523 | 770 | 975 | 385 | 294 | 23 | 2830 | 285 | 339 | 610 | 9600 | 14100 | 395 | 470 |

* 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.