



#### Technical Data

- Operating pressure up to 1000 kPa (10 bar).
- Static pressure testing up to 1500 kPa (15 bar).
- Back pressure valve setting: 0,5 bar per ISO 3968.
- By-pass valve setting: 2,5 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 0,875kg/dm<sup>3</sup>.

#### Filter Elements Main

- Synthetic media.
- Filtration efficiency according to ISO 16889:  
 $\beta_{11\mu(c)}=200, \beta_{13\mu(c)}=1000.$
- Unique interface with filter assembly.
- By-pass strainer integrated into the main element 125 micron wire mesh.
- Collapse resistance 1000 kPa (10 bar) per ISO 2941.
- Replacement element includes spring and O-ring seal.

#### Filter Elements Emergency Suction

- Emergency filtered suction from the tank (125  $\mu$ m).
- By-pass filtered and pressurized.

## Components

RETURN & SUCTION  
FILTERS IN-TANK

| Family              | Style 1                    | Style 2              | Style 3             | Main Element                  |         | Suction Element |         |         |         |     |                |   |                |
|---------------------|----------------------------|----------------------|---------------------|-------------------------------|---------|-----------------|---------|---------|---------|-----|----------------|---|----------------|
|                     |                            |                      |                     | Synthetic Media               |         | Wire Mesh       |         |         |         |     |                |   |                |
|                     |                            |                      |                     | $\beta_{13(\mu m)} \geq 1000$ |         | 125 $\mu m$     |         |         |         |     |                |   |                |
|                     |                            |                      |                     | RMF                           |         | RMF             |         |         |         |     |                |   |                |
| COMBO 120           | with Emergency suction     | Ports on same axis** |                     |                               | 120     | P763652         | 60      | P763643 |         |     |                |   |                |
|                     |                            | Ports on same side   |                     |                               |         |                 |         |         |         |     |                |   |                |
|                     | without Emergency suction* | Ports on same axis** |                     |                               |         |                 |         |         |         | 120 | P762421        | - | Not applicable |
|                     |                            | Ports on same side   |                     |                               |         |                 |         |         |         |     |                |   |                |
| COMBO 200           | with Emergency suction     | Without extra inlet  | no predrilled holes | 200                           | P764198 | 70              | P764183 |         |         |     |                |   |                |
|                     |                            |                      | predrilled holes a1 |                               |         |                 |         |         |         |     |                |   |                |
|                     |                            |                      | predrilled holes a2 |                               |         |                 |         |         |         |     |                |   |                |
|                     |                            | predrilled holes b   |                     |                               |         |                 |         |         |         |     |                |   |                |
|                     |                            | With extra inlet G1  | no predrilled holes |                               |         |                 |         |         |         |     |                |   |                |
|                     |                            |                      | predrilled holes a1 |                               |         |                 |         |         |         |     |                |   |                |
|                     | predrilled holes a2        |                      |                     |                               |         |                 |         |         |         |     |                |   |                |
|                     | without Emergency suction* | Without extra inlet  | no predrilled holes |                               |         |                 |         | 200     | P764198 | -   | Not applicable |   |                |
|                     |                            |                      | predrilled holes a1 |                               |         |                 |         |         |         |     |                |   |                |
|                     |                            |                      | predrilled holes a2 |                               |         |                 |         |         |         |     |                |   |                |
|                     |                            | predrilled holes b   |                     |                               |         |                 |         |         |         |     |                |   |                |
|                     |                            | With extra inlet G1  | no predrilled holes |                               |         |                 |         |         |         |     |                |   |                |
| predrilled holes a1 |                            |                      |                     |                               |         |                 |         |         |         |     |                |   |                |
| predrilled holes a2 |                            |                      |                     |                               |         |                 |         |         |         |     |                |   |                |
| COMBO 300           | with Emergency suction     | Without extra inlet  | no predrilled holes | 300                           | P765457 | 70              | P764183 |         |         |     |                |   |                |
|                     |                            |                      | predrilled holes a1 |                               |         |                 |         |         |         |     |                |   |                |
|                     |                            |                      | predrilled holes a2 |                               |         |                 |         |         |         |     |                |   |                |
|                     |                            | predrilled holes b   |                     |                               |         |                 |         |         |         |     |                |   |                |
|                     |                            | With extra inlet G1  | no predrilled holes |                               |         |                 |         |         |         |     |                |   |                |
|                     |                            |                      | predrilled holes a1 |                               |         |                 |         |         |         |     |                |   |                |
|                     | predrilled holes a2        |                      |                     |                               |         |                 |         |         |         |     |                |   |                |
|                     | without Emergency suction* | Without extra inlet  | no predrilled holes |                               |         |                 |         | 300     | P765457 | -   | Not applicable |   |                |
|                     |                            |                      | predrilled holes a1 |                               |         |                 |         |         |         |     |                |   |                |
|                     |                            |                      | predrilled holes a2 |                               |         |                 |         |         |         |     |                |   |                |
|                     |                            | predrilled holes b   |                     |                               |         |                 |         |         |         |     |                |   |                |
|                     |                            | With extra inlet G1  | no predrilled holes |                               |         |                 |         |         |         |     |                |   |                |
| predrilled holes a1 |                            |                      |                     |                               |         |                 |         |         |         |     |                |   |                |
| predrilled holes a2 |                            |                      |                     |                               |         |                 |         |         |         |     |                |   |                |

\* use the option of no emergency suction only if the returning flow rate is always bigger than the suction flow rate

\*\* Additional inlet port G3/8 available on request

NA = Not Applicable

BPV= Bypass Valve Setting



| Complete Filters (including Elements) | HOUSING DIMENSIONS |       |     |     |       |    |       |    |             |    |      |      |    |     |                     |             | CARTRIDGE DIMENSIONS |                      |     | POSSIBLE INDICATORS |                           |
|---------------------------------------|--------------------|-------|-----|-----|-------|----|-------|----|-------------|----|------|------|----|-----|---------------------|-------------|----------------------|----------------------|-----|---------------------|---------------------------|
|                                       | A1                 | A2    | B   | C   | D     | E  | F     | G  | H           | I  | J    | K    | L  | BPV | Back Pressure Valve | M           | N                    | X                    | Y   |                     | Z                         |
|                                       |                    |       | mm  | mm  | mm    | mm | mm    | mm | mm          | mm | mm   | mm   | mm | mm  | bar                 | bar         | predilled holes      | plugged or indicator | mm  |                     | mm                        |
| K041511                               | G1                 | G3/4  | 80  | 308 | 414   | 11 | 115   | 11 | 68          | 68 | 32   | 32   | 72 | 2,5 | 0,5                 | 9/16-18 UNF | P165194              | 91                   | 265 | 45                  | P165194, P167455, P173893 |
| K041595                               | G1                 | G3/4  | 80  | 308 | 414   | 11 | 115   | 11 | 90          | 69 | 30,3 | 42,3 | 72 | 2,5 | 0,5                 | 9/16-18 UNF | P165194              |                      |     |                     | P165194, P167455, P173893 |
| K041301                               | G1                 | G3/4  | 80  | 227 | 333,5 | 11 | 115   | 11 | 68          | 68 | 32   | 32   | NA | 2,5 | 0,5                 | 9/16-18 UNF | P165194              | 91                   | 233 | 36                  | P165194, P167455, P173893 |
| K041610                               | G1                 | G3/4  | 80  | 227 | 333,5 | 11 | 115   | 11 | 90          | 69 | 30,3 | 42,3 | NA | 2,5 | 0,5                 | 9/16-18 UNF | P165194              |                      |     |                     | P165194, P167455, P173893 |
| K041535                               | G1 1/4             | 2x G1 | 100 | 375 | 505   | 11 | 81/94 | 13 | 94,5        | 86 | 35   | 63   | 50 | 2,5 | 0,5                 | NA          | NA                   |                      |     |                     | none                      |
| K041598                               | G1 1/4             | 2x G1 | 100 | 375 | 505   | 11 | 81/94 | 13 | 94,5        | 86 | 35   | 63   | 50 | 2,5 | 0,5                 | G1/8        | YES                  |                      |     |                     | P764431, P764613, P764612 |
| K041602                               | G1 1/4             | 2x G1 | 100 | 375 | 505   | 11 | 81/94 | 13 | 94,5        | 86 | 35   | 63   | 50 | 2,5 | 0,5                 | G1/8        | YES                  |                      |     |                     | P764431, P764613, P764612 |
| K041606                               | G1 1/4             | 2x G1 | 100 | 375 | 505   | 11 | 81/94 | 13 | 94,5        | 86 | 35   | 63   | 50 | 2,5 | 0,5                 | G1/8        | YES                  |                      |     |                     | P171954                   |
| K041596                               | G1 1/4 + G1        | 2x G1 | 100 | 375 | 505   | 11 | 81/94 | 13 | 94,5 / 85,5 | 86 | 35   | 63   | 50 | 2,5 | 0,5                 | NA          | NA                   |                      |     |                     | none                      |
| K041599                               | G1 1/4 + G1        | 2x G1 | 100 | 375 | 505   | 11 | 81/94 | 13 | 94,5 / 85,5 | 86 | 35   | 63   | 50 | 2,5 | 0,5                 | G1/8        | YES                  |                      |     |                     | P764431, P764613, P764612 |
| K041603                               | G1 1/4 + G1        | 2x G1 | 100 | 375 | 505   | 11 | 81/94 | 13 | 94,5 / 85,5 | 86 | 35   | 63   | 50 | 2,5 | 0,5                 | G1/8        | YES                  |                      |     |                     | P764431, P764613, P764612 |
| K041607                               | G1 1/4 + G1        | 2x G1 | 100 | 375 | 505   | 11 | 81/94 | 13 | 94,5 / 85,5 | 86 | 35   | 63   | 50 | 2,5 | 0,5                 | G1/8        | YES                  |                      |     |                     | P171954                   |
| K041528                               | G1 1/4             | 2x G1 | 100 | 375 | 505   | 11 | 81/94 | 13 | 94,5        | 86 | 35   | 63   | NA | 2,5 | 0,5                 | NA          | NA                   | 88                   | 361 | 42                  | none                      |
| K041600                               | G1 1/4             | 2x G1 | 100 | 375 | 505   | 11 | 81/94 | 13 | 94,5        | 86 | 35   | 63   | NA | 2,5 | 0,5                 | G1/8        | YES                  |                      |     |                     | P764431, P764613, P764612 |
| K041604                               | G1 1/4             | 2x G1 | 100 | 375 | 505   | 11 | 81/94 | 13 | 94,5        | 86 | 35   | 63   | NA | 2,5 | 0,5                 | G1/8        | YES                  |                      |     |                     | P764431, P764613, P764612 |
| K041608                               | G1 1/4             | 2x G1 | 100 | 375 | 505   | 11 | 81/94 | 13 | 94,5        | 86 | 35   | 63   | NA | 2,5 | 0,5                 | G1/8        | YES                  |                      |     |                     | P171954                   |
| K041597                               | G1 1/4 + G1        | 2x G1 | 100 | 375 | 505   | 11 | 81/94 | 13 | 94,5 / 85,5 | 86 | 35   | 63   | NA | 2,5 | 0,5                 | NA          | NA                   |                      |     |                     | none                      |
| K041601                               | G1 1/4 + G1        | 2x G1 | 100 | 375 | 505   | 11 | 81/94 | 13 | 94,5 / 85,5 | 86 | 35   | 63   | NA | 2,5 | 0,5                 | G1/8        | YES                  |                      |     |                     | P764431, P764613, P764612 |
| K041605                               | G1 1/4 + G1        | 2x G1 | 100 | 375 | 505   | 11 | 81/94 | 13 | 94,5 / 85,5 | 86 | 35   | 63   | NA | 2,5 | 0,5                 | G1/8        | YES                  |                      |     |                     | P764431, P764613, P764612 |
| K041609                               | G1 1/4 + G1        | 2x G1 | 100 | 375 | 505   | 11 | 81/94 | 13 | 94,5 / 85,5 | 86 | 35   | 63   | NA | 2,5 | 0,5                 | G1/8        | YES                  |                      |     |                     | P171954                   |
| K041674                               | G1 1/4             | 2x G1 | 100 | 445 | 575   | 11 | 81/94 | 13 | 94,5        | 86 | 35   | 63   | 50 | 2,5 | 0,5                 | NA          | NA                   |                      |     |                     | none                      |
| K041659                               | G1 1/4             | 2x G1 | 100 | 445 | 575   | 11 | 81/94 | 13 | 94,5        | 86 | 35   | 63   | 50 | 2,5 | 0,5                 | G1/8        | YES                  |                      |     |                     | P764431, P764613, P764612 |
| K041660                               | G1 1/4             | 2x G1 | 100 | 445 | 575   | 11 | 81/94 | 13 | 94,5        | 86 | 35   | 63   | 50 | 2,5 | 0,5                 | G1/8        | YES                  |                      |     |                     | P764431, P764613, P764612 |
| K041661                               | G1 1/4             | 2x G1 | 100 | 445 | 575   | 11 | 81/94 | 13 | 94,5        | 86 | 35   | 63   | 50 | 2,5 | 0,5                 | G1/8        | YES                  |                      |     |                     | P171954                   |
| K041662                               | G1 1/4 + G1        | 2x G1 | 100 | 445 | 575   | 11 | 81/94 | 13 | 94,5 / 85,5 | 86 | 35   | 63   | 50 | 2,5 | 0,5                 | NA          | NA                   |                      |     |                     | none                      |
| K041663                               | G1 1/4 + G1        | 2x G1 | 100 | 445 | 575   | 11 | 81/94 | 13 | 94,5 / 85,5 | 86 | 35   | 63   | 50 | 2,5 | 0,5                 | G1/8        | YES                  |                      |     |                     | P764431, P764613, P764612 |
| K041664                               | G1 1/4 + G1        | 2x G1 | 100 | 445 | 575   | 11 | 81/94 | 13 | 94,5 / 85,5 | 86 | 35   | 63   | 50 | 2,5 | 0,5                 | G1/8        | YES                  |                      |     |                     | P764431, P764613, P764612 |
| K041665                               | G1 1/4 + G1        | 2x G1 | 100 | 445 | 575   | 11 | 81/94 | 13 | 94,5 / 85,5 | 86 | 35   | 63   | 50 | 2,5 | 0,5                 | G1/8        | YES                  |                      |     |                     | P171954                   |
| K041666                               | G1 1/4             | 2x G1 | 100 | 445 | 575   | 11 | 81/94 | 13 | 94,5        | 86 | 35   | 63   | NA | 2,5 | 0,5                 | NA          | NA                   | 88                   | 431 | 42                  | none                      |
| K041667                               | G1 1/4             | 2x G1 | 100 | 445 | 575   | 11 | 81/94 | 13 | 94,5        | 86 | 35   | 63   | NA | 2,5 | 0,5                 | G1/8        | YES                  |                      |     |                     | P764431, P764613, P764612 |
| K041668                               | G1 1/4             | 2x G1 | 100 | 445 | 575   | 11 | 81/94 | 13 | 94,5        | 86 | 35   | 63   | NA | 2,5 | 0,5                 | G1/8        | YES                  |                      |     |                     | P764431, P764613, P764612 |
| K041669                               | G1 1/4             | 2x G1 | 100 | 445 | 575   | 11 | 81/94 | 13 | 94,5        | 86 | 35   | 63   | NA | 2,5 | 0,5                 | G1/8        | YES                  |                      |     |                     | P171954                   |
| K041670                               | G1 1/4 + G1        | 2x G1 | 100 | 445 | 575   | 11 | 81/94 | 13 | 94,5 / 85,5 | 86 | 35   | 63   | NA | 2,5 | 0,5                 | NA          | NA                   |                      |     |                     | none                      |
| K041671                               | G1 1/4 + G1        | 2x G1 | 100 | 445 | 575   | 11 | 81/94 | 13 | 94,5 / 85,5 | 86 | 35   | 63   | NA | 2,5 | 0,5                 | G1/8        | YES                  |                      |     |                     | P764431, P764613, P764612 |
| K041672                               | G1 1/4 + G1        | 2x G1 | 100 | 445 | 575   | 11 | 81/94 | 13 | 94,5 / 85,5 | 86 | 35   | 63   | NA | 2,5 | 0,5                 | G1/8        | YES                  |                      |     |                     | P764431, P764613, P764612 |
| K041673                               | G1 1/4 + G1        | 2x G1 | 100 | 445 | 575   | 11 | 81/94 | 13 | 94,5 / 85,5 | 86 | 35   | 63   | NA | 2,5 | 0,5                 | G1/8        | YES                  |                      |     |                     | P171954                   |

Stock item (check e-commerce for availability)

RETURN & SUCTION  
FILTERS IN-TANK

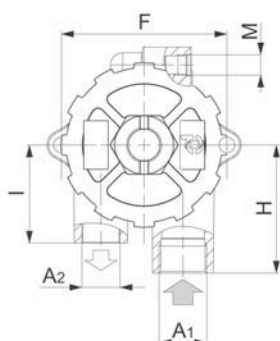
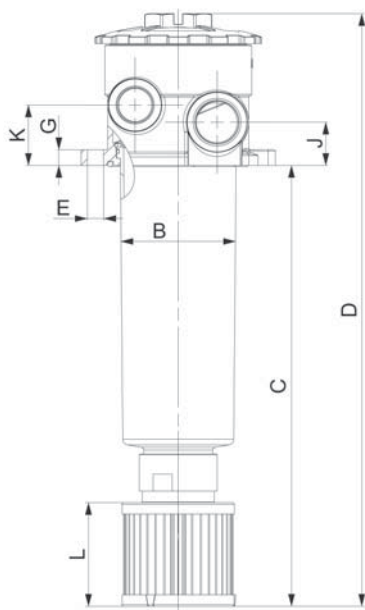
## Indicator Choices

RETURN & SUCTION  
FILTERS IN-TANK

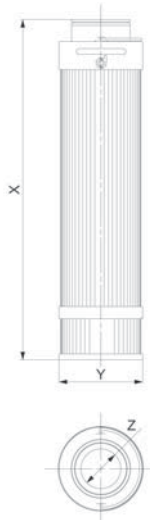
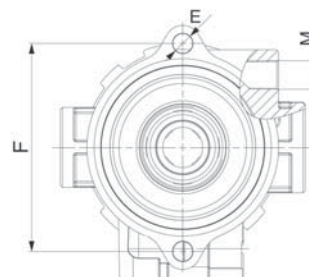
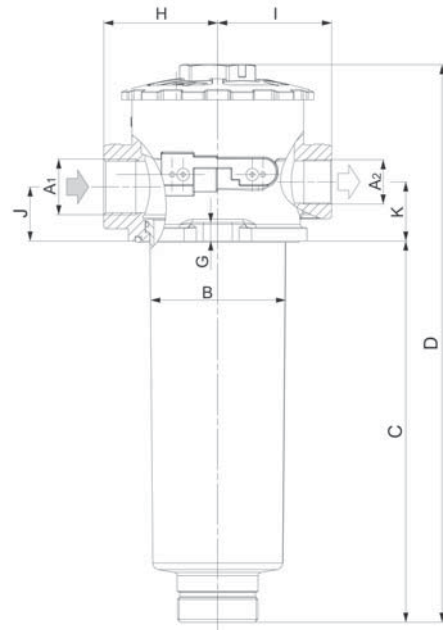
| Part    | Kind       |              | Reference Drawing | Setting (bar) | Contact         | Protection Class | Cable Clamp | Max. Values                           |
|---------|------------|--------------|-------------------|---------------|-----------------|------------------|-------------|---------------------------------------|
| P171954 | Visual     | Vacuum       | G                 | -1/3          |                 |                  |             |                                       |
| P764612 | Visual     | Differential | F                 | 2,5           |                 |                  |             | max 30 DCV; 0,5 A res. and 0,2 A ind. |
| P764431 | Electrical | Differential | C                 | 2,5           | Normally Open   | IP65             | PG7         | max 30 DCV; 0,5 A res. and 0,2 A ind. |
| P764613 | Electrical | Differential | C                 | 2,5           | Normally Closed | IP65             | PG7         | max 30 DCV; 0,5 A res. and 0,2 A ind. |
| P165194 | Electrical | Differential | B                 | 2,76          | Normally Open   |                  |             | 30 V DC; 0,2A                         |
| P167580 | Visual     | Differential | D                 | 3,4           |                 |                  |             |                                       |

### Combo 120

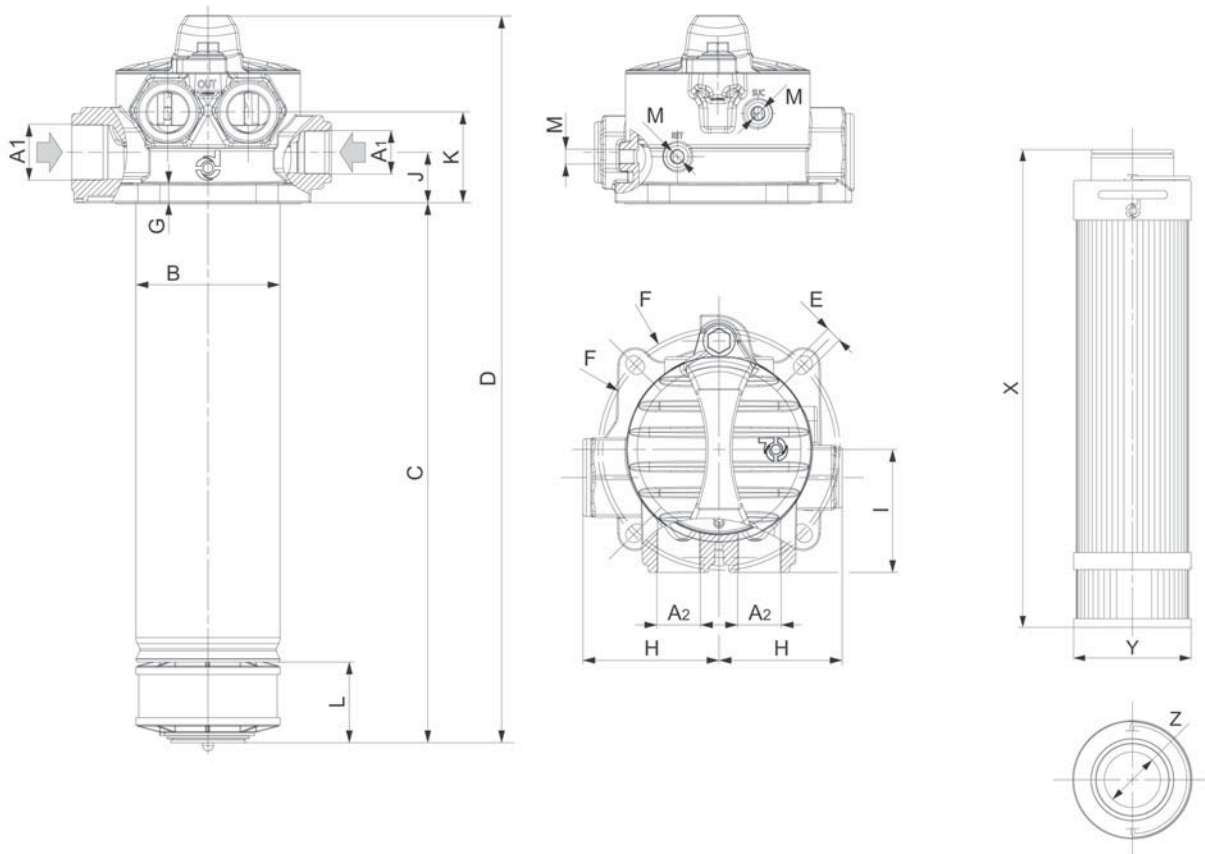
Ports on same Side



Ports on same Axis



## Combo 200/300



## Additions

Additional Indicator for SRK 120 (if mounting holes are predrilled) - only on request  
P167580

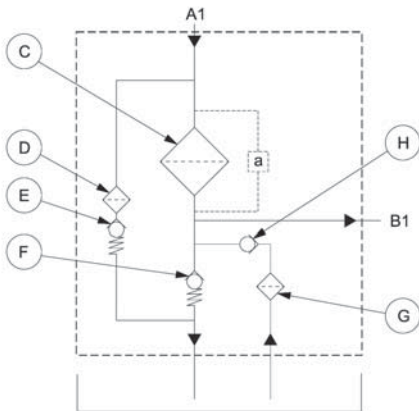
Additional extension tube for SRK 120 - only on request  
Extends length of SRK with 178 mm  
P763642

## Hydraulic Filter Schematics

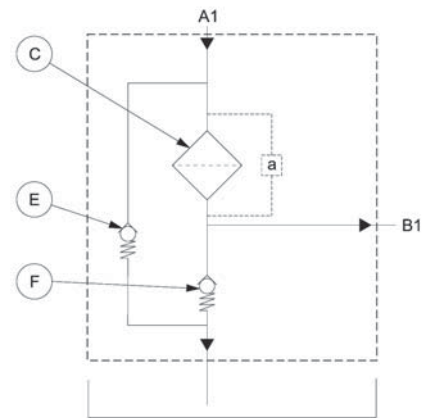
RETURN & SUCTION  
FILTERS IN-TANK

### Combo 120

With Emergency Suction

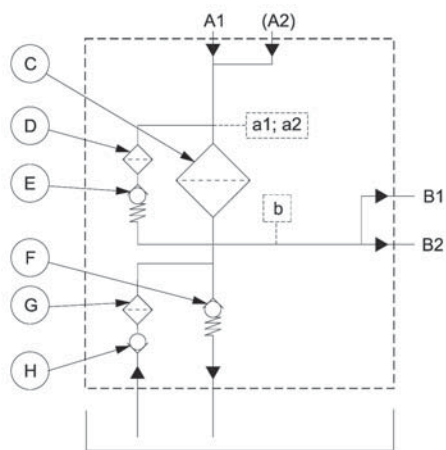


Without Emergency Suction

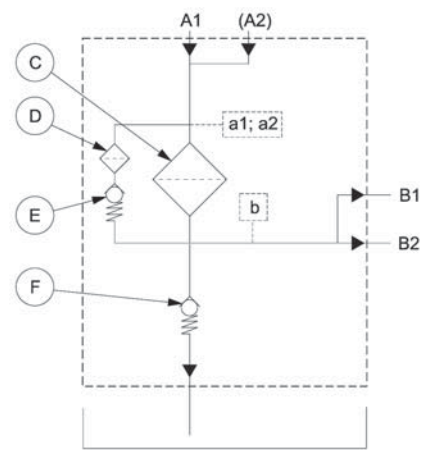


### Combo 200/300

With Emergency Suction



Without Emergency Suction



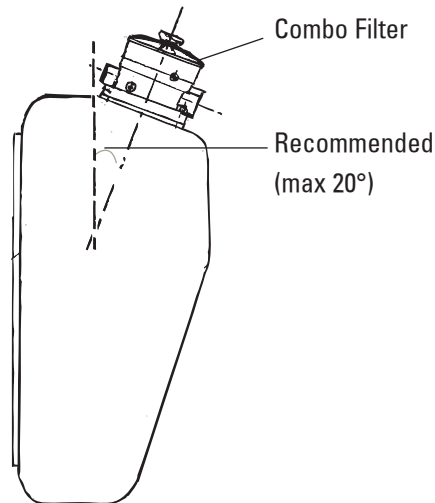
- A1 - A2: from hydraulic users
- B1 - B2: to boost pump
- a, a1, a2, b: pressure indicator ports
- C: main cartridge
- D: by-pass strainer
- E: by-pass valve
- F: back pressure valve
- G: suction strainer
- H: suction valve

## Installation & Service Guidelines

- Minimum oil level in the tank must be sufficient to cover completely the emergency suction cartridge or the housing end.
- Extension kit (X770576) is optional for Combo 120 (+178mm).
- Important for the Combo without emergency Suction.

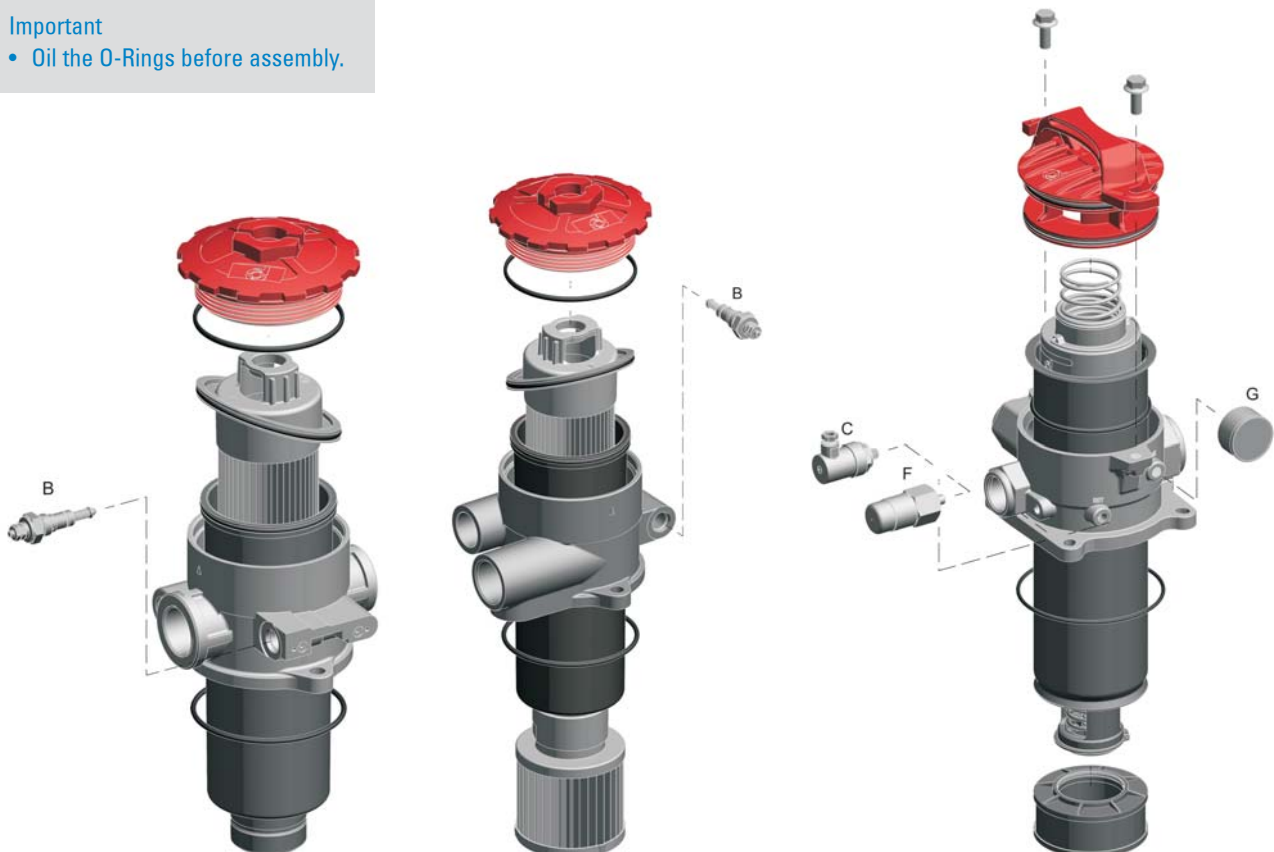
The suction port always gets clean oil. When the element becomes clogged, oil that reaches the suction port is gradually reduced, so the use of an electrical clogging indicator (P165194) is recommended. Return flow must always be higher than suction flow.

- Maximum slope on the installation: 20°.



### Important

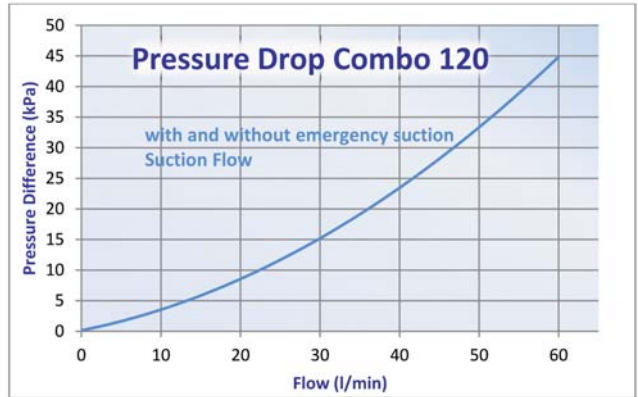
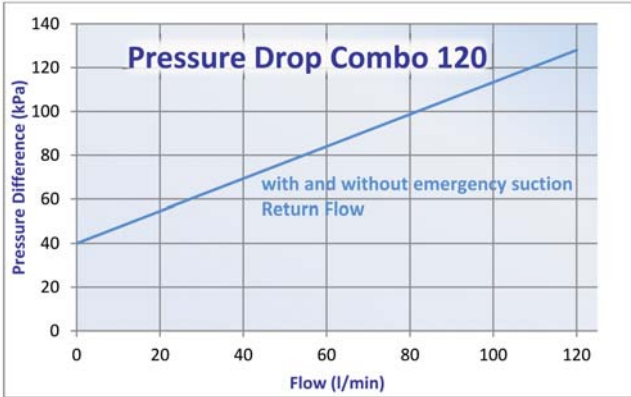
- Oil the O-Rings before assembly.



## Performance Curves

RETURN & SUCTION  
FILTERS IN-TANK

Ports on same Axis



Ports on same Side

