

## DHSV Series

### DESCRIPTION

#### Duplex bowls line filter

Connection type and size:

SAE Flange connection: DN40 DN50 DN65 DN80 DN100

DIN Flange connection: DN80 DN100 DN125 DN150 DN200

Switch type: Stainless steel balls

Maximum flow rate up to 15000 l/min

### TECHNICAL PARAMETER

Maximum working pressure: 16 bar

Bypass valve opening pressure: 3 bar

Transmitter opening pressure: 2 bar

Temperature range: -10°C to +100°C



### MATERIALS

Filter cover: Carbon steel

Filter cartridge: Carbon steel

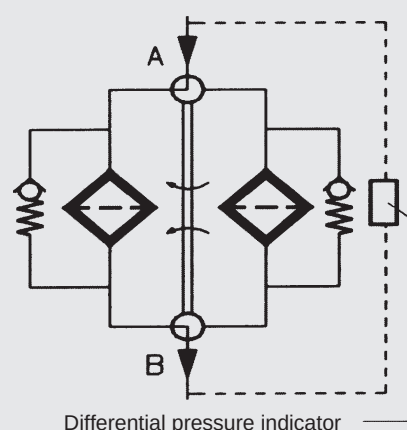
Steering valve: Cast iron

Seals: NBR nitrile rubber (standard)

Or FKM fluororubber (customizable)

Filter element material: Fiberglass and wire mesh

Symbol for hydraulic systems



### MEDIA COMPATIBILITY

Suitable for mineral oil, lubricating oil, fire-resistant oil, and rapidly biodegradable media.  
(If used for water-based or special media, please consult our sales department.)

## Ordering Options Table

DHSV 2520 T F 10 N D B3

Filter model

Filter specification

1300 1320 2500 2520 4000 4020 5200  
5220 6500 6520 7800 7820 15000 15020

Connection type and size

| Type | Connection port | Filter size |      |              |              |              |              |              |                |
|------|-----------------|-------------|------|--------------|--------------|--------------|--------------|--------------|----------------|
|      |                 | 1300        | 1320 | 2500<br>2520 | 4000<br>4020 | 5200<br>5220 | 6500<br>6520 | 7800<br>7820 | 15000<br>15020 |
| K    | SAE DN 40       | ●           | ●    |              |              |              |              |              |                |
| L    | SAE DN 50       | ●           | ●    | ●            |              |              |              |              |                |
| M    | SAE DN 65       | ●           | ●    | ●            |              |              |              |              |                |
| S    | SAE/DIN DN 80   | ●           | ●    | ●            | ●            | ●            | ●            |              |                |
| T    | SAE/DIN DN 100  | ●           | ●    | ●            | ●            | ●            | ●            | ●            |                |
| U    | DIN DN 125      | ●           | ●    | ●            | ●            | ●            | ●            | ●            |                |
| V    | DIN DN 150      |             |      | ●            | ●            | ●            | ●            | ●            |                |
| W    | DIN DN 200      |             |      |              | ●            | ●            | ●            | ●            | ●              |

Filter element material

F: Fiberglass

W: Stainless steel wire mesh

Filter fineness(μm)

(F): 03 05 10 20  
(W): 05 10 20 20

Seals

N: NBR V: FKM

Differential pressure transmitter

A: Steel blanking plug in indicator port  
B: Visual (Automatic reset)  
BM: Visual (Manual reset)  
C: Electrical indicator  
CM: Visual and electrical indicators  
CL: Visual and electrical indicators  
D: Electrical indicator  
DM: Electrical indicator Plug DT 04-2P

Bypass valve opening pressure

B0 = Without bypass valve  
B3 = 3 bar

# Filter Element

DYSV 1700 F 10 N

Filter element type

Filter element specification

0850 1300 1700 2600

Filter element material

F: Fiberglass

W: Stainless steel wire mesh

Filtration fineness(μm)

(F): 03 05 10 20 (W): 05 10 20 30

Seals

N: NBR V: FKM

The number of filter elements assembled in the filter

| DHSV  | The model and quantity of filter elements on each side |
|-------|--------------------------------------------------------|
| 1300  | 1x1300                                                 |
| 1320  | 1x2600                                                 |
| 2500  | 3x0850                                                 |
| 2520  | 3x1700                                                 |
| 4000  | 5x0850                                                 |
| 4020  | 5x1700                                                 |
| 5200  | 4x1300                                                 |
| 5220  | 4x2600                                                 |
| 6500  | 5x1300                                                 |
| 6520  | 5x2600                                                 |
| 7800  | 6x1300                                                 |
| 7820  | 6x2600                                                 |
| 15000 | 10x1300                                                |
| 15020 | 10x2600                                                |

## Maintenance Instructions

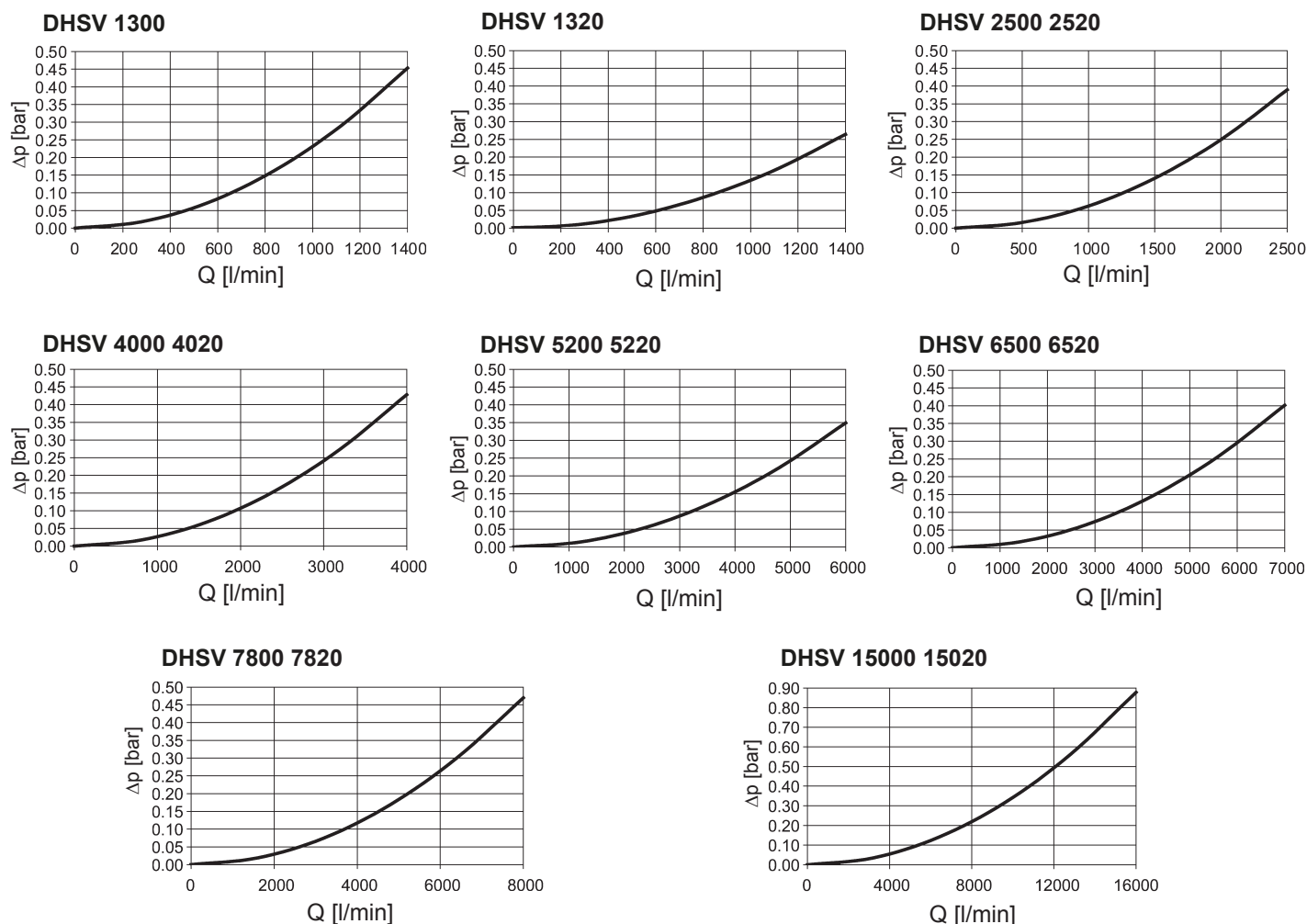
Filter housing must be grounded

When using electric plugging, please replace the filter element.

The system must be turned off before removing the clogging indicator light and power connector.

## $\Delta p$ -Q ISO 3968

The housing curves apply to mineral oil with a density of 0.86 kg/dm<sup>3</sup> and a kinematic viscosity of 30 mm<sup>2</sup>/s. In this case, the differential pressure changes proportionally to the density.



## GRADIENT COEFFICIENTS (SK) FOR FILTER ELEMENTS

The gradient coefficients in mbar/(l/min) apply to mineral oils with a kinematic viscosity of 30 mm<sup>2</sup>/s. The pressure drop changes proportionally to the change in viscosity.

| DHSV | F    |      |      |       |       |       | W     |
|------|------|------|------|-------|-------|-------|-------|
|      | 1 μm | 3 μm | 5 μm | 10 μm | 15 μm | 20 μm |       |
| 850  | 2.77 | 1.31 | 1.00 | 0.58  | 0.44  | 0.36  | 0.063 |
| 1300 | 1.72 | 0.72 | 0.59 | 0.35  | 0.32  | 0.22  | 0.045 |
| 1700 | 1.35 | 0.64 | 0.53 | 0.28  | 0.25  | 0.18  | 0.032 |
| 2600 | 0.84 | 0.36 | 0.29 | 0.18  | 0.16  | 0.11  | 0.018 |

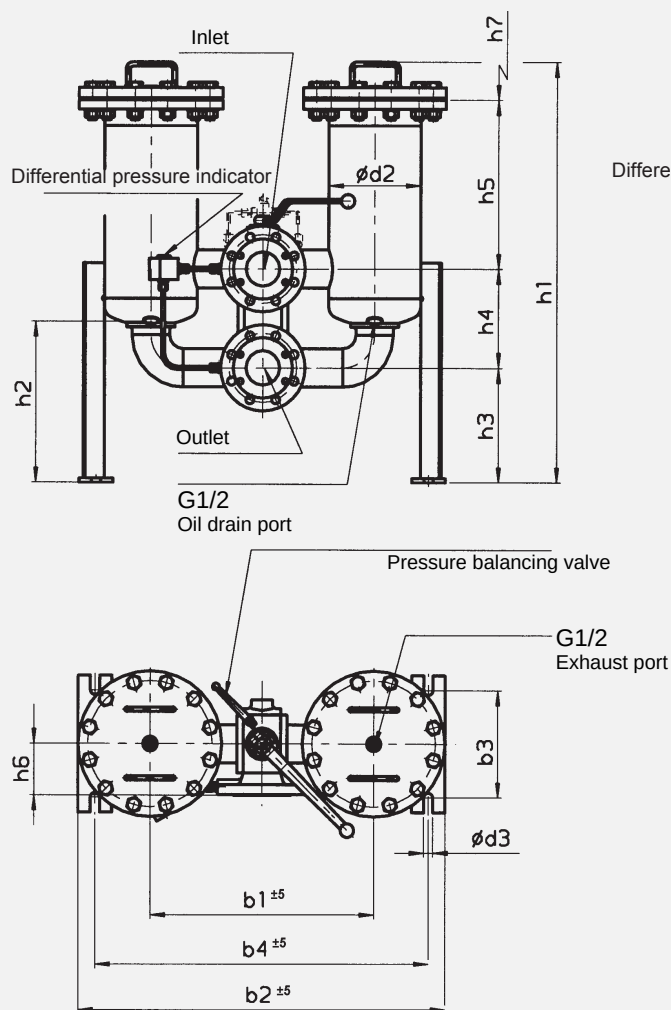
## Annotation

All information in this manual relates to the described working environment and application conditions. For applications and working conditions that are not described, please contact the relevant technical department. Technical modifications are possible.

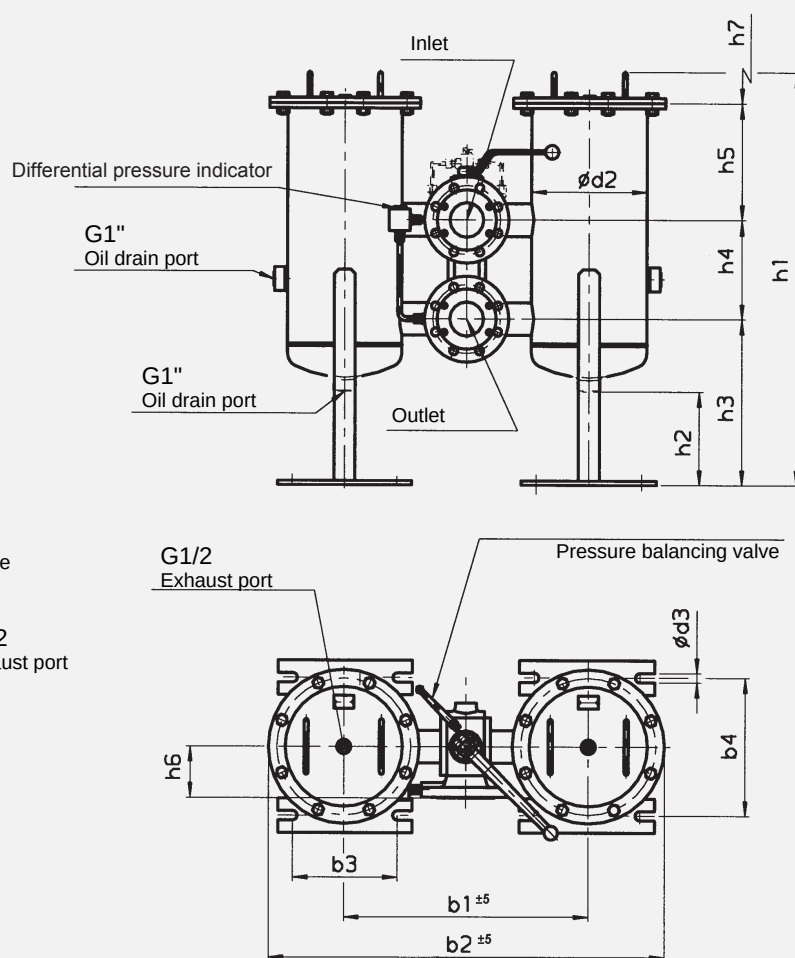


## DIMENSIONS

DHSV 1300 - 1320



DHSV 2500 - 2520



Dimensions in mm

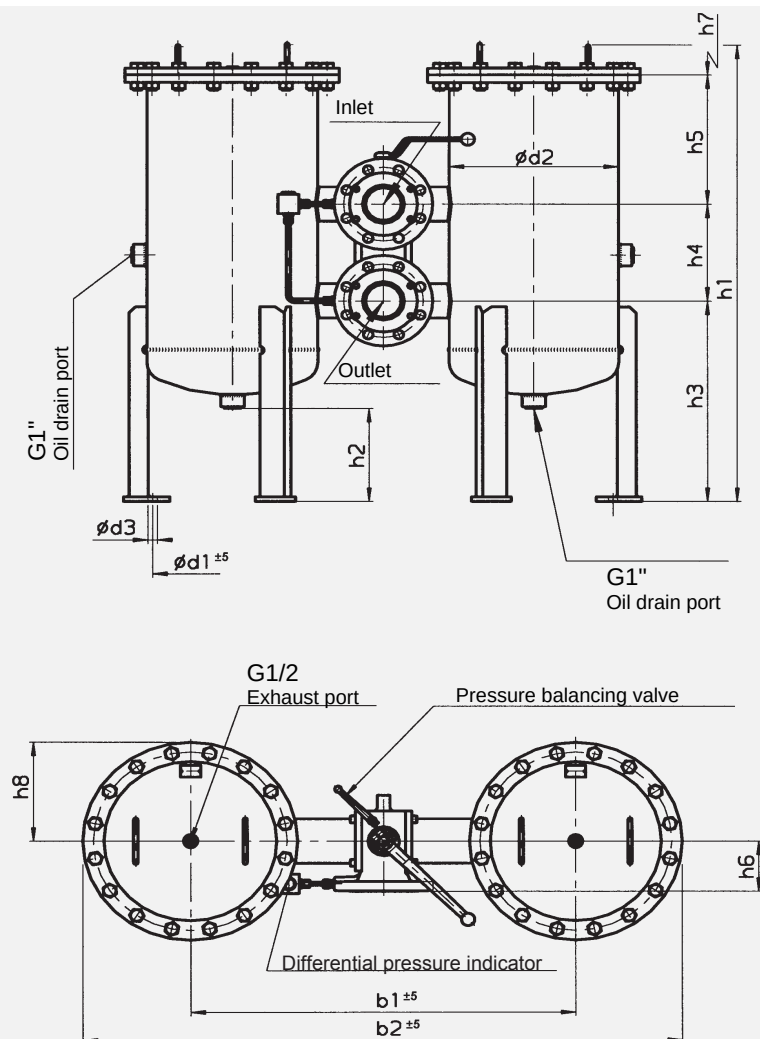
| Type           | Flange connection | b1  | b2   | b3  | b4  | d2  | d3 | h1        | h2  | h3  | h4  | h5      | h6  | h7      |
|----------------|-------------------|-----|------|-----|-----|-----|----|-----------|-----|-----|-----|---------|-----|---------|
| DHSV 1300 1320 | SAE DN 40         | 495 | 835  | 250 | 755 | 220 | 22 | 970/1410  | 205 | 335 | 95  | 460/900 | 92  | 500/940 |
|                | SAE DN 50         | 506 | 846  | 250 | 766 | 220 | 22 | 970/1410  | 210 | 328 | 110 | 452/892 | 102 | 500/940 |
|                | SAE DN 65         | 506 | 846  | 250 | 766 | 220 | 22 | 970/1410  | 210 | 328 | 110 | 452/892 | 167 | 500/940 |
|                | SAE/DIN DN 80     | 530 | 870  | 250 | 790 | 220 | 22 | 970/1410  | 370 | 260 | 230 | 400/840 | 120 | 500/940 |
|                | SAE/DIN DN 100    | 588 | 926  | 250 | 846 | 220 | 22 | 970/1410  | 375 | 266 | 250 | 374/814 | 130 | 500/940 |
| 1320           | DIN DN 125        | 603 | 943  | 250 | 863 | 220 | 22 | 1536      | 190 | 385 | 300 | 765     | 188 | 940     |
| DHSV 2500 2520 | SAE DN 50         | 548 | 908  | 250 | 312 | 273 | 22 | 940/1330  | 220 | 383 | 110 | 378/768 | 102 | 420/810 |
|                | SAE DN 65         | 548 | 908  | 250 | 312 | 273 | 22 | 940/1330  | 220 | 383 | 110 | 378/768 | 167 | 420/810 |
|                | SAE/DIN DN 80     | 572 | 932  | 250 | 312 | 273 | 22 | 990/1380  | 220 | 408 | 230 | 280/670 | 120 | 420/810 |
|                | SAE/DIN DN 100    | 588 | 948  | 250 | 312 | 273 | 22 | 990/1380  | 220 | 408 | 250 | 260/650 | 130 | 420/810 |
|                | DIN DN 125        | 589 | 948  | 250 | 312 | 273 | 22 | 1050/1440 | 220 | 438 | 300 | 240/630 | 188 | 420/810 |
|                | DIN DN 150        | 641 | 1001 | 250 | 312 | 273 | 22 | 1050/1440 | 220 | 438 | 300 | 240/630 | 190 | 420/810 |

Flange connection SAE J 518 C (standard pressure series 3000 psi)

DIN flange connection to DIN EN ISO 1092, PN25/40 up to DN100 and PN 16 from DN125

## DIMENSIONS

### DHSV 4000 - 15020



Dimensions in mm

| Type             | Flange connection | b1   | b2   | d1  | d2  | d3 | h1        | h2  | h3  | h4  | h5      | h6  | h7      | h8  |
|------------------|-------------------|------|------|-----|-----|----|-----------|-----|-----|-----|---------|-----|---------|-----|
| DHSV 4000 4020   | SAE/DIN DN 80     | 688  | 1152 | 330 | 356 | 22 | 1080/1470 | 260 | 475 | 230 | 295/685 | 120 | 420/810 | 230 |
|                  | SAE/DIN DN 100    | 704  | 1164 | 330 | 356 | 22 | 1080/1470 | 260 | 475 | 250 | 275/665 | 130 | 420/810 | 230 |
|                  | DIN DN 125        | 723  | 1183 | 330 | 356 | 22 | 1170/1560 | 260 | 525 | 300 | 265/645 | 188 | 420/810 | 230 |
|                  | DIN DN 150        | 775  | 1240 | 330 | 356 | 22 | 1170/1560 | 260 | 525 | 300 | 265/645 | 190 | 420/810 | 230 |
|                  | DIN DN 200        | 884  | 1349 | 330 | 356 | 22 | 1205/1585 | 260 | 525 | 500 | 215/480 | 270 | 420/810 | 230 |
| DHSV 5200 5220   | SAE/DIN DN 80     | 728  | 1244 | 380 | 406 | 22 | 1144/1584 | 250 | 465 | 230 | 371/811 | 120 | 500/940 | 255 |
|                  | SAE/DIN DN 100    | 744  | 1260 | 380 | 406 | 22 | 1144/1584 | 250 | 465 | 250 | 351/791 | 130 | 500/940 | 255 |
|                  | DIN DN 125        | 763  | 1275 | 380 | 406 | 22 | 1256/1696 | 250 | 525 | 300 | 351/791 | 188 | 500/940 | 255 |
|                  | DIN DN 150        | 815  | 1330 | 380 | 406 | 22 | 1256/1696 | 250 | 525 | 300 | 351/791 | 190 | 500/940 | 255 |
|                  | DIN DN 200        | 924  | 1439 | 380 | 406 | 22 | 1365/1696 | 250 | 525 | 500 | 260/591 | 270 | 500/940 | 255 |
| DHSV 6500 6520   | SAE/DIN DN 100    | 1024 | 1644 | 480 | 508 | 22 | 1260/1700 | 260 | 540 | 250 | 390/830 | 130 | 500/940 | 310 |
|                  | DIN DN 125        | 863  | 1483 | 480 | 508 | 22 | 1260/1700 | 260 | 540 | 300 | 340/780 | 188 | 500/940 | 310 |
|                  | DIN DN 150        | 915  | 1535 | 480 | 508 | 22 | 1260/1700 | 260 | 540 | 300 | 340/780 | 190 | 500/940 | 310 |
|                  | DIN DN 200        | 1024 | 1644 | 480 | 508 | 22 | 1440/1830 | 265 | 600 | 500 | 260/640 | 270 | 500/940 | 310 |
| DHSV 7800 7820   | SAE/DIN DN 100    | 1024 | 1644 | 480 | 508 | 22 | 1260/1700 | 260 | 540 | 250 | 390/830 | 130 | 500/940 | 310 |
|                  | DIN DN 125        | 863  | 1483 | 480 | 508 | 22 | 1260/1700 | 260 | 540 | 300 | 340/780 | 188 | 500/940 | 310 |
|                  | DIN DN 150        | 915  | 1535 | 480 | 508 | 22 | 1260/1700 | 260 | 540 | 300 | 340/780 | 190 | 500/940 | 310 |
|                  | DIN DN 200        | 1024 | 1644 | 480 | 508 | 22 | 1440/1830 | 265 | 600 | 500 | 260/640 | 270 | 500/940 | 310 |
| DHSV 15000 15020 | DIN DN 200        | 1284 | 2114 | 690 | 711 | 22 | 1505/1895 | 260 | 655 | 500 | 260/700 | 270 | 500/940 | 415 |

DIN flange connection to DIN EN ISO 1092, PN25/40 up to DN100 and PN 16 from DN125