

DHGN Series

● DESCRIPTION

High pressure overhead filter

Connection type and size:

Inlet and outlet diameter: DN17.5 DN21.4 DN41

Maximum flow rate up to 620 l/min

● TECHNICAL PARAMETER

Maximum working pressure: 315 bar

Bypass valve opening pressure: 6 bar

Transmitter alarm pressure: 5 bar

Temperature range: -29 to +100



● MATERIALS

Head: Cast iron

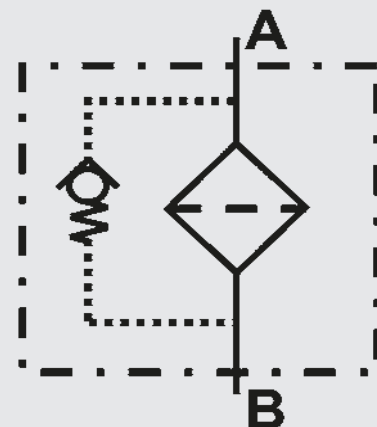
Filter bowl: Carbon steel

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

DHGN 140 B F 10 N 1 B B6

Filter model

Filter specification

30 60 110 140 160 240 280
330 500 660 990 1320

Connection type and size

Type	Port	Filter size										
		60	110	140	160	240	280	330	500	660	990	1320
B	Ø 17.5	●	●	●								
C	Ø 21.4				●	●	●					
D	Ø 41							●	●	●	●	●

Filter element material

F: Fiberglass
W: Stainless steel wire mesh

Filter fineness(µm)

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

Seals

N: NBR V: FKM

Type code

1. Integral filter cartridge
2. Detachable top of filter

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
B6 = 6 bar

Filter Element

DYGN 140 F 10 N

Filter element type

Filter element specification

30 60 110 140 160 240 280
330 500 660 990 1320

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

Maintenance Instructions

Filter housing must be grounded

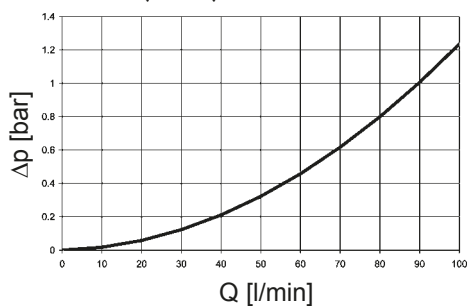
When using electric plugging, please replace the filter element.

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

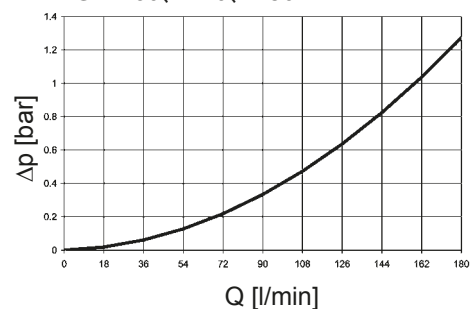
Δp -Q ISO 3968

The housing curves apply to mineral oil with a density of 0.86kg/dm^3 and a kinematic viscosity of $30\text{mm}^2/\text{s}$. In this case, the differential pressure changes proportionally to the density.

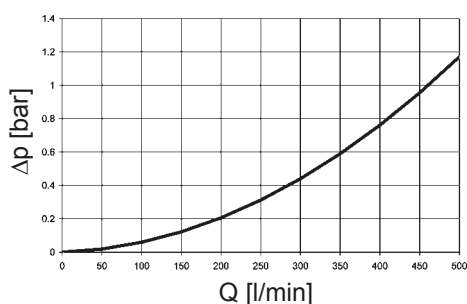
DHGN 60, 110, 140



DHGN 160, 240, 280



DHGN 330, 500, 660, 990, 1320



GRADIENT COEFFICIENTS (SK)

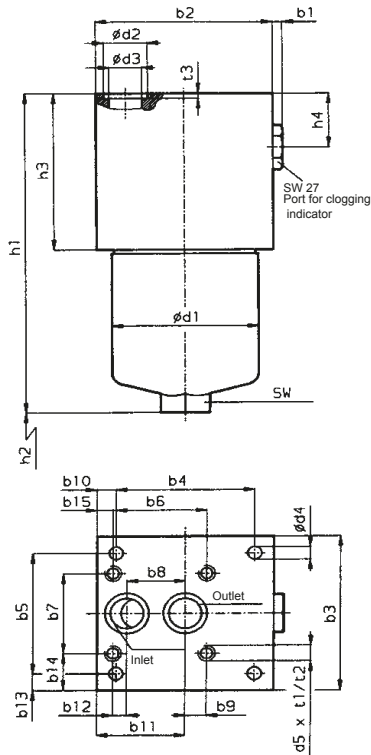
The gradient coefficients in mbar/(l/min) apply to mineral oils with a kinematic viscosity of 30 mm²/s.
The pressure drop changes proportionally to the change in viscosity.

DHGN	F					
	1 μm	3 μm	5 μm	10 μm	15 μm	20 μm
60	53.5	26.0	18.3	12.1	9.78	6.32
110	25.8	13.4	9.61	6.06	4.63	2.99
140	19.9	11.5	7.39	4.38	3.54	2.29
160	18.5	11.0	7.70	4.10	3.71	3.18
240	11.5	6.90	5.34	3.19	2.44	2.10
280	5.54	3.37	2.74	1.49	1.36	1.17
330	8.23	4.19	3.37	2.46	1.55	1.22
500	5.05	2.57	2.07	1.23	0.95	0.75
660	3.78	1.93	1.56	0.93	0.71	0.56
990	2.51	1.28	1.03	0.61	0.47	0.37
1320	1.85	0.97	0.76	0.45	0.35	0.27

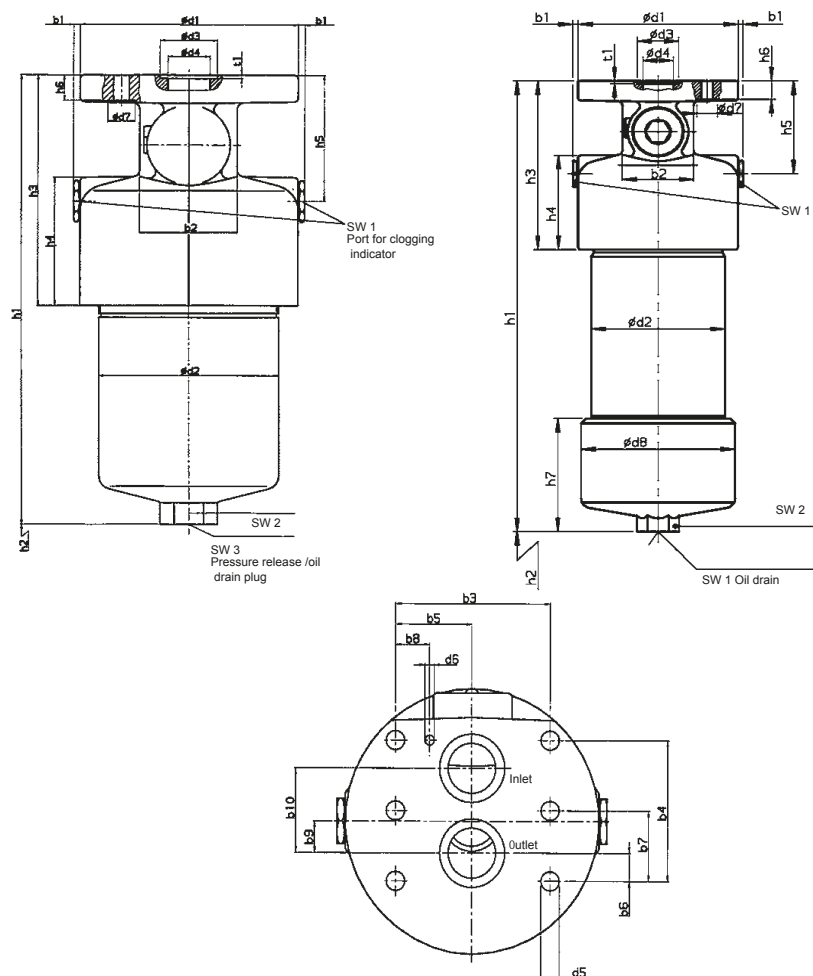
DHGN	W	F			
		3 μm	5 μm	10 μm	20 μm
60	0.757	58.6	32.6	18.1	12.2
110	0.413	25.4	14.9	8.9	5.6
140	0.413	25.4	14.9	8.9	5.6
160	0.284	16.8	10.4	5.9	4.4
240	0.189	10.6	6.8	3.9	2.9
280	0.162	5.7	3.4	1.8	1.6
330	0.138	7.7	4.5	2.8	2.0
500	0.091	4.2	2.6	1.5	1.2
660	0.069	3.3	1.9	1.0	0.9
990	0.046	2.2	1.3	0.8	0.6
1320	0.035	1.6	1.0	0.6	0.4

DIMENSIONS

DHGN 60 - 280



DHGN 330 - 1320





DHGN	60	110	140	160	240	280	330	500	660..1.x	660..2.x	990..2.x	1320..2.x
b1	6	6	6	6	6	6	5	5	5	5	5	5
b2	104	104	104	115	115	115	70	70	70	70	70	70
b3	80	80	80	110	110	110	96.8	96.8	96.8	96.8	96.8	96.8
b4	89	89	89	90	90	90	84.1	84.1	84.1	84.1	84.1	84.1
b5	31.8	31.8	31.8	86	86	86	48.4	48.4	48.4	48.4	48.4	48.4
b6	–	–	–	61	61	61	16.7	16.7	16.7	16.7	16.7	16.7
b7	–	–	–	57	57	57	42.05	42.05	42.05	42.05	42.05	42.05
b8	31.6	31.6	31.6	38	38	38	21.4	21.4	21.4	21.4	21.4	21.4
b9	–	–	–	14	14	14	19	19	19	19	19	19
b10	7.5	7.5	7.5	12.5	12.5	12.5	50.7	50.7	50.7	50.7	50.7	50.7
b11	55.9	55.9	55.9	57.5	57.5	57.5	–	–	–	–	–	–
b12	–	–	–	9	9	9	–	–	–	–	–	–
b13	24.1	24.1	24.1	12	12	12	–	–	–	–	–	–
b14	–	–	–	26.5	26.5	26.5	–	–	–	–	–	–
b15	–	–	–	10.5	10.5	10.5	–	–	–	–	–	–
d1	68.2	68.2	68.2	95.2	95.2	95.2	158	158	158	158	158	158
d2	25.3	25.3	25.3	28.6	28.6	28.6	130	130	130	130	130	130
d3	17.5	17.5	17.5	21.4	21.4	21.4	41	41	41	41	41	41
d4	8.5	8.5	8.5	9	9	9	30	30	30	30	30	30
d5	–	–	–	7/16– 14 UNC	7/16– 14 UNC	7/16– 14 UNC	11.5	11.5	11.5	11.5	11.5	11.5
d6	–	–	–	–	–	–	6	6	6	6	6	6
d7	–	–	–	–	–	–	20	20	20	20	20	20
d8	–	–	–	–	–	–	–	–	–	152	152	152
h1	158.5	227.5	269.5	199.5	263.5	445.0	339.5	432.5	510.0	504	660.0	826.0
h2	75	75	75	85	85	85	95	95	95	350	500	670
h3	76	76	76	83	83	83	174.5	174.5	174.5	174.5	174.5	174.5
h4	25	25	25	25	25	25	98	98	98	98	98	98
h5	–	–	–	–	–	–	96	96	96	96	96	96
h6	–	–	–	–	–	–	19	19	19	19	19	19
h7	–	–	–	–	–	–	–	–	–	112	112	112
t1	–	–	–	13	13	13	2.6	2.6	2.6	2.6	2.6	2.6
t2	–	–	–	18	18	18	–	–	–	–	–	–
t3	2	2	2	2	2	2	–	–	–	–	–	–
SW	27	27	27	32	32	32	–	–	–	–	–	–
SW1	–	–	–	–	–	–	27	27	27	27	27	27
SW2	–	–	–	–	–	–	36	36	36	36	36	36
SW 3	–	–	–	–	–	–	10	10	10	10	10	10
Weight [kg]	5.1	6.0	6.6	9.1	10.4	14.7	21.0	25.5	29.0	32.0	39.2	47.1
Vol. of pressure chamber [l]		0.33	0.40	0.60	0.80	1.60	1.50	2.30	3.00	3.00	4.20	5.60

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.