

DHGL Series

DESCRIPTION

High pressure filter

Connection type and size:

Threaded connection: G $\frac{1}{2}$ " G $\frac{3}{4}$ " G $1\frac{1}{4}$ " G $1\frac{1}{2}$ "

SAE Flange connection: DN20 DN32 DN50

Maximum flow rate up to 1320 l/min

TECHNICAL PARAMETER

Maximum working pressure: 420 bar

Bypass valve opening pressure: 6 bar

Transmitter opening pressure: 5 bar

Temperature range: -29 to +100



MATERIALS

Head: Cast iron

Filter bowl: Carbon steel

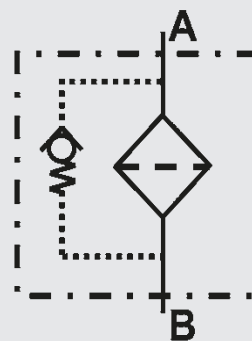
Seals: NBR nitrile rubber (standard)

Or FKM fluororubber (customizable)

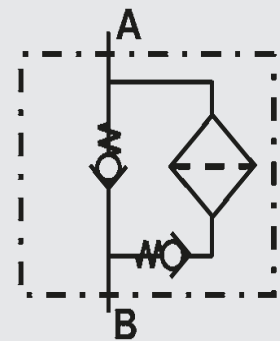
Filter element material: Fiberglass and wire mesh

Symbol for hydraulic systems

DHGL



DHGLF



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

DHGL F 160 E F 10 N 1 N B6

Filter model

For Reversible Oil Flow

Filter specification

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

Connection type and size

Type	Connection	Filter size												
		30	60	110	140	160	240	280	330	500	660	990	1320	
B	G 1/2	●												
C	G 3/4		●	●	●									
E	G1 1/4					●	●	●						
F	G1 1/2								●	●	●	●	●	
G	G2													
J	SAE DN 20		●	●	●									
L	SAE DN 32					●	●	●						
N	SAE DN 50								●	●	●	●	●	

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
- 3. 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

DYGL 160 F 10 N

Filter element type

Filter element specification

30 60 110 160 240 330 660

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.

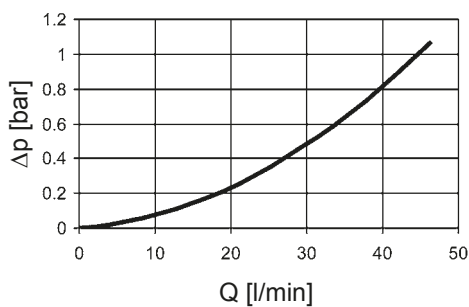
When using electrical blockage, please replace the filter element.

Before removing the blockage indicator light and power connector, the system must be turned off.

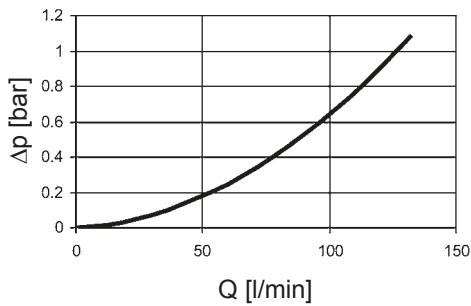
Δp-Q ISO 3968

The housing curves apply to mineral oil with a density of 0.86 kg/dm³ and a kinematic viscosity of 30 mm²/s. In this case, the differential pressure changes proportionally to the density.

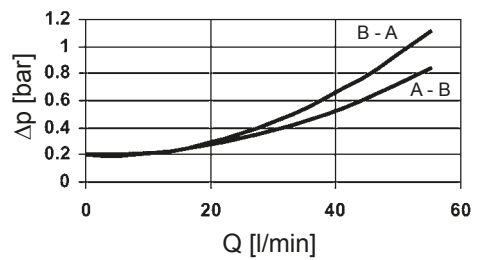
DHGL 30



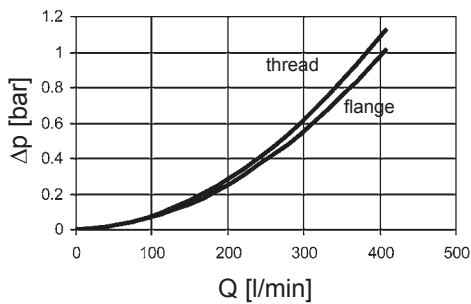
DHGL 60, 110, 140



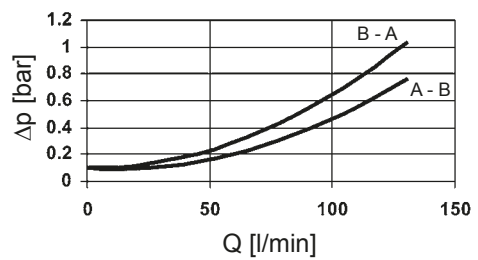
DHGLF 60, 110, 140



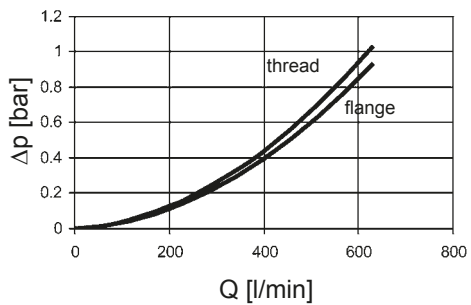
DHGL 160, 240, 280



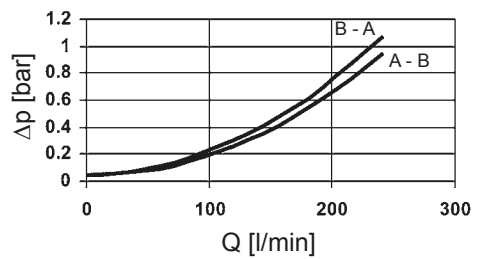
DHGLF 160, 240, 280



DHGL 330, 500, 660, 990, 1320



DHGLF 330, 500, 660, 990, 1320



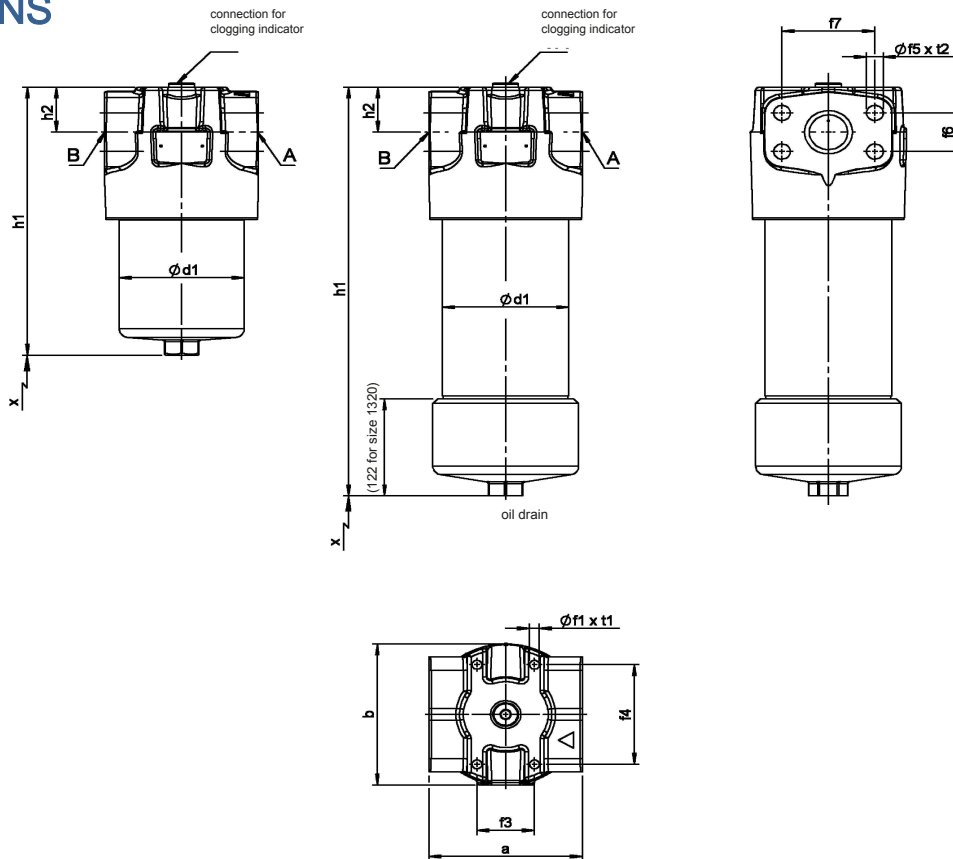
GRADIENT COEFFICIENTS (SK)

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.

DHGL DHGLF	F					
	1 μm	3 μm	5 μm	10 μm	15 μm	20 μm
30	77.8	63.9	43.3	22.8	14.0	11.3
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

DHGL DHGLF	W				
	-	3 μm	5 μm	10 μm	20 μm
30	3.030	91.2	50.7	36.3	19.0
60	0.757	58.6	32.6	18.1	12.2
110	0.413	25.4	14.9	8.9	5.6
140	0.324	19.9	11.3	8.1	4.3
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

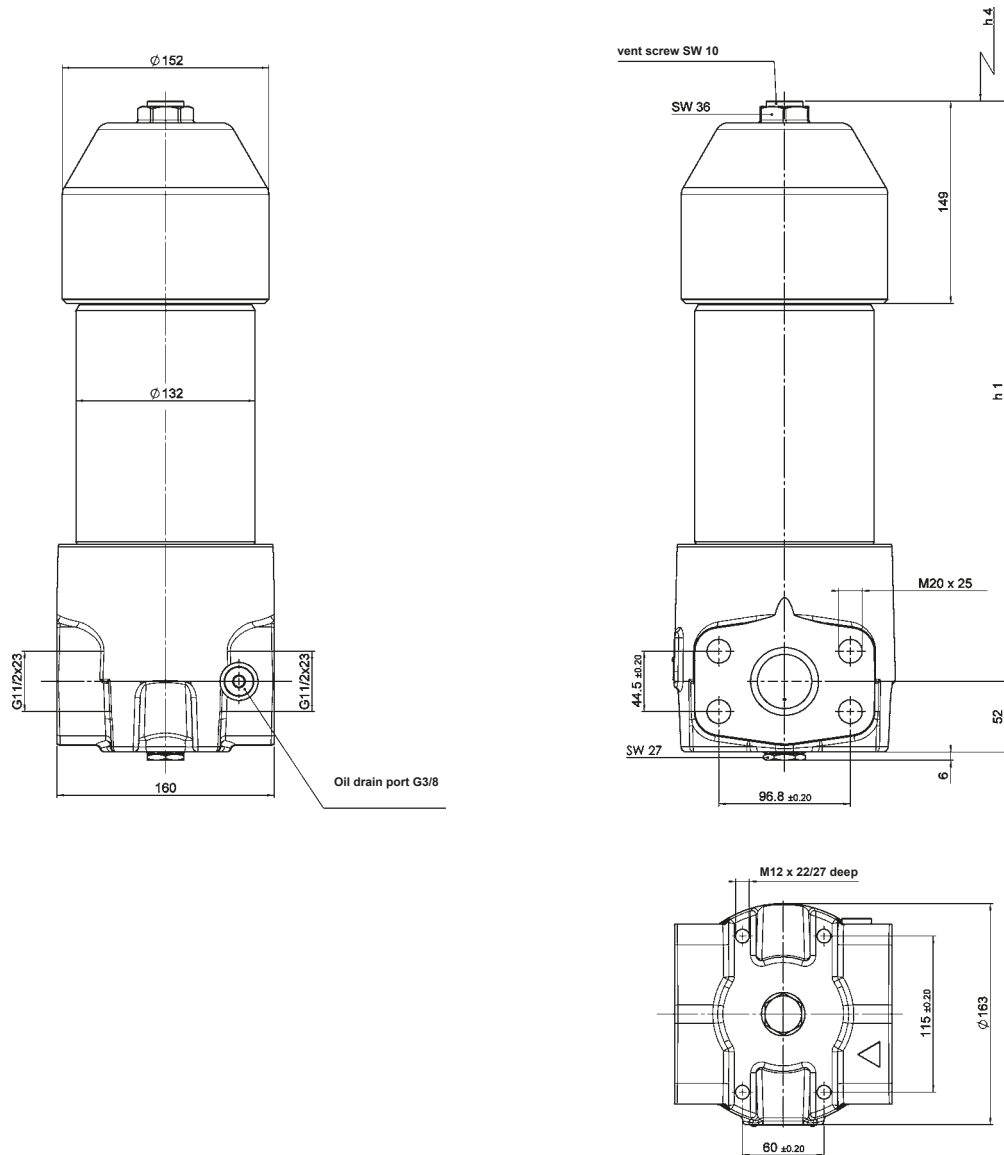


Type	b1	b2	b3	b4	c1	c2	d1	d2	d3	d4	d5	h1	h2	h4	SW	t1	t2	t3	Weight [kg]	Vol. of pressure chamber [l]
30... B...1	68	38	45	30	-	-		52	G 1/2	M5	-	131.5	38	75	24	14	6	-	2.3	
60... C...1	90	71	56	32	-	-		68	G 3/4	M6	-	140	40	85	27	16	9	-	4.5	
60... I...1	89	71	56	32	50.8	23.8		68	SAE DN 20	M6	M10	140	40	85	27	-	9	15	4.5	
110... C...1	90	71	56	32	-	-		68	G 3/4	M6	-	209.5	40	85	27	16	9	-	5.4	
110... I...1	89	71	56	32	50.8	23.8		68	SAE DN 20	M6	M10	209.5	40	85	27	-	9	15	5.4	
140... C...1	89	71	56	32	-	-		68	G 3/4	M6	-	250.5	40	85	27	16	9	-	6.0	
140... I...1	89	71	56	32	50.8	23.8		68	SAE DN 20	M6	M10	250.5	40	85	27	-	9	15	6.0	
160... E...1	125	95	85	35	-	-		95	G1 1/4	M10	-	196.5	47	105	32	20	14	-	10.3	
160... J...1	125	95	85	35	66.7	31.8		95	SAE DN 32	M10	M14	196.5	47	105	32	-	14	19	10.3	
240... E...1	125	95	85	35	-	-		95	G1 1/4	M10	-	256	47	105	32	20	14	-	11.8	
240... J...1	125	95	85	35	66.7	31.8		95	SAE DN 32	M10	M14	256	47	105	32	-	14	19	11.8	
280... E...1	125	95	85	35	-	-		95	G1 1/4	M10	-	438	47	105	32	20	14	-	16.3	
280... J...1	125	95	85	35	66.7	31.8		95	SAE DN 32	M10	M14	438	47	105	32	-	14	19	16.3	
330... F...1	160	133	115	60	-	-		130	G1 1/2	M12	-	257.5	52	115	36	22	17	-	24.5	
330... L...1	160	133	115	60	96.8	44.5		130	SAE DN 50	M12	M20	257.5	52	115	36	-	17	25	24.5	
500... F...1	160	133	115	60	-	-		130	G1 1/2	M12	-	350.5	52	115	36	22	17	-	28.6	
500... L...1	160	133	115	60	96.8	44.5		130	SAE DN 50	M12	M20	350.5	52	115	36	-	17	25	28.6	
660... F...1	160	133	115	60	-	-		130	G1 1/2	M12	-	428	52	115	36	22	17	-	31.6	
660... L...1	160	133	115	60	96.8	44.5		130	SAE DN 50	M12	M20	428	52	115	36	-	17	25	31.6	
330... F...2	160	133	115	60	-	-		132	G1 1/2	M12	-	254	52			22	17	-	27.4	
330... L...2	160	133	115	60	96.8	44.5		132	SAE DN 50	M12	M20	254	52			-	17	25	27.4	
500... F...2	160	133	115	60	-	-		132	G1 1/2	M12	-	343	52			22	17	-	31.5	
500... L...2	160	133	115	60	96.8	44.5		132	SAE DN 50	M12	M20	343	52			-	17	25	31.5	
660... F...2	160	133	115	60	-	-		132	G1 1/2	M12	-	420	52			22	17	-	34.4	
660... L...2	160	133	115	60	96.8	44.5		132	SAE DN 50	M12	M20	420	52			-	17	25	34.4	
990... F...2	160	133	115	60	-	-		132	G1 1/2	M12	-	576	52			22	17	-	43.4	
990... L...2	160	133	115	60	96.8	44.5		132	SAE DN 50	M12	M20	576	52			-	17	25	43.4	
1320... F...2	160	133	115	60	-	-		132	G1 1/2	M12	-	742	52			22	17	-	51.1	
1320... L...2	160	133	115	60	96.8	44.5		132	SAE DN 50	M12	M20	742	52			-	17	25	51.1	

B, C, E, F, G = threaded connection

I, J, L=DIN ISO 6162 6000 psi Flange connection with metric threads according to DIN ISO 6162 6000 psi

DF 330 to 1320...3 (Detachable top of filter)



Type	h1	h4	Weight [kg]	Volume of pressure chamber [l]
330...F..3	263	80	27.9	1.50
330...L..3	263	80	27.9	1.50
500...F..3	351	170	31.8	2.30
500...L..3	351	170	31.8	2.30
660...F..3	428	250	33.9	3.00
660...L..3	428	250	33.9	3.00
990...F..3	583	400	43.1	4.20
990...L..3	583	400	43.1	4.20
1320...F..3	749	570	50.8	5.60
1320...L..3	749	570	50.8	5.60

F = hreaded connection
 L = DIN ISO 6162 6000 psi
 Flange connection with metric threads according to DIN ISO 6162 6000 psi

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.