DHGM Series

DESCRIPTION

High pressure manifold filter

Connection type and size:

Inlet and outlet diameters: DN14 DN20 DN30 DN32

Maximum flow rateup to 550 l/min

TECHNICAL PARAMETER

Maximum working pressure: 315 bar

Bypass valve opening pressure: 6 bar

Transmitter opening pressure: 5 bar

Temperature range: -29℃ to +100℃

MATERIALS

Head: Cast iron

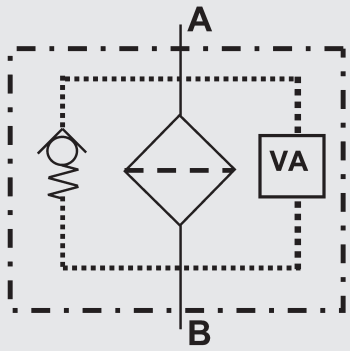
Filter bowl: Carbon steel

Seals: NBR nitrile rubber (standard)

Or FKM fluororubber (customizable)

Filter element material: Fiberglass and wire mesh

Symbol for hydraulic systems



VA = clogging indicator

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

DHGM 240 F F 10 N 1 A B6

Filter model

Filter specification

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

Connection type and size

Type	mounting 4 holes	Filter size			
		30	60-	160-	330-
A	DN14	●			
D	ND20		●		
F	DN32			●	
G	DN30				●

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

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

DYGM 240 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

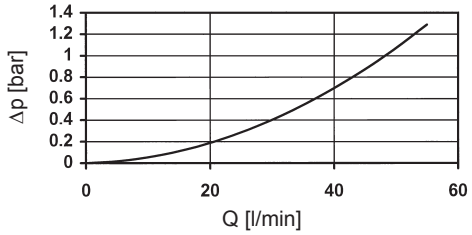
Maintenance Instructions

Filter housing must be grounded
When using electric plugging, please replace the filter element.
The system must be turned off before removing the clogging indicator light and power connector.

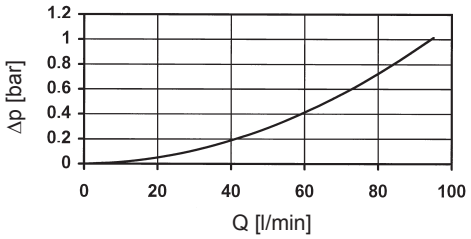
Δp-Q ISO 3968

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.

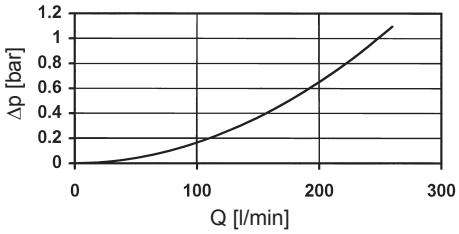
DHGM 30



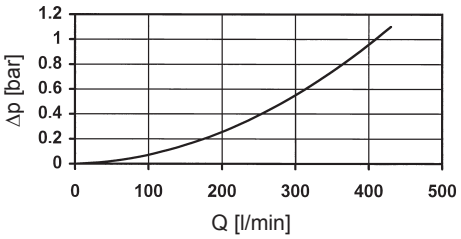
DHGM 60、110、140



DHGM 160、240、280



DHGM 330、500、660、990、1320



GRADIENT COEFFICIENTS (SK) FOR FILTER ELEMENTS

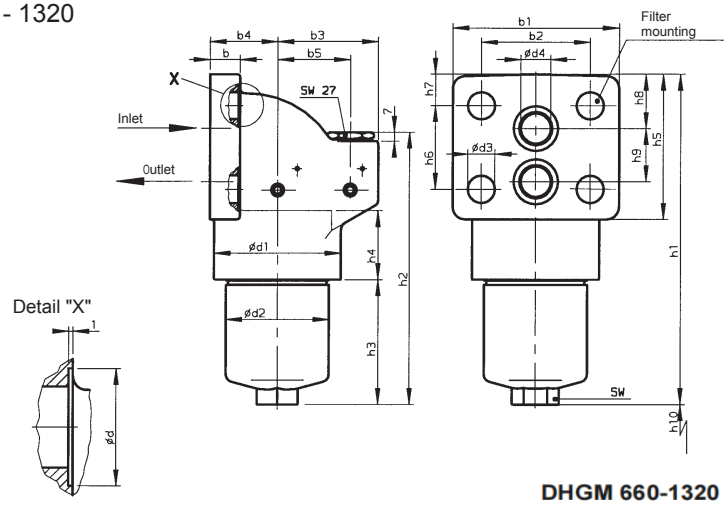
The gradient coefficients in mbar/(l/min) apply to mineral oils with a kinematic viscosity of 30 mm²/s. The pressure drop changes proportionally to the change in viscosity.

DHGM	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

DHGM	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

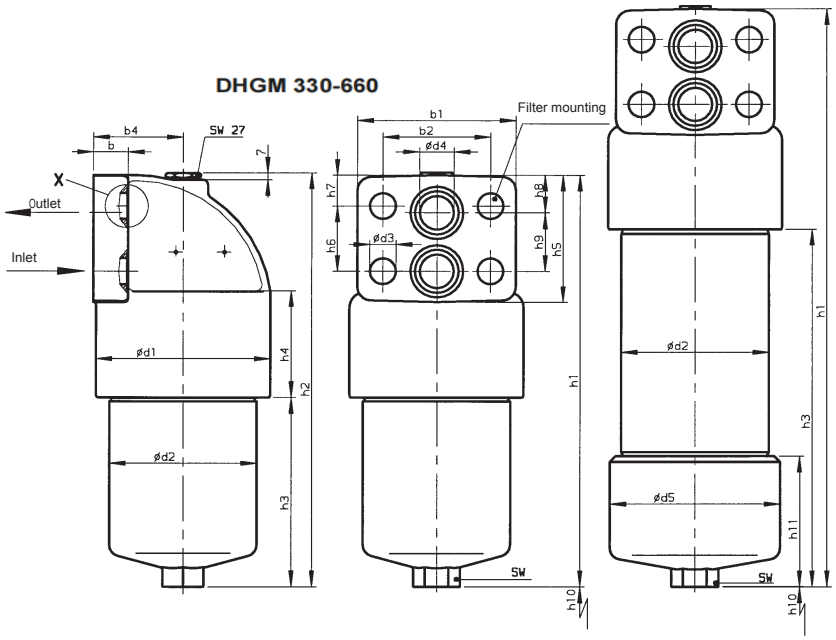
DIMENSIONS

DHGM 30 - 1320



DHGM 660-1320

DHGM 330-660



DHGM	Weight [kg]	Vol. of pressure chamber [l]
30	2.9	0.13
60	5.2	0.20
110	6.1	0.33
140	6.7	0.40
160	12.3	0.60
240	13.7	0.80
280	18.1	1.60
330	22.9	1.50
500	27.3	2.30
660	30.9	3.00
660 [2]	34.1	3.00
990 [2]	42.1	4.20
1320 [2]	50.3	5.60

DHGM	b	b1	b2	b3	b4	b5	d	d1	d2	d3	d4	d5	h1	h2	h3	h4	h5	h6	h7	h8	h9	h10	h11	SW	O-ring[1]
30	18	80	57	56	37	38	20	67	52	13	14	-	197	176	78	48	76	45	15.5	30.5	28	75	-	24	18 x 2.5
60	20	110	72	66	45	48	26	84	68	18	20	-	217	181	83	45.5	94	55	19.5	34.5	35	75	-	27	24 x 3
110	20	110	72	66	45	48	26	84	68	18	20	-	284	248	150	45.5	94	55	19.5	34.5	35	75	-	27	24 x 3
140	20	110	72	66	45	48	26	84	68	18	20	-	328	292	194	45.5	94	55	19.5	34.5	35	75	-	27	24 x 3
160	30	140	95	100	59	79	32	116	95	22	32	-	280	222	117	61	110	60	25	31	52	85	-	32	40 x 3.5
240	30	140	95	100	56	79	32	116	95	22	32	-	340	282	177	61	110	60	25	31	52	85	-	32	40 x 3.5
280	30	140	95	100	59	79	32	116	95	22	32	-	522	464	359	61	110	60	25	31	52	85	-	32	40 x 3.5
330	30	140	95	-	79,5	-	32	154	130	23	30	-	353	357	157	94	110	58	26	32	52	115	-	36	40 x 3.5
500	30	140	95	-	79.5	-	32	154	130	23	30	-	446	450	250	94	110	58	26	32	52	115	-	36	40 x 3.5
660	30	140	95	-	79.5	-	32	154	130	23	30	-	523	527	329	94	110	58	26	32	52	115	-	36	40 x 3.5
660 [2]	30	140	95	-	79.5	-	32	154	132	23	30	152	517	521	321	94	110	58	26	32	52	350	112	36	40 x 3.5
990 [2]	30	140	95	-	79.5	-	32	154	132	23	30	152	673	677	477	94	110	58	26	32	52	500	112	36	40 x 3.5
1320 [2]	30	140	95	-	79.5	-	32	154	132	23	30	152	839	843	643	94	110	58	26	32	52	670	112	36	40 x 3.5

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.