

PHGL Series

● DESCRIPTION

High pressure filter

Connection type and size:

Threaded connection: 1/2" 3/4" 1" 1-1/4" 1-1/2"

SAE Flange connection: 3/4" 1" 1-1/4" 1-1/2"

Maximum flow rate up to 500 l/min

● TECHNICAL PARAMETER

Maximum working pressure: 320 bar

Bypass valve opening pressure: 6 bar

Transmitter opening pressure: 5 bar

Temperature range: -25 to +110

● MATERIALS

Head: Cast iron

Filter bowl: Carbon steel

Seals: NBR nitrile rubber (standard)

FKM fluororubber (customizable)

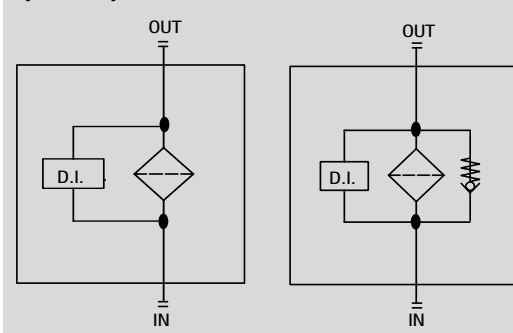
Filter element material: Fiberglass,

Stainless steel wire mesh



Highforce P

Hydraulic symbols



● 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.)

Weights [kg] and volumes [dm³]

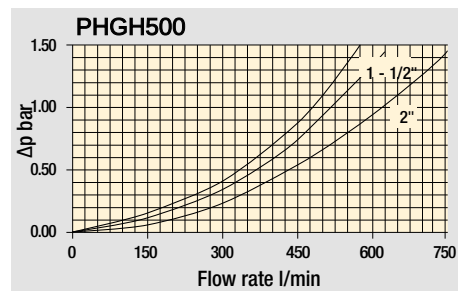
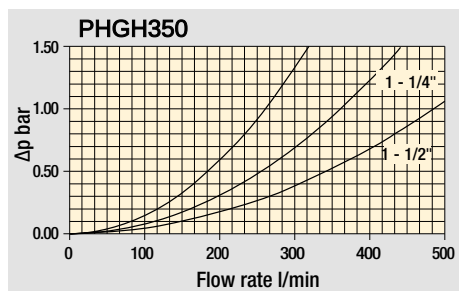
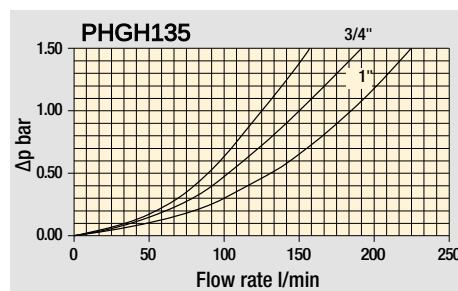
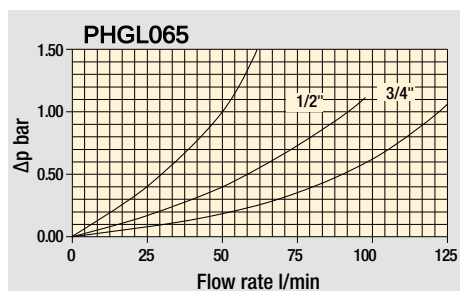
Filter series	Length	Weights [kg]				Length	Volumes [dm ³]			
		1	2	3	4		1	2	3	4
PHGL 039		-	0.60	0.70	0.80		-	0.19	0.26	0.34
PHGL 065		3.26	3.62	4.83	-		0.36	0.47	0.84	-
PHGL 135		5.61	7.21	8.27	-		0.45	0.78	1.00	-
PHGL 320		10.95	13.08	15.37	17.85		1.03	1.75	2.52	3.35

FILTER ASSEMBLY SIZING

Flow rates (l/min)

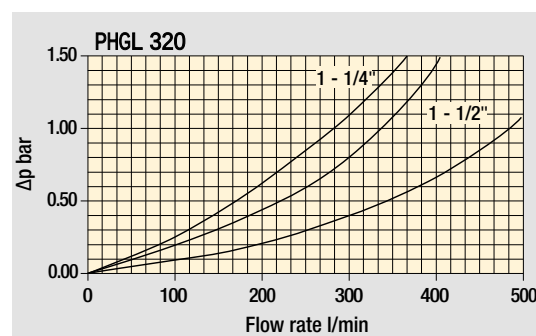
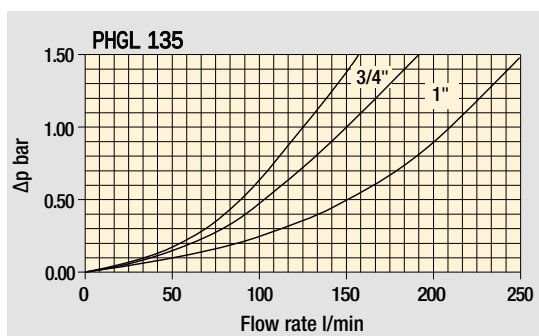
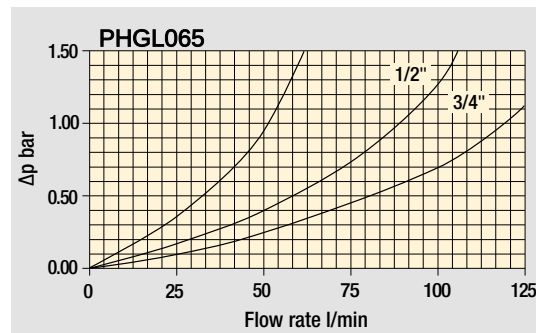
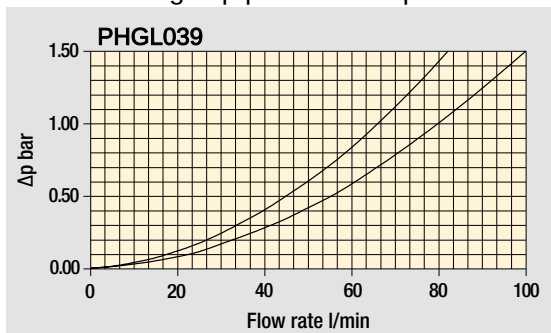
Filter series	Length	Filter element design - F series					W series	
		F03	F05	F10	F20	F30	W25	
PHGL 039	2	20	26	45	52	61	97	
	3	35	39	56	64	76	98	
	4	44	48	66	71	82	92	
PHGL 065	1	23	30	48	54	72	105	
	2	31	45	60	65	82	106	
	3	52	60	80	84	94	108	
PHGL 135	1	69	73	120	129	171	201	
	2	110	117	149	152	211	232	
	3	151	152	192	195	212	233	
PHGL 320	1	130	144	244	296	361	477	
	2	267	291	417	438	492	509	
	3	348	390	476	493	503	519	
	4	389	415	483	502	525	534	

Maximum flow rate for a complete return filter with a pressure drop $\Delta p = 1.5$ bar.

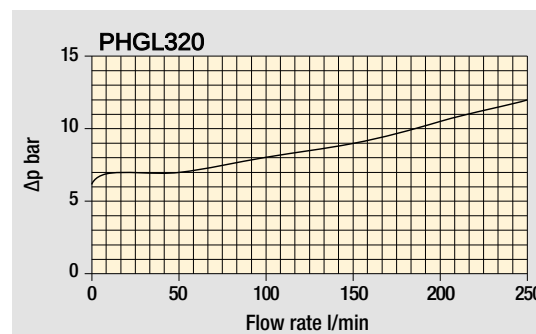
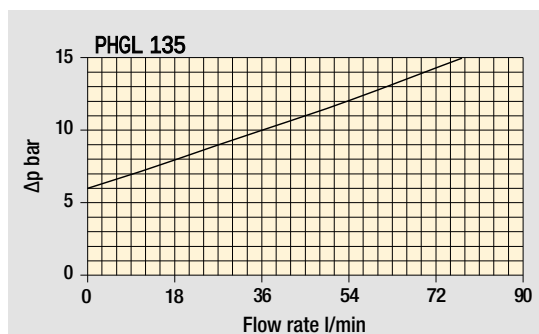
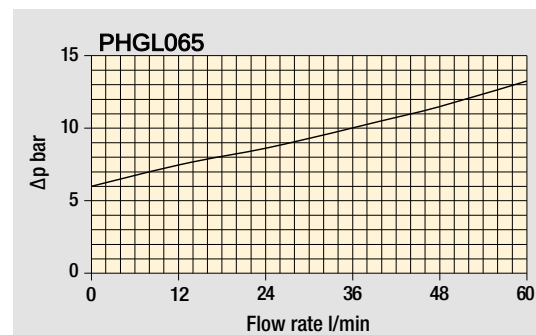
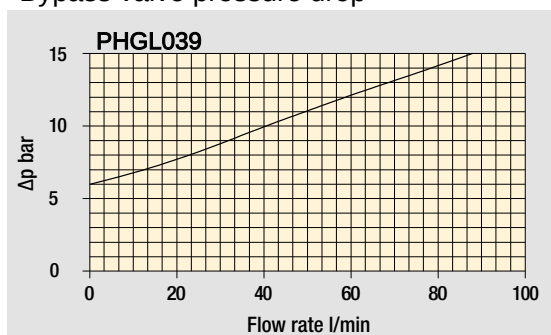
The reference fluid has a kinematic viscosity of 30 mm²/s (cSt) and a density of 0.86 kg/dm³.


The curves are plotted using mineral oil with density of 0.86 kg/dm³ in compliance with ISO 3968 Δp varies proportionally with density.

Filter housings Δp pressure drop



Bypass valve pressure drop



Ordering Options Table

PHGL 065 3 G2 F 10 N A B6

Filter type

Filter specification

039 065 135 320

Length

1 2 3 4

Connection type and size

Type	Connection	Filter specification			
		039	065	135	320
G1	G 1/2"	●	●	-	-
G2	G 3/4"	-	●	●	-
G3	G 1"	-	-	●	-
G4	G1-1/4"	-	-	-	●
G5	G1-1/2"	-	-	-	●
F1	SAE 3/4"	-	-	●	-
F2	SAE 1"	-	-	●	-
F3	SAE 1 - 1/4"	-	-	-	●
F4	SAE 1 - 1/2"	-	-	-	●

Filter element material

F: Fiberglass

W: Stainless steel wire mesh

Filter fineness(μm)

F: 03 05 10 20 30

W: 25 60 90

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

B6 = 6 bar

Filter Element

PYGL 065 3 F 10 N

Filter element type

Filter element specification

039 065 135 320

Length

1 2 3 4

Filter element material

F: Fiberglass

W: Stainless steel wire mesh

Filter fineness(μm)

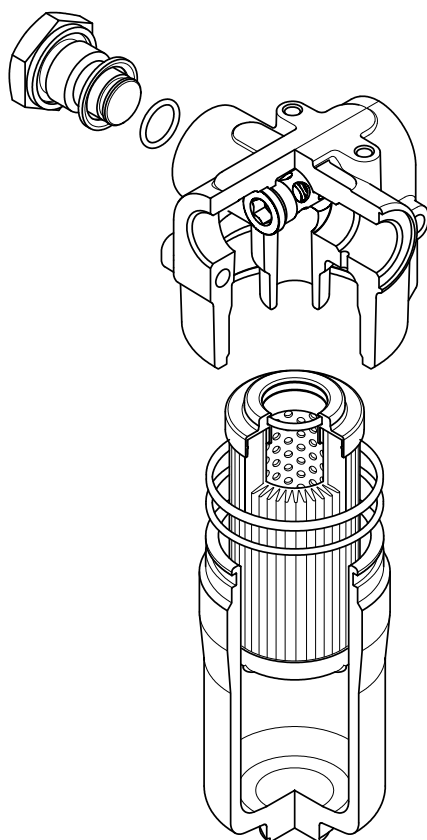
F: 03 05 10 20 30

W: 25 60 90

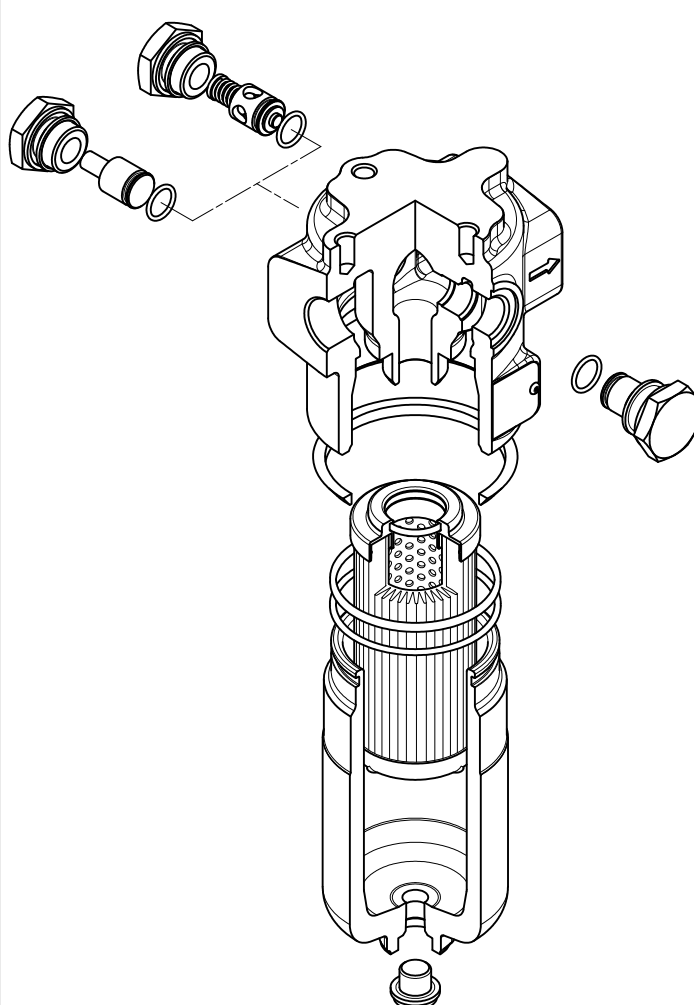
Seals

N: NBR V: FKM

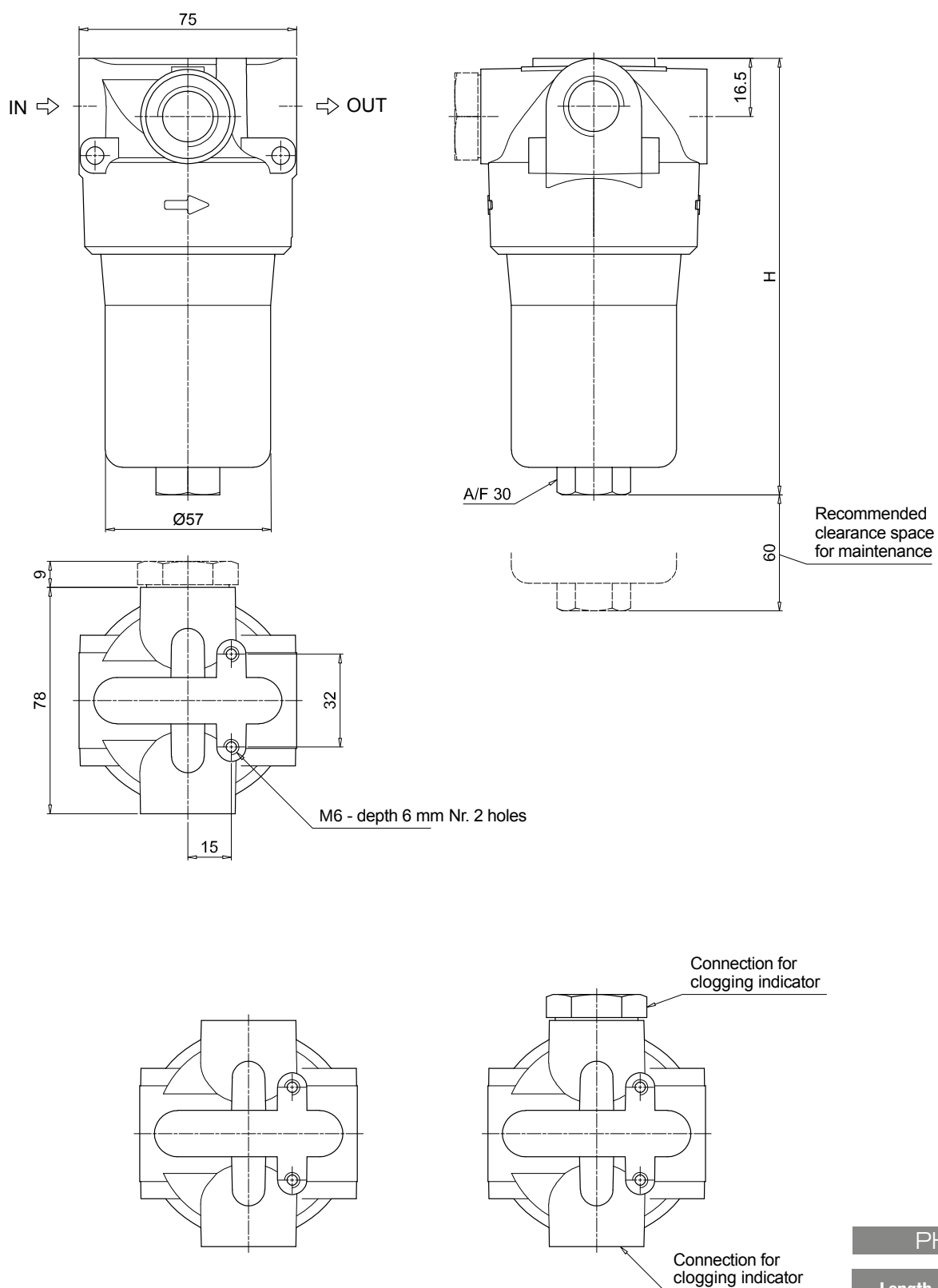
PHGL 039



PHGL 065 - 135 - 320



DIMENSIONS

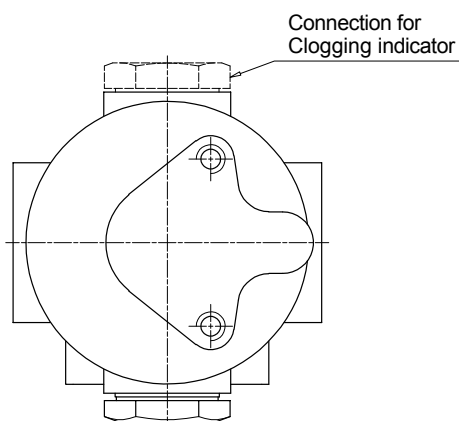
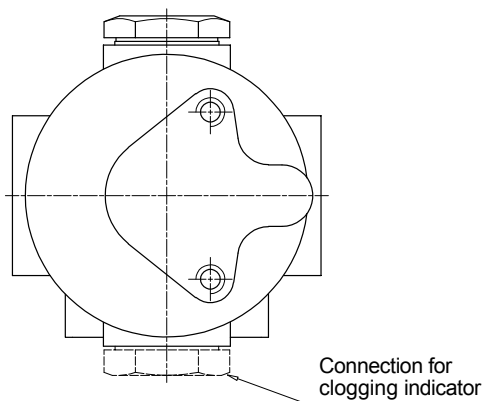
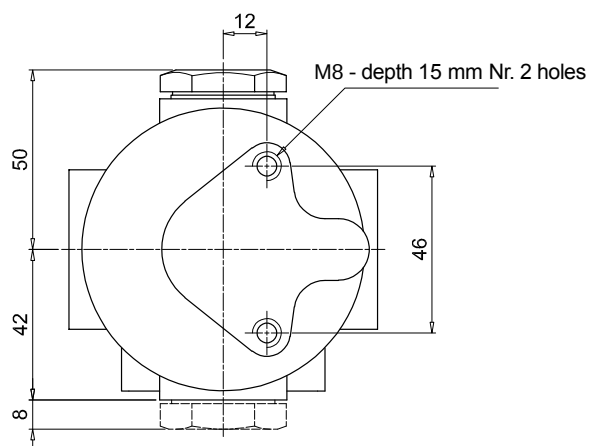
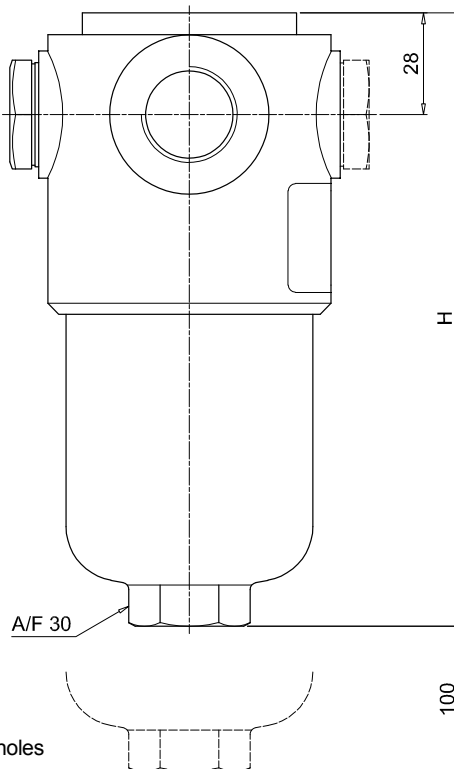
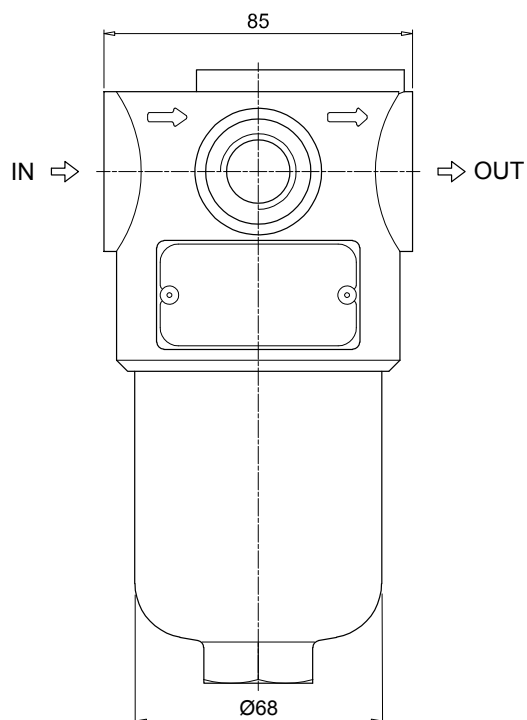


PHGL 039	
Length	H [mm]
2	151
3	194
4	238

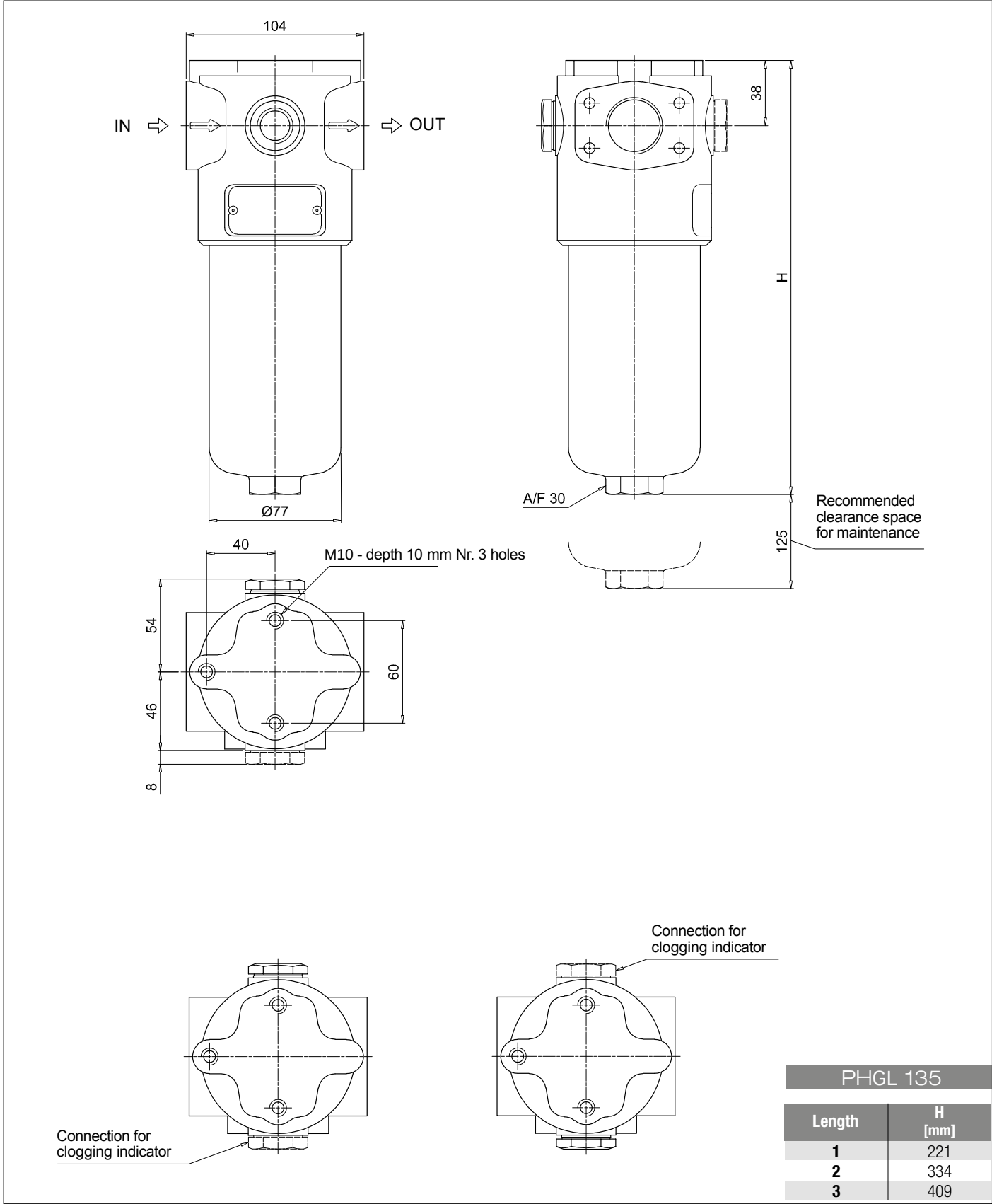
DIMENSIONS

PHGL 065

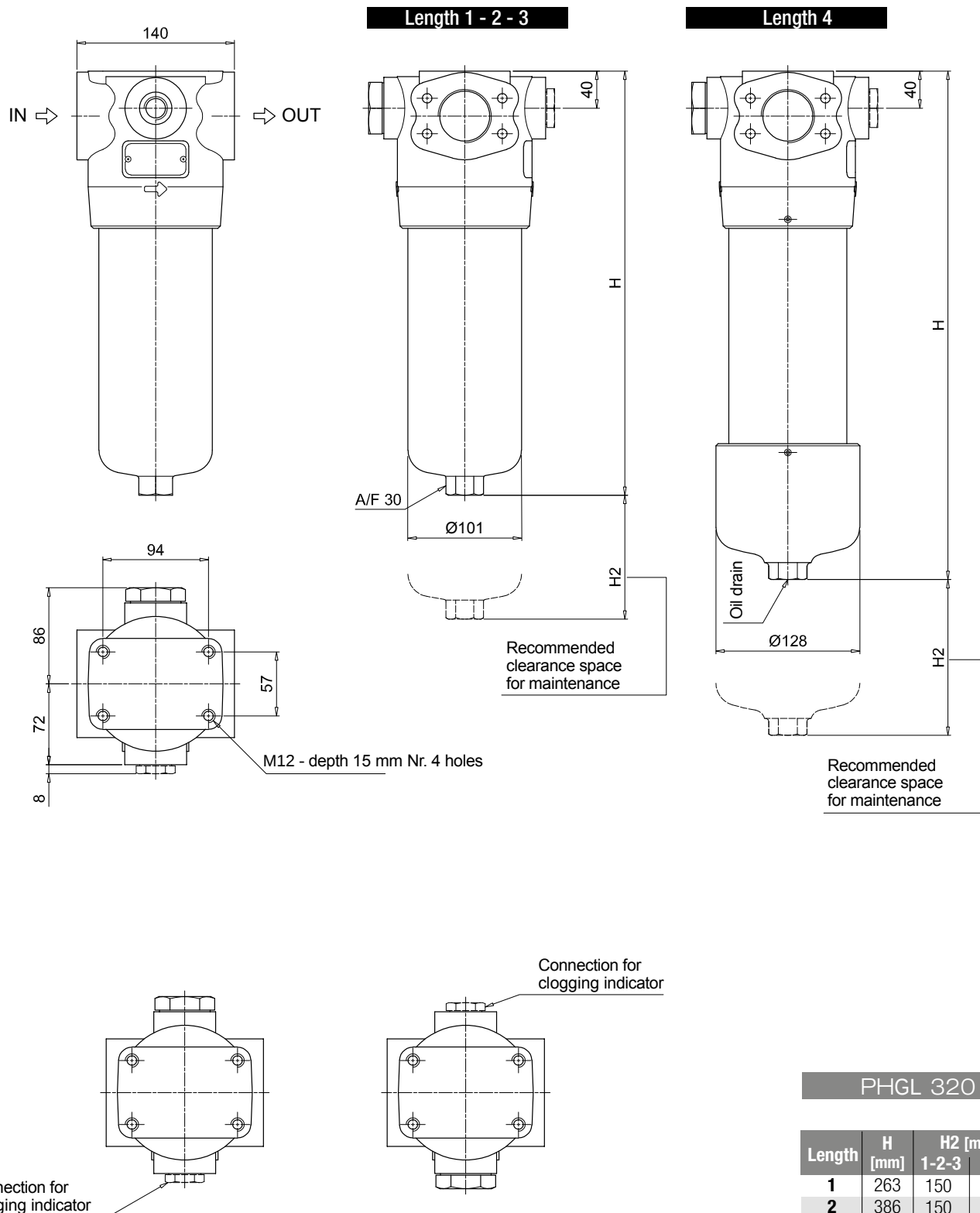
Length	H [mm]
1	169
2	200
3	302



DIMENSIONS



DIMENSIONS



PHGL 320

Length	H [mm]	H2 [mm]	
		1-2-3	4
1	263	150	-
2	386	150	-
3	518	150	-
4	671	150	550