

## HYDAC AutoFilt® RF14

Filter size	Operating Pressure [bar] Min. - Max.	Connection In-/Outlet [JIS/DIN] <u>Plain Weave</u>	Connection In-/Outlet [JIS/DIN] <u>Δ-Mesh</u>	Connection Backflush-line [DN]	Approx. empty weight [kg]	Volume [l]	Approx. Operating weight [kg]	Length [m]	Width [m]	Footprint [m²]	Δ-Mesh		Clean Pressure differential [bar]	min. Backflush-volume [m³/h]* 2)	TRC [m³/h] Hydac Min Flow 2)
											Filter area [cm²] Δ-Mesh	TRC [m³/h] Δ-Mesh @ 40 µm (+/-5%) <sup>1)</sup>			
10	2 - 6	100	125	50	265	34	299	0,5	0,5	0,3	4.000	140	< 0,1	26	52
15	2 - 6	150	200	65	337	65	402	0,6	0,5	0,3	7.500	265	< 0,1	44	88
20	2 - 6	200	250	80	422	144	566	0,7	0,6	0,4	14.500	520	< 0,1	65	130
25	2 - 6	250	300	80	553	277	830	0,7	0,7	0,5	19.300	690	< 0,1	65	130
30	2 - 6	300	350	100	873	400	1273	1	0,7	0,7	28.200	1.000	< 0,1	112	224
35	2 - 6	350	400	100	1185	410	1595	1,1	0,7	0,8	33.100	1.200	< 0,1	112	224
40	2 - 6	400	450	100	1685	887	2572	1,2	0,9	1,1	47.100	1.700	< 0,1	112	224
45	2 - 6	450	500	100	1890	1397	3287	1,3	1,1	1,4	56.400	2.000	< 0,1	112	224
50	2 - 6	500	600	125	2315	1692	4007	1,4	1,1	1,5	71.800	2.600	< 0,1	175	350
60	2 - 6	600	700	125	3450	2830	6280	1,6	1,3	2,1	101.000	3.500	< 0,1	175	350

Rev. November-19

Power supply: 3x 380V-480V/x/PE 50-60Hz

Power consumption: less than 0.5 kVA

min. required operating pressure at filter outlet: 1.5 bar

The sizing of the filter is subject to the exact knowledge of the dirt content.

The customer shall be responsible for the determination of the interfaces, the functionality of its entire system / his (final) product as well as for its requirements.

\* to be expected flow rate @ 1,5bar differential pressure - no indication of backflush loss. Based on water velocity of 3.5 m/s.

<sup>1)</sup> TRC @ 40 µm (Hydac sizing) is based on flange velocity of approx 3,1 m/s

<sup>2)</sup> Depending on installation. Backflush flow has to be maintained.

# Model code for AutoFit® RF14

max. number of digits:

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45

**R F 1 4 M - 2 5 2 F S - 2 1 X - P A N 5 1 - H 3 4 5 P - 0 / M H A 4 0 - (45) 1 2 3 4 5 6 7**

## Filter type

AutoFit®  
 M = Marine model  
 J = Industry model (\*specified in detail according to catalogue, or similar)

## Size, connection size, flange standard, design code

Connection- flange	RF14 Size											
	10	15	20	25	30	35	40	45	50	60		
1	DN125 5"	DN200 8"	DN250 10"	DN300 12"	DN350 14"	DN400 16"	DN450 18"	DN500 20"	DN600 24"	DN700 28"		
2	DN100 4"	DN150 6"	DN200 8"	DN250 10"	DN300 12"	DN350 14"	DN400 16"	DN450 18"	DN500 20"	DN600 24"	DN700 28"	
3	DN80 3"	DN125 5"	DN150 6"	DN200 8"	DN250 10"	DN300 12"	DN350 14"	DN400 16"	DN450 18"	DN500 20"		
4	DN65 2.5"	DN100 4"	DN125 5"	DN150 6"	DN200 8"	DN250 10"	DN300 12"	DN350 14"	DN400 16"	DN450 18"	DN500 20"	
5	DN50 2"	DN80 3"	DN100 4"	DN125 5"	DN150 6"	DN200 8"	DN250 10"	DN300 12"	DN350 14"	DN400 16"	DN450 18"	DN500 20"
6	Customer-specific model											

## Flange standard connection point (according to selected pressure range)

A = ANSI  
 F = DIN / EN  
 J = JIS

## Design Code

S = Hydac Standard (analogue AD2000)

## Control type

0 = Without control, with terminal box  
 1 = Without control, without terminal box, cable loose  
 2 = EPS Electro-pneumatic control with AutoFit® ACU  
 Y = Customer-specific model

## Supply voltage (gear motor Standard: 380-480V 50/60Hz // Solenoid valve Back-flush valve and HDA: 24V DC); Specification for Control type 0 and 1 is omitted

1 = 3 x 400V / N / PE 50 Hz      6 = 3 x 415V / X / PE 50 Hz      B = 3 x 575V / X / PE 60 Hz      G = 3 x 415V / N / PE 50 Hz  
 2 = 3 x 400V / X / PE 50 Hz      7 = 3 x 415V / N / PE 60 Hz      C = 3 x 690V / X / PE 50 Hz      H = 3 x 220V / X / PE 60 Hz  
 3 = 3 x 500V / X / PE 50 Hz      8 = 3 x 460V / X / PE 60 Hz      I = 3 x 380V / X / PE 50 Hz  
 4 = 3 x 230V / N / PE 50 Hz      9 = 3 x 440V / X / PE 60 Hz      K = 3 x 480V / X / PE 60 Hz  
 5 = 3 x 230V / X / PE 50 Hz      A = 3 x 525V / X / PE 50 Hz  
 Y = Customer-specific model

## Explosion-protection (specification omitted, if not applicable)

X = Ex-protection according to ATEX  
 C = Ex-protection according to IECEx

## Material Housing / Corrosion protection

N = Carbon steel, primer (RAL 7040), inside without corrosion protection  
 M = Carbon steel, primer (RAL 7040), inside 2K epoxy paint  
 P = Carbon steel, primer (RAL 7040), inside 2K polyurethane paint, highly interconnected  
 E = Stainless steel 1.4301, 1.4541 or similar (Group 304/321)  
 H = Stainless steel 1.4571 or similar (group 316)

## Pressure range

A = PN6

## Material Back-flush valve unit:

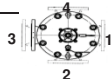
N = Butterfly valve: spheroidal graphite cast iron-coated housing, stainless steel disc and shaft, NBR seal  
 B = Butterfly valve: spheroidal graphite cast iron-coated housing, bronze disc and shaft, NBR seal  
 M = Butterfly valve: spheroidal graphite cast iron-coated housing, Super-Duplex disc and shaft, NBR seal  
 V = Butterfly valve: spheroidal graphite cast iron-coated housing, stainless steel disc and shaft, FKM/FPM seal

## Pressure transmitter

0 = Without pressure transmitter (Pressure measurement connection to the filter is retained)  
 5 = HDA 4700 stainless steel V2A group (not for filter model M - marine)  
 6 = HDA 4300 Duplex

## Flange position

1 = Filter outlet opposite filter inlet (Standard)  
 2 = Filter outlet offset 90° clockwise to default  
 3 = Filter outlet offset 180° clockwise to default  
 4 = Filter outlet offset 270° clockwise to default



## Internal parts, options (multiple designations possible), modification number

H = Stainless steel 1.4404 or similar (group 316)  
 E = Stainless steel 1.4301, 1.4541 or similar material (group 304/x321)  
 D = Duplex  
 S = SuperDuplex

0 = without  
 1 = With integrated protection basket  
 2 = With davit  
 3 = Pressure transmitter in back-flush line  
 4 = Top coat RAL 7040  
 5 = Automatic vent valve (plastic)  
 6 = Automatic vent valve (stainless steel/Superduplex)  
 7 = With sacrificial anode (O-ring material made of silicone element, conductive)  
 A = Certificate of Conformance CoC  
 B = Acceptance test certificate 3.1 acc. to DIN EN 10204 for design, pressure and function test  
 C = Acceptance test certificate 3.1 acc. to DIN EN 10204 for design, pressure and function test incl. material cert. acc. to EN 10204, 3.1 for the pressure bearing vessel parts in contact with media  
 D = Material products to EN 10204, 3.1 for pressurized vessel parts that come into contact with media  
 P = With back-flush pump

0 = Modification number; the latest model is always supplied

## Filter element: coating, material, model, filtration rating [µm]

M = Marine model  
 J = Industry model

H = Stainless steel 1.4435 or similar (group 316)

A = Wire mesh plain (Only for sizes 10 - 35)  
 B = Wire mesh Δ-Mesh (Only for 20/40/50 µm)

## Nominal filtration rating

AutoFit® RF14 Filtration ratings	Filter model		→ Recommended flange sizes*			
	Marine (M)	Industry (J)	Filter element type A		Filter element type B	
10 µm	-	X			4	5
20 µm	X	X			3	4
30 µm	-	X			3	4
40 µm	X	X			2	3
50 µm	X	X	1	2		
70 µm	-	X	1	2		
90 µm	-	X	1	2		

\* Model recommendation based on experiences with sea-water and serves only as orientation

Seal material of filter element without anode is identical to seal material of the butterfly valve  
 Seal material of filter element with anode is always silicone

## Customer-specific model (specification omitted if not applicable)

## Special number

For special design (number will be issued after technical clarification in Head Office)

Created by: Kaiser Oct 23, 2018  
 Checked by: Schlichter Oct 23, 2018  
 Version: -  
 Doc-no.: 4403403

## Filter element Model code AutoFilt® RF14

max. number of digits:

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

M 2 5 H A - 2 0 - N - (4 5) 1 2 3 4 5 6 7

**Filter element model**

M = Marine model  
J = Industry model

**Sizes (identical to filter size)**

10/15/20/25/30/35/40/45/50/60

**Material filter layer**

H = Stainless steel 1.4435 or similar (group 316)  
D = SMO254  
U = 1.4539 / 904L

**Filter element design**

A = Wire mesh plain (only for the sizes RF14-10 to RF14-35)  
B = Wire mesh Δ-Mesh

**Filtration rating in µm (nominal)**

10 = 10 µm  
20 = 20 µm (only Marine application)  
25 = 25 µm  
40 = 40 µm  
50 = 50 µm (only Marine application)  
60 = 60 µm  
80 = 80 µm

**Sealing material elements**

N = NBR  
S = conductive silicone O-rings  
V = FPM (Viton)

**Customer-specific model** (specifications are omitted, if not applicable)

**Drawing number**

For special design (number will be issued after technical clarification in Head Office)

FBL-Nr.: 4515094