WKRFD
Change-Over Return Line Filter

-up to 1300L/min

-up to 25bar

1. TECHNICAL SPECIFICATIONS

1.1 FILTER HOUSING

Construction

The filter housings are designed in accordance with international regulations. They consist of one-piece housings with bolt-on cover plates. The two housings are connected by a ball change-over valve with negative overlap and single-lever operation.

Standard equipment:

- bypass valve
- connection for a clogging indicator (1 clogging indicator per filter side!)

1.2 FILTER ELEMENTS

WK-Hydraulic filter elements are validated and their quality is constantly monitored according to the following standards:

- ISO 2941
- ISO 2942
- ISO 2943
- ISO 3724
- ISO 3968
- ISO 11170
- ISO 16889

Filter elements are available with the following pressure stability values:

Glass fiber (ON):	20 bar
Paper (P/HC):	10 bar
Stainl. st. wire mesh (W/HC):	20 bar
Stainless steel fibre (V):	210 bar

1.3 FILTER SPECIFICATIONS

Nominal pressure	25 bar
Temperature range	-10 °C to +100 °C
Material of filter housing and cover plate	WKRFD 60 to 330: Aluminium WKRFD 660 to 1300: EN-GJS-400-15
Type of clogging indicator	VR Connection thread G ½ (return line indicator up to 25 bar operating pressure)
Pressure setting of the clogging indicator	2 bar (others on request)
Bypass cracking pressure	3 bar (others on request)

1.4 SEALS

NBR (=Perbunan)

1.5 INSTALLATION

Tank-top filter

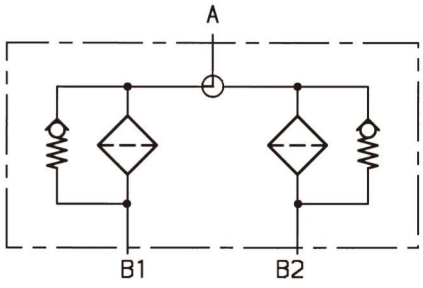
1.6 SPECIAL MODELS AND ACCESSORIES

On request

1.7 SPARE PARTS

See Original Spare Parts List

Symbol for hydraulic systems



2. MODEL CODE (also order example)

WKRFD ON 330 D A L 10 D 1 . X /-L24

2.1 COMPLETE FILTER

Filter type
WKRFD

Filter material

ON	Glass fiber	W/HC	Stainl. st. wire mesh
V	Stainless steel fibre	P/HC	Paper

Size of filter or element
60, 110, 160, 240, 330, 660, 950, 1300

Operating pressure
D = 25 bar

Type of change-over
A Ball

Type and size of connection

Type	Connection	Filter size							
		60	110	160	240	330	660	950	1300
C	G ¾	●	●						
D	G 1			●	●				
G	G 2					●			
L	SAE DN 50 (2")					●			
M	SAE DN 80 (3")						●		
N*	G3						●		
P	SAE DN 100 (4")							●	●

* This port, G3, applies to filter outlet only

Filtration rating in µm
ON: 1, 3, 5, 10, 15, 20 P/HC: 10, 20
V: 3, 5, 10, 20 W/HC: 25, 50, 100, 200

Type of clogging indicator
Y plastic blanking plug in indicator port
A steel blanking plug in indicator port
B visual
C electrical
D visual and electrical
] for other clogging indicators, see brochure no. 7.050../..

Type code
1

Modification number
X the latest version is always supplied

Supplementary details
B. special cracking pressure of bypass (e.g. B6 = 6 bar)
KB without bypass valve
L... light with appropriate voltage (24V, 48V, 110V, 220V)
LED 2 light emitting diodes up to 24 Volt
] only for clogging indicators type D
SO136 filter housing of RFD 330 in EN-GJS-400-15
V FPM seals

2.2 REPLACEMENT ELEMENT

0330 R 010 ON /-V

Size
0060, 0110, 0160, 0240, 0330, 0660, 0950, 1300

Type
R

Filtration rating in µm
ON: 001, 003, 005, 010, 015, 020 P/HC: 010, 020
V: 003, 005, 010, 020 W/HC: 025, 050, 100, 200

Filter material
ON, V, W/HC, P/HC

Supplementary details
V (for descriptions, see point 2.1)

3. FILTER CALCULATION / SIZING

The total pressure drop of a filter at a certain flow rate Q is the sum of the housing Δp and the element Δp and is calculated as follows:

$\Delta p_{total} = \Delta p_{housing} + \Delta p_{element}$

$\Delta p_{housing}$ = (see Point 3.1)

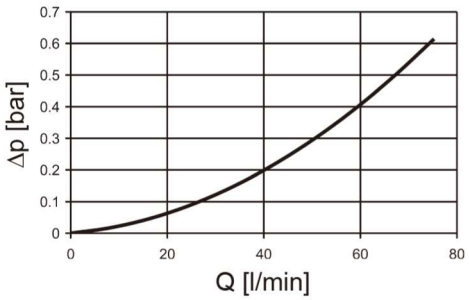
$$\Delta p_{element} = Q \cdot \frac{SK^*}{1000} \cdot \frac{viscosity}{30}$$

For ease of calculation, our Filter Sizing Program is available on request free of charge.

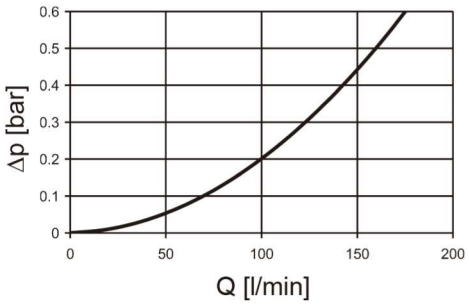
3.1 Δp-Q HOUSING CURVES BASED ON ISO 3968

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.

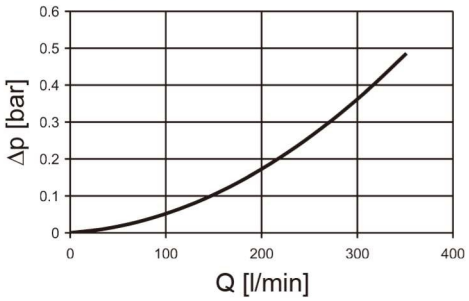
WKRFD 60, 110



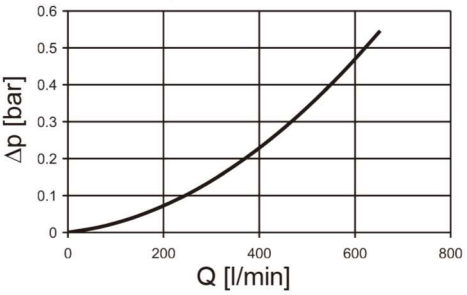
WKRFD 160, 240



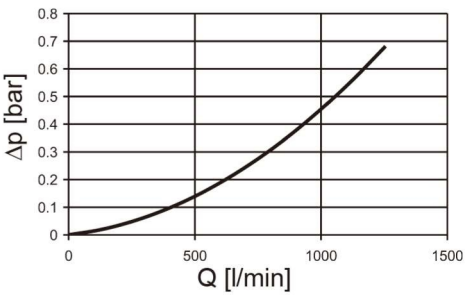
WKRFD 330



WKRFD 660, 950

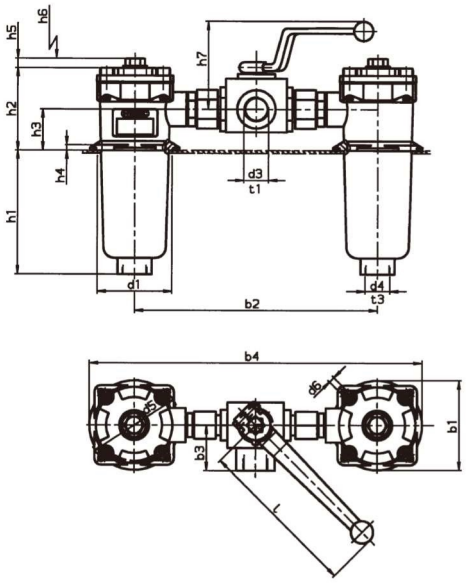


WKRFD 1300

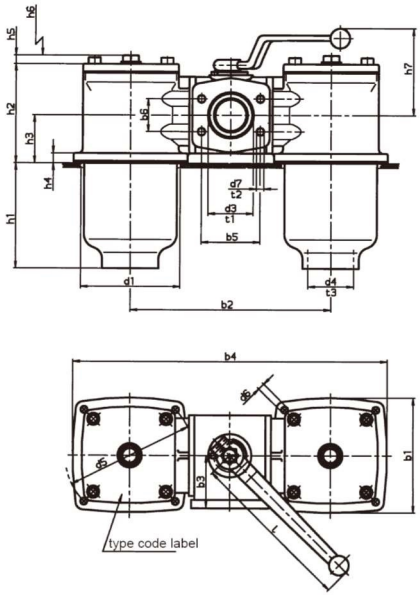


4. DIMENSIONS

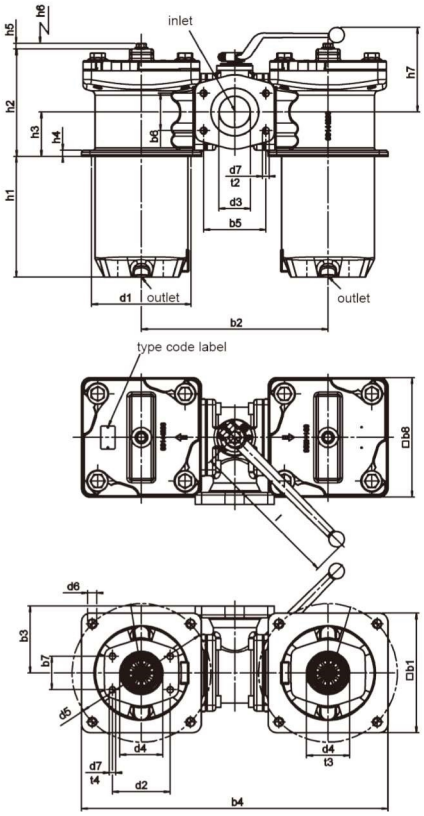
WKRFD 60-240



WKRFD 330



WKRFD 660-1300



WKRFD	60	110	160	240	330	660	950	1300
b1	96	96	126	126	150	195	250	250
$b2_{\pm 1.5}$	260.5	260.5	335.5	335.5	254	330	390	410
b3	47.5	47.5	56.5	56.5	69	100	140	140
b4	357	357	461	461	404	540	640	660
b5	-	-	-	-	77.8	106.5	130.2	130.2
b6	-	-	-	-	42.9	61.9	77.8	77.8
b7	-	-	-	-	-	61.9	69.9	77.8
b8	-	-	-	-	-	210	244	244
d1	80	80	106	106	135	180	208	208
d2	-	-	-	-	-	106.4	120.7	130.2
d3	G ¾	G ¾	G 1	G 1	G 2 / SAE DN 50 (2")	SAE DN 80 (3")	SAE DN 100 (4")	SAE DN 100 (4")
d4	G ¾	G ¾	G 1¼	G 1¼	G 2	G 3 or SAE DN 80 (3")	SAE DN 90 (3½ ")	SAE DN 100 (4")
d5	100	100	135	135	170	220	290	290
d6	Ø8 (M5)	Ø8 (M5)	Ø9.5 (M6)	Ø9.5 (M6)	Ø16 (M8)	Ø14 (M12)	Ø18 (M16)	Ø16 (M16)
d7	-	-	-	-	- / M12	M16	M16	M16
h1	66	133	89	150	139	246	252.5	330.5
h2	88	88	108	108	130	203	225	269
h3	44	44	54	54	63	83	93	121
h4	6	6	6	6	13	13	13	13
h5	11	11	11	11	11	8	8	8
h6	80	145	120	180	180	320	385	485
h7	92	92	95	95	110	114	170	170
l	173	173	173	173	229	229	318	318
t1[2)]	16	16	24	24	24 / -	-	-	-
t2[2)]	-	-	-	-	- / 17	20	25	25
t3	17	17	20	20	27	28	-	-
t4	-	-	-	-	-	18	20	20
Weight incl. element [kg]	3.2	3.7	7.0	7.8	13.4	72.0	105.0	118.0
Volume of pressure chamber [l]	2x 0.30	2x 0.60	2x 1.00	2x 1.40	2x 2.00	2x 6.80	2x 10.30	2x 13.50

NOTE

The information in this brochure relates to the operating conditions and applications described.
For applications or operating conditions not described, please contact the relevant technical department.
Subject to technical modifications.

ООО "Алькор Плюс"
+7 (982) 608-02-00 (+ WhatsApp)
sales@hydrootvet.ru
www.hydrootvet.ru