



DF 4.221

DOUBLE FILTER WITH 90° CONNECTION

DESCRIPTION

Double Changeover Filter with 90° connection

MATERIALS

Housing: EN-GJL-250 (alternatively EN-GJS-400-15)

Filter hood: GK-ALSi12 (Cu) (alternatively St)

Bypass valve: Brass.

Filter elements: see separately available data sheet

(Filter elements FE B)

PRESSURE

Max. working: 1,6 MPa (16 bar) (40 bar on request)

Collapse differential pressure of the filter element 6,4 to 30 bar, depending on the diameter.

BYPASS VALVE

Manual bypass valve available for DN 80, DN 50 on demand

FLOW RATE

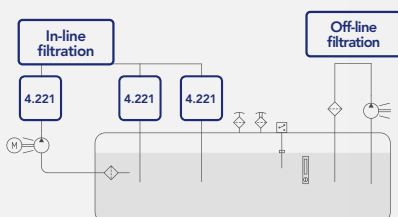
From 30 to 1100 l/min depending on the specification

WORKING TEMPERATURE

From -10° to +120°C



HYDRAULIC DIAGRAM



Is this datasheet the latest release? Please check on our website.

DF 4.221

DOUBLE FILTER WITH 90° CONNECTION

ORDERING AND OPTION CHART

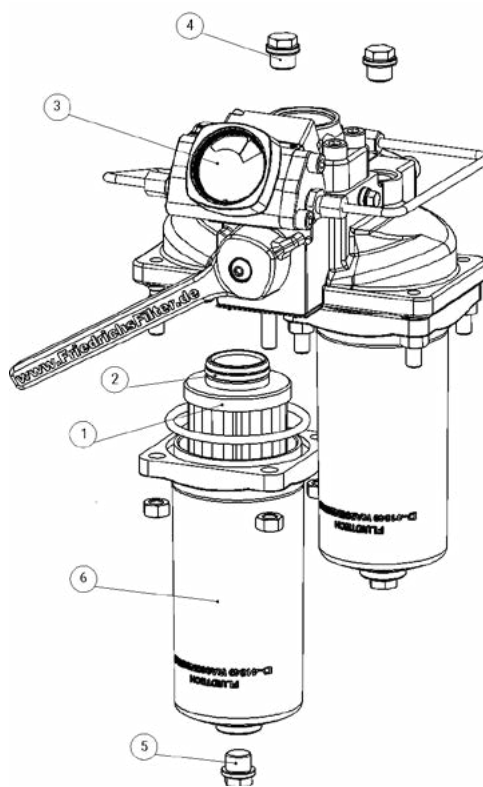
Type code (ordering example). The type code can be found on the type plate.

DF 4.221	B50	060	L2	V	H	BD	5.02-2,0	
								deltaP® Differential pressure indicator
								5.02-2,0 In their standard version the filters feature a deltaP® differential pressure indicator type 5.02 (the designation can be found in the separate data sheet). Other deltaP® types on request - please ask for our brochure
								Pressure adjustment/limitation
								N Without
								B Bypass valve only
								BD Bypass and pressure adjustment valve
								D Pressure adjustment valve only
								Mounting direction
								H Inverted mounting
								S Upright mounting
								Sealing material
								P NBR (Standard)
								V FKM
								Other materials on request
								Installation length code
								L2 Standard installation length (cast Aluminium filter hoods) Other installation lengths on request (welded filter hoods)
								Filter fineness/medium
								005 optimesh® wire mesh 5µm nominal, 10µm absolute
								010 optimesh® wire mesh 10µm nominal, 25µm absolute
								015 optimesh® wire mesh 15µm nominal, 34µm absolute
								020 optimesh® wire mesh 20µm nominal, 40µm absolute
								025 optimesh® wire mesh 25µm nominal, 60µm absolute
								040 optimesh® wire mesh 40µm nominal, 80µm absolute
								060 optimesh® wire mesh 60µm nominal, 100µm absolute
								080 precimesh® wire mesh 80µm nominal, 150µm absolute
								100 precimesh® wire mesh 100µm nominal, 200µm absolute
								120 precimesh® wire mesh 120µm nominal, 250µm absolute
								150 precimesh® wire mesh 150µm nominal, 300µm absolute
								xxx Paper, glass fibre paper
								Connection nominal diameter/installation size DN [mm]
								32 / 50 / 80
								"B" marking was introduced gradually starting in 2014 Before 2014 and in the transition phase until 2016, the "B" is missing.
								Series
								DF 4.221 fluidtech® double changeover filter type 4.221

DF 4.221

DOUBLE FILTER WITH 90° CONNECTION

SPARE PARTS



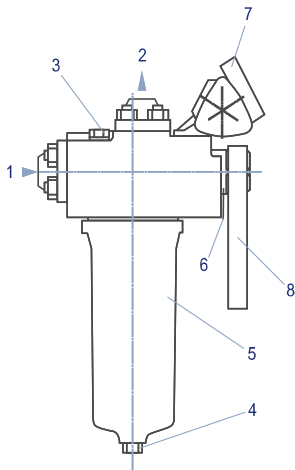
Pos	Description	Quantity	DN32	DN50	DN80
1	filter element	2	order no. written on the filter element		
2	gasket for filter element	1	no.220	no.225	no.234
3	differential pressure indicator	1	Type, measuring range and switch from display to specify		
4	vent screw	2	DIN 910 - G3/8	DIN 910 - G1/2	DIN 910 - G3/4
5	drain screw	2	DIN 910 - G3/8	DIN 910 - G1/2	DIN 910 - G3/4
6	filter hood	2	DN and L1, L2 or L3 to specify (standard L2)		
7*	gasket set NBR	1	order no.: 135384	order no.: 133612	order no.: 135746
7.1*	gasket set FPM	1	order no.: 135535	order no.: 133693	order no.: 141422

* not depicted

DF 4.221

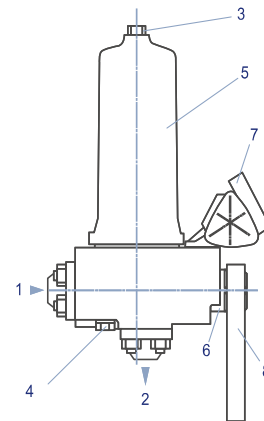
DOUBLE FILTER WITH 90° CONNECTION

INSTALLATION DRAWING



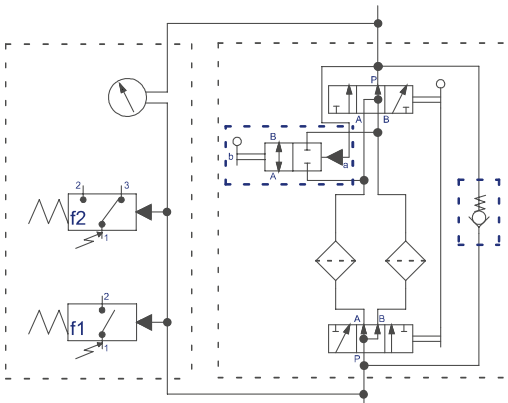
Legend:

- 1: Inlet
- 2: Outlet
- 3: Vent screw
- 4: Drain plug
- 5: Filter hood
- 6: Change over element
- 7: Differential pressure indicator



SCHEMATIC DIAGRAM

The filter unit is designed, built and tested in compliance with the European Pressure Equipment Directive 2014/68/EU and the German Equipment Safety Law.



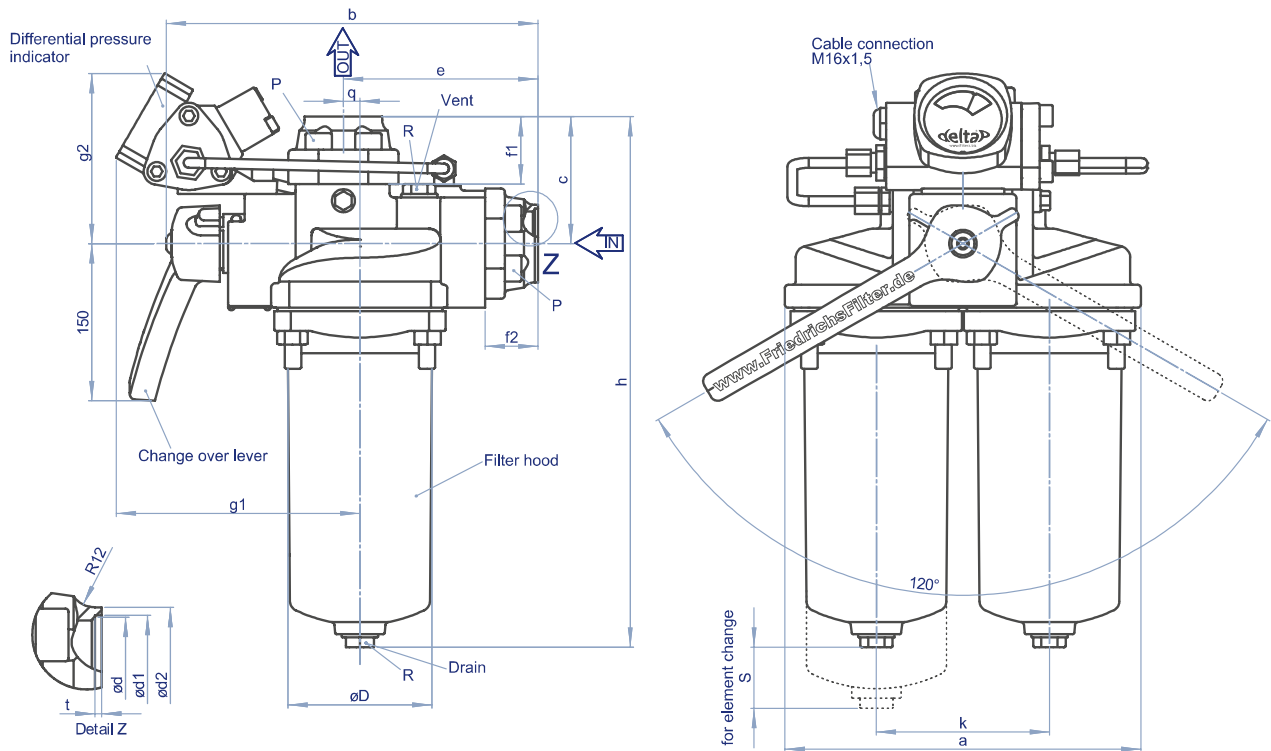
WORKING PRINCIPLE

The filter is used to separate contaminant particles from the operating fluid in the hydraulic system (e.g. lubricating oil) and is designed for continuous filtration. Normally one filter chamber is in use, while the other one is in standby, filled with fluid and fitted with a clean filter element. In the event of heavy contamination of the operating element, the standby element can be manually switched to. An overlapping changeover between the two filter chambers can ensure uninterrupted media flow. After changeover, the contaminated filter element must be removed, cleaned or replaced and reinstalled to provide a standby chamber for the next changeover.

DF 4.221

DOUBLE FILTER WITH 90° CONNECTION

DIMENSIONS



FLANGE DIMENSIONS

DN.	d	f1	f2	d1	d2	t	Remarks
32	G 1 1/4	41	32	42.2	47	2	Universal flange for screwing or welding
50	G 2	45	36	61.0	74	3	
80	-	50	41	81.0	89	-	Welding flange

FILTER DIMENSIONS

DN.	Installation length key	a	b	c	e	h	k	øD	R	S _≈ [standard]	S _≈ [inverted]	P	q	g1 ≈	g2 ≈	Weight without elements / DDA [kg]
32	L2	216	215	77	117	324	105	86	G 3/8	169	40	M 10	10	150	110	10
50	L2	260	247	92	141	435	130	110	G 3/8	250	40	M 12	9	160	130	18
80	L2	352	316	111	189	568	180	158	G 3/4	329	70	M 16	12	185	160	31

Dimensions in mm

DF 4.221

DOUBLE FILTER WITH 90° CONNECTION

INSTALLATION, FLOW AND VOLUME

DN.	Installation length key	Smallest flow area [mm]	Total volume [dm ³]
32	L2	ø 32	2.00
50	L2	ø 42	5.10
80	L2	ø 70	12.10

Alternative installation lengths, with different filter lengths, on request

DESIGN DATA

The filter unit is designed, built and tested in compliance with the European Pressure Equipment Directive 2014/68/EU and the German Equipment Safety Law.