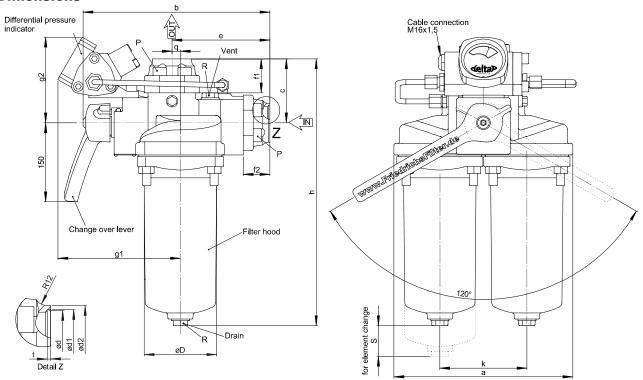
tech® Double Changeover

Series 4.221 Technical Data Sheet







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
50	G 2	45	36	61.0	74	3	welding
80	-	50	41	81.0	89	-	Welding flange

Filter dimensions

DN	Installation	а	b	С	е	h	k	øD	R	S≈	S≈	Р	q	g1	g2	Weight
	length key									[standard]	[inverted]			≈	≈	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 ¹ / ₄	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

Description

The filter is used to separate foreign particles from the particular medium (e.g. lubricating oil) and is designed for continuous filtration.

As a rule one filter chamber is operating while the other one stands full of liquid and has a clean filter element in reserve. If the operating filter element is very soiled, you can manually switch to the reserve filter element. An overlapping changeover between the two filter chambers ensures a continuous media flow.

After the changeover the soiled filter element must be removed, cleaned or replaced and re-inserted so that a reserve chamber is available for the next changeover process.

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.

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Series 4.221 Technical Data Sheet



Design data (continued)

DN	Installation length key	Smallest flow area	Total volume			
		[mm]	[dm³]			
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

Operating pressure: max. 16 bar (40 bar on request)

Operating temperature: max. 120°C

Flow rate data can be taken from the data sheet which is available separately (4.221-KV). Environment and medium must not have a negative influence on the materials used!

Materials

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

Filter hood: GK-AlSi12 (Cu) (alternatively St)

Filter element: see data sheet available separately (Filterelemente_4.121_221_225--TDB)

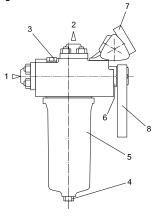
Differential pressure indicator: see data sheet available separately (5.02-TDB)

Seals: NBR (alternatively FPM)

bypass (optional): brass

Special materials on request

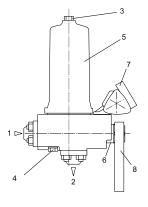
Layout



Inverted mounting (preferred design)

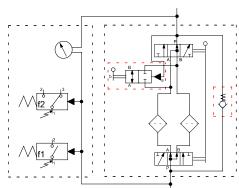
Legend:

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



upright mounting

Image



Type code (Order sample)

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TÜVRheinland

FRIEDRICHS FILTERSYSTEME GMBH

fluidtech® Double Changeover Filter

Series 4.221 Technical Data Sheet

The type code can be found on the type plate.



DF 5.02-**B50** 060 L2 BD 4.221 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 request our brochure. Pressure adjustment/limitation Ν without В bypass valve only BD bypass and pressure adjustment valve D pressure adjustment valve only Mounting direction Н Inverted mounting S upright mounting Sealing material Р NBR (Standard) V Other materials on request Installation length code Standard installation length (cast Aluminium filter L2 Other installation lengths on request (welded filter hoods) Filter mesh/medium 005 optimesh® wire mesh $5\mu m$ nominal , $10\mu m$ 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 optimesh® wire mesh 25μm nominal , 60μm absolute 025 040 optimesh® wire mesh 40μm nominal , 80μm absolute 060 optimesh® wire mesh 60μm nominal , 100μm 080 precimesh® wire mesh 80µm nominal, 150µm 100 precimesh® wire mesh 100μm nominal, 200μm precimesh® wire mesh 120μm nominal, 250μm 120 150 precimesh® wire mesh 150μm nominal, 300μm XXX Paper, glass fibre paper Connection nominal diameter/installation size DN [mm] 32 / 50 / 80 "B" marking was introduced gradually from 2014 2014 and in the transition phase until 2016, the "B" is missing. Series DF fluidtech® double changeover filter type 4.221

Stand: 02/2010

