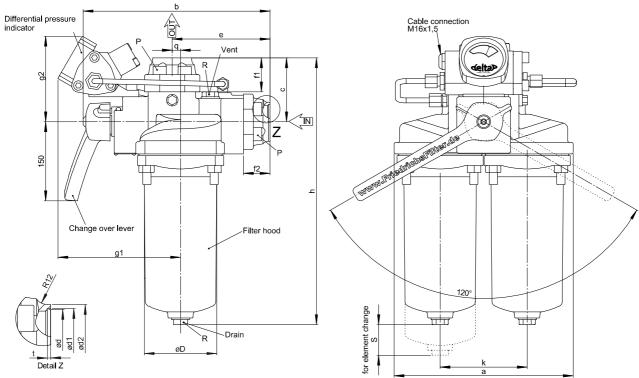
# idtech® Double Changeover

# **Series 4.221 Technical Data Sheet**







### Flange dimensions

_	gg-											
	DN	d	f1	f2	d1	d2	t	Remarks				
Г	32	G 1 <sup>1</sup> / <sub>4</sub>	41	32	42.2	47	2	Universal flange for screwing or				
	50	G 2	45	36	61.0	74	3	welding				
F	80	-	50	41	81.0	89	-	Welding flange				

### Filter dimensions

i itel ulliciisions																
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 97/23/EC and the German Equipment Safety Law.

4.221-TDB--rev3--en\_rev1.docx Stand: 02/2010



### FRIEDRICHS FILTERSYSTEME GMBH

# **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)

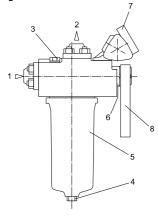
Differential pressure indicator: see data sheet available separately (5.02-TDB)

Seals: NBR (alternatively FPM)

brass bypass (optional):

Special materials on request

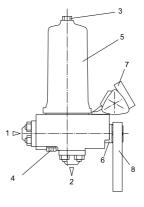
### Layout



Inverted mounting (preferred design)

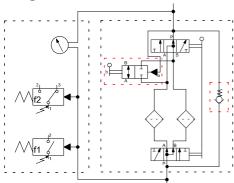
### Legend:

- 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**



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# fluidtech® Double Changeover Filter

# Series 4.221 Variants / Key to Type Code



Type code (Order sample)

4.221-KEY--rev2--en\_rev1.docx

The type cod	e can he	found	on the	tyne	nlate				
DF 4.221 -	<b>B50</b> .	060	L2 -	_	H.	PD	E 02 2 0	1	
DF 4.221 -	B50 .	060 .	LZ -	٧.	н.	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 request our
									brochure.
									Pressure adjustment/limitation
								N	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	FKM
								Other ma	terials on request
									Installation length code
								L2	Installation length code  Standard installation length (cast Aluminium filter hoods)
									tallation lengths on request (welded filter hoods)
								Other mist	taliation lengths on request (weided litter hoods)
									Filter mesh/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
									and the second discount of the second of the
								Со	nnection 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.
									,
									Sprips

Stand: 02/2010

DF 4.221 | fluidtech® double changeover filter type 4.221