

DAC INTERNATIONAL



Pressure Filter for Manifold **Mounting DFP and for** Reversible Flow DFPF up to 620

I/min, up to 315 bar

1. TECHNICAL **SPECIFICATIONS**

1.1 FILTER HOUSING Construction

The filter housings are designed in accordance with international regulations. They consist of a filter head and a screw-in filter bowl. DFPF filters are suitable for flow in both directions.

Standard equipment:

- connection for a clogging indicator
 two-piece bowl for DFP/F 990 and above (optional for DFP/F 660 and above)
- without bypass valve
- drain screw with pressure relief (standard for DFP/F 330 and above)

1.2 FILTER ELEMENTS

HYDAC 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:

20 bar Optimicron® (ON): Betamicron® (BH4HC): 210 bar Wire mesh (W): 20 bar Stainless steel fibre (V): 210 bar

1.4 FILTER SPECIFICATIONS

Nominal pressure	315 bar *
Fatigue strength	At nominal pressure 10 ₆ cycles (LC) from 0 to nominal pressure
Temperature range	-30 °C to +100 °C (-30 °C to -10 °C: p _{max} = 157.5 bar)
Material of filter head	EN-GJS 400-15
Material of filter bowl	Steel
Type of clogging indicator up to	VD (differential pressure measurement 420 bar operating pressure)
Pressure setting of the clogging indicator	DFP = 5 bar DFPF = 8 bar (others on request)
Bypass cracking pressure (optional)	6 bar (others on request)

1.4 SEALS

NBR (=Perbunan)

1.5 INSTALLATION

Pressure filter for manifold block mounting, with or without reversible oil

1.6 SPECIAL MODELS AND **ACCESSORIES**

- · Bypass valve built into the head
- · Seals in FPM, EPDM

1.7 SPARE PARTS

See Original Spare Parts List

1.8 CERTIFICATES AND APPROVALS

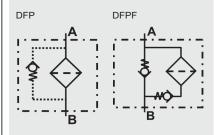
1.9 COMPATIBILITY WITH **HYDRAULIC FLUIDS ISO 2943**

- Hydraulic oils H to HLPD DIN 51524
- Lubrication oils DIN 51517, API, ACEA, DIN 51515, ISO 6743
- · Compressor oils DIN 51506
- Biodegradable operating fluids VDMA 24568 HETG, HEES, HEPG
- · Fire-resistant fluids HFA, HFB, HFC and HFD
- · Operating fluids with high water content (>50% water content) on request

1.10 IMPORTANT INFORMATION

- Filter housings must be earthed.
- When using visual clogging indicators, the BM version (visual with manual reset) only should be used.
- When using electrical clogging indicators, the electrical power supply to the system must be switched off before removing the clogging indicator connector

Symbol for hydraulic systems



Size 330 -660									
	with bypass	without bypass							
0–315 bar 9	5,000 LC	400,000 LC							
0–350 bar 8	0,000 LC	350,000 LC							

HYDAC 1



2. MC	DDEL C	ODE (also	ord	er ex	amp	ole)								DI	PO	N 60	Q B	10 E	<u>) 1</u> .	X /-
2.1 CO	MPLETE	FILTER	2			·															
Filter ty																					
DFP or																					
	naterial																				
	tmicron® BI cron® (BN4		Actal																		
fibre	CIOII® (DIV4	riic) v i	victai																		
W Wire																					
	filter or e 60, 110, 1		240	200 2	20 50	0 660		4220	`												
			240,	200, 3	30, 30	0, 000), 990	, 1320	,												
<u>Operat</u> Q	ing press = 315 bar																				
	nd size of		tion																		
Type P	ort	Filter																			
	~ 13.5				240 2	80 33	500	660 9	9 0 13	20											
B	Ø 17.5	•	•	•				-		-	+	_									
	1.4 •••										-	-									
D	Ø 41							•	•	•	•		•								
	on rating i 3, 5, 10, 15		I/HC	\/·		3 5	10, 2	0													
	50, 100, 10 50, 100, 20		i/11C,	٧.		3, 5,	10, 2	U													
Type of	f cloaaina	indicat	or																		
Y plasti	ic blanking	plug in	indica	tor poi	rt																
A steei BM visi	blanking p	iug in in	uicato																		
electric					or othe ee bro																
	al and elect	rical] 8	CE DIO	criure	110. 7	.000/													
Туре с																					
	piece filter		D/E o	CO +-	1220)																
	iece filter b	,	-P/F 6	000 (0	1320)																
	cation nun atest versio		ave e	ınnlied	1																_
			ays Si	applied	4																
ouppie	ementary of	SHETCH																			
R			nrece	uro (c	a P6 -	- 6 ha	r): \adi+	hout a	letaile	- varith	out h	21/22	ee vo	lve							
В. I	bypass c	racking	pressi	ure (e.	g. B6 =	= 6 ba	r); wit	hout o	letails	= with	nout b	oypa	ss va	lve							
L LED	bypass collight with 2 light-en	racking appropr nitting di	iate v odes	oltage up to 2	(24, 4 24 volts	8, 110 s	, 220	volts)		i	only fondica	or cl	oggin	g							
L LED SO184	bypass collight with 2 light-en pressure r	racking appropr nitting di	iate v odes	oltage up to 2	(24, 4 24 volts	8, 110 s	, 220	volts)		i	only fondica	or cl	oggin	g							
L LED SO184 V FPM	bypass collight with 2 light-en pressure reseals	racking appropr nitting di release/o	iate v odes oil dra	oltage up to 2 in scre	(24, 4 24 volts ew (sta	8, 110 s	, 220	volts)		i	only fondica	or cl	oggin	g							
L LED SO184 V FPM	bypass collight with 2 light-en pressure r	racking appropr nitting di release/o	iate v odes oil dra	oltage up to 2 in scre	(24, 4 24 volts ew (sta	8, 110 s	, 220	volts)		i	only fondica	or cl	oggin	g							
L LED SO184 V FPM	bypass collight with 2 light-en pressure reseals	racking appropr nitting di release/o	iate v odes oil dra	oltage up to 2 in scre	(24, 4 24 volts ew (sta	8, 110 s	, 220	volts)		i	only fondica	or cl	oggin	g							
L LED SO184 V FPM W suita	bypass co light with 2 light-en pressure r seals able for HF	racking appropr nitting di release/o	iate v odes oil dra FC en	oltage up to 2 in scre nulsior	(24, 4 24 volts ew (sta	8, 110 s	, 220	volts)		i	only fondica	or cl	oggin	g					000		
L LED SO184 V FPM W suita	bypass collight with 2 light-en pressure reseals	racking appropr nitting di release/o	iate v odes oil dra FC en	oltage up to 2 in scre nulsior	(24, 4 24 volts ew (sta	8, 110 s	, 220	volts)		i	only fondica	or cl	oggin	g				<u>0</u> (060 <u>r</u>	0 010	O ON
L LED SO184 V FPM W suita 2.2 RE Size	bypass of light with 2 light-en pressure r seals able for HF	racking appropr nitting di elease/d A and H	iate vodes odes oil dra FC en	oltage up to 2 in scre nulsior	(24, 4 24 volts ew (sta	8, 110 s ndard	for si	volts) ze DF	P/F 3] i 30 and	only fondica	or cl	oggin	g				0(060 [0 010	ON
L LED SO184 V FPM W suita 2.2 RE Size 0060, 0	bypass co light with 2 light-en pressure r seals able for HF	racking appropr nitting di elease/d A and H	iate vodes odes oil dra FC en	oltage up to 2 in scre nulsior	(24, 4 24 volts ew (sta	8, 110 s ndard	for si	volts) ze DF	P/F 3] i 30 and	only fondica	or cl	oggin	g				0	060 Γ	0 010	O ON
L LED SO184 V FPM W suita 2.2 RE Size	bypass of light with 2 light-en pressure r seals able for HF	racking appropr nitting di elease/d A and H	iate vodes odes oil dra FC en	oltage up to 2 in scre nulsior	(24, 4 24 volts ew (sta	8, 110 s ndard	for si	volts) ze DF	P/F 3] i 30 and	only fondica	or cl	oggin	g				0.	060 [0 010	ON
L LED SO184 V FPM W suita 2.2 RE Size 0060, 0 Type D	bypass of light with 2 light-en pressure r seals able for HF.	racking approprintling di release/o A and H ENT EL , 0160, 0	iate vodes oil dra FC en	oltage up to 2 in scre nulsion NT	(24, 4 24 volts ew (sta	8, 110 s ndard	for si	volts) ze DF	P/F 3] i 30 and	only fondica	or cl	oggin	g				0	060 [0 010) ON
L LED SO184 V FPM W suita 2.2 RE Size 0060, 0 Type D Filtratio ON: 00	bypass of light with 2 light-en pressure r seals able for HF. PLACEMI 110, 0140, on range i 1, 003, 003	racking approprintting displease/of A and High ENT EL (0160, Control of the contr	iate vodes oil dra FC en EME	oltage up to 2 in scre nulsion NT	(24, 4 24 volts ew (sta	8, 110 s ndard	for si	volts) ze DF	P/F 3] i 30 and	only fondica	or cl	oggin	g				0.	060 [0 010) ON
L LED SO184 V FPM W suita 2.2 RE Size 0060, 0 Type D Tiltratio ON: 000 BH4HO	bypass of light with 2 light-en pressure r seals able for HF. 2 PLACEMI 2110, 0140, 2110, 0140, 2110, 003, 003, 003, 003, 003, 003, 003,	racking appropriating dispersed to the second to the secon	iate vodes oil dra FC en EME	oltage up to 2 in scre nulsion NT	(24, 4 24 volts ew (sta	8, 110 s ndard	for si	volts) ze DF	P/F 3] i 30 and	only fondica	or cl	oggin	g				0	0000	0 010	ON ON
L LED SO184 V FPM W suita 2.2 RE Size 0060, 0 Type D Filtratio ON: 00 B W: 025 Filter n	bypass of light with 2 light-en pressure r seals able for HF/0110, 0140, 0110, 003, 005, V: 003, 00, 0, 000, naterial	racking appropriating disperses of the control of t	iate vodes oil dra FC en EME	oltage up to 2 in scre nulsion NT	(24, 4 24 volts ew (sta	8, 110 s ndard	for si	volts) ze DF	P/F 3] i 30 and	only fondica	or cl	oggin	g				0	060 [0 010) ON
L LED SO184 V FPM W suita 2.2 RE Size 0060, 0 Type D Filtratic ON: 00 BH4HC W: 025, Filter m ON, BH	bypass of light with 2 light-en pressure r seals able for HF/20110, 0140, 0110, 0140, 0110, 003, 003, v: 003, 003, v: 003, 100, naterial 14HC, V, W	racking approprintting direlease/o A and H ENT EL , 0160, 0 n µm 5, 010, 0 200	iate vodes oil dra FC en EME	oltage up to 2 in scre nulsion NT	(24, 4 24 volts ew (sta	8, 110 s ndard	for si	volts) ze DF	P/F 3] i 30 and	only fondica	or cl	oggin	g				0	000 [0 010) ON
L LED SO184 V FPM W suita 2.2 RE Size 0060, 0 Type D Filtratio ON: 00 BH4HC W: 025 Filter n ON, BH Supple	bypass of light with 2 light-en pressure r seals able for HF. PLACEMI 110, 0140, on range i 1, 003, 005, V: 003, 0, 050, 100, naterial 14HC, V, Wementary of light with the property	racking appropriating dispersed to the control of t	iate vodes odes oil dra FC en EME 0240, 015, 00	oltage up to 2 in scre nulsion NT 0280,	(24, 4 24 volts ew (sta	8, 110 s ndard	for si	volts) ze DF	P/F 3] i 30 and	only fondica	or cl	oggin	g				0.	000 [0 010	ON
L LED SO184 V FPM W suita 2.2 RE Size 0060, 0 Type D Filtratio ON: 00 BH4HC W: 025 Filter n ON, BH Supple	bypass of light with 2 light-en pressure r seals able for HF/20110, 0140, 0110, 0140, 0110, 003, 003, v: 003, 003, v: 003, 100, naterial 14HC, V, W	racking appropriating dispersed to the control of t	iate vodes odes oil dra FC en EME 0240, 015, 00	oltage up to 2 in scre nulsion NT 0280,	(24, 4 24 volts ew (sta	8, 110 s ndard	for si	volts) ze DF	P/F 3] i 30 and	only fondica	or cl	oggin	g				0	060	0 010) ON
L LED SO184 V FPM W suita 2.2 RE Size 0060, 0 Type D Filtratio ON: 00 BH4HC W: 025 Filter n ON, BH Supple	bypass of light with 2 light-en pressure r seals able for HF. PLACEMI 110, 0140, on range i 1, 003, 005, V: 003, 0, 050, 100, naterial 14HC, V, Wementary of light with the property	racking appropriating dispersed to the control of t	iate vodes odes oil dra FC en EME 0240, 015, 00	oltage up to 2 in scre nulsion NT 0280,	(24, 4 24 volts ew (sta	8, 110 s ndard	for si	volts) ze DF	P/F 3] i 30 and	only fondica	or cl	oggin	g				0	060 [0 010) ON
L LED SO184 V FPM W suita 2.2 RE Size 00600, 0 Type D Filtratic ON: 00 BH4HC W: 025 Filter n ON, BH Supple V, W (fc	bypass of light with 2 light-en pressure r seals able for HF. PLACEMI On range i 1, 003, 003, 003, 005, 100, naterial HHC, V, Wementary or descripti	racking appropriating dispersed to the second of the secon	iate v odes odes of the control of	oltage up to 2 in screenulsion NT 0280, 20	(24, 4 24 volts ew (stans	8, 110 s ndard	for si	volts) ze DF	P/F 3] i 30 and	only fondica	or cl	oggin	g							
L LED SO184 V FPM W suita 2.2 RE Size 00600, 0 Type D Filtratio ON: 00 BH4HC W: 025 Filter n ON, BH Supple V, W (fo	bypass of light with 2 light-en pressure r seals able for HF. PLACEMI 110, 0140, on range i 1, 003, 005, V: 003, 0, 050, 100, naterial 14HC, V, Wementary of light with the property	racking appropriating dispersed to the second of the secon	iate v odes odes of the control of	oltage up to 2 in screenulsion NT 0280, 20	(24, 4 24 volts ew (stans	8, 110 s ndard	for si	volts) ze DF	P/F 3] i 30 and	only fondica	or cl	oggin	g					060 C		
L LED SO184 V FPM W suita 2.2 RE Size 0060, 0 Type D Filtratic ON: 00 BH4HC W: 025 Filter n ON, BH Supple V, W (fo	bypass of light with 2 light-en pressure r seals able for HF. PLACEMI 110, 0140. on range i 1, 003, 003, 003, 050, 100, noto, aterial 14HC, V, Wementary or descripti	racking appropriating dispersed to the control of t	iate v odes odes oil dra FC en EME 2240, 015, 00, 020	oltage up to 2 iin scre nulsion NT 0280, 20 t 2.1)	024, 4 24 volts w (stans)	0500,	0660	volts)	P/F 3] i i i i i i i i i i i i i i i i i i i	only fondica	or cl	oggin	g							
L LED SO184 V FPM W suita 2.2 RE Size 0060, 0 Type D Filtratio ON: 005 Filter n ON, BH Supple V, W (fc	bypass of light with 2 light-en pressure r seals able for HF. PLACEMI 110, 0140, on range i 1, 003, 005, 0050, 100, notor ial 14HC, V, Wementary or descripti	racking appropriating disperses (A and H) ENT EL , 0160, 0 n µm 5, 010, 0 200 / details ons, see	iate v odes odes odes of the control of the contro	oltage up to 2 in screenulsion NT 0280, t 2.1)	024, 4 24 volts w (stans)	0500,	0660	volts)	P/F 3] i i i i i i i i i i i i i i i i i i i	only fondica	or cl	oggin	g							
L LED SO184 V FPM W suita 2.2 RE Size 0060, 0 Type D Filtratic ON: 000 BH4HC W: 025. Filter n ON, BH Supple V, W (fo	bypass of light with 2 light-en pressure r seals able for HF. PLACEMI 110, 0140. on range i 1, 003, 003, 003, 050, 100, noto, aterial 14HC, V, Wementary or descripti	racking appropriating disperses (A and H) ENT EL , 0160, 0 n µm 5, 010, 0 200 / details ons, see	iate v odes odes odes of the control of the contro	oltage up to 2 in screenulsion NT 0280, t 2.1)	024, 4 24 volts w (stans)	0500,	0660	volts)	P/F 3] i i i i i i i i i i i i i i i i i i i	only fondica	or cl	oggin	g							
L LED SO184 V FPM W suita 2.2 RE Size 0060, 0 Type D Filtratic ON: 00 BW: 025 Filter n ON, BH Supple V, W (fc 2.3 REI Type VD di Pressu DFP filt 8 stand	bypass of light with 2 light-en pressure r seals able for HF. PLACEMI 110, 0140. on range i 1, 003, 003, 003, 050, 100, notorial 4HC, V, Wementary of the control of the	racking appropriating dispersed to the control of t	iate v odes odes obil dra FC en EME 2240, 115, 0.0 occion odes obil dra indica occion odes occion occiona occion	oltage up to 2 iin scre nulsion NT 0280, 20 t 2.1) NG INI attor up or	024, 4 24 volts ew (stans) 0330,	88, 1100 s s nndard	0660	volts)	P/F 3] i i i i i i i i i i i i i i i i i i i	only fondica	or cl	oggin	g							
L LED SO184 V FPM W suita 2.2 RE Size 0060, 0 Type D Filtratic ON: 00 BH4HC W: 025 Filter n ON, BH Supple V, W (fc 2.3 REI Type VD di Pressu DFP filt 8 stand Type o	bypass of light with 2 light-en pressure r seals able for HF. PLACEMI 110, 0140. 110, 0140. 110, 03, 003. 110, 003, 003.	racking appropriating dispersed to the control of t	iate v odes odes obil dra FC en EME 2240, 115, 0.0 occion odes obil dra indica occion odes occion occiona occion	oltage up to 2 iin scre nulsior NT 0280, 20 t 2.1) NG INI attor up or	024, 4 24 volts ew (stans) 0330,	88, 1100 s s nndard	0660	volts)	P/F 3] i i i i i i i i i i i i i i i i i i i	only fondica	or cl	oggin	g							
L LED SO184 V FPM W suita 2.2 RE Size 0060, 0 Type D Filtratio ON: 000 BH4HC W: 025 Filter n ON, Bh Supple V, W (fc	bypass of light with 2 light-en pressure r seals able for HF. PLACEMI On range in 1, 003, 003, 050, 100, 100, 100, 100, 100, 100, 100	racking appropriating disperses of the control of t	iate v odes odes obil dra FC en EME 2240, 115, 0.0 occion odes obil dra indica occion odes occion occiona occion	oltage up to 2 iin scre nulsior NT 0280, 20 t 2.1) NG INI attor up or	024, 4 24 volts ew (stans) 0330,	88, 1100 s s nndard	0660	volts)	P/F 3] i i i i i i i i i i i i i i i i i i i	only fondica	or cl	oggin	g							
L LED SO184 V FPM W suita 2.2 RE Size 0060, 0 Type D Filtratio ON: 00 BH4HC W: 025 Filter n ON, BH Supple V, W (fo	bypass of light with 2 light-en pressure r seals able for HF. PLACEMI On range i 1,003,006 c, V:003,0 c, 050,100, naterial HHC, V, Wementary or description or description of the control of the contro	racking appropriating dispersion of the control of	iate vodes odes of the control of th	oltage up to 2 in scre nulsior NT 0280, 20 t 2.1) NG INI ator up or arother	024, 4 24 volts ew (stans) 0330,	88, 1100 s s nndard	0660	volts)	P/F 3] i i i i i i i i i i i i i i i i i i i	only fondica	or cl	oggin	g							
L LED SO184 V FPM W suita 2.2 RE Size 0060, 0 Type D Filtratic ON: 00 BW: 025 Filter n ON, BH Supple V, W (fc 2.3 REI Type VD di Pressu DFP filt 8 stand Type o D (see Modific X the la Supple	bypass of light with 2 light-en pressure r seals able for HF. PLACEMI 110, 0140. 110, 0140. 110, 03, 003. 110, 003, 003.	racking appropriating displayed appropriating displayed and Hill ENT EL. 0160, 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	iate vodes odes object of the control of the contro	oltage up to 2 in scre nulsion NT 0280, 20 t 2.1) NG INI ator up or	OCATO OCATO OCATO OCATO	0500, OR Obar o	0660	volts)	P/F 3] i i i i i i i i i i i i i i i i i i i	only fondica	or cl	oggin	g							
L LED SO184 V FPM W suita 2.2 RE Size 0060, 0 Type D Filtratic ON: 00 BW: 025 Filter n ON, BH Supple V, W (fc 2.3 REI Type VD di Pressu DFP filt 8 stand Type o D (see Modific X the la Supple	bypass of light with 2 light-en pressure r seals able for HF. PLACEMI On range i 1, 003, 003, 005, 050, 100, naterial 4HC, V, Wementary cor description of the light of the	racking appropriating displayed appropriating displayed and Hill ENT EL. 0160, 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	iate vodes odes obil dra FC en EME D240, D15, 00 DGGIN indicate of control of the	oltage up to 2 in scre nulsion NT 0280, 20 t 2.1) NG INI ator up or	OCATO OCATO OCATO OCATO	0500, OR Obar o	0660	volts)	P/F 3] i i i i i i i i i i i i i i i i i i i	only fondica	or cl	oggin	g							
L LED SO184 V FPM W suita 2.2 RE Size 0060, 0 Type D Filtratic ON: 00 BW: 025 Filter n ON, BH Supple V, W (fc 2.3 REI Type VD di Pressu DFP filt 8 stand Type o D (see Modific X the la Supple	bypass of light with 2 light-en pressure r seals able for HF. PLACEMI 110, 0140. 110, 0140. 110, 03, 003. 110, 003, 003.	racking appropriating displayed appropriating displayed and Hill ENT EL. 0160, 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	iate vodes odes obil dra FC en EME D240, D15, 00 DGGIN indicate of control of the	oltage up to 2 in scre nulsion NT 0280, 20 t 2.1) NG INI ator up or	OCATO OCATO OCATO OCATO	0500, OR Obar o	0660	volts)	P/F 3] i i i i i i i i i i i i i i i i i i i	only fondica	or cl	oggin	g							
L LED SO184 V FPM W suita 2.2 RE Size 0060, 0 Type D Filtratic ON: 00 BW: 025 Filter n ON, BH Supple V, W (fc 2.3 REI Type VD di Pressu DFP filt 8 stand Type o D (see Modific X the la Supple	bypass of light with 2 light-en pressure r seals able for HF. PLACEMI 110, 0140. 110, 0140. 110, 03, 003. 110, 003, 003.	racking appropriating displayed appropriating displayed and Hill ENT EL. 0160, 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	iate vodes odes obil dra FC en EME D240, D15, 00 DGGIN indicate of control of the	oltage up to 2 in scre nulsion NT 0280, 20 t 2.1) NG INI ator up or	OCATO OCATO OCATO OCATO	0500, OR Obar o	0660	volts)	P/F 3] i i i i i i i i i i i i i i i i i i i	only fondica	or cl	oggin	g							
L LED SO184 V FPM W suita 2.2 RE Size 0060, 0 Type D Filtratic ON: 00 BW: 025 Filter n ON, BH Supple V, W (fc 2.3 REI Type VD di Pressu DFP filt 8 stand Type o D (see Modific X the la Supple	bypass of light with 2 light-en pressure r seals able for HF. PLACEMI 110, 0140. 110, 0140. 110, 03, 003. 110, 003, 003.	racking appropriating displayed appropriating displayed and Hill ENT EL. 0160, 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	iate vodes odes obil dra FC en EME D240, D15, 00 DGGIN indicate of control of the	oltage up to 2 in scre nulsion NT 0280, 20 t 2.1) NG INI ator up or	OCATO OCATO OCATO OCATO	0500, OR Obar o	0660	volts)	P/F 3] i i i i i i i i i i i i i i i i i i i	only fondica	or cl	oggin	g							



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:

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

 $\begin{array}{l} \Delta p_{\text{housing}} = (\text{see Point 3.1}) \\ \Delta p = Q & \underline{SK^* \cdot \text{viscosity}} \\ \text{element} & 1000 & 30 \\ \text{(*see Point 3.2)} \end{array}$

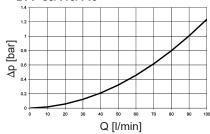
For ease of calculation, our Filter Sizing Program is available on request free of charge.

NEW: Sizing online at www.hydac.com

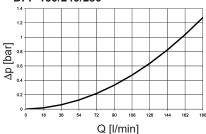
3.1 Δ p-Q HOUSING CURVES BASED ON ISO 3968

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.

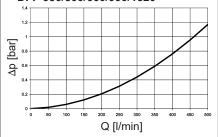
DFP 60/110/140



DFP 160/240/280



DFP 330/500/660/990/1320



DFPF $\Delta \text{p-Q}$ housing curves on request

3.2 GRADIENT COEFFICIENTS (SK) FOR FILTER ELEMENTS

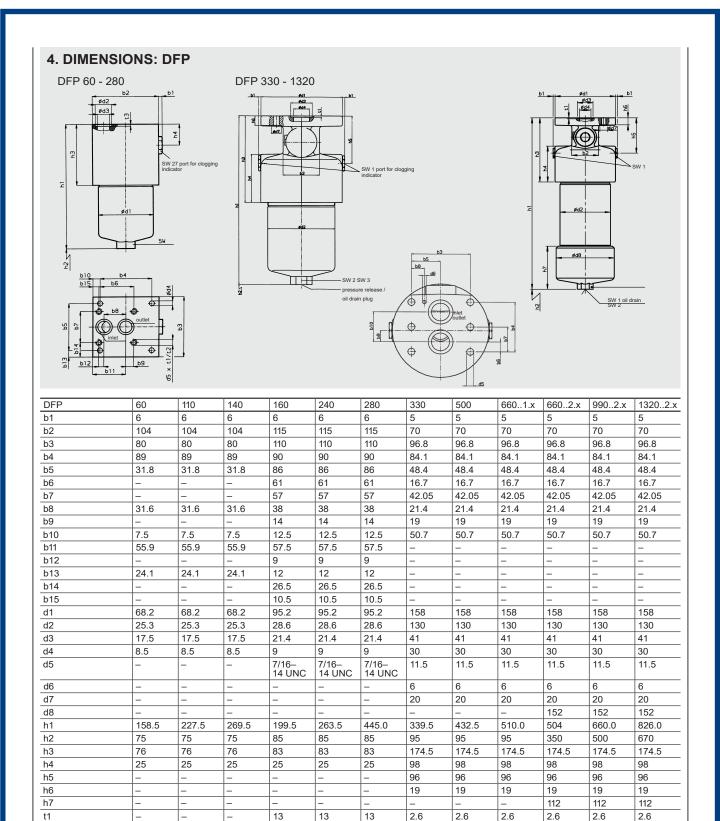
The gradient coefficients in mbar/(l/min) apply to mineral oils with a kinematic viscosity of 30 mm²/s. The pressure drop changes proportionally to the change in viscosity.

DFP/	ON 1				,	
DFPF	μm	3 µm	5 µm	10 µm	15 µm	20 µm
60	53.5	26.0	18.3	12.1	9.78	6.32
110	25.8	13.4	9.61	6.06	4.63	2.99
140	19.9	11.5	7.39	4.38	3.54	2.29
160	18.5	11.0	7.70	4.10	3.71	3.18
240	11.5	6.90	5.34	3.19	2.44	2.10
280	5.54	3.37	2.74	1.49	1.36	1.17
330	8.23	4.19	3.37	2.46	1.55	1.22
500	5.05	2.57	2.07	1.23	0.95	0.75
660	3.78	1.93	1.56	0.93	0.71	0.56
990	2.51	1.28	1.03	0.61	0.47	0.37
1320	1.85	0.97	0.76	0.45	0.35	0.27

DFP/	٧				W	ВН4НС			
DFPF	3 µm	5 µm	10 µm	20 µm	_	3 µm	5 µm	10 µm	20 µm
60	16.0	11.0	6.5	3.3	0.757	58.6	32.6	18.1	12.2
110	8.3	6.0	4.2	2.1	0.413	25.4	14.9	8.9	5.6
140	8.3	6.0	4.2	2.1	0.413	25.4	14.9	8.9	5.6
160	4.5	3.2	2.3	1.4	0.284	16.8	10.4	5.9	4.4
240	3.2	2.4	1.9	1.1	0.189	10.6	6.8	3.9	2.9
280	1.5	1.2	1.0	0.8	0.162	5.7	3.4	1.8	1.6
330	2.1	1.5	1.3	0.8	0.138	7.7	4.5	2.8	2.0
500	1.4	1.0	0.8	0.5	0.091	4.2	2.6	1.5	1.2
660	1.1	0.9	0.6	0.3	0.069	3.3	1.9	1.0	0.9
990	0.7	0.5	0.4	0.3	0.046	2.2	1.3	0.8	0.6
1320	0.6	0.5	0.3	0.2	0.035	1.6	1.0	0.6	0.4

E 7.551.12/11.16





E 7.551.12/11.16

4 | (HYDAC)

t2

t3

SW

SW1

SW₂

SW 3

Weight incl. element [kg] Volume of pressure

chamber [l]

27

5.1

0.20

18

32

9.1

0.60

2

27

6.6

0.40

27

6.0

0.33

18

32

10.4

0.80

18

32

14.7

1.60

27

36

10

21.0

1.50

27

36

10

25.5

2.30

27

36

10

29.0

3.00

27

36

10

32.0

3.00

27

36

10

39.2

4.20

27

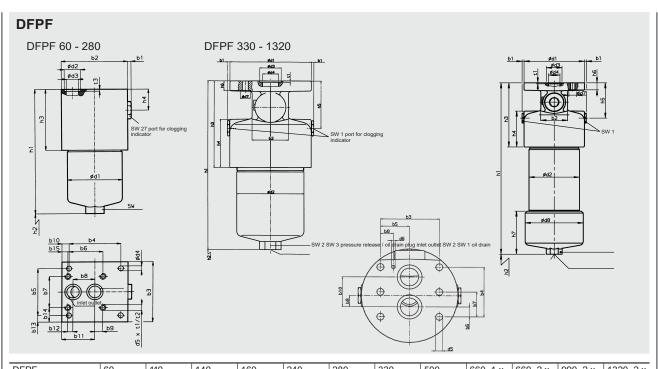
36

10

47.1

5.60

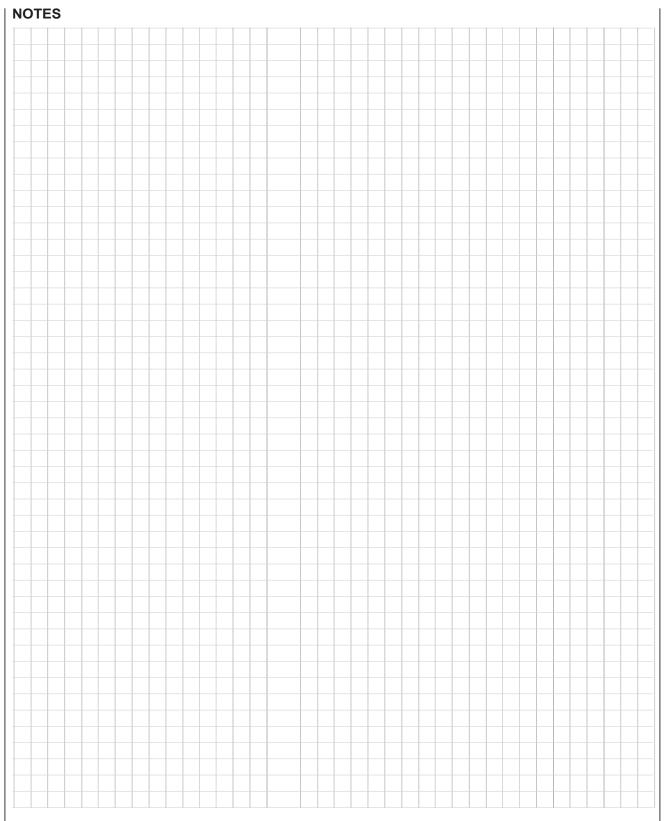




DFPF	60	110	140	160	240	280	330	500	6601.x	6602.x	9902.x	13202.x
b1	6	6	6	6	6	6	5	5	5	5	5	5
b2	104	104	104	120	120	120	70	70	70	70	70	70
b3	80	80	80	110	110	110	96.8	96.8	96.8	96.8	96.8	96.8
b4	89	89	89	90	90	90	84.1	84.1	84.1	84.1	84.1	84.1
b5	31.8	31.8	31.8	86	86	86	48.4	48.4	48.4	48.4	48.4	48.4
b6	_	_	_	61	61	61	16.7	16.7	16.7	16.7	16.7	16.7
b7	_	_	_	57	57	57	42.05	42.05	42.05	42.05	42.05	42.05
b8	31.6	31.6	31.6	38	38	38	21.4	21.4	21.4	21.4	21.4	21.4
b9	_	_	_	14	14	14	19	19	19	19	19	19
b10	7.5	7.5	7.5	17.5	17.5	17.5	50.7	50.7	50.7	50.7	50.7	50.7
b11	55.9	55.9	55.9	62.5	62.5	62.5	_	_	_	-	_	
b12	_	_	_	9	9	9	-	_	_	-	_	_
b13	24.1	24.1	24.1	12	12	12	-	_	_	-	_	_
b14	_	_	_	26.5	26.5	26.5	_	_	_	_	_	_
b15	_	_	_	15.5	15.5	15.5	_	_	_	_	_	_
<u>d1</u>	68.2	68.2	68.2	95.2	95.2	158	158	158	158	158	158	158
d2	25.3	25.3	25.3	28.6	28.6	28.6	130	130	130	130	130	130
d3	17.5	17.5	17.5	21.4	21.4	21.4	41	41	41	41	41	41
<u>d4</u>	8.5	8.5	8.5	9	9	9	30	30	30	30	30	30
d5	-	_	-	7/8– 14 UNC	7/8– 14 UNC	7/8– 14 UNC	11.5	11.5	11.5	11.5	11.5	11.5
d6	_	_	_	-	-	_	6	6	6	6	6	6
d7	_	_	_	-	-	_	20	20	20	20	20	20
d8	_	_	_	_	-	_	_	_	_	152	152	152
h1	158.5	227.5	269.5	206.5	266.5	448.5	339.5	432.5	510.0	504	660.0	826.0
h2	75	75	75	85	85	85	95	95	95	350	500	670
h3	76	76	76	90	90	90	174.5	174.5	174.5	174.5	174.5	174.5
h4	21	21	21	32	32	32	98	98	98	98	98	98
h5	_	_	_	_	_	_	96	96	96	96	96	96
h6	_	_	_	_	_	_	19	19	19	19	19	19
h7	_	_	_	_	_	_	_	_	_	112	112	112
t1	-	_	_	13	13	13	2.6	2.6	2.6	2.6	2.6	2.6
t2	-	_	-	18	18	18	_	-	-	-	-	_
t3	2	2	2	2	2	2	-	_	-	-	-	_
SW	27	27	27	32	32	32	-	_	_	-	-	_
SW1	-	_	-	-	-	_	27	27	27	27	27	27
SW2	-	_	_	-	-	_	36	36	36	36	36	36
SW 3	-	_	-	_	_	_	10	10	10	10	10	10
Weight incl. element [kg]	5.1	6.0	6.6	9.1	10.4	14.7	21.0	25.5	29.0	32.0	39.2	47.1
Volume of pressure chamber [I]	0.20	0.33	0.40	0.60	0.80	1.60	1.50	2.30	3.00	3.00	4.20	5.60

E 7.551.12/11.16





NOTE

The information in this brochure relates to the operating conditions and applications

The information in this prochure relates to described.
For applications or operating conditions no technical department. For applications or contact the relevant technical department.
All technical details are subject to change. For applications or operating conditions not described, please contact the relevant technical department. For applications or operating conditions not described please

6 | HYDAC