

INTERNORMEN

Hydraulic and Lubrication Filters



internormen 
 filter technology



Filter Types

Filter from **INTERNORMEN Technology** can be used for mineral oils, emulsions and for most synthetic hydraulic fluids and lubrication oils. If applying other liquids please contact us.

Approval can be conducted through TÜV, the "Shipyard Classification Societies" eg.: D.N.V., BV, GL, L.R.S., S.A., R.I.N.A., A.B.S., P.R.S., USS. R.S. and others. Furthermore we refer to our coarse filter types GFK and DGFK according to data sheet no. 3005, 3006 and 3109, which in addition could be used for water filtration.

Tank Mounted Return-Line Filters

for hydraulic systems. Mounting is on the top of the reservoir with the outlet port returning to the reservoir.

model no.	port size	working pressure	filtration area square inch		data sheet no.
			wire mesh	glass fibre	
RF 210	-20 SAE	145	275	508	1102
RF 320	-20 SAE	145	479	708	1102
TRW 310	-20 SAE	145	479	708	1068
TEF 41	-8 SAE	145	81	124	1040
TEFB 41	-8 SAE	145	81	124	1041
TEF 55	-8 SAE	145	135	230	1002
TEFB 55	-8 SAE	145	135	230	1061
TEF 70	-12 SAE	145	135	230	1002
TEFB 70	-12 SAE	145	135	230	1061
TEF 120	-16 SAE	145	142	257	1002
TEFB 120	-16 SAE	145	142	257	1061
TEF 210	-20 SAE	145	275	508	1002
TEFB 210	-16 SAE	145	275	508	1062
TEF 310	-20 SAE	145	479	708	1002
TEFB 310	-16 SAE	145	479	708	1062
TEF 320	-24 SAE	145	479	708	1002
TEF 426	SAE 1 1/2"	145	599	958	1043
TEF 625	SAE 2"	145	684	1264	1042
TEF 952	SAE 3"	145	1030	2232	1060
TEF 1652	SAE 4"	145	2052	3792	1056
TEF 2551	SAE 5"	145	3090	6696	1015
TEF 4801	ANSI 6"	145	6920	11172	1058
TEF 7201	ANSI 8"	145	10380	16758	1058

Please request our separate data sheets for DTEF-Mounted Return-Line Filters, change - over.

Return-Line Filters with suction connection

for mobile hydraulic with minimum two hydraulic circuits.

model no.	port size	working pressure	filtration area square inch		data sheet no.
			wire mesh	glass fibre	
TNRS 101	2x -16 SAE, 1x -12 SAE	145	266	403	1070
TRS 226	3x -20 SAE	145	772	887	1065
TRS 625	SAE 2"	145	684	1168	1066

Pressure Filters, change - over

for hydraulic and lubrication oil. Can be mounted in suction, pressure or return lines (see also on the next page).

model no.	port size	working pressure	filtration area * square inch		data sheet no.
			wire mesh	glass fibre	
MDD 40	-8 SAE	2900	86	119	2516
MDD 63	-12 SAE	2900	143	196	2516
HDD 30	-10 SAE	4568	64	76	2510
HDD 61	-16 SAE	4568	81	124	2517
HDD 91	-16 SAE	4568	134	207	2517
HDD 151	-16 SAE	4568	224	346	2517
HDD 170	SAE 1 1/2"	4568	193	309	2514
HDD 240	SAE 1 1/2"	4568	248	401	2514
HDD 360	SAE 1 1/2"	4568	340	547	2514
HDD 450	SAE 1 1/2"	4568	462	744	2514
HDD 601	SAE 2" Avit 2"	4568	534	869	2525
HDD 901	SAE 2" Avit 2"	4568	772	1253	2525
HDD 1351	SAE 2" Avit 2"	4568	1149	2006	2525

* filtration area per each filter-side



We get it to the light!
Measuring with our Contamination Control System
CCS 2.

Pressure Filters, change - over

for hydraulic and lubrication oil. Flow path through the filter can be changed to either of the two chambers. The dirty element can be serviced or changed while in the "off" position without interrupting the operation. Can be mounted in suction, pressure or return lines.

model no.	port size	working pressure	filtration area *		data sheet no.
			wire mesh	glass fibre	
DU 63	-12 SAE	464	143	196	2121
DU 101	SAE 1 1/4"	464	248	329	2117
DU 251	SAE 2"	464	476	725	2117
DU 401	SAE 2"	464	779	1180	2117
DU 631	SAE 2 1/2"	464	930	1547	2118
DU 635	SAE 2 1/2"	464	930	1547	2128
DUV 635	SAE 2 1/2"	464	930	1547	2146
DU 1001	SAE 3"	464	2004	3429	2118
DU 1050	SAE 4"	464	2004	3429	2119
DUV 1050	SAE 4"	464	2004	3429	2147
DU 1950	SAE 3"	464	4008	6858	2118
DU 2005	SAE 5"	464	2724	4593	2153
DUV 2005	SAE 5"	464	2724	4593	2154
DU 2050	SAE 4"	464	4008	6858	2147
DUV 2050	SAE 4"	464	4008	6858	2119
DU 3005	SAE 5"	464	4084	6889	2153
DUV 3005	SAE 5"	464	4084	6889	2154
DU 4005	SAE 5"	464	5647	9185	2153
DUV 4005	SAE 5"	464	5647	9185	2154
DSF 176	SAE 1 1/2", -24 SAE	363	217	392	2148
DSF 331	SAE 1 1/2", -24 SAE	363	383	706	2148
DSF 1201	ANSI 2", 2 1/2", 3", 4"	232	1730	2793	2133
DSF 1205	ANSI 2", 2 1/2", 3", 4" SAE 2", 2 1/2", 3", 4"	232	1730	2793	2134
DSF 2001	ANSI 2 1/2", 3", 4", 5"	232	2724	4593	2133
DSF 2005	ANSI 2 1/2", 3", 4", 5" SAE 2 1/2", 3", 4", 5"	232	2724	4593	2134
DSF 2401	ANSI 2 1/2", 3", 4", 5", 6"	232	3460	5586	2133
DSF 2405	ANSI 2 1/2", 3", 4", 5" SAE 2 1/2", 3", 4", 5"	232	3460	5586	2134
DSF 3005	ANSI 2 1/2", 3", 4", 5" SAE 2 1/2", 3", 4", 5"	232	4084	6889	2134
DSF 3601	ANSI 3", 4", 5", 6"	232	5190	8379	2133
DSF 3605	ANSI 3", 4", 5", 6" SAE 3", 4", 5", 6"	232	5190	8379	2134
DSF 4001	ANSI 2 1/2", 3", 4", 5"	232	5448	9186	2133
DSF 4005	ANSI 2 1/2", 3", 4", 5" SAE 2 1/2", 3", 4", 5"	232	5448	9186	2134
DSF 4801	ANSI 4", 5", 6", 8"	232	6920	11172	2133
DSF 4805	ANSI 4", 5", 6", 8" SAE 4", 5", 6", 8"	232	6920	11172	2134
DSF 6001	ANSI 4", 5", 6", 8"	232	8172	13779	2133
DSF 6005	ANSI 4", 5", 6", 8" SAE 4", 5", 6", 8"	232	8172	13779	2134
DSF 10001	ANSI 5", 6", 8"	232	13620	22965	2133
DSF 10005	ANSI 5", 6", 8" SAE 5", 6", 8"	232	13620	22965	2134
DNR 1001	ANSI 2", 2 1/2", 3", 4"	232	2004	3429	2135
DNR 2001	ANSI 3", 4", 5", 6"	232	4008	6858	2135
DNR 2201	ANSI 3", 4", 5", 6"	232	4008	6858	2135
DNR 3001	ANSI 4", 5", 6", 8"	232	6012	10287	2135
DNR 4001	ANSI 4", 5", 6", 8"	232	8016	13716	2135
DNR 4201	ANSI 3", 4", 5", 6", 8"	232	8016	13716	2135
DNR 6201	ANSI 4", 5", 6", 8", 10"	232	12024	20574	2135
DNR 8201	ANSI 4", 5", 6", 8"	232	16032	27432	2135
DA 100	SAE 1", ANSI 1"	580	231	313	2152
DA 250	SAE 2", ANSI 2"	580	476	725	2155
DNA 250	SAE 2", ANSI 2"	232	794	1215	2137
DA 400	SAE 2", ANSI 2"	580	806	1180	2155
DNA 400	SAE 2 1/2", ANSI 2 1/2"	232	1155	1408	2137
DA 630	SAE 3", ANSI 3"	580	930	1547	2156
DNA 630	SAE 2 1/2", ANSI 2 1/2"	232	1871	2280	2137
DA 1000	SAE 3", ANSI 3"	580	1248	2443	2156
DNA 1050	SAE 4", ANSI 4"	232	2004	3429	2138
DNA 2050	SAE 4", ANSI 4"	232	4008	6858	2138

* filtration area per each filter-side



DU 63

DU 251



DU 1050

DSF 331



DSF 3601



DNA 630

Filter testing and quality control according to ISO standards.

Pressure Filters

for hydraulic and lubrication oil. For mounting in suction, pressure and return lines.

model no.	port size	working pressure	filtration area square inch		data sheet no.
			PSI	wire mesh	
LF 63	-12 SAE	363	143	196	1109
LF 101	-16 SAE	464	248	329	1125
LF 251	SAE 1 1/2"	464	476	725	1117
LF 401	SAE 2"	464	779	1180	1117
LF 631	SAE 2 1/2"	464	930	1547	1117
LF 1001	SAE 3"	464	2004	3429	1117
LF 1100	SAE 5"	464	2004	3429	1117
LF 1201	ANSI 2", 2 1/2", 3", 4"	145	1730	2793	1118
LF 1211		232			1127
LF 1950	SAE 3"	464	4008	6858	1119
LF 2001	ANSI 2 1/2", 3", 4", 5"	145	2724	4593	1118
LF 2011		232			1127
LF 2200	SAE 5"	464	4008	6858	1119
LF 2401	ANSI 2 1/2", 3", 4", 5"	145	3460	5586	1118
LF 2411		232			1127
LF 3601	ANSI 3", 4", 5", 6"	145	5190	8379	1118
LF 3611		232			1127
LF 4801	ANSI 4", 5", 6", 8"	145	6920	11172	1118
LF 4811		232			1127
LF 6001	ANSI 4", 5", 6", 8"	145	8172	13779	1118
LF 6011		232			1127
LF 10001	ANSI 5", 6", 8", 10"	145	13620	22965	1118
LF 10011		232			1127



Pressure Filters PN > 1450

for hydraulic and lubrication oil. For mounting in pressure lines.
(see also on the next page).

model no.	port size	working pressure	filtration area square inch		data sheet no.
			PSI	wire mesh	
ML 30	-6 SAE	2320	64	76	1417
MLO 30	-6 SAE	2320	64	76	1417
MNL 40	-8 SAE	2320	86	119	1427
MNL 63	-12 SAE	2320	143	196	1427
MNL 100	-16 SAE	2320	231	313	1427
ML 170	-16 SAE, -24 SAE	2320	193	309	1429
ML 240	-16 SAE, -24 SAE	2320	248	401	1429
ML 360	-16 SAE, -24 SAE	2320	340	547	1429
ML 450	-16 SAE, -24 SAE	2320	462	744	1429
MDV 40	-8 SAE	2900	86	119	1419
MDV 63	-12 SAE	2900	143	196	1419
HP 31	-8 SAE	6000	64	76	1459
HP 61	-8 SAE	6000	81	124	1477
HP 91	-12 SAE	6000	134	207	1477
HP 151	-16 SAE	6000	224	346	1477
HP 170	SAE 1 1/2"	6000	193	309	1462
HP 171	-16, -20, -24 SAE	6000	193	309	1468
HP 240	SAE 1 1/2"	6000	248	401	1462
HP 241	-16, -20, -24 SAE	6000	248	401	1468
HP 360	SAE 1 1/2"	6000	340	547	1462
HP 361	-16, -20, -24 SAE	6000	340	547	1468
HP 450	SAE 1 1/2"	6000	462	744	1462
HP 451	-16, -20, -24 SAE	6000	462	744	1468
HP 601	SAE 2"	6000	534	869	1465
HP 901	SAE 2"	6000	772	1253	1465
HP 1351	SAE 2"	6000	1149	2006	1465
HPV 60	-16 SAE	6000	81	124	1478
HPV 90	-16 SAE	6000	134	207	1478
HPV 150	-16 SAE	6000	224	346	1478
HPV 170	-16, -20, -24 SAE	6000	193	309	1479
HPV 240	-16, -20, -24 SAE	6000	248	401	1479
HPV 360	-16, -20, -24 SAE	6000	340	547	1479
HPV 450	-16, -20, -24 SAE	6000	462	744	1479
HPW 60	-16 SAE	4568	81	124	1481
HPW 90	-16 SAE	4568	134	207	1481
HPW 150	-16 SAE	4568	224	346	1481
HPW 170	-24 SAE	4568	193	309	1481
HPW 240	-24 SAE	4568	248	401	1481
HPW 360	-24 SAE	4568	340	547	1481
HPW 450	-24 SAE	4568	462	744	1481
HPW 601	flange 2", -32 SAE	4568	534	869	1482
HPW 901	flange 2", -32 SAE	4568	772	1253	1482
HPW 1351	flange 2", -32 SAE	4568	1149	2006	1482



Modern laboratories with up-to-date test equipment guarantee best quality.

Pressure Filters, flangeable PN > 1450
with flange or manifold mounting.

model no.	port size	working pressure	filtration area square inch		data sheet no.
			PSI	wire mesh / glass fibre	
MNU 250	1 1/4"	2320	476	725	1428
MNU 400	1 1/4"	2320	779	1180	1428
HNU 401	1 1/4"	4568	779	1180	1476
HPU 601	1 1/4"	4568	534	869	1480
HPU 901	1 1/4"	4568	772	1253	1480
HPU 1351	1 1/4"	4568	1149	2006	1480
HPP 60	3/4"	4568	81	124	1471
HPP 90	3/4"	4568	134	207	1471
HPP 150	3/4"	4568	224	346	1471
HPP 170	1"	4568	193	309	1471
HPP 240	1"	4568	248	401	1471
HPP 360	1"	4568	340	547	1471
HPP 450	1"	4568	462	744	1471
HPP 601	1 1/4"	4568	534	869	1470
HPP 901	1 1/4"	4568	772	1253	1470
HPP 1351	1 1/4"	4568	1149	2006	1470
HPF 30	3/8"	4568	64	76	1495
HPFO 30	3/8"	4568	64	76	1495
HPF 60	3/4"	4568	81	124	1473
HPF 90	3/4"	4568	134	207	1473
HPF 150	3/4"	4568	224	346	1473
HPF 170	1"	4568	193	309	1473
HPF 240	1"	4568	248	401	1473
HPF 360	1"	4568	340	547	1473
HPF 450	1"	4568	462	744	1473
HPF 601	1 1/4"	4568	534	869	1472
HPF 901	1 1/4"	4568	772	1253	1472
HPF 1351	1 1/4"	4568	1149	2006	1472
MF 30	3/8"	2320	64	76	1416
MFO 30	3/8"	2320	64	76	1416
FHP 60	3/4"	3625	81	124	1474
FHP 90	3/4"	3625	134	207	1474
FHP 150	3/4"	3625	224	346	1474
HPX 60	3/4"	4568	81	124	1483
HPX 90	3/4"	4568	134	207	1483
HPX 150	3/4"	4568	224	346	1483
HPX 170	1 1/4"	4568	193	309	1485
HPX 240	1 1/4"	4568	248	401	1485
HPX 360	1 1/4"	4568	340	547	1485
HPX 450	1 1/4"	4568	462	744	1485
HPX 601	1 1/4"	4568	534	869	1487
HPX 901	1 1/4"	4568	772	1253	1487
HPX 1351	1 1/4"	4568	1149	2006	1487
HPY 60	3/4"	4568	81	124	1484
HPY 90	3/4"	4568	134	207	1484
HPY 150	3/4"	4568	224	346	1484
HPY 170	1 1/4"	4568	193	309	1486
HPY 240	1 1/4"	4568	248	401	1486
HPY 360	1 1/4"	4568	340	547	1486
HPY 450	1 1/4"	4568	462	744	1486
HPZ 32	1/4"	5075	64	76	1491
HPZ 90	3/8"	5075	134	207	1493



MNU 250



HPP 60



HNU 401



HPF 60



HPZ 32



HPZ 90



NF 631



NF 1000

Stainless Steel Filters

Please request our separate brochure for further information.

Off-Line Filters

model no.	port size	working pressure	filtration area square inch		data sheet no.
			PSI	wire mesh / glass fibre	
NF 250	SAE 1"	232	794	1215	1100
NF 631	SAE 1 1/4"	232	1871	2280	1115
NF 1000	SAE 2", 2 1/2"	232	2004	3429	1116

NF filters can be provided with filter elements for water absorption. Please request our separate brochure for further information.

Intelligent and economic filter selection with our filter expert system.

Tank Mounted Suction Filters

mount into the side of the reservoir below oil levels. Suction side is in the reservoir with a flap valve to stop oil draining from the reservoir when being serviced.

model no.	port size	filtration area square inch		data sheet no.
		wire mesh	glass fibre	
AS 220	SAE 1 1/2", 2"	307	-	1903
AS 632	SAE 2", 2 1/2", 3", 3 1/2"	780	-	1909
TS 210	-20 SAE	264	362	1904
TS 310	-20 SAE	365	500	1904
TS 426	-24 SAE, SAE 1 1/2"	715	916	1908
TS 625	SAE 2"	949	1109	1910
TSW 210	-20 SAE	264	362	1905
TSW 310	-20 SAE	365	500	1905
TSW 426	-24 SAE, SAE 1 1/2"	715	916	1906
TSW 625	SAE 2"	949	1109	1911

Tank Breather

model no.	port size	data sheet no.
NBF 25-85	BSPP 1, 1 1/2, 2, 3	6000
BF-WP 45, 90	BSPP 1, 1 1/2	6000
EBF 30, 50		6002
BFD 95	BSPP 3/4	6003
BFD 100	BSPP 3/4	6003
BFD 125	BSPP 1 1/4	6003
BFD 130	BSPP 1 1/4	6003

Spin On Filters

for mounting in suction and pressure lines.

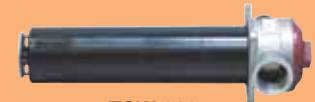
model no.	port size	working pressure	filtration area square inch		data sheet no.
			PSI	paper	
WPL 45	NPT 3/4"	145	396	379	9000
WPL 90	NPT 1 1/4"	145	853	769	9000
WPL 130	NPT 1 1/4"	145	1163	1092	9000
WPL 180	NPT 1 1/2"	145	1706	1538	9000
WPL 260	NPT 1 1/2"	145	2326	2184	9000
spin on					
WP 45	BSPP 3/4	145	396	379	9000
WP 90	BSPP 1 1/4	145	853	769	9000
WP 130	BSPP 1 1/4	145	1163	1092	9000

Clogging indicators

model no.	data sheet no.
OP (optical)	1614
OP (optical) - block execution	1628
OE (optical - electrical)	1614
OE (optical - electrical) - block execution	1628
OE (optical - electrical) - explosion-proof	1624
OE (optical - electrical) - block execution, explosion-proof	1629
AE (optical - electrical) - thread execution	1615
AE (optical - electrical) - block execution	1609
AE 10 (electrical) - explosion proof	1625
E (electrical)	1616
E6 (electrical)	1600
O (optical)	1616
O 1 (optical)	1616
AOR (optical) with reset function	1606
AOC (optical) with control function	1606
VS 1 and AG 1 (electronical) - thread execution	1617
VS 1 and AG 1 (electronical) - block execution	1607
VS 2 (electronical) - thread execution	1618
VS 2 (electronical) - block execution	1608
AV shut-off valve, G 1/4, 6000 PSI (3000 PSI)	1655



AS 220



TSW 210



TS 426



TSW 310



EBF 50



BFD 95



NBF 55



WPL 260



WPL 45



WPL 90



Confidence is good, control is better!
Contamination determination with our CCS 2.

Off-Line Filter Unit - Oil Service Equipment

Please request our separate brochure and detailed data sheets for further information.

Type	data sheet no.
Filter unit, stationary, series US 20/21/22	4008.1/4008.2/4008.3
Filter unit, stationary, series US 40	4011
Filter unit, stationary, series US 80	4009
Filter unit, stationary, series US 161	4010
Filter unit, stationary, series US 320/321	4012.1/4012.2
Filter unit, mobile, series UM 20	4013
Filter unit, mobile, series UM 40	4014
Filter unit, mobile, series UM 80	4015
Filter unit, mobile, series UMCC 40 with CCS2	4033
Filter unit, mobile, series UMFC 41 with fluid control	4052
Filter unit, mobile, series UMFC 81 with fluid control	4053
Filter unit, mobile with water separator, series UMW 80	4016
Filter unit, stationary with plate exchanger, series USP 20	4020
Filter unit, stationary with plate exchanger, series USP 41	4021
Filter unit, stationary with plate exchanger, series USP 81	4022
Filter unit, stationary with plate exchanger, series USP 161	4023
Filter unit, stationary with plate exchanger, series USP 320	4024
Fluid purifier system, mobile IFPM 21	4035
Fluid purifier system, mobile IFPM 31	4036
Fluid purifier system, mobile/stationary IFPM 71 / IFPS 71	4046/4045
Fluid purifier system, stationary IFPS 101	4043



US 20



US 80



USP 81
plate exchanger



US 320



UM 40



UM 80



CCS 2
Contamination Control System

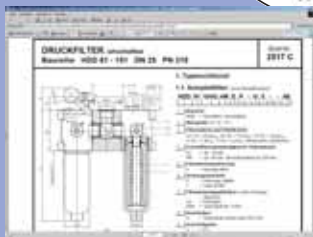
UMCC 40



IFPM 31

DVD - **INTERNORMEN** Technology

For a technical and an economic intelligent filter selection we recommend our DVD with filter expert system and digital product catalog.



Filter testing and quality control according to ISO standards.

