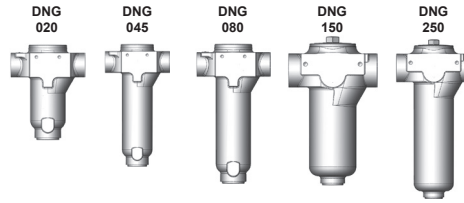




RT FILTER TECHNIK

Inline Filter DNG

Flow direction from in to out
up to 250 l/min, up to 25 bar



1. TECHNICAL SPECIFICATIONS

1.1 FILTER HOUSING

Design

The filter housings are designed in accordance with international regulations. They consist of a filter housing and a screw-on cover. The filter element can be removed from the top!

Standard equipment

- mounting holes in the housing
- magnetic core integrated into the element holder
- with bypass valve
- with oil drain plug
- without port for clogging indicator

1.2 FILTER ELEMENTS

RT 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:

Glass fibre (ULP): 6 bar
Glass fibre with pre-filter (UMC): 6 bar
Wire mesh (WPI): 6 bar

Other filter elements and filtration ratings on request.

1.3 FILTER SPECIFICATIONS

Nominal pressure	25 bar
Temperature range	-10 °C to +100 °C
Material of filter housing	EN-GJS
Material of cover	DNG 020, 045, 080: EN-GJS DNG 150, 250: EN-GJL
Bypass cracking pressure	2.5 bar (others on request)

1.4 SEALS

NBR (= Perbunan)

1.5 MOUNTING

Inline filter

1.6 SPECIAL MODELS AND ACCESSORIES

- with clogging indicator
- without magnetic core
- without bypass valve
- seals made of FKM

1.7 SPARE PARTS

See Original Spare Parts List

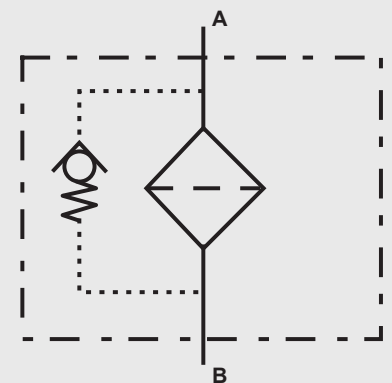
1.8 COMPATIBILITY WITH HYDRAULIC FLUIDS ISO 2943

- 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

1.9 IMPORTANT INFORMATION

- Filter housings must be earthed
- When using electrical clogging indicators, the electrical power supply to the system must be switched off before removing the clogging indicator connector

Symbol



2. MODEL CODE (also order example)

DNG 020 WPI 050 V M D B N J0 VX X 1 /-XXX

2.1 FILTER ASSEMBLY

Filter type

DNG

Size

020, 045, 080, 150, 250

Filter material

ULP glass fibre
UMC glass fibre with pre-filter
WPI wire mesh

Filtration rating in μm

ULP 010, 025
UMC 010, 020
WPI 025, 050, 100, 200

Bypass valve

V standard: with bypass valve 2.5 bar
X without bypass valve

Magnetic core

M with magnetic core
X without magnetic core

Setting range

D 25 bar

Type and size of port

Type	Connection	Filter size				
		020	045	080	150	250
W	G $\frac{1}{2}$	●				
C	G $\frac{3}{4}$		●			
D	G1			●		
F	G $1\frac{1}{2}$				●	●

Others on request

Seal

N NBR (Perbunan)
V FKM

Position of clogging indicator

J1 as per data sheet point 4.1
J2 as per data sheet point 4.1
J0 without clogging indicator

Clogging indicator

VG connection for external clogging indicator
VA visual/electrical
VE electrical
VO visual
VX without clogging indicator; closed up with plug

Response pressure of clogging indicator

A 1.8 bar
X none (if no clogging indicator is installed)

Modification number

X the latest version is always supplied

Supplementary details

2.2 REPLACEMENT ELEMENT

UMC-0010-xxx-xxxx-x-N-RT /-XXX

Filter material

ULP, UMC, WPI

Filtration rating in μm

ULP 0010, 0025
 UMC 0010, 0020
 WPI 0025, 0050, 0100, 0200

RT code

Seal

N NBR (Perbunan)
 V FKM

Packaging

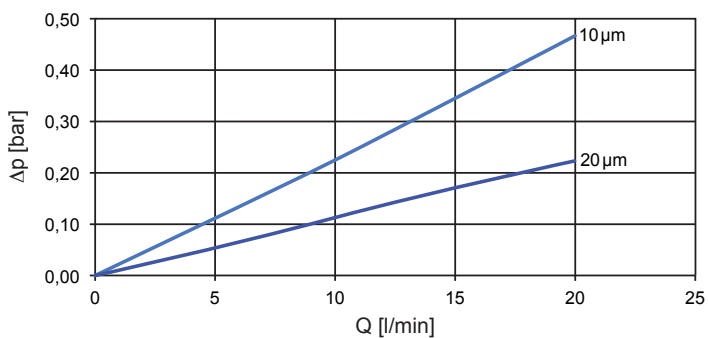
Supplementary details

3. FILTER CALCULATION / DIMENSIONING

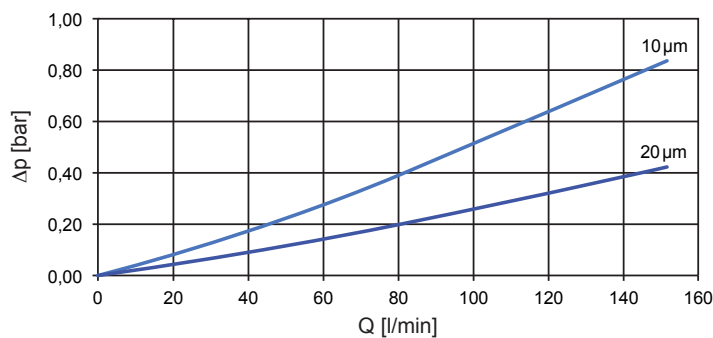
3.1 PERFORMANCE CURVES FOR FILTER ASSEMBLY

The total performance curves with UMC... element apply to mineral oil with a density of 0.86 kg/dm^3 and a kinematic viscosity of $30 \text{ mm}^2/\text{s}$.

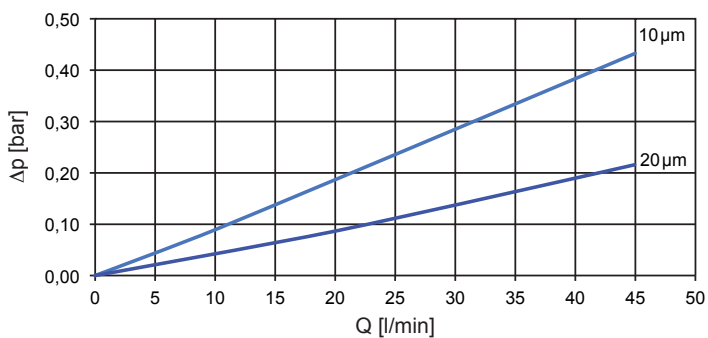
DNG 020



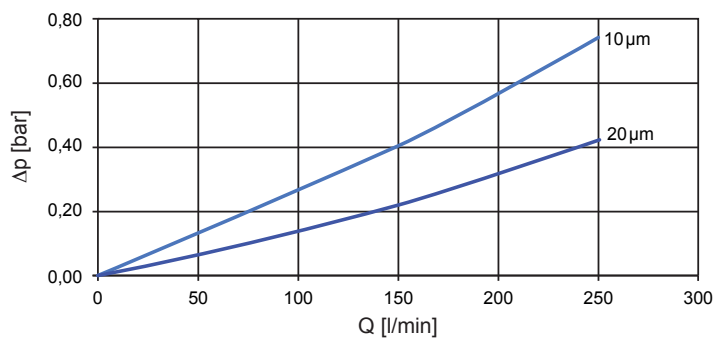
DNG 150



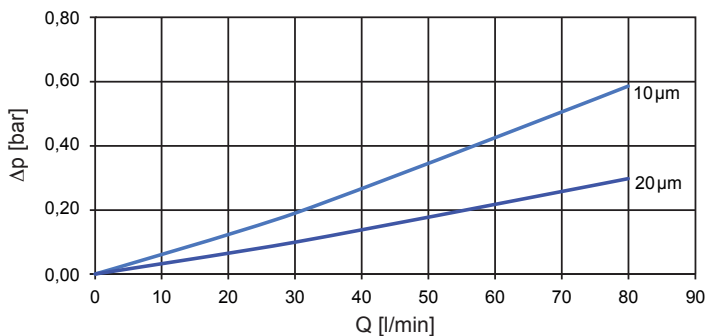
DNG 045



DNG 250



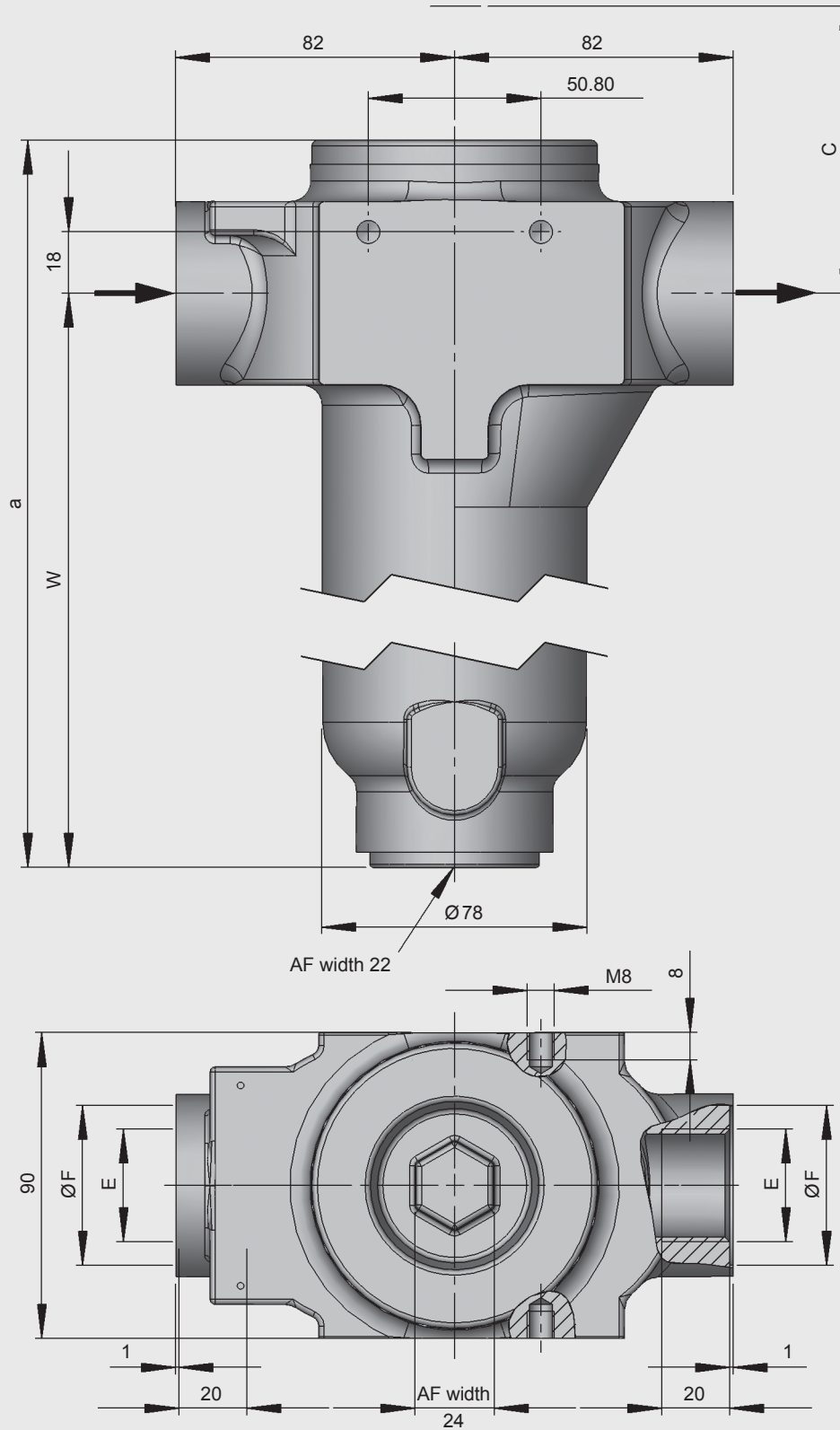
DNG 080



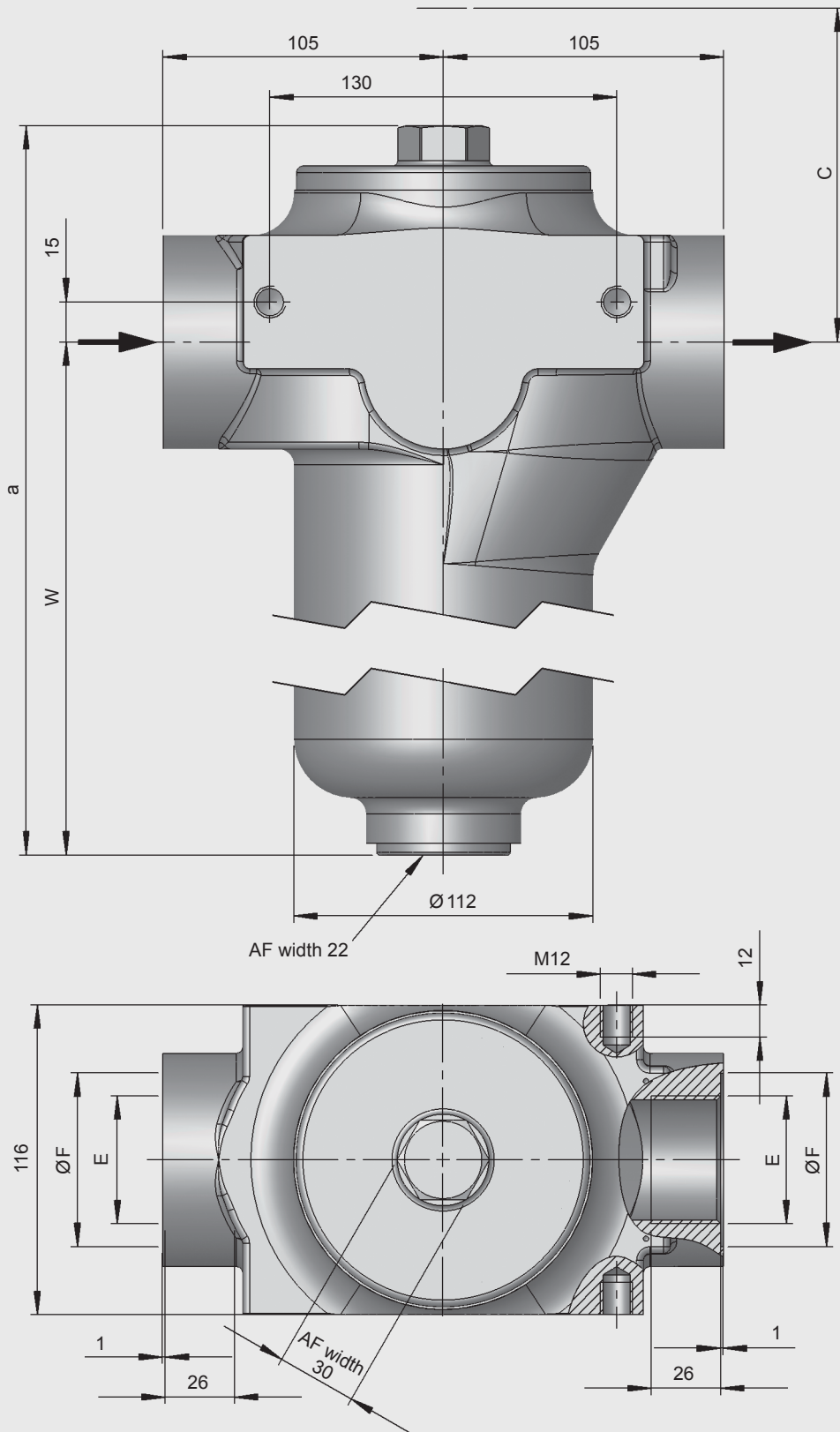
Others on request!

4. DIMENSIONS

DNG 020, 045, 080



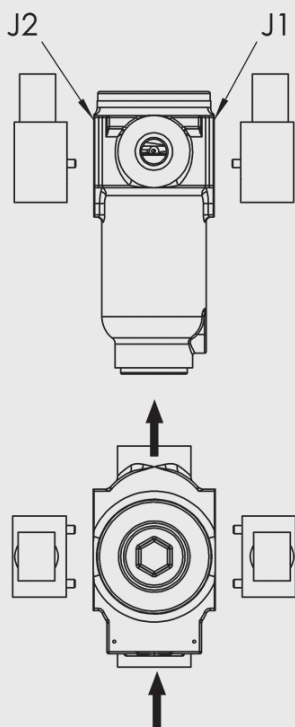
DNG	A	W	C	E	$\text{Ø}F$	Weight [kg]
020	212	167	180	G ½	34	5.3
045	312	267	250	G ¾	42	5.8
080	312	267	280	G 1	47	6.6



DNG	A	W	C	E	$\text{Ø}F$	Weight [kg]
150	354	273	335	G1½	68	14.2
250	454	373	435	G1½	65	15.0

4.1 MOUNTING OPTIONS FOR CLOGGING INDICATORS

Specify the mounting position in the order!



Caution:

If the version J0 is selected under “Position of clogging indicator”, it is not possible to mount a clogging indicator retrospectively!

NOTE

The information in this brochure relates to the operating conditions and applications described. For applications or operating conditions not described, please contact the relevant technical department. All technical details are subject to change without notice.

RT-Filtertechnik GmbH
Postfach 21 60
D-88011 Friedrichshafen
Tel.: +49 7541 508-0
Fax: +49 7541 508-101
e-mail: sales@rt-filter.de
Internet: www.rt-filter.de