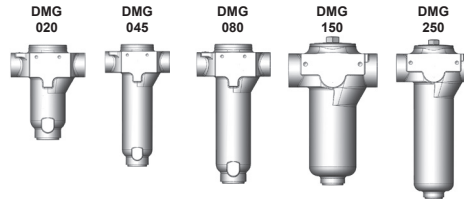




# RT FILTER TECHNIK

## Inline Filter DMG

Flow direction from in to out  
up to 250 l/min, up to 120 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 filtration ratings on request.

#### 1.3 FILTER SPECIFICATIONS

Nominal pressure	120 bar
Temperature range	-10 °C to +100 °C
Material of filter housing	EN-GJS
Material of cover	DMG 020, 045, 080: EN-GJS DMG 150, 250: 9SMn28k
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

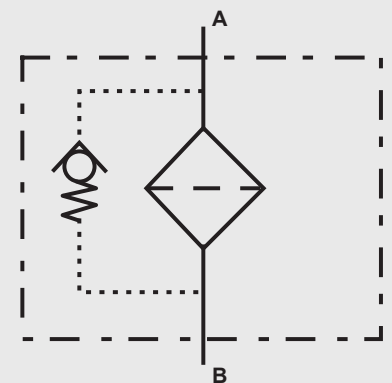
#### 1.8 COMPATIBILITY WITH HYDRAULIC FLUIDS ISO 2943

- 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)

DMG 020 WPI 050 V M I B N J0 VX X 1 /-XXX

### 2.1 FILTER ASSEMBLY

#### Filter type

DMG

#### 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

I 120 bar

#### Type and size of port

Type	Connection	Filter size				
		020	045	080	150	250
W	G 1/2	●				
C	G 3/4		●			
D	G 1			●		
F	G 1 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 $\mu\text{m}$

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

### RT code

### Seal

N NBR (Perbunan)  
 V FKM

### Packaging

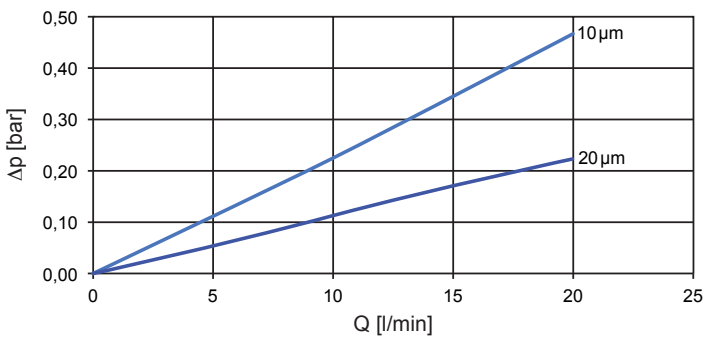
### Supplementary details

## 3. FILTER CALCULATION / DIMENSIONING

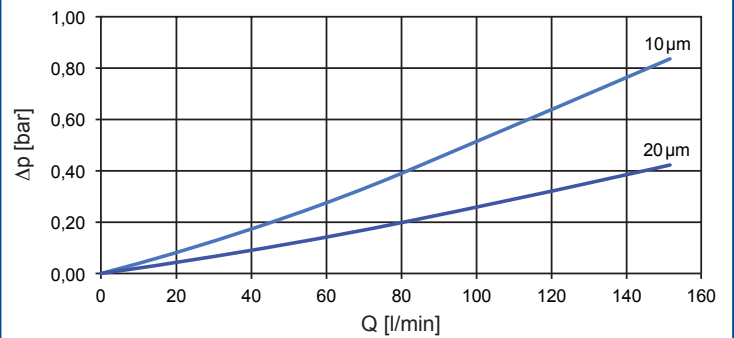
### 3.1 PERFORMANCE CURVES FOR FILTER ASSEMBLY

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

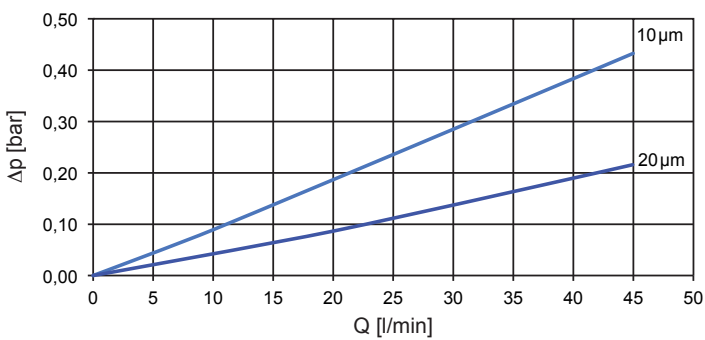
#### DMG 020



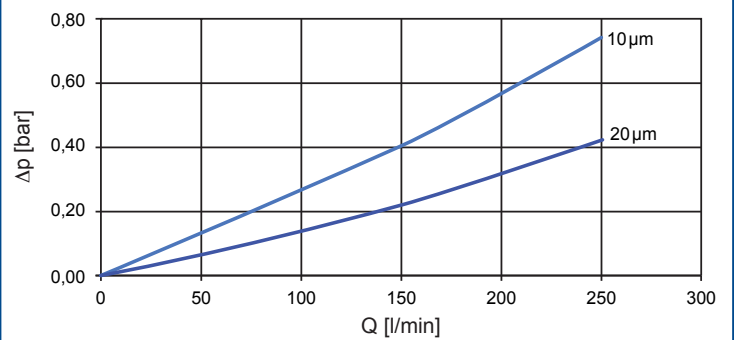
#### DMG 150



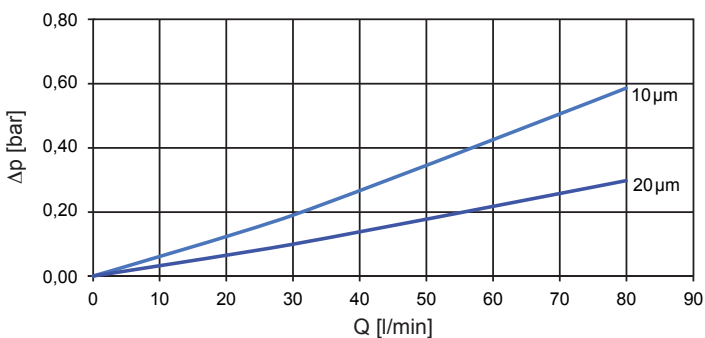
#### DMG 045



#### DMG 250



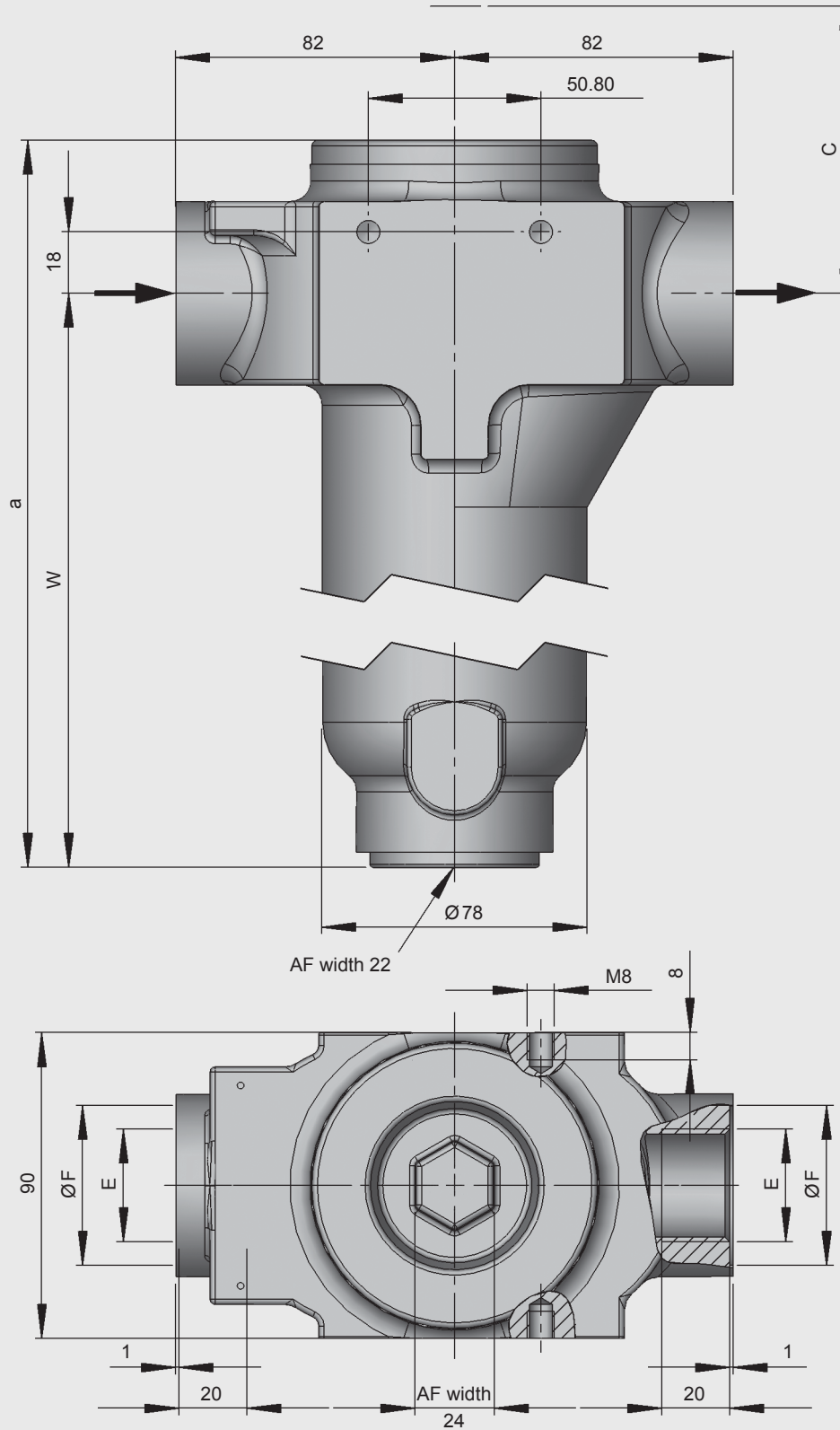
#### DMG 080



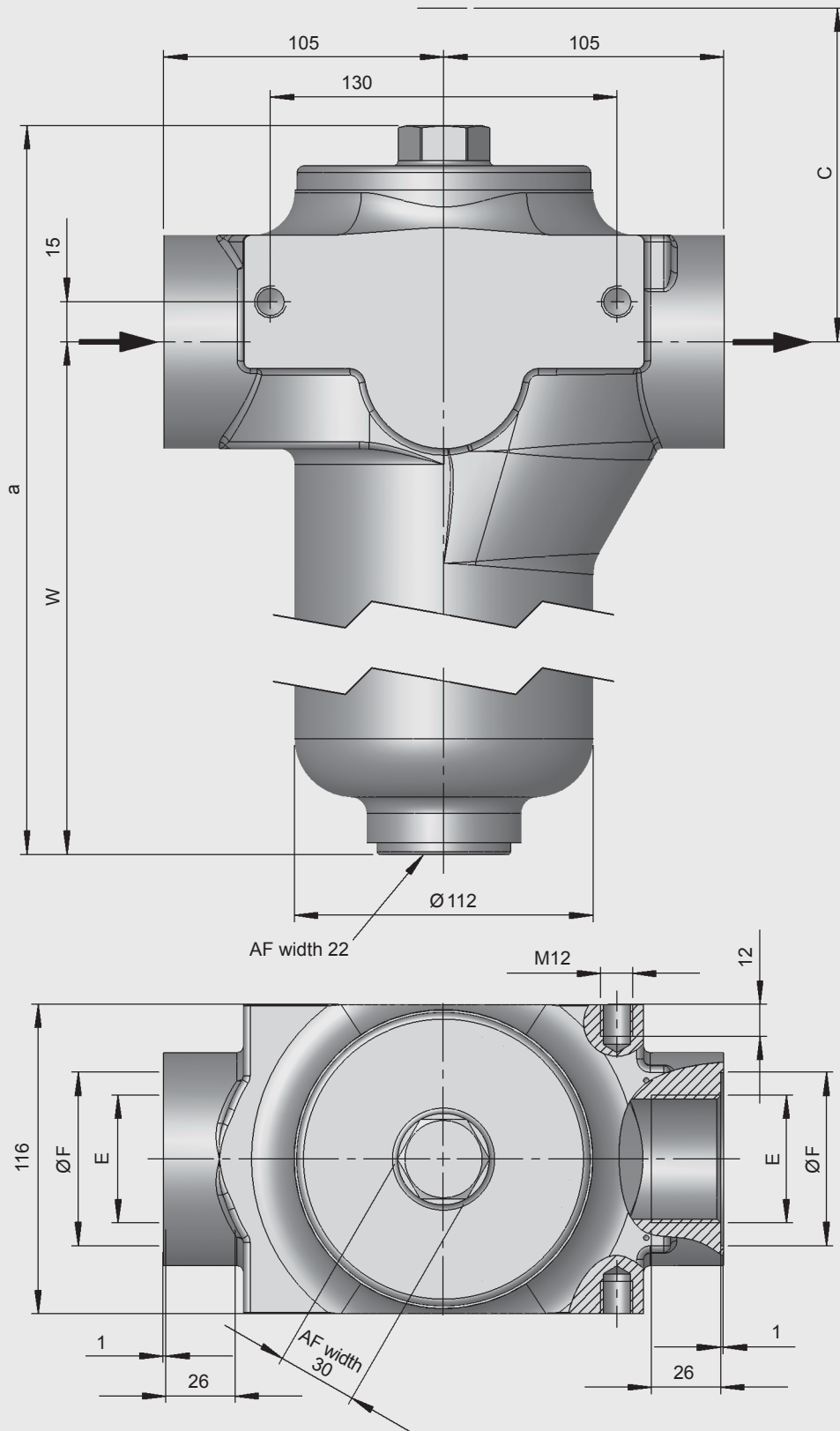
Others on request!

## 4. DIMENSIONS

DMG 020, 045, 080



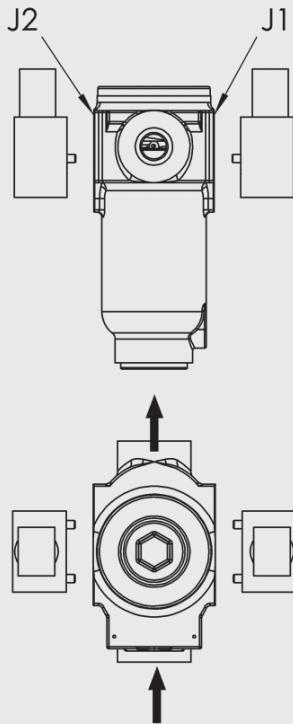
DMG	A	W	C	E	$\text{Ø}F$	Weight [kg]
020	212	167	180	G ½	34	5.3
045	312	267	250	G ¾	42	5.8
080	312	267	280	G 1	47	6.6



DMG	A	W	C	E	ØF	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.

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