



RT FILTER TECHNIK

Suction Line Filter SFG

Element flow direction from in to out
up to 300 l/min



1. TECHNICAL SPECIFICATIONS

1.1 FILTER HOUSING

Design

The RT suction line filters in this series are designed to be installed inside the tank.

The version with integrated foot valve enables horizontal installation and maintenance even below the oil level. The foot valve closes automatically when the cover is removed. The design of the filter head also enables residual oil to be drained from the housing space before the filter is opened. This allows maintenance to be performed without any environmental pollution.

The filter housings are designed in accordance with international regulations. They consist of a cover and a filter housing.

Standard equipment

- mounting holes on the filter head
- magnetic cores built into the cover
- with port for a 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 3968, ISO 11170, ISO 16889

Filter elements are available with the following pressure stability values:

Polyester mesh (SOP): 6 bar
 Wire mesh (WPI): 6 bar

Other filtration ratings on request.

1.3 FILTER SPECIFICATIONS

Temperature range	-30°C to +100°C
Material of filter housing	Cast aluminium
Material of cover	Cast aluminium

1.4 SEALS

NBR (= Perbunan)

1.5 INSTALLATION

Inline filter

1.6 SPECIAL MODELS AND ACCESSORIES

- port for clogging indicator
- without magnetic cores
- seals in FKM

1.7 SPARE PARTS

See Original Spare Parts List

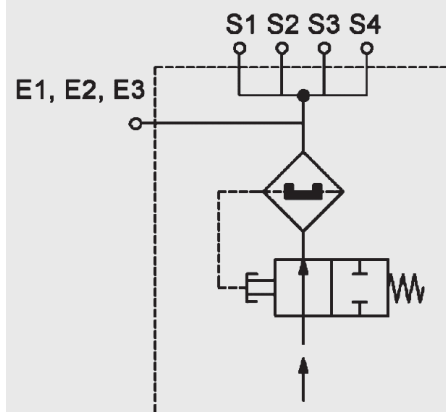
1.8 COMPATIBILITY WITH HYDRAULIC FLUIDS ISO 2943

- 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.

Symbol



2. MODEL CODE (also order example)

SFG 300 WPI 025 V M W N V EA VES 1 /-XXX

2.1 FILTER ASSEMBLY

Filter type

SFG

Size

300

Filter material

WPI wire mesh
SOP polyester mesh

Filtration rating in μm

WPI 025, 050, 100
SOP 010

Inlet valve

V with inlet valve
X without inlet valve

Magnetic core

M with magnetic core
X without magnetic core

Setting range

W suction operation

Type and size of port

Type	Connection	Filter size 300
N	SAE DN 80	●
O	SAE DN 80; S2+S4 = G1 1/2	●
U	SAE DN 80; S2+S4 = M48x2; G3/8	●
Z	Customer specification	●

others on request

Seals

N NBR (Perbunan)
V FKM

Position of clogging indicator

J0 without clogging indicator, all unbored
EB all bored
EE E1, E2, E3 all G3/8
EA E1, E2, E3 all G3/4

Clogging indicator

VX without clogging indicator, unbored
VG thread only
VE electrical
VO visual

Response pressure of clogging indicator

X no clogging indicator (for VX or VG)
T -0.18 bar (for VE)
U -1 to 0.6 bar (for VO)
V -1 to 0 (for VO)
S -0.25 bar (for VE)

Modification number

X the latest version is always supplied

Supplementary details

2.2 REPLACEMENT ELEMENT

WPI-0100-xxx-xxxx-x-N-RT /-XXX

Filter material

WPI, SOP

Filtration rating in μm

WPI 0025, 0050, 0100

SOP 0010

RT code

Seals

N NBR (Perbunan)

V FKM

Packaging

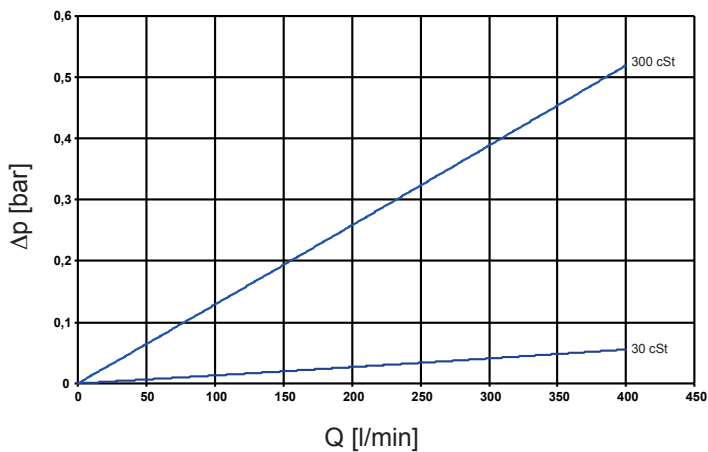
Supplementary details

3. FILTER CALCULATION / DIMENSIONING

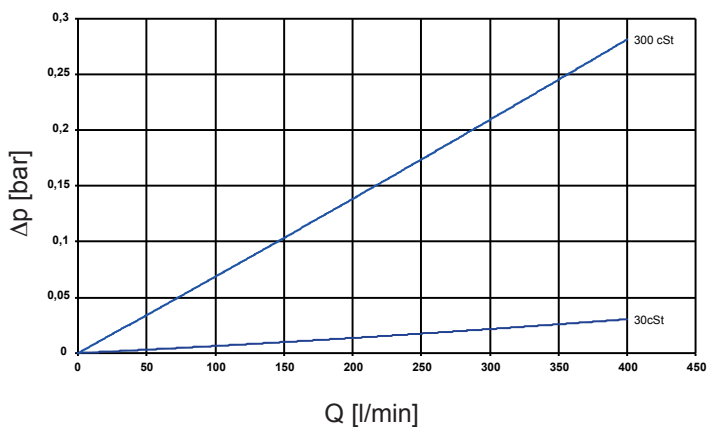
3.1 PERFORMANCE CURVES FOR FILTER ASSEMBLY

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

SFG 300 with element SOP



SFG 300 with element WPI

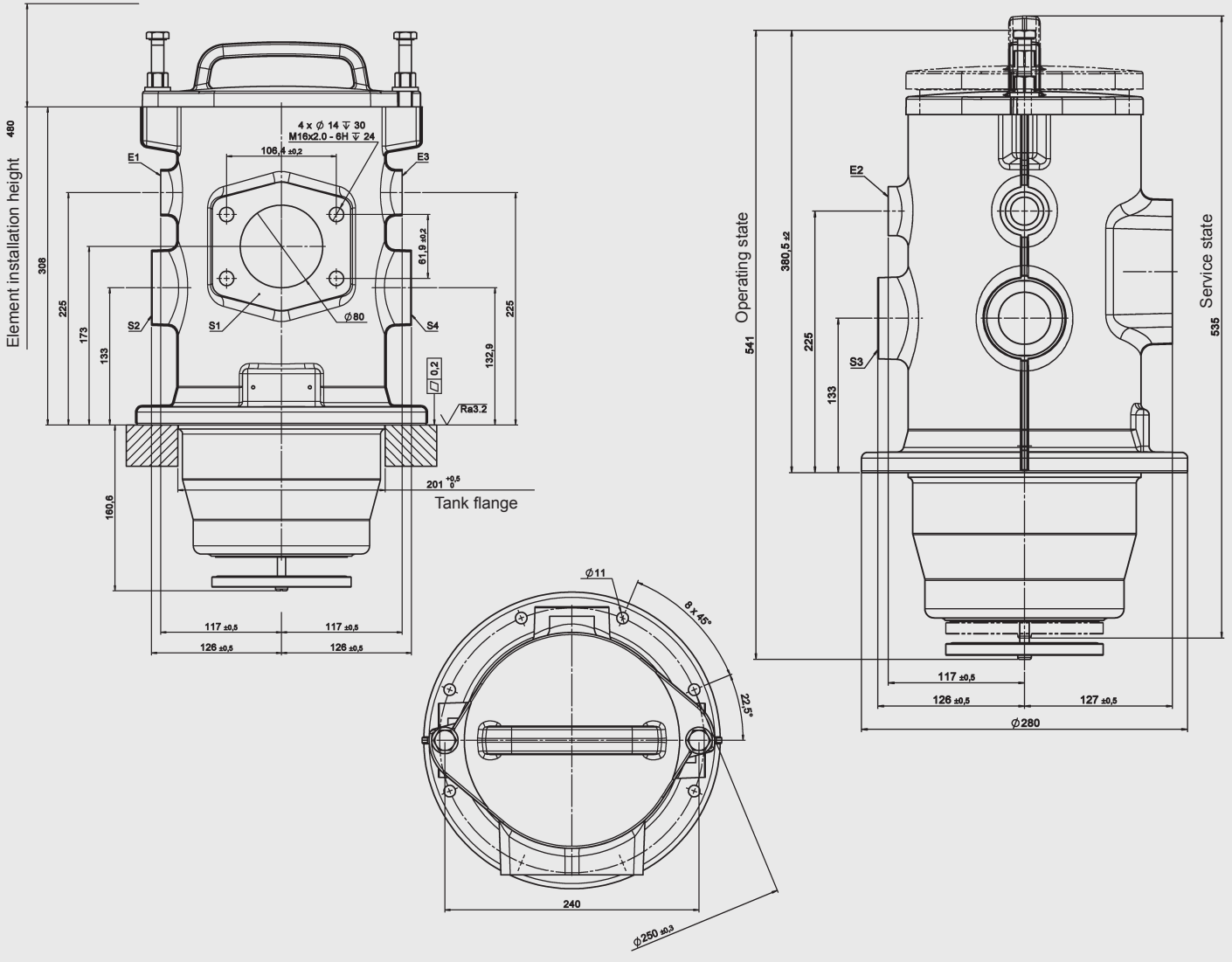


4. DIMENSIONS

SPECIFICATIONS FOR THE TANK FLANGE

1. In the filter mounting interface, the tank flange should have a maximum flatness of 0.3 mm and maximum roughness of Ra 3.2 µm.
2. In addition, the mounting interface should be free from damage and scratches.
3. The fixing holes of the flange must be blind, or stud bolts with threadlocker must be used to fix the filter. As an alternative, the tank flange can be continuously welded from the inside.
4. Both the tank sheet metal and the filter mounting flange must be sufficiently robust so that neither deform when the seal is compressed during tightening.

SFG 300



Type	Connection	Connection type	Max. size	Weight incl. element [kg]
SFG 300	S1	Suction port	SAE DN 80	18.6
	S2	Suction port	G1 1/2	
	S3	Suction port	G1 1/2	
	S4	Suction port	G1 1/2	
	E1	Drainage bore	G3/4	
	E2	Drainage bore	G3/4	
	E3	Drainage bore	G3/4	

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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