Filtration Unit
OF7

Description
The filtration unit OF7 is designed as a portable service unit for filling hydraulic systems, flushing small hydraulic systems and for offline filtration.

As an option, the OF7 can be ordered with the ContaminationSensor CS 1000. This makes it possible to simultaneously monitor the particle contamination in the oil. The cleanliness class is given according to ISO, SAE and NAS classifications.

Applications
- Filtered or unfiltered filling of hydraulic systems
- Temporary offline filtration for hydraulic systems
- Filtered or unfiltered transfer of fluids

Advantages
- Improvement in service life for both components and system filters
- Extension of oil lifetime
- Greater machine availability
- Simple operation
- Compact design
- Option: continuous monitoring of oil cleanliness during the cleaning process through the use of CS 1000 (OF7CM)
- Option: built-in protection against dry running and control cable for remote maintenance (OF7K)
- Option: version for viscosities up to 1000 mm²/s and 180 filter cartridge (OF7S90Px)

Technical specifications

Max. flow rate	OF7S 15 l/min OF7K/OF7CM 10 l/min
Pump type	Vane pump
Operating pressure	3.5 bar max
Permitted suction pressure at suction port	-0.4 bar to +0.6 bar
Viscosity range	OF7S10/OF7K10: 5 ... 350 mm²/s OF7CM: 5 ... 200 mm²/s OF7S90Px: 15 ... 1000 mm²/s
Permitted operating fluid	Mineral oil (DIN 51424)
Fluid temperature	0 ... 80 °C
Ambient temperature	-20 ... 40 °C
Seals, gaskets	NBR
Protection class	IP 54
Power cable, length	2.8 m
Length of hoses	2.5 m
Hoses	Suction hose NW 20 with lance Pressure hose NW 16 with lance
Weight	OF7S10/OF7K10 ≈ 12.5 kg (empty) OF7S90Px/OF7CM ≈ 18.0 kg (empty)

Recommended standard models

Filtration unit	Part No
OF7S10P1M1B03E	92 164
OF7S10P1M1B05E	92 161
OF7S10P1M1B10E	92 162
OF7S10P1M1P10E	92 165
OF7S10P1M1B20E	92 163

Model code

OF7 S 10 P 1 M 1 B 10 E /-C1

Basic type
OF7

Model
S = standard
K = special model
CM = Fluid Condition Monitoring

Type code
10 = standard
90(1) = special model

Seals, gaskets
P = NBR (Perbunan)

Pump type

Code	Nominal flow rate	Max. viscosity
1(1)	15 l/min	350 mm²/s
2	10 l/min	200 mm²/s

X(1) other nominal flow rates on request

Motor
D(1) = pneumatic motor
K = 1x 120 V 50 Hz, 0,18 kW
M = 1x 230 V 50 Hz, 0,18 kW
N*(1) = 3x 380-420 V 50 Hz, 3x 440-480 V (60 Hz)
T = 12 V DC, 0,2 kW
U = 24 V DC, 0,2 kW
X(1) = other voltage on request
* without on/off switch, cable or connector

Filter size
1 = element 160 (spin-on cartridge)
2(1) = element 180 (spin-on cartridge)

Filter material
B = Betamicron® (BN)
L = empty filter cartridge
P = paper (P)

Filtration rating
03 = 3 µm BN
05 = 5 µm BN
10 = 10 µm BN, P
20 = 20 µm BN

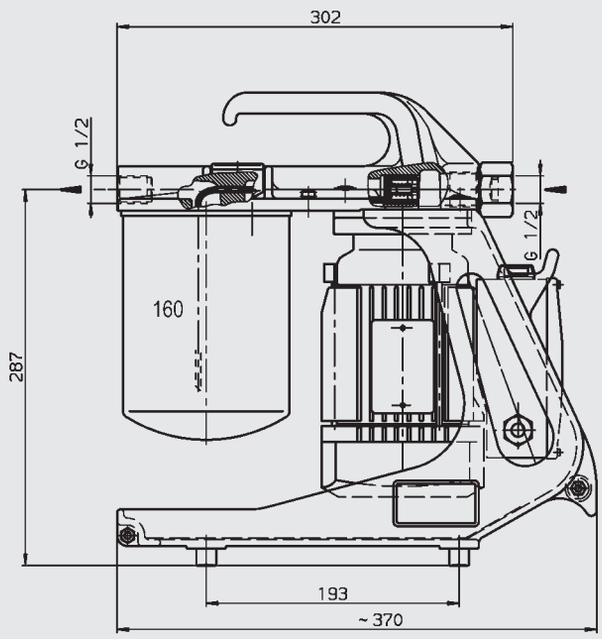
Clogging indicator
E = pressure gauge

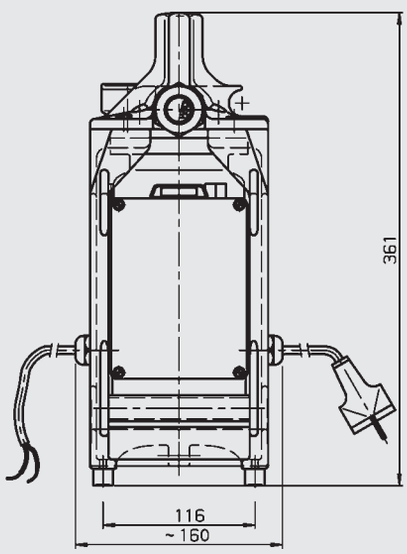
Supplementary details for model OF7CM
C1 = ContaminationSensor CS1320
Z = without ContaminationSensor

(1) Not possible for OF7CM version

Dimensions

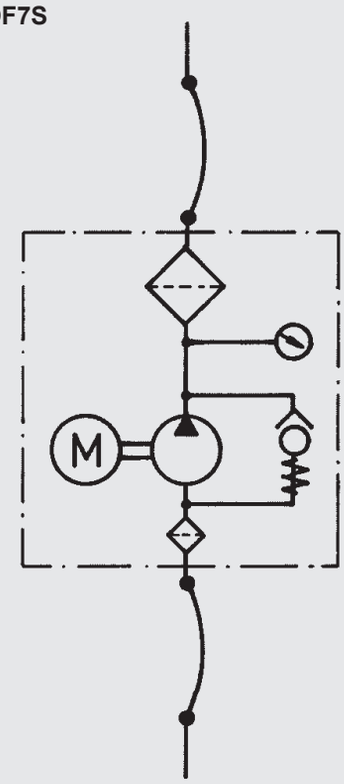
OF7S10 / OF7K10



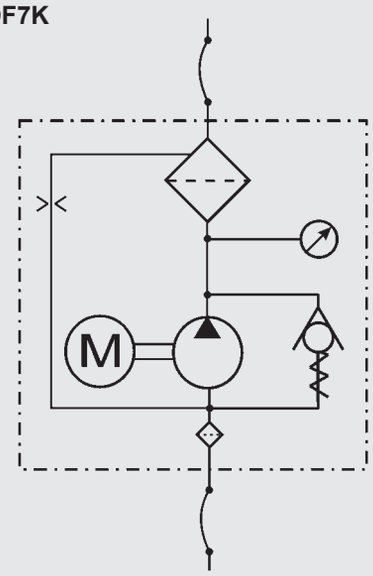


Hydraulic circuit diagram

OF7S

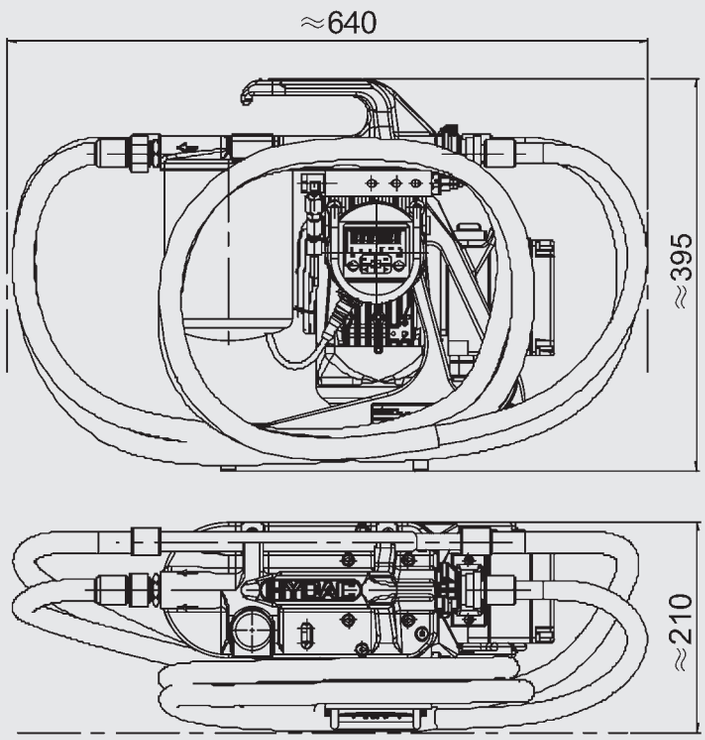


OF7K



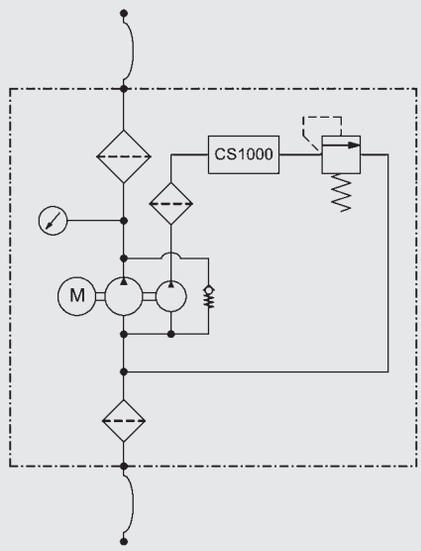
Dimensions

OF7CM10



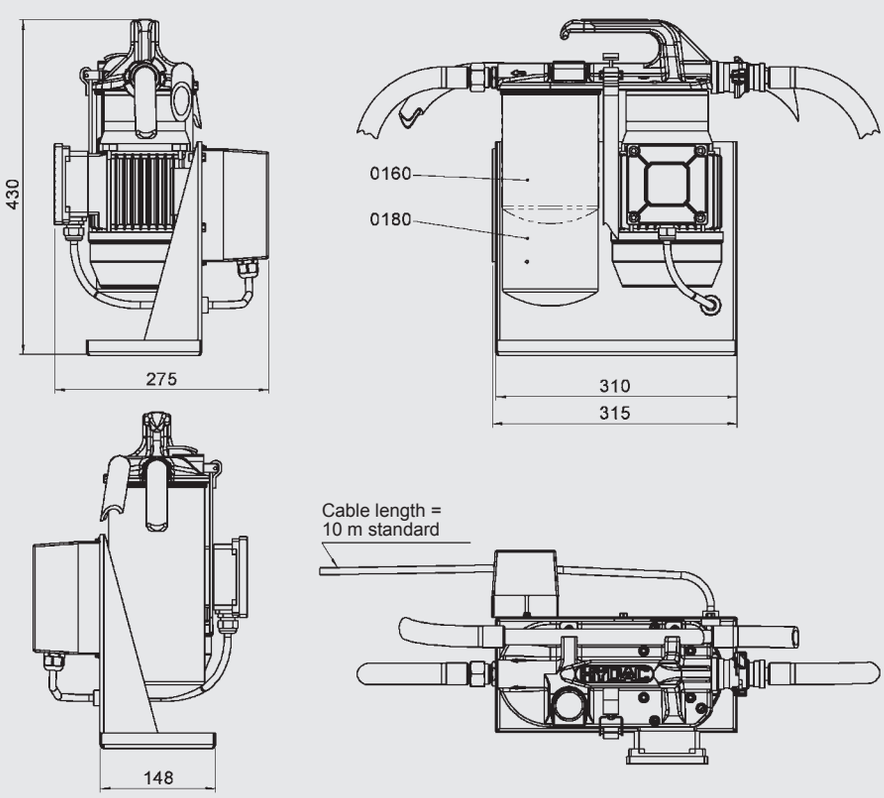
Hydraulic circuit diagram

OF7CM



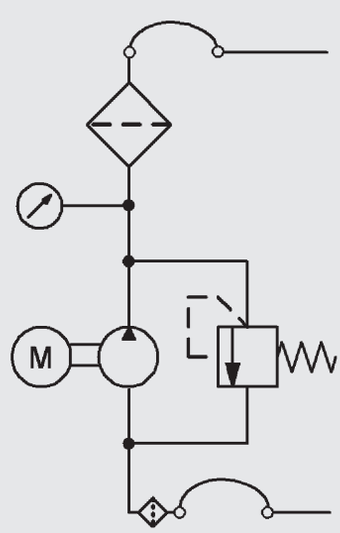
Dimensions

OF7S90



Hydraulic circuit diagram

OF7S90



Note

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

For applications and operating conditions not described, please contact the relevant technical department.

Subject to technical modifications.

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