



Pumps

BFP 41

size 3 and 5

Description

BFP 41 sizes 3 and 5 oil pumps are designed for small/medium-sized domestic oil burners up to 42 l/h.

Features & Benefits

- Light oil and kerosene
- 1 or 2-pipe operation
- 1-stage
- Built-in pressure regulator
- Solenoid valve cut-off
- Cartridge filter

Applications

- Small/medium-sized domestic oil burners up to 42 l/h.

Ordering

Product code numbers

Product Type	Nozzle/pressure outlet	ROTATION	1 or 2 stage	Capacity [l/h]	Biofuel blend	Code number
BFP 41	L	L	1	24.00	10	071N0188
BFP 41	L	R	1	24.00	10	071N0235
BFP 41	L	L	1	24.00	10	071N1196
BFP 41	L	L	1	24.00	10	071N8213

Identification

Example:

BFP **41 L 5 L**

BFP	
4	4: pressure adjustment on front, solenoid valve on side
1	1: one solenoid valve
L	R: clockwise rotation L: counter-clockwise rotation
5	3: capacity 24 l/h 5: capacity 42 l/h
L	R: right hand nozzle outlet L: left hand nozzle outlet

Nozzle capacity at 4.3 cSt., 10 bar, 2800 min⁻¹

Accessories code numbers

If your product code is not listed as a related product for any accessories, please reach out to us for assistance.



071N0062
COIL 24 V AC.
COIL 24 V AC.

Related products

071N0220



071N0074
PLUG FOR CARTRIDGE FILTER.
PLUG FOR CARTRIDGE FILTER.

Related products

071N0220



071N1055
PLUG FOR 1/4" CONNECTIONS
PLUG FOR 1/4" CONNECTIONS

Related products

071N0220



071N0064
CARTRIDGE FILTER BFP
CARTRIDGE FILTER BFP

Related products

071N0220



071N0061
COIL 110/120 V AC.
COIL 110/120 V AC.

Related products

071N0220



071N0010
COIL 220/240 V AC.
COIL 220/240 V AC.

Related products

071N0220



071B0011
BUSH 32 x 54 mm.
BUSH 32 x 54 mm.

Related products

071N0220



071N0601
NO COIL 220/240 V
NO COIL 220/240 V

Related products

071N0220



071G2245

CABLE FOR NC VALVE, 2100 mm

CABLE FOR NC VALVE, 2100 mm

Related products

071N0220



071G0202

CABLE FOR NC VALVE, 280 mm OEM

CABLE FOR NC VALVE, 280 mm OEM

Related products

071N0220



071N0050

NC VALVE

NC VALVE

Related products

071N0220



071G0204

CABLE FOR NC VALVE, 710 mm OEM

CABLE FOR NC VALVE, 710 mm OEM

Related products

071N0220



071N1033

O-RING Ø 54 FOR COVER

O-RING Ø 54 FOR COVER

Related products

071N0220



071N0047

BUSH 32 x 54 mm W. STD. FLANGE.

BUSH 32 x 54 mm W. STD. FLANGE.

Related products

071N0220



071N0604

PLUG 1/8" FOR P AND V PORTS.

PLUG 1/8" FOR P AND V PORTS.

Related products

071N0220



071G0200

CABLE FOR NC VALVE, 500 mm OEM

CABLE FOR NC VALVE, 500 mm OEM

Related products

071N0220



071N0007

**NC SERVICE VALVE FOR 24 V
DC**

NC SERVICE VALVE FOR 24 V DC

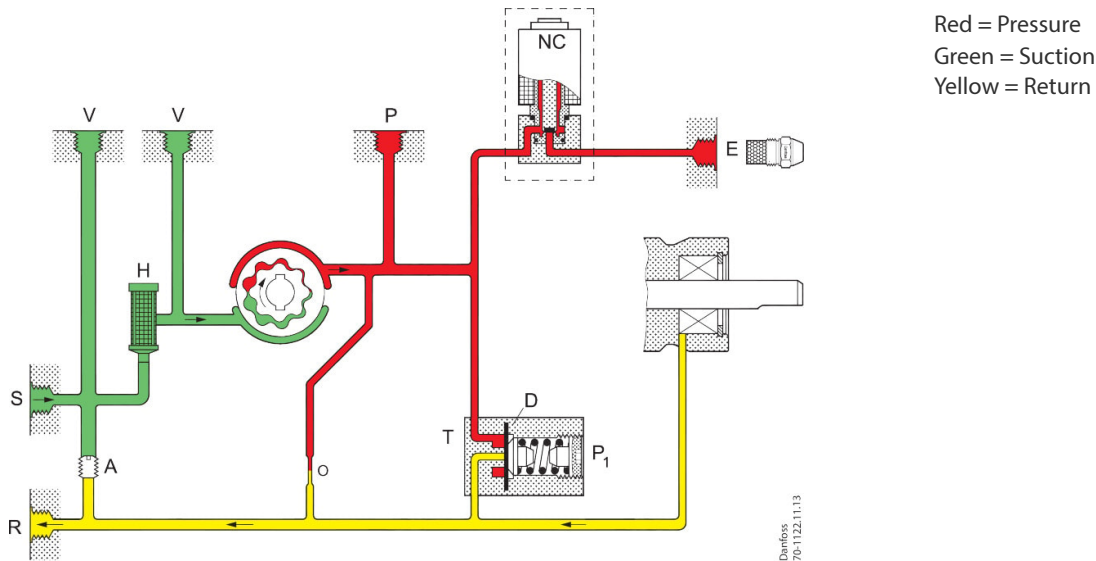
Related products

071N0220

If your product code is not listed as a related product for any accessories, please reach out to us for assistance.

Functions

Operation



From the suction inlet (S) oil is drawn through the filter (H) to the gear set, where the pressure is increased. When voltage is applied to the NC-valve (normally closed), it opens and releases oil to the nozzle outlet.

By means of the diaphragm (D) in the pressure regulator (T), the pressure is kept constant at the value set on adjustment screw (P1).

In 2-pipe systems the excess oil is led back to the return outlet (R) and the tank.

In 1-pipe systems with plugged return outlet (R) and screw (A) removed, the oil is returned internally to the gear set (see details in figure).

Cut-off function, solenoid valve

When the burner stops, the voltage to the NC-valve is cut off and the oil flow to the nozzle outlet is cut off immediately.

Bleeding

In 2-pipe systems the pump is self-priming, i.e. bleeding is performed via the constriction (O) to the return outlet (R).

In 1-pipe systems with plugged return outlet (R), bleeding must be performed through the nozzle outlet (E) or the pressure gauge port (P).

Warranty

For pumps used outside the stated technical data and used with oil containing abrasive particles Danfoss cannot give any warranty.

Note!

Do not mount the pump with the solenoid valve pointing downwards.

The solenoid valve must be replaced after 250.000 operations or 10 years (approved life expectancy).

Product details

General data

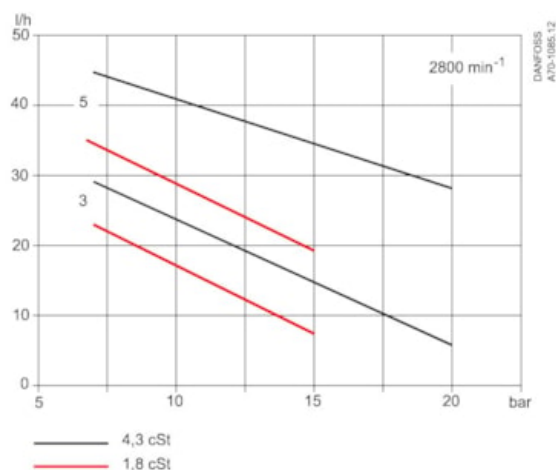
BFP 41	3	5
Oil types	Standard fuel gas oil and fuel gas oil acc. to DIN V 51603-6 EL A Bio-10 (max. 10% FAME)	
Viscosity range (measured in suction inlet) ¹⁾	(1.3) 1.8 to 12.0 cSt. (mm ² /s)	
Filter area / mesh	11 cm ² /200 µm	
Pressure range ²⁾	7 to 20 bar	
Default setting	10 ±1 bar	
Max. pressure in suction inlet/return outlet	2 bar	
Speed	2400 to 3450 min ⁻¹	1400 to 3450 min ⁻¹
Max. starting torque	0.1 Nm	0.12 Nm
Ambient/transport temperature	-20 to +70° C	
Temperature of medium	0 to +70° C	
Coil power consumption	9 W	
Rated voltage (other voltages on request)	230 V, 50/60 Hz	
Coil enclosure	IP 40	
Shaft/neck	EN 225	

1) Special pumps for Kerosene

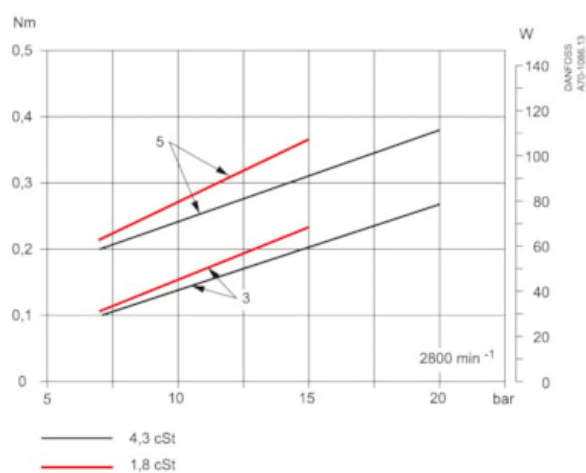
2) Max. 12 bar at 1.3 cSt., max. 15 bar at 1.8 cSt.

Capacity

Nozzle capacity [l/h]

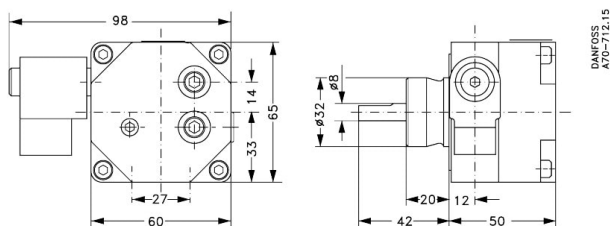


Operating torque [Nm]
Power consumption [W]



Dimensions & weights

Weight	Oil Pump type BFP 41, size 3 and 5	
	Gross weight	1.117 kg
	Net weight	1.116 kg
	Volumne	1.203 Liter



Connections

Example shows BFP 41 L5L

P₁: Pressure adjustment

S: Suction inlet G 1/4

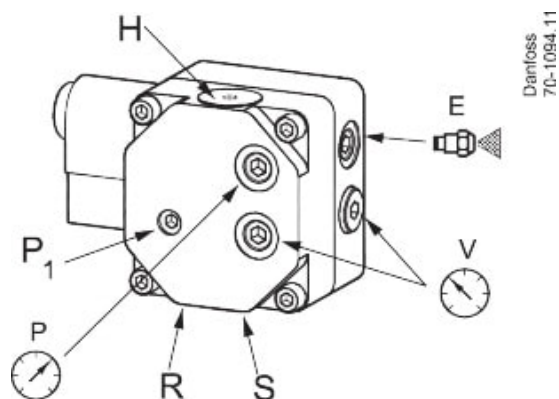
R: Return outlet G 1/4

E: Nozzle outlet G 1/8

P: Pressure gauge port G 1/8

V: Vacuum gauge port G 1/8

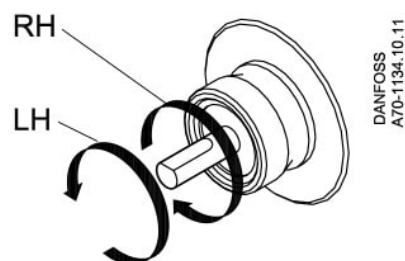
H: Filter



Note! Shaft rotation, location of nozzle outlet and other connections are seen from shaft end.

RH: R-rotation

LH: L-rotation



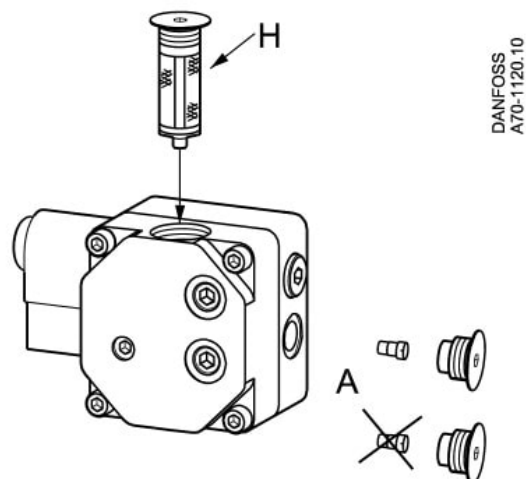
Service

Change-over and filter replacement

H: Filter

A: 2-pipe operation, with screw

1-pipe operation, without screw



Certificates, declarations and approvals

The list contains all certificates, declarations, and approvals for this product type. Individual code number may have some or all of these approvals, and certain local approvals may not appear on the list.

When you click on the link you will be directed to the latest version of the 'Declaration of Conformity'. Products developed and sold before this date of issue conform to the directives/standards in force at the time of their sale.

Approval type	Title	Certification body	Approval topic
Manufacturer's Declaration	Danfoss MD 071NP.05	Danfoss	EU RoHS
EU-UK Declaration	Danfoss EU-UK 071NP.05	Danfoss	LVD
Electrical Safety Certificate	DIN CERTCO 5S222	DIN CERTCO	
Electrical Safety Certificate	SEMKO SE-S-2101293R3	Intertek Semko	
Export Control Declaration	Oil pumps BFP/BFA/BFM	Danfoss	

Contact details

Online support

Danfoss offers a wide range of support along with our products, including digital information, software, mobile apps and expert guidance. See the possibilities below.



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