



Pumps

BFPM 61 LE-S

Description

The BFPM range is a series of Danfoss oil pumps in combination with a highly efficient permanent magnet motor. The BFPM Electronic Controller must be used for controlling BFPM motor pumps (see separate data sheet for BFPM Electronic Controller). BFPM 61 is designed with a pressure transducer, which makes it ideal for small, modulating oil burners.

Features & Benefits

- Light oil and kerosene
- 1- or 2-pipe operation
- 1-stage modulating
- Built-in pressure regulator
- Solenoid valve cut-off
- Cartridge filter
- Pressure transducer
- Variable set points and up to 3 set-back periods per day

Applications

- Small, modulating oil burners

Ordering

Product code numbers

Product group	Nozzle/pressure outlet	ROTATION	1 or 2 stage	Capacity [l/h]	Biofuel blend	Code number
Pumps	L	L	1 stage modulating	24.00	100	071N4106
Pumps	L	L	1 stage modulating	24.00	10	071N4109
Pumps	L	L	1 stage modulating	24.00	10	071N4117
Pumps	L	L	1	24.00	30	071N4119

Identification

Example:
BFPM **61 L 3 L**

BFPM	
6	6: pressure sensor
1	1: with one solenoid valve
L	L: left hand rotation
3	3: capacity 24 l/h
L	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.



071N4208

MOTOR CABLE, MP

MOTOR CABLE, MP

Related products

071N4117



071N4211

MOTOR CABLE BFPM (255MM)

MOTOR CABLE BFPM (255MM)

Related products

071N4117



071N4055

COMPLETE CONTROL FOR BFPM

COMPLETE CONTROL FOR BFPM

Related products

071N4117



071N4206

TRANSDUCER SIGNALCABLE MP

TRANSDUCER SIGNALCABLE MP

Related products

071N4117



071N4203

SIGNALCABLE

SIGNALCABLE

Related products

071N4117



071N4210

TRANSDUCER CABLE

TRANSDUCER CABLE

Related products

071N4117



071N4053

COMPLETE CONTROL FOR BFPM

COMPLETE CONTROL FOR BFPM

Related products

071N4117



071N4202

POWER CABLE BFPM WITHOUT FERRITE)

POWER CABLE BFPM WITHOUT FERRITE)

Related products

071N4117



071N4054

**COMPLETE CONTROL FOR
BFPM**

COMPLETE CONTROL FOR BFPM

Related products

071N4117



071N4052

**COMPLETE CONTROL FOR
BFPM VIESSMANN**

COMPLETE CONTROL FOR BFPM
VIESSMANN

Related products

071N4117

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, it opens and releases oil to the nozzle outlet.

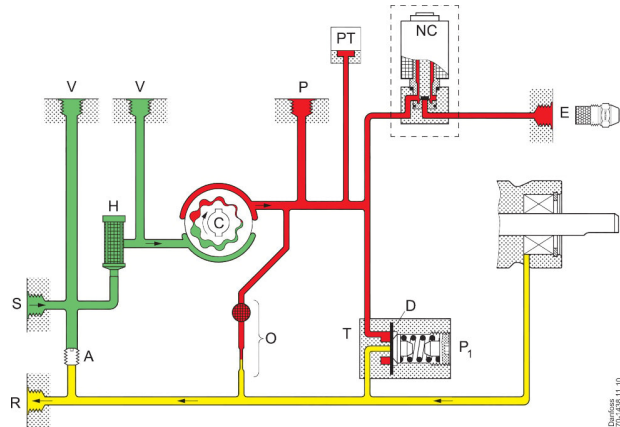
The pressure transducer (PT) reports the achieved pressure and the control, in conjunction with the oil/air ratio control, regulates the motor speed. The built-in pressure regulator prevents overpressure. Default setting is 30 bar.

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).



Red = Pressure
Green = Suction
Yellow = Return



Note:

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

Product details

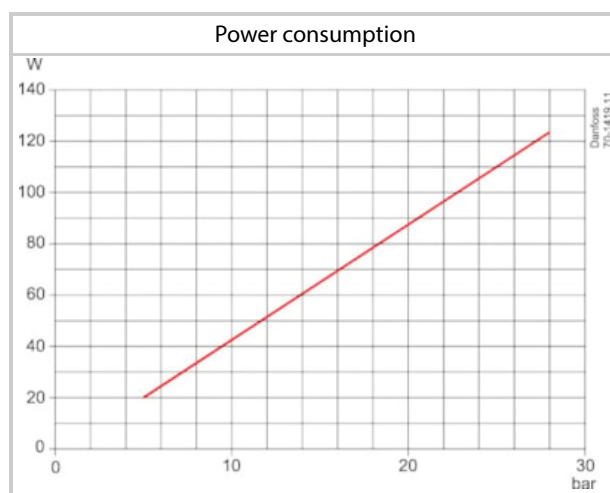
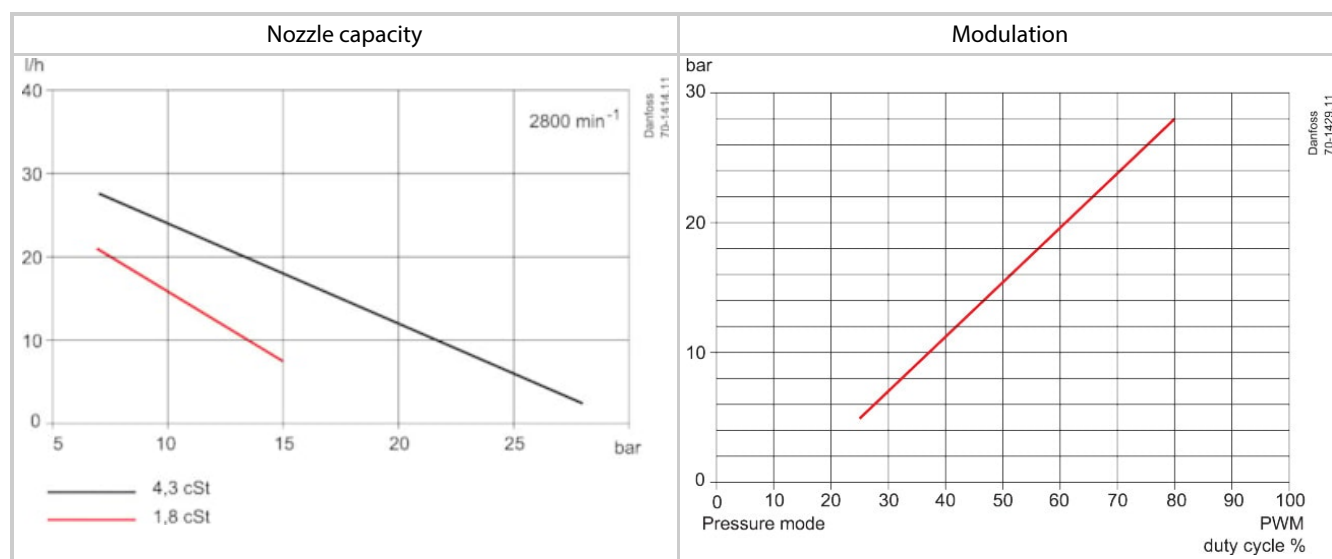
General data

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)	(1.3) 1.8 to 12.0 cSt. (mm ² /s)
Filter area/mesh	11/200 cm ² /μm
Pressure range ¹⁾	5 to 28 bar
Adjustable pressure, safety limitation	30 bar
Max. pressure in suction inlet/return outlet	2 bar
Speed	300 to 3400 min ⁻¹
Ambient/transport temperature	-20 to +70° C
Temperature of medium	0 to +70° C
Power supply/drive BFPM motor ²⁾	230 V switched from controller
Coil power consumption	9 W
Coil rated voltage (other voltages on request)	220/240 V, 50/60 Hz
Coil enclosure	IP 40

1) Max. 20 bar at 1.8 cSt.

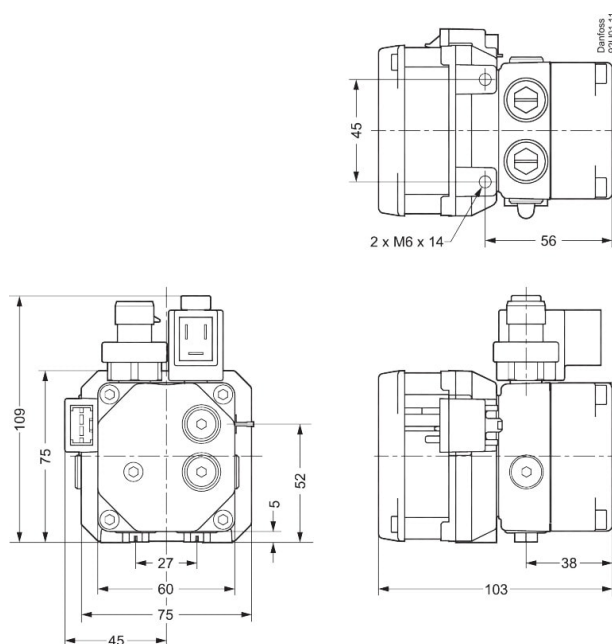
2) Warning: Do not connect BFPM motor directly to 230 V/50Hz power supply!

Capacity



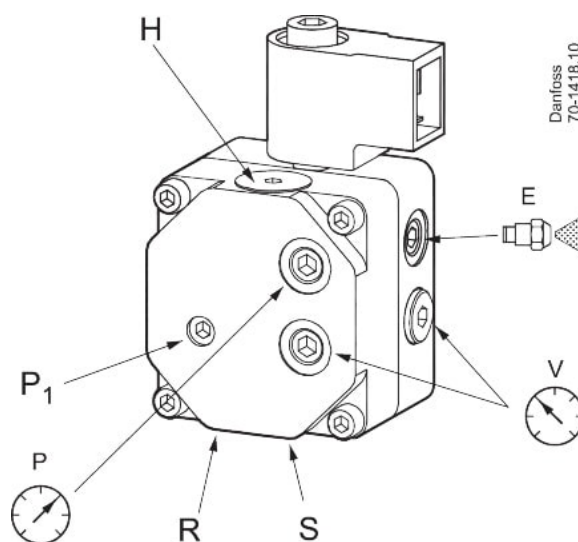
Dimensions & weights

Weight	Oil Motor Pump type BFPM 61	
	Gross weight	1.97 kg
	Net weight	1.969 kg
	Volumne	2.002 Liter



Connections

P1: Pressure limiter
 S: Suction inlet G1/4
 R: Return outlet G1/4
 E: Nozzle outlet G1/8
 P: Pressure gauge port G1/8
 V: Vacuum gauge port G1/8
 H: Filter

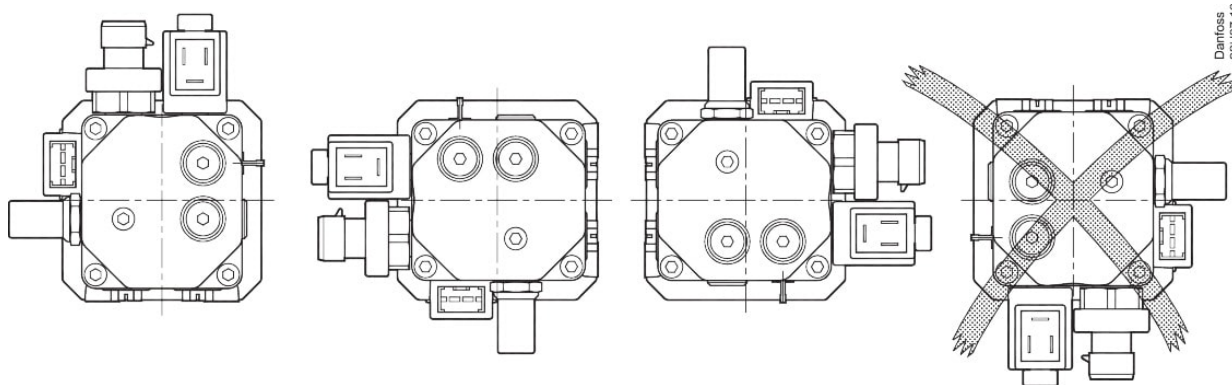


Warnings

Warranty

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

Installation



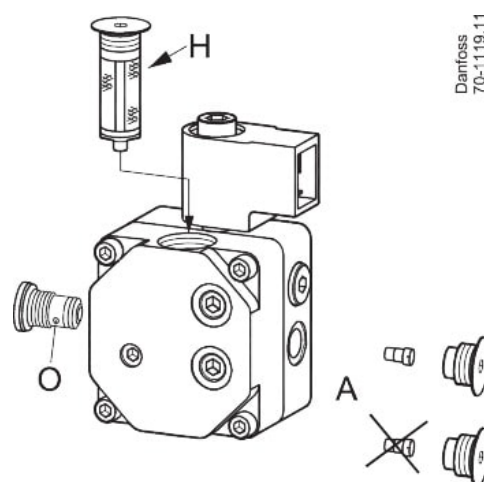
Service

Change-over and filter replacement

H: Filter

A: 2-pipe operation, with screw 1-pipe operation, without screw

O: Constriction with filter



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 MA-UK 071NPM.05	Danfoss	EU RoHS
EU-UK Declaration	Danfoss EU-UK 071NPM.06	Danfoss	EMC
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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