

Pumps

BFM

Burner Fuel Mobile Pump

Description

BFM pumps are specially designed for mobile heating applications up to 24 l/h. The size and weight of the pump make it particularly suitable where space is restricted. All components are designed to provide a long service life with constantly high efficiency and durability.

Features & Benefits

- Light oil, kerosene and biofuel blends hereof
- 2 pipe operation
- 1-stage
- Built-in pressure regulator
- Solenoid valve cut-off
- Shaft with Ø6 mm & Ø8 mm
- Bio compatible pressure and solenoid valve (Bio100 - version)

Applications

- Mobile heating applications up to 24 l/h.



Compatible with heating oil up to 100% biodiesel (FAME and UCOME)

Ordering

Product code numbers

Identification

Example:
BFM **B L 3 L**

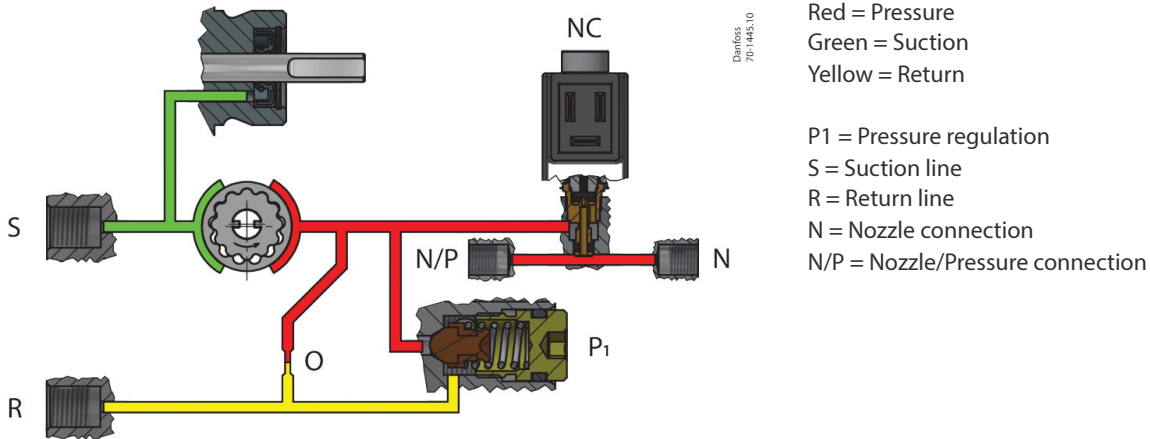
BFM	
B	B: biofuel ready for up to 100%
L	R: clockwise rotation L: counter-clockwise rotation
3	3: capacity 24 l/h
L	R: right hand nozzle outlet L: left hand nozzle outlet

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

Type	Nozzle/pressure outlet	ROTATION	1 or 2 stage	Capacity [l/h]	Biofuel blend	Code number
BFM	L	L	1	24.00	10	071N2550
BFM	L	L	1	24.00	10	071N2551
BFM	L	L	1	24.00	10	071N2555

Functions

Operation



Functionality

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

The pressure is kept constant at the value set by the adjustment screw (P1). In a 2-pipe system the excess fluid is led back to the return outlet (R) and the tank.

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

The pressure regulating valve (P1) functions in the following manner:

When the fluid opening pressure has been reached, flow to the return side is established.

The cone and spring maintain a constant pump pressure as set by the regulating valve.

Filtration

Proper pre-filtration (max. mesh size $w=0,15$) is crucial for the performance, the maintenance, and the warranty of the pump.

Bleeding

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

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).

By changing the materials of the components within our pumps, in relation to the different types of fuels - we ensure all product components are 100% bio compatible.

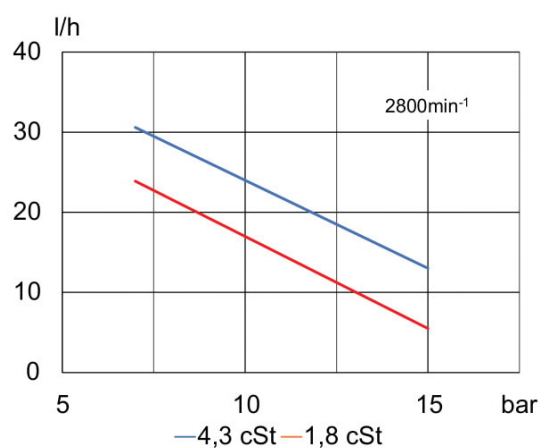


Product details

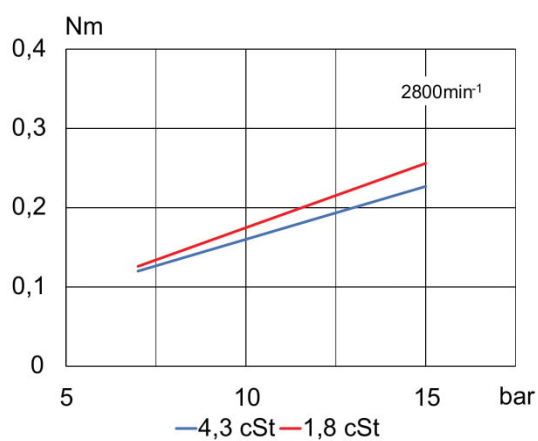
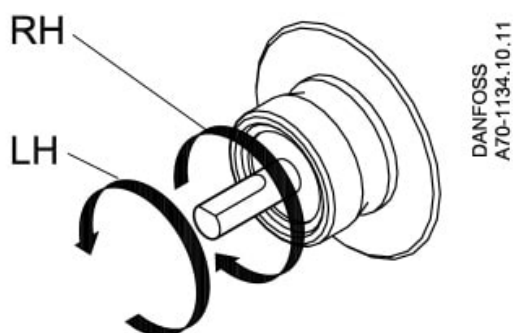
General data

Type		BFM - Burner Fuel Mobile Pump
Fuel types		Standard fuel according to DIN EN 51603-1 and biofuel according to DIN EN 51603-6;-8 and EN14214
Oil viscosity measured in suction port	cSt	1,8-12.0
Max. starting torque	Nm	0,12
Pressure range	bar	7-15
Factory setting	bar	10 ±1
Max. permissible pressure in suction/return line	bar	2
Speed	min ⁻¹	2400-3450
Ambient and transport temperature	° C	-20 - +70
Media temperature	° C	0 - +70°
Coil rated voltage	V	12 VDC 24 VDC 24 VAC 110/120 V 50/60 Hz 220/230 V 50/60 Hz
Coil power consumption	W	9
Coil grade of enclosure		IP 40
Shaft/neck		EN 225 - Ø8 or Ø6
Connection		2-pipe operation
Cable		To be ordered separately
Rotation		Left or right

Nozzle capacity [l/h]

Danfoss
70-1443.10

Operating torque [Nm]

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A70-1134.10.11

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

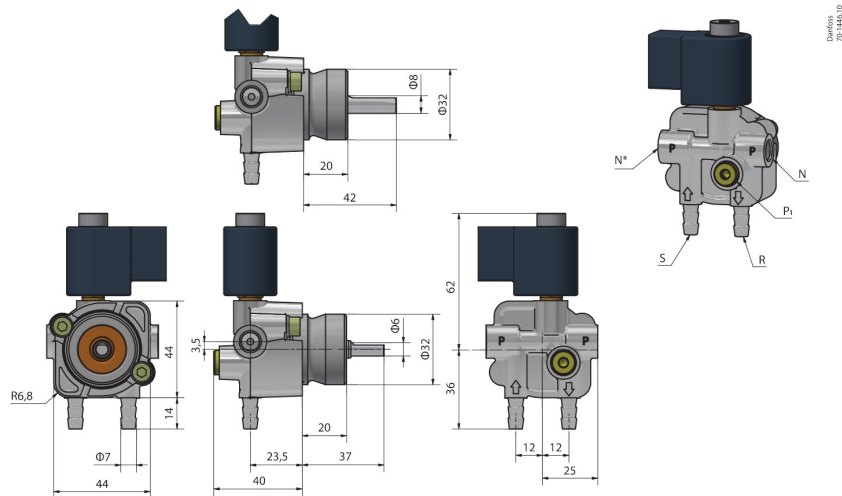
RH: R-rotation

LH: L-rotation

Dimensions & weights

- P1** Pressure regulation
S Suction line, tube
R Return line, tube
N Nozzle connection, G 1/8"
N* Alternative

Nozzle outlet: Left or right
 Option for both left and right (extra P port)
 Rotation: Left or right
 Motor connection options: Shaft Ø6 or Ø8



Warnings

Warranty

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

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
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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