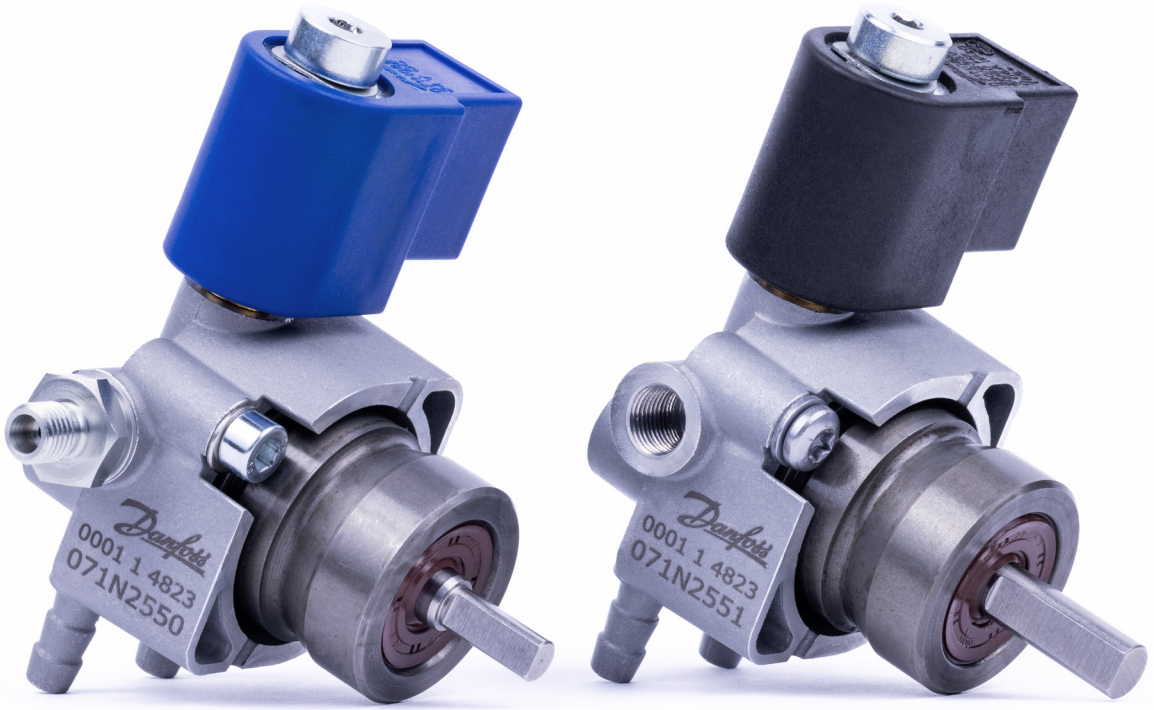
ENGINEERING TOMORROW

Danfoss Climate Solutions

BFM Pump
Burner Fuel Mobile Pump

Danfoss is utilizing more than 75 years of experience introducing the newest family member.

Little things can make a **BIG DIFFERENCE...**



- Premium **quality**
- High **performance**
- Long lasting **reliability**
- Highest demands on **repeatability**

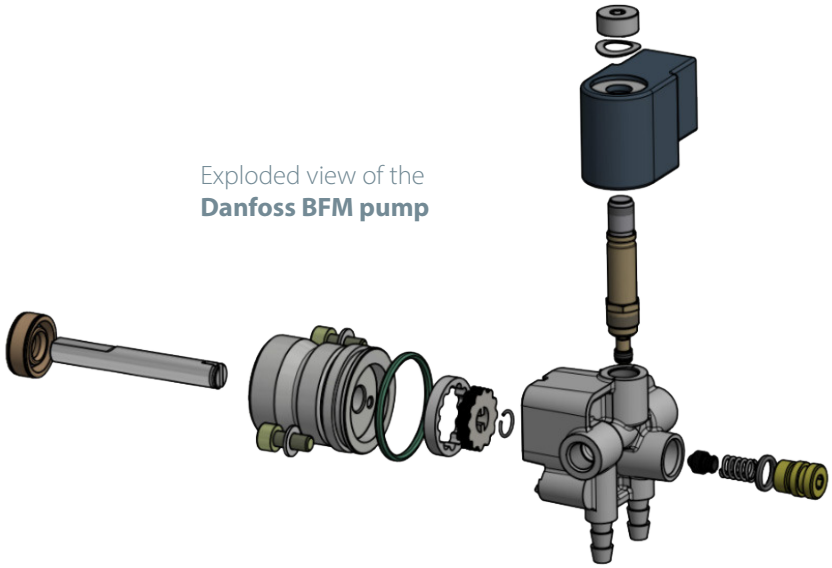
Why choose the Danfoss BFM Pump?

We are expanding our portfolio of reliable high-quality BFP pumps by introducing the new BFM pump, specially designed for mobile heating applications up to 24 l/h.

The pump's size and weight make it particularly suitable where space is restricted. All components are designed to provide a long service life with constantly high efficiency and durability.

Material properties

- **Valve housing:** Aluminum die cast
- **Pump housing:** Cast iron
- **Shaft:** Stainless steel
- **Regulating screw (Bio):** Brass (coating Tin-Nickel)
- **NC valve (Bio):** Brass (coating Tin-Nickel)
- **Shaft seal:** Rubber compound FKM



Exploded view of the **Danfoss BFM pump**

Applications

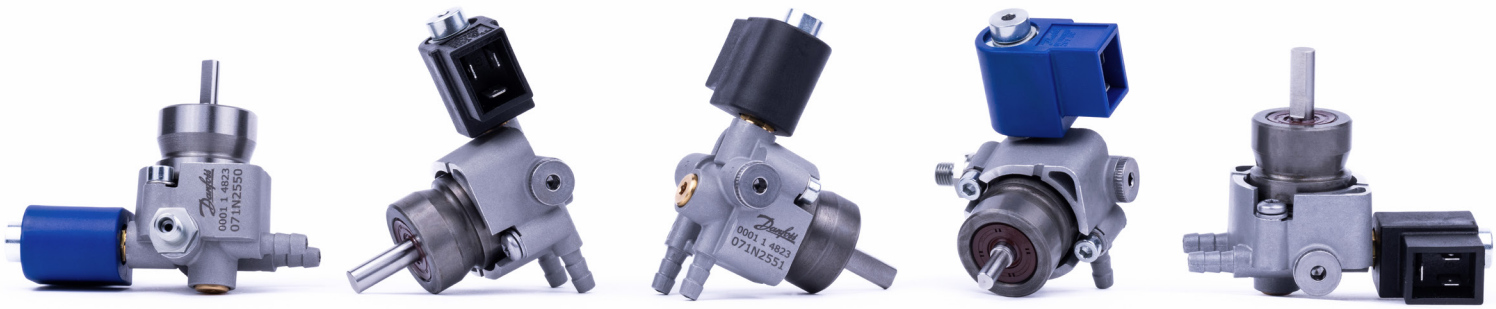
The BFM is **suitable for a wide range of operational areas.**

Open air heaters

Hot water high pressure cleaners

Car, truck and bus heaters

Operational properties to **match the right performance.**



Get to know the **BFM pumps**

Technical specifications

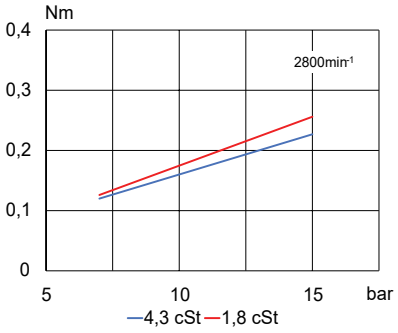
Type		BFM - Burner Fuel Mobile Pump
Fuel types		Standard fuel according to DIN EN 51603-1 and biofuel according to DIN EN 51603-6;-8 and EN14214
Oil viscosity measured in suction port	cSt	1,8-12.0
Max. starting torque	Nm	0,12
Pressure range	bar	7-15
Factory setting	bar	10 ±1
Max. permissible pressure 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

Bio 30 & 100
approved

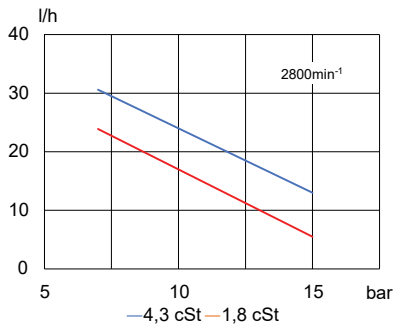
ISO 9001; ISO14001 - certified
IATF 16949 - compliant

We support our customers **decarbonization** efforts by providing them with best-in-class solutions for **transitioning to carbon-neutral energy sources.**

Operating torque



Nozzle capacity



> You get the same performance and quality independent of whether the pump is produced today, next month or in 10 years. It fulfills your exact needs – every time.

Please Note!

Contact us for a special quote if you should need other variants than specified.

We've taken the next step in our pump product portfolio development.

You can rely on our repeatability and high-end quality.

A smaller, lighter pump, with the **high quality and long lifetime** you would expect from **Danfoss.**

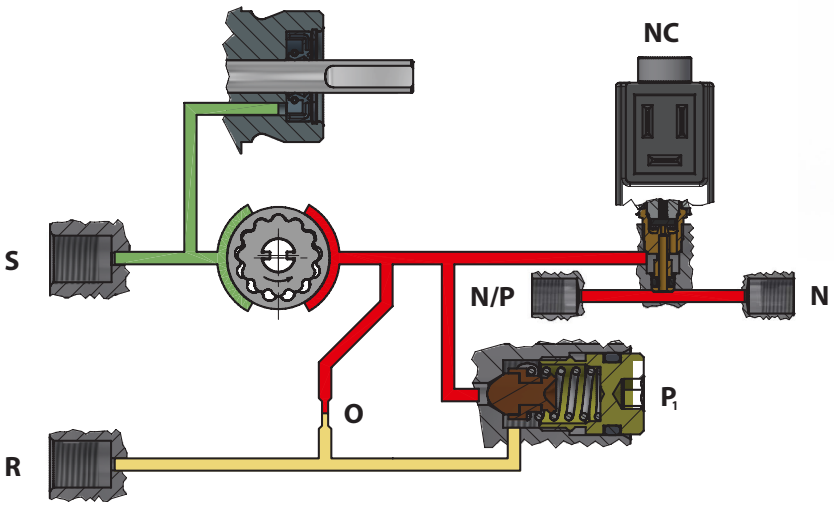
How it works

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.

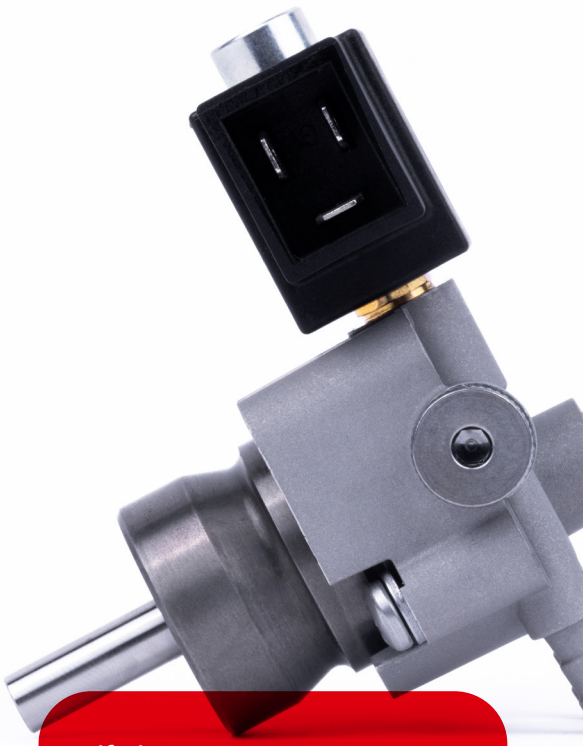
The pressure regulating valve (P1) functions in the following manner:

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



Pressure
Suction
Return

P_1 Pressure regulation
S Suction line
R Return line
N Nozzle connection
N/P Nozzle/Pressure connection



Lifetime

We've designed the BFM pump for long-lasting, service-free operations to reduce its life cycle costs. To achieve the pump's optimal lifetime, we strongly recommend following the factory specifications.

Filtration

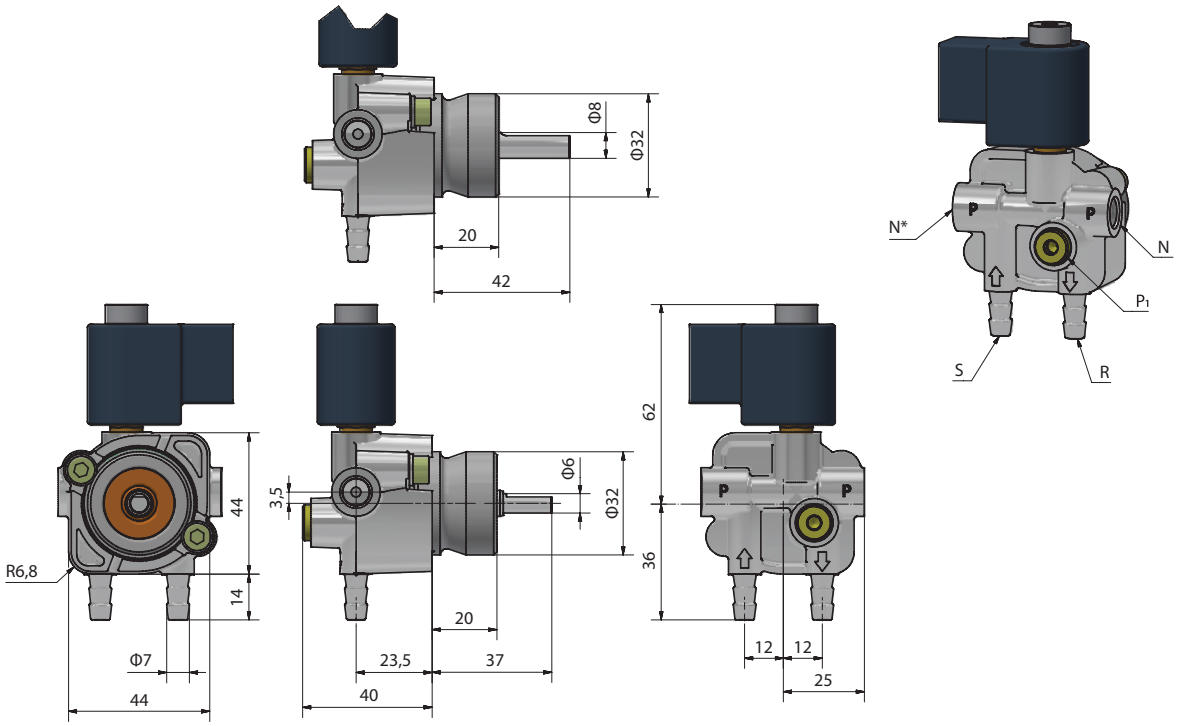
Proper pre-filtration (max. mesh size w=0,15) is crucial for the pump's performance, maintenance and warranty.

Your Benefits

- High mechanical efficiency
- Individual customization
- 2-pipe operation
- 75 years' operational experience transformed into smaller dimensions and built-in measurements

Dimensions and connections

For successful integration in the associated application



P_1 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

ENGINEERING
TOMORROW

Assistance & service:

We can help you choose the optimal combination and specification so you get the best pump solution for your needs.

To take advantage of this service, please

- **contact your regional sales manager**

  OR

- **send an e-mail to: R159227@danfoss.com**

The value of an idea lies **in the using of it.**

Our BFM pump covers the needs of a wide range of applications. And we back everything up with the solidity of Danfoss support. In short, **we are engineering tomorrow to fit your demand.**

AD480654638936en-000101