



Pumps

BFP 52

size 3 and 5

Description

BFP 52E fuel pumps - size 3 and 5 are designed for small/medium-sized 2-stage domestic fuel burners up to 42 l/h.

Features & Benefits

- Light oil, kerosene and biofuel blends hereof
- 1 or 2-pipe operation
- 2-stage
- Two built-in pressure regulators
- Solenoid valve cut-off
- Cartridge filter
- Bio compatible pressure and solenoid valve (Bio100 - version)

Applications

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



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

Ordering

Product code numbers

Product Type	Nozzle/pressure outlet	ROTATION	1 or 2 stage	Capacity [l/h]	Biofuel blend	Code number
BFP 52	L	R	2	42.00	10	071N2207
BFP 52	L	L	2	42.00	10	071N2212
BFP 52	L	L	2	24.00	30	071N2218
BFP 52	L	L	2	24.00	10	071N2251
BFP 52	L	L	2	42.00	10	071N2252
BFP 52	L	R	2	24.00	10	071N2253
BFP 52	L	R	2	42.00	10	071N2254
BFP 52	L	R	2	24.00	10	071N2257
BFP 52	L	L	2	24.00	10	071N2264
BFP 52	L	R	2	24.00	10	071N2273
BFP 52	R	L	2	16.00	10	071N2286
BFP 52	R	L	2	24.00	10	071N2299
BFP 52	L	L	2	24.00	10	071N3201
BFP 52	L	L	2	42.00	10	071N3202
BFP 52	L	R	2	24.00	10	071N3203

Identification

Example:
BFP **B 52 E L 5 L**

BFP	
B	B: biofuel ready for up to 100%
5	5: two stages, two pressure regulators
2	2: two solenoid valves
E	E: use electrical air damper
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.



071G0200

CABLE FOR NC VALVE, 500 mm OEM

CABLE FOR NC VALVE, 500
mm OEM

Related products

071N2203

071N2286

071N3204



071G0235

CABLE FOR NC VALVE, 180 mm OEM

CABLE FOR NC VALVE, 180 mm OEM

Related products

071N2286

071N3204



071G0202

CABLE FOR NC VALVE, 280 mm OEM

CABLE FOR NC VALVE, 280
mm OEM

Related products

071N2203

071N2286

071N3204



071G0204

CABLE FOR NC VALVE, 710 mm OEM

CABLE FOR NC VALVE, 710 mm OEM

Related products

071N2203

071N2286

071N3204



071G0205

CABLE FOR NO VALVE, 710 mm OEM

CABLE FOR NO VALVE, 710
mm OEM

Related products

071N2203

071N2286

071N3204



071N0007

NC SERVICE VALVE FOR 24 V DC

NC SERVICE VALVE FOR 24 V DC

Related products

071N2203



071N0062

Coil 24 V AC.

Coil 24 V AC.

Related products

071N2203



071N0604

PLUG 1/8" FOR P AND V PORTS.

PLUG 1/8" FOR P AND V PORTS.

Related products

071N2203



071B0011

BUSH 32 x 54 mm.

BUSH 32 x 54 mm.

Related products

071N2203



071N0047

BUSH 32 x 54 mm W. STD. FLANGE.

BUSH 32 x 54 mm W. STD. FLANGE.

Related products

071N2203



071G0201

CABLE FOR NO VALVE, 500 mm OEM

CABLE FOR NO VALVE, 500 mm OEM

Related products

071N2203



071N0010

COIL 220/240 V AC.

COIL 220/240 V AC.

Related products

071N2203



071N0601

NO COIL 220/240 V

NO COIL 220/240 V

Related products

071N2203



071N0061

COIL 110/120 V AC.

COIL 110/120 V AC.

Related products

071N2203



071N1033

O-rings for cover (ø54) and regulator (ø9,75)

O-rings for cover (ø54) and regulator (ø9,75)

Related products

071N2203



071N1055

PLUG FOR 1/4" CONNECTIONS

PLUG FOR 1/4" CONNECTIONS

Related products

071N2203



071N0050
NC VALVE
NC VALVE

Related products

071N2203



071G2245
CABLE FOR NC VALVE, 2100 mm
CABLE FOR NC VALVE, 2100 mm

Related products

071N2203

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

Spare parts code numbers

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



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

Related products

071N2209

071N2218

071N2257

071N2273

071N2286

071N2299

071N3201

071N3202

071N3203

071N3204



071N0041
CHANGE OVER SCREW 2-PIPE OPERATION
CHANGE OVER SCREW 2-PIPE OPERATION

Related products

071N2209

071N2218

071N2257

071N2273

071N2286

071N2299

071N3201

071N3202

071N3203

071N3204



071N0005
NO SERVICE VALVE FOR USE W. NC COIL
NO SERVICE VALVE FOR USE W. NC COIL

Related products

071N2209

071N2218

071N2257

071N2273

071N2286

071N2299

071N3201

071N3202

071N3203

071N3204



071N3010
NO SERVICE VALVE FOR USE W. NO COIL
NO SERVICE VALVE FOR USE W. NO COIL

Related products

071N2218

071N2257

071N2273

071N2286

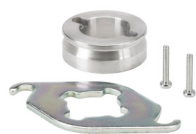
071N2299

071N3201

071N3202

071N3203

071N3204



071N0047

BUSH 32 x 54 mm W. STD. FLANGE.

BUSH 32 x 54 mm W. STD. FLANGE.

Related products

071N2218

071N2257

071N2273

071N2286

071N2299

071N3201

071N3202

071N3203

071N3204



071N3011

NC LE-S SERVICE VALVE

NC LE-S SERVICE VALVE

Related products

071N2218

071N2257

071N2273

071N2286

071N2299

071N3201

071N3202

071N3203

071N3204



071N1033

O-rings for cover (ø54) and regulator (ø9,75)

O-rings for cover (ø54) and regulator (ø9,75)

Related products

071N2218

071N2257

071N2273

071N2286

071N2299

071N3201

071N3202

071N3203

071N3204



071N0064

CARTRIDGE STRAINER BFP

CARTRIDGE STRAINER BFP

Related products

071N2218

071N2257

071N2273

071N2286

071N2299

071N3201

071N3202

071N3203

071N3204



071N0074

PLUG FOR CARTRIDGE FILTER.

PLUG FOR CARTRIDGE FILTER.

Related products

071N2218

071N2257

071N2273

071N2286

071N2299

071N3201

071N3202

071N3203

071N3204



071N1006

COIL T85 230 V AC

COIL T85 230 V AC

Related products

071N2218

071N2257

071N2273

071N2286

071N2299

071N3201

071N3202

071N3203

071N3204



071N1055

**PLUG FOR 1/4"
CONNECTIONS**

PLUG FOR 1/4" CONNECTIONS

Related products

071N2218

071N2257

071N2273

071N2286

071N2299

071N3201

071N3202

071N3203

071N3204



071N1007

NO COIL T85 230 V AC

NO COIL T85 230 V AC

Related products

071N2218

071N2257

071N2273

071N2286

071N2299

071N3201

071N3202

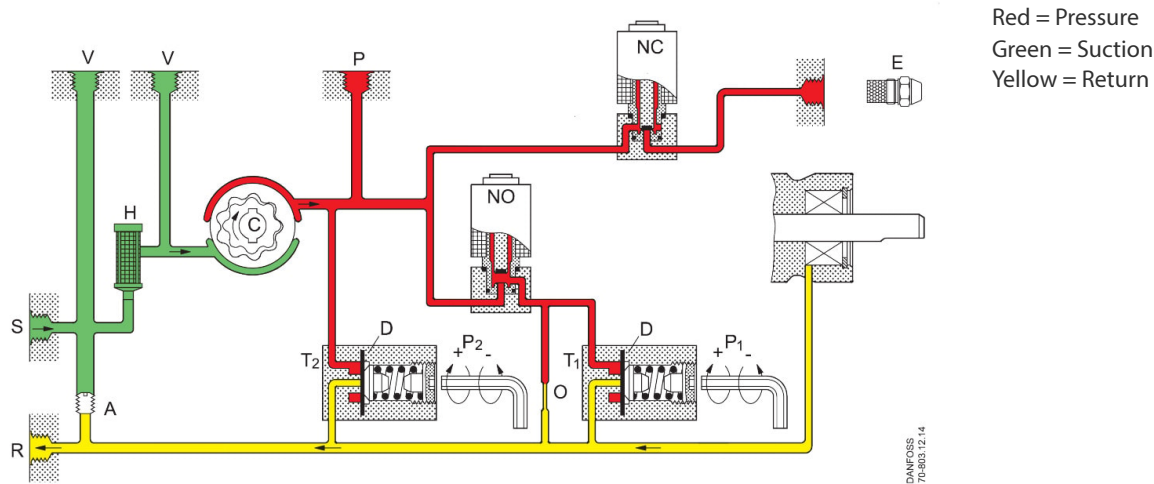
071N3203

071N3204

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) fuel is drawn through the filter (H) to the gear set, where the pressure is increased. By means of the diaphragm (D) in the pressure regulator for stage 1 (T_1), the pressure is kept constant at the value set on adjustment screw (P_1).

When voltage is applied to the NC-valve, it opens and releases fuel to the nozzle outlet.

When voltage is applied to the NO-valve, it closes and puts the pressure regulator (T_1) out of function.

The pressure now rises to the pressure regulator (T_2) value for stage 2 set on adjustment screw (P_2).

In 2-pipe systems the excess fuel 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 fuel is returned internally to the gear set (see figure).

Cut-off function, solenoid valve

When the burner stops, the voltage to the solenoid valves is cut off.

The NO-valve opens and the NC-valve closes and cuts off the fuel flow to the nozzle outlet 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 fuel 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).

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

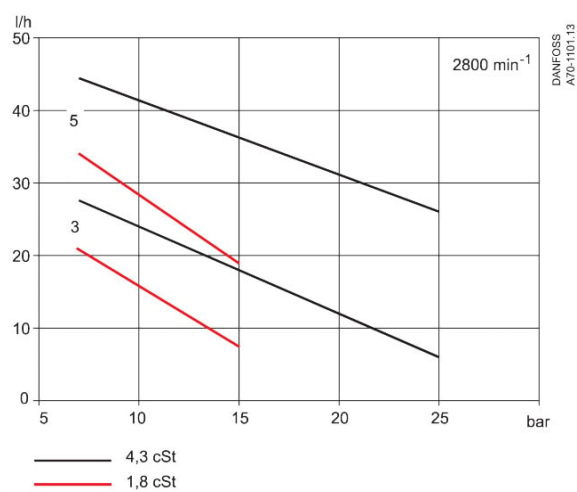
BFP 52E	3	5
Fuel type	Standard fuel according to DIN EN 51603-1 and biofuel according to DIN EN 51603-6;-8 and EN14214	
Viscosity range (measured in suction inlet) ¹⁾	(1.3) 1.8 to 12.0 cSt. (mm ² /s)	
Filter area/mesh	11 cm ² /200 µm	
Pressure range, stage 1 ^{1) 2)}	7 to 15 bar	
Pressure range, stage 2 ^{1) 2)}	10 to 25 bar	
Default setting, stage 1	10 ±1 bar	
Default setting, stage 2	13 ±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) Max. 12 bar at 1.3 cSt., max. 15 bar at 1.8 cSt.

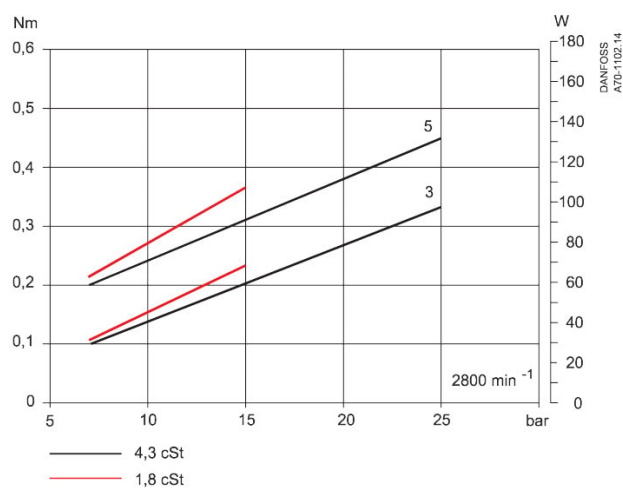
2) If blend oil used, technical data can be different

Capacity

Nozzle capacity [l/h]

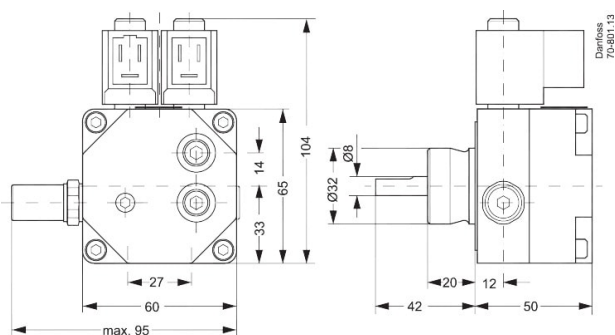


Operating torque [Nm] Power consumption [W]



Dimensions & weights

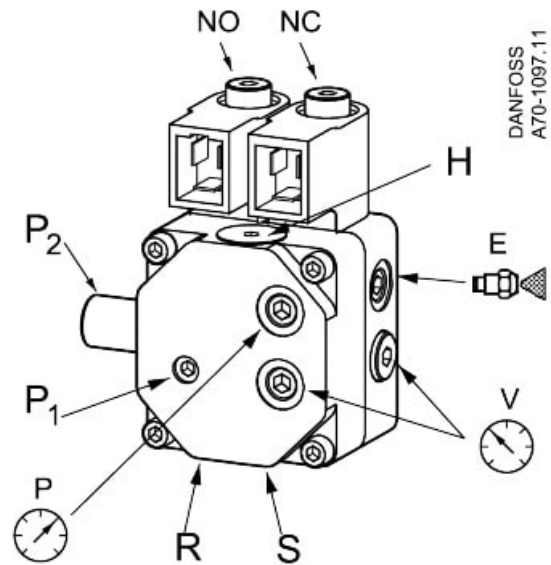
Weight	Fuel Pump type BFP 52E, size 3 and 5	
	Gross weight	1.144 kg
	Net weight	1.143 kg
	Volume	1.203 Liter



Connections

Example shows BFP 52 L5L

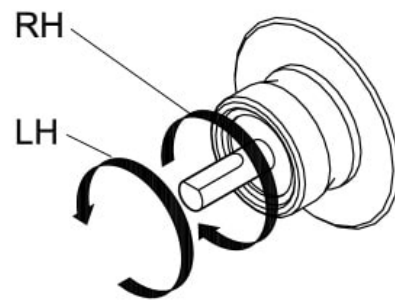
- P₁: Pressure adjustment stage 1
- P₂: Pressure adjustment stage 2
- S: Suction inlet G 1/4
- R: Return outlet G 1/4
- E: Nozzle outlet G 1/8
- P: Pressure gauge port G 1/8
- V: Vacuum gauge port G 1/8
- H: Filter



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

- RH: R-rotation
- LH: L-rotation

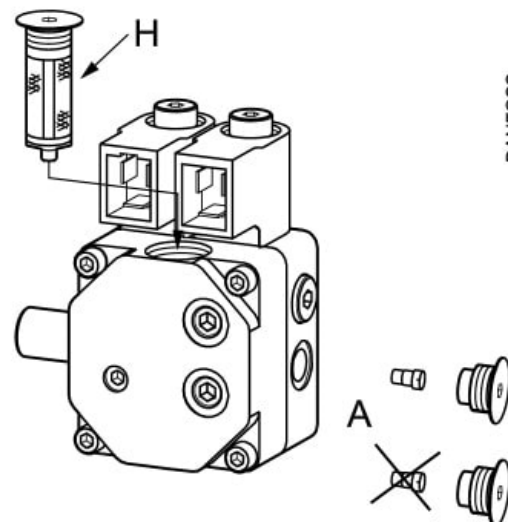


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Service

Change-over and filter replacement

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



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A70-1125.10

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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Danfoss A/S

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