

RFN

Flexible impeller pump



APPLICATION

The RFN pump is a flexible impeller pump. It is designed to be reversible and self-priming, able to draw liquid to a maximum height of 5 metres. This type of pump can pump products with a low or high viscosity as well as products that contain particles or gases.

The main applications include pumping dairy products, oil, wine and beverages in general.

HOW IT WORKS

The eccentric shape of the pump casing creates a vacuum in the suction zone as the volume between the paddles increases, sucking in the product.

As the impeller rotates, the product is transported from the suction port to the discharge port and, again due to the eccentric shape of the body, the paddles are bent in the discharge zone, decreasing the volume between them and forcing the discharge of the product.

DESIGN AND FEATURES

- Reversible and self-priming
- Machined investment-cast body
- Impeller drive with double plane on shaft
- Single exterior mechanical seal
- Easy to maintain
- NEMA motor

TECHNICAL SPECIFICATIONS

Materials

Parts in contact with the product	1.4404 (AISI 316L)
Other steel parts	1.4301 (AISI 304)
Lantern ring and bearing support	CF8
Impeller	CR (neoprene)
Gaskets in contact with the product	FPM (standard) - EPDM

Mechanical seal

Rotating part	Carbon (C)
Stationary part	Silicon carbide (SiC)
Gaskets	FPM

Surface finish

Internal	Polished Ra ≤ 0.8 µm
External	Matte

Connections

CLAMP

Operating limits

Maximum flow	28 m³/h	132 US gpm
Maximum operating pressure¹	200 - 400 kPa (2 - 4 bar)	29 - 58 PSI
Maximum operating temperature	80°C	176°F
Maximum speed	1750 rpm	

1) Depending on the model

Pump	Flow¹ [m³/h]	Starting torque² [Nm]	Reversing torque² [Nm]	Maximum differential pressure [kPa]	Maximum speed [rpm]
RFN-02/20	1.4	4.7	7.1	300	1750
RFN-05/25	4	7.3	13.4	250	
RFN-10/40	9	15.1	31.6	250	
RFN-20/50	20	24.4	51.6	200	

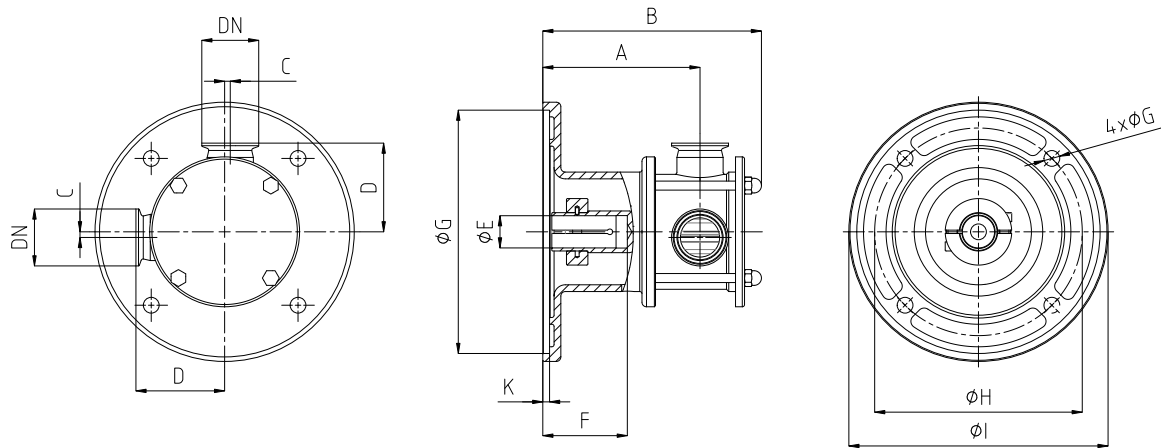
1) Maximum flow for clean, non-viscous liquids

2) The use of a frequency inverter can result in a drop in the motor starting torque.

OPTIONS

- SiC/SiC seal
- 6-pole motors
- Electrical panel with 10 m of cable
- Stainless steel trolley

DIMENSIONS



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Pump	NEMA motor	DN	A	B	C	D	E	F	G	H	ØI	J	K	kg
RFN-02/20	56C	1"	4.09	5.43	0.08	2.52	0.63	2.19	4.50	5.87	6.61	0.43	0.16	4.0
RFN-05/25	143TC/145TC	1"	4.45	6.14	0.08	2.68	0.88	2.20	4.50	5.87	6.61	0.43	0.16	4.5
RFN-10/40	182TC/184TC	1½"	5.47	7.64	0.20	3.09	1.13	2.95	8.50	7.25	9.06	0.55	0.24	8.0
RFN-20/50	213TC/215TC	2"	6.54	9.17	0.26	3.64	1.38	3.44	8.50	7.25	9.06	0.55	0.24	12

Dimensions in inches