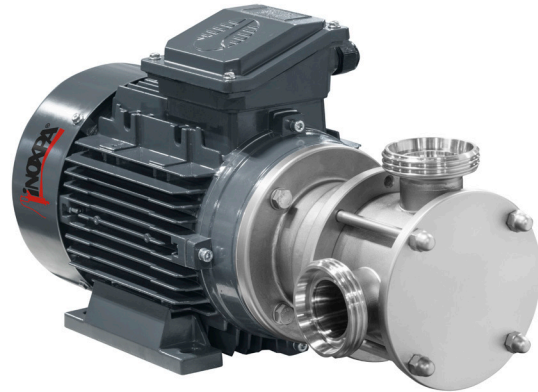


# RF

## Flexible impeller pump



### APPLICATION

The RF 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 body 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

Bare shaft or monoblock variants.

Reversible and self-priming

Machined investment-cast body

Impeller drive with double plane on shaft

Single exterior mechanical seal

Easy to maintain

IEC B3 motors for the bare shaft version and B34 for the monoblock model, IP55 protection, F insulation

### 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	Bright polished Ra ≤ 0.8 µm
External	Matte

**Connections**

DIN 11851  
 CLAMP  
 SMS  
 (Other connections available on request)

**Operating limits**

Maximum flow	28 m <sup>3</sup> /h	132 US gpm
Maximum operating pressure <sup>1</sup>	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	Flow <sup>1</sup> [m <sup>3</sup> /h]	Starting torque <sup>2</sup> [Nm]	Reversing torque <sup>2</sup> [Nm]	Maximum differential pressure [kPa]		Maximum speed [rpm]
				Mono- block	Bare shaft	
RF-02/20	1.4	4.7	7.1	300	400	1750
RF-05/25	4	7.3	13.4	250	400	
RF-10/40	9	15.1	31.6	250	400	
RF-20/50	20	24.4	51.6	200	200	
RF-30/65	28	64.3	110.5	-	400	

1) Maximum flow for clean, non-viscous liquids

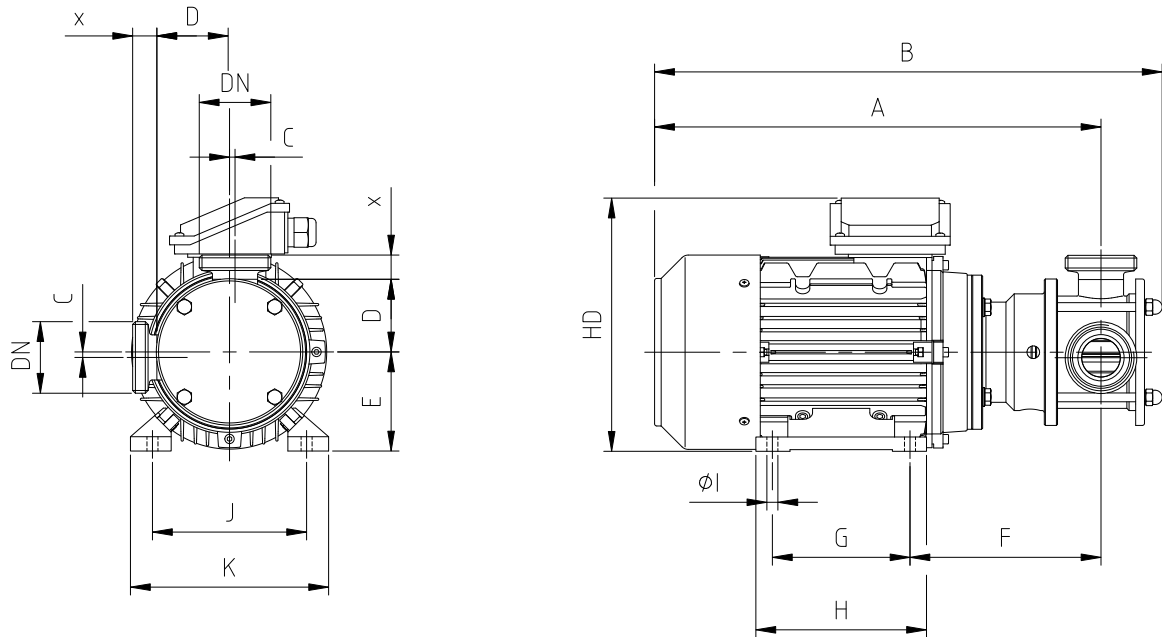
2) The use of a frequency inverter can result in a drop in the motor starting torque.

**OPTIONS**

Seal in SiC/SiC and SiC/C  
 Different types of connection  
 Motors with other protection levels  
 6-pole motors  
 Electrical panel with 10 m of cable  
 Stainless steel trolley

## DIMENSIONS

### Monoblock pump

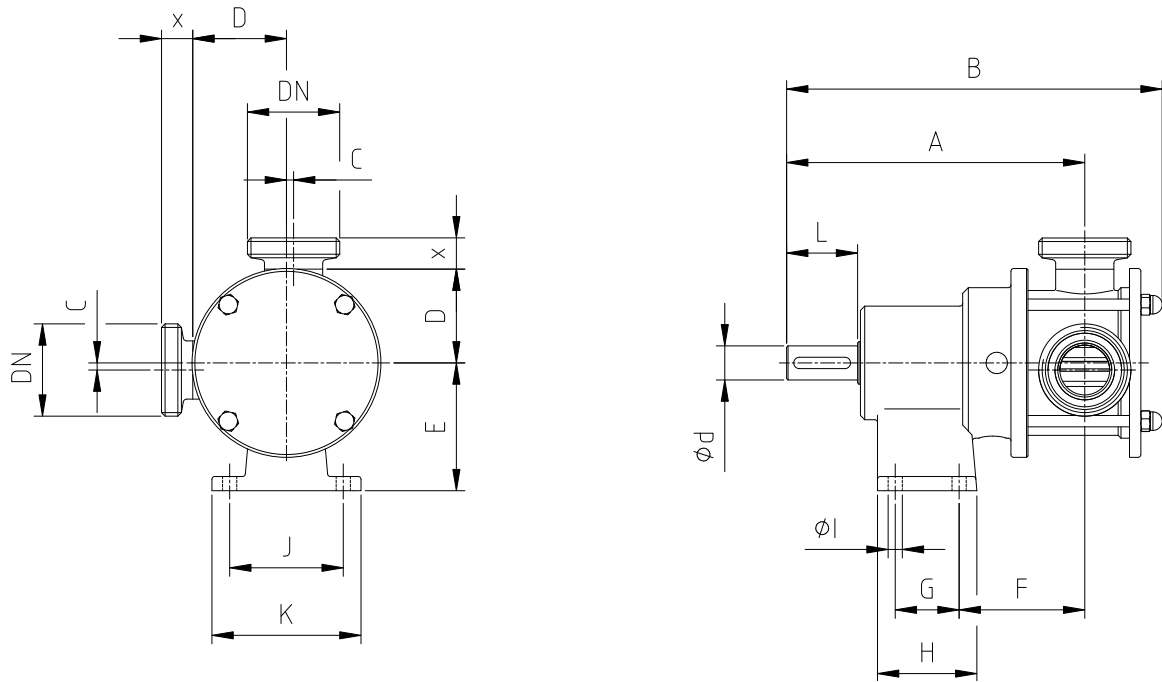


01.650.32.0045

Pump	DIN 11851		SMS		CLAMP OD	
	DN	x	DN	x	DN	x
RF-02/20	25	22	25	19	1"	12.5
RF-05/25	25	22	25	19	1"	12.5
RF-10/40	40	22	38	23	1½"	12.5
RF-20/50	50	23	51	23	2"	12.5

Pump	Motor [kW]			A	B	C	D	E	F	G	H	ØI	J	K	L	kg
	Size	4 poles	6 poles													
RF-02/20	80	0.75	0.55	330	350	2	51.5	80	139	100	125	9	125	155	220	14
RF-05/25	80	0.75	0.55	340	370	2	55.5	80	148	100	125	9	125	155	220	15
RF-10/40	90	1.5	1.1	410	445	5	66	90	174	125	155	10	140	180	240	25
RF-20/50	100	3	1.5	460	510	6.5	80	100	205	140	180	12	160	200	265	39

## Bare shaft pump



01.650.32.0046

Pump	DIN 11851		SMS		CLAMP OD	
	DN	x	DN	x	DN	x
RF-02/20	25	22	25	19	1"	12.5
RF-05/25	25	22	25	19	1"	12.5
RF-10/40	40	22	38	23	1½"	12.5
RF-20/50	50	23	51	23	2"	12.5
RF-30/65	65	25	63.5	27	2½"	12.5

Pump	Ød	A	B	C	D	E	F	G	H	Øl	J	K	L	kg
RF-02/20	19	172	206	2	51.5	80	74	30	60	9	70	90	40	4.5
RF-05/25	19	181	225	2	55.5	80	83	30	60	9	70	90	40	5
RF-10/40	24	210	265	5	66	90	88	45	70	10	80	105	50	9
RF-20/50	28	272	335	6.5	80	100	109	75	105	11	90	120	60	17
RF-30/65	28	280	350	10	85	100	117	75	105	11	90	120	60	21