



I Application

The range of BFI series presents vertical direct motor-driven agitators.

These agitators are used in processes of mixing, dissolution, dispersion and maintenance whenever powerful and high-speed agitation is required in the food processing, cosmetics, pharmaceutical or chemical industries.

The agitators are normally fitted to small or medium volume tanks for work with low-viscosity products.

Bearing support of the BFI series agitators is manufactured in stainless steel and it is indicated for the pharmaceutical applications.

I Operating principle

The agitators are normally installed inside the tank either centrally with current deflectors, or offset so that the offsetting itself prevents the rotation of the stirred product.

The rotation of the propeller makes the fluid flow to the bottom and then up to the surface of the product along the walls of the tank. The effect is promoted if the bottom of the tank is curved.

The saw tooth propeller promotes the dispersion of the product.



I Design and features

Vertical agitator.

Double lip seal.

Double ball bearing support.

The propeller fixed to the shaft by means of a threaded connection and a gasket; the shaft is made of one piece.

IEC motors, 1500 rpm, IP 55, F-class insulation.

Marine propeller (Type 10) or saw tooth propeller (Type 4).

Indicated for work under pressure or in vacuum (-1 to 4 bar).

I Materials

Parts in contact with the product

1.4404 (AISI 316L)

Retainer

GYLON according to FDA 177.1550

Bearing support

1.4301 (AISI 304)

Surface finish

Ra ≤ 0,8 µm (except cowler)



I Options

Different sealing options.

Shaft and propeller lined with plastic material for use with corrosive products.

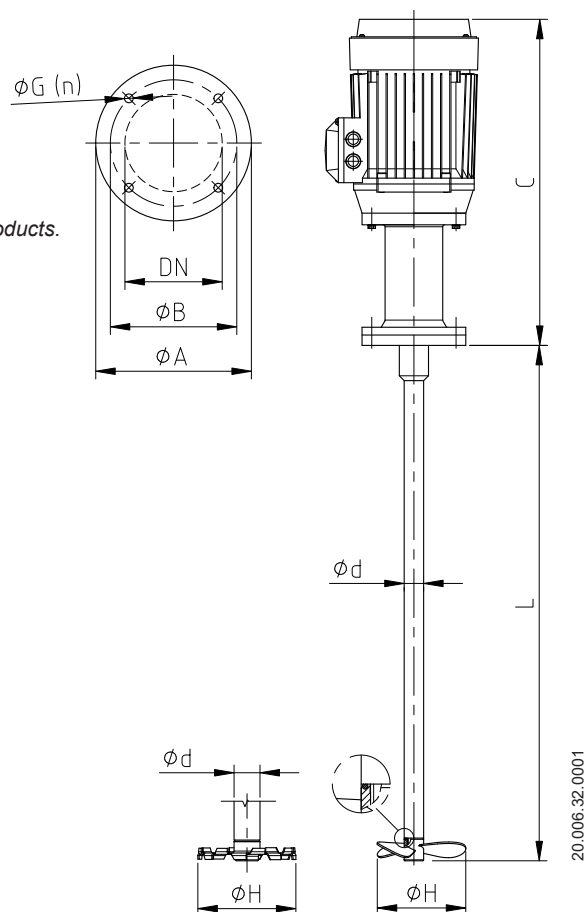
Welded propeller with $Ra \leq 0,4 \mu m$ surface finish.

Motor shroud.

Motors with other protections.

Motors: 950 rpm or 750 rpm.

Geared motors or variable speed drives.

**I Technical specifications and dimensions**

Agitator type	Motor power (kW)	Speed (rpm)	Bearing support size	Dimensions (mm)								
				C	Flange				Agitator shaft		Propeller	
					ϕA	ϕB	DN	$\phi G(n)$	ϕd	L_{max}	Marine ϕH	Cowler ϕH
BFI 1.10-4011-1-160	1,1	1450	90	515	160	130	100	14(4)	30	1500	160	-
BFI 1.10-4015-1-175	1,5	1450	90	515					30	1500	175	-
BFI 1.10-4030-1-200	3	1450	100	543					30	1500	200	-
BFI 1.10-4055-1-225	5,5	1450	112	546					30	1500	225	-
BFI 1.10-6007-1-175	0,75	950	90	515					30	1500	175	-
BFI 1.10-6011-1-200	1,1	950	100	543					30	1500	200	-
BFI 1.10-6015-1-225	1,5	950	100	543					30	1500	225	-
BFI 1.4-4022-1-150	2,2	1450	100	543					30	1500	-	150
BFI 1.4-4040-1-200	4	1450	112	546					30	1500	-	200

