Vertical Agitator



I Application

The range of the BCI agitators presents vertical direct motor-driven agitators. These agitators are used in the 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 volume tanks of up to 1.500 liters for use with low-viscosity products.

I Operating principle

The agitators are normally installed inside the tank either centrally with current deflectors, or offset, to prevent 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 Lineflux propeller vigorously agitates the content of the tank promoting the mixing of the product while the sawtooth propeller promotes its dispersion.

I Design and features

Vertical agitator.

Sealing: V-ring and retainer.

Bearing support.

Propeller attached to shaft and shaft attached to the half-shaft by Allen studbolts.

IEC B14 motor, 1500 rpm, IP 55, F-class insulation.

Max. power 0,75 kW. Lineflux propeller (Type 18).

I Materials

Parts in contact with the product AISI 316L NBR V-ring and retainer Bearing support Aluminum Surface finish (except Lineflux propeller) Ra ≤ 0,8 µm

I Options

V-ring and retainer: FPM.

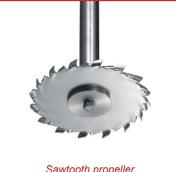
Sawtooth propeller.

Welded propeller with Ra ≤ 0,5 µm surface finish.

Motor shroud.

Motors with other protections. Motors: 950 rpm or 750 rpm.

Pneumatic drive.



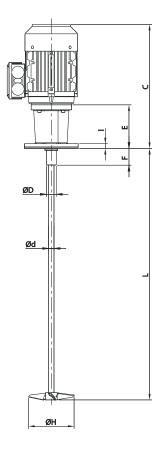


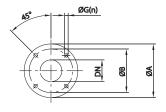






I Technical specifications and dimensions





| Туре | | | BCI 1.18-4007-1-100 | BCI 1.18-4007-1-130 | BCI 1.18-4007-1-150 | BCI 1.18-6005-1-130 | BCI 1.18-6005-1-150 |
|---------------------------|--------|-------|---------------------|---------------------|---------------------|---------------------|---------------------|
| Motor power | | [kW] | 0,75 | | | 0,55 | |
| Speed | | [rpm] | 1415 | | | 940 | |
| Volume [H ₂ O] | | [m³] | 0,1 - 0,6 | 0,2 - 0,8 | 0,4 - 1,5 | 0,1 - 0,7 | 0,15 - 1 |
| Dimensions | Α | [mm] | 160 | | | | |
| | В | | 130 | | | | |
| | С | | 360 | | | | |
| | ØD | | 30 | | | | |
| | E | | 130 | | | | |
| | F | | 50 | | | | |
| | ØG | | 10,5 (4) | | | | |
| | I | | 14 | | | | |
| | DN | | 65 | | | | |
| Agitator shaft | Ød | [| 16 | | | | |
| | L max. | [mm] | 1250 | | | | |
| Lineflux propeller | ØН | [mm] | 100 | 130 | 150 | 130 | 150 |
| Weight | | [kg] | 16,5 17 | | | | |

