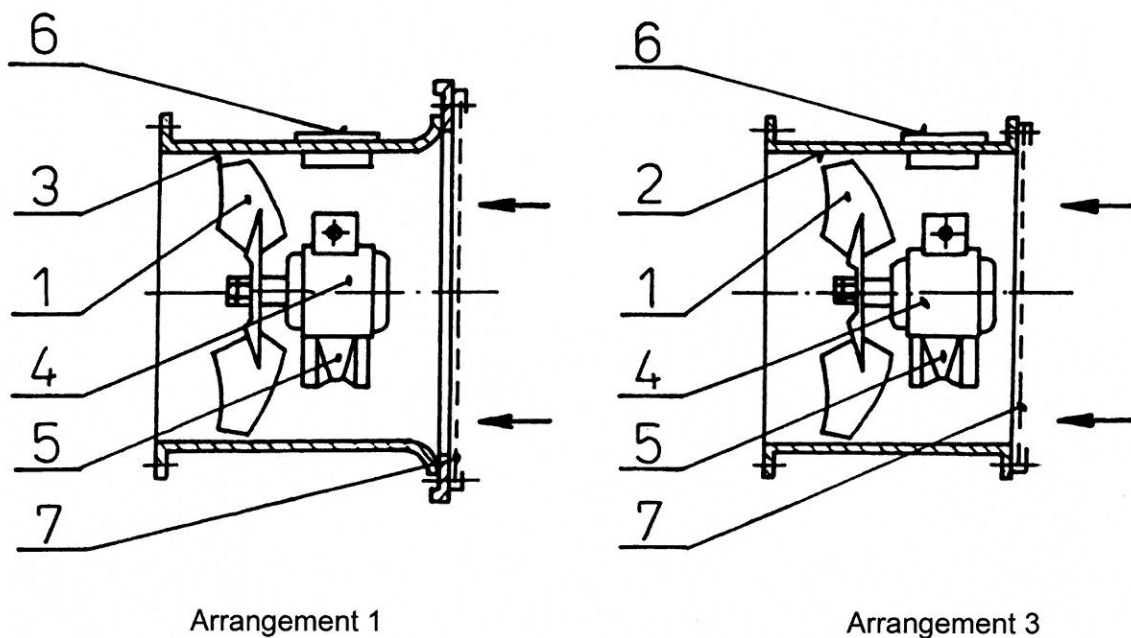


## API AXIAL FANS



**Main components:**

- 1. Impeller with hub
- 2. Housing with flanges
- 3. Housing with suction orifice
- 4. Electric motor

- 5. Bracket
- 6. Assembly hole
- 7. Guard grating

## Description

The API 500 axial fan is a propeller rotary machine for transportation of air at the maximum compressive strain of 1.3. Direction of the meridian velocity of air at the inlet and the delivery of the impeller is approximately parallel to the rotation axis. Static pressure behind the impeller is higher than in front of the impeller.

The fans are designed as vertical or horizontal and driven by an asynchronous motor.

They are manufactured in the size of 500 in two arrangements and BNV version - fans suitable for non explosive environment.

Arrangement 1 - fan with inlet air wall designed for installation in wall

Arrangement 2 - fan with the housing and flanges for installation in ducts

## Intended use

The fans are designed for transportation of clean air without abrasive particles. They are intended for ventilation of cellars, warehouses, auxiliary operations and for any applications where their parameters are appropriate.

## Operating conditions

The fans may transport air or gas at temperatures ranging from  $-20^{\circ}\text{C}$  to  $+40^{\circ}\text{C}$ . They are designed for installations at the ambient temperatures ranging from  $-20^{\circ}\text{C}$  to  $+40^{\circ}\text{C}$ .

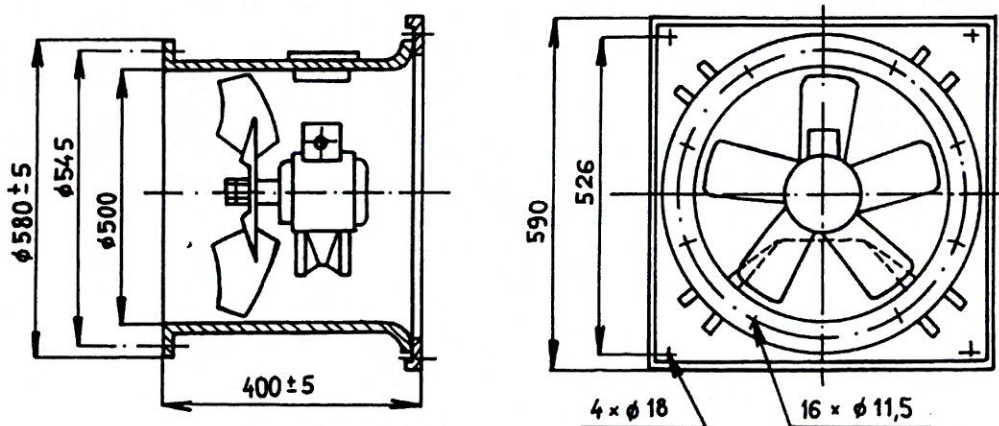
At low temperatures of the extracted air the user must exclude possible formation of frost on the impeller blades.

The fans must be installed on a rigid structure, in a wall or inside piping. They may be used in both horizontal and vertical position.

The fans must not be operated at higher duct resistance than as specified for the top values of the parameters as well as in the case of closed or blocked cross sectional area of the air flow.

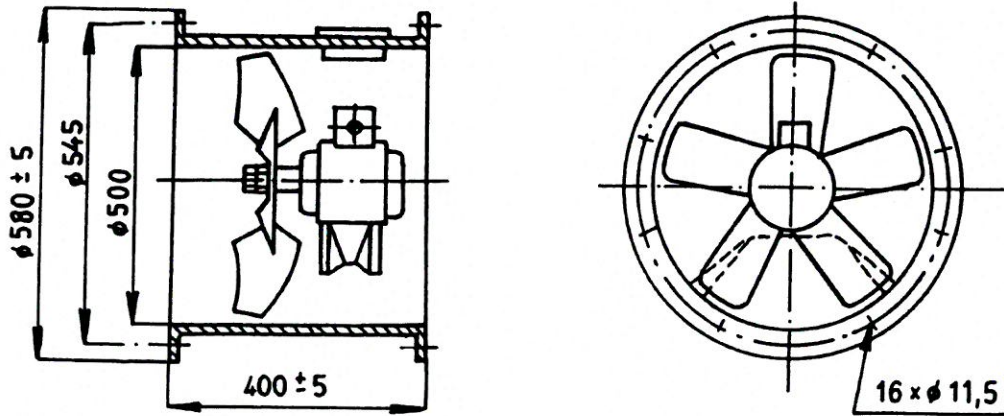
**Fig. 1 API 500 FAN, ARRANGEMENT 1**

Weight : 34,0 kg



**Fig. 2 API 500 FAN, ARRANGEMENT 3**

Weight : 29,0 kg



**Diagram 1 API FAN PERFORMANCE PARAMETERS**

$\rho = 1.2 \text{ kg.m}^{-3}$   
 $n = 1400 \text{ min}^{-1}$

