Adjustable Pitch Axial Fans

GTG fully adjustable pitch fans are available in a full range of metric sizes from 315mm diameter up to 1600mm diameter and capable of delivering air quantities up to 70m³/s. Fan diameters beyond 1600mm are available on request only.

The wide range of diameters, blade configurations, pitch angles and motor speeds, allow accurate selection of the fan to match the specific duty.

Pitch angle adjustment can be readily carried out on site allowing the fan performance to be modified to the final system resistance.

Whilst the standard range of axial fans cover most applications, purpose designed casings and mountings are available. Casings are manufactured from mild steel and hot dipped galvanized (as standard) or epoxy powder coated (on request) after manufacture. Flanges are where possible integrally rolled from the casing material for greater strength and stability.

MODEL RANGE

TFA - Tube Axial



· TFA-Q Series - Plate Axial





Standard Product SPECIFICATION

Casings shall be of mild steel, galvanised sheet, hot dipped galvanised or epoxy powder coated after manufacture. Impellers are manufactured from high pressure die cast aluminums, with blades matched and balanced for vibration free operation.

CONSTRUCTION

- Casing of mild steel hot dipped galvanised, galvanised sheet or epoxy powder coated after manufacture for corrosion protection.
- Flanges are rolled from the casing material or rolled from flat bar and welded to the case, prior to galvanising.
- Motor brackets or pedestals are available either bolted or welded to the casing, subject to motor size.

Adjustable Pitch Axial Fans

IMPELLER

- Pitch adjustment is infinitely variable over a wide range typically 10° to 40°
- Standard blade construction is high pressure die cast aluminum alloy, x-raying to ensure flawless structure is optional.
- Blades are friction mounted within the hub and secured with high tensile zinc plated bolts and self locking nuts.
- · The hubs are fixed with taper-lock bush to suit each motor shaft.
- Impellers are available with 4 to 14 blades dependent upon application.
- Blades are matched and balanced for vibration free operation.
- Maximum continuous operating temperature. (With no radiant heat)
- Smoke Spill Only aluminum impellers are suitable for smoke spill application.

MOTORS

Motors are typically foot mounted air stream rated, squirrel cage induction type, T.E. 3 phases 415v, 50Hz. Motors are normally supplied for the temperature range of -35°C to +40°C and normally wound to class F Insulation and IP55 protection for standard operation, however, options are available for a varying range of applications including :

- · Single phase
- · Explosion proof
- · High temperature
- · Smoke spill
- Special voltage

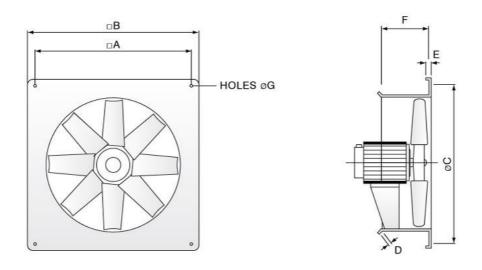
- Special frequency
- Speed control
- 2 speed
- Thermal Overload protection
- · Special insulation



APPLICATION

- · General air movement
- Supply and Exhaust
- Smoke Spill & Fire Service
- Dust extraction

TFA-Q SERIES DIMENSION



| Size | Electric Motor (kW) | | |) | | | | | | | | Max. Motor |
|------|---------------------|-------|-------|------|------|------|----|----|-----|------|------------------------|------------|
| | 6P | 4P | 2P | ΠA | □В | ØC | D | Е | F | ØG | Approx. Weight (kg) | Frame Size |
| 315 | ALL | ALL | TBA | 395 | 445 | 395 | 30 | 30 | 205 | 9 | 15 | 71 |
| 400 | ALL | ALL | ≤1.10 | 480 | 530 | 480 | 30 | 30 | 205 | 9 | 19 | 80 |
| 500 | ALL | ALL | TBA | 580 | 630 | 580 | 30 | 30 | 232 | 11 | 24 | 908 |
| 560 | ALL | ALL | TBA | 640 | 690 | 640 | 30 | 30 | 232 | 11 | 27 | 90L |
| 630 | ALL | ALL | TBA | 705 | 760 | 720 | 30 | 40 | 305 | 11 | 39 | 100LB |
| 710 | ALL | ALL | ALL | 785 | 840 | 800 | 30 | 40 | 305 | 14.5 | 58 | 112M |
| | 829 | - | ≤5.50 | 785 | 840 | 800 | 30 | 40 | 305 | 14.5 | 60 | 132M |
| 800 | ALL | ≤5.50 | - | 895 | 955 | 900 | 30 | 40 | 305 | 14.5 | 69 | 1328 |
| | ≤7.50 | ≤7.50 | 2 | 895 | 955 | 900 | 30 | 40 | 305 | 14.5 | 70 | 132M |
| 900 | ALL | ≤5.50 | - | 995 | 1055 | 1000 | 30 | 40 | 420 | 14.5 | 89 | 1328 |
| | 0.40 | ≤7.50 | - | 995 | 1055 | 1000 | 30 | 40 | 420 | 14.5 | 89 | 132M |
| 1000 | ≤5.50 | ≤7.50 | - | 1095 | 1155 | 1100 | 30 | 40 | 420 | 14.5 | 99 | 132M |
| | ≤11.0 | ≤22.0 | - | 1095 | 1155 | 1100 | 30 | 40 | 420 | 14.5 | 112 | 180L |

^{*}The actual dimension is subject to the motor frame size used, kindly refer to GTG Technical Submittal for further details *Weight indicated above excluded the weight of motor, hub and blades