HIGH PRESSURE TUNNEL FAN
High Pressure Tunnel Fan

High Pressure Tunnel Fans, with impeller directly coupled to the electric motor, is built to withstand the operating and emergency conditions meet to NFPA 130 (according to the EN 12101-3 standard).

Fan is built with materials and assemblies suitable for the environment in which it will be installed and it has suitable characteristics to withstand mechanical, corrosive, thermal and humidity conditions to which it will be exposed during operating conditions.

**Standard Product**

**SPECIFICATION**

**Impellers**

Precision cast aluminium adjustable pitch aerodyn blades. The blades are of Silumin (AlSi10Mg) aluminium alloy, according to UNI 1708 ENAB 43700 standard. The hub made of alloyed steel.

Large hub to blade ratio prevents backflow of air and moves large volumes of air at high pressure.

**Housings**

Heavy gauge cylindrical structure is steel (S355 JOWP) built opt for hard work conditions with drilled stiffening flanges both on the suction side and on the pushing side, built according to the ISO 6580 standard.

**Motors**

Motors are 4P4U / E Premium / HFP, (TAFDFYPFF) syn-cage induction type with class H/F insulation.

Options are available for a varying range of applications, including:

- Single Phase
- Special Frequency
- Explosion proof
- Speed Control
- High Temperature (250°C/2hrs or 400°C/hr)
- 2 Speed
- Thermal Overload Protection
- Special Voltage
- Special Insulation
- PTC or PT100 thermistors
- Anti-condensation heater

**Options**

- Bell mouth
- Protection grids
- Flexible coupling
- Matching flanges
- Base frame
- Vibration isolation mounts
- Sound attenuators
- Split housing
- Anti-Stall device
- Vibration detection system

**GUIDE VANE**

Multi vane section designed to serve as static regain device to ensure maximum efficiency in converting the velocity pressure with minimal turbulence.

The function of the guide vanes is to improve the efficiency and the pressure characteristics by converting rotational energy at the propeller discharge into useful work.
Reversible Pitch Angle Tunnel Axial Fan

Model: AXL 125 R-625-10-17° (Forward)

\( \rho = 1.2 \text{kg/m}^3 \)

FEG 71
Outlet Area: 1.227 m²

- Absorbed Power [kW]
- Static Pressure [Pa]
- Lw(A) in dB
  1480/980rpm
- Speed [rpm]
- Air Volume [m³/h]

* Performance certified is for installation type D - Ducted inlet, Ducted outlet.
* Performance ratings do not include the effects of appurtenances (accessories).
* The A-weighted sound ratings shown have been calculated per AMCA international Standard 301.
* Values shown are for inlet LWA sound power levels for installation type D - ducted inlet, ducted outlet.
* Ratings include the effects of duct end correction.
Reversible Pitch Angle Tunnel Axial Fan

Model: AXL 140 R-700-10-17° (Forward)

\[ p = 1.2 \text{ kg/m}^3 \]

**FEG 71**
Outlet Area: 1.539m²

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* Performance certified as for installation type D - Ducted inlet, Ducted outlet.
* Performance ratings do not include the effects of appurtenances (accessories).
* The A-weighted sound ratings shown have been calculated per AMCA international Standard 301.
* Values shown are for inlet LWA sound power levels for installation type D - ducted inlet, ducted outlet.
* Ratings include the effects of duct end correction.
Reversible Pitch Angle Tunnel Axial Fan

Model: AXL 160 R-800-10-17° (Forward)

FEG 71
Outlet Area: 2.011m²

Absorbed Power [kW]

Static Pressure [Pa]

Lw(A) in dB
1480/980rpm

Speed [rpm]

Air Volume [m³/h]

* Performance certified is for installation type D - Ducted inlet, Ducted outlet.
* Performance ratings do not include the effects of appurtenances (accessories).
* The A-weighted sound ratings shown have been calculated per AMCA international Standard 301.
* Values shown are for inlet LWA sound power. Levels for installation type D: ducted inlet, ducted outlet.
* Ratings include the effects of duct end correction.
Reversible Pitch Angle Tunnel Axial Fan

Model: AXL 160 R-800-10-17° (Reverse)

Outlet Area: 2.011 m²

FEG 71

Absorbed Power [kW]

Static Pressure [Pa]

Lw(A) in dB
1480/980rpm

Speed [rpm]

Air Volume [m³/h]

* Performance certified is for installation type D - Ducted inlet, Ducted outlet.
* Performance ratings do not include the effects of appurtenances (accessories).
* The A-weighted sound ratings shown have been calculated per AMCA International Standard 301.
* Values shown are for inlet LWA sound power levels for installation type D - ducted inlet, ducted outlet.
* Ratings include the effects of duct end correction.
Reversible Pitch Angle Tunnel Axial Fan

**Model: AXL 180 R-900-10-17°(Forward)**

\[ p = 1.2 \text{kg/m}^3 \]

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**FEG 71**

Outlet Area: 2.549m²

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- Absorbed Power [kW]
- Static Pressure [Pa]
- Speed [rpm]
- Air Volume [m³/h]

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* Performance certified is for installation type D - Ducted inlet, Ducted outlet.
* Performance ratings do not include the effects of appurtenances (accessories).
* The A-weighted sound ratings shown have been calculated per AMCA international Standard 301.
* Values shown are for inlet LWA sound power levels for installation type D: ducted inlet, ducted outlet.
* Ratings include the effects of duct end correction.
Reversible Pitch Angle Tunnel Axial Fan

Model: AXL 180 R-900-10-17° (Reverse)

\[ p = 1.2 \text{kg/m}^3 \]

**FEG 71**
Outlet Area: 2.543m²

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* Performance certified is for installation type D - Ducted inlet, Ducted outlet.
* Performance ratings do not include the effects of appurtenances (accessories).
* The A-weighted sound ratings shown have been calculated per AMCA international Standard 301.
* Values shown are for inlet LWA sound power: levels for installation type D: ducted inlet, ducted outlet.
* Ratings include the effects of duct and correction.
Reversible Pitch Angle Tunnel Axial Fan

Model: AXL 200 R-1000-10-17° (Forward)

p = 1.2 kg/m³

FEG 71
Outlet Area: 3.142 m²

* Performance certified is for installation type D - Ducted inlet, Ducted outlet.
* Performance ratings do not include the effects of aperturances (accessories).
* The A-weighted sound ratings shown have been calculated per AMCA International Standard 301.
* Values shown are for inlet Lw(A) sound power levels for installation type D: ducted inlet, ducted outlet.
* Ratings include the effects of duct end correction.
Reversible Pitch Angle Tunnel Axial Fan

Model: AXL 224 R-1120-10-17° (Forward)

FEG 71
Outlet Area: 3.941 m²

* Performance certified is for installation type D - Ducted inlet, Ducted outlet.
* Performance ratings do not include the effects of apertures (accessories).
* The A-weighted sound ratings shown have been calculated per AMCA International Standard 301.
* Values shown are for inlet Lev/A sound power levels for installation type D: ducted inlet, ducted outlet.
* Ratings include the effects of duct end correction.
Reversible Pitch Angle Tunnel Axial Fan

Model: AXL 250 R-1250-10-17° (Forward)

FEG 71
Outlet Area: 4.909 m²

Absorbed Power [kW]

Static Pressure [Pa]

Lw(A) in dB
980/740 rpm

Speed [rpm]

Air Volume [m³/h]

* Performance certified is for installation type D - Ducted inlet, Ducted outlet.
* Performance ratings do not include the effects of appurtenances (accessories).
* The A-weighted sound ratings shown have been calculated per AMCA international Standard 301.
* Values shown are for inlet LWA sound power; levels for installation type D- ducted inlet, ducted outlet.
* Ratings include the effects of duct end correction.
Reversible Pitch Angle Tunnel Axial Fan

Model: AXL 250 R-1250-10-17° (Reverse)

\( \rho = 1.2 \text{kg/m}^3 \)

**FEG 71**
Outlet Area: 4.909m²

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* Performance certified is for installation type D - Ducted inlet, Ducted outlet.
* Performance ratings do not include the effects of appurtenances (accessories).
* The A-weighted sound ratings shown have been calculated per AMCA International Standard 301.
* Values shown are for inlet LWA sound power levels for installation type D - ducted inlet, ducted outlet.
* Ratings include the effects of duct end correction.
Adjustable Pitch Angle Vane Tunnel Axial Fan

Model: AXL 125 UBS-625-10-17°

\( \rho = 1.2 \text{kg/m}^3 \)

**FEG 71**

Outlet Area: 1.227 m²

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*Performance certified for installation type D - Ducted inlet, Ducted outlet.*

*Performance ratings do not include the effects of appurtenances (accessories).*

*The A-weighted sound ratings shown have been calculated per AMCA international Standard 301.*

*Values shown are for inlet LWA sound power; levels for installation type D - ducted inlet, ducted outlet.*

*Ratings include the effects of duct end correction.*
Adjustable Pitch Angle Vane Tunnel Axial Fan

Model: AXL 160-UBS-800-10-17°

ρ = 1.2 kg/m³

FEG 71
Outlet Area: 2.01 m²

Absorbed Power [kW]

Static Pressure [Pa]

Lw(A) in dB
1480/980rpm

Speed [rpm]
1480
4Pole
190
6Pole

Air Volume [m³/h]

* Performance certified is for installation type D - Ducted inlet, Ducted outlet.
* Performance ratings do not include the effects of appurtenances (accessories).
* The A-weighted sound ratings shown have been calculated per AMCA International Standard 331.
* Values shown are for inlet LwA sound power levels for installation type D: ducted inlet, ducted outlet.
* Ratings include the effects of duct and correction.
Adjustable Pitch Angle Vane Tunnel Axial Fan
Model: AXL 180-UBS-900-10-17°

ρ = 1.2 kg/m³

FEG 71
Outlet Area: 2.546 m²

* Performance certified is for installation type D - Ducted inlet, Ducted outlet.
* Performance ratings do not include the effects of appurtenances (accessories).
* The A-weighted sound ratings shown have been calculated per AMCA International Standard 331.
* Values shown are for inlet Lw(A) sound power levels for installation type D: ducted inlet, ducted outlet.
* Ratings include the effects of duct and correction.
Adjustable Pitch Angle Vane Tunnel Axial Fan

Model: AXL 200-UBS-1000-10-17°

\( p = 1.2 \text{kg/m}^3 \)

**FEG 71**
Outlet Area: 3.142 m²

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Absorbed Power (kW)

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Static Pressure (Pa)

17°

Lw(A) in dB
1480/980/740 rpm

129/115/107
135/114/107
124/114/107
122/113/108

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Speed (rpm)

1480
980
740

6Pole

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Air Volume (m³/h)

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* Performance certified is for installation type D - Ducted inlet, Ducted outlet.
* Performance ratings do not include the effects of appurtenances (accessories).
* The A-weighted sound ratings shown have been calculated per AMCA International Standard 301.
* Values shown are for inlet Lou£ sound power levels for installation type D: ducted inlet, ducted outlet.
* Ratings include the effects of duct end correction.
Adjustable Pitch Angle Vane Tunnel Axial Fan

Model: AXL 250-UBS-1250-10-17°

FEG 71
Outlet Area: 4.80m²

\[ \rho = 1.2 \text{kg/m}^3 \]

**Absorbed Power [kW]**

**Static Pressure [Pa]**

Lw(A) in dB
980/740rpm

980 (kPa)

740 (kPa)

600000

Air Volume [m³/h]

* Performance certified is for installation type D: Ducted inlet, Ducted outlet.
* The A-weighted sound ratings shown have been calculated per AMCA International Standard 361.
* Values shown are for inlet LwA sound power levels for installation type D: ducted inlet, ducted outlet.
* Ratings include the effects of duct end correction.
### Dimension

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