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- AireGard TV
  www.HVLS.asia

Discover HVLS



Every one of our HVLS fans is engineered to deliver the smoothest, most efficient, and most precise airflow possible. Our fan blades are made from aviation grade magnalium, that makes them stronger and lighter.

Using only world class, industrial -grade components and the highest quality parts to ensure the most efficient, and reliable fan. We offer you the best-value proposition in the market from an investment perspective.











SUPERIOR VENTILATION

DELIVERS UP TO MORE THAN 500.000 CFM OF AIR.

2 IMPROVE THERMAL COMFORT

CREATING A COOLING EFFECT UP TO 4°C BY CREATING AN EQUAL CONSTANT TEMPERATURE IN ITS SURROUNDING SPACE.

3 SILENT OPERATION

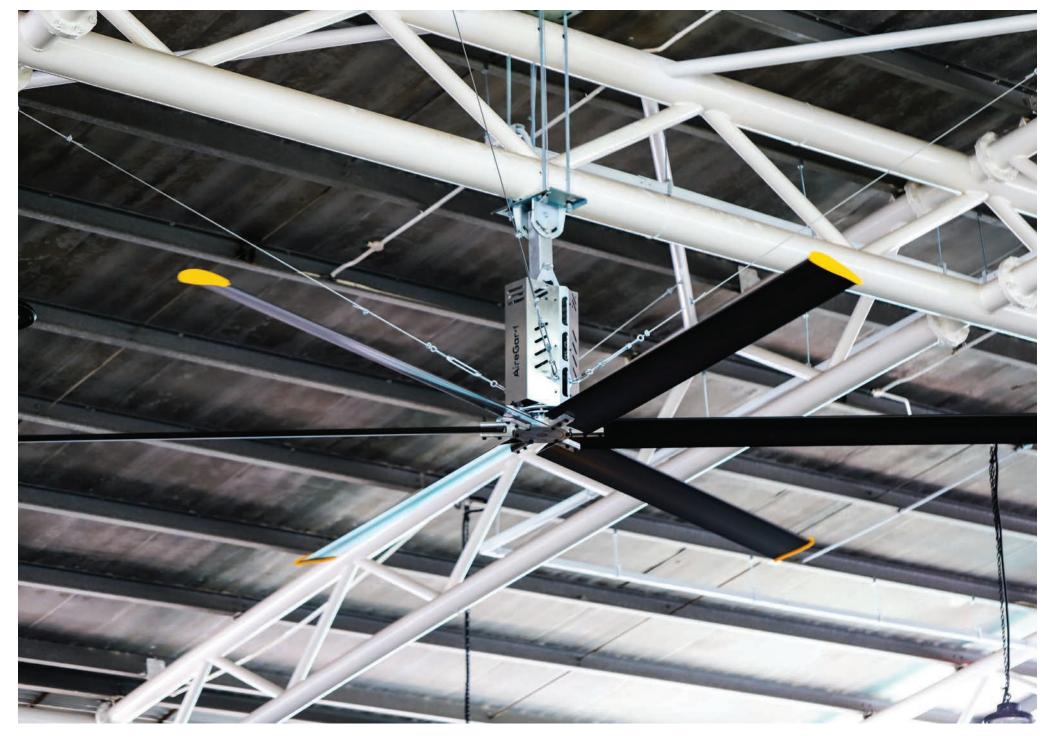
ENGINEERED TO DELIVER SILENCE AND EFFICIENT NON-DISRUPTIVE OPERATION.

4 COST SAVING

AIREGARD HVLS PRIMARILY USES MINIMAL ENERGY, IT ALSO HELPS IN LOWERING THE COST OF AIR-CONDITIONING WITH LESSER ENERGY USED.

5 EASE OF MIND

WE PROVIDE 360° SERVICES FROM GETTING THE RIGHT FAN WITH THE RIGHT BUDGET FOR YOUR SPACE TO PROFESSIONAL INSTALLATION AND DEDICATED AFTER-SALES SERVICES.



# DRIVE TRAIN

# Lenze



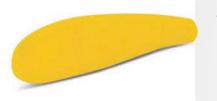
At the heart of our SIX series, we partner with market-leading drive automation manufacturer, Lenze; dual stage helical gearbox for maximum performance and reliability.

# AEROFOIL BLADES

Our aerofoil blades are made of aviation grade magnalium (magnesium alloy) and finished in fluorocarbon coating to withstand the toughest environment. It's unique patented design structure is further strengthened with 3 vertical stiffeners within the length of each blade to avoid structural fatigue.



# **AERO WINGLET**



A winglet is attached to a distal end of the aerofoils to reduce drag and improve downward lift, creating up to 40% more air than most of our competitors.



# **CONTROL SYSTEM**

Collaborating with some of the market leading brands such as Yaskawa and Danfoss, our frequency driver offers world class reliability and easy to use operation for peace of mind.





Made of Aluminium Alloy, our drive hub (SIX series only) are made using 1500T Hot Press Forging to ensure maximum mechanical efficiency.





	BLADES	SIX-12	SIX-16	SIX-20	SIX-24				
-	Blade diameter	12 ft (3.6 m)	12 ft (3.6 m) 16 ft (4.9 m) 20 ft (6.1 m) 24 ft (7.3 m)						
	Blade style		Aerofoil wi	th winglet					
Blade material		Magnalium (Aluminium Alloy) , Carbon Fluorine Treated Surface							
	Number of blades	6							

# PERFORMANCE & POWER

Max. Displacement	365,000 CFM	397,000 CFM	428,000 CFM	460,000 CFM
Variable Speed	90 RPM	70 RPM	60 RPM	50 RPM
Max. Power Usage	1.1 kW	1.5 kW	1.5 kW	1.5 kW
Equivalent Horsepower Rating	1.5 HP	2.0 HP	2.0 HP	2.0 HP
Rated Current	2.4 Amps / 415 V	3.5 Amps / 415 V	3.5 Amps / 415 V	3.5 Amps / 415 V

## **WEIGHT & DIMENSIONS**

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1	Fan Weight	65 kg	1	80 kg		105 kg	1	120 kg
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# **MOTOR**

Motor Type	MD Series 3 Phase AC Motor (4 poles)
Manufacturer	Lenze Automation GmbH, Germany
Max. Ambient Temperature for Operation	80 Celcius
Degree of Protection	IP55 (EN60529)

Cooling System	Integrated Blower Fan
Sound Level	50 ~ 55 dB

## **DRIVE TRAIN**

Gearbox Type	GST Series Dual Stage Helical Gearbox
Manufacturer	Lenze Drives GmbH, Germany
Mechanical Efficiency	0.97
Max. Torque	260 Nm

## CONTROLS

Control Type	Variable Frequency Drive (Inverter Drive)				
Features	16-bit Microprocessor Logic , LED Status Display , Built-in Dynamic Braking Transistor Yaskawa Electric Corporation / Danfoss Engineering				
Manufacturer					
Max. Ambient Temperature for Operation	50 Celcius				

### INSTALLATION

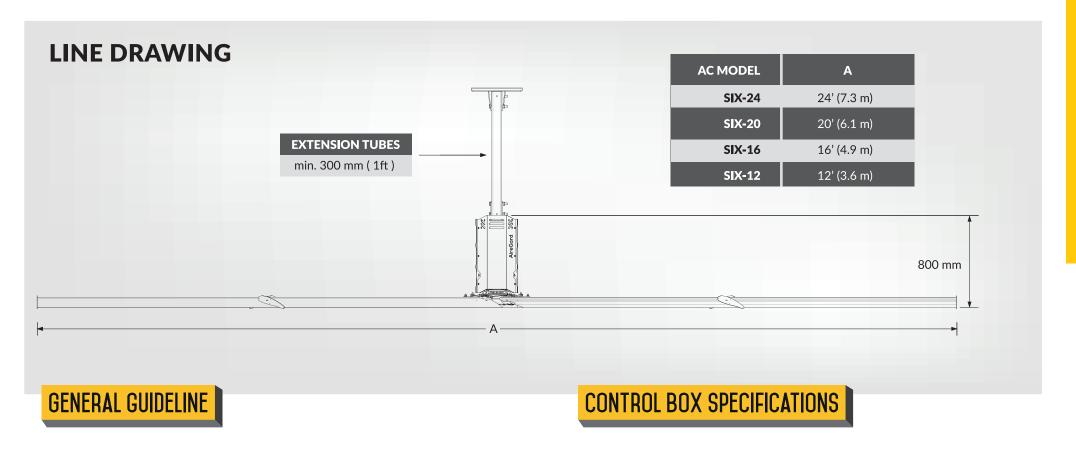
Mounting Hardware	Complete Mounting Kit Included	
Drop Extensions	Optional Extension Lengths Available	

## WARRANTY

WARRANTY	5 Years**	
WARRANTI	5 Tears	

\*\*Subject to Terms & Conditions.

AireGard



Before beginning installation, check that the building structure and fan location meet safety guidelines by confirming the below requirements.

- Fans mounted on fabricated I-beams, which are common in steel buildings, could cause the beam to flex and the fan to move during operation.
- The fan's lateral movement must be secured using guy wires if the fan's extension tube is longer than 1 ft (0.3 m) or if the mounting structure requires it. If the fan is close to any building fixtures, it is recommended to secure the fan with guy wires as a safety measure.
- The fan must be installed so that it is ≥ 18 ft (6 m) above the finished floor.
- Multiple fans must be spaced at a center-to-center distance that is no less than 2.5x the fan diameter.
- All fan parts must be ≥ 2 ft (0.6m) from all obstructions. The fan installation area must be free of obstructions such as lights, cables, sprinklers, or other building structure components.

(mm)

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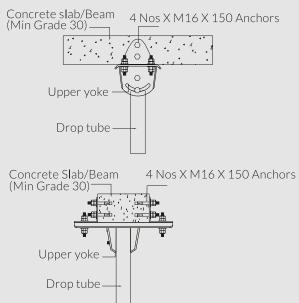
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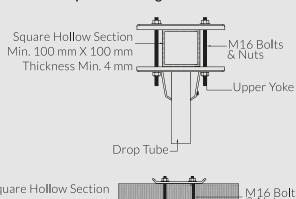
<sup>\*</sup>For specific requirements, please call 1300-88-4273

# **MOUNTING DETAILS**

### **Mounting Details To Conrete Beam**

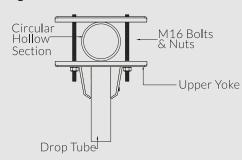


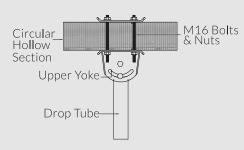
## Mounting Details To Square/Rectangular Hollow Section



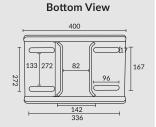
# Square Hollow Section Min. 100 mm X 100 mm Thickness Min. 4 mm Upper Yoke Drop Tube

# **Mounting Details To Circular Hollow Section**

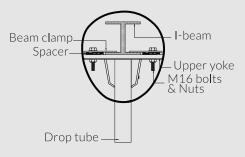


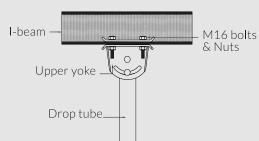


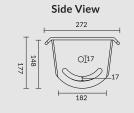
# Top View 400 148 272 133 142 167

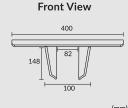


### **Mounting Details To I-BEAM**









(mm)



# DRIVE TRAIN

Running on Permanent Magnet Synchronous brushless direct drive motor (PMSM), the PS series offers the latest HVLS fan technology with 15% noise level reduction, high control accuracy, great airflow and totally maintenance-free.



# **AERO WINGLET**



A wingtip is attached to a distal end of the aerofoils to reduce drag and improve downward lift, creating up to 40% more air than most of our competitors.

# AEROFOIL BLADES

Our aerofoil blades are made of aviation grade magnalium (magnesium alloy) and finished in fluorocarbon coating to withstand the toughest environment. It's unique patented design structure is further strengthened with 3 vertical stiffeners within the length of each blade to avoid structural fatigue.



# SKF BEARING



AireGard HVLS PS Series uses top industrial grade bearing from SKF, reputable in optimizing performance with great stability control, exceptional strength and durability, enabling twice the service life of a bearing.





BLADES	PS-8	PS-10	PS-12	PS-14				
Blade diameter	8 ft (2.4 m)	8 ft (2.4 m) 10 ft (3.0 m) 12 ft (3.6 m) 14 ft (4.2 m)						
Blade style								
Blade material	Magnalium (Al	reated Surface						
Number of blades	8							

# PERFORMANCE & POWER

Max. Displacement	160,558 CFM	195,176 CFM	231,530 CFM	266,470 CFM
Variable Speed	120 RPM	100 RPM	90 RPM	80 RPM
Max. Power Usage	0.15kW	0.2kW	0.3kW	0.41 kW
Rated Current (Max.)	0.9 Amps	1.3 Amps	1.5 Amps	1.8 Amps
Input Voltage				

## **WEIGHT & DIMENSIONS**

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		31 KO	35 KG		38 KG	41 KG	
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# **MOTOR**

Motor Type	PMSM Motor
Drive Train	Gearless Direct Drive
Max. Torque	115 Nm
Mechanical Efficiency	0.8

Max. Ambient Temperature for Operation	80 Celcius
Degree of Protection	IP65 ( IEC 60529 Edition 2-1 : 2001 )
Cooling System	Centrifugal Cooling
Sound Level	< 43 dB

## **CONTROLS**

Control Type	Variable Frequency Drive (Inverter Drive)	
Features	Dual Microprocessor Logic, LED Status Display , Built-in Dynamic Braking Transistor	
Manufacturer	Yaskawa Electric Corporation / Danfoss Engineering	
Max. Ambient Temperature for Operation	50 Celcius	

### INSTALLATION

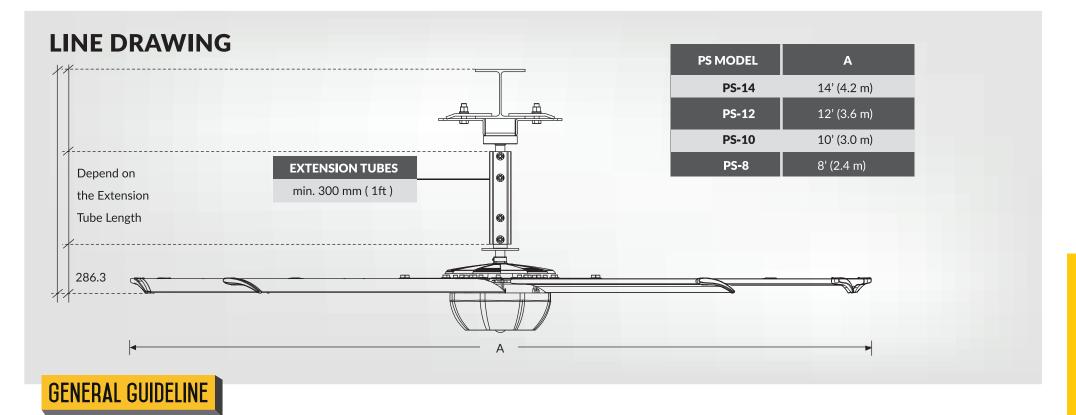
Mounting Hardware	Complete Mounting Kit Included
Drop Extensions	Optional Extension Lengths Available

# WARRANTY

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: WARRANTY	1	5 Years**
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\*\*Subject to Terms & Conditions.

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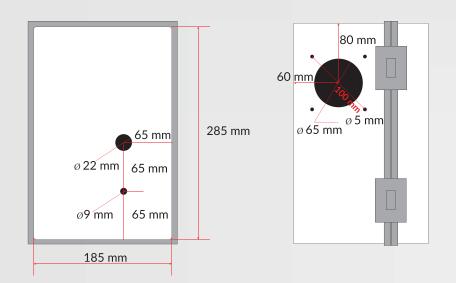


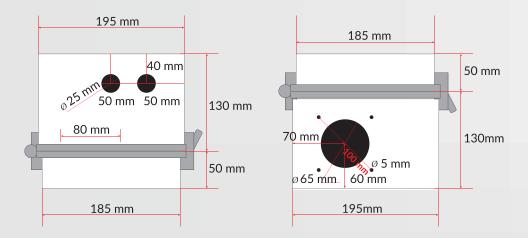
Before beginning installation, check that the building structure and fan location meet safety guidelines by confirming the below requirements.

- Fans mounted on fabricated I-beams, which are common in steel buildings, could cause the beam to flex and the fan to move during operation.
- The fan's lateral movement must be secured using guy wires if the fan's extension tube is longer than 1 ft (0.3 m) or if the mounting structure requires it. If the fan is close to any building fixtures, it is recommended to secure the fan with guy wires as a safety measure.
- The fan must be installed so that it is ≥ 10 ft (3 m) above the finished floor.
- Multiple fans must be spaced at a center-to-center distance that is no less than 2.5x the fan diameter.
- All fan parts must be ≥ 2 ft (0.6m) from all obstructions. The fan installation area must be free of obstructions such as lights, cables, sprinklers, or other building structure component.

<sup>\*</sup>For specific requirements, please call 1300-88-4273

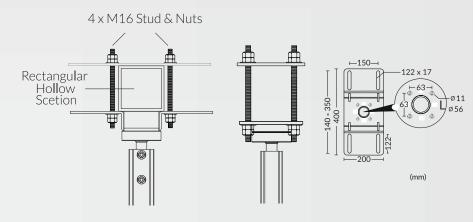
# CONTROL BOX SPECIFICATIONS



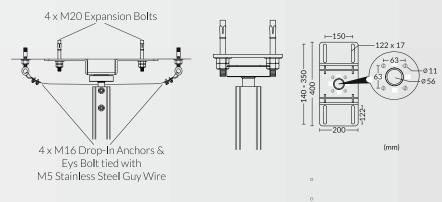


# **MOUNTING DETAILS**

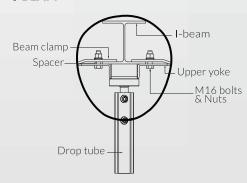
## For Rectangular Hollow Section & Circular Hollow Section



### For Concrete Slab



### I-BEAM





# **PSX SERIES**

# **EXHILARATING PERFORMANCE**

Operating on the epitome of HVLS motor technology, the PSX series runs on Permanent Magnet Synchronous brushless direct drive motor (PMSM) offering 30% increase in airflow, amazing torque balance, 15% reduced noise level and high transmission efficiency.



# TOTALLY FREE OF MAINTENANCE



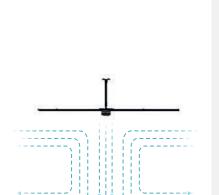
Different from gear technology products using regular replacement of lubricating oil in gearbox, the PSX series PMSM motor, based on the principle of electromagnetic induction and double bearing transmission, is completely sealed and truly free maintenance. No more costly gearbox maintenance visits and no more oil leakages.

# **AERO WINGLET**

# **AEROFOIL BLADES**

Our aerofoil blades are made of aviation grade magnalium (magnesium alloy) and finished in fluorocarbon coating to withstand the toughest environment. It's unique patented design structure is further strengthened with 3 vertical stiffeners within the length of each blade to avoid structural fatigue.





A wingtip is attached to a distal end of the aerofoils to reduce drag and improve downward lift, creating up to 40% more air than most of our competitors.

# **EXCELLENT COVERAGE**

The super large air volume and coverage area brings comfortable natural breeze and make the working environment change positively. It can, not only directly cool the human body, but also bring the whole area excellent ventilation and efficient dehumidification and moisture removal effect.



BLADES	PSX-16	PSX-18	PSX-20	PSX-24		
Blade diamete	16 ft (4.9 m)	18 ft (5.5 m)	20 ft (6.1 m)	24 ft (7.3 m)		
Blade style		Aerofoil with winglet				
Blade materia	Magnalium (Al	luminium Alloy) , C	Carbon Fluorine T	reated Surface		
Number of blades		Ĺ	5			

# PERFORMANCE & POWER

Max. Displacement	405,882 CFM	430,588 CFM	455,294 CFM	522,353 CFM
Variable Speed	10 - 75 RPM	10 - 65 RPM	10 - 60 RPM	10 - 56 RPM
Max. Power Usage	0.8 kW	0.9 kW	1.1 kW	1.5 kW
Rated Current (Max.)	3.6 A	4.1 A	5.0 A	6.8 A
Input Voltage	220 - 240 V / 1 P			

## **WEIGHT & DIMENSIONS**

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1	Fan Maight	115 1.~	1	120 kg		120 1/~	1	125 1/2	
1	Fan Weight	TT2 K5	1	1∠U Kg		129 Kg	1	T22 K5	
1	1 411 11018111								

## **MOTOR**

	Motor Type	Permanent Magnet Synchronous Motor (PMSM)		
	Drive Train	Direct Drive Gearless		
	Max. Torque	260 Nm		
-	Mechanical Efficiency	0.94		

Max. Ambient Temperature for Operation	80 Celcius
Degree of Protection	IP55
Cooling System	Heat Sink Cooling
Sound Level	< 40 dBA

## **CONTROLS**

Control Type	Variable Frequency Drive (Inverter Drive)
Features	Dual Microprocessor Logic, LED Status Display , Built-in Dynamic Braking Transistor
Manufacturer	Yaskawa Electric Corporation/Danfoss Engineering
Max. Ambient Temperature for Operation	50 Celcius

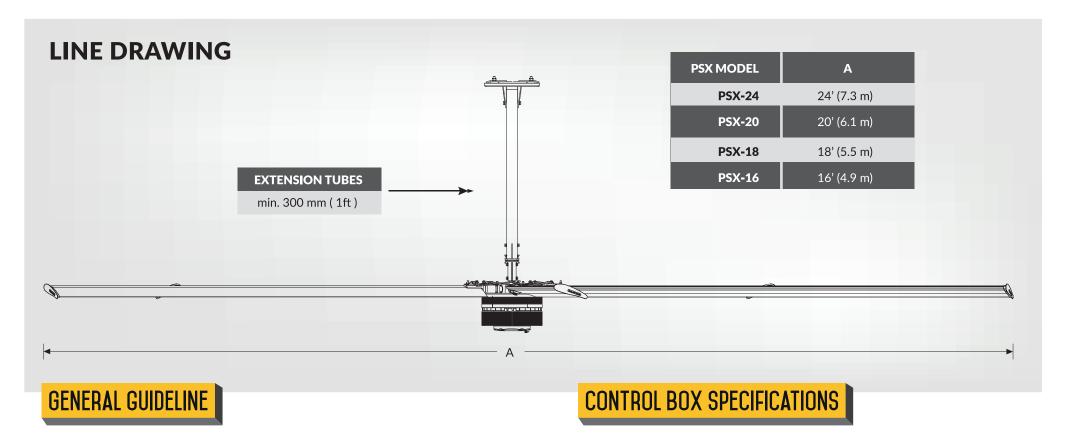
## INSTALLATION

Mounting Hardware	Complete Mounting Kit Included	
Drop Extensions	Optional Extension Lengths Available	

### **WARRANTY**

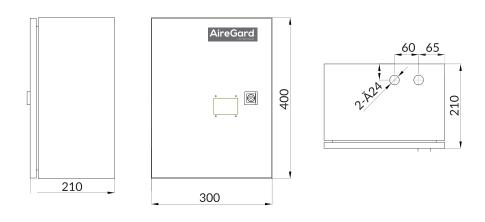
	WARRANTY	5 Years**
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\*\*Subject to Terms & Conditions.



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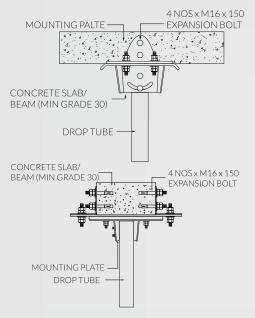
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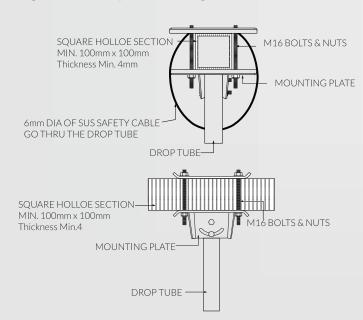
# **PSX SERIES**

# **MOUNTING DETAILS**

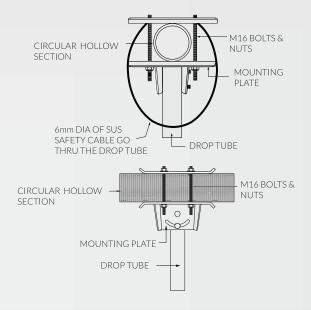
### **Mounting Details To Concrete Beam**



## **Mounting Details To Square/Rectangular Hollow Section**

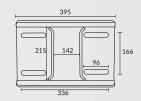


# **Mounting Details To Circular Hollow Section**

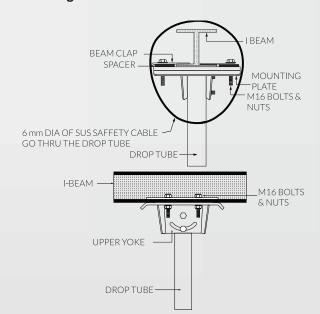


# Top View 336 117 132 142 96 166

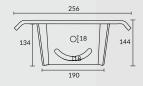
### **Bottom View**



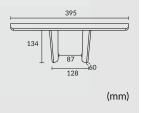
# **Mounting Details To I-BEAM**



### Side View



### Front View

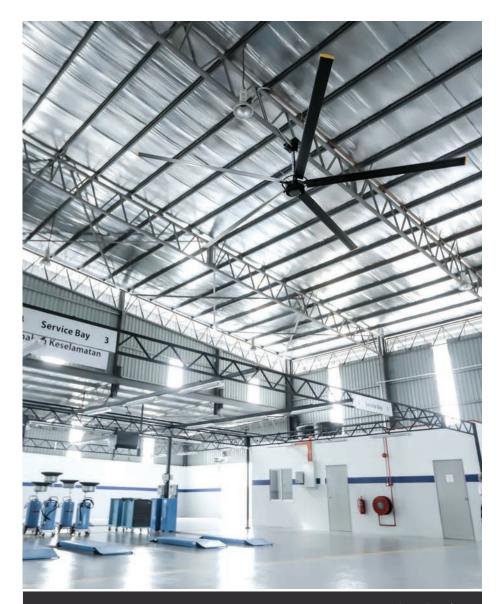




# Malaysian Flying Academy, Melaka

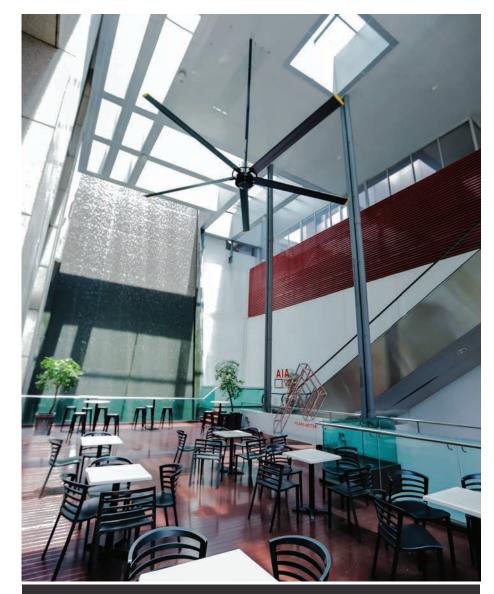
**PSX Series** 

The MFA has to take their safety standards very seriously. Safety will always be the first priority of every transport organization. As they said "prevention is better than cure". MFA took the initiative to upgrade the airflow in their hangar. Providing excellent thermal comfort and cool airflow for their engineers and safety officers. This is will constantly boost their productivity to ensure every job is done at it's best condition. With two PSX Series HVLS fan, they will save electricity cost and energy in the long run.



# Proton Service Center, Bandar Sungai Long PSX Series

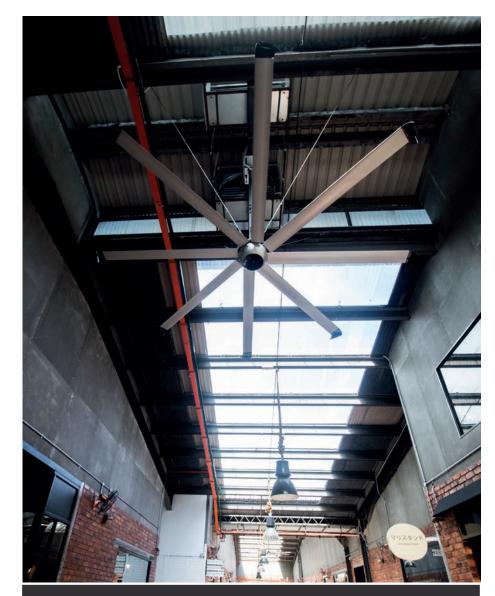
In order to find a solution to solve the excessive heat problem and productivity in their large service facility, they came across their neighbour (Honda) who installed AireGard HVLS fans. Not only did hvls fans cool down the temperature and provide airflow, it also tremendously boost work productivity in the facility. When the workers feel thermally comfortable, they are able to focus and get their head in the work. They decided to trust us with a pair of PSX.



# Menara AIA, Jalan Ampang

# **PSX Series**

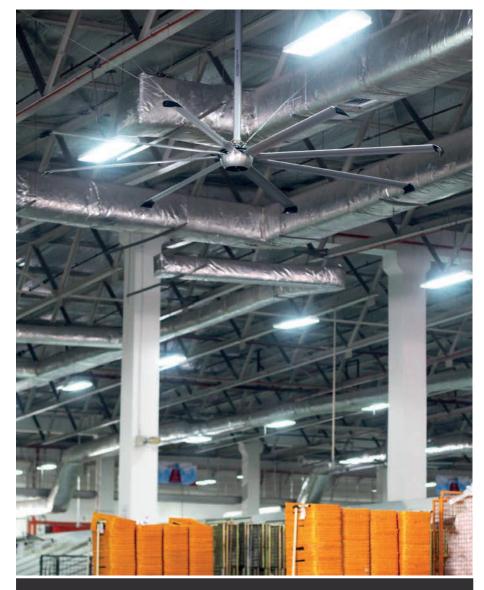
They needed an efficient and effective airflow solution to their open lounge area. As a well known company in the city centre of KL, they prefer a well perform and futuristic design to maintain their reputation of an iconic image and brand. We proposed the PSX Series, our latest motor technology in a HVLS fan. They were fascinated by it's features of a new dc gearless PMSM Motor. With no gear and no gear oil that means total low maintenance. They absolutely love the idea of a worry free after sales service experience. .



# The Gasket Alley, Petaling Jaya

# **PS Series**

Petrol Heads. Custom motorcycles. Groovy folks. Good vibes. The Gasket Alley is a curated space housing all of the above, with a huge knack for events from time to time. That's where they also realised the need for cool spaces. They wanted to up the comfort level without compromising their goal of being the greenest auto shop in the business and their choice of solution was to install 2 units of our DC-12 (3.6m) diameter HVLS fans. The hot rods couldn't have been more cooler.



# Pos Malaysia, Shah Alam

**PS Series** 

Facility managers worked with AireGard to create powerful air movement that kept workers cool in this semi air-conditioned facility. The facility installed ten DC-14(4.2-m) fans to help circulate the conditioned air in the plant to eliminate heat pockets for better comfort and even temperature.



# Daikin Steel Malaysia, Shah Alam

**SIX Series** 

Daikin Steel factory is heavily focused on production and operations. With dust and metal fumes inside the enclosed environment, it may not seem ideal for health and productivity. SIX Series HVLS fans came in just perfect for these problems. We were able to provide ventilation, thermal comfort and a quieter and healthier environment.



At AireGard, we set ourselves apart from the competition by providing professional installation, excellent customer service and prompt after-sales services. Our promise is only possible simply because of Gard Squad, our in-house technical team who are well groomed for the job to deliver superb customer satisfaction.

Specially factory-trained and certified, Gard Squad team takes the guess work out of any problems or service call and in reliably quick time.



Our trained engineers will visit your site to evaluate the situation



Valuable info collected from site visit will be important for our team to design an action plan for your site.



We will present the proposal to you and explain thoroughly on what should you install and why.