



# BRUSHLESS VARIABLE FAN MOTOR PRESSURISER

H0481841 | H0614663 | H0614665

ISO

Make your cabin compliant with  
ISO 23875



Optimised for use with  
SIGMA AIR SHIELD



Reduce Occupation Exposure



HEPA Air Filter Option



Fresh & Recirculation System



Brushless Variable Fan Motor

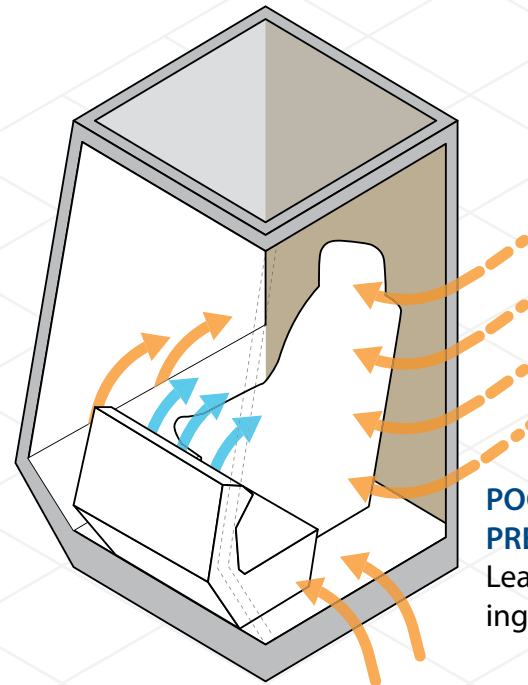
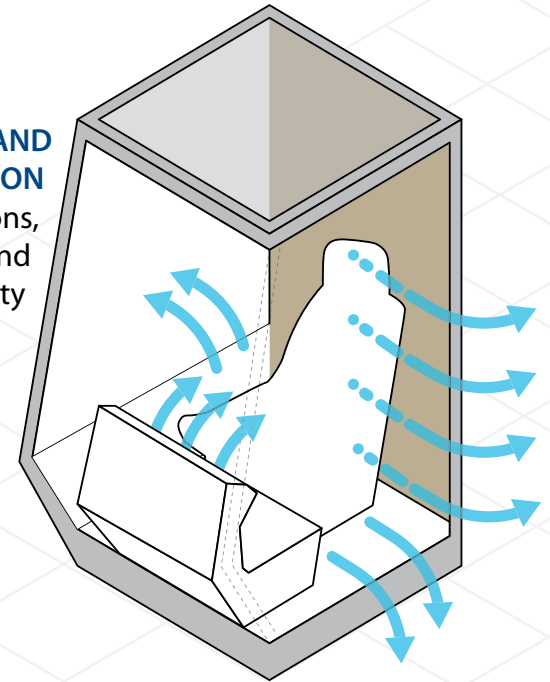
## Why is Pressurisation important?

Cabin pressurisation in mining is crucial for worker health by maintaining safe oxygen levels and preventing the build up of harmful gases. It helps avoid respiratory issues, such as hypoxia, and reduces the risk of exposure to toxic substances.

Proper pressurisation ensures a healthier and safer environment for mining personnel.

- **Dust Control:** Blocks dust particles, reducing the risk of respiratory diseases like silicosis.
- **Compliance with Health and Safety Regulations:** Ensures adherence to occupational safety standards and regulations.
- **Protection During Maintenance:** Prevents contaminants from entering the cabin during vehicle maintenance.
- **Extended Equipment Lifespan:** Keeps sensitive vehicle components free from dust and moisture, reducing repair needs.

**PROPER SEALS AND SUFFICIENT PRESSURISATION**  
Promotes efficient air circulations, prevents dust ingress and improves cabin air quality



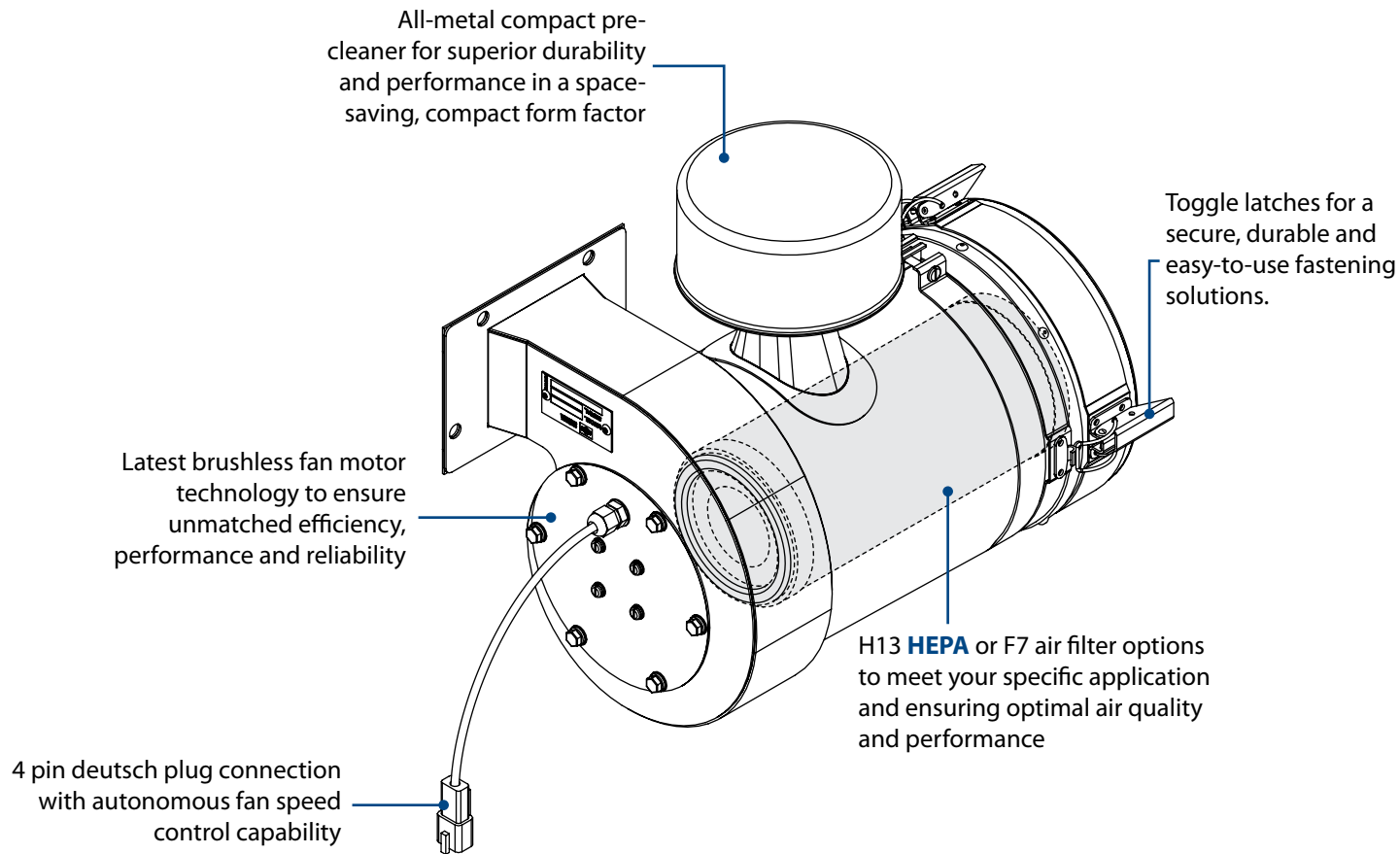
**POOR SEALS AND INSUFFICIENT PRESSURISATION**  
Leads in leakage, causing dust ingress

# FVV40: NEXT-GEN PRESSURISER

Introducing our Next-Generation Brushless Variable Fan Motor Pressuriser for the Mining Industry: Where Efficiency Meets Durability

Our advanced Brushless Variable Fan Motor Pressuriser represents the future of mining ventilation technology. Upgrade now for superior efficiency, reliability, and safety, all within one high-performance solution.

## WHAT'S NEW?



## KEY BENEFITS:

- **Reduced Operating Costs:** Lower energy consumption and reduced maintenance downtime.
- **Extended Lifespan:** Engineered to handle tough mining conditions with minimal wear and tear.
- **Increased Safety:** Improved ventilation and air circulation for healthier working conditions.
- **Seamless Integration:** Easy to integrate with existing mining machinery and systems.

# KEY COMPONENTS



## BRUSHLESS MOTOR

3X LONGER LIFE (upto 35,000 hours)

 **3X LONG LIFE**  
last upto 35,000 hours

 **LATEST BRUSHLESS TECHNOLOGY**  
Enhanced efficiency & reliability

Our high-performance centrifugal fan delivers efficient, quiet, and reliable airflow for compact, demanding systems.

Powered by a durable 3-phase brushless drive and precision-engineered for long service life.



**F7 FILTER**  
H0602295



**HEPA FILTER**  
H0602294

## FILTER OPTIONS

(SOLD SEPARATELY)

FEATURES	F7 Filter	HEPA Filter
<b>Filtration Efficiency</b>	70-90% for particles between 0.4 to 1 microns	99.97% for particles as small as 0.3 microns
<b>Particle Types</b>	Dust, pollen, mold spores, and general particles	Fine dust, allergens, pet dander, bacteria, viruses
<b>Air Quality Improvement</b>	Moderate air quality improvement	High air quality improvement, ideal for sensitive environments
<b>Ideal Use</b>	Offices, homes, commercial spaces	Hospitals, laboratories, clean rooms, allergy-sensitive areas
<b>Airflow Restriction</b>	Minimal airflow restriction	Higher airflow resistance due to dense filtration



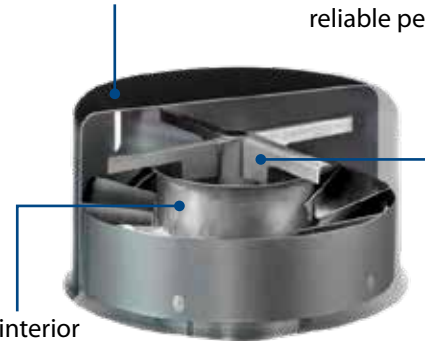
**All-metal pre-cleaners** increase the lifespan of primary air filters, improve system efficiency, and extends pressurisers life in medium to heavy dust environments.

## PRE-CLEANER

H0602293

Rugged one-piece **aluminium hood** with recessed louvre deflects flying debris.

One-piece **stainless steel impeller** is the only moving part. Dual bearings ensure reliable performance.



The interior components are made of solid stainless steel to resist dirt, water, heat, and debris.



Stainless steel clamp with quick and secure locking nut,



# PROTECT YOUR OPERATOR REDUCE OCCUPATION EXPOSURE

## APPLICATIONS

IDEAL FOR MOBILE VEHICLES

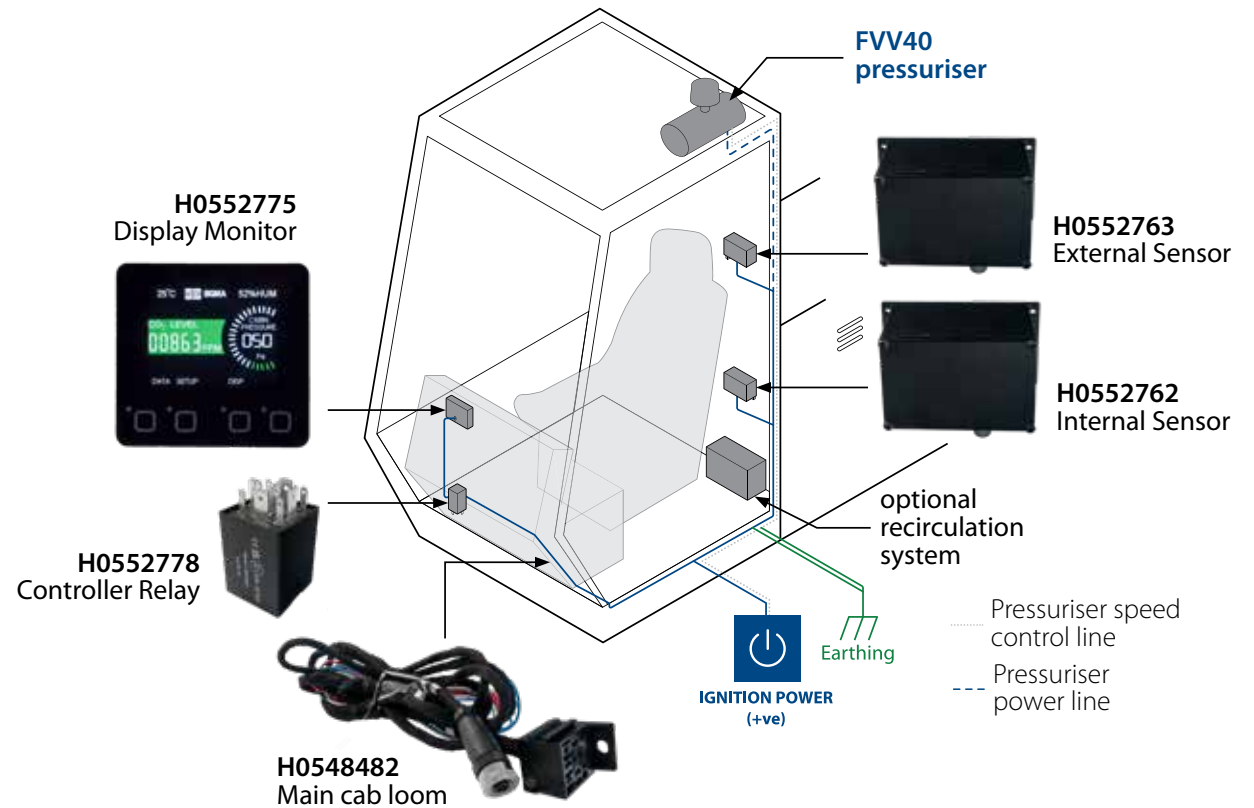


The FVV40 pressuriser has optimised for use with **Air SHIELD** cabin air monitoring system.

- ISO 23875 compliant
- real-time CO<sub>2</sub> and pressure monitoring with alarms
- autonomously maintains set pressure level
- easy to install
- durable build quality
- local support, global reach

## SIGMA Air SHIELD

(SOLD SEPARATELY)





DOZER



DRILL



EXCAVATOR



FORKLIFT & TELEHANDLERS



RAIL SPECIAL VEHICLE



TRUCK



UNDERGROUND EQUIPMENT



WHEEL LOADER

# FVV40

BRUSHLESS VARIABLE FAN MOTOR PRESSURISER

## H0481841

Fresh Air Pressuriser 35 l/s 24V, ROOF MOUNT

## H0614663

Fresh Air Pressuriser 35 l/s 24V, WALL MOUNT 270

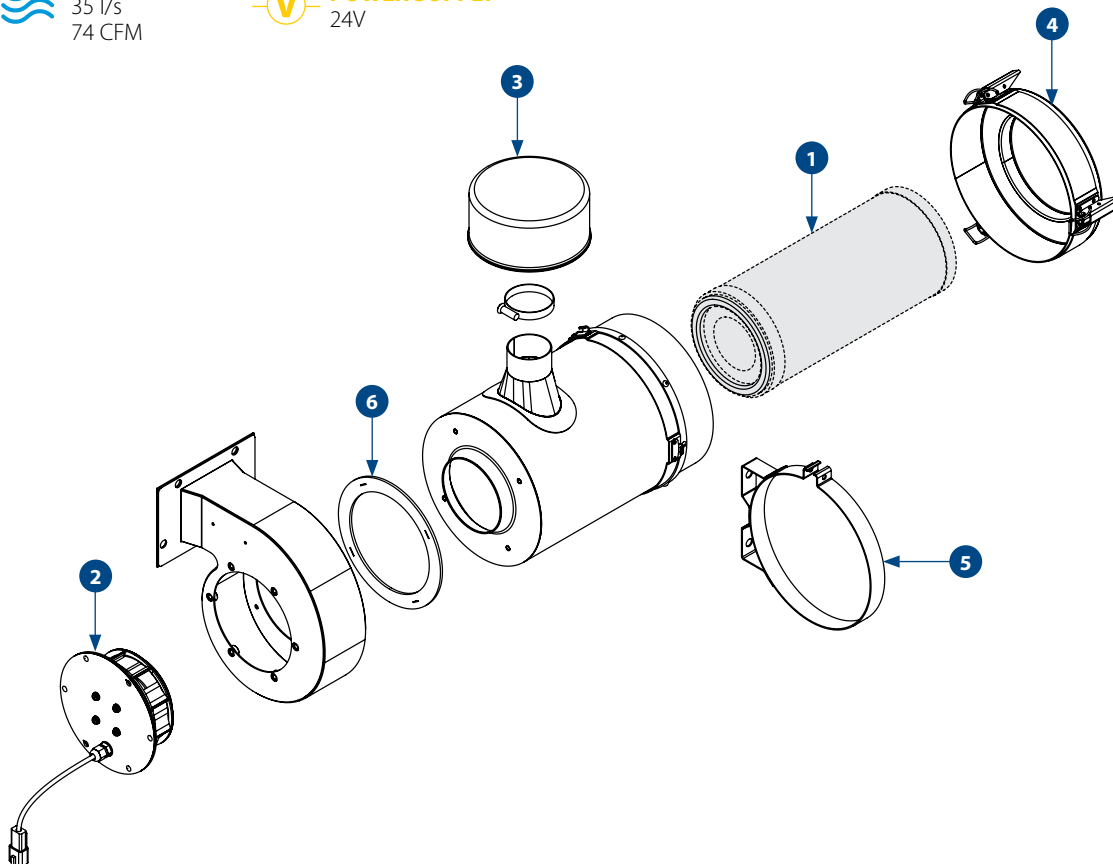
## H0614665

Fresh Air Pressuriser 35 l/s 24V, WALL MOUNT



**AIR FLOW**  
35 l/s  
74 CFM

**POWER SUPPLY**  
24V



## SPARE PARTS

PART NO.	DESCRIPTION	QTY
OPTIONAL FILTER (SOLD SEPARATELY)		
1	H0602294 H13 HEPA FILTER	1
	H0602295 F7 FILTER	1
2	H0654965 FAN MOTOR ASSEMBLY FOR H0614663	1
	H0654966 FAN MOTOR ASSEMBLY FOR H0614665 & H0481841	1
3	H0602293 PRE CLEANER TS 2" INLET	1
4	H0482389 AIR CLEANER CAP	1
5	H0484682 MOUNTING BAND AIR CLEANER 7.5" DIA	1
6	H0615028 SEAL GASKET CANISTER	1

## SPECIFICATIONS

	METRIC	IMPERIAL
Fan Speeds	variable	variable
Air Flow (H13 HEPA)	35 l/s	74 CFM
Air Flow (F7 FILTER)	40 l/s	84 CFM
Power Supply	24V	24V
Current Draw	2.5A	2.5A
Weight (nominal)	8.0 Kg	17.6 lbs
Dimension (L X W X H)	409mm X 226mm X 327mm	16.1in X 8.9in X 12.9in

## MAINTENANCE

### MONTHLY / 300 HOURS

H0602294	H13 HEPA FILTER
H0602295	F7 FILTER

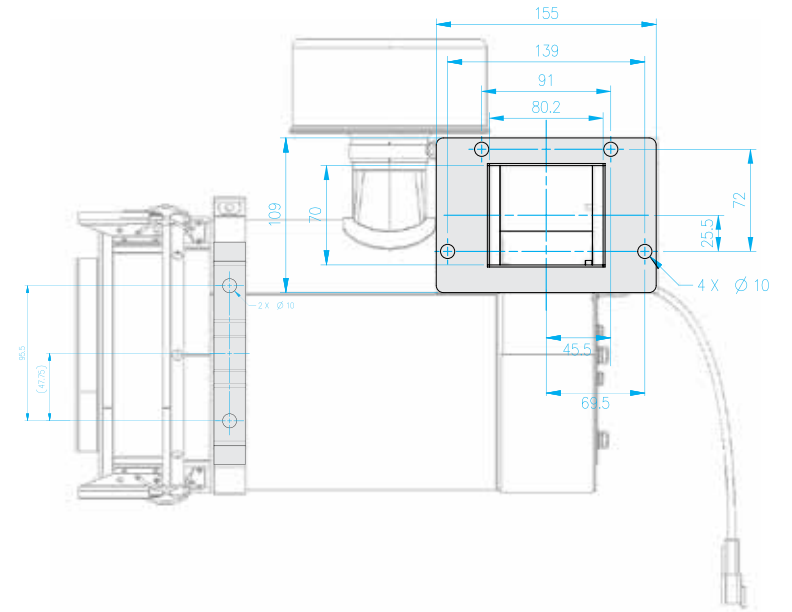
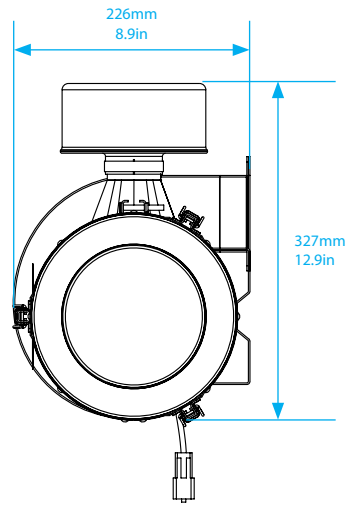
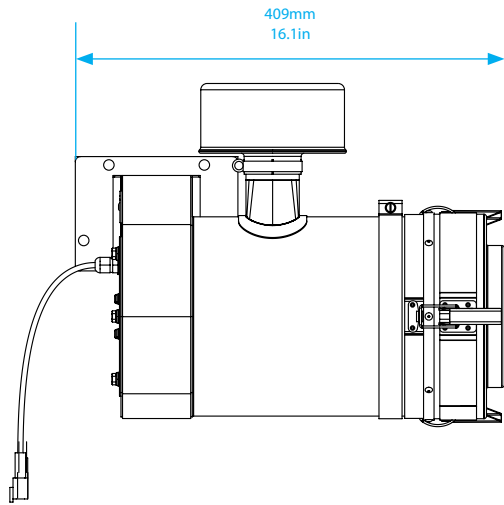
### 3 YEARS / 10,800 HOURS

H0654966	FAN MOTOR ASSEMBLY
H0602293	PRE CLEANER TS 2" INLET

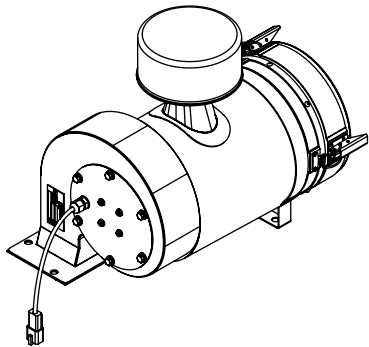


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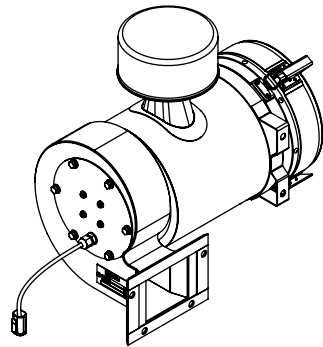
# DIMENSIONS & MOUNTING DETAILS



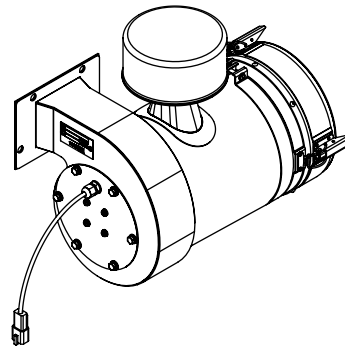
# AIR BLOWER OUTLET ORIENTATIONS



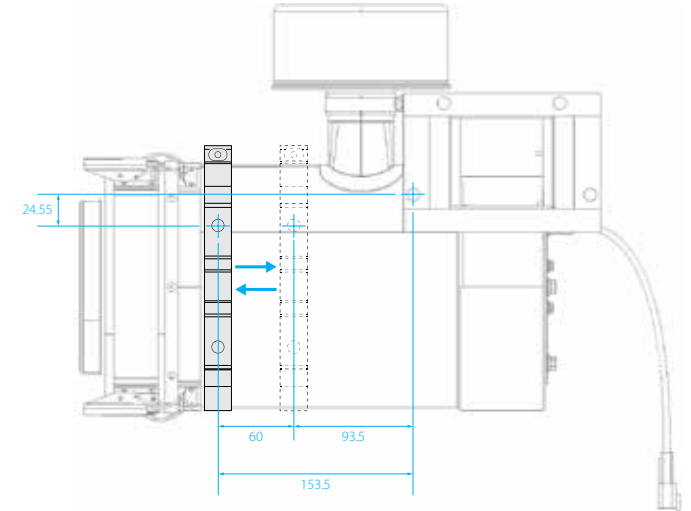
**H0481841**  
Fresh Air Pressuriser 35 l/s  
24V, ROOF MOUNT



**H0614663**  
Fresh Air Pressuriser 35 l/s  
24V, WALL MOUNT 270  
(Female plug)



**H0614665**  
Fresh Air Pressuriser 35 l/s  
24V, WALL MOUNT



unless otherwise specified dimensions are in mm



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[www.sigma-hvac.com](http://www.sigma-hvac.com)

[www.knorr-bremse.com.au](http://www.knorr-bremse.com.au)



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 SIGMA

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 KNORR-BREMSE

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 NEW YORK AIR BRAKE

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 IFE

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 MERAK

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 MICROELETTRICA

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 SELECTRON

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 KIEPE ELECTRIC

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 EVAC

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 ZELISKO

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 RAILSERVICES