



Compact Filter Technic

⇒ BREATHE THE SAFETY FANS

CFT Jet Fans and Smoke Extraction Fans
for Safety in Road, Metro and Railway Tunnels





CFT-A PILLAR OF THE CFH GROUP

Clean air is our mission

Through our many years of experience and the close relationship with our customers, we have an excellent understanding of the processes in mining and tunnelling. We know how strenuous the tasks are that underground personnel have to perform and we know how extreme the conditions can be that man and machine are subjected to. Our contribution is to make these tasks more acceptable and healthier. Moreover, our technology is designed to ensure compliance with all national and international legal limits for inhalable and respirable dust.

Air—its cleaning, provision, heating, cooling and moving—is our mission. In this respect we are able to support our customers with our wealth of knowledge, gathered over decades, with technical expertise and innovative strength. Now—and in future.

Tomorrow's greatest challenges will be mobility and energy. As the global economies grow and populations expand, so the numbers of passengers and goods will also increase constantly. Thus the traffic infrastructures of the future will also have to be designed increasingly for underground operations. Furthermore, the future demand for raw materials will also continue to increase. The underground mining of raw materials forms the basis for rapidly increasing wealth and for industrial added value worldwide. This means that in future an increase in the extraction of raw materials can also be expected.

We at CFT will be glad to take on these international challenges for you! Regardless of the depth to which you need our expertise or under what climatic conditions—we ensure that you and your employees enjoy the best possible air conditions at the workplace. To this end we are at your disposal with durable and sustainable dedusting and ventilation systems as well as systems for heating and cooling the air. All CFT solutions are made in Germany and designed to protect the environment and preserve resources—and that includes complex turnkey solutions and complete package systems.

We have already set our course for the future—with the forthcoming construction of our new factory we will ensure that our capacities are able to keep pace with the growth of our company in the years to come. In particular, this also allows to create a suitable working environment to meet the needs of the increasingly complex plant engineering sector.

Together with you we want to look to the future and be a fair and dedicated partner for you in every respect.

With a hearty “Glückauf” (traditional German miner’s greeting)!

Your team of experts from CFT GmbH Compact Filter Technic

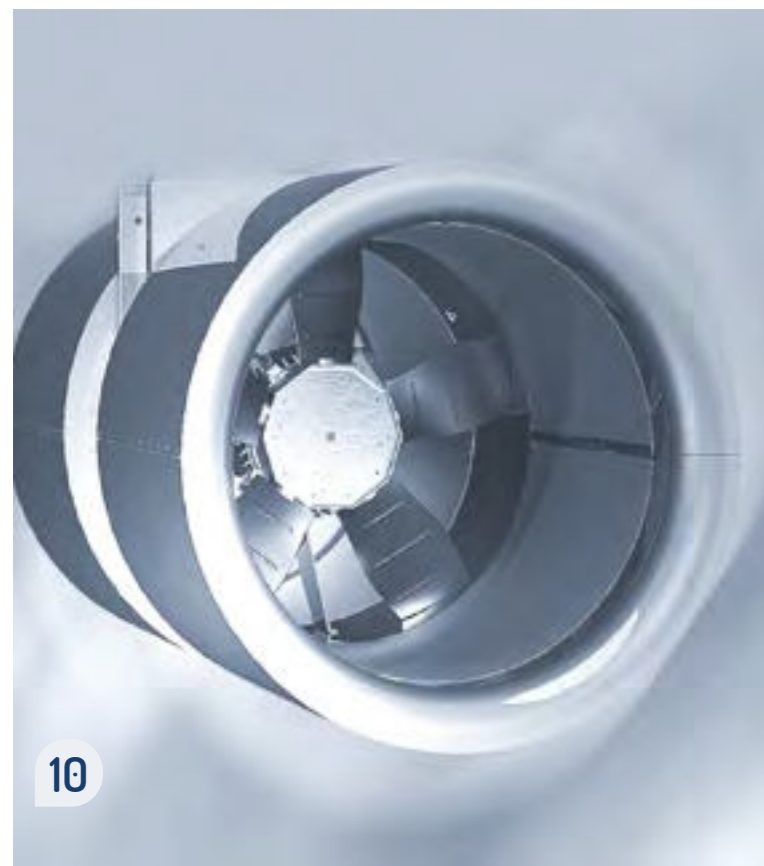
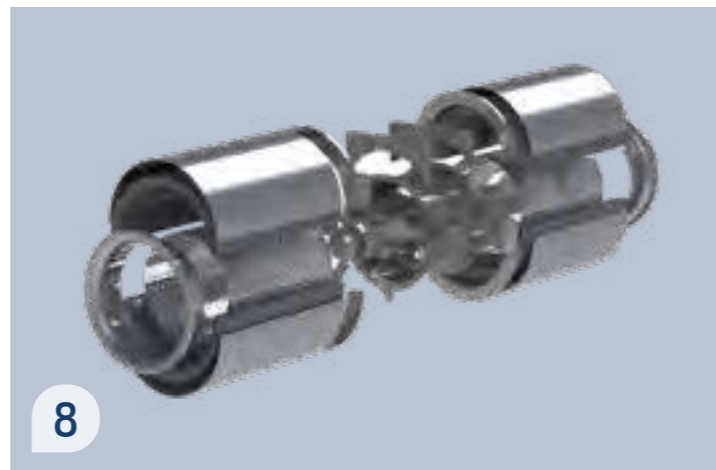
CONTENTS



3 **Intended for customer satisfaction**
Innovative solution provider with experience:
CFT GmbH Compact Filter Technic

6 **Range of material:**
SATM, SARM
CFT Jet Fans and Axial

8 **Range of application:**
The product line of the Smoke Extraction Fans from CFT
CFT Jet Fans



10 **JET FANS**
SATM DN 630-DN 1600

16 **AXIAL FANS**
SARM DN 630-2500
Range of application F300 and F400

12 **Accessories**
Mounting frame, fall protection,
isolator switch, vibration sensor



Jet Fans / Axial Fans

Every project has its own specific characteristics—just like our fans.
We have the right fan for every application.



Certificate No				
Type	SATM03	SATM14	SARM03	SARM04
Amount of blades	5	5	7	7
Fire protection class	F300	F400	F300	F400
Frequency	50/60	50/60	50/60	50/60
Motor size	132-250	132-250	160-355	160-355
Diameter	630-1600	630-1600	1000-2500	1000-2500
Voltage 50 Hz	380/660; 400/690; 415	380/660; 400/690; 415	380/660; 400/690; 415	380/660; 400/690; 415
	500; 690	500; 690	500; 690	500; 690
Voltage 60 Hz	380/660; 400/690; 415	380/660; 400/690; 415	380/660; 400/690; 415	380/660; 400/690; 415
	440; 460; 500; 690	440; 460; 500; 690	440; 460; 500; 690	440; 460; 500; 690
Impeller material	steel coated, AISI 304, AISI 316 Ti	steel coated, AISI 304, AISI 316 Ti	steel coated, AISI 304, AISI 316 Ti	steel coated, AISI 304, AISI 316 Ti
Fan casing	steel coated, AISI 304, AISI 316 Ti	steel coated, AISI 304, AISI 316 Ti	steel coated, AISI 304, AISI 316 Ti	steel coated, AISI 304, AISI 316 Ti
Motor				
WEG W22 IE3	TEA0	TEA0	TEFC	TEFC
max kW 50/60 Hz	75	75	400/500	250/260
Poles	2/4/6/8	2/4/6/8	4/6/8	2/4/6/8

Fire-tested accessories

Flexible sleeve
Fan casing extension
Counter flange/extensions
Mounting feet
Anti vibration mounts
Silencer

Inlet cone
Protection guard
Inspection hatch
Mounting frame
Damper round vertical
Damper round horizontal

Isolator switch
Terminal box
Ring measuring line
Diffusor
Fall protection
Deflector



Jet Fans

The product line of the Smoke Extraction Fans from CFT GmbH combines functionality with the latest design and sets new standards for the smoke control in tunnels and metros.

The essential benefits are:

- Solid fans made in Germany
- Welded blades, stainless steel
- Blades adjustable at standstill
- Maximum thrust at lowest height and maximum efficiency due to CFD-optimised design
- Worldwide applicable, 50 Hz- and 60 Hz
- Whisper mode by high performance silencer
- Optimum solutions by product diversity
- Temperature class F300 and F400
- CE-certified according to EN 12101-3



Permissible conveying temperatures:

Up to 55 °C (permanent ventilation). In case of fire 300 °C/120 min resp. 400 °C/120 min.

Casing:

Made of sheet-steel based on the unit construction principle with rolled flanges on both sides. Optimal corrosion protection due to surface coating in RAL or hot dip galvanizing. Stainless steel option available!

Impeller:

Hub and impeller blades made of stainless steel. Profiled blades adjustable at standstill.

Drive:

Three phase motor according to EN 12101-3 / IEC norm motor. Suitable for continuous operation S1. Ambient temperature for motor up to 55 °C. Motor performance selected for cold start-up at 20 °C.

Sound:

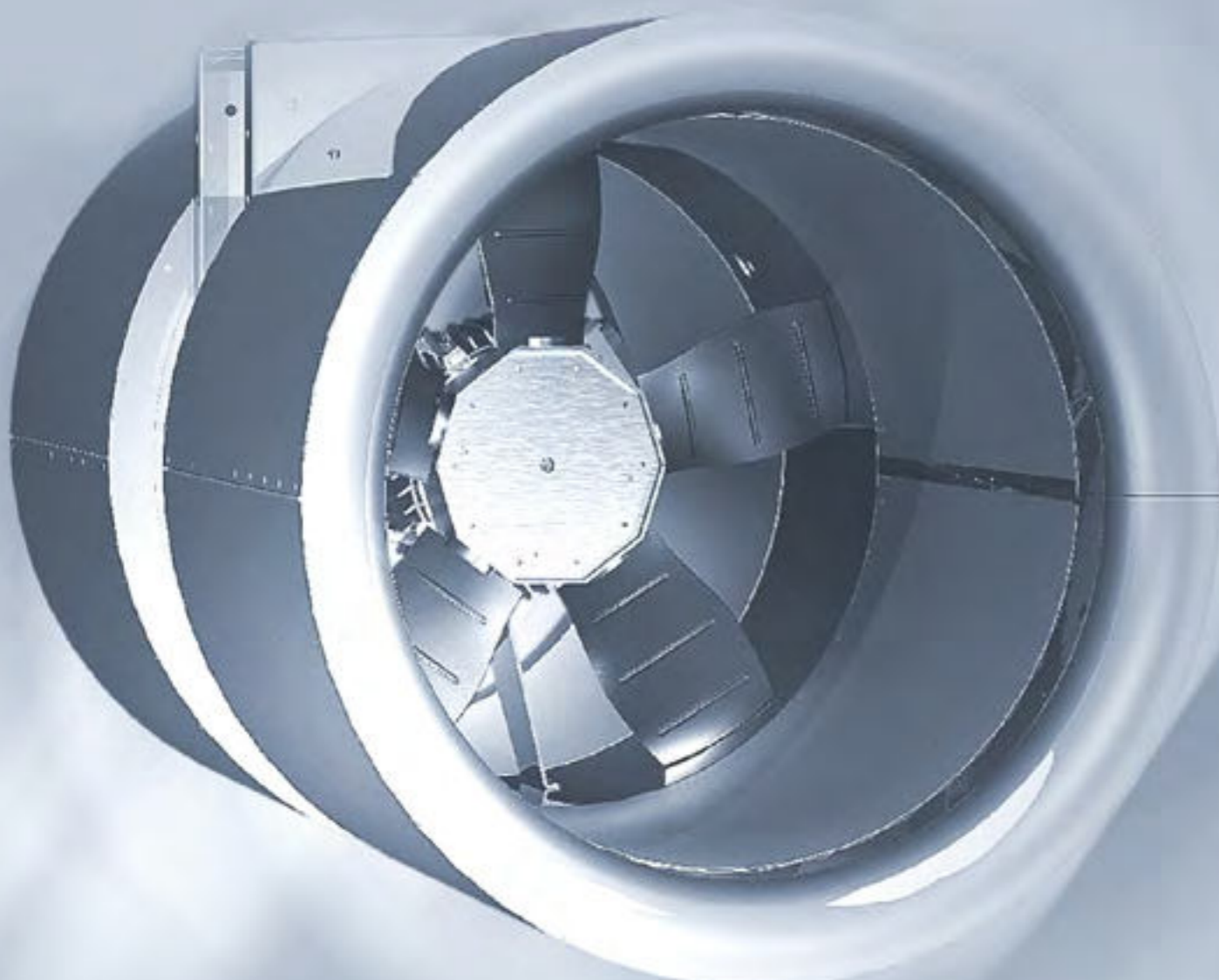
All sound values measured in the laboratory.

Norms:

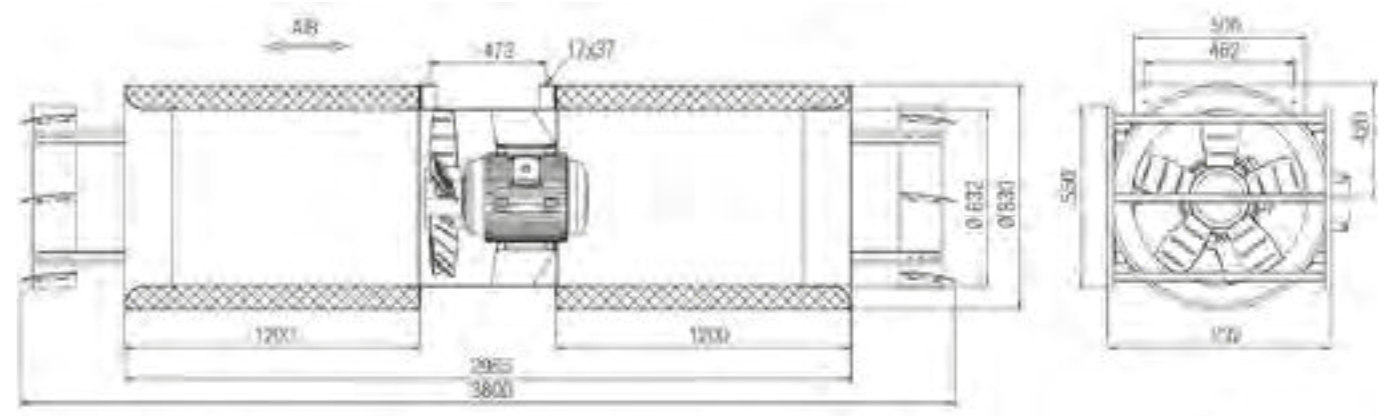
DIN EN ISO 5801 and DIN EN ISO 13350



TUNNEL JET FAN SATM DN 630-DN 1600

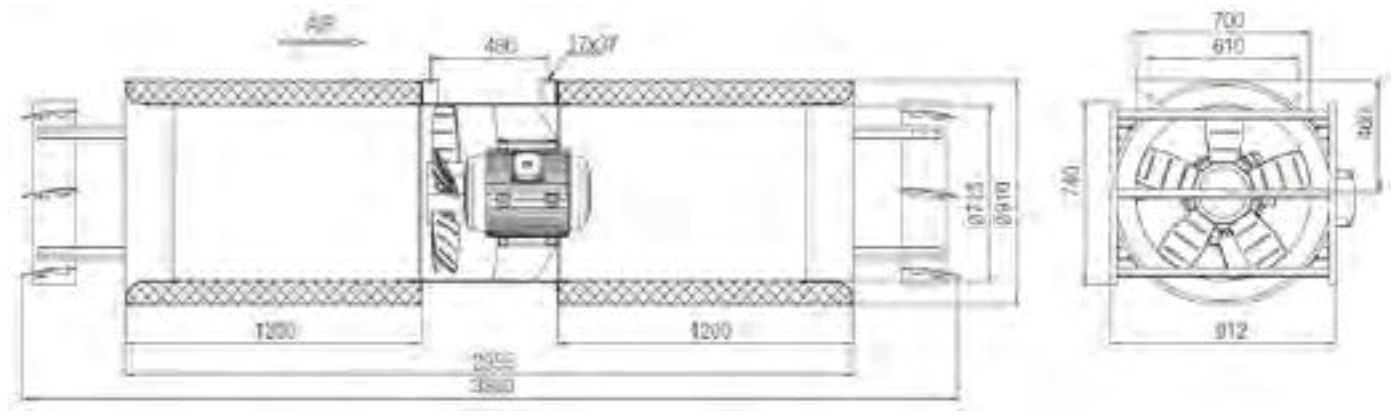


 630 mm, Tunnel Jet Fans, reversible, SATM



	type	poles	thrust [N]	velocity [m/s]	motor power [kW]	sound pressure [dB(A)]	weight kg
F300 (300 °C/120 min)	SATM03-0630	2	405	33,2	15	71	360
F400 (400 °C/120 min)	SATM14-0630	2	405	33,2	15	71	360

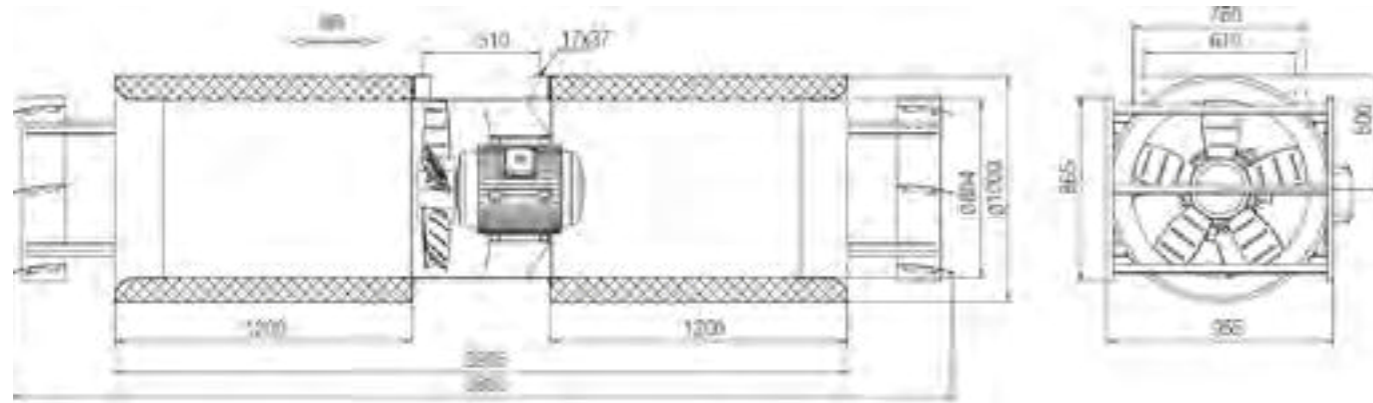
 710 mm, Tunnel Jet Fans, reversible, SATM



	type	poles	thrust [N]	velocity [m/s]	motor power [kW]	sound pressure [dB(A)]	weight kg
F300 (300 °C/120 min)	SATM03-0710	2	630	37,1	22	73,8	445
F400 (400 °C/120 min)	SATM14-0710	2	630	37,1	22	73,8	445



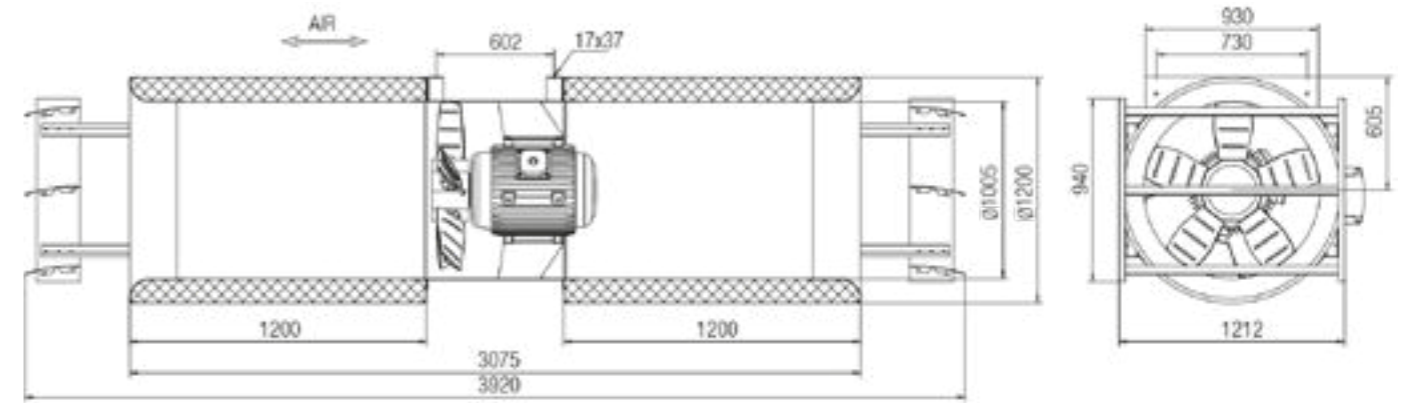
800 mm, Tunnel Jet Fans, reversible, SATM



	type	poles	thrust [N]	velocity [m/s]	motor power [kW]	sound pressure [dB(A)]	weight kg
F300 (300 °C/120 min)	SATM03-0800	2	790	36.5	30	81	475
F400 (400 °C/120 min)	SATM14-0800	2	790	36.5	30	81	475



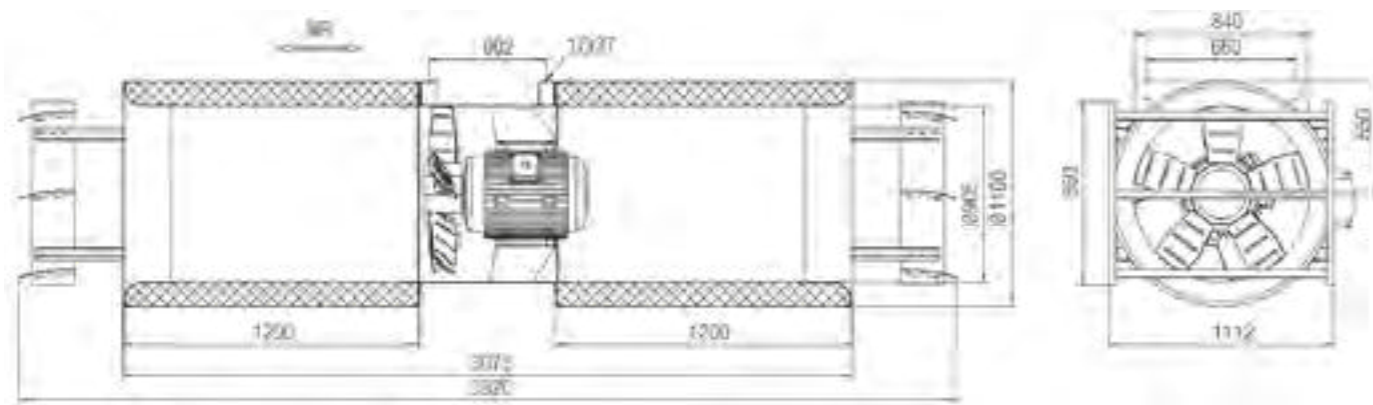
1000 mm, Tunnel Jet Fans, reversible, SATM



	type	poles	thrust [N]	velocity [m/s]	motor power [kW]	sound pressure [dB(A)]	weight kg
F300 (300 °C/120 min)	SATM03-1000	4	810	29.6	30	71	705
F400 (400 °C/120 min)	SATM14-1000	4	810	29.6	30	71	705



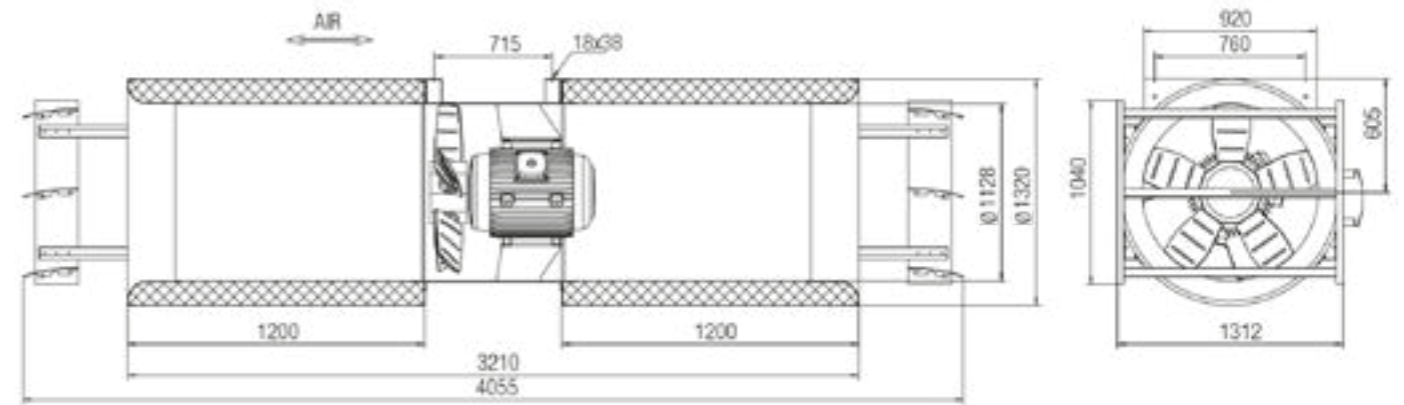
900 mm, Tunnel Jet Fans, reversible, SATM



	type	poles	thrust [N]	velocity [m/s]	motor power [kW]	sound pressure [dB(A)]	weight kg
F300 (300 °C/120 min)	SATM03-0900	2	405	33.2	15	67	555
F400 (400 °C/120 min)	SATM14-0900	2	405	33.2	15	67	555



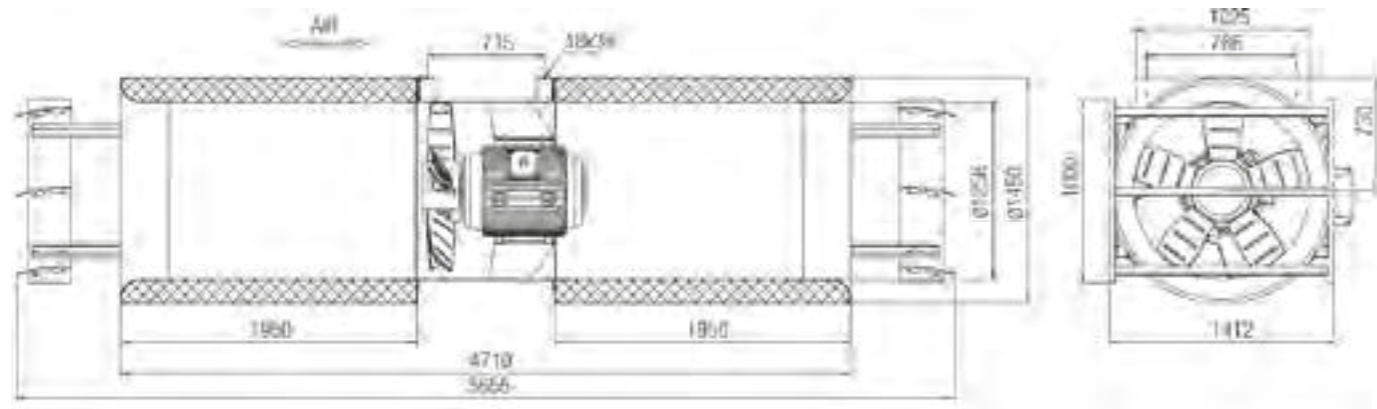
1120 mm, Tunnel Jet Fans, reversible, SATM



	type	poles	thrust [N]	velocity [m/s]	motor power [kW]	sound pressure [dB(A)]	weight kg
F300 (300 °C/120 min)	SATM03-1120	4	1280	33.2	45	79	915
F400 (400 °C/120 min)	SATM14-1120	4	1280	33.2	45	79	915



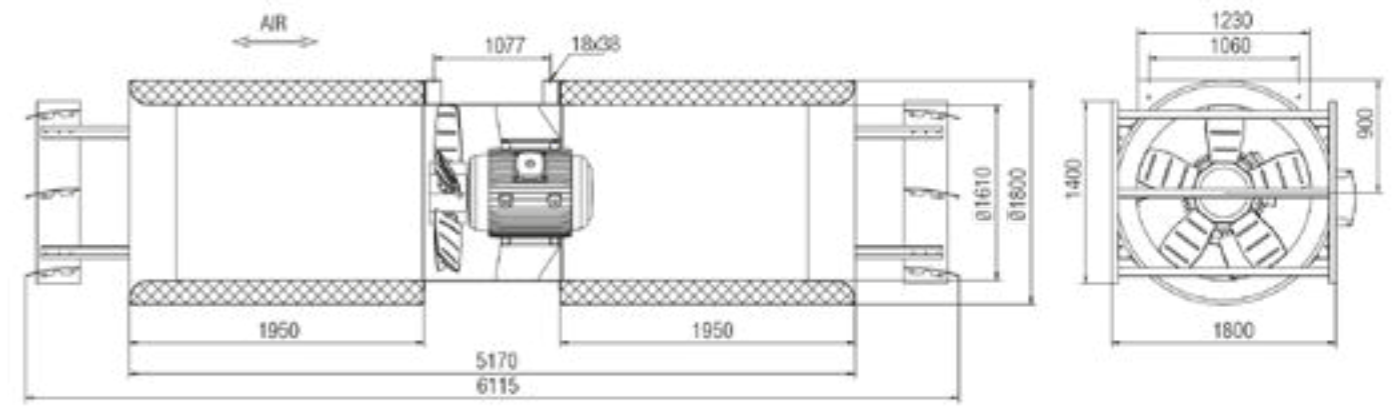
1250 mm, Tunnel Jet Fans, reversible, SATM



	type	poles	thrust [N]	velocity [m/s]	motor power [kW]	sound pressure [dB(A)]	weight kg
F300 (300 °C/120 min)	SATM03-1250	4	1665	34	55	75	1285
F400 (400 °C/120 min)	SATM14-1250	4	1665	34	55	75	1285



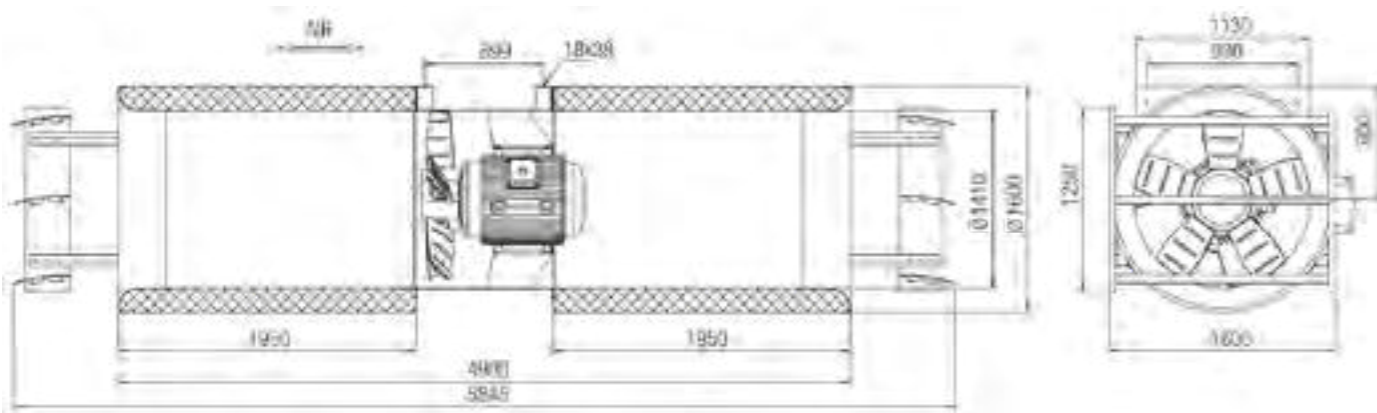
1600 mm, Tunnel Jet Fans, reversible, SATM



	type	poles	thrust [N]	velocity [m/s]	motor power [kW]	sound pressure [dB(A)]	weight kg
F300 (300 °C/120 min)	SATM03-1600	4	2620	33.2	75	78	1615
F400 (400 °C/120 min)	SATM14-1600	4	2620	33.2	75	78	1615



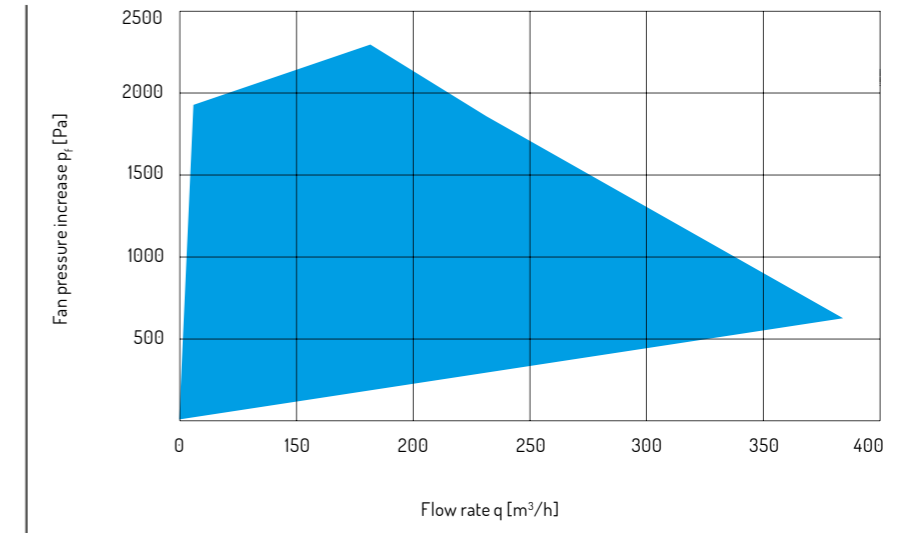
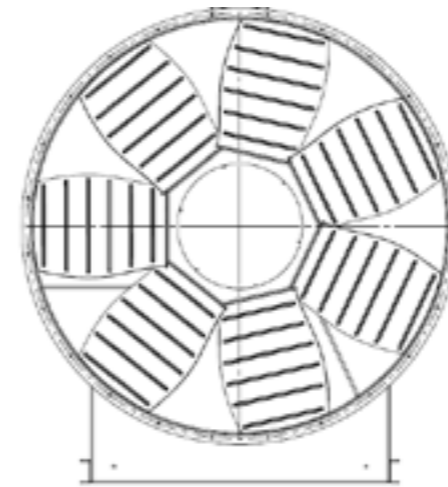
1400 mm, Tunnel Jet Fans, reversible, SATM



	type	poles	thrust [N]	velocity [m/s]	motor power [kW]	sound pressure 10m [dB(A)]	weight kg
F300 (300 °C/120 min)	SATM03-1400	4	2330	34	75	78	1465
F400 (400 °C/120 min)	SATM14-1400	4	2330	34	75	78	1465

AXIAL FAN DN 630-2500

Range of application SARM F300 and F400

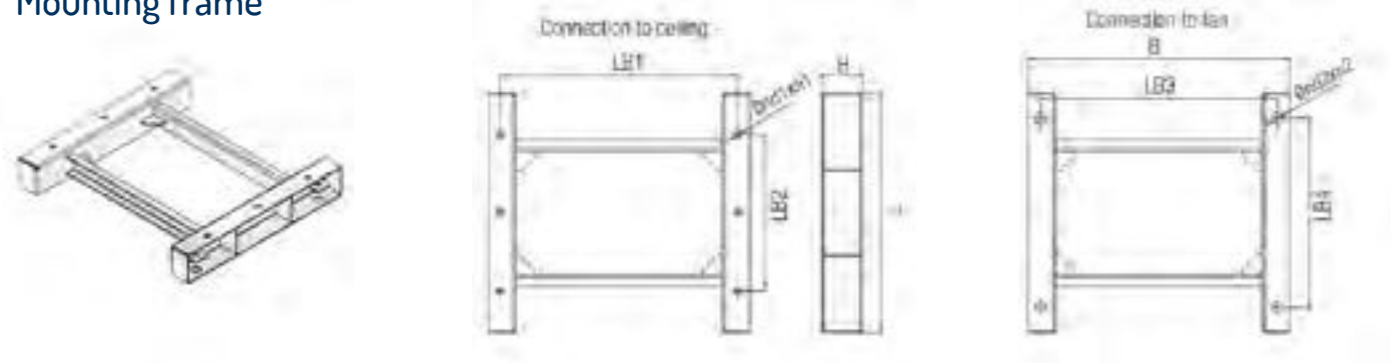


DN (mm)	Full load speed (1/min)	Max. ambient temperature (°C)	Fire rating	Max. power (kW)	Max. flow rate (m³/s)	Max. fan pressure (Pa)	Approx. weight (kg)
630	3600	55	F300/F400	18,5	11	1350	135-150
710	3600	55	F300/F400	37	15	1500	145-260
800	3600	55	F300/F400	37	20	1950	190-400
900	1800	55	F300/F400	45	16	600	200-260
1000	1800	55	F300/F400	260	30	670	230-360
1120	1800	55	F300/F400	260	42	830	430-650
1250	1800	55	F300/F400	355	62	1045	480-850
1400	1800	55	F300/F400	355	84	1360	580-950
1600	1800	55	F300/F400	355	125	1270	700-1100
1800	1800	80	F300/F400	500	181	2350	1360-2300
2000	1800	80	F300/F400	500	190	1400	1500-2450
2240	1200	80	F300/F400	500	270	1550	1850-2700
2500	1200	80	F300/F400	500	370	900	2200-3100

At CFT, we believe that every product is “only” as good as the sum of its parts. Irrespective of whether you purchase our machines or require an individual special solution-you can rely on the durability, performance and efficiency of all our products.

Based on our many years of experience and our knowledge of the industry, we will be pleased to advise you when specific machine solutions are required in special areas of application.

Mounting frame



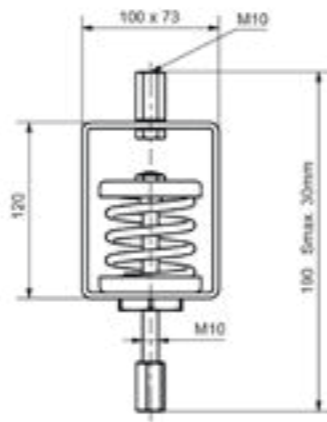
Isolator switch



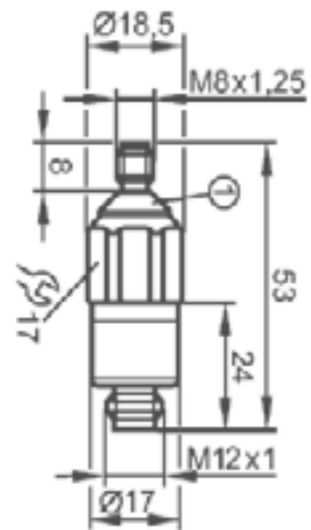
Fall protection



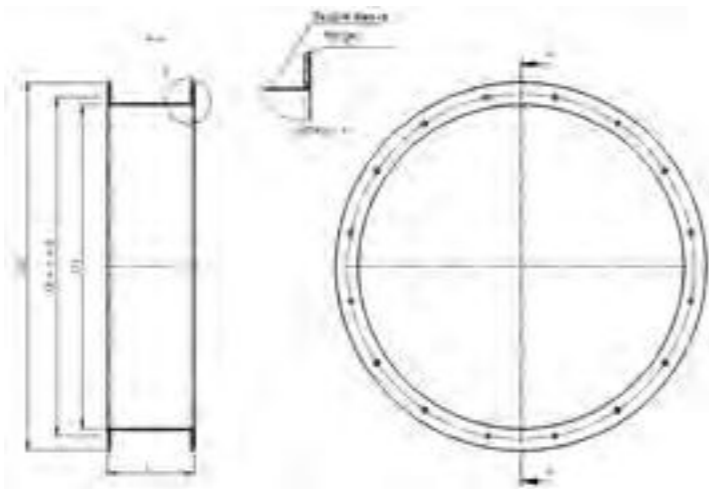
Spring anti-vibration sensor



Vibration sensor



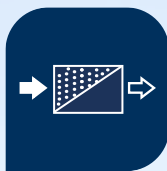
Flexible sleeve



CFT-BREATHE THE DIFFERENCE

CFT has been supporting customers from the mining and tunnelling industries since 1999 with its comprehensive know-how expertise in the fields of dust extraction, ventilation and the heating and cooling of air. As an innovative system supplier, we offer you the complete range of services from engineering and project planning to installation and service on site. Coming from our own factory in Gladbeck, all CFT products meet the high quality criteria "Made in Germany".

CFT is part of the worldwide operating CFH Group. The holding company unites a range of subsidiaries and shareholdings under one roof with a common goal: the application of excellent engineering services to create innovative solutions for all aspects of ventilation at the workplace. Cross-sector application, underground, on the surface, across the globe.



Dedusting



Ventilation



Air cooling systems



Air heating systems



Methane drainage
and utilization



Ducts

For more information, please visit our website www.cft-gmbh.de or give us a call. We will be pleased to answer your questions and to explain the advantages of CFT Tunnel Jet Fans & Smoke Extraction Fans in detail to you personally.

We look forward to meeting you!



CFT GmbH Compact Filter Technic
Neckarstraße 23 • 45768 Marl
Germany

+49 2365 8726-0
mail@cft-gmbh.de

www.cft-gmbh.de



A Member Company of the CFH Group • www.cfh-group.info

MADE IN GERMANY