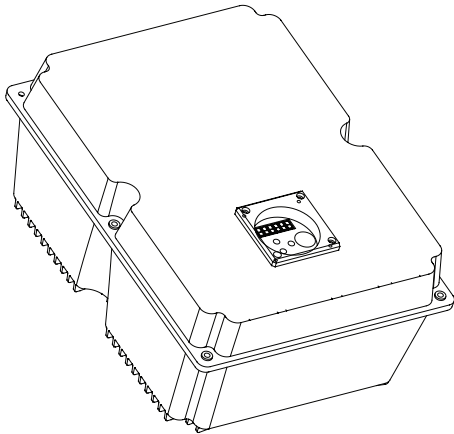


## Radialventilatoren

- aus chemisch widerstandsfähigem Kunststoff

Turbo Pressure Chemical Resistant Centrifugal Fans



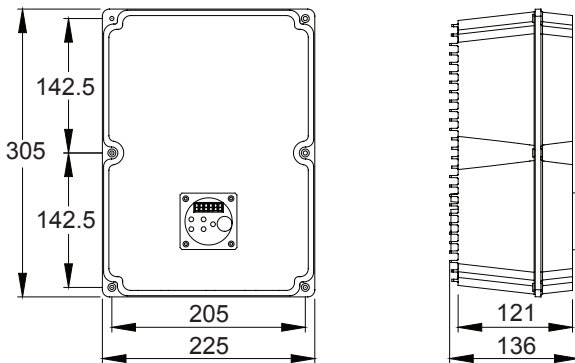
Frequency invertors were developed under special consideration of network abilities and international standards, such as CE and UL.  
Further advantages: energy efficiency, user-friendly design and the availability of a world-wide service network

### What can you expect :

- Conformity to global standards, specifications and certifications
- An open and flexible drive platform
- A broad product range geared to the needs of the market
- Simple operation and configuration
- Optimised control and data management
- Outstanding product reliability

### Plus extensive advanced technology functions like:

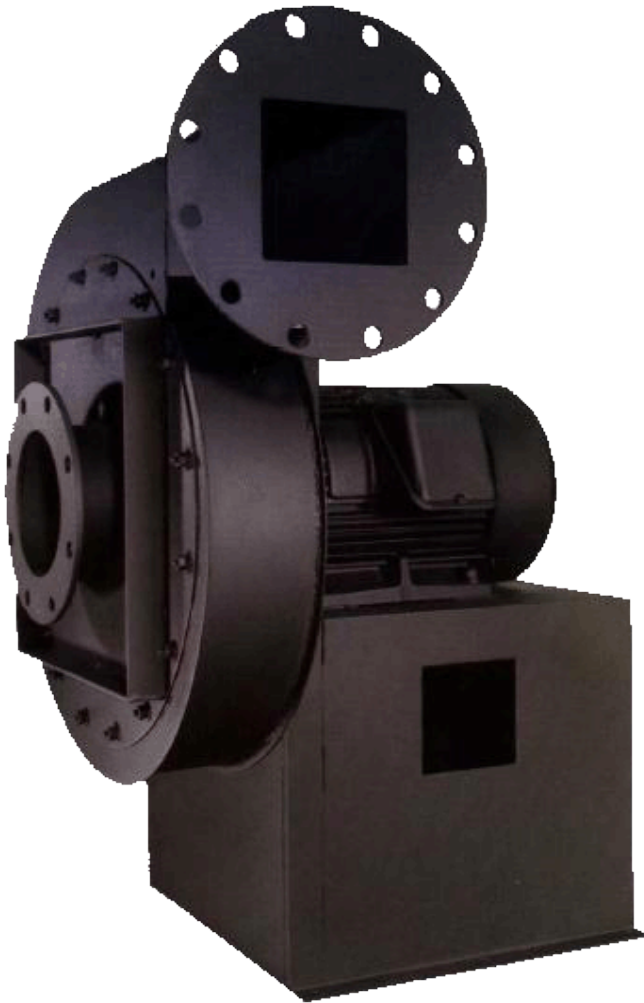
- SLV- Vector Control and V/f Control (fully programmable)
- Online Autotuning and automatic slip compensation for outstanding speed stability
- Soft PWM function for reduced motor noise
- OEC technology for maximum power savings
- Active current limiting (tripless operation)
- Automatic restart after power failures
- Flexible control units and intuitive configuration and setup



All dimensions in mm

Designation (Output For 3 phase Only)	Application motor (kW)	Rated Output Current[A]	L2	L3	W	W1	H	H1	Supply voltage
(F1S) WR75M1	0,75	4,0	140	152	105	89	117	130	1/N AC 230V
(F2S) W1R5M1	1,5	7,0	140	152	105	89	117	130	1/N AC 230V
(F3S) W2R2M1	2,2	10	140	152	105	89	117	130	1/N AC 230V
(F1) WR75M3	0,75	2,5	140	152	105	89	117	130	3 AC 400V
(F2) W1R5M3	1,5	3,7	140	152	105	89	117	130	3 AC 400V
(F3) W2R2M3	2,2	5	140	152	105	89	117	130	3 AC 400V
(F4) W4RG3	4,0	9,5	159	170	126	113	145	158	3 AC 400V
(F5) W5R5G3	5,5	14,5	237	249	155	144	150	169	3 AC 400V
(F6) W7R5G3	7,5	16	237	249	155	144	150	169	3 AC 400V

Frequency Inverter		3-phase 400V Class
Rated Input Voltage		1 ~ 220V, 3 ~ 380, 460, 660V, ±20%; 50/60 Hz ±5 %
Rated Output Voltage		3 ~ 220 ... 660 V (corresponding to input voltage)
Output Frequency Range		0,5 ... 650 Hz
Frequency Accuracy (at 25 °C ±10 °C)		Analogue setting: ±0,25 %, digital setting: ±0,01 %
Frequency Setting Resolution		Analogue setting: Maximum frequency/100, digital setting: 0,1 Hz
V/f Characteristics		V/f control, V/f variable (constant torque, reduced torque)
Overload Capacity		150 % for 60 s
Acceleration / Deceleration time		0,1 - 6553 s
Starting Torque		100 % at 6 Hz
Input	Intelligent Input Terminal	2 kOhm input impedance
	Functions	FW(Forward), RV(Reverse), SPD1-SPD3(Multispeed command), JG(Jogging), DB(External DC braking), 2CH(Second accel./decel.), FRS(Free-run stop), EXT(External trip), USP(Unattended start protection), OH(Overheat error), AT(Analog input selection), RS(Reset), PTC(Thermistor input), PID(PID On/Off), PIDC(PID reset), UP/DWN(Remote-controlled accel./decel.), UDC(Remote controlled data clearing), OPE(Operator control), EMR(Safety stop), NO(Not selected)
Output	Intelligent Ouyput Terminal	Analogue voltage, analogue current
	Functions	RUN(run signal), FA(Frequency arrival- over-frequency), AL(Alarm Signal), SPE(Speed Equal), SPNE(Speed Not Equal), SPO(Speed Over), SPNO(Speed Not Over), SPA(Speed Arrive), SPNA(Speed Not Arrive), DIR(Output Direction), SPZ(Zero Speed), Stalling(Output While Stalling), Power-Limit(Output Power Limit), Acc(Under Acceleration Status), Dec((Under Deceleration Status)
Serial port		RS485
Protection		Overcurrent, overvoltage, undervoltage, overload, overheat, ground fault protection at startup, input overvoltage, EEPROM error, CPU error, USP error, Termistor error, external trip, Safety stop
Environmental Conditions	Temperature / humidity	-10 ... +50 °C (carrier derating required for ambient temperature higher than 40 °C), no freezing / 20 ... 90 % humidity (non condensing)
	Vibration / Installation	0,5G, 10...55 Hz / altitude 1000 m or less, indoors, no corrosive gases or dust
Protection class		IP20



Above: The fan has a flanged inlet for easy attachment of inlet filter, silencer or piping and is commonly used to provide combustion air.

## Applications

Wolter T-CHEM single stage pressure fans are customized and built for combustion, air, fluid bed aeration, cooling, drying and different process system applications. It is normally employed in pneumatic conveying systems where extremely corrosive fumes, vapours, contaminated air and aggressive gases are present.

The different impeller/casing combinations provide a very wide performance range.

The T-CHEM is available in 16 discharge positions to meet the requirements of almost every industrial application and in either direct drive or belt drive.

At right: The Fan is designed and equipped with optional shaft, bearing guard and extended lubrication lines to convey processed air in a refinery. Epoxy coating was applied to all internal and external surfaces in accordance to the customer specified corrosion resistant requirements.



At right: The belt driven pressure fans with optional flanged inlet is used on the clean side of a dust collector.



At far right: These fans can either be direct or belt driven for applications in chemical plants. The fan casing, impeller and steel stand can be manufactured in different materials such as steel, stainless steel, polypropylene, GRP etc and phenol coating on the exterior steel surface.





## Design Features



### Casings

Casing and pedestals are made of heavy gauge material, continuously welded and rigidly braced.

They are able to handle and withstand the stresses that come with strenuous duty, delivering smooth and vibration-free performance. Removable inlet cover plate provides access to the impeller.

### Shaft & Bearings

Oversized shafts with a critical speed at least 1.35 times maximum RPM. Bearings are heavy, industrial duty ball or roller in cast iron pillow blocks.

### Impeller

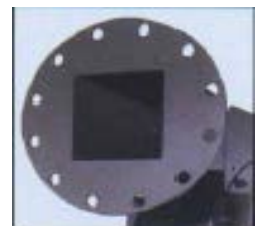
Exclusive "constant velocity" impellers substantially reduce loads on the motor. The wheels are mounted to the shaft with taperlock bushings.

### Inlets

The standard slip-fit inlet facilitates field mounting of either sleeves or flexible connectors. Flanged inlets and venture inlets are optional.

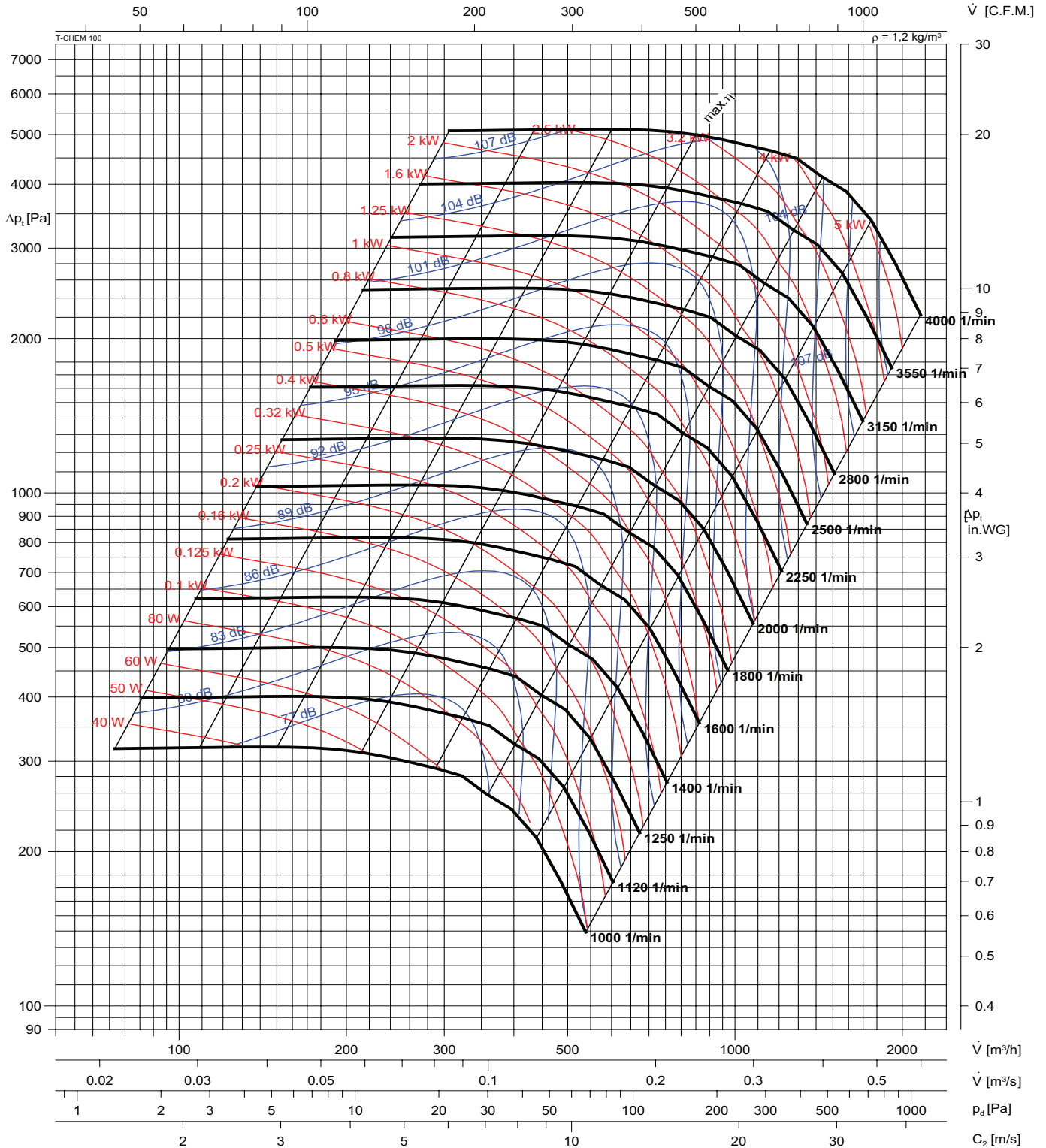
### Flanged Outlets

Standard flanged outlets have 125/150 pipe flange bolt holes and bolt circle dimensions to provide easy connection to flanged pipe. Outlets are continuously welded to the housing.





**T-CHEM 100**



Im Kennfeld ist der A-bewertete Schalleistungspegel  $L_{WA}$  angegeben.

A-weighted sound power level  $L_{WA}$  is quoted in the diagram

Schalldruckpegel  $L_{PA}$  in 1 m Entfernung

A-sound pressure level LPA at 1 meter distance

$$L_{W_{okt}} [dB] = L_{WA} [dB(A)] + \Delta L [dB]$$

Oktavpegel  $L_{W_{okt}}$ :

Octave sound power level  $L_{W_{okt}}$ :

$$L_{W_{okt}} [dB] = L_{WA} [dB(A)] + \Delta L [dB]$$

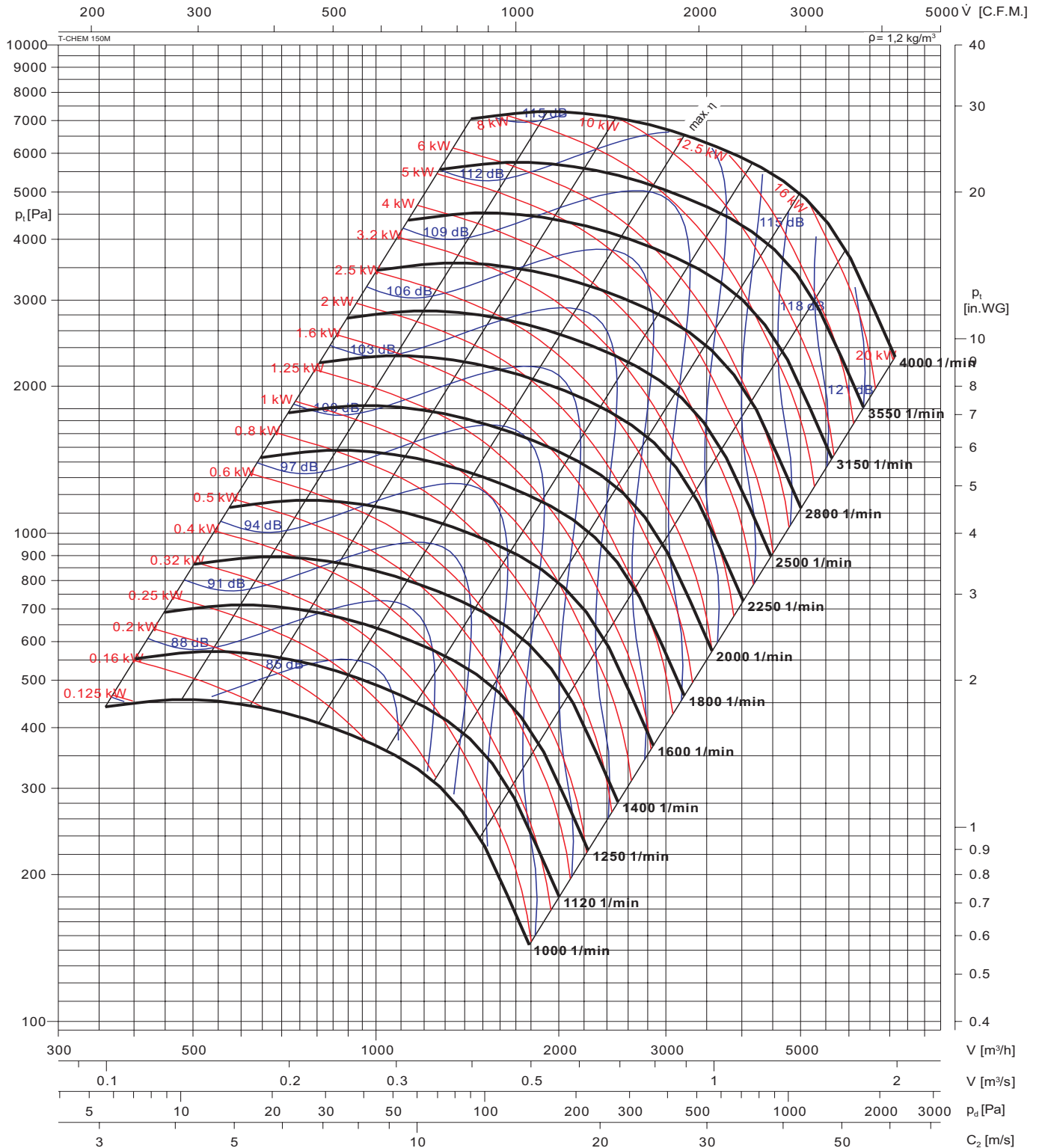
**Relative Frequenzspektren**

relative frequency spectrum  $\Delta L$  in dB/Okt

n [ 1 / min ] rpm	Oktavb.-Mittenfreq. / Octave b. midfreq. [Hz]							
	63	125	250	500	1K	2K	4K	8K
1120 - 1800	-8	-5	2	4	7	3	1	-3
2000 - 4000	-19	-16	-9	-7	-4	-8	-10	-14



**T-CHEM 150**



Im Kennfeld ist der A-bewertete Schalleistungspegel  $L_{WA}$  angegeben.

A-weighted Sound power level  $L_{WA}$  is quoted in the diagram

Schalldruckpegel  $L_{PA}$  in 1 m Entfernung

A-sound pressure level LPA at 1 meter distance

$$L_{W_{okt}} [dB] = L_{WA} [dB(A)] + \Delta L [dB]$$

Oktavpegels  $L_{W_{okt}}$ :

Octave sound power level  $L_{W_{okt}}$ :

$$L_{W_{okt}} [dB] = L_{WA} [dB(A)] + \Delta L [dB]$$

**Relative Frequenzspektren**

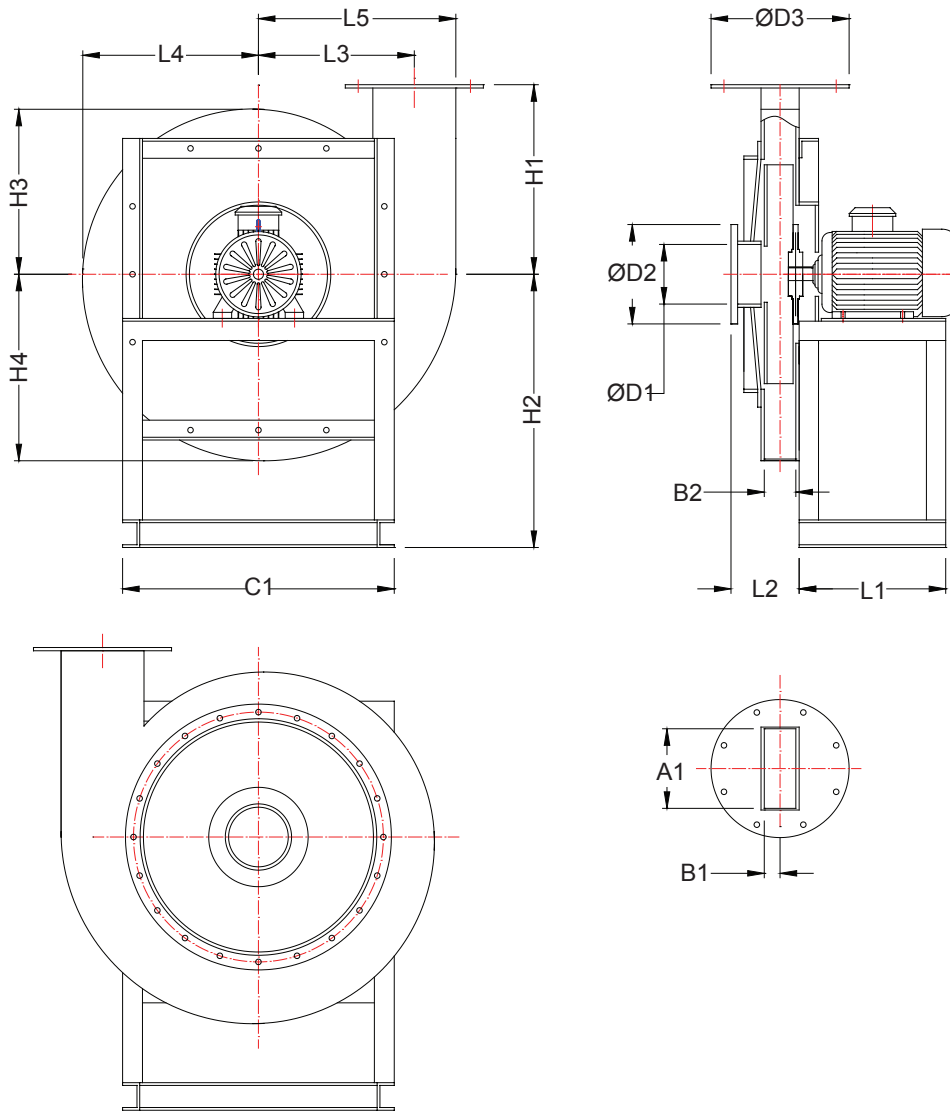
relative frequency spectrum  $\Delta L$  in dB/Okt

n [1 / min] rpm	Oktavb.-Mittenfreq. / Octave b. midfreq. [Hz]							
	63	125	250	500	1K	2K	4K	8K
1000 - 1800	-8	-5	2	4	7	3	1	-3
2000 - 4000	-19	-16	-9	-7	-4	-8	-10	-14

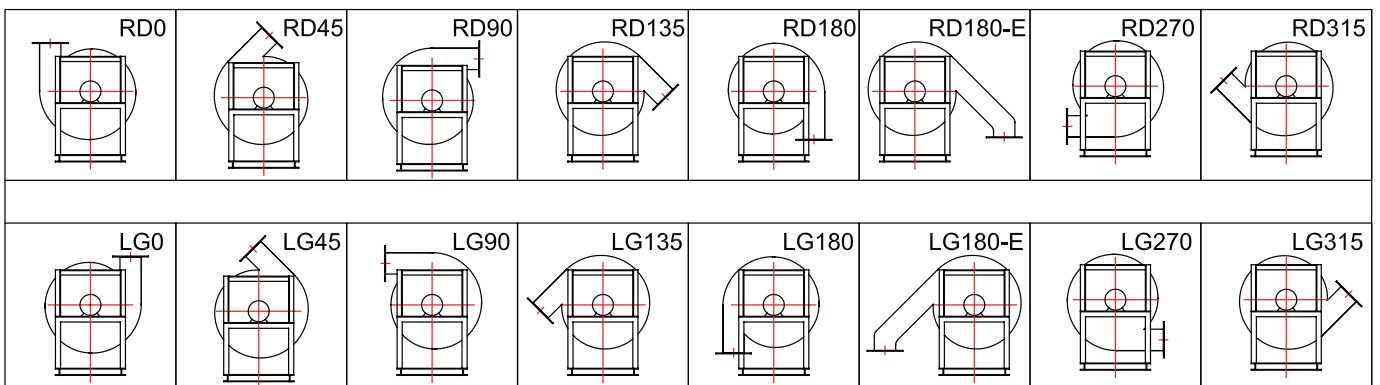
**Radialventilatoren -**  
 aus chemisch widerstandsfähigem Kunststoff  
*Chemical Resistant Plastic Radial Fans*  
 Dimensions



**T-CHEM 100 - 150**



Model	A1	B1	B2	C1	D1	D2	D3	H1	H2	H3	H4	L1	L2	L3	L4	L5
	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]
T-CHEM 100	144	49	98	492	108	180	250	343	495	299	338	265	124	282	318	357
T-CHEM 150	191	84	169	492	203	311	327	464	495	316	357	350	255	298	337	394



# Wolter Sales Network

## Inland

Ing. Günther Rößler  
D-07619 Schkölen  
Tel. (+49) 03 66 94 / 22 359  
Fax (+49) 03 66 94 / 22 357  
guenther.roessler@wolterfans.de

Mattias Industrievertretungen  
D-16259 Bad Freienwalde  
Tel. (+49)03344/301994  
Fax (+49)03344/301996  
thomas.mattias@wolterfans.de

Industrieservice Drexler  
D-49080 Osnabrück  
Tel. (+49) 0 541 / 20 04 88 3  
Fax (+49) 0 541 / 20 04 88 4  
wolfgang.drexler@wolterfans.de

Burkhardt Projekt GmbH  
D-67583 Guntersblum  
Tel. (+49) 0 62 49 / 82 01  
Fax (+49) 0 62 49 / 88 58  
info@bp-wolter.de

Friedrich Glock  
D-97980 Bad Mergentheim  
Tel. (+49) 0 79 31 / 37 44  
Fax (+49) 0 79 31 / 28 58  
friedrich.glock@wolterfans.de

## Europe

### Danmark:

Aircon Teknik A/S  
DK-8200 Aarhus N  
Tel. +45 (0) 86 / 34 51 11  
Fax +45 (0) 86 / 34 58 10  
post@airconteknik.dk

### The Netherlands:

AirFan B. V.  
NL-7442 CX Nijverdal  
Tel. (+31)054/8366366  
Fax (+31)054/8365320  
ventilatie@airfan.nl

### Poland:

Wentoprodukt  
44-100 Gliwice  
Tel. (+48)32 33 13 424  
Fax (+48)32 72 97 653 75  
biuro@wentoprodukt.pl

### Russia:

Daichi Co. Ltd  
RU-123022 Moscow  
Tel. +7 (0) 495 / 73 73 733  
Fax +7 (0) 495 / 73 73 732  
info@daichi.ru

### Switzerland:

Anson AG Zürich  
CH-8055 Zürich  
Tel. (+41) 0 44 / 46 11 111  
Fax (+41) 0 44 / 46 13 111  
info@anson.ch

Ventra Technik AG  
CH-8599 Salsmisch  
Tel. (+41) 0 71 / 46 11 447  
Fax (+41) 0 71 / 46 11 448  
ventra@bluewin.ch

### Turkey:

Air Trade Centre Ltd Sti Türkiye,  
TR-34418 Seyrantepe / Istanbul  
Tel. (+90) 02 12 / 28 34 510  
Fax (+90) 02 12 / 27 83 964  
atc.turkey@airtradecentre.com

### United Kingdom:

Wolter (UK) Ltd.  
GB-Leicestershire LE65 1AL  
Tel. (+44) 01530 / 412 473  
info@wolteruk.com

## Middle East and North Africa

### Israel:

Pach Taas (Ashkelon) Ltd.  
IL-78100 Ashkelon  
Tel. (+972) 0 8 / 67 19 770  
Fax (+972) 0 8 / 67 19 771  
info@pachtaas.com

UAE, Qatar, Lebanon, Jordan,  
Saudi Arabia:

Energy International Co.  
UAE-Sharjah, P.O. Box 3562  
Tel. (+971) 06 / 53 43 477  
Fax (+971) 06 / 53 43 756  
fsalibi@energyssh.ae

Energy International Co.  
P.O. Box 45217 Abu Dhabi, UAE  
Tel. (+971) 2 67 11 10 8  
Fax (+971) 2 67 69 669  
amohsen@energyintl.ae

Energy International Co.(Dubai-Sharjah)  
P.O. Box 3562 Sharjah, UAE  
Tel. (+971) 65 34 34 77  
Fax (+971) 65 34 37 56  
fsalibi@energyssh.ae

Energy International Corporation  
Malaz Area, Siteen Highway Beside BANK  
ALBILAD Riyadh, Saudi Arabia  
Tel. (+966) 14 15 39 59  
msheet@energyintl.com

Energy International Corporation  
P.O. Box 37364 Doha, Qatar  
Tel. (+974) 45 80 765  
Fax (+974) 45 81 126  
aassi@energyintl.com

Energy International  
234 Balbesi Blg 2nd floor Al-Madinah,  
Al Munawarah St Amman, Jordan  
Tel. (+962) 65 67 19 15  
Fax (+962) 65 67 19 16  
eabuzahra@energyintl.com

Energy International & Engineering  
Mar Roukoz Center-Block B - First Floor,  
Hazmieh, Lebanon  
Tel. (+961) 54 50 61 0  
Fax (+961) 54 51 16 9  
bsaab@energyintl.com

## Asia

### China Mainland:

Dongguan Wolter Chemco Ventilation Ltd.  
Chemco Building, Miao Bian Wang Ind.  
Shipai, Dongguan City, Guangdong  
Tel. (+86) 0 769 / 8655 7298  
Fax (+86) 0 769 / 8655 7278  
info@wolterfans.com

Taizhou Wolter Ventilation Co. Ltd.  
Hengjie, Luqiao District  
Taizhou City, Zhejiang  
Tel. (+86) 0 576 / 26 22 666 (26 52 888)  
Fax (+86) 0 576 / 26 56 830

### Hongkong:

Wolter Asia Ltd.  
Hong Kong  
Tel. (+852) 0 2456 0198  
Fax (+852) 0 2456 0290  
info@wolter.com.hk

### India:

Wolter Ventilators India Pvt. Ltd.  
867 D, Block-A, Sushant Lok, Phase-I,  
Gurgaon - 122009 (Haryana)  
Tel. +91 124 2577797, 4261001-3  
sales@wolterindia.in

### Indonesia:

PT Lung Makmur Abadi.  
Kawasan Pergudangan Taman Tekno Blok  
M/16, Serpong-Tangerang 15310  
Tel. +62 (0) 21 / 7588 2609 ext 104  
Fax +62 (0) 21 / 7588 2610  
lma.wolter@gmail.com

### Korea:

Kaceco-Wolter  
14-1, Dang-dong, Gunpo-shi, Gyeonggi-do  
Tel. +82 (0) 31 / 4773 104  
Fax +82 (0) 31 / 4773 132  
wolter@kaceco.com / info@kaceco.com

### Malaysia:

Vibrantech (M) Sdn Bhd.  
47200 Petaling Jaya Selangor, Malaysia  
Tel. +603 (0) 7847 3500  
Fax +603 (0) 7847 3380  
sales@vibrantech-sb.com

### Singapore:

Wolter Pte. Ltd.  
SG-569738 Singapore  
Tel. (+65) 0 63 / 52 95 48  
Fax (+65) 0 63 / 52 95 47  
info@wolterfans.com.sg

### Sri Lanka:

Sirocco Air Technologies (Pvt) Ltd.  
28/12, Gemunu Mawatha, Kotuwegoda,  
Rajagiriya, Sri Lanka  
Tel. +94 11 7 392 010  
Fax +94 11 7 392 015  
suren@sairt.com

### Taiwan:

Waxlink International Co., Ltd.  
8F-2 No.218 Roosevelt Rd., Sec.6,  
Taipei, Taiwan  
Tel. (+886) 02 / 8932 1196  
Fax (+886) 02 / 8932 1197  
waxlink@mail.waxlinktw.com

### Thailand:

Wolter Ventilation Co., Ltd.  
Thamai Kratumban Samutsakorn 74110  
Thailand  
Tel. +66 (0) 3486 6555  
Fax +66 (0) 3486 6599  
natiphan@wolterfan.com

## Australia

The Sydney Fan Company.  
NSW 2147, Sydney, Australia  
Tel. +61 (0) 2 / 9624 4000  
Fax +61 (0) 2 / 9624 4100  
sales@thesydneyfancompany.com

## Wolter GmbH

### Maschinen-und Apparatebau KG

Am Wasen 11  
D-76316 Malsch / Germany  
Tel. +49 (0) 7204/9201-0  
Fax +49 (0) 7204/9201-11  
www.wolter.eu  
info@wolter.eu

