

# Motorless Vacuum Pumps & Air Blowers



Bare Shaft  
RT Range

- |   |                    |
|---|--------------------|
| ➤ | Vacuum or Pressure |
| ➤ | AC / DC Motor ATEX |



> Motorless Side Channel Vacuum Pumps & Blowers

Zepher range of Motorless bare shaft Side Channel Vacuum Pumps and Blowers are used in combination with a V-Belt or Coupling Drive.

Construction in Aluminium, contact free operation, limited maintenance requirements, integrated silencers.

The solution for individual applications demanding variable motor classifications and standards, including flame proof and ATEX Motor Classifications.

Available as bare shaft side channel blower units or packaged units\*\*

Rotation speeds up to 4500 Rev/min optimising performance.

Single Stage and Double Stage options

All models are Certified ISO 9001 and can be used as follows:

Explosion Proof Applications  
Three Phase or Single Phase  
Standardised Motors  
Flow Adjustment Optimising Performance



Single Stage



Double Stage

Performance data for Pressure and Vacuum at rotation speeds:

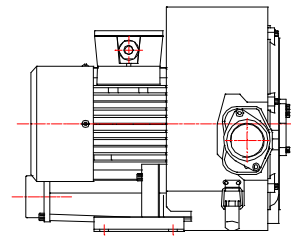
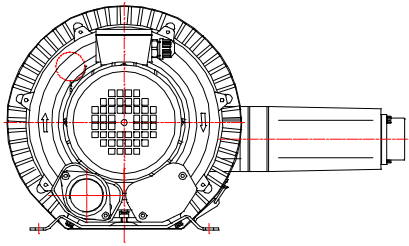
2900 rev/min data sheet

3400 rev/min data sheet

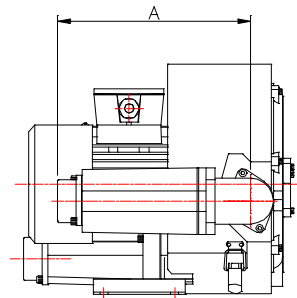
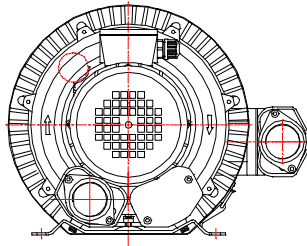
\*\* All models supplied without motor, packaged units available upon request.

> Discharge Configurations

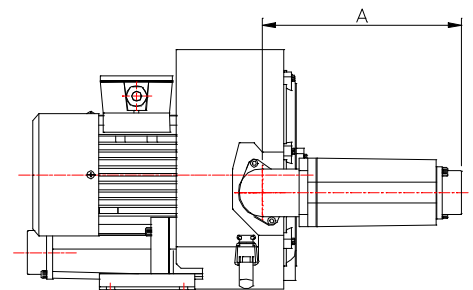
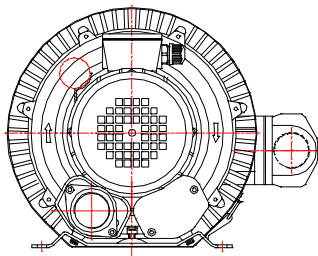
RT Type



RT1 Type

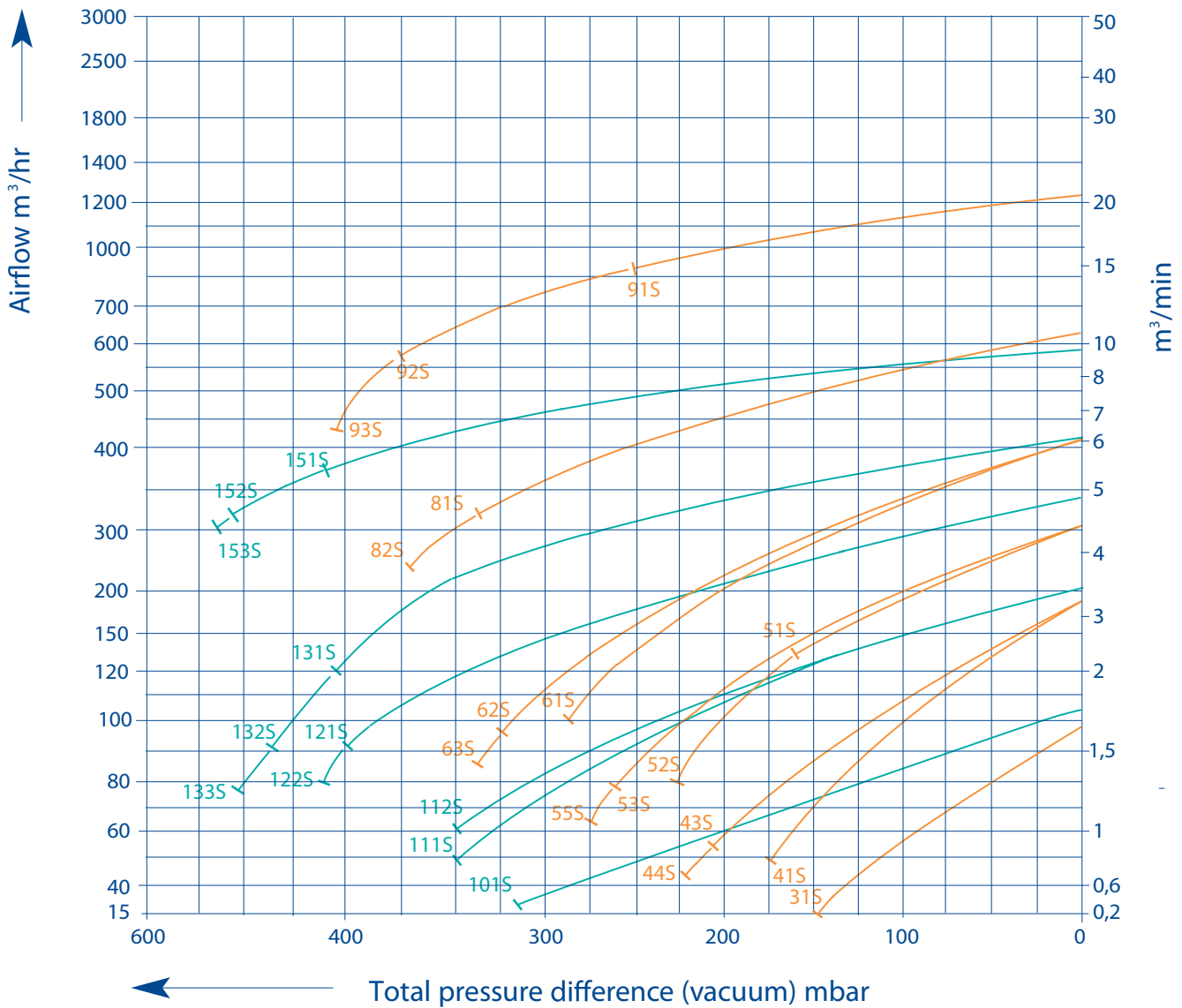


RT2 Type



> Performance Data Rotation speed 3400 rev/min - Three Phase Motor

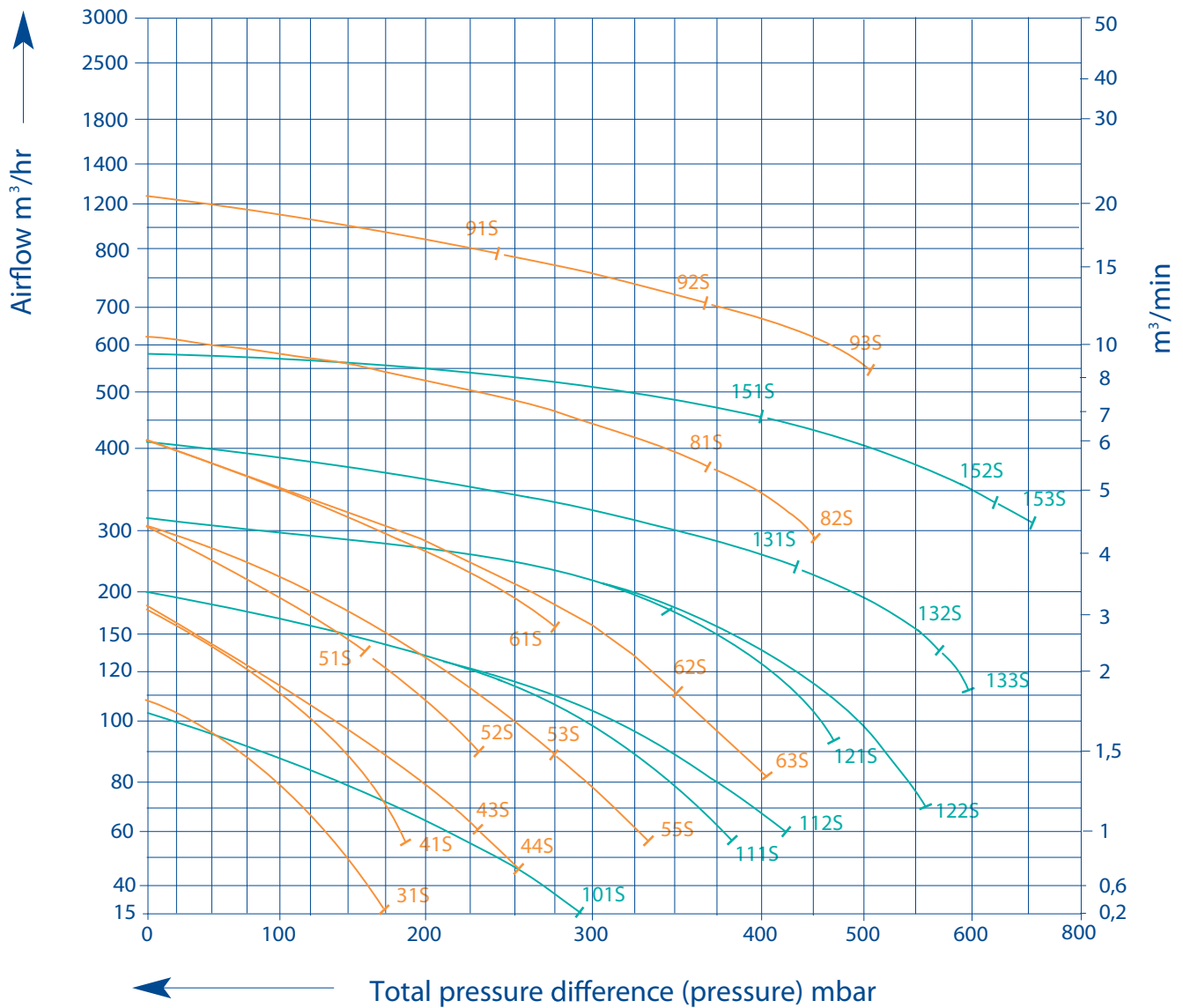
> Curve for Vacuum - 3400 rev/min



The performance curves apply for pumping air 15°C at the inlet flanges with an air pressure of 1013 mbar with a tolerance of ±10%. The total pressure differences apply up to an intake and ambient temperature of 25°C.

> Performance Data Rotation speed 3400 rev/min - Three Phase Motor

> Curve for Blower - 3400 rev/min



The performance curves apply for pumping air 15°C at the inlet flanges with an air pressure of 1013 mbar with a tolerance of ±10%. The total pressure differences apply up to an intake and ambient temperature of 25°C.

> Performance Data Rotation speed 3400 rev/min - Three Phase Motor

> Technical Data - 3400 rev/min

Curve Number	Model Number	Output kW	Relief Valve* Vacuum	Relief Valve* Pressure	Intake ** Filter
31S	RT-201	0.5	1 x RV01-VZ	1 x RV01-PZ	MF10
41S	RT-301	0.85	1 x RV01-VZ	1 x RV01-PZ	MF12
43S	RT-301	1.1	1 x RV01-VZ	1 x RV01-PZ	MF12
44S	RT-301	1.5	1 x RV01-VZ	1 x RV01-PZ	MF12
51S	RT-401	1.1	1 x RV01-VZ	1 x RV01-PZ	MF16
52S	RT-401	1.5	1 x RV01-VZ	1 x RV01-PZ	MF16
53S	RT-401	1.90	1 x RV01-VZ	1 x RV01-PZ	MF16
55S	RT-401	2.6	1 x RV01-VZ	1 x RV01-PZ	MF16
61S	RT-601	2.6	1 x RV01-VZ	1 x RV01-PZ	MF16
62S	RT-601	3.7	1 x RV01-VZ	1 x RV01-PZ	MF16
63S	RT-601	4.6	1 x RV01-VZ	1 x RV02-PZ	MF16
81S	RT-801	6.3	1 x RV01-VZ	1 x RV02-PZ	MF20
82S	RT-801	8.6	1 x RV02-VZ	1 x RV02-PZ	MF20
91S	RT-901	11	3 x RV01-VZ	3 x RV01-PZ	MF32
92S	RT-901	15	3 x RV01-VZ	3 x RV01-PZ	MF32
93S	RT-901	22	3 x RV01-VZ	3 x RV01-PZ	MF32
101S	RT-2301	0.85	1 x RV01-VZ	1 x RV01-PZ	MF10
111S	RT-3301	1.90	1 x RV01-VZ	1 x RV02-PZ	MF12
112S	RT-3301	2.6	1 x RV01-VZ	1 x RV02-PZ	MF12
121S	RT-4301	3.7	1 x RV02-VZ	1 x RV02-PZ	MF16
122S	RT-4301	4.6	1 x RV02-VZ	1 x RV02-PZ	MF16
131S	RT-6301	4.6	1 x RV02-VZ	1 x RV02-PZ	MF16
132S	RT-6301	6.3	1 x RV02-VZ	2 x RV02-PZ	MF16
133S	RT-6301	8.6	1 x RV02-VZ	2 x RV02-PZ	MF16
151S	RT-8301	8.6	1 x RV02-VZ	2 x RV02-PZ	MF20
152S	RT-8301	13	1 x RV02-VZ	2 x RV01-PZ	MF20
153S	RT-8301	19	1 x RV02-VZ	2 x RV01-PZ	MF20

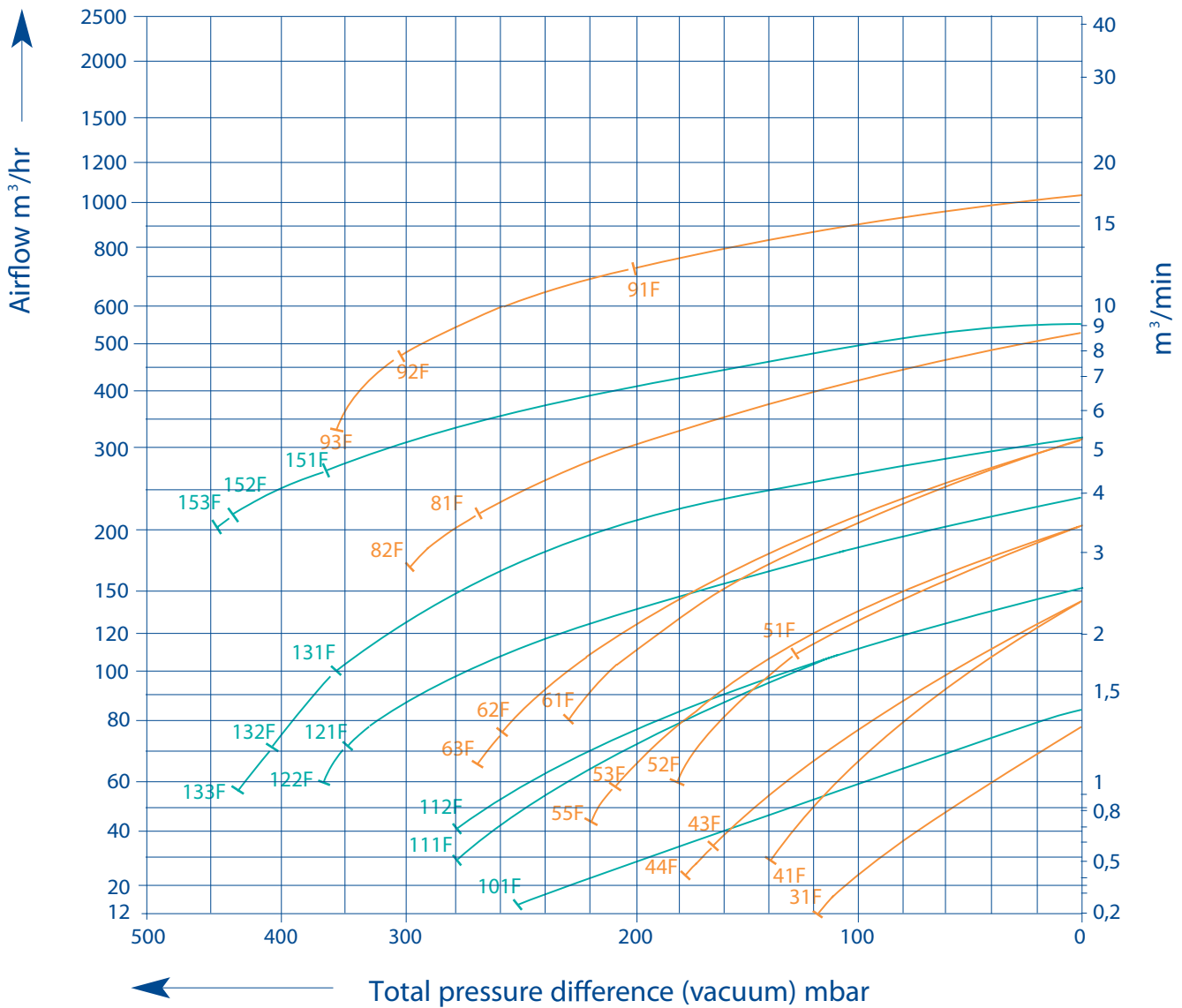


\* Vacuum/Pressure Relief Valves supplied loose, for adapter/connection options please contact zepher-uk.

\*\* Supplied without connection pipework, MF Filter efficiency 100 micron.

> Performance Data Rotation speed 2900 rev/min - Three Phase Motor

> Curve for Vacuum - 2900 rev/min

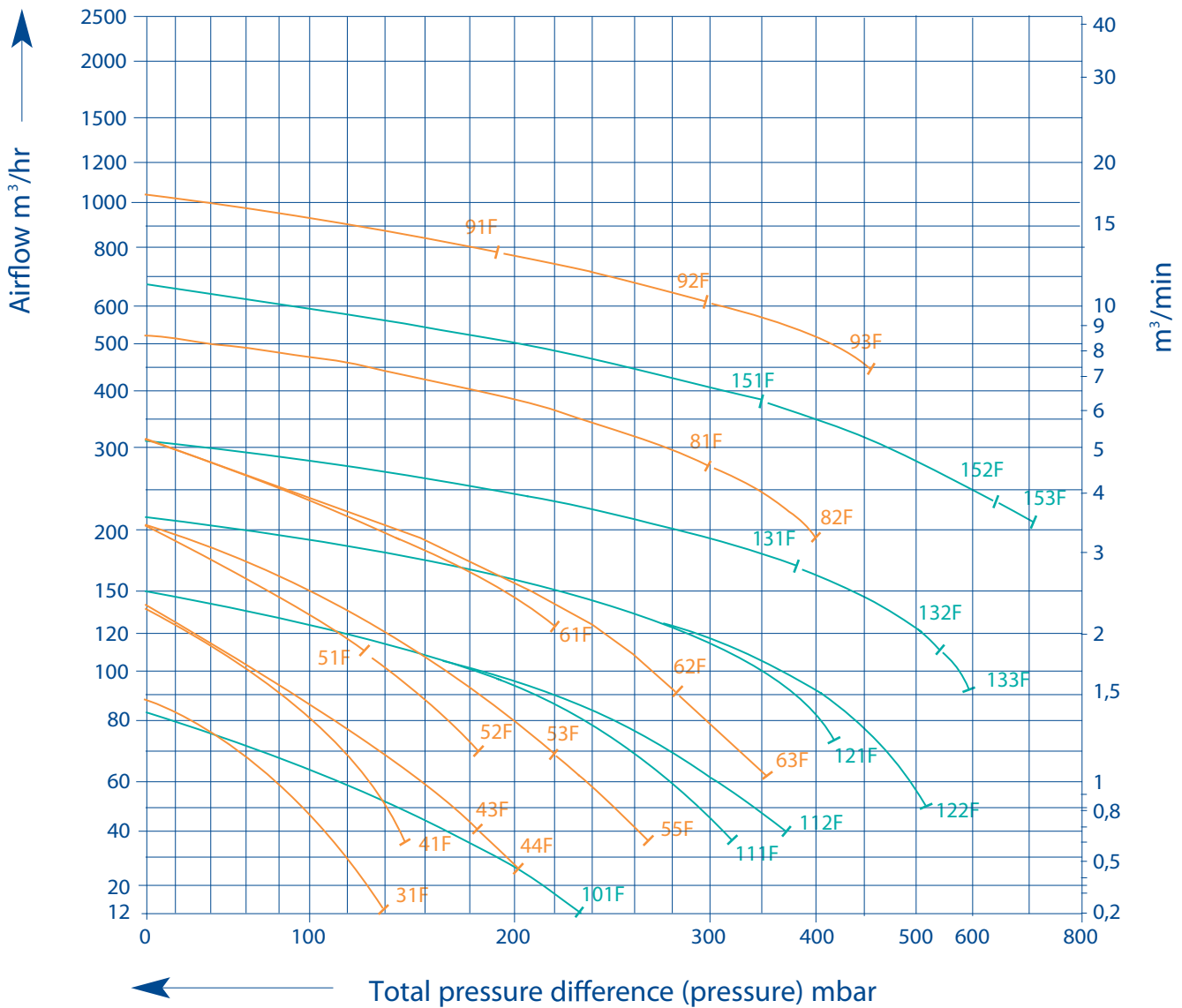


The performance curves apply for pumping air 15°C at the inlet flanges with an air pressure of 1013 mbar with a tolerance of ±10%. The total pressure differences apply up to an intake and ambient temperature of 25°C.



> Performance Data Rotation speed 2900 rev/min - Three Phase Motor

> Curve for Blower - 2900 Rpm



The performance curves apply for pumping air 15°C at the inlet flanges with an air pressure of 1013 mbar with a tolerance of ±10%. The total pressure differences apply up to an intake and ambient temperature of 25°C.



> Performance Data Rotation speed 2900 rev/min - Three Phase Motor

> Technical Data - 2900 rev/min

Curve Number	Model Number	Output kW	Relief Valve* Vacuum	Relief Valve* Pressure	Intake Filter **
31F	RT-201	0.4	1 x RV01-VZ	1 x RV01-PZ	MF10
41F	RT-301	0.75	1 x RV01-VZ	1 x RV01-PZ	MF12
43F	RT-301	0.9	1 x RV01-VZ	1 x RV01-PZ	MF12
44F	RT-301	1.3	1 x RV01-VZ	1 x RV01-PZ	MF12
51F	RT-401	0.9	1 x RV01-VZ	1 x RV01-PZ	MF16
52F	RT-401	1.3	1 x RV01-VZ	1 x RV01-PZ	MF16
53F	RT-401	1.75	1 x RV01-VZ	1 x RV01-PZ	MF16
55F	RT-401	2.2	1 x RV01-VZ	1 x RV01-PZ	MF16
61F	RT-601	2.2	1 x RV01-VZ	1 x RV01-PZ	MF16
62F	RT-601	3.4	1 x RV01-VZ	1 x RV01-PZ	MF16
63F	RT-601	4.0	1 x RV01-VZ	1 x RV02-PZ	MF16
81F	RT-801	5.5	1 x RV01-VZ	1 x RV02-PZ	MF20
82F	RT-801	7.5	1 x RV02-VZ	1 x RV02-PZ	MF20
91F	RT-901	9	3 x RV01-VZ	3 x RV01-PZ	MF32
92F	RT-901	13	3 x RV01-VZ	3 x RV01-PZ	MF32
93F	RT-901	20	3 x RV01-VZ	3 x RV01-PZ	MF32
101F	RT-2301	0.75	1 x RV01-VZ	1 x RV01-PZ	MF10
111F	RT-3301	1.75	1 x RV01-VZ	1 x RV02-PZ	MF12
112F	RT-3301	2.2	1 x RV01-VZ	1 x RV02-PZ	MF12
121F	RT-4301	3.4	1 x RV02-VZ	1 x RV02-PZ	MF16
122F	RT-4301	4	1 x RV02-VZ	1 x RV02-PZ	MF16
131F	RT-6301	4	1 x RV02-VZ	1 x RV02-PZ	MF16
132F	RT-6301	5.5	1 x RV02-VZ	2 x RV02-PZ	MF16
133F	RT-6301	7.5	1 x RV02-VZ	2 x RV02-PZ	MF16
151F	RT-8301	7.5	1 x RV02-VZ	2 x RV02-PZ	MF20
152F	RT-8301	11	1 x RV02-VZ	2 x RV01-PZ	MF20
153F	RT-8301	16	1 x RV02-VZ	2 x RV01-PZ	MF20

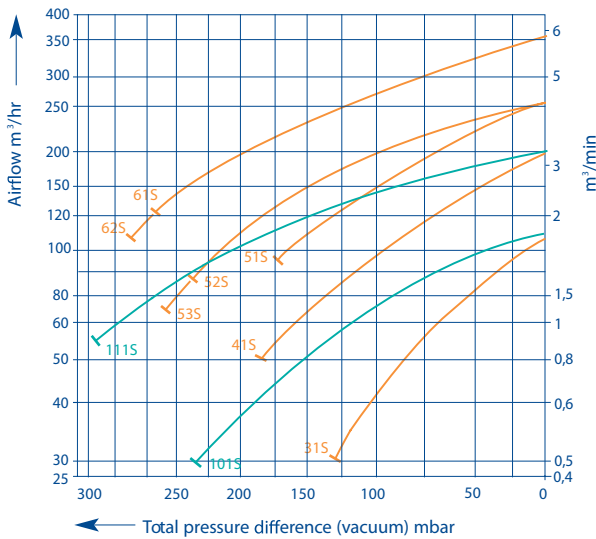


\* Vacuum/Pressure Relief Valves supplied loose, for adapter/connection options please contact zepher-uk.

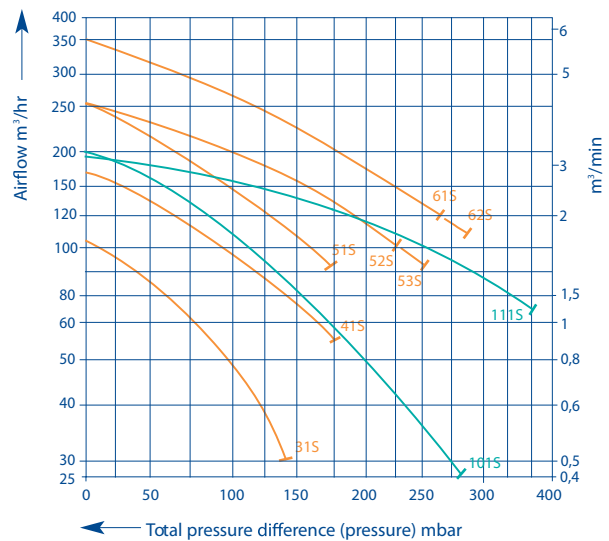
\*\* Supplied without connection pipework, MF Filter efficiency 100 micron.

> Performance Data Rotation speed 3400 rev/min - Single Phase Motor

> Curve for Vacuum - 3400 rev/min



> Curve for Blower - 3400 rev/min



> Technical Data - 3400 rev/min

Curve Number	Model Number	Output kW	Relief Valve Vacuum*	Relief Valve Pressure*	Intake** Filter
31S	RT-201	0.5	1 x RV01-VZ	1 x RV01-PZ	MF10
41S	RT-301	0.85	1 x RV01-VZ	1 x RV01-PZ	MF12
51S	RT-401	1.1	1 x RV01-VZ	1 x RV01-PZ	MF16
52S	RT-401	1.5	1 x RV01-VZ	1 x RV01-PZ	MF16
53S	RT-401	1.75	1 x RV01-VZ	1 x RV01-PZ	MF16
61S	RT-601	2.6	1 x RV01-VZ	1 x RV01-PZ	MF16
62S	RT-601	3.7	1 x RV01-VZ	1 x RV01-PZ	MF16
101S	RT-2301	0.85	1 x RV01-VZ	1 x RV01-PZ	MF10
111S	RT-3301	1.75	1 x RV01-VZ	1 x RV01-PZ	MF12



\* Vacuum/Pressure Relief Valves supplied loose, for adapter/connection options please contact zepher-uk.

\*\* Supplied without connection pipework, for options please contact zepher-uk, MF Filter efficiency 100 micron.

Voltage Requirements:

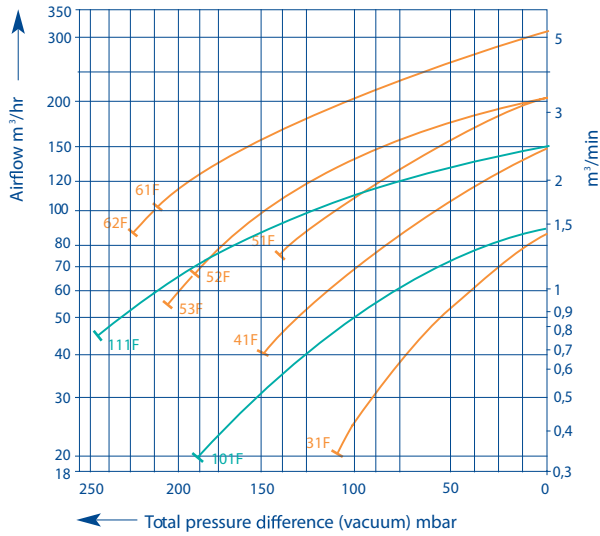
Permissible voltage range - Rated voltage - DIN IEC 38 - 230V - 400V - Voltage tolerance  $\pm 10\%$

Permissible voltage range - DIN VDE 0530 or DIN IEC 34-1 - 220...240V - 380...420V - This voltage range is also indicated on the rating plate,

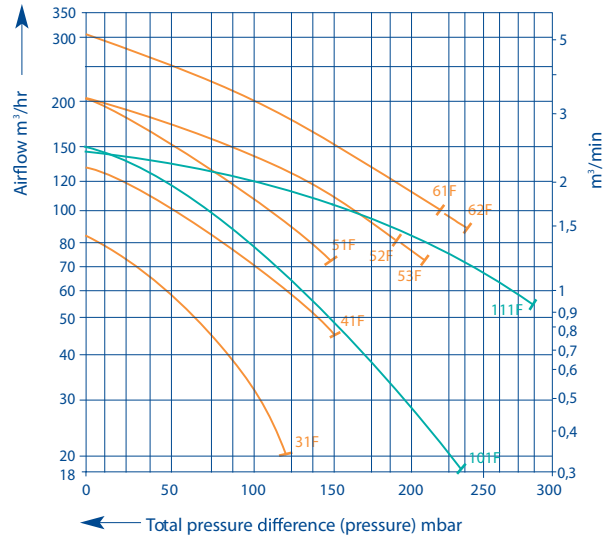
Together with the currents occurring in this range. For this range, the permissible voltage tolerance acc. to DIN VDE 0530 and IEC 34-1 is  $\pm 5\%$ .

> Performance Data Rotation speed 2900 rev/min - Single Phase Motor

> Curve for Vacuum - 2900 Rpm



> Curve for Blower - 2900 Rpm



> Technical Data - 2900 rev/min

Curve Number	Model Number	Output kW	Relief Valve Vacuum*	Relief Valve Pressure*	Intake** Filter
31F	RT-201	0.4	1 x RV01-VZ	1 x RV01-PZ	MF10
41F	RT-301	0.75	1 x RV01-VZ	1 x RV01-PZ	MF12
51F	RT-401	0.9	1 x RV01-VZ	1 x RV01-PZ	MF16
52F	RT-401	1.3	1 x RV01-VZ	1 x RV01-PZ	MF16
53F	RT-401	1.5	1 x RV01-VZ	1 x RV01-PZ	MF16
61F	RT-601	2.2	1 x RV01-VZ	1 x RV01-PZ	MF16
62F	RT-601	3.4	1 x RV01-VZ	1 x RV01-PZ	MF16
101F	RT-2301	0.75	1 x RV01-VZ	1 x RV01-PZ	MF10
111F	RT-3301	1.5	1 x RV01-VZ	1 x RV01-PZ	MF12



\* Vacuum/Pressure Relief Valves supplied loose, for adapter/connection options please contact zepher-uk.

\*\* Supplied without connection pipework, for options please contact zepher-uk, MF Filter efficiency 100 micron.

**Voltage Requirements:**

Permissible voltage range - Rated voltage - DIN IEC 38 - 230V - 400V - Voltage tolerance  $\pm 10\%$

Permissible voltage range - DIN VDE 0530 or DIN IEC 34-1 - 220...240V - 380...420V - This voltage range is also indicated on the rating plate,

Together with the currents occurring in this range. For this range, the permissible voltage tolerance acc. to DIN VDE 0530 and IEC 34-1 is  $\pm 5\%$ .

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>	<p>e: sales@zepher-uk.com w: zepher-uk.com</p>

>	<p><b>EC Declaration of Conformity</b></p> <p><b>Conforms to the following directives:</b> 89/336/EEC, 89/392/EEC, 91/368/EEC, 71/23/EEC, 93/44/EEC, 93/68/EEC</p> <p><b>Standards</b> Electromagnetic Compatibility- General Emission Standard Part 2. Industrial Environment. EN292-1, EN292-2, prEN563, prEN1012-1, prEN1012-2, EN60204-1, EN294, EN349, EN50081-2, EN50082-2</p> <p><b>Machinery Directive</b> 89/392/EEC TEC FILE HB-96-001</p> <p><b>Low Voltage</b> 73/23/EEC</p> <p><b>Council Directive</b> 89/336/EEC</p> <p><b>Annex IV EC Machinery Directive</b> AIB-VINCOTTE Inter n.f.p., Avenue A. Drouart 27-29, B-1160 Brussels</p> <p><b>ISO 9001</b> Effective October, 2003, Our Vacuum Pumps &amp; Air Blowers have been certified as meeting ISO 9001 manufacturing standards. This certification demonstrates our interest in providing our customers with the highest quality products manufactured under international standards.</p> <p><b>ISO Standards</b> ISO3266, ISO3529, ISO3744</p>
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