

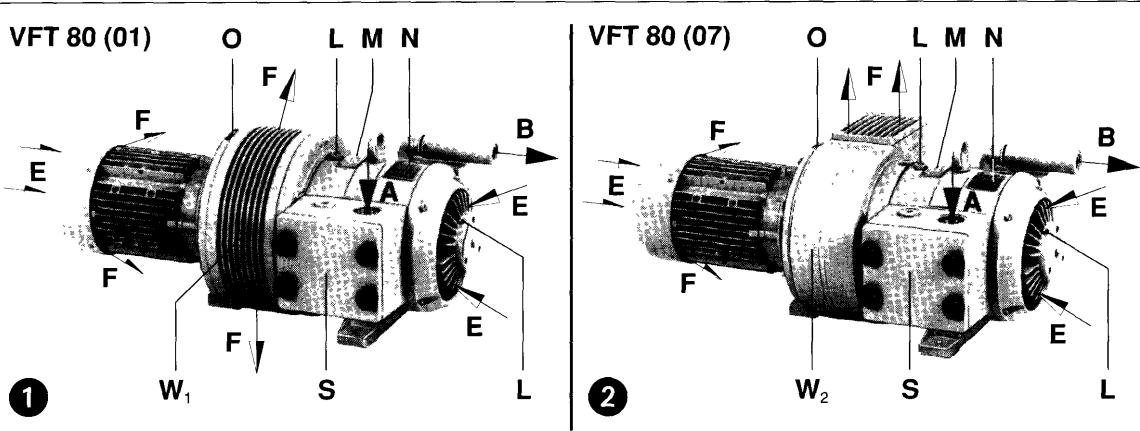
# Operating Instructions

# Rietschle



## Vacuum pumps

VFT



|         |
|---------|
| VFT 25  |
| VFT 40  |
| VFT 60  |
| VFT 80  |
| VFT 100 |
| VFT 140 |
| VFT 180 |
| VFT 250 |
| VFT 340 |
| VFT 500 |

### Pump ranges

These operating instructions concern the following dry running rotary vane vacuum pumps: Models VFT 25 to VFT 500.

Version (01) → cooling air exits through slots on the fan housing see pictures ① and ③

Version (07) → cooling air exits out of the spiral housing see pictures ② and ④

The vacuum capacities at atmosphere are 25, 40, 60, 80, 100, 140, 180, 250, 340 and 500 m³/hr operating on 50 cycles.

The pumping curves showing capacity against pressure can be found in data sheets:

D 157 → VFT 25 - VFT 100 (01)

D 158 → VFT 25 - VFT 100 (07)

D 167 → VFT 140 - VFT 500 (01)

D 168 → VFT 140 - VFT 500 (07)

### Description

All models are complete with an inlet threaded connection and a silencer on the exhaust (except when the exhaust is piped in to the spiral housing). All the air handled is filtered by a built-in micro-fine filter.

A high efficiency cooling fan that pulls air in is situated between the pump housing and the motor. On version (01) the fan is located in the fan housing (see pictures ① and ③). The heated cooling air (F) is totally directed out of the fan housing (W<sub>1</sub>). On version (07) the fan is located in a spiral housing (see pictures ② and ④). In this case the heated cooling air (F) can be directed either upwards or to the side depending on the position of the spiral housing (W<sub>2</sub>). It is also possible to connect ducting to the spiral housing so that the cooling air (F) can be transported away from the unit.

All the pumps are driven by a direct flanged three phase, standard TEFV motor via a pin and bush coupling

Optional extras: As required, vacuum regulating valve (ZRV), non return valve (ZRK), inlet dust filter (ZFP), vacuum tight suction filter (ZVF), motor starter (ZMS), star delta starter (ZSG), unloading valve (ZAE) and various vacuum gauges.

### Suitability

The VFT can be used for the evacuation of a closed system or for a permanent vacuum from 150 to 1000 mbar (abs.). A maximum vacuum of 100 mbar (abs.) is possible on intermittent operation.

**⚠ The ambient and suction temperatures must be between 5 and 40°C. For temperatures outside this range please contact your supplier.**

These dry running vacuum pumps are suitable for use with air of a relative humidity of 30 to 90%.

**⚠ No dangerous mixtures (i.e. flammable or explosive gases or vapours) extremely humid air, water vapour, aggressive gases or traces of oil and grease can be handled.**

All applications where an unplanned shut down of the vacuum pump could possibly cause harm to persons or installations, then the corresponding safety backup system must be installed.

### Handling and Setting up

**⚠ Pumps that have reached operating temperature may have a surface temperature at position (Q) of more than 70°C. WARNING! Do Not Touch.** (see pictures ⑤ and ⑥)

The filter housing (S), exhaust box (T), housing cover (b) and greasing points (L) must all be easily accessible. For maintenance purposes we recommend a space of 0.4 m in front of the filter housing and housing cover. The cooling air entries (E) and the cooling air exits (F) must have a minimum distance of 20 cm from any obstruction. The discharged cooling air must not be recirculated. If the cooling air exits from the spiral housing (W<sub>2</sub>) via ducting then care should be taken so that the passage of air is not obscured. (see pictures ① to ⑥)

**The VFT pumps can only be operated reliably if they are installed horizontally.**

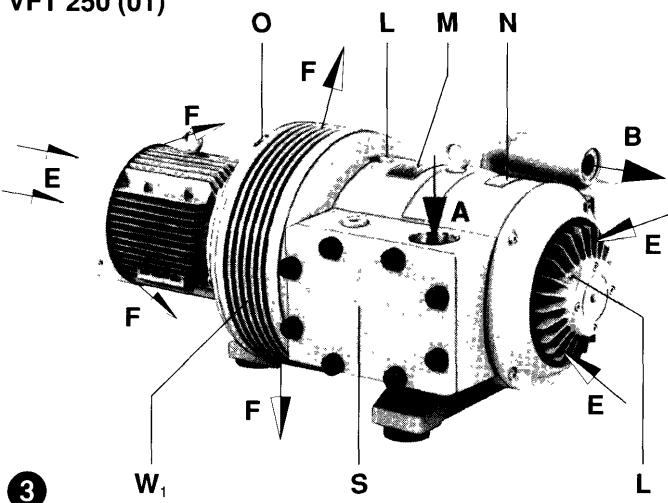
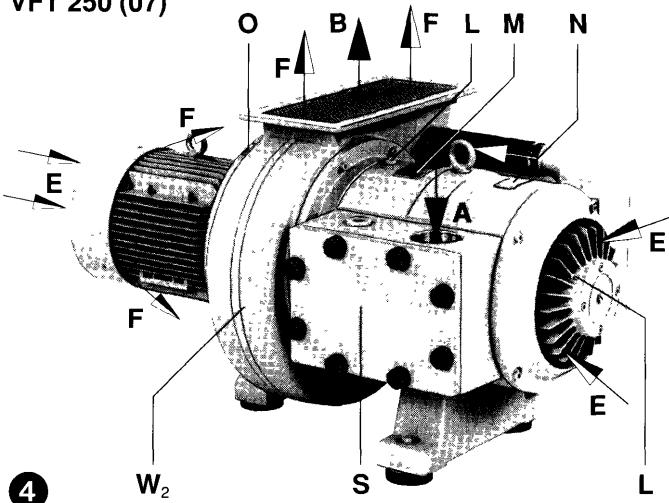
**⚠ For installations that are higher than 1000 m above sea level there will be a loss in capacity. For further advice please contact your supplier.**

Installed on a solid base these pumps may be installed without fixing down. If the pumps are installed on a base plate we would recommend fitting anti-vibration mounts. This range of vacuum pumps are almost vibration free in operation.

BE 157

1.1.95

|                       |
|-----------------------|
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**VFT 250 (01)****VFT 250 (07)****Installation (pictures ① to ⑥)**

**!** For operating and installation follow any relevant national standards that are in operation.

1. Vacuum connection at (A).

The air handled can be exhausted into the atmosphere through the exhaust port (B) or on models VFT 140-500 (07) by directing the air through the spiral housing ( $W_2$ ).

**!** Long and/or small bore pipework should be avoided as this tends to reduce the capacity of the pump.

2. The electrical data can be found on the data plate (N) or the motor data plate. The motors correspond to DIN/VDE 0530 and have IP 54 protection and insulation class B or F. The connection diagram can be found in the terminal box on the motor (unless a special plug connection is fitted). Check the electrical data of the motor for compatibility with your available supply (voltage, frequency, permissible current etc.).

3. Connect the motor via a motor starter. It is advisable to use thermal overload motor starters to protect the motor and wiring. All cabling used on starters should be secured with good quality cable clamps.

We recommend that motor starters should be used that are fitted with a time delayed trip resulting from running beyond the amperage setting. When the unit is started cold, overamperage may occur for a short time.

**!** Electrical connections should only be made by qualified electricians.

**Initial Operation (pictures ① to ④)**

1. Initially switch the pump on and off for a few seconds to check the direction of rotation against the direction arrow (O).

**Note:** On this initial start the suction pipework should not be connected. If the pump runs backwards with the pipework connected a pressure could build up within the housing which could result in damaged rotor blades.

2. Connect the suction pipe at (A).

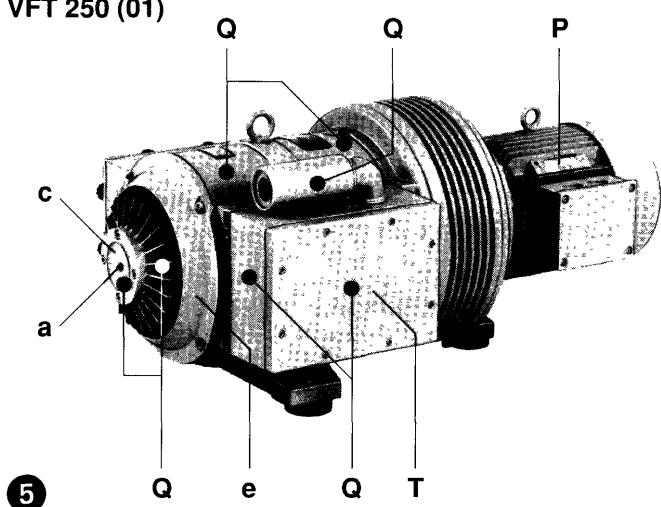
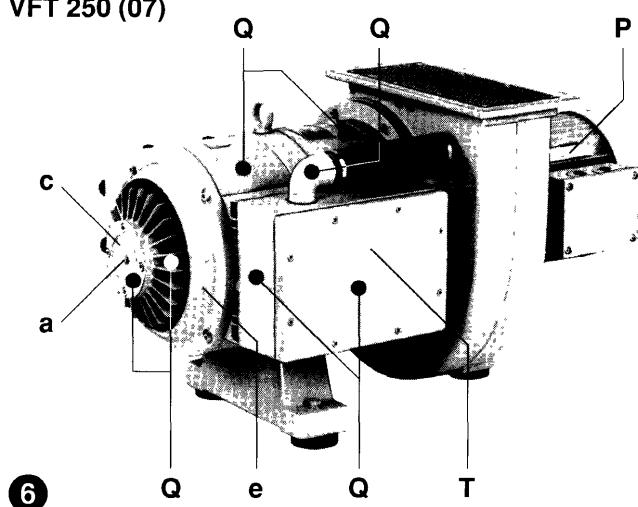
**!** For pipe work longer than 3 m we recommend using non-return-valves (ZRK), to avoid reverse rotation when the units are switched off.

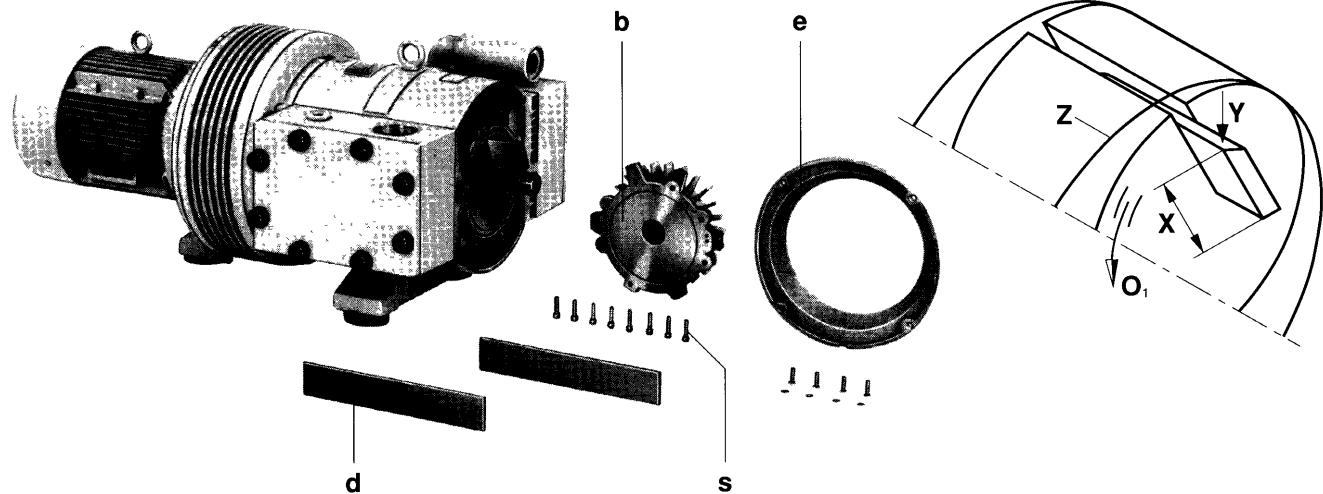
3. Vacuum regulating valve (optional extra):

The vacuum can be adjusted by turning the regulating valve (C) according to the symbols on the top of the regulating valve.

**Potential risks for operating personnel**

**Noise Emission:** The worst noise levels considering direction and intensity measured according to DIN 45635 part 3 (as per 3. GSGV) are shown in the table at the back. When working permanently in the vicinity of an operating pump we recommend wearing ear protection to avoid any damage to hearing.

**VFT 250 (01)****VFT 250 (07)**



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#### Maintenance and Servicing

**⚠️** When maintaining these units and having such situations where personnel could be hurt by moving parts or by live electrical parts the pump must be isolated by totally disconnecting the electrical supply. It is imperative that the unit cannot be re-started during the maintenance operation.

Do not maintain a pump that is at its normal operating temperature as there is a danger from hot parts.

**1. Lubrication** The lubrication points are (L); lubrication periods are as follows, but minimum is once a year:

| Model         | Operating hours |       | Grease every bearing |
|---------------|-----------------|-------|----------------------|
|               | 50 Hz           | 60 Hz |                      |
| VFT 25 - 60   | 7.000           | 7.000 | 4 g                  |
| VFT 80        | 4.000           | 4.000 | 6 g                  |
| VFT 100       | 4.000           | 3.000 | 6 g                  |
| VFT 140 - 250 | 4.000           | 3.000 | 8 g                  |
| VFT 340 - 500 | 4.000           | 3.000 | 10 g                 |

**Note!** These greasing instructions are valid for operation at 20°C ambient temperature. At 40°C these should be reduced by 50%.

We recommend the following grease types: Shell Alvania R3, Mobil Mobilux 3, BP Energease LS3, Esso Beacon 3, Aral Aralub HL3 or other equal greases (see label of recommended greases (M))

#### 2. Air filtration (pictures 1 to 8)

**⚠️** The capacity of the pump could be reduced if the air inlet filters are not maintained correctly.

The filter cartridges (f) of the suction filter (S) have to be cleaned monthly and replaced once a year (under extreme conditions more often). Changing the filter: Loosen thumb screws (g). Take off filter cover (h) complete with gasket. Remove filter cartridges (f) and clean or exchange. Reassemble in reverse order.

#### 3. Blades (picture 7)

**Checking blades:** The models VFT have 4 blades which have a low but permanent wear factor.

VFT 25 - VFT 100: first check after 4,000 operating hours, thereafter every 500 operating hours.

VFT 140 - VFT 500: first check after 2,000 operating hours, thereafter every 500 operating hours.

Screw off end cover (e). To remove the housing cover (b) from the housing the bolt (a) located in the centre of the bearing cover (c) should be removed. To facilitate this one of the fixing bolts (s) from the housing cover should be screwed into the thread in the centre of the bearing cover (c).

Remove the blades (d) and check. All blades must have a minimum height (X) of:

Model X (minimum height)

|               |       |
|---------------|-------|
| VFT 25 - 40   | 22 mm |
| VFT 60        | 25 mm |
| VFT 80 - 100  | 30 mm |
| VFT 140 - 250 | 40 mm |
| VFT 340 - 500 | 60 mm |

**⚠️** Blades must be changed completely.

**⚠️ Note!** The VFT 500 has 2 blades per slot.

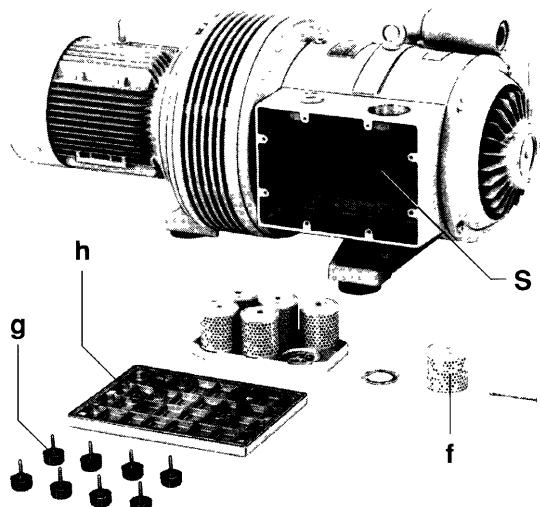
**Changing blades:** if the minimum height (X) is reached, then the whole set of rotor blades should be changed.

Before refitting the blades blow out the housing and the rotor slots. Place the blades with the radius outwards (Y) such that the bevel is in the direction of rotation ( $O_1$ ) and corresponds with the radius of the housing (Z).

Before refitting the housing cover (b) redistribute the grease from the bearing cover (c) on to the appropriate bearing. It is important that the shaft end is completely clean so that no grease can enter the housing, this could mix together with carbon dust and give a viscous paste which would result in blades being stuck into the rotor slots.

**Note! Care should be taken that the bearing should not become contaminated.**

When re-fitting the housing cover (b) tighten the bolts evenly so that the end cover fits correctly onto the fixing points. When the end cover is almost touching the housing we recommend moving the fan in both directions whilst further tightening the bolts. This can be achieved by removing the motor fan cover. This then ensures that the blades are sitting correctly in their slots and avoids any edge damage. Refit the end cover (e).



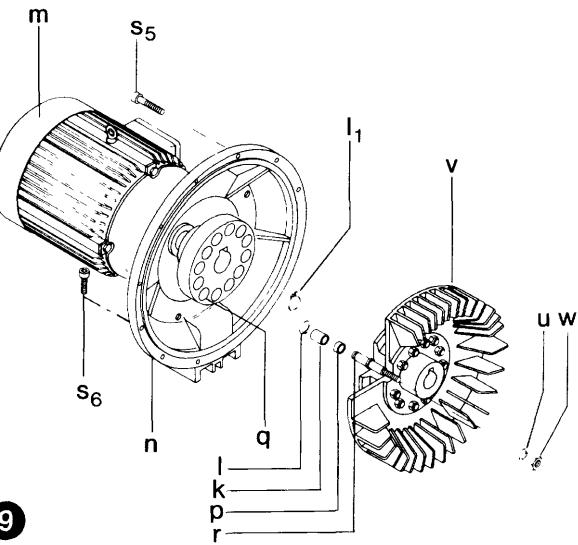
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## 5. Coupling (picture 9)

The coupling rubbers (k) are wearing parts and should be checked regularly. When the coupling rubbers are worn this can be detected by a knocking sound when the vacuum pump is started.

**Defective coupling rubbers can cause extensive damage and even in some extreme cases break the rotor shaft.**

To check the coupling stop the motor (m) and isolate. Remove the screws (s<sub>5</sub>) on the motor flange (n). For motors secured by the feet, screws (s<sub>6</sub>) should also be removed. Pull off the motor together with the motor side coupling half (q). If the coupling rubbers (k) are damaged remove the circlips (l) from the coupling bolt (r) and exchange the coupling rubbers (k). Leave the spacer (p) in place, check the coupling bolts (r) for any wear and replace if necessary. To replace, remove the circlip (l<sub>1</sub>), pull off the coupling and fan (v) complete from the pumpshaft, remove the nut (w) with washer (u) and exchange the coupling bolts. Re-assemble in reverse order.



### Trouble Shooting:

#### 1. Motor starter cuts out vacuum pump:

- 1.1 Check that the incoming voltage and frequency corresponds with the motor data plate.
- 1.2 Check the connections on the motor terminal block.
- 1.3 Pump is trying to operate against a closed exhaust or without an unloading valve on start/delta starting.  
Solution: Optional extra, unloading valve model ZAE.
- 1.4 Incorrect setting on the motor starter.
- 1.5 Motor starter trips too fast.  
Solution: Use a motor starter with a time delay trip (version as per ICE 947-4).
- 1.6 Back pressure on the exhaust pipework is excessive.

#### 2. Insufficient suction capacity:

- 2.1 Inlet filters are obscured.
- 2.2 Suction pipe work is too long or too small.
- 2.3 Leak on the pump or on the system.
- 2.4 Blades are damaged.

#### 3. Vacuum pump does not reach ultimate vacuum:

- 3.1 Check for leaks on the suction side of the pump or on the system
- 3.2 Blades are worn or damaged

#### 4. Vacuum pump operates at an abnormally high temperature:

- 4.1 Ambient or suction temperature too high
- 4.2 Cooling air flow is restricted.
- 4.3 Problem as per 1.6.

#### 5. Unit emits abnormal noise:

- 5.1 The pump cylinder is worn.  
Solution: send your complete unit off for repair to the supplier or approved service agent.
- 5.2 The regulating valve (if fitted) is noisy.  
Solution: replace valve.
- 5.3 Blades are damaged.

### Appendix:

Repair on Site: For all repairs on site an electrician must disconnect the motor so that an accidental start of the unit cannot happen.

All engineers are recommended to consult the original manufacturer or one of the subsidiaries, agents or service agents. The address of the nearest repair workshop can be obtained from the manufacturer on application.

After a repair or before re-installation follow the instructions as shown under the headings "Installation and Initial Operation".

Lifting and Transport: To lift and transport the vacuum pump the eye bolts on the housing and motor must be used. If an eye bolt is missing use suitably rated strops. The weight of the pumps are shown in the accompanying table.

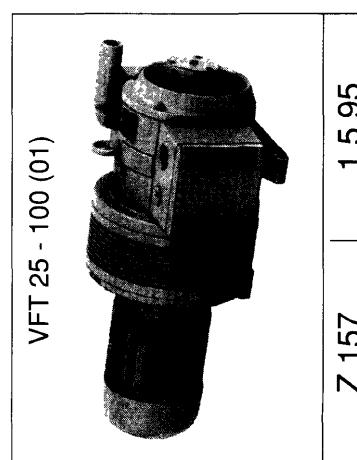
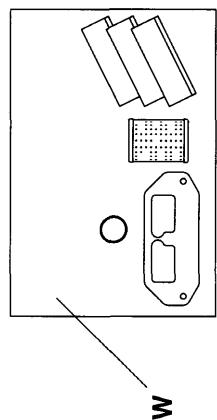
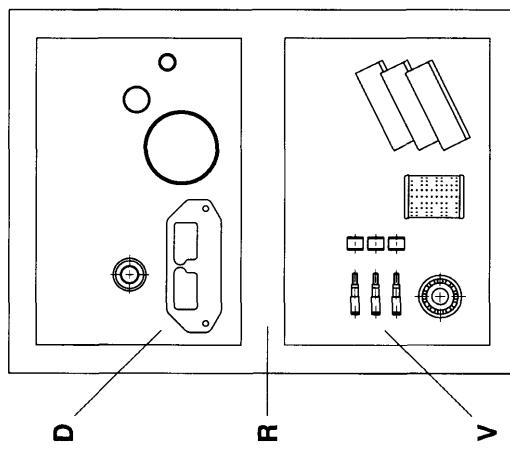
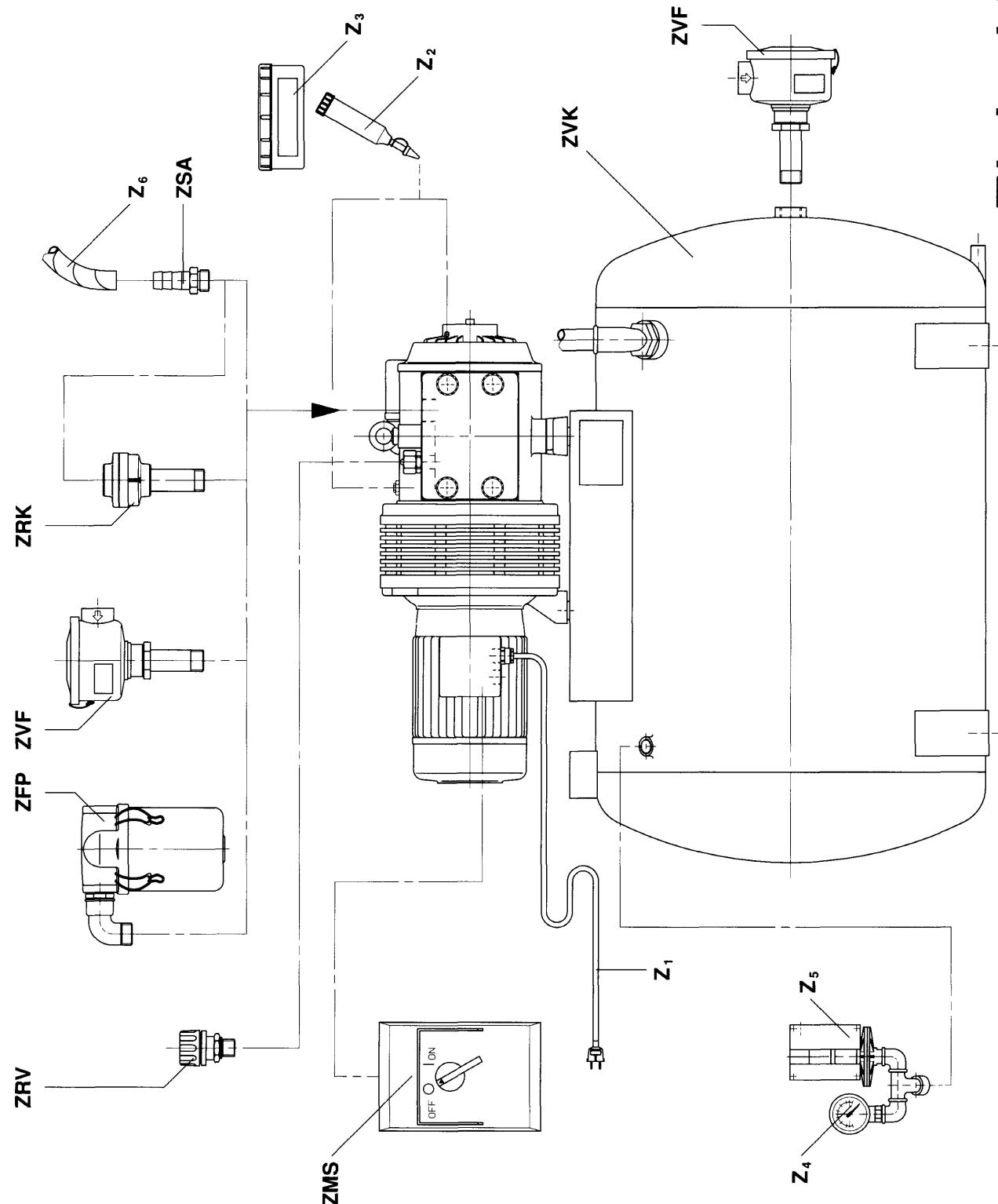
Storage: VFT units must be stored in dry ambient conditions with normal humidity. We recommend for a relative humidity of over 80% that the pump should be stored in a closed container with the appropriate drying agents

Disposal: The fast wearing parts (as listed in the spare parts lists) should be disposed of with due regard to health and safety regulations.

Spare part lists: E 157 → VFT 25 - VFT 100 (01) E 167 → VFT 140 - VFT 500 (01)  
E 158 → VFT 25 - VFT 100 (07) E 168 → VFT 140 - VFT 500 (07)

| VFT                |       | 25             | 40         | 60         | 80         | 100        | 140        | 180        | 250        | 340          | 500          |
|--------------------|-------|----------------|------------|------------|------------|------------|------------|------------|------------|--------------|--------------|
| Noise level (max.) | dB(A) | 50 Hz<br>60 Hz | 77<br>78   | 78<br>79   | 80<br>81   | 81<br>82   | 86<br>87   | 89<br>90   | 91<br>92   | 91<br>92     | 92<br>93     |
| Weight (max.)      | kg    | (01)<br>(07)   | 35<br>40   | 50<br>55   | 65<br>70   | 75<br>80   | 92<br>101  | 151<br>161 | 198<br>208 | 222<br>232   | 374<br>384   |
| Length (max.)      | mm    | (01)<br>(07)   | 585<br>585 | 680<br>680 | 710<br>709 | 753<br>754 | 803<br>804 | 828<br>847 | 955<br>955 | 1074<br>1073 | 1244<br>1244 |
| Width              | mm    |                | 333        | 333        | 383        | 431        | 437        | 566        | 566        | 566          | 702          |
| Height (max.)      | mm    | (01)<br>(07)   | 254<br>305 | 254<br>305 | 292<br>343 | 319<br>363 | 319<br>363 | 450<br>647 | 450<br>647 | 450<br>647   | 575<br>807   |

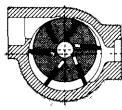
VFT 25 - 100 (01)



## VFT 25 - 100

|                       | <b>Deutsch</b>                     | <b>English</b>                  | <b>Français</b>                  | <b>Italiano</b>                | <b>Hollands</b>              |
|-----------------------|------------------------------------|---------------------------------|----------------------------------|--------------------------------|------------------------------|
| D                     | Dichtungssatz                      | Gasket set                      | Pochette de joints               | Serie garnizioni               | Pakkingset                   |
| V                     | Verschleißteilsatz                 | Wearing parts set               | Kit pièces d'usure               | Serie parti usurabili          | Set slijdeien                |
| R                     | Reparatursatz                      | Repair set                      | Kit d'entretien                  | Set revisione                  | Reparatie set                |
| W                     | Wartungssätze                      | Maintenance sets                | Kit de première intervention     | Set manutenzione               | Service set                  |
| ZMS                   | Motorschutzschalter                | Motor starter                   | Disjoncteur moteur               | Interruttore magnetotermico    | Motor beveiliging schakelaar |
| ZFP                   | Vakuumdichter Staubabscheider      | Vacuum tight dust separator     | Filtre séparateur étanche        | Separatore polveri             | Vacuümdicht stofafscheider   |
| ZRK                   | Rückschlagventil                   | Non return valve                | Clapet anti-retour               | Valvola di non ritorno         | Terugslagklep                |
| ZRV                   | Vakuum-Regulierventil              | Vacuum regulating valve         | Valve réglage vide               | Valvola regolazione vuoto      | Vacuüm regelventiel          |
| ZSA                   | Schlauchanschluss                  | Hose connection                 | Raccord tuyau                    | Attacco portagomma             | Slangpilaar                  |
| ZVF                   | Vakuumdichter Ansaugfilter         | Vacuum tight suction filter     | Filtre d'aspiration étanche      | Filtro aspirazione ermetico    | Vacuümdicht voorfilter       |
| ZVK                   | Vakuumkessel                       | Vacuum receiver                 | Réservoir                        | Serbatutto del vuoto           | Vacuümketel                  |
| Z <sub>1</sub>        | Anschlußkabel mit Stecker          | Connection cable with plug      | Câble raccordement avec fiche    | Cavo di collegamento con prese | Aansluitsnoer met stekker    |
| Z <sub>2</sub>        | Fettresse                          | Grease gun                      | Pompe à graisse                  | Ingrassatore                   | Vetspuit                     |
| Z <sub>3</sub>        | Schmierfett                        | Grease                          | Grasse                           | Grasso di lubrificazione       | Smeervet                     |
| Z <sub>4</sub>        | Vakuummeter                        | Vacuum gauge                    | Vacuometre                       | Vacuüm meter                   | Vacuümschakelaar             |
| Z <sub>5</sub>        | Vakuum-Schalter                    | Vacuum switch                   | Commutateur vide                 | Vacuostato                     | Vacuüm slang                 |
| Z <sub>6</sub>        | Vakuumschlauch                     | Flexible pipe                   | Flexible pipe                    | Tubo flessibile                | Vakuumslang                  |
| <b>Español</b>        |                                    |                                 |                                  |                                |                              |
| D                     | Kitt de juntas                     | Jogo de juntas                  | Jogo de peças de desgaste        | Vakuumtäkt støvfilter          | Pakkingssets                 |
| V                     | Kit partes desgasables             | Kit de revisión                 | Jogo de revisão gera             | Tilbageslagsventil             | Sliddeissets                 |
| R                     | Kit de mantenimiento               | Kit de mantenimiento            | Jogo de manutenção               | Vakuumreglerventil             | Reparationssæt               |
| W                     | Interruptor guarda motor           | Discontactor para motor         | Discontactor para motor          | Vakuumtäkt partikelfilter      | Servicesæt                   |
| ZMS                   | Separador polvo estanco            | Separador de poeiras para vácuo | Válvula de regulação de vácuo    | Vakuumtäkt insugningsfilter    | Motorskyddsryfare            |
| ZFP                   | Válvula de retención               | Válvula anti-retorno            | Válvula de regulação de vácuo    | Vakuumtäkt indsugningsfilter   | Vakuumtäkt                   |
| ZRK                   | Válvula reguladora de vacío        | Ponteira para tubo flexível     | Ponteira para tubo flexível      | Vakuumtäkt tank                | Slangnippel                  |
| ZSA                   | Racord conexión                    | Filtro de aspiración para vácuo | Filtro de aspiração para vácuo   | Kabel med stickprop            | Vakuumtäkt                   |
| ZVF                   | Filtro de aspiración               | Recipiente de vacío             | Reservatório de vácuo            | Fettspruta                     | Litäntäkaapelit              |
| ZVK                   | Recipiente de vacío                | Cable conectar con clavija      | Cabo com ficha de ligação        | Kullagerfett                   | Rasvapuristin                |
| Z <sub>1</sub>        | Cable conectar con clavija         | Bomba grasa                     | Bomba para lubrificación a massa | Vakuumeter                     | Vakuumtäkt                   |
| Z <sub>2</sub>        | Bomba grasa                        | Grasa                           | Massa de alta temperatura        | Pressostat                     | Alipainemittari              |
| Z <sub>3</sub>        | Grasa                              | Vacuómetro                      | Vacuômetro                       | Vakuumslang                    | Joustava liitos              |
| Z <sub>4</sub>        | Vacuómetro                         | Interruptor vacío               | Tubo para válvula de vácuo       | Vakuumstat                     |                              |
| Z <sub>5</sub>        | Interruptor vacío                  | Tubo flexible                   | Tubo flexible para vácuo         | Vakuumslange                   |                              |
| Z <sub>6</sub>        |                                    |                                 |                                  |                                |                              |
| <b>Português</b>      |                                    |                                 |                                  |                                |                              |
| D                     | Kitt de juntas                     | Jogo de juntas                  | Jogo de peças de desgaste        | Vakuumtäkt støvfilter          | Pakkingssets                 |
| V                     | Kit partes desgasables             | Kit de revisión                 | Jogo de revisão gera             | Tilbageslagsventil             | Sliddeissets                 |
| R                     | Kit de mantenimiento               | Kit de mantenimiento            | Jogo de manutenção               | Vakuumreglerventil             | Reparationssæt               |
| W                     | Interruptor guarda motor           | Discontactor para motor         | Discontactor para motor          | Vakuumtäkt partikelfilter      | Servicesæt                   |
| ZMS                   | Separador polvo estanco            | Separador de poeiras para vácuo | Válvula de regulação de vácuo    | Vakuumtäkt insugningsfilter    | Motorskyddsryfare            |
| ZFP                   | Válvula de retención               | Ponteira para tubo flexível     | Ponteira para tubo flexível      | Vakuumtäkt tank                | Vakuumtäkt                   |
| ZRK                   | Válvula reguladora de vacío        | Filtro de aspiración para vácuo | Filtro de aspiração para vácuo   | Kabel med stickprop            | Slangnippel                  |
| ZSA                   | Racord conexión                    | Recipiente de vacío             | Reservatório de vácuo            | Fettspruta                     | Vakuumtäkt                   |
| ZVF                   | Filtro de aspiración               | Cable conectar con clavija      | Cabo com ficha de ligação        | Kullagerfett                   | Alipainemittari              |
| ZVK                   | Recipiente de vacío                | Bomba grasa                     | Bomba para lubrificación a massa | Vakuumeter                     | Joustava liitos              |
| Z <sub>1</sub>        | Cable conectar con clavija         | Grasa                           | Massa de alta temperatura        | Pressostat                     |                              |
| Z <sub>2</sub>        | Bomba grasa                        | Vacuómetro                      | Vacuômetro                       | Vakuumslang                    |                              |
| Z <sub>3</sub>        | Grasa                              | Interruptor vacío               | Tubo para válvula de vácuo       | Vakuumstat                     |                              |
| Z <sub>4</sub>        | Vacuómetro                         | Tubo flexible                   | Tubo flexible para vácuo         | Vakuumslange                   |                              |
| Z <sub>5</sub>        | Interruptor vacío                  |                                 |                                  |                                |                              |
| Z <sub>6</sub>        |                                    |                                 |                                  |                                |                              |
| <b>Dansk</b>          |                                    |                                 |                                  |                                |                              |
| D                     | Pakningssæt                        | Pakningssæt                     | Pakningssæt                      | Tiivistesaria                  | Suomi                        |
| V                     | Sliddeissets                       | Sliddeissets                    | Sliddeissets                     | Kulutusosasarja                |                              |
| R                     | Reparationssæt                     | Reparationssæt                  | Reparationssæt                   | Korjaussarja                   |                              |
| W                     | Servicesæt                         | Servicesæt                      | Servicesæt                       | Huolto-osasarja                |                              |
| ZMS                   | Motorværn                          | Motorværn                       | Motorværn                        | Moottorin suojaustykin         |                              |
| ZFP                   | Vakuumtækt støvfilter              | Vakuumtækt støvfilter           | Vakuumtækt støvfilter            | Tölyn erotin                   |                              |
| ZRK                   | Tilbageslagsventil                 | Tilbageslagsventil              | Tilbageslagsventil               | Takaiskuventilli               |                              |
| ZSA                   | Vakuumreguleringsventil            | Vakuumreguleringsventil         | Vakuumreguleringsventil          | Vakuumreglerventil             |                              |
| ZVF                   | Slangestuds                        | Vakuumtækt indsugningsfilter    | Vakuumtækt indsugningsfilter     | Vakuumtækt insugningsfilter    |                              |
| ZVK                   | Vakuumbeholder                     | Vakuumbeholder                  | Vakuumbeholder                   | Vakuumtækt tank                |                              |
| Z <sub>1</sub>        | Kabel med stik                     | Kabel med stik                  | Kabel med stik                   | Kabel med stickprop            |                              |
| Z <sub>2</sub>        | Fedtsprøje                         | Fedtsprøje                      | Fedtsprøje                       | Fettspruta                     |                              |
| Z <sub>3</sub>        | Smedrefedt                         | Smedrefedt                      | Smedrefedt                       | Kullagerfett                   |                              |
| Z <sub>4</sub>        | Vakuumeter                         | Vakuumeter                      | Vakuumeter                       | Vakuumeter                     |                              |
| Z <sub>5</sub>        | Vakuumstat                         | Vakuumstat                      | Vakuumstat                       | Pressostat                     |                              |
| Z <sub>6</sub>        | Vakuumslange                       | Vakuumslange                    | Vakuumslange                     | Vakuumslang                    |                              |
| <b>Svensk</b>         |                                    |                                 |                                  |                                |                              |
| D                     | Packningssats                      | Packningssats                   | Packningssats                    | Tiivistesaria                  | Suomi                        |
| V                     | Sliddeissets                       | Sliddeissets                    | Sliddeissets                     | Kulutusosasarja                |                              |
| R                     | Reparationssæt                     | Reparationssæt                  | Reparationssæt                   | Korjaussarja                   |                              |
| W                     | Servicesæt                         | Servicesæt                      | Servicesæt                       | Huolto-osasarja                |                              |
| ZMS                   | Motorvärn                          | Motorvärn                       | Motorvärn                        | Moottorin suojaustykin         |                              |
| ZFP                   | Vakuumtækt støvfilter              | Vakuumtækt støvfilter           | Vakuumtækt støvfilter            | Tölyn erotin                   |                              |
| ZRK                   | Tilbageslagsventil                 | Tilbageslagsventil              | Tilbageslagsventil               | Takaiskuventilli               |                              |
| ZSA                   | Vakuumreguleringsventil            | Vakuumreguleringsventil         | Vakuumreguleringsventil          | Vakuumreglerventil             |                              |
| ZVF                   | Slangestuds                        | Vakuumtækt indsugningsfilter    | Vakuumtækt indsugningsfilter     | Vakuumtækt tank                |                              |
| ZVK                   | Vakuumbeholder                     | Vakuumbeholder                  | Vakuumbeholder                   | Kabel med stickprop            |                              |
| Z <sub>1</sub>        | Kabel med stik                     | Kabel med stik                  | Kabel med stik                   | Fettspruta                     |                              |
| Z <sub>2</sub>        | Fedtsprøje                         | Fedtsprøje                      | Fedtsprøje                       | Kullagerfett                   |                              |
| Z <sub>3</sub>        | Smedrefedt                         | Smedrefedt                      | Smedrefedt                       | Vakuumeter                     |                              |
| Z <sub>4</sub>        | Vakuumeter                         | Vakuumeter                      | Vakuumeter                       | Pressostat                     |                              |
| Z <sub>5</sub>        | Vakuumstat                         | Vakuumstat                      | Vakuumstat                       | Vakuumslang                    |                              |
| Z <sub>6</sub>        | Vakuumslange                       | Vakuumslange                    | Vakuumslange                     | Vakuumslang                    |                              |
| <b>Português</b>      |                                    |                                 |                                  |                                |                              |
| D                     | Jogo de juntas                     | Jogo de juntas                  | Jogo de peças de desgaste        | Vakuumtäkt støvfilter          | Pakkingssets                 |
| V                     | Jogo de peças de desgaste          | Kit de revisão gera             | Jogo de revisão gera             | Tilbageslagsventil             | Sliddeissets                 |
| R                     | Jogo de revisão gera               | Kit de revisão                  | Jogo de revisão gera             | Vakuumreguleringsventil        | Reparationssæt               |
| W                     | Jogo de manutenção                 | Kit de manutenção               | Jogo de manutenção               | Vakuumtäkt partikelfilter      | Servicesæt                   |
| ZMS                   | Discontactor para motor            | Discontactor para motor         | Discontactor para motor          | Vakuumtäkt partikelfilter      | Motorskyddsryfare            |
| ZFP                   | Separador de poeiras para vácuo    | Válvula anti-retorno            | Válvula de regulação de vácuo    | Vakuumtäkt insugningsfilter    | Vakuumtäkt                   |
| ZRK                   | Válvula anti-retorno               | Ponteira para tubo flexível     | Válvula de regulação de vácuo    | Vakuumtäkt tank                | Slangnippel                  |
| ZSA                   | Separador de poeiras para vácuo    | Filtro de aspiração para vácuo  | Ponteira para tubo flexível      | Kabel med stickprop            | Vakuumtäkt                   |
| ZVF                   | Válvula de regulação de vácuo      | Reservatório de vácuo           | Filtro de aspiração para vácuo   | Fettspruta                     | Alipainemittari              |
| ZVK                   | Ponteira para tubo flexível        | Cabo com ficha de ligação       | Reservatório de vácuo            | Kullagerfett                   | Joustava liitos              |
| Z <sub>1</sub>        | Válvula de regulação de vácuo      | Bomba para lubrificação a massa | Cabo com ficha de ligação        | Vakuumeter                     |                              |
| Z <sub>2</sub>        | Filtro de aspiração                | Massa de alta temperatura       | Bomba para lubrificação a massa  | Vakuumslang                    |                              |
| Z <sub>3</sub>        | Reservatório de vácuo              | Vácuômetro                      | Massa de alta temperatura        | Vakuumslange                   |                              |
| Z <sub>4</sub>        | Cabo com ficha de ligação          | Vácuômetro                      | Vácuômetro                       | Vakuumslange                   |                              |
| Z <sub>5</sub>        | Bomba para lubrificação a massa    | Vácuômetro                      | Vácuômetro                       | Vakuumslange                   |                              |
| Z <sub>6</sub>        | Massa de alta temperatura          | Tubo para válvula de vácuo      | Tubo para válvula de vácuo       | Vakuumslange                   |                              |
| <b>Italiano</b>       |                                    |                                 |                                  |                                |                              |
| D                     | Pochette de joints                 | Pochette de joints              | Pochette de joints               | Serie garnizioni               | Serie garnizioni             |
| V                     | Kit pièces d'usure                 | Kit pièces d'usure              | Kit pièces d'usure               | Serie parti usurabili          | Serie parti usurabili        |
| R                     | Kit d'entretien                    | Kit d'entretien                 | Kit d'entretien                  | Set revisione                  | Set revisione                |
| W                     | Kit de première intervention       | Kit de première intervention    | Kit de première intervention     | Set manutenzione               | Set manutenzione             |
| ZMS                   | Disjoncteur moteur                 | Disjoncteur moteur              | Disjoncteur moteur               | Interruttore magnetotermico    | Interruttore magnetotermico  |
| ZFP                   | Filtre réglage vide                | Filtre réglage vide             | Filtre réglage vide              | Separatore polveri             | Separatore polveri           |
| ZRK                   | Raccord tuyau                      | Raccord tuyau                   | Raccord tuyau                    | Valvola di non ritorno         | Valvola di non ritorno       |
| ZRV                   | Filtre d'aspiration étanche        | Filtre d'aspiration étanche     | Filtre d'aspiration étanche      | Valvola regolazione vuoto      | Valvola regolazione vuoto    |
| ZSA                   | Réervoir                           | Réervoir                        | Réervoir                         | Attacco portagomma             | Attacco portagomma           |
| ZVF                   | Câble raccordement avec fiche      | Câble raccordement avec fiche   | Câble raccordement avec fiche    | Filtro aspirazione ermetico    | Filtro aspirazione ermetico  |
| ZVK                   | Pompe à graisse                    | Pompe à graisse                 | Pompe à graisse                  | Filtri aspirazione ermetico    | Filtri aspirazione ermetico  |
| Z <sub>1</sub>        | Grasse                             | Grasse                          | Grasse                           | Serbatutto del vuoto           | Serbatutto del vuoto         |
| Z <sub>2</sub>        | Vacuômetro                         | Vacuômetro                      | Vacuômetro                       | Vacuômetro                     | Vacuômetro                   |
| Z <sub>3</sub>        | Commutateur vide                   | Commutateur vide                | Commutateur vide                 | Vacuômetro                     | Vacuômetro                   |
| Z <sub>4</sub>        | Flexible pipe                      | Flexible pipe                   | Flexible pipe                    | Vacuômetro                     | Vacuômetro                   |
| Z <sub>5</sub>        | Vácuo                              | Vácuo                           | Vácuo                            | Vácuo                          | Vácuo                        |
| Z <sub>6</sub>        | Vácuo                              | Vácuo                           | Vácuo                            | Vácuo                          | Vácuo                        |
| <b>Hollands</b>       |                                    |                                 |                                  |                                |                              |
| D                     | Pakkingset                         | Pakkingset                      | Pakkingset                       | Pakkingssets                   | Pakkingssets                 |
| V                     | Set slijdeien                      | Set slijdeien                   | Set slijdeien                    | Sliddeissets                   | Sliddeissets                 |
| R                     | Reparatie set                      | Reparatie set                   | Reparatie set                    | Reparationssæt                 | Reparationssæt               |
| W                     | Service set                        | Service set                     | Service set                      | Servicesæt                     | Servicesæt                   |
| ZMS                   | Motor beveiliging schakelaar       | Motor beveiliging schakelaar    | Motor beveiliging schakelaar     | Moottorin suojaustykin         | Moottorin suojaustykin       |
| ZFP                   | Terugslagklep                      | Terugslagklep                   | Terugslagklep                    | Vacuüm regelventiel            | Vacuüm regelventiel          |
| ZRK                   | Vacuüm regelventiel                | Vacuüm regelventiel             | Vacuüm regelventiel              | Vacuüm regelventiel            | Vacuüm regelventiel          |
| ZRV                   | Vacuüm regelventiel                | Vacuüm regelventiel             | Vacuüm regelventiel              | Vakuumtäkt                     | Vakuumtäkt                   |
| ZSA                   | Slangpilaar                        | Slangpilaar                     | Slangpilaar                      | Tilbageslagsventil             | Tilbageslagsventil           |
| ZVF                   | Vacuümreglerventil                 | Vakuumreguleringsventil         | Vakuumreguleringsventil          | Vakuumreglerventil             | Vakuumreglerventil           |
| ZVK                   | Vakuumtäkt                         | Vakuumtäkt                      | Vakuumtäkt                       | Vakuumtäkt                     | Vakuumtäkt                   |
| Z <sub>1</sub>        | Vakuumtäkt                         | Vakuumtäkt                      | Vakuumtäkt                       | Vakuumtäkt                     | Vakuumtäkt                   |
| Z <sub>2</sub>        | Vakuumtäkt                         | Vakuumtäkt                      | Vakuumtäkt                       | Vakuumtäkt                     | Vakuumtäkt                   |
| Z <sub>3</sub>        | Vakuumtäkt                         | Vakuumtäkt                      | Vakuumtäkt                       | Vakuumtäkt                     | Vakuumtäkt                   |
| Z <sub>4</sub>        | Vakuumtäkt                         | Vakuumtäkt                      | Vakuumtäkt                       | Vakuumtäkt                     | Vakuumtäkt                   |
| Z <sub>5</sub>        | Vakuumtäkt                         | Vakuumtäkt                      | Vakuumtäkt                       | Vakuumtäkt                     | Vakuumtäkt                   |
| Z <sub>6</sub>        | Vakuumtäkt                         | Vakuumtäkt                      | Vakuumtäkt                       | Vakuumtäkt                     | Vakuumtäkt                   |
| <b>Français</b>       |                                    |                                 |                                  |                                |                              |
| D                     | Pochette de joints                 | Pochette de joints              | Pochette de joints               | Serie garnizioni               | Serie garnizioni             |
| V                     | Kit pièces d'usure                 | Kit pièces d'usure              | Kit pièces d'usure               | Serie parti usurabili          | Serie parti usurabili        |
| R                     | Kit d'entretien                    | Kit d'entretien                 | Kit d'entretien                  | Set revisione                  | Set revisione                |
| W                     | Kit de première intervention       | Kit de première intervention    | Kit de première intervention     | Set manutenzione               | Set manutenzione             |
| ZMS                   | Disjoncteur moteur                 | Disjoncteur moteur              | Disjoncteur moteur               | Interruttore magnetotermico    | Interruttore magnetotermico  |
| ZFP                   | Filtre réglage vide                | Filtre réglage vide             | Filtre réglage vide              | Separatore polveri             | Separatore polveri           |
| ZRK                   | Raccord tuyau                      | Raccord tuyau                   | Raccord tuyau                    | Valvola di non ritorno         | Valvola di non ritorno       |
| ZRV                   | Filtre d'aspiration étanche        | Filtre d'aspiration étanche     | Filtre d'aspiration étanche      | Valvola regolazione vuoto      | Valvola regolazione vuoto    |
| ZSA                   | Réervoir                           | Réervoir                        | Réervoir                         | Attacco portagomma             | Attacco portagomma           |
| ZVF                   | Câble raccordement avec fiche      | Câble raccordement avec fiche   | Câble raccordement avec fiche    | Filtro aspirazione ermetico    | Filtro aspirazione ermetico  |
| ZVK                   | Pompe à graisse                    | Pompe à graisse                 | Pompe à graisse                  | Serbatutto del vuoto           | Serbatutto del vuoto         |
| Z <sub>1</sub>        | Grasse                             | Grasse                          | Grasse                           | Vacuüm regelventiel            | Vacuüm regelventiel          |
| Z <sub>2</sub>        | Vacuômetro                         | Vacuômetro                      | Vacuômetro                       | Vacuüm regelventiel            | Vacuüm regelventiel          |
| Z <sub>3</sub>        | Commutateur vide                   | Commutateur vide                | Commutateur vide                 | Vakuumtäkt                     | Vakuumtäkt                   |
| Z <sub>4</sub>        | Flexible pipe                      | Flexible pipe                   | Flexible pipe                    | Vakuumtäkt                     | Vakuumtäkt                   |
| Z <sub>5</sub>        | Vácuo                              | Vácuo                           | Vácuo                            | Vakuumtäkt                     | Vakuumtäkt                   |
| Z <sub>6</sub>        | Vácuo                              | Vácuo                           | Vácuo                            | Vakuumtäkt                     | Vakuumtäkt                   |
| <b>Italiano</b>       |                                    |                                 |                                  |                                |                              |
| D                     | Serie garnizioni                   | Serie garnizioni                | Serie garnizioni                 | Serie garnizioni               | Serie garnizioni             |
| V                     | Serie parti usurabili              | Serie parti usurabili           | Serie parti usurabili            | Serie parti usurabili          | Serie parti usurabili        |
| R                     | Set revisione                      | Set revisione                   | Set revisione                    | Set manutenzione               | Set manutenzione             |
| W                     | Set manutenzione                   | Set manutenzione                | Set manutenzione                 | Interruttore magnetotermico    | Interruttore magnetotermico  |
| ZMS                   | Motor beveiliging schakelaar       | Motor beveiliging schakelaar    | Motor beveiliging schakelaar     | Terugslagklep                  | Terugslagklep                |
| ZFP                   | Vacuüm regelventiel                | Vacuüm regelventiel             | Vacuüm regelventiel              | Vacuüm regelventiel            | Vacuüm regelventiel          |
| ZRK                   | Vacuüm regelventiel                | Vacuüm regelventiel             | Vacuüm regelventiel              | Vacuüm regelventiel            | Vacuüm regelventiel          |
| ZRV                   | Vacuüm regelventiel                | Vacuüm regelventiel             | Vacuüm regelventiel              | Vakuumtäkt                     | Vakuumtäkt                   |
| ZSA                   | Slangpilaar                        | Slangpilaar                     | Slangpilaar                      | Vakuumtäkt                     | Vakuumtäkt                   |
| ZVF                   | Vakuumreglerventil                 | Vakuumreglerventil              | Vakuumreglerventil               | Vakuumreglerventil             | Vakuumreglerventil           |
| ZVK                   | Vakuumtäkt                         | Vakuumtäkt                      | Vakuumtäkt                       | Vakuumtäkt                     | Vakuumtäkt                   |
| Z <sub>1</sub>        | Vakuumtäkt                         | Vakuumtäkt                      | Vakuumtäkt                       | Vakuumtäkt                     | Vakuumtäkt                   |
| Z <sub>2</sub>        | Vakuumtäkt                         | Vakuumtäkt                      | Vakuumtäkt                       | Vakuumtäkt                     | Vakuumtäkt                   |
| Z <sub>3</sub>        | Vakuumtäkt                         | Vakuumtäkt                      | Vakuumtäkt                       | Vakuumtäkt                     | Vakuumtäkt                   |
| Z <sub>4</sub>        | Vakuumtäkt                         | Vakuumtäkt                      | Vakuumtäkt                       | Vakuumtäkt                     | Vakuumtäkt                   |
| Z <sub>5</sub>        | Vakuumtäkt                         | Vakuumtäkt                      | Vakuumtäkt                       | Vakuumtäkt                     | Vakuumtäkt                   |
| Z <sub>6</sub>        | Vakuumtäkt                         | Vakuumtäkt                      | Vakuumtäkt                       | Vakuumtäkt                     | Vakuumtäkt                   |
| <b>Hausverwaltung</b> |                                    |                                 |                                  |                                |                              |
| D                     | Werner Rietzsche                   |                                 |                                  |                                |                              |
| V                     | Maschinen- und Apparatebau GmbH    |                                 |                                  |                                |                              |
| R                     | Postfach 1260 • D-79612 Schopfheim |                                 |                                  |                                |                              |
| W                     | Tel. 07622 / 3922-0                |                                 |                                  |                                |                              |

# Daten



Vakuum-pumpen

Vacuum Pumps

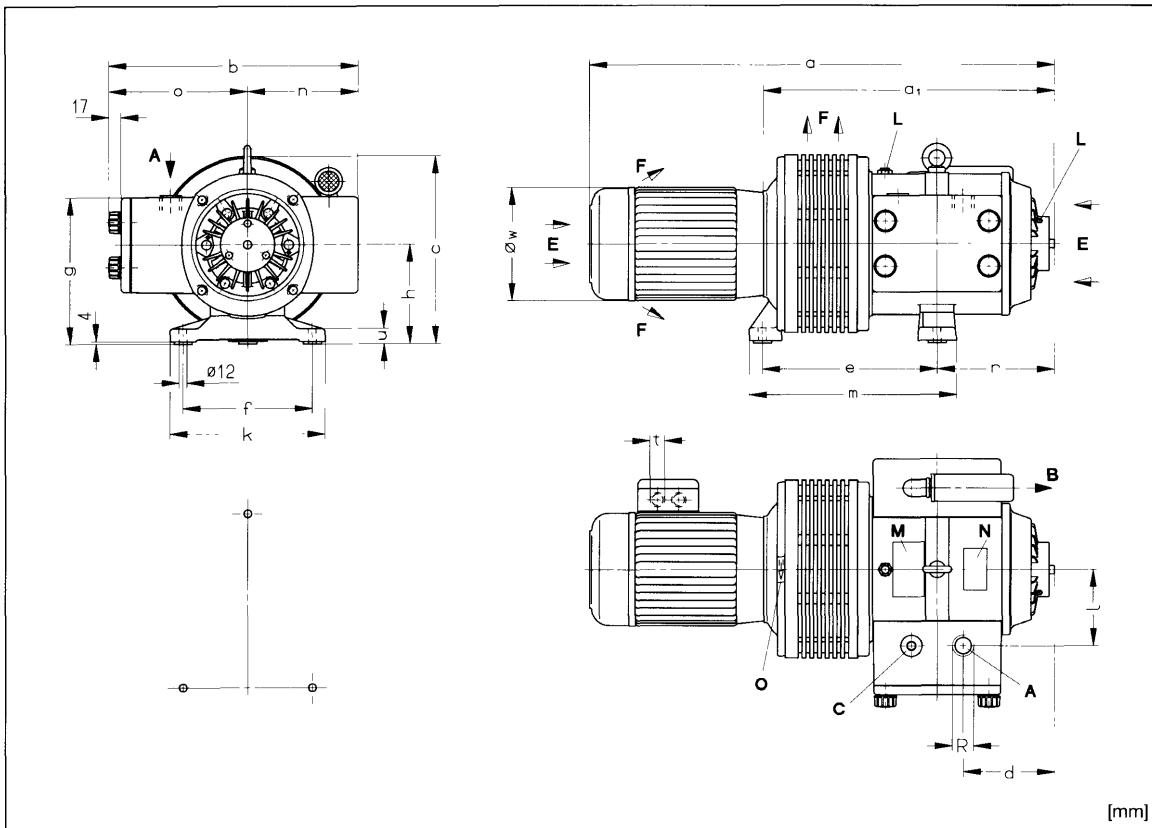
# Rietschle

Pompe à vide

Pompe per vuoto

**VFT (01)**

- VFT 25 (01)
- VFT 40 (01)
- VFT 60 (01)
- VFT 80 (01)
- VFT 100 (01)



[mm]

|   |  |  |  |   |
|---|--|--|--|---|
| A | Vakuum-Anschluß                                  | Vacuum connection                              | Raccord du vide  | Attacco vuoto   |
| B | Abluft-Austritt                                  | Exhaust  | Reffoulement   | Scarico aria  |
| C | Anschlußmöglichkeit für<br>Vakuum-Regulierventil | Connecting possibility<br>for regulation valve | Possibilité de raccordement<br>pour valve de réglage du vide | Possibilità di allacciamento<br>per valvola regolazione vuoto |
| E | Kühlung-Eintritt                                 | Cooling air entry                              | Entrée air refroidissement                                   | Entrata aria di raffredd.                                     |
| F | Kühlung-Austritt                                 | Cooling air exit                               | Sortie air refroidissement                                   | Uscita aria di raffredd                                       |
| L | Schmierstellen                                   | Greasing points                                | Points de graissage  | Punti di lubrificazione                                       |
| M | Schmiertschild                                   | Greasing label                                 | Etiquette graissage  | Targhetta della lubrificazione                                |
| N | Datenschild                                      | Data plate                                     | Etiquette caractéristique                                    | Targhetta dati  |
| O | Drehrichtungsschild                              | Direction of rotation                          | Flèche sens rotation   | Targhetta senso rotazione                                     |

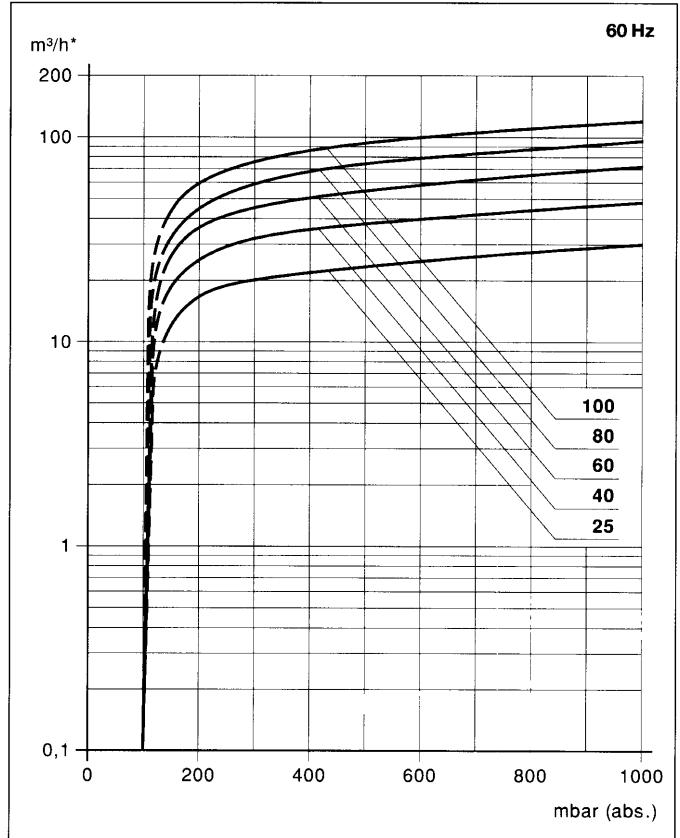
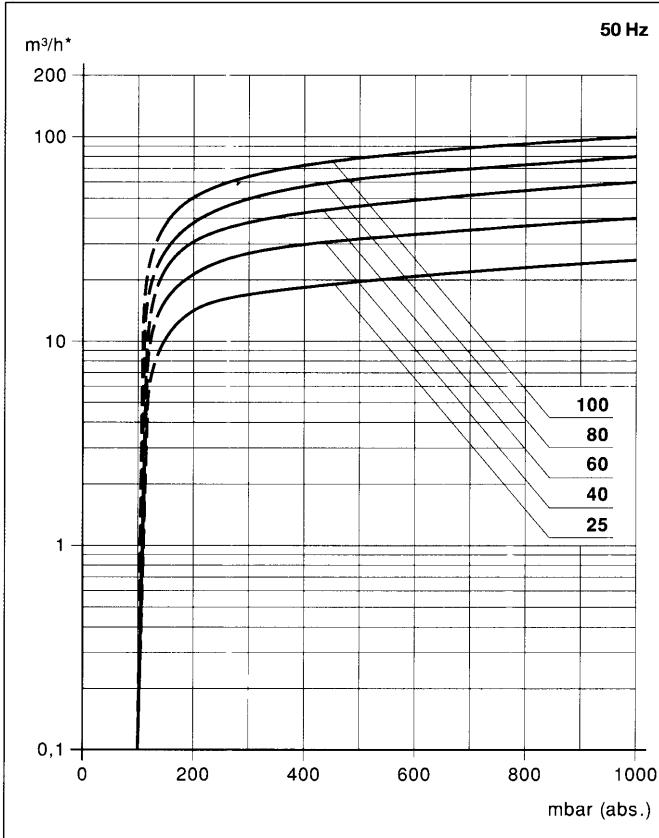
| VFT (01) |                | 25         | 40         | 60         | 80       | 100      |
|----------|----------------|------------|------------|------------|----------|----------|
| [mm]     | a              | 3 ~<br>1 ~ | 569<br>585 | 656<br>680 | 710<br>— | 753<br>— |
|          | a <sub>1</sub> | 342        | 412        | 441        | 450      | 500      |
|          | b              | 333        | 333        | 383        | 431      | 437      |
|          | c              | 254        | 254        | 292        | 319      | 319      |
|          | d              | 106        | 126        | 133        | 131      | 137      |
|          | e              | 203        | 238        | 270        | 285      | 310      |
|          | f              | 170        | 170        | 200        | 200      | 200      |
|          | g              | 198        | 198        | 229        | 244      | 244      |
|          | h              | 134        | 134        | 154        | 164      | 164      |
|          | k              | 204        | 204        | 240        | 240      | 240      |
|          | l              | 96         | 99         | 119        | 131      | 131      |
|          | m              | 253        | 288        | 320        | 335      | 360      |
|          | n              | 156        | 156        | 171        | 208      | 214      |
|          | o              | 177        | 177        | 212        | 223      | 223      |
|          | r              | 131        | 166        | 173        | 167      | 192      |
|          | t              | Pg 13,5    | Pg 16      | Pg 16      | Pg 21    | Pg 21    |
|          | u              | 26         | 26         | 24         | 24       | 24       |
|          | Ø w            | 160        | 176        | 176        | 196      | 196      |
|          | R              | G 3/4      | G 1        | G 1        | G 1 1/4  | G 1 1/2  |

**D 157**

**2.7.93**

| VFT (01)     | 25    | 40          | 60              | 80       | 100      |
|--------------|-------|-------------|-----------------|----------|----------|
| m³/h         | 50 Hz | 25          | 40              | 60       | 80       |
|              | 60 Hz | 30          | 48              | 72       | 96       |
| mbar (abs.)* |       |             | 100             |          |          |
| mbar (abs.)" |       |             | 150             |          |          |
| 3 ~          | 50 Hz |             | 230/400 V ± 10% |          |          |
|              | 60 Hz |             | 220/380 V       |          |          |
| 1 ~          | 50 Hz | 230 V ± 10% |                 | -        |          |
|              | 60 Hz | 220 V       |                 | -        |          |
| kW (50 Hz)   | 3 ~   | 0,75        | 1,1             | 1,5      | 2,2      |
|              | 1 ~   | 0,9         | 1,3             | -        | -        |
| kW (60 Hz)   | 3 ~   | 0,9         | 1,3             | 1,8      | 2,6      |
|              | 1 ~   | 1,1         | 1,5             | -        | -        |
| A (50 Hz)    | 3 ~   | 3,5/2       | 4,9/2,8         | 6,4/3,7  | 9/5,2    |
|              | 1 ~   | 6,2         | 8,1             | -        | -        |
| A (60 Hz)    | 3 ~   | 3,9/2,3     | 5,8/3,4         | 8/4,6    | 10,8/6,3 |
|              | 1 ~   | 7           | 9,8             | -        | -        |
| min⁻¹        | 50 Hz |             | 1450            |          |          |
|              | 60 Hz |             | 1740            |          |          |
| dB(A)        | 50 Hz | 73          | 74              | 76       | 77       |
|              | 60 Hz | 74          | 75              | 77       | 78       |
| kg           |       | 35          | 50              | 65       | 75       |
| ZRV          |       | 13          | 20              | 20       | 25       |
| ZRK          |       | 20 (03)     | 25 (03)         | 25 (03)  | 32 (03)  |
| ZFP          |       | 145 (11)    | 145 (06)        | 145 (06) | 216 (07) |
| ZVF          |       | 20 (03)     | 20 (04)         | 32 (02)  | 32 (03)  |
| ZMS (3 ~)    | 50 Hz | 40/24       | 60/40           | 100/40   | 100/60   |
|              | 60 Hz | 40/24       | 60/40           | 100/60   | 160/100  |
| ZMS (1 ~)    |       | 100         | 100             | -        | -        |

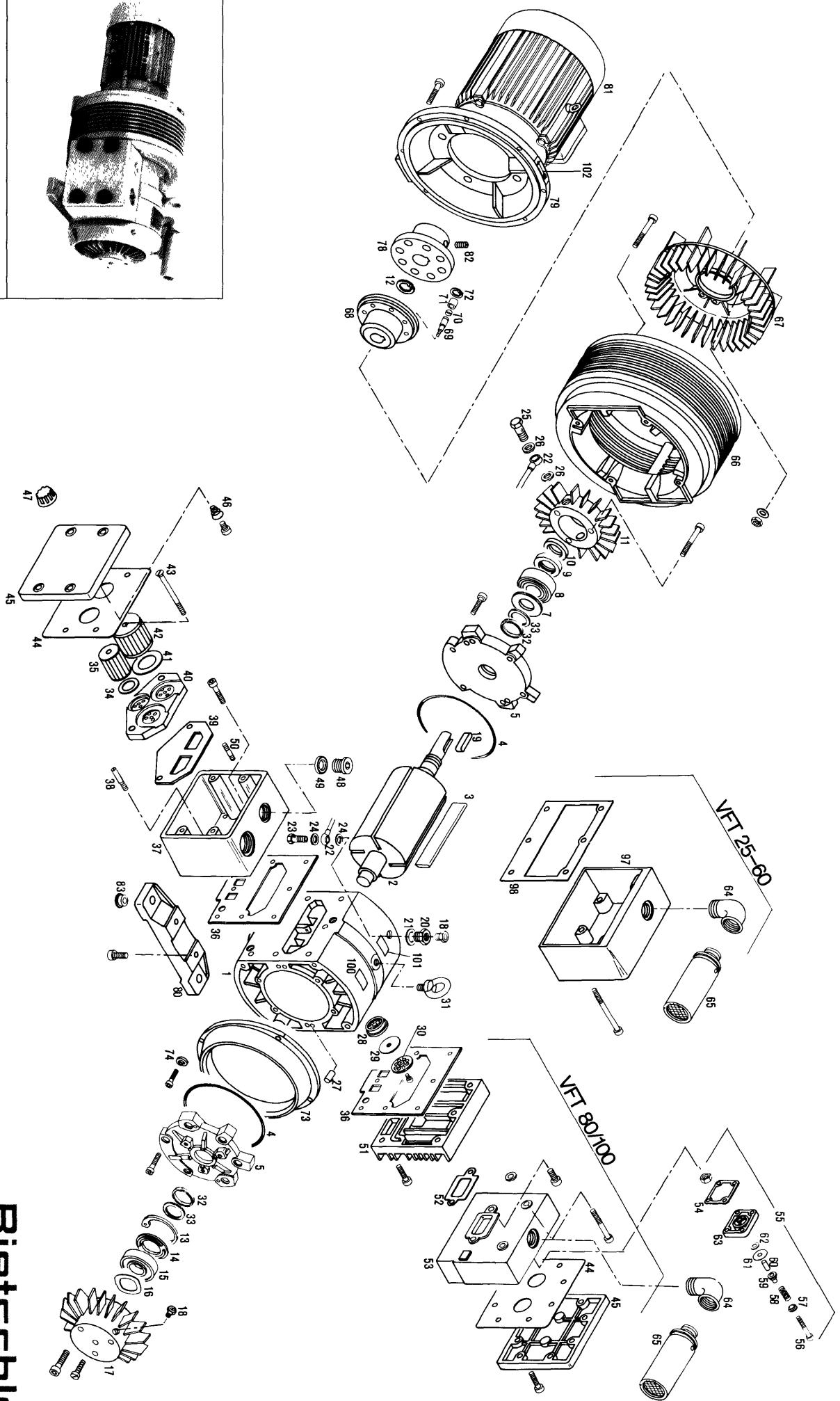
|  |   |  |  |  |
|--|---|--|--|--|
| m³/h<br>mbar (abs.)*<br>mbar (abs.)"<br>3 ~ / 1 ~<br>kW<br>A<br>min⁻¹<br>dB(A)<br>kg | Saugvermögen<br>max. Endvakuum<br>Endvakuum im Dauerbetrieb<br>Ansaugdruck<br>Motorausführung<br>Motorleistung<br>Stromaufnahme<br>Drehzahl<br>mittl. Schallpegel<br>max. Gewicht<br>Zubehör<br>Vakuum-Regulierventil<br>Ruckschlagventil<br>Staubabscheider<br>Vakuumdichtes Ansaugfilter<br>Motorschutzschalter | Capacity<br>Ultimate vacuum max.<br>Ult. vacuum on contin. operation<br>Suction pressure<br>Motor version<br>Motor rating<br>Current drawn<br>Speed<br>Average noise level<br>Weight max<br>Optional extras<br>Vacuum regulation valve<br>Non return valve<br>Dust separator<br>Vacuum tight suction filter<br>Motor starter | Débit<br>Vide limite maxi.<br>Vide limite en fonction continu<br>Pression d'aspiration<br>Exécution moteur<br>Puissance moteur<br>Intensité absorbée<br>Vitesse rotation<br>Niveau sonore moyen<br>Poids maxi.<br>Accessoires<br>Valve réglage vide<br>Clapet anti-retour<br>Filtre séparateur<br>Filtre d'aspiration étanche<br>Dijoncteur moteur | Portata<br>Vuoto finale massimo<br>Vuoto finale in esercizio perman.<br>Pressione di aspirazione<br>Esecuzione motore<br>Potenza motore<br>Corrente nominale<br>Numero giro<br>Rumorosità media<br>Peso massimo<br>Accessori<br>Valvola regolazione vuoto<br>Valvola di non ritorno<br>Separatore polveri<br>Filtro ermetico sull'aspirazione<br>Interruttore magnetotermico |
|--|---|--|--|--|



\*bezogen auf den Zustand im Sauganschluß / related to suction conditions at inlet connection / Relatif à l'état régnant à l'aspiration / riferito alle condizioni in aspirazione  
 Kennlinien und Tabellenangaben beziehen sich auf betriebswarme Vakuumpumpen / Curves and tables refer to vacuum pump at normal operating temperature / Les courbes et tableaux sont établis, pompe à température de fonctionnement / Le curve caratteristiche ed i dati riportati nelle tabelle si riferiscono alle pompe per vuoto con funzionamento a regime  
 Technische Änderungen vorbehalten! / We reserve the right to alter technical information! / Sous réserve de modification technique! / Salvo modifiche tecniche!  
 Die Abmessungen a und ø w sowie die Stromaufnahme können je nach Motorfabrikat von den hier aufgeführten Angaben abweichen / The dimensions a and ø w and/or the current drawn can differ when compared with the data list, depending on the motor type / Les dimensions a et ø w ainsi que l'aménagement peuvent différer des données indiquées, ci-dessus, selon le fabricant du moteur / Le dimensioni a e ø w come la corrente nominale possono scostarsi leggermente dai dati qui riportati a seconda del costruttore del motore

# Rietschle

VFT 25 - 100 (01)



# VFT 25 - 100 (01)

| Grundeinheit |            | Fundamental unit    | Eléments de base         | Parti fondamentali | Blastruftseite<br>VFT 80/100 | Coté refoulement d'air<br>VFT 80/100 |
|--------------|------------|---------------------|--------------------------|--------------------|------------------------------|--------------------------------------|
| 1            | Gehäuse    | Cylinder            | Corps                    | Corpa pompa        | 36 D                         | Lato soffieria<br>VFT 80/100         |
| 2            | Rotor      | Rotor               | Rotor                    | Rotore             | 51 D                         | Guarnizione                          |
| 3            | Lamelle    | Blade               | Paliette                 | Dichtung           | 52 D                         | Telaio                               |
| 4            | V          | O-Ring (VFT 80/100) | O-Ring (VFT 80/100)      | Zwischenkasten     | 53 D                         | Guarnizione                          |
| 5            | D          | Gehäusedeckel       | Coperchio corpo pompa    | Ausblassgehäuse    | 54 D                         | Scatola filtro                       |
| 6            | V          | Abdeckring 'A'      | Anello di protezione 'A' | Dichtung           | 55 D                         | Guarnizione                          |
| 7            | V          | Rillenkugellager    | Cuscinetto a sfere       | Ausblasetten       | 56                           | Valvola di scarico cpl.              |
| 8            | V          | Spannmutter         | Manicotto                | Exhaust valve cpl. |                              | Vite a brugola                       |
| 9            | V          | INA-Dichtring       | Anello di tenuta         | Spring plate       |                              | Piatto elastico                      |
| 10           | D          | Lagerdeckel 'A'     | Coperchio cuscinetti 'A' | Spring             |                              | Molla a pressione                    |
| 11           | V          | Sicherungsring      | Anello di sicurezza      | Valve plate        |                              | Disco della valvola                  |
| 12           | V          | Abdeckring 'B'      | Anello di protezione 'B' | Pipe               |                              | Tuyau                                |
| 13           | V          | Rollenlager         | Cuscinetto a rulli       | Valve disc         |                              | Rondella della valvola               |
| 14           | V          | Ausgleichsschelle   | Rondella di tolleranza   | Valve disc         |                              | Rondella della valvola               |
| 15           | V          | Lagerdeckel 'B'     | Coperchio cuscinetti 'B' | Valve disc         |                              | Piastra della valvola                |
| 16           | V          | Schmiernippel       | Ingrassatore             | Bow                |                              | Curva                                |
| 17           | V          | Paßfeder            | Chiavetta                | Silencer Complete  |                              | Silenziatore Completo                |
| 18           | V          | Verschl. Schraube   | Riduzione                | Gasket             |                              | Guarnizione                          |
| 19           | V          | Scheibe             | Tubazione                | Covercle filtri    |                              | Coperchio filtri                     |
| 20           | D          | Rohrleitung         | Vite cava                | VFT 25-60          |                              | VFT 25-60                            |
| 21           | D          | Hochschraube        | Anello di tenuta         | Carter refoulement |                              | Scatola filtri                       |
| 22           | D          | Dichtring           | Vite cava                | Joint              |                              | Guarnizione                          |
| 23           | D          | Hochschraube        | Anello di tenuta         |                    |                              |                                      |
| 24           | D          | Dichtring           | Vite cava                |                    |                              |                                      |
| 25           | D          | Hochschraube        | Anello di tenuta         |                    |                              |                                      |
| 26           | D          | Dichtring           | Anello di tenuta         |                    |                              |                                      |
| 27           | Zyl. Stift | Schraubeinsatz      | Spina cilindrica         |                    |                              |                                      |
| 28           | D          | Ventilscheibe       | Sede della vite          |                    |                              |                                      |
| 29           | D          | Ventiteller         | Rondella della valvola   |                    |                              |                                      |
| 30           | D          | Ringschraube        | Disco della valvola      |                    |                              |                                      |
| 31           | D          | Dichtring           | Goffare                  |                    |                              |                                      |
| 32           | D          | Stützung            | Anello di tenuta         |                    |                              |                                      |
| 33           | D          |                     | Anello di supporto       |                    |                              |                                      |
| 34           | D          | Saugluftseite       |                          |                    |                              |                                      |
| 35           | V          | Dichtring           | Cartuccia                |                    |                              |                                      |
| 36           | D          | Micro-Top-Patrone   | Guarnizione              |                    |                              |                                      |
| 37           | D          | Dichtung            | Scatola filtri           |                    |                              |                                      |
| 38           | D          | Filtergehäuse       | Prigioniero              |                    |                              |                                      |
| 39           | D          | Schaftschraube      | Guarnizione              |                    |                              |                                      |
| 40           | D          | Dichtung            | Base della filtro        |                    |                              |                                      |
| 41           | D          | Filtersockel        | Anello di tenuta         |                    |                              |                                      |
| 42           | V          | Dichtring           | Cartuccia                |                    |                              |                                      |
| 43           | V          | Micro-Top-Patrone   | Vite a testa svasata     |                    |                              |                                      |
| 44           | D          | Sektschraube        | Guarnizione              |                    |                              |                                      |
| 45           | D          | Dichtung            | Coperchio filtri         |                    |                              |                                      |
| 46           | D          | Filterdeckel        | Molla                    |                    |                              |                                      |
| 47           | V          | Kegelfeder          | Pomello                  |                    |                              |                                      |
| 48           | V          | Filterschraubknopf  | Vite di chiusura         |                    |                              |                                      |
| 49           | D          | Verschl. Schraube   | Anello guarnizione       |                    |                              |                                      |
| 50           | D          | Dichtring           | Vite prigioniera         |                    |                              |                                      |
|              |            |                     | Support filtre           |                    |                              |                                      |
|              |            |                     | Joint                    |                    |                              |                                      |
|              |            |                     | Cartouche filtre         |                    |                              |                                      |
|              |            |                     | Vit                      |                    |                              |                                      |
|              |            |                     | Joint                    |                    |                              |                                      |
|              |            |                     | Couvercle filtre         |                    |                              |                                      |
|              |            |                     | Ressort                  |                    |                              |                                      |
|              |            |                     | Tête de vis              |                    |                              |                                      |
|              |            |                     | Vit obturatrice          |                    |                              |                                      |
|              |            |                     | Anneau d'étranglement    |                    |                              |                                      |
|              |            |                     | Vit filetée              |                    |                              |                                      |

Bei Bestellungen folgendes angeben: Typ, Fabrikations-Nr., Positions-Nr., Motor (kW, V, Hz)

To order please indicate: model, serial-no., item-no., motor (kW, V, Hz)

En cas de commande préciser: type, d'appareil, no. de position des pièces, moteur (kW, V, Hz)

Nell'ordine indicare: tipo, il numero di matricola, il numero di posizione dei ricambi, il motore (kW, V, Hz)

V = Verschleißteile

D = Dichtungen

D = Fast-wearing parts

V = Piezas d'usure

D = Joints

V = Parti usabili

Garnizioni

D = Seals

D = Joints

D = Garnizioni

Hauptverwaltung

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