

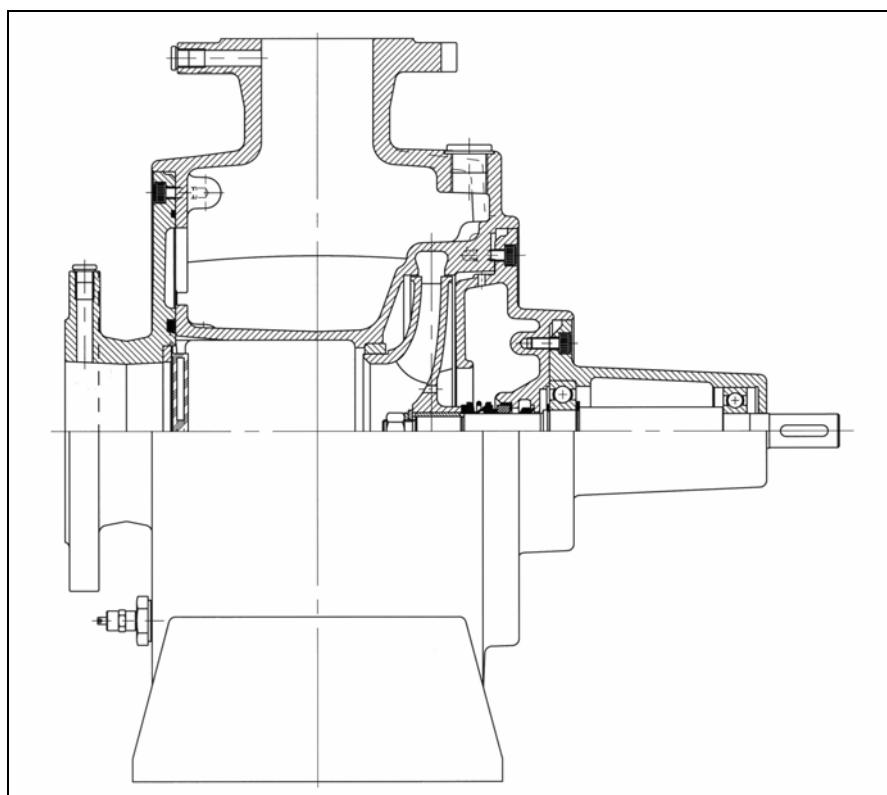
OPERATION AND MAINTENANCE INSTRUCTION

A/S DE SMITHSKE

DESMI

DESMI self-priming centrifugal pump

MODULAR S-N



Delton Marine Pte Ltd
Marine & Offshore Engineering Services
德泰海洋機械工程私人有限公司

Email : sales@delton.com.sg
Tel No : +65 6686 2282



TABLE OF CONTENTS:**PAGE**

| | |
|--|-----|
| 1. PRODUCT DESCRIPTION | 3 |
| 1.1 DELIVERY | 3 |
| 2. TECHNICAL DATA | 3 |
| 2.1 NAME PLATE | 3 |
| 2.2 EXPLANATION OF THE TYPE NUMBER | 4 |
| 2.3 TECHNICAL DESCRIPTION | 4 |
| 3. INSTALLATION | 6 |
| 3.1 MOUNTING/FASTENING | 6 |
| 3.2 WIRING | 7 |
| 4. TRANSPORT/ STORAGE | 7 |
| 5. DISMANTLING | 7 |
| 5.1 ACCESS TO IMPELLER AND SHAFT SEAL | 7 |
| 5.2 DISMANTLING SHAFT SEAL | 8 |
| 5.3 DISMANTLING SEAT | 8 |
| 5.4 DISMANTLING SHAFT WITH BEARINGS | 8 |
| 5.5 INSPECTION | 8 |
| 6. ASSEMBLING | 8 |
| 6.1 FITTING SEALING RING IN PUMP CASING | 8 |
| 6.2 FITTING SHAFT WITH BEARINGS | 8 |
| 6.3 FITTING WATER DEFLECTOR | 8 |
| 6.4 FITTING SHAFT SEAL | 9 |
| 6.5 FITTING IMPELLER | 9 |
| 6.6 FITTING GUIDE RING AND GUIDE VANE PIECE (ONLY S32-25-110N) | 9 |
| 6.7 FITTING BEARING HOUSING AND SHAFT SEAL COVER | 9 |
| 6.8 SHAFT | 10 |
| 7. FROST PROTECTION | 10 |
| 8. DISMANTLING | 10 |
| 9. START-UP | 10 |
| 9.1 STARTING | 10 |
| 10. SYSTEM BALANCING | 11 |
| 11. INSPECTION AND MAINTENANCE | 12 |
| 11.1 DRAINING THE PUMP | 12 |
| 11.2 BEARINGS | 12 |
| 12. REPAIRS | 12 |
| 12.1 ORDERING SPARE PARTS | 12 |
| 13. OPERATING DATA | 13 |
| 14. EC DECLARATION OF CONFORMITY | 14 |
| 15. ASSEMBLY DRAWINGS | 15 |
| 16. SPARE PARTS LISTS | 15 |
| 17. DIMENSIONAL SKETCH | "68 |

1. PRODUCT DESCRIPTION

These operation and maintenance instructions apply to the DESMI MODULAR S-N pump series. The pumps are available in sizes ranging from 25 to 100 mm on the pressure flange. The suction flange is bigger than the pressure flange.

DESMI S is a single-stage self-priming centrifugal pump with stainless steel shaft and mechanical shaft seal. The smallest pumps, S32-25-110N and S50-32-135N, have open impeller, whereas all other sizes have closed impeller.

The pump is suitable for the pumping of clean and polluted liquids with temperatures between 0 and 80°C. With special shaft seal up to 140°C. Max. number of revolutions: 3600 RPM.

The pump has horizontal inlet on the centre line and vertical outlet at the top.

The back of the impeller is equipped with relief blades to reduce the load on the bearings.

Relief holes in the impeller ensure circulation of liquid for the shaft seal and prevent overheating of the shaft seal during normal operation.

The pump is particularly suitable for the pumping of water in connection with f.inst. cooling of diesel engines, as bilge pumps, ballast pumps, pumps for irrigation, washing plants, air conditioning, cooling systems, and sanitary systems, etc. Furthermore, in the majority of cases where the transport of liquid is required within industry.

1.1 DELIVERY

- Check on delivery that the shipment is complete and undamaged.
- Defects and damages, if any, to be reported to the carrier and the supplier immediately in order that a claim can be advanced.

2. TECHNICAL DATA

The pumps are manufactured in various material combinations which appear from the type number on the name plate. See below.

2.1 NAME PLATE

Manufacturer:

DESMI

DK-9400 Nørresundby

Phone +45 96328111

Fax +45 98175499

e-mail: desmi@desmi.com

<http://www.desmi.com>

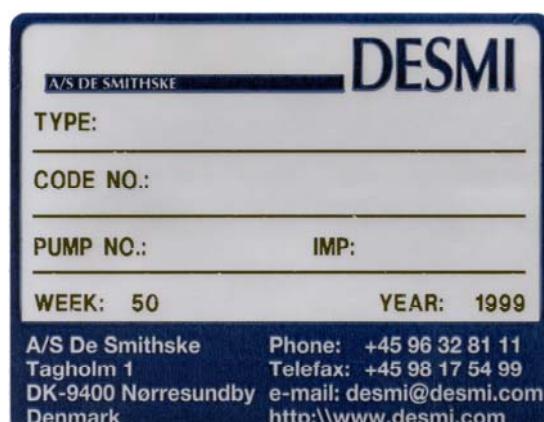
TYPE: Pump type number

CODE NO.: Pump item No.

PUMP NO.: Pump No.

IMP.: Impeller diameter

WEEK/YEAR: Production week and year



2.2 EXPLANATION OF THE TYPE NUMBER

All the S-N pumps are provided with a name plate. The type number indicated on the name plate is built up as follows:

SXXX-YYY-ZZZN-MR

XXX, YYY, ZZZ : Pump size where

XXX = Suction branch diameter, YYY= Pressure branch diameter,

ZZZ = Standard impeller diameter.

M : The material combination of the pump.

R : The assembly combination of the pump.

M may be the following:

A : Standard. Casing: GG20. Impeller: AlBz.

C : All cast iron.

D : Casing: BSP5, Impeller: AlBz.

E : Special alloy.

U : Nonmagnetic

The pumps can be delivered in other material combinations which are agreed with the supplier.

R may be the following:

01 : With electromagnetic clutch.

02 : Monobloc, flange-mounted with electric motor.

03 : With hydraulic motor.

04 : V-belt pulley and disengaging clutch.

07 : On base plate with petrol or diesel engine, or with electric motor.

08 : Mounted on trolley with petrol or diesel engine or with electric motor.

09 : With bare shaft end.

10 : Special-tailored according to task.

Any use of the pump is to be evaluated on the basis of the materials used in the pump. In case of doubt, contact the supplier.

Pumps in material combinations A and C are primarily used for fresh water.

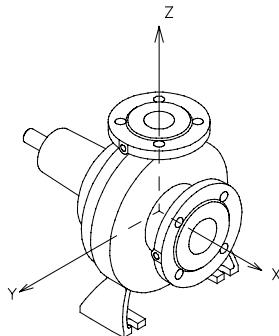
Pumps in material combination D are primarily used for seawater.

2.3 TECHNICAL DESCRIPTION

The noise level of the pump depends on the motor type supplied, as the noise from the pump can be calculated as the noise level of the motor + 2dB(A).

The capacity of the pump appears from the name plate on the pump. If the pump has been delivered without motor, the pump capacity is to be indicated on the plate when mounting the motor.

The permissible loads on the flanges appear from the following table:



| Pump | Fv N | Fh N | ΣF N | ΣMt Nm |
|---------------|---------|---------|-----------------|-------------------|
| S32-25-110N | 1250 | 950 | 1550 | 200 |
| S50-32-135N | 1250 | 950 | 1550 | 200 |
| S70-50-175N | 1350 | 1000 | 1700 | 200 |
| S70-50-220N | 1350 | 1000 | 1700 | 200 |
| S70-50-275N | 1350 | 1000 | 1700 | 250 |
| S80-70-175N | 1450 | 1050 | 1800 | 270 |
| S80-70-220N | 1450 | 1050 | 1800 | 270 |
| S80-70-275N | 1450 | 1050 | 1800 | 270 |
| S100-80-175N | 1800 | 1250 | 2200 | 470 |
| S100-80-220N | 1800 | 1250 | 2200 | 470 |
| S100-80-275N | 1800 | 1250 | 2200 | 470 |
| S125-80-220N | 3200 | 1900 | 3750 | 950 |
| S125-80-275N | 3300 | 2000 | 3850 | 1020 |
| S125-100-220N | 3300 | 2000 | 3850 | 1020 |

In connection with the permissible loads on the flanges the following is to be observed:

$$\frac{2}{3} F_{zout} + F_{zin} \leq F_v$$

$$\sqrt{F_{xin}^2 + F_{yin}^2} + \sqrt{F_{xout}^2 + F_{yout}^2} \leq F_h$$

$$\sqrt{M_{xin}^2 + M_{yin}^2 + M_{zin}^2} + \sqrt{M_{xout}^2 + M_{yout}^2 + M_{zout}^2} \leq M_t$$

$$\left(\frac{\sum F_{calc}}{\sum F} \right)^2 + \left(\frac{\sum M_{calc}}{\sum M_t} \right)^2 \approx 2$$

where index "in" is suction branch, "out" is pressure branch, and "calc" are the values calculated by the user.

3. INSTALLATION

3.1 MOUNTING/FASTENING

The pump should be mounted and fastened on a solid base plate with a flat and horizontal surface to avoid distortion.

The max. permissible loads on the flanges stated in paragraph 2.2 are to be observed.

When mounting a V-belt pulley on the pump a bore H7 is recommended. To facilitate the mounting the hub in the V-belt pulley may be heated to abt. 100 °C after which the V-belt pulley is easily lead over the shaft towards the shoulder. Alternatively, the V-belt pulley may be mounted with a TAPER LOCK bush.

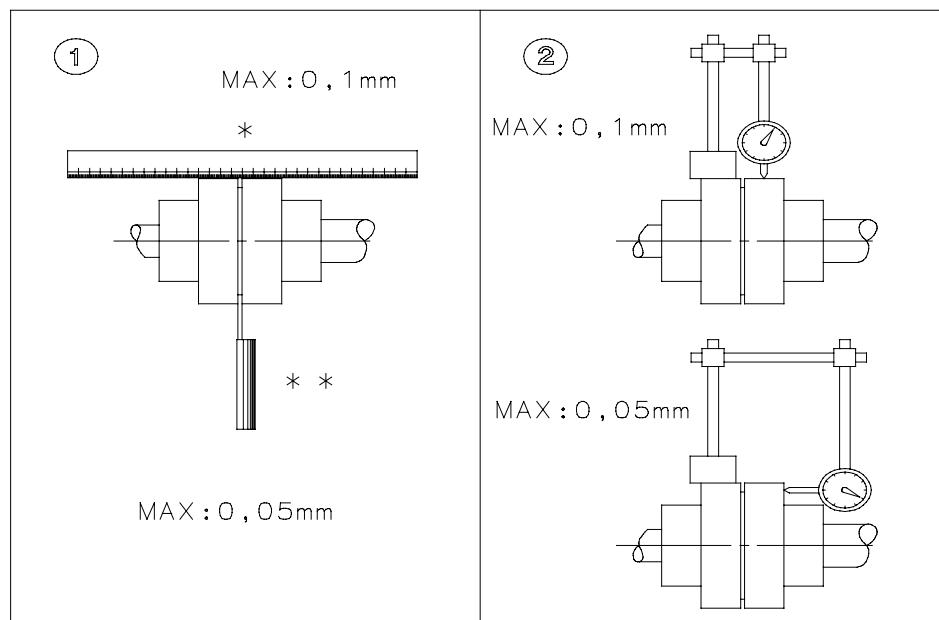
When dimensioning the V-belt pulley it is important to follow the rules of the DESMI nomograms for the pump size in question - contact DESMI.

Be careful when fitting the suction line to the pump so that it is absolutely tight, as even small leakages may impede the priming. When pumping polluted liquids a strainer is necessary. The strainer must be equipped with a sieve, the passage area of which is to be 3 x the area of the suction pipe. The mesh size is to be 1-3 mm smaller than the impeller gap of the pump in question.

If the pump is to be driven by a motor via a flexible coupling, motor and pump are to be placed on a common base plate. The following should be observed:

- Avoid distortion of the base plate.
- Avoid distortion in the piping system.
- Check that pump and motor are aligned correctly.

Below please find 2 proposals for alignment. The deviations mentioned cover a complete revolution of the coupling. The distance between the coupling halves is to be between 2 and 4 mm.



!

At installations pumping hot or very cold liquids, the operator must be aware that it is dangerous to touch the pump surface, and, consequently, he must take the necessary safety measures.

When connecting the pump and a prime mover the power transmission is to be equipped with a guard in accordance with the provisions of the COUNCIL DIRECTIVE of June 14, 1989, on the safety of machines.

3.2 WIRING



Wiring to be carried out by authorized skilled workmen according to the rules and regulations in force.

4. TRANSPORT/ STORAGE

The weights of the pumps (in A09 combination) are stated in the following table, and the pumps are to be lifted as shown.

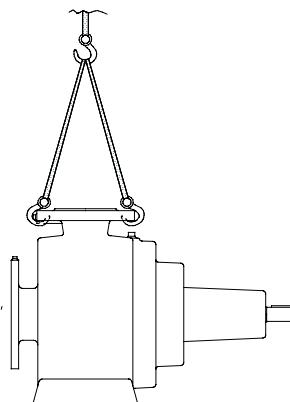
| Pump | Weight kg | Pump | Weight kg |
|-------------|-----------|---------------|-----------|
| S32-25-110N | 21.5 | S80-70-275N | 86.0 |
| S50-32-135N | 22.0 | S100-80-175N | 72.0 |
| S70-50-175N | 42.0 | S100-80-220N | 92.5 |
| S70-50-220N | 58.0 | S100-80-275N | 107.0 |
| S70-50-275N | 72.0 | S125-80-220N | 116.0 |
| S80-70-175N | 53.0 | S125-80-275N | 122.0 |
| S80-70-220N | 59.0 | S125-100-220N | 138.0 |

The pump is to be stored in a dry area.

Before shipment the pump is to be fastened securely on pallets or the like.



The pump is to be lifted as shown here:



The lifting straps must not bear against sharp edges and corners.

5. DISMANTLING

5.1 ACCESS TO IMPELLER AND SHAFT SEAL

Remove Allen screws (22), which hold the shaft seal cover to the pump casing, and pull the bearing housing to remove the complete bearing housing with impeller, bearings, and shaft.

Only S32-25-110N and S50-32-135N:

Remove Allen screw (22) which holds the bearing housing to the pump casing and pull the bearing housing with impeller and guide vane piece out of the pump casing.

Then remove Allen screw (29) (only S32-25-110N), and guide vane piece and guide ring can be dismantled from the bearing housing.

5.2 DISMANTLING SHAFT SEAL

Remove nut (6). Pull off the impeller. Remove Allen screws (19), which hold the bearing housing to the shaft seal cover. Pull shaft seal cover and bearing housing apart, by which shaft seal and water deflector are pulled off the shaft.

Only S32-25-110N and S50-32-135N:

Unscrew impeller. Dismantle the oil seal ring (31) by puncturing the front to permit the oil seal ring to be pulled out with a hook. The oil seal ring cannot be used again. Dismantle the ring lock (30), and the shaft with bearings can be pulled out of the bearing housing. At the same time, the shaft seal and the water deflector are pulled off the shaft.

5.3 DISMANTLING SEAT

Press out the seat from behind the shaft seal cover (the bearing housing in S32-25-110N and S50-32-135N).

5.4 DISMANTLING SHAFT WITH BEARINGS

Before dismantling the shaft with bearings, remove the sunk key (16). The shaft can now be pulled out of the bearing housing allowing inspection of the bearings.

5.5 INSPECTION

When the pump has been dismantled, check the following parts for wear and damage:

- Sealing ring/impeller: Max. clearance 0.4-0.5 mm measured in radius.
(There is no sealing ring
in S32-25-110N
and S50-32-135N)
- Shaft seal/shaft seal cover: Check the seat for flatness and cracks.
Check the rubber parts for elasticity.
- Bearings: Replace in case of wear and noise.
- Non-return flap: Check for cracks and hardness

6. ASSEMBLING

6.1 FITTING SEALING RING IN PUMP CASING

When fitted, the sealing ring is to bear against the shoulder of the pump casing.

6.2 FITTING SHAFT WITH BEARINGS

Lead shaft with bearings into the bearing housing. Fit sunk key (16). (Fit ring lock (30) and a new oil seal ring (31) in S32-25-110N or S50-32-135N).

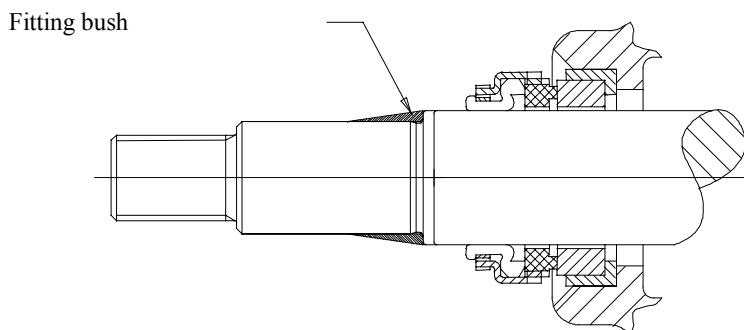
6.3 FITTING WATER DEFLECTOR

Assemble the bearing housing and the shaft seal cover. Lead the water deflector over the shaft until it

touches the shaft seal cover and then further 1-1.5 mm into the shaft seal cover (the bearing housing in S32-25-110N or S50-32-135N).

6.4 FITTING SHAFT SEAL

Before fitting the seat, clean the recess in the shaft seal cover (bearing housing in S32-25-110N and S50-32-135N). When fitting the seat, remove the protective coating, if any, without scratching the lapped surface. Dip the outer rubber ring of the seat into soapy water. Now press the seat into place with the fingers and check that all parts are correctly imbedded. If it is necessary to use tools for assembling, then protect the sliding surface of the seat to prevent it from being scratched or cut. Lubricate the inner diameter of the slide ring rubber bellows with soapy water and push it over the shaft. The use of a fitting bush as shown on the below assembly drawing is recommended to avoid that the rubber bellows is cut. Push the slide ring over the shaft with the hand. If the rubber bellows is tight, use a fitting tool and take care that the slide ring is not damaged.



If the carbon ring is not fixed, it is important to check that it is fitted correctly, i.e. the chamfered/lapped side is to face the seat. The carbon ring can be held by a little grease.

When using oil on the shaft, the bellows will settle and seat in about 15 minutes, and until then tightness should not be expected. After start, check by viewing the leak hole that there are no leaks.

6.5 FITTING IMPELLER

Fit the sunk key in the shaft and lead the impeller towards the shoulder of the shaft. Take care that the ring at the end of the shaft seal spring locates in the recess of the impeller. Secure the impeller with a washer and a nut.

Only S32-25-110N and S50-32-135N:

Apply LOCTITE 270 or similar to the thread on the shaft. Screw the impeller towards the shoulder of the shaft. Take care that the ring at the end of the shaft seal spring locates in the recess of the impeller.

6.6 FITTING GUIDE RING AND GUIDE VANE PIECE (ONLY S32-25-110N)

Place the guide ring (35) in the recess of the bearing housing. Fit and fasten the guide vane piece on the guide ring. Note that the flat part of the inlet neck of the guide vane piece is to face upwards, i.e. opposite of the drain passage for the shaft seal in the bearing housing. If the shaft cannot rotate freely, dismantle the guide vane piece again, and place a shim (34) between bearing housing and guide ring.

6.7 FITTING BEARING HOUSING AND SHAFT SEAL COVER

Place the gasket between pump casing and shaft seal cover on the shaft seal cover where it can be held with a little grease. Lead bearing housing with shaft seal cover into place and fasten. Note that the drain hole for the shaft seal faces downwards.

S32-25-110N:

Place the gasket (21) between pump casing and bearing housing on the bearing housing. Check that the non-return flap is placed correctly in the pump casing. Lead the bearing housing into place and fasten. Note that the drain passage for the shaft seal faces downwards.

S50-32-135N:

Place the gasket (21) between pump casing and bearing housing on the bearing housing. Lead the bearing housing into place and fasten. Note that the drain passage for the shaft seal faces downwards. If the shaft cannot rotate freely, dismantle the bearing housing again, and place an extra gasket (21) between bearing housing and pump casing.

6.8 SHAFT

When the pump has been assembled, check that the shaft rotates freely.

7. FROST PROTECTION

Pumps which are not in operation during frost periods are to be drained to avoid frost damage. Remove the plug in the inlet cover to empty the pump. Alternatively, it is possible to use anti-freeze liquids in normal constructions.

8. DISMANTLING

 Before dismantling the pump make sure that it has stopped. Empty the pump of liquid before it is dismantled from the piping system. If the pump has been pumping dangerous liquids you are to be aware of this and take the necessary safety measures. If the pump has been pumping hot liquids, take great care that it is drained before it is removed from the piping system.

If the pump has been pumping cold or very hot liquids, be aware that touching the pump surface is dangerous. Therefore, the necessary precautionary measures must be taken.

9. START-UP

 A self-priming centrifugal pump will not function until the pump casing has been filled with liquid.

 The liquid also serves as coolant for the shaft seal. In order to protect the shaft seal the pump must not run dry.

WARNING

For safety reasons the pump is only allowed to operate against a closed discharge valve for a short time (max. 5-10 minutes and at a max. temperature of 130°C). To protect the pump against unintentional operation it is equipped with a relief valve which opens at a preset pressure.

Be careful: When the valve opens, the escaping liquid will be hot.

The relief valve must in **no** circumstances be removed or re-adjusted !

As regards maintenance of the relief valve - see paragraph 11.

9.1 STARTING

Before starting the pump check that

- the shaft rotates freely without jarring sounds.
- the pump casing is filled with liquid.

Start the pump for a moment to check the direction of rotation. If the direction is correct (i.e. in the direction of the arrow), the pump may be started.

10. SYSTEM BALANCING

It is often difficult to calculate a manometric delivery head in advance. It is, however, decisively important to the quantity of liquid delivered.

A considerably smaller delivery head than expected will increase the quantity of liquid delivered, causing increased power consumption and perhaps cavitation in pump and piping. In the pump the impeller may show signs of heavy erosion caused by cavitation (corrosion) which may at times render an impeller unfit for use in a very short time. Not unusually do similar erosions occur in pipe bends and valves elsewhere in the piping system.

Therefore, after start-up, it is necessary to check either the quantity of liquid delivered or the power consumption of the pump e.g. by measuring the current intensity of the connected electric motor. Together with a reading of the differential pressure the quantity of water delivered can be determined against the characteristics of the pump.

Should the pump not function as intended, please proceed according to the fault-finding list. Bear in mind, though, that the pump was carefully checked and tested at the factory and that the majority of faults stem from the piping system.

| FAULT | CAUSE | REMEDY |
|-------------------------------------|--|---|
| The pump does not Prime | <ol style="list-style-type: none"> 1. The pump is not filled with liquid 2. Leaking non-return valve in pump 3. Wrong direction of rotation 4. Air is drawn in because of too little liquid or leaking suction line 5. Liquid lock in outlet line 6. Temperature of liquid too high 7. Air cannot escape on pressure side | <p>Fill pump casing with liquid</p> <p>Remove foreign body in valve/Remove any coating on mating faces</p> <p>Change direction of rotation</p> <p>Lower suction pipe/Tighten suction line</p> <p>Change the pressure line so that the air can pass out freely</p> <p>Replace liquid in pump casing/Wrong dimensioning/Contact DESMI</p> <p>Ventilate the system</p> |
| The pump has no or too low capacity | <ol style="list-style-type: none"> 1. Wrong direction of rotation 2. Piping system choked 3. The pump is choked 4. Suction line leaks Pump takes air 5. Suction lift too high 6. Pump and piping system wrongly dimensioned | <p>Change direction of rotation to clockwise when viewed from shaft end (the direction of the arrow)</p> <p>Clean or replace</p> <p>Clean the pump</p> <p>Find the leakage/repair the fault, non-return valve not submerged</p> <p>Check data sheet Q/H curve and NPSH or contact DESMI</p> <p>As 5</p> |

| FAULT | CAUSE | REMEDY |
|------------------------------|---|--|
| The pump uses too much power | 1. Counter-pressure too low 2. The liquid is heavier than water 3. Foreign body in pump 4. Electric motor is running on 2 phases | Insert orifice plate or check valve/Contact DESMI Contact DESMI Dismantle the pump, remove the cause Check fuses, cable connection, and cable |
| The pump makes noise | 1. Cavitation in pump | Suction lift too high/ Suction line wrongly dimensioned/Liquid temperature too high |

11. INSPECTION AND MAINTENANCE

Inspect the shaft seal for leaks at regular intervals (leak through the hole in the lower part of the shaft seal cover)

Activate the relief valve at regular intervals in order to check the function. If the valve is choked, replace or clean it, if possible.

- Before inspection of a pump without guard check that the pump cannot be started unintentionally.
- The system is to be without pressure and drained of liquid.
- The repairman must be familiar with the type of liquid which has been pumped as well as the safety measures he is to take when handling the liquid.

11.1 DRAINING THE PUMP

When the piping system has been drained, note that there is still liquid in the pump. Remove the liquid by dismantling the pipe plug (75) in the inlet cover of the pump.

11.2 BEARINGS

The pump is equipped with ball bearings with a nominal life of 25,000 working hours when direct coupled to electric motor, whereas the nominal life with overhanging V-belt drive is about 10,000 working hours. The bearings are lubricated for life and require no attention but are to be replaced in case of noise or bearing wear.

12. REPAIRS

12.1 ORDERING SPARE PARTS

When ordering spare parts please always state pump type and pump No. (appears on the name plate of the pump). See also spare parts drawing with item Nos.

13. OPERATING DATA

The following working pressures are allowed:

| Pump | S32-25-110N | S50-32-135N | S70-50-175N | S70-50-220N | S70-50-275N |
|-----------------|--------------|--------------|--------------|---------------|--------------|
| PRESSURE mWC | 45 | 45 | 65 | 100 | 150 |
| Pump | S80-70-175N | S80-70-220N | S80-70-275N | S100-80-175N | S100-80-220N |
| PRESSURE mWC | 65 | 100 | 160 | 65 | 100 |
| Pump | S100-80-275N | S125-80-220N | S125-80-275N | S125-100-220N | |
| PRESSURE mWC | 150 | 100 | 150 | 100 | |

(10.2 mWC = 1 bar)

The above-mentioned max. working pressure is **NOT** valid for pumps approved by a classification society. Pumps approved by classification societies have been pressure tested according to the requirements of these societies, i.e. a test pressure of 1.5 x the permissible working pressure. The test pressure is stated in the test certificate and stamped into the discharge flange of the pump.

The powers stated in the table below are the highest possible absorbed by the pump, whereas the min./max. values for flow and pressure indicate DESMI's recommended operating range for the pump with the biggest impeller.

| Pump | Max. Power kw 1450/1750/- 2950/3500 RPM | Min. Flow m3/h 1450/1750/- 2950/3500 RPM | Max. Fflow m3/h 1450/1750/- 2950/3500 RPM | Min. Pressure mVS 1450/1750/- 2950/3500 RPM | Max. Pressure mVS 1450/1750/- 2950/3500 RPM |
|---------------|--|---|--|--|--|
| S32-25-110N | 0.2/0.3/0.9/1.4 | 2.5/3.0/4.5/5.5 | 6.0/7.0/12.0/13.5 | 1.7/2.8/8.0/12.5 | 3.6/5.3/15.0/21 |
| S50-32-135N | 0.3/0.5/2.1/3.5 | 4,0/4,5/8,0/9,0 | 11,0/13,5/23/27 | 3.0/4.2/12.0/17.0 | 6.0/8.7/25/35 |
| S70-50-175N | 0.8/1.2/6.0/10.0 | 8.0/10.0/17.5/20 | 20/24/45/53 | 5.6/8.4/19.0/27 | 9.2/13.5/38/53 |
| S70-50-220N | 1.6/2.7/12.3/20.5 | 8,0/9,0/15/20 | 24/27/45/55 | 5.5/9.5/31/40 | 14.2/21/63/86 |
| S70-50-275N | 3.5/6.0/22/35 | 10,0/12,0/14,0/16,0 | 26/32/32/38 | 16.0/21/88/123 | 24/34/103/143 |
| S80-70-175N | 1.1/1.8/8.3/13.5 | 16,0/17,5/30/35 | 39/48/80/95 | 4.6/6.0/16.5/23 | 8.7/12.5/36/50 |
| S80-70-220N | 2.4/4.2/18.5/31 | 15,5/18,5/30/35 | 43/53/80/95 | 9.5/13.0/42/59 | 15.5/22/64/90 |
| S80-70-275N | 4.4/7.4/32/53 | 15,0/18,0/30/35 | 40/50/80/95 | 16/22/67/94 | 25/36/103/143 |
| S100-80-175N | 1.6/2,8/12.5/21 | 30/35/60/70 | 70/85/150/170 | 4.6/6.2/15.0/24 | 8.3/12.2/34/48 |
| S100-80-220N | 3.5/6.1/27/47 | 28/37/58/80 | 85/97/170/190 | 7.0/9.2/31/48 | 14,6/21/60/82 |
| S100-80-275N | 6.8/12.0/55/92 | 35/40/70/80 | 85/100/160/180 | 13.5/19.5/60/90 | 23/33/93/130 |
| S125-80-220N | 4.5/8.0/36.5/61 | 60/65/100/120 | 135/150/240/250 | 5.3/10.0/30/54 | 12.4/19.0/55/77 |
| S125-80-275N | 8.5/15.0/70/118 | 50/60/100/120 | 120/145/220/260 | 14.0/19.8/62/88 | 24/34/94/131 |
| S125-100-220N | 5.4/9.5/46/74 | 70/85/140/140 | 170/200/300/320 | 6.7/10.2/34/54 | 12.2/17.8/51/73 |

14. EC DECLARATION OF CONFORMITY

DESMI, A/S De Smithske, hereby declare that our pumps of the MODULAR S-N type are manufactured in conformity with the provisions of the COUNCIL DIRECTIVE of June 14, 1989, on mutual approximation of the laws of the member states on the safety of machines (98/37/EC with subsequent amendments) with special reference to Annex I of the Directive on essential safety and health requirements in relation to the construction and manufacture of machines.

The following harmonized standards have been used:

DS/EN 292-1, DS/EN 292-2

CE - marks are applied to pumps with prime movers only. Pumps with CE - mark and electric motor are manufactured in conformity with the low-voltage directive.

Pumps delivered by us without prime movers may only be used when the prime mover and the connection between prime mover and pump comply with the above directive as well as the low-voltage directive.

Nørresundby, September 14, 2001

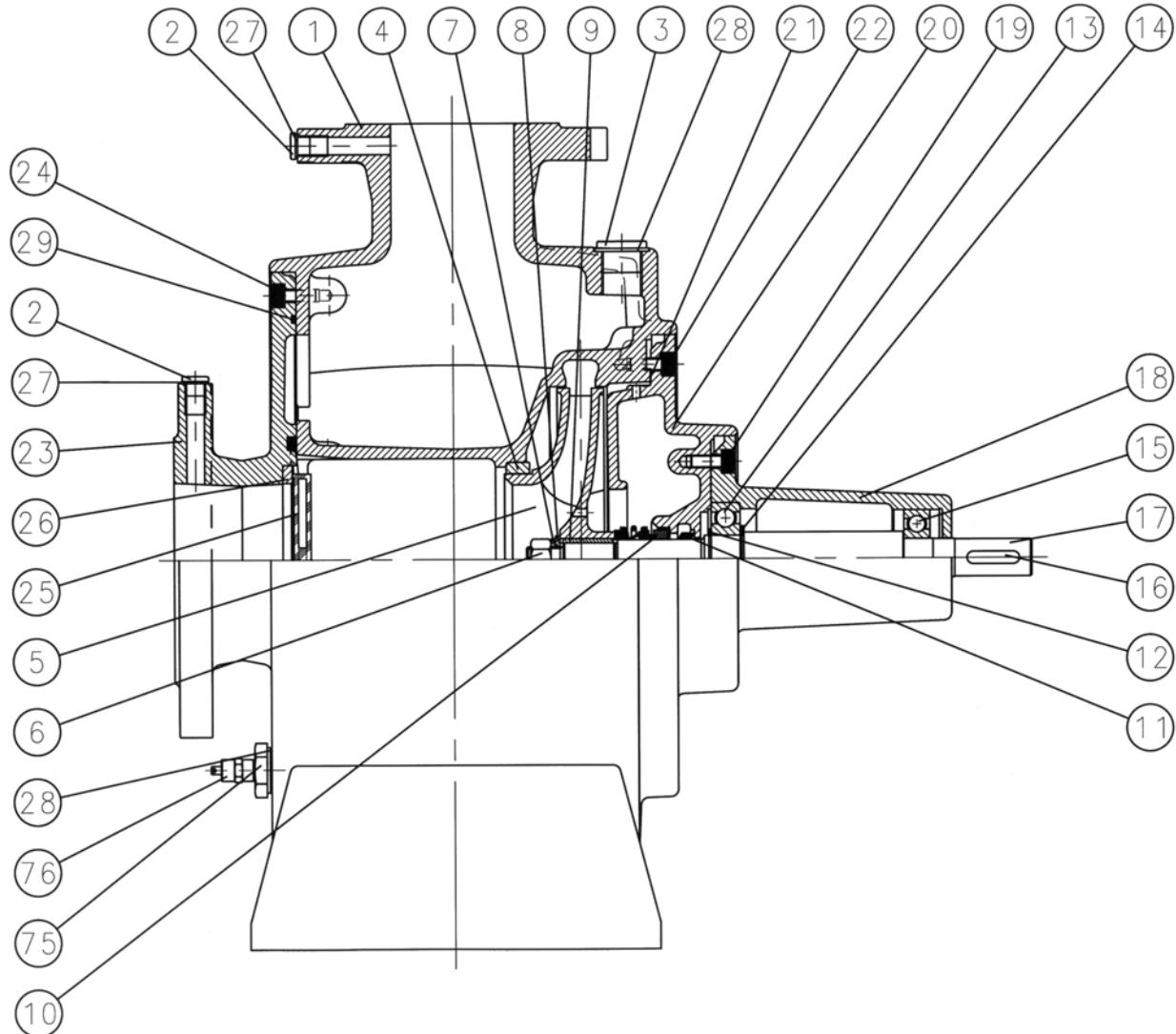


Poul Erik Mikkelsen
R&D Manager

DESMI
A/S De Smithske
Tagholm 1
9400 Nørresundby

15. ASSEMBLY DRAWINGS

Assembly drawings of S32-25-110N and S50-32-135N are shown on the next pages.



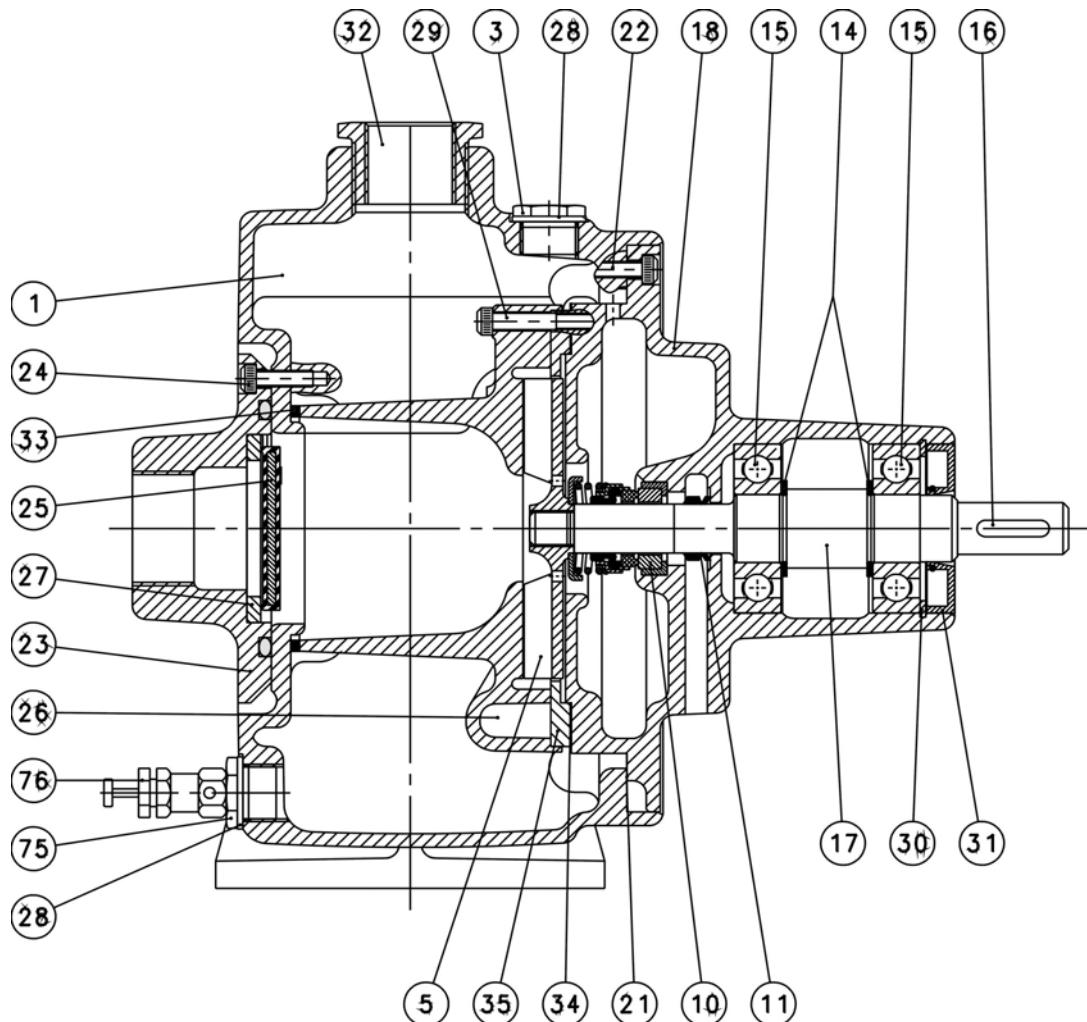
16. SPARE PARTS LISTS

Spare parts lists for S32-25-110N and S50-32-135N are shown on the next pages.

| | | | | | |
|----|-----------------------|----|------------------|----|-----------------|
| 1 | Pump casing | 11 | Water deflector | 21 | Gasket |
| 2 | Pipe plug | 12 | Ring lock | 22 | Allen screw |
| 3 | Pipe plug | 13 | Ball bearing | 23 | Suction piece |
| 4 | Sealing ring | 14 | Support disc | 24 | Allen screw |
| 5 | Impeller | 15 | Ball bearing | 25 | Non-return flap |
| 6 | Nut | 16 | Sunk key | 26 | Contact ring |
| 7 | Spring collar | 17 | Shaft | 27 | Gasket |
| 8 | Washer | 18 | Bearing housing | 28 | Gasket |
| 9 | Sunk key | 19 | Allen screw | 29 | O-ring |
| 10 | Mechanical shaft seal | 20 | Shaft seal cover | 75 | Drain plug |
| | | | | 76 | Relief valve |

ASSEMBLY DRAWING S32-25-110N

Assembly drawing of S50-32-135N is shown on the next page.

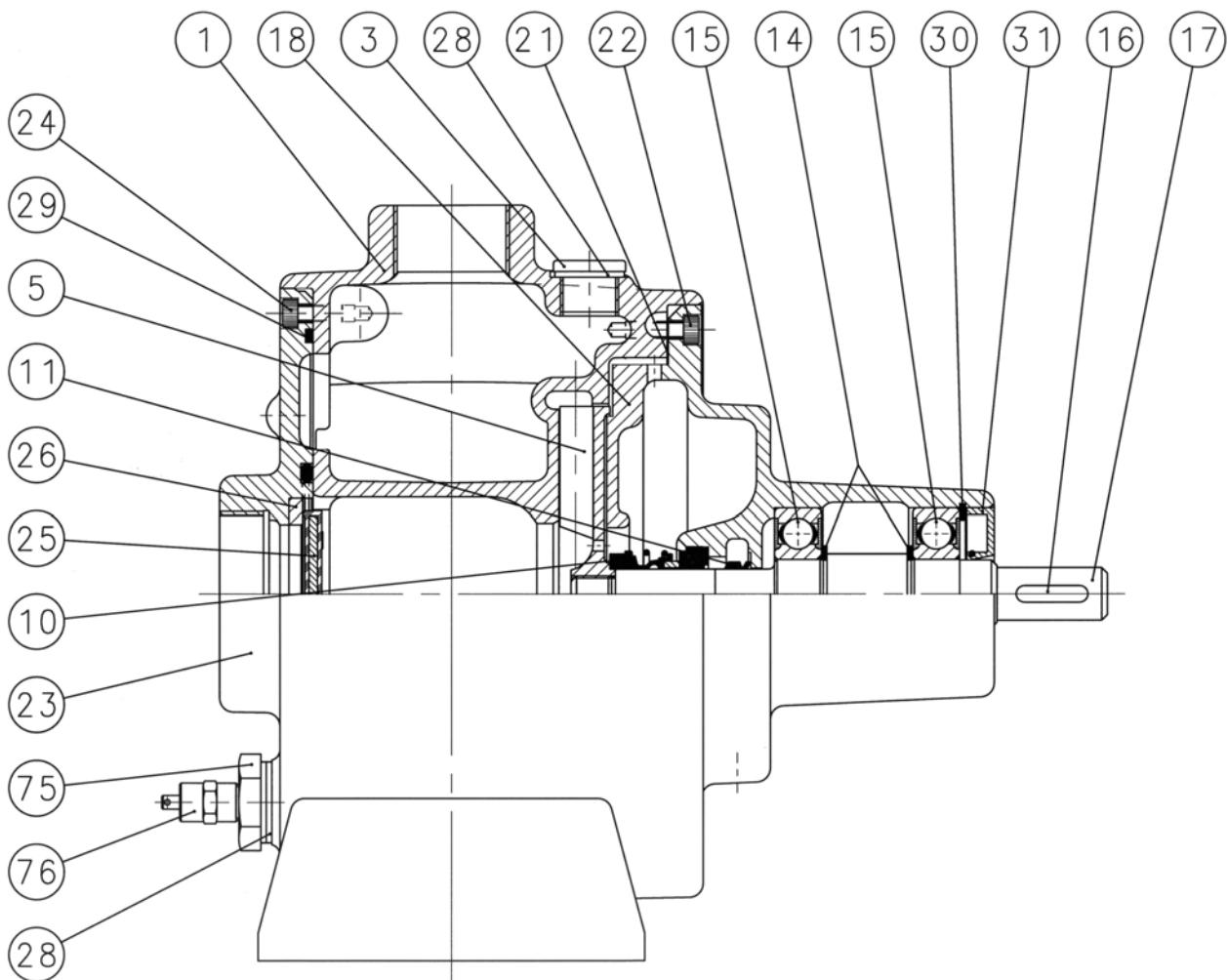


SPARE PARTS LIST S32-25-110N

Spare parts list for S50-32-135N is shown on the next page.

| | | |
|---------------------|---------------------|------------------|
| 1 Pump casing | 18 Bearing housing | 29 Allen screw |
| 3 Pipe plug | 21 Gasket | 30 Ring lock |
| 5 Impeller | 22 Allen screw | 31 Oil seal ring |
| 10 Mech. shaft seal | 23 Suction piece | 32 Reducing bush |
| 11 Water deflector | 24 Allen screw | 33 Gasket |
| 14 Support disc | 25 Non-return flap | 34 Shim |
| 15 Ball bearing | 26 Guide vane piece | 35 Guide ring |
| 16 Sunk key | 27 Contact ring | 75 Drain plug |
| 17 Shaft | 28 Sealing washer | 76 Relief valve |

ASSEMBLY DRAWING S50-32-135N



SPARE PARTS LIST S50-32-135N

| | | | | | |
|----|------------------|----|-----------------|----|-----------------|
| 1 | Pump casing | 16 | Sunk key | 25 | Non-return flap |
| 3 | Pipe plug | 17 | Shaft | 26 | Contact ring |
| 5 | Impeller | 18 | Bearing housing | 28 | Sealing washer |
| 10 | Mech. shaft seal | 21 | Gasket | 29 | O-ring |
| 11 | Water deflector | 22 | Allen screw | 30 | Ring lock |
| 14 | Support disc | 23 | Suction piece | 31 | Oil seal ring |
| 15 | Ball bearing | 24 | Allen screw | 75 | Drain plug |
| | | | | 76 | Relief valve |

Sparepart list S32-25-110/A09

Item no.: 670467,

| Pos. No. | Quantity | Item no. | Description |
|-----------------|-----------------|-----------------|--------------------------------|
| | 1.00 | 670467 | S32-25-110/A09 |
| | 1.00 | 704047 | STICKY ARROW LABEL. |
| | 1.00 | 704048 | DESMI TRANSFERS LABELS BLACK |
| | 1.00 | 709543 | NAME PLATE PLAST PUMP |
| | 1.00 | 514261B | IMPELLER A1 ALBZ |
| 0001 | 1.00 | 512370 | PUMP-CASING S32-25-110 GG20. |
| 0003 | 1.00 | 702852 | PLUG R 1/2" DIN908 ST.5.8 |
| 0005 | 1.00 | 514261 | IMPELLER A1 ALBZ |
| 0010 | 1.00 | 712091 | MECHANICAL SHAFT SEAL |
| 0011 | 1.00 | 704172 | V.RING 18S NITRILE |
| 0014 | 2.00 | 704173 | SHOULDER RING Ø25 Ø35X2,0 ST. |
| 0015 | 2.00 | 704009 | BALL BEARING |
| 0016 | 1.00 | 704246 | KEY B 6X6X20 ST.60.11 |
| 0017 | 1.00 | 514320 | SHAFT 1S SIS2324 |
| 0018 | 1.00 | 512270 | BEARING BRACKET GG20 |
| 0021 | 1.00 | 516013 | BODY GASKETS Ø182X165X0,4 OJ9 |
| 0022 | 8.00 | 705282 | ALLEN SCREW M6 X 20 SIS2343 |
| 0023 | 1.00 | 514460 | INLET S 32-25-110 GG20 |
| 0024 | 4.00 | 703339 | SCREW M6X16/DIN912-AISI316 |
| 0025 | 1.00 | 514160 | CHECK VALVE DN50 NITRIL |
| 0026 | 1.00 | 514450 | GUIDE-VANE. SA1 GG20. |
| 0027 | 1.00 | 516210 | CONTACT RING |
| 0028 | 2.00 | 704188 | 1/2" DOWTY SELON RG1/2 NYLON 6 |
| 0029 | 2.00 | 704180 | ALLEN SCREW M6X40 SIS2343 |
| 0030 | 1.00 | 701107 | CIRCLIP J 62 DIN 472 |
| 0031 | 1.00 | 704181 | OIL SEALING RING DIN3760 |
| 0032 | 1.00 | 704176 | BUSHING 5/4X1 BSP GALV,CAST IR |
| 0033 | 1.00 | 110611 | GASKET SA-1 NITRIL. |
| 0034 | 2.00 | 516080 | SHIM Ø160X0,2 OLIEP. 0J9 |
| 0035 | 1.00 | 516070 | GUIDE RING160/112X7 GG20 |
| 0075 | 1.00 | 110371 | PLUG 1/2" F. SAFETY VALVE |
| 0076 | 1.00 | 709637 | SAFETY VALVE 1/4" INDST. 6 BAR |

Sparepart list S50-32-135N/A09

Item no.: 677240,

| Pos. No. | Quantity | Item no. | Description |
|-----------------|-----------------|-----------------|--------------------------------|
| | 1.00 | 677240 | S50-32-135N/A09 |
| | 1.00 | 704047 | STICKY ARROW LABEL. |
| | 1.00 | 704048 | DESMI TRANSFERS LABELS BLACK |
| | 1.00 | 709543 | NAME PLATE PLAST PUMP |
| | 1.00 | 514231B | IMPELLER B2 ALBZ B |
| 0001 | 1.00 | 521790 | PUMP CASING SB2 GG20 G |
| 0003 | 1.00 | 702852 | PLUG R 1/2" DIN908 ST.5.8 |
| 0005 | 1.00 | 514231 | IMPELLER B2 ALBZ |
| 0010 | 1.00 | 712091 | MECHANICAL SHAFT SEAL |
| 0011 | 1.00 | 704172 | V.RING 18S NITRILE |
| 0014 | 2.00 | 704173 | SHOULDER RING Ø25 Ø35X2,0 ST. |
| 0015 | 2.00 | 704009 | BALL BEARING |
| 0016 | 1.00 | 704246 | KEY B 6X6X20 ST.60.11 |
| 0017 | 1.00 | 514320 | SHAFT 1S SIS2324 |
| 0018 | 1.00 | 512270 | BEARING BRACKET GG20 |
| 0021 | 1.00 | 516013 | BODY GASKETS Ø182X165X0,4 OJ9 |
| 0022 | 8.00 | 705282 | ALLEN SCREW M6 X 20 SIS2343 |
| 0023 | 1.00 | 521760 | INLET DN50 GG20 |
| 0024 | 8.00 | 703339 | SCREW M6X16/DIN912-AISI316 |
| 0025 | 1.00 | 514160 | CHECK VALVE DN50 NITRIL |
| 0026 | 1.00 | 516210 | CONTACT RING |
| 0028 | 2.00 | 704188 | 1/2" DOWTY SELON RG1/2 NYLON 6 |
| 0029 | 1.00 | 713237 | O-RING Ø183.82X2.62 NITRIL |
| 0030 | 1.00 | 701107 | CIRCLIP J 62 DIN 472 |
| 0031 | 1.00 | 704181 | OIL SEALING RING DIN3760 |
| 0075 | 1.00 | 110371 | PLUG 1/2" F. SAFETY VALVE |
| 0076 | 1.00 | 709637 | SAFETY VALVE 1/4" INDST. 6 BAR |

Sparepart list S70-50-175N/A09.

Item no.: 673900,

| Pos. No. | Quantity | Item no. | Description |
|-----------------|-----------------|-----------------|--------------------------------|
| | 1.00 | 673900 | S70-50-175N/A09. |
| | 1.00 | 514571B | IMPELLER C3 ALBZ Ø175 A |
| 0001 | 1.00 | 517840 | PUMP CASING SC3-A GG20 |
| 0002 | 2.00 | 702850 | PLUG R 1/4" DIN908 ST.5.8 |
| 0003 | 1.00 | 702852 | PLUG R 1/2" DIN908 ST.5.8 |
| 0004 | 1.00 | 516040 | SEAL RING Ø80X10 ALBZ |
| 0005 | 1.00 | 514571 | IMPELLER C3 ALBZ. |
| 0006 | 1.00 | 704037 | NUT M16/DIN934-AISI316 |
| 0007 | 1.00 | 704032 | SPR.WASHER BM16 SIS2343 DIN127 |
| 0008 | 1.00 | 704033 | WASHER AM16 SIS2343 DIN125 |
| 0009 | 1.00 | 704034 | KEY B 6X6X32 SIS2343 DS.96 |
| 0010 | 1.00 | 712094 | MECHANICAL SHAFT SEAL |
| 0011 | 1.00 | 704031 | V-RING 25S NITRIL |
| 0012 | 1.00 | 704007 | LOCKRING 30X1,5 DIN983 |
| 0013 | 1.00 | 704010 | BALL BEARING |
| 0014 | 1.00 | 704008 | WASHER Ø30 Ø42X2,5 ST. |
| 0015 | 1.00 | 704009 | BALL BEARING |
| 0016 | 1.00 | 702314 | KEY A 8X7X32 ST60.11 |
| 0017 | 1.00 | 514340 | SHAFT 3S SIS2324 C |
| 0018 | 1.00 | 514010 | BEARING HOUSING 2 GG20 |
| 0019 | 4.00 | 704367 | ALLEN SCREW M8X20/DIN912-AISI |
| 0020 | 1.00 | 514560 | REAR COVER A3 GG20 |
| 0021 | 1.00 | 516014 | GASKET Ø194X180X0.4 PAPER OJ9 |
| 0022 | 8.00 | 704367 | ALLEN SCREW M8X20/DIN912-AISI |
| 0023 | 1.00 | 517450 | INLET DN70 FOR SC3 GG20 |
| 0024 | 8.00 | 704367 | ALLEN SCREW M8X20/DIN912-AISI |
| 0025 | 1.00 | 514161 | CHECK VALVE DN70 NITRIL |
| 0026 | 1.00 | 516211 | CONTACT RING DN70 RG5 |
| 0027 | 2.00 | 704186 | DOWTY SELON RG1/4 NYLON 6 |
| 0028 | 2.00 | 704188 | 1/2" DOWTY SELON RG1/2 NYLON 6 |
| 0029 | 1.00 | 710404 | O-RING Ø202.80X3.53 NITRIL |
| 0075 | 1.00 | 110371 | PLUG 1/2" F. SAFETY VALVE |
| 0076 | 1.00 | 705392 | SAFETY VALVE 1/4"INDST. 10 BAR |

Sparepart list S70-50-220N/A09

Item no.: 677222,

| Pos. No. | Quantity | Item no. | Description |
|-----------------|-----------------|-----------------|--------------------------------|
| | 1.00 | 677222 | S70-50-220N/A09 |
| | 1.00 | 514151B | IMPELLER C4 Ø220 ALBZ B |
| 0001 | 1.00 | 521710 | PUMP CASING SC4 GG20 |
| 0002 | 2.00 | 702850 | PLUG R 1/4" DIN908 ST.5.8 |
| 0003 | 1.00 | 702852 | PLUG R 1/2" DIN908 ST.5.8 |
| 0004 | 1.00 | 516040 | SEAL RING Ø80X10 ALBZ |
| 0005 | 1.00 | 514151 | IMPELLER C4 ALBZ |
| 0006 | 1.00 | 704037 | NUT M16/DIN934-AISI316 |
| 0007 | 1.00 | 704032 | SPR.WASHER BM16 SIS2343 DIN127 |
| 0008 | 1.00 | 704033 | WASHER AM16 SIS2343 DIN125 |
| 0009 | 1.00 | 704034 | KEY B 6X6X32 SIS2343 DS.96 |
| 0010 | 1.00 | 712094 | MECHANICAL SHAFT SEAL |
| 0011 | 1.00 | 704031 | V-RING 25S NITRIL |
| 0012 | 1.00 | 704007 | LOCKRING 30X1,5 DIN983 |
| 0013 | 1.00 | 704010 | BALL BEARING |
| 0014 | 1.00 | 704008 | WASHER Ø30 Ø42X2,5 ST. |
| 0015 | 1.00 | 704009 | BALL BEARING |
| 0016 | 1.00 | 702314 | KEY A 8X7X32 ST60.11 |
| 0017 | 1.00 | 514340 | SHAFT 3S SIS2324 C |
| 0018 | 1.00 | 514010 | BEARING HOUSING 2 GG20 |
| 0020 | 1.00 | 514120 | REAR COVER B4 GG20 |
| 0021 | 1.00 | 516012 | GASKET Ø240X225X0,4 |
| 0023 | 1.00 | 521730 | INLET DN70 GG20 |
| 0024 | 8.00 | 760079 | ALLEN SCREW M10 X 25 A4 DIN912 |
| 0025 | 1.00 | 514161 | CHECK VALVE DN70 NITRIL |
| 0026 | 1.00 | 516211 | CONTACT RING DN70 RG5 |
| 0027 | 2.00 | 704186 | DOWTY SELON RG1/4 NYLON 6 |
| 0028 | 2.00 | 704188 | 1/2" DOWTY SELON RG1/2 NYLON 6 |
| 0029 | 1.00 | 710405 | O-RING Ø247.25X3.53 NITRIL |
| 0075 | 1.00 | 110371 | PLUG 1/2" F. SAFETY VALVE |
| 0076 | 1.00 | 705207 | SAFETY VALVE 1/4" 15 BAR |
| 1922 | 12.00 | 704367 | ALLEN SCREW M8X20/DIN912-AISI |

Sparepart list S70-50-275N/A09

Item no.: 674971,

| Pos. No. | Quantity | Item no. | Description |
|----------|----------|----------|--------------------------------|
| | 1.00 | 674971 | S70-50-275N/A09 |
| | 1.00 | 514101B | IMPELLER C5 ALBZ C |
| 0001 | 1.00 | 517860 | PUMP CASING SC5 GG20 |
| 0002 | 2.00 | 702850 | PLUG R 1/4" DIN908 ST.5.8 |
| 0003 | 1.00 | 702852 | PLUG R 1/2" DIN908 ST.5.8 |
| 0004 | 1.00 | 516040 | SEAL RING Ø80X10 ALBZ |
| 0005 | 1.00 | 514101 | IMPELLER C5 ALBZ |
| 0006 | 1.00 | 704037 | NUT M16/DIN934-AISI316 |
| 0007 | 1.00 | 704032 | SPR.WASHER BM16 SIS2343 DIN127 |
| 0008 | 1.00 | 704033 | WASHER AM16 SIS2343 DIN125 |
| 0009 | 1.00 | 704034 | KEY B 6X6X32 SIS2343 DS.96 |
| 0010 | 1.00 | 712094 | MECHANICAL SHAFT SEAL |
| 0011 | 1.00 | 704031 | V-RING 25S NITRIL |
| 0012 | 1.00 | 704007 | LOCKRING 30X1,5 DIN983 |
| 0013 | 1.00 | 704010 | BALL BEARING |
| 0014 | 1.00 | 704008 | WASHER Ø30 Ø42X2,5 ST. |
| 0015 | 1.00 | 704009 | BALL BEARING |
| 0016 | 1.00 | 702314 | KEY A 8X7X32 ST60.11 |
| 0017 | 1.00 | 514340 | SHAFT 3S SIS2324 C |
| 0018 | 1.00 | 514010 | BEARING HOUSING 2 GG20 |
| 0019 | 4.00 | 704367 | ALLEN SCREW M8X20/DIN912-AISI |
| 0020 | 1.00 | 514050 | BACK COVER A5 GG20 |
| 0021 | 1.00 | 516011 | GASKET Ø296/271X0,4 |
| 0022 | 8.00 | 707766 | ALLEN SCREW M12 X 25 A4 DIN912 |
| 0023 | 1.00 | 517510 | INLET DN70 FOR SC5 GG20 |
| 0024 | 16.00 | 760079 | ALLEN SCREW M10 X 25 A4 DIN912 |
| 0025 | 1.00 | 514161 | CHECK VALVE DN70 NITRIL |
| 0026 | 1.00 | 516211 | CONTACT RING DN70 RG5 |
| 0027 | 2.00 | 704186 | DOWTY SELON RG1/4 NYLON 6 |
| 0028 | 1.00 | 704188 | 1/2" DOWTY SELON RG1/2 NYLON 6 |
| 0029 | 1.00 | 507133 | O-RING Ø158.34 X 3.53 NITRIL |
| 0029 | 1.00 | 710709 | O-RING Ø304.39X3.53 NITRIL |
| 0075 | 1.00 | 110371 | PLUG 1/2" F. SAFETY VALVE |
| 0076 | 1.00 | 709636 | SAFETY VALVE 1/4" INDST.18 BAR |
| 0086 | 2.00 | 711372 | POINTED SCREW M10X20 A4 DIN913 |
| 028A | 1.00 | 704188 | 1/2" DOWTY SELON RG1/2 NYLON 6 |

Sparepart list S80-70-175N/A09

Item no.: 674440,

| Pos. No. | Quantity | Item no. | Description |
|----------|----------|----------|--------------------------------|
| | 1.00 | 674440 | S80-70-175N/A09 |
| | 1.00 | 514581B | IMPELLER D3 ALBZ |
| 0001 | 1.00 | 517870 | PUMP CASING SD3 GG20 |
| 0002 | 2.00 | 702850 | PLUG R 1/4" DIN908 ST.5.8 |
| 0003 | 1.00 | 702866 | PLUG R 3/4" DIN908 ST5.8 |
| 0004 | 1.00 | 516042 | SEAL RING Ø100X12 ALBZ |
| 0005 | 1.00 | 514581 | IMPELLER D3 ALBZ. |
| 0006 | 1.00 | 704037 | NUT M16/DIN934-AISI316 |
| 0007 | 1.00 | 704032 | SPR.WASHER BM16 SIS2343 DIN127 |
| 0008 | 1.00 | 704033 | WASHER AM16 SIS2343 DIN125 |
| 0009 | 1.00 | 704034 | KEY B 6X6X32 SIS2343 DS.96 |
| 0010 | 1.00 | 712094 | MECHANICAL SHAFT SEAL |
| 0011 | 1.00 | 704031 | V-RING 25S NITRIL |
| 0012 | 1.00 | 704007 | LOCKRING 30X1,5 DIN983 |
| 0013 | 1.00 | 704010 | BALL BEARING |
| 0014 | 1.00 | 704008 | WASHER Ø30 Ø42X2,5 ST. |
| 0015 | 1.00 | 704009 | BALL BEARING |
| 0016 | 1.00 | 702314 | KEY A 8X7X32 ST60.11 |
| 0017 | 1.00 | 514340 | SHAFT 3S SIS2324 C |
| 0018 | 1.00 | 514010 | BEARING HOUSING 2 GG20 |
| 0019 | 4.00 | 704367 | ALLEN SCREW M8X20/DIN912-AISI |
| 0020 | 1.00 | 514560 | REAR COVER A3 GG20 |
| 0021 | 1.00 | 516014 | GASKET Ø194X180X0.4 PAPER OJ9 |
| 0022 | 8.00 | 704367 | ALLEN SCREW M8X20/DIN912-AISI |
| 0023 | 1.00 | 517540 | INLET DN80 FOR SD3 GG20 |
| 0024 | 8.00 | 704367 | ALLEN SCREW M8X20/DIN912-AISI |
| 0025 | 1.00 | 514162 | CHECK VALVE DN80 NITRIL |
| 0026 | 1.00 | 516212 | CONTACT RING DN80 RG5 |
| 0027 | 2.00 | 704186 | DOWTY SELON RG1/4 NYLON 6 |
| 0028 | 1.00 | 703636 | BONDED SEAL 3/4". |
| 0029 | 1.00 | 710407 | O-RING Ø215.50X3.53 NITRIL |
| 0075 | 1.00 | 110371 | PLUG 1/2" F. SAFETY VALVE |
| 0076 | 1.00 | 705392 | SAFETY VALVE 1/4"INDST. 10 BAR |
| 0086 | 2.00 | 711381 | POINTED SCREW M8X16 A4 DIN913 |
| 028A | 1.00 | 704188 | 1/2" DOWTY SELON RG1/2 NYLON 6 |

Sparepart list S80-70-220N/A09

Item no.: 674880,

| Pos. No. | Quantity | Item no. | Description |
|----------|----------|----------|--------------------------------|
| | 1.00 | 674880 | S80-70-220N/A09 |
| | 1.00 | 514111B | IMPELLER D4 ALBZ |
| 0001 | 1.00 | 517880 | PUMPCASING SD4 GG20 |
| 0002 | 2.00 | 702850 | PLUG R 1/4" DIN908 ST.5.8 |
| 0003 | 1.00 | 702866 | PLUG R 3/4" DIN908 ST5.8 |
| 0004 | 1.00 | 516042 | SEAL RING Ø100X12 ALBZ |
| 0005 | 1.00 | 514111 | IMPELLER D4 ALBZ |
| 0006 | 1.00 | 704037 | NUT M16/DIN934-AISI316 |
| 0007 | 1.00 | 704032 | SPR.WASHER BM16 SIS2343 DIN127 |
| 0008 | 1.00 | 704033 | WASHER AM16 SIS2343 DIN125 |
| 0009 | 1.00 | 704034 | KEY B 6X6X32 SIS2343 DS.96 |
| 0010 | 1.00 | 712094 | MECHANICAL SHAFT SEAL |
| 0011 | 1.00 | 704031 | V-RING 25S NITRIL |
| 0012 | 1.00 | 704007 | LOCKRING 30X1,5 DIN983 |
| 0013 | 1.00 | 704010 | BALL BEARING |
| 0014 | 1.00 | 704008 | WASHER Ø30 Ø42X2,5 ST. |
| 0015 | 1.00 | 704009 | BALL BEARING |
| 0016 | 1.00 | 702314 | KEY A 8X7X32 ST60.11 |
| 0017 | 1.00 | 514340 | SHAFT 3S SIS2324 C |
| 0018 | 1.00 | 514010 | BEARING HOUSING 2 GG20 |
| 0019 | 4.00 | 704367 | ALLEN SCREW M8X20/DIN912-AISI |
| 0020 | 1.00 | 514120 | REAR COVER B4 GG20 |
| 0021 | 1.00 | 516012 | GASKET Ø240X225X0,4 |
| 0022 | 8.00 | 704367 | ALLEN SCREW M8X20/DIN912-AISI |
| 0023 | 1.00 | 517570 | INLET DN80 TIL SD4 GG20 |
| 0024 | 8.00 | 760079 | ALLEN SCREW M10 X 25 A4 DIN912 |
| 0025 | 1.00 | 514162 | CHECK VALVE DN80 NITRIL |
| 0026 | 1.00 | 516212 | CONTACT RING DN80 RG5 |
| 0027 | 2.00 | 704186 | DOWTY SELON RG1/4 NYLON 6 |
| 0028 | 1.00 | 703636 | BONDED SEAL 3/4". |
| 0029 | 1.00 | 710405 | O-RING Ø247.25X3.53 NITRIL |
| 0075 | 1.00 | 110371 | PLUG 1/2" F. SAFETY VALVE |
| 0076 | 1.00 | 705207 | SAFETY VALVE 1/4" 15 BAR |
| 0086 | 2.00 | 2447312 | SCREW M10X16/DIN913-AISI316 |
| 028A | 1.00 | 704188 | 1/2" DOWTY SELON RG1/2 NYLON 6 |

Sparepart list S80-70-275N/A09

Item no.: 677759,

| Pos. No. | Quantity | Item no. | Description |
|-----------------|-----------------|-----------------|--------------------------------|
| | 1.00 | 677759 | S80-70-275N/A09 |
| | 1.00 | 514081B | IMPELLER D5 ALBZ |
| 0001 | 1.00 | 522580 | PUMP CASING SD5 GG20 |
| 0002 | 2.00 | 702850 | PLUG R 1/4" DIN908 ST.5.8 |
| 0003 | 1.00 | 702866 | PLUG R 3/4" DIN908 ST.5.8 |
| 0004 | 1.00 | 516042 | SEAL RING Ø100X12 ALBZ |
| 0005 | 1.00 | 514081 | IMPELLER D5 ALBZ |
| 0006 | 1.00 | 704037 | NUT M16/DIN934-AISI316 |
| 0007 | 1.00 | 704032 | SPR.WASHER BM16 SIS2343 DIN127 |
| 0008 | 1.00 | 704033 | WASHER AM16 SIS2343 DIN125 |
| 0009 | 1.00 | 704034 | KEY B 6X6X32 SIS2343 DS.96 |
| 0010 | 1.00 | 712094 | MECHANICAL SHAFT SEAL |
| 0011 | 1.00 | 704031 | V-RING 25S NITRIL |
| 0012 | 1.00 | 704007 | LOCKRING 30X1,5 DIN983 |
| 0013 | 1.00 | 704010 | BALL BEARING |
| 0014 | 1.00 | 704008 | WASHER Ø30 Ø42X2,5 ST. |
| 0015 | 1.00 | 704009 | BALL BEARING |
| 0016 | 1.00 | 702314 | KEY A 8X7X32 ST60.11 |
| 0017 | 1.00 | 514340 | SHAFT 3S SIS2324 C |
| 0018 | 1.00 | 514010 | BEARING HOUSING 2 GG20 |
| 0019 | 4.00 | 704367 | ALLEN SCREW M8X20/DIN912-AISI |
| 0020 | 1.00 | 514050 | BACK COVER A5 GG20 |
| 0021 | 1.00 | 516011 | GASKET Ø296/271X0,4 |
| 0022 | 8.00 | 707766 | ALLEN SCREW M12 X 25 A4 DIN912 |
| 0023 | 1.00 | 522710 | INLET DN80 GG20 |
| 0024 | 8.00 | 707766 | ALLEN SCREW M12 X 25 A4 DIN912 |
| 0025 | 1.00 | 514162 | CHECK VALVE DN80 NITRIL |
| 0026 | 1.00 | 516212 | CONTACT RING DN80 RG5 |
| 0027 | 2.00 | 704186 | DOWTY SELON RG1/4 NYLON 6 |
| 0028 | 1.00 | 703636 | BONDED SEAL 3/4". |
| 0029 | 1.00 | 713235 | O-RING 278,99X3,53 NITRIL |
| 0075 | 1.00 | 110371 | PLUG 1/2" F. SAFETY VALVE |
| 0076 | 1.00 | 709636 | SAFETY VALVE 1/4" INDST.18 BAR |
| 028A | 1.00 | 704188 | 1/2" DOWTY SELON RG1/2 NYLON 6 |

Sparepart list S100-80-175N/A09

Item no.: 674600,

| Pos. No. | Quantity | Item no. | Description |
|----------|----------|----------|--------------------------------|
| | 1.00 | 674600 | S100-80-175N/A09 |
| | 1.00 | 514251B | IMPELLER E3 ALBZ/Ø175 C |
| 0001 | 1.00 | 517900 | PUMP CASING SE3 GG20 |
| 0002 | 2.00 | 702850 | PLUG R 1/4" DIN908 ST.5.8 |
| 0003 | 1.00 | 702866 | PLUG R 3/4" DIN908 ST5.8 |
| 0004 | 1.00 | 516041 | SEAL RING Ø125X15 ALBZ |
| 0005 | 1.00 | 514251 | IMPELLER E3 ALBZ |
| 0006 | 1.00 | 704037 | NUT M16/DIN934-AISI316 |
| 0007 | 1.00 | 704032 | SPR.WASHER BM16 SIS2343 DIN127 |
| 0008 | 1.00 | 704033 | WASHER AM16 SIS2343 DIN125 |
| 0009 | 1.00 | 704034 | KEY B 6X6X32 SIS2343 DS.96 |
| 0010 | 1.00 | 712094 | MECHANICAL SHAFT SEAL |
| 0011 | 1.00 | 704031 | V-RING 25S NITRIL |
| 0012 | 1.00 | 704007 | LOCKRING 30X1,5 DIN983 |
| 0013 | 1.00 | 704010 | BALL BEARING |
| 0014 | 1.00 | 704008 | WASHER Ø30 Ø42X2,5 ST. |
| 0015 | 1.00 | 704009 | BALL BEARING |
| 0016 | 1.00 | 702314 | KEY A 8X7X32 ST60.11 |
| 0017 | 1.00 | 514340 | SHAFT 3S SIS2324 C |
| 0018 | 1.00 | 514010 | BEARING HOUSING 2 GG20 |
| 0019 | 4.00 | 704367 | ALLEN SCREW M8X20/DIN912-AISI |
| 0020 | 1.00 | 514270 | COVER B3 GG20. |
| 0021 | 1.00 | 516014 | GASKET Ø194X180X0.4 PAPER OJ9 |
| 0022 | 8.00 | 704367 | ALLEN SCREW M8X20/DIN912-AISI |
| 0023 | 1.00 | 517630 | INLET DN100 FOR SE3 GG20 |
| 0024 | 8.00 | 704367 | ALLEN SCREW M8X20/DIN912-AISI |
| 0025 | 1.00 | 514163 | CHECK VALVE DN100 NITRIL |
| 0026 | 1.00 | 516213 | CONTACT RING DN100 RG5 |
| 0027 | 2.00 | 704186 | DOWTY SELON RG1/4 NYLON 6 |
| 0028 | 1.00 | 703636 | BONDED SEAL 3/4". |
| 0029 | 1.00 | 708119 | O-RING Ø253,60X3,53 NITRIL |
| 0075 | 1.00 | 110371 | PLUG 1/2" F. SAFETY VALVE |
| 0076 | 1.00 | 705392 | SAFETY VALVE 1/4"INDST. 10 BAR |
| 0086 | 2.00 | 711381 | POINTED SCREW M8X16 A4 DIN913 |
| 028A | 1.00 | 704188 | 1/2" DOWTY SELON RG1/2 NYLON 6 |

Sparepart list S100-80-220N/A09

Item no.: 674172,

| Pos. No. | Quantity | Item no. | Description |
|----------|----------|----------|--------------------------------|
| | 1.00 | 674172 | S100-80-220N/A09 |
| | 1.00 | 514401B | IMPELLER E4 ALBZ |
| 0001 | 1.00 | 517910 | PUMP CASING SE4-A GG20 |
| 0002 | 2.00 | 702850 | PLUG R 1/4" DIN908 ST.5.8 |
| 0003 | 1.00 | 702866 | PLUG R 3/4" DIN908 ST.5.8 |
| 0004 | 1.00 | 516041 | SEAL RING Ø125X15 ALBZ |
| 0005 | 1.00 | 514401 | IMPELLER E4 ALBZ. |
| 0006 | 1.00 | 704037 | NUT M16/DIN934-AISI316 |
| 0007 | 1.00 | 704032 | SPR.WASHER BM16 SIS2343 DIN127 |
| 0008 | 1.00 | 704033 | WASHER AM16 SIS2343 DIN125 |
| 0009 | 1.00 | 704034 | KEY B 6X6X32 SIS2343 DS.96 |
| 0010 | 1.00 | 712094 | MECHANICAL SHAFT SEAL |
| 0011 | 1.00 | 704031 | V-RING 25S NITRIL |
| 0012 | 1.00 | 704007 | LOCKRING 30X1,5 DIN983 |
| 0013 | 1.00 | 704010 | BALL BEARING |
| 0014 | 1.00 | 704008 | WASHER Ø30 Ø42X2,5 ST. |
| 0015 | 1.00 | 704009 | BALL BEARING |
| 0016 | 1.00 | 702314 | KEY A 8X7X32 ST60.11 |
| 0017 | 1.00 | 514340 | SHAFT 3S SIS2324 C |
| 0018 | 1.00 | 514010 | BEARING HOUSING 2 GG20 |
| 0019 | 4.00 | 704367 | ALLEN SCREW M8X20/DIN912-AISI |
| 0020 | 1.00 | 514120 | REAR COVER B4 GG20 |
| 0021 | 1.00 | 516012 | GASKET Ø240X225X0,4 |
| 0022 | 8.00 | 704367 | ALLEN SCREW M8X20/DIN912-AISI |
| 0023 | 1.00 | 517660 | INLET DN100 FOR SE4 GG20 |
| 0024 | 8.00 | 705569 | SCREW M10X20 A4 DIN912 |
| 0025 | 1.00 | 514163 | CHECK VALVE DN100 NITRIL |
| 0026 | 1.00 | 516213 | CONTACT RING DN100 RG5 |
| 0027 | 2.00 | 704186 | DOWTY SELON RG1/4 NYLON 6 |
| 0028 | 1.00 | 703636 | BONDED SEAL 3/4". |
| 0029 | 1.00 | 710709 | O-RING Ø304.39X3.53 NITRIL |
| 0075 | 1.00 | 110371 | PLUG 1/2" F. SAFETY VALVE |
| 0076 | 1.00 | 705207 | SAFETY VALVE 1/4" 15 BAR |
| 0086 | 2.00 | 711381 | POINTED SCREW M8X16 A4 DIN913 |
| 028A | 1.00 | 704188 | 1/2" DOWTY SELON RG1/2 NYLON 6 |

Sparepart list S100-80-275N/A09

Item no.: 674120,

| Pos. No. | Quantity | Item no. | Description |
|-----------------|-----------------|-----------------|--------------------------------|
| | 1.00 | 674120 | S100-80-275N/A09 |
| | 1.00 | 514091B | IMPELLER E5 ALBZ |
| 0001 | 1.00 | 517920 | PUMP CASING SE5-A GG20 |
| 0002 | 2.00 | 702850 | PLUG R 1/4" DIN908 ST.5.8 |
| 0003 | 1.00 | 702866 | PLUG R 3/4" DIN908 ST.5.8 |
| 0004 | 1.00 | 516041 | SEAL RING Ø125X15 ALBZ |
| 0005 | 1.00 | 514091 | IMPELLER E5 ALBZ |
| 0006 | 1.00 | 707803 | NUT M20 SIS2343-80 DIN934 |
| 0007 | 1.00 | 704020 | SPR.WASHER BM20 SIS2343 DIN127 |
| 0008 | 1.00 | 704021 | WASHER AM20 SIS2343 DIN125 |
| 0009 | 1.00 | 704022 | KEY B 10X8X56 SIS2343 DS.96 |
| 0010 | 1.00 | 712098 | MECHANICAL SHAFT SEAL |
| 0011 | 1.00 | 704019 | V-RING 40S R NITRIL |
| 0012 | 1.00 | 704026 | LOCKRING 40X1,75 DIN983 |
| 0013 | 1.00 | 704029 | BALL BEARING |
| 0014 | 1.00 | 704027 | WASHER Ø40X50X2,5 ST. |
| 0015 | 1.00 | 704466 | BALL BEARING |
| 0016 | 1.00 | 704030 | KEY B 10X8X56 ST.60.11 DS.96 |
| 0017 | 1.00 | 514350 | SHAFT 4S SIS2324 C |
| 0018 | 1.00 | 514070 | BEARING HOUSING 3 GG20 |
| 0019 | 4.00 | 707766 | ALLEN SCREW M12 X 25 A4 DIN912 |
| 0020 | 1.00 | 514060 | BACK COVER B5 GG20 |
| 0021 | 1.00 | 516011 | GASKET Ø296/271X0,4 |
| 0022 | 8.00 | 707766 | ALLEN SCREW M12 X 25 A4 DIN912 |
| 0023 | 1.00 | 517690 | SUCTION PIECE DN100, SE5 GG20 |
| 0024 | 8.00 | 707766 | ALLEN SCREW M12 X 25 A4 DIN912 |
| 0025 | 1.00 | 514163 | CHECK VALVE DN100 NITRIL |
| 0026 | 1.00 | 516213 | CONTACT RING DN100 RG5 |
| 0027 | 2.00 | 704186 | DOWTY SELON RG1/4 NYLON 6 |
| 0028 | 1.00 | 703636 | BONDED SEAL 3/4". |
| 0029 | 1.00 | 710408 | O-RING Ø329.79X3.53 NITRIL |
| 0075 | 1.00 | 110371 | PLUG 1/2" F. SAFETY VALVE |
| 0076 | 1.00 | 709636 | SAFETY VALVE 1/4" INDST.18 BAR |
| 028A | 1.00 | 704188 | 1/2" DOWTY SELON RG1/2 NYLON 6 |

Sparepart list S125-80-220N/A09

Item no.: 675556,

| Pos. No. | Quantity | Item no. | Description |
|----------|----------|----------|--------------------------------|
| | 1.00 | 675556 | S125-80-220N/A09 |
| | 1.00 | 514201B | IMPELLER F4 ALBZ |
| 0001 | 1.00 | 517930 | PUMP CASING SF4 GG20 |
| 0002 | 2.00 | 702850 | PLUG R 1/4" DIN908 ST.5.8 |
| 0003 | 1.00 | 702866 | PLUG R 3/4" DIN908 ST5.8 |
| 0004 | 1.00 | 516043 | SEALING RING Ø150X18 ALBZ |
| 0005 | 1.00 | 514201 | IMPELLER F4 ALBZ |
| 0006 | 1.00 | 707803 | NUT M20 SIS2343-80 DIN934 |
| 0007 | 1.00 | 704020 | SPR.WASHER BM20 SIS2343 DIN127 |
| 0008 | 1.00 | 704021 | WASHER AM20 SIS2343 DIN125 |
| 0009 | 1.00 | 704022 | KEY B 10X8X56 SIS2343 DS.96 |
| 0010 | 1.00 | 712098 | MECHANICAL SHAFT SEAL |
| 0011 | 1.00 | 704019 | V-RING 40S R NITRIL |
| 0012 | 1.00 | 704026 | LOCKRING 40X1,75 DIN983 |
| 0013 | 1.00 | 704029 | BALL BEARING |
| 0014 | 1.00 | 704027 | WASHER Ø40X50X2,5 ST. |
| 0015 | 1.00 | 704466 | BALL BEARING |
| 0016 | 1.00 | 704030 | KEY B 10X8X56 ST.60.11 DS.96 |
| 0017 | 1.00 | 514350 | SHAFT 4S SIS2324 C |
| 0018 | 1.00 | 514070 | BEARING HOUSING 3 GG20 |
| 0019 | 4.00 | 707766 | ALLEN SCREW M12 X 25 A4 DIN912 |
| 0020 | 1.00 | 514210 | REAR COVER C4 GG20 |
| 0021 | 1.00 | 516012 | GASKET Ø240X225X0,4 |
| 0022 | 8.00 | 704367 | ALLEN SCREW M8X20/DIN912-AISI |
| 0023 | 1.00 | 517720 | INLET DN125 FOR SF4 GG20 |
| 0024 | 20.00 | 760079 | ALLEN SCREW M10 X 25 A4 DIN912 |
| 0025 | 1.00 | 514164 | CHECK-VALVE DN125 NITRIL. |
| 0026 | 1.00 | 516214 | CONTACT RING DN125 RG5 |
| 0027 | 2.00 | 704186 | DOWTY SELON RG1/4 NYLON 6 |
| 0028 | 1.00 | 703636 | BONDED SEAL 3/4". |
| 0029 | 1.00 | 708161 | O-RING Ø228,20X3,53 NITRIL |
| 0029 | 1.00 | 710408 | O-RING Ø329,79X3,53 NITRIL |
| 0075 | 1.00 | 110371 | PLUG 1/2" F. SAFETY VALVE |
| 0076 | 1.00 | 705207 | SAFETY VALVE 1/4" 15 BAR |
| 028A | 1.00 | 704188 | 1/2" DOWTY SELON RG1/2 NYLON 6 |

Sparepart list S125-80-275N/A09

Item no.: 674836,

| Pos. No. | Quantity | Item no. | Description |
|----------|----------|----------|--------------------------------|
| | 1.00 | 674836 | S125-80-275N/A09 |
| | 1.00 | 514191B | IMPELLER F5 ALBZ |
| 0001 | 1.00 | 517940 | PUMPCASING SF5 GG20 |
| 0002 | 2.00 | 702850 | PLUG R 1/4" DIN908 ST.5.8 |
| 0003 | 1.00 | 702866 | PLUG R 3/4" DIN908 ST5.8 |
| 0004 | 1.00 | 516043 | SEALING RING Ø150X18 ALBZ |
| 0005 | 1.00 | 514191 | IMPELLER F5 ALBZ |
| 0006 | 1.00 | 707803 | NUT M20 SIS2343-80 DIN934 |
| 0007 | 1.00 | 704020 | SPR.WASHER BM20 SIS2343 DIN127 |
| 0008 | 1.00 | 704021 | WASHER AM20 SIS2343 DIN125 |
| 0009 | 1.00 | 704022 | KEY B 10X8X56 SIS2343 DS.96 |
| 0010 | 1.00 | 712098 | MECHANICAL SHAFT SEAL |
| 0011 | 1.00 | 704019 | V-RING 40S R NITRIL |
| 0012 | 1.00 | 704026 | LOCKRING 40X1,75 DIN983 |
| 0013 | 1.00 | 704029 | BALL BEARING |
| 0014 | 1.00 | 704027 | WASHER Ø40X50X2,5 ST. |
| 0015 | 1.00 | 704466 | BALL BEARING |
| 0016 | 1.00 | 704030 | KEY B 10X8X56 ST.60.11 DS.96 |
| 0017 | 1.00 | 514350 | SHAFT 4S SIS2324 C |
| 0018 | 1.00 | 514070 | BEARING HOUSING 3 GG20 |
| 0019 | 4.00 | 707766 | ALLEN SCREW M12 X 25 A4 DIN912 |
| 0020 | 1.00 | 514060 | BACK COVER B5 GG20 |
| 0021 | 1.00 | 516011 | GASKET Ø296/271X0,4 |
| 0022 | 8.00 | 707766 | ALLEN SCREW M12 X 25 A4 DIN912 |
| 0023 | 1.00 | 517750 | INLET DN125 NITRIL |
| 0024 | 20.00 | 760079 | ALLEN SCREW M10 X 25 A4 DIN912 |
| 0025 | 1.00 | 514164 | CHECK-VALVE DN125 NITRIL. |
| 0026 | 1.00 | 516214 | CONTACT RING DN125 RG5 |
| 0027 | 2.00 | 704186 | DOWTY SELON RG1/4 NYLON 6 |
| 0028 | 1.00 | 703636 | BONDED SEAL 3/4". |
| 0029 | 1.00 | 708161 | O-RING Ø228,20X3,53 NITRIL |
| 0029 | 1.00 | 711364 | O-RING Ø355,19X3,53 NITRIL |
| 0075 | 1.00 | 110371 | PLUG 1/2" F. SAFETY VALVE |
| 0076 | 1.00 | 709636 | SAFETY VALVE 1/4" INDST.18 BAR |
| 0086 | 2.00 | 711372 | POINTED SCREW M10X20 A4 DIN913 |
| 028A | 1.00 | 704188 | 1/2" DOWTY SELON RG1/2 NYLON 6 |

Sparepart list S125-100-220N/A09

Item no.: 675598,

| Pos. No. | Quantity | Item no. | Description |
|----------|----------|----------|--------------------------------|
| | 1.00 | 675598 | S125-100-220N/A09 |
| | 1.00 | 514301B | IMPELLER G4 ALBZ |
| 0001 | 1.00 | 517950 | PUMP CASING SG4 GG20 |
| 0002 | 2.00 | 702850 | PLUG R 1/4" DIN908 ST.5.8 |
| 0003 | 1.00 | 702866 | PLUG R 3/4" DIN908 ST5.8 |
| 0004 | 1.00 | 516044 | WEAR RING Ø155X20 ALBZ |
| 0005 | 1.00 | 514301 | IMPELLER G4 ALBZ |
| 0006 | 1.00 | 707803 | NUT M20 SIS2343-80 DIN934 |
| 0007 | 1.00 | 704020 | SPR.WASHER BM20 SIS2343 DIN127 |
| 0008 | 1.00 | 704021 | WASHER AM20 SIS2343 DIN125 |
| 0009 | 1.00 | 704022 | KEY B 10X8X56 SIS2343 DS.96 |
| 0010 | 1.00 | 712098 | MECHANICAL SHAFT SEAL |
| 0011 | 1.00 | 704019 | V-RING 40S R NITRIL |
| 0012 | 1.00 | 704026 | LOCKRING 40X1,75 DIN983 |
| 0013 | 1.00 | 704029 | BALL BEARING |
| 0014 | 1.00 | 704027 | WASHER Ø40X50X2,5 ST. |
| 0015 | 1.00 | 704466 | BALL BEARING |
| 0016 | 1.00 | 704030 | KEY B 10X8X56 ST.60.11 DS.96 |
| 0017 | 1.00 | 514350 | SHAFT 4S SIS2324 C |
| 0018 | 1.00 | 514070 | BEARING HOUSING 3 GG20 |
| 0019 | 4.00 | 707766 | ALLEN SCREW M12 X 25 A4 DIN912 |
| 0020 | 1.00 | 514210 | REAR COVER C4 GG20 |
| 0021 | 1.00 | 516012 | GASKET Ø240X225X0,4 |
| 0022 | 8.00 | 704367 | ALLEN SCREW M8X20/DIN912-AISI |
| 0023 | 1.00 | 517750 | INLET DN125 NITRIL |
| 0024 | 20.00 | 760079 | ALLEN SCREW M10 X 25 A4 DIN912 |
| 0025 | 1.00 | 514164 | CHECK-VALVE DN125 NITRIL. |
| 0026 | 1.00 | 516214 | CONTACT RING DN125 RG5 |
| 0027 | 2.00 | 704186 | DOWTY SELON RG1/4 NYLON 6 |
| 0028 | 1.00 | 703636 | BONDED SEAL 3/4". |
| 0029 | 1.00 | 708161 | O-RING Ø228,20X3,53 NITRIL |
| 0029 | 1.00 | 711364 | O-RING Ø355,19X3,53 NITRIL |
| 0075 | 1.00 | 110371 | PLUG 1/2" F. SAFETY VALVE |
| 0076 | 1.00 | 705207 | SAFETY VALVE 1/4" 15 BAR |
| 028A | 1.00 | 704188 | 1/2" DOWTY SELON RG1/2 NYLON 6 |

Sparepart list S32-25-110/D09

Item no.: 672038,

| Pos. No. | Quantity | Item no. | Description |
|-----------------|-----------------|-----------------|--------------------------------|
| | 1.00 | 672038 | S32-25-110/D09 |
| | 1.00 | 514261B | IMPELLER A1 ALBZ |
| 0001 | 1.00 | 512372 | P.CAS. S32-25-110 RG5 C |
| 0003 | 1.00 | 506963 | PLUG RG1/2" MS58PB |
| 0005 | 1.00 | 514261 | IMPELLER A1 ALBZ |
| 0010 | 1.00 | 712091 | MECHANICAL SHAFT SEAL |
| 0011 | 1.00 | 704172 | V.RING 18S NITRILE |
| 0014 | 2.00 | 704173 | SHOULDER RING Ø25 Ø35X2,0 ST. |
| 0015 | 2.00 | 704009 | BALL BEARING |
| 0016 | 1.00 | 704246 | KEY B 6X6X20 ST.60.11 |
| 0017 | 1.00 | 514320 | SHAFT 1S SIS2324 |
| 0018 | 1.00 | 512271 | BEARING BRACKET 1 RG5 |
| 0021 | 1.00 | 516013 | BODY GASKETS Ø182X165X0,4 OJ9 |
| 0022 | 8.00 | 705282 | ALLEN SCREW M6 X 20 SIS2343 |
| 0023 | 1.00 | 514461 | INLET S32-25-110 RG5 |
| 0023 | 1.00 | 516210 | CONTACT RING |
| 0024 | 4.00 | 703339 | SCREW M6X16/DIN912-AISI316 |
| 0025 | 1.00 | 514160 | CHECK VALVE DN50 NITRIL |
| 0026 | 1.00 | 514451 | GUIDE VANE S A1 ALBZF60 B |
| 0028 | 2.00 | 704188 | 1/2" DOWTY SELON RG1/2 NYLON 6 |
| 0029 | 2.00 | 704180 | ALLEN SCREW M6X40 SIS2343 |
| 0030 | 1.00 | 701107 | CIRCLIP J 62 DIN 472 |
| 0031 | 1.00 | 704181 | OIL SEALING RING DIN3760 |
| 0032 | 1.00 | 706562 | HEX.BUSHING 1 1/4"X1" RG BRASS |
| 0033 | 1.00 | 110611 | GASKET SA-1 NITRIL. |
| 0034 | 2.00 | 516080 | SHIM Ø160X0,2 OLIEP. OJ9 |
| 0035 | 1.00 | 516072 | GUIDERING S1 RG5 D |
| 0075 | 1.00 | 110371 | PLUG 1/2" F. SAFETY VALVE |
| 0076 | 1.00 | 709637 | SAFETY VALVE 1/4" INDST. 6 BAR |

Sparepart list S50-32-135N/D09

Item no.: 677243,

| Pos. No. | Quantity | Item no. | Description |
|-----------------|-----------------|-----------------|--------------------------------|
| | 1.00 | 677243 | S50-32-135N/D09 |
| | 1.00 | 704047 | STICKY ARROW LABEL. |
| | 1.00 | 704048 | DESMI TRANSFERS LABELS BLACK |
| | 1.00 | 709543 | NAME PLATE PLAST PUMP |
| | 1.00 | 514231B | IMPELLER B2 ALBZ B |
| 0001 | 1.00 | 521792 | PUMP CASING SB2 RG5 |
| 0003 | 1.00 | 506963 | PLUG RG1/2" MS58PB |
| 0005 | 1.00 | 514231 | IMPELLER B2 ALBZ |
| 0010 | 1.00 | 712091 | MECHANICAL SHAFT SEAL |
| 0011 | 1.00 | 704172 | V.RING 18S NITRILE |
| 0014 | 2.00 | 704173 | SHOULDER RING Ø25 Ø35X2,0 ST. |
| 0015 | 2.00 | 704009 | BALL BEARING |
| 0016 | 1.00 | 704246 | KEY B 6X6X20 ST.60.11 |
| 0017 | 1.00 | 514320 | SHAFT 1S SIS2324 |
| 0018 | 1.00 | 512271 | BEARING BRACKET 1 RG5 |
| 0021 | 1.00 | 516013 | BODY GASKETS Ø182X165X0,4 OJ9 |
| 0022 | 8.00 | 705282 | ALLEN SCREW M6 X 20 SIS2343 |
| 0023 | 1.00 | 521770 | INLET DN50 RG5 |
| 0024 | 8.00 | 703339 | SCREW M6X16/DIN912-AISI316 |
| 0025 | 1.00 | 514160 | CHECK VALVE DN50 NITRIL |
| 0028 | 2.00 | 704188 | 1/2" DOWTY SELON RG1/2 NYLON 6 |
| 0029 | 1.00 | 713237 | O-RING Ø183.82X2.62 NITRIL |
| 0030 | 1.00 | 701107 | CIRCLIP J 62 DIN 472 |
| 0031 | 1.00 | 704181 | OIL SEALING RING DIN3760 |
| 0075 | 1.00 | 110371 | PLUG 1/2" F. SAFETY VALVE |
| 0076 | 1.00 | 709637 | SAFETY VALVE 1/4" INDST. 6 BAR |

Sparepart list S70-50-175N/D09

Item no.: 673906,

| Pos. No. | Quantity | Item no. | Description |
|-----------------|-----------------|-----------------|--------------------------------|
| | 1.00 | 673906 | S70-50-175N/D09 |
| | 1.00 | 514571B | IMPELLER C3 ALBZ Ø175 A |
| 0001 | 1.00 | 517841 | PUMP CASING SC3 RG5 |
| 0002 | 2.00 | 506961 | PLUG RG1/4" MS58PB |
| 0003 | 1.00 | 506963 | PLUG RG1/2" MS58PB |
| 0004 | 1.00 | 516040 | SEAL RING Ø80X10 ALBZ |
| 0005 | 1.00 | 514571 | IMPELLER C3 ALBZ. |
| 0006 | 1.00 | 704037 | NUT M16/DIN934-AISI316 |
| 0007 | 1.00 | 704032 | SPR.WASHER BM16 SIS2343 DIN127 |
| 0008 | 1.00 | 704033 | WASHER AM16 SIS2343 DIN125 |
| 0009 | 1.00 | 704034 | KEY B 6X6X32 SIS2343 DS.96 |
| 0010 | 1.00 | 712094 | MECHANICAL SHAFT SEAL |
| 0011 | 1.00 | 704031 | V-RING 25S NITRIL |
| 0012 | 1.00 | 704007 | LOCKRING 30X1,5 DIN983 |
| 0013 | 1.00 | 704010 | BALL BEARING |
| 0014 | 1.00 | 704008 | WASHER Ø30 Ø42X2,5 ST. |
| 0015 | 1.00 | 704009 | BALL BEARING |
| 0016 | 1.00 | 702314 | KEY A 8X7X32 ST60.11 |
| 0017 | 1.00 | 514340 | SHAFT 3S SIS2324 C |
| 0018 | 1.00 | 514010 | BEARING HOUSING 2 GG20 |
| 0019 | 4.00 | 704367 | ALLEN SCREW M8X20/DIN912-AISI |
| 0020 | 1.00 | 514561 | COVER A3 RG5 |
| 0021 | 1.00 | 516014 | GASKET Ø194X180X0.4 PAPER OJ9 |
| 0022 | 8.00 | 704367 | ALLEN SCREW M8X20/DIN912-AISI |
| 0023 | 1.00 | 517460 | INLET DN70 FOR SC3 RG5 |
| 0024 | 8.00 | 704367 | ALLEN SCREW M8X20/DIN912-AISI |
| 0025 | 1.00 | 514161 | CHECK VALVE DN70 NITRIL |
| 0027 | 2.00 | 704186 | DOWTY SELON RG1/4 NYLON 6 |
| 0028 | 2.00 | 704188 | 1/2" DOWTY SELON RG1/2 NYLON 6 |
| 0029 | 1.00 | 710404 | O-RING Ø202.80X3.53 NITRIL |
| 0075 | 1.00 | 110371 | PLUG 1/2" F. SAFETY VALVE |
| 0076 | 1.00 | 705392 | SAFETY VALVE 1/4"INDST. 10 BAR |

Sparepart list S70-50-220N/D09

Item no.: 677224,

| Pos. No. | Quantity | Item no. | Description |
|-----------------|-----------------|-----------------|--------------------------------|
| | 1.00 | 677224 | S70-50-220N/D09 |
| | 1.00 | 514151B | IMPELLER C4 Ø220 ALBZ B |
| 0001 | 1.00 | 521713 | PUMP CASING SC4 RG5 |
| 0002 | 2.00 | 506961 | PLUG RG1/4" MS58PB |
| 0003 | 1.00 | 506963 | PLUG RG1/2" MS58PB |
| 0004 | 1.00 | 516040 | SEAL RING Ø80X10 ALBZ |
| 0005 | 1.00 | 514151 | IMPELLER C4 ALBZ |
| 0006 | 1.00 | 704037 | NUT M16/DIN934-AISI316 |
| 0007 | 1.00 | 704032 | SPR.WASHER BM16 SIS2343 DIN127 |
| 0008 | 1.00 | 704033 | WASHER AM16 SIS2343 DIN125 |
| 0009 | 1.00 | 704034 | KEY B 6X6X32 SIS2343 DS.96 |
| 0010 | 1.00 | 712094 | MECHANICAL SHAFT SEAL |
| 0011 | 1.00 | 704031 | V-RING 25S NITRIL |
| 0012 | 1.00 | 704007 | LOCKRING 30X1,5 DIN983 |
| 0013 | 1.00 | 704010 | BALL BEARING |
| 0014 | 1.00 | 704008 | WASHER Ø30 Ø42X2,5 ST. |
| 0015 | 1.00 | 704009 | BALL BEARING |
| 0016 | 1.00 | 702314 | KEY A 8X7X32 ST60.11 |
| 0017 | 1.00 | 514340 | SHAFT 3S SIS2324 C |
| 0018 | 1.00 | 514010 | BEARING HOUSING 2 GG20 |
| 0020 | 1.00 | 514121 | REAR COVER B4 RG5 |
| 0021 | 1.00 | 516012 | GASKET Ø240X225X0,4 |
| 0023 | 1.00 | 521740 | INLET DN70 RG5 |
| 0024 | 8.00 | 760079 | ALLEN SCREW M10 X 25 A4 DIN912 |
| 0025 | 1.00 | 514161 | CHECK VALVE DN70 NITRIL |
| 0027 | 2.00 | 704186 | DOWTY SELON RG1/4 NYLON 6 |
| 0028 | 2.00 | 704188 | 1/2" DOWTY SELON RG1/2 NYLON 6 |
| 0029 | 1.00 | 710405 | O-RING Ø247.25X3.53 NITRIL |
| 0075 | 1.00 | 110371 | PLUG 1/2" F. SAFETY VALVE |
| 0076 | 1.00 | 705207 | SAFETY VALVE 1/4" 15 BAR |
| 1922 | 12.00 | 704367 | ALLEN SCREW M8X20/DIN912-AISI |

Sparepart list S70-50-275N/D09

Item no.: 674979,

| Pos. No. | Quantity | Item no. | Description |
|----------|----------|----------|--------------------------------|
| | 1.00 | 674979 | S70-50-275N/D09 |
| | 1.00 | 514101B | IMPELLER C5 ALBZ C |
| 0001 | 1.00 | 517861 | PUMP CASING SC5 RG5 |
| 0002 | 2.00 | 506961 | PLUG RG1/4" MS58PB |
| 0003 | 1.00 | 506963 | PLUG RG1/2" MS58PB |
| 0004 | 1.00 | 516040 | SEAL RING Ø80X10 ALBZ |
| 0005 | 1.00 | 514101 | IMPELLER C5 ALBZ |
| 0006 | 1.00 | 704037 | NUT M16/DIN934-AISI316 |
| 0007 | 1.00 | 704032 | SPR.WASHER BM16 SIS2343 DIN127 |
| 0008 | 1.00 | 704033 | WASHER AM16 SIS2343 DIN125 |
| 0009 | 1.00 | 704034 | KEY B 6X6X32 SIS2343 DS.96 |
| 0010 | 1.00 | 712094 | MECHANICAL SHAFT SEAL |
| 0011 | 1.00 | 704031 | V-RING 25S NITRIL |
| 0012 | 1.00 | 704007 | LOCKRING 30X1,5 DIN983 |
| 0013 | 1.00 | 704010 | BALL BEARING |
| 0014 | 1.00 | 704008 | WASHER Ø30 Ø42X2,5 ST. |
| 0015 | 1.00 | 704009 | BALL BEARING |
| 0016 | 1.00 | 702314 | KEY A 8X7X32 ST60.11 |
| 0017 | 1.00 | 514340 | SHAFT 3S SIS2324 C |
| 0018 | 1.00 | 514010 | BEARING HOUSING 2 GG20 |
| 0019 | 4.00 | 704367 | ALLEN SCREW M8X20/DIN912-AISI |
| 0020 | 1.00 | 514051 | REAR COVER A5 RG5 |
| 0021 | 1.00 | 516011 | GASKET Ø296/271X0,4 |
| 0022 | 8.00 | 707766 | ALLEN SCREW M12 X 25 A4 DIN912 |
| 0023 | 1.00 | 517520 | INLET DN70 FOR SC5 RG5 |
| 0024 | 16.00 | 760079 | ALLEN SCREW M10 X 25 A4 DIN912 |
| 0025 | 1.00 | 514161 | CHECK VALVE DN70 NITRIL |
| 0027 | 2.00 | 704186 | DOWTY SELON RG1/4 NYLON 6 |
| 0028 | 1.00 | 704188 | 1/2" DOWTY SELON RG1/2 NYLON 6 |
| 0029 | 1.00 | 507133 | O-RING Ø158.34 X 3.53 NITRIL |
| 0029 | 1.00 | 710709 | O-RING Ø304.39X3.53 NITRIL |
| 0075 | 1.00 | 110371 | PLUG 1/2" F. SAFETY VALVE |
| 0076 | 1.00 | 709636 | SAFETY VALVE 1/4" INDST.18 BAR |
| 0086 | 2.00 | 711372 | POINTED SCREW M10X20 A4 DIN913 |
| 028A | 1.00 | 704188 | 1/2" DOWTY SELON RG1/2 NYLON 6 |

Sparepart list S80-70-175N/D09

Item no.: 674447,

| Pos. No. | Quantity | Item no. | Description |
|-----------------|-----------------|-----------------|--------------------------------|
| | 1.00 | 674447 | S80-70-175N/D09 |
| | 1.00 | 514581B | IMPELLER D3 ALBZ |
| 0001 | 1.00 | 517871 | PUMP CASING SD3 RG5 |
| 0002 | 2.00 | 506961 | PLUG RG1/4" MS58PB |
| 0003 | 1.00 | 506964 | PLUG RG 3/4" MS58PB |
| 0004 | 1.00 | 516042 | SEAL RING Ø100X12 ALBZ |
| 0005 | 1.00 | 514581 | IMPELLER D3 ALBZ. |
| 0006 | 1.00 | 704037 | NUT M16/DIN934-AISI316 |
| 0007 | 1.00 | 704032 | SPR.WASHER BM16 SIS2343 DIN127 |
| 0008 | 1.00 | 704033 | WASHER AM16 SIS2343 DIN125 |
| 0009 | 1.00 | 704034 | KEY B 6X6X32 SIS2343 DS.96 |
| 0010 | 1.00 | 712094 | MECHANICAL SHAFT SEAL |
| 0011 | 1.00 | 704031 | V-RING 25S NITRIL |
| 0012 | 1.00 | 704007 | LOCKRING 30X1,5 DIN983 |
| 0013 | 1.00 | 704010 | BALL BEARING |
| 0014 | 1.00 | 704008 | WASHER Ø30 Ø42X2,5 ST. |
| 0015 | 1.00 | 704009 | BALL BEARING |
| 0016 | 1.00 | 702314 | KEY A 8X7X32 ST60.11 |
| 0017 | 1.00 | 514340 | SHAFT 3S SIS2324 C |
| 0018 | 1.00 | 514010 | BEARING HOUSING 2 GG20 |
| 0019 | 4.00 | 704367 | ALLEN SCREW M8X20/DIN912-AISI |
| 0020 | 1.00 | 514561 | COVER A3 RG5 |
| 0021 | 1.00 | 516014 | GASKET Ø194X180X0.4 PAPER OJ9 |
| 0022 | 8.00 | 704367 | ALLEN SCREW M8X20/DIN912-AISI |
| 0023 | 1.00 | 517550 | INLET DN80 FOR SD3 RG6 |
| 0024 | 8.00 | 704367 | ALLEN SCREW M8X20/DIN912-AISI |
| 0025 | 1.00 | 514162 | CHECK VALVE DN80 NITRIL |
| 0027 | 2.00 | 704186 | DOWTY SELON RG1/4 NYLON 6 |
| 0028 | 1.00 | 704189 | SEALING WASHER BSP3/4 NYLON 6 |
| 0029 | 1.00 | 710407 | O-RING Ø215.50X3.53 NITRIL |
| 0075 | 1.00 | 110371 | PLUG 1/2" F. SAFETY VALVE |
| 0076 | 1.00 | 705392 | SAFETY VALVE 1/4"INDST. 10 BAR |
| 0086 | 2.00 | 711381 | POINTED SCREW M8X16 A4 DIN913 |
| 028A | 1.00 | 704188 | 1/2" DOWTY SELON RG1/2 NYLON 6 |

Sparepart list S80-70-220N/D09

Item no.: 674888,

| Pos. No. | Quantity | Item no. | Description |
|-----------------|-----------------|-----------------|--------------------------------|
| | 1.00 | 674888 | S80-70-220N/D09 |
| | 1.00 | 514111B | IMPELLER D4 ALBZ |
| 0001 | 1.00 | 517881 | PUMPCASING SD4 RG5 |
| 0002 | 2.00 | 506961 | PLUG RG1/4" MS58PB |
| 0003 | 1.00 | 506964 | PLUG RG 3/4" MS58PB |
| 0004 | 1.00 | 516042 | SEAL RING Ø100X12 ALBZ |
| 0005 | 1.00 | 514111 | IMPELLER D4 ALBZ |
| 0006 | 1.00 | 704037 | NUT M16/DIN934-AISI316 |
| 0007 | 1.00 | 704032 | SPR.WASHER BM16 SIS2343 DIN127 |
| 0008 | 1.00 | 704033 | WASHER AM16 SIS2343 DIN125 |
| 0009 | 1.00 | 704034 | KEY B 6X6X32 SIS2343 DS.96 |
| 0010 | 1.00 | 712094 | MECHANICAL SHAFT SEAL |
| 0011 | 1.00 | 704031 | V-RING 25S NITRIL |
| 0012 | 1.00 | 704007 | LOCKRING 30X1,5 DIN983 |
| 0013 | 1.00 | 704010 | BALL BEARING |
| 0014 | 1.00 | 704008 | WASHER Ø30 Ø42X2,5 ST. |
| 0015 | 1.00 | 704009 | BALL BEARING |
| 0016 | 1.00 | 702314 | KEY A 8X7X32 ST60.11 |
| 0017 | 1.00 | 514340 | SHAFT 3S SIS2324 C |
| 0018 | 1.00 | 514010 | BEARING HOUSING 2 GG20 |
| 0019 | 4.00 | 704367 | ALLEN SCREW M8X20/DIN912-AISI |
| 0020 | 1.00 | 514121 | REAR COVER B4 RG5 |
| 0021 | 1.00 | 516012 | GASKET Ø240X225X0,4 |
| 0022 | 8.00 | 704367 | ALLEN SCREW M8X20/DIN912-AISI |
| 0023 | 1.00 | 517580 | INLET DN80 TIL SD4 RG5 |
| 0024 | 8.00 | 760079 | ALLEN SCREW M10 X 25 A4 DIN912 |
| 0025 | 1.00 | 514162 | CHECK VALVE DN80 NITRIL |
| 0027 | 2.00 | 704186 | DOWTY SELON RG1/4 NYLON 6 |
| 0028 | 1.00 | 704189 | SEALING WASHER BSP3/4 NYLON 6 |
| 0029 | 1.00 | 710405 | O-RING Ø247.25X3.53 NITRIL |
| 0075 | 1.00 | 110371 | PLUG 1/2" F. SAFETY VALVE |
| 0076 | 1.00 | 705207 | SAFETY VALVE 1/4" 15 BAR |
| 028A | 1.00 | 704188 | 1/2" DOWTY SELON RG1/2 NYLON 6 |

Sparepart list S80-70-275N/D09

Item no.: 677760,

| Pos. No. | Quantity | Item no. | Description |
|-----------------|-----------------|-----------------|--------------------------------|
| | 1.00 | 677760 | S80-70-275N/D09 |
| | 1.00 | 709543 | NAME PLATE PLAST PUMP |
| | 1.00 | 514081B | IMPELLER D5 ALBZ |
| 0001 | 1.00 | 522581 | PUMP CASING S80-70-275N RG5 |
| 0002 | 2.00 | 506961 | PLUG RG1/4" MS58PB |
| 0003 | 1.00 | 506964 | PLUG RG 3/4" MS58PB |
| 0004 | 1.00 | 516042 | SEAL RING Ø100X12 ALBZ |
| 0005 | 1.00 | 514081 | IMPELLER D5 ALBZ |
| 0006 | 1.00 | 704037 | NUT M16/DIN934-AISI316 |
| 0007 | 1.00 | 704032 | SPR.WASHER BM16 SIS2343 DIN127 |
| 0008 | 1.00 | 704033 | WASHER AM16 SIS2343 DIN125 |
| 0009 | 1.00 | 704034 | KEY B 6X6X32 SIS2343 DS.96 |
| 0010 | 1.00 | 712094 | MECHANICAL SHAFT SEAL_ |
| 0011 | 1.00 | 704031 | V-RING 25S NITRIL |
| 0012 | 1.00 | 704007 | LOCKRING 30X1,5 DIN983 |
| 0013 | 1.00 | 704010 | BALL BEARING |
| 0014 | 1.00 | 704008 | WASHER Ø30 Ø42X2,5 ST. |
| 0015 | 1.00 | 704009 | BALL BEARING |
| 0016 | 1.00 | 702314 | KEY A 8X7X32 ST60.11 |
| 0017 | 1.00 | 514340 | SHAFT 3S SIS2324 C |
| 0018 | 1.00 | 514010 | BEARING HOUSING 2 GG20 |
| 0019 | 4.00 | 704367 | ALLEN SCREW M8X20/DIN912-AISI |
| 0020 | 1.00 | 514051 | REAR COVER A5 RG5 |
| 0021 | 1.00 | 516011 | GASKET Ø296/271X0,4 |
| 0022 | 8.00 | 707766 | ALLEN SCREW M12 X 25 A4 DIN912 |
| 0023 | 1.00 | 522720 | INLET DN80 RG6 |
| 0024 | 8.00 | 707766 | ALLEN SCREW M12 X 25 A4 DIN912 |
| 0025 | 1.00 | 514162 | CHECK VALVE DN80 NITRIL |
| 0027 | 2.00 | 704186 | DOWTY SELON RG1/4 NYLON 6 |
| 0028 | 1.00 | 704189 | SEALING WASHER BSP3/4 NYLON 6 |
| 0029 | 1.00 | 713235 | O-RING 278,99X3,53 NITRIL |
| 0075 | 1.00 | 110371 | PLUG 1/2" F. SAFETY VALVE |
| 0076 | 1.00 | 709636 | SAFETY VALVE 1/4" INDST.18 BAR |
| 028A | 1.00 | 704188 | 1/2" DOWTY SELON RG1/2 NYLON 6 |

Sparepart list S100-80-175N/D09

Item no.: 674607,

| Pos. No. | Quantity | Item no. | Description |
|-----------------|-----------------|-----------------|--------------------------------|
| | 1.00 | 674607 | S100-80-175N/D09 |
| | 1.00 | 514251B | IMPELLER E3 ALBZ/Ø175 C |
| 0001 | 1.00 | 517901 | PUMP CASING SE3 RG5 |
| 0002 | 2.00 | 506961 | PLUG RG1/4" MS58PB |
| 0003 | 1.00 | 506964 | PLUG RG 3/4" MS58PB |
| 0004 | 1.00 | 516041 | SEAL RING Ø125X15 ALBZ |
| 0005 | 1.00 | 514251 | IMPELLER E3 ALBZ |
| 0006 | 1.00 | 704037 | NUT M16/DIN934-AISI316 |
| 0007 | 1.00 | 704032 | SPR.WASHER BM16 SIS2343 DIN127 |
| 0008 | 1.00 | 704033 | WASHER AM16 SIS2343 DIN125 |
| 0009 | 1.00 | 704034 | KEY B 6X6X32 SIS2343 DS.96 |
| 0010 | 1.00 | 712094 | MECHANICAL SHAFT SEAL |
| 0011 | 1.00 | 704031 | V-RING 25S NITRIL |
| 0012 | 1.00 | 704007 | LOCKRING 30X1,5 DIN983 |
| 0013 | 1.00 | 704010 | BALL BEARING |
| 0014 | 1.00 | 704008 | WASHER Ø30 Ø42X2,5 ST. |
| 0015 | 1.00 | 704009 | BALL BEARING |
| 0016 | 1.00 | 702314 | KEY A 8X7X32 ST60.11 |
| 0017 | 1.00 | 514340 | SHAFT 3S SIS2324 C |
| 0018 | 1.00 | 514010 | BEARING HOUSING 2 GG20 |
| 0019 | 4.00 | 704367 | ALLEN SCREW M8X20/DIN912-AISI |
| 0020 | 1.00 | 514272 | COVER B3 RG 5 |
| 0021 | 1.00 | 516014 | GASKET Ø194X180X0.4 PAPER OJ9 |
| 0022 | 8.00 | 704367 | ALLEN SCREW M8X20/DIN912-AISI |
| 0023 | 1.00 | 517640 | INLET DN100 FOR SE3 RG6 |
| 0024 | 8.00 | 704367 | ALLEN SCREW M8X20/DIN912-AISI |
| 0025 | 1.00 | 514163 | CHECK VALVE DN100 NITRIL |
| 0027 | 2.00 | 704186 | DOWTY SELON RG1/4 NYLON 6 |
| 0028 | 1.00 | 704189 | SEALING WASHER BSP3/4 NYLON 6 |
| 0029 | 1.00 | 708119 | O-RING Ø253,60X3,53 NITRIL |
| 0075 | 1.00 | 110371 | PLUG 1/2" F. SAFETY VALVE |
| 0076 | 1.00 | 705392 | SAFETY VALVE 1/4"INDST. 10 BAR |
| 0086 | 2.00 | 711381 | POINTED SCREW M8X16 A4 DIN913 |
| 028A | 1.00 | 704188 | 1/2" DOWTY SELON RG1/2 NYLON 6 |

Sparepart list S100-80-220N/D09

Item no.: 674180,

| Pos. No. | Quantity | Item no. | Description |
|-----------------|-----------------|-----------------|--------------------------------|
| | 1.00 | 674180 | S100-80-220N/D09 |
| | 1.00 | 514401B | IMPELLER E4 ALBZ |
| 0001 | 1.00 | 517911 | PUMP CASING SE4 RG5 |
| 0002 | 2.00 | 506961 | PLUG RG1/4" MS58PB |
| 0003 | 1.00 | 506964 | PLUG RG 3/4" MS58PB |
| 0004 | 1.00 | 516041 | SEAL RING Ø125X15 ALBZ |
| 0005 | 1.00 | 514401 | IMPELLER E4 ALBZ. |
| 0006 | 1.00 | 704037 | NUT M16/DIN934-AISI316 |
| 0007 | 1.00 | 704032 | SPR.WASHER BM16 SIS2343 DIN127 |
| 0008 | 1.00 | 704033 | WASHER AM16 SIS2343 DIN125 |
| 0009 | 1.00 | 704034 | KEY B 6X6X32 SIS2343 DS.96 |
| 0010 | 1.00 | 712094 | MECHANICAL SHAFT SEAL |
| 0011 | 1.00 | 704031 | V-RING 25S NITRIL |
| 0012 | 1.00 | 704007 | LOCKRING 30X1,5 DIN983 |
| 0013 | 1.00 | 704010 | BALL BEARING |
| 0014 | 1.00 | 704008 | WASHER Ø30 Ø42X2,5 ST. |
| 0015 | 1.00 | 704009 | BALL BEARING |
| 0016 | 1.00 | 702314 | KEY A 8X7X32 ST60.11 |
| 0017 | 1.00 | 514340 | SHAFT 3S SIS2324 C |
| 0018 | 1.00 | 514010 | BEARING HOUSING 2 GG20 |
| 0019 | 4.00 | 704367 | ALLEN SCREW M8X20/DIN912-AISI |
| 0020 | 1.00 | 514121 | REAR COVER B4 RG5 |
| 0021 | 1.00 | 516012 | GASKET Ø240X225X0,4 |
| 0022 | 8.00 | 704367 | ALLEN SCREW M8X20/DIN912-AISI |
| 0023 | 1.00 | 517670 | INLET DN100 FOR SE4 RG5 |
| 0024 | 8.00 | 705569 | SCREW M10X20 A4 DIN912 |
| 0025 | 1.00 | 514163 | CHECK VALVE DN100 NITRIL |
| 0027 | 2.00 | 704186 | DOWTY SELON RG1/4 NYLON 6 |
| 0028 | 1.00 | 704189 | SEALING WASHER BSP3/4 NYLON 6 |
| 0029 | 1.00 | 710709 | O-RING Ø304.39X3.53 NITRIL |
| 0075 | 1.00 | 110371 | PLUG 1/2" F. SAFETY VALVE |
| 0076 | 1.00 | 705207 | SAFETY VALVE 1/4" 15 BAR |
| 0086 | 2.00 | 711381 | POINTED SCREW M8X16 A4 DIN913 |
| 028A | 1.00 | 704188 | 1/2" DOWTY SELON RG1/2 NYLON 6 |

Sparepart list S100-80-275N/D09

Item no.: 674128,

| Pos. No. | Quantity | Item no. | Description |
|-----------------|-----------------|-----------------|--------------------------------|
| | 1.00 | 674128 | S100-80-275N/D09 |
| | 1.00 | 514091B | IMPELLER E5 ALBZ |
| 0001 | 1.00 | 517921 | PUMP CASING SE5 RG5 |
| 0002 | 2.00 | 506961 | PLUG RG1/4" MS58PB |
| 0003 | 1.00 | 506964 | PLUG RG 3/4" MS58PB |
| 0004 | 1.00 | 516041 | SEAL RING Ø125X15 ALBZ |
| 0005 | 1.00 | 514091 | IMPELLER E5 ALBZ |
| 0006 | 1.00 | 707803 | NUT M20 SIS2343-80 DIN934 |
| 0007 | 1.00 | 704020 | SPR.WASHER BM20 SIS2343 DIN127 |
| 0008 | 1.00 | 704021 | WASHER AM20 SIS2343 DIN125 |
| 0009 | 1.00 | 704022 | KEY B 10X8X56 SIS2343 DS.96 |
| 0010 | 1.00 | 712098 | MECHANICAL SHAFT SEAL |
| 0011 | 1.00 | 704019 | V-RING 40S R NITRIL |
| 0012 | 1.00 | 704026 | LOCKRING 40X1,75 DIN983 |
| 0013 | 1.00 | 704029 | BALL BEARING |
| 0014 | 1.00 | 704027 | WASHER Ø40X50X2,5 ST. |
| 0015 | 1.00 | 704466 | BALL BEARING |
| 0016 | 1.00 | 704030 | KEY B 10X8X56 ST.60.11 DS.96 |
| 0017 | 1.00 | 514350 | SHAFT 4S SIS2324 C |
| 0018 | 1.00 | 514070 | BEARING HOUSING 3 GG20 |
| 0019 | 4.00 | 707766 | ALLEN SCREW M12 X 25 A4 DIN912 |
| 0020 | 1.00 | 514061 | REAR COVER RG5 |
| 0021 | 1.00 | 516011 | GASKET Ø296/271X0,4 |
| 0022 | 8.00 | 707766 | ALLEN SCREW M12 X 25 A4 DIN912 |
| 0023 | 1.00 | 517700 | INLET DN100 FOR SE5 RG5 |
| 0024 | 8.00 | 707766 | ALLEN SCREW M12 X 25 A4 DIN912 |
| 0025 | 1.00 | 514163 | CHECK VALVE DN100 NITRIL |
| 0027 | 2.00 | 704186 | DOWTY SELON RG1/4 NYLON 6 |
| 0028 | 1.00 | 704189 | SEALING WASHER BSP3/4 NYLON 6 |
| 0029 | 1.00 | 710408 | O-RING Ø329.79X3.53 NITRIL |
| 0075 | 1.00 | 110371 | PLUG 1/2" F. SAFETY VALVE |
| 0076 | 1.00 | 709636 | SAFETY VALVE 1/4" INDST.18 BAR |
| 028A | 1.00 | 704188 | 1/2" DOWTY SELON RG1/2 NYLON 6 |

Sparepart list S125-80-220N/D09

Item no.: 675564,

| Pos. No. | Quantity | Item no. | Description |
|-----------------|-----------------|-----------------|--------------------------------|
| | 1.00 | 675564 | S125-80-220N/D09 |
| | 1.00 | 514201B | IMPELLER F4 ALBZ |
| 0001 | 1.00 | 517931 | PUMP CASING SF4 RG5 |
| 0002 | 2.00 | 506961 | PLUG RG1/4" MS58PB |
| 0003 | 1.00 | 506964 | PLUG RG 3/4" MS58PB |
| 0004 | 1.00 | 516043 | SEALING RING Ø150X18 ALBZ |
| 0005 | 1.00 | 514201 | IMPELLER F4 ALBZ |
| 0006 | 1.00 | 707803 | NUT M20 SIS2343-80 DIN934 |
| 0007 | 1.00 | 704020 | SPR.WASHER BM20 SIS2343 DIN127 |
| 0008 | 1.00 | 704021 | WASHER AM20 SIS2343 DIN125 |
| 0009 | 1.00 | 704022 | KEY B 10X8X56 SIS2343 DS.96 |
| 0010 | 1.00 | 712098 | MECHANICAL SHAFT SEAL |
| 0011 | 1.00 | 704019 | V-RING 40S R NITRIL |
| 0012 | 1.00 | 704026 | LOCKRING 40X1,75 DIN983 |
| 0013 | 1.00 | 704029 | BALL BEARING |
| 0014 | 1.00 | 704027 | WASHER Ø40X50X2,5 ST. |
| 0015 | 1.00 | 704466 | BALL BEARING |
| 0016 | 1.00 | 704030 | KEY B 10X8X56 ST.60.11 DS.96 |
| 0017 | 1.00 | 514350 | SHAFT 4S SIS2324 C |
| 0018 | 1.00 | 514070 | BEARING HOUSING 3 GG20 |
| 0019 | 4.00 | 707766 | ALLEN SCREW M12 X 25 A4 DIN912 |
| 0020 | 1.00 | 514211 | REAR COVER C4 RG5 |
| 0021 | 1.00 | 516012 | GASKET Ø240X225X0,4 |
| 0022 | 8.00 | 704367 | ALLEN SCREW M8X20/DIN912-AISI |
| 0023 | 1.00 | 517730 | INLET DN125 FOR SF4 RG5 |
| 0024 | 20.00 | 760079 | ALLEN SCREW M10 X 25 A4 DIN912 |
| 0025 | 1.00 | 514164 | CHECK-VALVE DN125 NITRIL. |
| 0027 | 2.00 | 704186 | DOWTY SELON RG1/4 NYLON 6 |
| 0028 | 1.00 | 704189 | SEALING WASHER BSP3/4 NYLON 6 |
| 0029 | 1.00 | 708161 | O-RING Ø228,20X3,53 NITRIL |
| 0029 | 1.00 | 710408 | O-RING Ø329,79X3,53 NITRIL |
| 0075 | 1.00 | 110371 | PLUG 1/2" F. SAFETY VALVE |
| 0076 | 1.00 | 705207 | SAFETY VALVE 1/4" 15 BAR |
| 028A | 1.00 | 704188 | 1/2" DOWTY SELON RG1/2 NYLON 6 |

Sparepart list S125-80-275N/D09

Item no.: 674846,

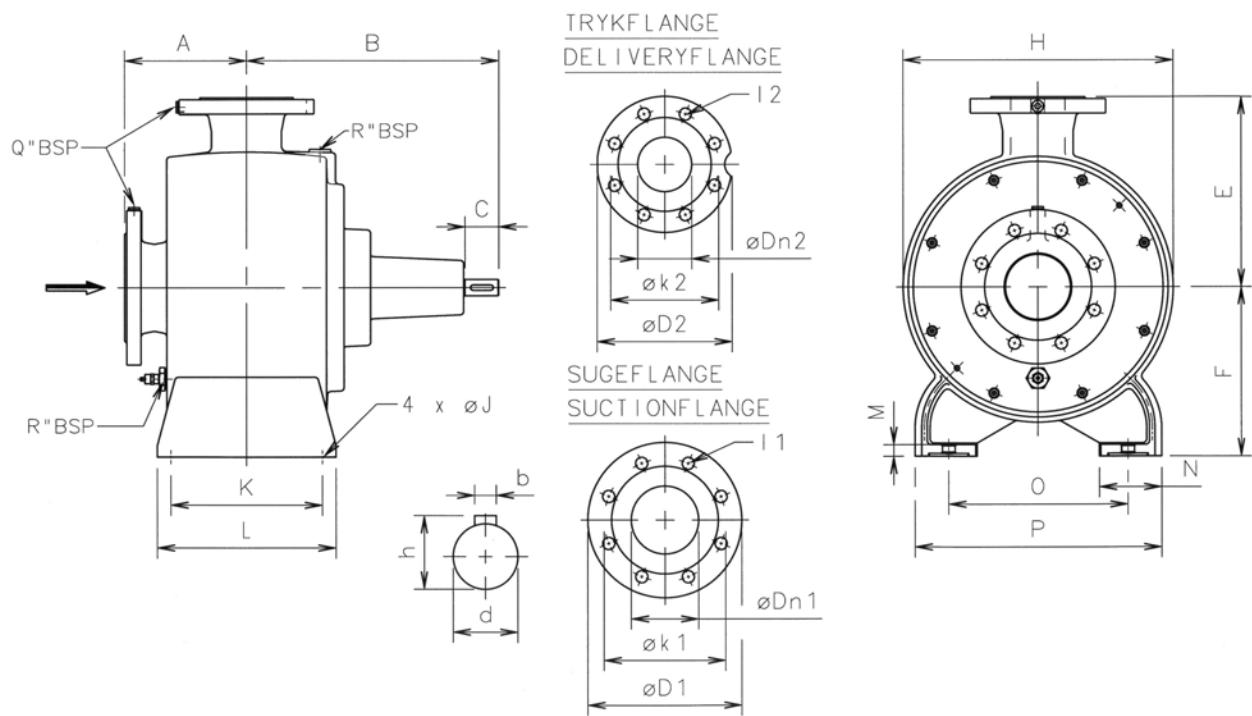
| Pos. No. | Quantity | Item no. | Description |
|----------|----------|----------|--------------------------------|
| | 1.00 | 674846 | S125-80-275N/D09 |
| | 1.00 | 514191B | IMPELLER F5 ALBZ |
| 0001 | 1.00 | 517941 | PUMPCASING SF5 RG5 |
| 0002 | 2.00 | 506961 | PLUG RG1/4" MS58PB |
| 0003 | 1.00 | 506964 | PLUG RG 3/4" MS58PB |
| 0004 | 1.00 | 516043 | SEALING RING Ø150X18 ALBZ |
| 0005 | 1.00 | 514191 | IMPELLER F5 ALBZ |
| 0006 | 1.00 | 707803 | NUT M20 SIS2343-80 DIN934 |
| 0007 | 1.00 | 704020 | SPR.WASHER BM20 SIS2343 DIN127 |
| 0008 | 1.00 | 704021 | WASHER AM20 SIS2343 DIN125 |
| 0009 | 1.00 | 704022 | KEY B 10X8X56 SIS2343 DS.96 |
| 0010 | 1.00 | 712098 | MECHANICAL SHAFT SEAL |
| 0011 | 1.00 | 704019 | V-RING 40S R NITRIL |
| 0012 | 1.00 | 704026 | LOCKRING 40X1,75 DIN983 |
| 0013 | 1.00 | 704029 | BALL BEARING |
| 0014 | 1.00 | 704027 | WASHER Ø40X50X2,5 ST. |
| 0015 | 1.00 | 704466 | BALL BEARING |
| 0016 | 1.00 | 704030 | KEY B 10X8X56 ST.60.11 DS.96 |
| 0017 | 1.00 | 514350 | SHAFT 4S SIS2324 C |
| 0018 | 1.00 | 514070 | BEARING HOUSING 3 GG20 |
| 0019 | 4.00 | 707766 | ALLEN SCREW M12 X 25 A4 DIN912 |
| 0020 | 1.00 | 514061 | REAR COVER RG5 |
| 0021 | 1.00 | 516011 | GASKET Ø296/271X0,4 |
| 0022 | 8.00 | 707766 | ALLEN SCREW M12 X 25 A4 DIN912 |
| 0023 | 1.00 | 517760 | INLET DN125 TIL SF5 RG5 |
| 0024 | 20.00 | 760079 | ALLEN SCREW M10 X 25 A4 DIN912 |
| 0025 | 1.00 | 514164 | CHECK-VALVE DN125 NITRIL. |
| 0027 | 2.00 | 704186 | DOWTY SELON RG1/4 NYLON 6 |
| 0028 | 1.00 | 704189 | SEALING WASHER BSP3/4 NYLON 6 |
| 0029 | 1.00 | 708161 | O-RING Ø228,20X3,53 NITRIL |
| 0029 | 1.00 | 711364 | O-RING Ø355,19X3,53 NITRIL |
| 0075 | 1.00 | 110371 | PLUG 1/2" F. SAFETY VALVE |
| 0076 | 1.00 | 709636 | SAFETY VALVE 1/4" INDST.18 BAR |
| 0086 | 2.00 | 711372 | POINTED SCREW M10X20 A4 DIN913 |
| 028A | 1.00 | 704188 | 1/2" DOWTY SELON RG1/2 NYLON 6 |

Sparepart list S125-100-220N/D09

Item no.: 675603,

| Pos. No. | Quantity | Item no. | Description |
|-----------------|-----------------|-----------------|--------------------------------|
| | 1.00 | 675603 | S125-100-220N/D09 |
| | 1.00 | 514301B | IMPELLER G4 ALBZ |
| 0001 | 1.00 | 517951 | PUMP CASING SG4 RG5 |
| 0002 | 2.00 | 506961 | PLUG RG1/4" MS58PB |
| 0003 | 1.00 | 506964 | PLUG RG 3/4" MS58PB |
| 0004 | 1.00 | 516044 | WEAR RING Ø155X20 ALBZ |
| 0005 | 1.00 | 514301 | IMPELLER G4 ALBZ |
| 0006 | 1.00 | 707803 | NUT M20 SIS2343-80 DIN934 |
| 0007 | 1.00 | 704020 | SPR.WASHER BM20 SIS2343 DIN127 |
| 0008 | 1.00 | 704021 | WASHER AM20 SIS2343 DIN125 |
| 0009 | 1.00 | 704022 | KEY B 10X8X56 SIS2343 DS.96 |
| 0010 | 1.00 | 712098 | MECHANICAL SHAFT SEAL |
| 0011 | 1.00 | 704019 | V-RING 40S R NITRIL |
| 0012 | 1.00 | 704026 | LOCKRING 40X1,75 DIN983 |
| 0013 | 1.00 | 704029 | BALL BEARING |
| 0014 | 1.00 | 704027 | WASHER Ø40X50X2,5 ST. |
| 0015 | 1.00 | 704466 | BALL BEARING |
| 0016 | 1.00 | 704030 | KEY B 10X8X56 ST.60.11 DS.96 |
| 0017 | 1.00 | 514350 | SHAFT 4S SIS2324 C |
| 0018 | 1.00 | 514070 | BEARING HOUSING 3 GG20 |
| 0019 | 4.00 | 707766 | ALLEN SCREW M12 X 25 A4 DIN912 |
| 0020 | 1.00 | 514211 | REAR COVER C4 RG5 |
| 0021 | 1.00 | 516012 | GASKET Ø240X225X0,4 |
| 0022 | 8.00 | 704367 | ALLEN SCREW M8X20/DIN912-AISI |
| 0023 | 1.00 | 517760 | INLET DN125 TIL SF5 RG5 |
| 0024 | 20.00 | 760079 | ALLEN SCREW M10 X 25 A4 DIN912 |
| 0025 | 1.00 | 514164 | CHECK-VALVE DN125 NITRIL. |
| 0027 | 2.00 | 704186 | DOWTY SELON RG1/4 NYLON 6 |
| 0028 | 1.00 | 704189 | SEALING WASHER BSP3/4 NYLON 6 |
| 0029 | 1.00 | 708161 | O-RING Ø228,20X3,53 NITRIL |
| 0029 | 1.00 | 711364 | O-RING Ø355,19X3,53 NITRIL |
| 0075 | 1.00 | 110371 | PLUG 1/2" F. SAFETY VALVE |
| 0076 | 1.00 | 705207 | SAFETY VALVE 1/4" 15 BAR |
| 028A | 1.00 | 704188 | 1/2" DOWTY SELON RG1/2 NYLON 6 |

17. DIMENSIONAL SKETCH



See also table on the next page

| Type | A | B | C | H | E | F | d | h | b | J | K | L | M | N |
|---------------|-------|-----|----|-----|-----|-----|------|------|----|----|-----|-----|----|-----|
| S32-25-110N | 100 | 237 | 40 | 234 | 155 | 132 | 19j6 | 21,5 | 6 | 12 | 110 | 140 | 10 | 56 |
| S50-32-135N | 84 | 237 | 40 | 234 | 140 | 132 | 19j6 | 21,5 | 6 | 12 | 110 | 140 | 10 | 56 |
| S70-50-175N | 125 | 355 | 50 | 270 | 180 | 160 | 24j6 | 27 | 8 | 15 | 145 | 175 | 10 | 55 |
| S70-50-220N | 134,5 | 352 | 50 | 330 | 220 | 190 | 24j6 | 27 | 8 | 15 | 170 | 200 | 12 | 68 |
| S70-50-275N | 140 | 350 | 50 | 390 | 240 | 225 | 24j6 | 27 | 8 | 19 | 170 | 210 | 12 | 75 |
| S80-70-175N | 150,5 | 363 | 50 | 295 | 200 | 180 | 24j6 | 27 | 8 | 15 | 190 | 220 | 13 | 69 |
| S80-70-220N | 155 | 365 | 50 | 330 | 220 | 190 | 24j6 | 27 | 8 | 15 | 190 | 220 | 12 | 70 |
| S80-70-275N | 150 | 360 | 50 | 390 | 250 | 225 | 24j6 | 27 | 8 | 19 | 170 | 210 | 12 | 75 |
| S100-80-175N | 175,5 | 374 | 50 | 344 | 240 | 200 | 24j6 | 27 | 8 | 15 | 220 | 270 | 13 | 72 |
| S100-80-220N | 180 | 376 | 50 | 400 | 280 | 250 | 24j6 | 27 | 8 | 19 | 225 | 265 | 15 | 90 |
| S100-80-275N | 180 | 465 | 80 | 425 | 280 | 250 | 32j6 | 35 | 10 | 19 | 225 | 265 | 14 | 90 |
| S125-80-220N | 204 | 480 | 80 | 424 | 280 | 250 | 32j6 | 35 | 10 | 19 | 260 | 300 | 16 | 95 |
| S125-80-275N | 202 | 480 | 80 | 454 | 300 | 260 | 32j6 | 35 | 10 | 19 | 260 | 300 | 14 | 90 |
| S125-100-220N | 235 | 500 | 80 | 476 | 315 | 280 | 32j6 | 35 | 10 | 19 | 330 | 370 | 16 | 105 |

| Type | O | P | D1 | K1 | Dn1 | l1 | D2 | k2 | Dn2 | L2 | Q | R |
|---------------|-----|-----|-----|-----|------------|------|-----|-----|------------|------|----------|----------|
| S32-25-110N | 160 | 230 | — | — | 1 1/4" BSP | — | — | ... | 1" BSP | — | ... | 1/2" BSP |
| S50-32-135N | 160 | 230 | — | — | 2" BSP | — | — | - | 1 1/4" BSP | .. | - | 1/2" BSP |
| S70-50-175N | 190 | 250 | 185 | 145 | 70 | 4x18 | 165 | 125 | 50 | 4x18 | 1/4" BSP | 1/2" BSP |
| S70-50-220N | 230 | 300 | 185 | 145 | 70 | 4x18 | 165 | 125 | 50 | 4x18 | 1/4" BSP | 1/2" BSP |
| S70-50-275N | 280 | 360 | 185 | 145 | 70 | 4x18 | 165 | 125 | 50 | 4x18 | 1/4" BSP | 1/2" BSP |
| S80-70-175N | 200 | 273 | 200 | 160 | 80 | 8x18 | 185 | 145 | 70 | 4x18 | 1/4" BSP | 3/4" BSP |
| S80-70-220N | 230 | 305 | 200 | 160 | 80 | 8x18 | 185 | 145 | 70 | 4x18 | 1/4" BSP | 3/4" BSP |
| S80-70-275N | 280 | 360 | 200 | 160 | 80 | 8x18 | 185 | 145 | 70 | 4x18 | 1/4" BSP | 3/4" BSP |
| S100-80-175N | 230 | 319 | 220 | 180 | 100 | 8x18 | 200 | 160 | 80 | 8x18 | 1/4" BSP | 3/4" BSP |
| S100-80-220N | 265 | 365 | 220 | 180 | 100 | 8x18 | 200 | 160 | 80 | 8x18 | 1/4" BSP | 3/4" BSP |
| S100-80-275N | 280 | 380 | 220 | 180 | 100 | 8x18 | 200 | 160 | 80 | 8x18 | 1/4" BSP | 3/4" BSP |
| S125-80-220N | 280 | 382 | 250 | 210 | 125 | 8x18 | 200 | 160 | 80 | 8x18 | 1/4" BSP | 3/4" BSP |
| S125-80-275N | 320 | 414 | 250 | 210 | 125 | 8x18 | 200 | 160 | 80 | 8x18 | 1/4" BSP | 3/4" BSP |
| S125-100-220N | 320 | 445 | 250 | 210 | 125 | 8x18 | 220 | 180 | 100 | 8x18 | 1/4" BSP | 3/4" BSP |