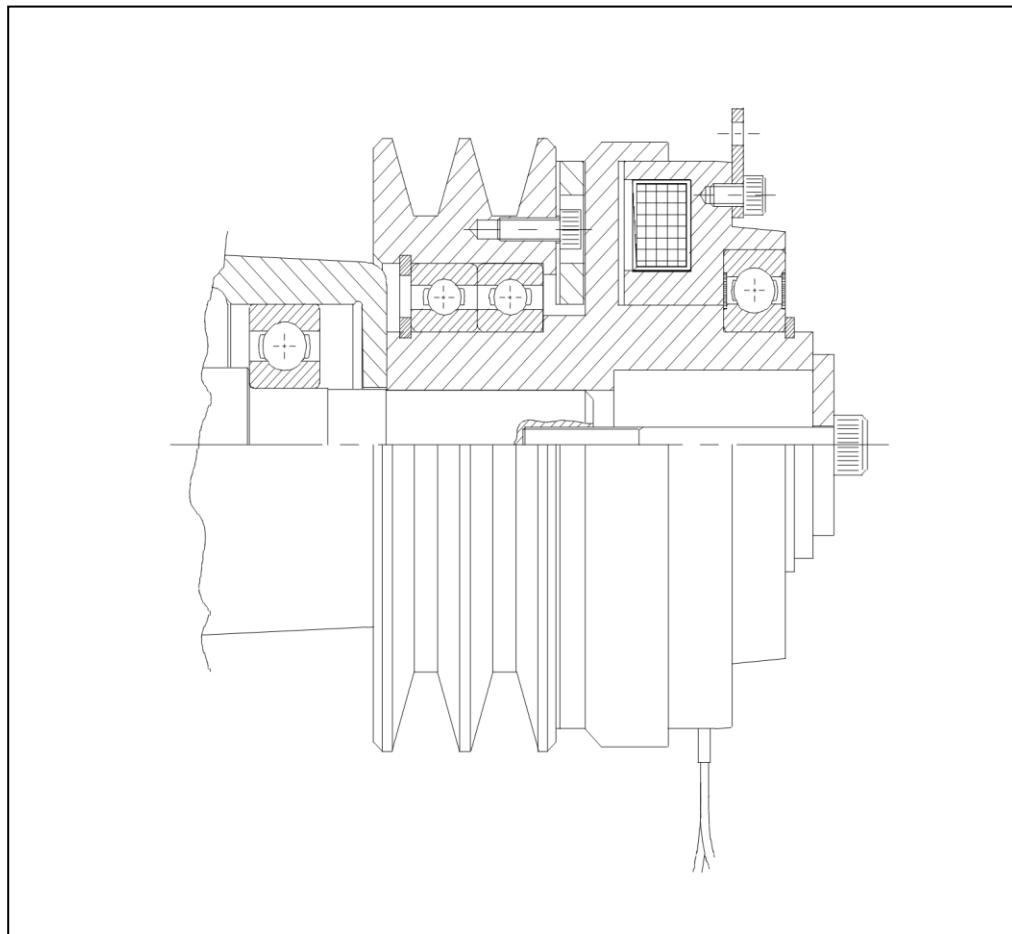


# DESMI

## OPERATION AND MAINTENANCE INSTRUCTIONS

### ELECTROMAGNETIC CLUTCH FOR S-PUMPS



**DESMI Pumping Technology A/S**

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Manual: T1376	Language: English	Revision: B (10/19)
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## 1. INTRODUCTION AND DESCRIPTION

The clutch is an electromagnetic 1-disk clutch designed for dry friction. The special advantage of an electromagnet is that it can be operated by remote control.

When the current is connected to the magnetic part (item 68) a magnetic field is formed, so that the armature part (item 66) is drawn towards the friction coating on the rotor (item 68), by which the coupling takes place. The armature part (item 66) is bolted to the driven V-belt pulley by means of an annular pre-stressed spring leaf riveted to the armature part. At the same time, the spring serves to transfer the torque. When the current is off the spring pulls the armature part free of the friction coating of the rotor, so that there is no friction and no residual torque. The bearing of the clutch needs no lubrication as it is closed. The current is supplied to the wires which are lead out through the magnetic clutch (item 68). The item numbers refer to drawing No 41 19 60, on which the mounting dimensions are also shown.

### Clutch for S50-32-135:

Power consumption: 28 Watt  
Normal voltage DC: 24 Volt

### Clutch for S70-50-175:

Power consumption: 35 Watt  
Normal voltage DC: 24 Volt

### Clutch for S80-70-275:

Power consumption: 50 Watt  
Normal voltage: 24 Volt

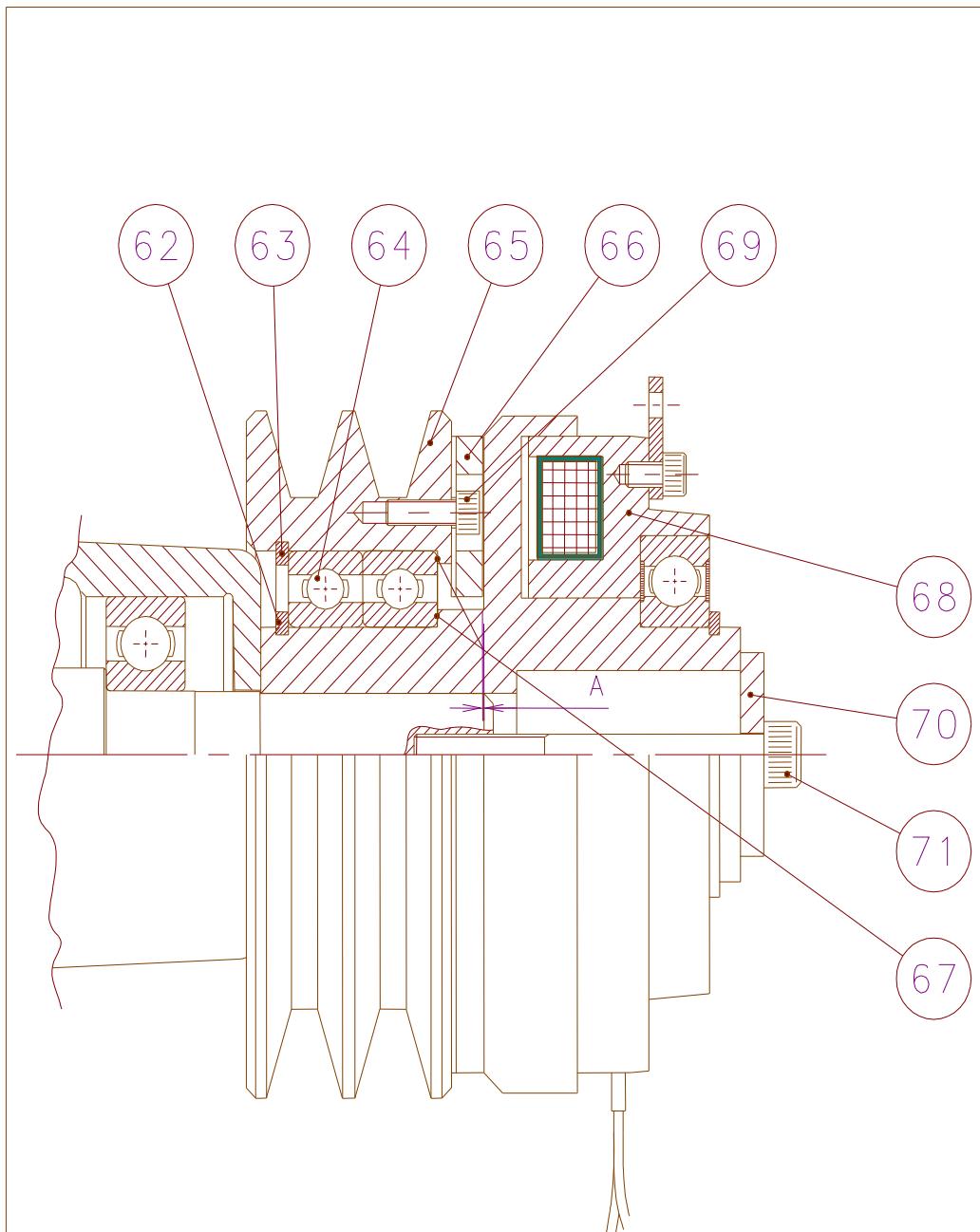
## 2. MOUNTING INSTRUCTIONS

1. Assemble the pump as usual, but with a special shaft.
2. Press the bearings (item 64) into the V-belt pulley (item 65) and secure them with a locking ring (item 63).
3. Mount the armature part (item 66) on the V-belt pulley (item 65) by means of an Allen screw (item 69).
4. Press the V-belt pulley into the rotor (item 68) of the magnetic clutch and secure with a locking ring (item 62).
5. Check the distance A - see drawing (41 19 60)- between armature part (item 66) and the rotor on the magnetic clutch (item 68) with a distance meter, and, if necessary, adjust with a baffle ring (item 67).
6. Push the magnetic clutch with belt pulley on to the pump shaft until the rotor on the magnetic clutch touches the shoulder.
7. Mount the Allen screw (item 41) with a washer.
8. Mount the wires in the junction box.



**IMPORTANT: MOUNT THE FITTING ON THE MAGNETIC CLUTCH BEFORE STARTING UP THE PUMP UNIT!**

### 3. SECTIONAL DRAWING OF THE CLUTCH



KEB-10.03.810	S80-70-275	0,3		
KEB-09.03.810	S70-50-175	0,3		
KEB-08.03.810	S50-32-135	0,2		
KOBLINGSTYPE	PUMPETYPE	A		
	A/S De Smithske P.O.Box 226 DK-9400 Nørresundby, Denmark. Phone: +45 98 17 81 11 Telex: 6 96 20 Telefax: +45 98 17 54 99	SNITTEGNING AF ELEKTROMAGNETISK KEB-KOBLING	41 19 60	
			Blad 1 af 1 blade	
			Dato 95.02.22	
			Udført af HSJ	

COMMENT =

Subject to alterations

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## 4. SPARE PARTS LIST

- 62 Locking ring
- 63 Locking ring
- 64 Bearing
- 65 Belt pulley
- 66 Armature part
- 67 Baffle ring
- 68 Magnetic clutch
- 69 Allen screw
- 70 Washer
- 71 Allen screw

## 5. INFORMATION RELEVANT FOR DISASSEMBLY, RECYCLING OR DISPOSAL AT END-OF-LIFE:

No dangerous materials are used in DESMI pumps – please refer to DESMI Green Passport (can be sent on request – contact a DESMI sales office) – i.e. common recycling company can handle the disposal at end-of-life. Alternatively the pump and motor can be returned to DESMI at end-of-life for safe recycling.