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1. INTRODUCTION AND DESCRIPTION

The clutch is an electromagnetic l-disc 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 32/35) a magnetic field is formed, so that the armature part (item 34/41) is drawn towards the friction coating on the rotor (item 33/38), by which the coupling takes place. The armature part (item 34/41) 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 bearings of the clutch need no lubrication as they are closed. The current is supplied to the wires which are lead out through the protective cap (item 44/52). The item numbers refer to drawing No 40 11 36/40 15 59 on which the mounting dimensions are also shown. The first number in brackets refer to 40 11 36 and the second to 40 15 59.

2. MOUNTING INSTRUCTIONS

1. Assemble the pump as usual, but with a special shaft and mount a bearing plate (item 41/28 instead of the normal bearing cover.
2. Mount the magnetic part (item 32/35) on the bearing plate.
3. Measure the distance A - see drawing (40 11 36/40 15 59) - from the magnetic part to the shoulder of the shaft. This measure is to be observed and, if necessary, to be adjusted with a shim (item 40/49).
4. Mount the rotor (item 33/38).
5. Mount the distance bush (item 39/51).
6. Fasten the armature part (item 34/41) to the V-belt pulley (item 43/55).
   Mount locking ring (item 38) on the clutches for SA20 and SA25. Press the bearings (item 36) into place and secure with a Seeger-ring (item 37) and mount it all on the shaft.
   Press the bearings with a distance bush (item 50) mounted in between into the clutch for SA50 and adjust a clearance, if any, with a shim (item 49). Secure the bearings with a locking ring (item 46) and mount it all on the shaft.
7. Check the distance B - see drawing (40 11 36/4015 59) - between the armature part and the rotor with distance meter and, if necessary, adjust with a shim (item 40/49).
8. Mount lock nab (item 23/47). Mount lock nut (item 24/48), tighten and secure with the lock nab.
9. Push the protective cap (item 44/52) on to the V-belt pulley (item 43/55) until the wires (item 46/54) can be lead through the protective cap. Push the protective cap further towards the shoulder and fasten.
10. Mount (glue) the cover (item 42/45).
11. Mount the wires (item 46/54) in a junction box.
3. SECTIONAL DRAWINGS OF THE CLUTCHES FOR SA20/SA25/SA50
4. SPARE PARTS LIST FOR SA20 AND SA25

23. Lock nut MB3
24. Lock nut KM3
31. Bearing plate
32. Magnetic part
33. Rotor part
34. Armature part
35. Allen slotted screw
36. Bearing
37. Seeger-ring
38. Locking ring
39. Distance ring
40. Shim
41. Distance ring
42. Bearing cover
43. V-belt pulley
44. Protective cap
45. Screw-joint
46. PVC-hose

5. SPARE PARTS LIST FOR SA50

28. Bearing plate
35. Magnetic part
38. Rotor part
41. Armature part
42. LH-screw
43. Bearing
45. Bearing cover
46. Locking ring
47. Lock nut MB6
48. Lock nut KM6
49. Shim
50. Distance ring
51. Distance bush
52. Protective cap
53. Screw-joint
54. PVC-hose
55. V-belt pulley

6. TECHNICAL DATA

Clutch for SA20/SA25:
Power consumption: 20 Watt
Normal voltage DC: 24 Volt

Clutch for SA50:
Power consumption: 35 Watt
Normal voltage DC: 24 Volt
7. INFORMATION RELEVANT FOR DISASSEMBLY OR DISPOSAL AT END-OF-LIFE

No damage 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 companies 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.