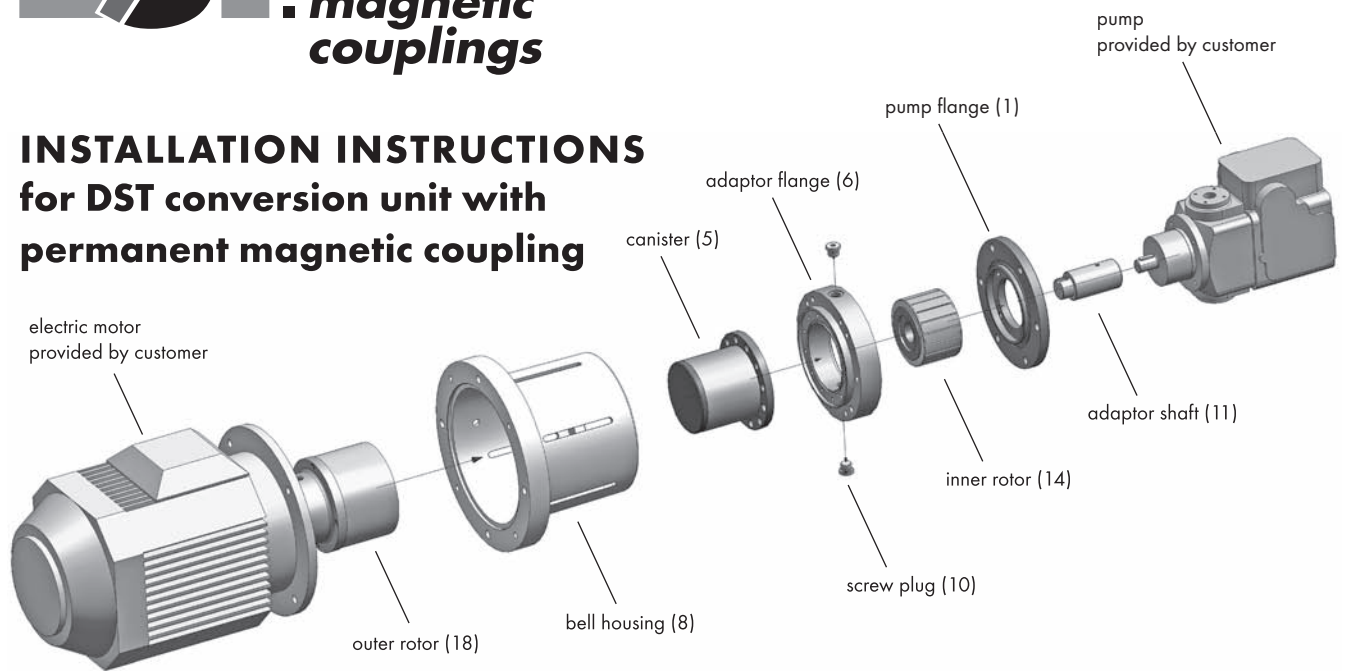


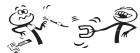
## INSTALLATION INSTRUCTIONS for DST conversion unit with permanent magnetic coupling



### 1. Warning and safety notes

DST Permanent magnetic couplings generate a strong magnetic field. The installation must be carried out only by authorized staff. All installation instructions must be strictly followed. Modifications or changes to the magnet coupling or its components are not allowed. The manufacturer does not take responsibility for damage caused by improper use.

### ATTENTION



- ▶ In areas where permanent magnetic couplings are handled or stored with open access, persons with heart pacemakers should keep a safety distance of 3 meters. For permanent magnetic couplings assembled within a pump or an agitator a safety distance of 1 meter is sufficient.
- ▶ Magnetic data carriers (e.g. bank cards and floppy disks) may become unreadable and should be kept away from the magnetic field.

### DANGER

- ▶ Installation and maintenance must always take place during complete shutdown in an un-pressurised condition. The drive unit must be secured against inadvertent switching-on (with signs, switching off electricity power supply) in order to avoid serious injuries due to rotating parts.
- ▶ Do not reach inside the working area during the operation of the coupling. For protection against accidental contact appropriate security must be installed.

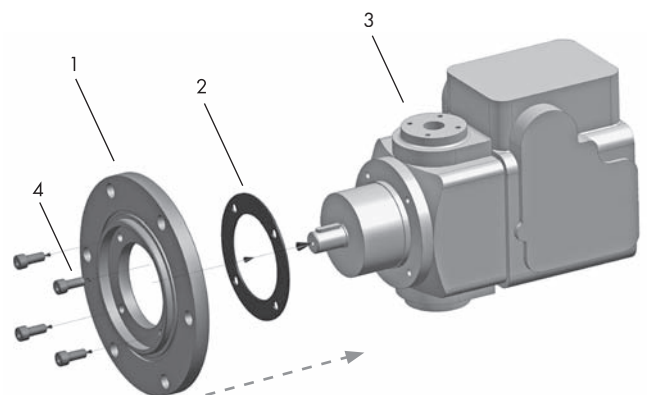
### 2. Storage

DST Permanent magnetic couplings are supplied as separate components. Before assembly the contents should be checked. Storage rooms should not contain electronic equipment that reacts to magnetic fields. Rooms with high humidity are not suitable for storage. Furthermore checks should be made that no condensation occurs.

### 3. Installation

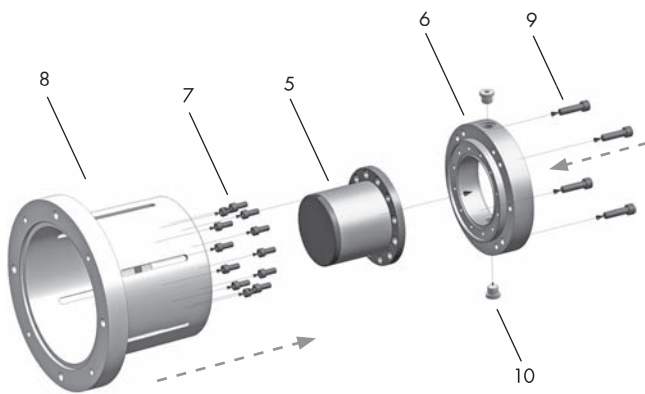
Prior to the installation all relevant dimensions should be verified. Before operation, it is essential that sufficient provision is made for heat dissipation. This can be achieved through the process fluid, a bypass or a separate cooling circuit. To reduce local heating, an additional cooling flange and/or ceramic canister can be used. DST offers both options.

#### 3.1 Assembly of pump flange



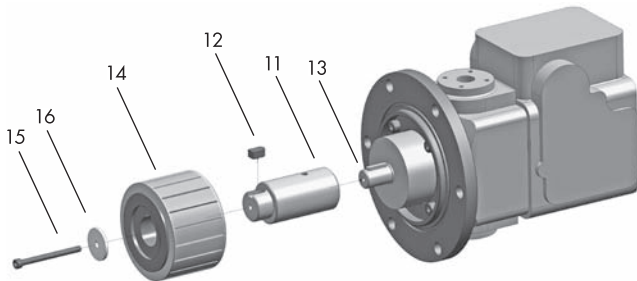
- ▶ Mount pump flange (1) together with flat gasket (2) onto pump housing (3) with mounting screws (4).

### 3.2 Assembly of adaptor flange and bell housing



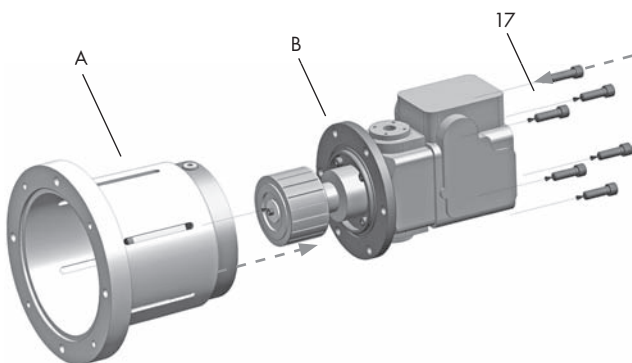
- ▶ Mount canister (5) onto adaptor flange (6) with mounting screws (7).
- ▶ Connect bell housing (8) with screws (9) to adaptor flange (6).
- ▶ Insert screw plugs (10) in adaptor flange (6).

### 3.3 Assembly of inner rotor to pump



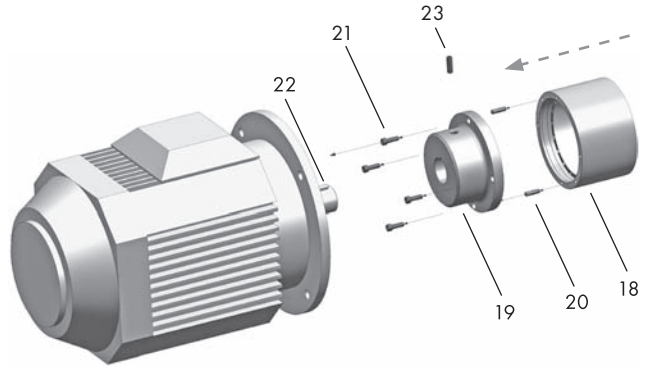
- ▶ Slide adaptor shaft (11) together with key (12) onto pump shaft (13).
- ▶ Fix inner rotor (14) with screw (15) and washer (16) onto adaptor shaft (11).  
Verify dimension to provided drawing.

### 3.4 Assembly of bell housing to pump



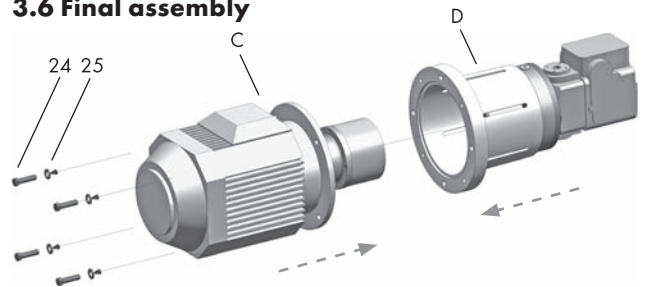
- ▶ Mount bell housing unit (A) with screws (17) to pump flange (B).

### 3.5 Assembly of outer rotor to electric motor



- ▶ Fix outer rotor (18) and motor hub (19) with pin (20) and mounting screws (21).
- ▶ Slide motor hub (19) onto motor shaft (22) and secure it with set screw (23).  
Verify dimension to provided drawing.

### 3.6 Final assembly



- ▶ Connect motor unit (C) and pump unit (D) with screws (24) and washers (25).

### ATTENTION

- ▶ The outer rotor must always be brought to its final position over the canister using a guide to eliminate lateral movement. Careful monitoring is necessary to ensure that the outer rotor and canister do not come into contact during installation.
- ▶ All screws must be tightened crosswise with a torque wrench (values see table).

screw size class	tightening torque (mit $\mu_{ges}=0,14$ )
M4 - 8.8	3,0 Nm
M5 - 8.8	5,9 Nm
M6 - 8.8	10 Nm
M8 - 8.8	25 Nm
M10 - 8.8	49 Nm
M12 - 8.8	85 Nm
M16 - 8.8	135 Nm

### 4. Disassembly

The disassembly process takes place in reverse order to the assembly.

### 5. Maintenance

DST Permanent Magnetic Couplings are maintenance free if installation and operation are performed as described above. Please feel free to contact us in case of technical questions regarding installation, removal and maintenance of DST Permanent Magnetic Couplings.