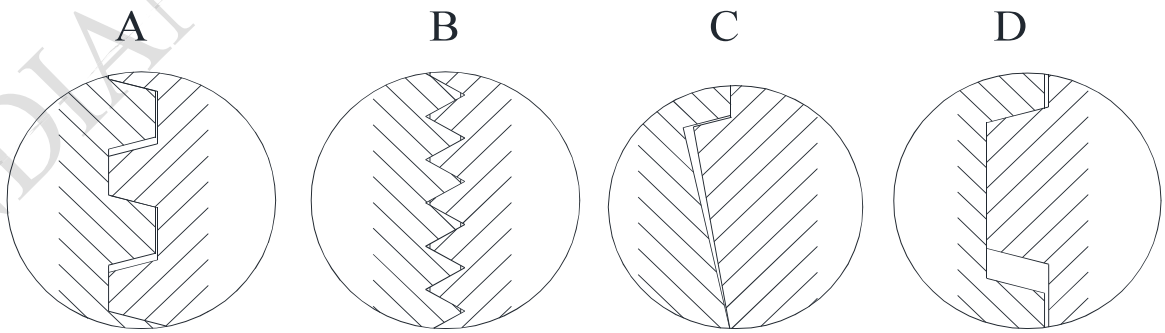
INSTALLATION OF TOOTHED CLUTHCES & BRAKES

1. The Positive type of Toothed Clutches can transmit a higher torque (torque through profiled teeth) than a multi-disc clutch of the same size. High speeds are possible and are maintenance free.
2. The clutches should be thoroughly cleaned before assembly.
3. They should be engaged only while at rest or at a relative speed of ± 5 r.p.m. of the shafts but may be disengaged at any speed or under load.
4. It is very much essential that the clutch is installed using pressure only and not hampering it into position. Apply pressure at C or D and never at A or B.
5. The class fitting for the shaft should always be h7 to j6.
6. It is very important that the clutch coil housing and Armature disc is properly centered and located axially. The maximum radial and axial run-out permitted is 0.02mm.
7. When the clutch body is pressed onto the shaft, care must be taken to avoid burring. All sharp edges must be rounded off.
8. The Armature Plate must move very freely in the axial direction.
9. Ensure that the screws on the armature plate are fully tightened in position.
10. The gap between the two halves of the clutch should be maintained as per catalogue very strictly.
11. In a stationery field type of clutch the maximum speed permitted is determined by the maximum speed permitted for the bearings.
12. The restraining device (holding the coil housing) which prevents the magnet body from rotating must not cause any axial or radial distortion to load the bearings in a stationery type of clutch.
13. While mounting two stationery clutches back-to-back, a small gap should be left between the units for the oil to reach the bearings.
14. A radial gap of 2mm is maintained between the shaft and the armature plate to prevent magnetic flux leakage into the shaft.
15. The drive motor and the clutch should never be energized at the same instant.
16. Both Wet and Dry operation is possible.
17. In case the clutch is installed vertically then the armature disc clearance should reduce to 0.2mm to reduce the engagement time. Ensure armature plate is at the bottom.
18. The toothed Clutches can be supplied with different tooth forms continuous engagement (Fig A & B) Fixed point engagement (Fig D). Unidirectional engagement (Fig.C).



19. The tooth clutches are provided with brass drive rings to facilitate easy replacement of the drive rings and for their non-magnetic property.

20. The stationery field type of clutches should never be disassembled since the air gap between the stator and rotor is very critical.