

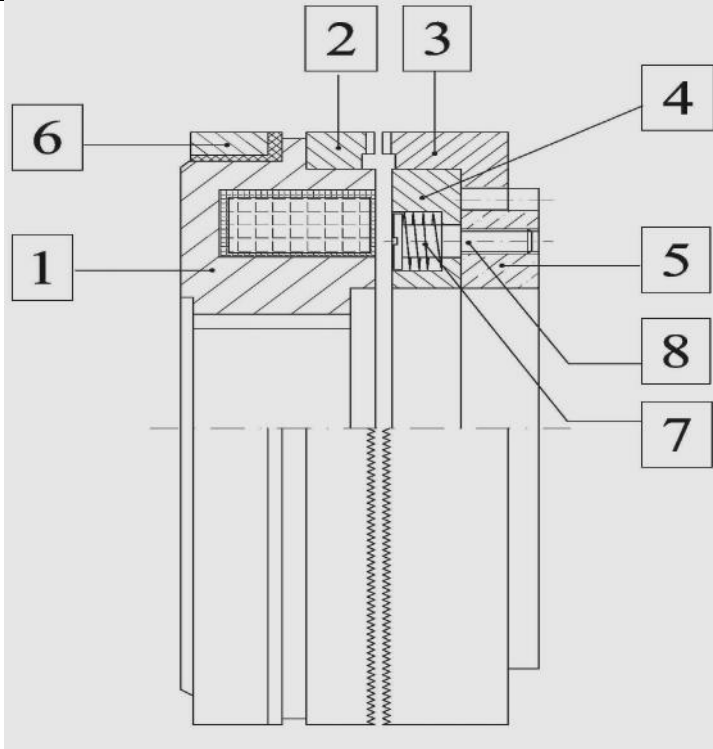
Size		11	12	15	21	22	24	26	28	120	
Torque	Mu (Nm)	100	200	350	600	1200	2200	3000	4000	6000	
DC Voltage	(V)	24 V DC									
Power Consumption	Watt (W)	17	24	42	51	69	74	87	100	140	
Weight approx..	(kg)	0.93	1.2	2.1	3.4	6.6	10.3	12.5	18.7	21.5	
Moment of inertia	Magnet Side ( $10^{-3} \text{kgm}^2$ )	0.9	1.5	3.7	7.0	20	42	57	100	160	
	Armature Side	0.3	0.6	1.4	3.5	10	24	37	62	80	
	$\text{Ø } D_1/D_2$ (mm)	82	95	114	134	166	195	210	240	258	
	A (mm)	37	38	43	50	60	68	73	81	84	
	A <sub>1</sub> (mm)	40	41	46	53	63.5	71	75	83.5	86.5	
Bore	$\text{Ø } d_2$ (Min)	12	25	25	25	30	45	50	60	75	
	$\text{Ø } d_2$ (Max)	20	28	35	40	45	65	70	75	85	
Multi Keyway /Spline	$\text{Ø } d_2$ (mm)	34H7 3(6x1.7)	A8x 36x40	A8x 46x50	A8x 52x58	A8x 72x78	A10x 82x88	A10x 92x98	A10x 102x108	A10x 112x120	
	$\text{Ø } d_5 + 0.2$ (mm)	35	45	53	63	80	89	100	112	133	
	$\text{Ø } d_6$ (mm)	M4	M4	M4	M5	M6	M6	M6	M6	M6	
	$\text{Ø } d_7 \pm 0.1$ (mm)	55	65	80	100	120	150	150	150	170	
	$\text{Ø } d_1$ (mm)	36	42	52	60	80	90	100	110.5	123	
	f (mm)	23	23	26	29	35	38.5	38	42	46	
	g (mm)	23	20	23	26	30	33.5	35	37	42	
	h + 0.05 (mm)	1.5	1.5	2	2	2.5	3	3	3	3	
	k (mm)	5.5	5.5	6	7	7	7	8.5	8.5	8.5	
	n (mm)	6	6	7	8	9.5	12	14	14.5	16.5	
	y (mm)	0.3	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.6	

\* The holes for attaching the adapter plate to the item of machinery must be made by the customers.

\* Special Voltage Clutches available on request.

\* Keyways BS 4235, DIN 6885

\* Technical Alteration reserved.



**CONSTRUCTION**

- |                  |                         |                   |                        |
|------------------|-------------------------|-------------------|------------------------|
| (1) Coil Housing | (3) Armature Drive Ring | (5) Adapter Plate | (7) Compression Spring |
| (2) Drive Ring   | (4) Armature Plate      | (6) Slip Ring     | (8) Screw              |

**OPERATION**

This Toothed clutch comprises a coil Housing (1) containing a potted coil, a face teeth drive ring (2) and slip ring (6) mounted on the coil housing outside. Coil Housing is bored has a keyway and is pressed directly on to the driving shaft. This part is to be preferred as the driving part of the clutch. Armature drive ring (3) is press fitted on armature plate (4) and these two slides on spur gear provided on adapter plate (5). Adapter plate is bolted to the item of machinery with which it must rotate. Adapter Plate is supplied without mounting holes. Required Mounting hole and finish bore can be made by the user. Spring (7) and screw (8) ensure that the two toothed rings are kept apart when the clutch is de energized. Face Teeth are machined on faces of the drive ring and armature drive ring. Energization of the coil through slip ring by telescopic brush (refer page 37 for brush details) generates a magnetic field which attracts the sliding armature plate and armature drive ring. The face teeth mesh together and this allows the driving torque to be transmitted. For disengagement all that is necessary is to switch off the power supply. Armature drive ring is retracted into rest position by means of the screw and springs.

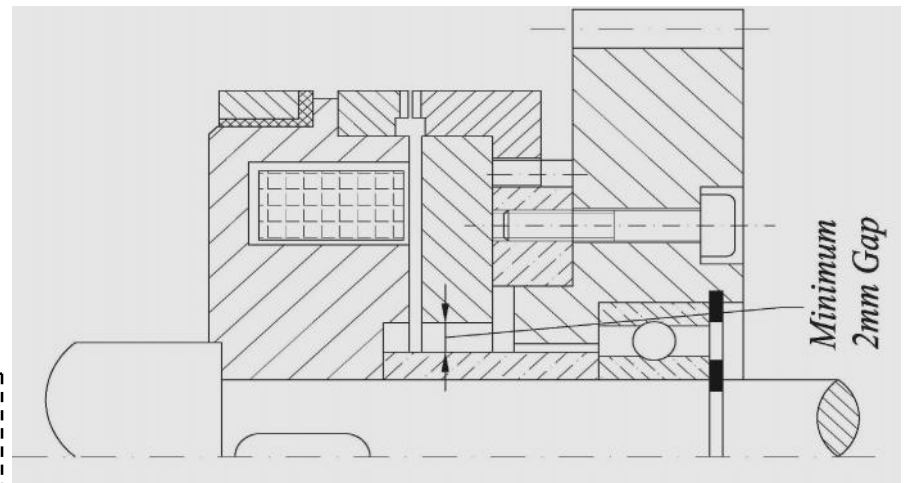
**APPLICATION**

Engagement at Rest or at a relative speed of +/-5r.p.m of the shafts but may be disengaged at any speed or under load. Nil residual torque. Operation is possible in both wet and dry condition.

**EXAMPLE OF INSTALLATION**

**The Basic Version of Clutch for Torque transmission between shaft and gear wheel.**

The Clutch should be fitted with the Coil Housing Body on the driving side.  
An adapter plate is bolted and pinned to the gear wheel for transferring the torque from the clutch to the gear wheel.



**ORDER EXAMPLE.**

**Electromagnetic Slip Ring Toothed Clutch**  
TYPE : 24.503.12.1 – 24 V.d.c  
Bore d = 25mm / Keyway to DIN 6885