



Flaton Clutches have long been recognized for their high torque capabilities in low speed applications. Flaton's compact designs have a high degree of repeatability and are available in a variety of configurations.

When a power transmission system is subject to sudden or excessive loads, Flaton Clutches prevent twisted shafts and broken gears, sprockets and chains. Once the unit is adjusted and locked, the clutch will slip automatically if the load exceeds the predetermined torque setting. When the overload is relieved, the clutch resets automatically and is ready to carry a normal load once again. Flaton Clutches operate both clockwise and counterclockwise and function efficiently at moderate and low speeds, to less than one rpm.

Operating Mechanism

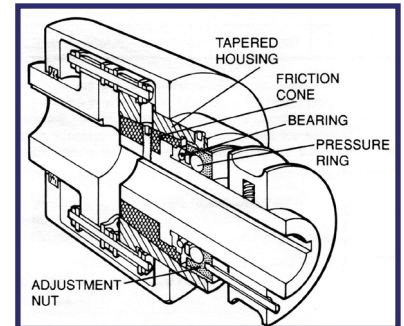
The operating principle is the same for all types of Flaton Clutches. A friction cone is fitted into the threaded and taper-bored housing, and this integral cone is backed up with a thrust bearing. An adjustment nut forces a rubber pressure ring against the bearing to hold the friction cone at the proper tension to transmit the required torque. The adjustment nut and locking mechanism allow for 40 standard torque settings. The amount of torque can be increased or decreased by tightening or releasing the adjustment nut as conditions require.

Clutch Location

Flaton Clutches are designed to offer high torque capacity and compact size. The recommended clutch location is, therefore, at the high torque (low speed) area of the transmission train. Locating the clutch on the slow side of the transmission minimizes heat generation and results in longer wear life and minimal maintenance.

Torque in Inch Pounds

After determining proper torque in inch pounds, refer to this table for proper clutch size. Check maximum bore to make sure the selected clutch can be used.



Clutch Size	Clutch Setting									
	10	20	30	40	50	60	70	80	90	100
Size 10	139	239	334	422	454	529	592	630	693	819
Size 15	315	567	756	945	1008	1197	1324	1450	1576	1891
Size 20	567	1008	1387	1765	1891	2206	2458	2710	3025	3340
Size 25	819	1450	2017	2521	2710	3151	3529	3908	4286	4664
Size 30	1891	3403	4727	5987	6429	7500	8319	9202	10273	11345
Size 35	3340	5924	8130	10336	11092	12920	14433	15882	17710	19538
Size 40	7878	13992	19286	24516	26281	30630	34160	37626	42038	46386
Size 45	15315	27290	37500	47710	51050	59685	66491	73298	81806	90378

Standard Bore Tolerances

.250" to .999" bore	+ .000" to + .001"
1.000" to 1.999" bore	+ .0005" to + .0015"
2.000" to 2.999" bore	+ .001" to + .002"
3.000" to 3.999" bore	+ .0015" to + .0025"
4.000" and over bore	+ .0015" to + .0035"

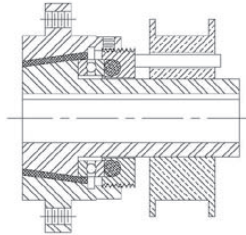
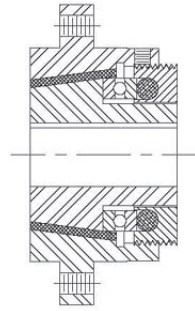
For tolerance requirements that differ from the standard bore tolerances, please consult the factory.

Most Requested Clutch Models

For further information about these models please request the individual technical data sheets. For information about other types of clutches, please call the factory.

Model DH - Demountable Hub Clutch

Model DH clutches are designed for applications in which plate sprockets, gears, cams and other parts will be mounted onto the hub of the clutch housing. This design permits removal and replacement of the drive component with minimal downtime. For available sprockets see Model DH Technical Data Sheet.

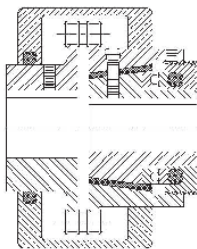
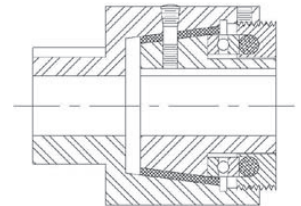


Model DHL - Demountable Hub Clutch with Shut-off

DHL Clutches with automatic shut-off are designed for applications in which it is necessary to mount plate sprockets, gears, cams, and other parts onto the hub of the clutch housing. The shut-off spool allows for superior torque control when interfaced with a drive such as a limit switch. For available sprockets see Model DHL Technical Data Sheet.

Model E - Extended Hub Clutch

The Flaton Model E Clutch is designed for the installation of gears, sprockets and similar drive components on the clutch hub.

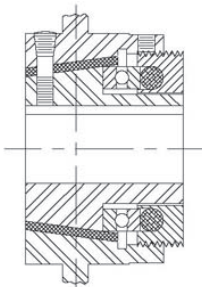
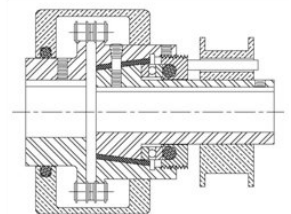


Model FC - Flexible Coupling Clutches

The Flaton model FC is an adjustable clutch with a built-in flexible shaft coupling assembly. It is used in applications which require flexibility in addition to torque control, for protection against overload.

Model FCL - Flexible Coupling Clutches with Shut-off

The Flaton Model FCL is a chain coupling style clutch with a built-in mechanical shut-off spool. This shut-off spool allows for superior torque control when interfaced with a device such as a limit switch.



Model I - Integral Clutches

The Model I Flaton Clutch is constructed with a sprocket or gear as an integral part of the exterior housing. By making the drive component a permanent part of the clutch, its overall size can be reduced. For available sprockets see Model I technical data sheet. For available gears, pulleys, etc. please consult factory.

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