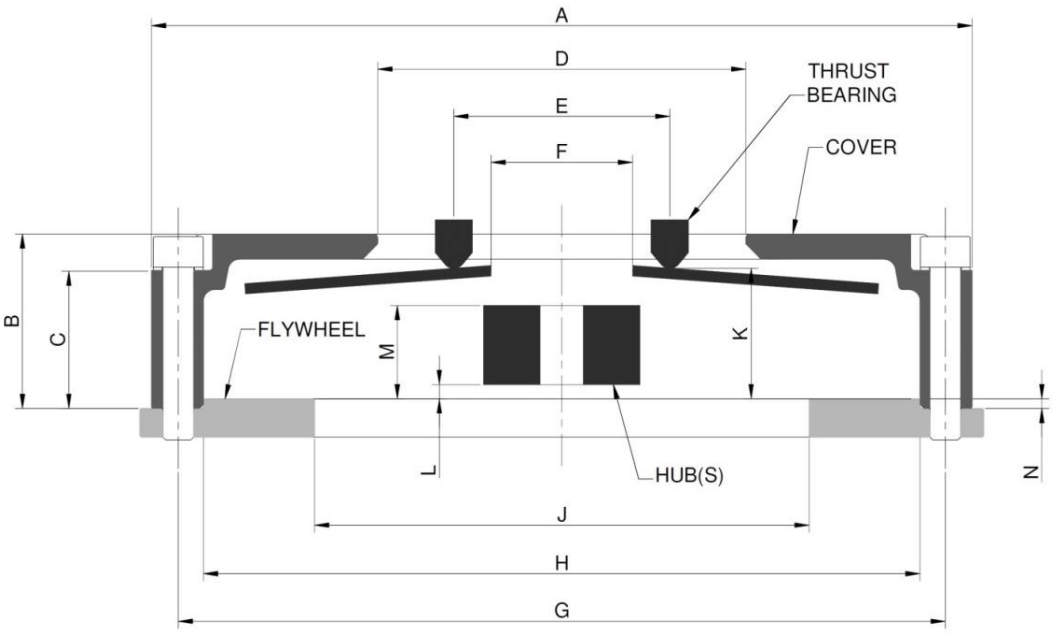
TTV	Clutch Specifications	Doc Number: 2804-01-500	Revision: -
	Title: 2804 Series – 140mm Twin Plate Paddle Clutch	Author: SRV	Effective Date: 09/07/20



Clutch Dimensions

Dim	Description	mm
A	Diameter of cover	167
B	Height of cover	48.5
C	Grip height	38.5
D	Minimum inside diameter of cover	69
E	Min/max thrust bearing fulcrum diameter	40/50
F	Minimum inside diameter of spring fingers	36
G	Mounting bolt/stud PCD - BASIC	154.45
H	Flywheel spigot diameter ±0.02	142.67
J	Flywheel inner diameter +0/-2	95
L	Clutch face to start of hub(s)	-
M	Clutch face to end of hub(s)	-
N	Flywheel spigot step height ±0.04	2.5

- Dimensions “L” and “M” are dependent on hub configurations selected at time of order. Please consult TTV Racing for details.
- Please consult TTV racing if your input shaft diameter is between Ø30mm – Ø35mm.

Clutch Fastener Specifications

- Clutch should be fastened to the flywheel using 8 off M8 studs/ mechanical locking nuts or M8 Cap head screws/ safety washers.
- Fastener strength should be grade 10.9 minimum.
- Fasteners to be gradually tightened to 27Nm (20lbft) in a criss-cross pattern. Thread locking compound should be used.

Clutch Performance Specifications

Clutch Type (Spring Colour)	Setup Height "K" mm		Torque Capacity Nm (lbft)	Max Release Load Kg	Spring Thickness mm
	New	Worn			
2804-04-001 (low ratio)	33.8	36	653 (482)	358	2x 2
2804-04-002 (High ratio)	33.8	36	834 (615)	358	2x 2

- Setup heights are from flywheel friction face and based on using an Ø40mm release bearing. Heights are subject to a tolerance of ±0.5mm.
- Release loads are based on an Ø46mm release bearing. A smaller diameter bearing will reduce release loads.

Clutch Mass and Inertias

Clutch Type	Assembly Mass Kg	Assembly MMOI $Kg.m^2$
2804-04-001	1.8954	0.00709
2804-04-002	1.883	0.00701

- Mass and inertias are for cover assemblies only and are estimated values.

Release Bearing Specification

- Release bearing should be of the steel caged, round nose type. Nominal Ø40 diameter.
- Release bearing travel must not exceed 3.8mm and should be limited by an external stop. Ensure spring fingers do not contact drive hubs.
- Release bearing should have enough backwards travel to allow the bearing to be free of the spring fingers when clutch is fully engaged at maximum wear.

Maintenance

Type	Thickness mm		Flatness mm
	New	Worn	
Pressure Plate	12.6	12.4	0.10
Floater Plate	6.0	5.8	0.10
Drive Plate	5.6	5.2	0.15

- Total allowable wear shall be not more than 0.8mm for the whole assembly.
- Regular inspection and maintenance of the clutch is recommended for optimum performance over the life of the clutch.
- Pressure, floater and drive plates should be checked for flatness and wear.