

# A1 INSTALLATION DRAWING

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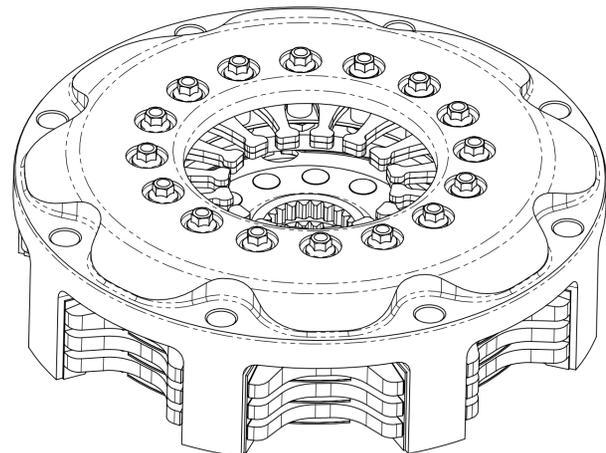


**AP Racing**  
Wheler Road  
Coventry  
CV3 4LB

Tel: +44 (0) 24 7663 9595  
Fax: +44 (0) 24 7663 9559  
e-mail: [engineering@apracing.co.uk](mailto:engineering@apracing.co.uk)  
Web site: <http://www.apracing.com>

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## CP6013 - Ø140mm (5.50") SINTERED THREE PLATE ENDURANCE CLUTCH ASSEMBLY



## CP6013 CLUTCH FAMILY

### MAXIMUM DYNAMIC TORQUE CAPACITY

(Nm)	450	603			
(ft.lb)	332	444			
<b>RELEASE LOAD</b>					
Max. Peak Worn (N)	4000	5400			
Max. Peak New (N)	3100	3600			
<b>WEAR IN (See Note)</b>					
	0.75	1.00			
Set Up Height New	36.60	36.56			
	34.61	34.87			
Set Up Height Worn - MAX	38.32	39.25			
(Set Up Height is calculated from the flywheel friction face.)					
Release Ratio	2.65	2.65			
Estimated Assembly Mass (No Driven Plates) = 2.53 Kg					
Estimated Assembly Inertia (No Driven Plates) = 0.009567 Kgm <sup>2</sup>					
Estimated Driven Plate Inertia - Sheet 2 for details					

SET UP HEIGHT - WORN FROM FLYWHEEL FRICTION FACE (SEE CHART)

SET UP HEIGHT - NEW FROM FLYWHEEL FRICTION FACE (SEE CHART)

### RECOMMENDED RELEASE BEARING :-

STEEL CAGED, ROUND NOSED BALL TYPE BEARING TO BE FREE OF SPRING FINGERS WHEN CLUTCH IS FULLY ENGAGED.  
CP3457-1 STANDARD RELEASE BEARING (OUTER RACE ROTATES)  
CP3457-5 HIGH SPEED RELEASE BEARING (INNER RACE ROTATES).

PERFORMANCE SUFFIX	OH	CH			
For Reference					
Diaphragm Spring Rate	ORA	CRV			
Clutch Ratio	HiR	HiR			

MATERIAL	SUFFIX	DRIVE PLATE MATERIAL	DRIVE PLATE THICKNESS
90		SINTERED	2.63mm

### FLYWHEEL TYPE

	SUFFIX	COMMENTS
FLAT FLYWHEEL	FF	N/A
STEPPED FLYWHEEL	SF	FOR INSTALLATION DATA SEE SHEET 2

Sample AP Racing Part No.

### WEAR IN

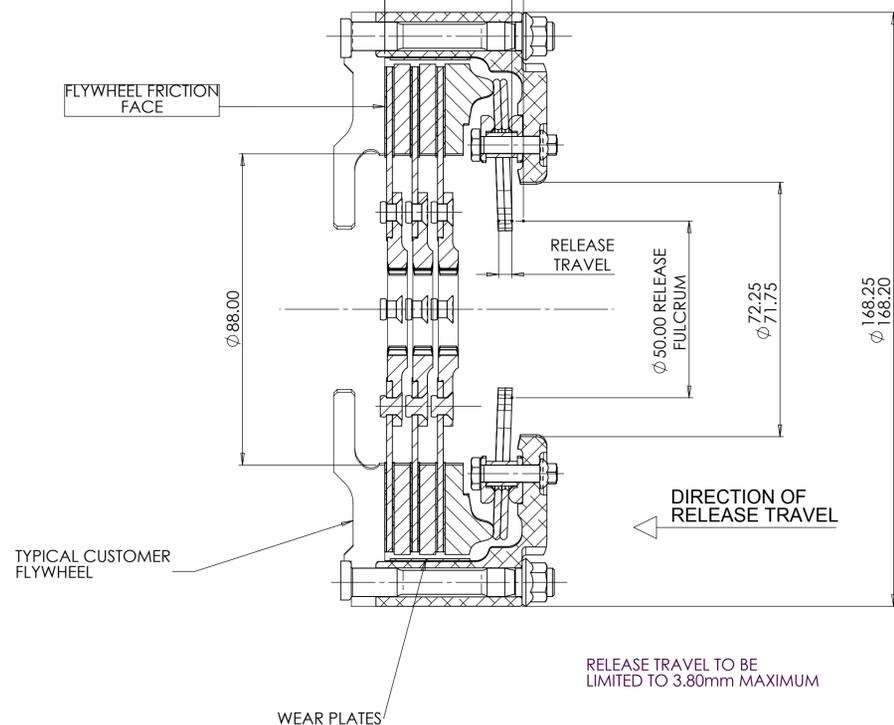
THIS CLUTCH HAS BEEN DESIGNED FOR THE WEAR IN INDICATED ABOVE,

DRIVEN PLATE THICKNESS NEW = 2.63mm Nominal

DRIVEN PLATE THICKNESS WORN (1.00 WEAR IN) = 2.29mm Minimum

DRIVEN PLATE THICKNESS WORN (0.75 WEAR IN) = 2.38mm Minimum

FOR DRIVEN PLATE DETAILS SEE SHEET 2



RELEASE TRAVEL TO BE LIMITED TO 3.80mm MAXIMUM

Issue No.	Alterations		Zone	Initials
	Date & No.	Particulars		
11	16/04/13 C4479	REDRAWN INTO THE LATEST FORMAT SHEET. FOR ALL PREVIOUS CHANGES SEE ARCHIVED DRAWING CP6013-1CD. OH90-SF WAS AORA CH90-SF WAS ACRV SUH NOW CALCULATED FROM THE FRICTION FACE CH SPEC 603Nm WAS 630Nm 444ft.lb WAS 471ft.lb 5400N WAS 450daN OH SPEC 450Nm WAS 741Nm 332ft.lb WAS 348ft.lb 4000N WAS 375daN. WEAR-IN 0.75 WAS 1.00	#	JG
12	22/07/19	PICTORIAL UPDATE TO DRIVE PLATES (SHEET 2)	#	BJP

SCALE 1:1	SHEET 1 OF 2
DRAWN	Jeremy Govan
APPROVED	
DERIVED FROM	
TITLE	Ø140mm (5.5") THREE PLATE SINTERED CLUTCH
DRG NO.	CP6013CD

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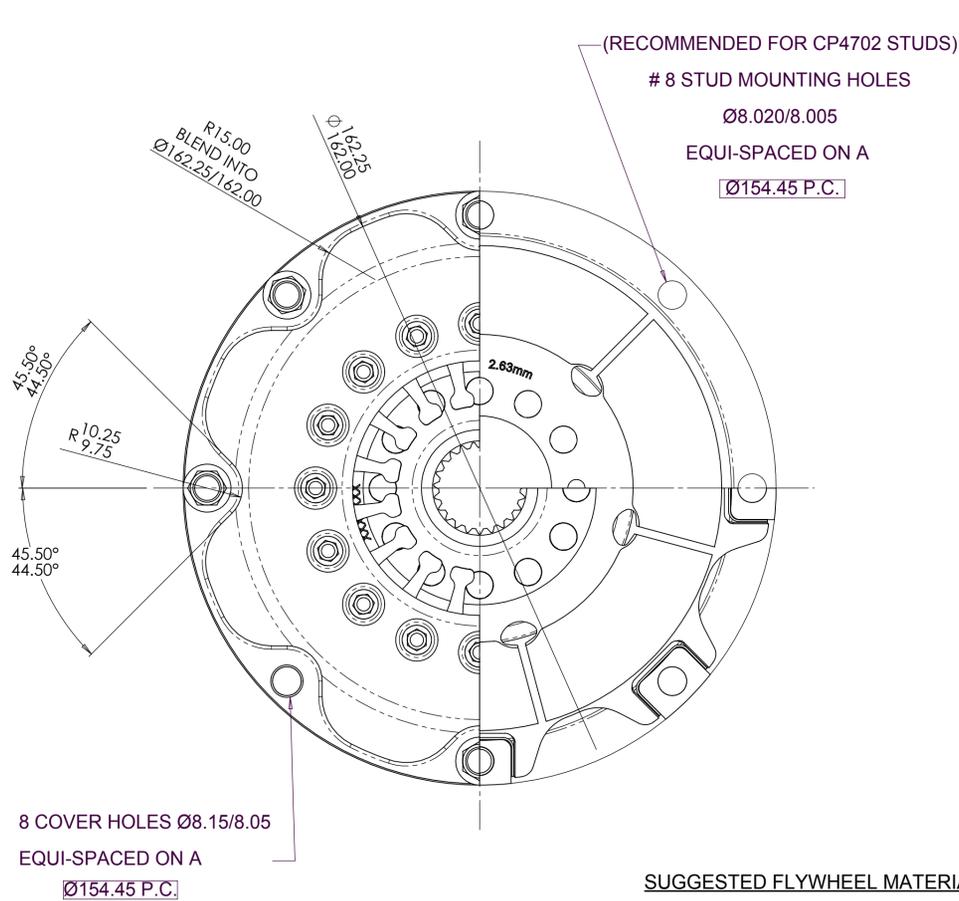


**AP Racing**  
Wheler Road  
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CV3 4LB

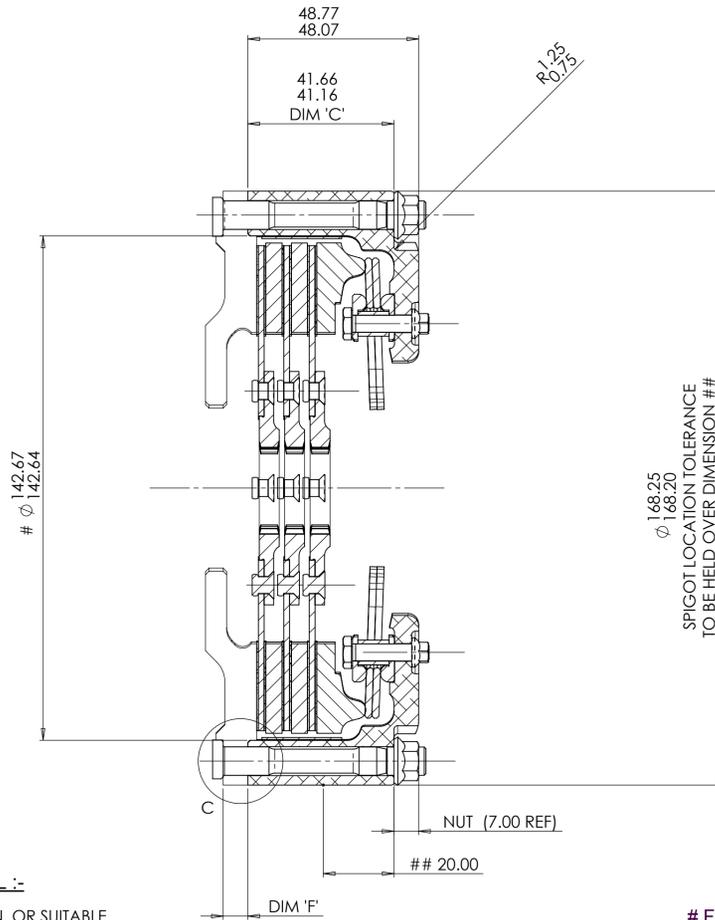
Tel: +44 (0) 24 7663 9595  
Fax: +44 (0) 24 7663 9559  
e-mail: [engineering@apracing.co.uk](mailto:engineering@apracing.co.uk)  
Web site: <http://www.apracing.com>

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Issue No.	Alterations		Zone	Initials
	Date & No.	Particulars		
-	-	SEE SHEET 1 FOR ISSUE INFORMATION.	-	-



**SUGGESTED FLYWHEEL MATERIAL :-**  
0.35/0.45% CARBON STEEL, BRINELL 200 MIN. OR SUITABLE MATERIAL FOR HIGH RPM. FRICTION FACE TO BE FINE TURNED AND GROUND SMOOTH AND FLAT. RUNOUT AT R77.2 <=0.08 MAX. WHEN ASSEMBLED TO CRANKSHAFT.



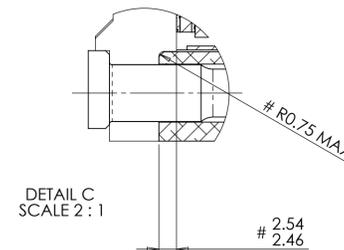
## FLYWHEEL DIMENSIONS

RECOMMENDED CLUTCH MOUNTING :  
(FOR ALL TYPES OF ASSEMBLY)  
M8 x 1.0, CP4702 FAMILY STUD AND  
K-LOCK NUT.  
TIGHTENING TORQUE : 19Nm (14 ft.lb)

LENGTH OF STUD REQUIRED TO BE  
CALCULATED THUS :

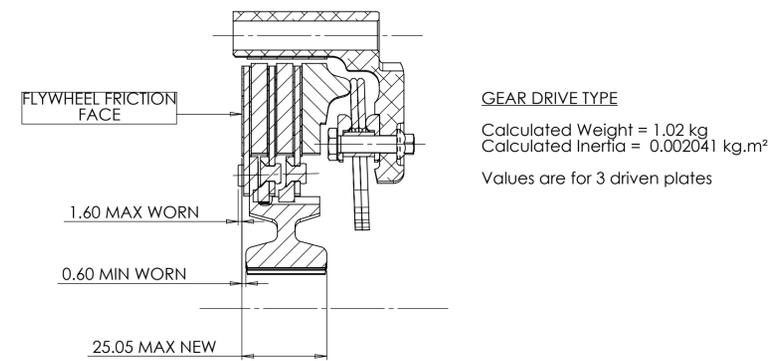
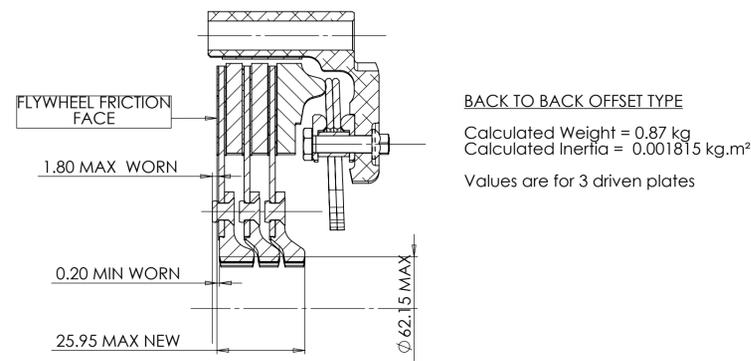
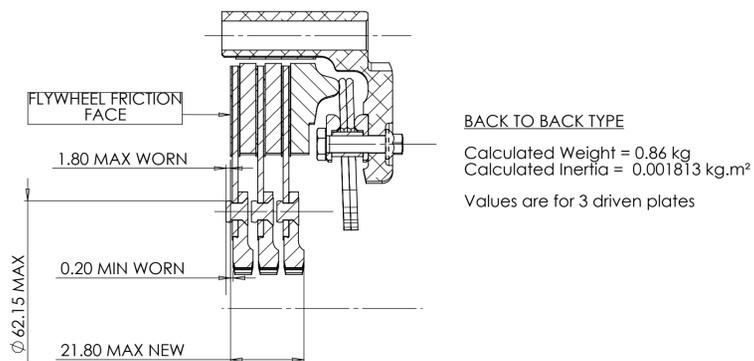
STUD LENGTH =  
DIMENSIONS 'C' + 'F' + NUT

THIS CALCULATED LENGTH TO BE ROUNDED  
UP TO THE NEXT AVAILABLE STANDARD STUD  
LENGTH.



# FLYWHEEL DIMENSIONS

## DRIVEN PLATE DETAILS



SPLINE	DRIVEN PLATE DETAILS									
	BACK TO BACK TYPE			BACK TO BACK OFFSET TYPE			GEAR DRIVE TYPE			
	PART No.	NUMBER REQUIRED	PART NUMBER	NUMBER REQUIRED	PART No.	NUMBER REQUIRED	PART NUMBER	NUMBER REQUIRED	PART No.	NUMBER REQUIRED
1" x 23T	CP3683-3	3					CP4073-4	1	CP4074-6	2
1" x 24T	CP3683-14	3					CP4073-5	1	CP4074-6	2
7/8" x 20T	CP3683-4	3					CP4073-6	1	CP4074-6	2
1" 5/32" x 26T	CP3683-12	3	CP6014-10	1	CP6014-9	2	CP4073-3	1	CP4074-6	2
29.0 x 10T	CP3686-13	3					CP4073-7	1	CP4074-6	2
1" 1/8" x 10T	CP3683-5	3					CP4073-10	1	CP4074-6	2
1" 25" x 10T	CP3683-16	3								

SCALE 1:1 SHEET 2 OF 2

DRAWN Jeremy Govan

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TITLE

Ø140mm (5.5") THREE PLATE  
SINTERED CLUTCH

DRG NO. CP6013CD