A1 INSTALLATION DRAWING

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FIRST ANGLE PROJECTION

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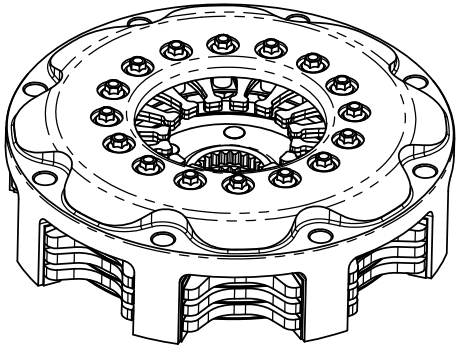
CP6013 CLUTCH FAMILY

CP6013 - Ø140mm (5,50") SINTERED THREE PLATE ENDURANCE CLUTCH ASSEMBLY



MAXIMUM DYNAMIC TORQUE CAPACITY						
(Nm)	450	603				
(ft.lb)	332	444				
RELEASE LOAD						
Max. Peak Worn (N)	4000	5400				
Max. Peak New (N)	3100	3600				
WEAR IN (See Note)	0.75	1.00				
Set Up Height New	36.60 34.61	36.56 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 Kgm²						
Estimated Driven Plate Inertia - Sheet 2 for details						

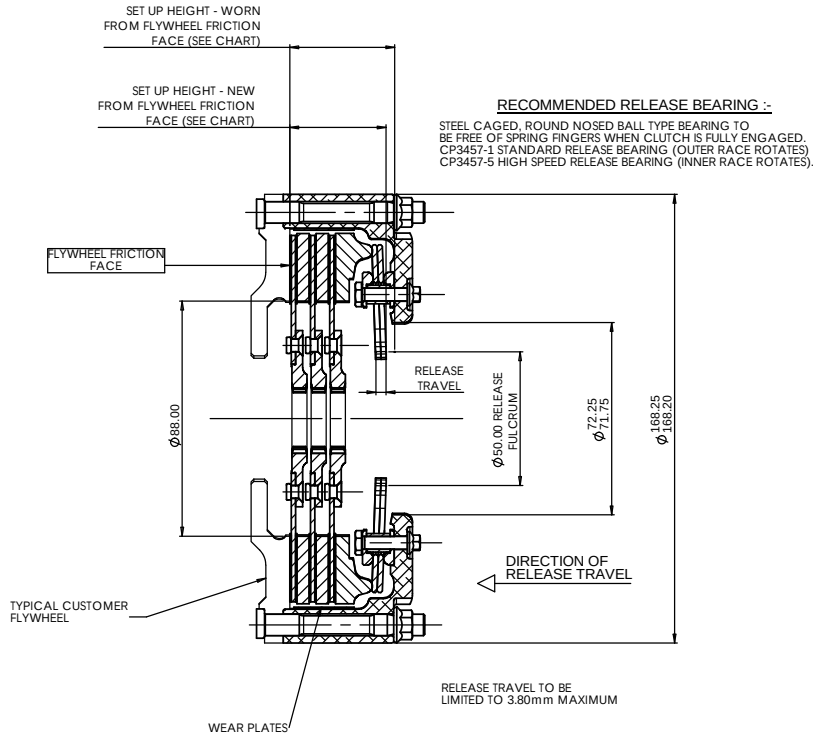
PERFORMANCE SUFFIX	OH	CH				
For Reference						
Diaphragm Spring Rate	ORA	CRV				
Clutch Ratio	HiR	HiR				

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



Issue No.	Alterations: Date & No.	Particulars	Zone	Initials
11	16/04/13 C4479	REDRAWN INTO THE LATEST FORMAT SHEET. FOR ALL PREVIOUS CHANGES SEE ACHIVED 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

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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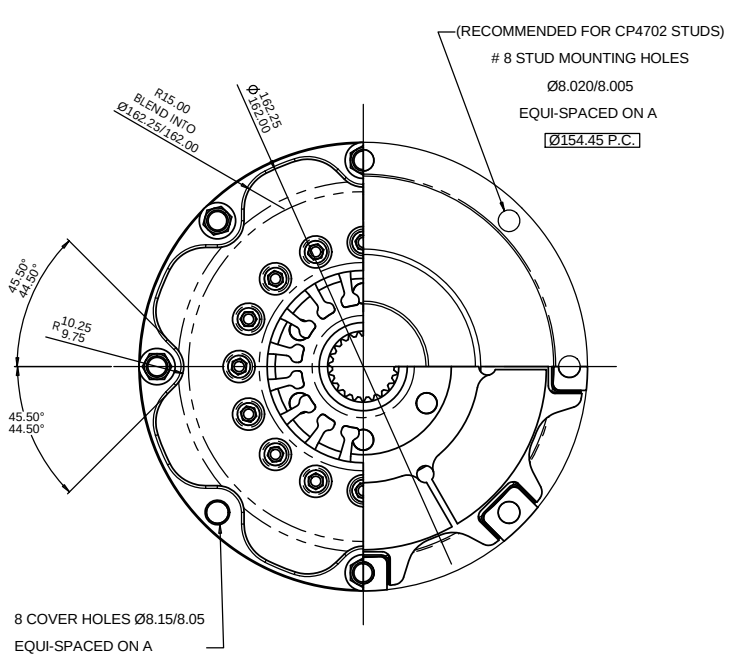
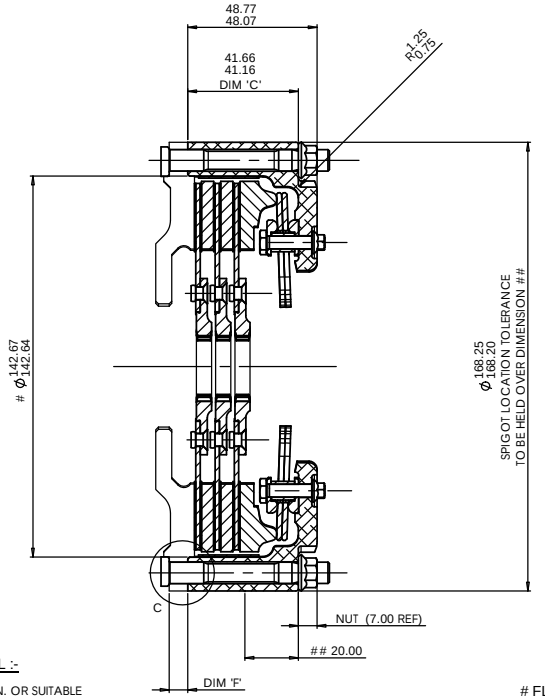




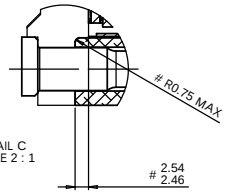
FLYWHEEL DIMENSIONS

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.



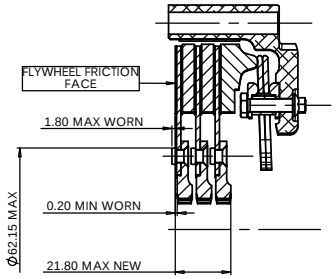
DETAIL C
SCALE 2 : 1

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

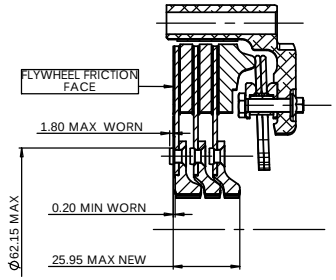
DRIVEN PLATE DETAILS



BACK TO BACK TYPE

Calculated Weight = 0.86 kg
Calculated Inertia = 0.001813 kg.m²

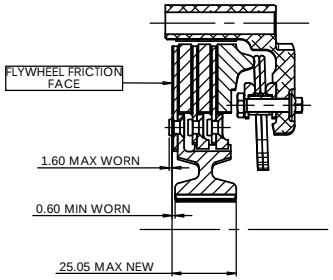
Values are for 3 driven plates



BACK TO BACK OFFSET TYPE

Calculated Weight = 0.87 kg
Calculated Inertia = 0.001815 kg.m²

Values are for 3 driven plates



GEAR DRIVE TYPE

Calculated Weight = 1.02 kg
Calculated Inertia = 0.002041 kg.m²

Values are for 3 driven plates

DRIVEN PLATE DETAILS

	BACK TO BACK TYPE		BACK TO BACK OFFSET TYPE				GEAR DRIVE TYPE			
SPLINE	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								

Alterations

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SCALE 1:1	SHEET 2 OF 2
DRAWN	Jeremy Govan
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DRG NO. CP6013CD