

A1 INSTALLATION DRAWING

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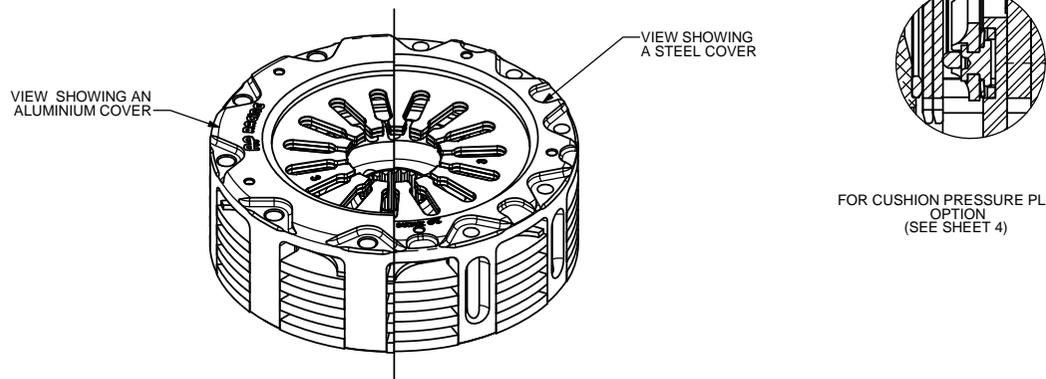


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CP8273 Ø115mm (4.5") PULL TYPE CARBON / CARBON CLUTCH ASSEMBLY. INCLUDING AN OPTIONAL CUSHION PRESSURE PLATE SYSTEM (CPS) AND CONCENTRIC SLAVE CYLINDER

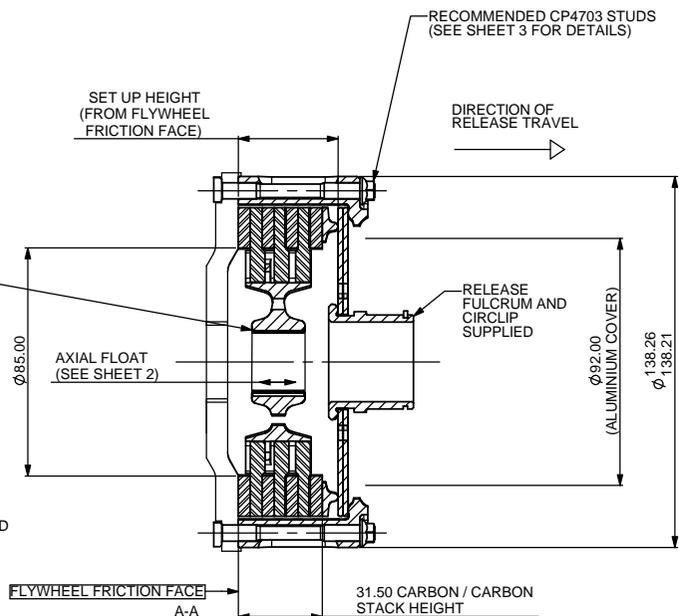


FOR CUSHION PRESSURE PLATE OPTION (SEE SHEET 4)

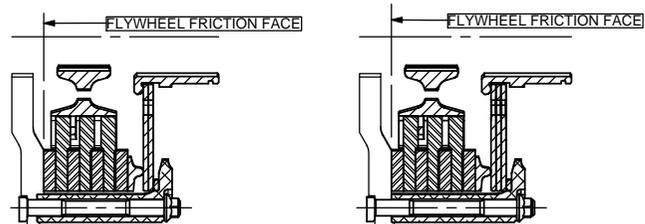
HUB PART No. SPLINE
CP8273-121 (S/T) 1.16" x 26 x 30°
CP8273-122 (S/T) 1.00" x 23
CP8273-123 (S/T) 0.87" x 20

HUB MATERIAL SUFFIX.
S = STEEL
T = TITANIUM

HUBS ARE AVAILABLE WITH OTHER SPLINE SIZES. CONTACT AP RACING FOR DETAILS. FOR HUB ENVELOPE SEE SHEET 2.



RELEASE TRAVEL TO BE LIMITED TO 4.00 MAXIMUM



FOR OPTIONAL PULL TYPE SLAVE CYLINDER DETAIL SEE SHEET 4

CP8273 CLUTCH FAMILY

MAXIMUM DYNAMIC TORQUE CAPACITY			
(Nm)	1092	1092	
(ft.lb)	805	805	
RELEASE LOAD			
Max. Peak Worn (N)	4300	6700	
Max. Peak New (N)	2800	4100	
WEAR IN (See Note)			
	0.7	1.10	
Set Up Height New			
	38.31	38.14	
	36.54	36.71	
Set Up Height Worn			
	31.52	30.63	
(Set Up Height is calculated from the flywheel friction face.)			
Release Ratio			
	7.18	5.52	
Assembly Mass		Steel Cover	
	Aluminium Cover	1.48 kg	1.89 Kg
Assembly Inertia		Steel Cover	
	Aluminium Cover	0.003488 Kgm ²	0.005084 Kgm ²
Estimated Driven Plate & STL Hub Inertia = 0.0007842 Kgm ²			

PERFORMANCE SUFFIX	CM TWIN SPING	DE TRIPLE SPRING	
For Reference			
Diaphragm Spring Rate	CRV	GLD	
Clutch Ratio	MHR	EHR	

MATERIAL SUFFIX	COVER MATERIAL	PRESSURE PLATE MATERIAL	CARBON / CARBON TYPE
02	ALUMINIUM	STEEL	HEAVY DUTY
03	STEEL	STEEL	HEAVY DUTY

FLYWHEEL TYPE		
	SUFFIX	COMMENTS
FLAT FLYWHEEL NO CUSHION	FN	FOR INSTALLATION DATA SEE SHEET 2
FLAT FLYWHEEL WITH CPS	FP	FOR INSTALLATION DATA SEE SHEET 2 AND SHIM DETAILS SEE SHEET 4
STEPPED FLYWHEEL NO CUSHION	SN	FOR INSTALLATION DATA SEE SHEET 2
STEPPED FLYWHEEL WITH CPS	SP	FOR INSTALLATION DATA SEE SHEET 2 AND SHIM DETAILS SEE SHEET 4

Sample AP Racing Part No. **CP8273-CM02-FP**
If a displacement transducer is required add '-DT' to the part number (See sheet 5)

WEAR IN

Issue No.	Alterations			Zone	Initials
	Date & No.	Particulars			
1	19/04/07 C3123	FIRST ISSUE		#	JG
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7	17/04/08 C3395	'DE' SPECIFICATION WAS 'GE'. FLYWHEEL FRICTION FACE DATUM ADDED. 1.00 EXTERNAL STEP ADDED TO STEPPED FLYWHEEL DETAIL		#	JG
8	01/08/08	REF. SHEET 3 DIM 'R' ADDED DIM 'S' MOVED FROM 50.37/49.87 TO 47.37/46.87	E10 C5 B10	#	JG
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12	21/01/13	'DE' SPEC 1092 WAS 1457 805 WAS 1074		#	JG

SCALE 1:1	SHEET 1 OF 5
DRAWN	Jeremy Govan
APPROVED	
DERIVED FROM	CP7223-1CD
TITLE	
Ø115mm PULL TYPE, 3 PLATE CARBON / CARBON CLUTCH	
DRG NO.	CP8273CD

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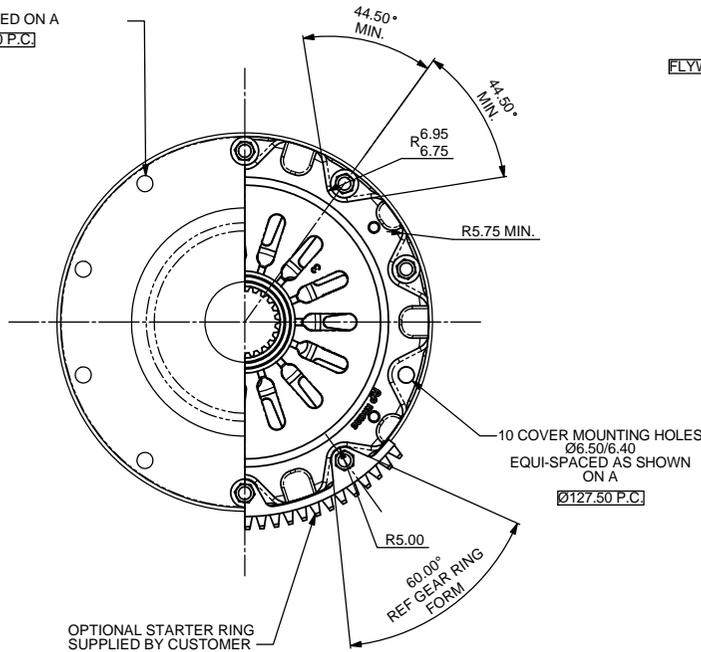
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FLYWHEEL DIMENSIONS

(RECOMMENDED FOR CP4703 STUDS)

10 MOUNTING HOLES Ø6.361 / 6.349

EQUI-SPACED ON A
Ø127.50 P.C.



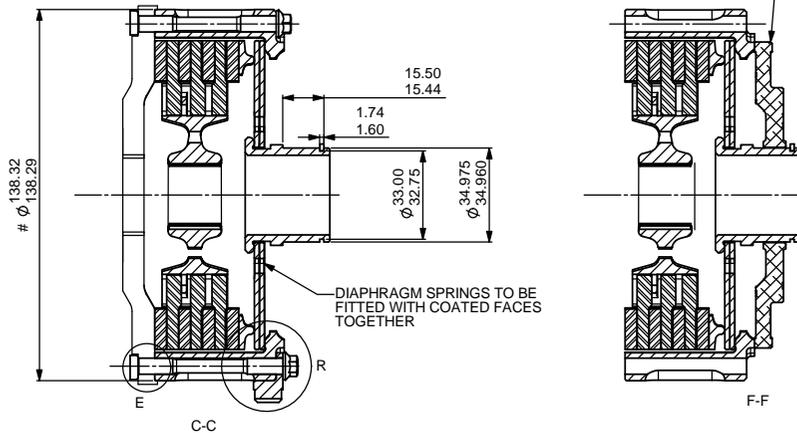
THIS ASSEMBLY IS SUPPLIED NEW WITH AN INSTALLATION PLATE AS SHOWN. THIS IS TO ALLOW THE ASSEMBLY TO BOLTED TO THE FLYWHEEL WITHOUT DAMAGING ANY OF THE CLUTCH COMPONENTS.

AFTER BOLTING THE CLUTCH TO THE FLYWHEEL REMOVE THE CIRCLIP AND INSTALLATION PLATE AND RETAIN FOR USE WHEN REMOVING THE ASSEMBLY FROM THE FLYWHEEL.

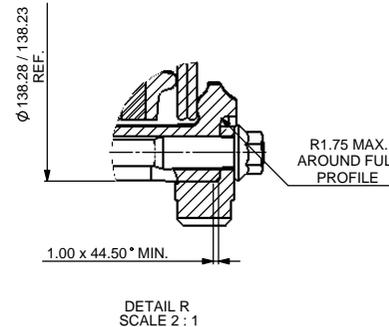
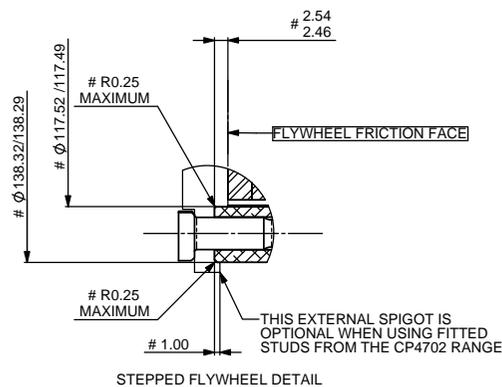
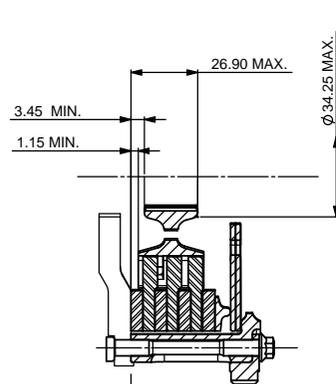
NOTE WHEN REMOVING A WORN CLUTCH ASSEMBLY THE INSTALLATION PLATE IS TO BE FITTED WITH THE 'WORN CONDITION - THIS SIDE UP' INSTRUCTION ON THE OUTSIDE.

WHEN RETURNING THIS CLUTCH ASSEMBLY BACK TO AP RACING FOR RECONDITIONING PLEASE RETURN WITH THIS INSTALLATION PLATE FITTED.

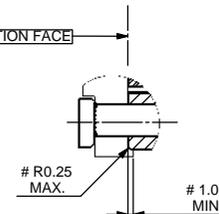
FLYWHEEL FRICTION FACE



ALL FIGURES SPECIFIED ARE FROM THE CLUTCH FRICTION FACE.



FLYWHEEL FRICTION FACE



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SCALE 1:1	SHEET 2 OF 5
DRAWN	Jeremy Govan
APPROVED	
DERIVED FROM	CP7223-1CD
TITLE	Ø115mm PULL TYPE, 3 PLATE CARBON / CARBON CLUTCH
DRG NO.	CP8273CD

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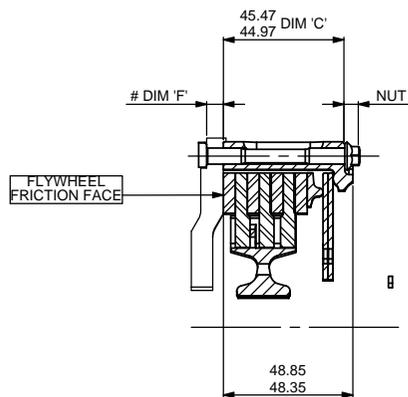


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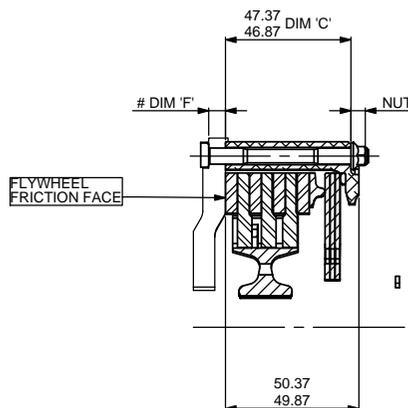
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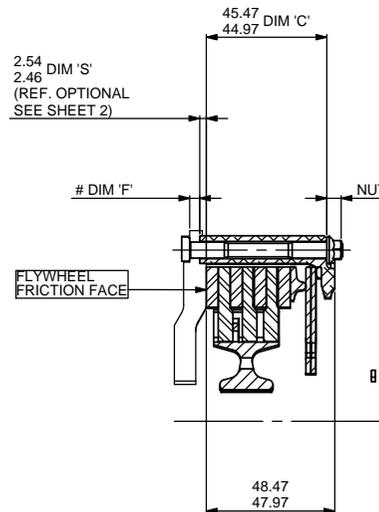
FLYWHEEL DIMENSION



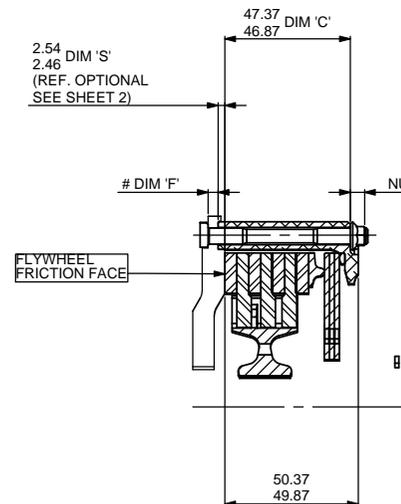
TYPICAL ASSEMBLIES:
CP8273-CM02-FN
CP8273-CM03-FN
CP8273-CM02-FP
CP8273-CM03-FP



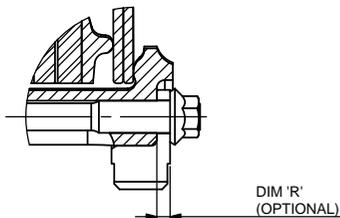
TYPICAL ASSEMBLIES:
CP8273-DE02-FN
CP8273-DE03-FN
CP8273-DE02-FP
CP8273-DE03-FP



TYPICAL ASSEMBLIES:
CP8273-CM02-SN
CP8273-CM03-SN
CP8273-CM02-SP
CP8273-CM03-SP



TYPICAL ASSEMBLIES:
CP8273-DE02-SN
CP8273-DE03-SN
CP8273-DE02-SP
CP8273-DE03-SP



IF A STARTER RING GEAR IS TO BE ATTACHED TO ANY OF THE ABOVE CLUTCH ASSEMBLIES ITS THICKNESS IS TO BE INCLUDED IN THE STUD LENGTH CALCULATION - REF. DIM 'R'

RECOMMENDED CLUTCH MOUNTING :
(FOR ALL TYPES OF ASSEMBLY)
1/4 UNF. CP4703 FAMILY STUD AND
K-LOCK NUT.
NUTS TO BE TIGHTENED IN A
DIAMETRICALLY-OPPOSITE
SEQUENCE, HALF A TURN AT A TIME
TIGHTENING TORQUE : 10Nm (7.5 ft.lb)

LENGTH OF STUD REQUIRED TO BE
CALCULATED THUS :

STUD LENGTH =

DIM 'C' + DIM 'F' + (DIM 'R' OPTIONAL) + (DIM 'S' OPTIONAL) + NUT

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

SEE CP4703-1CD FOR DETAILS.

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DRAWN	Jeremy Govan
APPROVED	
DERIVED FROM	CP7223-1CD
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Ø115mm PULL TYPE, 3 PLATE CARBON / CARBON CLUTCH	
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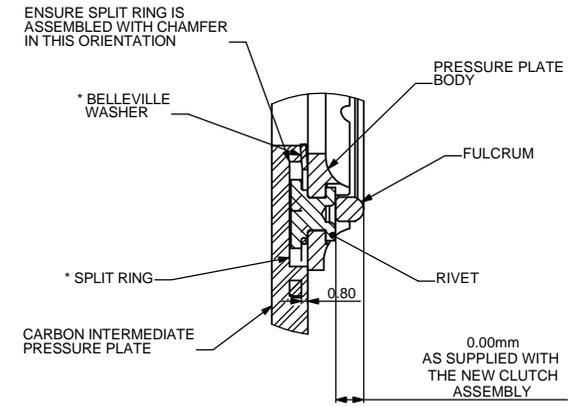
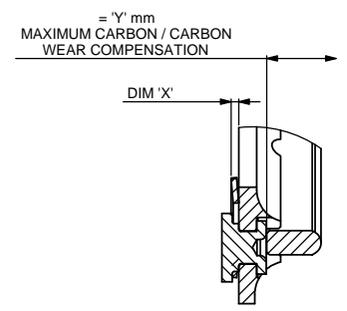
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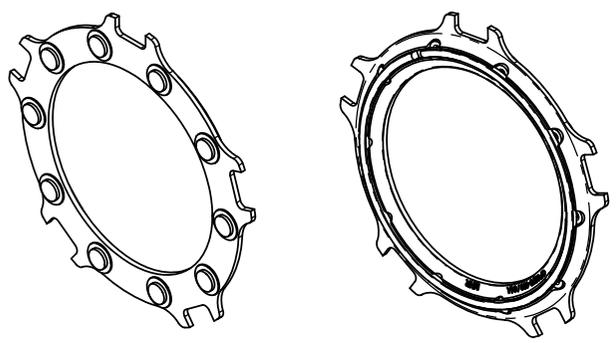
CUSHION PRESSURE PLATE ASSEMBLY CP8273-10



WITH TIME AND USE THE CUSHIONING EFFECT WILL DETERIORATE AND COMPONENTS SHOULD BE SERVICED WHEN EITHER THE BELLEVILLES BECOME LOOSE OR WHEN DIMENSION 'X' FALLS BELOW 0.80, TAKEN AS THE AVERAGE OF 4 EQUALLY SPACED MEASUREMENTS AROUND THE CIRCUMFERENCE OF THE BELLEVILLE.

THIS TYPE OF ASSEMBLY IS SUPPLIED COMPLETE FROM AP RACING. SERVICE IS LIMITED TO THE FITMENT OF FULCRUM RING SHIMS TO COMPENSATE FOR CLUTCH WEAR.

CUSHION PRESSURE PLATE DETAIL



SCALE 1:1 SHEET 4 OF 5

DRAWN: Jeremy Govan

APPROVED:

DERIVED FROM: CP7223-1CD

TITLE:
Ø115mm PULL TYPE, 3 PLATE
CARBON / CARBON CLUTCH

DRG NO.: CP8273CD

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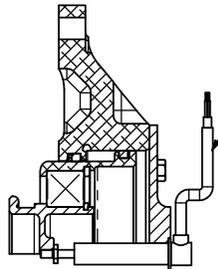


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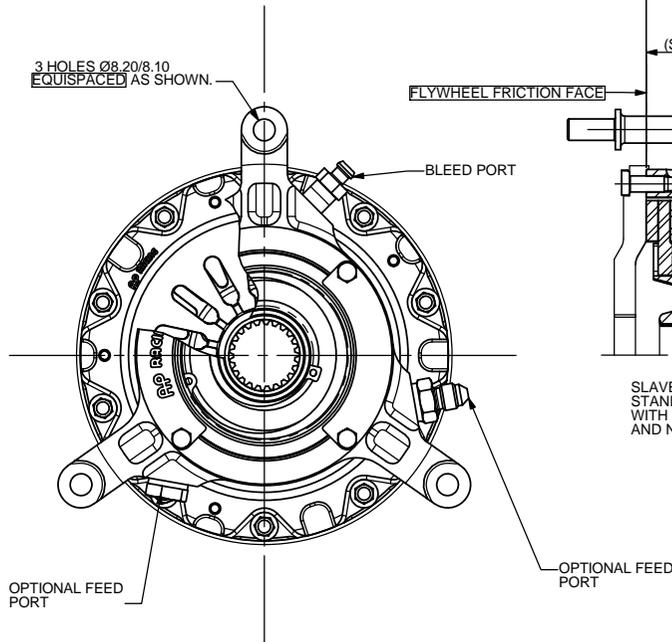
OPTIONAL SLAVE CYLINDER DETAIL. (SEE CP8275-1CD OR CP6245-1CD FOR FULL DETAILS)



AN OPTIONAL LVDT KIT IS AVAILABLE (FOR USE WITH CONCENTRIC DRIVE AND INPUT SHAFTS.) SEE INSTALLATION DRAWING CP8275-1CD

NOTE: AN LVDT KIT REQUIRES A DIFFERENT RELEASE FULCRUM TO BE SUPPLIED IN THE CLUTCH ASSEMBLY. PLEASE ADD THE SUFFIX '-DT' TO THE BASE PART NUMBER AS SPECIFIED ON SHEET 1.

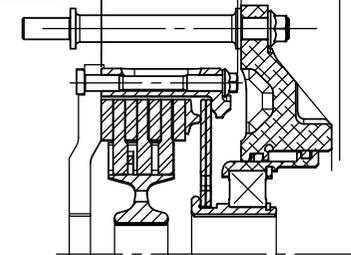
3 HOLES Ø8.20/8.10
EQUISPACED AS SHOWN.



FLYWHEEL FRICTION FACE

BLEED PORT

FLYWHEEL FRICTION FACE



SLAVE CYLINDER FITTING: STANDARD CP8273 ASSEMBLY WITH 2 DIAPHRAGM SPRINGS AND NO GEAR RING FITTED.

OPTIONAL FEED PORT

FLYWHEEL FRICTION FACE

Ø185.35

THESE HEIGHTS ARE ALSO VALID FOR THE CP6245 RANGE OF SLAVE CYLINDERS.

ALL FIGURE SPECIFIED ARE FROM THE CLUTCH FRICTION FACE.

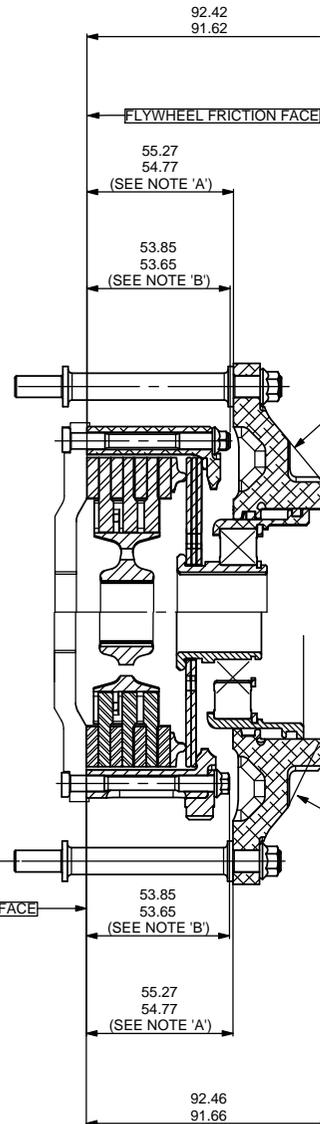
NOTE 'A'
THIS DIMENSION MUST BE MAINTAINED BY THE USE OF CORRECT LENGTH STUDS/SLEEVES TO ENSURE PROPER FUNCTIONING OF THE RELEASE MECHANISM.

NOTE 'B'
IN THE CASE OF 'OVER LONG' MOUNTING STUD PROTRUSION THROUGH NUT SOME MACHINING OF STUD LENGTH MAY BE REQUIRED.

PLEASE CHECK SLAVE CLEARANCE

SLAVE CYLINDER SET-UP HEIGHT FROM NEW MUST MAKE ALLOWANCES FOR MAXIMUM CARBON STACK WEAR-IN (1.50 mm) AND MAXIMUM RELEASE TRAVEL. (4.00mm).

ALTERNATIVE LVDT FOR NON CONCENTRIC GEAR BOXES. CONTACT AP RACING FOR DETAILS



92.42
91.62

FLYWHEEL FRICTION FACE

55.27
54.77
(SEE NOTE 'A')

53.85
53.65
(SEE NOTE 'B')

SLAVE CYLINDER FITTING: DETAILS WITH A 3 PSRR ASSEMBLY ('DE' SPEC.)

SLAVE CYLINDER FITTING: WITH GEAR RING

53.85
53.65
(SEE NOTE 'B')

55.27
54.77
(SEE NOTE 'A')

92.46
91.66

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