

A1

INSTALLATION
DRAWING

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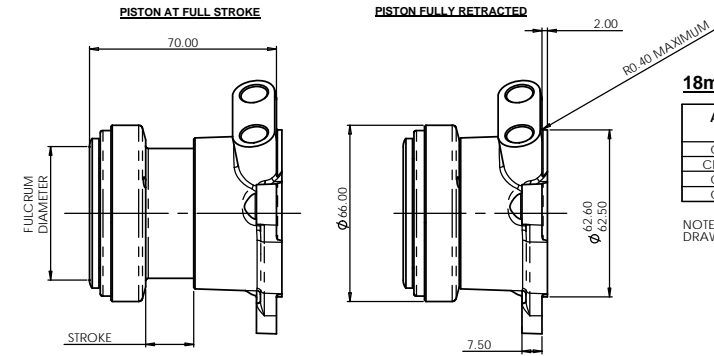
FIRST ANGLE
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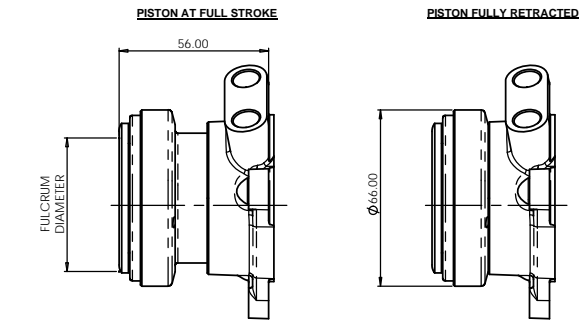


18mm STROKE - INNER ROTATNG RACE (HIGH SPEED)

ASSEMBLY NUMBER	FULCRUM DIAMETER	FULL STROKE	REPLACEMENT BEARING SUB. ASSY.
CP6859-38	38.0 (1.496")	18.0 (0.709")	CP3457-16
CP6859-45-IN	45.0 (1.772")	18.0 (0.709")	CP3457-26
CP6859-50	50.0 (1.969")	18.0 (0.709")	CP3457-11
CP6859-54	54.0 (2.126")	18.0 (0.709")	CP3457-6

NOTE: LVDT VERSION OF CP6859-54 IS AVAILABLE - SEE CP6859-54LVDTCD DRAWING FOR DETAILS

THIS SLAVE CYLINDER FEATURES :
THE BEARING IS HOUSED IN THE PISTON VIA THE OUTER RACE
THE INNER RACE ROTATES, SUITABLE FOR HIGH SPEED APPLICATIONS.

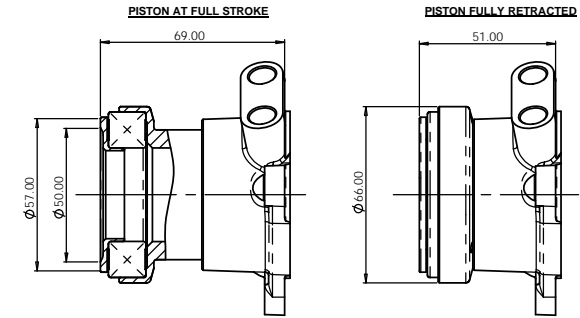


12mm STROKE - INNER ROTATNG RACE (HIGH SPEED)

ASSEMBLY NUMBER	FULCRUM DIAMETER	FULL STROKE	REPLACEMENT BEARING SUB. ASSY.
CP6859-1238-IN	38.0 (1.496")	12.0 (0.472")	CP3457-16
CP6859-1250-IN	50.0 (1.969")	12.0 (0.472")	CP3457-11
CP6859-1245-IN	45.0 (1.772")	12.0 (0.472")	CP3457-26
CP6859-1254-IN	54.0 (2.126")	12.0 (0.472")	CP3457-6

THIS SLAVE CYLINDER FEATURES :
A SHORTENED STROKE SO AS TO REDUCE THE OVERALL LENGTH.
THE BEARING IS HOUSED IN THE PISTON VIA THE OUTER RACE
THE INNER RACE ROTATES, SUITABLE FOR HIGH SPEED APPLICATIONS.

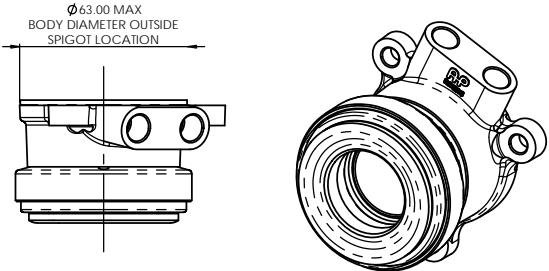
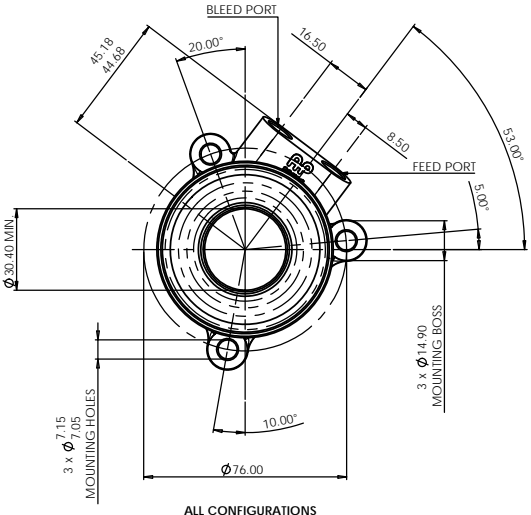
ALL OTHER MOUNTING DIMENSIONS REMAIN THE SAME.



18mm STROKE - INNER ROTATNG RACE (HIGH SPEED)
FLAT FULCRUM

ASSEMBLY NUMBER	FULCRUM DIAMETER	FULL STROKE	REPLACEMENT BEARING SUB. ASSY.
CP6859-14	N/A	18.0 (0.709")	CP3457-22

THIS SLAVE CYLINDER FEATURES :
THE BEARING IS HOUSED IN THE PISTON VIA THE OUTER RACE
THE INNER RACE ROTATES, SUITABLE FOR HIGH SPEED APPLICATIONS.



DESCRIPTION

THE CP6859 SERIES CONCENTRIC SLAVE CYLINDER IS A LIGHTWEIGHT, HYDRAULICALLY SELF-CONTAINED UNIT WITH HIGH TEMPERATURE SEALS. ALL SEALING SURFACES ARE PROTECTED BY A HARD WEARING / LOW FRICTION COATING WHICH HELPS PROLONG SEAL LIFE.

ENSURE THAT THE UNIT IS INSTALLED AT THE SPECIFIED ANGLE, WITH THE BLEED PORT UPPERMOST. ALL FITTINGS INTENDED TO SEAT AT THE BOTTOM OF THE HYDRAULIC PORTS MUST HAVE AN INCLUDED ANGLE OF 90°

BODY MATERIAL: ALUMINIUM ALLOY (FORGED)
PISTON MATERIAL: ALUMINIUM ALLOY

EFFECTIVE AREA: 920 mm² (1.426 sq. in.)
MAXIMUM STROKE: REFER TO TABLE
MAXIMUM PRESSURE: 8.6 N/mm² (1250 psi)

CALCULATED WEIGHTS
CP6859-XX 381 g
CP6859-12XX 257 g
CP6859-12XX-IN 346 g

HYDRAULIC PORTS M10x1.0x11.5 MIN. FULL THREAD
HYDRAULIC FLUID APR550 OR 600 BRAKE FLUID

REPLACEMENT SEAL KIT - CP3759-3

HYDRAULIC FITTING KIT (STEEL ADAPTOR 7/16" - 1/4") - CP3759-6
HYDRAULIC FITTING KIT (STEEL ADAPTOR 3/8" - 1/4") - CP3759-5
FITTINGS TO BE TIGHTENED TO 28 Nm (21 ft.lb)

NOTE:
WHEN LARGE DIAMETER SPLINES ARE USED PLEASE CHECK CLEARANCE OF THE SPLINE IN THE SLAVE CYLINDER BODY.

LARGER SPLINES ALSO HAVE AN INCREASED DRIVEN PLATE HUB BOSS. PLEASE CHECK THE CLEARANCE OF THE DRIVEN PLATE AT MAXIMUM SLAVE TRAVEL.
SEE THE CLUTCH ASSEMBLY INSTALLATION DRAWING FOR DETAILS.

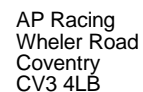
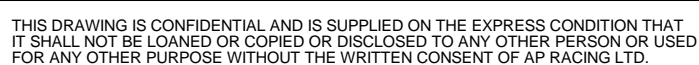
MINERAL OIL VERSIONS OF ALL THE ASSEMBLIES ON THIS DRAWING ARE AVAILABLE FOR FURTHER INFORMATION PLEASE CONTACT AP RACING. SEE CP8084-1CD FOR MINERAL OIL COMPATIBLE ASSEMBLIES

FOR OUTER ROTATING RACE SLAVE CYLINDERS SEE SHEET 2

Issue No.	Alterations		Zone	Initials
	Date & No.	Particulars		
1	04/01/12 C3988	FIRST ISSUE	#	JO
2	20/09/12 C3988	MINERAL OIL INSTALLATION DRAWING REFERENCE ADDED	A12	JO
3	05/04/13 C4477	CP6859-1245-IN ADDED	#	JG
4	13/05/13	Ø30.40 MIN ADDED	J9	JG
5	27/01/14 C4652	SAAB REFERENCE REMOVED	B12	JG
6	01/05/14 C4708	FITTINGS TO BE TIGHTENED TO 28 Nm (21 ft.lb) NOTE ADDED	#	JG
7	22/07/14 C4753	FLAT FULCRUM OPTION ADDED.	#	JG
8	04/03/15 C4867	Ø63.00 NOTE AND VIEW ADDED.	#	JG
9	23/03/16	CP6859-45 REMOVED FROM THE DRAWING.	#	JG
10	12/02/18 C5231	DRAWING SPLIT ONTO 2 SHEETS FOR INNER ROTATING AND OUTER ROTATING SLAVES CP6859-45 ADDED ONTO SHEET 2	#	GS
11	19/03/18 C5231-02	SHEET 1: FEED & BLEED NOTES ADDED SHEET 2: CP6859-45 STROKE CORRECTED. 18mm WAS 12mm	L12 K13 E3	GS
12	18/06/18 RAC22280	R0.40 MAX. WAS R0.25 MAX.	L5	JCD
13	14/08/18	BLEED AND FEED PORTS CORRECTED	L12	DSM
14	20/11/19	CP6859-54-OUT ADDED TO SHEET 2	E1	CGT
15	26/03/20 C5377_02	CP6859-54-LVDT NOTE ADDED	K6	CGT

SCALE 1:1		SHEET 1 OF 2	
DRAWN	Jeremy Govan		
APPROVED			
DERIVED FROM	CP3859-1CD		
TITLE			
CONCENTRIC SLAVE CYLINDER			
INSTALLATION DRAWING			
DRG NO.		CP6859-1CD	

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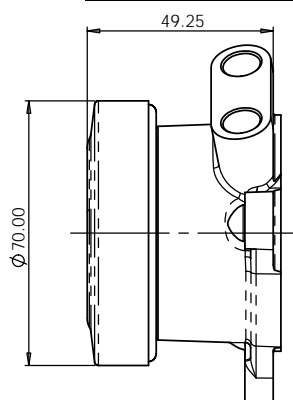


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SCALE 1:1		SHEET 2 OF 2	
DRAWN		Jeremy Govan	
APPROVED			
DERIVED FROM			
<p>TITLE</p> <p>CONCENTRIC SLAVE CYLINDER INSTALLATION DRAWING</p>			
DRG NO.		CP6859-1CD	

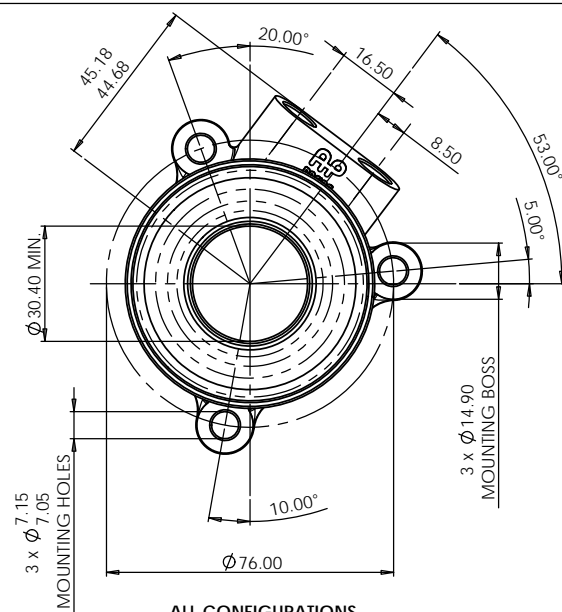
PISTON FULLY RETRACTED



ASSEMBLY NUMBER	FULCRUM DIAMETER	FULL STROKE	REPLACEMENT BEARING SUB. ASSY.
CP6859-45	45.0 (1.772")	18.0 (0.709")	CP3457-19
CP6859-54-OUT	54.0 (2.126")	18.0 (0.709")	CP3457-10

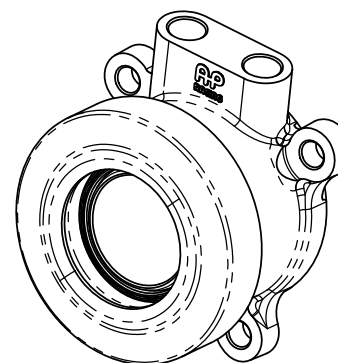
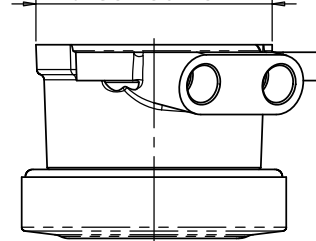
THIS SLAVE CYLINDER FEATURES :
THE BEARING HOUSED ON THE PISTON VIA THE INNER RACE WITH THE OUTER RACE ROTATING.

ALL OTHER MOUNTING DIMENSIONS REMAIN THE SAME.



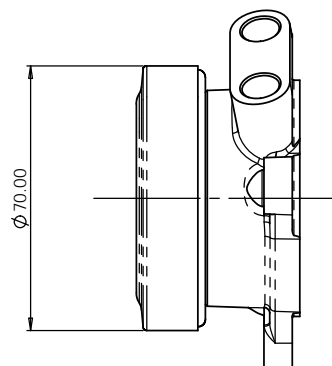
ALL CONFIGURATIONS

Ø63.00 MAX
BODY DIAMETER OUTSIDE
SPIGOT LOCATION



PISTON AT FULL STROKE

PISTON FULLY RETRACTED



ASSEMBLY NUMBER	FULCRUM DIAMETER	FULL STROKE	REPLACEMENT BEARING SUB. ASSY.
CP6859-1245	45.0 (1.772")	12.0 (0.472")	CP3457-19
CP6859-1250	50.0 (1.969")	12.0 (0.472")	CP3457-9
CP6859-1254	54.0 (2.126")	12.0 (0.472")	CP3457-10

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FOR INNER ROTATING RACE SLAVE CYLINDERS SEE SHEET 1