

# A1 INSTALLATION DRAWING

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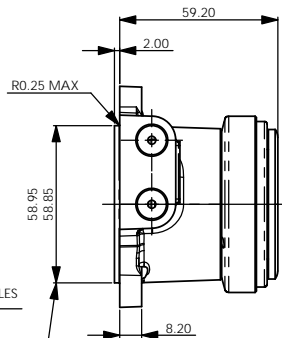
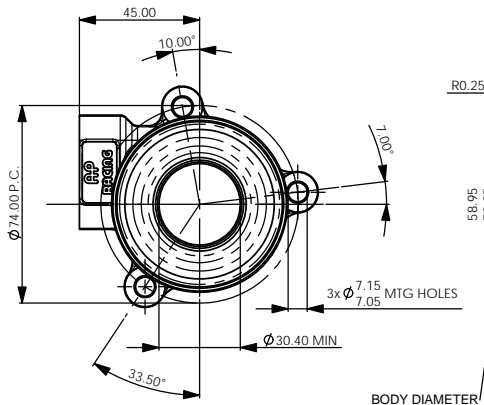
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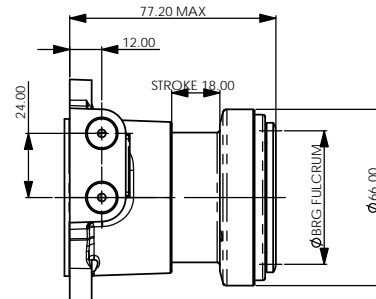
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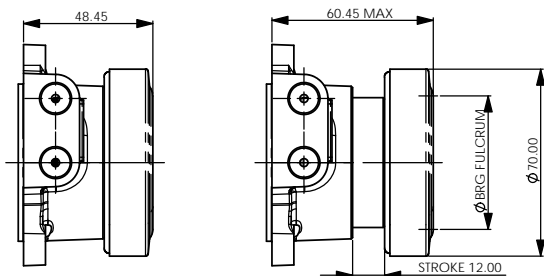
PISTON FULLY RETRACTED



PISTON AT MAXIMUM STROKE

## STANDARD CONFIGURATION (18mm STROKE)

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



PISTON FULLY RETRACTED

PISTON AT FULL STROKE

## REDUCED LENGTH CONFIGURATION (12mm STROKE)

THIS SLAVE CYLINDER FEATURES:  
A SHORTENED STROKE SO AS TO REDUCE THE OVERALL LENGTH.  
THE BEARING HOUSED ON THE PISTON VIA THE INNER RACE WITH  
THE OUTER RACE ROTATING.

ALL OTHER MOUNTING DIMENSIONS REMAIN THE SAME.

### DESCRIPTION

THE CP3959 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.

### NOTES:

ENSURE THAT THE UNIT IS INSTALLED IN THE ORIENTATIONS SHOWN, 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 (DIE CAST)  
PISTON MATERIAL: ALUMINIUM ALLOY

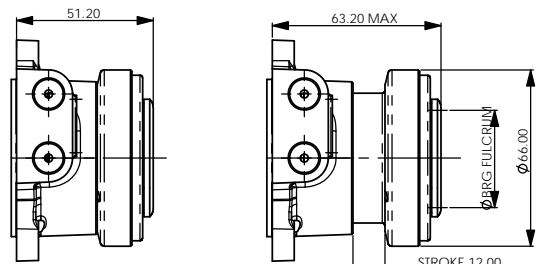
EFFECTIVE AREA: 320 mm<sup>2</sup> (1,426 sq. in.)  
MAXIMUM STROKE: REFER TO TABLE  
MAXIMUM PRESSURE: 8.6 N/mm<sup>2</sup> (1250 psi)

HYDRAULIC PORTS: M12x1.0x11.5 MIN. FULL THREAD  
HYDRAULIC FLUID: APR550 OR 600 BRAKE FLUID

REPLACEMENT SEAL KIT - CP3759-3

HYDRAULIC FITTING KIT (ALUMINIUM ADAPTOR 7/16" -4) - CP3859-15  
HYDRAULIC FITTING KIT (STEEL ADAPTOR 3/8" - 3) - CP3859-16  
FITTINGS TO BE TIGHTENED TO 28 Nm (21 ft.lb)

THIS UNIT IS INTERCHANGEABLE WITH THE SAAB 900 SLAVE CYLINDER. PART No. 4776308 (8729840).



PISTON FULLY RETRACTED

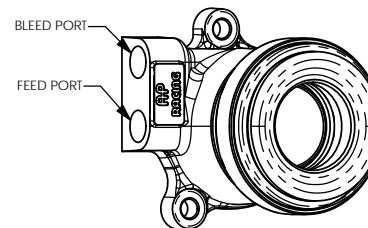
PISTON AT FULL STROKE

## CP3959-1238-IN (12mm STROKE)

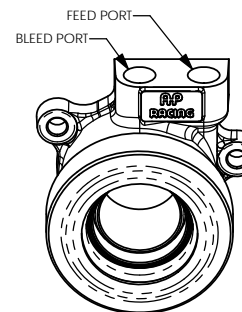
THIS SLAVE CYLINDER FEATURES:  
A SHORTENED STROKE SO AS TO REDUCE THE OVERALL LENGTH.  
THE BEARING IS HOUSED IN THE PISTON VIA THE OUTER RACE  
THE INNER RACE ROTATES, SUITABLE FOR HIGH SPEED APPLICATIONS.

ALL OTHER MOUNTING DIMENSIONS REMAIN THE SAME.

## MOUNTING ORIENTATION



HORIZONTAL



VERTICAL

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.

FOR FURTHER INFORMATION PLEASE CONTACT AP RACING

Issue No	Alterations			Zone	Initials
	Date & No.	Particulars			
1	07/01/99	FIRST ISSUE			SY
2	25/03/99	11.50 MIN FULL THR'D WAS 12.00 BRG REPLACEMENT CHART CP2487-11 WAS .5 & -16 WAS .15			SY
3	14/03/00	NEW 12.0 STROKE VERSION ADDED SHEET SIZE A1 WAS A2. BRG CONFIG NOTES 1 & 2 ADDED. NOTE - MAX STROKE REFER TO TABLE 'WAS 18.0 CP3959-1250 ADDED. SIDE VIEW DELTD			SY
4	09/04/01 RAC9527	DRAWING FORMAT MODIFIED TO IMPROVE CLARITY			JG
5	16/09/02 C2084	REFERENCES TO THE SCRAPER RING DELETED. SEAL REPAIR KIT WAS CP3859-2. LOGOS CHANGED TO LASER ETCHED TYPE.			D2 JG A2
6	06/02/03 C2113	48.45 WAS 48.20 60.45 WAS 60.20			G6 G8
7	12/01/04 RAC20825	'BODY DIAMETER' NOTE ADDED.			H4 JG
8	12/02/04 C2390	INSTALLATION NOTE ADDED.			C11 JG
9	26/02/07 C3076	CP3959-1254 ADDED			JG
10	08/12/09 C3772	DIMENTION UPDATED TO ACCOUNT FOR ANODISING			K5 AB
11	26/10/10 C3964	CP3959-1238 ADDED CP3959-1238 NOTES ADDED			A10 JCD E7
12	15/11/10 C3970	FITTING KIT PART NUMBERS ADDED			JG
13	01/05/14 C4708	FITTINGS TO BE TIGHTENED TO 28 Nm (21 ft.lb) NOTE ADDED			JG

SCALE 1:1 SHEET 1 OF 1

DRAWN: S.YOUNG

APPROVED:

DERIVED FROM:

TITLE

**CONCENTRIC SLAVE CYLINDER INSTALLATION DRAWING**

DRG NO. CP3959-1 CD

CONFIGURATION	SLAVE CYLINDER ASSEMBLY	BRG. FULCRUM Ø	FULL STROKE	REPLACEMENT BEARING SUB ASSY.
STANDARD	CP3959-50	50.0 (1.969")	18.0 (0.709")	CP3457-11
	CP3959-54	54.0 (2.126")	18.0 (0.709")	CP3457-6
	CP3959-38	38.0 (1.496")	18.0 (0.709")	CP3457-16
REDUCED LENGTH	CP3959-1238-IN	38.0 (1.496")	12.0 (0.472")	CP3457-16
	CP3959-1250	50.0 (1.969")	12.0 (0.472")	CP3457-9
	CP3959-1254	54.0 (1.125")	12.0 (0.472")	CP3457-10