

MOTORCYCLE PRODUCTS



- ▣ BRAKE CALIPERS.
- ▣ MASTER CYLINDERS.

AP RACING MOTORCYCLE PRODUCT

For many years AP Racing had been a world leader in the technology and manufacture of motorcycle brake systems and technical innovations were our hallmark, whether it be, brake calipers, carbon/carbon clutches or master cylinders, AP Racing always pushed the boundaries of motorcycle brake system design to their limits with products supplied in the past to Moto GP, World and National Superbike Championships, Supermoto and Sidecars .

IMPORTANT INFORMATION:

AP Racing currently manufacture a small but selective range of brake system products for competition and performance road motorcycle which can be found in this section of the 2018 product catalogue.

Whilst these pages provide a comprehensive overview of some of the most popular AP Racing motorcycle products, our website (<https://www.apracing.com/products/motorcycle.aspx>) details the entire product range available and provides our customers the most up to date information including any changes that may occur during 2018.

In 2016 we removed the pages on Sidecar Products and Classic Equipment Spares, however this information can be found on the website.

HELP ON HAND.

AP Racing's motorcycle engineers are on hand to offer practical help and assistance our customers. At our headquarters in Coventry we have a dedicated team of Customer Service personnel, ready to respond to any enquiry.

BRAKE CALIPERS

INTRODUCTION.

For many years AP Racing has produced brake calipers winning many of the world's premier race series. AP Racing now produce a small but selective range of brake caliper suitable for most motorcycle applications.



This section provides detailed information on the brake calipers available in the range plus general information on basic dimensions, servicing and part numbers.

SERVICING & RECONDITIONING.

- Regular examinations and maintenance of brake calipers is essential to maintain safety and efficiency of operation.

- AP Racing recommend that brake calipers should be cleaned with soapy water only as this will not damage any of the rubber components.

- Seal repair kits can be identified by referring to the individual caliper technical specifications on page 150. Individual seal part numbers can be found on page 32.

- Replacement seals should be soaked in brake fluid for 30 minutes prior to fitment.

- Other spare parts e.g. pistons and bleed screws are also available.

- AP Racing also offers a complete reconditioning service for its motorcycle calipers.

- For more information please contact AP Racing or your nearest Distributor. Check website for Distributor listing.
www.apracing.com/info/stockists.asp

PART NUMBERING EXPLANATION.

Caliper	Position of inlet adaptor
Family No.	E = Endfeed
	S = Sidefeed

CP7853 - 2 E 0

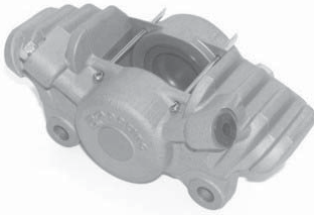
Stroke No.
- Even Numbers = Right Hand
- Odd Numbers = Left Hand

Anti-Knockback Springs
('0' means no spring fitted)

CUSTOMER NOTES

CP2696-38E0

2 Piston, Classic Caliper.



APPLICATIONS

- Solo machines.
- Classic machines.
- F2 Sidecar.

FEATURES

- Classic design.
- Aluminium alloy body.
- Machined from high quality die castings.
- Aluminium alloy pistons.
- Hard anodised surface treatment.
- Split pin pad retainer.

PART NUMBERS

- CP2696-38E0.

TECHNICAL SPECIFICATION

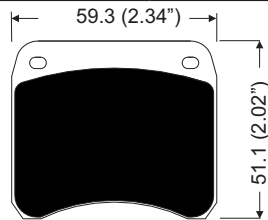
Piston Sizes x 2	Ø41.3mm
Piston Area	26.8cm ²
Disc Diameter	Ø304.0mm
Disc Thickness	6.4mm
Weight No Pads	900g
Hydraulic Thread	3/8" x 24UNF
Mounting Type	Lug
Mtg centres	89.0mm
Mtg offset	19.1mm
Mtg hole Ø	10.2mm
Seal Repair Kit	CP4518-K

SPARE PARTS

Piston	CP2055 x 1 CP2195-9 x 1
Pad Retainer	Split Pin
Retainer P/No.	CP2696-160
Bleed Screw	CP3720-182
B/Screw Tightening Torque - 17Nm	

BRAKE PAD-CP2195D38

Pad Thickness	10.5mm
Pad Depth	38.4mm
Pad Area	10.5cm ²



CP4227-2S0

2 x 2, Rear Caliper.



APPLICATIONS

- Grand Prix.
- Superbike.
- Road.
- Formula Student.

FEATURES

- Dual circuit caliper designed to allow the use of both a foot and thumb master cylinder.
- Aluminium alloy body.
- CNC machined from billet.
- Low Deflection.
- Lightweight.
- Aluminium alloy pistons.
- Hard anodised surface treatment.
- 'R' Clip quick release pad retainer.

PART NUMBERS

- CP4227-2S0

TECHNICAL SPECIFICATION

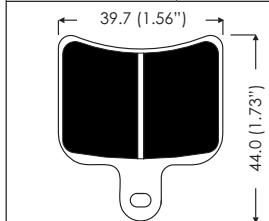
Piston Sizes x 4	Ø25.4mm
Piston Area	20.2cm ²
Disc Diameter	Ø220.0mm
Disc Thickness	4.0mm
Weight No Pads	500g
Hydraulic Thread	M10 x 1.0
Mounting Type	Lug
Mtg centres	96.0mm
Mtg offset	26.5mm
Mtg threads	M8 x 1.25
Seal Repair Kit	CP4518-AA

SPARE PARTS

Piston	CP4226-103
Pad Retainer	R Clip
Retainer P/No.	CP4226-107
Bleed Screw	CP4469-101
B/Screw Tightening Torque - 5.5Nm	

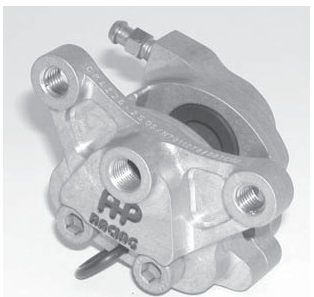
BRAKE PAD-CP4226D27

Pad Thickness	7.0mm
Pad Depth	26.8mm
Pad Area	9.4cm ²



CP4226-2S0

2 Piston, Rear Caliper.



APPLICATIONS

- Moto GP. / ■ Superbike.
- Road. / ■ Formula Student.

FEATURES

- Aluminium alloy body.
- CNC machined from billet.
- Aluminium alloy pistons.
- Lightweight.
- Hard anodised surface treatment.
- 'R' Clip quick release pad retainer.

PART NUMBERS

- CP4226-2S0.

TECHNICAL SPECIFICATION

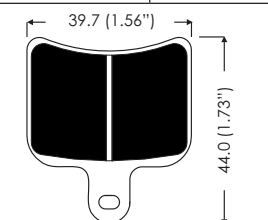
Piston Sizes x 2	Ø25.4mm
Piston Area	10.1cm ²
Disc Diameter	Ø220.0mm
Disc Thickness	4.0mm
Weight No Pads	240g
Hydraulic Thread	M10x1.0
Mounting Type	Lug
Mtg centres	64.0mm
Mtg offset	26.5mm
Mtg Thread	M8x1.25
Seal Repair Kit	CP4518-A

SPARE PARTS

Piston	CP4226-103
Pad Retainer	R/Clip
Retainer P/No.	CP4226-104
Bleed Screw	CP4469-101
B/Screw Tightening Torque - 5.5Nm	

BRAKE PAD-CP4226D27

Pad Thickness	7.0mm
Pad Depth	26.8mm
Pad Area	9.4cm ²



CP7853

4 Piston, 2 Piece, Radial Mount Caliper.



APPLICATIONS

- Performance Road.
- Supermoto.

FEATURES

- Radial mount.
- Two piece aluminium alloy body.
- Machined from billet.
- Aluminium alloy pistons.
- Differential bore diameters. - for extended pad life.
- Pad anti-rattle clip fitted.
- Hard anodised surface treatment.
- 'R' Clip quick release pad retainer.

PART NUMBERS

- CP7853-2E0 Right Hand.
- CP7853-3E0 Left Hand.

TECHNICAL SPECIFICATION

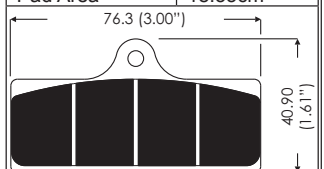
Piston Sizes	Ø31.75mm x 2 Ø36.0mm x 2
Piston Area	36.2cm ²
Disc Diameter	Ø320.0mm
Disc Thickness	6.0mm
Weight No Pads	760g
Hydraulic Thread	M10x1.0
Mounting Type	Radial
Mtg centres	108.0mm
Mtg offset	22.5mm
Mtg hole	10.15mm
Seal Repair Kit	CP4518-EH

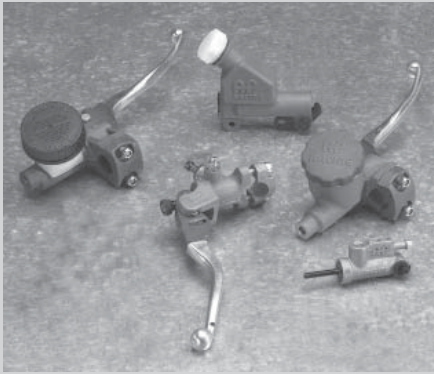
SPARE PARTS

Piston - Ø31.75	CP4484-107
Piston - Ø36.0	CP4484-106
Pad Retainer	R/Clip
Retainer P/No.	CP3696-106
Bleed Screw	CP4469-101
B/Screw Tightening Torque - 5.5Nm	

BRAKE PAD-CP4488D27

Pad Thickness	9.5mm
Pad Depth	27.0mm
Pad Area	18.55cm ²





INTRODUCTION.

The range of AP Racing master cylinders are patented, worldwide state of the art products that are a major advance in brake technology offering the ability to precisely set the braking performance of any motorcycle under all conditions.

CP4125 cylinder has a unique radial pull type design with variable lever ratio and span adjustment which can cater for all hand spans.

All AP Racing master cylinders are meticulously manufactured and rigorously tested for the peace of mind of the rider.

MASTER CYLINDER RANGE.

CP4125

This unique design of pull type handlebar master cylinder provides the user with the ability to adjust the ratio and the lever position as required. The single chamber configuration allows the compact design to weigh only 320grams, and is now non handed to allow it to be used as a clutch master cylinder. This master cylinder is typically used on Moto GP, Superbike as well as Road Applications. Use with remote fluid reservoir (not supplied)

CP3125

The original adjustable ratio master cylinder used by GP and Superbike teams in the 80's. Can be used to upgrade any brake system. Available with integral reservoir only.

CP3756

This uniquely developed single chamber, pull type rear master cylinder, has been designed for use on all solo motorcycle applications. The pull type configuration allows an exceptionally compact design for ease of installation. Weight 100grams.

CP2215

Due to demand CP2215-90 "Classic" master cylinder has been added to the range. The assembly is based on the original CP2215-20 cylinder, but using latest seal technology.

CP2232

Due to demand CP2232-90 "Classic" rear master cylinder has been added to the range. The assembly is based on the original CP2232-12 cylinder, but using latest seal technology.

RECONDITIONING NOTES.

CP4325, CP4225.

User reconditioning is limited to replacing lever assemblies. However AP Racing offer a reconditioning service for seal and piston replacement where the use of specialist test equipment is necessary to set up the master cylinder.

CP6125, CP4125, CP3125, CP2215 & CP2232

User servicing of these master cylinders is possible and seal repair kits are available.

Obsolete Master Cylinders Seal repair kits are available for master cylinders which are no longer in the range.

IMPORTANT NOTE:

IF ANY IMPACT IS SUSTAINED ON THE LEVER OR CYLINDER BODY, THE COMPLETE MASTER CYLINDER ASSEMBLY MUST BE SENT BACK TO AP RACING FOR EXAMINATION OR BE REPLACED.

CP4125-26

Adjustable Ratio Master Cylinder.

FEATURES.

- ▣ Single chamber configuration.
- ▣ This unique design of pull type handlebar master cylinder provides the user with the ability to adjust the lever ratio and the lever position in increments as required.
- ▣ Reverse for use as clutch master cylinder.
- ▣ Use with remote fluid reservoir. (Not supplied)
- ▣ Incremental ratio adjustments. Ratio is 6.88-14.45:1



TYPICAL APPLICATIONS.

- ▣ Grand Prix Machines
- ▣ Superbikes.
- ▣ Road.

ASSEMBLY PART NUMBER.

- ▣ CP4125-26 (17mm to 20mm effective bore)

TECHNICAL SPECIFICATIONS.

- | | |
|---------------------------------|-----------------|
| ▣ Weight | 304g |
| ▣ Range Effective bore size | 16mm -20mm. |
| ▣ Actual bore size | 22.0mm (0.86") |
| ▣ Hydraulic Connections | |
| - Outlet thread | M10 x 1.0 |
| ▣ Bleed Screw Tightening Torque | 5.5Nm (4lbs/ft) |
| ▣ Repair Kit | CP4125-26RK |

RATIO ADJUSTMENTS GUIDE.

This variable ratio master cylinder has a knurled wheel to adjust the ratio. This adjuster is rotated to increase or decrease the lever ratio.

TECHNICAL SPECIFICATIONS & NOTES.

▣ Master Cylinder will be supplied with the wheel adjuster set at position 0 (i.e. with the fulcrum point at end of guide slot in lever, nearest to end of the handlebars, as drawn) at this setting piston travel is at its maximum, which will give best conditions for bleeding the brake system.

Typical working stroke is shown as a guide only, working stroke should be set to riders preference. After initial setting only small adjustments, typically ± 1 turn should be necessary to suit differing conditions.

The ratio adjuster wheel has a detent mechanism allowing it to be moved $\frac{1}{4}$ turn per click. No locking of the mechanism is required. Lever travel will usually increase slightly in dynamic applications over static settings due to disc run-out etc. it is therefore advisable to set lever feel on the hard side for initial test.

▣ Master Cylinder will be supplied with the lever reach set at the nominal position as drawn. To obtain a longer reach the adjuster should be turned anti-clockwise using the reach adjuster wheel to suit riders preference. Conversely the adjuster can be turned clockwise to give a shorter reach. Adjustments should be made in $\frac{1}{4}$ turn increments, but should not be set between detents positions. The correct lever reach should be established prior to any adjustment to the lever ratio using the wheel adjuster.

▣ Outlet fitting is not supplied with assembly as standard, but Tecalomit or Aeroquip are available on request.

▣ To remove lever sub-assembly, take the Master Cylinder off the handlebar, then set wheel adjuster in position 0. Knock out spring and remove the lever reach adjuster wheel. Turn the exposed pull rod clockwise using the 1mm slot in it's end until the lever assembly is disconnected from the pull rod lever sub-assembly will then slide out from the retaining flanges. To replace lever sub-assembly reverse the above procedure.

▣ **Important: If any impact is sustained on lever causing a high pressure input to brake system, whole system should be replaced.**

CP3125-2

Original Adjustable Ratio Master Cylinder.

FEATURES.

The original adjustable ratio brake master cylinder can be used to up grade any brake system.

- Supplied with integral fluid reservoir.
- Incremental ratio adjustments - 6.4-9.34:1



TYPICAL APPLICATIONS.

- Historic Grand Prix & Superbike machines
- Road.

PART NUMBER.

- CP3125-2 R/H (16mm to 19mm effective bore)

TECHNICAL SPECIFICATIONS.

- Weight 475g
- Effective bore size 16mm -19mm.
- Actual bore size 19.0mm (0.74")
- Hydraulic Connections
- Outlet thread M10 x 1.0
- Bleed Screw
- Tightening Torque 5.5Nm (4lbs/ft)
- Repair Kit
- CP3125-2 CP3125-2RK
- CP3125-4 & -5 CP3125-4RK

RATIO ADJUSTMENTS GUIDE.

This variable ratio master cylinders has a screw to adjust the ratio. This adjuster is moved to and away from the handlebar with the effects detailed in the table below.

GUIDE TO ADJUSTMENT

Screw Adjuster	Braking	Lever Travel	Lever Feel
In - Clockwise	Decreased	Decreased	Harder
Out - Anti-Clockwise	Increased	Increased	Softer

TECHNICAL SPECIFICATIONS & NOTES.

Master cylinder will be supplied with the screw adjuster set at position 0 (i.e. with the adjuster flush with locknut as drawn) at this setting piston travel is at its maximum, which will give best conditions for bleeding the brake system.

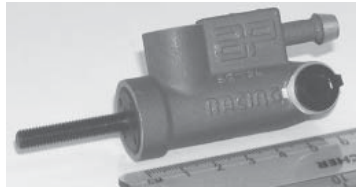
Typical working stroke is shown as a guide (see table opposite) only working stroke should be set to riders preference. After initial setting only small adjustments, typically $\pm\frac{1}{2}$ turn should be necessary to suit differing conditions.

Lever travel will usually increase slightly in dynamic applications over static settings due to disc runout etc. It is therefore advisable to set lever feel on the hard side for initial test.

Important: If any impact is sustained on lever causing a high pressure input to brake system, the whole system should be either replaced or set back to AP Racing for examination.

CP3756-4

Pull Type Rear Master Cylinder.



FEATURES.

- Pull type configuration.
- allows for a compact installation.
- Single chamber, single seal.
- Aluminium alloy body.
- Manufactured from high quality castings.

TYPICAL APPLICATIONS.

- All Solo machines

TECHNICAL SPECIFICATIONS.

- Weight 100g
- Effective bore size 14.0mm.
- Actual bore size 15.875mm (0.625")
- Stroke 16.2mm (0.638")
- Hydraulic Connections
- Push-on inlet 7.9mm (5/16") inside \varnothing hose
- Outlet thread M10 x 1.0

RECONDITIONING / SERVICING.

For reconditioning / servicing the cylinder needs to be returned to AP Racing.

CP2215-90

"Classic" Master Cylinder



FEATURES.

- The original "Classic" master cylinder.
- Aluminium alloy body and cap.
- Suitable for single and twin disc applications.
- Integral fluid reservoir.
- manufactured from high quality castings.
- Replaces CP2215-20.

TYPICAL APPLICATIONS.

- Classic Racing and Road Motorcycles.

TECHNICAL SPECIFICATIONS.

- Weight 520g.
- Actual bore size 15.875mm (0.625")
- Stroke 16.0mm (0.638")
- Hydraulic Connections
- Outlet thread 3/8" x 24UNF
- Fluid Reservoir Capacity 50cc
- When re-filling reservoir reform internal bellows as flat as possible prior to re-fitting.

SPARE PARTS

- Repair Kit CP5678-1RK
- Lever Part No CP2233-18

CP2232-90

"Classic" Rear Master Cylinder.



FEATURES.

- The original "Classic" rear master cylinder.
- Aluminium alloy body.
- manufactured from high quality castings.
- Integral fluid reservoir.
- Replaces CP2232-12.

TYPICAL APPLICATIONS.

- Classic Racing and Road Motorcycles.

TECHNICAL SPECIFICATIONS.

- Weight 300g.
- Actual bore size 15.875mm (0.625")
- Stroke 11.8mm (0.46")
- Hydraulic Connections
- Outlet thread 3/8" x 24UNF
- Fluid Capacity 35cc

SPARE PART FOR CP2232-90 ONLY

- Repair Kit CP5678-1RK

SEAL KIT FOR ORIGINAL CP2232.

- Seal Kit CP2232-12RK