

ACCOSATO

RADIAL MASTER CYLINDERS – DATA SHEET



5 reasons why you should choose an Accossato master cylinder

- 1) **Aesthetics:** looks matter. Lay some Accossato master cylinders, same model and compare their shapes, dimensions and aesthetics – they all look alike!
- 2) **Product range:** more than two hundred models available between standard and “black edition” with coloured lever.
- 3) **“Made in Italy” quality:** all Accossato radial master cylinders are made in Italy. Every part is designed to guarantee a reduced passive braking section. Pulling the lever, the space between the actioning of the lever and the actual braking is reduced by more than 50% compared to any other radial master cylinder.
- 4) **Control:** We fully control and test all the radial Accossato brake master cylinders before mounting and introducing them on the market.
- 5) All the screws of the Accossato radial brake master cylinders are made in stainless steel. The jumper is offset in order to reduce the flexion of the master cylinder during the braking process.

Models and usage advice

Together with an Accossato brake hose kit and an Accossato brake fluid, our radial brake master cylinder is the trump card for all sport bikes, ensuring a safer brake for your bike. There are several versions of the brake master cylinders with different levers and different technical features. The piston and the distance will help you choosing the most suitable master cylinder for you.



You find two figures in the description of the master cylinder, for example 19 X 18

- The first figure refers to the diameter of the piston
- The second figure refers to the distance of the lever

Wide range of master cylinders with several piston diameters:

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- Ø 14 mm piston
- Ø 15 mm piston
- Ø 16 mm piston

Please note: 16 mm diameter is suggested for single-rotor bikes (as braking with a 19 mm -version would be too harsh).

- Ø 17 mm piston
- Ø 19 mm piston

Please note: 19 mm diameter is suggested for double-rotor bikes

Distances available:

- 16 mm distance

Please note: Softer version, less stress on the lever, longer motion.

- 18 mm distance

Please note: track use but also suggested for street use.

- 19 mm distance

Please note: It's a mix use version for both track and street use, however 18mm is higher recommended for street use.

- 20 mm distance

Note: This is the prompter version on a brake master cylinder (shorter motion of the lever). Under the same stress on the lever, the higher distance, the higher strength will be needed for braking. It is not recommended for street use.

- PRS 17-18-19mm

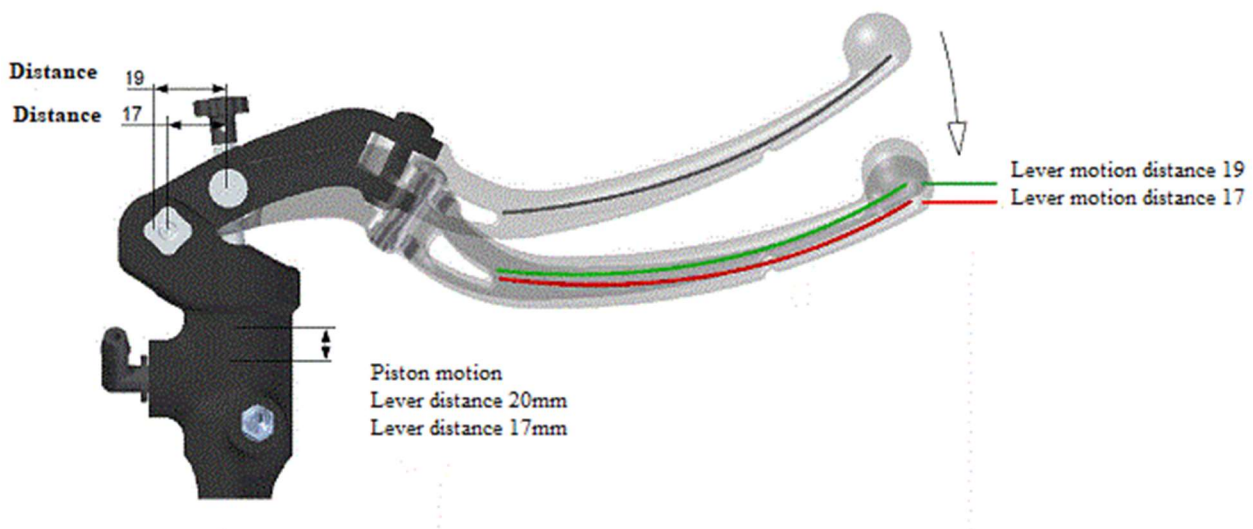
Note: Suitable for all uses as distance can be adjusted to please everyone tastes and to fit every situation.

- PRS 15-16-17 for clutch master cylinders

- Note: Suitable for all uses, its variable distance can be adjusted to please everyone tastes and to fit every situation.

Please note: Under the same stress, higher distance, higher strength will be needed for braking.

Brake master cylinder data sheet



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Warranty

Warranty on Accossato is valid 24 months from the date of the invoice; without an invoice, warranty will not be valid.

Accossato brake master cylinder maintenance

The maintenance on the Accossato brake master cylinder is carried within one working week from the reception of the radial master cylinder.

Maintenance includes:

- Visual external inspection of the product
- Dismantling of the parts of the master cylinder
- Visual microscope inspection of all the components of the master cylinder
- Visual inspection inside the body of the master cylinder
- Replacement of the internal seals + fluid inlet
- Assembly of all the parts
- Static test of the master cylinder
- Dynamic test of the master cylinder

The replaced parts are disposed and from the maintenance, the master cylinder acquires a 12-month warranty as stated by invoice. A further (second) maintenance will not extend the 12-month warranty of the product.

The maintenance will not include the replacement of the lever and / or other non-mentioned external parts. In case of falling, the maintenance is carried out only if the master cylinder can be fixed and come back to its original status, like a brand-new part.

Serial number of the brake master cylinder

Accossato radial brake master cylinder is unique: indeed, it has a serial number, it is identifiable and different from the other radial calipers. The removal of the serial number will invalid warranty and maintenance.

Piston and internal seals

The piston and the seals are made in materials conceived for sport races and are fully verified and assembled according strict controls in Accossato Labs.

Brake master cylinder body

There are 2 options of brake master cylinder bodies: forged aluminium or CNC-worked. The masters are processed in hard oxidation, which makes them high-resistant and long-lasting.

Stop light switch

Available on the "Ready to Brake" model with integrated-microswitch.

No switch included on other versions. You can also buy an hydraulic stop M10x1 separately.

Level distance adjustment

All masters have a front register that enables to adjust the lever from the handlebar, according to your needs with a simple rotation. You can purchase a separate cable remote adjuster, placing it on the clutch side (you can adjust the distance of the lever without stopping at the boxes).

How to replace Accossato brake and clutch master cylinder

Before dismantling a master cylinder remove all the parts that could obstruct the passing of tools or the master cylinder once dismantled (sump, mirrors etc).

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In order to avoid any brake fluid leaking on the bike you can cover the parts underneath the master with a cloth or some absorbing paper.

➤ Dismantling

Remove the micro-switch and the stop light wire, if present on the old master.

Loosen the joint enough to remove the master without ruining the hoses. This process will ease the removal of the hoses when the master is dismantled.

Careful: when carrying this procedure, protect the master with a cloth in order to prevent from any possible brake fluid leaking.

If necessary, dismantle the fuel tank keeping the hose connected to the master cylinder.

Careful: while moving the fuel tank, some drops of fluid may fall on the bike.

Loosen the jumper screws and move the master cylinder away from the handlebar.

Careful: this dismantling process must be carried with extreme care making sure the brake fluid doesn't get to the parts of the bike and ruin them (e.g. coated parts, in plastic or rubber).

To avoid any fluid leaking while dismantling the parts we suggest to keep the master higher than the other braking components. When possible, rotate the master so that the fluid inlet connection is faced-up.

Stop up any possible fluid leaking with a cloth or some absorbing paper.

Completely unscrew the fluid inlet connection (previously loosen).

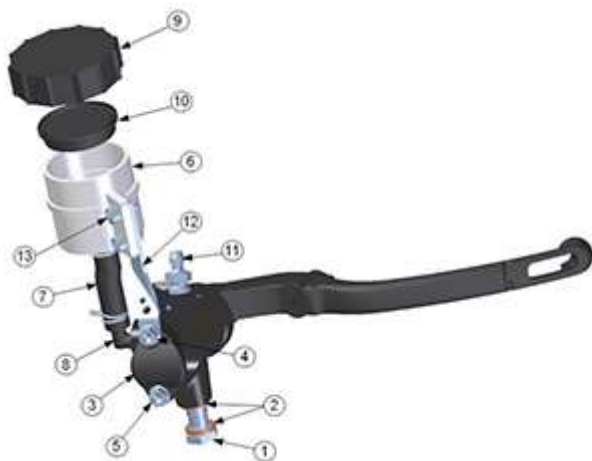
Careful: stop the hole immediately with a cloth or some absorbing paper to avoid any fluid leaking, keeping the hole faced-up.

Empty the master cylinder and the fluid tank pouring and draining the fluid in a specific container.

You can use the plastic cap protecting the hole of the new master to plug the hole of the old one.

You can keep or throw the old master unit away and dispose the fluid following the law. C

➤ Mounting



Manually screw the fluid inlet connection (1) on the new Accosato master unit.

Careful: To avoid any possible leaking from the connection once mounted we recommend to replace all copper washers (2) with new similar washers.

Before fastening the connection make sure it is compatible to the new master cylinder (M10x1 thread on the master cylinder)

Place the new master unit on the handlebar.

Fix the jumper (3) and the fluid tank support (12) and fasten the two screws (4-5) in steel.

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Before clamping the screws, place the master in the desired position.

For a correct mounting, alternately clamp the screws. Once close, start tighten with a screw the upper screw (4) with a half turn. Proceed with a half turn on the lower one (5). Repeat this procedure until you get a tightening torque of maximum 10Nm on both screws.

Screw the inlet fluid connection (1), previously manually fasten, with a tightening torque of 20÷23 Nm.

Careful: a proper tightening torque avoids, together with new copper washers any leaking fluid and it is mandatory to prevent any damage to the hole of the master cylinder.

Mount the tank (6) with the hose (7).

Connect the tank with the hose to the connection (8) of the master cylinder.

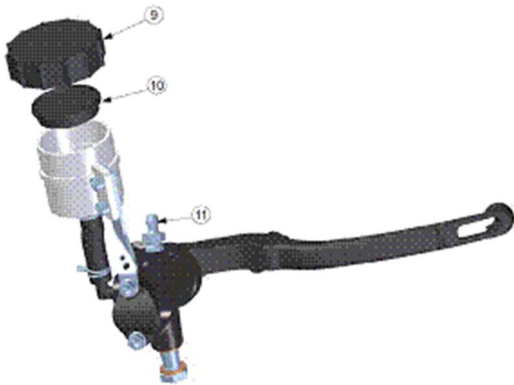
Fix the tank to the bracket (12) with some screws (13).

Once the master unit is mounted, restore the level of brake fluid (we suggest to usually use DOT 4) in the tank and bleed.

Before carrying these steps, check the completely absence of any possible “syphons” that would impede the proper air outflows in the hoses.

In order to do, make sure the bends and curves are never higher than the master cylinder.

➤ How to bleed an Accossato brake or clutch master cylinder



Remove the brake fluid reservoir cap (9) and the rubber seal (10).

Restore the level of fluid in the reservoir.

Careful: make sure the level of fluid in the system is compatible with the new fluid input in the reservoir or otherwise replace it.

Remove the cap in rubber to the bleeding valve (11) and connect a hose in rubber (preferably transparent to see the air and fluid flow).

Careful: collect the fluid in a special container in order to dispose it correctly.

At this point, proceed with this procedure:

- 1) Loose the bleeding valve (11)
- 2) Pull the lever;
- 3) After 2/3 seconds fasten the bleeding valve, without releasing the lever;
- 4) Release the lever.

Repeat the steps from 1 to 4 times.

When the bleeding is fastened, the lever has to harder and harder until when, opening the bleeding, there will only be fluid coming out of the hose without any air left.

Remove the reservoir hose, clamp the bleeding valve with a tightening torque of 8÷10 Nm.

Clean the bleeding valve (11) with a cloth and cover it with a rubber cap.

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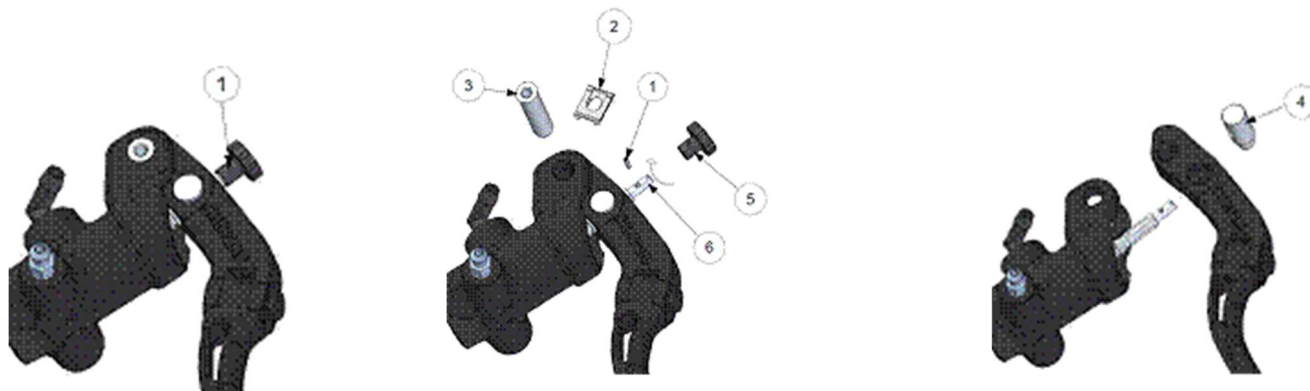
After carrying these steps, fill in the fluid reservoir until MAX level.

Careful: during the bleeding procedure it is mandatory to check, and if necessary, to fill in, the level of fluid in the reservoir before it finishes.

You can clean the brake fluid from the parts of the bike with a damp cloth.

Careful: to activate the stop light on street bikes you must install the Hydraulic stop sold by Accossato. The disposal of the spilled fluid during the procedure has to follow the local law.

How to replace an Accossato brake / clutch lever



Place the master cylinder to easily remove the elastic plug, diameter 1,5mm (1) with a special pin punch.

CAREFUL: lay the adjusting knob on a safe and stable surface, be careful not to bend the threaded pin while removing the plug.

After removing the elastic plug, remove the adjusting knob (5) from the threaded pin.

Continue by taking the safety clip off (2) and the knob (3) from the master cylinder - Rotate clockwise the threaded knob (6) (with a screwdriver) until you can pull out the lever.

Pull out the knob (4) and insert it on the new lever.

Insert the new lever on the master cylinder and rotate the threaded knob counter clockwise (6) (with a screwdriver) until a proper **positioning of the lever**. **Now you will be able to insert the knob again (3) in the master cylinder and the safety clip (2)**

Insert the adjusting knob (5) on the threaded knob and insert the elastic pin, diameter 1,5 mm.

CAREFUL: lay the adjusting knob on a safe and stable surface, be careful not to bend the threaded pin while removing the plug.

Check the proper functioning of the lever and the adjusting knob by tightening and loosening the adjusting knob.

How to modify the distance on brake and clutch PRS master cylinders

You can easily modify your distance with Accossato PRS Brake and Clutch master cylinder without replacing the lever.

Example of adjustment of the distance from 18 to 17.

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Brake Master Cylinder with distance of 18

Remove the knob (3) and the safety clip (2) from the master cylinder



Rotate the adjusting knob clockwise (5), in order to remove the bushing (7)



Insert the bushing on the hub of the lever in the desired ratio (In this case 17)

Rotate the adjusting knob counter clockwise, in order to replace the lever in its original position.



Insert the knob (3) in its position, placing the desired distance, accordingly to the arrow on the body of the master cylinder. (in this case 17)

Please note: Make sure the position of the bushing (7) and the numbers of the knob (3) keep the same count.

Insert the safety clip (2) on the master cylinder.

Check the correct functioning of the lever and the adjustment tightening and loosening the adjusting knob.

FAQ

- **What to do in case of fall?**

The radial brake master cylinder is a safety part, it is absolutely not recommended to keep on riding after falling, especially if you feel or suspect a failure in the functioning of the master cylinder.

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- **Are there repairing kits for the Accossato master cylinder?**

There are no official Accossato maintenance kit in order to protect the safety of our Clients.

- **What does that blue seal on the master cylinder stands for?**

It is the warranty seal on the master cylinder: its removal will invalid its warranty.

- **What brake fluid should I use?**

Accossato suggest to use Accossato Racing DOT4 brake fluid because it is especially designed to be used by the most demanding Clients, who ask for the best performance of their braking system. Accossato technicians recommend to be careful while using different brake fluids you can find on the market. In particular, proceed with caution while using DOT 5.1 at a high boiling poin: indeed, this fluid has to be removed from the braking system soon after the race and / or a single use. If this doesn't happen, you risk to damage the seals of the master cylinder.

- **How much should you tighten the bleeding valve?**

Accossato suggest to tighten the bleeding valve with a torque wrench at 8-10 Nm. Accossato discourages any attempt to tighten the valve manually, without measuring the tightening torque. After bleeding and tightening the valve, blow some compressed air around the screw, in order to leak the fluid left in the thread and the central whole with a diameter of 3mm.