STRENGTH AND RESISTANCE

MALOSSI Crankshafts for Vespa

The crankshaft of a Vespa is one of the **most delicate** yet important components of this type of propulsion unit, having to handle the movement of rods and pistons, as well as regulating intake through the crank timings.

The Malossi technical office has dedicated its attention to both of these elements, creating two versions of the crankshaft and developing unique solutions with a high technological value, starting with the choice of **materials**; top quality as always.

All Malossi crankshafts for Vespa are made from aeronautical quality **reinforced steel** and are founded in a vacuum. It is a material highly resistant to scratches and guaranteed by the certifications required in Malossi's strict handbook. The **"viper head" piston rod's shape** is designed to limit weight to a minimum whilst guaranteeing the **required rigidity**.

Not even the smallest detail has been overlooked. Indeed, Malossi technicians have even worked on the **thread** on the transmission side axis of the crankshaft, succeeding in significantly increasing resistance by producing **smoother stepping**. Even the **position of the key** has been reviewed both in terms of size and shape, so as to **no longer damage the thread** and contribute to resistance in what is an avant-garde solution. Crankshafts are supplied with **special nuts**, much stronger, to take advantage of the increased resistance offered by the tighter thread.

Different versions

Crankshafts are available with **different piston rod lengths** for "small frame" Vespas, on to which the **full crankshaft** is fitted.

The shaft for motors with a rotating valve inlet has a standard length shaft and piston rod.

NEW Vespa

MALOSSI

Crankshafts for cases with rotating valve

In the version for rotating valve propulsion units, the **suction phase** has been **worked into the half crank**, inside the **circular mass structure itself**, which results in a significant inward pitch, whilst maintaining a normal shape externally. This innovative choice has allowed for a unique shape able to guarantee extremely efficient fluid dynamics.

The prominent pitch has always been one of the most delicate elements of Vespa crankshafts when trying to **balance the motor correctly.** Malossi has resolved this problem by **inserting parts made from tungsten** into the crankshaft, used as counterweights for increased stability of the shaft itself.

VESPA *ET3 Primavera 125 2T*
ETS 125 2T
PK 125 2T
PK XL125 2T
Primavera 125 2T

CRANKSHAFT pin Ø 15
rod 97 (stroke 51 mm)
*rotating valve - **cone Ø 20***

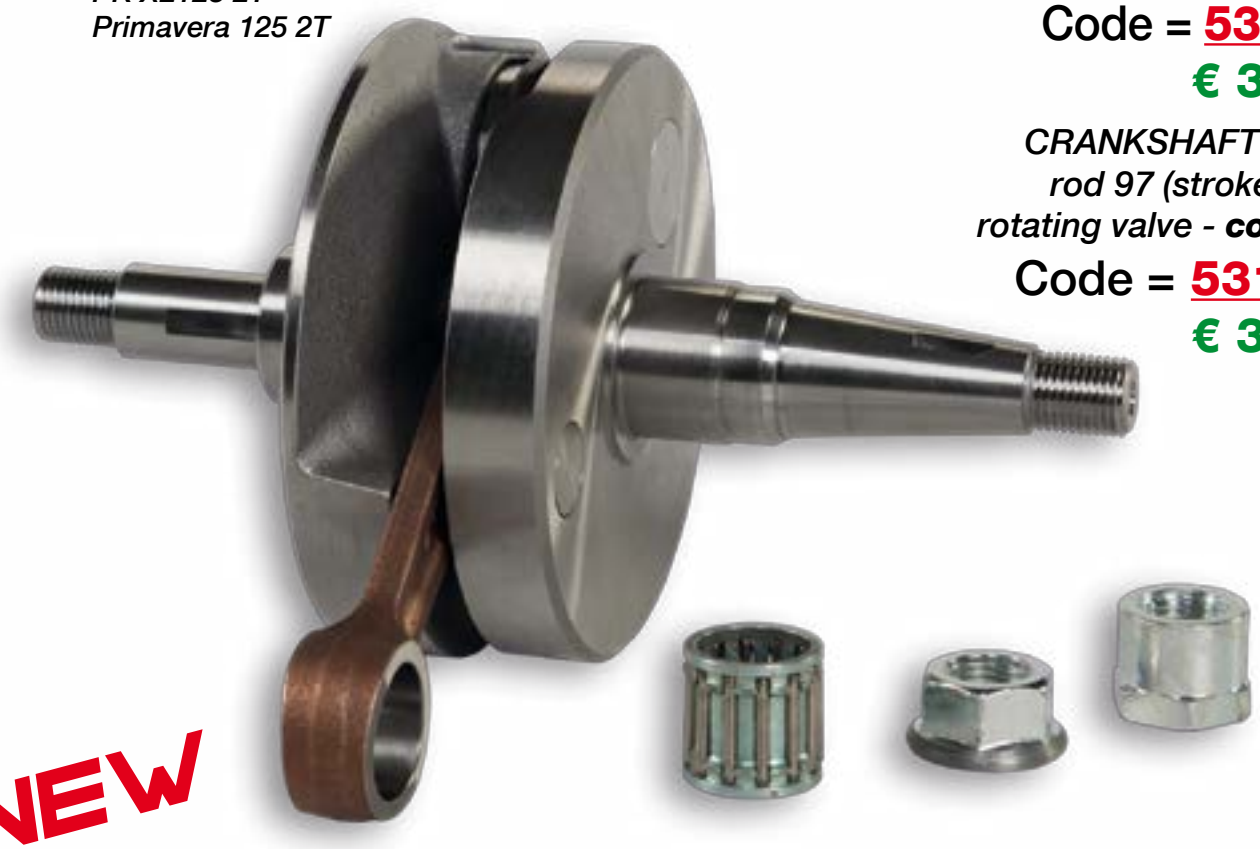
Code = **5316594**

€ 380.00

CRANKSHAFT pin Ø 15
rod 97 (stroke 51 mm)
*rotating valve - **cone Ø 19***

Code = **5316595**

€ 380.00



NEW

CRANKSHAFT pin Ø 15
rod 05 (stroke 57 mm) rotating valve

Code = **5317510**

€ 402.00

VESPA *COSA 125 2T*
COSA 150 2T
PX 125 2T euro 0 - 1 - 2 (VLX2M) - 3
PX 150 2T euro 0 - 1 - 2 (VLX2M) - 3

CRANKSHAFT pin Ø 16
rod 110 (stroke 57 mm) rotating valve

Code = **5316082**

€ 382.00

VESPA *PX 200 E 2T*

Products to be used exclusively for racing in places specially designed for such activity according to the regulations of the competent sporting authorities. We accept no liability resulting from improper use.

- *The picture refers to art. 5316082*

NEW Vespa

MALOSSI

Full crankshaft

The **Malossi full crankshaft**, designed only for Vespa motors modified for use with a **reed valve** inlet systems instead of the original rotating valve, is the next level for Vespa enthusiasts.

As with the rotating valve version, this version is also guaranteed to offer **optimal balance**, having tungsten inserts. Furthermore the **half crank on the transmission end** has a specially-designed **chamfer** to **ease fresh gas intake** under the sump.

The **circular mass structure** is the zone which benefits the most from this new shaft and sump configuration, receiving the **maximum possible pressure level.**

CRANKSHAFT pin Ø 16
rod 110 (stroke 60 mm)
reed valve

Code = **5316176**

€ 506.00

VESPA *COSA 200 2T*
PX E 200 2T

Products to be used exclusively for racing in places specially designed for such activity according to the regulations of the competent sporting authorities. We accept no liability resulting from improper use.

CRANKSHAFT pin Ø 15
***rod 97** (stroke 51 mm)*
reed valve - cone Ø 20

Code = **5316528**

€ 365.00

CRANKSHAFT pin Ø 15
***rod 105** (stroke 51 mm)*
reed valve - cone Ø 20

Code = **5316517**

€ 365.00

TO COUPLE ONLY WITH cylinder Kit 3115829 or 3116326: spacer cylinder base kit 8 mm. IS ALSO NECESSARY, to be bought separately.
Code = **0717472** **€ 48.00**

VESPA **ET3 Primavera 125 2T*
ETS 125 2T
PK 125 2T
PK XL125 2T

6617380 **€ 60.00** Roller bearing Ø 25x47x14 / Oil-seal kit Ø 22x32x6

**** Attention:***
In order to fit crankshafts 5316517 - 5316528 on Vespa ET3 Primavera, kit art. 6617380 is also necessary (to be bought separately).

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- *The picture refers to art. 5316528*