



Thank you for choosing BFA Motori - FRT Racing products.

All our products are intended for sporting use, as they have been designed primarily for competitions dedicated to geared scooters.

Like all products intended for competition, BFA Motori products must be considered differently from products intended for road use and cannot be subject to the road laws and regulations of the various countries in which they are sold. They must therefore be used exclusively on private property and/or in areas dedicated to competition.

180cc REED-VALVE CYLINDER KIT - PIAGGIO STUD PATTERN FOR VESPA SMALLFRAME

DESCRIPTION:

- aluminium cylinder with 5 transfer ports and Nikasil plating - single-piece exhaust port
- recessed hard-anodized aluminium cylinder head, with HT O-ring and 4 additional M6 fasteners
- forged Woessner piston Ø 64.00 mm with graphite coating - 2 thrust washers, 15.00 mm I.D., in hardened steel
- BFA/FRT "carbo" reed valve with TM® bolt pattern
- special-polymer intake manifold with integrated flow guide; available in 35.00 or 40.00 mm
- crankcase intake blanking plate (3 holes)
- gasket and fastener set

TECHNICAL DATA in mm:

BORE	64.00
STROKE	56.00
CON-ROD LENGTH	110.00
PISTON PIN Ø	15.00
EXHAUST OUTLET Ø	38.00
EXHAUST STUD SPACING	60.00
TRANSFER PORT WIDTH *	80.00

* = can be enlarged up to 92.00 mm

RECOMMENDED SETUP:

Squish clearance	1.1 to 1.3
Fixed ignition timing	18 - 19° BTDC
Variable ignition timing	[VAPE SPORT recommended] 26 - 27° at 3,000 rpm BTDC
Oil mixture	[recommended oil Pakelo® 2TS-P] 2.5%

TIGHTENING TORQUES in Nm:

M6 socket-head cylinder-head screws	9 - 11
M7 stud nuts **	14 - 16

** = Use of the BFA/FRT M7 stud kit, 158 mm, is recommended
part no. kpsm7158

MAIN PROCEDURES FOR CORRECT INSTALLATION:

Installation of the cylinder kit on a VMC crankcase is recommended. Alternatively, a standard Piaggio crankcase may be used.

For installation on a VMC or standard Piaggio crankcase, check the cylinder spigot bore and machine it if required.
Dimensions from the gasket surface: Ø 69.00 x 6.00 - Ø 65.00 x 21.50 mm.

The cylinder kit has been designed to fit all commercially available exhaust systems with 60-62 mm exhaust-stud spacing; for this reason no dedicated expansion chamber has been developed.

Although every product is checked individually before packaging, we recommend thorough cleaning before installation.