

PREVIEW



<b>VORTEX FACTORY</b> OTK KART GROUP s.r.l. Via E. Fermi, 5 I - 27040 PAVIA	<b>HOMOLOGATION FORM for</b> <b>ENGINE cl. 100 cc.</b>	Form.
		N. OMOL.

<b>Manufacturer</b>	<b>VORTEX FACTORY</b>
<b>Make</b>	<b>VORTEX FACTORY</b>
<b>Model</b>	<b>ROK VLR</b>
<b>Inlet type</b>	<b>REED VALVE</b>
<b>Number of pages</b>	<b>9</b>

**PICTURE OF ENGINE**



**FRONT / LEFT SIDE**

**BACK / RIGHT SIDE**

<b>Official TAG Signature and Stamp</b>	<b>Importer Signature and Stamp</b>



PREVIEW



TECHNICAL INFORMATION		
A	CHARACTERISTICS	
	Measurement	Tolerances
Volume of cylinder	98.53 cc	100cc MAX
Original bore	48.20 mm	±0.2
Theoretical maximum bore	48.53 mm	MAX
Stroke	54.00 mm	± 0.2 mm
Cooling system	AIR-COOLED	
Number of carburation systems	1	
Number of transfer ports/ducts, cylinder/sump	3	
Number of exhaust ports/ducts	1+2 (1 elliptical port plus 2 boosters)	
Shape of combustion chamber	Spherical with squish	
Length between axes of the Connecting rod	102 mm	± 0.2 mm
Minimum weight of connecting rod	115 g	MIN
Volume of combustion chamber	9.2 cc	MIN
Type of bearings and size	Conrod big end bearing = 20x26x15 Conrod small end bearing = 14x18x17 Crankshaft bearings = 25x52x15	

B	OPENING ANGLES (all measurement done with 0.20mm feeler gauge)	
		Tolerances
Inlet	126°	± 2°
Exhaust	164°	± 2°

C	LIST OF ACCESSORIES INCLUDED	
Carburetor	Butterfly valve/24 mm	
Generator for battery charging	On board	
Electric starter	On board	
Exhaust with flex	Exhaust with silencer	

D	MATERIAL	
Cylinder	AL – SI ALLOY	
Connecting rod	NI – CR – MO STEEL	
Crankshaft	NI – CR – MO STEEL	
Head	AL – SI ALLOY	
Liner	IRON	
Crankcase	AL – SI ALLOY	
Piston	AL – SI ALLOY	
Piston Ring	STEEL OR IRON	

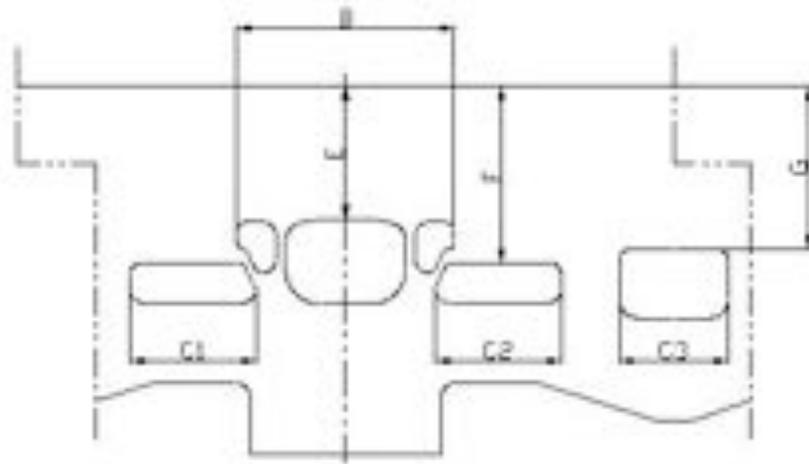


PREVIEW



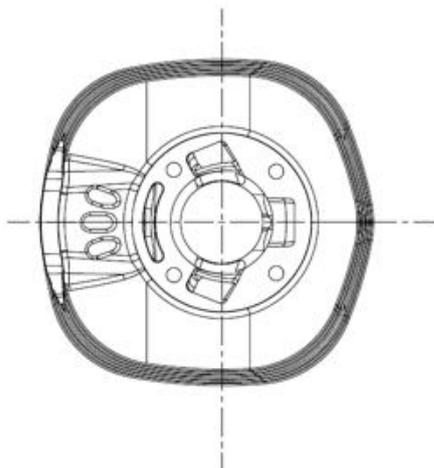
### DRAWING OF THE CYLINDER DEVELOPMENT

<b>B</b>	<b>47.80±0.5mm</b>
<b>C1=C2</b>	<b>26.90±0.5mm</b>
<b>C3</b>	<b>26.80±0.5mm</b>
<b>E</b>	<b>164° ± 2°</b>
<b>F</b>	<b>120° ± 2°</b>
<b>G</b>	<b>126° ± 2°</b>

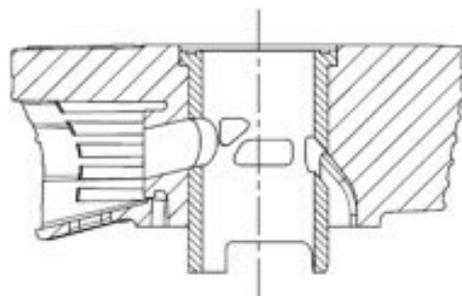


Angular reading by 0.2 mm feeler gauge

### DRAWING OF THE CYLINDER BASE



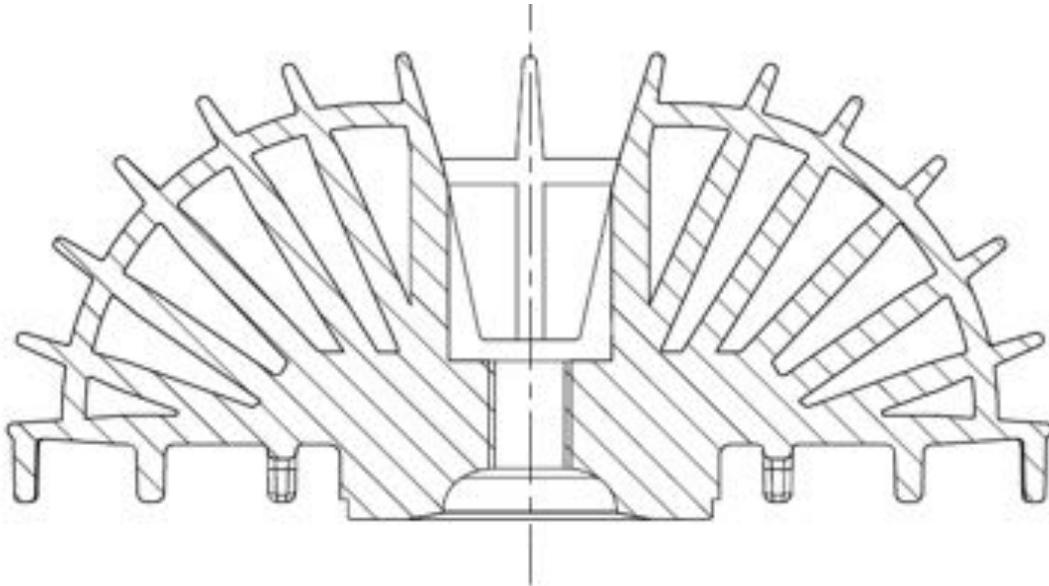
### CILINDER SECTION VIEW



PREVIEW

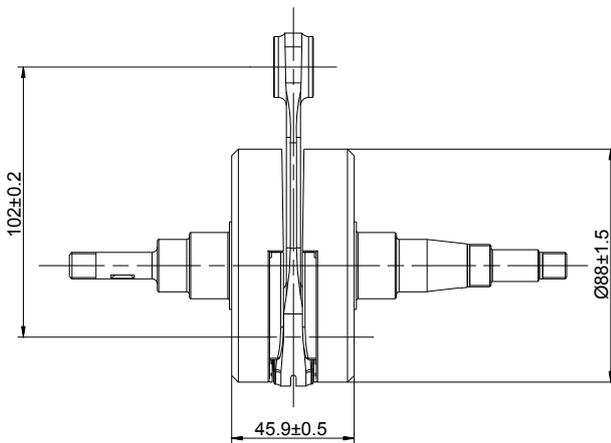


**DRAWING OF THE CYLINDER HEAD AND COMBUSTION CHAMBER**



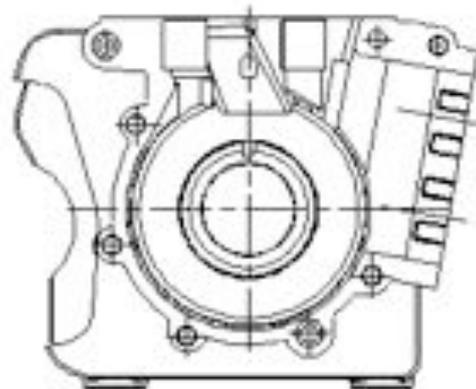
**Combustion chamber volume = 9.2 cc minimum**

**DRAWING OF THE CRANKSHAFT**



**Weight= 1860g ± 280g**

**DRAWING OF THE INSIDE SUMP**



PREVIEW



IGNITION	
Manufacturer	SELETTA
Model Number	
Rotation	
Description	

PHOTO OF IGNITION SYSTEM

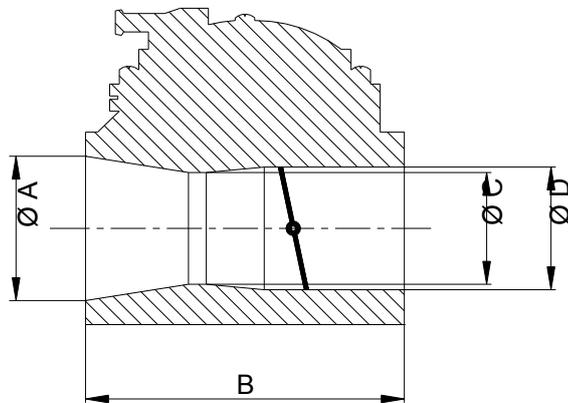


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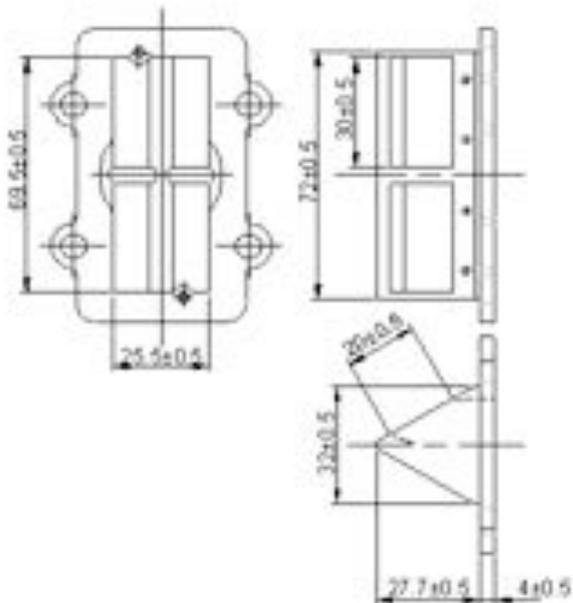


### CARBURETOR DIMENSION

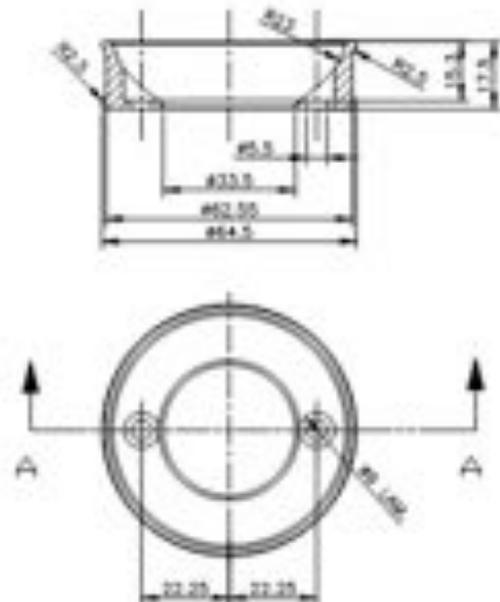
Item	Measure	Tolerance
A	33.5mm	±1mm
B	66mm	±1.5mm
C	24mm	±0.3mm
D	27mm	±0.5mm



### CONVEYOR

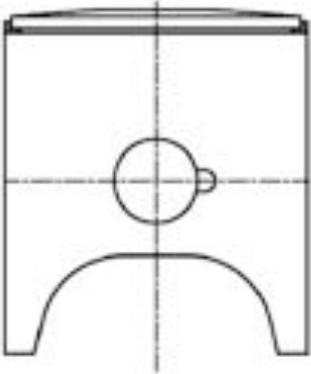
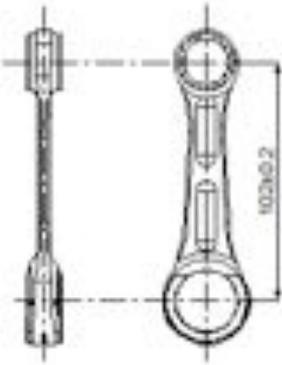


### INTAKE SILENCER ADAPTER



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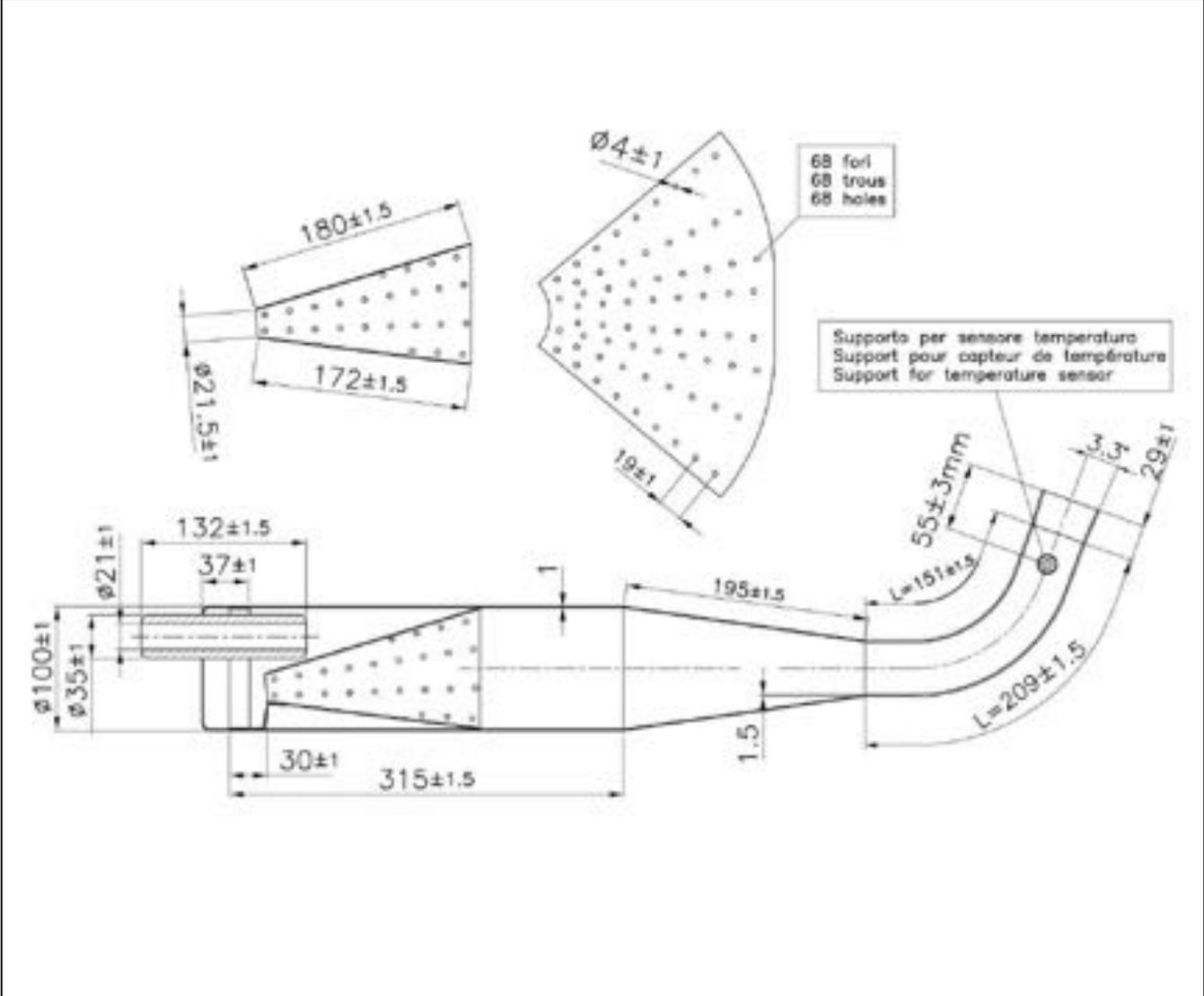
PISTON	CONNECTING ROD
	
<p>Weight = 105g ± 10g</p>	<p>Weight = 130g ± 15g</p>



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DRAWING OF THE SILENCER AND IT'S COMPONENTS



The end parts of the silencer must have two soldered pairs of lugs (one pair at the top and one pair at the bottom) to allow for fixing of seals by the Organizer so that the silencer may be opening during the competition.



PREVIEW



DRAWING OF THE CLUTCH

