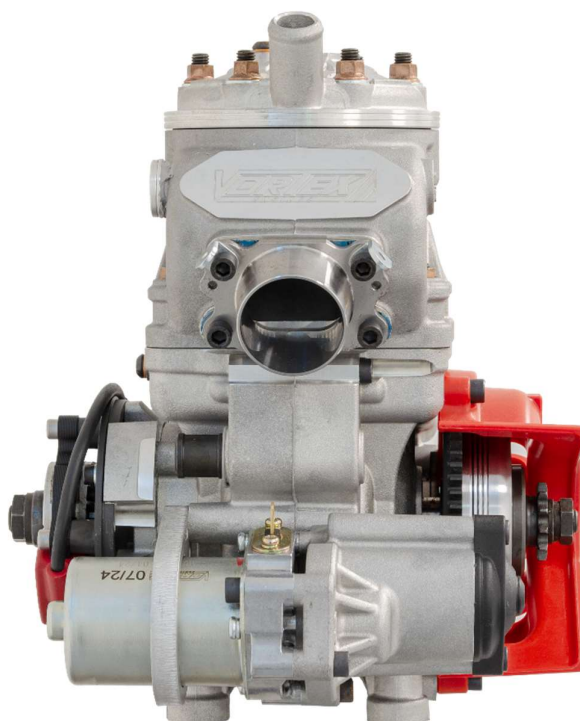
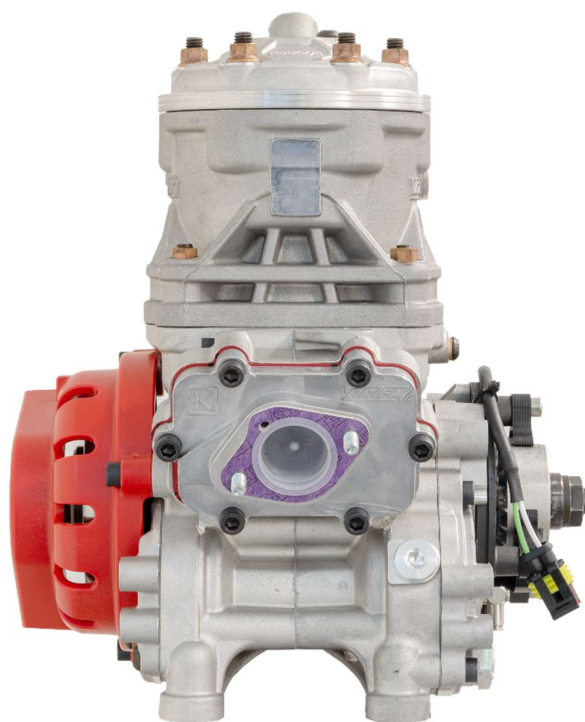
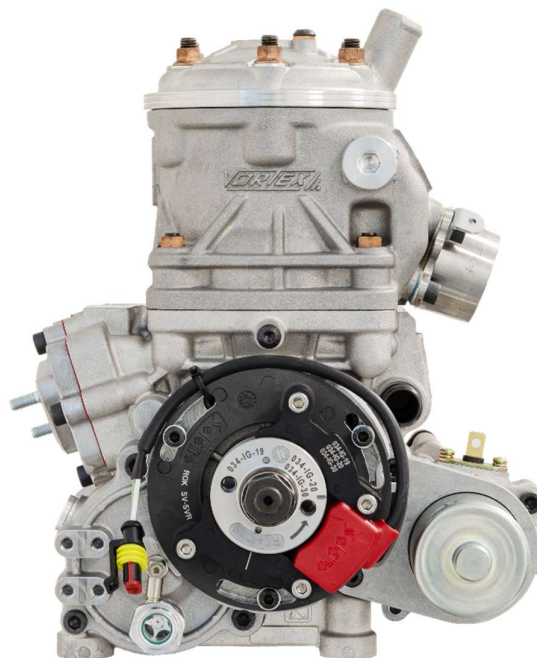
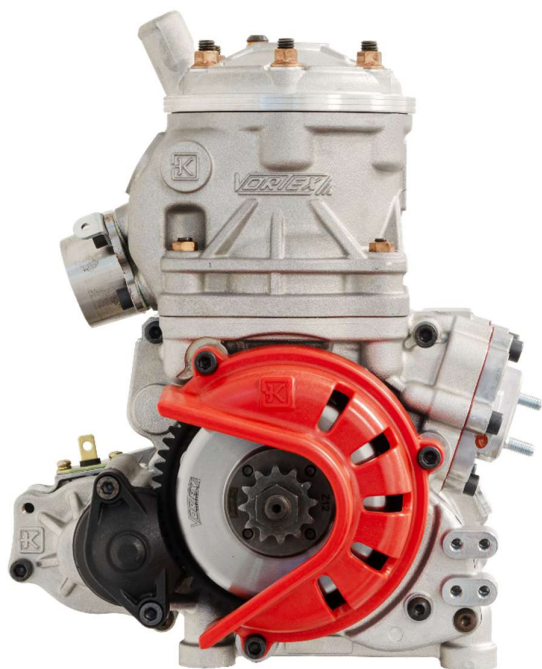


IDENTIFICATION SHEET

This Identification Sheet reproduces descriptions, illustrations and dimensions of the **VORTEX SV** engine.

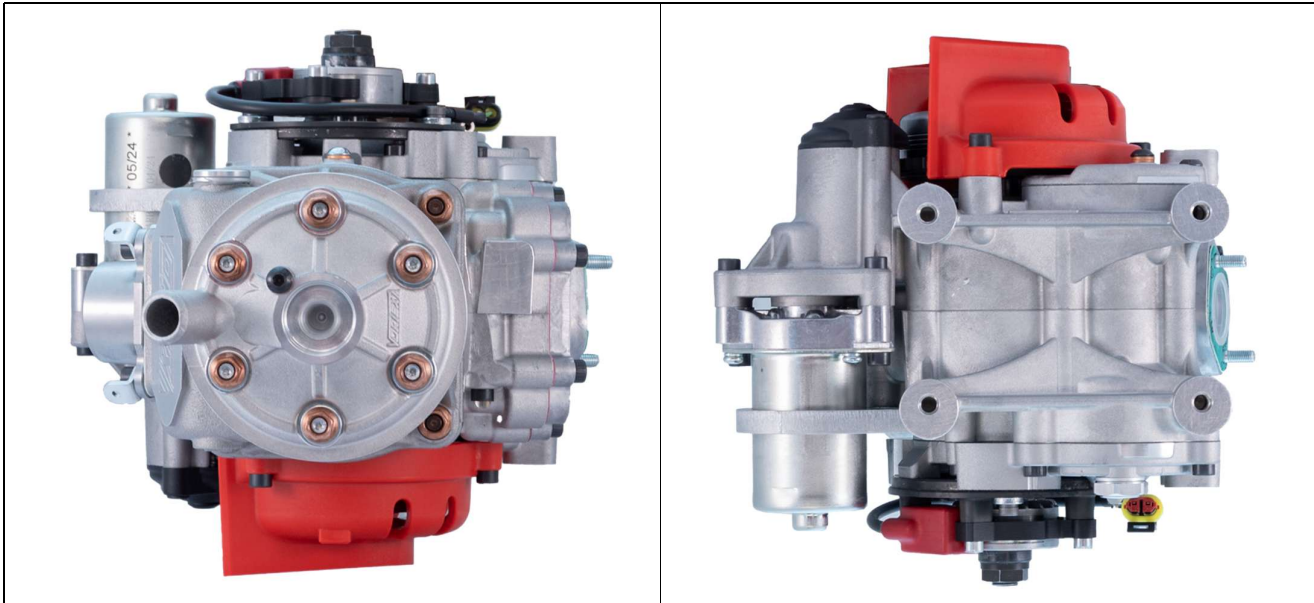


ATTENTION

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All dimensions in the technical drawings are in mm.



TECHNICAL INFORMATION AND CHARACTERISTICS

ORIGINAL BORE	54,13 mm
MAX ALLOWED BORE	54,29 mm
STROKE	54 +/- 0,1 mm
ORIGINAL DISPLACEMENT	124,27 cm ³
CONROD C-TO-C DISTANCE	102 +/- 0,2 mm
WEIGHT OF THE CONROD	126g +/- 5g
WEIGHT OF THE COMPLETE BALANCE SHAFT	212g +/- 10g

PARAMETERS OF THE DISTRIBUTION

EXHAUST PORT	168° MAX
BOOSTER	168° MAX
MAIN TRANSFER	127.5 ±1.5°
SECONDARY TRANSFER	125±1.5°

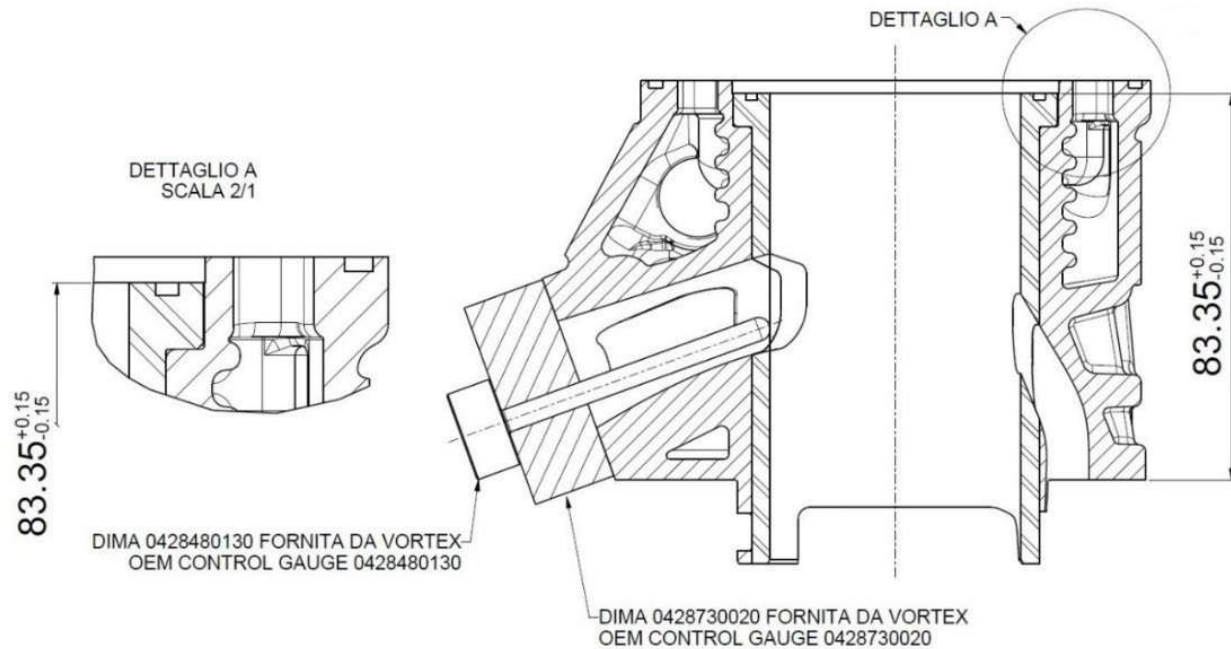
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CYLINDER SECTION WITH CAST IRON LINER



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CYLINDER PICTURES



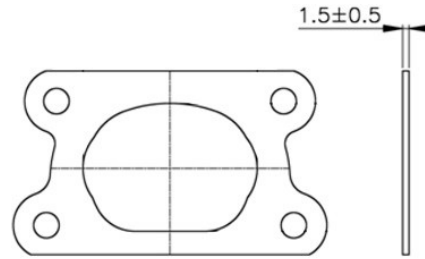
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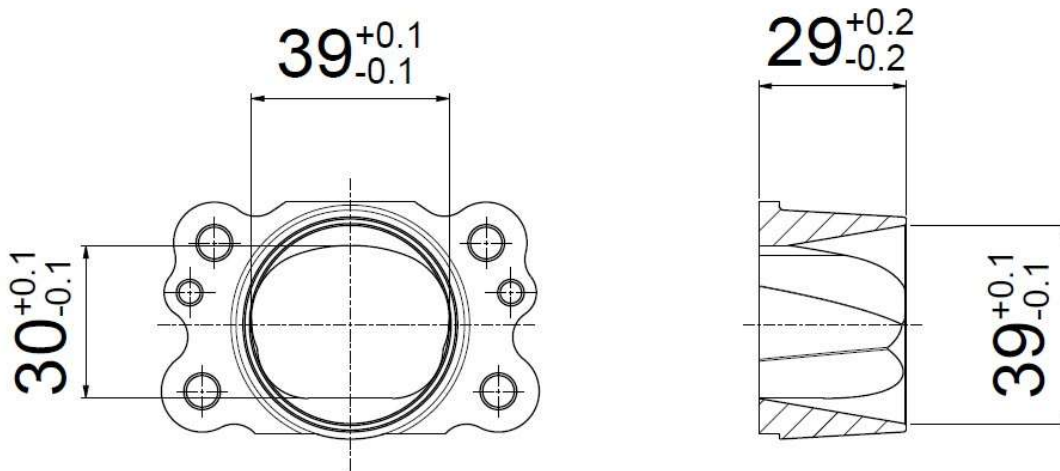
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EXHAUST GASKET



MANIFOLD SV



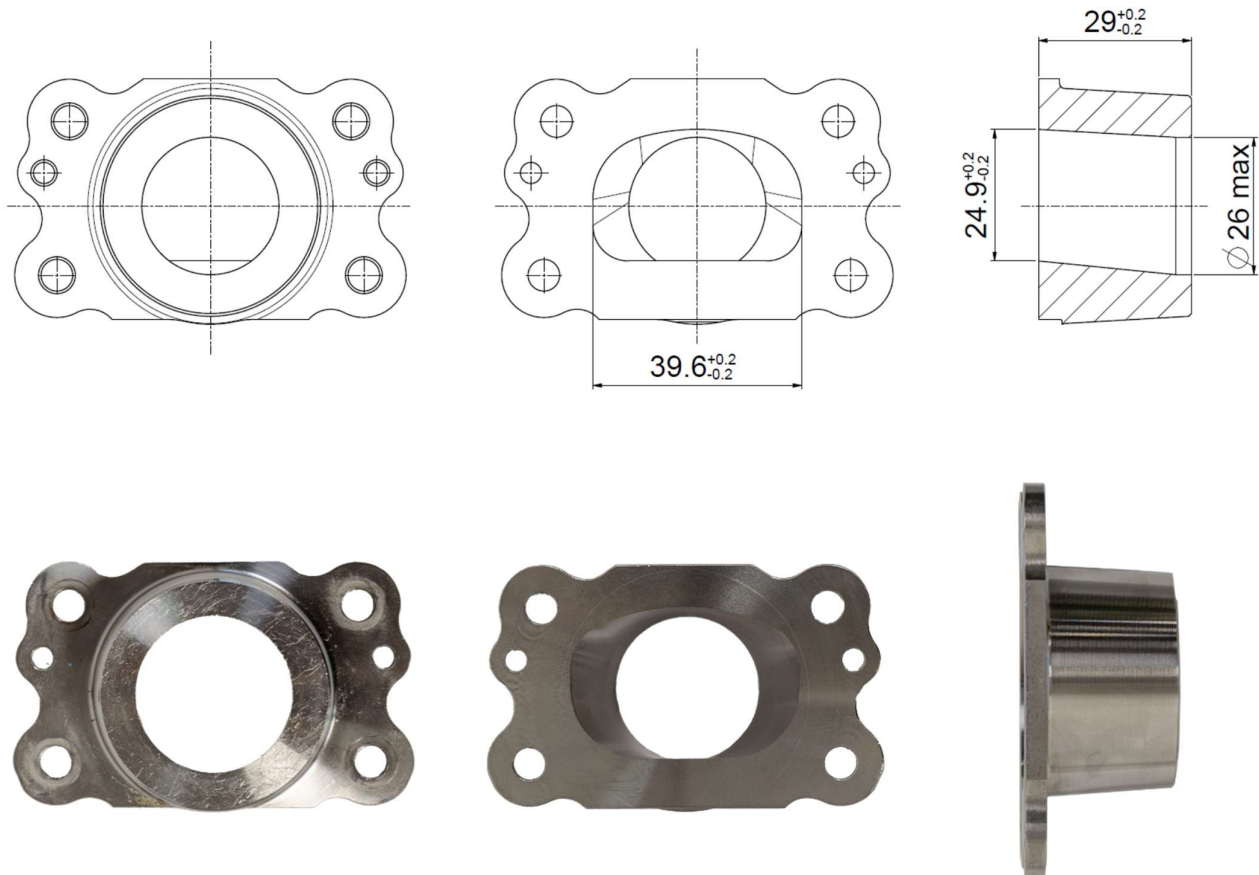
ATTENTION

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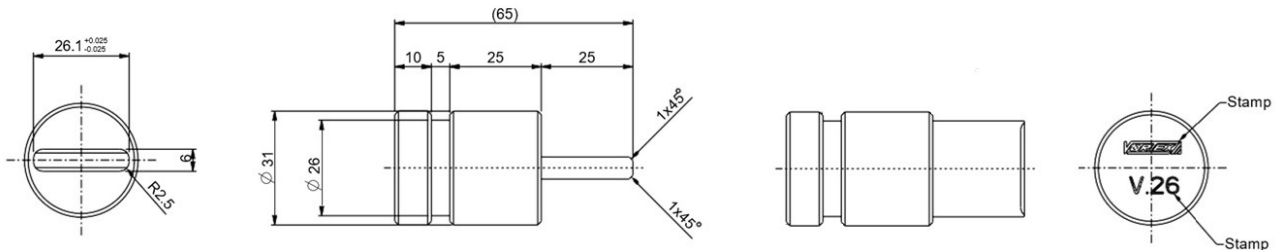
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MANIFOLD SV-J



VORTEX SV-J MANIFOLD CONTROL GAUGE



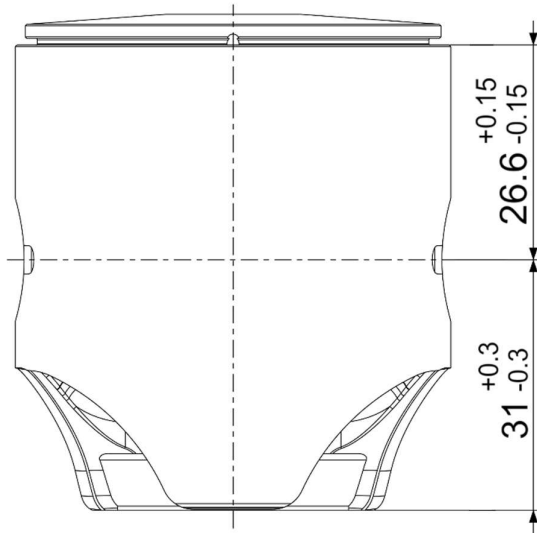
ATTENTION

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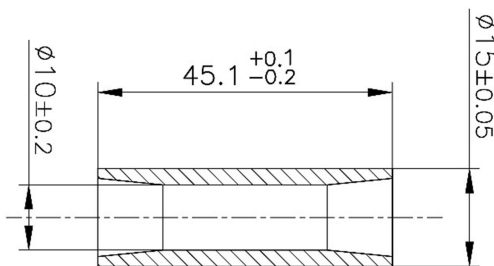
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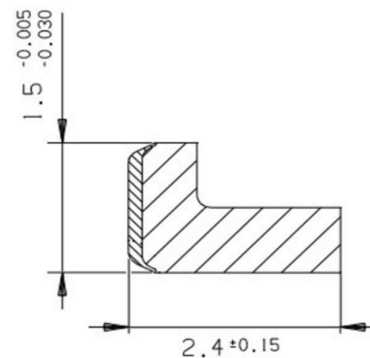
PISTON



**Weight
122 ±5 gr**



**Weight
30g Min.**



Piston Ring Detail

ATTENTION

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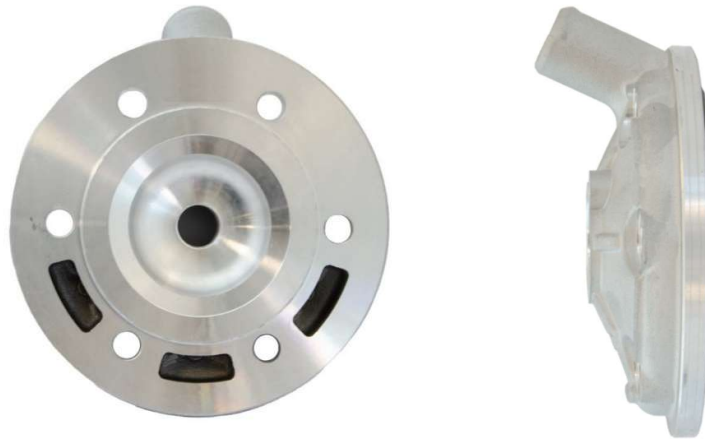
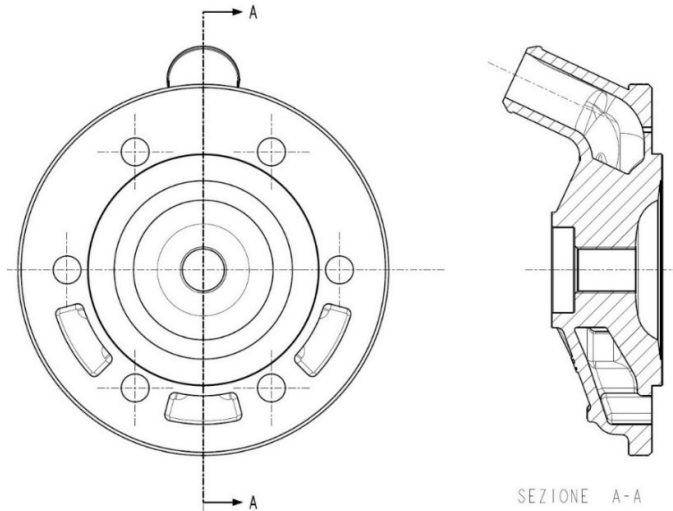
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CYLINDERHEAD AND COMBUSTION CHAMBER

Combustion Chamber Volume: $8,7 \text{ cm}^3 + \text{insert } 2 \text{ cm}^3 = 10,7 \text{ cm}^3 \text{ Min.}$

SQUISH THICKNESS – SQUISH - EPESSEUR DE SQUISH: 0.9 mm MIN.



TEMPLATE FOR CHECKING THE PROFILE OF COMBUSTION CHAMBER



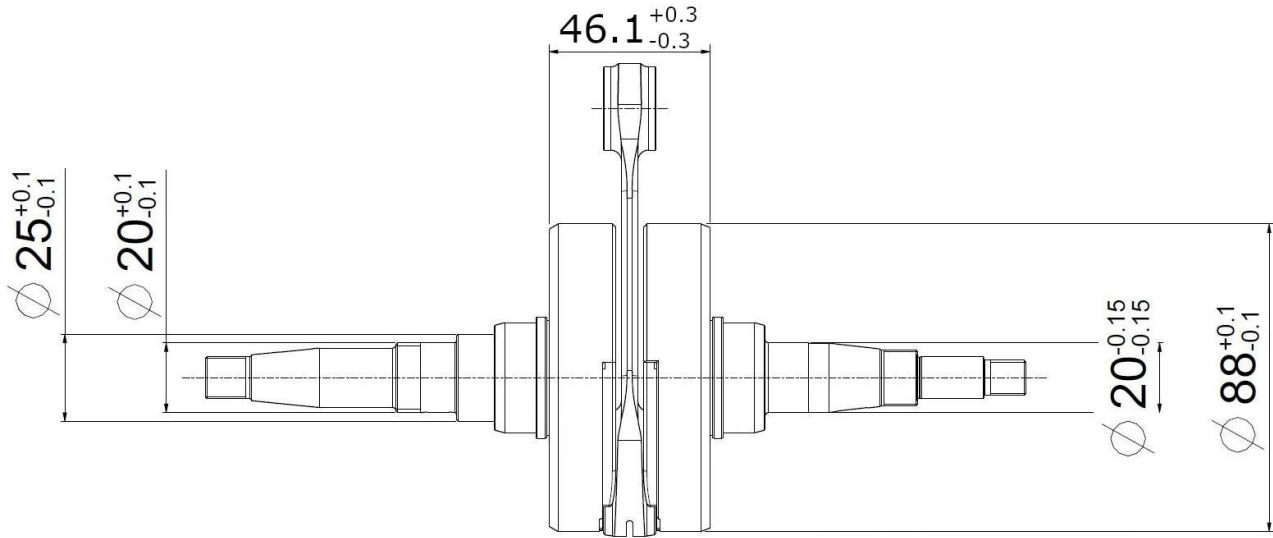
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CRANKSHAFT



WEIGHT
2082g Min.



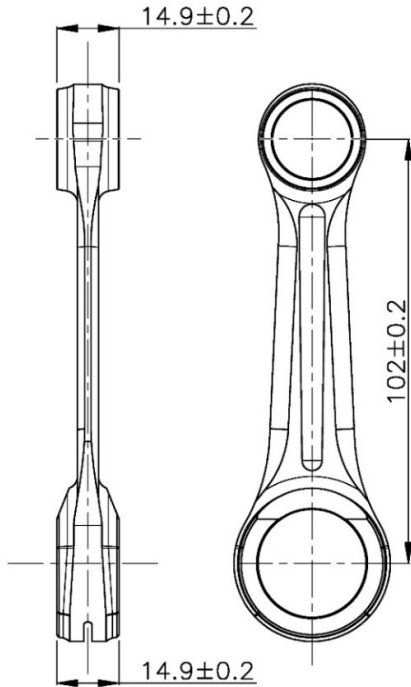
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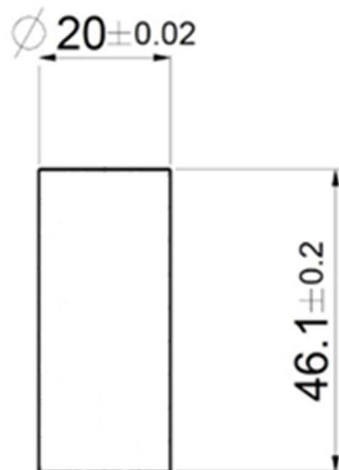
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CRANK PIN AND CONROD



WEIGHT
128 ±2gr



WEIGHT
102gr. Min.

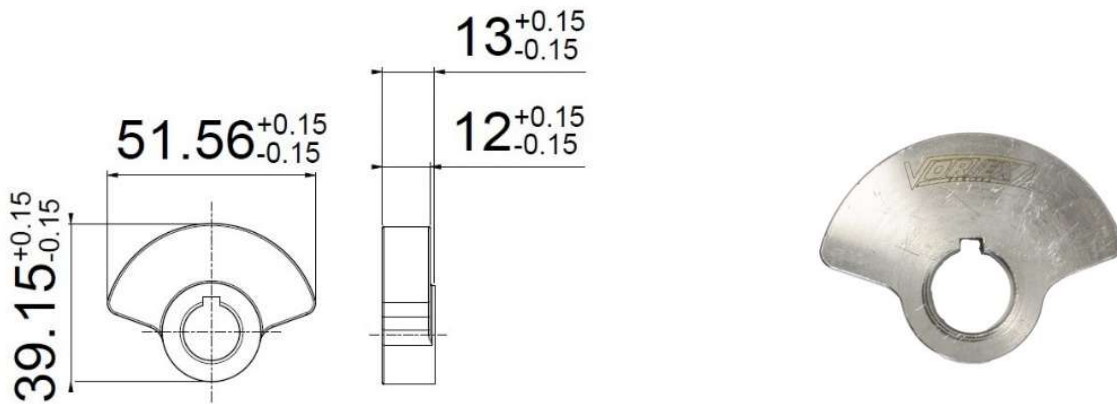
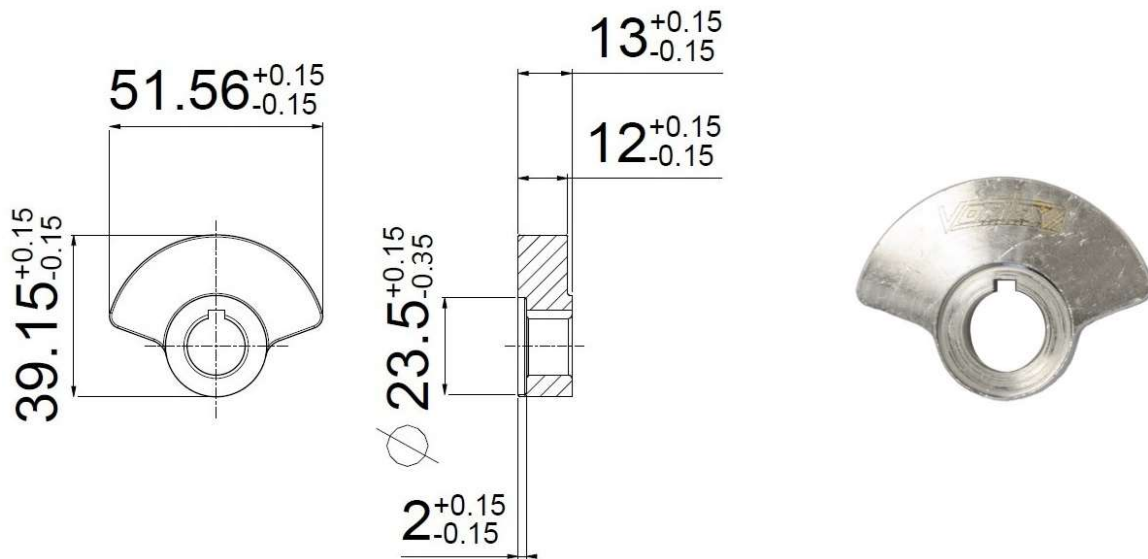
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BALANCE SHAFT



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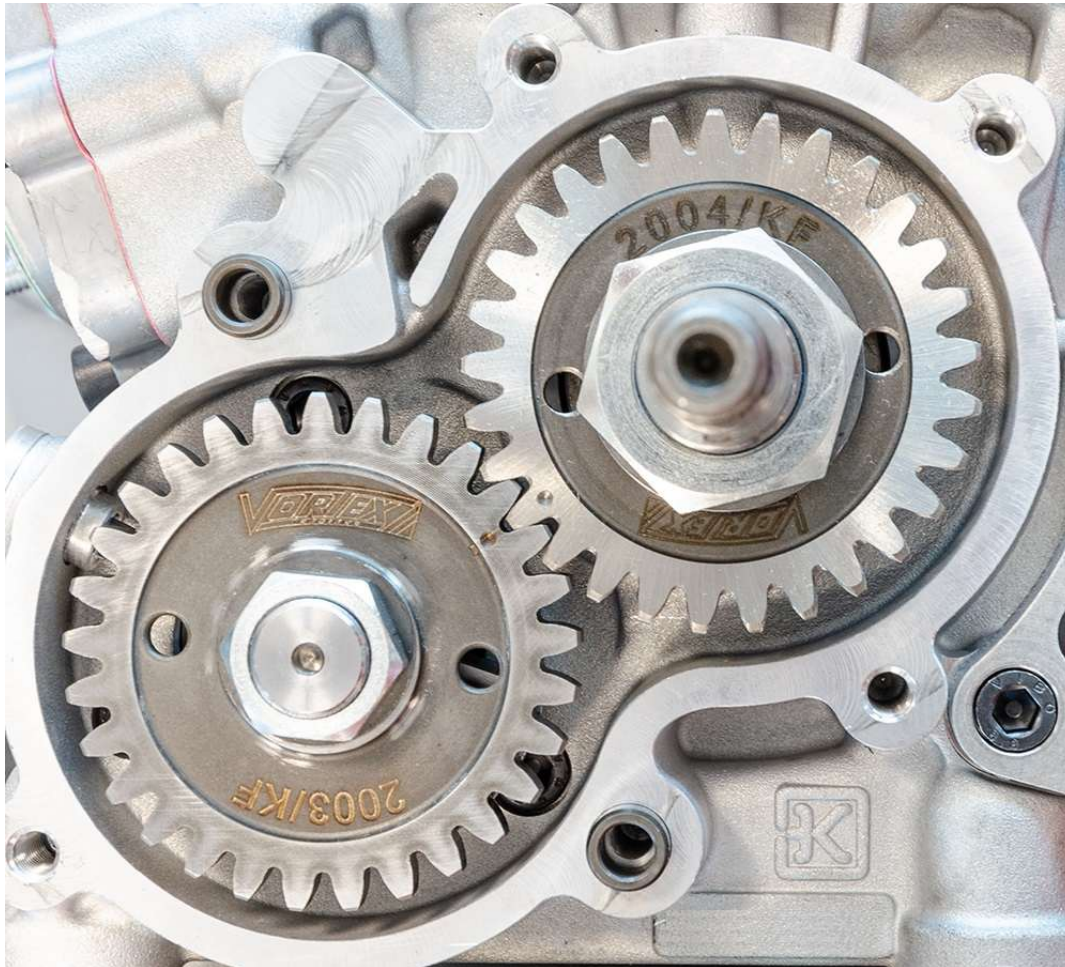
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ANY OPERATING STATUS OF THE SYSTEM (FAILURE, BREAKAGE, WEAR, ETC.), SUCH AS TO DETERMINE AN INCORRECT DRIVING OF THE BALANCE SHAFT, MUST BE CONSIDERED NOT IN RULE

BALANCER SHAFT PHASING

IN THE DRAWING BELOW, WE SHOW YOU IN DETAILS THE ORIGINAL POSITION (TO BE RESPECTED) OF THE BALANCER SHAFT PHASING.
 AS THE TIMING SHOULD BE REGULAR THE NOTCHS OF THE GEARS AND THE BALANCER SHAFT SHOULD CORRESPOND WHEN THE PISTON IS AT THE DEAD UPPER POINT. AS SHOWN ON THE DRAWING.



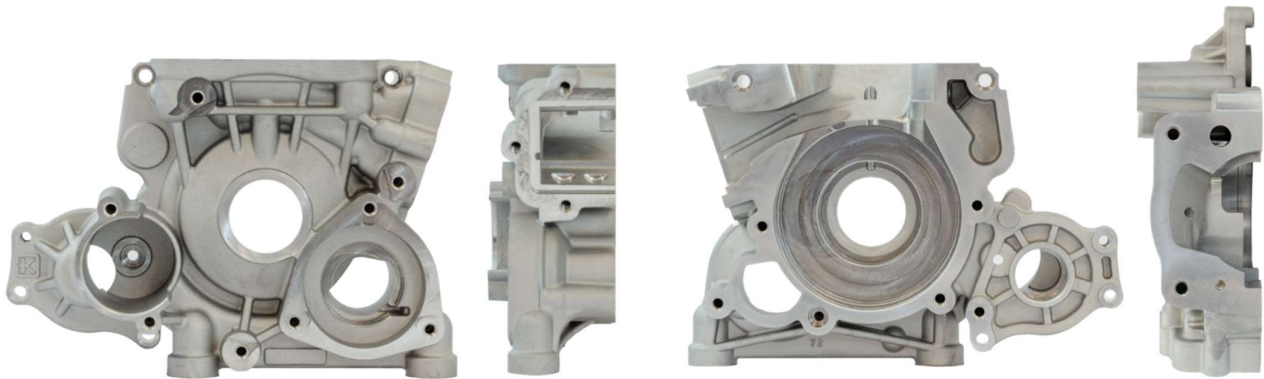
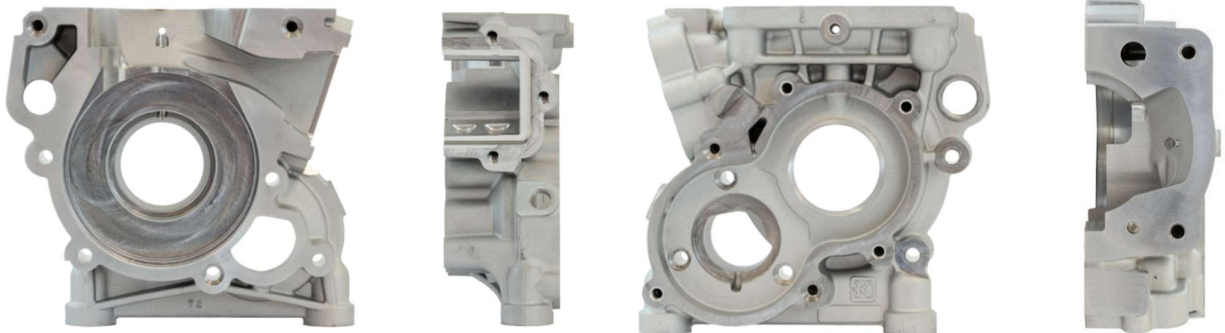
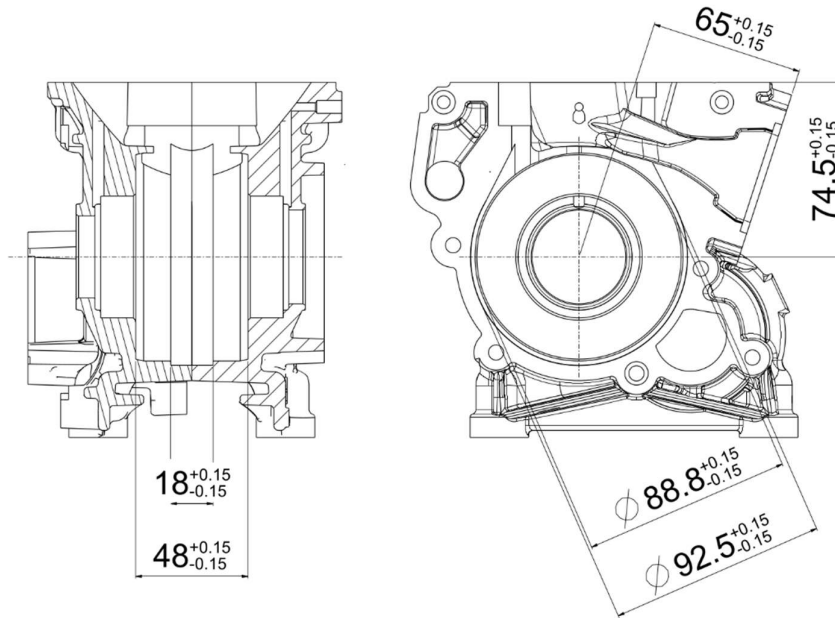
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INTERIOR VIEW OF THE CRANKCASE



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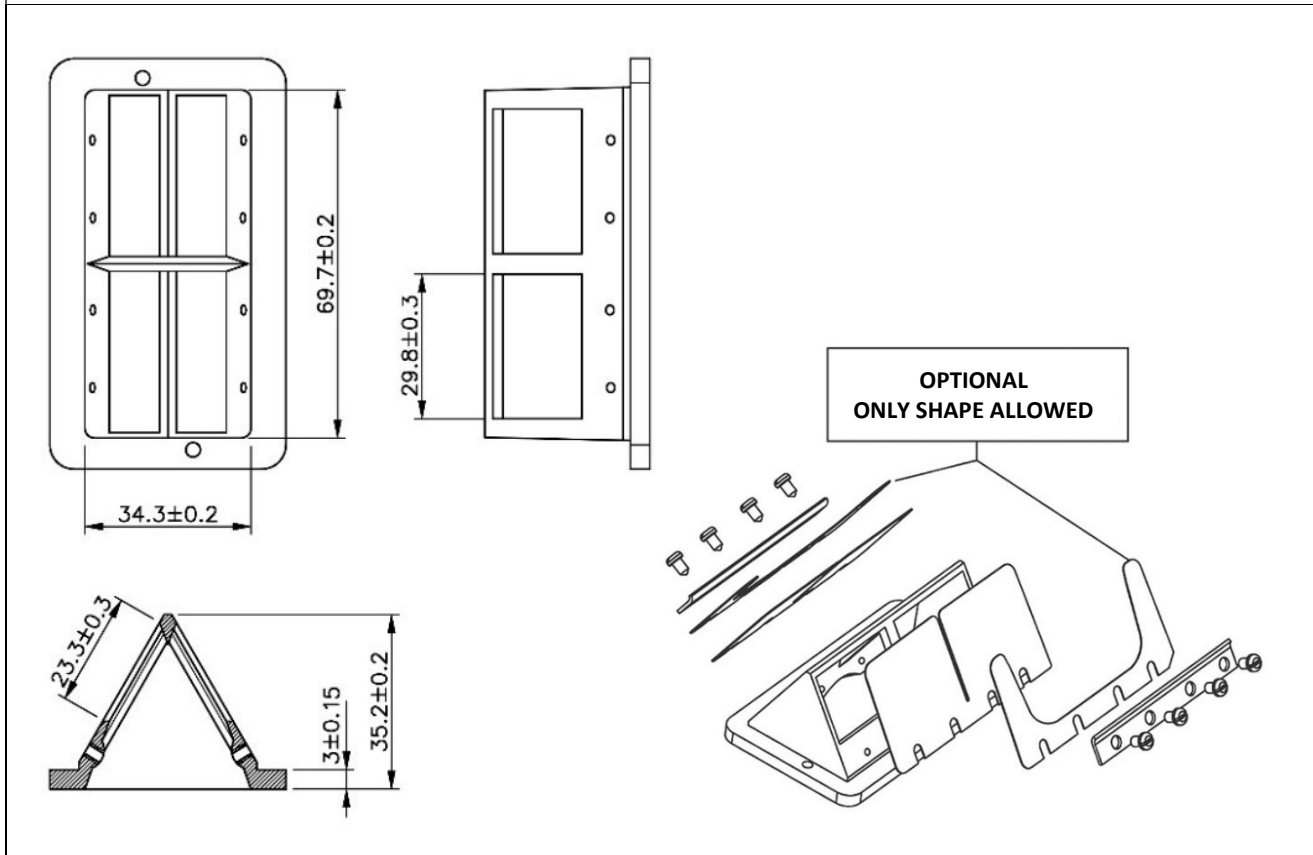
CRANKSHAFT BEARINGS

TYPE	DIMENSIONS	CHARACTERISTICS
SKF BC1-1442	30 x 16 x 62 mm	Steel balls 13

BALANCER SHAFT BEARINGS

TYPE	DIMENSIONS	CHARACTERISTICS
Free brand NU203-ECP C3	12 x 17 x 40 mm	Steel balls 11
Free brand 6302.C4	15 x 13 x 42 mm	Steel balls 7

DRAWING OF REED BLOCK



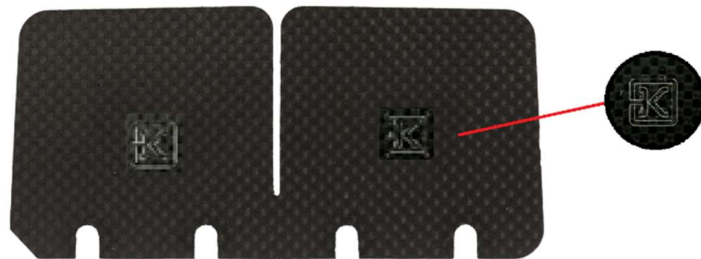
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REED BLOCK



REED PETALS MINIMUM THICKNESS	0.23 mm
REINFORCEMENT (STOPPER) MINIMUM THICKNESS	0.22 mm

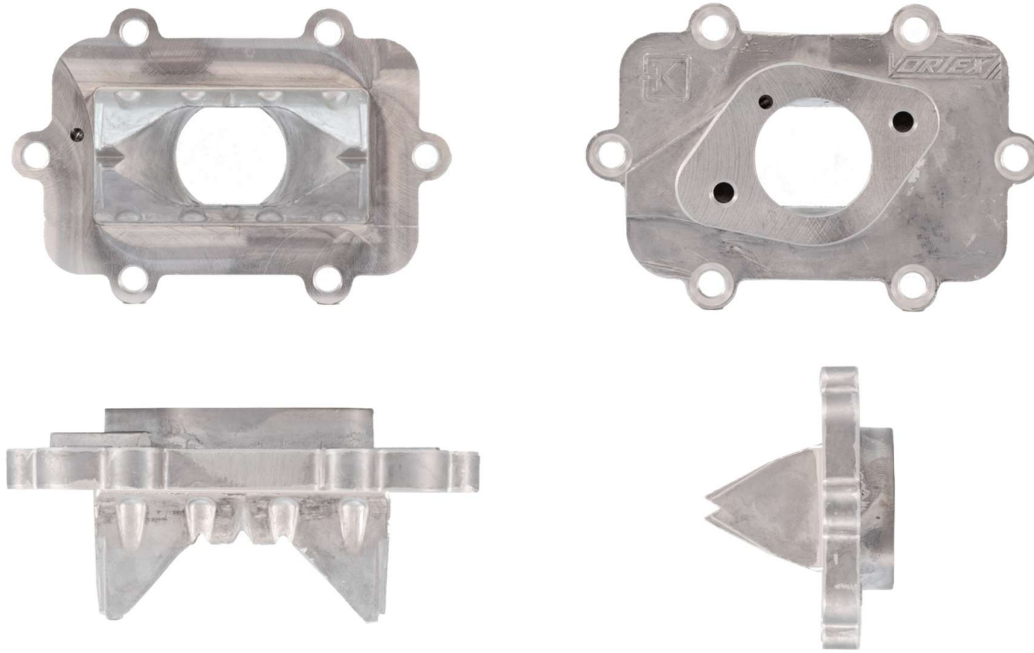
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REED VALVE COVER



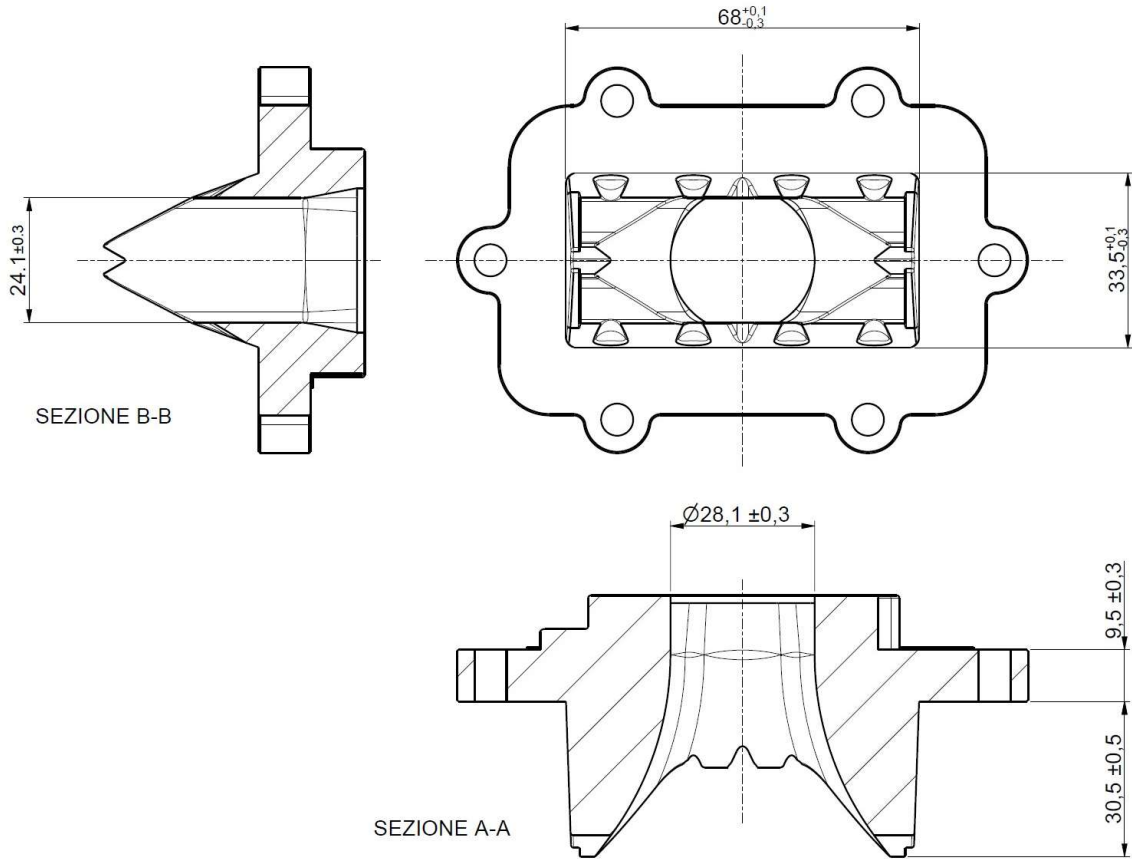
ATTENTION

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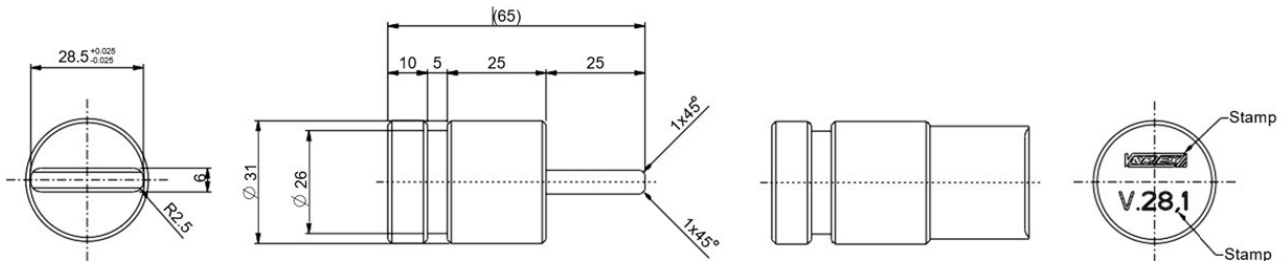
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REED VALVE COVER



VORTEX REED VALVE CONTROL GAUGE



ATTENTION

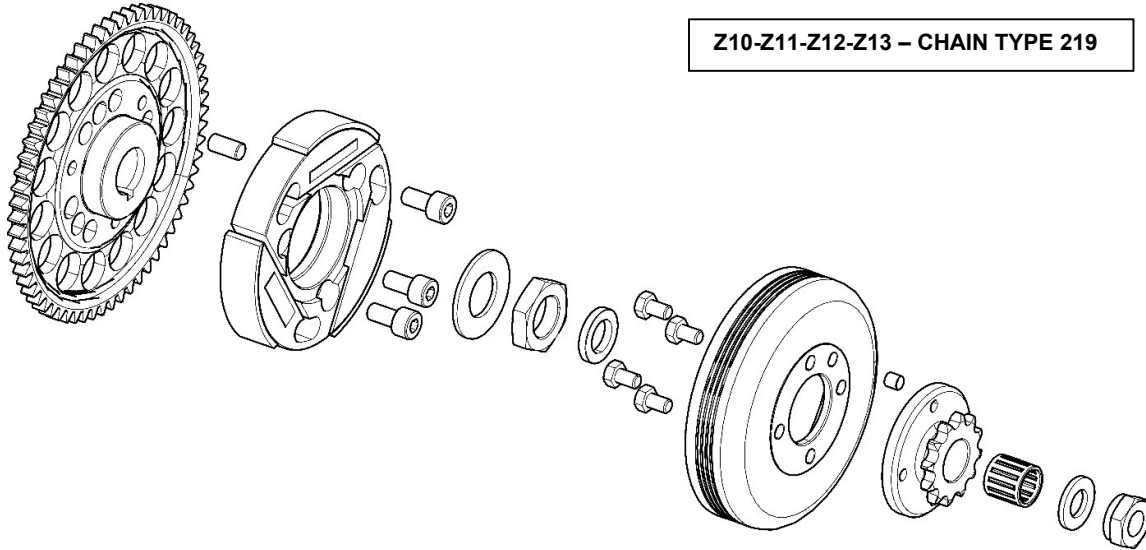
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CLUTCH DESCRIPTION AND PARTS SKETCH

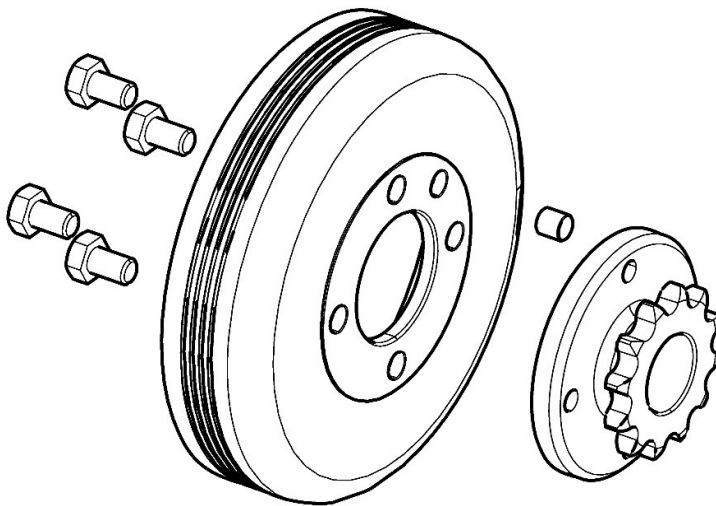
Z10-Z11-Z12-Z13 – CHAIN TYPE 219



PARTS QUANTITY: **19**

WEIGHT OF THE COMPLETE CLUTCH WITH STARTING GEAR: **980 gr Min.**

ENGAGEMENT SPEED (MAXIMUM) CAN BE VERIFIED IN EVERY MOMENT OF THE EVENT: **4000RPM**



PARTS QUANTITY: **7**

WEIGHT OF THE CLUTCH HOUSING WITH SPROCKET: **263gr Min.**

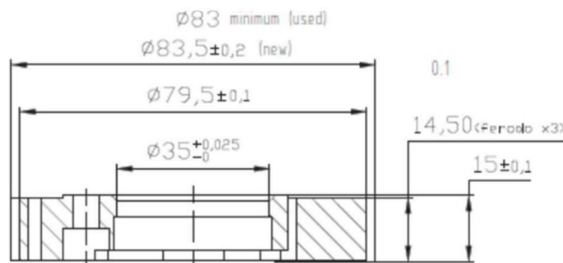
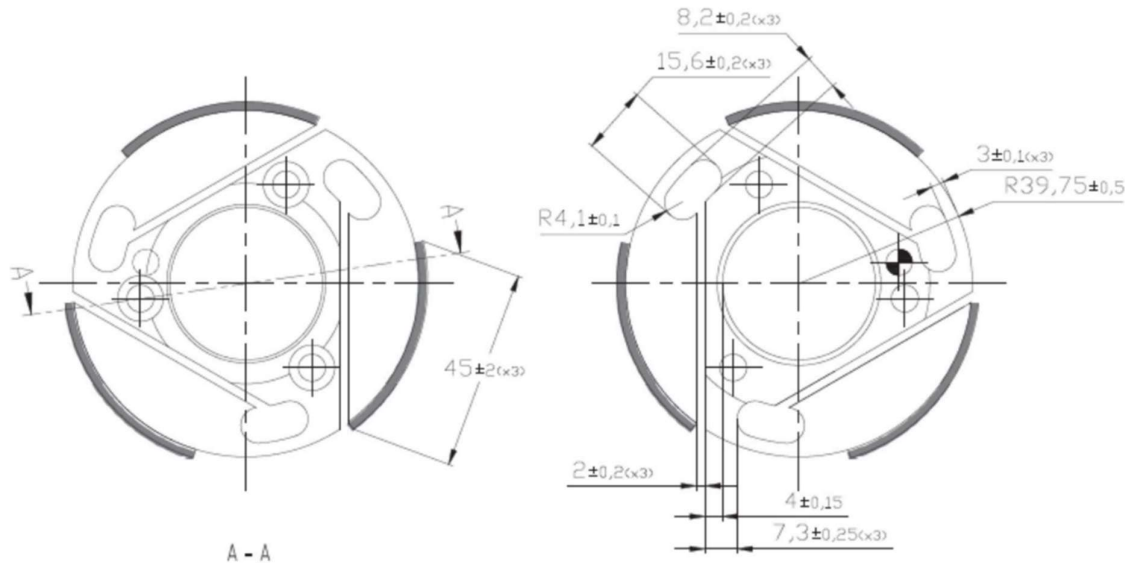
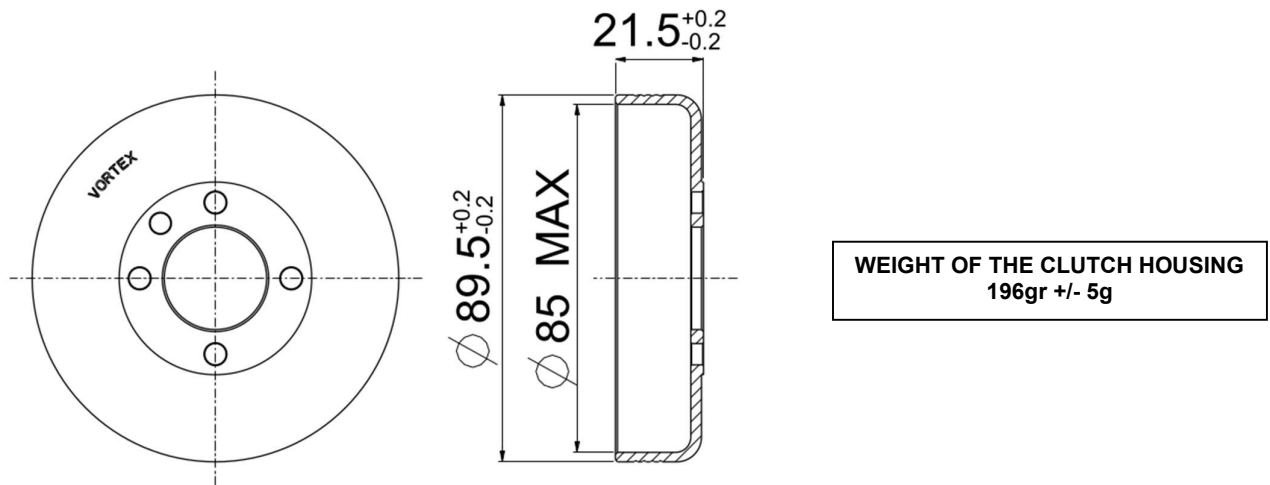
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CLUTCH HOUSING / CLUTCH ROTOR



WEIGHT OF THE CLUTCH ROTOR
356 gr +/- 10g

Cotes en mm
Dimensions in mm

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EXHAUST MUFFLER



The ROK SV brand must always be present on the muffler.

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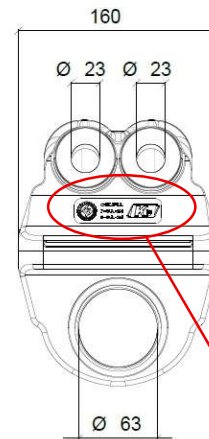
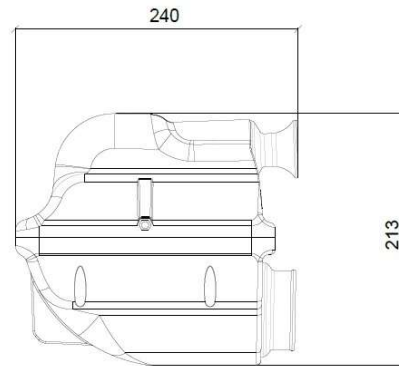
INLET SILENCER

MODEL, TYPE

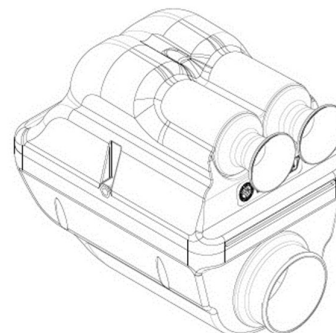
KG Nitro 23 Homologated by
CIK/FIA n. 7-SA-24 n. 8-SA-24



CIK/FIA 7-SA-24 8-SA-24



CIK/FIA 7-SA-24 8-SA-24



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**RAIN PROTECTION INLET SILENCER
ONLY RAIN PROTECTION ALLOWED**



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SELETTA IGNITION



034-IG-19
034-IG-20
034-IG-30

STARTER WIRING



Optional button cover

Engines shall be mandatory switched on and off by means of onboard starting system.
Technical Stewart members shall check the on-off onboard system anytime.

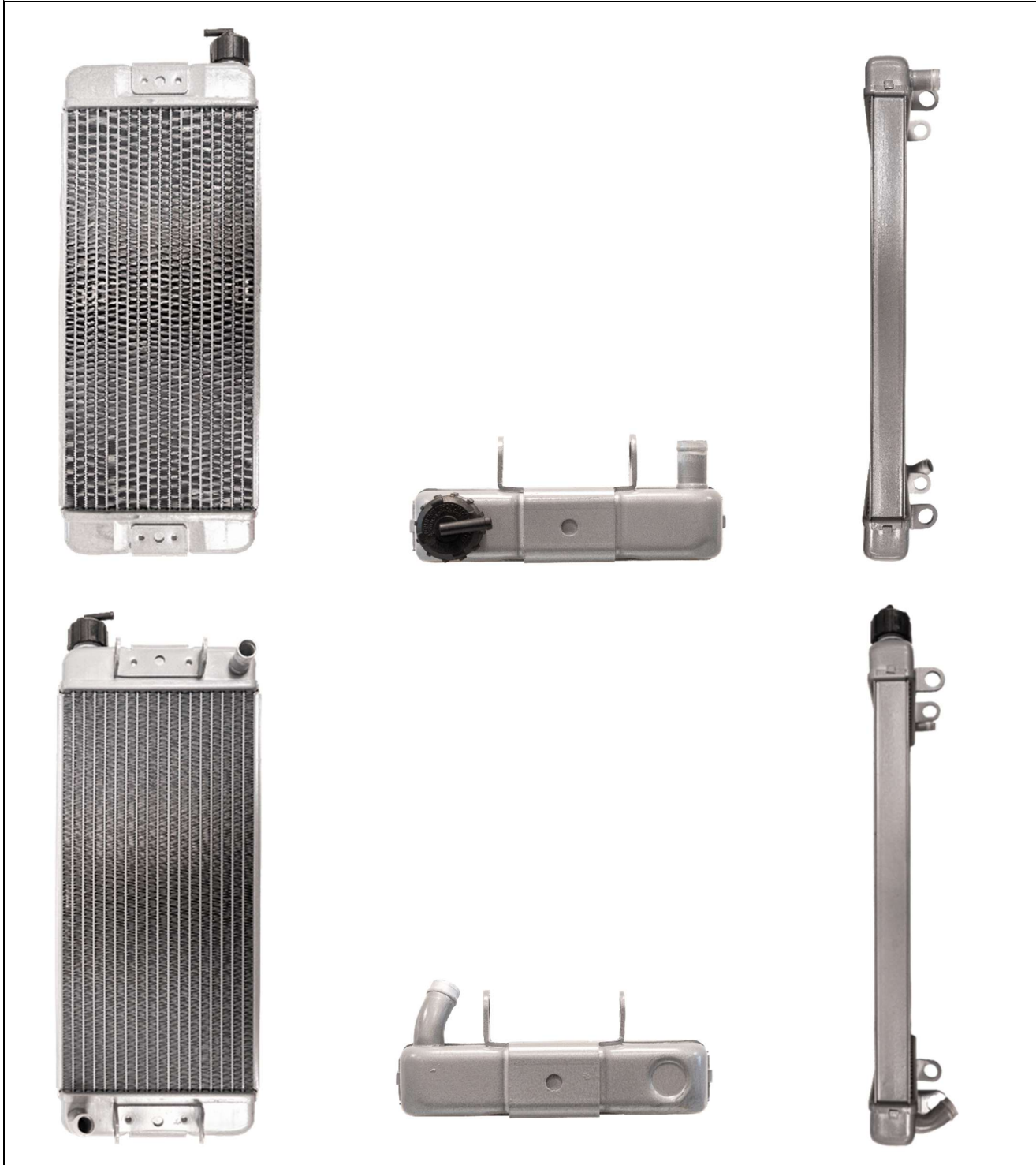
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OTK ORIGINAL RADIATOR Option 1



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OTK ORIGINAL RADIATOR Option 2



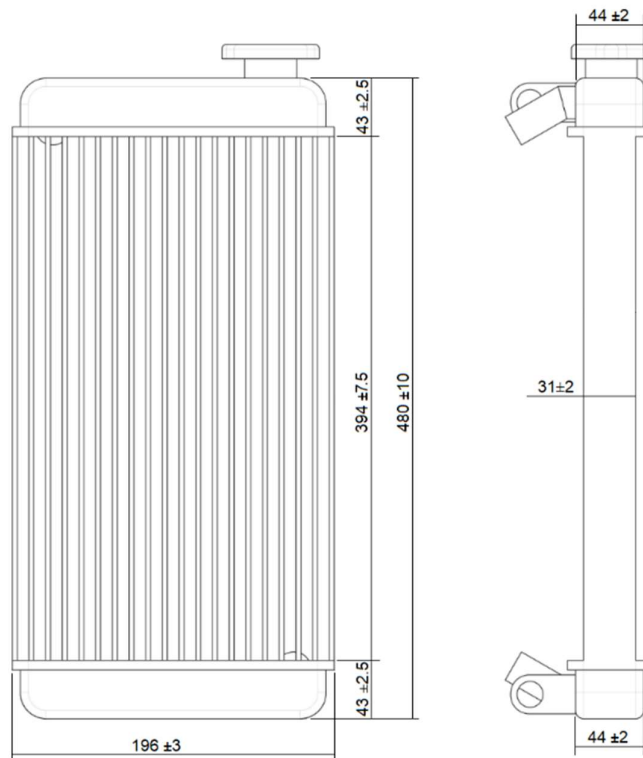
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OTK ORIGINAL RADIATOR DIMENSIONS



OTK ORIGINAL WATER PUMP'S PULLEY



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OTK ORIGINAL WATER PUMP



SPARK PLUG



**ONLY AUTHORIZED SPARK PLUG
NGK B10-EG**

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ENGINE STARTER SUPPORT

OPTION 1 (STANDARD)



OPTION 2



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