



SHRIRAM PISTONS & RINGS LTD.

New  
Launch

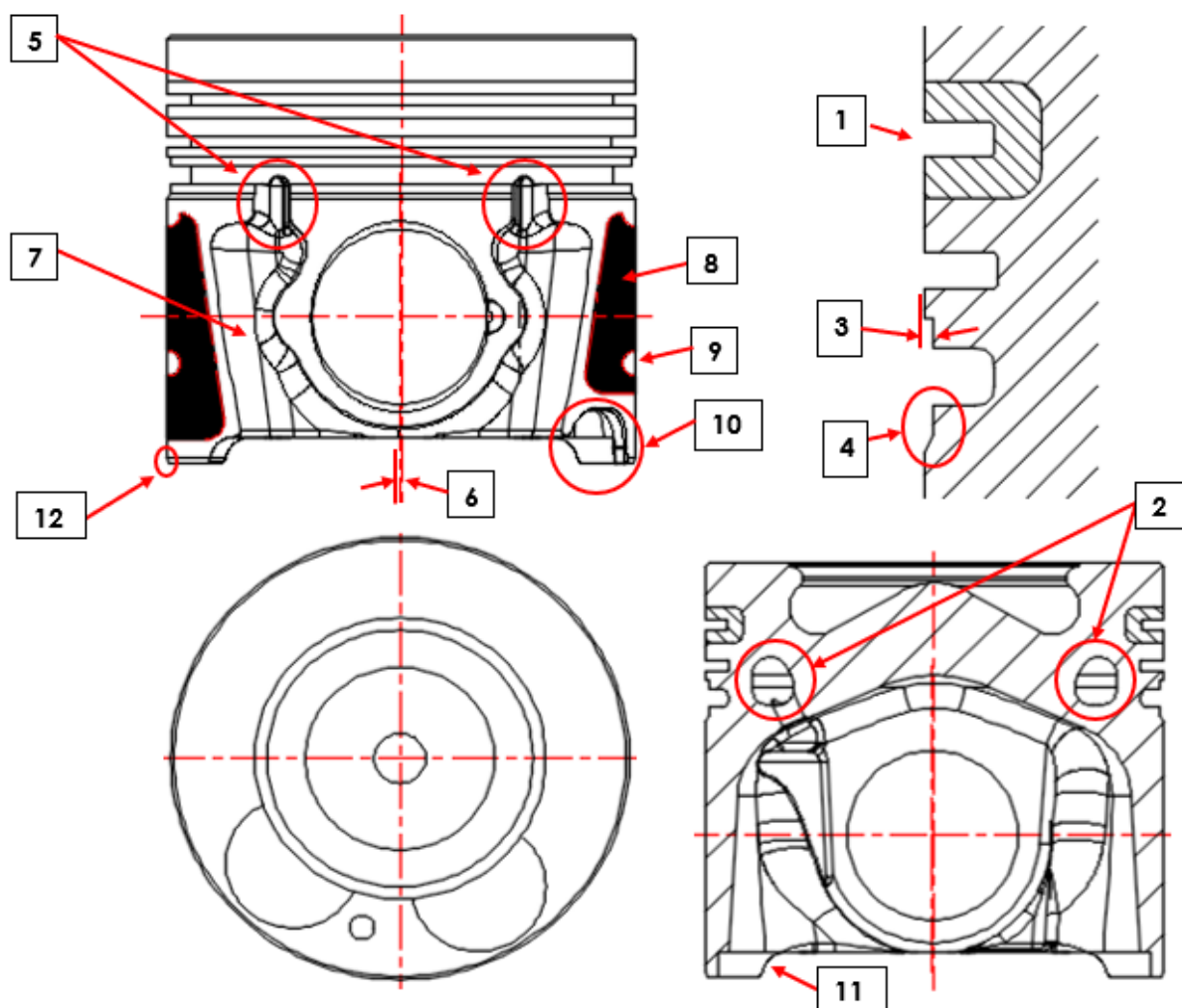
MD: TS: 01/MAY'25 INTRODUCTION CIRCULAR-VERNA FLUIDIC/ CRETA 1.6L (D) 'U16'-PISTON SET

USHA is pleased to launch **VERNA FLUIDIC/ CRETA 1.6L (U16) DIESEL** piston set in its aftermarket Car/ PV product range.



This piston set has following special features: -

#### PISTON:-



Private & Confidential

Unique features of USHA **VERNA FLUIDIC/ CRETA 1.6L (U16) DIESEL** piston are as follows:

SL. NO.	SPECIAL FEATURE	BENEFITS TO CUSTOMER
1)	<b>HIGH NICKEL WEAR RESISTANT RING CARRIER (RCP):</b> Top groove of this piston is made of high nickel wear resistant ring carrier insert which is manufactured using latest centrifugal casting technology.	<ul style="list-style-type: none"> <li>Longer life of piston due to negligible wear of top groove</li> </ul>
2)	<b>OIL COOLING GALLERY (OCG):</b> A through oil cooling gallery is made around the periphery at under crown area of the piston beneath ring zone with the help of salt core during casting, through which oil flows continuously during its working cycle.	<ul style="list-style-type: none"> <li>Facilitates faster heat dissipation</li> <li>Helps in rapid cooling of combustion bowl &amp; ring groove areas, thereby enhancing piston &amp; engine life</li> </ul>
3)	<b>STEP CUT IN 2<sup>ND</sup> RING LAND:</b> This piston has a step cut in second ring land for better seating, stability & functioning of intermediate ring.	<ul style="list-style-type: none"> <li>Helps in controlling blow-by &amp; reducing oil consumption</li> </ul>
4)	<b>'J' CUT:</b> Piston has been provided with a unique 'J' cut below the oil ring groove area.	<ul style="list-style-type: none"> <li>Provides all time lubrication to piston skirt</li> <li>No piston seizure in extreme limits of normal working conditions</li> </ul>
5)	<b>QUICK OIL RETURN SLOTS (QORS):</b> Two nos. of Quick Oil Return Slots (QORS) are provided on either side of piston above the pin bore, half in groove & half in window.	<ul style="list-style-type: none"> <li>Faster drainage of excess oil, hence low oil consumption</li> </ul>
6)	<b>PISTON-PIN BORE OFFSET:</b> The piston is provided with a pin bore offset to avoid piston slap. Piston pin bore offset means that the centre line of piston is slightly offset from the centre line of pin bore. Due to this offset, piston tilts at TDC & BDC smoothly & prevents slapping with liner.	<ul style="list-style-type: none"> <li>Reduced engine noise</li> </ul>
7)	<b>AS CAST CONVERGENT WINDOW:</b> This not only gives more space for oil drainage but the unique convergent type design also provides more bearing area to piston skirt, which helps in guiding piston rings' movement.	<ul style="list-style-type: none"> <li>Faster oil drainage, hence low oil consumption</li> <li>Seizure on minor axis is avoided, hence longer piston life</li> </ul>
8)	<b>'Nano-friKS COATING' ON PISTON SKIRT:</b>	<ul style="list-style-type: none"> <li>Helps in initial lubrication &amp; seizure free operation</li> <li>Better wear resistance</li> <li>Reduces engine noise</li> </ul>
9)	<b>MEASURING POINTS ON PISTON SKIRT:</b>	<ul style="list-style-type: none"> <li>Provided for easy diameter verification</li> </ul>

10)	<b>SLOT FOR PISTON COOLING NOZZLE (PCN) JET:</b> Provides room for oil cooling jet.	<ul style="list-style-type: none"> <li>Helps in directing oil flow underneath piston combustion cavity results in faster dissipation of heat</li> </ul>
11)	<b>SLIPPER DESIGN:</b> Slipper design helps in reducing piston weight.	<ul style="list-style-type: none"> <li>Improves fuel efficiency</li> <li>Low noise during engine working</li> </ul>
12)	<b>SCRAPING CHAMFER:</b> A smooth chamfer is provided at the bottom end of the piston skirt.	<ul style="list-style-type: none"> <li>Helps in regulating oil supply, reduces skirt wear &amp; hence longer life</li> </ul>

TECHNICAL DATA – <b>VERNA FLUIDIC/ CRETA 1.6L (U16) DIESEL PISTON (Ø 77.20 mm)</b>	
USHA CODE→ <b>C46</b>	
Nominal Bore Diameter	77.20
Piston Diameter	77.14
Recommended Piston-Liner Clearance	0.06
Compression Height	41.95
Total Height	65.75
Gudgeon Pin Length X OD	63.80 X 28.00
All dimensions in 'mm'	

Above features make USHA **VERNA FLUIDIC/ CRETA 1.6L (U16) DIESEL** piston set unique, produced to give better performance & longer life especially when fitted with USHA '**DVM**' ring set of subject model, released by us in September'2024.



Technical Product News is an exclusive update of product & information from  
 Shriram Pistons & Rings Ltd., 3rd Floor, Himalaya House, 23, Kasturba Gandhi Marg, New Delhi-110001  
 Tel: 011-46451100, 23315941, Email: [tss@shrirampistons.com](mailto:tss@shrirampistons.com), Website: [www.shrirampistons.com](http://www.shrirampistons.com)