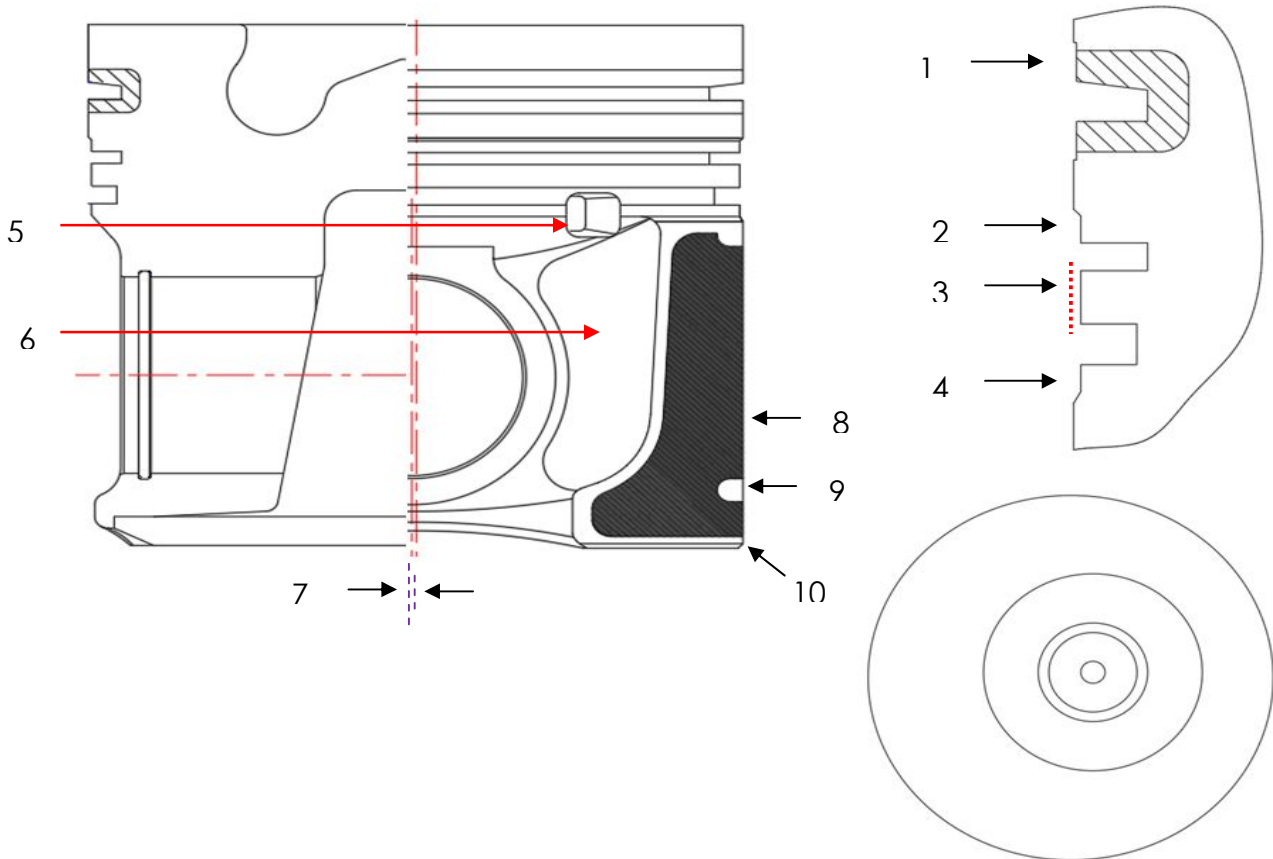


TECHNICAL BULLETIN- EICHER 683/483 TC BS-III PISTON SET

USHA is pleased to introduce Eicher 683/483 TC BS-III piston set in our product range of HCV/LCV segment.

The Unique features of this piston are as follows:



Sl. no.	Special Features	Benefits to Customer
1	HIGH NICKEL WEAR RESISTANT RING CARRIER (RCP): Top groove of this piston is made of high wear resistant ring carrier insert, which is manufactured as per latest centrifugal casting process.	<ul style="list-style-type: none"> • Longer life of piston due to negligible wear of top groove.
2	STEP CUT IN 1st RING LAND: Provides perfect seating to the top ring on the bottom surface.	<ul style="list-style-type: none"> • Helps in reducing blow-by. • Helps in reducing oil consumption.
3	CUT BACK IN SECOND RING LAND: Land is slightly undersize to provide more space for the oil scrapped by the second ring.	<ul style="list-style-type: none"> • Helps in reducing oil consumption.

4	“J” CUT: This piston has been provided with a unique ‘J’ cut below the oil ring groove area.	<ul style="list-style-type: none"> • ‘J’ cut provides all time lubrication to skirt. • No piston seizure in extreme limits of normal working conditions.
5	QUICK OIL RETURN SLOTS (QORS): Two nos. of Quick Oil Return Slots (QORS) are provided on each side of the piston above the pin bore, half in groove & half in window.	<ul style="list-style-type: none"> • Quick drainage of oil and hence lower oil consumption.
6	AS CAST HYDRODYNAMIC WINDOW: New hydrodynamic ‘As Cast’ window designed by our collaborator, not only provides more space for oil drainage, but also provides more skirt area for piston ring guidance.	<ul style="list-style-type: none"> • Faster drainage of oil due to more space helps in reducing oil consumption. • Better guidance to rings.
7	PISTON- PIN BORE OFFSET: Pistons are provided with a piston 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"> • Reduced engine noise.
8	SKIRT COATED WITH NEW “D-10” COATING	<ul style="list-style-type: none"> • D-10 permanent coating provides better wear resistance & helps in initial lubrication to avoid piston scuffing.
9	MEASURING POINTS ON THE SKIRT: Two points on both sides of the skirt.	<ul style="list-style-type: none"> • Provided for easy diameter verification.
10	BOTTOM CHAMFER: A smooth chamfer is provided at the bottom end of piston which provides better hydrodynamic oil film.	<ul style="list-style-type: none"> • Helps in reducing skirt wear, regulates oil supply and hence longer life.

TECHNICAL DATA- EICHER 483/683 TC BS-III PISTON		
		USHA CODE→ L09/H12
Nominal Bore Diameter	mm	100.00
Piston Diameter	STD Size mm	99.87
Recommended Clearance	Piston-Liner mm	0.130
Compression Height	mm	60.59
Total Height	mm	90.09
Piston Pin- Pin Bore Clearance	mm	+0.007 to +0.019 (Clearance Fit)

PISTON RINGS:

This piston is designed to match with existing USHA Eicher 683/483 “**CPDVM**” ring set for low oil consumption and an excellent performance.