



## SHRIRAM PISTONS & RINGS LTD.

MD: TS: 43/JAN'25

INTRODUCTION CIRCULAR–EICHER 494 BS VI CNG- 'CPC IPVENT' RING SET

USHA is pleased to launch **EICHER 494 BS VI CNG** ring set in its aftermarket LCV product range.

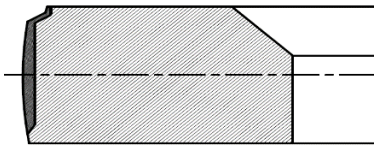
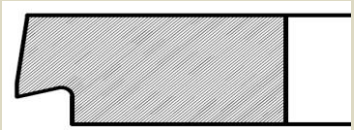
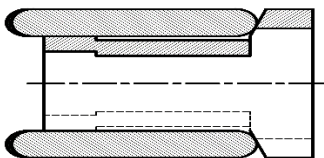


This ring set has following special features:

ITEM	CONFIGURATION	FEATURES	BENEFITS TO CUSTOMER
Top Ring	Special Steel Inside Bevel Semi Inlaid Composite Plating of Chrome {SSIBCPC(I)}	Special Steel Material (RIK-20A)	Top ring is manufactured using special steel alloy which has properties similar to steel. This material has good elasticity and excellent resistance to twisting, breakage & wear etc.
		Inside Bevelling	Ring has a bevel cut on upper inside edge which facilitates ring to twist positively during its downward movement & provides better sealing.
		Semi Inlaid CPC Coating	A semi groove is made on the outer periphery of the ring & multi layers of chrome are filled in the groove.  CPC is a specialized process of first plating the ring OD with chrome, creating cracks & then filling up hard particles ( $Al_2O_3$ ) in these cracks. This process is repeated many times building one layer above another. CPC rings have higher wear & scuff resistance under all working conditions.
		Parkerising	Side faces are parkerised to provide porous surface for oil retention resulting in better lubrication & lesser wear.
2 <sup>nd</sup> Ring	Taper Napier {N}	Taper face	Ring has a Taper on OD to provide line contact with liner resulting in higher wall pressure, hence better sealing.
		Napier cut	Ring has a taper face on OD & a scraper notch at its bottom known as Napier cut which facilitates the ring to accumulate excess oil & scraps it towards crankcase, hence low oil consumption.
		Parkerising	Ring is fully parkerised to provide porous surface for oil retention resulting in better lubrication & lesser wear.

Oil Ring	IPVENT	'RIKVENT' design	'RIKVENT' ring has a unique design consisting of three parts i.e. two rails & one spacer. The spacer acts as an expander and has protruded lips which not only push ring rails against cylinder walls but also tilt lower rail upwards and upper rail downwards making it nearly impossible for lubricating oil to go up towards combustion chamber, resulting in lower oil consumption.
		Steel material	Spacer & Rails are made up of steel material having better conformability & wear resistance, hence improved oil scraping & ring life.
		Ion Plating on Rails	Ion plating is a Japanese technology done through PVD (Physical Vapour Deposition) process in which chrome and nitrogen ions get deposited on rails outer surface. Ion plating is a superior coating which enhances wear resistance.
		Gas Nitriding	Spacer & Rails are gas nitrided to provide wear resistance to all surfaces, hence longer life.

Technical data of **EICHER 494 BS VI CNG 'CPC IPVENT'** ring set is as under:

TECHNICAL DATA- <b>EICHER 494 BS VI CNG-'CPC IPVENT'</b> RING SET (Ø 100.00 mm)						
						USHA Code → <b>L40</b>
Ring	Ring Configuration	Axial Thickness (mm)	Closed Gap		Surface Treatment	Cross Section
			(mm)	(Thou)		
Top	SSIBCPC(I)	2.50	0.25-0.40	10-16	Semi Inlaid CPC/ Parkerising	
2 <sup>nd</sup>	N	2.50	0.50-0.70	20-28	Parkerising	
Oil	RIKVENT (IP)	3.00	0.25-0.75	10-30	Ion Plated Rails/ Gas Nitriding	

USHA **EICHER 494 BS VI CNG 'CPC IPVENT'** ring set is specially designed to reduce oil consumption & blow-by for an excellent performance.



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