



L5P Duramax High-Pressure Fuel Pump Comparative Testing

Base Bosch CP3

Max pressure: 1,800 bar continuous
Output plateaus at roughly 3,500 rpm
Robust bottom end design that uses buckets for stability

Stock L5P HP4

Max pressure: 2,000 bar continuous **maximum stock L5P operating pressure, not official from Denso**
Output plateaus at roughly 3,000 rpm
Buckets are not used in the bottom end, resulting in less stability than a CP3
Larger plunger diameter which creates more leakage at high pressure

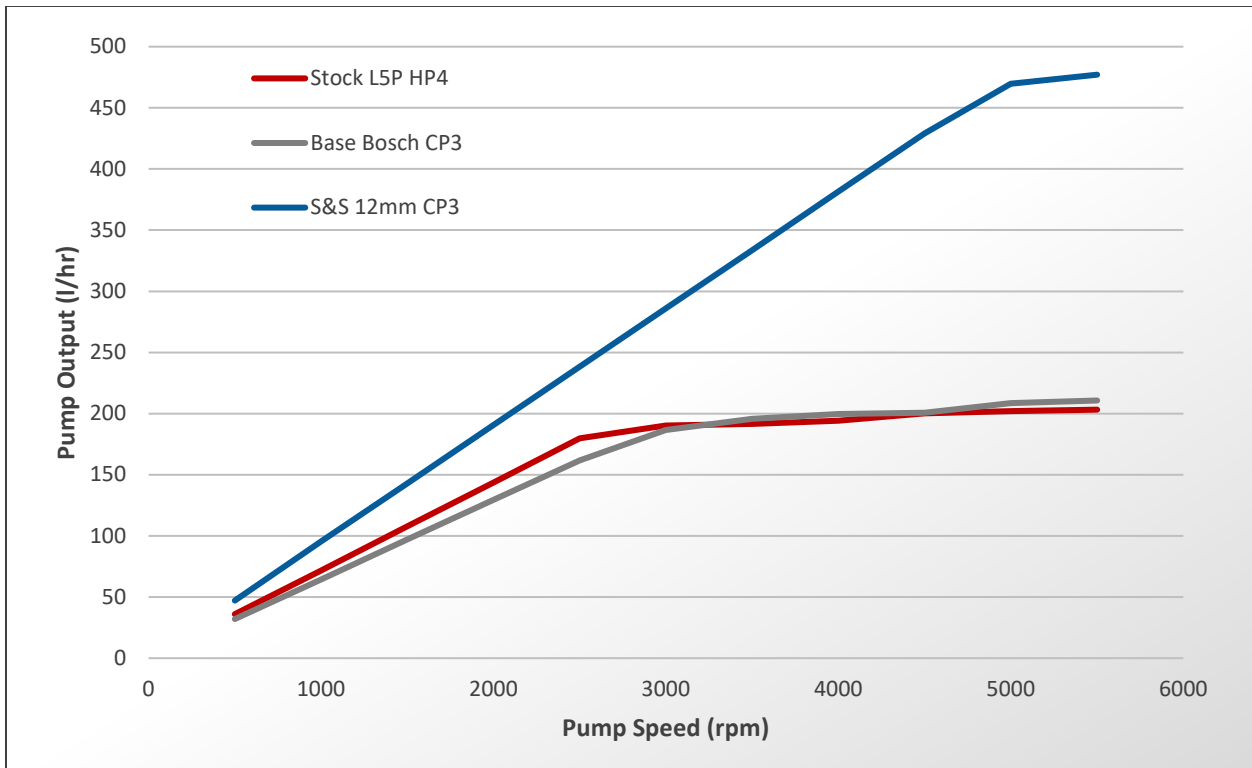
S&S 12mm CP3

Max pressure: 2,000 bar continuous, 2,500 bar intermittent
Upgraded inlet valves for high-rpm efficiency and high-pressure durability
Lightweight TiN coated buckets for high-rpm performance and durability
Other proprietary modifications for improved high-rpm performance and durability
Maintains output and efficiency to 5,000 rpm +
Capable of 7,000 rpm for intermittent usage





Fuel Pump Output Testing						
RPM	Stock L5P HP4		Base Bosch CP3		S&S 12mm CP3	
	Output (l/hr)	Efficiency	Output (l/hr)	Efficiency	Output (l/hr)	Efficiency
500	36	100%	32	98%	47.1	99%
1000	71.8	100%	64.5	99%	95.4	100%
1500	107.7	100%	97.1	99%	142.9	100%
2000	143.8	100%	129.6	99%	190.7	100%
2500	179.7	100%	161.8	99%	238.3	100%
3000	190.2	88%	186.6	95%	286.1	100%
3500	191.5	76%	195.7	86%	333.7	100%
4000	194.2	67%	199.6	77%	381.5	100%
4500	200.2	62%	200.8	68%	429.1	100%
5000	201.9	56%	208.6	64%	469.6	98%
5500	203.2	51%	210.7	59%	477.1	91%
		400 mA	400 mA		400 mA	
		60 psig	15 psig		15 psig	





Fuel Pump Efficiency Testing				
	Stock L5P HP4		S&S 12mm CP3	
(psig) MPa	Output (l/hr)	Efficiency	Output (l/hr)	Efficiency
(7,252) 50	71.9	100%	95.0	100%
(14,504) 100	70.4	98%	93.6	99%
(21,756) 150	66.6	93%	91.3	96%
(29,008) 200	60.4	84%	87.4	92%
(36,259) 250	48.4	67%	81.0	85%
	400 mA, 1,000 rpm 60 psig		400 mA, 1,000 rpm 15 psig	

