

Metric Mechanic M50, M50tu, S50, M52, S52 Engine Series

3200 Sport, 3200 Rally & 3300 Rally

M50 Non-Vanos** (325i / 525i - '91 & '92) M50tu (325i / 525i - '93 to '95) S50 (M3 '95) M52 (328i / 528i - '96 to '97) S52 (M3 '96 to '99)

MM Engine	Displacement	HP	Head	Cam Duration & Lift	Piston Weight	Pin Weight	CR	Rod Length & Weight	Stroke & Crank
* 3200 Sport OBD I or II	3194 cc	275	ST** 6% Flow Increase	Stock	87mm Forged Alusil 315 grams	22mm 89 grams	11.5:1	135mm I Beam M3/328i Rod 560 grams	89.6mm Forged
* 3200 Rally OBD I or II	3194 cc	285 - 305	ST** 6% Flow Increase	Intake 262°/11.15mm Lift or Intake 272°/11.4mm Exhaust 250°/10.9mm Lift	87mm Forged Alusil 295 grams	21mm 80 grams	12.0:1	138mm H Beam 525 grams	89.6mm Forged
* 3300 Rally OBD I or II	3315 cc	295 - 315	ST** 6% Flow Increase	Intake 262°/11.15mm Lift or Intake 272°/11.4mm Exhaust 250°/10.9mm Lift	87mm Forged Alusil 285 grams	22mm 89 grams	12.0:1	139mm H Beam 495 grams	93mm Forged Chrome Moly

M50, M50tu, S50, M52, S52 Forced Induction Engines

3200 FI

M50 Non-Vanos** (325i / 525i - '91 & '92) M50tu (325i / 525i - '93 to '95) S50 (M3 '95) M52 (328i / 528i - '96 to '97) S52 (M3 '96 to '99)

MM Engine	Displacement	Boost & HP	Head	Cam Duration & Lift	Piston Weight	Pin Weight	CR	Rod Length & Weight	Stroke & Crank
* 3200 FI OBD I or II	3158cc	10 to 15 lbs. 375 to 500	ST** 6% Flow Increase	Intake 262°/11.15mm Lift Exhaust 250°/10.9mm Lift	86.5mm Forged Alusil Ceramic Coated Crown 365 grams	22mm 110 grams	8.7:1	135mm H Beam 550 grams	89.6mm Forged

* Non-Vanos M50: the M50tu and all engines from 1993 onwards have Single Vanos.

** ST means Surface Turbulence: Metric Mechanic Patented Machined Grooves on backside of the Intake Valves, Head of Intake and Exhaust Valves for the purpose of increasing fuel efficiency, minimizes tuning problems, reduces detonation in the motor, allows higher compression, and alleviates head cracking problems.