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BMW Differential Info and More

highway cruising engine RPMs for a given speed.

BMW E46 Gear Ratio / Cruising RPM calculator

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BMW Differential Info

Gear Ratios (E46, E90...)

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Gear Ratio Calculator

How does final drive ratio

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Links E46fanatics.com **BMW Parts Catalog**

Reset Calculate Wheel Size Tire Width (in mm) [Example: (225 / 45 - 17)] 235 Tire Aspect Ratio [Example: (225 / 45 - 17)] 40 Wheel Size (in inches) [Example: (225 / 45 - 17)] 17 **Transmission Ratios** 1st Gear 4.21 2nd Gear 2.49 3rd Gear 1.66 4th Gear 1.24 5th Gear 1.00 6th Gear **Final Drive Ratio** 3.73 **Engine Redline RPM** 7000 MPH at Max Speed in each Gear Redline Max Speed in 1st Gear 32.36 Max Speed in 2nd Gear 54.71 Max Speed in 3rd Gear 82.07000 Max Speed in 4th Gear 109.87 Max Speed in 5th Gear 136.24 Max Speed in 6th Gear Calculate your RPMs based upon your Cruising Speed Cruising Speed (Enter speed you drive on the HWY) 70 Ν Engine RPM at Cruising Speed 3597 R

for the specific models. You you need to enter in your tire size, the E46 Profiles do not change it. These are specifications for US cars only. Other countries have different ratios for the same car. This will also calculate your

Gear Ratio Calculator

This calculator is for finding your maximum speed for each gear. You can either enter the values manually or use the

Select an E46 Profile. Clicking on the model changes the Transmission Ratio, Final Drive Ratio and the Engine Redline (Does not update Tire Size)

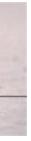
	/
235	- Default Manual Gear Ratios
40	323i 323ci 323cic 323iT
17	328i 328ci
	325i 325ci 325cic 325iT 325xi/T
4.21	330i 5spd 330ci 5spd 330cic 5spd
2.49	330xi 5spd
1.66	330i 6spd 330ci 6spd 330cic 6spd
	330xi 6spd
1.24	330i ZHP 330ci ZHP 330cic ZHP
1.00	M3 / M3 convertible
-	- Default Automatic Gear Ratios
3.73	323i/ 325i/ 328i All Models
7000	330i All Models (except ZHP)
MPH at	330i ZHP All Models
Redline	Tire Sizes
32.36	225 / 45 - 17 245 / 40 - 17 225 / 40 - 18
54.71	255 / 35 - 18 255 / 40 - 18 255 / 35 - 19
82.07000	Select Different Final Drive E46 Ratios (non M3)
109.87	2.93 3.07 3.15 3.23 3.38
136.24	3.46 3.64 3.73 3.91
	E46 M3 Ratios * 3.91 and 4.10 are aftermarket
	3.62 *3.91 *4.10
	Select Different Redline
70 MPH	6500 RPM - Standard E46
3597 RPM	6800 RPM - E46 330i ZHP
Calculate	7000 RPM - Software Upgraded

8000 RPM - E46 M3

* These results are based on mathematical formulas. Your actual speed may vary. Top speeds are theoretical. I am not responsible for any inaccuracies provided in these calculations. They are only provided for entertainment / informational purposes.

Reset

E-mail me questions / comments / or corrections to my info.



presets on the right. The presets on the right only change the Transmission Ratios, Final Drive Ratio and Engine Redline