



BMW Gear Ratios													
My Car / Gallery / Contact Me /													
Index													
Home													
DIY Projects and Maintenance													
BMW Differential Info													
Gear Ratios (E46, E90...)													
Gear Ratio swaps for E46s													
Gear Ratio Calculator													
How does final drive ratio affect my top speed?													
Where to buy a Differential?													
FAQ													
Links													
E46fanatics.com													
BMW Parts Catalog													
BMW Gear Ratios													
The Chart below shows E36 E46 E90 E91 E92 E93 E85 E86 E83 E82 E88 transmission gear ratios. It only shows cars that were available in the US.													
Note: Data may not be 100% accurate. Please let me know if you see any errors													
Model	Platform	Type	Transmission	1	2	3	4	5	6	reverse	final drive	redline	
Series - E36													
318i	E36	Sedan	Manual	4.23	2.52	1.66	1.22	1.00	-	4.04	3.45	6300	
318is	E36	Coupe	Manual	4.23	2.52	1.66	1.22	1.00	-	4.04	3.45	6300	
318ic	E36	Convertible	Manual	4.23	2.52	1.66	1.22	1.00	-	4.04	3.45	6300	
318ti	E36	Compact	Manual	4.23	2.52	1.66	1.22	1.00	-	4.04	3.45	6300	
323i	E36	Sedan	Manual	4.23	2.52	1.66	1.22	1.00	-	4.04	2.93	6500	
323is	E36	Coupe	Manual	4.23	2.52	1.66	1.22	1.00	-	4.04	2.93	6500	
323ic	E36	Convertible	Manual	4.23	2.52	1.66	1.22	1.00	-	4.04	2.93	6500	
325i	E36	Sedan	Manual	4.23	2.52	1.66	1.22	1.00	-	4.04	3.15	6500	
325is	E36	Coupe	Manual	4.23	2.52	1.66	1.22	1.00	-	4.04	3.15	6500	
325ic	E36	Convertible	Manual	4.23	2.52	1.66	1.22	1.00	-	4.04	3.15	6500	
328i	E36	Sedan	Manual	4.2	2.49	1.66	1.24	1.00	-	3.89	2.93	6500	
328is	E36	Coupe	Manual	4.2	2.49	1.66	1.24	1.00	-	3.89	2.93	6500	
328ic	E36	Convertible	Manual	4.2	2.49	1.66	1.24	1.00	-	3.89	2.93	6500	
M3 Coupe 95	E36	Coupe	Manual	4.2	2.49	1.66	1.24	1.00	-	3.89	3.15	6500	
M3 Coupe	E36	Coupe	Manual	4.2	2.49	1.66	1.24	1.00	-	3.89	3.23	6500	
M3 Sedan	E36	Sedan	Manual	4.2	2.49	1.66	1.24	1.00	-	3.89	3.23	6500	
M3 Convertible	E36	Convertible	Manual	4.2	2.49	1.66	1.24	1.00	-	3.89	3.23	6500	
318i	E36	Sedan	Automatic	2.86	1.62	1.00	0.72	-	-	2.00	4.44	6300	
318is	E36	Coupe	Automatic	2.86	1.62	1.00	0.72	-	-	2.00	4.44	6300	
318ic	E36	Convertible	Automatic	2.86	1.62	1.00	0.72	-	-	2.00	4.44	6300	
318ti	E36	Compact	Automatic	2.86	1.62	1.00	0.72	-	-	2.00	4.44	6300	
323i	E36	Sedan	Automatic	2.86	1.62	1.00	0.72	-	-	2.00	3.91	6500	
323is	E36	Coupe	Automatic	2.86	1.62	1.00	0.72	-	-	2.00	3.91	6500	
323ic	E36	Convertible	Automatic	2.86	1.62	1.00	0.72	-	-	2.00	3.91	6500	
325i	E36	Sedan	Automatic	2.86	1.62	1.00	0.72	-	-	2.00	3.91	6500	
325is	E36	Coupe	Automatic	2.86	1.62	1.00	0.72	-	-	2.00	3.91	6500	
325ic	E36	Convertible	Automatic	2.86	1.62	1.00	0.72	-	-	2.00	3.91	6500	
328i	E36	Sedan	Automatic	2.86	1.62	1.00	0.72	-	-	2.00	3.91	6500	
328is	E36	Coupe	Automatic	2.86	1.62	1.00	0.72	-	-	2.00	3.91	6500	
328ic	E36	Convertible	Automatic	2.86	1.62	1.00	0.72	-	-	2.00	3.91	6500	
M3 Coupe	E36	Coupe	Automatic	3.67	2.00	1.41	1.00	0.74	-	4.1	3.38	6500	
M3 Sedan	E36	Sedan	Automatic	3.67	2.00	1.41	1.00	0.74	-	4.1	3.38	6500	
M3 Convertible	E36	Convertible	Automatic	3.67	2.00	1.41	1.00	0.74	-	4.1	3.38	6500	
3 Series - E46													
323i	E46	Sedan	manual	4.23	2.52	1.66	1.22	1.00	-	4.04	3.07	6500	
323ci	E46	Coupe	manual	4.23	2.52	1.66	1.22	1.00	-	4.04	3.07	6500	
323cic	E46	Convertible	manual	4.23	2.52	1.66	1.22	1.00	-	4.04	3.46	6500	
323iT	E46	Wagon	manual	4.23	2.52	1.66	1.22	1.00	-	4.04	3.46	6500	
328i	E46	Sedan	manual	4.21	2.49	1.66	1.24	1.00	-	3.85	2.93	6500	
328ci	E46	Coupe	manual	4.21	2.49	1.66	1.24	1.00	-	3.85	2.93	6500	
325i	E46	Sedan	manual	4.23	2.52	1.66	1.22	1.00	-	4.04	3.15	6500	
325ci	E46	Coupe	manual	4.23	2.52	1.66	1.22	1.00	-	4.04	3.15	6500	
325cic	E46	Convertible	manual	4.23	2.52	1.66	1.22	1.00	-	4.04	3.46	6500	
325iT	E46	Wagon	manual	4.23	2.52	1.66	1.22	1.00	-	4.04	3.46	6500	
325xi	E46	Sedan AWD	manual	4.21	2.49	1.66	1.24	1.00	-	3.85	3.23	6500	
325xiT	E46	Wagon AWD	manual	4.21	2.49	1.66	1.24	1.00	-	3.85	3.23	6500	
330i	E46	Sedan	manual	4.21	2.49	1.66	1.24	1.00	-	3.85	2.93	6500	
330ci	E46	Coupe	manual	4.21	2.49	1.66	1.24	1.00	-	3.85	2.93	6500	
330cic	E46	Convertible	manual	4.21	2.49	1.66	1.24	1.00	-	3.85	3.07	6500	
330xi	E46	Sedan AWD	manual	4.21	2.49	1.66	1.24	1.00	-	3.85	3.07	6500	
330i 6spd	E46	Sedan	manual	4.35	2.5	1.66	1.23	1.00	0.85	3.93	2.93	6500	
330ci 6spd	E46	Coupe	manual	4.35	2.5	1.66	1.23	1.00	0.85	3.93	2.93	6500	
330cic 6spd	E46	Convertible	manual	4.35	2.5	1.66	1.23	1.00	0.85	3.93	3.07	6500	
330xi 6spd	E46	Sedan AWD	manual	4.35	2.5	1.66	1.23	1.00	0.85	3.93	3.07	6500	
330i ZHP	E46	Sedan	manual	4.35	2.5	1.66	1.23	1.00	0.85	3.93	3.07	6800	
330ci ZHP	E46	Coupe	manual	4.35	2.5	1.66	1.23	1.00	0.85	3.93	3.07	6800	
330cic ZHP	E46	Convertible	manual	4.35	2.5	1.66	1.23	1.00	0.85	3.93	3.07	6800	
M3 Coupe	E46	Coupe	manual	4.23	2.53	1.67	1.23	1.00	0.83	3.75	3.62	8000	
M3 Convertible	E46	Convertible	manual	4.23	2.53	1.67	1.23	1.00	0.83	3.75	3.62	8000	
323i	E46	Sedan	automatic	3.67	2.00	1.41	1.00	0.74	-	4.1	3.46	6500	
323ci	E46	Coupe	automatic	3.67	2.00	1.41	1.00	0.74	-	4.1	3.46	6500	
323cic	E46	Convertible	automatic	3.67	2.00	1.41	1.00	0.74	-	4.1	3.46	6500	
323iT	E46	Wagon	automatic	3.67	2.00	1.41	1.00	0.74	-	4.1	3.46	6500	
328i	E46	Sedan	automatic	3.67	2.00	1.41	1.00	0.74	-	4.1	3.46	6500	
328ci	E46	Coupe	automatic	3.67	2.00	1.41	1.00	0.74	-	4.1	3.46	6500	
325i	E46	Sedan	automatic	3.67	2.00	1.41	1.00	0.74	-	4.1	3.46	6500	
325ci	E46	Coupe	automatic	3.67	2.00	1.41	1.00	0.74	-	4.1	3.46	6500	
325cic	E46	Convertible	automatic	3.67	2.00	1.41	1.00	0.74	-	4.1	3.46	6500	
325iT	E46	Wagon	automatic	3.67	2.00	1.41	1.00	0.74	-	4.1	3.46	6500	
325xi	E46	Sedan AWD	automatic	3.45	2.21	1.59	1.00	0.76	-	3.17	3.46	6500	
325xiT	E46	Wagon AWD	automatic	3.45	2.21	1.59	1.00	0.76	-	3.17	3.46	6500	
330i	E46	Sedan	automatic	3.45	2.21	1.23	1.00	0.76	-	3.17	3.38	6500	
330ci	E46	Coupe	automatic	3.45	2.21	1.23	1.00	0.76	-	3.17	3.38	6500	
330cic	E46	Convertible	automatic	3.45	2.21	1.23	1.00	0.76	-	3.17	3.38	6500	
330xi	E46	Sedan AWD	automatic	3.42	2.22	1.60	1.00	0.75	-	3.03	3.46	6500	
330i ZHP	E46	Sedan	automatic	3.45	2.21	1.23	1.00	0.76	-	3.17	3.64	6800	
330ci ZHP	E46	Coupe	automatic	3.45	2.21	1.23	1.00	0.76	-	3.17	3.64	6800	
330cic ZHP	E46	Convertible	automatic	3.45	2.21	1.23	1.00	0.76	-	3.17	3.64	6800	
3 Series - E9x													
325i	E90	Sedan	manual	4.32	2.46	1.66	1.23	1.00	0.85	3.94	3.23	7000	
325i	E90	xDrive Sedan	manual	4.35	2.5	1.67	1.23	1.00	0.85	3.93	3.38	7000	
325i	E91	xDrive Wagon	manual	4.35	2.5	1.67	1.23	1.00	0.85	3.93	3.38	7000	
330i	E90	Sedan	manual	4.32	2.46	1.66	1.23	1.00	0.85	3.93	3.15	7000	
330i	E90	xDrive Sedan	manual	4.35	2.5	1.67	1.23	1.00	0.85	3.93	3.15	7000	
328i	E90	Sedan	manual	4.32	2.46	1.66	1.23	1.00	0.85	3.94	3.23	7000	
328i	E90	xDrive Sedan	manual	4.35	2.5	1.67	1.23	1.00	0.85	3.93	3.38	7000	

328i	E91	Wagon	manual	4.32	2.46	1.66	1.23	1.00	0.85	3.94	3.23	7000
328i	E91	xDrive Wagon	manual	4.35	2.5	1.67	1.23	1.00	0.85	3.93	3.38	7000
328i	E92	Coupe	manual	4.32	2.46	1.66	1.23	1.00	0.85	3.94	3.23	7000
328i	E92	xDrive Coupe	manual	4.35	2.5	1.67	1.23	1.00	0.85	3.93	3.38	7000
328i	E93	Convertible	manual	4.32	2.46	1.66	1.23	1.00	0.85	3.94	3.38	7000
335i	E90	Sedan	manual	4.06	2.4	1.58	1.19	1.00	0.87	3.68	3.08	7000
335i	E90	xDrive Sedan	manual	4.06	2.4	1.58	1.19	1.00	0.87	3.68	3.08	7000
335i	E92	Coupe	manual	4.06	2.4	1.58	1.19	1.00	0.87	3.68	3.08	7000
335i	E92	xDrive Coupe	manual	4.06	2.4	1.58	1.19	1.00	0.87	3.68	3.08	7000
335i	E93	Convertible	manual	4.06	2.4	1.58	1.19	1.00	0.87	3.68	3.08	7000
M3	E92	Coupe	manual	4.06	2.4	1.58	1.19	1.00	0.87	3.68	3.85	8300
M3	E90	Sedan	manual	4.06	2.4	1.58	1.19	1.00	0.87	3.68	3.85	8300
M3	E93	Convertible	manual	4.06	2.4	1.58	1.19	1.00	0.87	3.68	3.85	8300
325i	E90	Sedan	automatic	4.17	2.34	1.52	1.14	0.87	0.69	3.4	3.73	7000
325i	E90	xDrive Sedan	automatic	4.17	2.34	1.52	1.14	0.87	0.69	3.4	3.91	7000
325i	E91	xDrive Wagon	automatic	4.17	2.34	1.52	1.14	0.87	0.69	3.4	3.91	7000
330i	E90	Sedan	automatic	4.17	2.34	1.52	1.14	0.87	0.69	3.4	3.64	7000
330i	E90	xDrive Sedan	automatic	4.17	2.34	1.52	1.14	0.87	0.69	3.4	3.64	7000
328i	E90	Sedan	automatic	4.07	2.37	1.55	1.16	0.85	0.67	3.2	3.73	7000
328i	E90	xDrive Sedan	automatic	4.07	2.37	1.55	1.16	0.85	0.67	3.2	3.91	7000
328i	E91	Wagon	automatic	4.07	2.37	1.55	1.16	0.85	0.67	3.2	3.73	7000
328i	E91	xDrive Wagon	automatic	4.07	2.37	1.55	1.16	0.85	0.67	3.2	3.91	7000
328i	E92	Coupe	automatic	4.07	2.37	1.55	1.16	0.85	0.67	3.2	3.73	7000
328i	E92	xDrive Coupe	automatic	4.07	2.37	1.55	1.16	0.85	0.67	3.2	3.91	7000
328i	E93	Convertible	automatic	4.07	2.37	1.55	1.16	0.85	0.67	3.2	3.91	7000
335i	E90	Sedan	automatic	4.17	2.34	1.52	1.14	0.87	0.69	3.4	3.46	7000
335i	E90	xDrive Sedan	automatic	4.17	2.34	1.52	1.14	0.87	0.69	3.4	3.46	7000
335d	E90	Sedan	automatic	4.17	2.34	1.52	1.14	0.87	0.69	3.4	2.81	7000
335i	E92	Coupe	automatic	4.17	2.34	1.52	1.14	0.87	0.69	3.4	3.46	7000
335i	E92	xDrive Coupe	automatic	4.17	2.34	1.52	1.14	0.87	0.69	3.4	3.46	7000
335i	E93	Convertible	automatic	4.17	2.34	1.52	1.14	0.87	0.69	3.4	3.46	7000
Z4 - E85 / E86												
Z4 2.5i	E85	roadster	manual	4.23	2.52	1.66	1.22	1.00	-	4.04	3.46	6500
Z4 3.0i	E85	roadster	manual	4.35	2.5	1.66	1.23	1.00	0.85	3.93	3.07	6500
Z4 3.0si	E85	roadster	manual	4.35	2.5	1.66	1.23	1.00	0.85	3.93	3.23	7000
Z4 3.0i N52	E85	roadster	manual	4.32	2.46	1.66	1.23	1.00	0.85	3.94	3.38	7000
Z4 M3.2	E85	roadster	manual	4.35	2.5	1.66	1.23	1.00	0.85	3.93	3.62	8000
Z4 2.5i	E85	roadster	automatic	4.23	2.52	1.66	1.22	1.00	-	4.04	3.64	6500
Z4 3.0i	E85	roadster	automatic	4.23	2.52	1.66	1.22	1.00	-	4.04	3.46	6500
Z4 3.0si	E85	roadster	automatic	4.17	2.34	1.52	1.14	0.87	0.69	3.4	3.64	7000
Z4 3.0i N52	E85	roadster	automatic	4.17	2.34	1.52	1.14	0.87	0.69	3.4	3.73	7000
Z4 3.0si	E86	coupe	manual	4.35	2.5	1.66	1.23	1.00	0.85	3.93	3.46	7000
Z4 M3.2	E86	coupe	manual	4.35	2.5	1.66	1.23	1.00	0.85	3.93	3.62	8000
Z4 3.0si	E86	coupe	automatic	4.17	2.34	1.52	1.14	0.87	0.69	3.4	3.64	7000
X3 - E83												
X3 2.5i	E83	SAV	manual	4.35	2.5	1.66	1.23	1.00	0.85	3.93	3.91	6500
X3 3.0i	E83	SAV	manual	4.35	2.5	1.66	1.23	1.00	0.85	3.93	3.64	6500
X3 3.0i N52	E83	SAV	manual	4.35	2.5	1.66	1.23	1.00	0.85	3.93	3.91	7000
X3 3.0si	E83	SAV	manual	4.35	2.5	1.66	1.23	1.00	0.85	3.93	3.73	7000
X3 2.5i	E83	SAV	automatic	3.67	2	1.41	1.00	0.74	-	4.04	3.91	6500
X3 3.0i	E83	SAV	automatic	3.67	2	1.41	1.00	0.74	-	4.04	3.64	6500
X3 3.0i N52	E83	SAV	automatic	4.07	2.37	1.55	1.16	0.85	0.67	3.2	4.44	7000
X3 3.0si	E83	SAV	automatic	4.07	2.37	1.55	1.16	0.85	0.67	3.2	4.44	7000
1 Series E8x												
128i	E82	Coupe	manual	4.32	2.46	1.66	1.23	1.00	0.85	3.94	3.23	7000
128i	E88	Convertible	manual	4.32	2.46	1.66	1.23	1.00	0.85	3.94	3.23	7000
135i	E82	Coupe	manual	4.06	2.4	1.58	1.19	1.00	0.87	3.68	3.08	7000
135i	E88	Convertible	manual	4.06	2.4	1.58	1.19	1.00	0.87	3.68	3.08	7000
128i	E82	Coupe	automatic	4.065	2.37	1.55	1.16	0.85	0.67	3.2	3.73	7000
128i	E88	Convertible	automatic	4.065	2.37	1.55	1.16	0.85	0.67	3.2	3.73	7000
135i	E82	Coupe	automatic	4.17	2.34	1.52	1.14	0.87	0.69	3.4	3.46	7000
135i	E88	Convertible	automatic	4.17	2.34	1.52	1.14	0.87	0.69	3.4	3.46	7000