BMW Group

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Technical Data - Europe.

BMW 1 Series 3-doors (E81) - ACEA.

Only for internal use

		118i	118i	120i	120i	130i	130i	118d	118d	120d	120d
Engine platform		**N43B20U0**	**N43B20U0**	**N43B20O0**	**N43B20O0**	**N52B30O1**	**N52B30O1**	**N47D20U0**	**N47D20U0**	**N47D20O0**	**N47D20O0**
Transmission		**M6**	**A6**	**M6**	**A6**	**M6**	**A6**	**M6**	**A6**	**M6**	**A6**
No of doors / seats	-	3 / 4	3 / 4	3 / 4	3 / 4	3 / 4	3 / 4	3 / 4	3 / 4	3 / 4	3 / 4
Vehicle lenght / width / height -unloaded-	mm	4239 / 1748 / 1421	4239 / 1748 / 1421	4239 / 1748 / 1421	4239 / 1748 / 1421	4239 / 1748 / 1421	4239 / 1748 / 1421	4239 / 1748 / 1421	4239 / 1748 / 1421	4239 / 1748 / 1421	4239 / 1748 / 1421
Weelbase / Turning cicle	mm / m	2660 / 10,7	2660 / 10,7	2660 / 10,7	2660 / 10,7	2660 / 10,7	2660 / 10,7	2660 / 10,7	2660 / 10,7	2660 / 10,7	2660 / 10,7
Track front / rear	mm	1484 / 1497	1484 / 1497	1480 / 1493	1480 / 1493	1474 / 1487	1474 / 1487	1484 / 1497	1484 / 1497	1480 / 1493	1480 / 1493
Overhang rear	mm	828	828	828	828	828	828	828	828	828	828
Ground clearance -empty-	mm	145	145	145	145	145	145	145	145	145	145
Shoulder width front / rear	mm	1372 / 1357	1372 / 1357	1372 / 1357	1372 / 1357	1372 / 1357	1372 / 1357	1372 / 1357	1372 / 1357	1372 / 1357	1372 / 1357
Ellbow width front / rear	mm	1423 / 1398	1423 / 1398	1423 / 1398	1423 / 1398	1423 / 1398	1423 / 1398	1423 / 1398	1423 / 1398	1423 / 1398	1423 / 1398
Eff. head room front / rear	mm	966 / 969	966 / 969	966 / 969	966 / 969	966 / 969	966 / 969	966 / 969	966 / 969	966 / 969	966 / 969
Luggage capacity	m³	0,330-1,150	0,330-1,150	0,330-1,150	0,330-1,150	0,330-1,150	0,330-1,150	0,330-1,150	0,330-1,150	0,330-1,150	0,330-1,150
Fuel tank capacity	ltr	53	53	53	53	53	53	51	51	51	51
Curb weight -acc DIN-	kg	1265 / 1340	1290 / 1365	1290 / 1365	1310 / 1385	1375 / 1450	1400 / 1475	1310 / 1385	1335 / 1410	1365 / 1440	1370 / 1445
Axle load ratio -unloaded DIN-	%	49,5	48,9	48,9	48,2	47,3	47,2	48,9	48,4	48,4	48,2
Gross vehicle weight / Payload	kg	1765 / 500	1790 / 500	1790 / 500	1810 / 500	1875 / 500	1900 / 500	1820 / 510	1845 / 510	1865 / 500	1870 / 500
Axle load limit front / rear	kg	855 / 1020	855 / 1020	875 / 1020	875 / 1020	920 / 1045	920 / 1045	885 / 1040	885 / 1040	905 / 1050	905 / 1050
Trailer load braked -12% / 8%-	kg	1200 / 1200	1200 / 1200	1200 / 1200	1200 / 1200	1200 / 1200	1200 / 1200	1200 / 1200	1200 / 1200	1200 / 1200	1200 / 1200
Trailer load unbraked / roof load	kg	650 / 75	650 / 75	665 / 75	665 / 75	680 / 75	680 / 75	690 / 75	690 / 75	705 / 75	705 / 75
Engine type / cylinder / valves p cyl	-	In line / 4 / 4	In line / 4 / 4	In line / 4 / 4	In line / 4 / 4	In line / 6 / 4	In line / 6 / 4	In line / 4 / 4	In line / 4 / 4	In line / 4 / 4	In line / 4 / 4
Fuel management	-	MSD 80,2	MSD 80,2	MSD 80,2	MSD 80,2	MSV80	MSV80	DDE 70	DDE 70	DDE 70	DDE 70
Effective displacement	cm³	1995	1995	1995	1995	2996	2996	1995	1995	1995	1995
Stroke / Bore	mm	90 / 84	90 / 84	90 / 84	90 / 84	88 / 85	88 / 85	90 / 84	90 / 84	90 / 84	90 / 84
Nom power output / Engine speed	kW(hp)/ 1/min	105 (143) / 6000	105 (143) / 6000	125 (170) / 6700	125 (170) / 6700	195 (265) / 6650	195 (265) / 6650	105 (143) / 4000	105 (143) / 4000	130 (177) / 4000	130 (177) / 4000
Max torque / Engine speed	Nm / 1/min	190 / 4500	190 / 4500	210 / 4250	210 / 4250	315 / 2750	315 / 2750	300 / 2000	300 / 2000	350 / 2000	350 / 2000
RPM at max torque -range-	1/min	see 'Tor./Engine speed'	see 'Tor./Engine speed'	see 'Tor./Engine speed'	see 'Tor./Engine speed'	see 'Tor./Engine speed'	see 'Tor./Engine speed'	see 'Tor./Engine speed'	see 'Tor./Engine speed'	see 'Tor./Engine speed'	see 'Tor./Engine speed'
Compression ratio / Fuel type	-	12 / ROZ91-98	12 / ROZ91-98	12 / ROZ91-98	12 / ROZ91-98	10,7 / ROZ91-98	10,7 / ROZ91-98	16 / Diesel	16 / Diesel	16 / Diesel	16 / Diesel
Exhaust emissions classification	-	EU4	EU4	EU4	EU4	EU4	EU4	EU4	EU4	EU4	EU4
Codification of reference gearbox	-	GETRAG I	ZF 6HP19 TÜ	GETRAG I	ZF 6HP19 TÜ	ZF H	GM GM6	GETRAG Iweit	ZF 6HP19 TÜ	ZF Hweit	ZF 6HP19 TÜ
Gear ratio 1st/2nd/3rd	-	4,323 / 2,456 / 1,659	4,171 / 2,34 / 1,521	4,323 / 2,456 / 1,659	4,171 / 2,34 / 1,521	4,35 / 2,496 / 1,665	4,065 / 2,371 / 1,551	4,002 / 2,108 / 1,38	4,171 / 2,34 / 1,521	5,14 / 2,83 / 1,804	4,171 / 2,34 / 1,521
Gear ratio 4th/5th/6th/7th	-	1,23 / 1 / 0,848 / -	1,143 / 0,867 / 0,691 / -	1,23 / 1 / 0,848 / -	1,143 / 0,867 / 0,691 / -	1,23 / 1 / 0,851 / -	1,2 / 0,853 / 0,674 / -	1 / 0,78 / 0,645 / -	1,143 / 0,867 / 0,691 / -	1,257 / 1 / 0,831 / -	1,143 / 0,867 / 0,691 / -
Reverse ratio	-	3,938	3,403	3,938	3,403	3,926	3,200	3,187	3,403	4,638	3,403
Final drive ratio	-	3,38	3,91	3,73	3,91	3,46	3,64	3,07	3,23	2,56	3,15
Steering type / ratio	-	Rack-and-pinion / 16	Rack-and-pinion / 16	Rack-and-pinion / 16	Rack-and-pinion / 16	Rack-and-pinion / 16	Rack-and-pinion / 16	Rack-and-pinion / 16	Rack-and-pinion / 16	Rack-and-pinion / 16	Rack-and-pinion / 16
Brake front / diameter	-/mm	Ventilated Disc / 292	Ventilated Disc / 292	Ventilated Disc / 300	Ventilated Disc / 300	Ventilated Disc / 330	Ventilated Disc / 330	Ventilated Disc / 292	Ventilated Disc / 292	Ventilated Disc / 300	Ventilated Disc / 300
Brake rear / diameter	-/mm	Disc / 296	Disc / 296	Disc / 296	Disc / 296	Ventilated Disc / 300	Ventilated Disc / 300	Ventilated Disc / 300	Ventilated Disc / 300	Ventilated Disc / 300	Ventilated Disc / 300
Drag Cd / A / Cd x A	- / m² / m²	0,3 / 2,09 / 0,63	0,3 / 2,09 / 0,63	0,3 / 2,09 / 0,63	0,3 / 2,09 / 0,63	0,32 / 2,09 / 0,67	0,32 / 2,09 / 0,67	0,3 / 2,09 / 0,63	0,3 / 2,09 / 0,63	0,3 / 2,09 / 0,63	0,3 / 2,09 / 0,63
Top speed	km/h	210	210	224	222	250	250	210	210	228	226
Acceleration 0-100 Km/h	s	8,7	9,2	7,7	8,3	6,0	6,2	8,9	9,0	7,5	7,7
Acceleration 0-1000 m	s	29,7	30,1	28,3	28,8	25,4	25,5	29,8	29,9	28,1	28,0
Accel 80-120 Km/h 4/5 Gear	s	8,9 / 11,5 / -	- / - / -	7,4 / 9,5 / -	- / - / -	5,6 / 6,9 / -	- / - / -	7,6 / 10 / -	- / - / -	6,3 / 7,9 / -	- / - / -
Weight ratio	kg/kW	12,0	12,3	10,3	10,5	7,1	7,2	12,5	12,7	10,5	10,5
Output per litre	kW/ltr	52,6	52,6	62,7	62,7	65,1	65,1	52,6	52,6	65,2	65,2
Fuel consumtion -EU urban-	ltr/100km	7,9	8,2	8,7	8,4	12,2	12,3	5,7	6,9	6,2	7,3
Fuel consumption -EU extra-urban-	ltr/100km	4,7	5,0	5,1	5,1	6,0	6,0	4,1	4,5	4,1	4,5
Fuel consumption KV01 / Range	ltr/100km / km	5,9 / 895	6,2 / 850	6,4 / 825	6,3 / 840	8,3 / 635	8,3 / 635	4,7 / 1085	5,4 / 940	4,9 / 1040	5,5 / 925
CO2-emission -EU-	g/km	140	148	152	150	197	198	123	144	129	145
Tyre type -front-	-	195/55 R16 87H RSC	195/55 R16 87H RSC	205/55 R16 87V RSC	205/55 R16 87V RSC	205/55 R17 89W RSC	205/55 R17 89W RSC	195/55 R16 87H RSC	195/55 R16 87H RSC	205/55 R16 87V RSC	205/55 R16 87V RSC
Tyre type -rear-	-	195/55 R16 87H RSC	195/55 R16 87H RSC	205/55 R16 87V RSC	205/55 R16 87V RSC	205/55 R17 89W RSC	205/55 R17 89W RSC	195/55 R16 87H RSC	195/55 R16 87H RSC	205/55 R16 87V RSC	205/55 R16 87V RSC
Front rim	-	6,5J x 16 Steel wheel	6,5J x 16 Steel wheel	7J x 16 Steel wheel	7J x 16 Steel wheel	7J x17 Light alloy	7J x17 Light alloy	6,5J x 16 Steel wheel	6,5J x 16 Steel wheel	7J x 16 Steel wheel	7J x 16 Steel wheel
Rear rim	-	6,5J x 16 Steel wheel	6,5J x 16 Steel wheel	7J x 16 Steel wheel	7J x 16 Steel wheel	7J x17 Light alloy	7J x17 Light alloy	6,5J x 16 Steel wheel	6,5J x 16 Steel wheel	7J x 16 Steel wheel	7J x 16 Steel wheel
Wheel offset -front/rear-	mm	42 / 42	42 / 42	44 / 44	44 / 44	47 / 47	47 / 47	42 / 42	42 / 42	44 / 44	44 / 44
Radiator incl. heater / Engine oil exchange quantity	ltr	7,3 / 4,25	7,9 / 4,25	7,3 / 4,25	7,3 / 4,25	8,2 / 6,5	8,5 / 6,5	7,2 / 5,5	7,5 / 5,5	7,2 / 5,5	7,5 / 5,5
Transmission fluid -exchange quantity-	ltr	Permanent filling	Permanent filling	Permanent filling	Permanent filling	Permanent filling	Permanent filling	Permanent filling	Permanent filling	Permanent filling	Permanent filling
Battery capacity / installed position	Ah/-	70 / Luggage comp.	70 / Luggage comp.	70 / Luggage comp.	70 / Luggage comp.	70 / Luggage comp.	70 / Luggage comp.	80 / Luggage comp.	80 / Luggage comp.	80 / Luggage comp.	80 / Luggage comp.
Alternator output rating	A/W	180 / 2520	180 / 2520	180 / 2520	180 / 2520	180 / 2520	180 / 2520	180 / 2520	180 / 2520	180 / 2520	180 / 2520