

8. Technical specifications

BMW S 1000 XR		
Engine		
Capacity	cc	999
Bore/stroke	mm	80/49.7
Output	kW/hp	121/165
at engine speed	rpm	11000
Torque	Nm	114
at engine speed	rpm	9250
Type	Water-cooled in-line 4-cylinder engine	
Compression/fuel	12.5:1 / premium (super plus) unleaded petrol, octane number 95-98 (RON) (knock control; rated output with 98 RON)	
Valve/accelerator actuation	DOHC (double overhead camshaft) Valve activation via individual rocker arms	
Valves per cylinder		4
Ø intake/outlet	mm	33.5/27.2
Throttle valve diameter	mm	48
Engine control		BMS-O
Emission control	Closed-loop three-way catalytic converter	
Electrical system		
Alternator	W	493
Battery	V/Ah	12 / 9, maintenance-free
Headlamp	W	LED low beam twin headlamp with projection module LED high beam with projection module
Starter	kW	0.8
Power transmission – gearbox		
Clutch	Self-reinforcing multi-plate anti-hopping wet clutch, mechanically activated	
Gearbox	Constant mesh 6-speed gearbox	
Primary ratio		1.652
Transmission ratios	I	2.647
	II	2.091
	III.	1.727
	IV.	1.476
	V	1.304
	VI.	1.167
Rear wheel drive		Chain
Secondary ratio		(2.647)
Suspension		
Frame construction type	Aluminium composite bridge frame, self-supporting engine	
Front wheel control	Upside-down telescopic fork, slide tube diameter 45 mm, Dynamic ESA, damping electronically adjustable	
Rear wheel control	Aluminium underslung double-sided swinging arm with central spring strut, Dynamic ESA, damping electronically adjustable	
Spring travel, front/rear	mm	150/150
Wheel castor	mm	116
Wheelbase	mm	1 552
Steering head angle	°	65.1

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Brakes	Front	Twin disc brake, floating, Ø 320 mm, radial 4-piston fixed calipers
	Rear	Single-disc brake, Ø 220 mm, single-piston floating caliper
ABS		BMW Motorrad ABS Pro (part integral)
Traction control		BMW Motorrad DTC
Wheels		Standard: Die-cast aluminium wheels
		Aluminium forged wheels optionally available
	Front	3.50 x 17"
	Rear	6.00 x 17"
Tyres	Front	120/70 ZR17
	Rear	190/55 ZR17
Dimensions and weights		
Total length	mm	2 333
Total width with mirrors	mm	850
Seat height	mm	840
DIN unladen weight, road ready, fully fuelled	kg	Standard: 226
Permitted total weight	kg	450
Fuel tank capacity	l	20
Performance figures		
Fuel consumption (WMTC)	l/100 km	(6.2)
CO ₂	g/km	144
Acceleration	0-100 km/h s	(3.3)
Top speed	km/h	200