



Technical specifications.

F 450 R		
Engine		
Displacement	cm ³	420
Bore/stroke	mm	72 × 51.6
Output	kW/hp	35/48
At rpm	rpm	8 750
Torque	Nm	43
At rpm	rpm	6 750
Design	Liquid-cooled four-stroke parallel-twin engine with two overhead camshafts, four rocker-arm-actuated valves per cylinder, and a 135-degree crankpin offset	
Compression ratio		13:1
Fuel		Unleaded premium gasoline, 95 RON
Valves per cylinder		4
Intake/exhaust valve diameter	mm	29/24.3
Throttle-valve diameter	mm	38
Engine management		BMS-Z
Exhaust-gas treatment	Closed-loop three-way catalytic converter, Euro 5+ emissions standard	
Electrical system		
Generator	W	364
Battery	VI/Ah	12/8, maintenance-free
Headlight		LED
Taillight		LED
Turn indicators		LED
Starter motor	W	700
Power transmission		
Clutch	Mechanically operated, multi-plate wet clutch	
Transmission	Constant-mesh six-speed transmission	
Primary ratio		2.025
Gear ratios	I	2.765
	II	2.062
	III	1.588
	IV	1.286
	V	1.095
	VI	0.955
Secondary drive		Chain
Secondary ratio		3.13

F 450 R**Chassis**

Frame design	Tubular steel space frame, engine as load-bearing element	
Front wheel control	KYB USD telescopic fork, diameter 43 mm; Adjustable rebound and compression damping with Sport suspension	
Rear wheel control	Aluminum swingarm, directly mounted KYB central spring strut, adjustable spring preload and rebound damping	
Suspension travel, front/rear	mm	140/140
Trail	mm	110
Wheelbase	mm	1 405
Steering-head angle	°	23.4
Brakes	front	Brembo single-disc brake, floating, diameter 310 mm, four-piston monobloc fixed caliper
	rear	ByBre single-disc brake, diameter 240 mm, single-piston floating caliper
ABS	BMW Motorrad ABS Pro (lean-angle optimized)	
Wheels	Cast-aluminum wheels	
	front	3.00 x 17"
	rear	4.00 x 17"
Tires	front	110/70-17
	rear	150/60-17

Dimensions and weights

Overall length	mm	2 002
Overall width across bar-end weights	mm	825
Seat height	mm	790

DIN unladen weight, road ready	kg	175 (176 with ERC)
Permitted gross weight	kg	355
Fuel tank capacity	l	14

Performance

Fuel consumption (WMTC)	l/100 km	3.8
CO ₂	g/km	88
Acceleration 0–100 km/h	s	5.7
Top speed	km/h	169