

## Technical data sheets BMW Motorrad

Date: 13.11.2018  
Status: approved

MY 2020 (0E21)

### S 1000 RR

#### Engine

|                   |  |
|-------------------|--|
| Type              | Water/oil-cooled 4-cylinder 4-stroke in-line engine, four titanium valves per cylinder, BMW ShiftCam |
| Bore / stroke     | 80 mm x 49.7 mm  |
| Capacity          | 999 ccm  |
| Rated output      | 152 kW (207 hp) at 13,500 rpm  |
| Max. torque       | 113 Nm at 11,000 rpm   |
| Compression ratio | 13.3 : 1   |
| Mixture control   | Electronic injection, variable intake pipe   |
| Emission control  | Closed-loop 3-way catalytic converters, EU-4 norm  |

#### Performance / fuel consumption

|   |  |
|---|--|
| Maximum speed                                   | 299 km/h   |
| Fuel consumption per 100 km based on WMTC cycle | 6.4 l  |
| CO <sub>2</sub> emission based on WMTC          | 149 g/km   |
| Fuel type                                       | Unleaded super(premium), octane number 95 - 98 (RON) (knock control; rated output at 98 RON) |

#### Electrical system

|            |                               |
|------------|-------------------------------|
| Alternator | 450 W                         |
| Battery    | 12 V / 8 Ah, maintenance-free |

#### Power transmission

|                 |   |
|-----------------|---|
| Clutch          | Multiplate clutch in oil bath, anti-hopping clutch, with self-reinforcement |
| Gearbox         | Constant-mesh 6-speed gearbox with straight cut gears                       |
| Drive           | Chain 525 17/45   |
| Tractioncontrol | DTC   |

#### Chassis / brakes

|                                   |  |
|-----------------------------------|--|
| Frame                             | Bridge-type frame, cast aluminium, load-bearing engine   |
| Front wheel location / suspension | Upside-down telescopic fork Ø 45 mm, compression and rebound stage adjustable, adjustable preload            |
| Rear wheel location / suspension  | "WSBK" Aluminium swing arm, full floater pro, compression and rebound damping adjustable, adjustable preload |
| Suspension travel, front / rear   | 120 mm / 117 mm  |
| Wheelbase                         | 1,441 mm   |
| Castor                            | 93.9 mm  |
| Steering head angle               | 66.5°  |
| Wheels                            | Aluminium cast wheels  |
| Rim, front                        | 3.50" x 17"  |
| Rim, rear                         | 6.00" x 17"  |
| Tyre, front                       | 120/70 ZR 17   |
| Tyre, rear                        | 190/55 ZR 17   |
| Brake, front                      | Twin disc brake, 4-piston fixed caliper, 4.5 mm diameter 320 mm  |
| Brake, rear                       | Single disc brake, single piston floating caliper, diameter 220 mm   |
| ABS                               | BMW Motorrad Race ABS (part-integral), disengageable, modes to select  |
| ABS Pro                           | ABS Pro settings for RAIN, ROAD, DYNAMIC mode, no ABS in RACE mode   |

#### Dimensions / weights

|  |   |
|--|---|
| Seat height                                  | 824 mm                                      |
| Inner leg curve                              | 1,827 mm                                    |
| Usable tank volume                           | 16.5 l                                      |
| Reserve                                      | approx. 4 l                                 |
| Length                                       | 2,073 mm                                    |
| Height (excl. mirrors)                       | 1,151 mm                                    |
| Width (incl. mirrors)                        | 848 mm                                      |
| Dry weight                                   | 175 kg (M Package 173.3 kg) without battery |
| Unladen weight, road ready, fully fuelled 1) | 197 kg (M Package 193.5 kg)                 |
| Permitted total weight                       | 407 kg                                      |
| Payload (with standard equipment)            | 210 kg                                      |

#### Equipment (in parts)

|                           |   |
|---------------------------|---|
| Standard equipment        | BMW Motorrad Race ABS, ABS Pro, 4 riding modes (Rain, Road, Dynamic, Race), DTC, HSC (Hill Start Control), Shift Assist Pro, TFT-Display, LED-Turn Signal, LED-Headlight and Rearlight  |
| Optional equipment (OE)   | Riding Mode Pro (+3 modes: Race Pro 1-3, pit-lane-limiter, launchcontrol, DTC +/- Shift, wheelie control- slide controle, HSC Pro, DBC (Dynamic Brake Control), Engine Break, DDC (next generation), heated grips, cruise control, M forged wheels, M Package: M sport seat, M carbon wheels, M light weight battery, M chassis kit with rear height adjustment and swingarm pivot. |
| Optional accessories (OA) | M Carbon parts M Footrests, M Brake- Clutch lever, Windshields tinted, Windshield bubble, Windshield bubble tinted, three M sport Seat with: low 814 mm or 824 mm or high 849 mm, M Datalogger und M Laptrigger, M Cover Kit, M Calibration Kit, Tank Bag, Rear Bag.  |

Technical data relate to the unladen weight (DIN)

1) According to guideline VO (EU) 168/2013 with all fluids, with standard equipment and fuelled with at least 90% of usable tank volume.