

# Futaba

BRUSHLESS  
MOTOR

High Voltage System

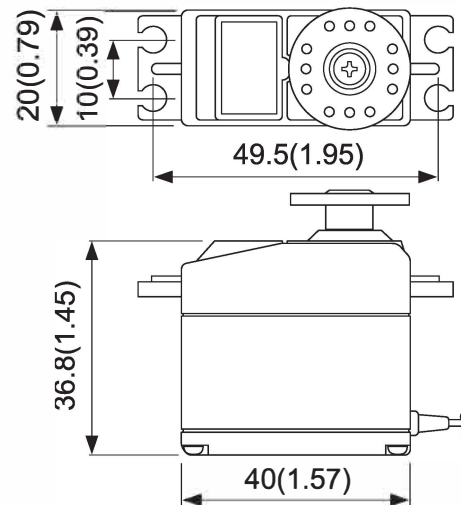
S.BUS2

# HV BLS276SV

## BLS276SV

Heli Rudder Servo  
(Neutral Pulse Width : 760 $\mu$ S)

- SPEED  
0.055 sec/60° at 6.6V  
0.05 sec/60° at 7.4V
- TORQUE  
4.4 kgf · cm at 6.6V  
(61.12 ozf · in at 6.6V)  
5.0 kgf · cm at 7.4V  
(69.45 ozf · in at 7.4V)
- SIZE  
40 × 20 × 36.8 mm  
(1.57 × 0.79 × 1.45 in)
- WEIGHT  
60g (2.12 oz)
- POWER SUPPLY  
DC 6.0V~7.4V



Unit : mm(in)

**No dry battery use**

**WARNING**

- ⚠ Always this servo use only for CGY750, GY701, GY520, GY430, GY611, or GY601 gyro. This servo cannot be used with applications other than the above. It may damage the servo.
- ⚠ Use the servo selection of a gyro at 760 $\mu$ S. This servo cannot be used with 1520 $\mu$ S. It may damage the servo.
- ⊘ Do not connect this servo to receiver directly. Be sure to connect this servo to a gyro. It will break down, if this servo is directly connected to a receiver.
- ⚠ **Turn on the power in transmitter → receiver order. In addition, always check the operation of all the servos before flight.**
- ⊘ Do not leave the servo in the locked state. Leaving the servo in the locked state (state in which enough force is applied that the servo cannot move) may cause smoke, fire, and damage.
- ⊘ Never connect the battery in reverse. Reverse connection may cause smoke, fire, and damage.
- ⊘ Do not expose the servo to dust and water. The servo does not have a waterproof construction. If it gets wet, the servo may not operate or the power supply may short circuit.
- ⚠ For the servo which has a middle case of an aluminum heat sink construction: **Install the servo so that it does not touch the servo case and metal parts of the fuselage.** It will generate a large amount of noise if touched. It will become impossible to receive and is extremely dangerous.
- ⚠ **When installing the servo, check PUSHROD LINKAGE to make sure there is no binding in order to prevent excessive power consumption and decrease the life of the motor and battery.**

**CAUTION**

- ⊘ Do not touch the servo case immediately after servo operation. You may be burned because the motor and circuits inside the servo become hot.
- ⊘ Do not turn the servo horn with unreasonable force. The servo may be damaged.
- ⊘ Do not disassemble or modify the servo. The servo has a precision construction. Futaba Corp. will not be responsible for any disassembly or modification other than those specified by us.
- ⊘ Do not drop the servo or expose it to strong shocks or vibrations. It will damage with a shock.
- ⚠ Use the servo as an actuator in hobby applications. Futaba will not be responsible if the servo is used in applications other than the above.

Futaba will not be responsible for damage, etc. caused by the use of parts other than Genuine Futaba parts.

**• Current consumption**

This servo is specially designed for HIGH-SPEED for Futaba high end gyros. For this reason, a large current flows during servo operation. Therefore, decide the safe number of uses by paying careful attention to the remaining battery capacity.

**• Power supply**

This servo is a high voltage (SV,HV) specification. The specified performance cannot be displayed with a power supply of ratings 4.8V. We recommend the use of Futaba Li-Fe battery FR2F1800. Use a battery or a voltage regulator with an ample margin as the power supply. The specified performance cannot be displayed with a dry cell battery. Even if using a receiver with the BATTERY FAIL SAFE function, it may not operate correctly. Therefore always check the battery voltage and charge the battery quickly.

**• Servo horn screw**

Servo horn screw should be used "HORN LOCK SCREW 3x8". In case the other screw is used, there is dangerous of loosening by vibration.

**• Behavior**

This servo is only for the rudder gyro of the helicopter. Dead-band is set as narrowly as possible. When the fuselage is static, the servo may start jitter. And this is not a problem.

**• System use**

For full performance, 2.4GHz system is recommended.

**• Programming function**

This servo can be connected to a PC by using the CIU-2 USB Adapter sold separately and its various operating characteristics can be changed as a programmable servo by means of dedicated software "S-Link". S-Link is downloadable from a Futaba WEB site. However, channel setting and other operating characteristics settings cannot be made with the existing S.BUS PCLink software. This servo does not have stop mode function. Therefore becomes as [ hold ] when the input signal of a servo stops. Depending on a setup, a servo carries out vibration. If a servo continues carrying out vibration, it will break, please restore a setup.

**• Soft start**

In order to protect the linkage, only the first operation when the power is turned on moves the servo to the specified position slowly. When a new control signal enters while the soft start is operating, it become normal operation at once.

