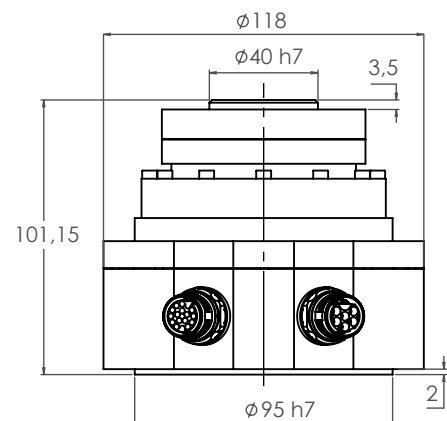


# SVTM 78 Series Mechatronic Joint

**servotecnica**



A robotic joint with an integrated ABS encoder, brushless motor, hollow shaft, and zero-backlash gearbox is a compact and precise actuator unit designed for high-performance robotics. The brushless motor provides efficient and smooth motion, while the ABS encoder ensures accurate position feedback. The hollow shaft allows for wiring or component integration through the joint. The zero-backlash gearbox eliminates mechanical play, resulting in highly accurate and repeatable movement, ideal for robotics applications requiring high precision and minimal latency.



## SVTM 78-25-Y/19-BIS10/HG20-50

### Motor Data

Torque peak: 2.93Nm  
 Torque nominal: 1.38Nm  
 Nominal voltage: 600Vdc  
 Nominal speed: 23000RPM  
 Max input speed gearbox: 6000RPM  
 Nominal speed at 48Vdc: 3300RPM

### Encoder Data

Protocol: BiSS-C  
 Resolution: 19bits

### Harmonic Gearbox

Ratio 50:1  
 Zero Backlash  
 Hollow shaft  $\varnothing$ 12mm

Sealing IP65

### Output Torque

Torque peak: 73Nm  
 Torque nominal: 33Nm

### Available Option

Motor with torque peak up to 10.85Nm\* and nominal torque up to 4.41Nm\*  
 Encoder with resolution up to 21 bits and protocol BiSS, SSI, Incremental, SPI and Asynchronous  
 Gearbox option ratio 50, 100 and 120:1

\* Increasing of torque may increase total length of the product



Customizable



High accuracy and high resolution



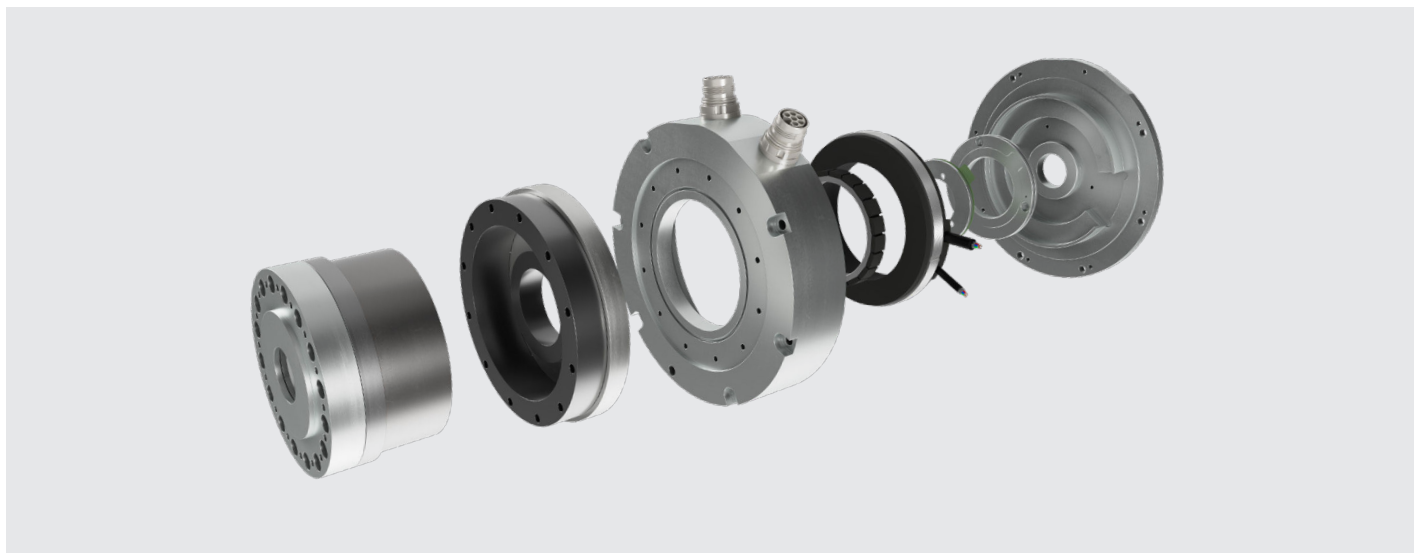
Hollow shaft



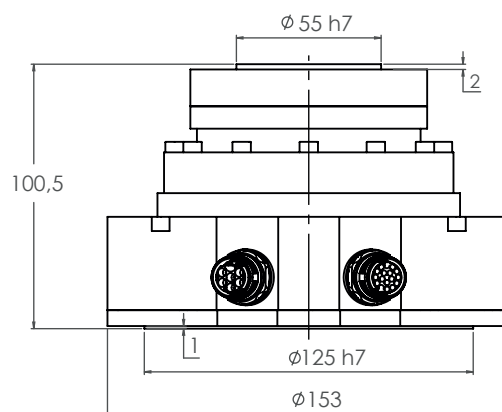
IP65

# SVTM 105 Series Mechatronic Joint

**servotecnica**



A robotic joint with an integrated ABS encoder, brushless motor, hollow shaft, and zero-backlash gearbox is a compact and precise actuator unit designed for high-performance robotics. The brushless motor provides efficient and smooth motion, while the ABS encoder ensures accurate position feedback. The hollow shaft allows for wiring or component integration through the joint. The zero-backlash gearbox eliminates mechanical play, resulting in highly accurate and repeatable movement, ideal for robotics applications requiring high precision and minimal latency.



## SVTM 105-17-Z/19-BIS10/HG25-50

### Motor Data

Torque peak: 3.3Nm  
 Torque nominal: 1.4Nm  
 Nominal voltage: 325Vdc  
 Nominal speed: 16500RPM  
 Max input speed gearbox: 5500RPM  
 Nominal speed at 48Vdc: 3300RPM

### Encoder Data

Protocol: BiSS-C  
 Resolution: 19bits

### Harmonic Gearbox

Ratio 50:1  
 Zero Backlash  
 Hollow shaft  $\phi 20\text{mm}$

Sealing IP65

### Output Torque

Torque peak: 115Nm  
 Torque nominal: 49Nm

### Available Option

Motor with torque peak up to 28.4Nm and nominal torque up to 12Nm and 600Vdc wiring

Encoder with resolution up to 22 bits and protocol BiSS, SSI, Incremental, SPI and Asynchronous

\* Increasing of torque may increase total length of the product



Customizable



High accuracy and high resolution



Hollow shaft



IP65