

ESINTI[®]

ZD- Planetary

Gear box

Model number: 78zr5-750t1



Technical Specifications

Model / Series

- Model: 78ZR5-750T1 (ZD planetary / helical planetary gearbox).

Gear / Mechanical

- Reduction ratio: 5 : 1 (single-stage).
- Stage: 1-stage.
- Gear type: planetary gearbox with helical gear teeth

Power / Torque

- Intended input motor power: 750 W (matches 750 W servo motor).
- Rated output torque (T_{2N}): $\approx 330 \text{ N}\cdot\text{m}$ (listed for the 5:1, 750 W variant).
- Instant / stall torque (max): $\approx 990 \text{ N}\cdot\text{m}$ ($\sim 3\times$ rated torque as listed).

Performance & Efficiency

- Efficiency (single stage): $\approx 96\text{--}97\%$.
- Backlash: ≤ 3 arc-minutes (high precision).
- Noise: ≤ 60 dB (measured at 1 m / L=100 cm) for the listed model.

Mechanical / Mounting / Size

- Frame / flange size: ~ 90 mm frame (flange mount listed; compatible with NEMA 42 in many listings).
- Weight: ≈ 8.0 kg (5:1 variant).
- Mounting: Flange mounting (motor coupling to servo / stepper).

Materials & Protection

- Housing / material in listings: Stainless steel (some listings) — other ZD series variants use steel/cast materials depending on SKU.
- Typical protection / lubrication: Lifetime lubrication and option for IP ratings depending on configuration

Applications

- Typical use: matched to 750 W servo / stepper motors for automation, robotics, CNC, printing, packaging, conveyors, anilox drives, etc.

Technical specifications

- Ratio: 5:1
- Stage: 1
- Backlash: $\leq 3'$ (arc-min.)
- Rated Output Torque: 330N.m
- Instant stop torque: 990N.m
- For Motor: NEMA 42
- Efficiency: 97%
- Noise: ≤ 60 dB (L=100cm)
- Life: 30000 Hour
- Weight: 8,1 Kg
- Operating Temperature: -25°C bis $+90^{\circ}\text{C}$
- Protection Grade: IP65