JINGJIANG GEAO AUTOMOTIVE TECHNOLOGY CO., LTD.

PRODUCT DATASHEET

JZX90-01 90° Positive Angle Steering Gear

Spiral bevel angle drive, i = 1:1 | ZF 7860 955 900 equivalent



PRODUCT MODEL
JZX90-01

TRANSFER ANGLE / RATIO
90° / i = 1:1

Rotation **IN CW → OUT CCW**

Spline **ZGN 79T / 36T**

Backlash **≤ 0.05°**

Housing **Al die-cast**

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PRODUCT OVERVIEW

The JZX90-01 redirects steering input by 90° with a spiral bevel gear pair at a 1:1 ratio — input clockwise, output counter-clockwise. It is used where the steering column and the steering gear cannot be coupled in a straight line, typical of bus and coach front-axle layouts. The aluminium die-cast housing keeps weight down, skeleton oil seals make it maintenance-free, and the flanged four-bolt base mounts flat to the frame.

KEY FEATURES

90° redirection

Turns the steering line by 90° at a 1:1 ratio without changing steering feel.

Spiral bevel gear pair

Ground bevel gears run quieter (≤60 dB(A)) and carry higher torque than straight-cut types.

Aluminium die-cast housing

Rigid, lightweight housing with a four-bolt flange for flat mounting.

Maintenance-free sealing

Skeleton oil seals retain the factory 60 – 65 ml lubricant for the full service life.

Two spline sizes

ZGN 79T / 36T in C-type 5:1, or changed to your drawing for other column interfaces.

Fleet-proven

Built to QC/T 1227 practice with test data on clearance, torque and noise.

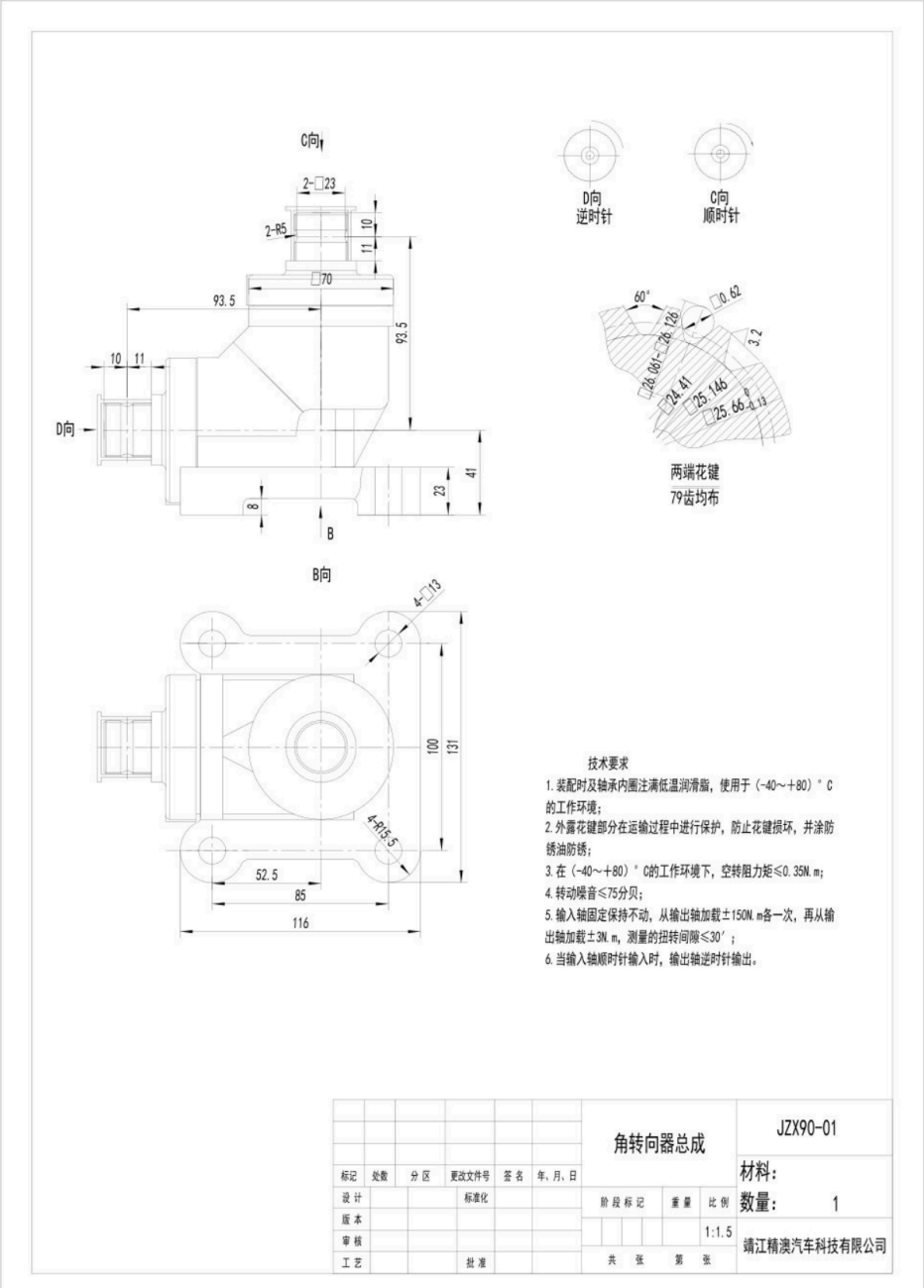


Fig. 1 — JZX90-01 angle steering gear, scale 1:1. Outline, mounting and section views.

1. Spiral bevel gear pair, ratio i = 1:1, input-output angle 90°;
2. Axial clearance ≤ 0.05 mm, circumferential backlash ≤ 0.05°;
3. No-load resistance torque ≤ 0.35 N·m at −40 to +80 °C;
4. Lubricant volume 60 – 65 ml, skeleton oil seals, maintenance-free;
5. Aluminium die-cast housing, noise level ≤ 60 dB(A).

TECHNICAL SPECIFICATIONS

ANGLE STEERING GEAR · JZX90-01

ITEM	SPECIFICATION
Product model	JZX90-01 (90° positive angle steering gear)
Transmission type	Spiral bevel gear, ratio i = 1:1
Angle / rotation	Input CW → output CCW; input-output angle 90°
Input / output spline	ZGN 79 teeth / 36 teeth (C-type 5:1; two sizes available)
Mounting dimensions	100 / 85 / 52.5 mm (see installation drawing)
Axial clearance	≤ 0.05 mm
Circumferential backlash	≤ 0.05°
No-load resistance torque	≤ 0.35 N·m
Lubricant volume	60 – 65 ml
Operating temperature	−40 to +80 °C
Noise level	≤ 60 dB(A)
Housing material	Aluminium die-casting
Sealing	Skeleton oil seal (maintenance-free)
Spline customisation	Beyond the two standard sizes, input/output spline parameters can be changed to customer requirement

Values above are taken from the JZX90-01 assembly drawing and type-test data.

OPERATING & SERVICE NOTES

Operating environment

Ambient −40 to +80 °C, suitable for high-temperature variation and dusty or humid conditions common to bus front-axle steering.

Lubrication & service

Factory-filled with 60 – 65 ml of special lubricant. Skeleton oil seals are maintenance-free for the whole service life.

Installation

Four-bolt flange mounting; the mating surface must be flat and clean, and bolts tightened evenly to the specified torque.

Port customisation

Input/output spline parameters and mounting dimensions can be changed to suit the vehicle model, verified by sample before series supply.