

Servo Worm Gear Technology EJ Product Group

Unmatched Precision and Versatility for the Machine Builder



NIDEC-SHIMPO has been at the forefront of developing gear technology to fill the requirements of our OEM customers. Our close partnerships with our installed customer base provided much insight into their evolving need for more high-precision right-angle gearing options. In order to fill that need, NIDEC-SHIMPO expanded upon our right-angle product offering to include a variety of high-precision worm gearboxes, known as our EJ Series.

These servo grade gearheads are ideal for the most challenging of motion control applications. Each series incorporates a globoidal worm gear mesh design in order to achieve the torque handling capacity, shock load capability and level of precision that our customers have come to expect from us. The input design of the EJ product range applies the same concept of motor modularity that is common across our planetary product family, meaning our customers get the same level of flexibility, product variety, and overall availability that is unparalleled within our industry.

Advantages of the EJ SERIES platform design

- > Quiet operation, in comparison to other competitive worm gearing
- > High shock load capacity
- > A reduced backlash feature, unique among right-angle gearheads
- > Wide range of output mounting options
- > Compact, lightweight construction
- > Exact gear reduction ratios simplify system tuning
- > Maintenance free, lubricated for life



EJM SERIES

Right-angle Worm Gearbox

General purpose servo reducer with globoidal worm gearing. Lightweight aluminum housing with coupling connection.

Series Features

- > Globoidal worm gear mesh
- > Economy leader of category
- > Aluminum housing
- > Standard backlash

Frame Sizes	02, 03, 05, 06, 09, 11
Reduction Ratios	5, 7.5, 10, 15, 20, 25, 30, 40, 50, 60
Nominal Torque (Nm)	29 – 614
Maximum Torque (Nm)	33 – 696
Max. Input speed (rpm)	4000
Backlash (Arc-min)	12 – 41
Output Hollow Bore Size (mm)	Ø20 – 75



HEAVY INDUSTRIAL CLASS

EJH SERIES

Right-angle Worm Gearbox

Globoidal worm gearing with high torque capacity, high-efficiency, quiet and smooth running. Standard, high-precision options with hollow or solid output shafts in a cost-effective package.

Series Features

- > Globoidal worm gear mesh
- > Strong internal structure
- > Robust cast iron housing
- > Standard, precision backlash

	Frame Sizes	15, 20, 25, 30, 35
	Reduction Ratios	5, 6, 7, 8, 9, 10, 15, 20, 25, 30, 40, 50, 60
	Nominal Torque (Nm)	35 - 475
	Maximum Torque (Nm)	46 – 663
	Max. Input speed (rpm)	4000
	Backlash (Arc-min)	6 – 32
ľ	Output Hollow Bore Size (mm)	Ø25 – 60



EJP SERIES

Right-angle Worm Gearbox

Globoidal worm gearing with high torque capacity, high-efficiency, quiet and smooth running. Low and zero backlash options with hollow or solid output shafts in a premium package.

Series Features

- > Globoidal worm gear mesh
- > Zero backlash available
- > Optimal sound characteristics
- > Performance leader of category

Frame Sizes	38, 51, 64, 76, 89
Reduction Ratios	5, 6, 7, 8, 9, 10, 15, 20, 25, 30, 40, 50, 60
Nominal Torque (Nm)	35 – 480
Maximum Torque (Nm)	46 – 660
Max. Input speed (rpm)	6000
Backlash (Arc-min)	0 – 24
Output Hollow Bore Size (mm)	Ø25 – 60

HIGH PRECISION CLASS



HYGIENIC CLASS

EJS SERIES

Right-angle Worm Gearbox

Stainless steel gearbox designed for sterile manufacturing environments. Smooth housing design allows for easy cleaning and bacteria free surfaces. Easy mounting to stainless steel servo or NEMA frame motors.

Series Features

- > Globoidal worm gear mesh
- > IP69K rated aseptic design
- > 316 stainless with food grade oil
- > Various output options

Frame Sizes	39, 44, 50, 60, 76
Reduction Ratios	5, 7, 10, 15, 20, 25, 30, 40, 50, 60
Nominal Torque (Nm)	41 – 396
Maximum Torque (Nm)	47 – 721
Max. Input speed (rpm)	3000
Backlash (Arc-min)	4 – 24
Output Hollow Bore Size (mm)	Ø19 – 35



VERSATILE OUTPUT MOUNTING OPTIONS









Solid Shaft

Hollow Shaft

Shrink Disc

Flange Mount

Our right-angle servo grade gearboxes are ideal for applications within custom assembly and test systems, packaging equipment, metal cutting and metal forming machinery, general purpose automotive, among many others. If your application requires the compact footprint of a right-angle worm gear without sacrificing performance, contact NIDEC-SHIMPO about the EJ Series today.

www.drives.nidec-shimpo.com



NIDEC-SHIMPO CORPORATION

175 Wall Street, Glendale Heights, IL 60139 USA

Phone: (800) 842-1479 • Fax: (630) 924-7383