

EDT-B-90

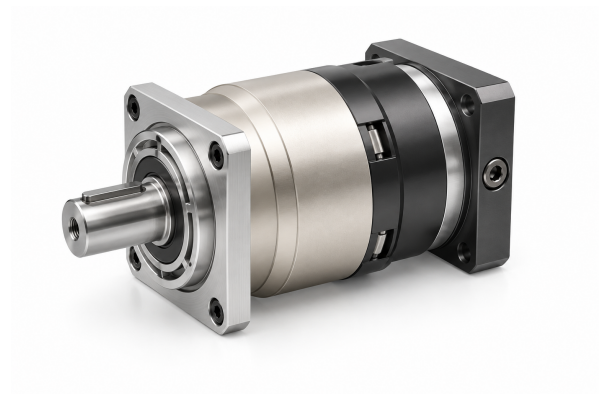
Gear Reducers

PRODUCT

A planetary gear reducer that lowers speed and raises torque at a selected stage and ratio.

TECHNICAL SPECIFICATIONS

Rated output torque T2N By stage and ratio; see table below	100-160 Nm by ratio
Moment of inertia J1 By stage and ratio; see table below	0.13-0.61 kg cm ² by ratio
Standard Backgap P2 Stage 1, ratios 3~10	<=5 arcmin
Standard Backgap P2 Stage 2, ratios 15~100	<=7 arcmin
Torsion rigidity Stages 1,2; ratios 3~100	14 Nm/arcmin
Rated input speed n1N Stages 1,2; ratios 3~100	4,000 rpm
Maximum input speed n1B Stages 1,2; ratios 3~100	8,000 rpm
Noise value Stages 1,2; ratios 3~100; 3000 rpm	<=60 dB
Allowable radial force F2rB Stages 1,2; ratios 3~100; 2. Output speed of 100rpm, acting on the center position of the output shaft.	3,250 N
Allowable axial force F2a1B Stages 1,2; ratios 3~100; 2. Output speed of 100rpm, acting on the center position of the output shaft.	1,300 N
Allowable axial force F2a2B Stages 1,2; ratios 3~100; 2. Output speed of 100rpm, acting on the center position of the output shaft.	1,625 N
weight Stage 1, ratios 3~10	3.7 kg
weight Stage 2, ratios 15~100	4.1 kg



Product illustration

SELECTION

Select the stage and reduction ratio first. Then check torque, inertia, backlash, speed, shaft load, and mounting dimensions for that exact ratio.

TORQUE AND INERTIA BY STAGE AND RATIO

Stage	Ratio	Rated output torque	Moment of inertia
1	3	130 Nm	0.61 kg cm ²
1	4	140 Nm	0.48 kg cm ²
1	5	160 Nm	0.47 kg cm ²
1	6	150 Nm	0.45 kg cm ²

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Stage	Ratio	Rated output torque	Moment of inertia
1	7	140 Nm	0.45 kg cm ²
1	8	120 Nm	0.44 kg cm ²
1	10	100 Nm	0.44 kg cm ²
2	12	130 Nm	0.13 kg cm ²
2	15	130 Nm	0.13 kg cm ²
2	20	140 Nm	0.13 kg cm ²
2	25	160 Nm	0.13 kg cm ²
2	30	130 Nm	0.13 kg cm ²
2	35	160 Nm	0.13 kg cm ²
2	40	140 Nm	0.13 kg cm ²
2	50	160 Nm	0.13 kg cm ²
2	60	150 Nm	0.13 kg cm ²
2	70	140 Nm	0.13 kg cm ²
2	80	120 Nm	0.13 kg cm ²
2	100	100 Nm	0.13 kg cm ²

A ratio group can list more than one installation size. Match each size to the drawing view; do not combine them into one configuration.

RATIOS 3, 4, 5, 6, 7, 8, 10		RATIOS 12, 15, 20, 25, 30, 35, 40, 50, 60, 70, 80, 100	
C1	phi90 mm / phi100 mm / phi115 mm / phi145 mm	C1	phi66.7 mm / phi70 mm / phi90 mm / phi100 mm
C10	7 mm / 6 mm / 16.5 mm / 19 mm	C10	5.5 mm / 12 mm / 11 mm
C2	4-M 5X12,4-M 6X14 mm / 4-M 6X14 mm / 4-M 8X20 mm	C2	4-M 4X10 mm / 4-M 4X10,4-M 5X12 mm / 4-M 5X12,4-M 6X14 mm / 4-M 6X14 mm
C3	phi19 mm / phi16 mm / phi19,phi22 mm / phi19,phi22,phi24 mm	C3	phi8 mm / phi11,phi14 mm / phi19 mm / phi16 mm
C4	42 mm / 56.5 mm / 59 mm	C4	34 mm / 42 mm
C5	phi70 mm / phi80 mm / phi95 mm / phi110 mm	C5	phi38.1 mm / phi50 mm / phi70 mm / phi80 mm
C6	6.5 mm / 8 mm / 11 mm	C6	5 mm / 6.5 mm
C7	80 mm / 86 mm / 100 mm / 130 mm	C7	60 mm / 80 mm / 86 mm
C8	99 mm / 115 mm / 117 mm	C8	123 mm / 130 mm
C9	147 mm / 162.5 mm / 165 mm	C9	171 mm / 177.5 mm