

EDT-B-220

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	1140-2000 Nm by ratio
Moment of inertia J1 By stage and ratio; see table below	22.51-69.61 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	225 Nm/arcmin
Rated input speed n1N Stages 1,2; ratios 3~100	2,000 rpm
Maximum input speed n1B Stages 1,2; ratios 3~100	4,000 rpm
Noise value Stages 1,2; ratios 3~100; 3000 rpm	≤70 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.	50,000 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.	35,000 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.	25,000 N
weight Stage 1, ratios 3~10	48 kg
weight Stage 2, ratios 15~100	60 kg

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	1,140 Nm	69.61 kg cm ²
1	4	1,700 Nm	54.37 kg cm ²
1	5	2,000 Nm	53.27 kg cm ²
1	6	1'600 Nm	51.72 kg cm ²



Product illustration

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Stage	Ratio	Rated output torque	Moment of inertia
1	7	1'800 Nm	50.97 kg cm ²
1	8	1'600 Nm	50.84 kg cm ²
1	10	1'220 Nm	50.56 kg cm ²
2	15	1'140 Nm	23.29 kg cm ²
2	20	1'700 Nm	23.29 kg cm ²
2	25	2'000 Nm	23.29 kg cm ²
2	30	2'000 Nm	23.29 kg cm ²
2	35	2'000 Nm	23.29 kg cm ²
2	40	2'000 Nm	23.29 kg cm ²
2	50	2'000 Nm	22.51 kg cm ²
2	70	1'800 Nm	22.51 kg cm ²
2	80	1'600 Nm	22.51 kg cm ²
2	100	1'220 Nm	22.51 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, 7, 8, 10		RATIOS 15, 20, 25, 30, 35, 40, 50, 70, 80, 100	
C1	phi200 mm / phi215 mm / phi235 mm	C1	phi200 mm / phi215 mm / phi235 mm
C10	19.5 mm / 12.5 mm / 22.5 mm	C10	7.5 mm / 40 mm / 14 mm / 44 mm
C2	4-M 12X28 mm / 4-M 12X30 mm	C2	4-M 12X30 mm
C3	phi35,phi42 mm / phi42 mm / phi42,phi55 mm	C3	phi35 mm / phi42 mm
C4	116 mm / 109 mm / 119 mm	C4	85 mm / 116 mm / 90 mm / 120 mm
C5	phi114.3 mm / phi180 mm / phi200 mm	C5	phi114.3 mm / phi180 mm
C6	15 mm / 8 mm / 10 mm	C6	7 mm / 8 mm / 10 mm
C7	200 mm / 220 mm	C7	180 mm / 200 mm / 220 mm
C8	227 mm / 220 mm / 230 mm	C8	264 mm / 295 mm / 269 mm / 299 mm
C9	365 mm / 358 mm / 368 mm	C9	402 mm / 433 mm / 407 mm / 437 mm