Performance table/Technical data

DYNA GEAR Economy

DynaEco DE-DG

Size		DE-DG55	DE-DG75	DE-DG90	DE-DG115	DE-DG55	DE-DG75	DE-DG90	DE-DG115
Ratio	**i**	**5/8/10**				**15**			
Output torque									
Nominal torque	T_{2N} [Nm]	35	70	140	260	25	50	95	180
Maximum acceleration ④	T_{2B} [Nm]	53	105	210	390	38	75	143	270
Emergency stop torque ③	T_{2Not} [Nm]	70	140	280	520	50	100	190	360
Maximum input speed	n_{1max} [min^{-1}]	6000	6000	5000	4000	6000	6000	5000	4000
Nominal input speed i = 5/8	n_{1N} [min^{-1}]	3100	2400	2100	1820	–	–	–	–
Nominal input speed i = 10/15	n_{1N} [min^{-1}]	3800	2900	2600	2250	3800	2900	2600	2250
Backlash ①	j_t [arcmin]	< 7	< 7	< 6	< 6	< 7	< 7	< 6	< 6
Backlash stiffness at output ⑤	C_{t21} [Nm/arcmin]	2.5	5.0	12.0	28.0	2.5	5.0	12.0	28.0
Radial force ②	F_{2Rmax} [N]	3300	4900	7200	10000	3300	4900	7200	10000
Axial force ②	F_{2Amax} [N]	1650	2450	3600	5000	1650	2450	3600	5000
Efficiency rating at full load	η [%]	> 96	> 96	> 96	> 96	> 93	> 93	> 93	> 93
Noise level (n_1=3000 min^{-1})	L_{pA} [dB(A)]	< 66	< 66	< 68	< 68	< 66	< 66	< 68	< 68
Weight approx	m [kg]	2.5	4.2	8.2	13.5	2.5	4.2	8.2	13.5

DynaEco DE-PL

Size		DG-PL55	DE-PL75	DE-PL90	DE-PL 115	DE-PL55	DE-PL75	DE-PL90	DE-PL115
Ratio	**i**	**5/8/10**				**15**			
Output torque									
Nominal torque	T_{2N} [Nm]	35	70	140		25	50	95	
Maximum acceleration ④	T_{2B} [Nm]	53	105	210		38	75	143	
Emergency stop torque ③	T_{2Not} [Nm]	70	140	280		50	100	190	
Maximum input speed	n_{1max} [min^{-1}]	6000	6000	5000		6000	6000	5000	
Nominal input speed i = 5/8	n_{1N} [min^{-1}]	3100	2400	2100		–	–	–	
Nominal input speed i = 10/15	n_{1N} [min^{-1}]	3800	2900	2600		3800	2900	2600	
Backlash ①	j_t [arcmin]	< 7	< 7	< 6		< 7	< 7	< 6	
Backlash stiffness at output ⑤	C_{t21} [Nm/arcmin]	2.5	5.0	12.0		2.5	5.0	12.0	
Radial force ②	F_{2Rmax} [N]	2200	4050	6200		2200	4050	6200	
Axial force ②	F_{2Amax} [N]	1100	2025	3100		1100	2025	3100	
Efficiency rating at full load	η [%]	> 96	> 96	> 96		> 93	> 93	> 93	
Noise level (n_1=3000 min^{-1})	L_{pA} [dB(A)]	< 66	< 66	< 68		< 66	< 66	< 68	
Weight approx	m [kg]	2.6	4.5	9.0		2.6	4.5	9.0	

Service life (SL) [h]: > 15.000 based on operation mode S5
Lubrication: Lubricated for life, closed system
Mounting positions: Any
Operation temperature: -10 °C to 100 °C
Paint: Primary coated RAL 9005 – black
Ex-protection / type of protection: Ex II 2 D/G T4 / IP 64

① At the output, at 2 % load
② Resulting force centre of output shaft at output speed 400 min^{-1}
③ Max 1000 times during the service life of the gearbox
④ At max 1000 cycles per hour, please consider reducing factor in other cases

Mass moment of inertia I_1 related to input [kgcm²] (coupling included)

Ratio i	Size						
	DE-DG55	DE-DG75	DE-DG90	DE-DG115	DG-PL55	DE-PL75	DE-PL90
5:1	0.44	1.06	3.6	7.2	0.44	1.07	3.7
8:1	0.37	0.88	3.0	5.7	0.37	0.89	3.0
10:1	0.35	0.84	2.9	5.3	0.35	0.84	2.9
15:1	0.33	0.79	2.7	4.9	0.33	0.79	2.7