

The DynaGear Economy series, versions DE-DG, is available with solid or hollow shafts on the output end. For output with a hollow shaft, the shaft is extended so a shrink disc can be fitted

**The dimensions of the output correspond to those of our standard DynaGear series.**



## Performance table/Technical data

### 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 <sup>-1</sup> ]	6000	6000	5000	4000	6000	6000	5000	4000
Nominal input speed i = 5/8	$n_{1N}$ [min <sup>-1</sup> ]	3100	2400	2100	1820	–	–	–	–
Nominal input speed i = 10/15	$n_{1N}$ [min <sup>-1</sup> ]	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	$\eta$ [%]	> 96	> 96	> 96	> 96	> 93	> 93	> 93	> 93
Noise level ( $n_1=3000$ min <sup>-1</sup> )	$L_{pA}$ [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

Service life (SL) [h]: > 15.000 based operation mode S5  
 see "Technical service and maintenance" page 21  
 Lubrication: see "Technical service and maintenance" page 21  
 Mounting positions: Any  
 Operation temperature: -10 °C to 90 °C  
 Paint: Primary coated RAL 9005 – black  
 Ex-protection: Ex II 2 D/G c T4  
 type of protection: IP 64

① At the output, at 2 % load and max. 10 Nm

② Resulting force centre of output shaft at output speed 400 min<sup>-1</sup>

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

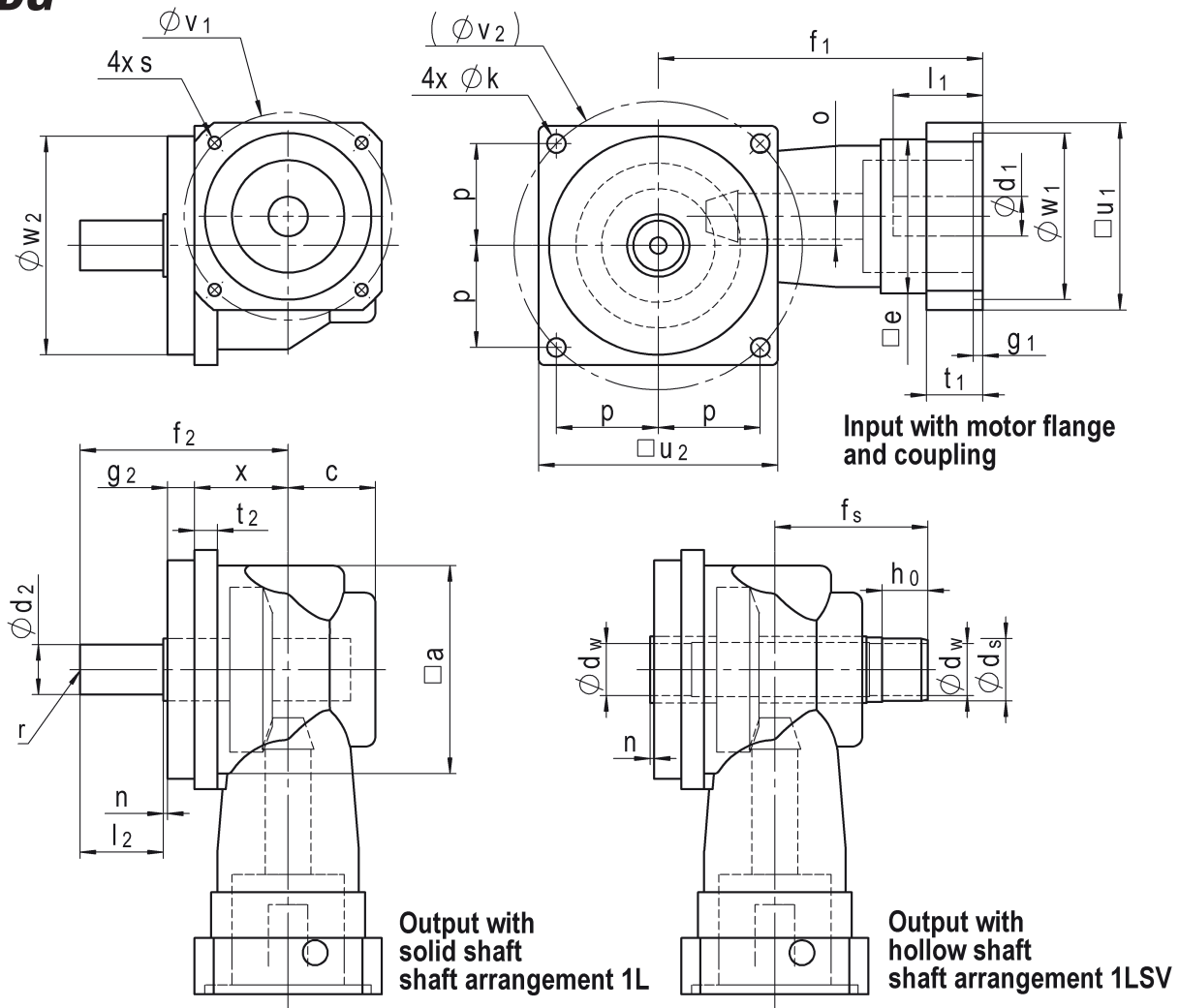
### Mass moment of inertia $I_1$ related to input [kgcm<sup>2</sup>] (coupling included)

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

Symbols and units see page 19

# Dimensions and Configurations DE-DG

**DYNA GEAR** *Economy*



other shaft arrangements on request

Size	$\square a$	c	x	o	$\square e$	$f_1$	$g_1$	$t_1$	$g_2$	$t_2$	$\phi k$	p	$\square u_2$	$\phi v_2$	$\phi w_{2\ g6}$
DE-DG55	84	36	37	9	58	130	4.5	20	13	9	6.6	39	90	110.3	89
DE-DG75	100	42	45	14	74	156	4.5	27	13	11	9	49	115	138.6	105
DE-DG90	125	52	58	18	89	187	4.5	33	16	14	11	59	140	166.9	125
DE-DG115	150	63	71	23	107	225	6	40	16	17	13.5	72	170	203.6	150

## Input with motor flange and coupling

Size	Version	$\phi d_1$	$l_1$	$\square u_1$	$\phi v_1$	$\phi w_1^{F7}$	s
DE-DG55	V1	9	23	60	63	40	M4
	V2	11	26	75	75	60	M5
	V3	14	33	75	75	60	M5
DE-DG75	V1	11	26	75	75	60	M5
	V2	14	33	75	75	60	M5
	V3	19	43	90	100	80	M6
DE-DG90	V1	14	33	90	100	80	M6
	V2	19	43	90	100	80	M6
	V3	24	53	115	130	110	M8
DE-DG115	V1	19	43	115	130	110	M8
	V2	24	53	115	130	110	M8
	V3	32	63	140	165	130	M10

## Output with solid shaft

Size	$\phi d_2\ k6$	$l_2$	$f_2$	n	$r^{\text{①}}$
DE-DG55	20	35	87	2	M6
DE-DG75	24	40	100	2	M8
DE-DG90	32	50	126	2	M12
DE-DG115	40	60	146	2	M16

## Output with hollow shaft<sup>②</sup>

Size	$\phi d_w^{H7}$	$\phi d_s\ f7$	$h_0$	$f_s$	n
DE-DG55	20	24	20	64.5	2
DE-DG75	25	30	22	73.5	2
DE-DG90	30	36	26	87	2
DE-DG115	40	50	29	102	2

① To D DIN 332

② Extended shaft for a shrink disk (e.g. Stüwe – Type HSD 22)

Delivery with shrink disk on request