



PGB040 ... 155

Planetary gearboxes for esiMot
and AC-Servomotors

Rugged design
Low backlash

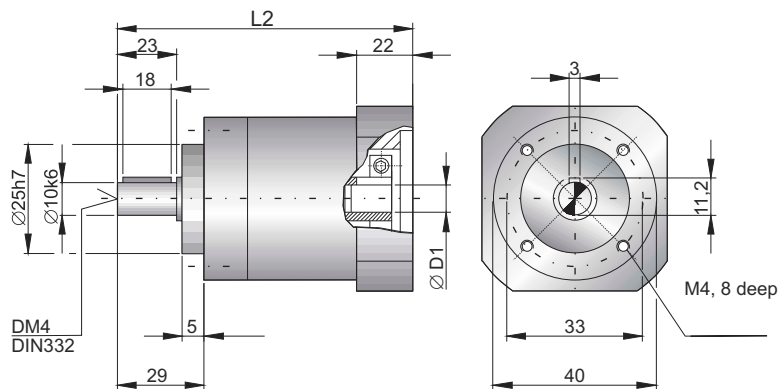
- 5 sizes PGB040 to PGB155
- Torque range from 4Nm to 290Nm
- Ratios from 3:1 to 100:1
- Tripple emergency stop torque
- Service life 20.000h
- High efficiency
- Maintenance free by lifetime lubrication
- Simple motor mounting through clamping ring technology



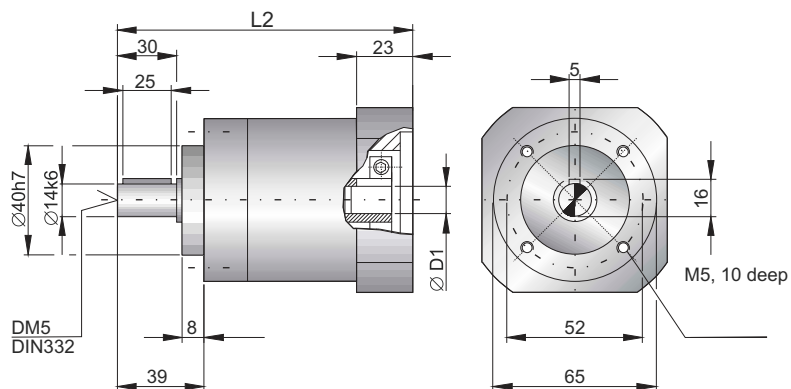
Selecting the right size

Size		PGB040	PGB065	PGB085	PGB120	PGB155
Stages	Ratio	Nominal driving torque [Nm]				
1	3	-	13	35	85	160
	4	4	14	45	90	250
	5	4,5	16	45	110	270
	7	4,5	15	43	90	270
	9	4	-	-	-	-
	10	-	14	35	80	160
2	16	5	19	55	100	270
	20	5	19	55	100	270
	25	5	21	58	110	290
	28	5	21	55	100	270
	35	5	21	55	110	290
	40	-	21	55	100	270
	49	5	-	-	-	-
	50	-	21	58	110	290
	70	-	17	50	95	290
	100	-	16	35	85	170

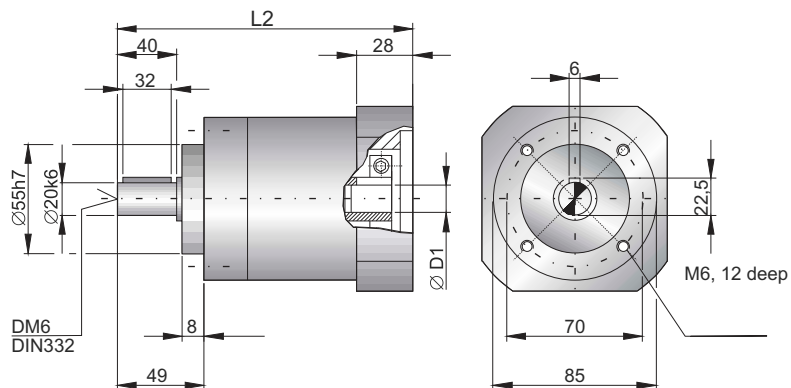
PGB040		
Stages	1	2
Backlash [']	20	25
Efficiency [%]	95	92
Torsional rigidity [Nm/arcmin]	0,4	0,5
Axial-Load max. [N]	330	
Radial-Load max. [N]	220	
L2 (esiMot6) [mm]	100	116
L2 (esiMot7) [mm]	95	111
Weight [kg]	0,3	0,4



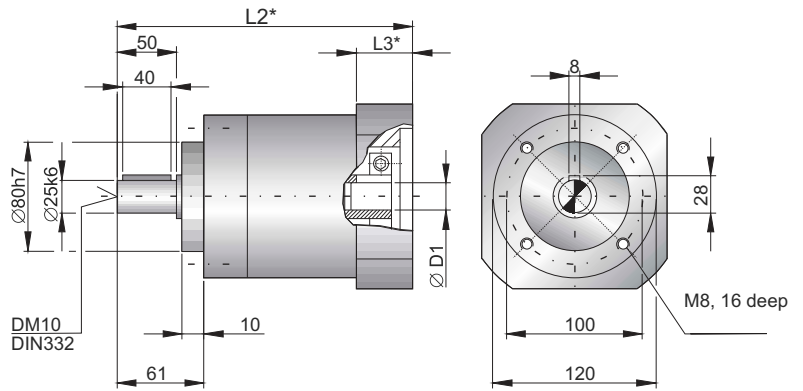
PGB065		
Stages	1	2
Backlash [']	12	15
Efficiency [%]	97	94
Torsional rigidity [Nm/arcmin]	1,6	2,0
Axial-Load max. [N]	1.080	
Radial-Load max. [N]	930	
Length L2 [mm]	127,5	151,5
Weight [kg]	1,3	1,95



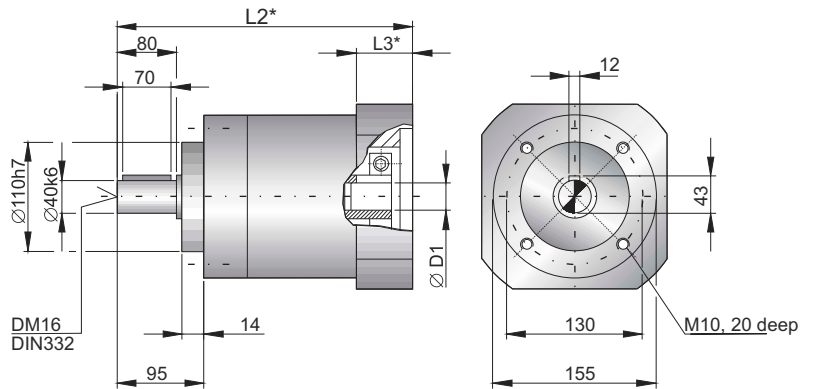
PGB085		
Stages	1	2
Backlash [']	10	15
Efficiency [%]	96	93
Torsional rigidity [Nm/arcmin]	4,8	6,0
Axial-Load max. [N]	2.180	
Radial-Load max. [N]	1.770	
Length L2 [mm]	161	192
Weight [kg]	2,6	3,5



PGB120		
Stages	1	2
Backlash [']	10	15
Efficiency [%]	96	94
Torsional rigidity [Nm/arcmin]	10	13
Axial-Load max. [N]	3730	
Radial-Load max. [N]	3000	
L2 [mm]	196	232
Weight [kg]	6,0	8,6



PGB155		
Stages	1	2
Backlash [']	10	15
Efficiency [%]	96	94
Torsional rigidity [Nm/arcmin]	34	37
Axial-Load max. [N]	7730	
Radial-Load max. [N]	6770	
L2 [mm]	262	306
Weight [kg]	12,6	17



Motor Flange

Size	PGB040	PGB065	PGB085	PGB120	PGB155
Motor axle D1 x L1*	3-11 x 14-30	6-14 x 19-40	9-19 x 24-45	14-24 x 27-69	19-32 x 30-79
Centering \varnothing	22 - 50	30-80	50-95	50-110	70-130
Hole circle	32-70	45-100	60-130	75-165	90-215
Thread / bore	M3-M5	M3-M6	M4-M8	M4-M10	M5-M12
Flange dimension	40-85	65-100	85-120	120-180	155-220
Flange width	22-31	20-35	26-40	31-50	37-50

* Dimensions depending on motor

Other technical Data

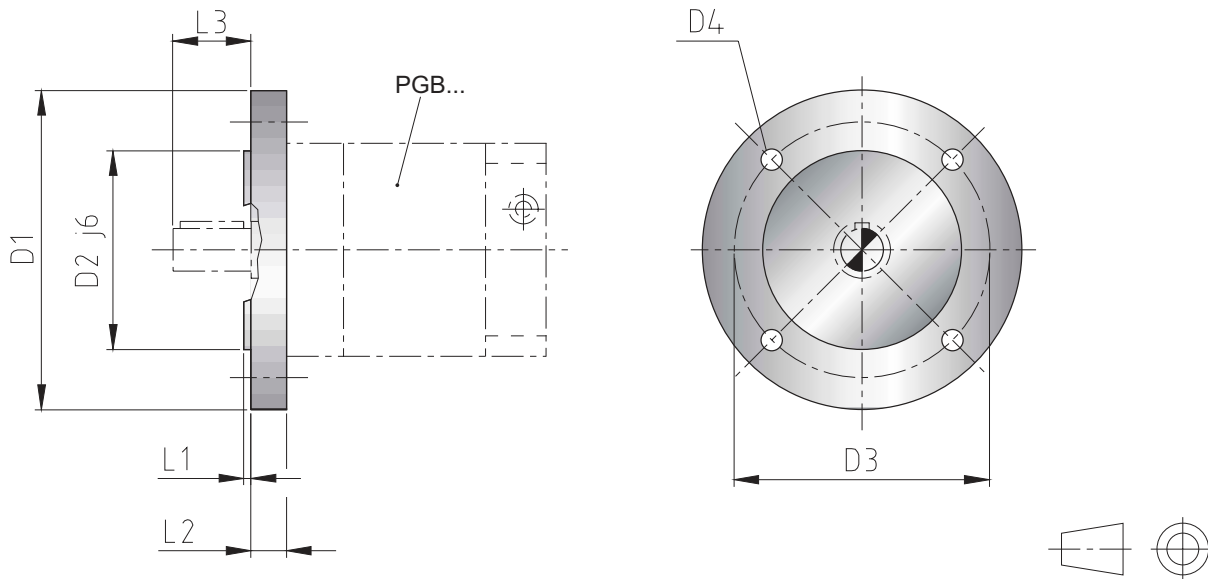
Size	PGB040	PGB065	PGB085	PGB120	PGB155
Protection class	IP64				
Service life	20.000 h				
Running noise****	< 70 dB(A)				
rated input speed	3000	3000	3000	3000	2600/3000**
max. input speed	6000	6000	5000	5000	3600
operating temp.***	-25 to +90°C				

**) 2600 rpm 1-stage / 3000 rpm 2-stage

***) on housing surface (not ambience)

****) Determined at a distance of 1m, rated speed, no load

Optional output flange



size	IEC flange type		flange dimensions							
	B5	B14	D1	D2	D3	L1	L2	L3	D4/B5	D4/B14
PGB040	B5-Ø80	B14-Ø80	80	50	65	2,5	6	23	Ø5,5	M5
	B5-Ø90	B14-Ø90	90	60	75	2,5	6	23	Ø5,5	M5
PGB065	B5-Ø90	B14-Ø90	90	60	75	2,5	9	30	Ø5,5	M5
	B5-Ø105	B14-Ø105	105	70	85	3	9	30	Ø6,6	M6
	B5-Ø120	B14-Ø120	120	80	100	3	9	30	Ø6,6	M6
	B5-Ø160	B14-Ø160	160	110	130	3,5	9	30	Ø9,0	M8
PGB085	B5-Ø120	B14-Ø120	120	80	100	3	9	40	Ø6,6	M6
	B5-Ø160	B14-Ø160	160	110	130	3,5	9	40	Ø9,0	M8
PGB120		B14-Ø160	160	110	130	3,5	11	50		M8
	B5-Ø200	B14-Ø200	200	130	165	3,5	11	50	Ø11	M10
PGB155		B14-Ø200	200	130	165	3,5	15	80		M10
	B5-Ø250	B14-Ø250	250	180	215	4	15	80	Ø14	M12

all dimensions in mm

other output flanges on request

All data in this brochure have an informative character without warranty of characteristics. Changes without previous announcement reserved.

esitron-electronic GmbH

Ernst-Zimmermann-Str. 18
D-88045 Friedrichshafen
Internet: www.esitron.de

Tel. +49(0)7541-6000-0
Fax +49(0)7541-6000-11
E-Mail: info@esitron.de