

Planetary gear

IMS.42 Eco

Our plastic planetary gear from the Eco Series with outer diameter 42 mm combines efficiency with economy.



Economy

Modular system, optimized material mix:
For economic solutions even in small quantities.

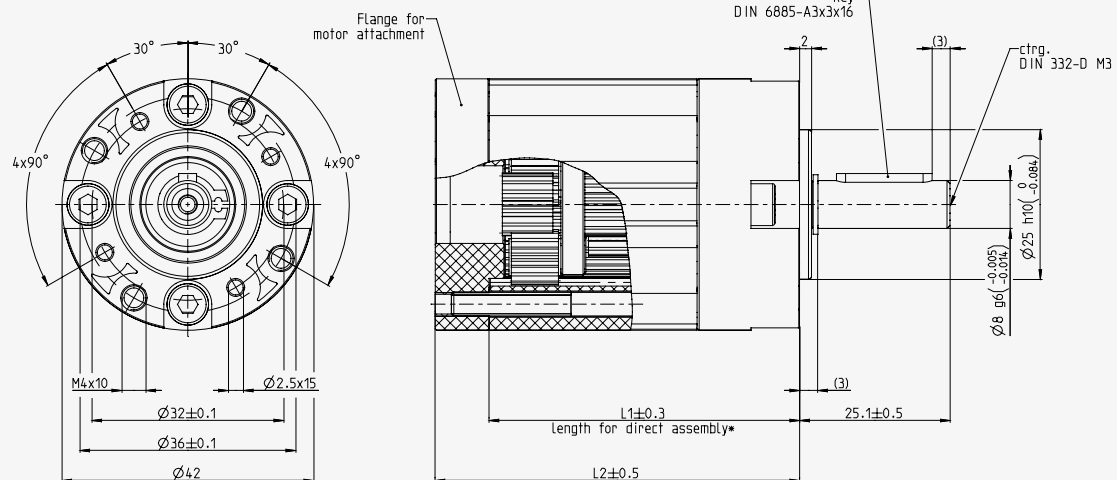


Temperature

Also ideally suited for demanding
temperature ranges from -15° to +65°C.



Parameter	1-stage	2-stage	3-stage
Perm. output torque T_{AB} (Appl. factor $C_B = 1.0$)	0.8 Nm	2.0 Nm	4.0 Nm
Gearbox efficiency, approx.	0.80	0.75	0.70
Max. backlash	1.70 °DEG	1.75 °DEG	1.80 °DEG
Recommended initial speed	3,000 U/min	3,000 U/min	3,000 U/min



All dimensions in millimeters [mm]

Current reduction ratios i rounded

Eco	Eco	Eco
1-stage	2-stage	3-stage
4:1 (3.71)	14:1 (13.73)	51:1 (50.89)
4:1 (4.29)	16:1 (15.88)	59:1 (58.86)
5:1 (5.18)	18:1 (18.37)	68:1 (68.07)
7:1 (6.75)	19:1 (19.20)	71:1 (71.16)
	22:1 (22.21)	79:1 (78.72)
	25:1 (25.01)	93:1 (92.70)
	27:1 (26.85)	95:1 (95.18)
	29:1 (28.93)	100:1 (99.51)
	35:1 (34.98)	107:1 (107.21)
	46:1 (45.56)	115:1 (115.08)
		124:1 (123.98)
		130:1 (129.62)
		139:1 (139.14)
		150:1 (149.90)
		169:1 (168.85)
		181:1 (181.25)
		195:1 (195.27)
		236:1 (236.10)
		308:1 (307.55)

Output side with sintered metal bearing	1-stage	2-stage	3-stage
Max. load, radial (Middle output shaft)	15 N	30 N	45 N
Max. load, axial	5 N	10 N	30 N
Max. perm.fitting pressure	150 N	150 N	150 N
Weight approx.	150 g	180 g	215 g

Gearbox length in mm	1-stage	2-stage	3-stage
Length 1 ^a	38.85 ± 0.3	51.85 ± 0.3	64.8 ± 0.3
Length 2 ^b	48.7 ± 0.5	61.7 ± 0.5	74.7 ± 0.5

^a Shortest possible gear length, can only be realized if motor design directly matches our ring gear.

^b The calculatory minimum length of the gear is indicated on condition of an optimum connection of flange and motor.
Please contact us directly for your concrete project.

All figures are approximate values.

Variations are possible and may arise for example due to non-standardized inspection and measurement methods. For more detailed information, please contact us directly. The company always reserves the right to make technical modifications. For current status, please consult www.imsgear.com