

Planetary gear

# IMS.22 Pro MAX

Our planetary gear from the Pro Series with outer diameter 22 mm combines performance with robustness. In the radially screwed MAX version it stands for improved performance with less installation space.



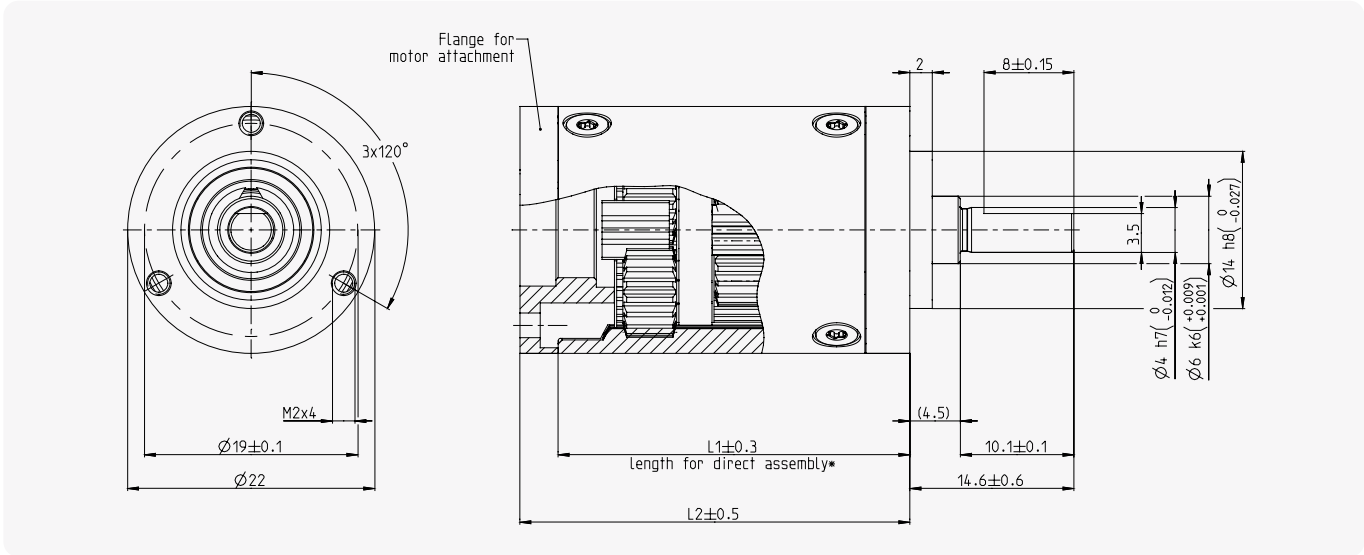
**Performance**  
Powerful, long-lived and robust - the planetary gear convinces in a multitude of applications.



**Temperature**  
Also ideally suited for demanding temperature ranges from -30° to +120°C.



Parameter	1-stage	2-stage	3-stage
Perm. output torque $T_{AB}$ (Appl. factor $C_B = 1.0$ )	0.6 Nm	0.7 Nm	0.8 Nm
Gearbox efficiency, approx.	0.90	0.80	0.70
Max. backlash	1.50 °DEG*	2.00 °DEG	2.50 °DEG
Recommended initial speed	6,000 U/min	6,000 U/min	6,000 U/min



All dimensions in millimeters [mm]

# Current reduction ratios i rounded

Pro MAX	Pro MAX	Pro MAX
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 ball bearing (2Z)	1-stage	2-stage	3-stage
Max. load, radial (10 mm from flange)	25 N	35 N	50 N
Max. load, axial	10 N	15 N	15 N
Max. perm.fitting pressure	80 N	80 N	80 N
Weight approx.	43 g	59 g	75 g

Gearbox length in	1-stage	2-stage	3-stage
Length 1 <sup>a</sup>	23.15 ± 0.3	31.3 ± 0.3	39.5 ± 0.3
Length 2 <sup>b</sup>	24.25 ± 0.5	32.4 ± 0.5	40.6 ± 0.5

<sup>a</sup> Shortest possible gear length, can only be realized if motor design directly matches our ring gear.

<sup>b</sup> 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](http://www.imsgear.com)