

Planetary gear

IMS.28 Pro MAX IMS.28 Pro MAX LN

Our planetary gear from the Pro Series with outer diameter 28 mm combines performance with robustness. In the radially pinned MAX version it stands for improved performance with less installation space. Due to easy adaptations of the configuration it is also available in Low Noise (LN) design.



Low Noise (LN)

Due to the use of helical gearing in the first stage available as Low Noise variant.



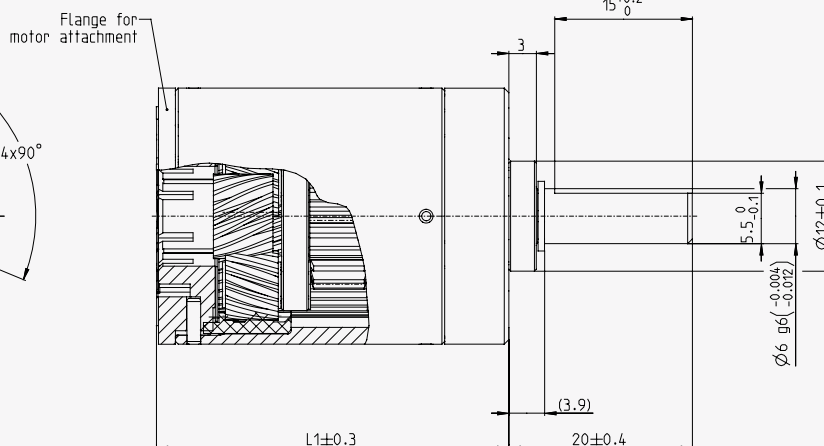
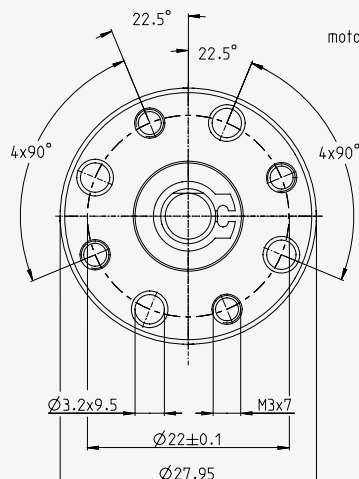
Temperature

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 $C_B = 1.0$)	0.75 Nm	2.25 Nm	4.50 Nm
Gearbox efficiency, approx.	0.80	0.75	0.70
Max. backlash	1.50 °DEG*	1.55 °DEG	1.60 °DEG
Recommended initial speed	3,000 U/min	3,000 U/min	3,000 U/min

* LN: 2.00 °DEG. For plastic PL wheels only! Impact of 1st stage for 2-4 stage versions is negligible.



All dimensions in millimeters [mm]

Current reduction ratios i rounded

Pro MAX / Pro MAX LN	Pro MAX / Pro MAX LN	Pro MAX / Pro MAX LN
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 (Middle output shaft)	40 N	70 N	100 N
Max. load, axial	10 N	20 N	30 N
Max. perm.fitting pressure	120 N	120 N	120 N
Weight approx.	160 g	210 g	260 g

Gearbox length in	1-stage	2-stage	3-stage
Length 1 ^a	28.75 ± 0.3	38.4 ± 0.3	48 ± 0.3

^a 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