

Planetary gear

IMS.120 Pro

Our planetary gear from the Pro Series with outer diameter 120 mm combines performance with robustness.



Performance

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

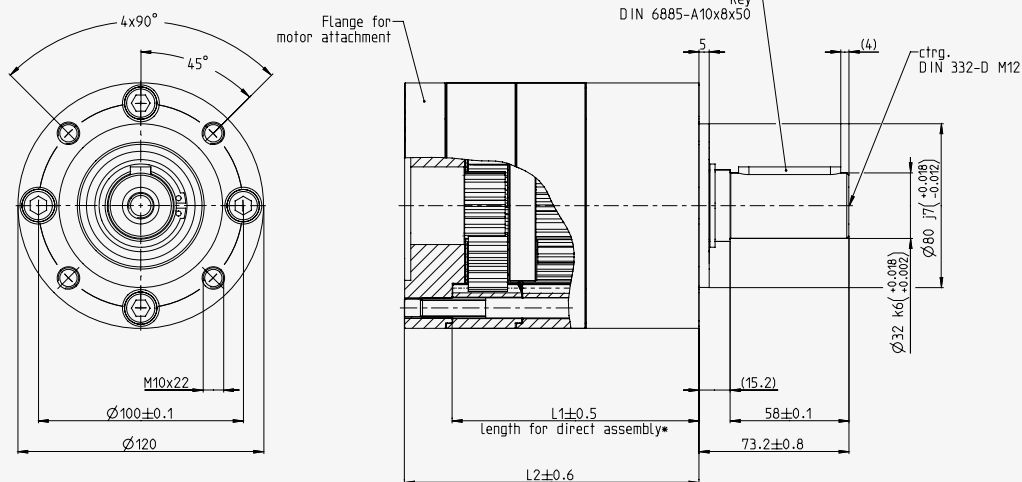


Temperature

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 $C_B = 1.0$)	50.0 Nm	150.0 Nm	300.0 Nm
Gearbox efficiency, approx.	0.80	0.75	0.70
Max. backlash	1.00 °DEG*	1.50 °DEG	2.00 °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

Pro LN	Pro LN	Pro LN
1-stage	2-stage	3-stage
4:1 (3.71)	14:1 (13.73)	51:1 (50.89)
7:1 (6.75)	25:1 (25.01)	93:1 (92.70)
	46:1 (45.56)	169:1 (168.85)
		308:1 (307.55)

Output side with ball bearing (2RS)	1-stage	2-stage	3-stage
Max. load, radial (Middle output shaft)	600 N	900 N	1,500 N
Max. load, axial	120 N	180 N	300 N
Max. perm.fitting pressure	2,500 N	2,500 N	2,500 N
Weight approx. with motor flange C105	5.6 kg	8.0 kg	10.4 kg

Gearbox length in	1-stage	2-stage	3-stage
Length 1 ^a	86.3 ± 0.5	120.45 ± 0.5	154.6 ± 0.5
Length 2 ^b	109.2 ± 0.6	143.4 ± 0.6	177.5 ± 0.6

^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.imsgea.com