

# PM 120 $\varnothing$ 120 mm, Metal

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
Min. Operating temperature	-30 °C	-30 °C	-30 °C
Max. Operating temperature	+120 °C	+120 °C	+120 °C

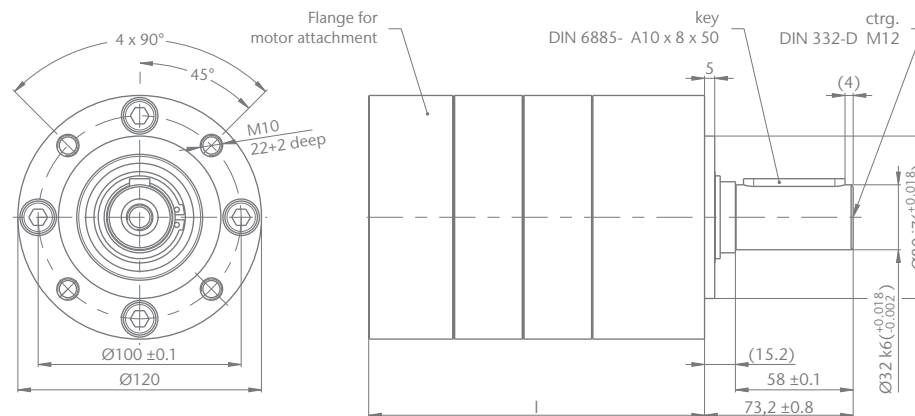
### Current reduction ratios $i$ rounded

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 mm	1-stage	2-stage	3-stage
Length $l^*$	$109.2 \pm 0.6$	$143.4 \pm 0.6$	$177.5 \pm 0.6$

\* The minimum length is only possible with an optimal attachment to the motor, the actual length we like to determine for you.



**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](http://www.imsgea.com)