

PM 42/LN Ø42 mm, Metal-Low-Noise

Parameter	1-stage	2-stage	3-stage
Perm. output torque T_{AB} (Appl. factor $C_B = 1.0$)	3.0 Nm	7.5 Nm	15.0 Nm
Gearbox efficiency, approx.	0.80	0.75	0.70
Max. backlash	0.90 °DEG*	0.95 °DEG	1.00 °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

* LN: 1,30 °DEG. For plastic PL wheels only! Impact of 1st stage for 2-4 stage versions is negligible.

Current reduction ratios i rounded

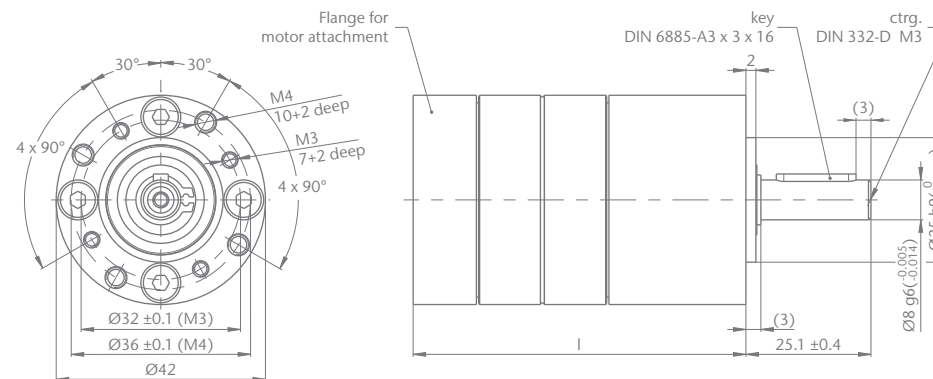
1-stage		2-stage		3-stage	
PM	LN	PM	LN	PM	LN
4:1 (3.71)	4:1 (3.65)	14:1 (13.73)	14:1 (13.53)	51:1 (50.89)	50:1 (50.16)
4:1 (4.29)	5:1 (4.59)	16:1 (15.88)	16:1 (15.65)	59:1 (58.86)	58:1 (58.01)
5:1 (5.18)	5:1 (5.36)	18:1 (18.37)	17:1 (17.00)	68:1 (68.07)	67:1 (67.08)
7:1 (6.75)	7:1 (6.55)	19:1 (19.20)	19:1 (18.92)	71:1 (71.16)	70:1 (70.13)
	9:1 (8.63)	22:1 (22.21)	23:1 (22.96)	79:1 (78.72)	81:1 (81.11)
	*13:1 (13.20)	25:1 (25.01)	25:1 (24.65)	93:1 (92.70)	91:1 (91.36)
		27:1 (26.85)	28:1 (27.76)	95:1 (95.18)	98:1 (98.07)
		29:1 (28.93)	28:1 (28.05)	100:1 (99.51)	102:1 (101.89)
		35:1 (34.98)	34:1 (33.92)	107:1 (107.21)	106:1 (105.65)
		46:1 (45.56)	45:1 (44.69)	115:1 (115.08)	115:1 (114.77)
			58:1 (58.22)	124:1 (123.98)	123:1 (123.20)
			*68:1 (68.40)	130:1 (129.62)	128:1 (127.74)
			*89:1 (89.10)	139:1 (139.14)	137:1 (136.99)
				150:1 (149.90)	145:1 (145.36)
				169:1 (168.85)	166:1 (166.40)
				181:1 (181.25)	176:1 (175.75)
				195:1 (195.27)	192:1 (191.54)
				236:1 (236.10)	232:1 (231.59)
				308:1 (307.55)	302:1 (301.68)
					393:1 (392.98)
					*462:1 (461.70)
					*601:1 (601.43)

* not all reduction ratios available ex-stock

Output side with ball bearing (2RS)	1-stage	2-stage	3-stage
Max. load, radial (Middle output shaft)	160 N	230 N	300 N
Max. load, axial	50 N	80 N	110 N
Max. perm.fitting pressure	320 N	320 N	320 N
Weight approx.	275 g	385 g	500 g

Gearbox length in mm	1-stage	2-stage	3-stage
Length l*	49.1 ± 0.5	62.2 ± 0.5	75.3 ± 0.5

* 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.imsgear.com