

TSL-GM12-C1215R Series

Micro DC Gear Motor - Product Specification

SERIES OVERVIEW

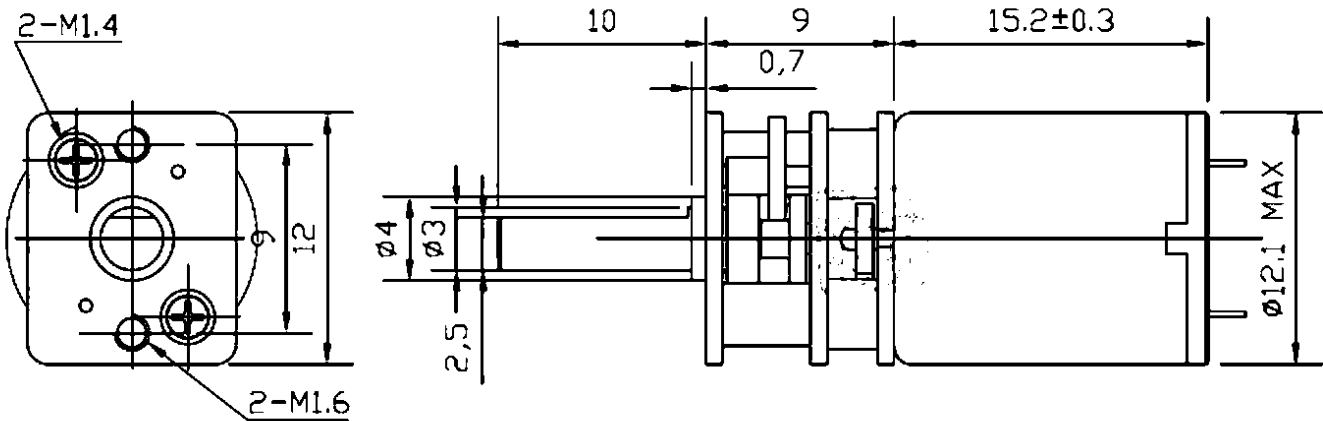
- Available rated voltages: 3 V DC, 6 V DC and 12 V DC Available
- gear ratios: 10:1 to 380:1
- Compact metal Spur gearbox with coreless brushed DC motor

ELECTRICAL OPTIONS

Model	Voltage	Power
TSL-GM12-C1215R	3 V DC	0.65 W
	6 V DC	0.35 W
	12 V DC	1.3 W

DIMENSIONAL DRAWING

All dimensions are in mm unless otherwise specified.



TSL-GM12-C1215R, 3 V DC, 0.65 W

Output performance by gear ratio

Ratio	No Load		Rated Load			Stall	
i : 1	Current	Speed	Current	Speed	Torque	Current	Torque
10:1	≤70mA	1750rpm	≤0.75A	870rpm	0.07kg.cm	≤1.6A	≥0.2kg.cm
20:1	≤70mA	870rpm	≤0.75A	430rpm	0.14kg.cm	≤1.6A	≥0.3kg.cm
30:1	≤70mA	580rpm	≤0.75A	290rpm	0.20kg.cm	≤1.6A	≥0.5kg.cm
50:1	≤70mA	350rpm	≤0.75A	174rpm	0.45kg.cm	≤1.6A	≥0.7kg.cm
100:1	≤70mA	175rpm	≤0.75A	87rpm	0.70kg.cm	≤1.6A	≥1.4kg.cm
150:1	≤70mA	115rpm	≤0.75A	58rpm	1.00kg.cm	≤1.6A	≥2.0kg.cm
210:1	≤70mA	83rpm	≤0.75A	40rpm	1.40kg.cm	≤1.6A	≤3.0kg.cm
298:1	≤70mA	58rpm	≤0.75A	20rpm	2.0kg.cm	≤1.6A	≤3.0kg.cm
380:1	≤70mA	46rpm	≤0.75A	15rpm	2.5kg.cm	≤1.6A	≤3.0kg.cm

Performance parameters are for reference only and can be customized according to customer requirements.

TSL-GM12-C1215R, 6 V DC, 0.35 W

Output performance by gear ratio

Ratio	No Load		Rated Load			Stall	
i : 1	Current	Speed	Current	Speed	Torque	Current	Torque
10:1	≤30mA	1050rpm	≤0.16A	600rpm	0.05kg.cm	≤0.45A	≥0.1kg.cm
20:1	≤30mA	530rpm	≤0.16A	300rpm	0.10kg.cm	≤0.45A	≥0.2kg.cm
30:1	≤30mA	360rpm	≤0.16A	200rpm	0.15kg.cm	≤0.45A	≥0.3kg.cm
50:1	≤30mA	210rpm	≤0.16A	120rpm	0.25kg.cm	≤0.45A	≥0.5kg.cm
100:1	≤30mA	107rpm	≤0.16A	60rpm	0.50kg.cm	≤0.45A	≥1.0kg.cm
150:1	≤30mA	70rpm	≤0.16A	40rpm	0.70kg.cm	≤0.45A	≥1.5kg.cm
210:1	≤30mA	50rpm	≤0.16A	28rpm	1.00kg.cm	≤0.45A	≥2.0kg.cm
298:1	≤30mA	36rpm	≤0.16A	20rpm	1.4kg.cm	≤0.45A	≥3.0kg.cm
380:1	≤30mA	28rpm	≤0.16A	15rpm	2.0kg.cm	≤0.45A	≥3.0kg.cm

Performance parameters are for reference only and can be customized according to customer requirements.

TSL-GM12-C1215R, 12 V DC, 1.3 W

Output performance by gear ratio

Ratio	No Load		Rated Load			Stall	
i : 1	Current	Speed	Current	Speed	Torque	Current	Torque
10:1	≤40mA	2150rpm	≤0.3A	1200rpm	0.1kg.cm	≤0.75A	≥0.2kg.cm
20:1	≤40mA	1050rpm	≤0.3A	600rpm	0.2kg.cm	≤0.75A	≥0.4kg.cm
30:1	≤40mA	720rpm	≤0.3A	400rpm	0.3kg.cm	≤0.75A	≥0.6kg.cm
50:1	≤40mA	430rpm	≤0.3A	240rpm	0.5kg.cm	≤0.75A	≥1.0kg.cm
100:1	≤40mA	215rpm	≤0.3A	120rpm	1.0kg.cm	≤0.75A	≥2.0kg.cm
150:1	≤40mA	140rpm	≤0.3A	80rpm	1.5kg.cm	≤0.75A	≤3.0kg.cm
210:1	≤40mA	100rpm	≤0.3A	57rpm	2.0kg.cm	≤0.75A	≤3.0kg.cm
298:1	≤40mA	72rpm	≤0.3A	50rpm	2.0kg.cm	≤0.75A	≤3.0kg.cm
380:1	≤40mA	56rpm	≤0.3A	45rpm	2.0kg.cm	≤0.75A	≤3.0kg.cm

Performance parameters are for reference only and can be customized according to customer requirements.