

TSL-36GP-555

Brushed DC Motor with Planetary Gearbox



Product Type	Brushed DC Motor with Planetary Gearbox
Nominal Voltage	12 VDC / 24 VDC
Motor Type	555 Brushed DC Motor
Gear Ratios	3.7:1, 5.18:1, 19:1, 27:1, 50:1, 71:1, 100:1, 139:1, 189:1, 262:1, 369:1, 516:1, 721:1
Gearbox Outer Diameter	Ø36 mm
Gearbox Length	27 / 33 / 39 / 45 mm (ratio-dependent)
Motor Body	Ø36 mm; 57 mm length
Output Shaft	Ø8 mm, D-shaped; 19 mm protrusion
Mounting	4 x M3 threaded holes

Single Motor Type

A 555 brushed DC motor is paired with the 36 mm planetary gearbox platform for compact high-torque output.

Thirteen Gear Ratios

Standard ratios from 3.7:1 to 721:1 provide broad output-speed and torque options for different motion requirements.

Two Voltage Options

12 V and 24 V windings are available. Performance values and mechanical details can also be customized upon request.

Performance Parameters - 12 VDC

Ratio	Rated Voltage V	No Load		Rated Load				Stall	
		Speed	Current	Speed	Current	Torque	Power	Torque	Current
		RPM +/-10%	A	RPM +/-10%	A	kg.cm	W	kg.cm	A
3.7	12	2160	0.52	1850	1.30	0.74	15	4.75	6
5.18	12	1544	0.53	1270	1.325	1.0	16	8	6
19	12	421	0.45	370	1.125	3.4	14	16.5	6
27	12	296	0.49	260	1.225	4.9	14.7	28.5	6
50	12	160	0.43	130	1.075	8.2	13	50	6
71	12	112	0.39	90	0.975	11.6	12	70	6
100	12	80	0.39	61	0.975	16.4	12	93	6
139	12	57	0.43	40	1.075	22.8	13	107	6
189	12	42	0.51	33	1.275	27.6	15	128	6
262	12	30	0.55	25	1.375	38.3	16.5	160	6
369	12	21	0.50	17	1.275	53.9	15	180	6
516	12	15	0.48	12	1.20	75.4	14	225	6
721	12	11	0.42	9	1.05	100	12.6	300	6

Performance parameters can be customized according to customer requirements. The values above are standard specifications.

Performance Parameters - 24 VDC

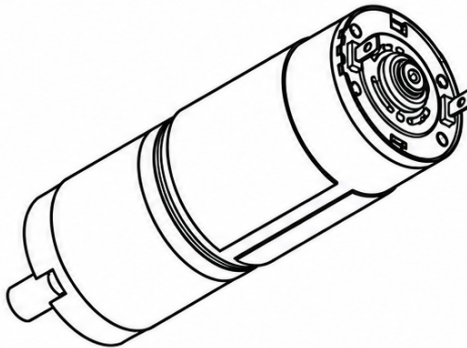
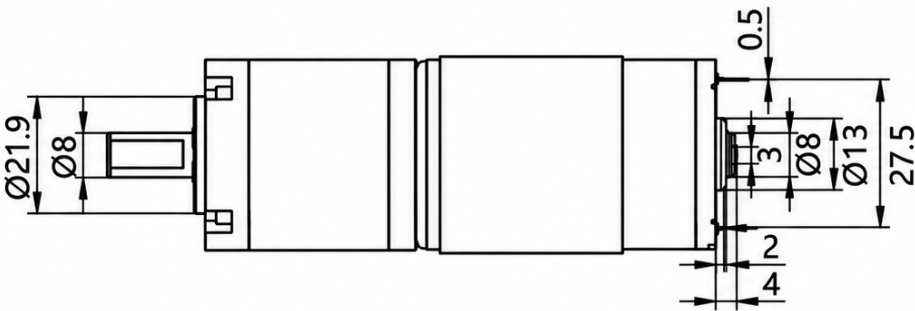
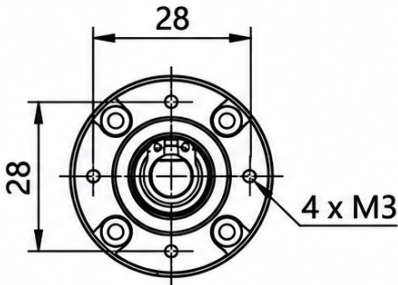
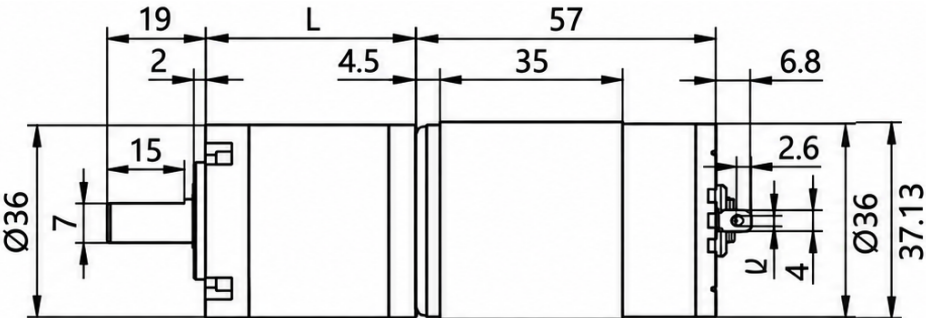
Ratio	Rated Voltage V	No Load		Rated Load				Stall	
		Speed	Current	Speed	Current	Torque	Power	Torque	Current
		RPM +/-10%	A	RPM +/-10%	A	kg.cm	W	kg.cm	A
3.7	24	2160	0.20	1845	0.70	0.86	16	4.3	7
5.18	24	1544	0.25	1290	0.75	1.2	18	7.6	7
19	24	421	0.21	378	0.70	4.0	16	18.5	7
27	24	296	0.25	266	0.75	5.6	18	28.7	7
50	24	160	0.32	140	0.82	9.4	24	53	7
71	24	112	0.33	91	0.82	13.4	24	72.5	7
100	24	80	0.21	70	0.70	18.9	16	90	7
139	24	57	0.30	50	0.75	26.3	18	102	7
189	24	42	0.31	37	0.75	31.9	18	150	7
262	24	30	0.25	26	0.75	44.2	18	175	7
369	24	21	0.26	18	0.75	62.3	18	200	7
516	24	15	0.24	12	0.75	87.2	18	250	7
721	24	11	0.29	8	0.75	100	18	300	7

Performance parameters can be customized according to customer requirements. The values above are standard specifications.

Mechanical Dimensions

All dimensions are in millimetres.

L Value Represents Housing Length for Different Gear Ratios													
Gear Ratio	3.7	5.18	19	27	50	71	100	139	189	262	369	516	721
L Dimension (mm)	27		33		39				45				



Item	Dimension
Gearbox Outer Diameter	Ø36 mm
Motor Body	Ø36 mm
Motor Body Length	57 mm
Gearbox Length L	27 / 33 / 39 / 45 mm
Output Shaft	Ø8 mm, D-shaped
Shaft Protrusion	19 mm
D-flat Length	15 mm
Mounting	4 x M3 threaded holes
Weight	374 / 408 / 443 / 479 g

The gearbox housing length varies with the selected reduction ratio. Output shaft geometry and mounting details are shown in the drawing. Customized shaft and mounting configurations are available upon request.