

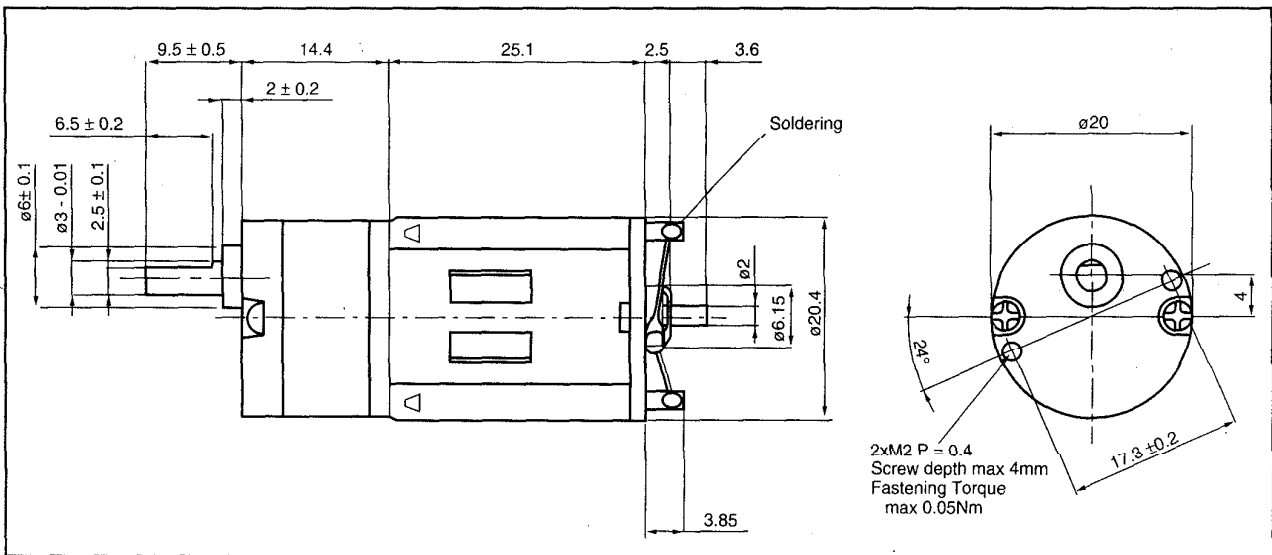


20GN compact DC Motor Gearhead

The Igarashi 20GN motor gearhead combination is designed for applications where small package size is a major design parameter. The 12V version of this extremely compact package will be stocked in large quantities in ratios of 50:1, 150:1 and 380:1. Other versions with supply voltages from 4 to 24V and alternative gear ratios are available to order. Measuring only 40mm long and weighing 30g the 20GN has a maximum axial load of 2N and the spur gearhead creates a maximum peak torque of 180mNm.

The 20GN is ideal for applications such as card reader mechanisms, small drawer actuators and general instrumentation equipment.

- Weight 30g
- DC permanent magnet motor
- Spur gearhead
- Voltage: 4 to 24V
- RFI suppression by capacitor
- Radial load max: 2.5N at 5mm from mounting surface
- Axial load max: 2N
- Axial play max: 0.5mm



Technical Data

Motor Gear Type	Nominal Voltage DC	Gear Ratio i	No-Load Speed rpm	Continuous Operation At Maximum Efficiency			Gear Peak Torque max. mNm
				Speed rpm	Current A	Torque mNm	
330-050	12	50	200	175	0,13	30	90
330-150	12	150	67	60	0,11	60	180
330-380	12	380	25	23	0,08	60	180

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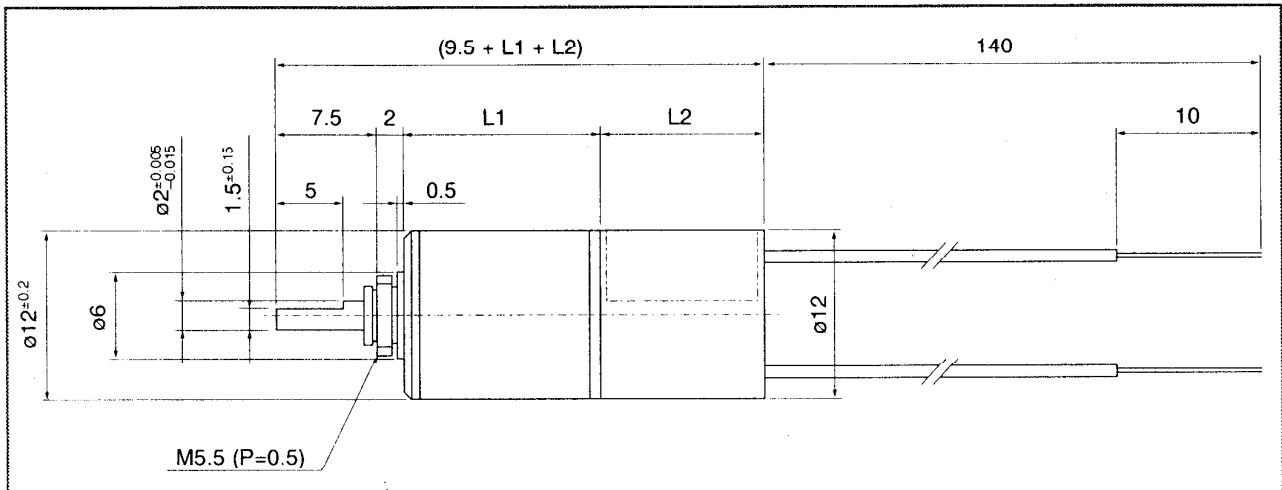
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12mm coreless DC motor fitted with spur gearheads

The SC12G is a high quality combination of a coreless DC motor and spur gearhead, that provides a extremely cost effective drive solution.

Available in 12 volts with 9 ratios providing a maximum rated torque of 19.6mNm it is ideally suited to a wide range of applications.



Part number	Ratio	Rated torque mNm	Rated torque kg-cm	Rated speed rpm	Rated current mA	No load speed rpm	No load current mA	L1 mm	L2 mm
SC12G-12-0015	15:1	2.45	0.025	889	55	1087	15	12	20
SC12G-12-0032	32:1	4.90	0.050	413	55	509	15	14.2	20
SC12G-12-0052	52:1	8.33	0.085	251	55	313	15	14.2	20
SC12G-12-0070	70:1	9.81	0.10	194	50	234	15	14.2	20
SC12G-12-0103	103:1	14.7	0.15	127	55	158	15	15.6	20
SC12G-12-0144	144:1	19.6	0.20	92	55	113	15	15.6	20
SC12G-12-0209	209:1	19.6	0.20	68	40	78	15	15.6	20

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PLANETARY GEARHEAD

Metal Version

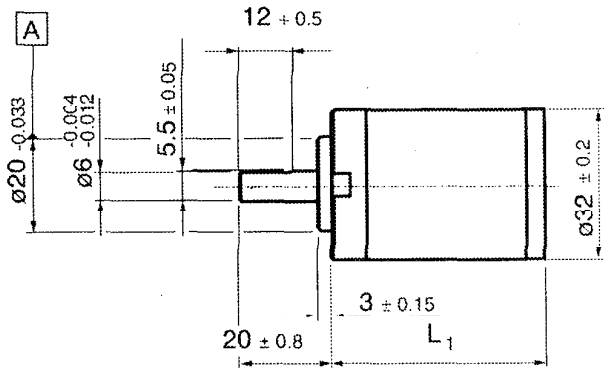
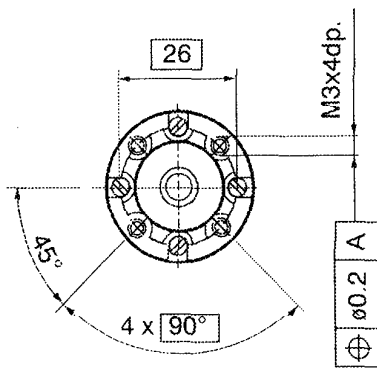
GP32. _ _ _ _

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General data		Product combinations				
Planetary gearhead		straight teeth	2-29/02			
Bearing at output		ball bearing	3-30/05			
Radial play, 5mm from flange		max. 0.08mm	3-38/14			
Axial play		max. 0.7mm				
Max. permissible axial load		120N				
Max. permissible force for press fits		120N				
Average backlash to load per stage		<0.9°				
Recommended input speed		<4000rpm				
Recommended temperature range		-20/+80°C				
		1 stage	2 stages	3 stages		
Max radial load 12mm from flange		70N	140N	210N		
Efficiency		80%	75%	70%		
Gearhead Order No	Ratio reduction	No of stages	Max Torque continuous Nm	Max Torque intermittent Nm	Weight G	L1 Length
GP32 0005	5.2:1	1	0.75	1.12	130	26.6
GP32 0019	19.2:1	2	2.25	3.37	170	36.10
GP32 0027	27:1	2	2.25	3.37	170	36.10
GP32 0035	35:1	2	2.25	3.37	170	36.10
GP32 0071	71:1	3	4.50	6.75	215	45.60
GP32 0100	100:1	3	4.50	6.75	215	45.60
GP32 0139	139:1	3	4.50	6.75	215	45.60
GP32 0181	181:1	3	4.50	6.75	215	45.60
GP32 0236	236:1	3	4.50	6.75	215	45.60

The ratios shown are stock ratios, there are many more options available please contact our technical department for more details.



Notes



DC MOTOR

14 watt

3-38/14 _ _

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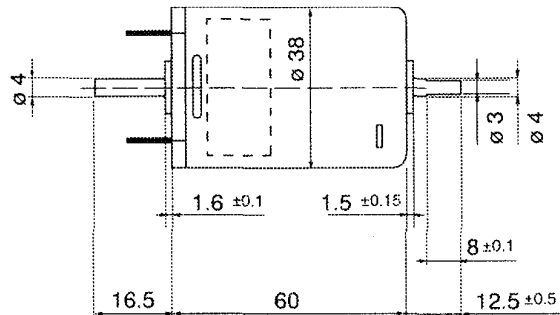
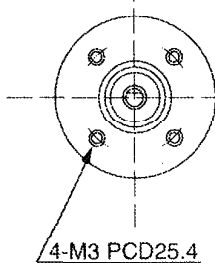
Stock Voltages		12	24
1. Voltage	V	12	24
2. Power Output	W	13.9	13.2
3. Rated Torque	mN-m	24.5	24.5
	g-cm	250	250
4. Rated Speed	r/min	5,400	5,150
5. Rated Current	mA	1,660	850
6. No load Speed	r/min	6,600	6,300
7. No. load Current	mA	205	110
8. Starting Torque	mN-m	137	134
	g-cm	1,400	1,370
9. Torque Constant	mN-m/A	16.9	33.1
	g-cm/A	172	338
10. Voltage Constant	V/1000r/min	1.8	3.5
11. Winding Resistance	Ω	1.7	5.9
12. Winding inductance	m H	0.9	3.7
13. Moment of Inertia	g-cm ²	39	39
14. Mechanical Constant	mS	23	21
15. Thermal Resistance	$^{\circ}\text{C/W}$	17	17

Product combinations

Gearheads GP32, GS40, GPP32, GS38

Encoders HEDS

Front Mounting Face



Notes

