

Light Duty DC Motors

Low Cost dc



- Three dc motors with different operating characteristics.

Order Code	599-104	599-116	599-128
Operating voltage range (Vdc)	1.5 to 3.0	1.5 to 4.5	2.4 to 4.5
Nominal voltage (Vdc)	1.5/3.0	1.5/3.0	3.0
No load speed (RPM)	8700/16300	3000/6300	9600
Direction of rotation *	Anti-clockwise	Clockwise	Clockwise
Current (A)	0.3/0.38	0.08/0.11	0.22
At maximum efficiency			
Speed (RPM)	6500/12000	2300/4900	7850
Current (A)	0.81/1.15	0.26/0.41	0.99
Torque (g/cm)	6.2/10.0	5.2/9.0	20.1
Efficiency %	33.9/35.6	38.3/46.0	55.2
Output (W)	0.41/1.23	0.14/0.51	1.64
Stall torque (g/cm)	24/44	21/44	112
Length inc. shaft	38	38	45
Diameter	20.1	23.8	24.2
Shaft length/dia.	7.7/2.0	6.9/2.0	10.4/2.0
Weight (g)	17g	28g	42g

* Viewed towards shaft

FM4

	Order Code	1+	25+	100+	250+	500+
High speed	599-104					
Medium torque	599-116					
High torque	599-128					

12 and 24 Vdc, 32 Diameter



- Motor max. power: 1 to 3.9W fitted with interference suppression
- Sintered-bronze bearings
- Pitch terminals axial connection 2.8mm
- Standard interference suppression



		309-1284	309-1326
Nominal voltage		12V	24V
No load characteristics			
Speed of rotation	rpm	5000	5000
Power consumption	W	1.2	1.92
Current consumption	A	0.1	0.98
Nominal characteristics			
Speed	rpm	3700	2000
Torque	mN.m	7.7	7.7
Rating power	W	3	3
Power consumption	W	6.2	6
Current consumption	A	0.43	0.26
Max. operating temperature	°C	50	50
Efficiency	%	48	50

MOT198

	Order Code	1+	3+	10+
12V	309-1284			
24V	309-1326			

Medium Duty Dc Motors

12 and 24 Vdc 42mm diameter



- For low speed drive applications
- Motor maximum power: 17W
- Sintered-bronze bearing.



		308-9496	308-9502
Nominal voltage		12V	24V
No load characteristics			
Speed of rotation	rpm	2960	2750
Power consumption	W	4.8	4.3
Current consumption	A	0.4	0.18
Nominal characteristics			
Speed of	rpm	2000	2000
Torque	mN.m	75	75
Rating power	W	15.7	15.6
Power consumption	W	30	26.4
Current consumption	A	2.5	1.1
Box warming	°C	44	40
Efficiency	%	52	59

MOT199

	Order Code	1+	3+	10+
12V	308-9496			
24V	308-9502			

12 and 24 Vdc, 63mm Diameter



- Motor maximum power: 33W
- Ø 63mm: with 2 ball bearings. Power supply through 2 output threads.
- For low speed driving applications



		308-9770	308-9782
Nominal Voltage		12V	24V
No load characteristics			
Speed	rpm	2100	2100
Power consumption	W	4.8	4.8
Current consumption	A	0.4	0.2
Nominal characteristics			
Speed	rpm	1500	1500
Torque	mN.m	172	172
Rating power	W	27	27
Power consumption	W	43	45
Current consumption	A	3.6	1.9
Max. operating temperature	°C	50	50
Efficiency	%	62	60

MOT200

	Order Code	1+	3+	10+
12V	308-9770			
24V	308-9782			

12 and 24 Vdc, 42mm and 63mm Diameter



- For applications demanding high power
- Motor maximum power: 42 to 255W
- Ø 42mm: Sintered-bronze bearing. Power supply through 2 input springs
- Ø 63mm: with 2 ball bearings. Power supply through 2 input springs



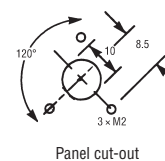
		308-9939	308-9940	308-9952
Types				
Nominal voltage		12V	24V	24V
No load characteristics				
Speed	rpm	4150	4050	3700
Power consumption	W	7.32	7.44	10.8
Current consumption	A	0.61	0.31	0.45
Nominal characteristics				
Speed	rpm	3100	3200	3200
Torque	mN.m	100	100	270
Rating power	W	32.5	33.5	90
Power consumption	W	51	52	120
Current consumption	A	4.25	2.15	5
Max. operating temperature	°C	63	54	50
Efficiency	%	63	64	75

MOT201

	Order Code	1+	3+	10+
12	42 308-9939			
24	42 308-9940			
24	63 308-9952			

12 Volt dc Servo

AIRPAX



Body: L = 39.5, Dia. = 29.
Shaft = 7.5 3.0 dia.

- Designed for low noise, smooth running and accurate speed applications
- Ironless rotor, low inertia and high starting torque
- Suitable gearboxes also available **Page 1046**

Current @ no load	56mA	Starting torque	30mNm
Current @ nominal torque	164 to 238mA	Nominal torque	5mNm
Nominal operating voltage	12V dc	Direction or rotation	Reversible
Maximum voltage	15V dc	Operating temperature	-10°C to +60°C

Shaft Speed (RPM)	Mfrs. List No.	Order Code
3000	9904-120-18105	147-875

FM10