

DC Carbon-brush motors

PG28M395 Geared Motor Series

PG28 1:16

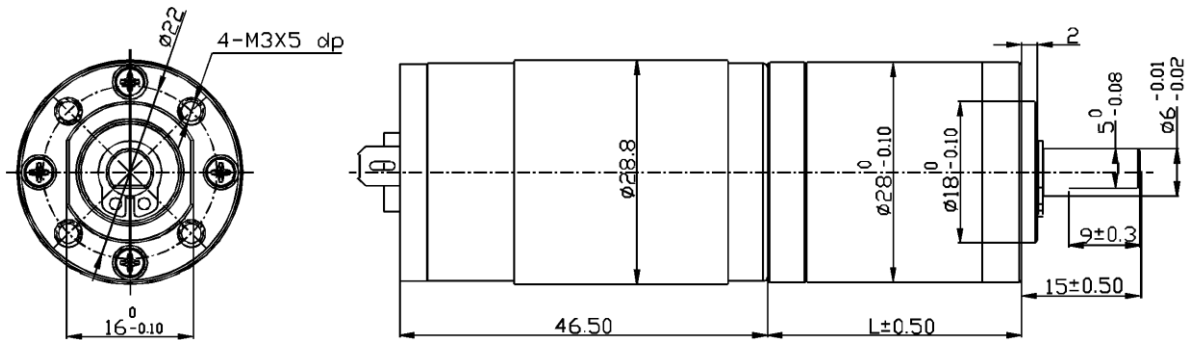
750Rpm



Typical applications:

Peristaltic pump, Micro CNC equipment, ATM bank automatic system, Card conveyors, Auto shutter, Binding machine, Mimeograph, Office equipment, Household appliances, Automatic actuator.

Appearance size



Gearbox data

Number of stages	1 stages reduction	2 stages reduction	3 stages reduction	4 stages reduction	5 stages reduction
Reduction ratio	4 4.75	16 19 22.5	64, 76, 90, 107,	256, 304, 361, 428, 509,	1024, 1216, 14, 1715, 2036, 2418.
Gearbox length L mm	22	27.1	32.2	37.3	42.4
Max. Running torque	2.0Kg f · cm	3.0Kg f · cm	4.0Kg f · cm	6.0Kg f · cm	10Kg f · cm
Max. Gear breaking torque	6.0Kg f · cm	9.0Kg f · cm	12Kg f · cm	18Kg f · cm	30Kg f · cm
Gearing efficiency	90%	81%	73%	65%	59%

Motor data

Motor name	Rated Volt. V	No load		Load torque			Output power W	Stall torque	
		Current mA	Speed r/min	Current mA	Speed r/min	Torque gf cm		Torque gf cm	Current mA
RS-395123000	12	60	3000	250	2200	65	1.4	260	800
RS-395124500	12	90	4500	430	3300	80	1.4	320	1400
RS-395126000	12	130	6000	750	4500	105	1.4	420	2600
RS-395243000	24	40	3000	120	2200	65	1.4	260	400
RS-395244500	24	50	4500	220	3300	80	2.6	320	700
RS-3952412000	24	70	12000	380	6000	150	4.7	820	1400

- 1 Please refer to motor RS-395 for the motor graph.
- 2 After connecting motor and gearbox which is named gearmotor the output torque: motor torque X reduction ratio X gearing efficiency; output speed: motor speed / reduction ratio.

NOTE

- 1、 Gearmotor named methods: e.g. PG28M395123000-90K Motor please refer to the motor data RS-395123000. Gearbox please refer to gearbox data reduction ratio 90. Related to gearmotor output speed and torque please refer to motor data.
- 2、 Motor can be installed with magnetic encoder.
- 3、 Standard output shaft after reducing: $\Phi 8.0$ mm. other sizes of the output shaft can make as client request.
- 4、 Chart only for reference, products shall prevail the entity.

ENCODERS MAGNETIC SERIES

● Two Channel Hall Effect Encoder

★ Operating relative humidity: 20% ~ 85%RH

★ Operating temperature range: $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$



Ω

℃

μ

Appearance size

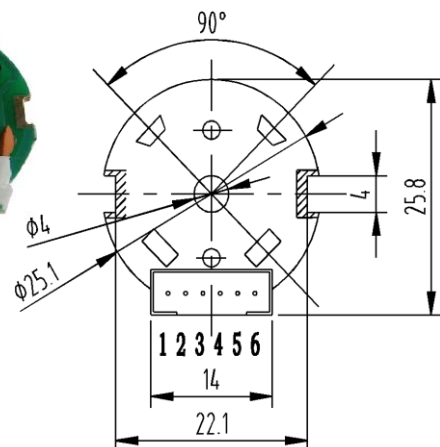


JST PHR-6
P=2.0-6P

Two Channel Encoder
Connections :

1. MOTOR-
2. MOTOR+
3. HALL SENSOR Vcc
4. HALL SENSOR GND
5. HALL SENSOR A Vout
6. HALL SENSOR B Vout

*The encoder mainly install on the Motor of RS-385, 395
*Each turn output 3PPR, 7PPR, 12PPR, 7PPR



ELECTRICAL CHARACTERISTICS

At $V = 24\text{V}$ with 20mA load with $T_a = -40^{\circ}\text{C}$ to 125°C [-40°F to 257°F] unless otherwise noted.

CHARACTERISTICS	SYMBOL	TEST CONDITIONS	MIN	REF	MAX	UNITS
Supply Voltage	Vcc	---	4.5	--	24	V
Supply Current	Ice	---	--	14	20	mA
Output Current	Ic	Vce=12V; Gauss<-170	--	-0.1	20	mA
Output Leakage Current	Icex	Output open;25 [77°F]	--	--	10	A
Output Rise Time	Tr	RL=820 ; CL=20pF;25	--	0.5	1.5	S
Output Fall Time	Tf	RL=820 ; CL=20pF;25	--	0.2	1.5	S