

# Athlonix™ DCP/DCT



## Brush DC Coreless Motors

When you need excellent price to performance ratio for critical applications

One design definitely does not fit all. Some applications require more power density in a small package while others are more cost sensitive. That's why we created the **Athlonix DCT and DCP** series of Brush DC coreless motors. Get the price to performance you need, while gaining increased reliability, improved life time, and improved efficiency.



### DCP line:

Optimized for medium performances in  
16mm and 22mm frame sizes

#### Recommended applications:

- Medical analyzers
- Pipettes
- Diaphragm pumps
- Watch winders
- Portable gas analyzers
- Security & access



### DCT line:

Optimized for higher performances in  
16mm, 17mm, 22mm, 24mm frame sizes

#### Recommended applications:

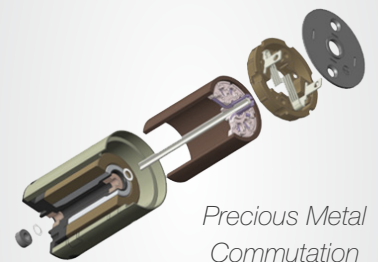
- Medical analyzers - conveyor
- Single use surgical tools
- Humanoid robots
- Tattoo machines
- Pumps
- Medical injectors

#### Customization Services

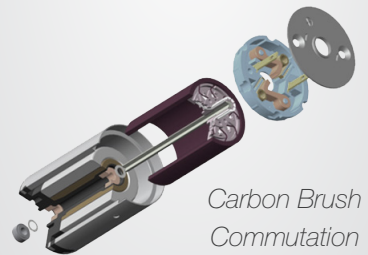
- ✓ Shaft length
- ✓ Fixation holes
- ✓ Ball bearing assembly with preload and special stop ring
- ✓ Value adds like Timer Belts, Pulleys etc
- ✓ Cable and connectors
- ✓ Laser welded ball bearing option
- ✓ Fiber coated coils rated 125° C for high performance
- ✓ Closed cover and cable clamp options

*More customizations available on request.*

**DCP** and **DCT** motors are available with precious metal commutation for high efficiency or with graphite commutation for high current density and PWM drive.



*Precious Metal  
Commutation*

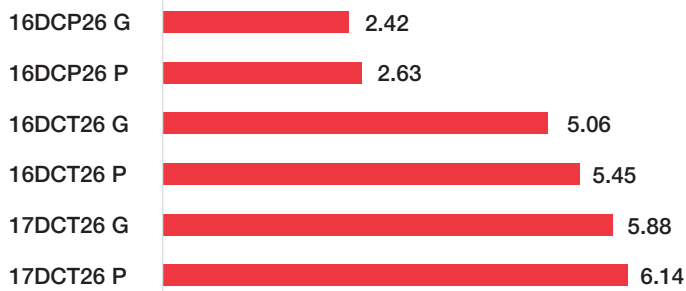


*Carbon Brush  
Commutation*

## Typical performance

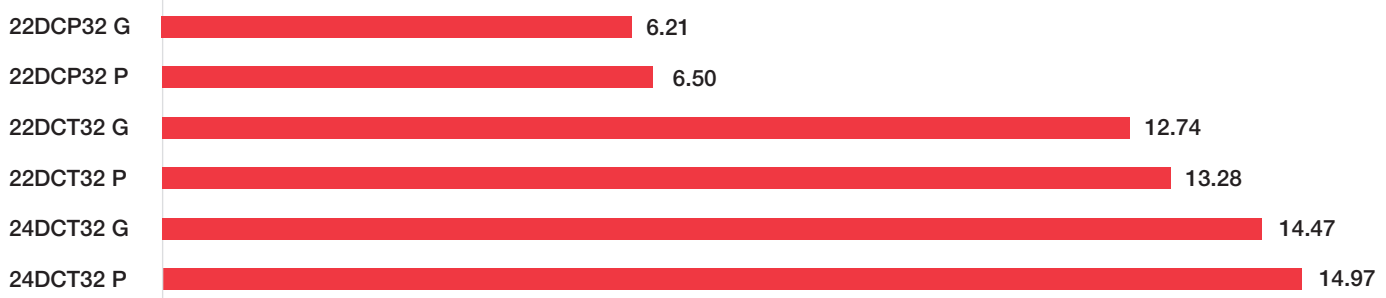
Model	16DCP	16DCT	17DCT	22DCP	22DCT	24DCT
Diameter (mm)	16	16	17	22	22	24
Length (mm)	26	26	26	32	32	32
Nominal Voltage	3 V to 24 V	3 V to 48 V	3 V to 48 V	3 V to 48 V	3 V to 48 V	3 V to 48 V
Max. Recommended Continuous Speed (rpm)	10,000	10,000	10,000	10,000	10,000	10,000
Max. Continuous Torque (mNm)	2.63	5.45	6.14	6.5	13.28	14.97
Motor regulation R/K2 (103/Nms)	239	52	60	57	11	11
Rotor Inertia (g.cm <sup>2</sup> )	1	1	1	4.7	4.7	4.7
Mass (g)	23	23	27	58	65	72
Gearboxes		R16, B16, BA16			R22, R22HT, K24, K27	
Encoders		MR2			MR2, E9	

### Ø16-17mm Maximum Continuous Torque (mNm)\*

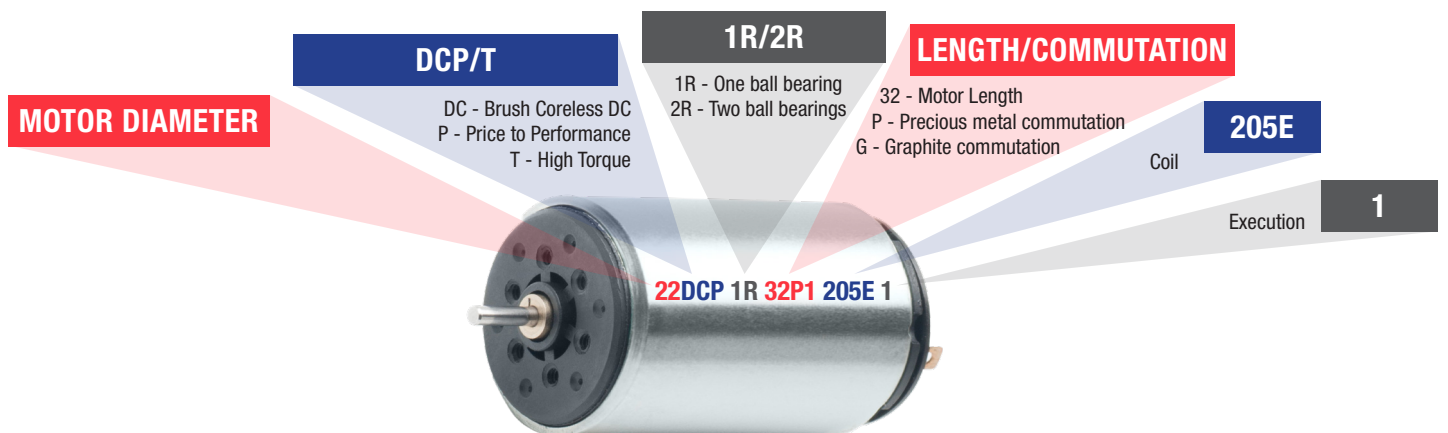


\* Max Continuous Torque for standard coil. Coil with Fiber coating increases continuous torque by 10%.

### Ø22-24mm Maximum Continuous Torque (mNm)\*



## Motor Designation



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# Portescap