

HC-PQ SERVO MOTOR



*Low Inertia Servo Motor*

*30W - 400W*

# HC-PQ - A GIANT LEAP UP FROM STEPPER PERFORMANCE

The HC-PQ motor range design utilises the latest developments in motor technology. With rare earth permanent magnets and concentrated winding techniques, this extremely compact motor provides high torque across a wide speed range.

When used in conjunction with the MR-C digital servo amplifier it becomes a powerful solution to take stepper applications to much higher levels of performance.

## Other Features

In addition to its compact design, the HC-PQ motor range also incorporates other features that ensure superior performance.

**Incremental encoders** - Closed loop systems provide much higher levels of accuracy and repeatability. With incremental encoders with a resolution of 4000 pulses per rev, the HC-PQ motor range gives smooth, accurate performance.

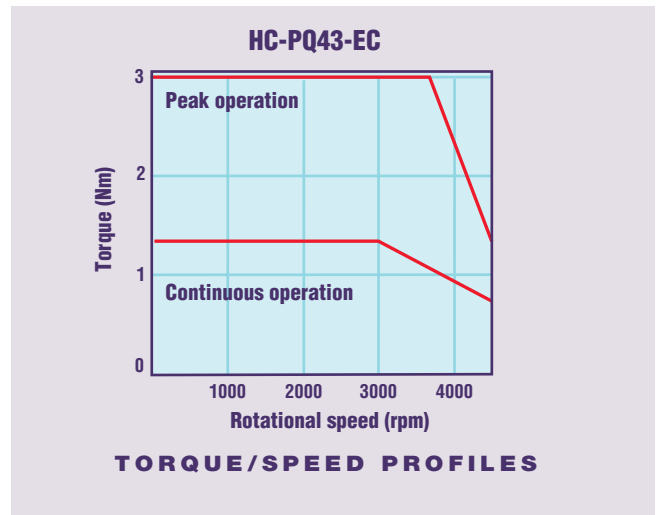
**Serial communication** - The encoders are linked to the servo amplifier by serial communications increasing the immunity to noise and reducing the cable diameter.

**Applications** - Low power servo and stepper applications are numerous and include:

- Textile machines
- Electronic assembly

- Printing machines
- Indexing applications

**Performance** - The graph below represents a typical torque speed profile for the HC-PQ motor range, with the continuous torque levels across the whole speed range.



Servo motor	HC-PQ		033	053	13	23	43
Servo amplifier	MR-C		10A	10A	10A	20A	40A
Continuous duty	Rated output (kW)		30	50	100	200	400
	Rated torque	Nm	0.095	0.16	0.32	0.64	1.27
Kgf.cm		0.97	1.62	3.25	6.5	13.0	
Rated speed	Rpm		3000				
Maximum speed	Rpm		4500				
Maximum torque	Nm		0.38	0.64	1.28	1.92	2.92
	Kgf.cm		3.88	6.48	13.0	19.5	29.2
Moment of inertia - J	Kg.cm <sup>2</sup>		0.014	0.019	0.03	0.089	0.145
	- GD <sup>2</sup>		0.057	0.074	0.12	0.35	0.57
Recommended load to rotor inertia ratio	30 times or less						
Power supply capacity	KVA		0.1	0.2	0.3	0.5	0.9
Rated current	A		0.85	0.85	0.85	1.5	2.8
Maximum current	A		5.0	5.0	5.0	6.0	6.44
Speed/position detector	Encoder (resolution 4000 pulses per rev.)						
Structure	Totally enclosed, self cooled, IP44						
Weight	Kg		0.32	0.37	0.50	0.96	1.42



**THE POWER TO INTEGRATE**



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