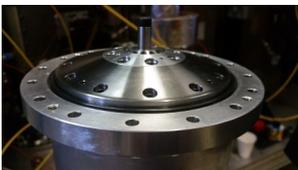
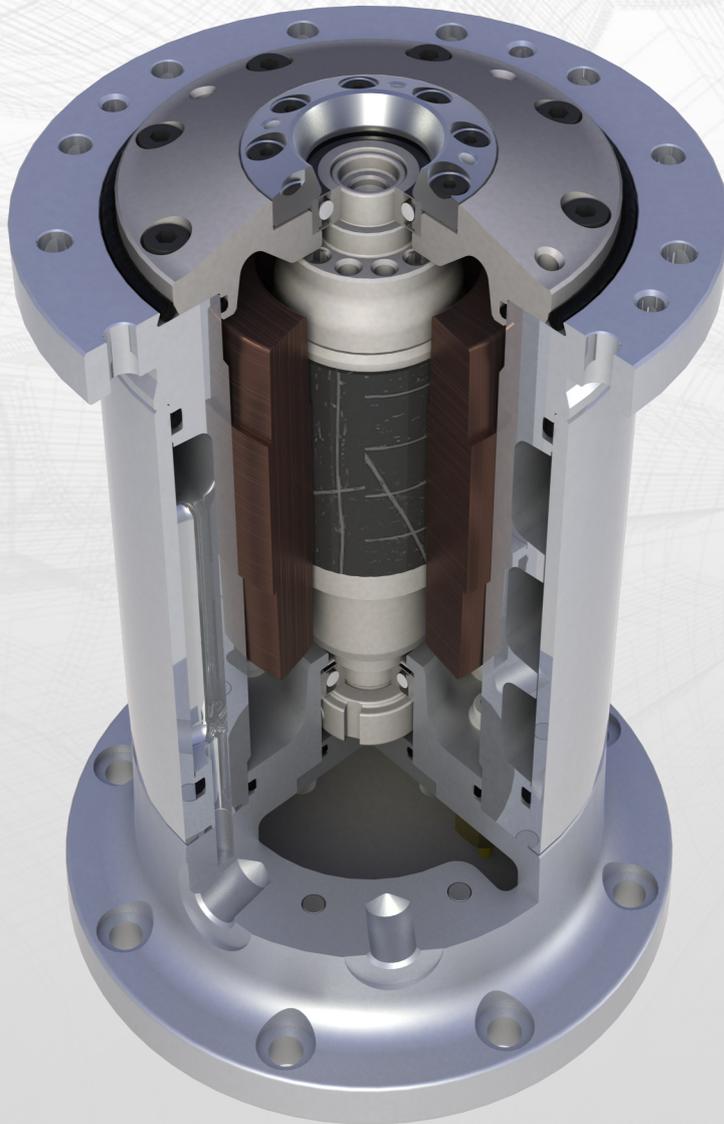


DBS 'M' Series High-Speed Motors and Generators



Three phase synchronous or asynchronous
Grease packed or oil lubricated
Semi-hermetic sealing
20 to 75 krpm



DBS 'M' Series Motors and Generators

Fields of Application

Standalone high speed rotating machinery of all types especially where direct overhang of driven or driving components is required. The IAM series is equally suitable for motor or generator applications.

Design

High power density and high speed capability with liquid cooling and oil lubricated ball bearings as standard. All machines exceed IE4 [Super premium efficiency] as per EU motor efficiency standard IEC/EN 60034-30-1: 2014. All machines are IP54 rated (up to IP67 on request). 3 phase, permanent magnet or induction machines available.

Proprietary VFD drives available from a number of suppliers to suit customer compliance requirements. Proprietary front flange with captive 'O' ring seal provides precise, concentric location. All key mechanical ancillaries incorporated directly into machine:

Special Customer Requirements

Where rotational speed, power or other operational requirement fall outside our normal range of machines, DBS will be pleased to quote for bespoke designs.

Operating Range

See page 4 for full operating range and performance graphs.

- Nominal Power: 1-150kW
- Nominal Speed: 30-100kRPM
- Operating temperature: -60/+70°C
- Operating pressures up to 40barg (580psi)*

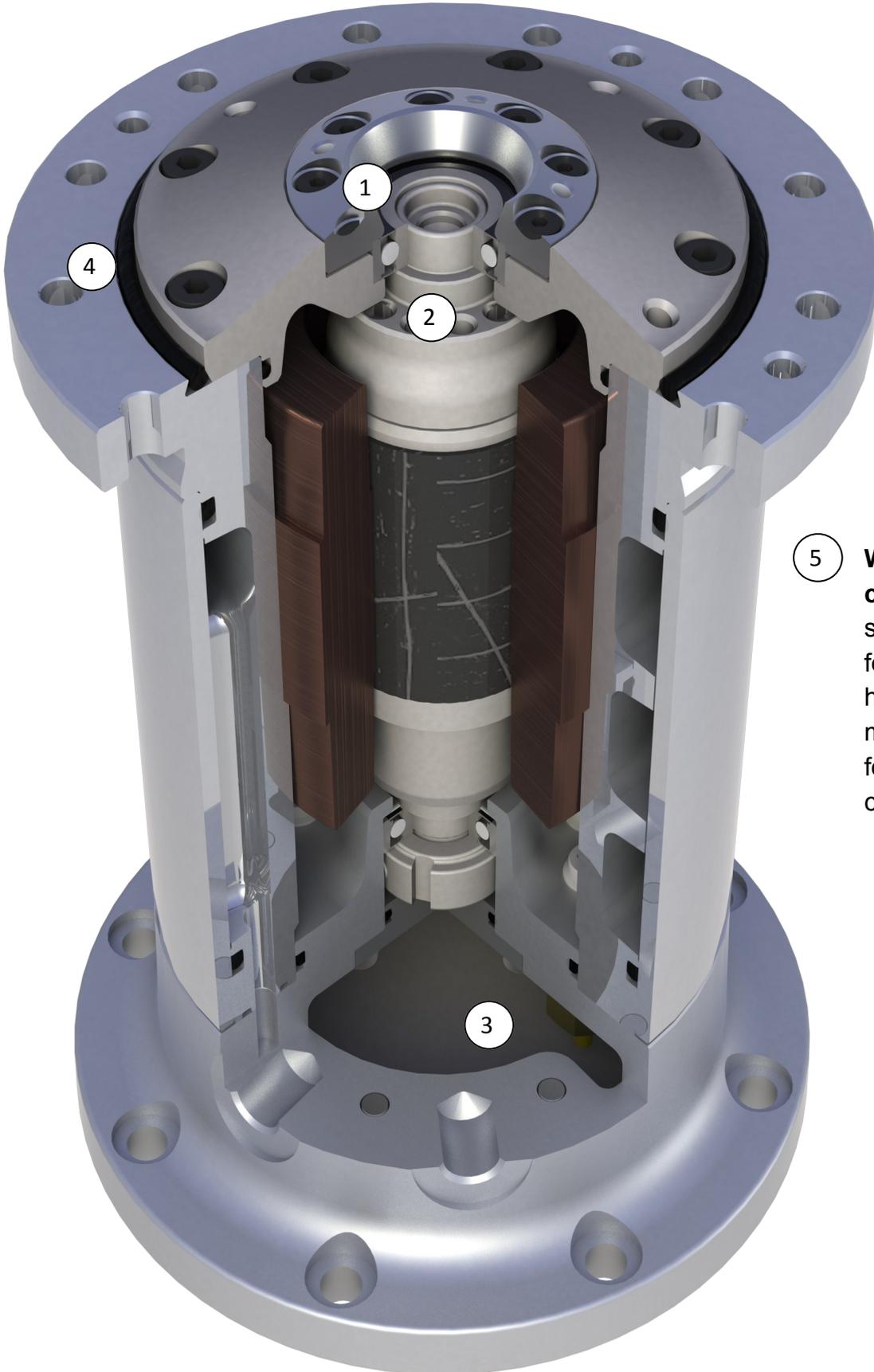
* Dependant on the compatibility of working fluid of the driven machine with the bearings.

1 **Keyed shaft end provided as standard.** Special shaft ends to suit customer requirements available on request.

2 **Super precision, angular contact ball bearings** support magnetic rotor and overhung driven components. Bearings sized to withstand substantial radial and axial loads to meet customer requirements if required.

3 **Integrated terminal box** includes stud terminals for all power and sensor connections.

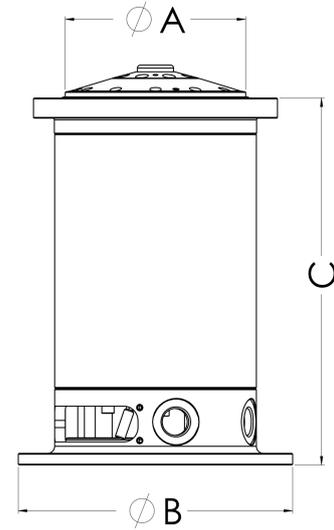
- 4 **DBS standard flange face** provides accurate location concentric and square with rotor shaft. Incorporates captive 'O' ring seal rated to body design pressure.



- 5 **Water, oil or glycol cooling** to remove stator heat. Coolant is fed first through hairpin heat exchanger mounted inside oil tank for simultaneous oil cooling.

Selection Chart

The table below shows the range of powers and speeds that we offer. Standard frame sizes and/or machine properties can be adjusted to suit customer requirements. The examples are there to show indicative lengths. Please note: All values are indicative, it is possible to exceed powers and speeds in certain cases. Please direct enquiries to enquiries@dynamicboost.com



Frame Size**	Rated Power Range [kW]	Maximum Speed [rpm]		Example Rating	Dimensions [mm]		
		Grease	Oil		A	B	C*
M80	1 - 10	75,000	110,000	2.35kW @110kRPM	80 h6	114	160
				3.5kW @110kRPM			175
				4.7kW @100kRPM			190
				6.3kW @90kRPM			210
M125	5 - 30	55,000	75,000	10kW @75kRPM	125 h6	190	230
				16kW @68kRPM			250
				21kW @60kRPM			270
				29kW @55kRPM			300
M170	10 - 60	45,000	70,000	12kW @60kRPM	170 h6	243	230
				20kW @50kRPM			260
				27kW @45kRPM			290
				35kW @45kRPM			330
M240***	30 - 150	30,000	45,000	55kW @50kRPM	240 h6	344	300
				85kW @45kRPM			340
				105kW @40kRPM			380
				125kW @40kRPM			400

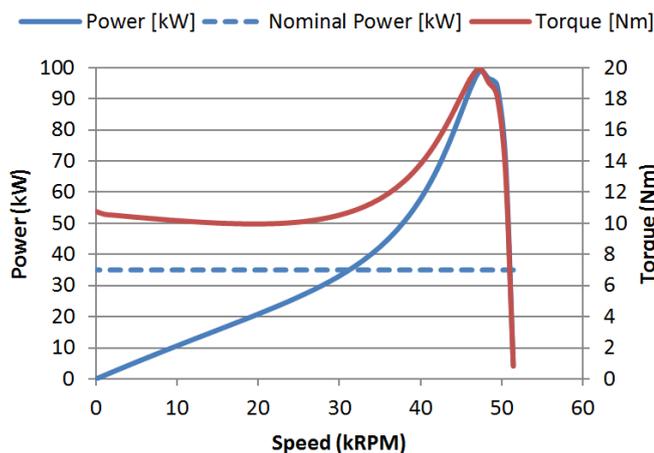
*Length dimension C has been provided for water cooled motors, air cooled versions are also available.

** Special custom sizes such as M60 & M100 available upon request. *** Custom larger motors are also available upon request.

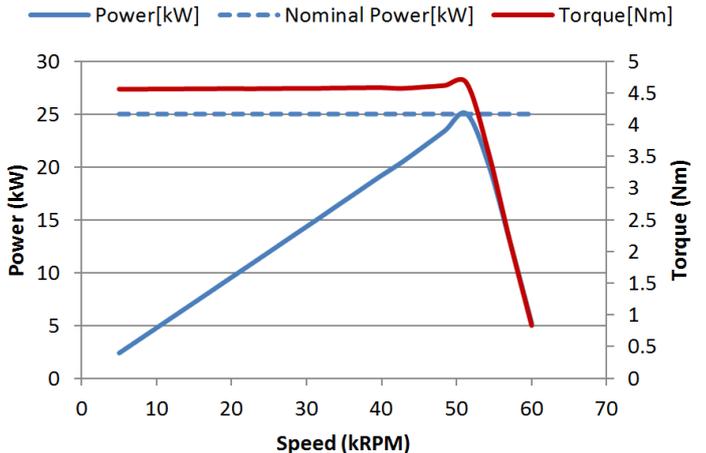
Performance Curves

Typical performance curves for our synchronous and asynchronous machines are shown below. A set of performance curves and equivalent circuit are supplied with each quotation.

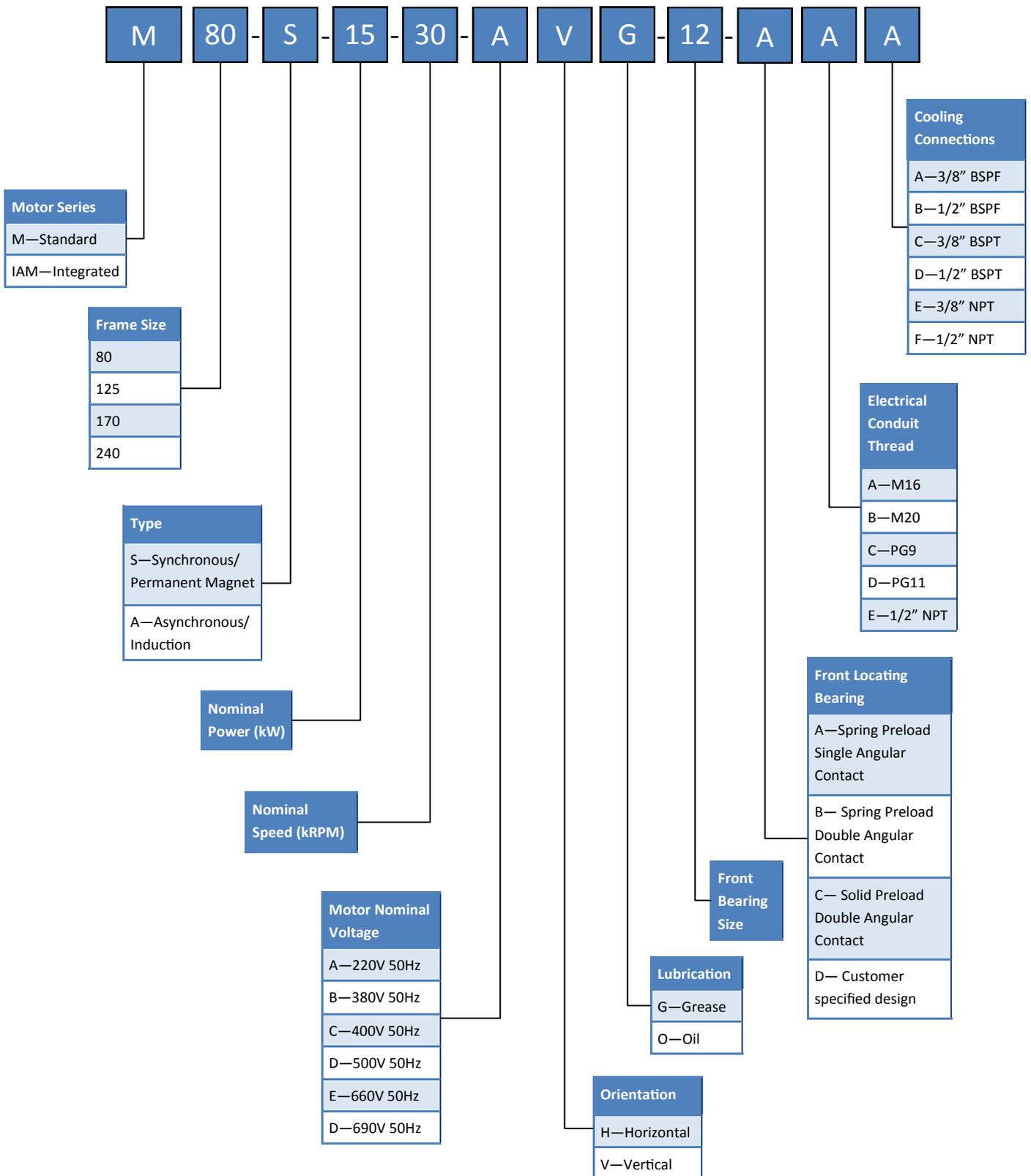
Asynchronous/Induction 35 kW, 50kRPM



Synchronous/Permanent Magnet 25 kW, 50kRPM



Order Code & Scope of Supply



Order Code Example: M80-S-15-30-CVG-12-1-12-ABB

The scope of supply would be: M series motor/generator; DBS 80 frame size; Synchronous; 15kW; 30kRPM; 400 motor nominal voltage; vertical mount; grease packed bearings; 12 mm single angular contact front locating bearing; M20 conduit connection ; 1/2" BSPT threaded cooling connections.



Head Office:

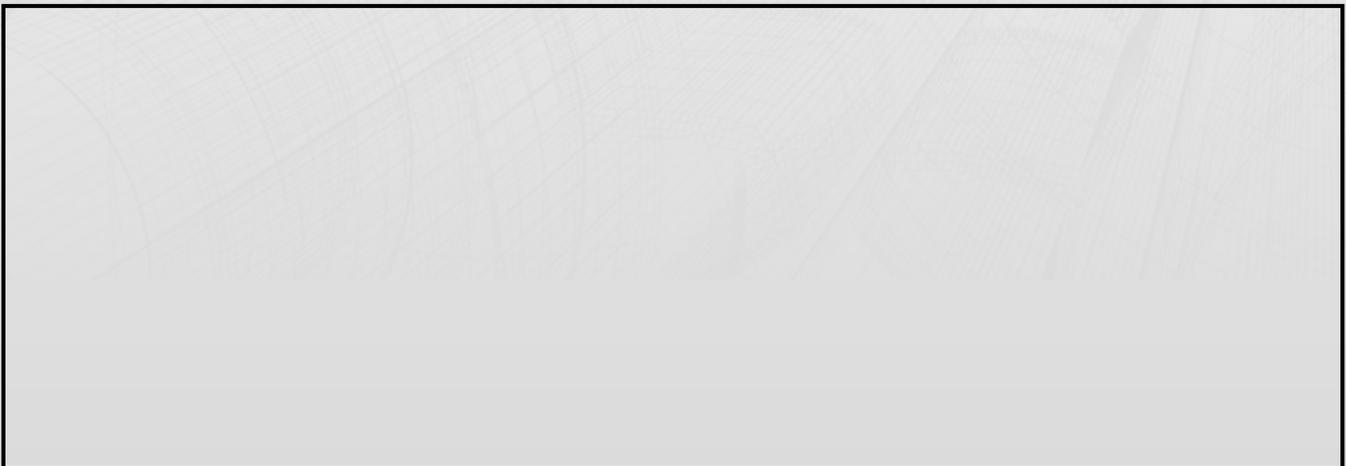
Dynamic Boosting Systems,
10 Canbury Business Centre
Elm Crescent
Kingston upon Thames,

Surrey, KT2 6HJ
United Kingdom

Phone:+44 (0) 20 3417 4686 / +44 (0) 20 8546 6372

Email: enquiries@dynamicboost.com

Presented by:



This document is for informational purposes only and should not be considered as a binding description of the products or their performance in all applications. The performance data in this document depicts typical performance under controlled conditions. Actual performance may vary depending on the operating environment and application. Contact DBS to confirm suitability of the product for your application.