CONFIGURABLE PRE-ENGINEERED DOWNHOLE MOTORS

Help reduce non-productive time (NPT) service costs with the Moog DH Series Pre-Engineered Motors



PRE-ENGINEERED DOWNHOLE BRUSHLESS SERVO MOTORS

Reduce your new downhole tool development time, shorten time to market, and increase productivity with our DH Series Pre-Engineered Motors. Available in a variety of sizes with standard configurations, you can develop a highly reliable drlling tooling equipped to stand up to high environmental pressures (1,723 bar/25,000 PSI) and max winding temperatures (220° C/ 425° F). All motors are encased in a shock and vibration resistant housing for maximum durability and equipment life.

Five pre-engineered motors available in sizes 10 to 28 are available

MOTOR SIZE	10	16	19	23	28
Outer Diameter mm (in)	26 (1.02)	42 (1.65)	49 (1.93)	60 (2.36)	73 (2.88)
Continuous Output Power Wattage	60	500	1,040	1,500	2,500
Operating Terminal Peak Voltage	48	100	100	650	650

ADVANTAGES

- Brushless motors capable of operating in severe duty HPHT downhole service tool environments including temperature, shock, vibration, pressure, fluid filled environments, and more
- Proven downhole brushless motor technologies with Moog downhole application knowledge, experience and support
- Faster return on investment (ROI) on your projects with proven and tested designs



MOOG

SIZE 10 MOTOR

Outside Diameter: 26 mm (1.02 in) Continuous Output Power: Up to 60 Watts Operating Terminal Peak: 48 Volts

PRODUCT DIMENSIONS

Motor without Gearbox



Motor with Gearbox



Dimensions: mm (in.)

PERFORMANCE CURVES



 $Operating \ Environment: \ Motor \ fully \ immersed \ in \ synthetic \ lubrication \ oil \ at \ 25,000 \ PSI \ (1,723 \ Bar) \ pressure \ and \ up \ to \ ambient \ temperature \ of \ 175^{\circ} C \ (347^{\circ} \ F).$

SIZE 16 MOTOR

Outside Diameter: 42 mm (1.65 in) Continuous Output Power: Up to 500 Watts Operating Terminal Peak: 100 Volts

PRODUCT DIMENSIONS

Motor without Gearbox



Motor with Gearbox



Dimensions: mm (in.)

PERFORMANCE CURVES



 $Operating \ Environment: Motor \ fully \ immersed \ in \ synthetic \ lubrication \ oil \ at \ 25,000 \ PSI \ (1,723 \ Bar) \ pressure \ and \ up \ to \ ambient \ temperature \ of \ 175^{\circ} C \ (347^{\circ} \ F).$

SIZE 19 MOTOR

Outside Diameter: 49 mm (1.93 in) Continuous Output Power: Up to 1,040 Watts Operating Terminal Peak: 100 Volts

PRODUCT DIMENSIONS

Motor without Gearbox



Motor with Gearbox



Dimensions: mm (in.)

PERFORMANCE CURVES



 $Operating \ Environment: \ Motor \ fully \ immersed \ in \ synthetic \ lubrication \ oil \ at \ 25,000 \ PSI \ (1,723 \ Bar) \ pressure \ and \ up \ to \ ambient \ temperature \ of \ 175^{\circ} C \ (347^{\circ} \ F).$

SIZE 23 MOTOR

Outside Diameter: 60 mm (2.36 in) Continuous Output Power: Up to 1,500 Watts Operating Terminal Peak: 650 Volts

PRODUCT DIMENSIONS

Motor without Gearbox





Dimensions: mm (in.)

PERFORMANCE CURVES



Operating Environment: Motor fully immersed in synthetic lubrication oil at 25,000 PSI (1,723 Bar) pressure and up to ambient temperature of 175° C (347° F).

SIZE 28 MOTOR

Outside Diameter: 73 mm (2.88 in) Continuous Output Power: Up to 2,500 Watts Operating Terminal Peak: 650 Volts

PRODUCT DIMENSIONS

Motor without Gearbox





Dimensions: mm (in.)

PERFORMANCE CURVES



Operating Environment: Motor fully immersed in synthetic lubrication oil at 25,000 PSI (1,723 Bar) pressure and up to ambient temperature of 175° C (347° F).

PRODUCTS FOR TODAY'S TOUGHEST ENVIRONMENTS IN OIL & GAS EXPLORATION



Motion-control technologies are a linchpin for helping oilfield services firms precisely hit a target depth or lateral position. But designing for precision is not enough. That's because the speed and reliability of downhole equipment impacts your overall profitability.

When it comes to choosing the right products for your downhole application, rely on the extensive experience of Moog engineers. In every solution, our team brings with them decades of knowledge designing severe duty products in applications that range from heavy industry to space and defense.

MOTOR FEATURES

- Highly accurate feedback delivered via a two-pole resolver
- RTD 1000 Ω temperature sensor
- Stainless steel construction for long-life durability
- Ruggedized design to withstand extreme environments of shock, vibration, and high pressures

WIRING DIAGRAM



TAKE A CLOSER LOOK

Moog designs a range of motion control and data products that complement the performance of those featured in this document. Visit our website for more information and contact the Moog facility nearest you.

Argentina +54 11 4326 5916 info.argentina@moog.com

Australia +61 3 9561 6044 info.australia@moog.com

Brazil +55 11 3572 0400 info.brazil@moog.com

Canada +1 716 652 2000 info.canada@moog.com

China +86 21 2893 1600 info.china@moog.com

Finland +358925172730 info.finland@moog.com

France +33 1 4560 7000 info.france@moog.com

Germany +49 7031 622 0 info.germany@moog.com

Hong Kong +852 2 635 3200 info.hongkong@moog.com India +91 80 4057 6666 info.india@moog.com

Ireland +353 21 451 9000 info.ireland@moog.com

Italy +39 0332 421 111 info.italy@moog.com

Japan +81 46 355 3767 info.japan@moog.com

Korea +82 31 764 6711 info.korea@moog.com

Luxembourg +352 40 46 401 info.luxembourg@moog.com

The Netherlands +31 252 462 000 info.thenetherlands@moog.com

Norway +47 6494 1948 info.norway@moog.com Singapore +65 677 36238 info.singapore@moog.com

South Africa +27 12 653 6768 info.southafrica@moog.com

Spain +34 902 133 240 info.spain@moog.com

Sweden +46 31 680 060 info.sweden@moog.com

Switzerland +41 71 394 5010 info.switzerland@moog.com

Turkey +90 216 663 6020 info.turkey@moog.com

United Kingdom +44 168 429 6600 info.uk@moog.com

USA +1 716 652 2000 info.usa@moog.com

www.moog.com/industrial

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