Flat external rotor with encoder

*Feldkirchen (Germany), October 20, 2022* – The DF45 brushless DC motors from Nanotec are now available with an integrated encoder. The new flat motors have a diameter of only 45 mm and, owing to their extremely compact design, are ideal for applications that require precise positioning in confined spaces.

The 2-channel encoder has a resolution of 1,024 CPR and provides additional Hall signals for commutation. Due to the inductive scanning principle, the encoder is insensitive to magnetic interference and contamination. The difference in length between the standard motor and the encoder version is only 2 mm, as the encoder has been completely integrated.

The DF45-E has a rated power of 65 W at a rated speed of 4,840 rpm. In addition to the standard versions, custom windings or shafts are also possible.

The short external rotor motors are used in AGV wheel drives, access control systems and door drives. For high-torque applications, Nanotec offers matching high-torque planetary gearboxes.

*Nanotec was founded in 1991 and is now among the leading manufacturers of motors and controllers/drives for industrial automation and medical engineering applications. The company   
has been based in Feldkirchen near Munich/Germany since 2011. With some 250 employees in Germany, Bulgaria, the US and China, Nanotec serves customers around the world.*

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