

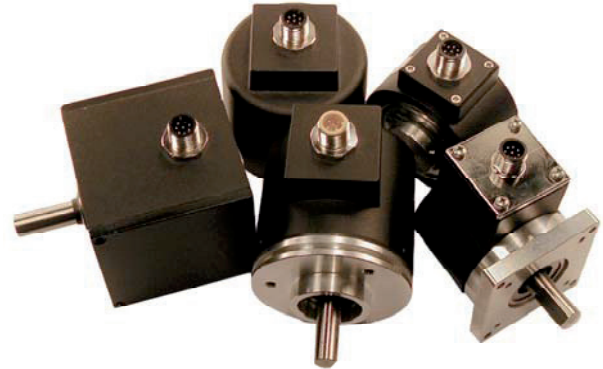
## Technical Bulletin 111

### M12 (12mm) Connector

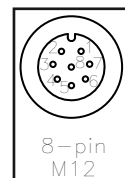
The MS style connector has been the standard for encoder connector wiring for more than 30 years – since the introduction of the Cube series, EPC's first Encoder products. However, since that time, not only has our Encoder line broadened into a full line of encoder offerings, but the encoder industry has also matured, and encoders have found their way into an increasingly wide range of applications. Due to the demands of these new applications, EPC/BEPC's customers began asking for connectors, and associated cordsets, which could provide smaller profiles and improved sealing. After extensive research, EPC selected the M12 (12 mm) style of connector as offering the best combination of performance and price, so that, today, you can specify either the standard MS series or the M12 (12 mm) connector on nearly all of BEPC's encoders. The many advantages of the M12 (12 mm) style of connectors more than offset the small additional cost. For openers, they are physically much smaller in size, and the associated cordsets have a tighter bend radius. As a result, an Encoder with an M12 (12 mm) connector installed will have a lower profile than with the traditional MS series, allowing for an easier and more flexible installation of the Encoder in many applications.

Uniformity is another key feature of the M12 (12 mm) option. Unlike the MS Series with its variety of pin-outs and casing styles, the M12 (12 mm) option uses one of just two connector types, a 5-pin or an 8-pin. Moreover, each pin on a given connector has the same function no matter which Encoder model is chosen. The unused functions are simply not brought out. That way, since the pin-outs for all cordsets are identical, you can standardize on a reduced number of cordsets. In addition, the same cordset will work for all Encoder models that have a given connector type. This also means that, if you change to or add another Encoder model with the same M12 (12 mm) connector, the same cordsets you already own and stock can be used.

Another important thing to consider is that most motion control applications include sensors or other detectors besides encoders. Quite often these devices - limit switches, proximity switches, and the like – will also have M12 (12 mm) style connectors. Therefore, given that the 3-, 4-, and 5-pin cordsets are all compatible with the 5-pin connector on the Encoder, the very real possibility exists that you will be able to stock fewer cordsets to cover multiple motion control devices, making this option even more cost effective.



Connector View



For Ordering M12 (12 mm) cable's - please see our Accessories Section of our Catalogue which can be downloaded from [www.encoder.co.uk](http://www.encoder.co.uk) or call our sales office on +44 (0) 1978 262100

For Wiring Details please see the correct Datasheet for the Encoder that you require the M12 for. These as well can be downloaded as above.