**MAGRES BMMH 30**
The robust, absolute multi-turn encoder in a miniature housing
**MAGRES BMMH 30** absolute multi-turn encoder with 30 mm diameter.

### Highlights

- Patented magnetic position measurement
- Highly resistant against shock, vibration and temperature variation
- Smallest absolute multi-turn encoder
- Seamless product family with numerous shaft and hollow shaft versions
- Cable or connector output
- Bearingless kit versions with protection class up to IP 69K

### Your benefit

- Maximum reliability and lifetime even in harsh environment
- Best economy thanks to outstanding price/performance ratio
- Minimum space requirements
- Simple and time saving installation
- High flexibility due to a wide variety of versions

The **MAGRES principle – robust and contactless**

**MAGRES** are highly robust encoders. They are based on the patented combination of magnetic single-turn and contactless multi-turn position measurement. This allows them to attain the best possible values with regard to shock and vibration resistance, compact size, temperature resistance and cost-effectiveness.

**MAGRES** encoders convince with high levels of reliability and long lifetime. Thanks to their new sensor arrangement and digital signal processing, a practically unlimited range of mechanical and electronic designs can be created. And because of their outstanding integration capabilities, **MAGRES** encoders are the optimum alternative to optical encoders.
**MAGRES BMMH 30 in automation technology.**

**Spindle positioning**
*MAGRES* BMMH 30 are used in simple spindle positioning systems — their rugged design guarantees maximum lifetime.

**Medical technology**
*MAGRES* BMMH 30 show their strength where space is limited, even under difficult conditions.

**Incremental encoder replacement**
*MAGRES* BMMH 30 replace incremental encoders thanks to their outstanding price/performance ratio — to your advantage!

**Compact**
With a 30 mm flange diameter, the *MAGRES* BMMH 30 is ideally suited for use where installation space is limited. Despite its small size, end hollow shaft diameters up to 6 mm can be realized.

**Versatile**
Whether it’s a hollow shaft or a shaft, a kit or with bearings, cable or connector output — the *MAGRES* BMMH 30 is the optimum solution for many applications. Beyond this, customer-specific versions can also be realized.

**Robust**
*MAGRES* encoders operate wear-free and are insensitive against dust and dirt. Even challenging media can’t touch them. High protection classes, large temperature range and increased robustness against shocks and vibrations prevent machine downtimes and repairs.

**Typical application fields**
- Machine building industry
- Laboratory automation
- Semiconductor industry
- Medical technology
The miniaturized members of the **MAGRES** family – most important technical features

<table>
<thead>
<tr>
<th>New series 30</th>
<th>Standard series 42</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BMSH 30 / BMSV 30</strong></td>
<td><strong>BMMH 30 / BMMV 30</strong></td>
</tr>
<tr>
<td>- Absolute single-turn encoder</td>
<td>- Absolute multi-turn encoder</td>
</tr>
<tr>
<td>- SSI (10 bit)</td>
<td>- SSI (10/15 bit)</td>
</tr>
<tr>
<td>- ø 30 mm</td>
<td>- ø 30 mm</td>
</tr>
<tr>
<td>- Hollow shaft / shaft</td>
<td>- Hollow shaft / shaft</td>
</tr>
</tbody>
</table>

**BMSK 30 (MAGRES Kit)**
- Absolute single-turn encoder
- SSI (10 bit)
- ø 30 mm
- Kit version (bearingless)

**BMMK 30 (MAGRES Kit)**
- Absolute single-turn encoder
- SSI (10 bit)
- ø 30 mm
- Kit version (bearingless)

<table>
<thead>
<tr>
<th><strong>BMSH 42 / BMSV 42</strong></th>
<th><strong>BMMH 42 / BMMV 42</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>- Absolute single-turn encoder</td>
<td>- Absolute multi-turn encoder</td>
</tr>
<tr>
<td>- Parallel (9 bit), SSI (12 bit), CANopen (12 bit), DeviceNet (12 bit)</td>
<td>- SSI (12/13 bit), CANopen (12/18 bit), DeviceNet (12/18 bit)</td>
</tr>
<tr>
<td>- ø 42 mm</td>
<td>- ø 42 mm</td>
</tr>
<tr>
<td>- Hollow shaft / shaft</td>
<td>- Hollow shaft / shaft</td>
</tr>
</tbody>
</table>

**BMSK 42 (MAGRES Kit)**
- Absolute single-turn encoder
- Parallel (9 bit), SSI (12 bit)
- ø 42 mm
- Kit version (bearingless)

**BMMK 42 (MAGRES Kit)**
- Absolute multi-turn encoder
- SSI (12/13 bit)
- ø 42 mm
- Kit version (bearingless)

For more information on **MAGRES** encoders, visit [www.baumerelectric.com/en/212.html](http://www.baumerelectric.com/en/212.html)

**Baumer**

Baumer Switzerland
Baumer Electric AG - P.O. Box
Hummelstrasse 17 - CH-8501 Frauenfeld
Phone +41 (0)52 728 1122
Fax +41 (0)52 728 1144
sales.ch@baumerelectric.com
www.baumerelectric.com

Find your local partner
[www.baumergroup.com/worldwide](http://www.baumergroup.com/worldwide)