Since 1955 the Varvel Group has been making gearboxes and variators for light industry applications. Modularity and flexibility lead Varvel products by a unique kit form, common to all gearbox series. This feature allows distributors an easier job to set up required products in few minutes.

Thanks to the design and the quality made in Italy of its components, Varvel gearboxes are internationally recognized to ensure a high level of performance in terms of reliability and efficiency, with consequent benefits in terms of reduction of product maintenance and management costs and noisiness.

Varvel is extremely focused on the customized solution of specific problems to meet the needs of the most demanding customers. Thanks to a high level of flexibility, the Varvel Group is able to provide the various market players with the following design solutions and plus:

- **Modularity**
  - Quickly assembled kits of the distributor network
  - Speed and flexibility of the distributor network

- **Customization**
  - Dedicated solutions developed together with Varvel's customers
  - Custom-made solutions

- **Interchangeability**
  - Of Varvel products with those of the main competitors
  - Interchangeability with other manufacturers

- **Versatility of use**
  - For the various applications from Varvel
  - Versatility of use for different applications

Our strenghts / نقاط قوت ما

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  - For the various applications from Varvel
  - Versatility of use for different applications
The RS and RT Series of worm gearboxes are designed to be the ideal solution for applications that require small or medium power ratings for their drive.

**Worm gearboxes / گیربکس‌های حلزونی**

- Easy installation and maintenance
- Extended lifetime with excellent reliability
- Long life lubrication
- Low maintenance and management costs
- Modular concept
- Versatility of use

Sizes: 9 for RS and 7 for RT
- Housing and covers: in aluminium till size 85 and in cast iron from size 110
- Reduction ratios: from 5 to 10,000:1

<table>
<thead>
<tr>
<th>Sizes</th>
<th>Torque</th>
<th>Reduction ratios: from 5 to 10,000:1</th>
</tr>
</thead>
<tbody>
<tr>
<td>RD</td>
<td>Nm</td>
<td>in-lb</td>
</tr>
<tr>
<td>0</td>
<td>55</td>
<td>490</td>
</tr>
<tr>
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<td>700</td>
<td>6200</td>
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<td>1230</td>
<td>11,000</td>
</tr>
<tr>
<td>3</td>
<td>2900</td>
<td>26,200</td>
</tr>
<tr>
<td>4</td>
<td>5000</td>
<td>45,000</td>
</tr>
</tbody>
</table>

**In-line helical gearboxes / گیربکس‌های هلیکال خطی**

The RD Series of in-line helical gearboxes are characterized by high efficiency and a modular structure able to reduce management and maintenance costs.

**RD**

- Excellent stress resistance
- Extended lifetime with excellent reliability
- High efficiency
- Low maintenance and management costs
- Modular concept
- Versatility of use

Sizes: 7 (with 2 or 3 reduction stages)
- Housing and covers: in aluminium till size 4 and in cast iron from size 5
- Reduction ratios: from 2.25 to 630:1

<table>
<thead>
<tr>
<th>Sizes</th>
<th>Torque</th>
<th>Reduction ratios: from 2.25 to 630:1</th>
</tr>
</thead>
<tbody>
<tr>
<td>RD</td>
<td>Nm</td>
<td>in-lb</td>
</tr>
<tr>
<td>0</td>
<td>85 Nm</td>
<td>740 in-lb</td>
</tr>
<tr>
<td>1</td>
<td>110 Nm</td>
<td>980 in-lb</td>
</tr>
<tr>
<td>2</td>
<td>140 Nm</td>
<td>1240 in-lb</td>
</tr>
<tr>
<td>3</td>
<td>200 Nm</td>
<td>1770 in-lb</td>
</tr>
<tr>
<td>4</td>
<td>300 Nm</td>
<td>2580 in-lb</td>
</tr>
<tr>
<td>5</td>
<td>430 Nm</td>
<td>3810 in-lb</td>
</tr>
<tr>
<td>6</td>
<td>700 Nm</td>
<td>6200 in-lb</td>
</tr>
</tbody>
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RD

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</tbody>
</table>
The RO and RV Series of 3-stage bevel helical gearboxes stand out for their high efficiency and for a modular structure in kits that can be assembled with extreme rapidity and simplicity.

Easy installation and maintenance
- Extended lifetime with excellent reliability
- High efficiency
- Long life lubrication
- Low maintenance and management costs
- Modular concept

Sizes: 6 [with 3 reduction stages]
- Housing and covers: in aluminium till size 3
- Reduction ratios: from 6.3 to 315:1

Input speed 1400 rpm / 1800 rpm

<table>
<thead>
<tr>
<th>Sizes</th>
<th>Torque</th>
</tr>
</thead>
<tbody>
<tr>
<td>RO</td>
<td>RV</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
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<td>4</td>
<td>4</td>
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<tr>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>6</td>
<td>6</td>
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</tbody>
</table>

Input speed 1400 rpm / 1800 rpm

<table>
<thead>
<tr>
<th>Sizes</th>
<th>Input Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>RO</td>
<td>RV</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
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<tr>
<td>2</td>
<td>2</td>
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<tr>
<td>3</td>
<td>3</td>
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<td>4</td>
<td>4</td>
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<tr>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>6</td>
<td>6</td>
</tr>
</tbody>
</table>

The RO2 Series of 2-stage bevel helical gearboxes have, in addition to their high efficiency, a monobloc housing for excellent torsional rigidity, stress resistance and reduced backlash.

Excellent stress resistance
- Extended lifetime with excellent reliability
- High efficiency
- Long life lubrication
- Low maintenance and management costs
- Silent running

Sizes: 4 [with 2 reduction stages]
- Housing and covers: in aluminium
- Reduction ratios: from 5 to 55:1

Input speed 1400 rpm / 1800 rpm

<table>
<thead>
<tr>
<th>Sizes</th>
<th>Torque</th>
</tr>
</thead>
<tbody>
<tr>
<td>RO2</td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>3.20 Nm / 1140 in·lb</td>
</tr>
<tr>
<td>1</td>
<td>2.20 Nm / 2950 in·lb</td>
</tr>
<tr>
<td>2</td>
<td>2.20 Nm / 2950 in·lb</td>
</tr>
<tr>
<td>3</td>
<td>3.20 Nm / 4710 in·lb</td>
</tr>
</tbody>
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Input speed 1400 rpm / 1800 rpm

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<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>RO2</td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>1.2 kW / 1.6 Hp</td>
</tr>
<tr>
<td>1</td>
<td>1.4 kW / 2.5 Hp</td>
</tr>
<tr>
<td>2</td>
<td>6.0 kW / 8.0 Hp</td>
</tr>
<tr>
<td>3</td>
<td>10 kW / 16 Hp</td>
</tr>
</tbody>
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</tbody>
</table>
Parallel shaft gearboxes / RN

The RN Series of parallel shaft gearboxes are characterized by a high efficiency and a considerable flexibility of use guaranteed by their modular design.

Easy installation and maintenance
- Extended lifetime with excellent reliability
- High efficiency
- Low maintenance and management costs
- Modular concept
- Silent running

Sizes: 6 [with 2 or 3 reduction stages]
- Housing and covers: in aluminium till size 3 and in cast iron from size 4
- Reduction ratios: from 6.3 to 710:1

Input speed 1400 rpm / 1800 rpm
- Easy installation and maintenance
- Extended lifetime with excellent reliability
- High efficiency
- Low maintenance and management costs
- Modular concept
- Silent running

Sizes: 6 [with 2 or 3 reduction stages]
- Housing and covers: in aluminium till size 3 and in cast iron from size 4
- Reduction ratios: from 6.3 to 710:1

Input speed 1400 rpm / 1800 rpm

Planetary gearboxes / RG

The RG Series of planetary gearboxes with reduced backlash allow high speed decreases with reduced dimensions and are used for applications that require high levels of precision during operation.

Easy installation and maintenance
- Extended lifetime with excellent reliability
- High efficiency
- High precision
- Silent running
- Weight reduced

Sizes: 4 [with 1 or 2 reduction stages]
- Housing: hardened and tempered steel
- Reduction ratios: from 3 to 100:1

Input speed from 2500 rpm to 4800 rpm
- Easy installation and maintenance
- Extended lifetime with excellent reliability
- High efficiency
- High precision
- Silent running
- Weight reduced

Sizes: 4 [with 1 or 2 reduction stages]
- Housing: hardened and tempered steel
- Reduction ratios: from 3 to 100:1

Input speed from 2500 rpm to 4800 rpm
The FRP680 helical gearbox is expressly designed to drive the linear-feeder systems in the poultry sector and provides a wide choice of fixings according to the various systems adopted.

**FRP680 Helical gearbox for farming systems / گیربکس هلیکال برای سیستم‌های مزارع**

- **Easy installation and maintenance**
- **Extended lifetime with excellent reliability**
- **Long life lubrication**
- **Low maintenance and management costs**
- **Modular concept**
- **Silent running**

**Sizes:**
- 1 (with 1 reduction stage)
- Housing: in aluminium
- Reduction ratios: from 2.5 to 8:1

**Input speed:** 1400 rpm / 1800 rpm

- **Torque:** 27 Nm / 330 in-lb
- **Input Power:** 1.5 kW / 2 Hp

**Accessories / لوازم جانبی**

**G-GS motor flexible coupling / G-GS کوپلینگ انعطاف پذیر موتور**

The flexible coupling for use between Varvel gearboxes and IEC/NEMA motors provides a versatile alternative solution to standard key and keyway couplings without increasing the overall length of the assembled gearmotor and offering numerous technical advantages.

**XA pre-stage / XA گیربکس های هلیکال واسطه**

The XA helical pre-stage is usually combined with worm gearboxes when it is necessary to achieve higher reduction ratios than those guaranteed by standard solutions.

**ISM-BSM moduls / ISM-BSM کیت‌های**

ISM input shaft modules and BSM input backstop modules can be fitted to most Varvel "S" type gearboxes without input flange and "G" type gearboxes with flexible coupling in only a few minutes.
The VARsize assisted selection and configuration program, available from the website www.varvel.com, facilitates the selection of VARVEL products in the size needed to satisfy customers’ performance requirements.

After determining the right size of gearbox, VARsize generates a document containing the product’s performance data along with a dimensioned drawing and the relevant 3D model/2D drawing in formats compatible with most common CAD programs.

The VARfast rapid delivery program, available from the website www.varvel.com, satisfies the needs of all those customers who require rapid deliveries of VARVEL products, even if ordered at the last moment.

VARfast is a fast and efficient service that guarantees rapid delivery times depending on product configuration: within 24 hours for individual kits and within 72 hours for products assembled from kits.

Services / خدمات

- UNI EN ISO 9001:2015
- UNI EN ISO 14001:2015
- BS OHSAS 18001:2007
- EC DIRECTIVE 2014/34/EC (ATEX)

www.varvel.com

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