OptoPulse® EIL580P
The versatile programmable encoder.
OptoPulse® EIL580P
Flexible, robust, precise

- Universal encoder with programmable parameters
- Outstanding durability
- Robust mechanical design with ShaftLock bearing concept
- Operating temperature from -40 °C to +100 °C
- High protection up to IP 67
- Speed up to 12000 rpm
- Excellent price-performance ratio
- One-stop source for encoders and accessories

Reduced inventory cost and shorter delivery time.

There are many benefits of the OptoPulse® EIL580P programmable encoder and its multiple configuration options. Maximum availability and flexibility while cutting down on product variety.

User-configurable parameters:
- Any pulse number from 1...65536
- Pulse sequence
- Output level HTL or TTL
- Set function for user-configurable reference signal
- Reference signal width 90° or 180°

Your benefits:
- Less product variants and resulting cost reduction, such as storage and spare parts
- Cutting down on storage, handling and purchasing cost
- Simplified component management
- Cost-efficient realisation of individual, even high-resolution pulse numbers
- Preventing downtime
- Electronic label for full traceability
- Quick setup by R-Set function for user-configurable reference signal
- Quick, cost-efficient exchange and retrofit

ShaftLock
For high shaft loading
High protection
Low temperatures
Magnetic immunity
Shock and vibration proof
High speed
IP 67
Easy programming via handheld tool.

Thanks to a compact handheld programming tool, encoder configuration is done in seconds—even if the encoder is already integrated in the system. Handling the battery-operated stand-alone solution is child’s play:

- Four user-assigned buttons for simple and quick programming
- Memory of several encoder configuration profiles
- Intuitive, fully menu-driven programming
- Backlit display
- Clear readability under any ambient light condition
- Encoder diagnostics
- LED activity indicator

Convenient programming via PC software.

The convenient PC software is ideal for distributors or drive manufacturers who need to program several encoders in line. Simply select the desired configuration profile and just a mouseclick later it’s all done:

- Efficient programming by automatic identification of the connected devices
- Easy, intuitive operation and programming
- Quick and efficient configuration by user-assigned buttons
- Encoder diagnostics with on-screen readout
- On-screen feedback of the programming process
- Perfect product documentation by individual product label print outs

Quick retooling and adjustment thanks to R-Set

User-configurable reference signal for minimized downtime

The R-Set input is a particularly convenient feature of each programmable encoder with M23 flange connector within the OptoPulse® EIL580P series. R-Set will automatically set the reference signal (zero pulse) at the current shaft position. R-Set is run directly by motor or control system upon voltage application at PIN 7.

The reference signal is non-volatile and will be retained at the shaft position even after power off. Setting the reference signal for retooling or during maintenance or adjusting work is quickly done without manual intervention which will keep downtime at a minimum.
Product overview OptoPulse® EIL580P

<table>
<thead>
<tr>
<th></th>
<th>EIL580P-SC</th>
<th>EIL580P-SY</th>
<th>EIL580P-SQ</th>
<th>EIL580P-B</th>
<th>EIL580P-T</th>
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</thead>
<tbody>
<tr>
<td>Sensing method</td>
<td>Optical</td>
<td></td>
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<tr>
<td>Size</td>
<td>58 mm</td>
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<tr>
<td>Voltage supply</td>
<td>4.75...30 VDC</td>
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<tr>
<td>Output stages</td>
<td>TTL/RS422 or HTL/push-pull, programmable</td>
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<tr>
<td>Shaft type</td>
<td>Solid shaft ø10 mm Clamping flange</td>
<td>Solid shaft ø6 mm Synchro flange</td>
<td>Solid shaft ø10 mm Square flange</td>
<td>Blind hollow shaft ø8...15 mm</td>
<td>Through hollow shaft ø8...15 mm</td>
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<tr>
<td>Connection</td>
<td>Radial, axial: flange connector M23, 12-pin or M12, 8-pin; cable Tangential: cable outlet</td>
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<tr>
<td>Pulse per revolution</td>
<td>1...65536, programmable</td>
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<tr>
<td>Operating temperature</td>
<td>–40...+100 °C</td>
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<tr>
<td>Protection</td>
<td>IP 67 with shaft seal, IP 65 without</td>
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<tr>
<td>Shaft loading</td>
<td>≤40 N axial, ≤80 N radial</td>
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</table>

Latest accessory highlights

Varied cable outlet and connector options for any housing design and installation condition
Clip for easy mounting on top or underneath the fan guard with 8 mm grid
Optimally matching stator coupling
Torque support optionally cut to length for universal installation

Learn more about our OptoPulse® EIL580P encoder series at:
www.baumer.com/optopulse

You will encounter our complete portfolio of incremental and absolute encoders at:
www.baumer.com/motion

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