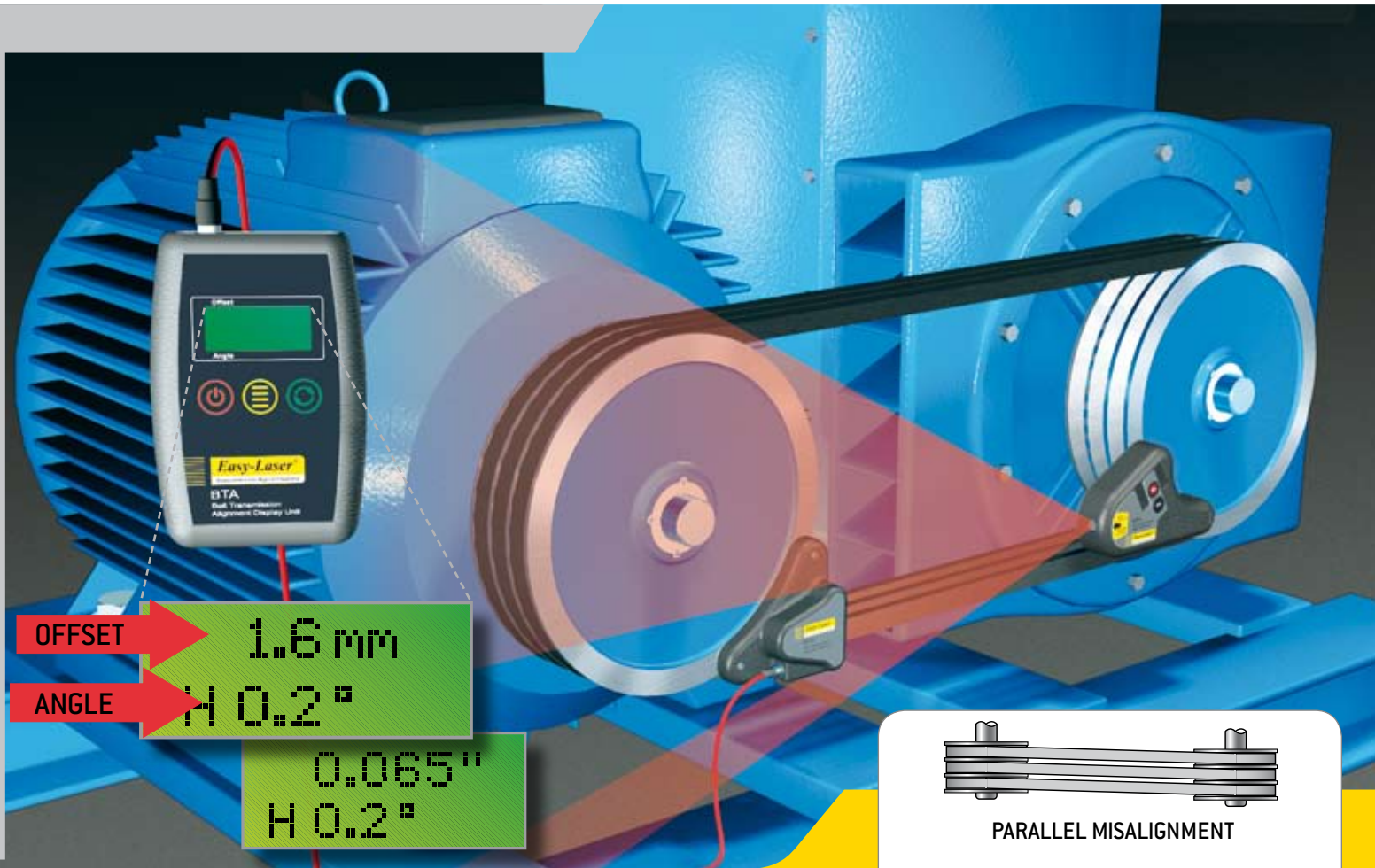


# EASY-LASER®

D160 BTA *digital*

## SHEAVE/PULLEY ALIGNMENT

*With digital precision and a separate display unit*



- Read off alignment results continuously where the adjustment is made
- Connects to Easy-Laser® shaft alignment systems; save and document the results using printouts or transfer to a PC
- Shows the parallel and angular misalignment between the sheaves with digital precision
- The adjustment values are always displayed live
- Much faster and more accurate than measuring with earlier, conventional methods
- Alignment can be made by one operator
- Also suitable for non-magnetic sheaves
- Fits almost any kind of sheave:



PARALLEL MISALIGNMENT



ANGULAR MISALIGNMENT



PARALLEL AND ANGULAR MISALIGNMENT



V-BELT



FLAT BELT



TIMING BELT

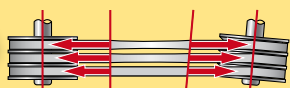


CHAIN DRIVES



## EASY TO USE

Easy-Laser® BTA is attached in a few seconds (magnets) with the laser transmitter on one of the sheaves and the detector on the other. The transmitter generates a laser plane parallel to the reference sheave. The detector reads the position in relation to the laser plane and provides a live digital display of both offset and angular value. This makes the alignment of the adjustable machine very simple. The accuracy of the digital readout also means that you can align within prescribed tolerances and rely on the result. The separate display unit makes it all even easier, as you can read off and follow the adjustment at the precise point on the machine where the adjustment is made. The display is also backlit for optimum visibility in poor lighting conditions.



Transmissions with two or more belts, or wide belts, are highly affected by misalignment, causing large differences in belt tensions and also increased wear and tear on edges. When aligning with the Easy-Laser® BTA you reduce the wear on sheaves/pulleys, belts, bearings and seals as well as reducing vibration. Increased efficiency also means large energy cost savings.

Easy-Laser® D160 is delivered in carrying case with contoured foam insert, extra batteries and manual.

## TECHNICAL SPECIFICATIONS

Easy-Laser® D160 BTA, complete system Part. Nr.: 12-0411


|                          |   |
|--------------------------|---|
| <b>Laser transmitter</b> | Part. Nr.: 12-0309  |
| Sheave diameters         | Ø60 mm [2.5"] and larger  |
| Laser class              | 2   |
| Output power             | <1 mW   |
| Laser wavelength         | 635-670 nm  |
| Beam angle               | 60°   |
| Accuracy                 | Laser plane – Reference plane:<br>Parallelity: < 0.05°, Offset < 0.2 mm [0.008"]  |
| Battery type             | 1xR6 (AA) 1,5 V   |
| Battery operation        | 8 hours continuously  |
| Material                 | ABS plastics / Hard anodized aluminium  |
| Dimensions               | WxHxD: 145x86x30 mm [5.7x3.4x1.2"]  |
| Weight                   | 270 g [9.5 oz]  |
| <b>Detector unit</b>     | Part. Nr.: 12-0403  |
| Measurement distance     | Up to 3 m [9.8'] between Transmitter and Detector                                 |
| Measurement range        | Axial offset: ±3 mm [0.12"]. Angular value: ±8°                                   |
| Material                 | ABS plastics / Anodized aluminium   |
| Dimensions               | WxHxD: 95x95x36 mm [3.7x3.7x1.4"]   |
| Weight                   | 170 g [6.0 oz]  |
| <b>Display unit</b>      | Part. Nr.: 12-0404  |
| Display                  | 2-row backlit LCD   |
| Displayed resolution     | Changeable between mm/inch.<br>Axial offset: 0.1 mm [0.005"]. Angular value: 0.1° |
| Battery type             | 1xLR61 9V   |
| Battery operation        | 24 hours continuously   |
| Material                 | ABS plastics  |
| Dimensions               | WxHxD: 78x120x23 mm [3.1x4.7x0.9"]  |
| Weight                   | 170 g [6.0 oz]  |
| <b>Cable</b>             | Part. Nr.: 12-0074  |
| Length                   | 2 m [78.7"]   |

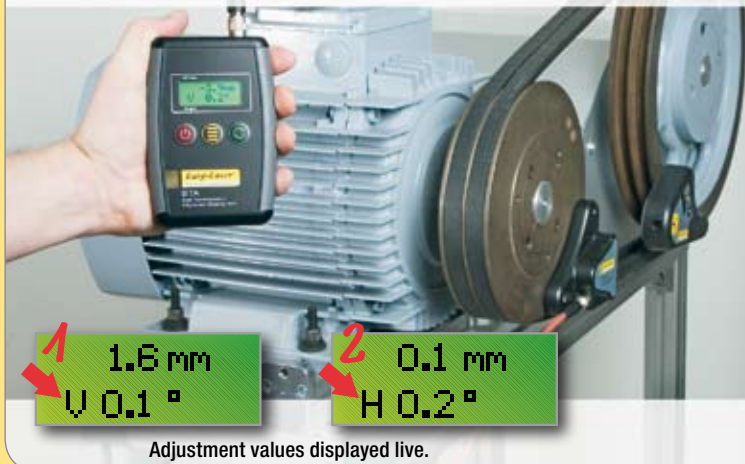
Patent; USA: US 7,042,561 China: ZL99813151.2 Japan: 3655827

Patent pending; EU: PCT/SE/02034 USA: 11/289,755

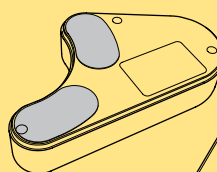
Easy-Laser® is manufactured by Damalini AB, Åbäcksgatan 6B, 431 67 Mölndal, Sweden, Phone +46 31 708 63 00, Fax +46 31 708 63 50, email: info@damalini.com, www.damalini.com © 2007 Damalini AB. We reserve the right to make modifications without prior notification. Easy-Laser® is a registered trademark of Damalini AB.

## MEASUREMENT PROCEDURE

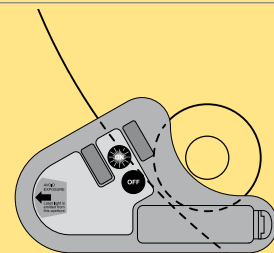
1. Mount the transmitter on the sheave of the reference machine and the detector on the sheave of the movable machine. Read offset and angle for *vertical* direction. Adjust if necessary.
2. Shift to view *horizontal* values on the display unit (by pressing , the units are not moved). Read offset and angle. Adjust if necessary.



Adjustment values displayed live.



Magnetic reference surface on both transmitter and detector for easy attachment to the sheaves.





Easy-Laser® D160 fits small as well as large sheaves.

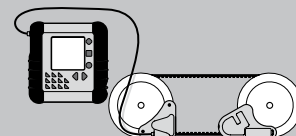
## CONNECT TO EASY-LASER® DISPLAY UNIT D279

The Easy-Laser® D160 detector unit can be connected to our standard display unit D279\*, which is included in shaft alignment systems D505 and D525, for example. The pulleys' mutual parallelism is shown graphically and digitally with adjustment and shim values for the machine's foot pair.

The D279 also allows you to save, print out and transfer the measurement results to a PC, in the same way as for normal shaft alignment.

\*Does not apply for system D450, which does not have the required software for sheave alignment. NB! Requires software version 1.06 or later for Display unit D279.

|                   |   |
|-------------------|---|
| <b>Vertical</b>   |  |
| -0.09°            |   |
| F2: -0.7          |   |
| <b>Horizontal</b> |  |
| 0.32°             |   |
| Offset: 1.5       |   |



Authorized dealer