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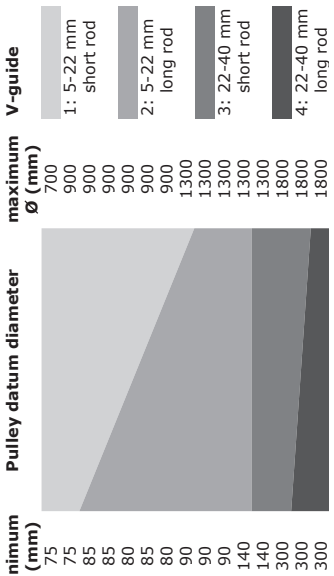
P-0172 FL PAT 2004-09-09

Technical specification

Housing material:
Aluminium
Dimensions:
61 x 77 x 61 mm (h X w X d)
Weight: 300 g/unit
Battery type:
2 x LR03 (AAA) 1.5V per unit
Operating time:
20 hrs continuous operation
Measuring distance:
50mm - 6000 mm
Measuring accuracy:
Better than 0.5 mm or
0.2 degrees
Pulley diameter range: From
75 mm and larger (standard)
Pulley belt groove width:
6 mm - 40 mm (standard)
Laser class 2;
Output power: <1mW
Laser wavelength: 600-650 nm

V-guide selector



P·A·T
PulleyAlignmentTool
by FIXTURLASER

User's Manual

FIXTUR LASER

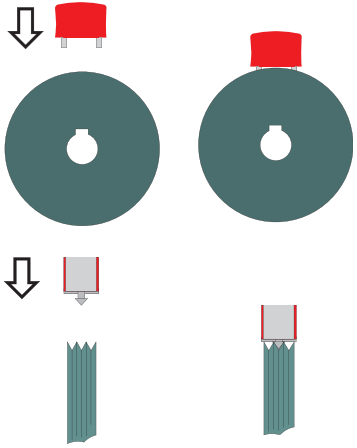
FIXTUR LASER

Pulley Alignment

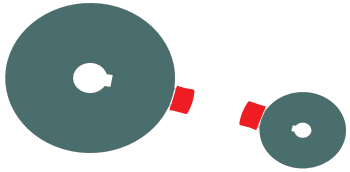
The P.A.T. uses two laser transmitters for projecting of laser lines on the opposite laser unit. By adjusting the pulleys so that the laserline coincides with the reference line on the opposite laser unit, the pulleys are aligned.

Mounting of the P.A.T. units.

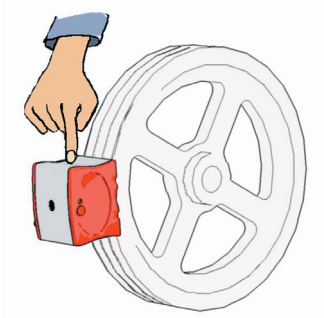
Each unit is mounted on the pulley as shown in the diagram below. NOTE! The magnet, which hold the unit to the pulley, are very strong. Do not pinch your fingers!



Position both units with the spring action probes resting in the same grove on both pulleys and the units are facing each other as shown below.

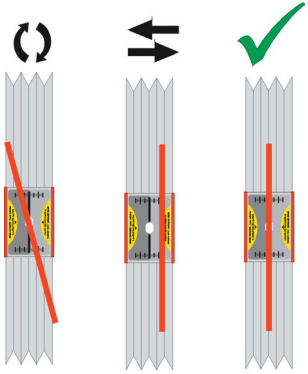


Ensure that the probes has settled correctly in the groove by pushing the units a few millimeters along the groove.



Alignment process

When the units are mounted, turn on the lasers. Each laser generates a line on the opposite unit. When correctly aligned the lines coincide with the reference marks on the labels on both units.
If the belt transmission is misaligned, start by correcting the angular error.



It is important that the pulleys are mounted correctly on the shafts and that the shafts are straight before starting the alignment process. Wobbling or warped pulleys affect the alignment quality severly.

Safety

The P.A.T. uses laser diodes with a power output of less than 1.0 mW. The laser classification is Class 2, which is considered safe for its intended use with only minor precautions required. These are:

Never stare directly into the laser light source. Never direct the laser into anyone else's eyes.

Your system complies with the requirements in:

- SS-EN-60825-1-1994
- British Standards BS 4803Parts 1 to 3
- Deutsche Industrie Norm DIN JEC 76 (CO) 6
- USA FDA Standard 21 CFR, Ch 1,
  Part 1040.10 and 1040.11