

Application

Precise alignment of belt driven machinery is essential to increase belt and pulley life and reduce vibration as well as energy costs. The TMEB 2 Belt Alignment Tool offers an easy and accurate method to adjust the machinery so that the grooves of the V-belt pulleys are accurately aligned.

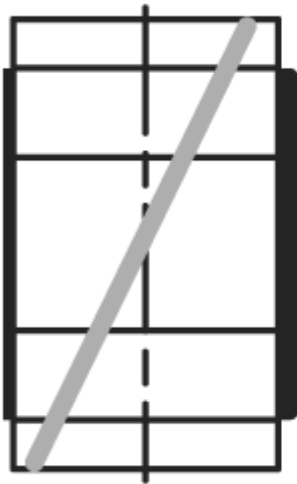
Description

The TMEB 2 consists of one laser unit and one receiver unit, which attach magnetically to the grooves of each pulley. The laser unit emits a laser line which is projected onto a three-dimensional target area on the opposite receiver unit. Depending on the laser pattern projected on the receiver unit, the user can determine the type of misalignment and how to correct it. Belt alignment is easily performed by adjusting the moveable machine(s) until the laser line coincides with the reference lines on the receiver unit. For chain sprockets and timing and ribbed belts alignment, the side adapter TMEB A2 is available as an accessory.

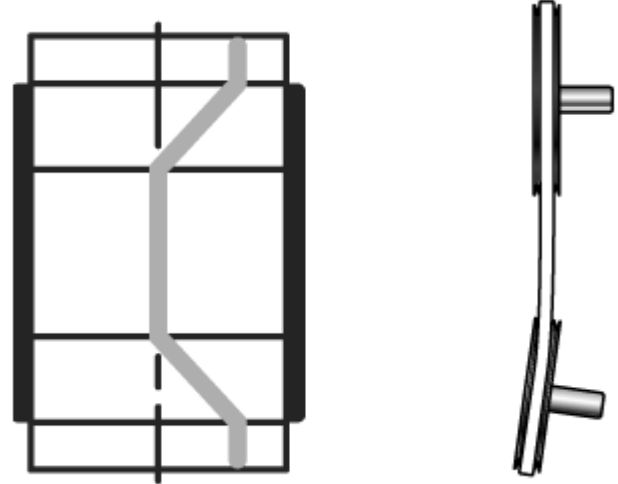


Determining the type of misalignment

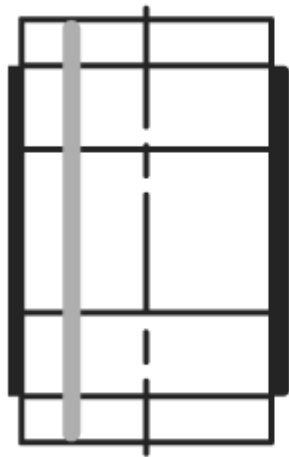
The laser line emitted from the laser unit will now appear on the receiver unit. The pattern will vary depending on the type of misalignment, as shown in figures below



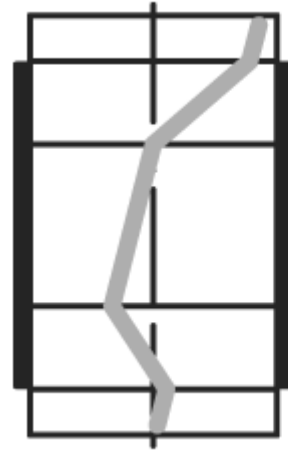
Display of vertical angle misalignment



Display of horizontal angle misalignment



Display of parallel misalignment



Display of all three misalignments combined



Technical data

Designation

Colour
Content

Housing material

Operating temperature

Operating humidity

Type of laser

Laser wave length

Laser class

Maximum laser power

Measurement distance

V-guides

Fixture

Measurement accuracy angular

Measurement accuracy linear

Dimensions laser unit

Dimensions receiver unit

Dimensions carrying case

Battery type

Battery lifetime

Weight laser unit

Weight receiver unit

Total weight (incl. case)

Calibration certificate

Warranty

TMEB 2

Silver-grey/black

1 laser unit

1 receiver unit

3 sets of V-guides

1 carrying case

Extruded aluminium

0 - 40 ° C (32 - 104 ° F)

5 - 95%

Diode laser

632 nm

2

1 mW

50 mm to 6 m (2 in to 20 ft)

3 sizes:

Size 22 mm with rods 14 mm: 2 x 3 guides

Size 22 mm with rods 20 mm: 2 x 3 guides

Size 40 mm with rods 20 mm: 2 x 3 guides

Magnetic

Better than 0.2 °

Better than 0.5 mm

70 x 74 x 61 mm (2.8 x 2.9 x 2.4 in)

96 x 74 x 61 mm (3.8 x 2.9 x 2.4 in)

275 x 230 x 82 mm (10.8 x 9.0 x 3.2 in)

2 x 1.5V LR03 (AAA) batteries in laser unit

20 hours continuous operation

320 g (11.3 oz)

270 g (9.5 oz)

1,1 kg (2.4 lbs)

Valid for two years

12 months

Application range

Pulley diameter range

Belt profiles

SPZ, XPZ

SPA, XPA

SPB, XPB

SPC, XPC

3V/9N, 3VX/9NX

5V/15N, 5VX/15NX

8V/25N

Y/6, 8

Z/10, A/13, ZX/X10, AX/X13

B17, BX/X17

C22, CX/X22

20, 25, D/32, E/40

Pulley groove width

Pulley diameter

85 mm (3.3 in) to largest standard

85 mm (3.3 in) to largest standard

90 mm (3.5 in) to largest standard

all standard diameters

85 mm (3.3 in) to largest standard

all standard diameters

all standard diameters

75 mm (2.9 in) to largest standard

80 mm (3.1 in) to largest standard

all standard diameters

all standard diameters

all standard diameters

6 mm to 40 mm (0.2 to 1.6 in)

Accessories

TMEB A2

Magnetic side adapter for aligning chain sprockets and timing and ribbed belts, pulleys

Replacement parts

TMEB G2	Set of V-guides, 4 different sizes
TMEB A2	Side adapter

