

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.

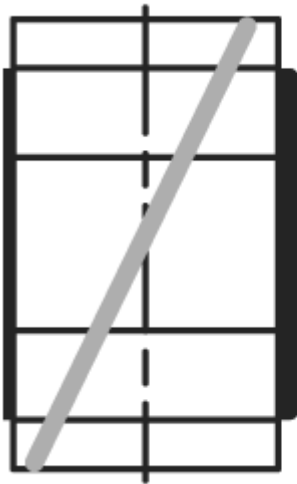
Description

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.

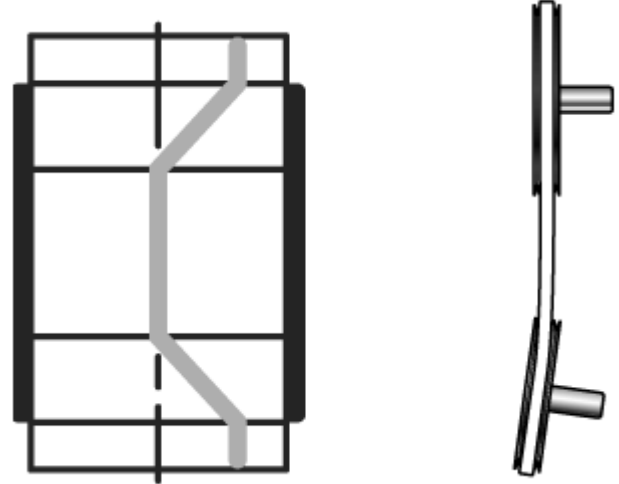


Determining the type of misalignment

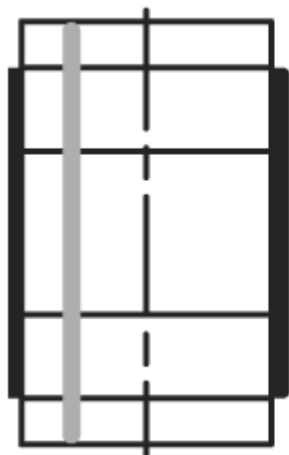
The laser line emitted from the laser unit will now appear on the receiver unit. The pattern will vary depending on the type of misalignment, as shown in figures below



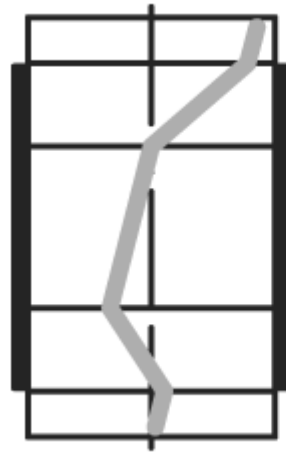
Display of vertical angle misalignment



Display of horizontal angle misalignment



Display of parallel misalignment



Display of all three misalignments combined



Technical data

Designation	
Colour	Silver-grey/black
Content	1 laser unit 1 receiver unit 3 sets of V-guides 1 carrying case
Housing material	Extruded aluminium
Operating temperature	0 - 40 ° C (32 - 104 ° F)
Operating humidity	5 - 95%
Type of laser	Diode laser
Laser wave length	632 nm
Laser class	2
Maximum laser power	1 mW
Measurement distance	50 mm to 6 m (2 in to 20 ft)
V-guides	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
Fixture	Magnetic
Measurement accuracy angular	Better than 0.2 °
Measurement accuracy linear	Better than 0.5 mm
Dimensions laser unit	70 x 74 x 61 mm (2.8 x 2.9 x 2.4 in)
Dimensions receiver unit	96 x 74 x 61 mm (3.8 x 2.9 x 2.4 in)
Dimensions carrying case	275 x 230 x 82 mm (10.8 x 9.0 x 3.2 in)
Battery type	2 x 1.5V LR03 (AAA) batteries in laser unit
Battery lifetime	20 hours continuous operation
Weight laser unit	320 g (11.3 oz)
Weight receiver unit	270 g (9.5 oz)
Total weight (incl. case)	1,1 kg (2.4 lbs)
Calibration certificate	Valid for two years
Warranty	12 months

Application range

Pulley diameter range

Belt profiles	Pulley diameter
SPZ, XPZ	85 mm (3.3 in) to largest standard
SPA, XPA	85 mm (3.3 in) to largest standard
SPB, XPB	90 mm (3.5 in) to largest standard
SPC, XPC	all standard diameters
3V/9N, 3VX/9NX	85 mm (3.3 in) to largest standard
5V/15N, 5VX/15NX	all standard diameters
8V/25N	all standard diameters
Y/6, 8	75 mm (2.9 in) to largest standard
Z/10, A/13, ZX/X10, AX/X13	80 mm (3.1 in) to largest standard
B17, BX/X17	all standard diameters
C22, CX/X22	all standard diameters
20, 25, D/32, E/40	all standard diameters
Pulley groove width	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
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Replacement part

TMEB G2
TMEB A2

3АО «БЕРГ АБ», (495) 727-22-72, promshop-biz@ya.ru, www.promshop.biz

Set of V-guides, 4 different sizes
Side adapter



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