

TKBA 40

SKF Belt Alignment Tool

High-accuracy tool for V-belt pulley alignment

Belt-driven machinery must be precisely aligned in order to increase belt and pulley life – and reduce both machine vibration and energy costs.

SKF's TKBA 40 Belt alignment tool offers a straightforward way to do this, by accurately aligning the grooves of V-belt pulleys. It can correct for vertical angle, horizontal angle and parallel misalignment.

The tool has two components – a laser-emitting unit and a receiver unit. It uses powerful magnets and V-guides to fit to the pulley's grooves, allowing the TKBA 40 to be attached quickly and easily.



The TKBA 40 offers a number of key benefits to the user:

- Fast, easy attachment – using powerful magnets
- Simplified alignment process
- Ability to align a wide range of V-belt pulleys, as four sizes of V-guide are supplied
- Simultaneous adjustment of tension and alignment
- Aligns grooves – rather than faces – of V-belt pulley, for optimum alignment of pulleys of dissimilar widths or faces

The TKBA 40 has a number of user-friendly features:

- Optional extra: a special side adaptor allows alignment of multi-ribbed and timing belt pulleys, as well as sprockets
- Maximum operating distance of 6 m (20 ft) accommodates many applications
- Relies on red laser diode, and supplied in sturdy carrying case
- Runs on 2 x AAA batteries for 20 hours' continuous operation

The laser unit emits a laser line that is projected onto the receiver unit. A three-dimensional target area on the receiver unit allows easy detection of the type of misalignment and how to correct it. Belt alignment is achieved when the laser line coincides with the three reference lines on the receiver unit.



Scan (or click) the code for the SKF Belt Alignment Tools comparison table



Highly accurate method for aligning V-belt pulleys

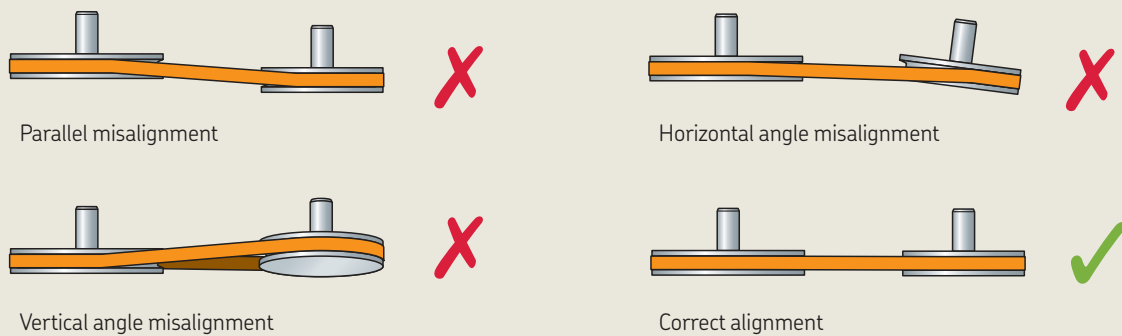
The TKBA 40 is supplied with four sizes of V-guide – to fit pulley grooves of most widths and types. Exchanging a V-guide for a smaller or larger one is a straightforward operation. The TKBA 40 can be applied to a number of end-use applications:

Belt drives

- HVAC
- Pump installations
- Paper mills
- Flour mills
- Lathe machine
- Milling machines
- Conveyors

Sprocket drives

- Agricultural machinery
- Compressors
- Engine camshafts



Technical data

Designation	TKBA 40		
Emitter unit		Operating requirements	
Type of laser	Red laser diode	Operating temperature	0 to 40 °C (32 to 104 °F)
Laser	1 × Built-in class 2 laser, <1 mW, 632 nm	Storage temperature	-20 to +65 °C (-4 to +150 °F)
Laser line length	3 m at 2 m (9.8 ft at 6.6 ft)	Relative humidity	10 to 90% RH non-condensing
Measurement accuracy angular	Better than 0,2°	IP rating	IP 40
Measurement accuracy offset	Better than 0,5 mm (0.02 in.)	Calibration certificate	Valid for two years
Measurement distance	50 mm to 6 000 mm (2 in. to 20 ft)	Dimensions	
Control	Laser on/off switch	Emitter unit	70 × 74 × 61 mm (2.8 × 2.9 × 2.4 in.)
Housing material	Extruded aluminium	Receiver unit	96 × 74 × 61 mm (3.8 × 2.9 × 2.4 in.)
Receiver unit		Carrying case	260 × 85 × 180 mm (10.2 × 3.3 × 7.1 in.)
Housing material	Aluminium	Weight	
Fixtures		Emitter unit	320 g (0.7 lb)
Mounting	Magnetic, groove mounted (optional side adapter TMEBA2)	Receiver unit	270 g (0.6 lb)
V-guides		Total (incl. case)	1,2 kg (2.7 lb)
	Size 1: 22 mm, short rods (3 × pairs)	Case contents	
	Size 2: 22 mm, long rods (3 × pairs)	1 × TKBA 40 emitter unit	
	Size 3: 40 mm, short rods (3 × pairs)	1 × TKBA 40 receiver unit	
	Size 4: 40 mm, long rods (3 × pairs)	2 × AA batteries	
Battery	2 × AAA Alkaline type IEC LR03	4 × Sizes of V-guides, 3 × of each size	
Operation time	20 hours continuous operation	1 × Printed instructions for use	
		1 × Calibration certificate	

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