SKF Shaft Alignment Tool TKSA 31

The intuitive and affordable laser shaft alignment system

Live view supports intuitive measurements and facilitates horizontal and vertical machine position corrections.

The TKSA 31 is SKF's most affordable solution for easy laser shaft alignment. The ergonomic display unit with touch screen makes the instrument very easy to use and the built-in machine library helps storing alignment reports for multiple machines. Large sized laser detectors in the measuring heads reduce the need for pre-alignments and the embedded soft foot tool helps establish the foundation for a successful alignment. Additional functions such as live view and automatic measurement support fast and effective alignment tasks and make the TKSA 31 an innovative laser shaft alignment tool that is affordable for almost every budget.

- Easy measurements can be performed by using the well-known three position measurement (9-12-3 o'clock) with additional positioning flexibility of 40° around each measurement position.
- High affordability is achieved by focussing on the standard shaft alignment process and essential functions to allow quick and effective shaft alignments.
- "Automatic measurement" enables hands-free measurements by detecting the position of the heads and only taking a measurement when the heads are in the right position.
- Automatic reports are generated after each alignment and can be customised with notes about the application. All reports can be exported as pdf files.
- The machine library gives an overview of all machines and alignment reports. It simplifies the machine identification and improves the alignment workflow.

Technical data

Designation	TKSA 31
Sensors and communication	29 mm *(1.1 in.)* CCD with red line laser Class 2 Inclinometer ±0.5°, Wired, USB cables
System measuring distance	0,07 to 4 m *(0.23 to 13.1 ft)* (up to 2 m *(6.6 ft)* with cables supplied)
Measuring errors	<0,5% ±5 µm
Housing material	20% Glass filled Polycarbonate
Dimensions	120 × 90 × 36 mm *(4.7 × 3.5 × 1.4 in.)*
Weight	180 g *(0.4 lb)*
Operating device	5.6" colour resistive touchscreen LCD display. High Impact PC/ABS with overmould
Software/App update	via USB stick
DU Operating time	Up to 7 hours (100% backlight)
Dimensions	205 × 140 × 60 mm *(8.1 × 5.5 × 2.4 in.)*
Weight	420 g *(0.9 lb)*
Alignment method	Alignment of horizontal shafts, 3 position measurement 9 -12 -3 (with min. 140° rotation), automatic measurement, soft foot
Live correction values	Vertical and horizontal
Extra features	Machine library, screen orientation flip, automatic .pdf report
Fixture	2× V-brackets with chains, width 21 mm *(0.8 in.)*
Shaft diameters	20 to 150 mm *(0.8 to 5.9 in.)* 300 mm *(11.8 in.)* with optional extension chains (not included)
Max. coupling height [1]	105 mm *(4.2 in.)* with standard rods 195 mm *(7.7 in.)* with optional extension rods (not included)
Power adapter	Input: 100V-240V 50/60Hz AC power supplier Output: DC 12V 3A with EU, US, UK, AUS adapters
Operating temperature	0 to 45 °C *(32 to 113 °F)*
IP rating	IP 54
Carrying case dimensions	530 × 110 × 360 mm *(20.9 × 4.3 × 14.2 in.)*
Total weight (incl. case)	4,75 kg *(10.5 lb)*
Calibration certificate	Supplied with 2 years validity
Case content	2 measuring units (M&S); display unit; 2 shaft brackets with chains 400 mm *(15.8 in.)* and threaded rods 150 mm *(5.9 in.)*; chain tightening rod; power supply with country adapters; 2 micro USB to USB cables; measuring tape; printed certificate of calibration and conformance; printed quick start guide (EN); SKF carrying case

[1] Depending on the coupling, the brackets can be mounted on the coupling, reducing the coupling heigt limitation.

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