SOKKIA

B20 · B30 · B40

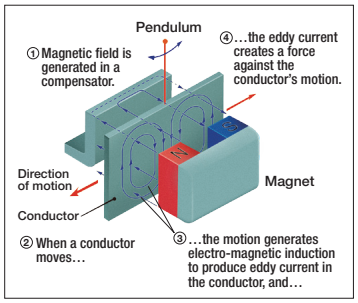
AUTOMATIC LEVELS

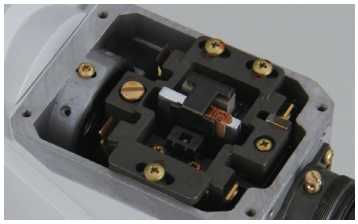
World-Proven Precision and Durability

Sokkia B series automatic levels feature enhanced reliability under all environmental conditions. Tough and compact bodies are more tightly sealed against water, humidity and dust (IPx6). The B series levels provide quick setup, easy sighting, and superior durability against vibration and shock, ensuring the increased productivity over an extra-long period of time.

■ Precise, Reliable Automatic Compensator

The B series levels incorporate the most precise and reliable compensator available in the market today. The technological superiority of the Sokkia automatic levels has been proven since the release of the best-selling B2 model in 1963. Four super-high-tensile suspension wires and magnetic damping system ensure accuracy and stability even when exposed to temperature changes, vibrations, or shock.





■ Quick Collimation

Two knobs of endless horizontal motion drives can be operated with either hand for fast and easy aiming.

■ Horizontal Angle Measurement

Horizontal angles can be read in 1° or 1gon units. Freely rotatable circle allows any angle reading from zero. Right angles can be quickly set for layout and alignment tasks. The readout window is conveniently located on the instrument base – directly below the eyepiece.

■ Rapid, Easy Setup

A domed-head tripod makes setting up faster and easier even on inclined, uneven grounds. The B series levels also fit flat-head tripods. The circular level can be seen on a pentaprism or plane mirror located beside the telescope eyepiece.

■ Superior Telescope

Optimally designed telescope provides exceptionally bright and sharp view that reduces operator's eye strain. Ultra-short focus distance of 20cm (7.9in.) from end of telescope* makes it easiest to use in confined locations. Two-speed focus knob switches between coarse and fine for even faster operation (B20).

*30cm (1ft.) from instrument center

B20·B30·B40 Specifications

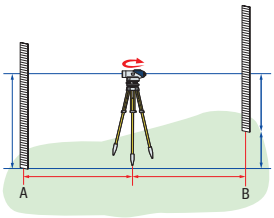
Model	B20	B30	B40
Telescope			
Length	215mm (8.46in.)		
Magnification	32x	28x	24x
Objective aperture	42mm (1.65in.)	36mm (1.42in.)	32mm (1.26in.)
Resolving power	3"	3.5"	4"
Field of View (at 100m/328ft.)	1°20' (2.3m/7.5ft.)	1°25' (2.5m / 8.2ft.)	
Minimum focus	0.2m (7.9in.) from end of telescope 0.3m (1ft.) from instrument center		
Image	Erect		
Reticle pattern	Wedge	Cross line	
Stadia constant	0		
Stadia ratio	100		
Focusing knob	2-speed	1-speed	
Sighting aid	Peep sight		Gun sight
Lens hood	Retractable	-	
Accuracy (standard deviation for 1km double run leveling)			
Without micrometer	0.7mm (0.03in.)	1.5mm (0.06in.)	2.0mm (0.08in.)
With micrometer	0.5mm (0.02in.)	-	
Compensator			
Type	Pendulum compensator with magnetic damping system		
Setting accuracy	0.3"	0.5"	
Working range	±15'		
Circular level			
Sensitivity	10' / 2mm		
Mirror	Pentaprism	Plane mirror	
Horizontal circle			
Diameter	103mm (4.1in.)		
Graduations	1°/ 1gon		
General			
Horizontal motion drive	Clampless, endless, double-sided knobs		
Water resistance	IPX6 (IEC 60529:2001)		
Operating temperature	-20 to +50°C (-4 to +122°F)		
Size Width	130mm (5.12in.)		
Length	215mm (8.46in.)		
Height	140mm (5.51in.)		135mm (5.31in.)
Weight	1.85kg (4.1 lb.)	1.7kg (3.7 lb.)	

■ Standard Equipment

Instrument, lens cap, plumb bob, vinyl cover, cleaning cloth, tool kit, operator's manual, and carrying case.

■ Stadia

The stadia lines on the reticle allow distance measurements. Simply multiply the staff length between the top and bottom stadia lines by 100.



■ Easy to Adjust

Reticle adjustment is made with one screw. Circular level vial is adjusted with two screws. Both adjustments are simple and fast with provided tools.

■ Options

■ DE16/DE22 Diagonal Eyepiece

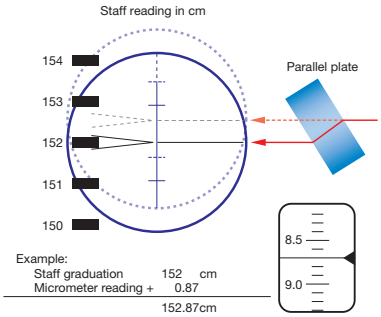
A diagonal eyepiece facilitates work in tight spots with little space behind the instrument.

■ EL5 40x Removable Eyepiece (B20)

Increases the standard 32x magnification to 40x.

■ OM5/OM5F Parallel Plate Micrometer (B20)

To achieve the highest precision with the top-of-the-line B20 model, the optional parallel plate micrometer OM5 allows for staff readings in increments of 0.1mm (estimation to 0.01mm). Accuracy for 1km double run leveling can be increased from 0.7mm to 0.5mm. Imperial version OM5F has 0.001ft. graduations.



DE16 (B20)

DE22 (B30/B40)

EL5 (B20)

OM5/OM5F (B20)

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