



DATA SHEET

LEICA ABSOLUTE TRACKER AT960 ASME B89.4.19-2006 Specifications

Some laser tracker producers do not publish their MPE values as specifications. Instead they use their typical accuracy which is stated as half of their MPE values. To be able to compare specifications side by side the Leica Absolute Tracker AT960 specifications have been converted to reflect both MPE and typical (or half MPE) values.



IN-LINE DISTANCE MEASUREMENT

Range (m)	ADM (mm)	IFM (mm)	ADM (mm)	IFM (mm)
	MPE values		Typical values	
2 to 5	0.014	0.001	0.007	0.001
2 to 10	0.014	0.003	0.007	0.001
2 to 20	0.014	0.005	0.007	0.003
2 to 30	0.014	0.008	0.007	0.004
2 to 35	0.014	0.010	0.007	0.005
2 to 40	0.014	0.011	0.007	0.006
2 to 60	0.014	0.017	0.007	0.009
2 to 80	0.014	0.023	0.007	0.012




ASME B89.4.19-2006 SPECIFICATIONS

All specifications are calculated per the ASME B89.4.19 standard. Information is from the most recent Leica Absolute Tracker AT960 specifications. To allow for comparison, variation in air temperature is not included.

HORIZONTAL SCALE BAR MEASUREMENT

Range (m)	ADM (mm)	IFM (mm)	ADM (mm)	IFM (mm)
	MPE values		Typical values	
2	0.036	0.036	0.018	0.018
5	0.063	0.063	0.032	0.032
10	0.106	0.106	0.053	0.053
20	0.191	0.191	0.096	0.096
30	0.276	0.276	0.138	0.138
35	0.318	0.318	0.159	0.159
40	0.361	0.361	0.180	0.180
60	0.530	0.530	0.265	0.265
80	0.700	0.700	0.350	0.350



PERFORMANCE

	MPE values	Typical values
Angle Performance Angular accuracy	$\pm 15 \mu\text{m} + 6 \mu\text{m}/\text{m}$	$\pm 7.5 \mu\text{m} + 3 \mu\text{m}/\text{m}$
Distance Performance <u>ADM</u> Accuracy	$\pm 10 \mu\text{m}$	$\pm 5 \mu\text{m}$
<u>Interferometer</u> Accuracy	$\pm 0.4 \mu\text{m} + 0.3 \mu\text{m}/\text{m}$	$\pm 0.2 \mu\text{m} + 0.15 \mu\text{m}/\text{m}$
R0 Parameter	$\pm 3 \mu\text{m}$	

About Hexagon Manufacturing Intelligence

Hexagon Manufacturing Intelligence helps industrial manufacturers develop the disruptive technologies of today and the life-changing products of tomorrow. As a leading metrology and manufacturing solution specialist, our expertise in sensing, thinking and acting – the collection, analysis and active use of measurement data – gives our customers the confidence to increase production speed and accelerate productivity while enhancing product quality.

Through a network of local service centres, production facilities and commercial operations across five continents, we are shaping smart change in manufacturing to build a world where quality drives productivity. For more information, visit HexagonMI.com.

Hexagon Manufacturing Intelligence is part of Hexagon (Nasdaq Stockholm: HEXA B; hexagon.com), a leading global provider of information technologies that drive quality and productivity across geospatial and industrial enterprise applications.