



Linear Scales AT103

SERIES 539 — Standard Type



FEATURES

- Enhanced vibration-resistance and durability.
- The innovative rubber lips keep out contaminants.
- An armored signal cable is used to connect the scale unit to the DRO counter for safe operation in harsh shop environments.
- The signal cable outlet can be positioned on either side of the detector head, allowing the signal cable to be connected from either direction.
- A wide variety of measuring ranges are available in this standard type scale unit.
- Connectable to the **KA** counter, **KLD** counter, or **PSU-200**.

Optional Accessories

- 09AAA033A:** Extension cable (80" / 2m)
09AAA033B: Extension cable (200" / 5m)
09AAA033C: Extension cable (280" / 7m)

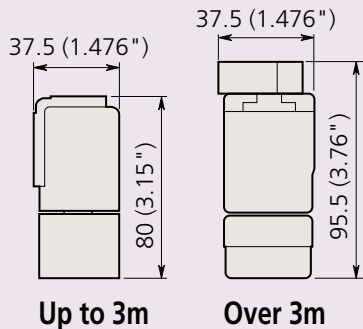


- 174-183A** 2-Axis KA Counter
174-185A 3-Axis KA Counter



174-183A

Unit: mm (inch)



SPECIFICATIONS

Model	AT103
Effective range	4" to 240" / 100 to 6000mm (42 models)
Resolution	.001" to .000005" / 0.01 to 0.0001mm
Accuracy (20°C)	Effective range 100 to 3000: (5+5L ₀ /1000)μm Effective range 3250 to 6000: (5+8L ₀ /1000)μm
Output signal	Two 90° phase-shifted sinusoidal signals
Maximum response speed	120m/min (50m/min when the effective measuring length is 3250 to 6000mm)
Signal output pitch	20μm
Scale reference point	Output in 50mm pitch
Protection level	IP53
Operating temperature	0 to 45°C

* High-precision model **AT103F** (JIS Class 0, (3+3L₀/1000)μm) is also available to special order for the effective range of 100 to 2000mm.

* Ultrahigh-precision model **AT103S** (2+2L₀/1000)μm is also available to special order for the effective range of 100 to 500mm.

AT103				Effective range L ₀ inch / mm	Signal cable length (m)
Order No. (standard)	Model (standard)	Order No. (high accuracy)	Model (high accuracy)		
539-111-30	AT103-100	539-111-40	AT103-100F	4" /100mm	3
539-112-30	AT103-150	539-112-40	AT103-150F	6" /150mm	
539-113-30	AT103-200	539-113-40	AT103-200F	8" /200mm	
539-114-30	AT103-250	539-114-40	AT103-250F	10" /250mm	
539-115-30	AT103-300	539-115-40	AT103-300F	12" /300mm	
539-116-30	AT103-350	539-116-40	AT103-350F	14" /350mm	
539-117-30	AT103-400	539-117-40	AT103-400F	16" /400mm	
539-118-30	AT103-450	539-118-40	AT103-450F	18" /450mm	
539-119-30	AT103-500	539-119-40	AT103-500F	20" /500mm	
539-121-30	AT103-600	539-121-40	AT103-600F	24" /600mm	
539-123-30	AT103-700	539-123-40	AT103-700F	28" /700mm	
539-124-30	AT103-750	539-124-40	AT103-750F	30" /750mm	
539-125-30	AT103-800	539-125-40	AT103-800F	32" /800mm	5
539-126-30	AT103-900	539-126-40	AT103-900F	36" /900mm	
539-127-30	AT103-1000	539-127-40	AT103-1000F	40" /1000mm	
539-128-30	AT103-1100	539-128-40	AT103-1100F	44" /1100mm	
539-129-30	AT103-1200	539-129-40	AT103-1200F	48" /1200mm	
539-130-30	AT103-1300	539-130-40	AT103-1300F	52" /1300mm	
539-131-30	AT103-1400	539-131-40	AT103-1400F	56" /1400mm	
539-132-30	AT103-1500	539-132-40	AT103-1500F	60" /1500mm	
539-133-30	AT103-1600	539-133-40	AT103-1600F	64" /1600mm	
539-134-30	AT103-1700	539-134-40	AT103-1700F	68" /1700mm	
539-135-30	AT103-1800	539-135-40	AT103-1800F	72" /1800mm	
539-136-30	AT103-2000	539-136-40	AT103-2000F	80" /2000mm	
539-137-30	AT103-2200	—	AT103-2200F	88" /2200mm	7
539-138-30	AT103-2400	—	AT103-2400F	96" /2400mm	
539-139-30	AT103-2500	—	AT103-2500F	100" /2500mm	
539-140-30	AT103-2600	—	AT103-2600F	104" /2600mm	
539-141-30	AT103-2800	—	AT103-2800F	112" /2800mm	
539-142-30	AT103-3000	—	AT103-3000F	120" /3000mm	
539-143-30	AT103-3250	—	AT103-3250F	130" /3250mm	
539-144-30	AT103-3500	—	AT103-3500F	140" /3500mm	
539-145-30	AT103-3750	—	AT103-3750F	150" /3750mm	
539-146-30	AT103-4000	—	AT103-4000F	160" /4000mm	
539-147-30	AT103-4250	—	AT103-4250F	170" /4250mm	
539-148-30	AT103-4500	—	AT103-4500F	180" /4500mm	10
539-149-30	AT103-4750	—	AT103-4750F	190" /4750mm	
539-150-30	AT103-5000	—	AT103-5000F	200" /5000mm	
539-151-30	AT103-5250	—	AT103-5250F	210" /5250mm	
539-152-30	AT103-5500	—	AT103-5500F	220" /5500mm	
539-153-30	AT103-5750	—	AT103-5750F	230" /5750mm	
539-154-30	AT103-6000	—	AT103-6000F	240" /6000mm	