

BREAK-RESISTANT SMR_s

Spherically Mounted Retroreflectors



Lasting accuracy

Your tracker's accuracy is only as good as your retroreflector. API's Break-Resistant SMRs are constructed with a one-piece optic, eliminating the common risk of fragile glass panels shifting, separating, or fracturing. Not only are API's SMRs durable in harsh environments, but they can track over 80 meters when used with an API laser tracker.

Description	Type	Range	Centering
Prismatic 0.5"	Standard	40 m	± 0,0254 mm
Prismatic 1.5"	Standard	50 m	± 0,0254 mm
Hollow 0.5"	Standard	40 m	± 0,0127 mm
Hollow 1.5"	Standard	50 m	± 0,0127 mm
Hollow 1.5"	Standard	80 m	± 0,0127 mm
Hollow 1.5"	Precision	50 m	± 0,00254 mm
Hollow 1.5"	Precision	80 m	± 0,00254 mm

WHEN TO REPLACE SMR_s

Scratched Surface

Cleaning dust from the SMR optic with a rag or other abrasive material scratches the gold plating and diminishes SMR accuracy.

Drops and Breaks

An SMR should be replaced if it is dropped. Although API's SMRs are break-resistant, dropping an SMR can flatten out the surface of the outer ball. An SMR with a flat spot causes centering inaccuracy.

Calibration Confidence

Inaccurate SMRs reduce productivity and increase operator frustration and cost. Periodically calibrate or change out SMRs to have confidence in your measurement accuracy.



Hollow SMRs use an aluminum optic with gold coated reflective surfaces. API's specially surfaced SMR's have a measurement range of up to 80m without sacrificing accuracy.

Prismatic SMRs use a solid glass prism that protects the reflective surface from dust. These types of SMR's are suited to outdoor environments where high dust concentrations can affect accuracy.