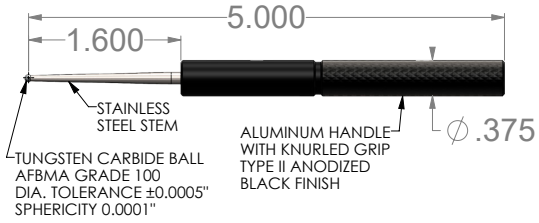
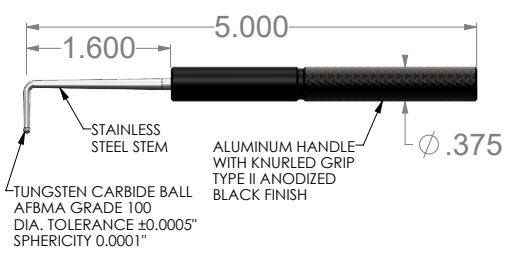


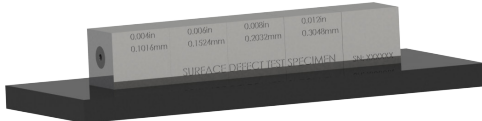
Hand Held Spherical Ball-Tipped Scribers for Surface Defect Analysis			
Surface Defect Scriber – Straight		NO CERTIFICATION	NIST CERTIFIED
 TUNGSTEN CARBIDE BALL AFBMA GRADE 100 DIA. TOLERANCE ± 0.0005" SPHERICITY 0.0001" STAINLESS STEEL STEM ALUMINUM HANDLE WITH KNURLED GRIP TYPE II ANODIZED BLACK FINISH 5.000 1.600 $\phi .375$ For NIST Certified Scriber Styli a Long-Form NIST Traceable Certificate of Calibration per ISO 17025 Accreditation Standards will be Provided for the Carbide Ball Tip Only, and a Non-Traceable Certificate of Conformance will be Provided for Entire Part. Scriber Handle will be Engraved with Matching NIST Certificate Serial Number A Sample Certificate is available upon Request	A Ball Diameter	Part Number	Part Number
	.005"	SDS-0050	SDS-0050-NISTCERT
	.007"	SDS-0070	SDS-0070-NISTCERT
	.010"	SDS-0100	SDS-0100-NISTCERT
	.015"	SDS-0150	SDS-0150-NISTCERT
	.020"	SDS-0200	SDS-0200-NISTCERT
	.025"	SDS-0250	SDS-0250-NISTCERT
	.030"	SDS-0300	SDS-0300-NISTCERT
	.035"	SDS-0350	SDS-0350-NISTCERT
	1.0mm	SDS-1.0mm	SDS-1.0MM-NISTCERT
	.040"	SDS-0400	SDS-0400-NISTCERT
	.045"	SDS-0450	SDS-0450-NISTCERT
	.050"	SDS-0500	SDS-0500-NISTCERT
	1.5mm	SDS-1.5mm	SDS-1.5MM-NISTCERT
	.060"	SDS-0600	SDS-0600-NISTCERT
	.070"	SDS-0700	SDS-0700-NISTCERT
	2.0mm	SDS-2.0mm	SDS-2.0MM-NISTCERT
	.080"	SDS-0800	SDS-0800-NISTCERT
	.090"	SDS-0900	SDS-0900-NISTCERT
	.100"	SDS-1000	SDS-1000-NISTCERT
	3.0mm	SDS-3.0mm	SDS-3.0MM-NISTCERT
	.120"	SDS-1200	SDS-1200-NISTCERT
	.160"	SDS-1600	SDS-1600-NISTCERT
	.240"	SDS-2400	SDS-2400-NISTCERT

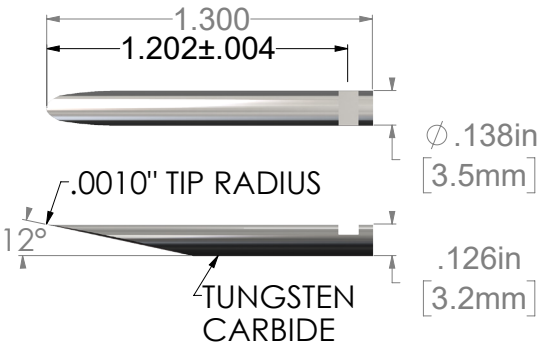
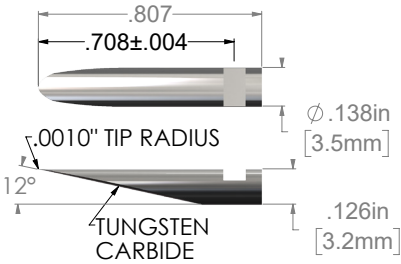
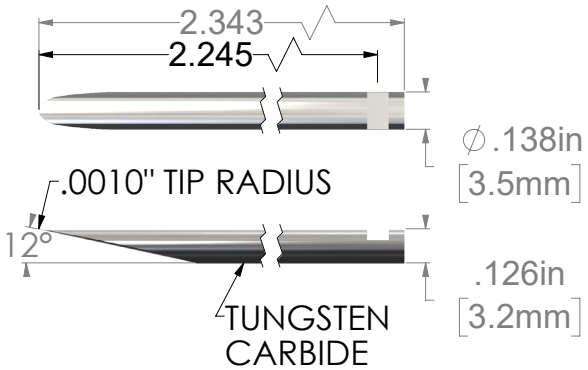
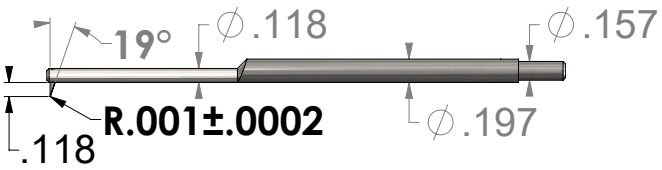
Hand Held Spherical Ball-Tipped Scribes for Surface Defect Analysis

Surface Defect Scriber – Right Angle		NO CERTIFICATION	NIST CERTIFIED
 TUNGSTEN CARBIDE BALL AFBMA GRADE 100 DIA. TOLERANCE ± 0.0005" SPHERICITY 0.0001" STAINLESS STEEL STEM ALUMINUM HANDLE WITH KNURLED GRIP TYPE II ANODIZED BLACK FINISH $\phi .375$	A Ball Diameter	Part Number	Part Number
	.005"	SDSRA-0050	SDSRA-0050-NISTCERT
	.007"	SDSRA-0070	SDSRA-0070-NISTCERT
	.010"	SDSRA-0100	SDSRA-0100-NISTCERT
	.015"	SDSRA-0150	SDSRA-0150-NISTCERT
	.020"	SDSRA-0200	SDSRA-0200-NISTCERT
	.025"	SDSRA-0250	SDSRA-0250-NISTCERT
	.030"	SDSRA-0300	SDSRA-0300-NISTCERT
	.035"	SDSRA-0350	SDSRA-0350-NISTCERT
	1.0mm	SDSRA-1.0mm	SDSRA-1.0MM-NISTCERT
	.040"	SDSRA-0400	SDSRA-0400-NISTCERT
	.045"	SDSRA-0450	SDSRA-0450-NISTCERT
	.050"	SDSRA-0500	SDSRA-0500-NISTCERT
	1.5mm	SDSRA-1.5mm	SDSRA-1.5MM-NISTCERT
	.060"	SDSRA-0600	SDSRA-0600-NISTCERT
	.070"	SDSRA-0700	SDSRA-0700-NISTCERT
	2.0mm	SDSRA-2.0mm	SDSRA-2.0MM-NISTCERT
	.080"	SDSRA-0800	SDSRA-0800-NISTCERT
	.090"	SDSRA-0900	SDSRA-0900-NISTCERT
	.100"	SDSRA-1000	SDSRA-1000-NISTCERT
	3.0mm	SDSRA-3.0mm	SDSRA-3.0MM-NISTCERT
	.120"	SDSRA-1200	SDSRA-1200-NISTCERT
	.160"	SDSRA-1600	SDSRA-1600-NISTCERT
	.240"	SDSRA-2400	SDSRA-2400-NISTCERT

For NIST Certified Scriber Styli a Long-Form NIST Traceable Certificate of Calibration per ISO 17025 Accreditation Standards will be Provided for the Carbide Ball Tip Only, and a Non-Traceable Certificate of Conformance will be Provided for Entire Part. Scriber Handle will be Engraved with Matching NIST Certificate Serial Number

A Sample Certificate is available upon Request

Calibration Test Block for Evaluating Surface Defect Anomalies	
Surface Defect Test Specimen Block	Part Number
 Calibration Test Block for Evaluating Surface Defect Anomalies; Hardened Steel Block with Base; Four Gap Widths of 0.0005", 0.001", 0.002" and 0.003" Long-Form NIST Traceable Certification of Calibration per ISO 17025 Accreditation Standards Provided, Certificate Lists Actual Measured Width Dimension of Each Gap in Block; Block Engraved with Matching NIST Certificate Serial Number; Non-Traceable Certification of Conformity Provided for Entire Block	SDTS-B1
 Calibration Test Block for Evaluating Surface Defect Anomalies; Hardened Steel Block with Base; Four Gap Widths of 0.004", 0.006", 0.008" and 0.012" Long-Form NIST Traceable Certification of Calibration per ISO 17025 Accreditation Standards Provided, Certificate Lists Actual Measured Width Dimension of Each Gap in Block; Block Engraved with Matching NIST Certificate Serial Number; Non-Traceable Certification of Conformity Provided for Entire Block	SDTS-B2

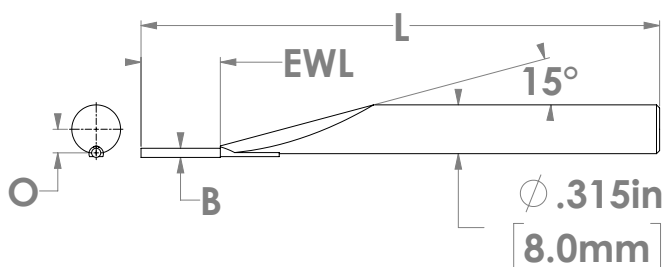
Contour Styli for Form Measurement	
Replacement Stylus Tip for Mahr (MarSurf) Contour Measurement	Part Number
	CPM6850286
	Replacement for Mahr Part Number: 6850286
	CPM6850289
	Replacement for Mahr Part Number: 6850289
	CPM6851517
	Replacement for Mahr Part Number: 6851517
	CPM6851527
	Replacement for Mahr Part Number: 6851527

Contour Styli for Form Measurement	
Replacement Stylus Tip for Mitutoyo Contour Measurement	Part Number
	CPM354884
	Replacement for Mitutoyo Part Number: 354884 or SPH-71

Contour Styli for Form Measurement	
Replacement Stylus Tip for Zeiss/Accretech/TSK Contour Measurement	Part Number
	CPDM45502
	Replacement for Zeiss/Accretech/TSK Part Number: DM45502

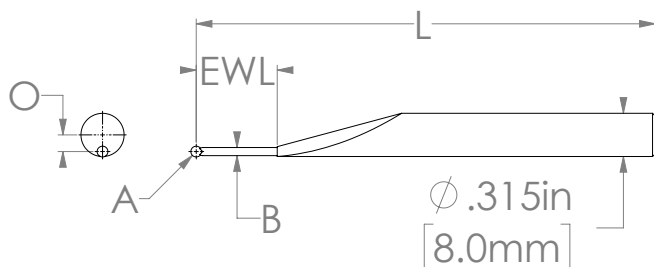
Contour Styli for Form Measurement	
Replacement Stylus Tip for Zeiss/Accretech/TSK Contour Measurement	Part Number
	CPDM45505
	Replacement for Zeiss/Accretech/TSK Part Number: DM45505

Pin Tipped Offset Height Gauge Probe (for Height Gages with Ø8.0mm Shanks)



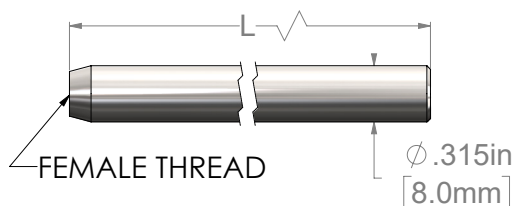
B Carbide Stem Diameter	L Length	EWL	O Offset	Part Number
1.0mm .039"	85.0mm 3.347"	7.0mm 2.76"	4.0mm .157"	HGP-885-1CYL
1.5mm .059"	85.0mm 3.347"	10.0mm .394"	4.0mm .157"	HGP-885-1.5CYL
2.0mm .078"	85.0mm 3.347"	15mm .591"	3.76mm .148"	HGP-885-2CYL

Height Gauge Ball Tip Offset Probes (for Height Gages with Ø8.0mm Shanks)



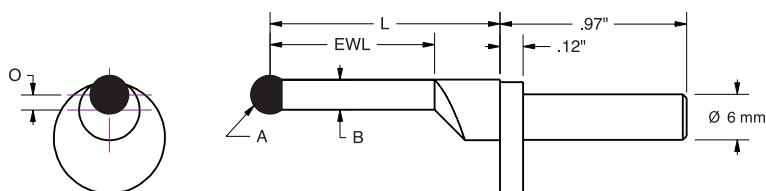
A Ball Diameter	B Stem Diameter	L Length	EWL	O Offset	Stem Material	Ball Material	Part Number
1.0mm .039"	.079mm .031"	85.0mm 3.347"	7.0mm 2.76"	3.45mm .136"	Tungsten Carbide	Ruby	HGB-885-1R
						Carbide	HGB-885-1C
1.5mm .059"	1.0mm .039"	85.0mm 3.347"	10.0mm .394"	3.35mm .132"	Tungsten Carbide	Ruby	HGB-885-1.5R
						Carbide	HGB-885-1.5C
2.0mm .078"	1.5mm .059"	85.0mm 3.347"	15mm .591"	3.07mm .121"	Tungsten Carbide	Ruby	HGB-885-2R
						Carbide	HGB-885-2C
3.0mm .118"	2.0mm .078"	85.0mm 3.347"	18mm .709"	2.84mm .112"	Tungsten Carbide	Ruby	HGB-885-3R
						Carbide	HGB-885-3C
4.0mm .157"	2.0mm .078"	85.0mm 3.347"	20mm .787"	2.84mm .112"	Tungsten Carbide	Ruby	HGB-885-4R
						Carbide	HGB-885-4C
5.0mm .197"	3.5mm .138"	85.0mm 3.347"	20mm .787"	2.26mm .089"	Stainless Steel	Ruby	HGB-885-5R
						Carbide	HGB-885-5C
6.0mm .236"	4.0mm .157"	85.0mm 3.347"	25mm .984"	2.0mm .079"	Stainless Steel	Ruby	HGB-885-6R
						Carbide	HGB-885-6C

Height Gauge Probe Adaptors for Contact Points and Styli (for Height Gages with Ø8.0mm Shanks)



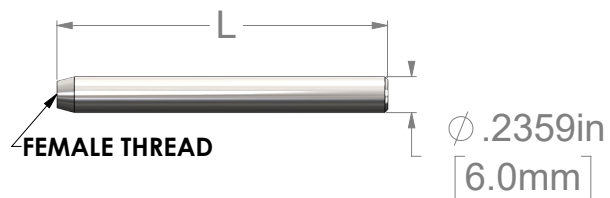
Actual Size	Female Thread	Length	Part Number
	4-48	100mm 3.937"	HGAD-8100-4-48
	M2 X 0.4	100mm 3.937"	HGAD-8100-M2
	M2.5 X 0.45	100mm 3.937"	HGAD-8100-M2.5
	M3 X 0.5	100mm 3.937"	HGAD-8100-M3
	M4 X 0.7	100mm 3.937"	HGAD-8100-M4

Height Gauge Ball Tip Offset Probes (for Brown & Sharpe Micro-Hite)



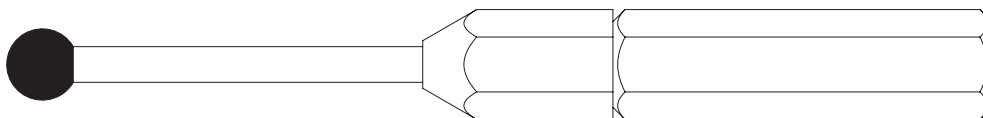
A Ball Diameter	B Stem Diameter	L Length	EWL	O Offset	Ball Material	Part Number
1.0mm	.031"	1.203"	.276"	.166"	Ruby	MH-220R
					Carbide	MH-220C
1.5mm	.039"	1.203"	.354"	.166"	Ruby	MH-221R
					Carbide	MH-221C
2.0mm	.059"	1.203"	.461"	.155"	Ruby	MH-222R
					Carbide	MH-222C
3.0mm	.078"	1.203"	.461"	.155"	Ruby	MH-223R
					Carbide	MH-223C
5.0mm	.156"	1.195"	.855"	.116"	Ruby	MH-224R
					Carbide	MH-224C

Height Gauge Probe Adaptors for Contact Points and Styli (for Height Gages with Ø6.0mm Shanks)



Actual Size	Female Thread	Length	Part Number
	4-48	55mm 2.165"	MHAD-4-48
	M2 X 0.4	55mm 2.165"	MHAD-M2
	M2.5 X 0.45	55mm 2.165"	MHAD-M2.5
	M3 X 0.5	55mm 2.165"	MHAD-M3
	M4 X 0.7	55mm 2.165"	MHAD-M4

Custom Ball Gauges Made To Your Specifications – Available In Single Or Double End



Ruby Balls

Synthetic Ruby (Sapphire)

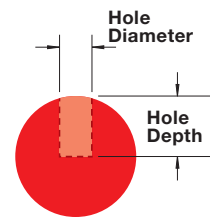
AFBMA Grade 10

Basic Diameter Tolerance $\pm .0001"$

Sphericity .00001"



Ruby Ball
without Hole



Ruby Ball
with Blind Hole

Available with or without Hole

Ball Diameter	Hole Diameter x Depth	Part Number
0.3mm	No Hole	RB.3MM
0.5mm	No Hole	RB.5MM
0.6mm	No Hole	RB.6MM
0.7mm	No Hole	RB.7MM
1/32"	No Hole	RB.0312
1/32"	.013" x .015"	RB.0312H
1.0mm	No Hole	RB1.0MM
1.0mm	.015" x .020"	RB1.0MMH
3/64"	No Hole	RB.0469
3/64"	.018" x .025"	RB.0469H
1.35mm	No Hole	RB1.35MM
1.35mm	.018" x .025"	RB1.35MMH
1.5mm	No Hole	RB1.5MM
1.5mm	.018" x .030"	RB1.5MMH
1/16"	No Hole	RB.0625
1/16"	.018" x .030"	RB.0625H
2.0mm	No Hole	RB2.0MM
2.0mm	.025" x .040"	RB2.0MMH
3/32"	No Hole	RB.0937
3/32"	.025" x .045"	RB.0937H
2.5mm	No Hole	RB2.5MM
2.5mm	.025" x .045"	RB2.5MMH
3.0mm	No Hole	RB3.0MM
3.0mm	.031" x .059"	RB3.0MMH
1/8"	No Hole	RB.1250
1/8"	.031" x .059"	RB.1250H
3.5mm	No Hole	RB3.5MM
3.5mm	.031" x .059"	RB3.5MMH

Ball Diameter	Hole Diameter x Depth	Part Number
5/32"	No Hole	RB.1562
5/32"	.059" x .080"	RB.1562H
4.0mm	No Hole	RB4.0MM
4.0mm	.059" x .080"	RB4.0MMH
.1875"	No Hole	RB.1875
.1875"	.059" x .080"	RB.1875H
5.0mm	No Hole	RB5.0MM
5.0mm	.059" x .080"	RB5.0MMH
7/32"	No Hole	RB.2187
7/32"	.059" x .100"	RB.2187H
6.0mm	No Hole	RB6.0MM
6.0mm	.059" x .120"	RB6.0MMH
1/4"	No Hole	RB.2500
1/4"	.059" x .120"	RB.2500H
7.0mm	No Hole	RB7.0MM
7.0mm	.059" x .120"	RB7.0MMH
9/32"	No Hole	RB.2812
9/32"	.078" x .140"	RB.2812H
5/16"	No Hole	RB.3125
5/16"	.078" x .156"	RB.3125H
8.0mm	No Hole	RB8.0MM
8.0mm	.078" x .156"	RB8.0MMH
9.0mm	No Hole	RB9.0MM
9.0mm	.078" x .156"	RB9.0MMH
3/8"	No Hole	RB.3750
3/8"	.098" x .187"	RB.3750H
10.0mm	No Hole	RB10.0MM
10.0mm	.098" x .187"	RB10.0MMH