Carbide Probes Inc.®

CATALOG #2024-0101

- Carbide & Ruby Indicator Tips
- Custom-Built Contact Points
- CMM Replacement Styli

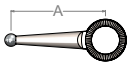
Tips for Dial Test Indicators PG 2-18

Tips for Electronic Lever Gageheads PG 19-24

Contact Points for LVDT, Linear, Digital and Dial Indicators PG 25-42

CMM Styli PG 43-97

Surface Test & Miscellaneous PG 98-105

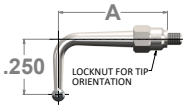
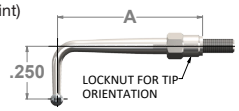
ALINA	A (Length)	Thread Size/Pitch	Model Number	Ball Diameter	T.C. Ball Part Number	Ruby Ball Part Number
	.472"	Ratchet	88	.015" .031" .062" .100"	101-015 101-031 101-062 101-100	101-015R 101-031R 101-062R 101-100R
	.547"	M1.7 x 0.35	M31, M31SM, M32, M33, M34, M34SM	.006" .008" .015" .031" 1mm 1.5mm .062" 2mm .100"	102-006 102-008 102-015 102-031 102-040 102-060 102-062 102-080 102-100	- - 102-015R 102-031R 102-040R - 102-062R 102-080R 102-100R
	.512"	M1.7 x 0.35	K22, K24, K26, K28	.008" .010" .015" .031" 1mm .062" 2mm .100"	103-008 103-010 103-015 103-031 103-040 103-062 103-080 103-100	- - 103-015R 103-031R 103-040R 103-062R 103-080R 103-100R
	1.500"	M1.7 x 0.35	K21, K23, K25, K27	.015" .031" 1mm .062" 2mm .100"	104-015 104-031 104-040 104-062 104-080 104-100	104-015R 104-031R 104-040R 104-062R 104-080R 104-100R

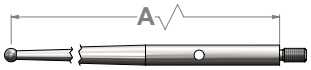
ALINA continued on page 3

ALINA continued from page 2	**A (Length)**	**Thread Size/Pitch**	**Model Number**	**Ball Diameter**	**T.C. Ball Part Number**	**Ruby Ball Part Number**
	1.170"	M1.7 x 0.35	M35 SHORT RANGE	.015" .031" 1mm .062" 2mm .100"	105-015 105-031 105-040 105-062 105-080 105-100	105-015R 105-031R 105-040R 105-062R 105-080R 105-100R
	.321"	M1.6 x 0.35	524, 526, 531, 532, 622, 628, 633, 634, 724, 726	.015" .031" 1mm .062" 2mm .100"	130-015 130-031 130-040 130-062 130-080 130-100	130-015R 130-031R 130-040R 130-062R 130-080R 130-100R
	1.276"	M1.6 x 0.35	525, 527, 621, 623, 725, 727, 731, 732	.015" .031" 1mm .062" 2mm .100"	131-015 131-031 131-040 131-062 131-080 131-100	131-015R 131-031R 131-040R 131-062R 131-080R 131-100R

AMES	**A (Length)**	**Thread Size/Pitch**	**Model Number**	**Ball Diameter**	**T.C. Ball Part Number**	**Ruby Ball Part Number**
	.190"	1-72	Trutest #1 – 2	.015" .031" 1mm .062" 2mm .100"	106-015 106-031 106-040 106-062 106-080 106-100	106-015R 106-031R 106-040R 106-062R 106-080R 106-100R

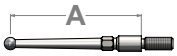
ASH	**A (Length)**	**Thread Size/Pitch**	**Model Number**	**Ball Diameter**	**T.C. Ball Part Number**	**Ruby Ball Part Number**
	.365"	M1.7 x 0.35	N/A	.015" .031" 1mm .062" 2mm .100" 3mm	155-015 155-031 155-040 155-062 155-080 155-100 -	155-015R 155-031R 155-040R 155-062R 155-080R 155-100R 155-120R

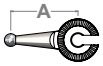
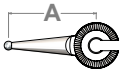
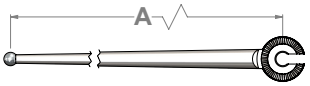
BROWN & SHARPE	A (Length)	Thread Size/Pitch	Model Number	Ball Diameter	T.C. Ball Part Number	Ruby Ball Part Number	Delrin Ball Part Number
	.245"	M1.4 x 0.30	7025, 7027, 7028	.006" .008" .015" .031" 1mm .062" 2mm .100" 3mm	107-006 107-008 107-015 107-031 107-040 107-062 107-080 107-100 107-120	- - 107-015R 107-031R 107-040R 107-062R 107-080R 107-100R -	- - - - - - - - -
	.494"	M1.4 x 0.30	7021, 7022, 7023, 7024, 7029, 7030, 7031,7032, 7033, 7036, 7037, 7038, 7049, 7050	.005" .006" .007" .008" .010" .012" .015" .016" .020" .025" .031" 1mm 1.5mm .062" 2mm .100" 3mm	108-005 108-006 108-007 108-008 108-010 108-012 108-015 108-016 108-020 108-025 108-031 108-040 108-060 108-062 108-080 108-100 108-120	- - - - - - 108-015R - - 108-025R 108-031R 108-040R 108-060R 108-062R 108-080R 108-100R -	- - - - - - - - - - - - - 108-062D - - -
(Hook Point) 	.494"	M1.4 x 0.30	7021, 7022, 7023, 7024, 7029, 7030, 7031,7032, 7033, 7036, 7037, 7038, 7049, 7050	.015" .031" .062"	108-015HP 108-031HP 108-062HP	108-015RHP 108-031RHP 108-062RHP	- - -
	1.437"	M1.4 x 0.30	7034, 7035	.006" .008" .010" .012" .015" .020" .031" 1mm 1.5mm .062" 2mm .100" 3mm	109-006 109-008 109-010 109-012 109-015 109-020 109-031 109-040 109-060 109-062 109-080 109-100 109-120	- - - - 109-015R - 109-031R 109-040R 109-060R 109-062R 109-080R 109-100R -	- - - - - - - - - 109-062D - - -
	.688"	M1.7 x 0.35	7025-4, 7026-4, 7027-4, 7028-4	.005" .006" .007" .008" .010" .012" .015" .020" .025" .031" 1mm 1.5mm .062" 2mm .100" 3mm	120-005 120-006 120-007 120-008 120-010 120-012 120-015 120-020 120-025 120-031 120-040 120-060 120-062 120-080 120-100 120-120	- - - - - - 120-015R - 120-025R 120-031R 120-040R 120-060R 120-062R 120-080R 120-100R -	- - - - - - - - - - - - 120-062D - - -
(Hook Point) 	.688"	M1.7 x 0.35	7025-4, 7026-4, 7027-4, 7028-4	.015" .031" .062"	120-015HP 120-031HP 120-062HP	120-015RHP 120-031RHP 120-062RHP	- - -

COMPAC	A (Length)	Thread Size/Pitch	Model Number	Ball Diameter	T.C. Ball Part Number	Ruby Ball Part Number
	.573"	M1.6 x 0.35	212A, 214A, 214GA, 215A, 215GA, 224A, 224GA, 225A, 225GA, 234A, 234GA, 235A, 235GA, 245A, 245GA	.006" .008" .010" .015" .031" 1mm 1.5mm .062" 2mm .100" 3mm	135-006 135-008 135-010 135-015 135-031 135-040 135-060 135-062 135-080 135-100 135-120	- - - 135-015R 135-031R 135-040R 135-060R 135-062R 135-080R 135-100R -
	1.293"	M1.6 x 0.35	213LA, 213GLA, 223LA, 223GLA, 233LA, 233GLA	.015" .031" 1mm 1.5mm .062" 2mm .100" 3mm	136-015 136-031 136-040 - 136-062 136-080 136-100 136-120	136-015R 136-031R 136-040R 136-060R 136-062R 136-080R 136-100R -
	.528"	M1.6 x 0.35	244A, 244GA	.006" .008" .015" .031" 1mm .062" 2mm .100"	137-006 137-008 137-015 137-031 137-040 137-062 137-080 137-100	- - 137-015R 137-031R 137-040R 137-062R 137-080R 137-100R
	1.652"	M1.6 x 0.35	244LA, 244GLA	.006" .015" .031" 1mm .062" 2mm .100"	145-006 145-015 145-031 145-040 145-062 145-080 145-100	- 145-015R 145-031R 145-040R 145-062R 145-080R 145-100R
	.561"	M1.6 x 0.35	213, 213G, 215, 215G, 216G, 223, 223G, 225, 225G, 233, 233G, 235, 235G, 242, 242G, 245, 245G	.008" .015" .031" 1mm .062" 2mm .100"	162-008 162-015 162-031 162-040 162-062 162-080 162-100	- 162-015R 162-031R 162-040R 162-062R 162-080R 162-100R
	1.269"	M1.6 x 0.35	212L, 212GL, 215GL, 222L, 222GL, 232L, 232GL	.015" .031" 1mm .062" 2mm .100"	163-015 163-031 163-040 163-062 163-080 163-100	163-015R 163-031R 163-040R 163-062R 163-080R 163-100R
	1.624"	M1.6 x 0.35	243L, 243GL	.015" .031" 1mm .062" 2mm .100"	164-015 164-031 164-040 164-062 164-080 164-100	164-015R 164-031R 164-040R 164-062R 164-080R 164-100R

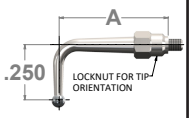
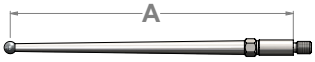
DATCON-HAMILTON	A (Length)	Thread Size/Pitch	Model Number	Ball Diameter	T.C. Ball Part Number	Ruby Ball Part Number
	.812"	4-48	T14, T15, T101	.015" .031" 1mm .062" 2mm .100"	132-015 132-031 132-040 132-062 132-080 132-100	132-015R 132-031R 132-040R 132-062R 132-080R 132-100R

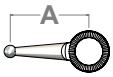
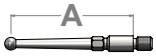
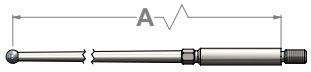
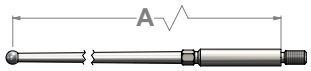
EMS	A (Length)	Thread Size/Pitch	Model Number	Ball Diameter	T.C. Ball Part Number	Ruby Ball Part Number
	.375"	M1.7 x 0.35	N/A	.015" .031" 1mm .062" 2mm .100"	156-015 156-031 156-040 156-062 156-080 156-100	156-015R 156-031R 156-040R 156-062R 156-080R 156-100R

ENCO	A (Length)	Thread Size/Pitch	Model Number	Ball Diameter	T.C. Ball Part Number	Ruby Ball Part Number
	.245"	M1.4 x 0.30	609-00, 609-01, 609-05, 609-06, 609-07	.006" .008" .015" .031" 1mm .062" 2mm .100" 3mm	107-006 107-008 107-015 107-031 107-040 107-062 107-080 107-100 107-120	- - 107-015R 107-031R 107-040R 107-062R 107-080R 107-100R -
	.660"	M1.6 x 0.35	699-10	.015" .031" 1mm .062" 2mm .100"	146-015 146-031 146-040 146-062 146-080 146-100	146-015R 146-031R 146-040R 146-062R 146-080R 146-100R

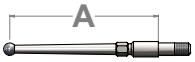
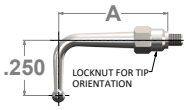
FEDERAL	A (Length)	Thread Size/Pitch	Model Number	Ball Diameter	T.C. Ball Part Number	Ruby Ball Part Number
	.547"	M1.7 x 0.35	L2, L6, L10, L12	.006" .008" .015" .031" 1mm 1.5mm .062" 2mm .100"	102-006 102-008 102-015 102-031 102-040 102-060 102-062 102-080 102-100	- - 102-015R 102-031R 102-040R - 102-062R 102-080R 102-100R
	.512"	M1.7 x 0.35	L1, L5, L9, L11	.008" .010" .015" .031" 1mm .062" 2mm .100"	103-008 103-010 103-015 103-031 103-040 103-062 103-080 103-100	- - 103-015R 103-031R 103-040R 103-062R 103-080R 103-100R
	.331"	Ratchet	T2, T3, T6, T7, LT1/2, LT2, LT6, LT13	.015" .031" .062" .100"	110-015 110-031 110-062 110-100	110-015R 110-031R 110-062R 110-100R
	.398"	Ratchet	T1, T5, T9, LT1, LT5, LT9, LT10	.015" .020" .031" 1mm 1.5mm .062" 2mm .100"	111-015 111-020 111-031 111-040 111-060 111-062 111-080 111-100	111-015R - 111-031R - - 111-062R - 111-100R
	1.660"	Ratchet	T11, LT11, LT12	.015" .031" .062" .100"	112-015 112-031 112-062 112-100	112-015R 112-031R 112-062R 112-100R

FEDERAL continued on page 7

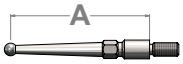
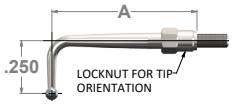
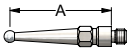
FEDERAL continued from page 6	A (Length)	Thread Size/Pitch	Model Number	Ball Diameter	T.C. Ball Part Number	Ruby Ball Part Number	Delrin Ball Part Number
	.494"	M1.4 x 0.30	LT102, LT104, LT109, LT113, LT123, LT150, T101, T102, T104, T105, T106, T108, T109, T123	.005" .006" .007" .008" .010" .012" .015" .016" .020" .025" .031" 1mm 1.5mm .062" 2mm .100" 3mm	108-005 108-006 108-007 108-008 108-010 108-012 108-015 108-016 108-020 108-025 108-031 108-040 108-060 108-062 108-080 108-100 108-120	- - - - - - - - 108-025R 108-015R 108-031R 108-040R 108-060R 108-062R 108-080R 108-100R -	- - - - - - - - - - - - - 108-062D - - -
(Hook Point) 	.494"	M1.4 x 0.30	LT102, LT104, LT109, LT113, LT123, LT150, T101, T102, T104, T105, T106, T108, T109, T123	.015" .031" .062"	108-015HP 108-031HP 108-062HP	108-015RHP 108-031RHP 108-062RHP	- - -
	.366"	M1.6 x 0.35	T-82, LT-82	.015" .031" 1mm .062" 2mm .100"	150-015 150-031 150-040 150-062 150-080 150-100	150-015R 150-031R 150-040R 150-062R 150-080R 150-100R	- - - - - -
	.636"	M1.6 x 0.35	T-83, LT-83, T-85, LT-85	.015" .031" 1mm .062" 2mm .100"	151-015 151-031 151-040 151-062 151-080 151-100	151-015R 151-031R 151-040R 151-062R 151-080R 151-100R	- - - - - -
	1.447"	M1.6 x 0.35	T-84, LT-84, T-86, LT-86	.015" .031" 1mm .062" 2mm .100"	152-015 152-031 152-040 152-062 152-080 152-100	152-015R 152-031R 152-040R 152-062R 152-080R 152-100R	- - - - - -
	1.437"	M1.4 x 0.30	T-103, LT-103, T-111, LT-111	.006" .008" .010" .012" .015" .020" .031" 1mm 1.5mm .062" 2mm .100" 3mm	109-006 109-008 109-010 109-012 109-015 109-020 109-031 109-040 109-060 109-062 109-080 109-100 109-120	- - - - 109-015R - 109-031R 109-040R 109-060R 109-062R 109-080R 109-100R -	- - - - - - - - - 109-062D - - -

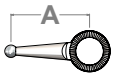
FOWLER	A (Length)	Thread Size/Pitch	Model Number	Ball Diameter	T.C. Ball Part Number	Ruby Ball Part Number
(VERDICT)	.306"	Ratchet	52-555-000, 52-555-005, 52-555-666 TYPE C	.015" .031" .062" .100"	113-015 113-031 113-062 113-100	113-015R 113-031R 113-062R 113-100R
 (VERDICT)	.375"	Ratchet	SP Super Test	.015" .031" .062" .100"	114-015 114-031 114-062 114-100	114-015R 114-031R 114-062R 114-100R
(VERDICT)	.250"	M1.7 x 0.35	52-560-010, 52-560-015, TA4, T5, T7, T500	.015" .031" 1mm .062" 2mm .100"	115-015 115-031 115-040 115-062 115-080 115-100	115-015R 115-031R 115-040R 115-062R 115-080R 115-100R
(VERDICT)	.344"	M1.7 x 0.35	T1, T2, T4	.015" .031" 1mm .062" 2mm .100"	116-015 116-031 116-040 116-062 116-080 116-100	116-015R 116-031R 116-040R 116-062R 116-080R 116-100R
 (VERDICT)	.605"	M1.7 x 0.35	T8, 52-560-005	.015" .031" 1mm .062" 2mm .100"	117-015 117-031 117-040 117-062 117-080 117-100	117-015R 117-031R 117-040R 117-062R 117-080R 117-100R
(VERDICT)	.674"	M1.7 x 0.35	T15	.015" .031" 1mm .062" 2mm .100"	118-015 118-031 118-040 118-062 118-080 118-100	118-015R 118-031R 118-040R 118-062R 118-080R 118-100R
(VERDICT)	.860"	M1.7 x 0.35	T6	.015" .031" 1mm .062" 2mm .100"	139-015 139-031 139-040 139-062 139-080 139-100	139-015R 139-031R 139-040R 139-062R 139-080R 139-100R
	2.890"	M1.7 x 0.35	52-555-022, 52-555-023	.015" .031" 1mm 1.5mm .062" 2mm .100"	158-015 158-031 158-040 158-060 158-062 158-080 158-100	158-015R 158-031R 158-040R - 158-062R 158-080R 158-100R
(ULTRA-TAST)	.516"	M1.6 x 0.35	52-568-005, 52-568-006, 52-568-010, 52-568-011, 52-568-015, 52-568-016, 52-568-020	.015" .031" 1mm .062" 2mm .100"	143-015 143-031 143-040 143-062 143-080 143-100	143-015R 143-031R 143-040R 143-062R 143-080R 143-100R
(ULTRA-TAST)	.545"	M1.6 x 0.35	52-568-021	.012" .015" .031" 1mm .062" 2mm .100"	159-012 159-015 159-031 159-040 159-062 159-080 159-100	- 159-015R 159-031R 159-040R 159-062R 159-080R 159-100R
 (ULTRA-TAST)	1.378"	M1.6 x 0.35	52-568-022	.015" .031" 1mm .062" 2mm .100"	160-015 160-031 160-040 160-062 160-080 160-100	160-015R 160-031R 160-040R 160-062R 160-080R 160-100R
 (ULTRA-TAST)	1.457"	M1.6 x 0.35	52-568-023	.015" .031" 1mm .062" 2mm .100"	161-015 161-031 161-040 161-062 161-080 161-100	161-015R 161-031R 161-040R 161-062R 161-080R 161-100R

FOWLER continued on page 9

FOWLER continued from page 8	A (Length)	Thread Size/Pitch	Model Number	Ball Diameter	T.C. Ball Part Number	Ruby Ball Part Number	Delrin Ball Part Number
(GIROD-TAST)	.480	M1.6 x 0.35	52-562-252*, 52-562-253, 52-562-272, 52-562-273, 52-562-452*, 52-562-453, 52-562-473, 52-563-252, 52-563-253, 52-563-272, 52-563-273, 52-563-452, 52-563-453,52-563-473 FOR OLD STYLE INDICATORS WITH M1.6 THREADS *WITHOUT REVOLUTION COUNTER	.006" .008" .010" .015" .031" 1mm 1.5mm .062" 2mm .100"	138-006 138-008 138-010 138-015 138-031 138-040 - 138-062 138-080 138-100	- - - 138-015R 138-031R 138-040R 138-060R 138-062R 138-080R 138-100R	- - - - - - - - - -
 (GIROD-TAST)	.750"	M1.6 x 0.35	52-562-252, 52-562-452, FOR INDICATORS WITH REVOLUTION COUNTER	.015" .031" 1mm .062" 2mm .100"	147-015 147-031 147-040 147-062 147-080 147-100	147-015R 147-031R 147-040R 147-062R 147-080R 147-100R	- - - - - -
(GIROD-TAST)	1.415"	M1.6 x 0.35	52-562-474, 52-563-474, FOR OLD STYLE INDICATORS WITH M1.6 THREADS	.015" .031" 1mm .062" 2mm .100"	148-015 148-031 148-040 148-062 148-080 148-100	148-015R 148-031R 148-040R 148-062R 148-080R 148-100R	- - - - - -
(GIROD-TAST)	.494"	M1.4 x 0.30	52-562-253, 52-562-272, 52-562-273, 52-562-453, 52-562-473, 52-563-252, 52-563-253, 52-563-272, 52-563-273, 52-563-452, 52-563-453, 52-563-473, 54-562-777 FOR NEW STYLE INDICATORS WITH M1.4 THREADS	.005" .006" .007" .008" .010" .012" .015" .016" .020" .025" .031" 1mm 1.5mm .062" 2mm .100" 3mm	108-005 108-006 108-007 108-008 108-010 108-012 108-015 108-016 108-020 108-025 108-031 108-040 108-060 108-062 108-080 108-100 108-120	- - - - - - 108-015R - - 108-025R 108-031R 108-040R 108-060R 108-062R 108-080R 108-100R -	- - - - - - - - - - - - - 108-062D - - -
(Hook Point)  (GIROD-TAST)	.494"	M1.4 x 0.30	52-562-253, 52-562-272, 52-562-273, 52-562-453, 52-562-473, 52-563-252, 52-563-253, 52-563-272, 52-563-273, 52-563-452, 52-563-453, 52-563-473, 54-562-777 FOR NEW STYLE INDICATORS WITH M1.4 THREADS	.015" .031" .062"	108-015HP 108-031HP 108-062HP	108-015RHP 108-031RHP 108-062RHP	- - -
(GIROD-TAST)	1.437"	M1.4 x 0.30	52-562-474, 52-563-474, 54-562-888 FOR NEW STYLE INDICATORS WITH M1.4 THREADS	.006" .008" .010" .012" .015" .020" .031" 1mm 1.5mm .062" 2mm .100" 3mm	109-006 109-008 109-010 109-012 109-015 109-020 109-031 109-040 109-060 109-062 109-080 109-100 109-120	- - - - 109-015R - 109-031R 109-040R 109-060R 109-062R 109-080R 109-100R -	- - - - - - - - - 109-062D - - -

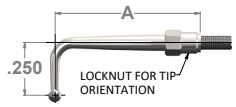
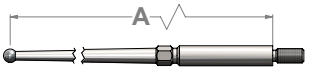
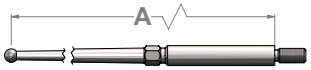
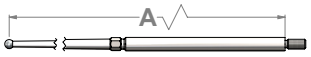
FOWLER continued on page 10

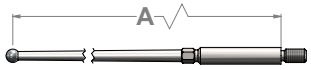
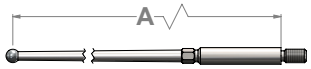
FOWLER continued from page 9	A (Length)	Thread Size/Pitch	Model Number	Ball Diameter	T.C. Ball Part Number	Ruby Ball Part Number	Delrin Ball Part Number
 (X-TEST)	.688"	M1.7 x 0.35	52-562-001, 52-562-002, 52-562-003, 52-562-004, 52-562-005, 52-562-006, 52-562-007, 52-562-008, 52-562-100, 52-562-105, 52-562-110, 52-562-120	.005" .006" .007" .008" .010" .012" .015" .020" .025" .031" 1mm 1.5mm .062" 2mm .100" 3mm	120-005 120-006 120-007 120-008 120-010 120-012 120-015 120-020 120-025 120-031 120-040 120-060 120-062 120-080 120-100 120-120	- - - - - - 120-015R - 120-025R 120-031R 120-040R 120-060R 120-062R 120-080R 120-100R -	- - - - - - - - - - - - 120-062D - - -
(Hook Point)  (X-TEST)	.688"	M1.7 x 0.35	52-562-001, 52-562-002, 52-562-003, 52-562-004, 52-562-005, 52-562-006, 52-562-007, 52-562-008, 52-562-100, 52-562-105, 52-562-110, 52-562-120	.015" .031" .062"	120-015HP 120-031HP 120-062HP	120-015RHP 120-031RHP 120-062RHP	- - -
	.537"	M2 x 0.4	52-562-774, 52-562-775, 52-562-776, 52-562-778, 52-562-780	.015" .031" 1mm .060" .062" 2mm .100"	185-015 185-031 185-040 185-060 185-062 185-080 185-100	185-015R 185-031R 185-040R 185-060R 185-062R 185-080R 185-100R	- - - - - - -

GEM	A (Length)	Ratchet	Model Number	Ball Diameter	T.C. Ball Part Number	Ruby Ball Part Number
	.375"	Ratchet	222, 225, 250, 300, 325, 333, 334, 335	.015" .031" 1mm .062" 2mm .100"	119-015 119-031 119-040 119-062 119-080 119-100	119-015R 119-031R - 119-062R - 119-100R

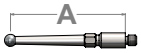
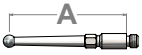
INTERAPID	A (Length)	Thread Size/Pitch	Model Number	Ball Diameter	T.C. Ball Part Number	Ruby Ball Part Number	Delrin Ball Part Number
	.688"	M1.7 x 0.35	74.111366, 74.111367, 74.111370, 74.111371, 74.111372, 74.111373, 74.111374, 74.111375, 74.111376, 74.111377, 74.111378, 74.111379, 74.111957, 310B-1, 310B-1V, 310B-2, 310B-2V, 310B-20, 310B-20V, 311, 311B-2, 312-1, 312-2, 312-IV, 312-2V, 312B-1, 312B-1V, 312B-2, 312B-2V, 312B-3, 312B-3V, 312B-4, 312B-20, 312B-20V	.005" .006" .007" .008" .010" .012" .015" .020" .025" .031" 1mm 1.5mm .062" 2mm .100" 3mm	120-005 120-006 120-007 120-008 120-010 120-012 120-015 120-020 120-025 120-031 120-040 120-060 120-062 120-080 120-100 120-120	- - - - - - 120-015R - 120-025R 120-031R 120-040R 120-060R 120-062R 120-080R 120-100R -	- - - - - - - - - - - - 120-062D - - -

INTERAPID continued on page 11

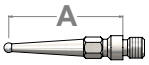
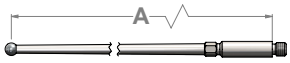
INTERAPID continued from page 10	A (Length)	Thread Size/Pitch	Model Number	Ball Diameter	T.C. Ball Part Number	Ruby Ball Part Number
(Hook Point) 	.688"	M1.7 x 0.35	74.111366, 74.111367, 74.111370, 74.111371, 74.111372, 74.111373, 74.111374, 74.111375, 74.111376, 74.111377, 74.111378, 74.111379, 74.111957, 310B-1, 310B-1V, 310B-2, 310B-2V, 310B-20, 310B-20V, 311, 311B-2, 312-1, 312-2, 312-IV, 312-2V, 312B-1, 312B-1V, 312B-2, 312B-2V, 312B-3, 312B-3V, 312B-4, 312B-20, 312B-20V	.015" .031" .062"	120-015HP 120-031HP 120-062HP	120-015RHP 120-031RHP 120-062RHP
	.676"	M1.7 x 0.35	74.111368, 74.111369, 312-3, 312-4	.015" .031" 1mm .062" 2mm .100"	186-015 186-031 186-040 186-062 186-080 186-100	186-015R 186-031R 186-040R 186-062R 186-080R 186-100R
	1.450"	M1.7 x 0.35	310B-L1, 310B-L2 MAY BE USED AS A DOUBLE LENGTH TIP FOR MODELS LISTED ABOVE WHICH USE THE .688" LENGTH TIPS (120 SERIES TIPS)	.008" .010" .015" .031" 1mm 1.5mm .062" 2mm .100"	121-008 121-010 121-015 121-031 121-040 121-060 121-062 121-080 121-100	- - 121-015R 121-031R 121-040R 121-060R 121-062R 121-080R 121-100R
	.827"	M1.7 x 0.35	310B-3, 311B-3 STANDARD LENGTH	.006" .008" .010" .015" .031" 1mm 1.5mm .062" 2mm .100"	129-006 129-008 129-010 129-015 129-031 129-040 129-060 129-062 129-080 129-100	- - - 129-015R 129-031R 129-040R 129-060R 129-062R 129-080R 129-100R
	1.750"	M1.7 x 0.35	310B-3, 311B-3 DOUBLE LENGTH	.015" .031" 1mm .062" 2mm .100"	149-015 149-031 149-040 149-062 149-080 149-100	149-015R 149-031R 149-040R 149-062R 149-080R 149-100R
	2.750"	M1.7 x 0.35	74.111958, 74.111965, 312B-15, 312B-15V	.008" .015" .031" 1mm 1.5mm .062" 2mm .100"	142-008 142-015 142-031 142-040 142-060 142-062 142-080 142-100	- 142-015R 142-031R 142-040R 142-060R 142-062R 142-080R 142-100R

MAHR	A (Length)	Thread Size/Pitch	Model Number	Ball Diameter	T.C. Ball Part Number	Ruby Ball Part Number
MAHR PUPPITAST INDICATORS DISCONTINUED BY MAHR – M1.6 THDS						
	1.378"	M1.6 x 0.35	800SLZ	.015" .031" 1mm .062" 2mm .100"	160-015 160-031 160-040 160-062 160-080 160-100	160-015R 160-031R 160-040R 160-062R 160-080R 160-100R
	.516"	M1.6 x 0.35	800S, 800SG, 800SGI, 800SGZ, 800SM, 800SZ, 800SMZ, 800WZ, 801TH	.015" .031" 1mm .062" 2mm .100"	143-015 143-031 143-040 143-062 143-080 143-100	143-015R 143-031R 143-040R 143-062R 143-080R 143-100R
	1.457"	M1.6 x 0.35	800SL	.015" .031" 1mm .062" 2mm .100"	161-015 161-031 161-040 161-062 161-080 161-100	161-015R 161-031R 161-040R 161-062R 161-080R 161-100R
	.545"	M1.6 x 0.35	800W	.012" .015" .031" 1mm .062" 2mm .100"	159-012 159-015 159-031 159-040 159-062 159-080 159-100	- 159-015R 159-031R 159-040R 159-062R 159-080R 159-100R

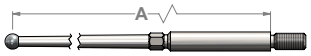
MAHR MARTEST INDICATORS – M2 THDS						
	.571"	M2 x 0.4	800S, 801S1, 801S, 800SG, 801SG, 800SA, 800SGA, 800SM, 801SM, 800SGM, 801SGM, 801SGE, 800SR, 801SR, 800SRM, 801SRM, 800H, 801H, 800V, 801V, 800VGM, 801VGM, 800EW	.010" .015" .020" .031" 1mm .062" 2mm .100"	183-010 183-015 183-020 183-031 183-040 183-062 183-080 183-100	- 183-015R - 183-031R 183-040R 183-062R 183-080R 183-100R
	1.622"	M2 x 0.4	800SL, 801SL, 800SGL, 801SGL, 800EWL	.015" .031" 1mm .062" 2mm .100"	184-015 184-031 184-040 184-062 184-080 184-100	184-015R 184-031R 184-040R 184-062R 184-080R 184-100R

MITUTOYO	A (Length)	Thread Size/Pitch	Model Number	Ball Diameter	T.C. Ball Part Number	Ruby Ball Part Number
	.256"	M1.4 x 0.30	513-302, 513-302G, 513-304, 513-304GE, 513-942, 513-944 FOR OLD STYLE INDICATORS WITH EXTENSION/ADAPTOR 513-202, 513-202N, 513-212, 513-212N, 513-213, 513-252, 513-253, 513-282, 513-902, 513-902N, 513-922, 513-922N	.015" .031" 1mm .062" 2mm .100"	182-015 182-031 182-040 182-062 182-080 182-100	182-015R 182-031R 182-040R 182-062R 182-080R 182-100R
	352"	M1.4 x 0.30	513-102	.006" .015" .020" .031" 1mm 1.5mm .062" 2mm .100"	124-006 124-015 124-020 124-031 124-040 - 124-062 124-080 124-100	- 124-015R - 124-031R 124-040R 124-060R 124-062R 124-080R 124-100R
	.598"	M1.4 x 0.30	FOR OLD STYLE INDICATORS 513-104, 513-104-1	.008" .015" .031" 1mm 1.5mm .062" 2mm .100"	125-008 125-015 125-031 125-040 125-060 125-062 125-080 125-100	- 125-015R 125-031R 125-040R - 125-062R 125-080R 125-100R
	.598"	M1.7 x 0.35	513-128, 513-128-1, 513-405-10, 513-409-10, 513-425-10, 513-445-10, 513-455-10, 513-465-10, 513-475-10, 516-485-10, 513-504, 513-504-10, 513-528 FOR NEW STYLE INDICATORS 513-104, 513-104-1	.006" .015" .031" 1mm .062" 2mm .100" 3mm	157-006 157-015 157-031 157-040 157-062 157-080 157-100 157-120	- 157-015R 157-031R 157-040R 157-062R 157-080R 157-100R -
	.649"	M1.7 x 0.35	513-206, 513-242, 513-252, 513-262, 513-282G, 513-282GT, 513-402, 513-402-10, 513-406, 513-406-10, 513-442, 513-442-01 513-442-06, 513-442-10, 513-442-16, 513-452, 513-552-10, 513-462, 513-462-10, 513-472, 513-472-10, 513-482-10, 513-906, 513-907, 513-952, 513-982 FOR NEW STYLE INDICATORS 513-202, 513-202N, 513-282, 513-902, 513-902N	.006" .008" .015" .020" .031" 1mm 1.5mm .062" 2mm .100"	126-006 126-008 126-015 126-020 126-031 126-040 - 126-062 126-080 126-100	- - 126-015R - 126-031R 126-040R 126-060R 126-062R 126-080R 126-100R
	.906"	M1.7 x 0.35	513-518, 513-518-10 FOR NEW STYLE INDICATORS 513-118, 513-118-1	.015" .031" 1mm .062" 2mm .100"	128-015 128-031 128-040 128-062 128-080 128-100	128-015R 128-031R 128-040R 128-062R 128-080R 128-100R
	.455"	M1.7 x 0.35	513-203, 513-203N, 513-223, 513-243, 513-403, 513-443, 513-443-06, 513-453, 513-463, 513-473, 513-903, 513-953 FOR NEW STYLE INDICATORS 513-253	.006" .008" .010" .015" .020" .031" 1mm 1.5mm .062" 2mm .100"	140-006 140-008 140-010 140-015 140-020 140-031 140-040 - 140-062 140-080 140-100	- - - 140-015R - 140-031R 140-040R 140-060R 140-062R 140-080R 140-100R
	1.198"	M1.7 x 0.35	513-412, 513-412-10, 513-446, 513-446-06, 513-446-10, 513-446-16, 513-479, 513-479-10 FOR NEW STYLE INDICATORS 513-212, 513-212N, 513-922, 513-922N	.015" .031" 1mm 1.5mm .062" 2mm .100" 3mm	141-015 141-031 141-040 - 141-062 141-080 141-100 141-120	141-015R 141-031R 141-040R 141-060R 141-062R 141-080R 141-100R -

MITUTOYO continued on page 14

MITUTOYO continued from page 13	A (Length)	Thread Size/Pitch	Model Number	Ball Diameter	T.C. Ball Part Number	Ruby Ball Part Number
	.738"	M1.7 x 0.35	513-424, 513-424-10, 513-426, 513-426-10, 513-456-10, 513-466, 513-466-10, 513-478, 513-478-10, 513-486-10	.015" .031" 1mm .062" 2mm .100"	187-015 187-031 187-040 187-062 187-080 187-100	187-015R 187-031R 187-040R 187-062R 187-080R 187-100R
	.369"	M1.7 x 0.35	513-401, 513-471	.015" .031" 1mm .062" 2mm .100"	188-015 188-031 188-040 188-062 188-080 188-100	188-015R 188-031R 188-040R 188-062R 188-080R 188-100R
	.685	M1.7 x 0.35	513-117, 513-117H, 513-204F, 513-204N, 513-284G, 513-404, 513-404-10, 513-444, 513-444-10, 513-454, 513-454-10, 513-464, 513-464-10, 513-474, 513-474-10, 513-484-10, 513-517, 513-517-10, 513-904, 513-904F, 513-908, 513-954F, 513-984F	.015" .031" 1mm .062" 2mm .100"	166-015 166-031 166-040 166-062 166-080 166-100	166-015R 166-031R 166-040R 166-062R 166-080R 166-100R
	.441"	M1.7 x 0.35	513-103, 513-103H, 513-115, 513-127, 513-127H, 513-205F, 513-205N, 513-255FA, 513-401-10, 513-405, 513-409, 513-425, 513-445, 513-455, 513-465, 513-471-10, 513-475, 513-503, 513-503-10, 513-527, 513-905F, 513-955F	.015" .031" 1mm .062" 2mm .100"	167-015 167-031 167-040 167-062 167-080 167-100	167-015R 167-031R 167-040R 167-062R 167-080R 167-100R
	1.335"	M1.7 x 0.35	513-112, 513-112-1, 513-414-10, 513-512, 513-512-10	.015" .031" 1mm .062" 2mm .100"	168-015 168-031 168-040 168-062 168-080 168-100	168-015R 168-031R 168-040R 168-062R 168-080R 168-100R
	1.614"	M1.7 x 0.35	513-115, 513-115H, 513-415, 513-415-10, 513-477, 513-477-10, 513-515, 513-515-10	.015" .031" 1mm .062" 2mm .100" .120"	169-015 169-031 169-040 169-062 169-080 169-100 169-120	169-015R 169-031R 169-040R 169-062R 169-080R 169-100R -
	.335"	M1.7 x 0.35	513-101, 513-101H, 513-501, 513-501-10	.015" .031" 1mm .062" 2mm .100"	180-015 180-031 180-040 180-062 180-080 180-100	180-015R 180-031R 180-040R 180-062R 180-080R 180-100R
	1.311"	M1.7 x 0.35	513-414, 513-514, 513-514-10, 513-924F	.015" .031" 1mm .062" 2mm .100"	181-015 181-031 181-040 181-062 181-080 181-100	181-015R 181-031R 181-040R 181-062R 181-080R 181-100R
	.609"	M1.7 x 0.35	513-403-10, 513-407-10, 513-443-10, 513-443-16, 513-453-10, 513-463-10, 513-473-10	.015" .031" 1mm .062" 2mm .100"	190-015 190-031 190-040 190-062 190-080 190-100	190-015R 190-031R 190-040R 190-062R 190-080R 190-100R

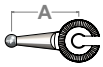
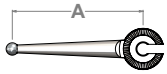
MUELLER	A (Length)	Thread Size/Pitch	Model Number	Ball Diameter	T.C. Ball Part Number	Ruby Ball Part Number
	.515"	M1.7 x 0.35	G301, G301K, G302, G303, G304, G306, G306K, G307, G308, G309	.015" .031" 1mm .062" 2mm .100"	123-015 123-031 123-040 123-062 123-080 123-100	123-015R 123-031R 123-040R 123-062R 123-080R 123-100R

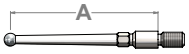
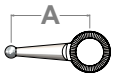
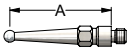
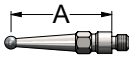
PARVUS-COMPAC	A (Length)	Thread Size/Pitch	Model Number	Ball Diameter	T.C. Ball Part Number	Ruby Ball Part Number
	.547"	M1.7 x 0.35	V3, P3G, V3G, P3GA	.006" .008" .015" .031" 1mm 1.5mm .062" 2mm .100"	102-006 102-008 102-015 102-031 102-040 102-060 102-062 102-080 102-100	- - 102-015R 102-031R 102-040R - 102-062R 102-080R 102-100R
	.512"	M1.7 x 0.35	V2, P2G, V2G, P2GA	.008" .010" .015" .031" 1mm .062" 2mm .100"	103-008 103-010 103-015 103-031 103-040 103-062 103-080 103-100	- - 103-015R 103-031R 103-040R 103-062R 103-080R 103-100R
	1.500"	M1.7 x 0.35	V2GL, P2GLA	.015" .031" 1mm .062" 2mm .100"	104-015 104-031 104-040 104-062 104-080 104-100	104-015R 104-031R 104-040R 104-062R 104-080R 104-100R

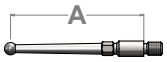
PEACOCK	A (Length)	Thread Size/Pitch	Model Number	Ball Diameter	T.C. Ball Part Number	Ruby Ball Part Number
	.649"	M1.7 x 0.35	20-400, 2000, 2050, 2200	.006" .008" .015" .020" .031" 1mm 1.5mm .062" 2mm .100"	126-006 126-008 126-015 126-020 126-031 126-040 - 126-062 126-080 126-100	- - 126-015R - 126-031R 126-040R 126-060R 126-062R 126-080R 126-100R
	.375"	M1.7 x 0.35	20-406-6, 2010, 2060, 2210	.015" .031" 1mm .062" 2mm .100"	153-015 153-031 153-040 153-062 153-080 153-100	153-015R 153-031R 153-040R 153-062R 153-080R 153-100R

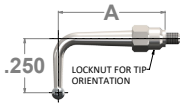
SCHERR-TUMICO	A (Length)	Thread Size/Pitch	Model Number	Ball Diameter	T.C. Ball Part Number	Ruby Ball Part Number
	.306"	Ratchet	F1 F2 F5	.015" .031" .062" .100"	113-015 113-031 113-062 113-100	113-015R 113-031R 113-062R 113-100R
	.250"	M1.7 x 0.35	FX1 FX13 FX15	.015" .031" 1mm .062" 2mm .100"	115-015 115-031 115-040 115-062 115-080 115-100	115-015R 115-031R 115-040R 115-062R 115-080R 115-100R
	.605"	M1.7 x 0.35	FX11	.015" .031" 1mm .062" 2mm .100"	117-015 117-031 117-040 117-062 117-080 117-100	117-015R 117-031R 117-040R 117-062R 117-080R 117-100R

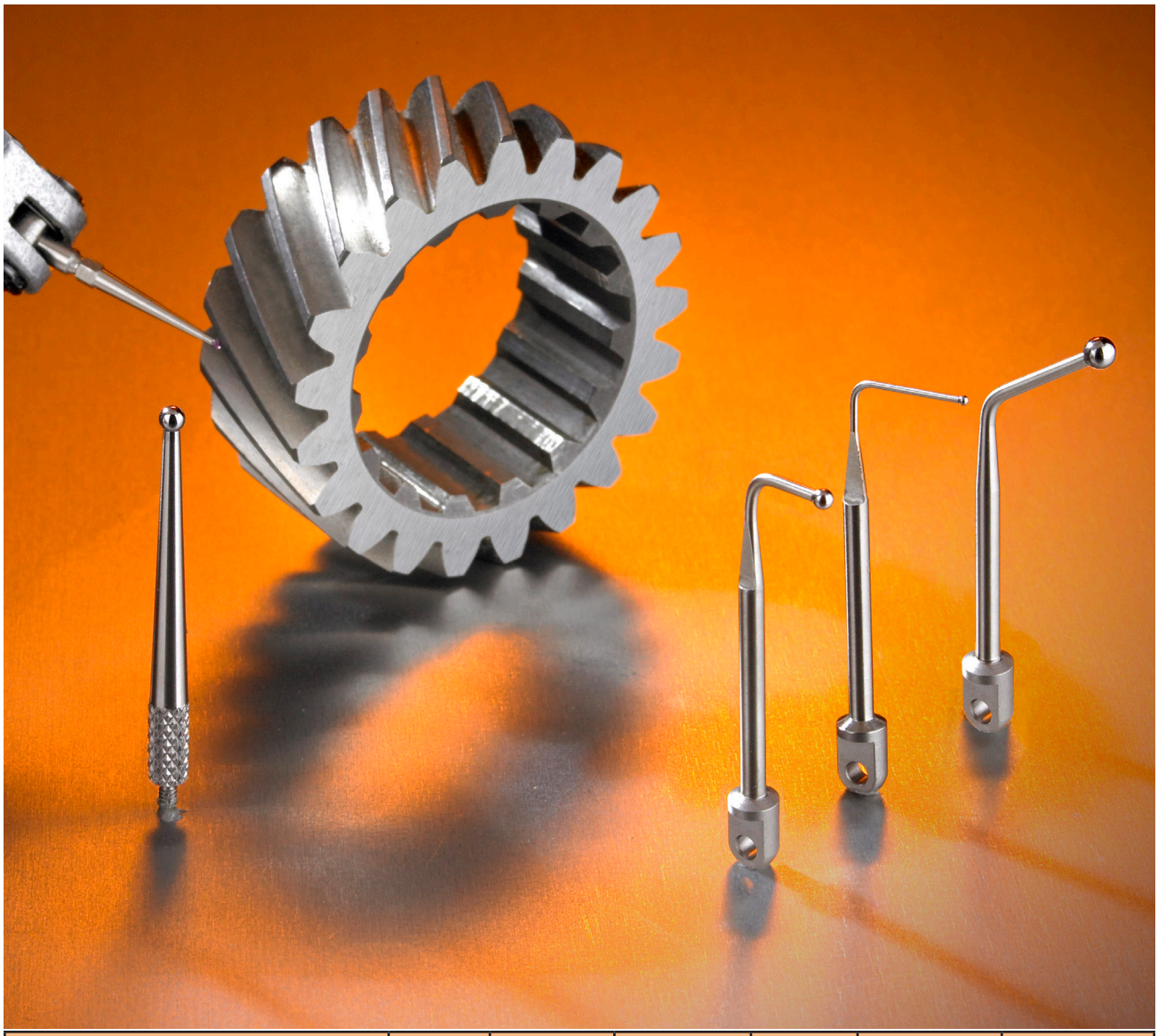
SPI	A (Length)	Thread Size/Pitch	Model Number	Ball Diameter	T.C. Ball Part Number	Ruby Ball Part Number
	.528"	M1.6 x 0.35	20-051-9, 20-053-5	.006" .008" .015" .031" 1mm .062" 2mm .100"	137-006 137-008 137-015 137-031 137-040 137-062 137-080 137-100	- - 137-015R 137-031R 137-040R 137-062R 137-080R 137-100R
	.573"	M1.6 x 0.35	20-160-8, 20-164-0, 20-052-7, 20-054-3, 20-055-0, 20-140-0, 20-141-8, 20-144-2, 20-145-9, 20-150-9, 20-151-7, 20-154-1, 20-155-8	.006" .008" .010" .015" .031" 1mm 1.5mm .062" 2mm .100" 3mm	135-006 135-008 135-010 135-015 135-031 135-040 135-060 135-062 135-080 135-100 135-120	- - - 135-015R 135-031R 135-040R 135-060R 135-062R 135-080R 135-100R -
	1.293"	M1.6 x 0.35	20-142-6, 20-143-4, 20-152-5, 20-153-3, 20-162-4	.015" .031" 1mm 1.5mm .062" 2mm .100" 3mm	136-015 136-031 136-040 - 136-062 136-080 136-100 136-120	136-015R 136-031R 136-040R 136-060R 136-062R 136-080R 136-100R -
	.561"	M1.6 x 0.35	21-140-9, 21-145-8	.008" .015" .031" 1mm .062" 2mm .100"	162-008 162-015 162-031 162-040 162-062 162-080 162-100	- 162-015R 162-031R 162-040R 162-062R 162-080R 162-100R
	1.269"	M1.6 x 0.35	21-153-2	.015" .031" 1mm .062" 2mm .100"	163-015 163-031 163-040 163-062 163-080 163-100	163-015R 163-031R 163-040R 163-062R 163-080R 163-100R
	.674"	M1.7 x 0.35	24-400-4, 24-402-0	.015" .031" 1mm .062" 2mm .100"	118-015 118-031 118-040 118-062 118-080 118-100	118-015R 118-031R 118-040R 118-062R 118-080R 118-100R
	.512"	M1.7 x 0.35	24-401-2	.008" .010" .015" .031" 1mm .062" 2mm .100"	103-008 103-010 103-015 103-031 103-040 103-062 103-080 103-100	- - 103-015R 103-031R 103-040R 103-062R 103-080R 103-100R

STANDARD GAUGE	A (Length)	Ratchet	Model Number	Ball Diameter	T.C. Ball Part Number	Ruby Ball Part Number
	.331"	Ratchet	24N, 25N, 27N, 28N, 34N	.015" .031" .062" .100"	110-015 110-031 110-062 110-100	110-015R 110-031R 110-062R 110-100R
	.662"	Ratchet	21N, 22N, 25NL, 26N, 32N	.015" .031" .062" .100"	127-015 127-031 127-062 127-100	127-015R 127-031R 127-062R 127-100R

STARRET-LASTWORD	A (Length)	Thread Size/Pitch	Model Number	Ball Diameter	T.C. Ball Part Number	Ruby Ball Part Number
	.728"	1-64	708 & 709 SERIES	.006" .008" .015" .031" 1mm .062" 2mm .100"	165-006 165-008 165-015 165-031 165-040 165-062 165-080 165-100	- - 165-015R 165-031R 165-040R 165-062R 165-080R 165-100R
	.375"	Ratchet	711 SERIES LASTWORD	.015" .031" 1mm .062" 2mm .100"	122-015 122-031 122-040 122-062 122-080 122-100	122-015R 122-031R - 122-062R - 122-100R
	.495"	1-64	711-T	.015" .031" 1mm .062" 2mm .100" 3mm	134-015 134-031 134-040 134-062 134-080 134-100 134-120	134-015R 134-031R 134-040R 134-062R 134-080R 134-100R -
	.515"	1-64	811 Short	.015" .031" 1mm .062" 2mm .100"	144-015 144-031 144-040 144-062 144-080 144-100	144-015R 144-031R 144-040R 144-062R 144-080R 144-100R
	1.196"	1-64	811 Long	.015" .031" 1mm .062" 2mm .100"	154-015 154-031 154-040 154-062 154-080 154-100	154-015R 154-031R 154-040R 154-062R 154-080R 154-100R
	.537"	M2 x 0.4	3809A, 3809AC, 3909A, 3909AC,	.015" .031" 1mm 1.5mm .062" 2mm .100"	185-015 185-031 185-040 185-060 185-062 185-080 185-100	185-015R 185-031R 185-040R 185-060R 185-062R 185-080R 185-100R
	.494"	M2 x 0.4	3808A, 3808AC, 3908A, 3908AC, 3808MA, 3808MAC, 3908MA, 3908MAC	.015" .031" 1mm .062" 2mm .100"	189-015 189-031 189-040 189-062 189-080 189-100	189-015R 189-031R 189-040R 189-062R 189-080R 189-100R
	.571"	M2 x 0.4	3809MA, 3809MAC, 3909MA, 3909MAC	.010" .015" .020" .031" 1mm .062" 2mm .100"	183-010 183-015 183-020 183-031 183-040 183-062 183-080 183-100	- 183-015R - 183-031R 183-040R 183-062R 183-080R 183-100R

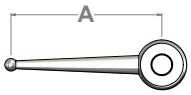
TECLOCK	A (Length)	Ratchet	Model Number	Ball Diameter	T.C. Ball Part Number	Ruby Ball Part Number
	.674"	M1.7 x 0.35	LTI-352	.015" .031" 1mm .062" 2mm .100"	118-015 118-031 118-040 118-062 118-080 118-100	118-015R 118-031R 118-040R 118-062R 118-080R 118-100R
	.512"	M1.7 x 0.35	LTI-355	.008" .010" .015" .031" 1mm .062" 2mm .100"	103-008 103-010 103-015 103-031 103-040 103-062 103-080 103-100	- - 103-015R 103-031R 103-040R 103-062R 103-080R 103-100R

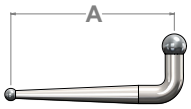
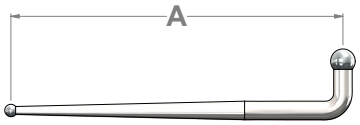
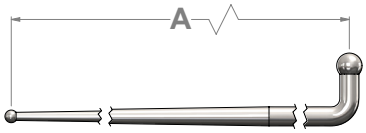
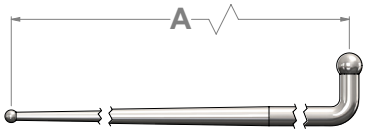
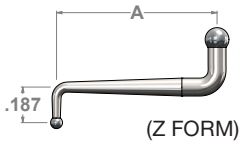
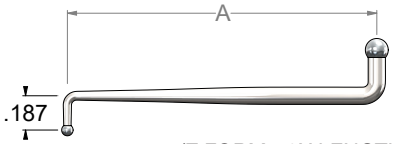
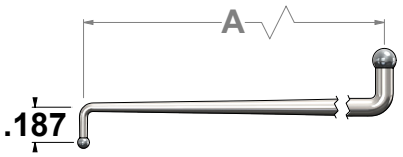
TESA	A (Length)	Thread Size/Pitch	Model Number	Ball Diameter	T.C. Ball Part Number	Ruby Ball Part Number	Delrin Ball Part Number
	.245"	M1.4 x 0.3	20-202	.006" .008" .015" .031" 1mm .062" 2mm .100" 3mm	107-006 107-008 107-015 107-031 107-040 107-062 107-080 107-100 107-120	- - 107-015R 107-031R 107-040R 107-062R 107-080R 107-100R -	- - - - - - - - -
	.494"	M1.4 x 0.3	18.10005, 18.10006, 18.10009, 18.10010, 18.10011, 18.10013, 18.10204, 18.10304, 18.20006, 18.20007, 18.20010, 18.20011, 18.20012, 18.20013, 18.20014, 18.20015, 18.20204, 18.20304, 01830001	.005" .006" .007" .008" .010" .012" .015" .016" .020" .025" .031" 1mm 1.5mm .062" 2mm .100" 3mm	108-005 108-006 108-007 108-008 108-010 108-012 108-015 108-016 108-020 108-025 108-031 108-040 108-060 108-062 108-080 108-100 108-120	- - - - - - 108-015R - - 108-025R 108-031R 108-040R 108-060R 108-062R 108-080R 108-100R -	- - - - - - - - - - - - - 108-062D - - -
(Hook Point) 	.494"	M1.4 x 0.3	18.10005, 18.10006, 18.10009, 18.10010, 18.10011, 18.10013, 18.10204, 18.10304, 18.20006, 18.20007, 18.20010, 18.20011, 18.20012, 18.20013, 18.20014, 18.20015, 18.20204, 18.20304, 01830001	.015" .031" .062"	108-015HP 108-031HP 108-062HP	108-015RHP 108-031RHP 108-062RHP	- - -
	1.437"	M1.4 x 0.3	18.10007, 18.10008, 18.10012, 18.10205, 18.20008, 18.20009, 18.20016, 18.20205, 01830002	.006" .008" .010" .012" .015" .020" .031" 1mm 1.5mm .062" 2mm .100" 3mm	109-006 109-008 109-010 109-012 109-015 109-020 109-031 109-040 109-060 109-062 109-080 109-100 109-120	- - - - 109-015R - 109-031R 109-040R 109-060R 109-062R 109-080R 109-100R -	- - - - - - - - - 109-062D - - -



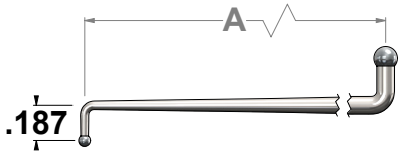
AIRTRONICS	A (Length)	Thread Size/Pitch	Model Number	Ball Diameter	T.C. Ball Part Number	Ruby Ball Part Number
	.875"	1-72	Microtol #1 16522	.015" .031" .062" .100" .125"	201-015 201-031 201-062 201-100 201-125	201-015R 201-031R 201-062R 201-100R -

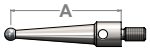
ALINA	A (Length)	Thread Size/Pitch	Model Number	Ball Diameter	T.C. Ball Part Number	Ruby Ball Part Number
	.900"	1-72	1950M	.015" .031" 1mm .062" 2mm .100"	210-015 210-031 210-040 210-062 210-080 210-100	210-015R 210-031R 210-040R 210-062R 210-080R 210-100R

BENDIX-SHEFFIELD	A (Length)	Thread Size/Pitch	Model Number	Ball Diameter	T.C. Ball Part Number
	.760"	N/A	Feather Touch	.015" .031" .062" .100"	214-015 214-031 214-062 214-100

BENDIX-SHEFFIELD PRECISION DEVICES INC INDI-AC	A (Length)	Thread Size/Pitch	Model Number	Ball Diameter	T.C. Ball Part Number	Ruby Ball Part Number
	.844"	.125" Ball	T210 T220 T225 T425	.015" .031" 1mm .062" 2mm .100" .125"	203-015 203-031 203-040 203-062 203-080 203-100 203-125	203-015R 203-031R 203-040R 203-062R 203-080R 203-100R -
 (2X LENGTH)	1.688"	.125" Ball	T220 T225 T425	.015" .031" .062" .100" .125"	204-015 204-031 204-062 204-100 204-125	- - - - -
	2.058"	.125" Ball	T210	.015" .031" .062" .100" .125"	229-015 229-031 229-062 229-100 229-125	- - - - -
 (3X LENGTH)	2.532"	.125" Ball	T220 T225 T425	.015" .031" .062" .100" .125"	205-015 205-031 205-062 205-100 205-125	- - - - -
	3.273"	.125" Ball	T210	.015" .031" .062" .100" .125"	230-015 230-031 230-062 230-100 230-125	- - - - -
 (4X LENGTH)	3.376"	.125" Ball	T220 T225 T425	.015" .031" .062" .100" .125"	218-015 218-031 218-062 218-100 218-125	- - - - -
	4.488"	.125" Ball	T210	.015" .031" .062" .100" .125"	231-015 231-031 231-062 231-100 231-125	- - - - -
 (Z FORM)	.844"	.125" Ball	T210 T220 T225 T425	.015" .031" 1mm .062" 2mm .100" .125"	219-015 219-031 219-040 219-062 219-080 219-100 219-125	219-015R 219-031R 219-040R 219-062R 219-080R 219-100R -
 (Z FORM - 2X LENGTH)	1.688"	.125" Ball	T220 T225 T425	.015" .031" .062" .100" .125"	220-015 220-031 220-062 220-100 220-125	- - - - -
	2.058"	.125" Ball	T210	.015" .031" .062" .100" .125"	232-015 232-031 232-062 232-100 232-125	- - - - -
 (Z FORM - 3X LENGTH)	2.532"	.125" Ball	T220 T225 T425	.015" .031" 1mm .062" .100" .125"	221-015 221-031 - 221-062 221-100 221-125	- - 221-040R - - -
	3.273"	.125" Ball	T210	.015" .031" .062" .100" .125"	233-015 233-031 233-062 233-100 233-125	- - - - -

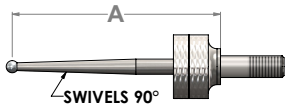
continued on page 21

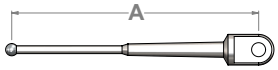
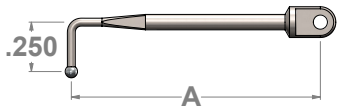
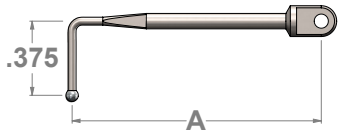
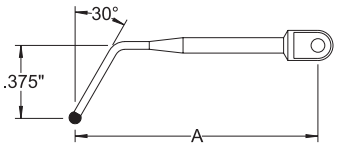
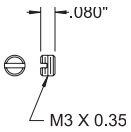
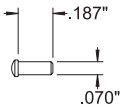
BENDIX-SHEFFIELD/PRECISION DEVICES INC INDI-AC continued from page 20	A (Length)	Thread Size/Pitch	Model Number	Ball Diameter	T.C. Ball Part Number	Ruby Ball Part Number
 (Z FORM - 4X LENGTH)	3.376"	.125" Ball	T220 T225 T425	.015" .031" .062" .100" .125"	222-015 222-031 222-062 222-100 222-125	
	4.488"	.125" Ball	T210	.015" .031" .062" .100" .125"	234-015 234-031 234-062 234-100 234-125	

BROWN & SHARPE	A (Length)	Thread Size/Pitch	Model Number	Ball Diameter	T.C. Ball Part Number	Ruby Ball Part Number
	.945"	N/A	599-980, 981	.015" .031" 1mm .062" 2mm .100"	202-015 202-031 202-040 202-062 202-080 202-100	202-015R 202-031R 202-040R 202-062R 202-080R 202-100R
	1.260"	N/A	599-988 (TESA GT31)	.010" .015" .025" .031" 1mm .046" .062" 2mm .100" .125"	223-010 223-015 223-025 223-031 223-040 223-046 223-062 223-080 223-100 223-125	- 223-015R - 223-031R 223-040R - 223-062R 223-080R 223-100R -
	1.000"	4-40	599-1002	.015" .031" .062" .100"	224-015 224-031 224-062 224-100	- - - -
	.563"	M1.7 x 0.35	599-999-1	.015" .031" .062" .100"	227-015 227-031 227-062 227-100	- - 227-062R -
	1.563"	M1.7 x 0.35	599-999-2	.015" .031" .062" .100"	228-015 228-031 228-062 228-100	- - - -

BRUNSWICK	A (Length)	Thread Size/Pitch	Model Number	Ball Diameter	T.C. Ball Part Number	Ruby Ball Part Number
	.555"	.156" Ball	Finger Probe 221	.015" .031" .062" .100"	215-015 215-031 215-062 215-100	- - - -
	1.055"	.156" Ball	Finger Probe 221	.015" .031" .062" .100"	216-015 216-031 216-062 216-100	- - - -
	.563"	M1.7 x 0.35	Finger Probe 24-00-1	.015" .031" .062" .100"	227-015 227-031 227-062 227-100	- - 227-062R -
	1.563"	M1.7 x 0.35	Finger Probe 24-00-2	.015" .031" .062" .100"	228-015 228-031 228-062 228-100	- - - -

DO-ALL	A (Length)	Thread Size/Pitch	Model Number	Ball Diameter	Part Number
	.915"	1-72	Trans-Check TC-510-3	.015" .031" .062" .100" .125"	206-015 206-031 206-062 206-100 206-125
	1.000"	4-40	T	.015" .031" .062" .080" .100"	235-015 235-031 235-062 235-080 235-100

FEDERAL / MAHR	A (Length)	Thread Size/Pitch	Model Number	Ball Diameter	T.C. Ball Part Number	Ruby Ball Part Number	Delrin Ball Part Number
	1.085"	4-48	EHE-1048, EHE-1050, EHE-1052, EHE-1056, EHE-1115, EHE-1165, EHE-2048, EHE-2050, EHE-2052, EHE-2056 LEVER GAUGE HEAD	.005" .006" .008" .010" .015" .031" 1mm 1.5mm .062" 2mm .100" 3mm .125"	207-005 207-006 207-008 207-010 207-015 207-031 207-040 - 207-062 207-080 207-100 - 207-125	- - - - 207-015R 207-031R 207-040R 207-060R 207-062R 207-080R 207-100R 207-120R 207-125R	- - - - - - - - 207-062D 207-080D - - 207-125D
	1.085"	4-48	EHE-1048, EHE-1050, EHE-1052, EHE-1056, EHE-1115, EHE-1165, EHE-2048, EHE-2050, EHE-2052, EHE-2056 LEVER GAUGE HEAD	.015" .031" .062" 2mm .100" .125"	225-015 225-031 225-062 225-080 225-100 225-125	225-015R 225-031R 225-062R 225-080R 225-100R 225-125R	- - 225-062D 225-080D - 225-125D
	1.199"	0-80	EHE-2168, EHE-2172 MINIATURE STYLE LEVER GAUGE HEAD	.006" .008" .010" .015" .031" 1mm .062" 2mm .100" .125"	237-006 237-008 237-010 237-015 237-031 237-040 237-062 237-080 237-100 237-125	- - - 237-015R 237-031R 237-040R 237-062R 237-080R 237-100R 237-125R	- - - - - - 237-062D 237-080D - 237-125D

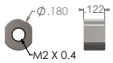
M&M PRECISON / BROWN & SHARPE / TESA	MODEL NUMBER	A (Length)	Ball Diameter	Part Number
	(M&M) Q-1154 (B&S) 599-988 (TESA) GT31	1.260"	.015" .025" .031" .046" .062" .100" .250"	241-015 241-025 241-031 241-046 241-062 241-100 241-250
	(M&M) Q-1154 (B&S) 599-988 (TESA) GT31	1.260"	.015" .031" .046" .062" .100" .250"	242-015 242-031 242-046 242-062 242-100 242-250
	(M&M) Q-1154 (B&S) 599-988 (TESA) GT31	1.260"	.015" .031" .046" .062" .100" .250"	243-015 243-031 243-046 243-062 243-100 243-250
	(M&M) Q-1154 (B&S) 599-988 (TESA) GT31	1.260"	.015" .031" .046" .062" .100" .250"	244-015 244-031 244-046 244-062 244-100 244-250
REPLACEMENT SCREW				245
REPLACEMENT PIN				246

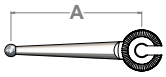
MAHR	A (Length)	Thread Size/Pitch	Model Number	Ball Diameter	T.C. Ball Part Number	Ruby Ball Part Number
	.827"	M1.6 x 0.35	1318	.015" .020" .031" 1mm .062" 2mm .100"	226-015 226-020 226-031 226-040 226-062 226-080 226-100	226-015R - 226-031R 226-040R 226-062R 226-080R 226-100R

MINNETECH	A (Length)	Thread Size/Pitch	Model Number	Ball Diameter	T.C. Ball Part Number	Ruby Ball Part Number
	.900"	1-72	MS-103	.015" .031" 1mm .062" 2mm .100"	210-015 210-031 210-040 210-062 210-080 210-100	210-015R 210-031R 210-040R 210-062R 210-080R 210-100R

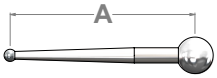
MITUTOYO	A (Length)	Thread Size/Pitch	Model Number	Ball Diameter	T.C. Ball Part Number	Ruby Ball Part Number
	.352"	M1.4 x 0.3	519-106, 519-321, 519-322, 519-521, 519-522	.006" .015" .020" .031" 1mm 1.5mm .062" 2mm .100"	124-006 124-015 124-020 124-031 124-040 - 124-062 124-080 124-100	- 124-015R - 124-031R 124-040R 124-060R 124-062R 124-080R 124-100R

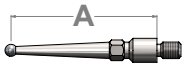
MITUTOYO continued on page 24

MITUTOYO continued from page 23	A (Length)	Thread Size/Pitch	Model Number	Ball Diameter	T.C. Ball Part Number	Ruby Ball Part Number
	.256"	M1.4 x 0.30	519-326 519-327	.015" .031" 1mm .062" 2mm .100"	182-015 182-031 182-040 182-062 182-080 182-100	182-015R 182-031R 182-040R 182-062R 182-080R 182-100R
	.739"	M1.6 x 0.2	574-004 574-005 574-006 574-007	.015" .031" 1mm .062" 2mm .100"	236-015 236-031 236-040 236-062 236-080 236-100	- - 236-040R - 236-080R -
	.563"	M1.7 x 0.35	519-899 “Short” **STANDARD LENGTH TIP**	.015" .031" .062" .100"	227-015 227-031 227-062 227-100	- - 227-062R -
	1.563"	M1.7 x 0.35	519-899 “Long” **EXTRA LENGTH TIP**	.015" .031" .062" .100"	228-015 228-031 228-062 228-100	- - - -
	.641"	M2 X 0.4	192-001, 192-002, 192-007, 192-008	.015" .031" 1mm .062" 2mm 2.5mm .100" 3mm	238-015 238-031 238-040 238-062 238-080 - 238-100 238-120	238-015R 238-031R 238-040R 238-062R 238-080R 238-100R - 238-120R
			Nut for 238 Series Tips for Mounting in Mitutoyo 192 Series Bi-Directional Touch-Signal Probes			238LN

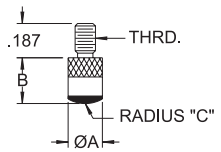
PRATT & WHITNEY	A (Length)	Ratchet	Model Number	Ball Diameter	Part Number
	.662"	Ratchet	Trans-O-Limit D-E	.015" .031" .062" .100"	212-015 212-031 212-062 212-100

SOLARTRON	A (Length)	Thread Size/Pitch	Model Number	Ball Diameter	T.C. Ball Part Number	Ruby Ball Part Number
	.900"	1-72	DL05	.015" .031" 1mm .062" 2mm .100"	210-015 210-031 210-040 210-062 210-080 210-100	210-015R 210-031R 210-040R 210-062R 210-080R 210-100R

STARRETT	A (Length)	Ball Size	Model Number	Ball Diameter	T.C. Ball Part Number	Ruby Ball Part Number
	.950"	.187" Ball	Last Word 712 715-1Z LEVER TYPE HEAD	.015" .031" .062" 2mm .100" .125"	213-015 213-031 213-062 213-080 213-100 213-125	213-015R 213-031R 213-062R 213-080R 213-100R -

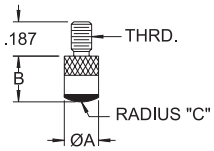
TAPER-MICROMETER	A (Length)	Thread Size/Pitch	Model Number	Ball Diameter	Part Number
	.760"	2-56	Comparator TMC500	.015" .031" .062" .100"	217-015 217-031 217-062 217-100

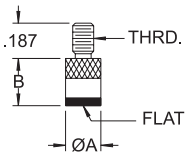
A.G.D. & METRIC	Actual Size	A Diameter	B Length	C Radius	Thread	Part Number
RADIUS Gauging Surface		.187"	.125"	.187"	4-48	301
					M2.5 x 0.45	321
	RUBY INSERT TIP	.187"	.125"	.187"	4-48	301R
					M2.5 x 0.45	321R
		.190"	.150"	.115"	4-48	312
					M2.5 x 0.45	332
		.187"	.250"	.187"	4-48	302
					M2.5 x 0.45	322
	RUBY INSERT TIP	.187"	.250"	.187"	4-48	302R
					M2.5 x 0.45	322R
		.187"	.375"	.187"	4-48	303
					M2.5 x 0.45	323
		.187"	.500"	.187"	4-48	304
					M2.5 x 0.45	324
		.187"	.750"	.187"	4-48	308
					M2.5 x 0.45	328
		.187"	1.000"	.187"	4-48	309
					M2.5 x 0.45	329
		.187"	2.000"	.187"	4-48	309-2000
					M2.5 x 0.45	329-2000



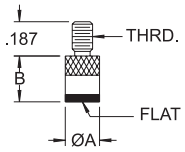
Contact Surface
Highly Polished
Tungsten Carbide
Unless Noted

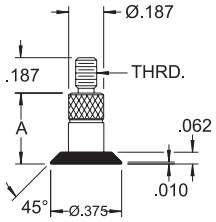
A.G.D. & METRIC RADIUS continued on page 26

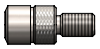
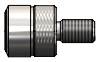
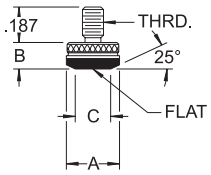
A.G.D. & METRIC continued from page 25	Actual Size	A Diameter	B Length	C Radius	Thread	Part Number
RADIUS Gauging Surface		.187"	3.000"	.187"	4-48	309-3000
					M2.5 x 0.45	329-3000
		.187"	4.000"	.187"	4-48	309-4000
					M2.5 x 0.45	329-4000
		.250"	.250"	.250"	4-48	310
					M2.5 x 0.45	330
	RUBY INSERT TIP	.250"	.250"	.250"	4-48	310R
					M2.5 x 0.45	330R
		.281"	.140"	.312"	4-48	305
					M2.5 x 0.45	325
		.312"	.156"	.375"	4-48	315
					M2.5 x 0.45	362
		.375"	.156"	.437"	4-48	306
					M2.5 x 0.45	326
Contact Surface Highly Polished Tungsten Carbide Unless Noted		.500"	.187"	.562"	4-48	311
					M2.5 x 0.45	331
		.625"	.187"	.813"	4-48	316
					M2.5 x 0.45	335
		.750"	.218"	1.000"	4-48	319
					M2.5 x 0.45	336
		1.000"	.218"	1.500"	4-48	320
					M2.5 x 0.45	339

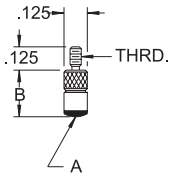
A.G.D. & METRIC	Actual Size	A Diameter	B Length	Thread	Part Number
FLAT Gauging Surface		.062"	.250"	4-48	351
				M2.5 x 0.45	371
		.125"	.250"	4-48	352
				M2.5 x 0.45	372
		.187"	.125"	4-48	353
				M2.5 x 0.45	373
		.187"	.250"	4-48	354
				M2.5 x 0.45	374
Tungsten Carbide Contact Surface Unless Noted Highly Polished Lapped Flat And Parallel With Shoulder		.187"	.375"	4-48	355
				M2.5 x 0.45	375
		.187"	.500"	4-48	356
				M2.5 x 0.45	376

A.G.D. & METRIC FLAT continued on page 27

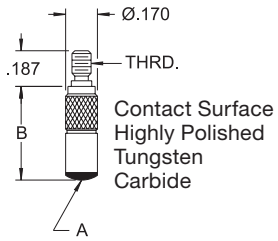
A.G.D. & METRIC continued from page 26	Actual Size	A Diameter	B Length	Thread	Part Number
FLAT Gauging Surface		.187"	.750"	4-48	359
				M2.5 x 0.45	379
		.187"	1.000"	4-48	360
				M2.5 x 0.45	380
		.187"	2.000"	4-48	360-2000
				M2.5 x 0.45	380-2000
		.187"	3.000"	4-48	360-3000
				M2.5 x 0.45	380-3000
		.187"	4.000"	4-48	360-4000
				M2.5 x 0.45	380-4000
		.250"	.250"	4-48	361
				M2.5 x 0.45	381
		.281"	.140"	4-48	357
				M2.5 x 0.45	377
		.312"	.156"	4-48	508
				M2.5 x 0.45	518
Tungsten Carbide Contact Surface Unless Noted Highly Polished Lapped Flat And Parallel With Shoulder		.375"	.156"	4-48	358
				M2.5 x 0.45	378
		.500"	.187"	4-48	317
				M2.5 x 0.45	337
		.625"	.187"	4-48	365
				M2.5 x 0.45	395
		.750"	.218"	4-48	366
				M2.5 x 0.45	396
		1.000"	.218"	4-48	367
				M2.5 x 0.45	398

A.G.D. & METRIC	Actual Size	A Length	Thread	Part Number
Flanged Contacts For Checking Grooves And Ledges  Contact Surface Highly Polished Tungsten Carbide		.250"	4-48	340
			M2.5 x 0.45	345
		.375"	4-48	341
			M2.5 x 0.45	346
		.500"	4-48	342
			M2.5 x 0.45	347

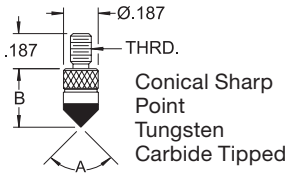
A.G.D. & METRIC	Actual Size	A Diameter	B Length	C Diameter	Thread	Part Number
FLAT Gauging Surface with Lead Chamfer		.187"	.125	.125"	4-48	501
					M2.5 x 0.45	511
	RUBY INSERT TIP	.187"	.125"	.125"	4-48	353R
					M2.5 x 0.45	373R
	RUBY INSERT TIP 	.187"	.250"	.125"	4-48	354R
					M2.5 x 0.45	374R
	RUBY INSERT TIP 	.250"	.250"	.177"	4-48	361R
					M2.5 x 0.45	381R
		.281"	.140"	.187"	4-48	502
					M2.5 x 0.45	512
		.312"	.156"	.203"	4-48	509
					M2.5 x 0.45	519
		.375"	.156"	.250"	4-48	503
					M2.5 x 0.45	513
Tungsten Carbide Contact Surface Unless Noted Highly Polished Lapped Flat And Parallel With Shoulder		.500"	.187"	.375"	4-48	504
					M2.5 x 0.45	514
		.625"	.187"	.500"	4-48	505
					M2.5 x 0.45	515
		.750"	.218"	.625"	4-48	506
					M2.5 x 0.45	516
		1.000"	.218"	.875"	4-48	507
					M2.5 x 0.45	517

ANSI Group O	Actual Size	A	B Length	Thread	Part Number
Radius And Flat Gauging Surface		.125" Radius	.156"	0-80	541
				1-72	552
		.125" Radius	.250"	0-80	542
				1-72	553
		Flat	.156"	0-80	543
				1-72	554
Contact Surface Highly Polished Tungsten Carbide		Flat	.250"	0-80	544
				1-72	555

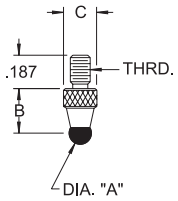
METRIC	Actual Size	A	B Length	Thread	Part Number
Radius And Flat Gauging Surface		.156" Radius	.250"	M2.6 x 0.45	601
				M2.5 x 0.45	609
		.156" Radius	.500"	M2.6 x 0.45	602
				M2.5 x 0.45	610
		Flat	.250"	M2.6 x 0.45	603
				M2.5 x 0.45	611
		Flat	.500"	M2.6 x 0.45	604
				M2.5 x 0.45	612



A.G.D. & METRIC	Actual Size	A Angle	B Length	Thread	Part Number
		90°	.312"	4-48	561
				M2.5 x 0.45	565
		60°	.375"	4-48	562
				M2.5 x 0.45	566



A.G.D. & METRIC	Actual Size	A Diameter	B Length	C Diameter	Thread	T.C. Ball Part Number	Ruby Ball Part Number
BALL POINTS FRACTIONAL SIZE		.0050"	.250"	.187"	4-48	400-005	-
					M2.5 x 0.45	450-005	-
		.0100"	.250"	.187"	4-48	400-010	-
					M2.5 x 0.45	450-010	-
		.0150"	.250"	.187"	4-48	400-015	400-015R
					M2.5 x 0.45	450-015	450-015R
		.0200"	.250"	.187"	4-48	400-020	-
					M2.5 x 0.45	450-020	-
		.0250"	.250"	.187"	4-48	400-025	-
					M2.5 x 0.45	450-025	-
		.0300"	.250"	.187"	4-48	400-030	-
					M2.5 x 0.45	450-030	-
		.03125"	.250"	.187"	4-48	401	401R
					M2.5 x 0.45	415	415R
		.0350"	.250"	.187"	4-48	400-035	-
					M2.5 x 0.45	450-035	-
		.0400"	.250"	.187"	4-48	400-040	-
					M2.5 x 0.45	450-040	-
		.0450"	.250"	.187"	4-48	400-045	-
					M2.5 x 0.45	450-045	-
		.04687"	.250"	.187"	4-48	402	402R
					M2.5 x 0.45	416	416R
		.0500"	.250"	.187"	4-48	400-050	-
					M2.5 x 0.45	450-050	-
		.0600"	.250"	.187"	4-48	400-060	-
					M2.5 x 0.45	450-060	-
		.0625"	.250"	.187"	4-48	403	403R
					M2.5 x 0.45	417	417R
		.0700"	.250"	.187"	4-48	400-070	-
					M2.5 x 0.45	450-070	-

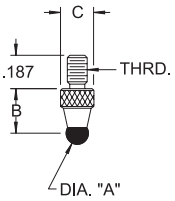
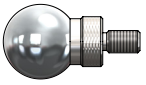
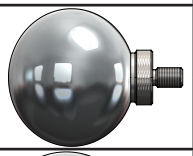
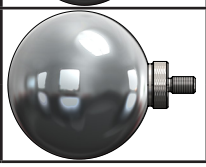


Carbide Ball is
Grade 25 AFBMA
Tolerance ±0.0001"
Sphericity 0.000025"

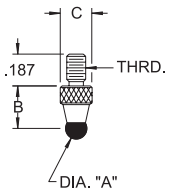
NOTE: Carbide Ball
Diameters Ø.015" and
Smaller are
Grade 100 AFBMA
Tolerance ±0.0005"
Sphericity 0.0001"

Ruby Ball is
Grade 10 AFBMA
Tolerance ±0.0001"
Sphericity 0.000010"

A.G.D. & METRIC FRACTIONAL SIZE continued on page 30

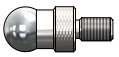
A.G.D. & METRIC continued from page 29	Actual Size	A Diameter	B Length	C Diameter	Thread	T.C. Ball Part Number	Ruby Ball Part Number
		.0800"	.250"	.187"	4-48	400-080	-
					M2.5 x 0.45	450-080	-
		.0900"	.250"	.187"	4-48	400-090	-
					M2.5 x 0.45	450-090	-
		.09375"	.250"	.187"	4-48	404	404R
					M2.5 x 0.45	418	418R
		.1000"	.250"	.187"	4-48	400-100	-
					M2.5 x 0.45	450-100	-
		.1094"	.250"	.187"	4-48	400-1094	-
					M2.5 x 0.45	450-1094	-
		.1200"	.250"	.187"	4-48	400-120	-
					M2.5 x 0.45	450-120	-
		.1250"	.250"	.187"	4-48	405	405R
					M2.5 x 0.45	419	419R
		.1406"	.250"	.187"	4-48	400-1406	-
					M2.5 x 0.45	450-1406	-
		.15625"	.250"	.187"	4-48	406	406R
					M2.5 x 0.45	420	420R
BALL POINTS FRACTIONAL SIZE		.1719"	.250"	.187"	4-48	400-1719	-
					M2.5 x 0.45	450-1719	-
		.1875"	.250"	.187"	4-48	407	407R
					M2.5 x 0.45	421	421R
		.21875"	.250"	.218"	4-48	408	408R
					M2.5 x 0.45	422	422R
		.2500"	.250"	.218"	4-48	409	409R
					M2.5 x 0.45	423	423R
		.28125"	.250"	.234"	4-48	410	410R
					M2.5 x 0.45	424	424R
Carbide Ball is Grade 25 AFBMA Tolerance ±0.0001" Sphericity 0.000025"		.3125"	.250"	.250"	4-48	411	411R
					M2.5 x 0.45	425	425R
Ruby Ball is Grade 10 AFBMA Tolerance ±0.0001" Sphericity 0.000010"		.3750"	.312"	.250"	4-48	412	412R
					M2.5 x 0.45	426	426R
		.4375"	.343"	.250"	4-48	413	-
					M2.5 x 0.45	427	-
		.5000"	.375"	.250"	4-48	414	-
					M2.5 x 0.45	428	-
		.6250"	.430"	.250"	4-48	400-625	-
					M2.5 x 0.45	450-625	-
		.7500"	.485"	.313"	4-48	400-750	-
					M2.5 x 0.45	450-750	-
		1.000"	.615"	.313"	4-48	441	-
					M2.5 x 0.45	451	-

BALL POINTS METRIC SIZE



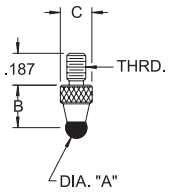
Carbide Ball is
Grade 25 AFBMA
Tolerance ±0.0001"
Sphericity 0.000025"

Ruby Ball is
Grade 10 AFBMA
Tolerance ±0.0001"
Sphericity 0.000010"

A.G.D. & METRIC	Actual Size	A Diameter	B Length	C Diameter	Thread	T.C. Ball Part Number	Ruby Ball Part Number
		0.5mm	.250"	.187"	4-48	400-.5	-
					M2.5 x 0.45	450-.5	-
		0.6mm	.250"	.187"	4-48	400-.6	-
					M2.5 x 0.45	450-.6	-
		0.7mm	.250"	.187"	4-48	400-.7	-
					M2.5 x 0.45	450-.7	-
		0.8mm	.250"	.187"	4-48	400-.8	-
					M2.5 x 0.45	450-.8	-
		0.9mm	.250"	.187"	4-48	400-.9	-
					M2.5 x 0.45	450-.9	-
		1mm	.250"	.187"	4-48	400-1	400-1R
					M2.5 x 0.45	450-1	450-1R
		1.25mm	.250"	.187"	4-48	400-1.25	-
					M2.5 x 0.45	450-1.25	-
		1.5mm	.250"	.187"	4-48	400-1.5	400-1.5R
					M2.5 x 0.45	450-1.5	450-1.5R
		1.75mm	.250"	.187"	4-48	400-1.75	-
					M2.5 x 0.45	450-1.75	-
		2mm	.250"	.187"	4-48	400-2	400-2R
					M2.5 x 0.45	450-2	450-2R
		2.25mm	.250"	.187"	4-48	400-2.25	-
					M2.5 x 0.45	450-2.25	-
		2.5mm	.250"	.187"	4-48	400-2.5	400-2.5R
					M2.5 x 0.45	450-2.5	450-2.5R
		2.75mm	.250"	.187"	4-48	400-2.75	-
					M2.5 x 0.45	450-2.75	-
		3mm	.250"	.187"	4-48	400-3	400-3R
					M2.5 x 0.45	450-3	450-3R
		3.25mm	.250"	.187"	4-48	400-3.25	-
					M2.5 x 0.45	450-3.25	-
		3.5mm	.250"	.187"	4-48	400-3.5	400-3.5R
					M2.5 x 0.45	450-3.5	450-3.5R
		3.75mm	.250"	.187"	4-48	400-3.75	-
					M2.5 x 0.45	450-3.75	-
		4mm	.250"	.187"	4-48	400-4	400-4R
					M2.5 x 0.45	450-4	450-4R
		4.25mm	.250"	.187"	4-48	400-4.25	-
					M2.5 x 0.45	450-4.25	-
		4.5mm	.250"	.187"	4-48	400-4.5	-
					M2.5 x 0.45	450-4.5	-
		4.75mm	.250"	.187"	4-48	400-4.75	-
					M2.5 x 0.45	450-4.75	-
		5mm	.250"	.187"	4-48	400-5	400-5R
					M2.5 x 0.45	450-5	450-5R
		5.5mm	.250"	.218"	4-48	400-5.5	-
					M2.5 x 0.45	450-5.5	-
		6mm	.250"	.218"	4-48	400-6	400-6R
					M2.5 x 0.45	450-6	450-6R
		6.5mm	.250"	.218"	4-48	400-6.5	-
					M2.5 x 0.45	450-6.5	-

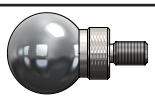
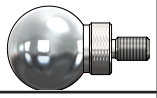
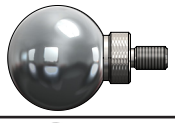
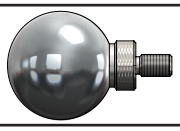
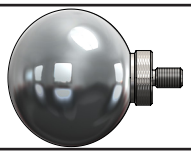
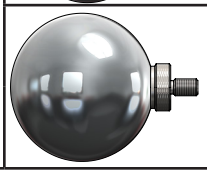
A.G.D. & METRIC FRACTIONAL SIZE continued on page 32

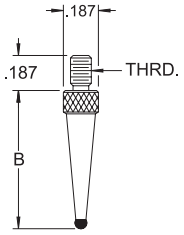
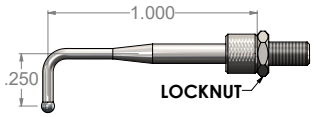
BALL POINTS METRIC SIZE

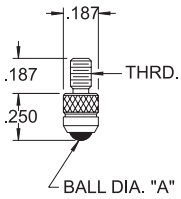


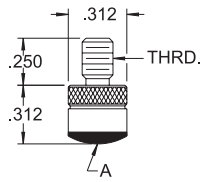
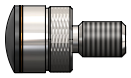
Carbide Ball is
Grade 25 AFBMA
Tolerance ±0.0001"
Sphericity 0.000025"

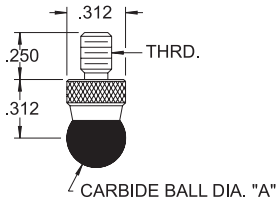
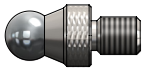
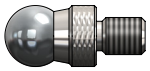
Ruby Ball is
Grade 10 AFBMA
Tolerance ±0.0001"
Sphericity 0.000010"

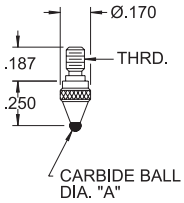
A.G.D. & METRIC continued from page 31	Actual Size	A Diameter	B Length	C Diameter	Thread	T.C. Ball Part Number	Ruby Ball Part Number
		7mm	.250"	.234"	4-48	400-7	400-7R
					M2.5 x 0.45	450-7	450-7R
		7.5mm	.250"	.234"	4-48	400-7.5	-
					M2.5 x 0.45	450-7.5	-
		8mm	.250"	.250"	4-48	400-8	400-8R
					M2.5 x 0.45	450-8	450-8R
		8.5mm	.250"	.250"	4-48	400-8.5	-
					M2.5 x 0.45	450-8.5	-
		9mm	.312"	.250"	4-48	400-9	400-9R
					M2.5 x 0.45	450-9	450-9R
		9.5mm	.312"	.250	4-48	400-9.5	-
					M2.5 x 0.45	450-9.5	-
		10mm	.312"	.250"	4-48	400-10	400-10R
					M2.5 x 0.45	450-10	450-10R
		10.5mm	.312"	.250"	4-48	400-10.5	-
					M2.5 x 0.45	450-10.5	-
		11mm	.343"	.250"	4-48	400-11	-
					M2.5 x 0.45	450-11	-
		12mm	.343"	.250"	4-48	400-12	-
					M2.5 x 0.45	450-12	-
		13mm	.370"	.250"	4-48	400-13	-
					M2.5 x 0.45	450-13	-
		14mm	.390"	.250"	4-48	400-14	-
					M2.5 x 0.45	450-14	-
		15mm	.410"	.250"	4-48	400-15	-
					M2.5 x 0.45	450-15	-
		16mm	.434"	.250"	4-48	400-16	-
					M2.5 x 0.45	450-16	-
		20mm	.505"	.312"	4-48	400-20	-
					M2.5 x 0.45	450-20	-
		25mm	.610"	.312"	4-48	400-25	-
					M2.5 x 0.45	450-25	-

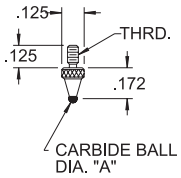
A.G.D. & METRIC	Actual Size	B Length	Thread	Ball Size	T.C Ball Part Number	Ruby Ball Part Number
BALL POINTS EXTENDED TAPER		.500"	4-48	.015" .031" .062"	431-015 431-031 431-062	431-015R 431-031R 431-062R
			M2.5 x 0.45	.015" .031" .062"	436-015 436-031 436-062	436-015R 436-031R 436-062R
		.625"	4-48	.015" .031" .062"	434-015 434-031 434-062	434-015R 434-031R 434-062R
			M2.5 x 0.45	.015" .031" .062"	439-015 439-031 439-062	439-015R 439-031R 439-062R
		.750"	4-48	.015" .031" .062"	432-015 432-031 432-062	432-015R 432-031R 432-062R
			M2.5 x 0.45	.015" .031" .062"	437-015 437-031 437-062	437-015R 437-031R 437-062R
Carbide Ball is Grade 25 AFBMA Tolerance ±0.0001" Sphericity 0.000025"		.750"	4-48	.015"	435	-
			M2.5 x 0.45	.015"	445	-
NOTE: Carbide Ball Diameters Ø.015" and Smaller are Grade 100 AFBMA Tolerance ±0.0005" Sphericity 0.0001" EXCEPT for Part Numbers 435 & 445 which are Grade 25		1.000	4-48	.015" .031" .062"	433-015 433-031 433-062	433-015R 433-031R 433-062R
			M2.5 x 0.45	.015" .031" .062"	438-015 438-031 438-062	438-015R 438-031R 438-062R
	 RIGHT ANGLE STYLUS	1.000"	4-48	.031" .062" .100"	500-031 500-062 500-100	500-031R 500-062R 500-100R
			M2.5 x 0.45	.031" .062" .100"	600-031 600-062 600-100	600-031R 600-062R 600-100R
Ruby Ball is Grade 10 AFBMA Tolerance ±0.0001" Sphericity 0.000010"		1.500"	4-48	.015" .031" .062"	449-015 449-031 449-062	449-015R 449-031R 449-062R
			M2.5 x 0.45	.015" .031" .062"	444-015 444-031 444-062	444-015R 444-031R 444-062R

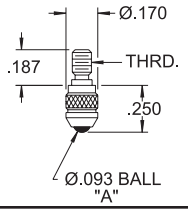
A.G.D. & METRIC	Actual Size	A Diameter	Thread	Part Number
BALL POINTS (LOW PROFILE)		.062" Carbide	4-48	479
			M2.5 x 0.45	489
		.062" Ruby	4-48	480
			M2.5 x 0.45	490
		.125" Carbide	4-48	481
			M2.5 x 0.45	491
		.125" Ruby	4-48	482
			M2.5 x 0.45	492
		.125" Silicon Nitride	4-48	482SN
			M2.5 x 0.45	492SN
		.125" Delrin	4-48	482D
			M2.5 x 0.45	492D
		.125" Teflon	4-48	482T
			M2.5 x 0.45	492T

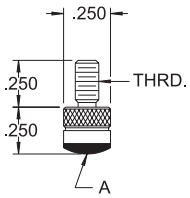
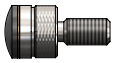
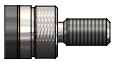
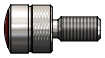
A.G.D.	Actual Size	A	Thread	Part Number
Radius & Flat Gauging Surface  Contact Surface Highly Polished Tungsten Carbide		.312" Radius	8-32	581
			10-32	591
		Flat	8-32	582
			10-32	592

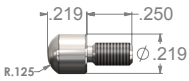
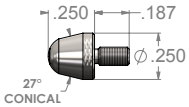
A.G.D.	Actual Size	A Diameter	Thread	Part Number
BALL POINTS  		.250"	10-32	584
			8-32	594
		.3125"	10-32	585
			8-32	595

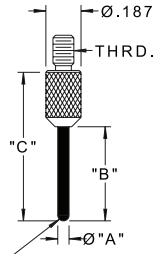
METRIC	Actual Size	A Diameter	Thread	Part Number
BALL POINTS  		.0312"	M2.6 x 0.45	620
			M2.5 x 0.45	631
		.0625"	M2.6 x 0.45	621
			M2.5 x 0.45	632
		.0937"	M2.6 x 0.45	622
			M2.5 x 0.45	633
		.125"	M2.6 x 0.45	623
			M2.5 x 0.45	634

ANSI GROUP O	Actual Size	A Diameter	Thread	Part Number
BALL POINTS  		.0312"	0-80	520
			1-72	531
		.0469"	0-80	521
			1-72	532
		.0625"	0-80	522
			1-72	533
		.0937"	0-80	523
			1-72	534

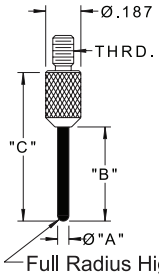
METRIC	Actual Size	A	Thread	Part Number
BALL POINTS (LOW PROFILE) 		Carbide	M2.6 x 0.45	640
			M2.5 x 0.45	645
		Ruby	M2.6 x 0.45	641
			M2.5 x 0.45	646

A.G.D.	Actual Size	A	Thread	Part Number
Radius & Flat Gauging Surface  Contact Surface Highly Polished Tungsten Carbide Unless Noted		.250" Radius	5-40	660
			4-40	665
		Flat	5-40	661
			4-40	668
	RUBY INSERT TIP 	.250" Radius	5-40	660R
		Flat	5-40	661R

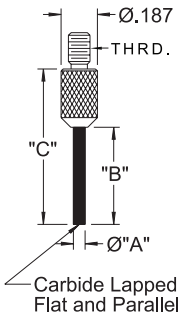
A.G.D. & METRIC DIAMOND TIPPED	Actual Size	A	Thread	Part Number
Radius Gauging Surface Contact Surface Highly Polished Diamond	DIAMOND INSERT TIP 	.125" Radius	5-40	70050103
Radius Gauging Surface Contact Surface Highly Polished Diamond	DIAMOND INSERT TIP 	.105" Radius	M2.5 X 0.45	172246-01
			4-48	172246-4-48

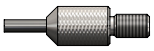
A.G.D. & METRIC	Actual Size	A Diameter	B Length	C Length	Thread	Part Number
RADIUS NEEDLE Gauging Surface  Full Radius Highly Polished Carbide		.018"	.120"	.400"	4-48	567
					M2.5 x 0.45	597
		.018"	.200"	.480"	4-48	568
					M2.5 x 0.45	598
		.031"	.200	.480"	4-48	607
					M2.5 x 0.45	667
		.031"	.500"	.780"	4-48	630
					M2.5 x 0.45	680
		.031"	1.000"	1.280"	4-48	658
					M2.5 x 0.45	698

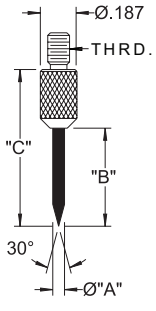
A.G.D. & METRIC RADIUS NEEDLE continued on page 36

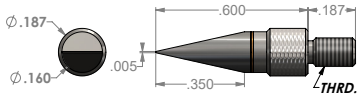
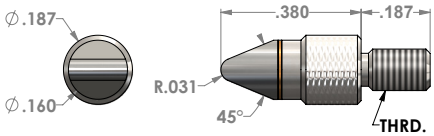
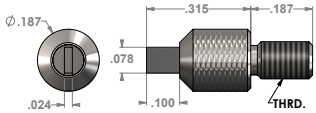
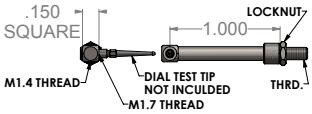
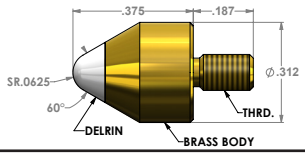
A.G.D. & METRIC continued from page 35	Actual Size	A Diameter	B Length	C Length	Thread	Part Number
RADIUS NEEDLE Gauging Surface		1.0mm	.120"	.400"	4-48	625
					M2.5 x 0.45	635
		1.0mm	.180"	.480"	4-48	650
					M2.5 x 0.45	690
		1.0mm	.200"	(±0.002") .500"	4-48	605
		1.0mm	.500"	.780"	4-48	628
					M2.5 x 0.45	638
		1.0mm	1.000"	1.280"	4-48	651
					M2.5 x 0.45	691
		1.0mm	1.600"	1.880"	4-48	652
					M2.5 x 0.45	692
		1.5mm	.200"	.500"	4-48	653
					M2.5 x 0.45	693
		1.5mm	.500"	.800"	4-48	525
					M2.5 x 0.45	535
 Full Radius Highly Polished Carbide		1.5mm	.800"	1.100"	4-48	657
					M2.5 x 0.45	697
		1.5mm	1.000"	1.300"	4-48	528
					M2.5 x 0.45	538
		1.5mm	1.600"	1.900"	4-48	654
					M2.5 x 0.45	694
		1.5mm	2.100"	2.400"	4-48	659
					M2.5 x 0.45	699
		2.0mm	.500"	.800"	4-48	655
					M2.5 x 0.45	695
		2.0mm	1.000"	1.300"	4-48	547
					M2.5 x 0.45	557
		2.0mm	1.600"	1.900"	4-48	656
					M2.5 x 0.45	696

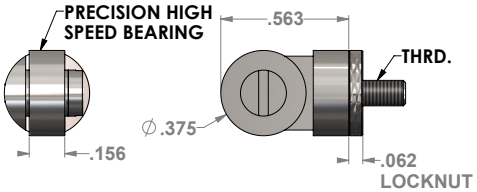
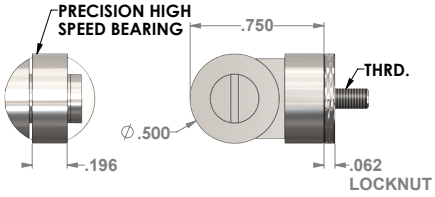
FLAT NEEDLE
Gauging Surface

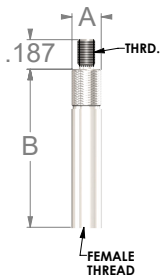


A.G.D. & METRIC	Actual Size	A Diameter	B Length	C Length	Thread	Part Number
		.018"	.120"	.400"	4-48	363
					M2.5 x 0.45	383
		.018"	.200"	.480"	4-48	613
					M2.5 x 0.45	673
		.031"	.200	.480"	4-48	614
					M2.5 x 0.45	674
		.031"	.500"	.780"	4-48	615
					M2.5 x 0.45	675
		.031"	1.000"	1.280"	4-48	648
					M2.5 x 0.45	688
		1.0mm	.120"	.400"	4-48	364
					M2.5 x 0.45	384
		1.0mm	.200"	.480"	4-48	616
					M2.5 x 0.45	676
		1.0mm	.500"	.780"	4-48	627
					M2.5 x 0.45	637
		1.0mm	1.000"	1.280"	4-48	617
					M2.5 x 0.45	677
		1.0mm	1.600"	1.880"	4-48	618
					M2.5 x 0.45	678
		1.5mm	.200"	.500"	4-48	619
					M2.5 x 0.45	679
		1.5mm	.500"	.800"	4-48	314
					M2.5 x 0.45	334
		1.5mm	.800"	1.100"	4-48	647
					M2.5 x 0.45	687
		1.5mm	1.000"	1.300"	4-48	527
					M2.5 x 0.45	537
		1.5mm	1.600"	1.900"	4-48	642
					M2.5 x 0.45	682
		1.5mm	2.100"	2.400"	4-48	649
					M2.5 x 0.45	689
		2.0mm	.500"	.800"	4-48	643
					M2.5 x 0.45	683
		2.0mm	1.000"	1.300"	4-48	546
					M2.5 x 0.45	556
		2.0mm	1.600"	1.900"	4-48	644
					M2.5 x 0.45	684

A.G.D. & METRIC	Actual Size	A Diameter	B Length	C Length	Thread	Part Number
CONICAL SHARP POINT NEEDLE Gauging Surface  Carbide Tip		1.0mm	.120"	.400"	4-48	626
					M2.5 x 0.45	636
		1.0mm	.500"	.780"	4-48	629
					M2.5 x 0.45	639
		1.5mm	.500"	.800"	4-48	526
					M2.5 x 0.45	536
		1.5mm	1.000"	1.300"	4-48	529
					M2.5 x 0.45	539
		2.0mm	1.000"	1.300"	4-48	548
					M2.5 x 0.45	558

A.G.D. & METRIC		Thread	Part Number
FLAT END CHISEL Carbide Tipped		4-48	318
		M2.5 x 0.45	338
RADIUS END CHISEL Carbide Tipped		4-48	577
		M2.5 x 0.45	587
FLAT END BLADE Carbide Tipped		4-48	350
		M2.5 x 0.45	370
RIGHT ANGLE STYLUS CENTER For use with tips on pages 2-18		4-48	549
		M2.5 x 0.45	559
		4-48	313
		M2.5 x 0.45	333

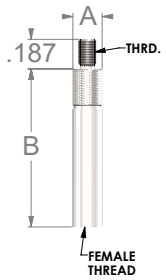
ROLLER CONTACT			
A.G.D. & METRIC		**Thread**	**Part Number**
PRECISION BEARING IS ABEC 3P		4-48	670-375
		M2.5 x 0.45	671-375
PRECISION BEARING IS ABEC 3P		4-48	670-500
		M2.5 x 0.45	671-500

EXTENSIONS						
A.G.D. & METRIC	Actual Size	A DIA	B Length	Female Thread	Male Thread	Part Number
		.187"	.250"	4-48	4-48	307-E250
				M2.5 x 0.45	M2.5 x 0.45	327-E250
		.187"	.375"	4-48	4-48	307-E375
				M2.5 x 0.45	M2.5 x 0.45	327-E375
		.187"	10mm	4-48	4-48	307-E10
				M2.5 x 0.45	M2.5 x 0.45	327-E10
		.187"	.500"	4-48	4-48	307-E500
				M2.5 x 0.45	M2.5 x 0.45	327-E500
		.187"	15mm	4-48	4-48	307-E15
				M2.5 x 0.45	M2.5 x 0.45	327-E15
		.187"	.750" .187"	4-48	4-48	307-E750
				M2.5 x 0.45	M2.5 x 0.45	327-E750
		.187"	20mm	4-48	4-48	307-E20
				M2.5 x 0.45	M2.5 x 0.45	327-E20
		.187"	25mm	4-48	4-48	307-E25
				M2.5 x 0.45	M2.5 x 0.45	327-E25
		.187"	1.000"	4-48	4-48	307-E1000
				M2.5 x 0.45	M2.5 x 0.45	327-E1000
		.187"	30mm	4-48	4-48	307-E30
				M2.5 x 0.45	M2.5 x 0.45	327-E30
		.187"	35mm	4-48	4-48	307-E35
				M2.5 x 0.45	M2.5 x 0.45	327-E35
		.187"	40mm	4-48	4-48	307-E40
				M2.5 x 0.45	M2.5 x 0.45	327-E40
		.187"	45mm	4-48	4-48	307-E45
				M2.5 x 0.45	M2.5 x 0.45	327-E45
		.187"	50mm	4-48	4-48	307-E50
				M2.5 x 0.45	M2.5 x 0.45	327-E50
		.187"	2.000"	4-48	4-48	307-E2000
				M2.5 x 0.45	M2.5 x 0.45	327-E2000
		.187"	55mm	4-48	4-48	307-E55
				M2.5 x 0.45	M2.5 x 0.45	327-E55

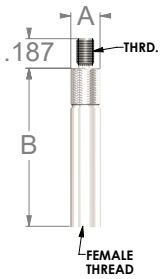
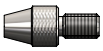
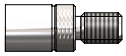
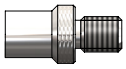
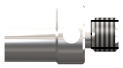
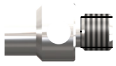
A.G.D. & METRIC FRACTIONAL SIZE continued on page 40

EXTENSIONS

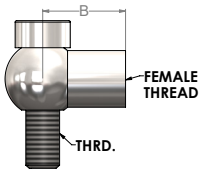
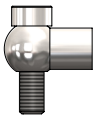
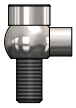
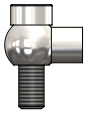
A.G.D. & METRIC
continued from page 39



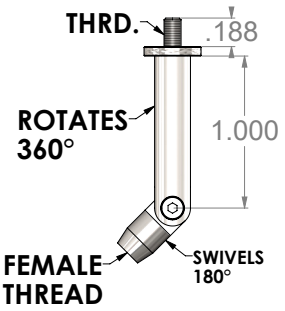
Actual Size	A DIA	B Length	Female Thread	Male Thread	Part Number
	.187"	60mm	4-48	4-48	307-E60
			M2.5 x 0.45	M2.5 x 0.45	327-E60
	.187"	65mm	4-48	4-48	307-E65
			M2.5 x 0.45	M2.5 x 0.45	327-E65
	.187"	70mm	4-48	4-48	307-E70
			M2.5 x 0.45	M2.5 x 0.45	327-E70
	.187"	75mm	4-48	4-48	307-E75
			M2.5 x 0.45	M2.5 x 0.45	327-E75
	.187"	3.000"	4-48	4-48	307-E3000
			M2.5 x 0.45	M2.5 x 0.45	327-E3000
	.187"	80mm	4-48	4-48	307-E80
			M2.5 x 0.45	M2.5 x 0.45	327-E80
	.187"	90mm	4-48	4-48	307-E90
			M2.5 x 0.45	M2.5 x 0.45	327-E90
	.187"	100mm	4-48	4-48	307-E100
			M2.5 x 0.45	M2.5 x 0.45	327-E100
	.187"	4.000"	4-48	4-48	307-E4000
			M2.5 x 0.45	M2.5 x 0.45	327-E4000
	.187"	6.000"	4-48	4-48	307-E6000
			M2.5 x 0.45	M2.5 x 0.45	327-E6000

ADAPTORS						
A.G.D. & METRIC	**Actual Size**	**A DIA**	**B Length**	**Female Thread**	**Male Thread**	**Part Number**
		.187"	.375"	M2.5 x 0.45	4-48	343-E375
				4-48	M2.5 x 0.45	344-E375
		.185"	.250"	M1.4 x 0.3	4-48	349-E250
					M2.5 x 0.45	369-E250
		.185"	.250"	M1.7 x 0.35	4-48	348-E250
					M2.5 x 0.45	368-E250
		.185"	.250"	M2.0 x 0.4	4-48	429-E250
					M2.5 x 0.45	430-E250
		.185"	.250"	M3 x 0.5	4-48	459-E250
					M2.5 x 0.45	460-E250
		.250"	.375"	4-48	8-32	461-E375
				M2.5 x 0.45		462-E375
		.312"	.375"	4-48	10-32	463-E375
				M2.5 x 0.45		464-E375
		.250"	.375"	4-48	5-40	465-E375
				M2.5 x 0.45		466-E375
		.187"	.250"	4-48	M2 x 0.4	467-E250
				M2.5 x 0.45		468-E250
		.187"	.375"	4-48	M3 x 0.5	469-E375
				M2.5 x 0.45		470-E375
Can be used to build custom configurations by matching AGD & Metric contact points, Dial Test indicator tips, or CMM Styli to corresponding female thread listed		.273"	.375"	4-48	M4 x 0.7	471-E375
				M2.5 x 0.45		472-E375
		.312"	.375"	4-48	M5 x 0.8	473-E375
				M2.5 x 0.45		474-E375

ADJUSTABLE RIGHT ANGLE ADAPTORS

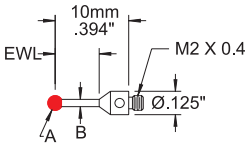
A.G.D. & METRIC	Actual Size	B Length	Female Thread	Male Thread	Part Number
 Female threaded body has thru hole for male cap screw and rotates 360° for orientation; body is locked into place by cap screw. Can be used to build custom 90° Right-Angle Hook configurations by matching AGD & Metric contact points, or CMM Styli to corresponding female thread listed		.400"	4-48	4-48	307-RA
			M2.5 x 0.45	M2.5 x 0.45	327-RA
		.297"	M2.0 x 0.4	4-48	307-RAM2
				M2.5 x 0.45	327-RAM2
		.344"	M3 x 0.5	4-48	307-RAM3
				M2.5 x 0.45	327-RAM3

ADJUSTABLE KNUCKLE ADAPTORS

A.G.D. & METRIC	Actual Size	Female Thread	Male Thread	Part Number
 Can be used to build custom Hook-Offset configurations by matching AGD & Metric contact points, Dial Test indicator tips, or CMM Styli to corresponding female thread listed		4-48	4-48	524
		M2.5 x 0.45	M2.5 x 0.45	624
		M1.7 x 0.35	4-48	524-M1.7
			M2.5 x 0.45	624-M1.7
		M2.0 x 0.4	4-48	524-M2
			M2.5 x 0.45	624-M2
		M3 x 0.5	4-48	524-M3
			M2.5 x 0.45	624-M3

M2 THREADED STYLI

Ruby and Carbide Ball Styli Length **10.0mm Range**



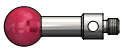
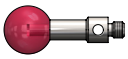
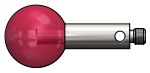
Actual Size	A Ball Size	B Stem Dia.	EWL	Stem Material	Ball Material	Part Number
	0.2mm .008"	0.18mm .007"	2.0mm .079"	Tungsten Carbide	Carbide	265-.2
	0.3mm .012"	0.23mm .009"	2.0mm .079"	Tungsten Carbide	Ruby	265-.3R
					Carbide	265-.3
	0.5mm .020"	0.38mm .015"	3.0mm .118"	Tungsten Carbide	Ruby	265-.5R
					Carbide	265-.5
	0.7mm .028"	0.50mm .020"	4.0mm .157"	Tungsten Carbide	Ruby	265-.7R
					Carbide	265-.7
	1.0mm .039"	0.79mm .031"	5.0mm .197"	Tungsten Carbide	Ruby	265-1R-TCS
	1.0mm .039"	0.71mm .028"	4.5mm .177"	Stainless Steel	Ruby	265-1R
					Carbide	265-1
	1.5mm .059"	0.71mm .028"	4.5mm .177"	Stainless Steel	Ruby	265-1.5R
					Carbide	265-1.5
	2.0mm .079"	1.00mm .039"	6.0mm .236"	Stainless Steel	Ruby	265-2R
					Carbide	265-2

Ruby and Carbide Ball Styli - 10.0mm Range Length

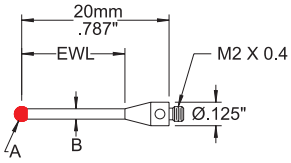
continued on page 44

Ruby and Carbide Ball Styli — 10.0mm Range Length

continued from page 43

Actual Size	A Ball Size	B Stem Dia.	EWL	Stem Material	Ball Material	Part Number
	2.5mm .098"	1.00mm .039"	6.0mm .236"	Stainless Steel	Ruby	265-2.5R
					Carbide	265-2.5
	3.0mm .118"	1.50mm .059"	5.0mm .197"	Stainless Steel	Ruby	265-3R
					Carbide	265-3
	4.0mm .157"	2.0mm .079"	5.0mm .197"	Stainless Steel	Ruby	265-4R
					Carbide	265-4
	5.0mm .197"	2.50mm .098"	7.3mm .286"	Stainless Steel	Ruby	265-5R
					Carbide	265-5
	6.0mm .236"	2.50mm .098"	7.3mm .286"	Stainless Steel	Ruby	265-6R
					Carbide	265-6
12.0mm Range Length 	8.0mm .315"	3.2mm .125"	12.0mm .472"	Stainless Steel	Ruby	265-8R
					Carbide	265-8

Ruby and Carbide Ball Styli — 20.0mm Range Length



Actual Size	A Ball Size	B Stem Dia.	EWL	Stem Material	Ball Material	Part Number
	0.2mm .008"	0.18mm .007"	2.0mm .079"	Tungsten Carbide	Carbide	266-.2
	0.3mm .012"	0.23mm .009"	2.0mm .079"	Tungsten Carbide	Ruby	266-.3R
					Carbide	266-.3
	0.5mm .020"	0.38mm .015"	3.0mm .118"	Tungsten Carbide	Ruby	266-.5R
					Carbide	266-.5
	0.5mm .020"	0.38mm .015"	7.0mm .276"	Tungsten Carbide	Ruby	266-.5RL
					Carbide	266-.5L
	0.7mm .028"	0.50mm .020"	4.0mm .157"	Tungsten Carbide	Ruby	266-.7R
					Carbide	266-.7
	0.7mm .028"	0.50mm .020"	12.0mm .472"	Tungsten Carbide	Ruby	266-.7RL
					Carbide	266-.7L
	1.0mm .039"	0.79mm .031"	5.0mm .197"	Tungsten Carbide	Ruby	266-1R-TCS
	1.0mm .039"	0.71mm .028"	7.0mm .276"	Stainless Steel	Ruby	266-1R
					Carbide	266-1
	1.0mm .039"	0.79mm .031"	15.0mm .591"	Tungsten Carbide	Ruby	266-1RL
					Carbide	266-1L
	1.5mm .059"	1.07mm .042"	8.0mm .315"	Stainless Steel	Ruby	266-1.5R
					Carbide	266-1.5
	1.5mm .059"	1.0mm .039"	15mm .591"	Tungsten Carbide	Ruby	266-1.5RL
					Carbide	266-1.5L
	2.0mm .079"	1.40mm .055"	14.0mm .551"	Stainless Steel	Ruby	266-2R
					Carbide	266-2
	2.0mm .079"	1.0mm .039"	15.0mm .591"	Tungsten Carbide	Ruby	266-2RL

Ruby and Carbide Ball Styli - 20.0mm Range Length

continued on page 45

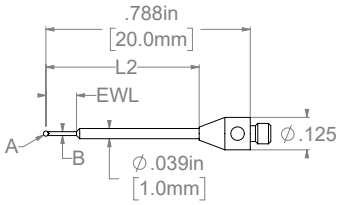
M2 THREADED STYLI

Ruby and Carbide Ball Styli — 20.0mm Range Length

continued from page 44

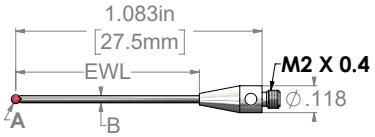
Actual Size	A Ball Size	B Stem Dia.	EWL	Stem Material	Ball Material	Part Number
	2.5mm .098"	1.40mm .055"	14.0mm .551"	Stainless Steel	Ruby	266-2.5R
					Carbide	266-2.5
	2.5mm .098"	1.0mm .039"	15.0mm .591"	Tungsten Carbide	Ruby	266-2.5RL
	3.0mm .118"	1.50mm .059"	15.0mm .591"	Stainless Steel	Ruby	266-3R
					Carbide	266-3
	3.0mm .118"	1.50mm .059"	15.0mm .591"	Tungsten Carbide	Ruby	266-3RL
	4.0mm .157"	2.0mm .079"	15.0mm .591"	Stainless Steel	Ruby	266-4R
					Carbide	266-4
	4.0mm .157"	2.0mm .079"	15.0mm .591"	Tungsten Carbide	Ruby	266-4RL
	5.0mm .197"	2.5mm .098"	17.2mm .679"	Stainless Steel	Ruby	266-5R
					Carbide	266-5
	5.0mm .197"	2.3mm .093"	15.0mm .591"	Tungsten Carbide	Ruby	266-5RL
	6.0mm .236"	2.5mm .098"	17.2mm .679"	Stainless Steel	Ruby	266-6R
					Carbide	266-6
	8.0mm .315"	3.2mm .125"	20.0mm .787"	Stainless Steel	Ruby	266-8R
					Carbide	266-8

Ruby and Carbide Ball Extended Reach Styli — 20.0mm Range Length



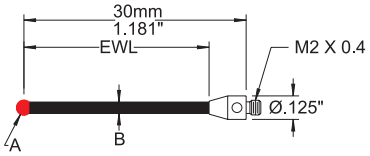
Actual Size	A Ball Size	B Stem Dia.	EWL	L2 Length	Stem Material	Ball Material	Part Number
	0.2mm .008"	0.18mm .007"	2.0mm .079"	15.0mm .591"	Tungsten Carbide	Carbide	266-.2LXR
	0.3mm .012"	0.23mm .009"	2.0mm .079"	15.0mm .591"	Tungsten Carbide	Ruby	266-.3RLXR
						Carbide	266-.3LXR
	0.5mm .020"	0.38mm .015"	3.0mm .118"	15.0mm .591"	Tungsten Carbide	Ruby	266-.5RLXR
						Carbide	266-.5LXR
	0.7mm .028"	0.50mm .020"	4.0mm .157"	15.0mm .591"	Tungsten Carbide	Ruby	266-.7RLXR
						Carbide	266-.7LXR

Ruby Ball Styli — 27.5mm Range Length



Actual Size	A Ball Size	B Stem Dia.	EWL	Stem Material	Part Number
	1.0mm .039"	0.79mm .031"	20.5mm .081"	Tungsten Carbide	799-1R

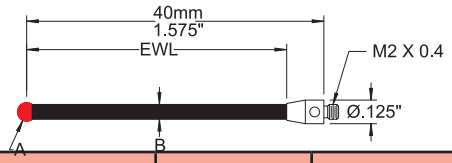
Ruby Ball Styli **30.0mm Range Length**



Actual Size	A Ball Size	B Stem Dia.	EWL	Stem Material	Part Number
	1.0mm .039"	0.79mm .031"	25.0mm .984"	Tungsten Carbide	801-1R
	1.5mm .059"	1.00mm .039"	25.0mm .984"	Tungsten Carbide	801-1.5R
	2.0mm .079"	1.50mm .059"	25.0mm .984"	Tungsten Carbide	801-2R
	2.5mm .098"	2.00mm .079"	25.0mm .984"	Tungsten Carbide	801-2.5R
	3.0mm .118"	2.00mm .079"	25.0mm .984"	Tungsten Carbide	801-3R
	3.0mm .118"	2.38mm .093"	25.0mm .984"	Carbon Fiber	9230-3R
	3.0mm .118"	2.00mm .079"	22.5mm .886"	Ceramic	798-3R
	3.0mm .118"	2.00mm .079"	22.5mm .886"	Carbon Fiber	9230-3R-2CFS
	4.0mm .157"	2.00mm .079"	25.0mm .984"	Tungsten Carbide	801-4R
	4.0mm .157"	3.18mm .125"	30.0mm 1.181"	Carbon Fiber	9230-4R
	4.0mm .157"	2.00mm .079"	22.5mm .886"	Ceramic	798-4R
	4.0mm .157"	2.00mm .079"	22.5mm .886"	Carbon Fiber	9230-4R-2CFS
	5.0mm .197"	2.38mm .093"	23.7mm .932"	Tungsten Carbide	801-5R
	5.0mm .197"	3.18mm .125"	30.0mm 1.181"	Carbon Fiber	9230-5R
	5.0mm .197"	2.38mm .093"	23.7mm .931"	Ceramic	798-5R
	6.0mm .236"	3.18mm .125"	30.0mm 1.181"	Carbon Fiber	9230-6R
	6.0mm .236"	2.38mm .093"	23.7mm .931"	Ceramic	798-6R

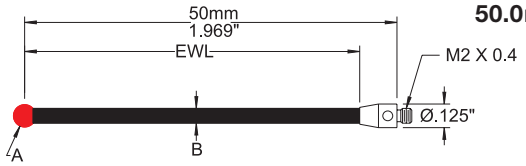
M2 THREADED STYLI

Ruby Ball Styli **40.0mm Range Length**



Actual Size	A Ball Size	B Stem Dia.	EWL	Stem Material	Part Number
	2.0mm .079"	1.50mm .059"	35.0mm 1.378"	Tungsten Carbide	802-2R
	2.5mm .098"	2.00mm .079"	35.0mm 1.378"	Tungsten Carbide	802-2.5R
	3.0mm .118"	2.00mm .079"	35.0mm 1.378"	Tungsten Carbide	802-3R
	3.0mm .118"	2.38mm .093"	35.0mm 1.378"	Carbon Fiber	9240-3R
	3.0mm .118"	2.00mm .079"	32.5mm 1.280"	Carbon Fiber	9240-3R-2CFS
	4.0mm .157"	2.00mm .079"	35.0mm 1.378"	Tungsten Carbide	802-4R
	4.0mm .157"	3.18mm .125"	40.0mm 1.575"	Carbon Fiber	9240-4R
	4.0mm .157"	2.00mm .079"	32.5mm 1.280"	Carbon Fiber	9240-4R-2CFS
	5.0mm .197"	2.38mm .093"	33.7mm 1.326"	Tungsten Carbide	802-5R
	5.0mm .197"	3.18mm .125"	40.0mm 1.575"	Carbon Fiber	9240-5R
	6.0mm .236"	3.18mm .125"	40.0mm 1.575"	Carbon Fiber	9240-6R

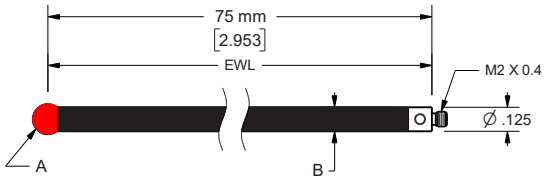
Ruby Ball Styli **50.0mm Range Length**



Actual Size	A Ball Size	B Stem Dia.	EWL	Stem Material	Part Number
	3.0mm .118"	2.00mm .079"	45.0mm 1.772"	Tungsten Carbide	803-3R
	3.0mm .118"	2.38mm .093"	45.0mm 1.772"	Ceramic	804-3R
	3.0mm .118"	2.38mm .093"	43.7mm 1.720"	Carbon Fiber	9250-3R
	3.0mm .118"	2.00mm .079"	42.5mm 1.673"	Ceramic	804-3R-2CS
	3.0mm .118"	2.00mm .079"	42.5mm 1.673"	Carbon Fiber	9250-3R-2CFS
	4.0mm .157"	2.00mm .079"	45.0mm 1.772"	Tungsten Carbide	803-4R
	4.0mm .157"	2.38mm .093"	43.7mm 1.720"	Ceramic	804-4R
	4.0mm .157"	3.18mm .125"	50.0mm 1.969"	Carbon Fiber	9250-4R
	4.0mm .157"	2.00mm .079"	42.5mm 1.673"	Ceramic	804-4R-2CS
	4.0mm .157"	2.00mm .079"	42.5mm 1.673"	Carbon Fiber	9250-4R-2CFS
	5.0mm .197"	2.38mm .093"	43.7mm 1.720"	Tungsten Carbide	803-5R
	5.0mm .197"	2.38mm .093"	43.7mm 1.720"	Ceramic	804-5R
	5.0mm .197"	3.18mm .125"	50.0mm 1.969"	Carbon Fiber	9250-5R
	6.0mm .236"	2.38mm .093"	43.7mm 1.720"	Ceramic	804-6R
	6.0mm .236"	3.18mm .125"	50.0mm 1.969"	Carbon Fiber	9250-6R

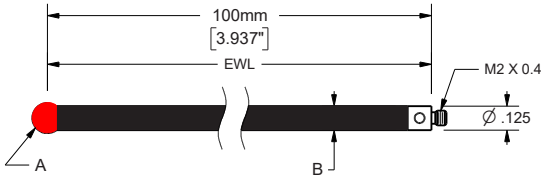
M2 THREADED STYLI

Ruby Ball Styli — **75.0mm Range Length**



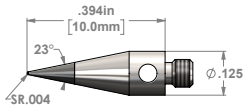
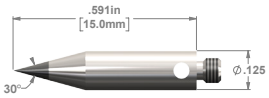
Actual Size	A Ball Size	B Stem Dia.	EWL	Stem Material	Part Number
	4.0mm .157"	3.18mm .125"	75.0mm 2.953"	Carbon Fiber	9275-4R
	4.0mm .157"	2.00mm .079"	67.5mm 2.657"	Carbon Fiber	9275-4R-2CFS
	5.0mm .197"	3.18mm .125"	75.0mm 2.953"	Carbon Fiber	9275-5R
	6.0mm .236"	3.18mm .125"	75.0mm 2.953"	Carbon Fiber	9275-6R

Ruby Ball Styli — **100.0mm Range Length**



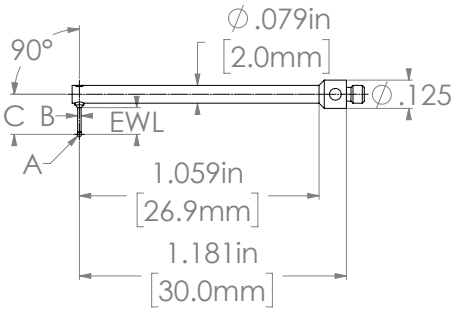
Actual Size	A Ball Size	B Stem Dia.	EWL	Stem Material	Part Number
	4.0mm .157"	3.18mm .125"	100.0mm 3.937"	Carbon Fiber	92100-4R
	5.0mm .197"	3.18mm .125"	100.0mm 3.937"	Carbon Fiber	92100-5R
	6.0mm .236"	3.18mm .125"	100.0mm 3.937"	Carbon Fiber	92100-6R

Pointer Styli – Tungsten Carbide Tip

Actual Size	Part Number
	388
	269

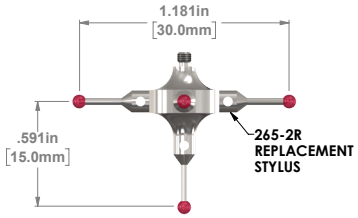
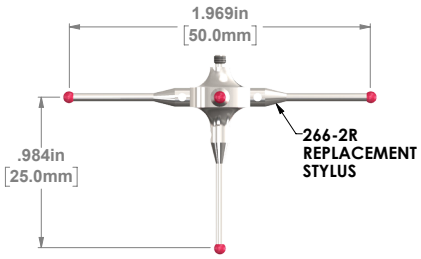
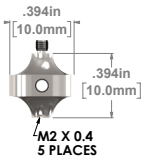
Ruby and Carbide Ball Right Angle Styli

30.0mm Range Length

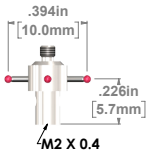
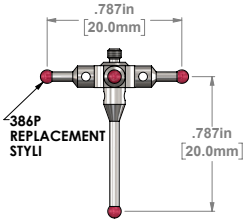
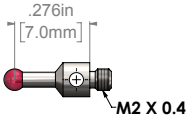


Actual Size	A Ball Size	B Stem Dia.	C R.A. Drop	EWL	Stem Material	Ball Material	Part Number
	0.2mm .008"	0.18mm .007"	3.5mm .138"	2.0mm .079"	Tungsten Carbide	Carbide	252-.2
	0.3mm .012"	0.23mm .009"	3.5mm .138"	2.0mm .079"	Tungsten Carbide	Ruby	252-.3R
						Carbide	252-.3
	0.5mm .020"	0.38mm .015"	4.5mm .177"	3.0mm .118"	Tungsten Carbide	Ruby	252-.5R
						Carbide	252-.5
	0.7mm .028"	0.50mm .020"	5.5mm .217"	4.0mm .157"	Tungsten Carbide	Ruby	252-.7R
						Carbide	252-.7
	1.0mm .039"	0.79mm .031"	6.5mm .256"	6.5mm .256"	Tungsten Carbide	Ruby	252-1R
						Carbide	252-1

Ruby Star Styli – **Stationary**

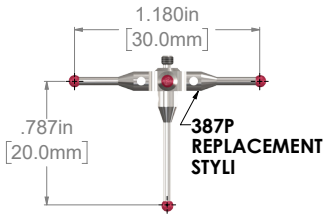
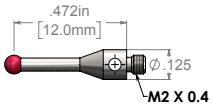
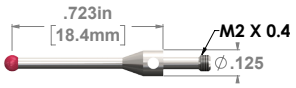
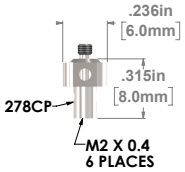
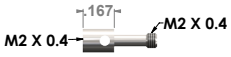
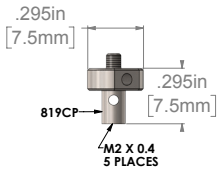
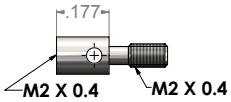
Actual Size	Ball Size	Part Number
	2.0mm .079"	265-A
	2.0mm .079"	266-A
 5 Way Stationary Stylus Center		265-0

Ruby Star Styli – **Adjustable**

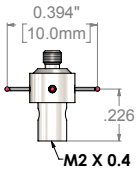
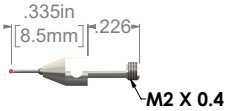
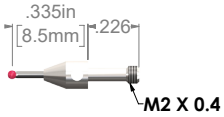
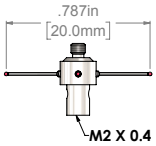
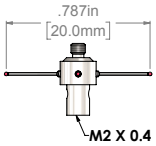
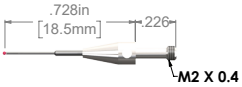
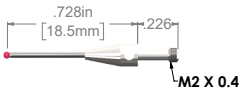
Actual Size	Ball Size	Part Number
	1.0mm .039"	830
	2.0mm .079"	386
 Common Stylus for 386 Star Styi	2.0mm .079"	386P

M2 THREADED STYLI

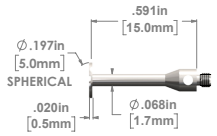
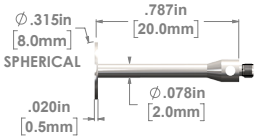
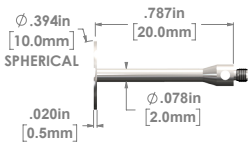
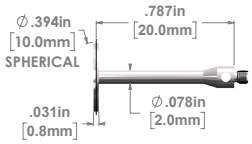
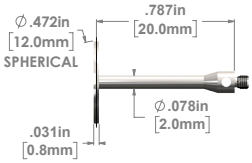
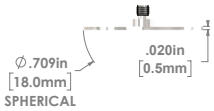
Ruby Star Styli – **Adjustable**

Actual Size	Ball Size	Part Number
	2.0mm .079"	387
 Common Stylus for 387 Star Styi	2.0mm .079"	387P
 Common Center Stylus for 386 & 387 Star Styi	2.0mm .079"	385
 Adjustable 5 Way Stylus Center		278
 Common Center Post for All Adujustable Star Styli and Stylus Centers Except for 819 Stylus Center		278CP
 Adjustable 4 Way Stylus Center		819
 Center Post for 819 Stylus Center		819CP

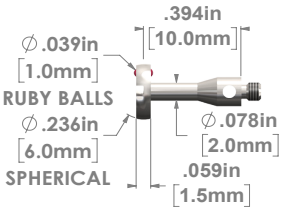
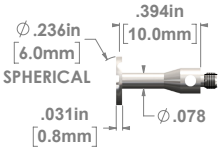
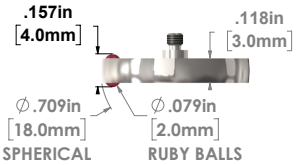
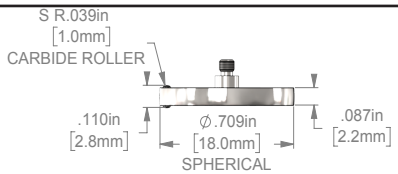
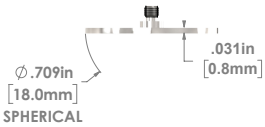
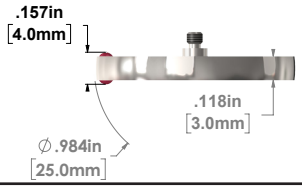
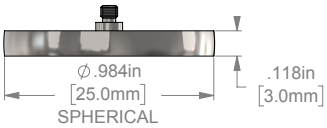
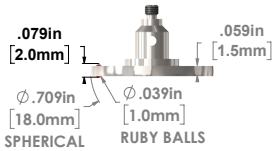
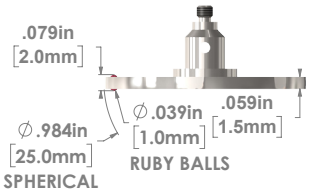
Ruby Star Styli – **Adjustable**

Actual Size	Ball Size	Part Number
	0.5mm .020"	830-.5R
 Center Stylus for All Adjustable Star Styli	0.5mm .020"	830-.5RCS
 Center Stylus for All Adjustable Star Styli	1.0mm .039"	830-1RCS
	0.5mm .020"	860-.5R
	1.0mm .039"	860-1R
 Center Stylus for All Adjustable Star Styli	0.5mm .020"	860-.5RCS
 Center Stylus for All Adjustable Star Styli	1.0mm .039"	860-1RCS

Disk Styli – **Hardened Tool Steel**

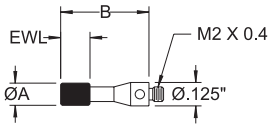
Actual Size	Part Number
	831
	832
	833
	828
	829
	834

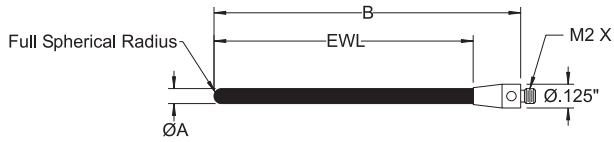
Disk Styli – **Hardened Tool Steel**

Actual Size	Part Number
	270
	827
	271
	274
	826
	272
	275
	813
	814

M2 THREADED STYLI

Cylinder Styli

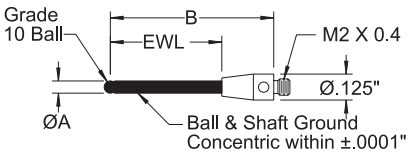




Spherical Radius Concentric to ØA Within ±.0005"

Actual Size	A Diameter	A Tolerance	Radius Tolerance	EWL	B Length	Cylinder Material	Part Number
	1.5mm .059"	+0/-.0005"	-	1.0mm .039"	10.75mm .423"	Carbide	267
	3.0mm .118"	+0/-.0005"	-	3.5mm .138"	12mm .472"	Carbide	268
	0.3mm .012"	±.0003"	±.0003"	3.0mm .118"	10mm .394"	Carbide	708
	0.5mm .020"	+0/-.0002"	±.0003"	8.0mm .315"	15mm .590"	Carbide	709
	1.0mm .039"	+0/-.002"	±.001"	8.5mm .335"	15.5mm .610"	Ruby	815R
	1.5mm .059"	+0/-.002"	±.001"	8.75mm .344"	15.75mm .620"	Ruby	816R
	2.0mm .079"	+0/-.002"	±.001"	7.2mm .283"	21mm .827"	Ruby	382R
						Carbide	382
	4.0mm .157"	+0/-.002"	±.001"	10mm .394"	22mm .866"	Ruby	817R
	1.0mm .039"	±.0005"	±.001"	14.15mm .557"	20.5mm .807"	Steel	710-20
		+0/-.0002"	+.0003"/-0			Carbide	710-20C
	1.5mm .059"	±.0005"	±.001"	14.4mm .567"	20.75mm .817"	Steel	711-20
		+0/-.0002"	+.0003"/-0			Carbide	711-20C
	2.0mm .079"	±.0005"	±.001"	14.65mm .577"	21mm .827"	Steel	712-20
		+0/-.0002"	+.0003"/-0			Carbide	712-20C
	1.0mm .039"	±.0005"	±.001"	34.15mm 1.345"	40.5mm 1.595"	Steel	710-40
		+0/-.0002"	+.0003"/-0			Carbide	710-40C
	1.5mm .059"	±.0005"	±.001"	34.4mm 1.354"	40.75mm 1.604"	Steel	711-40
		+0/-.0002"	+.0003"/-0			Carbide	711-40C
	2.0mm .079"	±.0005"	±.001"	34.65mm 1.364"	41mm 1.614"	Steel	712-40
		+0/-.0002"	+.0003"/-0			Carbide	712-40C
	1.0mm .039"	+0/-.0002"	+.0003"/-0	29.15mm 1.148"	35.5mm 1.398"	Carbide	717
	1.5mm .059"	+0/-.0002"	+.0003"/-0	9.45mm .372"	15.8mm .622"	Carbide	718
	2.0mm .079"	+0/-.0002"	+.0003"/-0	9.65mm .3.80"	16.0mm .630"	Carbide	719
	3.0mm .118"	+0/-.0002"	+.0003"/-0	17.0mm .669"	22.5mm .886"	Carbide	720

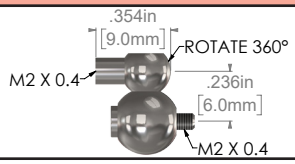
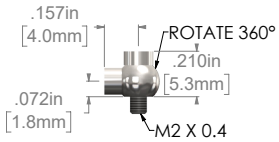
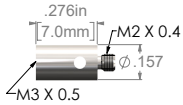
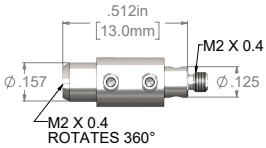
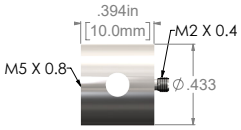
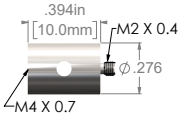
Precision Ball Cylinder Styli



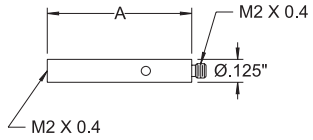
Actual Size	A Ball Size (±0.0001")	B Length	EWL	Cylinder Material	Part Number
	1.0mm .039" Carbide	20.0mm .787"	13.65mm .537"	Carbide	714-20C
	1.0mm .039" Carbide	40.0mm 1.575"	33.65mm 1.325"	Carbide	714-40C
	1.5mm .059" Carbide	20.0mm .787"	13.65mm .537"	Carbide	715-20C
	1.5mm .059" Carbide	40.0mm 1.575"	33.65mm 1.325"	Carbide	715-40C
	2.0mm .079" Carbide	20.0mm .787"	13.65mm .537"	Carbide	716-20C
	2.0mm .079" Carbide	40.0mm 1.575"	33.65mm 1.325"	Carbide	716-40C
	2.0mm .079" Ruby	40.0mm 1.575"	30.5mm 1.201"	Ceramic	292
	2.0mm .079" Ruby	40.0mm 1.575"	30.5mm 1.201"	Ceramic	291
	2.0mm .079" Ruby	40.0mm 1.575"	30.5mm 1.201"	Ceramic	290

M2 THREADED STYLI

Adapters

Actual Size		Part Number
Adjustable Stylus Knuckle		277
Adjustable 90° Right Angle Adaptor 90° Offset Arm Rotates 360° around M2 Socket Cap Screw for Orientation		265-RA4
		265-AD7
In-line Rotary Adaptor		265-ROA13
		6013
		6014

Stylus Extensions



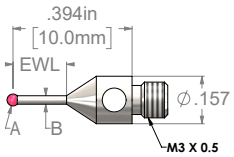
Actual Size	A Length	Material	Part Number
	5.0mm .196"	Stainless Steel	265-E5
	10.0mm .394"	Stainless Steel	265-E10
	20.0mm .787"	Stainless Steel	265-E20
	30.0mm 1.181"	Stainless Steel	265-E30
	40.0mm 1.575"	Stainless Steel	265-E40
	60.0mm 2.362"	Stainless Steel	265-E60
	90.0mm 3.543"	Stainless Steel	265-E90
	30.0mm 1.181"	Ceramic	265-EC30
	40.0mm 1.575"	Ceramic	265-EC40
	50.0mm 1.969"	Ceramic	265-EC50
	75.0mm 2.953"	Ceramic	265-EC75
	100.0mm 3.937"	Ceramic	265-EC100

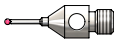
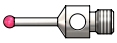
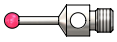
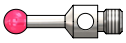
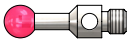
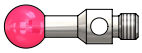
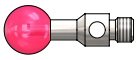
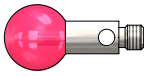
Extensions with Carbon Fiber Shaft

	A Length	B Shaft Diameter	Shaft Material	Threaded Ends Material	Part Number
	30.0mm 1.181"	3.18mm .125"	Carbon Fiber	Stainless Steel	9202-E30
	40.0mm 1.575"	3.18mm .125"	Carbon Fiber	Stainless Steel	9202-E40
	50.0mm 1.969"	3.18mm .125"	Carbon Fiber	Stainless Steel	9202-E50
	75.0mm 2.953"	3.18mm .125"	Carbon Fiber	Stainless Steel	9202-E75
	100.0mm 3.937"	3.18mm .125"	Carbon Fiber	Stainless Steel	9202-E100

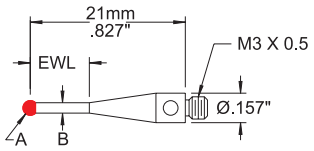
M3 THREADED STYLI

Ruby and Carbide Ball Styli — **10.0mm Range Length**



Actual Size	A Ball Size	B Stem Dia.	EWL	Stem Material	Ball Material	Part Number
	0.2mm .008"	0.18mm .007"	2.0mm .079"	Tungsten Carbide	Carbide	260-.2
	0.3mm .012"	0.23mm .009"	2.0mm .079"	Tungsten Carbide	Ruby	260-.3R
					Carbide	260-.3
	0.5mm .020"	0.38mm .015"	3.0mm .118"	Tungsten Carbide	Ruby	260-.5R
					Carbide	260-.5
	0.7mm .028"	0.50mm .020"	4.0mm .157"	Tungsten Carbide	Ruby	260-.7R
					Carbide	260-.7
	1.0mm .039"	0.71mm .028"	4.0mm .157"	Stainless Steel	Ruby	260-1R
					Carbide	260-1
	1.0mm .039"	0.79mm .031"	4.0mm .157"	Tungsten Carbide	Ruby	260-1R-TCS
					Carbide	260-1-TCS
	1.5mm .059"	1.0mm .039"	6.0mm .236"	Stainless Steel	Ruby	260-1.5R
					Carbide	260-1.5
	1.5mm .059"	1.0mm .039"	4.0mm .157"	Tungsten Carbide	Ruby	260-1.5R-TCS
					Carbide	260-1.5-TCS
	2.0mm .079"	1.0mm .039"	6.0mm .236"	Stainless Steel	Ruby	260-2R
					Carbide	260-2
	2.0mm .079"	1.5mm .059"	4.0mm .157"	Tungsten Carbide	Ruby	260-2R-TCS
					Carbide	260-2-TCS
	2.5mm .098"	1.0mm .039"	6.0mm .236"	Stainless Steel	Ruby	260-2.5R
					Carbide	260-2.5
	2.5mm .098"	1.5mm .059"	4.0mm .157"	Tungsten Carbide	Ruby	260-2.5R-TCS
					Carbide	260-2.5-TCS
	3.0mm .118"	1.50mm .059"	6.0mm .236"	Stainless Steel	Ruby	260-3R
					Carbide	260-3
	4.0mm .157"	2.0mm .079"	6.0mm .236"	Stainless Steel	Ruby	260-4R
					Carbide	260-4
	5.0mm .197"	2.50mm .098"	6.0mm .236"	Stainless Steel	Ruby	260-5R
					Carbide	260-5
	6.0mm .236"	2.50mm .098"	6.0mm .236"	Stainless Steel	Ruby	260-6R
					Carbide	260-6
	8.0mm .315"	4.0mm .157"	10.0mm .394"	Stainless Steel	Ruby	260-8R
					Carbide	260-8

Ruby and Carbide Ball Styli **21.0mm Range Length**

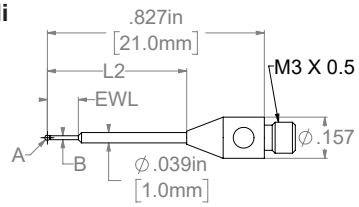


Actual Size	A Ball Size	B Stem Dia.	EWL	Stem Material	Ball Material	Part Number
	0.2mm .008"	0.18mm .007"	2.0mm .079"	Tungsten Carbide	Carbide	261-.2
	0.3mm .012"	0.23mm .009"	2.0mm .079"	Tungsten Carbide	Ruby	261-.3R
					Carbide	261-.3
	0.5mm .020"	0.38mm .015"	3.0mm .118"	Tungsten Carbide	Ruby	261-.5R
					Carbide	261-.5
	0.7mm .028"	0.50mm .020"	4.0mm .157"	Tungsten Carbide	Ruby	261-.7R
					Carbide	261-.7
	1.0mm .039"	0.71mm .028"	4.0mm .157"	Stainless Steel	Ruby	261-1R
					Carbide	261-1
	1.0mm .039"	0.79mm .031"	15.0mm .591"	Tungsten Carbide	Ruby	261-1RL
					Carbide	261-1L
	1.5mm .059"	1.04mm .041"	8.0mm .315"	Stainless Steel	Ruby	261-1.5R
					Carbide	261-1.5
	1.5mm .059"	1.0mm .039"	13.5mm .532"	Tungsten Carbide	Ruby	261-1.5RL
					Carbide	261-1.5L
	2.0mm .079"	1.40mm .055"	8.0mm .315"	Stainless Steel	Ruby	261-2R
					Carbide	261-2
	2.0mm .079"	1.50mm .059"	13.5mm .532"	Tungsten Carbide	Ruby	261-2RL
					Carbide	261-2L
	2.5mm .098"	2.0mm .079"	13.5mm .532"	Tungsten Carbide	Ruby	261-2.5RL
					Carbide	261-2.5L
	3.0mm .118"	1.50mm .059"	12.0mm .472"	Stainless Steel	Ruby	261-3R
					Carbide	261-3
	4.0mm .157"	2.50mm .098"	13.0mm .512"	Stainless Steel	Ruby	261-4R
					Carbide	261-4
	5.0mm .197"	2.50mm .098"	13.0mm .512"	Stainless Steel	Ruby	261-5R
					Carbide	261-5
	6.0mm .236"	2.50mm .098"	13.0mm .512"	Stainless Steel	Ruby	261-6R
					Carbide	261-6
	8.0mm .315"	4.0mm .157"	21.0mm .827"	Stainless Steel	Ruby	261-8R
					Carbide	261-8

M3 THREADED STYLI

Ruby and Carbide Ball Extended Reach Styli

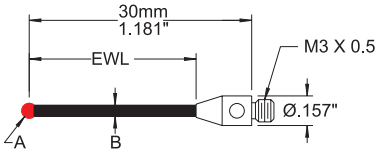
21.0mm Range Length



Actual Size	A Ball Size	B Stem Dia.	EWL	L2 Length	Stem Material	Ball Material	Part Number
	0.2mm .008"	0.18mm .007"	2.0mm .079"	13.5mm .531"	Tungsten Carbide	Carbide	261-.2LXR
	0.3mm .012"	0.23mm .009"	2.0mm .079"	13.5mm .531"	Tungsten Carbide	Ruby	261-.3RLXR
						Carbide	261-.3LXR
	0.5mm .020"	0.38mm .015"	3.0mm .118"	13.5mm .531"	Tungsten Carbide	Ruby	261-.5RLXR
						Carbide	261-.5LXR
	0.7mm .028"	0.50mm .020"	4.0mm .157"	13.5mm .531"	Tungsten Carbide	Ruby	261-.7RLXR
						Carbide	261-.7LXR

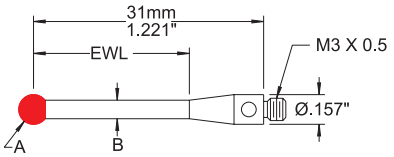
Ruby Ball Styli

30.0mm Range Length



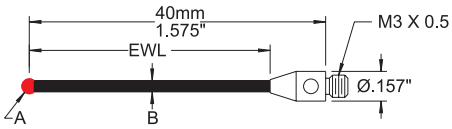
Actual Size	A Ball Size	B Stem Dia.	EWL	Stem Material	Part Number
	1.5mm .059"	1.00mm .039"	22.5mm .886"	Tungsten Carbide	805-1.5R
	2.0mm .079"	1.50mm .059"	22.5mm .886"	Tungsten Carbide	805-2R
	2.5mm .098"	2.0mm .079"	22.5mm .886"	Tungsten Carbide	805-2.5R
	3.0mm .118"	2.0mm .079"	22.5mm .886"	Tungsten Carbide	805-3R

Ruby Ball Styli — **31.0mm Range Legth**



Actual Size	A Ball Size	B Stem Dia.	EWL	Stem Material	Ball Material	Part Number
	4.0mm .157"	2.50mm .098"	21.0mm .827"	Stainless Steel	Ruby	261-L4R
					Carbide	261-L4
	5.0mm .197"	2.50mm .098"	21.0mm .827"	Stainless Steel	Ruby	261-L5R
					Carbide	261-L5

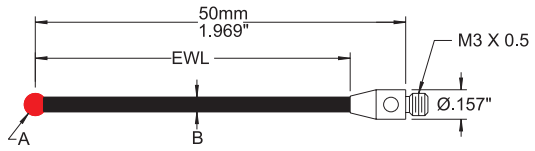
Ruby Ball Styli — **40.0mm Range Length**



Actual Size	A Ball Size	B Stem Dia.	EWL	Stem Material	Part Number
	2.0mm .079"	1.50mm .059"	32.5mm 1.280"	Tungsten Carbide	806-2R
	2.5mm .098"	2.0mm .079"	32.5mm 1.280"	Tungsten Carbide	806-2.5R
	3.0mm .118"	2.0mm .079"	32.5mm 1.280"	Tungsten Carbide	806-3R
	4.0mm .157"	2.0mm .079"	32.5mm 1.280"	Tungsten Carbide	806-4R
	5.0mm .197"	2.38mm .093"	32.5mm 1.280"	Tungsten Carbide	806-5R

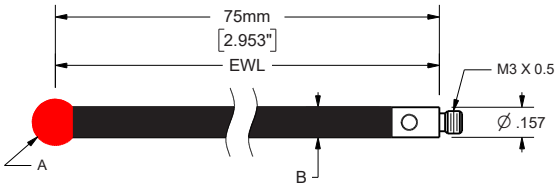
M3 THREADED STYLI

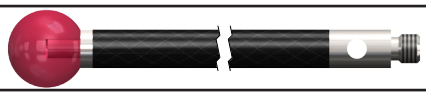
Ruby Ball Styli **50.0mm Range Length**



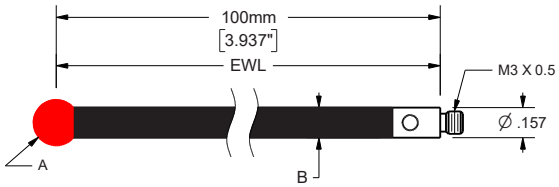
Actual Size	A Ball Size	B Stem Dia.	EWL	Stem Material	Part Number
	3.0mm .118"	2.0mm .079"	42.5mm 1.673"	Tungsten Carbide	807-3R
	3.0mm .118"	2.38mm .093"	42.5mm 1.673"	Ceramic	808-3R
	3.0mm .118"	2.38mm .093"	42.5mm 1.673"	Carbon Fiber	9350-3R
	3.0mm .118"	2.0mm .079"	42.5mm 1.673"	Ceramic	808-3R-2CS
	3.0mm .118"	2.0mm .079"	42.5mm 1.673"	Carbon Fiber	9350-3R-2CFS
	4.0mm .157"	2.0mm .079"	42.5mm 1.673"	Tungsten Carbide	807-4R
	4.0mm .157"	2.38mm .093"	42.5mm 1.673"	Ceramic	808-4R
	4.0mm .157"	2.38mm .093"	42.5mm 1.673"	Carbon Fiber	9350-4R
	4.0mm .157"	2.0mm .079"	42.5mm 1.673"	Ceramic	808-4R-2CS
	4.0mm .157"	2.0mm .079"	42.5mm 1.673"	Carbon Fiber	9350-4R-2CFS
	5.0mm .197"	2.38mm .093"	42.5mm 1.673"	Tungsten Carbide	807-5R
	5.0mm .197"	2.38mm .093"	42.5mm 1.673"	Ceramic	808-5R
	5.0mm .197"	2.38mm .093"	42.5mm 1.673"	Carbon Fiber	9350-5R

Ruby Ball Styli — **75.0mm Range Length**



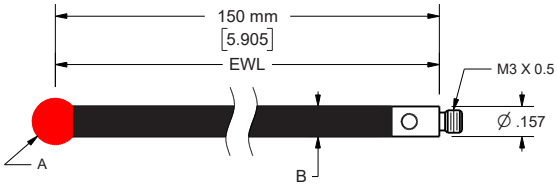
Actual Size	A Ball Size	B Stem Dia.	EWL	Stem Material	Part Number
	6.0mm .236"	4.0mm .157"	75.0mm 2.953"	Carbon Fiber	9375-6R
	8.0mm .315"	4.0mm .157"	75.0mm 2.953"	Carbon Fiber	9375-8R
	10.0mm .394"	4.0mm .157"	75.0mm 2.953"	Carbon Fiber	9375-10R

Ruby Ball Styli — **100.0mm Range Length**



Actual Size	A Ball Size	B Stem Dia.	EWL	Stem Material	Part Number
	6.0mm .236"	4.0mm .157"	100.0mm 3.937"	Carbon Fiber	93100-6R
	8.0mm .315"	4.0mm .157"	100.0mm 3.937"	Carbon Fiber	93100-8R
	10.0mm .394"	4.0mm .157"	100.0mm 3.937"	Carbon Fiber	93100-10R
	12.0mm .472"	4.0mm .157"	100.0mm 3.937"	Carbon Fiber	93100-12R

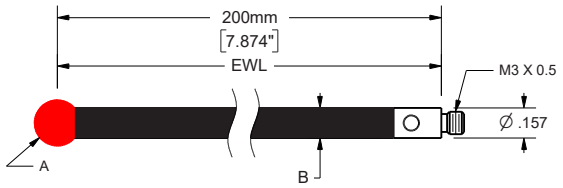
Ruby Ball Styli — **150.0mm Range Length**



Actual Size	A Ball Size	B Stem Dia.	EWL	Stem Material	Part Number
	10.0mm .394"	4.0mm .157"	150.0mm 5.905"	Carbon Fiber	93150-10R
	12.0mm .472"	4.0mm .157"	150.0mm 5.905"	Carbon Fiber	93150-12R

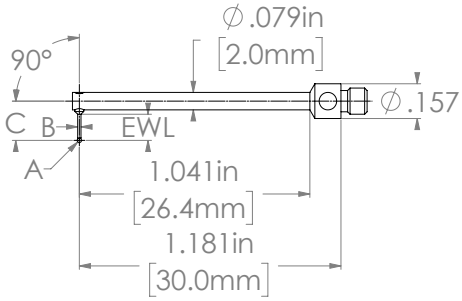
M3 THREADED STYLI

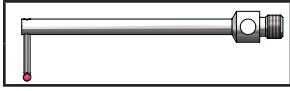
Ruby Ball Styli — **200.0mm Range Length**



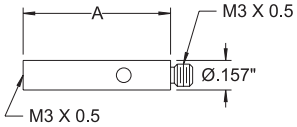
Actual Size	A Ball Size	B Stem Dia.	EWL	Stem Material	Part Number
	10.0mm .394"	4.0mm .157"	200.0mm 7.874"	Carbon Fiber	93200-10R
	12.0mm .472"	4.0mm .157"	200.0mm 7.874"	Carbon Fiber	93200-12R

Ruby and Carbide Ball Right Angle Styli — **30.0mm Range Length**



Actual Size	A Ball Size	B Stem Dia.	C R.A. Drop	EWL	Stem Material	Ball Material	Part Number
	0.2mm .008"	0.18mm .007"	3.5mm .138"	2.0mm .079"	Tungsten Carbide	Carbide	251-.2
	0.3mm .012"	0.23mm .009"	3.5mm .138"	2.0mm .079"	Tungsten Carbide	Ruby	251-.3R
						Carbide	251-.3
	0.5mm .020"	0.38mm .015"	4.5mm .177"	3.0mm .118"	Tungsten Carbide	Ruby	251-.5R
						Carbide	251-.5
	0.7mm .028"	0.50mm .020"	5.5mm .217"	4.0mm .157"	Tungsten Carbide	Ruby	251-.7R
						Carbide	251-.7
	1.0mm .039"	0.79mm .031"	6.5mm .256"	6.5mm .256"	Tungsten Carbide	Ruby	251-1R
						Carbide	251-1

Stylus Extensions

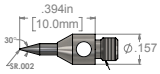


Actual Size	A Length	Material	Part Number
	10.0mm .394"	Stainless Steel	261-E10
	20.0mm .787"	Stainless Steel	261-E20
	30.0mm 1.181"	Stainless Steel	261-E30
	35.0mm 1.378"	Stainless Steel	261-E35
	50.0mm 1.969"	Ceramic	261-EC50
	75.0mm 2.953"	Ceramic	261-EC75
	100.0mm 3.937"	Ceramic	261-EC100

Extensions with Carbon Fiber Shaft

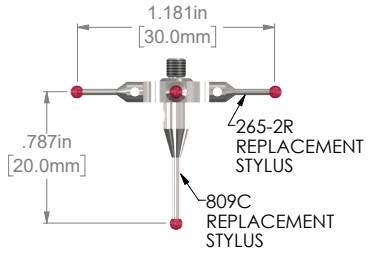
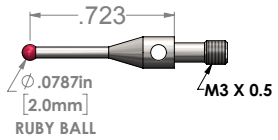
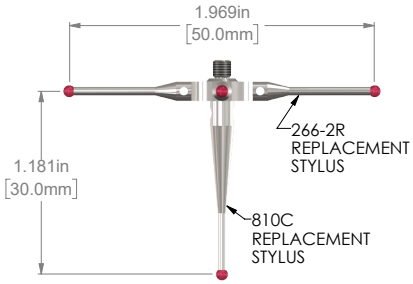
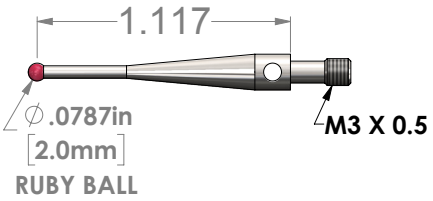
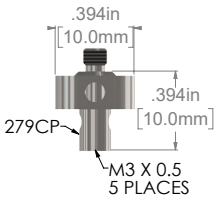
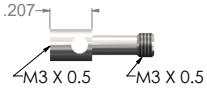
	A Length	B Shaft Diameter	Shaft Material	Threaded Ends Material	Part Number
	50.0mm 1.969"	4.0mm .157"	Carbon Fiber	Stainless Steel	9303-E50
	75.0mm 2.953"	4.0mm .157"	Carbon Fiber	Stainless Steel	9303-E75
	100.0mm 3.937"	4.0mm .157"	Carbon Fiber	Stainless Steel	9303-E100

Pointer Styli – **Tungsten Carbide Tip**

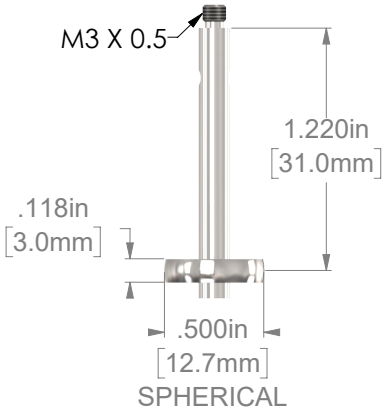
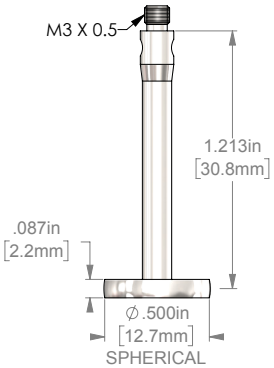
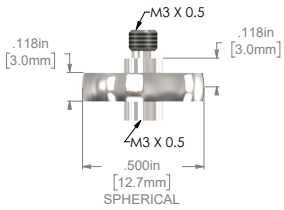
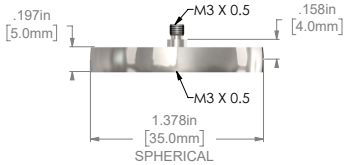
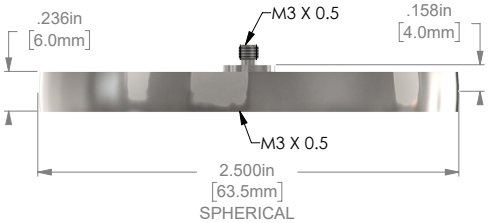
Actual Size	Part Number
	260-P

M3 THREADED STYLI

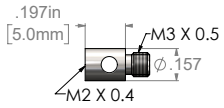
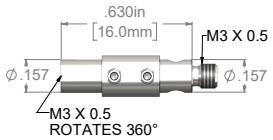
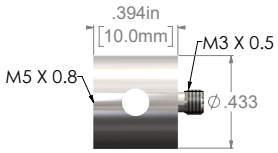
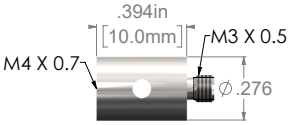
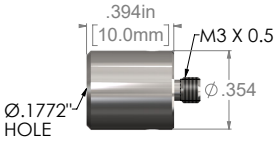
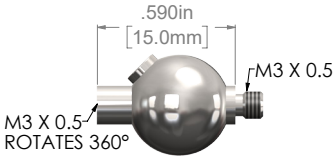
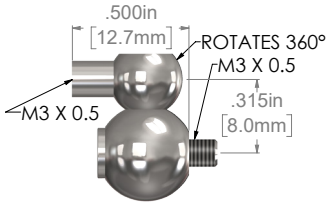
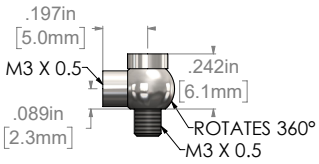
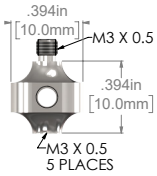
Ruby Star Styli – **Adjustable**

Actual Size	Ball Size	Part Number
	2.0mm .079"	809
 Center Stylus for 809 Star Styli	2.0mm .079"	809C
	2.0mm .079"	810
 Center Stylus for 810 Star Styli	2.0mm .079"	810C
 5 Way Adjustable Stylus Center		279
 Center Post for 279 Stylus Center		279CP

Disc Styli

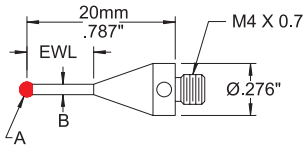
Actual Size	Part Number
	273
	280
	283
	284
	285

Adapters

Actual Size	Part Number
	261-AD5
In-line Rotary Adaptor 	261-ROA16
	6015
	6016
	282
Adjustable Offset Stylus Knuckle 	281
Adjustable Stylus Knuckle 	276
Adjustable 90° Right Angle Adaptor 90° Offset Arm Rotates 360° around M3 Socket Cap Screw for Orientation 	261-RA5
5 Way Stationary Stylus Center 	394

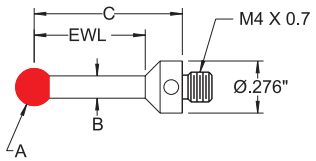
M4 THREADED STYLI

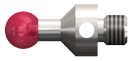
Ruby and Carbide Ball Styli
20.0mm Range Length



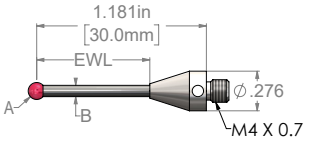
Actual Size	A Ball Size	B Stem Dia.	EWL	Stem Material	Ball Material	Part Number
	1.0mm .039"	0.76mm .030"	5.0mm .197"	Stainless Steel	Ruby	840-1R
					Carbide	840-1
	1.0mm .039"	0.76mm .030"	10.0mm .394"	Tungsten Carbide	Ruby	840-1RL
					Carbide	840-1L
	2.0mm .079"	1.40mm .055"	9.0mm .354"	Stainless Steel	Ruby	840-2R
					Carbide	840-2
	2.0mm .079"	1.5mm .059"	10.0mm .394"	Tungsten Carbide	Ruby	840-2RL
					Carbide	840-2L
	3.0mm .118"	1.75mm .069" (Tapered)	15.0mm .591"	Stainless Steel	Ruby	840-3R
					Carbide	840-3
	3.0mm .118"	2.0mm .079"	10.0mm .394"	Tungsten Carbide	Ruby	840-3RL
					Carbide	840-3L
	4.0mm .157"	3.10mm .122"	15.0mm .591"	Stainless Steel	Ruby	840-4R
					Carbide	840-4
	4.0mm .157"	2.0mm .079"	10.0mm .394"	Tungsten Carbide	Ruby	840-4RL
					Carbide	840-4L
	5.0mm .197"	3.60mm .142"	15.0mm .591"	Stainless Steel	Ruby	840-5R
					Carbide	840-5
	5.0mm .197"	2.40mm .094"	10.0mm .394"	Tungsten Carbide	Ruby	840-5RL
					Carbide	840-5L
	6.0mm .236"	4.60mm .181"	16.0mm .630"	Stainless Steel	Ruby	840-6R
					Carbide	840-6
	6.0mm .236"	2.40mm .094"	10.0mm .394"	Tungsten Carbide	Ruby	840-6RL
					Carbide	840-6L
	8.0mm .315"	6.1mm .240"	16.5mm .651"	Stainless Steel	Ruby	840-8R
					Carbide	840-8

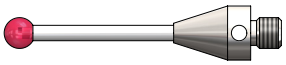
Ruby and Carbide Ball Styli Assorted Range Lengths



Actual Size	A Ball Size	B Stem Dia.	C Length	EWL	Stem Material	Ball Material	Part Number
	5.0mm .197"	3.0mm .118"	10.0mm .394"	5.0mm .197"	Stainless Steel	Ruby	841-5R
						Carbide	841-5
	5.0mm .197"	3.0mm .118"	20.0mm .787"	15.0mm .591"	Stainless Steel	Ruby	842-5R
						Carbide	842-5

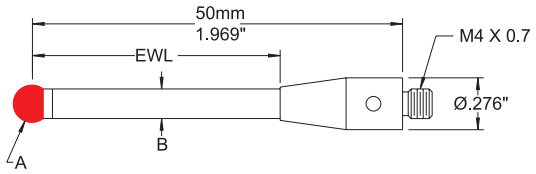
Ruby and Carbide Ball Styli 30.0mm Range Length



Actual Size	A Ball Size	B Stem Dia.	EWL	Stem Material	Ball Material	Part Number
	3.0mm .118"	2.0mm .079"	20.0mm .787"	Carbide	Ruby	843-3RL
	4.0mm .157"	2.0mm .079"	20.0mm .787"	Carbide	Ruby	843-4RL
	4.0mm .157"	2.0mm .079"	20.0mm .787"	Ceramic	Ruby	843-4R-2CS
	5.0mm .197"	3.0mm .118"	25.0mm .984"	Stainless Steel	Ruby	843-5R
					Carbide	843-5

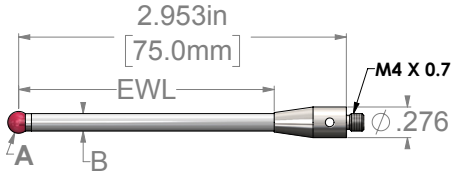
M4 THREADED STYLI

Ruby and Carbide Ball Styli
50.0mm Range Length



Actual Size	A Ball Size	B Stem Dia.	EWL	Stem Material	Ball Material	Part Number
	2.0mm .079"	1.50mm .059"	40.0mm 1.575"	Tungsten Carbide	Ruby	844-2RL
					Carbide	844-2L
	3.0mm .118"	2.0mm .079"	40.0mm 1.575"	Ceramic	Ruby	811-3R
	3.0mm .118"	2.0mm .079"	40.0mm 1.575"	Tungsten Carbide	Ruby	844-3RL
					Carbide	844-3L
	4.0mm .197"	3.18mm .125"	33.5mm 1.319"	Ceramic	Ruby	811-4R
	4.0mm .197"	2.0mm .079"	40.0mm 1.575"	Tungsten Carbide	Ruby	844-4RL
					Carbide	844-4L
	5.0mm .197"	3.95mm .156"	33.5mm 1.319"	Ceramic	Ruby	811-5R
					Carbide	811-5
	5.0mm .197"	2.40mm .094"	40.0mm 1.575"	Tungsten Carbide	Ruby	844-5RL
					Carbide	844-5L
	5.0mm .197"	4.5mm .177"	33.5mm 1.319"	Stainless Steel	Ruby	811-5R-SS
		3.81mm .150"			Carbide	811-5-SS
	5.0mm .197"	4.0mm .157"	33.5mm 1.319"	Carbon Fiber	Ruby	9450-5R
	6.0mm .236"	4.75mm .187"	33.5mm 1.319"	Ceramic	Ruby	811-6R
					Carbide	811-6
	6.0mm .236"	2.40mm .094"	40.0mm 1.575"	Tungsten Carbide	Ruby	844-6RL
					Carbide	844-6L
	6.0mm .236"	4.5mm .177"	33.5mm 1.319"	Stainless Steel	Carbide	811-6-SS
	6.0mm .236"	4.76mm .187"	33.5mm 1.319"	Carbon Fiber	Ruby	9450-6R
	8.0mm .315"	4.75mm .187"	35.5mm 1.319"	Ceramic	Ruby	811-8R
	8.0mm .315"	4.76mm .187"	33.5mm 1.319"	Carbon Fiber	Ruby	9450-8R
Common Center Stulus with Extended Thread for use in Building Star Styli with Adjustable Stylus Center 850	6.0mm .236"	4.75mm .187"	33.5mm 1.319"	Ceramic	Ruby	811-L6R
Common Center Stulus with Extended Thread for use in Building Star Styli with Adjustable Stylus Center 850	6.0mm .236"	4.76mm .187"	33.5mm 1.319"	Carbon Fiber	Ruby	9450-L6R

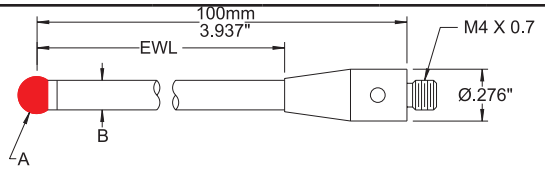
Ruby and Carbide Ball Styli
75.0mm Range Length



Actual Size	A Ball Size	B Stem Dia.	EWL	Stem Material	Ball Material	Part Number
	5.0mm .197"	4.0mm .157"	58.5mm 2.303"	Ceramic	Ruby	821-5R
					Carbide	821-5
	5.0mm .197"	4.5mm .177"	58.5mm 2.303"	Stainless Steel	Ruby	821-5R-SS
					Carbide	821-5-SS
	6.0mm .236"	4.75mm .187"	58.5mm 2.303"	Ceramic	Ruby	821-6R
					Carbide	821-6
	6.0mm .236"	4.5mm .177"	58.5mm 2.303"	Stainless Steel	Carbide	821-6-SS
	8.0mm .315"	4.0mm .157"	33.5mm 1.319"	Ceramic	Ruby	821-8R

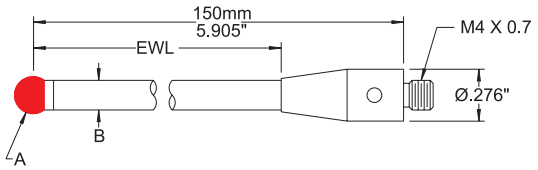
M4 THREADED STYLI

Ruby Ball Styli
100.0mm Range Length



Actual Size	A Ball Size	B Stem Dia.	EWL	Stem Material	Ball Material	Part Number
	5.0mm .197"	3.95mm .156"	83.5mm 3.287"	Ceramic	Ruby	812-5R
					Carbide	812-5
	5.0mm .197"	4.50mm .177"	83.2mm 3.276"	Stainless Steel	Ruby	812-5R-SS
					Carbide	812-5-SS
	5.0mm .197"	4.0mm .157"	83.5mm 3.287"	Carbon Fiber	Ruby	94100-5R
	6.0mm .236"	4.75mm .187"	83.5mm 3.287"	Ceramic	Ruby	812-6R
					Carbide	812-6
	6.0mm .236"	4.50mm .177"	83.2mm 3.276"	Stainless Steel	Carbide	812-6-SS
	6.0mm .236"	4.76mm .187"	83.5mm 3.287"	Carbon Fiber	Ruby	94100-6R
	8.0mm .315"	4.75mm .187"	83.5mm 3.287"	Ceramic	Ruby	812-8R
	8.0mm .315"	4.76mm .187"	83.5mm 3.287"	Carbon Fiber	Ruby	94100-8R
Common Center Stulus with Extended Thread for use in Building Star Styli with Adjustable Stylus Center 850	6.0mm .236"	4.75mm .187"	83.5mm 3.287"	Ceramic	Ruby	812-L6R
Common Center Stulus with Extended Thread for use in Building Star Styli with Adjustable Stylus Center 850	6.0mm .236"	4.76mm .187"	83.5mm 3.287"	Carbon Fiber	Ruby	94100-L6R

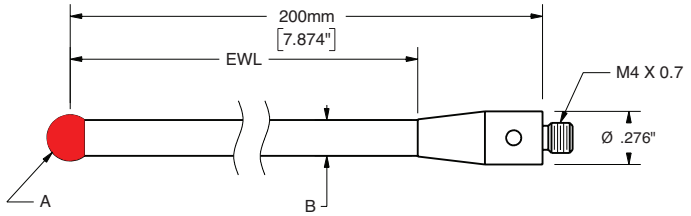
Ruby Ball Styli
150mm Range Length



Actual Size	A Ball Size	B Stem Dia.	EWL	Stem Material	Ball Material	Part Number
	5.0mm .197"	3.95mm .156"	133.5mm 5.256"	Ceramic	Ruby	820-5R
					Carbide	820-5
	5.0mm .197"	4.50mm .177	133.5mm 5.256"	Stainless Steel	Ruby	820-5R-SS
					Carbide	820-5-SS
	5.0mm .197"	4.0mm .157"	133.5mm 5.256"	Carbon Fiber	Ruby	94150-5R
	6.0mm .236"	4.75mm .187"	133.5mm 5.256"	Ceramic	Ruby	820-6R
					Carbide	820-6
	6.0mm .236"	4.76mm .187"	133.5mm 5.256"	Carbon Fiber	Ruby	94150-6R
	8.0mm .315"	4.75mm .187"	133.5mm 5.256"	Ceramic	Ruby	820-8R
	8.0mm .315"	4.76mm .187"	133.5mm 5.256"	Carbon Fiber	Ruby	94150-8R
Common Center Stulus with Extended Thread for use in Building Star Styli with Adjustable Stylus Center 850	6.0mm .236"	4.75mm .187"	133.5mm 5.256"	Ceramic	Ruby	820-L6R
Common Center Stulus with Extended Thread for use in Building Star Styli with Adjustable Stylus Center 850	6.0mm .236"	4.76mm .187"	133.5mm 5.256"	Carbon Fiber	Ruby	94150-L6R

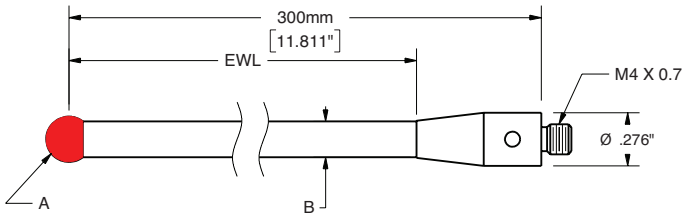
M4 THREADED STYLI

Ruby Ball Styli
200mm Range Length



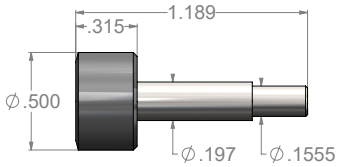
Actual Size	A Ball Size	B Stem Dia.	EWL	Stem Material	Part Number
	6.0mm .236"	4.76mm .187"	183.5mm 7.224"	Carbon Fiber	94200-6R
	8.0mm .315"	4.76mm .187"	183.5mm 7.224"	Carbon Fiber	94200-8R

Ruby Ball Styli
300mm Range Length

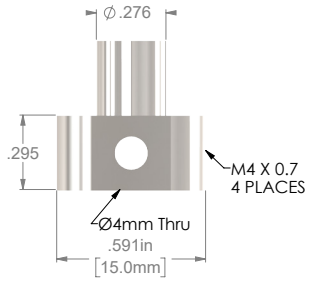
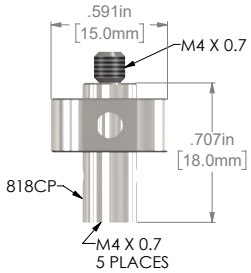
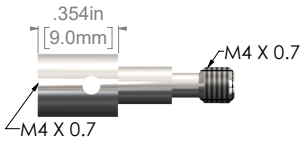


Actual Size	A Ball Size	B Stem Dia.	EWL	Stem Material	Part Number
	6.0mm .236"	4.76mm .187"	283.5mm 11.161"	Carbon Fiber	94300-6R
	8.0mm .315"	4.76mm .187"	283.5mm 11.161"	Carbon Fiber	94300-8R

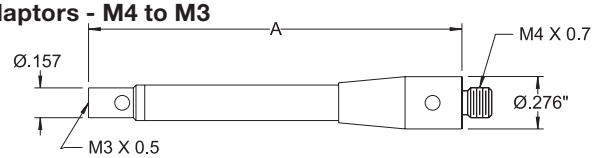
Carbide Stylus for TS27R Contact Tool Setting Touch Probe

Actual Size	Part Number
	729

Star Stylus Centers – Adjustable

Actual Size	Part Number
 5-way Adjustable Stylus Center for use with M4 Extended Thread Common Center Styli	850
 5-way Adjustable Stylus Center	818
 Center Post for 818 Stylus Center	818CP

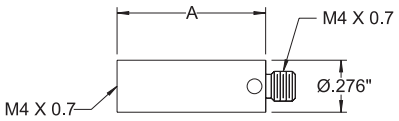
Stylus Extensions/Adaptors - M4 to M3



Actual Size	A Length	Stem Material	Part Number
	20.0mm .787"	Stainless Steel	824-E20
	50.0mm 1.969"	Ceramic	824-EC50
	75.0mm 2.953"	Ceramic	824-EC75
	100.0mm 3.937"	Ceramic	824-EC100

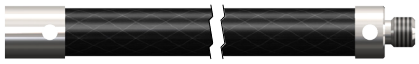
M4 THREADED STYLI

Stylus Extensions



Actual Size	A Length	Material	Part Number
	10.0mm .394"	Stainless Steel	823-E10
	12.7mm .500"	Stainless Steel	823-E12.7
	15.0mm .591"	Stainless Steel	823-E15
	20.0mm .787"	Stainless Steel	823-E20
	30.0mm 1.181"	Stainless Steel	823-E30
	50.0mm 1.969	Stainless Steel	823-E50
	30.0mm 1.181"	Ceramic	823-EC30
	50.0mm 1.968"	Ceramic	823-EC50
	100.0mm 3.937"	Ceramic	823-EC100

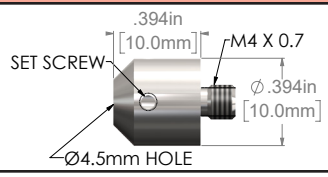
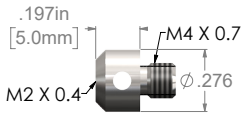
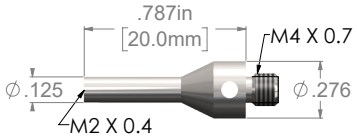
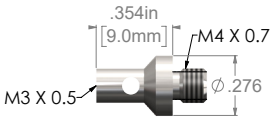
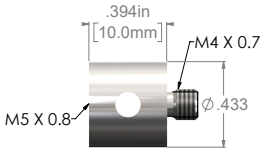
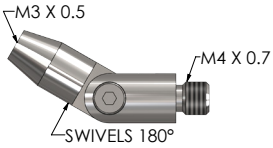
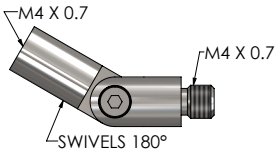
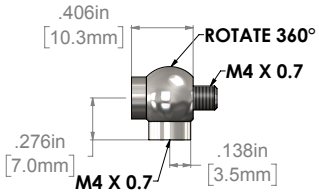
Extensions with Carbon Fiber Shaft

	A Length	B Shaft Diameter	Shaft Material	Threaded Ends Material	Part Number
	30.0mm 1.181"	6.35mm .250"	Carbon Fiber	Stainless Steel	9404-E30
	50.0mm 1.969"	6.35mm .250"	Carbon Fiber	Stainless Steel	9404-E50
	100.0mm 3.937"	6.35mm .250"	Carbon Fiber	Stainless Steel	9404-E100

Stylus Extensions/Adaptors - M4 to M3 Carbon Fiber Shaft

	A Length	B Shaft Diameter	Shaft Material	Threaded Ends Material	Part Number
	50.0mm 1.969"	4.76mm .187"	Carbon Fiber	Stainless Steel	9403-E50
	75.0mm 2.953"	4.76mm .187"	Carbon Fiber	Stainless Steel	9403-E75
	100.0mm 3.937"	4.76mm .187"	Carbon Fiber	Stainless Steel	9403-E100

Adapters

Actual Size	Part Number
	392
	399
	825-E20
	393
	854
Adjustable Stylus Knuckle 	851
Adjustable Stylus Knuckle 	852
Adjustable 90° Right Angle Adaptor 90° Offset Arm Rotates 360° around M4 Socket Cap Screw for Orientation 	840-RA7

MISCELLANEOUS ADAPTERS

Miscellaneous Adapters	
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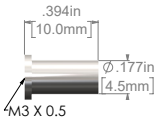
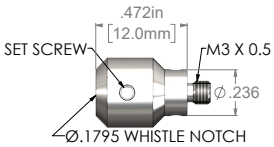
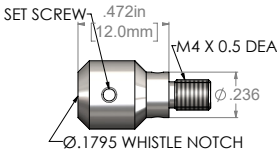
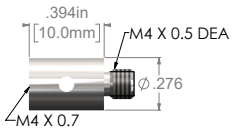
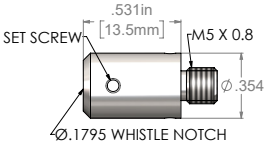
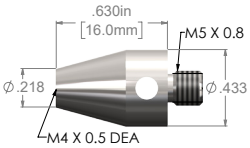
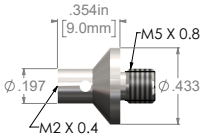
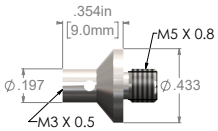
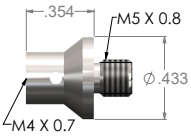
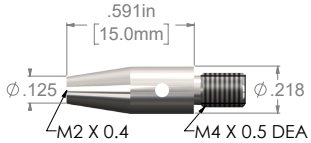
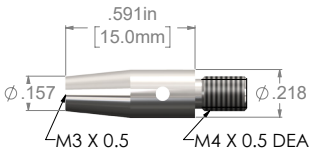
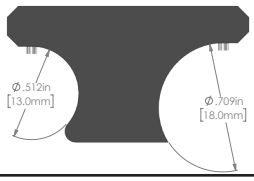
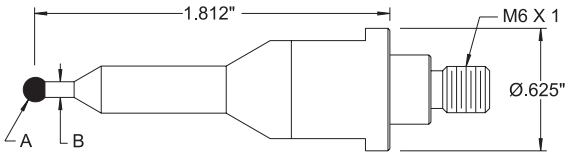
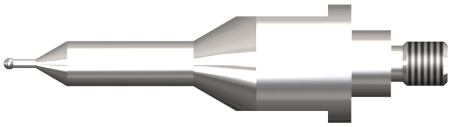
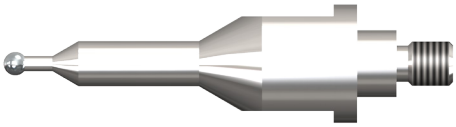
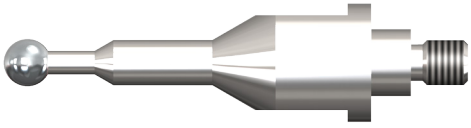
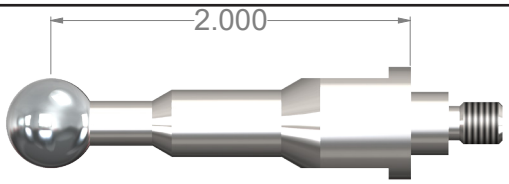
	262-AD9
	6001
	6002
	855
	6003
r 	6006
	6007
	6008
	853
	6009
	6010

Actual Size	Part Number
	389
	397
	390
	CP-1486
	CP-3932

REPLACEMENT STYLI for FARO

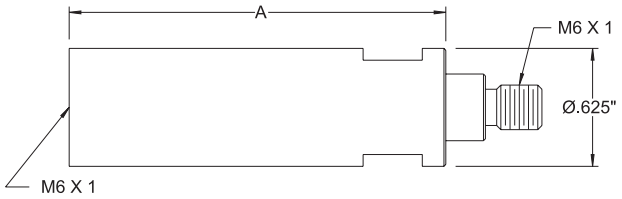
Ruby, Carbide and Delrin Ball Styli



Scale 1:2	A Ball Size	B Stem Dia.	Ball Material	Part Number
	1.59mm .0625"	1.17mm .046"	Ruby	CPF-062R
			Carbide	CPF-062
			Delrin	CPF-062D
	3.18mm .1250"	2.03mm .080"	Ruby	CPF-125R
			Carbide	CPF-125
			Delrin	CPF-125D
	6.35mm .2500"	3.18mm .125"	Ruby	CPF-250R
			Carbide	CPF-250
			Delrin	CPF-250D
	12.70mm .5000"	6.35mm .250"	Ruby	N/A
			Carbide	CPF-500
			Delrin	N/A

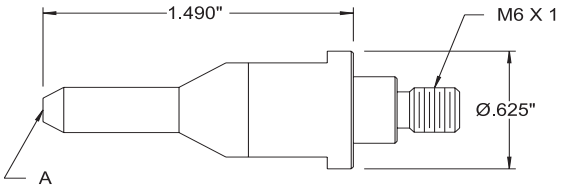
REPLACEMENT STYLI for FARO

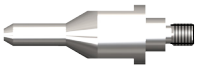
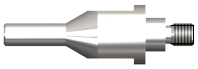
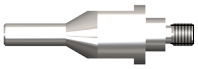
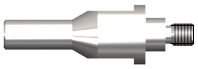
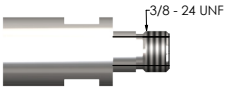
Stylus Extensions



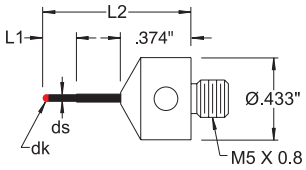
Scale 1:2	A Length	Part Number
	50.8mm 2.000"	CPF-E2000
	76.2mm 3.000"	CPF-E3000
	101.6mm 4.000"	CPF-E4000
	152.4mm 6.000"	CPF-E6000

Adapters



Scale 1:2	A Tap Size	Part Number
	M2 x 0.4	CPF-AD2
	M2.5 x 0.45	CPF-AD2.5
	4-48 UNF	CPF-AD4-48
	M3 x 0.5	CPF-AD3
	M4 x 0.7	CPF-AD4
	M5 x 0.8	CPF-AD5
1.000" Long	3/8 - 24 UNF	CPF-AD38
1.000" Long 	M6 x 1	CPF-AD6

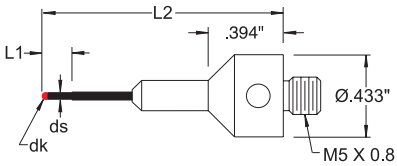
Ruby Ball Styli – Stepped Shafts
Carbide Stems

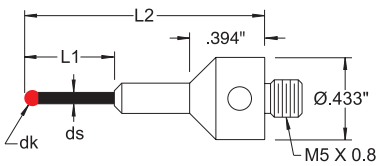


Scale 1:2	dk Ball Size	ds Stem Diameter	L1 EWL	L2 Length	Stem Material	Ball Material	Part Number
	.3mm .012"	.20mm .008"	2.2mm .087"	20.0mm .787"	Tungsten Carbide	Ruby	CPZ000-0320
						Carbide	CPZ000-0320C
	.5mm .020"	.38mm .015"	3.25mm .128"	20.0mm .787"	Tungsten Carbide	Ruby	CPZ000-0520
						Carbide	CPZ000-0520C
	.6mm .024"	.46mm .018"	4.29mm .169"	20.0mm .787"	Tungsten Carbide	Ruby	CPZ000-0620
						Carbide	CPZ000-0620C
	.7mm .028"	.53mm .021"	4.34mm .171"	20.0mm .787"	Tungsten Carbide	Ruby	CPZ000-0720
						Carbide	CPZ000-0720C
	.79mm .031"	.56mm .022"	4.37mm .172"	20.0mm .787"	Tungsten Carbide	Ruby	CPZ000-0820
						Carbide	CPZ000-0820C
	1.0mm .039"	.71mm .028"	4.47mm .176"	20.0mm .787"	Tungsten Carbide	Ruby	CPZ000-1020
						Carbide	CPZ000-1020C
	1.0mm .039"	.71mm .028"	4.50mm .177"	25.0mm .984"	Tungsten Carbide	Ruby	CPZ000-1025
	1.0mm .039"	.71mm .028"	10.5mm .413"	30.0mm 1.181"	Tungsten Carbide	Ruby	CPZ000-1030
	1.5mm .059"	1.0mm .039"	10.5mm .413"	30.0mm 1.181"	Tungsten Carbide	Ruby	CPZ000-1530

M5 THREADED STYLI

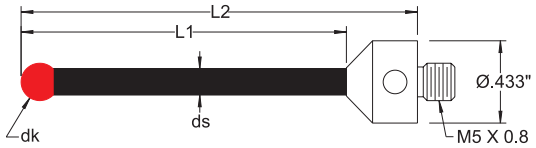
Ruby Ball Styli – Stepped Extended Shafts Carbide Stems





Scale 1:2	dk Ball Size	ds Stem Diameter	L1 EWL	L2 Length	Stem Material	Ball Material	Part Number
	.79mm .031"	.61mm .024"	4.0mm .157"	32.0mm 1.260"	Tungsten Carbide	Ruby	CPZ030-8060
	1.0mm .039"	.79mm .031"	4.5mm .177"	32.0mm 1.260"	Tungsten Carbide	Ruby	CPZ030-8061
	1.35mm .053"	1.0mm .039"	12.0mm .472"	32.0mm 1.260"	Tungsten Carbide	Ruby	CPZ030-8062
	1.35mm .053"	1.0mm .039"	19.0mm .748"	44.0mm 1.732"	Tungsten Carbide	Ruby	CPZ030-8063
	1.5mm .059"	1.0mm .039"	12.0mm .472"	32.0mm 1.260"	Tungsten Carbide	Ruby	CPZ030-8064
	1.5mm .059"	1.0mm .039"	19.0mm .748"	44.0mm 1.732"	Tungsten Carbide	Ruby	CPZ030-8065
	2.0mm .079"	1.5mm .059"	12.0mm .472"	32.0mm 1.260"	Tungsten Carbide	Ruby	CPZ030-8066
	2.0mm .079"	1.5mm .059"	19.0mm .748"	44.0mm 1.732"	Tungsten Carbide	Ruby	CPZ030-8067
	2.0mm .079"	1.5mm .059"	33.0mm 1.299"	58.0mm 2.283"	Tungsten Carbide	Ruby	CPZ030-8068
	2.5mm .098"	1.5mm .059"	12.0mm .472"	32.0mm 1.260"	Tungsten Carbide	Ruby	CPZ030-8069
	2.5mm .098"	1.5mm .059"	19.0mm .748"	44.0mm 1.732"	Tungsten Carbide	Ruby	CPZ030-8070
	2.5mm .098"	1.5mm .059"	33.0mm 1.299"	58.0mm 2.283"	Tungsten Carbide	Ruby	CPZ030-8071

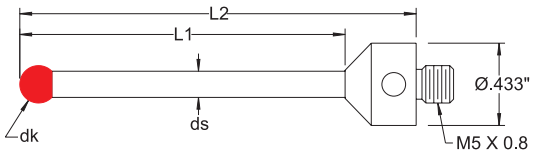
Ruby Ball Styli – Straight Shafts
Carbide Stems



Scale 1:2	dk Ball Size	ds Stem Diameter	L1 EWL	L2 Length	Stem Material	Ball Material	Part Number
	1.35mm .053"	1.0mm .039"	10.5mm .413"	20.0mm .787"	Tungsten Carbide	Ruby	CPZ000-1320
	1.35mm .053"	1.0mm .039"	15.5mm .610"	25.0mm .984"	Tungsten Carbide	Ruby	CPZ000-1325
	1.5mm .059"	1.0mm .039"	10.5mm .413"	20.0mm .787"	Tungsten Carbide	Ruby	CPZ000-1520
	1.5mm .059"	1.0mm .039"	15.5mm .610"	25.0mm .984"	Tungsten Carbide	Ruby	CPZ000-1525
	2.0mm .079"	1.0mm .039"	10.5mm .413"	20.0mm .787"	Tungsten Carbide	Ruby	CPZ000-2020
	2.0mm .079"	1.0mm .039"	15.5mm .610"	25.0mm .984"	Tungsten Carbide	Ruby	CPZ000-2025
	2.0mm .079"	1.5mm .059"	20.5mm .807"	30.0mm 1.181"	Tungsten Carbide	Ruby	CPZ000-2030
	2.0mm .079"	1.5mm .059"	30.5mm 1.201"	40.0mm 1.575"	Tungsten Carbide	Ruby	CPZ000-2040
	2.5mm .098"	1.5mm .059"	10.5mm .413"	20.0mm .787"	Tungsten Carbide	Ruby	CPZ000-2520
	2.5mm .098"	1.5mm .059"	15.5mm .610"	25.0mm .984"	Tungsten Carbide	Ruby	CPZ000-2525
	2.5mm .098"	1.5mm .059"	20.5mm .807"	30.0mm 1.181"	Tungsten Carbide	Ruby	CPZ000-2530
	3.0mm .118"	2.0mm .079"	15.5mm .610"	25.0mm .984"	Tungsten Carbide	Ruby	CPZ030-9010
	3.0mm .118"	2.0mm .079"	24.0mm .945"	33.5mm 1.319"	Tungsten Carbide	Ruby	CPZ342-8020
	3.0mm .118"	2.0mm .079"	40.5mm 1.595"	50.0mm 1.969"	Tungsten Carbide	Ruby	CPZ030-9011
	3.0mm .118"	2.0mm .079"	48.5mm 1.909"	58.0mm 2.283"	Tungsten Carbide	Ruby	CPZ342-8021

M5 THREADED STYLI

Ruby Ball Styli – Straight Shafts



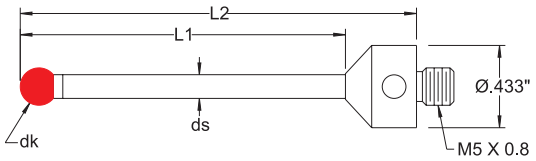
Scale 1:2	dk Ball Size	ds Stem Diameter	L1 EWL	L2 Length	Stem Material	Ball Material	Part Number
	4.0mm .157"	2.0mm .079"	24.0mm .945"	33.5mm 1.319"	Tungsten Carbide	Ruby	CPZ342-8025
	4.0mm .157"	2.0mm .079"	54.5mm 2.146"	64.0mm 2.520"	Tungsten Carbide	Ruby	CPZ030-9012
	5.0mm .197"	3.5mm .138"	40.0mm 1.575"	50.0mm 1.969"	Stainless Steel	Ruby	CPZ030-9013
	5.0mm .197"	3.5mm .138"	43.5mm 1.713"	53.0mm 2.087"	Tungsten Carbide	Ruby	CPZ342-8022
	5.0mm .197"	3.5mm .138"	65.0mm 2.558"	75.0mm 2.953"	Stainless Steel	Ruby	CPZ030-9015
	6.0mm .236"	4.0mm .157"	42.0mm 1.653"	53.0mm 2.086"	Carbon Fiber	Ruby	9550-6R
	6.0mm .236"	3.5mm .138"	44.5mm 1.752"	54.0mm 2.126"	Tungsten Carbide	Ruby	CPZ342-8026
	6.0mm .236"	4.0mm .157"	67.0mm 2.637"	78.0mm 3.070"	Carbon Fiber	Ruby	9575-6R
	6.0mm .236"	4.0mm .157"	92.0mm 3.622"	103.0mm 4.055"	Carbon Fiber	Ruby	95100-6R
	7.0mm .276"	3.5mm .138"	45.5mm 1.791"	55.0mm 2.165"	Tungsten Carbide	Ruby	CPZ342-8027
	8.0mm .315"	6.35mm .250"	41.0mm 1.614"	54.0mm 2.126"	Carbon Fiber	Ruby	9550-8R
	8.0mm .315"	6.0mm .236"	56.0mm 2.205"	63.5mm 2.500"	Stainless Steel	Ruby	CPZ342-8023
	8.0mm .315"	6.0mm .236"	61.0mm 2.401"	74.0mm 2.913"	Stainless Steel	Ruby	CPZ030-9014
	8.0mm .315"	6.0mm .236"	62.0mm 2.441"	75.0mm 2.953"	Stainless Steel	Ruby	CPZ030-9016
	8.0mm .315"	6.35mm .250"	66.0mm 2.598"	79.0mm 3.110"	Carbon Fiber	Ruby	9575-8R
	8.0mm .315"	6.0mm .236"	87.0mm 3.425"	100.0mm 3.937"	Stainless Steel	Ruby	CPZ030-9017
	8.0mm .315"	6.35mm .250"	91.0mm 3.582"	104.0mm 4.094"	Carbon Fiber	Ruby	95100-8R
	8.0mm .315"	6.0mm .236"	107.0mm 4.213"	114.5mm 4.508"	Stainless Steel	Ruby	CPZ342-8024
	9.0mm .354"	6.0mm .236"	57.0mm 2.244"	64.5mm 2.539"	Stainless Steel	Ruby	CPZ342-8028
	10.0mm .394"	6.35mm .250"	42.0mm 1.653"	55.0mm 2.165"	Carbon Fiber	Ruby	9550-10R
	10.0mm .394"	6.0mm .236"	58.0mm 2.283"	65.5mm 2.579"	Stainless Steel	Ruby	CPZ342-8029
	10.0mm .394"	6.35mm .250"	67.0mm 2.638"	80.0mm 3.150"	Carbon Fiber	Ruby	9575-10R
	10.0mm .394"	6.0mm .236"	105.0mm 4.134"	118.0mm 4.646"	Stainless Steel	Ruby	CPZ030-9018

M5 THREADED STYLI

Actual Size	dk Ball Size	ds Stem Diameter	L1 EWL	L2 Length	Stem Material	Ball Material	Part Number
	6.0mm .236"	4.0mm .157"	142.0mm 5.590"	153.0mm 6.023"	Carbon Fiber	Ruby	95150-6R
	6.0mm .236"	4.0mm .157"	192.0mm 7.559"	203.0mm 7.992"	Carbon Fiber	Ruby	95200-6R
	6.0mm .236"	4.0mm .157"	292.0mm 11.496"	303.0mm 11.929"	Carbon Fiber	Ruby	95300-6R
	8.0mm .315"	6.35mm .250"	141.0mm 5.551"	154.0mm 6.063"	Carbon Fiber	Ruby	95150-8R
	8.0mm .315"	6.35mm .250"	191.0mm 7.519"	204.0mm 8.031"	Carbon Fiber	Ruby	95200-8R
	8.0mm .315"	6.35mm .250"	291.0mm 11.456"	304.0mm 11.968"	Carbon Fiber	Ruby	95300-8R
	10.0mm .394"	6.35mm .250"	92.0mm 3.622"	105.0mm 4.134"	Carbon Fiber	Ruby	95100-10R
	10.0mm .394"	6.35mm .250"	142.0mm 5.590"	155.0mm 6.102"	Carbon Fiber	Ruby	95150-10R
	10.0mm .394"	6.35mm .250"	192.0mm 7.559"	205.0mm 8.071"	Carbon Fiber	Ruby	95200-10R
	10.0mm .394"	6.35mm .250"	292.0mm 11.469"	305.0mm 12.008"	Carbon Fiber	Ruby	95300-10R

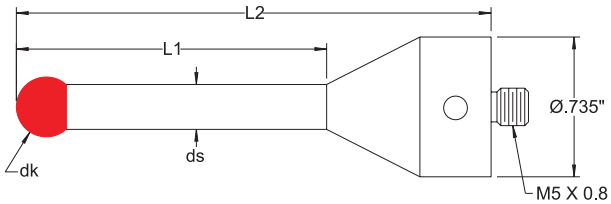
M5 THREADED STYLI

Ruby Ball Styli – Straight Shafts Ceramic Stems



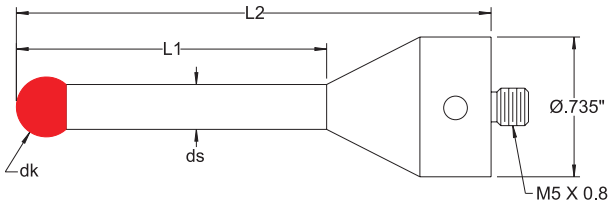
Scale 1:2	dk Ball Size	ds Stem Diameter	L1 EWL	L2 Length	Stem Material	Part Number
	5.0mm .197"	3.18mm .125"	43.5mm 1.713"	53.0mm 2.087"	Ceramic	CPZ342-8013
	6.0mm .236"	3.18mm .125"	44.5mm 1.752"	54.0mm 2.126"	Ceramic	CPZ342-8016
	7.0mm .276"	3.18mm .125"	45.5mm 1.791"	55.0mm 2.165"	Ceramic	CPZ342-8017
	8.0mm .315"	4.75mm .187"	56.0mm 2.205"	63.5mm 2.500"	Ceramic	CPZ342-8014
	8.0mm .315"	4.75mm .187"	107.0mm 4.213"	114.5mm 4.508"	Ceramic	CPZ342-8015
	9.0mm .354"	4.75mm .187"	57.0mm 2.244"	64.5mm 2.539"	Ceramic	CPZ342-8018
	10.0mm .394"	4.75mm .187"	58.0mm 2.283"	65.5mm 2.579"	Ceramic	CPZ342-8019

Ruby Ball Styli – Standard Probes Straight Shafts Steel Stems



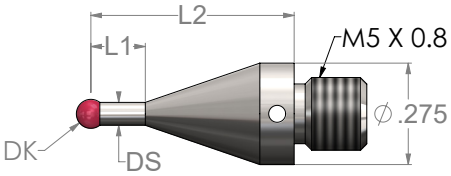
Scale 1:2	dk Ball Size	ds Stem Diameter	L1 EWL	L2 Length	Stem Material	Part Number
	8.0mm .315"	6.0mm .236"	41.5mm 1.634"	63.5mm 2.500"	Stainless Steel	CPZ342-8123
	8.0mm .315"	6.0mm .236"	92.5mm 3.642"	114.5mm 4.508"	Stainless Steel	CPZ342-8124
	9.0mm .354"	6.0mm .236"	42.5mm 1.673"	64.5mm 2.539"	Stainless Steel	CPZ342-8128
	10.0mm .394"	6.0mm .236"	43.5mm 1.713"	65.5mm 2.579"	Stainless Steel	CPZ342-8129

Ruby Ball Styli – Standard Probes
Straight Shafts
Ceramic Shaft



Scale 1:2	dk Ball Size	ds Stem Diameter	L1 EWL	L2 Length	Stem Material	Part Number
	8.0mm .315"	4.75mm .187"	41.5mm 1.634"	63.5mm 2.500"	Ceramic	CPZ342-8114
	8.0mm .315"	4.75mm .187"	92.5mm 3.642"	114.5mm 4.508"	Ceramic	CPZ342-8115
	9.0mm .354"	4.75mm .187"	42.5mm 1.673"	64.5mm 2.539"	Ceramic	CPZ342-8118
	10.0mm .394"	4.75mm .187"	43.5mm 1.713"	65.5mm 2.579"	Ceramic	CPZ342-8119

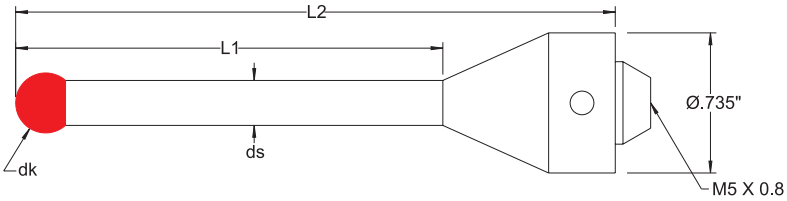
Ruby Ball Styli – Standard Probes
Straight Shafts
Stainless Steel Shaft
(for Use in Building Star Styli)



Scale 1:2	dk Ball Size	ds Stem Diameter	L1 EWL	L2 Length	Stem Material	Part Number
	1.0mm .039"	0.79mm .031"	4.0mm .157"	15.0mm .591"	Stainless Steel	CPZ040-1000
	1.5mm .059"	1.01mm .040"	4.0mm .157"	15.0mm .591"	Stainless Steel	CPZ040-1500
	2.0mm .079"	1.57mm .062"	4.75mm .187"	15.0mm .591"	Stainless Steel	CPZ040-2000
	2.5mm .098"	1.57mm .062"	5.54mm .218"	15.0mm .591"	Stainless Steel	CPZ040-2500
	3.5mm .138"	2.79mm .110"	6.35mm .250"	15.0mm .591"	Stainless Steel	CPZ040-3500

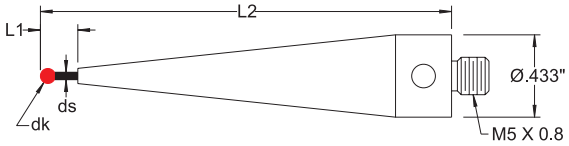
M5 THREADED STYLI

Ruby Ball Styli – Universal Probes
Straight Shafts
Carbide or Steel Stems
For Use With Analog
3D Probe Heads



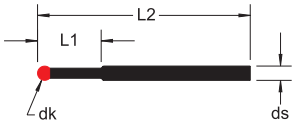
Scale 1:2	dk Ball Size	ds Stem Diameter	L1 EWL	L2 Length	Stem Material	Part Number
	3.0mm .118"	2.0mm .079"	21.5mm .846"	50.0mm 1.968"	Tungsten Carbide	CPZ331-9096
	3.0mm .118"	2.0mm .079"	18.0mm .709"	115.0mm 4.528"	Tungsten Carbide	CPZ331-9098
	8.0mm .315"	6.0mm .236"	57.0mm 2.244"	80.0mm 3.150"	Stainless Steel	CPZ331-9097
	8.0mm .315"	6.0mm .236"	56.5mm 2.224"	115.0mm 4.528"	Stainless Steel	CPZ331-9099

Ruby Ball Styli –
Light Weight Titanium Probes



Scale 1:2	dk Ball Size	ds Stem Diameter	L1 EWL	L2 Length	Stem Material	Ball Material	Part Number
	0.3mm .012"	0.20mm .008"	2.16mm .085"	55.0mm 2.165"	Tungsten Carbide	Ruby	CPZ000-0066
						Carbide	CPZ000-0066C
	0.5mm .020"	0.38mm .015"	3.25mm .128"	55.0mm 2.165"	Tungsten Carbide	Ruby	CPZ000-0067
						Carbide	CPZ000-0067C
	0.6mm .024"	0.46mm .018"	4.29mm .169"	55.0mm 2.165"	Tungsten Carbide	Ruby	CPZ000-0068
						Carbide	CPZ000-0068C
	0.7mm .028"	0.53mm .021"	4.34mm .171"	55.0mm 2.165"	Tungsten Carbide	Ruby	CPZ000-0069
						Carbide	CPZ000-0069C
	0.79mm .031"	0.56mm .022"	4.37mm .172"	55.0mm 2.165"	Tungsten Carbide	Ruby	CPZ000-0070
						Carbide	CPZ000-0070C
	1.0mm .039"	0.8mm .032"	4.0mm .157"	55.0mm 2.165"	Tungsten Carbide	Ruby	CPZ000-0071
	1.5mm .059"	1.0mm .039"	5.0mm .197"	55.0mm 2.165"	Tungsten Carbide	Ruby	CPZ000-0072
	2.0mm .079"	1.0mm .039"	5.0mm .197"	55.0mm 2.165"	Tungsten Carbide	Ruby	CPZ000-0073
	2.5mm .098"	1.5mm .059"	5.0mm .197"	55.0mm 2.165"	Tungsten Carbide	Ruby	CPZ000-0274
	3.5mm .138"	1.5mm .059"	10.0mm .394"	55.0mm 2.165"	Tungsten Carbide	Ruby	CPZ000-0375

Ruby Ball Styli – Mini Probes Non-Threaded



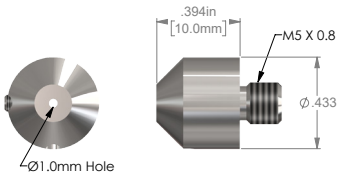
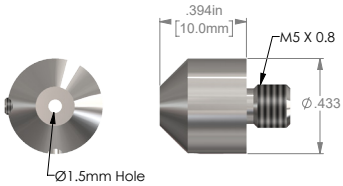
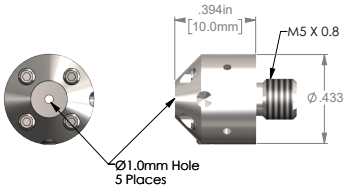
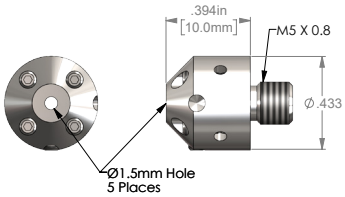
Stem Material: Carbide

Scale 2:1	dk Ball Size	ds Stem Diameter	L1 EWL	L2 Length	Ball Material	Part Number
	0.2mm .008"	1.0mm .039"	2.11mm .083"	15.0mm .591"	Carbide	CPZ341-8449C
	0.3mm .012"	1.0mm .039"	2.16mm .085"	15.0mm .591"	Ruby	CPZ341-8450
					Carbide	CPZ341-8450C
	0.5mm .020"	1.0mm .039"	3.25mm .128"	15.0mm .591"	Ruby	CPZ341-8451
					Carbide	CPZ341-8451C
	0.6mm .024"	1.0mm .039"	4.29mm .169"	15.0mm .591"	Ruby	CPZ341-8452
					Carbide	CPZ341-8452C
	0.7mm .028"	1.0mm .039"	4.34mm .171"	15.0mm .591"	Ruby	CPZ341-8455
					Carbide	CPZ341-8455C
	0.8mm .031"	1.0mm .039"	4.37mm .172"	15.0mm .591"	Ruby	CPZ341-8453
					Carbide	CPZ341-8453C
	1.0mm .039"	1.0mm .039"	4.50mm .177"	15.0mm .591"	Ruby	CPZ341-8454
					Carbide	CPZ341-8454C
	1.0mm .039"	1.0mm .039"	4.50mm .177"	25.0mm .984"	Ruby	CPZ341-8504
					Carbide	CPZ341-8504C
	1.35mm .053"	1.0mm .039"	25.0mm .984"	25.0mm .984"	Ruby	CPZ341-8500
					Carbide	CPZ341-8500C
	1.5mm .059"	1.0mm .039"	25.0mm .984"	25.0mm .984"	Ruby	CPZ341-8501
					Carbide	CPZ341-8501C
	2.0mm .079"	1.5mm .059"	25.0mm .984"	25.0mm .984"	Ruby	CPZ341-8502
					Carbide	CPZ341-8502C
	2.5mm .098"	1.5mm .059"	25.0mm .984"	25.0mm .984"	Ruby	CPZ341-8503
					Carbide	CPZ341-8503C

Mini Probes are for use with the Mini Probe Holders on page 89. They are held in with set screws supplied with the Mini Probe Holders.

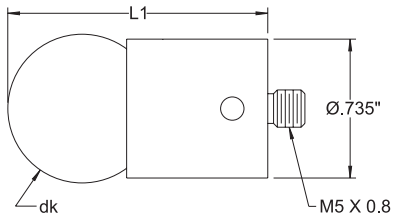
M5 THREADED STYLI

Mini Probe Holders

Actual Size	Part Number
Single – 1 Way Stylus Holder 	CPZ000-8365
Single – 1 Way Stylus Holder 	CPZ000-8366
5 Way Star Stylus Holder 	CPZ341-8367
5 Way Star Stylus Holder 	CPZ341-8368

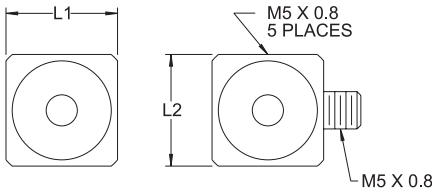
Mini Probes Holders are for use with the Mini Probe on page 88. They are held in with set screws supplied with the Mini Probe Holders.

Carbide Ball Styli



Scale 1:2	dk Ball Size	L1 Length	Base Material	Part Number
	15.0mm .591"	35.0mm 1.378"	Stainless Steel	CPZ000-0019
	20.0mm .787"	35.0mm 1.378"	Stainless Steel	CPZ000-0018
	25.0mm .984"	35.0mm 1.378"	Stainless Steel	CPZ000-0017

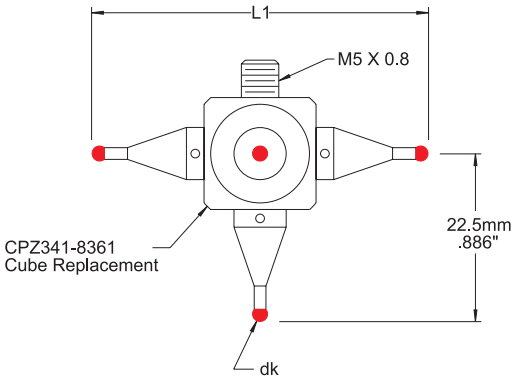
Star Cube

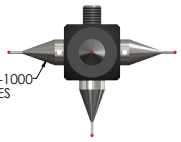
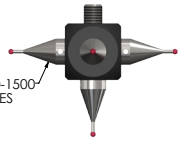
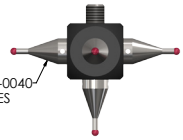
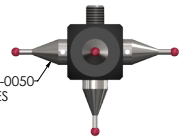
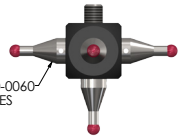


Scale 1:2	L1	L2	Part Number
	15.0mm .591"	15.0mm .591"	CPZ341-8361
	20.0mm .787"	20.0mm .787"	CPZ342-8002

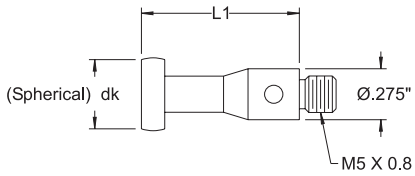
M5 THREADED STYLI

Star Styli



Scale 1:2	dk Ball Size	L1 Span	Part Number
 CPZ040-1000 5 PLACES	1.0mm .039"	45.0mm 1.772"	CPZ000-0020
 CPZ040-1500 5 PLACES	1.5mm .059"	45.0mm 1.772"	CPZ000-0030
 CPZ040-0040 5 PLACES	2.0mm .079"	45.0mm 1.772"	CPZ000-0040
 CPZ040-0050 5PLACES	2.5mm .098"	45.0mm 1.772"	CPZ000-0050
 CPZ040-0060 5 PLACES	3.5mm .138"	45.0mm 1.772"	CPZ000-0060

Disk Styli - Hardened Tool Steel

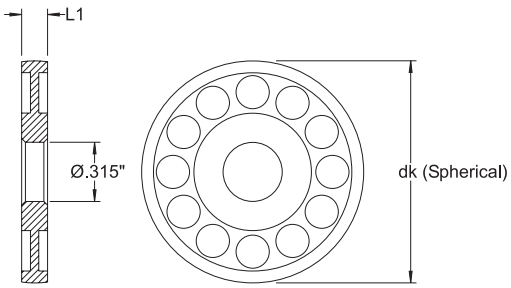


Actual Size	dk Diameter	L1 Length	Part Number
	10.0mm .394"	21.5mm .846"	CPZ341-8090
	15.0mm .591"	21.5mm .846"	CPZ341-8095

Disk Styli - Hardened Tool Steel continued on page 92

Disk Styli – Hardened Tool Steel

continued from page 91

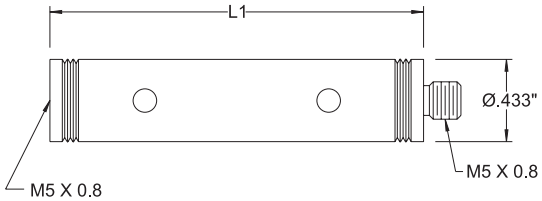


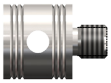
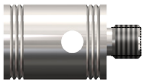
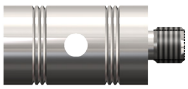
Scale 1:2	dk Diameter	L1 Thickness	Part Number
	30.0mm 1.181"	3.5mm .138"	CPZ341-0203
	40.0mm 1.575"	5.0mm .196"	CPZ341-0204
	50.0mm 1.969"	7.0mm .276"	CPZ341-0205
	60.0mm 2.362"	8.0mm .315"	CPZ341-0206

Mount to Extension or Holders with Screws on page 95.

M5 THREADED STYLI

Stylus Extensions

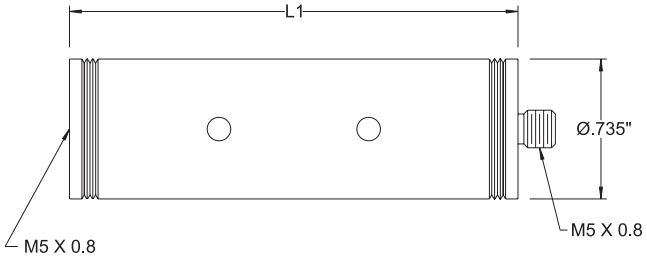


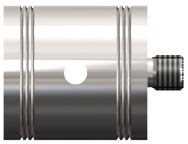
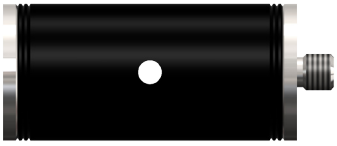
Actual Size	L1 Length	Material	Part Number
	10.0mm .394"	Stainless Steel	CPZ341-0250
	15.0mm .591"	Stainless Steel	CPZ341-0251
	20.0mm .787"	Stainless Steel	CPZ341-0252
	25.0mm .984"	Stainless Steel	CPZ341-0253
	40.0mm 1.575"	Stainless Steel	CPZ341-0254
	25.0mm .984"	Aluminum	CPZ000-0012
	40.0mm 1.575"	Aluminum	CPZ341-8261
	50.0mm 1.969"	Aluminum	CPZ000-0011
	60.0mm 2.362"	Aluminum	CPZ341-8262
	80.0mm 3.150"	Aluminum	CPZ341-8263
	100.0mm 3.937"	Aluminum	CPZ341-8264
	120.0mm 4.724"	Aluminum	CPZ341-8265

Stylus Extensions continued on page 94

Stylus Extensions

continued from page 93

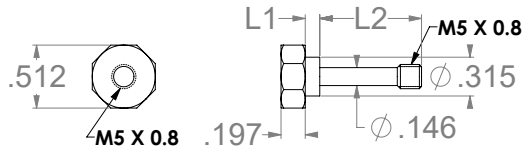


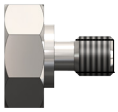
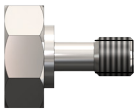
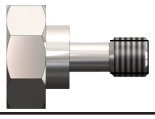
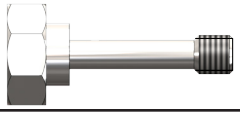
Actual Size	L1 Length	Material	Part Number
	10.0mm .394"	Stainless Steel	CPZ341-0249
	20.0mm .787"	Stainless Steel	CPZ341-0248
	25.0mm .984"	Stainless Steel	CPZ341-0247
	40.0mm 1.575"	Aluminum	CPZ341-8425
	60.0mm 2.362"	Aluminum	CPZ341-8424
	80.0mm 3.150"	Aluminum	CPZ341-8423
	100.0mm 3.937"	Aluminum	CPZ341-8422
	150.0mm 5.906"	Aluminum	CPZ341-8421
	200.0mm 7.874"	Aluminum	CPZ341-8420

M5 THREADED STYLI

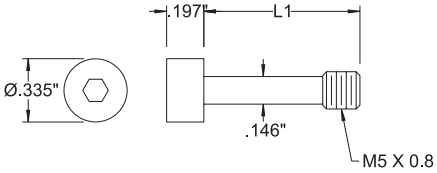
Adapter Screws

(for Mounting Disc Styli with Ø8.0mm Central Thru Hole)



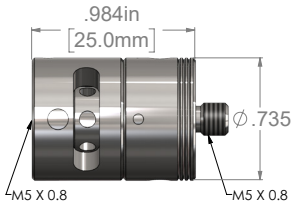
Actual Size	L1	L2	Part Number
	1.3mm .051"	7.5mm .295"	CPZ341-0213
	1.3mm .051"	10.0mm .394"	CPZ341-0212
	3.0mm 0.118"	10.0mm .394"	CPZ341-0214
	3.0mm 0.118"	21.0mm .827"	CPZ341-0211
	3.0mm 0.118"	26.0mm 1.024"	CPZ341-0210

Adapter Screws

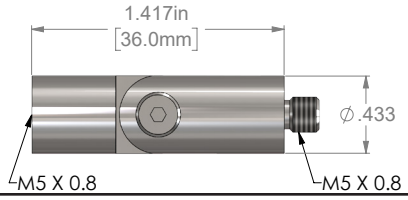
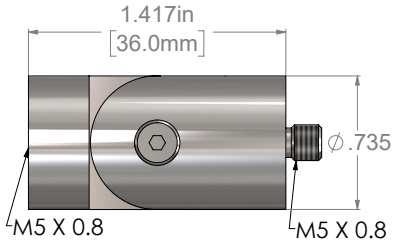


Actual Size	L1	Part Number
	21.0mm .827"	CPZ341-0221
	26.0mm 1.024"	CPZ341-0220

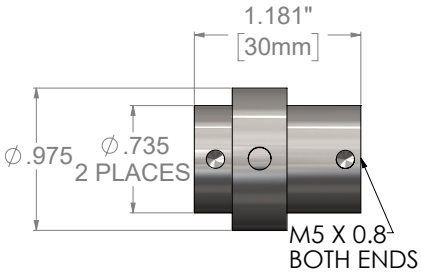
Adjustable Rotary Adapter

Actual Size	Part Number
	CPZ341-8356

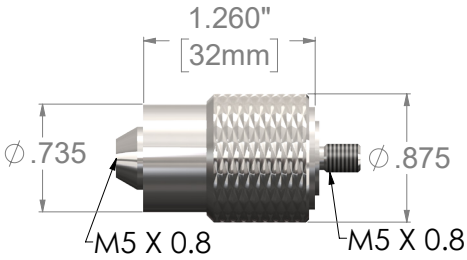
Adjustable Stylus Knuckle

Actual Size	Part Number
	CPZ000-0010
	CPZ342-9003

Adjustable Rotary Adapter

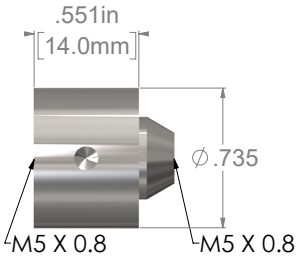
Actual Size	Part Number
	CPZ000-0015

Universal Rotary Adapter

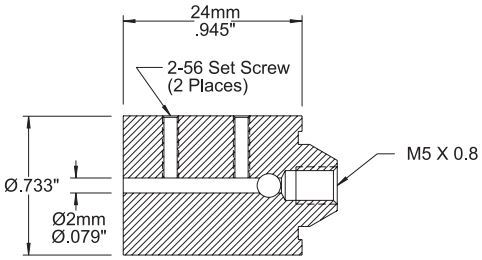
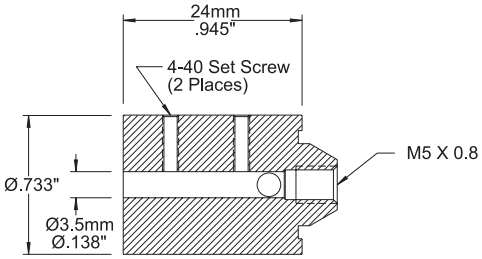
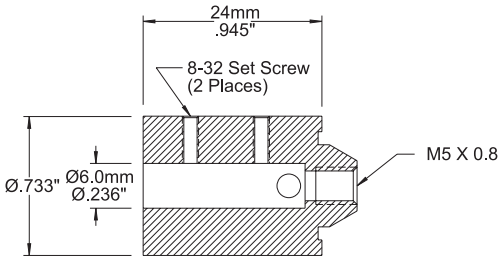
Actual Size	Part Number
For Use With Analog 3D Probe Heads 	CPZ331-9094

ADAPTERS

Special Adapter - For Use With Analog 3D Probe Heads

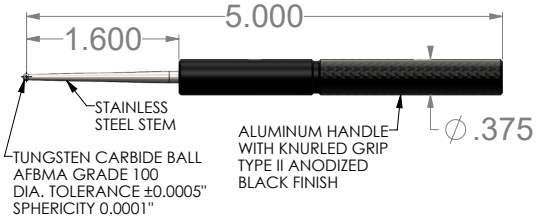
Actual Size	Part Number
	CPZ331-0001

Special Probe Holders - For Use With Analog 3D Probe Heads

Actual Size	Part Number
	CPZ341-8350
	CPZ341-8351
	CPZ341-8352

Hand Held Spherical Ball-Tipped Scribers for Surface Defect Analysis

Surface Defect Scriber – Straight		NO CERTIFICATION	NIST CERTIFIED
	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

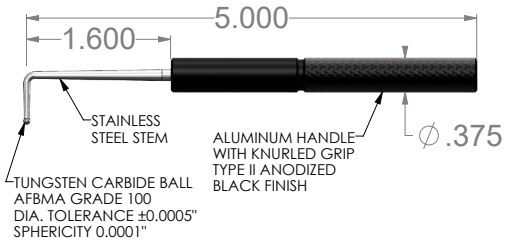


For NIST Certified Scriber Styli a Long-Form NIST Traceable Certificate of Calibration per ISO 17025 Accreditation Standards will be Provided for the Carbide Ball Tip Only, and a Non-Traceable Certificate of Conformance will be Provided for Entire Part. Scriber Handle will be Engraved with Matching NIST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

A Sample Certificate is available upon Request

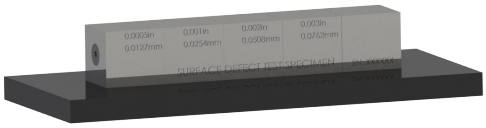
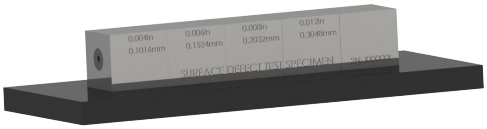
Hand Held Spherical Ball-Tipped Scribers for Surface Defect Analysis

Surface Defect Scriber – Right Angle		NO CERTIFICATION	NIST CERTIFIED
	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

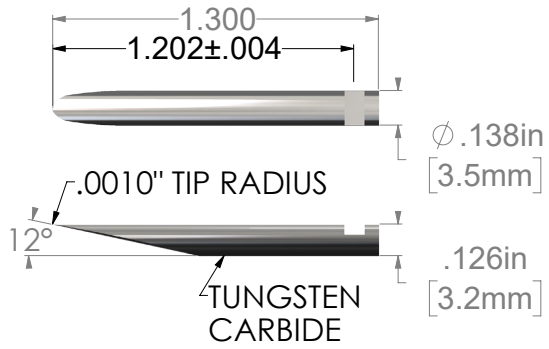
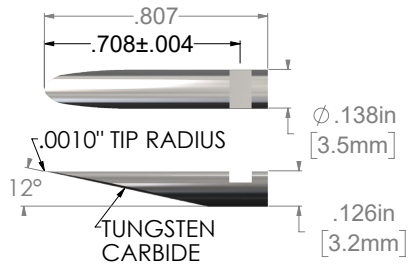
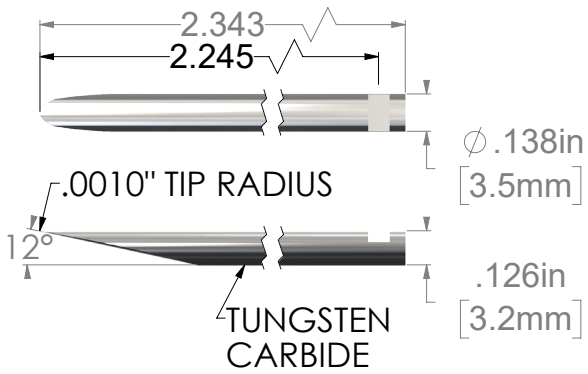
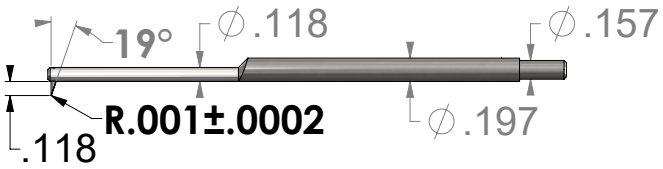


For NIST Certified Scriber Styli a Long-Form NIST Traceable Certificate of Calibration per ISO 17025 Accreditation Standards will be Provided for the Carbide Ball Tip Only, and a Non-Traceable Certificate of Conformance will be Provided for Entire Part. Scriber Handle will be Engraved with Matching NIST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

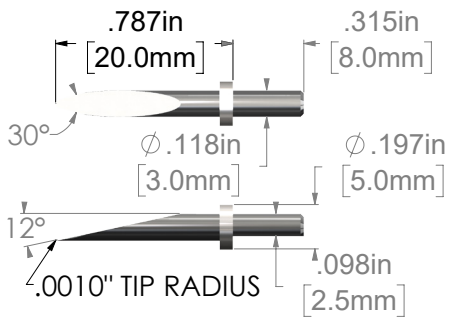
A Sample Certificate is available upon Request

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**

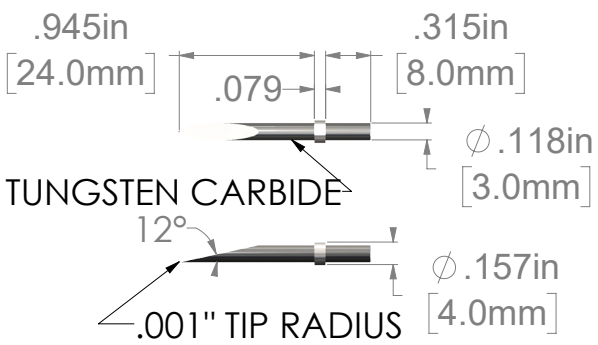
Contour Styli for Form Measurement

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

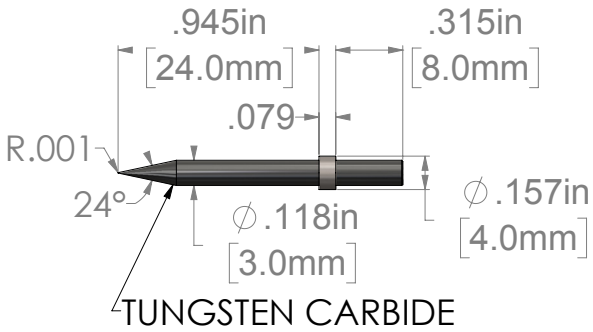
Contour Styli for Form Measurement

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

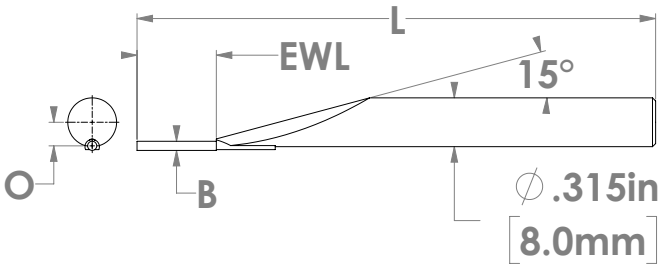
Contour Styli for Form Measurement

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

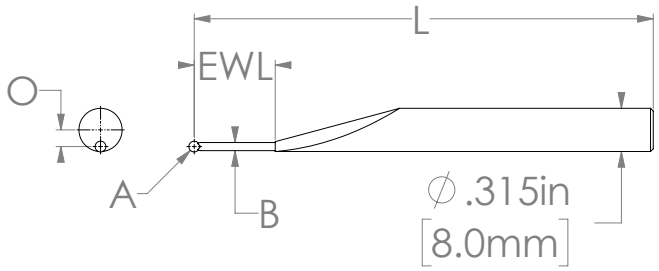
Replacement Stylus Tip for Zeiss/Accretech/TSK Contour Measurement	Part Number
	CPDM45505 Replacement for Zeiss/Accretech/TSK Part Number: DM45505

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



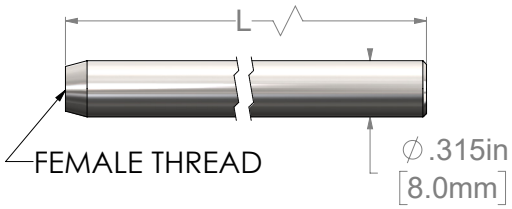
B Carbide Stem Diameter	L Length	EWL	O Offset	Part Number
1.0mm .039"	85.0mm 3.347"	7.0mm 2.76"	4.0mm .157"	HGP-885-1CYL
1.5mm .059"	85.0mm 3.347"	10.0mm .394"	4.0mm .157"	HGP-885-1.5CYL
2.0mm .078"	85.0mm 3.347"	15mm .591"	3.76mm .148"	HGP-885-2CYL

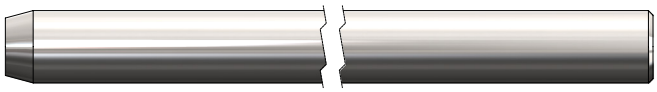
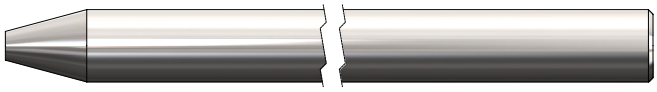
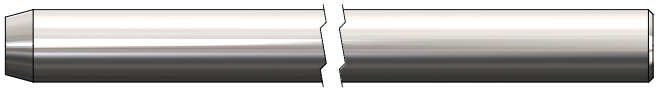
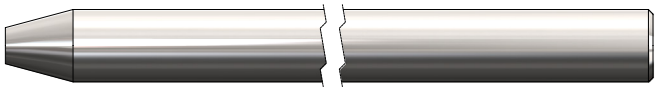
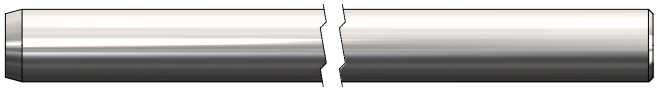
Height Gauge Ball Tip Offset Probes (for Height Gages with Ø8.0mm Shanks)



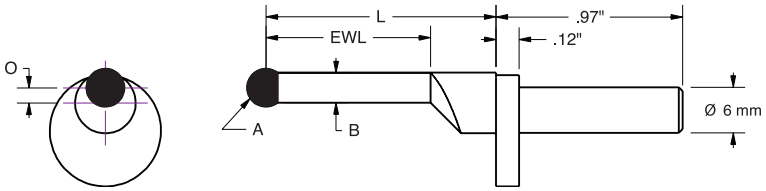
A Ball Diameter	B Stem Diameter	L Length	EWL	O Offset	Stem Material	Ball Material	Part Number
1.0mm .039"	.079mm .031"	85.0mm 3.347"	7.0mm 2.76"	3.45mm .136"	Tungsten Carbide	Ruby	HGB-885-1R
						Carbide	HGB-885-1C
1.5mm .059"	1.0mm .039"	85.0mm 3.347"	10.0mm .394"	3.35mm .132"	Tungsten Carbide	Ruby	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)



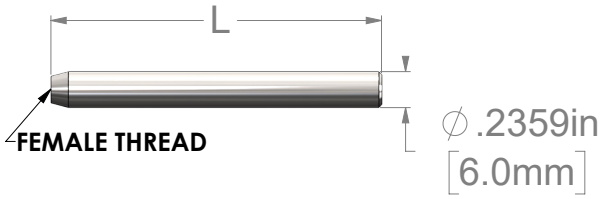
Actual Size	Female Thread	Length	Part Number
	4-48	100mm 3.937"	HGAD-8100-4-48
	M2 X 0.4	100mm 3.937"	HGAD-8100-M2
	M2.5 X 0.45	100mm 3.937"	HGAD-8100-M2.5
	M3 X 0.5	100mm 3.937"	HGAD-8100-M3
	M4 X 0.7	100mm 3.937"	HGAD-8100-M4

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



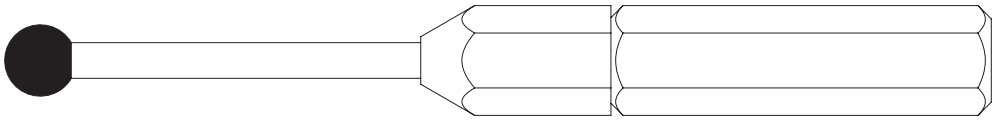
A Ball Diameter	B Stem Diameter	L Length	EWL	O Offset	Ball Material	Part Number
1.0mm	.031"	1.203"	.276"	.166"	Ruby	MH-220R
					Carbide	MH-220C
1.5mm	.039"	1.203"	.354"	.166"	Ruby	MH-221R
					Carbide	MH-221C
2.0mm	.059"	1.203"	.461"	.155"	Ruby	MH-222R
					Carbide	MH-222C
3.0mm	.078"	1.203"	.461"	.155"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

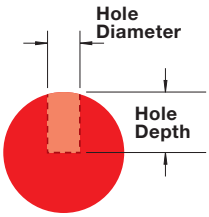


Ruby Balls

Synthetic Ruby (Sapphire)

AFBMA Grade 10
Basic Diameter Tolerance ±.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

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Precision made for all popular models

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www.carbideprobes.com

Special carbide ball sizes are available in diameters from .005" and up, and special ruby ball sizes are available in diameters from .3mm and up for all contact points, and styli.

Most ball tipped contact points and styli can be provided with silicon nitride, zirconia, delrin, nylon, or teflon balls upon request.