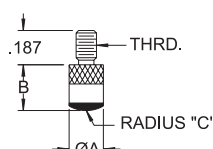
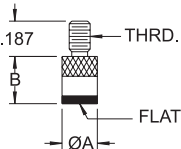




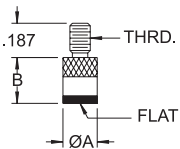
A.G.D. & METRIC	Actual Size	A Diameter	B Length	C Radius	Thread	Part Number
RADIUS Gauging Surface  Contact Surface Highly Polished Tungsten Carbide Unless Noted		.187"	.125"	.187"	4-48	301
					M2.5 x 0.45	321
	RUBY INSERT TIP 	.187"	.125"	.187"	4-48	301R
					M2.5 x 0.45	321R
	DELTRIN TIP 	.187"	.125"	.187"	4-48	301D
					M2.5 x 0.45	321D
		.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

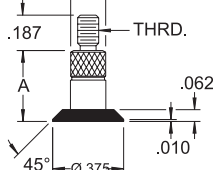
A.G.D. & METRIC RADIUS continued on page 26

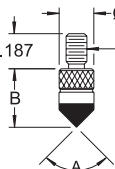
A.G.D. & METRIC continued from page 25		Actual Size	A Diameter	B Length	C Radius	Thread	Part Number

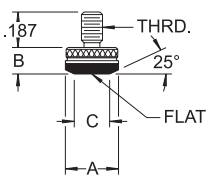
A.G.D. & METRIC	Actual Size	A Diameter	B Length	Thread	Part Number
FLAT Gauging Surface  Tungsten Carbide Contact Surface Unless Noted Highly Polished Lapped Flat And Parallel With Shoulder		.062"	.250"	4-48	351
				M2.5 x 0.45	371
		.125"	.250"	4-48	352
				M2.5 x 0.45	372
		.187"	.125"	4-48	353
				M2.5 x 0.45	373
	DELTRIN TIP		.187"	4-48	353D
				M2.5 x 0.45	373D
		.187"	.250"	4-48	354
				M2.5 x 0.45	374
		.187"	.375"	4-48	355
				M2.5 x 0.45	375
		.187"	.500"	4-48	356
				M2.5 x 0.45	376
		.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
		.375"	.156"	4-48	358
				M2.5 x 0.45	378
	DELTRIN TIP		.375"	4-48	358D
				M2.5 x 0.45	378D

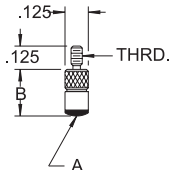
A.G.D. & METRIC continued on page 28

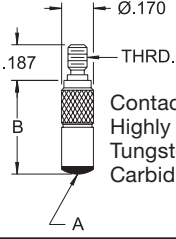
A.G.D. & METRIC continued from page 27	Actual Size	A Diameter	B Length	Thread	Part Number
FLAT Gauging Surface  Tungsten Carbide Contact Surface Unless Noted Highly Polished Lapped Flat And Parallel With Shoulder		.500"	.187"	4-48	317
				M2.5 x 0.45	337
		.625"	.187"	4-48	365
				M2.5 x 0.45	395
		.750"	.218"	4-48	366
				M2.5 x 0.45	396
		1.000"	.218"	4-48	367
				M2.5 x 0.45	398

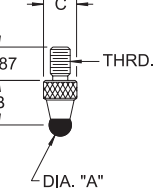
A.G.D. & METRIC	Actual Size	A Length	Thread	Part Number
Flanged Contacts For Checking Grooves And Ledges  Contact Surface Highly Polished Tungsten Carbide		.250"	4-48	340
			M2.5 x 0.45	345
		.375"	4-48	341
			M2.5 x 0.45	346
		.500"	4-48	342
			M2.5 x 0.45	347

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

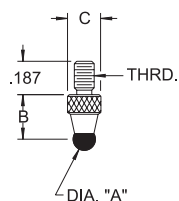
A.G.D. & METRIC	Actual Size	A Diameter	B Length	C Diameter	Thread	Part Number
FLAT Gauging Surface with Lead Chamfer  Tungsten Carbide Contact Surface Unless Noted Highly Polished Lapped Flat And Parallel With Shoulder		.187"	.125	.125"	4-48	501
					M2.5 x 0.45	511
	RUBY INSERT TIP 	.187"	.125"	.125"	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
		.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  Contact Surface Highly Polished Tungsten Carbide		.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
		Flat	.250"	0-80	544
				1-72	555

METRIC	Actual Size	A	B Length	Thread	Part Number
 Radius And Flat Gauging Surface Ø.170 .187 THR. B Contact Surface Highly Polished Tungsten Carbide A		.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 Diameter	B Length	C Diameter	Thread	T.C. Ball Part Number	Ruby Ball Part Number
 BALL POINTS FRACTIONAL SIZE .187 B THR. DIA. "A" 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"		.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	-
		.0781"	.250"	.187"	4-48	400-0781	-
					M2.5 x 0.45	450-0781	-

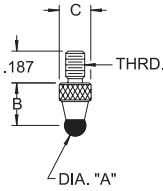
A.G.D. & METRIC FRACTIONAL SIZE continued on page 31

A.G.D. & METRIC
continued from page 30**BALL POINTS
FRACTIONAL SIZE**

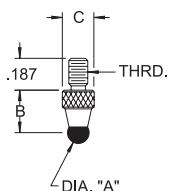
Carbide Ball is Grade 25
AFBMA Tolerance ± 0.0001 "
Sphericity 0.000025"

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

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
	.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
	.3125"	.250"	.250"	4-48	411	411R
				M2.5 x 0.45	425	425R
	.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	-

A.G.D. & METRIC	Actual Size	A Diameter	B Length	C Diameter	Thread	T.C. Ball Part Number	Ruby Ball Part Number
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"		0.5mm	.250"	.187"	4-48 M2.5 x 0.45	400-.5 450-.5	- -
		0.6mm	.250"	.187"	4-48 M2.5 x 0.45	400-.6 450-.6	- -
		0.7mm	.250"	.187"	4-48 M2.5 x 0.45	400-.7 450-.7	- -
		0.8mm	.250"	.187"	4-48 M2.5 x 0.45	400-.8 450-.8	- -
		0.9mm	.250"	.187"	4-48 M2.5 x 0.45	400-.9 450-.9	- -
		1mm	.250"	.187"	4-48 M2.5 x 0.45	400-1 450-1	400-1R 450-1R
		1.25mm	.250"	.187"	4-48 M2.5 x 0.45	400-1.25 450-1.25	- -
		1.5mm	.250"	.187"	4-48 M2.5 x 0.45	400-1.5 450-1.5	400-1.5R 450-1.5R
		1.75mm	.250"	.187"	4-48 M2.5 x 0.45	400-1.75 450-1.75	- -
		1.8mm	.250"	.187"	4-48 M2.5 x 0.45	400-1.8 450-1.8	- -
		2mm	.250"	.187"	4-48 M2.5 x 0.45	400-2 450-2	400-2R 450-2R
		2.25mm	.250"	.187"	4-48 M2.5 x 0.45	400-2.25 450-2.25	- -
		2.5mm	.250"	.187"	4-48 M2.5 x 0.45	400-2.5 450-2.5	400-2.5R 450-2.5R
		2.75mm	.250"	.187"	4-48 M2.5 x 0.45	400-2.75 450-2.75	- -
		3mm	.250"	.187"	4-48 M2.5 x 0.45	400-3 450-3	400-3R 450-3R
		3.25mm	.250"	.187"	4-48 M2.5 x 0.45	400-3.25 450-3.25	- -
		3.5mm	.250"	.187"	4-48 M2.5 x 0.45	400-3.5 450-3.5	400-3.5R 450-3.5R
		3.75mm	.250"	.187"	4-48 M2.5 x 0.45	400-3.75 450-3.75	- -
		4mm	.250"	.187"	4-48 M2.5 x 0.45	400-4 450-4	400-4R 450-4R
		4.25mm	.250"	.187"	4-48 M2.5 x 0.45	400-4.25 450-4.25	- -
		4.5mm	.250"	.187"	4-48 M2.5 x 0.45	400-4.5 450-4.5	- -
		4.75mm	.250"	.187"	4-48 M2.5 x 0.45	400-4.75 450-4.75	- -
		5mm	.250"	.187"	4-48 M2.5 x 0.45	400-5 450-5	400-5R 450-5R
		5.5mm	.250"	.218"	4-48 M2.5 x 0.45	400-5.5 450-5.5	- -
		6mm	.250"	.218"	4-48 M2.5 x 0.45	400-6 450-6	400-6R 450-6R

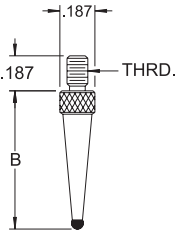
A.G.D. & METRIC FRACTIONAL SIZE continued on page 33

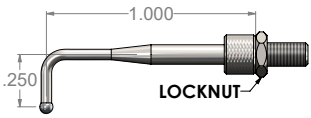
A.G.D. & METRIC
continued from page 32**BALL POINTS
METRIC SIZE**

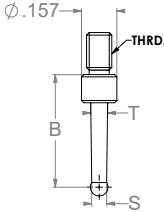
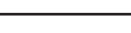
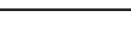
Carbide Ball is
Grade 25 AFBMA
Tolerance ± 0.0001 "
Sphericity 0.000025"

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

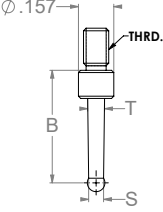
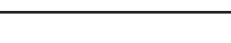
Actual Size	A Diameter	B Length	C Diameter	Thread	T.C. Ball Part Number	Ruby Ball Part Number
	6.5mm	.250"	.218"	4-48	400-6.5	-
				M2.5 x 0.45	450-6.5	-
	7mm	.250"	.234"	4-48	400-7	400-7R
				M2.5 x 0.45	450-7	450-7R
	7.5mm	.250"	.234"	4-48	400-7.5	-
				M2.5 x 0.45	450-7.5	-
	8mm	.250"	.250"	4-48	400-8	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  Carbide Ball is Grade 25 AFBMA Tolerance ± 0.0001 " Sphericity 0.000025" NOTE: Carbide Ball Diameters $\varnothing 0.015$ " and Smaller are Grade 100 AFBMA Tolerance ± 0.0005 " Sphericity 0.0001" EXCEPT for Part Numbers 435 & 445 which are Grade 25 Ruby Ball is Grade 10 AFBMA Tolerance ± 0.0001 " Sphericity 0.000010"		.500"	4-48	.0150" .03125" .0625"	431-015 431-031 431-062	431-015R 431-031R 431-062R
			M2.5 x 0.45	.0150" .03125" .0625"	436-015 436-031 436-062	436-015R 436-031R 436-062R
		.625"	4-48	.0150" .03125" .0625"	434-015 434-031 434-062	434-015R 434-031R 434-062R
			M2.5 x 0.45	.0150" .03125" .0625"	439-015 439-031 439-062	439-015R 439-031R 439-062R
		.750"	4-48	.0150" .03125" .0625"	432-015 432-031 432-062	432-015R 432-031R 432-062R
			M2.5 x 0.45	.0150" .03125" .0625"	437-015 437-031 437-062	437-015R 437-031R 437-062R
		.750"	4-48	.0156"	435	-
			M2.5 x 0.45	.0156"	445	-
		1.000	4-48	.0150" .03125" .0625"	433-015 433-031 433-062	433-015R 433-031R 433-062R
			M2.5 x 0.45	.0150" .03125" .0625"	438-015 438-031 438-062	438-015R 438-031R 438-062R
		1.500"	4-48	.0150" .03125" .0625"	449-015 449-031 449-062	449-015R 449-031R 449-062R
			M2.5 x 0.45	.0150" .03125" .0625"	444-015 444-031 444-062	444-015R 444-031R 444-062R

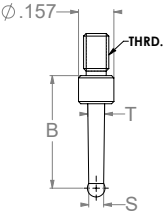
A.G.D. & METRIC	Length	Thread	Ball Size	T.C Ball Part Number	Ruby Ball Part Number
BALL POINTS OFFSET HOOK  Carbide Ball is Grade 25 AFBMA Tolerance ± 0.0001 " Sphericity 0.000025" Ruby Ball is Grade 10 AFBMA Tolerance ± 0.0001 " Sphericity 0.000010"	1.000"	4-48	.03125" .0625" .1000"	500-031 500-062 500-100	500-031R 500-062R 500-100R
		M2.5 x 0.45	.03125" .0625" .1000"	600-031 600-062 600-100	600-031R 600-062R 600-100R

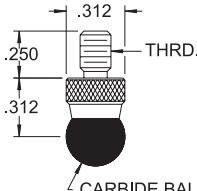
A.G.D. & METRIC	Actual Size	B Length	S Seat Dia	T Taper Dia	Thread	Ball Size	T.C Ball Part Number	Ruby Ball Part Number
BALL POINTS EXTENDED NARROW TAPER / STRAIGHT STEM  Carbide Ball is Grade 25 AFBMA Tolerance $\pm 0.0001"$ Sphericity $0.000025"$ Ruby Ball is Grade 10 AFBMA Tolerance $\pm 0.0001"$ Sphericity $0.000010"$		.500"	.017"	.0195"	4-48	.0200"	442-020	-
					M2.5 x 0.45	.0200"	452-020	-
		.500"	.021"	.0245"	4-48	.0250"	442-025	-
					M2.5 x 0.45	.0250"	452-025	-
		.500"	.027"	.0305"	4-48	.03125"	442-031	442-031R
					M2.5 x 0.45	.03125"	452-031	452-031R
		.500"	.033"	.0385"	4-48	1mm	442-1	442-1R
					M2.5 x 0.45	1mm	452-1	452-1R
		.500"	.040"	.0465"	4-48	.04687"	442-046	442-046R
					M2.5 x 0.45	.04687"	452-046	452-046R
		.500"	.050"	.0585"	4-48	1.5mm	442-1.5	442-1.5R
					M2.5 x 0.45	1.5mm	452-1.5	452-1.5R
		.500"	.053"	.059"	4-48	.0625"	442-062	442-062R
					M2.5 x 0.45	.0625"	452-062R	452-062R
		.500"	.066"	.075"	4-48	.0781"	442-078	-
					M2.5 x 0.45	.0781"	452-078	-
		.500"	.066"	.075"	4-48	2mm	442-2	442-2R
					M2.5 x 0.45	2mm	452-2	452-2R
		.500"	.080"	.090"	4-48	.09375"	442-093	442-093R
					M2.5 x 0.45	.09375"	452-093	452-093R
		.500"	.084"	.095"	4-48	2.5mm	442-2.5	442-2.5R
					M2.5 x 0.45	2.5mm	452-2.5	452-2.5R
		.500"	.100"	.110"	4-48	3mm	442-3	442-3R
					M2.5 x 0.45	3mm	452-3	452-3R
		.500"	.106"	.117"	4-48	.1250"	442-125	442-125R
					M2.5 x 0.45	.1250"	452-125	452-125R
		.500"	.117"	.130"	4-48	3.5mm	442-3.5	442-3.5R
					M2.5 x 0.45	3.5mm	452-3.5	452-3.5R
		.500"	.135"	.135"	4-48	.15625"	442-156	442-156R
					M2.5 x 0.45	.15625"	452-156	152-156R
		.500"	.135"	.135"	4-48	4mm	442-4	442-4R
					M2.5 x 0.45	4mm	452-4	452-4R

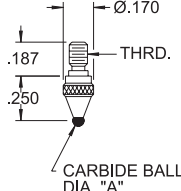
A.G.D. & METRIC BALL POINTS EXTENDED continued on page 36

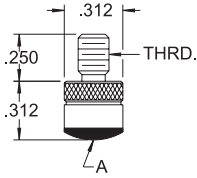
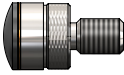
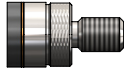
A.G.D. & METRIC continued from page 35	Actual Size	B Length	S Seat Dia	T Taper Dia	Thread	Ball Size	T.C Ball Part Number	Ruby Ball Part Number
BALL POINTS EXTENDED NARROW TAPER / STRAIGHT STEM  Carbide Ball is Grade 25 AFBMA Tolerance ±0.0001" Sphericity 0.000025" Ruby Ball is Grade 10 AFBMA Tolerance ±0.0001" Sphericity 0.000010"		1.000"	.026"	.0305"	4-48	.03125"	443-031	443-031R
					M2.5 x 0.45	.03125"	453-031	453-031R
		1.000"	.033"	.0385"	4-48	1mm	443-1	443-1R
					M2.5 x 0.45	1mm	453-1	453-1R
		1.000"	.040"	.0465"	4-48	.04687"	443-046	443-046R
					M2.5 x 0.45	.04687"	453-046	453-046R
		1.000"	.050"	.0585"	4-48	1.5mm	443-1.5	443-1.5R
					M2.5 x 0.45	1.5mm	453-1.5	453-1.5R
		1.000"	.053"	.059"	4-48	.0625"	443-062	443-062R
					M2.5 x 0.45	.0625"	453-062	453-062R
		1.000"	.066"	.075"	4-48	.0781"	443-078	-
					M2.5 x 0.45	.0781"	453-078	-
		1.000"	.066"	.075"	4-48	2mm	443-2	443-2R
					M2.5 x 0.45	2mm	453-2	453-2R
		1.000"	.080"	.090"	4-48	.09375"	443-093	443-093R
					M2.5 x 0.45	.09375"	453-093	453-093R
		1.000"	.084"	.095"	4-48	2.5mm	443-2.5	443-2.5R
					M2.5 x 0.45	2.5mm	453-2.5	453-2.5R
		1.000"	.100"	.110"	4-48	3mm	443-3	443-3R
					M2.5 x 0.45	3mm	453-3	453-3R
		1.000"	.106"	.117"	4-48	.1250"	443-125	443-125R
					M2.5 x 0.45	.1250"	453-125	453-125R
		1.000"	.117"	.130"	4-48	3.5mm	443-3.5	443-3.5R
					M2.5 x 0.45	3.5mm	453-3.5	453-3.5R
		1.000"	.135"	.135"	4-48	.15625"	443-156	443-156R
					M2.5 x 0.45	.15625"	453-156	453-156R
		1.000"	.135"	.135"	4-48	4mm	443-4	443-4R
					M2.5 x 0.45	4mm	453-4	453-4R
		1.000"	.135"	.135"	4-48	4.5mm	443-4.5	-
					M2.5 x 0.45	4.5mm	453-4.5	-
		1.000"	.135"	.135"	4-48	.1875"	443-187	443-187R
					M2.5 x 0.45	.1875"	453-187	453-187R
		1.000"	.135"	.135"	4-48	5mm	443-5	443-5R
					M2.5 x 0.45	5mm	453-5	453-5R
		1.000"	.135"	.135"	4-48	.21875"	443-218	443-218R
					M2.5 x 0.45	.21875"	453-218R	453-218R

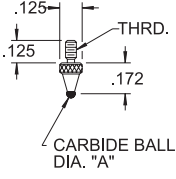
A.G.D. & METRIC BALL POINTS EXTENDED continued on page 37

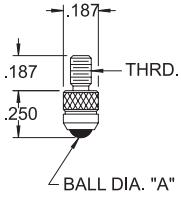
A.G.D. & METRIC continued from page 35	Actual Size	B Length	S Seat Dia	T Taper Dia	Thread	Ball Size	T.C Ball Part Number	Ruby Ball Part Number
BALL POINTS EXTENDED NARROW TAPER / STRAIGHT STEM  Carbide Ball is Grade 25 AFBMA Tolerance ± 0.0001 " Sphericity 0.000025" Ruby Ball is Grade 10 AFBMA Tolerance		1.000"	.135"	.135"	4-48	6mm	443-6	453-6R
					M2.5 x 0.45	6mm	453-6	453-6R
		1.000"	.135"	.135"	4-48	.2500"	443-250	443-250R
					M2.5 x 0.45	.2500"	453-250	453-250R

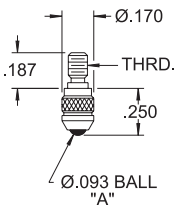
A.G.D.	Actual Size	A Diameter	Thread	Part Number
BALL POINTS 		.2500"	10-32	584
			8-32	594
		.3125"	10-32	585
			8-32	595

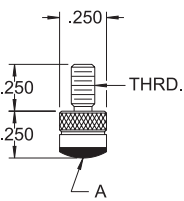
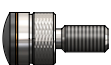
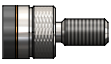
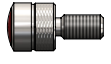
METRIC	Actual Size	A Diameter	Thread	Part Number
BALL POINTS 		.0312"	M2.6 x 0.45	620
			M2.5 x 0.45	631
		.0625"	M2.6 x 0.45	621
			M2.5 x 0.45	632
		.0937"	M2.6 x 0.45	622
			M2.5 x 0.45	633
		.1250"	M2.6 x 0.45	623
			M2.5 x 0.45	634

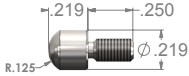
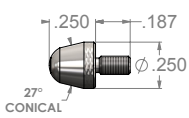
A.G.D.	Actual Size	A	Thread	Part Number
Radius & Flat Gauging Surface 		.312" Radius	8-32	581
			10-32	591
		Flat	8-32	582
			10-32	592

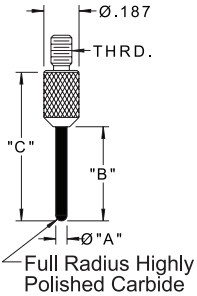
ANSI GROUP O	Actual Size	A Diameter	Thread	Part Number
BALL POINTS 		.0312"	0-80	520
			1-72	531
		.0469"	0-80	521
			1-72	532
		.0625"	0-80	522
			1-72	533
		.0937"	0-80	523
			1-72	534

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

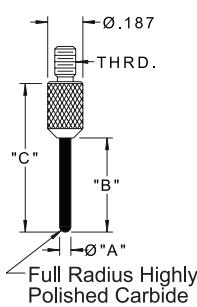
METRIC	Actual Size	A	Thread	Part Number
BALL POINTS (LOW PROFILE) 		Carbide	M2.6 x 0.45	640
			M2.5 x 0.45	645
		Ruby	M2.6 x 0.45	641
			M2.5 x 0.45	646

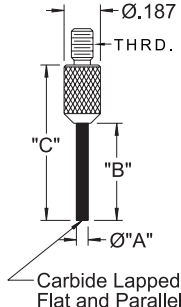
A.G.D.	Actual Size	A	Thread	Part Number
Radius & Flat Gauging Surface  Contact Surface Highly Polished Tungsten Carbide Unless Noted		.250" Radius	5-40	660
			4-40	665
		Flat	5-40	661
			4-40	668
		.250" Radius	5-40	660R
			Flat	661R

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

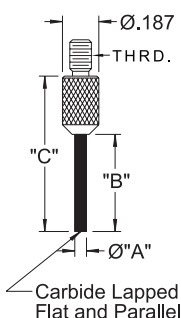
A.G.D. & METRIC	Actual Size	A Diameter	B Length	C Length	Thread	Part Number
RADIUS NEEDLE Gauging Surface 		.018"	.120"	.400"	4-48	567
					M2.5 x 0.45	597
		.018"	.200"	.480"	4-48	568
					M2.5 x 0.45	598
		.031"	.200	.480"	4-48	607
					M2.5 x 0.45	667
		.031"	.500"	.780"	4-48	630
					M2.5 x 0.45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

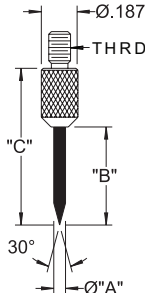
A.G.D. & METRIC RADIUS NEEDLE continued on page 40

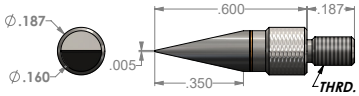
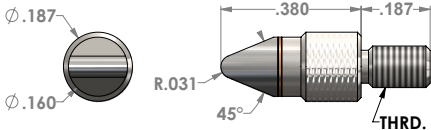
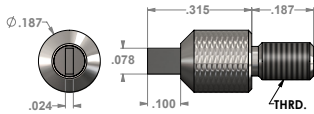
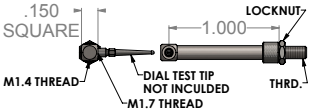
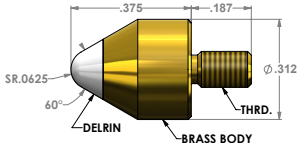
A.G.D. & METRIC continued from page 39		Actual Size	A Diameter	B Length	C Length	Thread	Part Number
 RADIUS NEEDLE Gauging Surface		1.0mm	.120"	.400"	4-48	625	
					M2.5 x 0.45	635	
		1.0mm	.180"	.480"	4-48	650	
					M2.5 x 0.45	690	
		1.0mm	.200"	(±0.002") .500"	4-48	605	
		1.0mm	.500"	.780"	4-48	628	
					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	
		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	

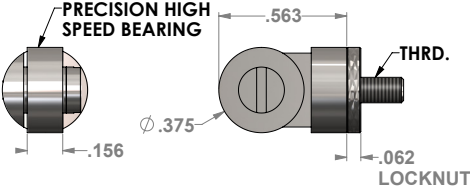
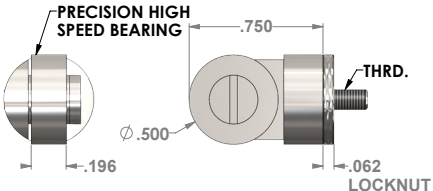
A.G.D. & METRIC	Actual Size	A Diameter	B Length	C Length	Thread	Part Number
FLAT NEEDLE Gauging Surface 		.018"	.120"	.400"	4-48	363
					M2.5 x 0.45	383
		.018"	.200"	.480"	4-48	613
					M2.5 x 0.45	673
		.031"	.200"	.480"	4-48	614
					M2.5 x 0.45	674
		.031"	.500"	.780"	4-48	615
					M2.5 x 0.45	675
		.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

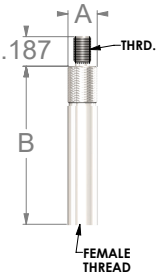
A.G.D. & METRIC FLAT NEEDLE continued on page 42

A.G.D. & METRIC continued from page 41		Actual Size	A Diameter	B Length	C Length	Thread	Part Number
FLAT NEEDLE Gauging Surface 		3.0mm	1.100"	1.400"	4-48	606	
					M2.5 x 0.45	608	
		3.0mm	1.600"	1.900"	4-48	662	
					M2.5 x 0.45	663	
		3.0mm	2.100"	2.400"	4-48	664	
					M2.5 x 0.45	669	
		4.0mm	1.100"	1.400"	4-48	510	
					M2.5 x 0.45	530	
		4.0mm	1.600"	1.900"	4-48	540	
					M2.5 x 0.45	560	
		4.0mm	2.100"	2.400"	4-48	550	
					M2.5 x 0.45	570	

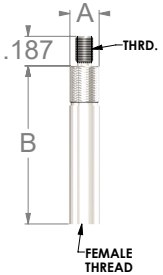
A.G.D. & METRIC	Actual Size	A Diameter	B Length	C Length	Thread	Part Number
CONICAL SHARP POINT NEEDLE Gauging Surface 		1.0mm	.120"	.400"	4-48	626
					M2.5 x 0.45	636
		1.0mm	.500"	.780"	4-48	629
					M2.5 x 0.45	639
		1.5mm	.500"	.800"	4-48	526
					M2.5 x 0.45	536
		1.5mm	1.000"	1.300"	4-48	529
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

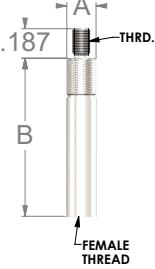
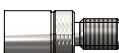
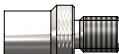
A.G.D. & METRIC	Thread	Part Number
FLAT END CHISEL Carbide Tipped 	4-48	318
	M2.5 x 0.45	338
RADIUS END CHISEL Carbide Tipped 	4-48	577
	M2.5 x 0.45	587
FLAT END BLADE Carbide Tipped 	4-48	350
	M2.5 x 0.45	370
RIGHT ANGLE STYLUS CENTER For use with tips on pages 2-18 	4-48	549
	M2.5 x 0.45	559
	4-48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

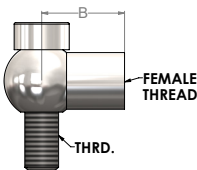
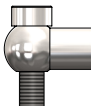
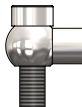
ROLLER CONTACT		
A.G.D. & METRIC	Thread	Part Number
PRECISION BEARING IS ABEC 3P 	4-48	670-375
	M2.5 x 0.45	671-375
PRECISION BEARING IS ABEC 3P 	4-48	670-500
	M2.5 x 0.45	671-500

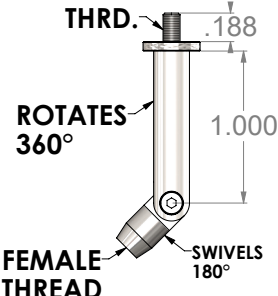
EXTENSIONS						
A.G.D. & METRIC	Actual Size	A DIA	B Length	Female Thread	Male Thread	Part Number
		.187"	.250"	4-48	4-48	307-E250
				M2.5 x 0.45	M2.5 x 0.45	327-E250
		.187"	.375"	4-48	4-48	307-E375
				M2.5 x 0.45	M2.5 x 0.45	327-E375
		.187"	10mm	4-48	4-48	307-E10
				M2.5 x 0.45	M2.5 x 0.45	327-E10
		.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"	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 45

EXTENSIONS						
A.G.D. & METRIC continued from page 44	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
 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		.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
		.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