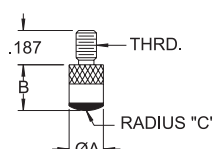
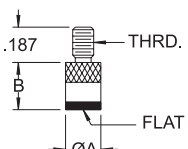




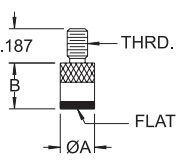
A.G.D. & METRIC	Actual Size	A Diameter	B Length	C Radius	Thread	Part Number
RADIUS Gauging Surface  Contact Surface Highly Polished Tungsten Carbide Unless Noted		.187"	.125"	.187"	4-48	301
					M2.5 x 0.45	321
	RUBY INSERT TIP 	.187"	.125"	.187"	4-48	301R
					M2.5 x 0.45	321R
		.190"	.150"	.115"	4-48	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

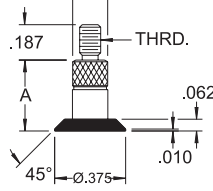
A.G.D. & METRIC RADIUS continued on page 26

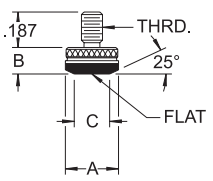
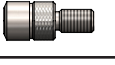
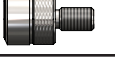
A.G.D. & METRIC continued from page 25		Actual Size	A Diameter	B Length	C Radius	Thread	Part Number
<							

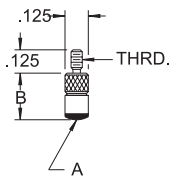
A.G.D. & METRIC	Actual Size	A Diameter	B Length	Thread	Part Number
FLAT Gauging Surface  Tungsten Carbide Contact Surface Unless Noted Highly Polished Lapped Flat And Parallel With Shoulder		.062"	.250"	4-48	351
				M2.5 x 0.45	371
		.125"	.250"	4-48	352
				M2.5 x 0.45	372
		.187"	.125"	4-48	353
		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

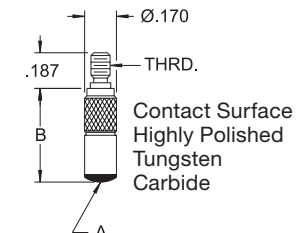
A.G.D. & METRIC FLAT continued on page 27

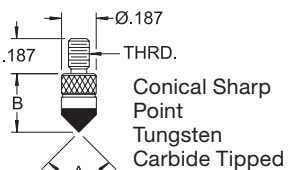
A.G.D. & METRIC continued from page 26	Actual Size	A Diameter	B Length	Thread	Part Number
FLAT Gauging Surface  Tungsten Carbide Contact Surface Unless Noted Highly Polished Lapped Flat And Parallel With Shoulder		.187"	.750"	4-48	359
				M2.5 x 0.45	379
		.187"	1.000"	4-48	360
				M2.5 x 0.45	380
		.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
		.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

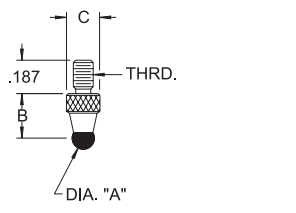
A.G.D. & METRIC	Actual Size	A Length	Thread	Part Number
Flanged Contacts For Checking Grooves And Ledges  Contact Surface Highly Polished Tungsten Carbide		.250"	4-48	340
			M2.5 x 0.45	345
		.375"	4-48	341
			M2.5 x 0.45	346
		.500"	4-48	342
			M2.5 x 0.45	347

A.G.D. & METRIC	Actual Size	A Diameter	B Length	C Diameter	Thread	Part Number
FLAT Gauging Surface with Lead Chamfer  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

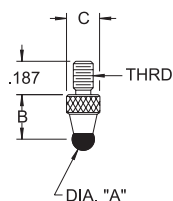
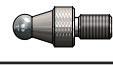
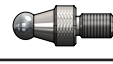
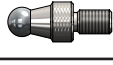
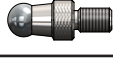
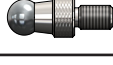
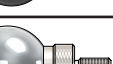
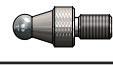
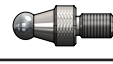
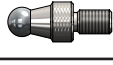
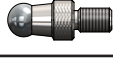
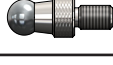
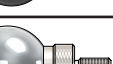
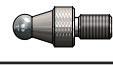
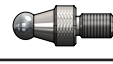
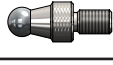
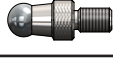
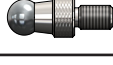
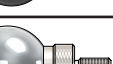
ANSI Group O	Actual Size	A	B Length	Thread	Part Number
Radius And Flat Gauging Surface  Contact Surface Highly Polished Tungsten Carbide		.125" Radius	.156"	0-80	541
				1-72	552
		.125" Radius	.250"	0-80	542
				1-72	553
		Flat	.156"	0-80	543
				1-72	554
		Flat	.250"	0-80	544
				1-72	555

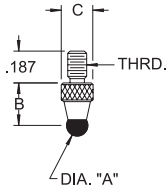
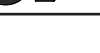
METRIC	Actual Size	A	B Length	Thread	Part Number
Radius And Flat Gauging Surface 		.156" Radius	.250"	M2.6 x 0.45	601
				M2.5 x 0.45	609
		.156" Radius	.500"	M2.6 x 0.45	602
				M2.5 x 0.45	610
		Flat	.250"	M2.6 x 0.45	603
				M2.5 x 0.45	611
		Flat	.500"	M2.6 x 0.45	604
				M2.5 x 0.45	612

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

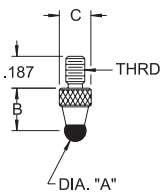
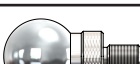
A.G.D. & METRIC	Actual Size	A Diameter	B Length	C Diameter	Thread	T.C. Ball Part Number	Ruby Ball Part Number
BALL POINTS FRACTIONAL SIZE  Carbide Ball is Grade 25 AFBMA Tolerance ± 0.0001" Sphericity 0.000025" NOTE: Carbide Ball Diameters Ø.015" and Smaller are Grade 100 AFBMA Tolerance ± 0.0005" Sphericity 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	-

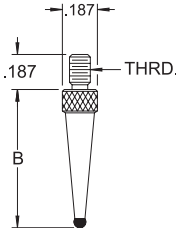
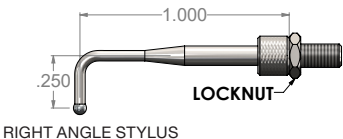
A.G.D. & METRIC FRACTIONAL SIZE continued on page 30

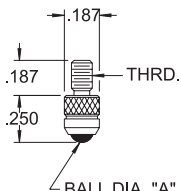
A.G.D. & METRIC continued from page 29		Actual Size	A Diameter	B Length	C Diameter	Thread	T.C. Ball Part Number	Ruby Ball Part Number																																																																																																																																																																							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

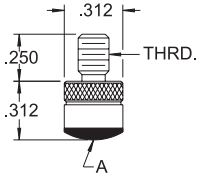
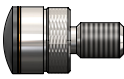
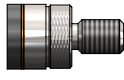
A.G.D. & METRIC	Actual Size	A Diameter	B Length	C Diameter	Thread	T.C. Ball Part Number	Ruby Ball Part Number
BALL POINTS METRIC SIZE  Carbide Ball is Grade 25 AFBMA Tolerance ± 0.0001 " Sphericity 0.000025" Ruby Ball is Grade 10 AFBMA Tolerance ± 0.0001 " Sphericity 0.000010"		0.5mm	.250"	.187"	4-48	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	-

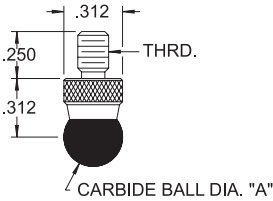
A.G.D. & METRIC FRACTIONAL SIZE continued on page 32

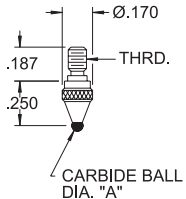
A.G.D. & METRIC continued from page 31		Actual Size	A Diameter	B Length	C Diameter	Thread	T.C. Ball Part Number	Ruby Ball Part Number
BALL POINTS METRIC SIZE  Carbide Ball is Grade 25 AFBMA Tolerance ± 0.0001" Sphericity 0.000025" Ruby Ball is Grade 10 AFBMA Tolerance ± 0.0001" Sphericity 0.000010"		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	-		

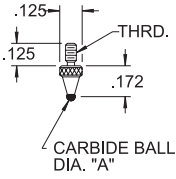
A.G.D. & METRIC	Actual Size	B Length	Thread	Ball Size	T.C Ball Part Number	Ruby Ball Part Number
BALL POINTS EXTENDED TAPER  Carbide Ball is Grade 25 AFBMA Tolerance ± 0.0001 " Sphericity 0.000025" NOTE: Carbide Ball Diameters $\varnothing .015$ " and Smaller are Grade 100 AFBMA Tolerance ± 0.0005 " 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	.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
		.750"	4-48	.015"	435	-
			M2.5 x 0.45	.015"	445	-
		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
		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
		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

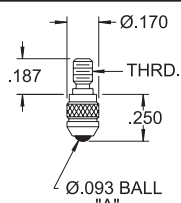
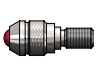
A.G.D. & METRIC	Actual Size	A Diameter	Thread	Part Number
BALL POINTS (LOW PROFILE) 		.062" Carbide	4-48	479
			M2.5 x 0.45	489
		.062" Ruby	4-48	480
			M2.5 x 0.45	490
		.125" Carbide	4-48	481
			M2.5 x 0.45	491
		.125" Ruby	4-48	482
			M2.5 x 0.45	492
		.125" Silicon Nitride	4-48	482SN
			M2.5 x 0.45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

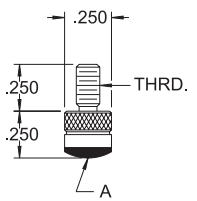
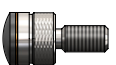
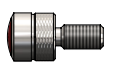
A.G.D.	Actual Size	A	Thread	Part Number
Radius & Flat Gauging Surface 		.312" Radius	8-32	581
			10-32	591
		Flat	8-32	582
			10-32	592

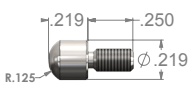
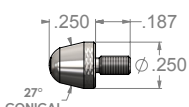
A.G.D.	Actual Size	A Diameter	Thread	Part Number
BALL POINTS 		.250"	10-32	584
			8-32	594
		.3125"	10-32	585
			8-32	595

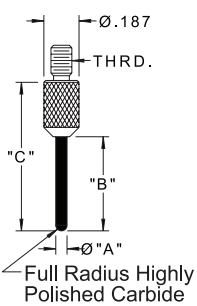
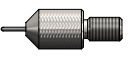
METRIC	Actual Size	A Diameter	Thread	Part Number
BALL POINTS 		.0312"	M2.6 x 0.45	620
			M2.5 x 0.45	631
		.0625"	M2.6 x 0.45	621
			M2.5 x 0.45	632
		.0937"	M2.6 x 0.45	622
			M2.5 x 0.45	633
		.125"	M2.6 x 0.45	623
			M2.5 x 0.45	634

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

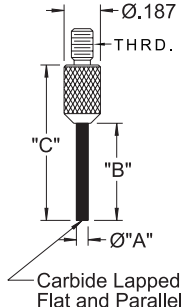
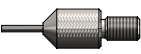
METRIC	Actual Size	A	Thread	Part Number
BALL POINTS (LOW PROFILE) 		Carbide	M2.6 x 0.45	640
			M2.5 x 0.45	645
		Ruby	M2.6 x 0.45	641
			M2.5 x 0.45	646

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

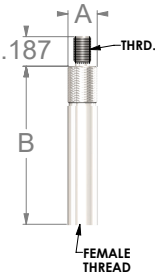
A.G.D. & METRIC continued from page 35		Actual Size	A Diameter	B Length	C Length	Thread	Part Number

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	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
		1.0mm	.500"	.780"	M2.5 x 0.45	636
		1.0mm	.500"	.780"	4-48	629
		1.0mm	.500"	.780"	M2.5 x 0.45	639
		1.5mm	.500"	.800"	4-48	526
		1.5mm	.500"	.800"	M2.5 x 0.45	536
		1.5mm	1.000"	1.300"	4-48	529
		1.5mm	1.000"	1.300"	M2.5 x 0.45	539
		2.0mm	1.000"	1.300"	4-48	548
		2.0mm	1.000"	1.300"	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

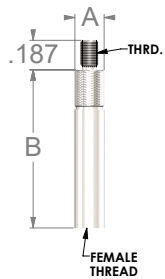
ROLLER CONTACT		
A.G.D. & METRIC	Thread	Part Number
PRECISION BEARING IS ABEC 3P 	4-48	670-375
	M2.5 x 0.45	671-375
PRECISION BEARING IS ABEC 3P 	4-48	670-500
	M2.5 x 0.45	671-500

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 40

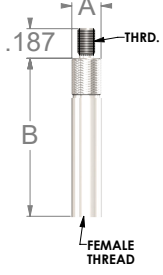
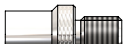
EXTENSIONS

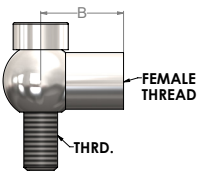
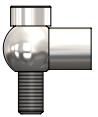
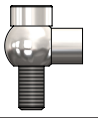
A.G.D. & METRIC
continued from page 39

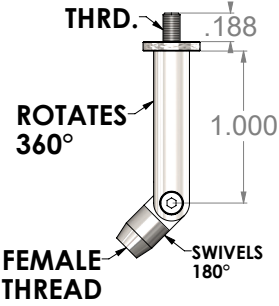


Actual Size	A DIA	B Length	Female Thread	Male Thread	Part Number
	.187"	60mm	4-48	4-48	307-E60
			M2.5 x 0.45	M2.5 x 0.45	327-E60
	.187"	65mm	4-48	4-48	307-E65
			M2.5 x 0.45	M2.5 x 0.45	327-E65
	.187"	70mm	4-48	4-48	307-E70
			M2.5 x 0.45	M2.5 x 0.45	327-E70
	.187"	75mm	4-48	4-48	307-E75
			M2.5 x 0.45	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

CONTACT POINTS for LVDT, LINEAR, DIGITAL and DIAL INDICATORS

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