RENISHAW
apply innovation™

M5 threaded stylus range



SP80 is an ultra-accurate quill-mounted scanning probe

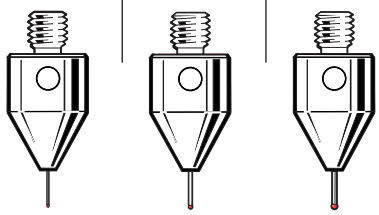
Renishaw's probing systems are designed to give optimum performance using styli from its comprehensive range. The following probes all use M5 threaded styli, however, with suitable adaptors, other thread sizes may be used.

- **SP80**

Ruby micro ball styli (Tungsten carbide stems)

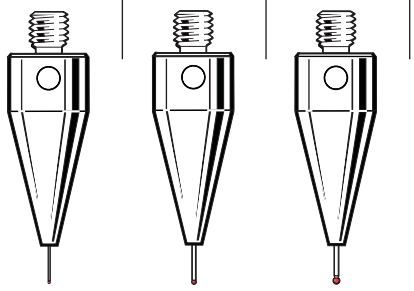
Part number		A-5003-5201	A-5003-5202	A-5003-5203
A	Ball dia. mm (in.)	0.3 (0.012)	0.5 (0.020)	0.7 (0.028)
B	Length mm (in.)	20.0 (0.79)	20.0 (0.79)	20.0 (0.79)
C	Stem dia. mm (in.)	0.2 (0.008)	0.4 (0.016)	0.5 (0.020)
D	EWL* mm (in.)	3.0 (0.12)	4.0 (0.16)	5.0 (0.20)
	Mass grammes	6.5	6.5	6.5

20 mm range



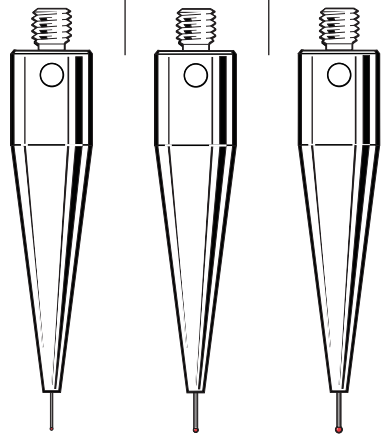
	A-5003-5211	A-5003-5212	A-5003-5213
	0.3 (0.012)	0.5 (0.020)	0.7 (0.028)
	30.0 (1.19)	30.0 (1.19)	30.0 (1.19)
	0.2 (0.008)	0.4 (0.016)	0.5 (0.020)
	3.0 (0.12)	4.0 (0.16)	5.0 (0.20)
	8.95	8.95	8.98

30 mm range



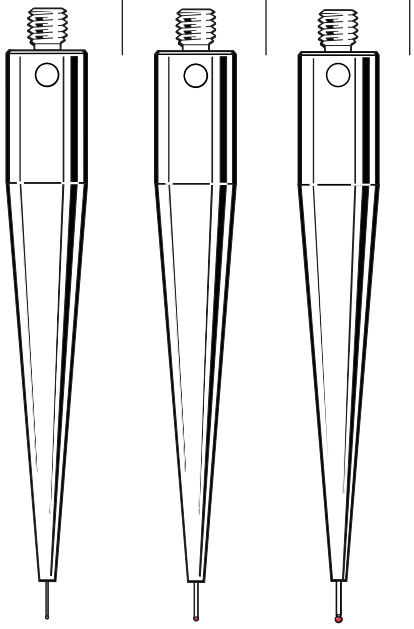
Part number		A-5003-5225	A-5003-5226	A-5003-5227
A	Ball dia. mm (in.)	0.3 (0.012)	0.5 (0.020)	0.7 (0.028)
B	Length mm (in.)	50.0 (1.97)	50.0 (1.97)	50.0 (1.97)
C	Stem dia. mm (in.)	0.2 (0.008)	0.4 (0.016)	0.5 (0.020)
D	EWL* mm (in.)	3.0 (0.12)	4.0 (0.16)	5.0 (0.20)
	Mass grammes	15.79	15.79	15.79

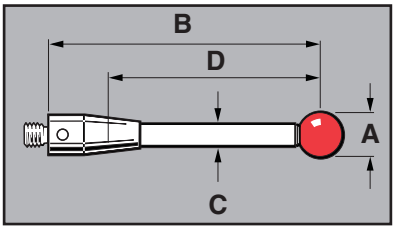
50 mm range



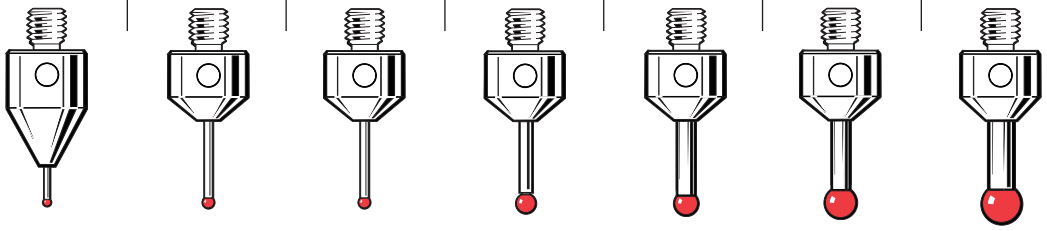
	A-5003-5240	A-5003-5241	A-5003-5242
	0.3 (0.012)	0.5 (0.020)	0.7 (0.028)
	75.0 (2.96)	75.0 (2.96)	75.0 (2.96)
	0.2 (0.008)	0.4 (0.016)	0.5 (0.020)
	3.0 (0.12)	4.0 (0.16)	5.0 (0.20)
	23.84	23.84	23.84

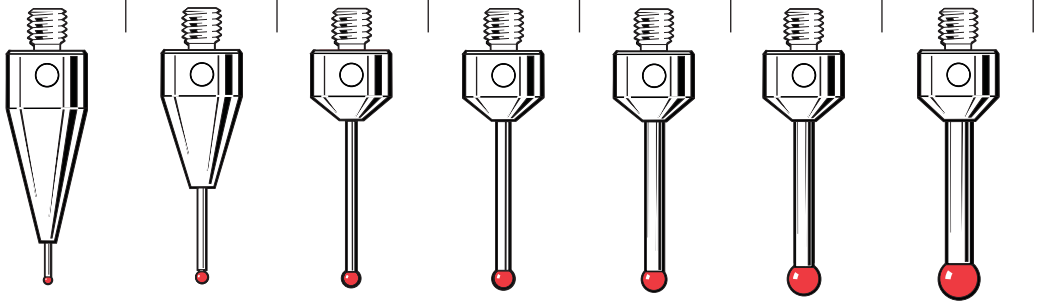
75 mm range

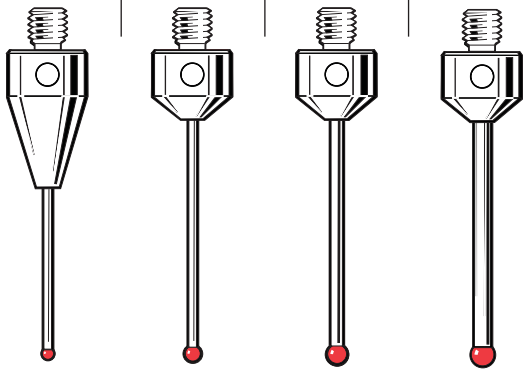




Ruby ball styli (tungsten carbide stems)

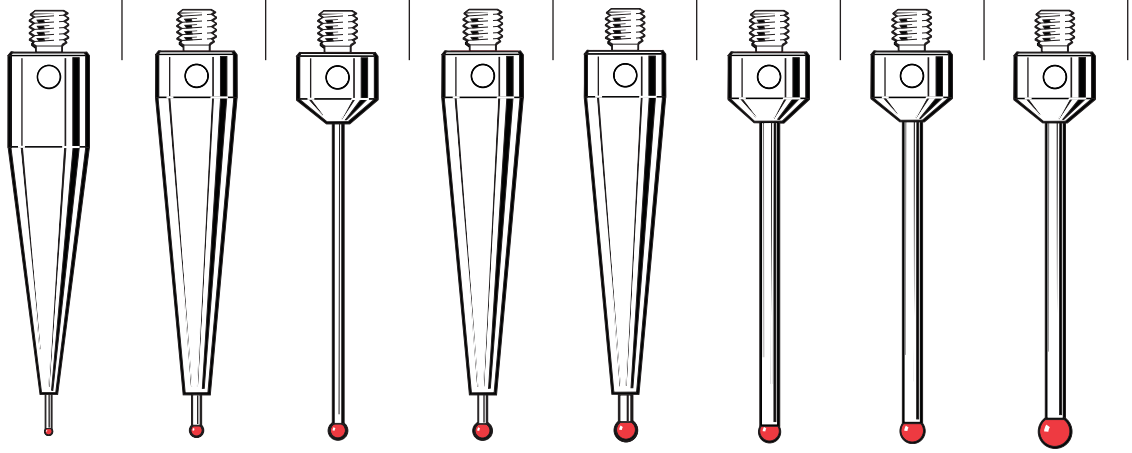
Ball material		Part number						
Ruby Silicon nitride Zirconia		A-5003-5204	A-5003-5205	A-5003-5206 A-5003-5732 A-5003-5746	A-5003-5207	A-5003-5208	A-5003-5209 A-5003-5733 A-5003-5747	A-5003-5210
A	Ball dia. mm (in.)	1.0 (0.04)	1.5 (0.06)	2.0 (0.08)	2.5 (0.10)	3.0 (0.12)	4.0 (0.16)	5.0 (0.20)
B	Length mm (in.)	20.0 (0.79)	20.0 (0.79)	20.0 (0.79)	20.0 (0.79)	20.0 (0.79)	20.0 (0.79)	20.0 (0.79)
C	Stem dia. mm (in.)	0.7 (0.028)	1.0 (0.04)	1.0 (0.04)	1.5 (0.06)	2.0 (0.08)	2.0 (0.08)	3.0 (0.12)
D	EWL* mm (in.)	5.0 (0.20)	11.0 (0.44)	11.0 (0.44)	11.0 (0.44)	11.0 (0.44)	11.9 (0.47)	11.5 (0.45)
	Mass grammes	6.52	4.68	4.70	4.84	5.12	5.19	6.06
20 mm range								

Part number		A-5003-5214	A-5003-5215	A-5003-5216	A-5003-5217	A-5003-5218	A-5003-5219	A-5003-5220
A	Ball dia. mm (in.)	1.0 (0.04)	1.5 (0.06)	2.0 (0.08)	2.5 (0.10)	3.0 (0.12)	4.0 (0.16)	5.0 (0.20)
B	Length mm (in.)	30.0 (1.19)	30.0 (1.19)	30.0 (1.19)	30.0 (1.19)	30.0 (1.19)	30.0 (1.19)	30.0 (1.19)
C	Stem dia. mm (in.)	0.7 (0.028)	1.0 (0.04)	1.0 (0.04)	1.5 (0.06)	2.0 (0.08)	2.0 (0.08)	3.0 (0.12)
D	EWL* mm (in.)	5.0 (0.20)	12.0 (0.48)	21.0 (0.83)	21.0 (0.83)	21.0 (0.83)	21.9 (0.86)	21.5 (0.85)
	Mass grammes	9.01	7.28	4.81	5.14	5.58	5.64	7.10
30 mm range								

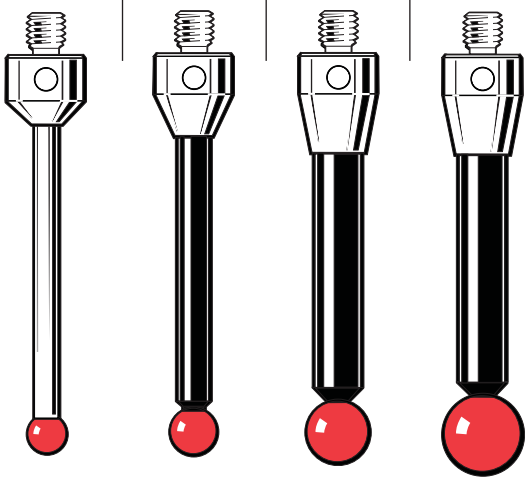
Part number		A-5003-5221	A-5003-5222	A-5003-5223	A-5003-5224
A	Ball dia. mm (in.)	1.5 (0.06)	2.0 (0.08)	2.5 (0.10)	3.0 (0.12)
B	Length mm (in.)	40.0 (1.58)	40.0 (1.58)	40.0 (1.58)	40.0 (1.58)
C	Stem dia. mm (in.)	1.0 (0.04)	1.0 (0.04)	1.5 (0.06)	2.0 (0.08)
D	EWL* mm (in.)	22.0 (0.87)	31.0 (1.23)	31.0 (1.23)	31.0 (1.23)
	Mass grammes	7.39	4.93	5.40	6.04
40 mm range					

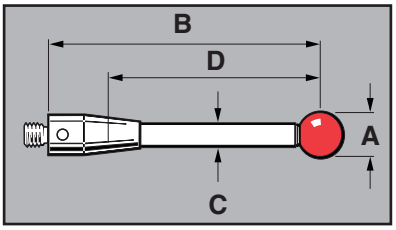
*Effective working length

Ruby ball styli (tungsten carbide stems – <5 mm ball diameter)

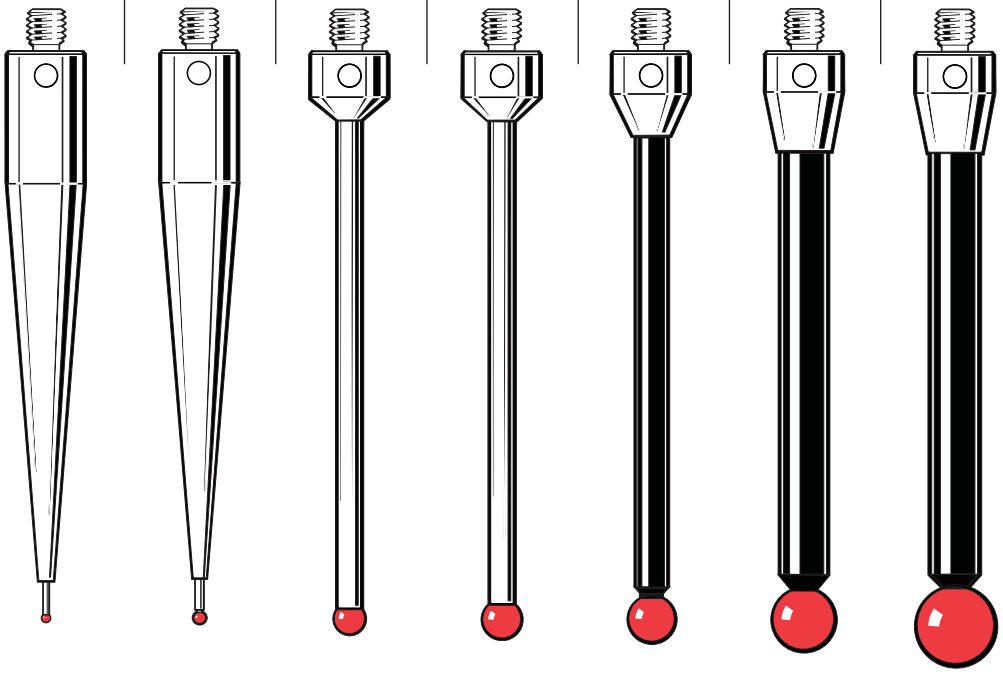
Part number		A-5003-5228	A-5003-5229	A-5003-5230	A-5003-5231	A-5003-5233	A-5003-5232	A-5003-5234	A-5003-5235
A	Ball dia. mm (in.)	1.0 (0.04)	1.5 (0.06)	2.0 (0.08)	2.0 (0.08)	2.5 (0.10)	2.5 (0.10)	3.0 (0.12)	4.0 (0.16)
B	Length mm (in.)	50.0 (1.97)	50.0 (1.97)	50.0 (1.97)	50.0 (1.97)	50.0 (1.97)	50.0 (1.97)	50.0 (1.97)	50.0 (1.97)
C	Stem dia. mm (in.)	0.7 (0.028)	1.0 (0.04)	1.0 (0.04)	1.0 (0.04)	1.5 (0.06)	2.0 (0.08)	2.0 (0.08)	2.0 (0.08)
D	EWL* mm (in.)	5.0 (0.20)	5.0 (0.20)	41.0 (1.62)	5.0 (0.20)	5.0 (0.20)	41.0 (1.62)	41.0 (1.62)	41.9 (1.65)
	Mass grammes	15.81	14.82	5.05	14.85	14.94	6.48	6.50	6.55
50 mm range									

Ruby ball styli (≥5 mm ball diameter)

Ball material		Part number			
Ruby Silicon nitride Zirconia		A-5003-5236	A-5003-5237 A-5003-5734	A-5003-5238 A-5003-5748	A-5003-5239
		Tungsten carbide	Carbon fibre	Carbon fibre	Carbon fibre
A	Ball dia. mm (in.)	5.0 (0.20)	6.0 (0.24)	8.0 (0.32)	10.0 (0.40)
B	Length mm (in.)	50.0 (1.97)	50.0 (1.97)	50.0 (1.97)	50.0 (1.97)
C	Stem dia. mm (in.)	3.0 (0.12)	4.0 (0.16)	6.0 (0.24)	6.0 (0.24)
D	EWL* mm (in.)	41.5 (1.63)	39.5 (1.55)	39.5 (1.55)	44.5 (1.75)
	Mass grammes	9.19	6.10	7.96	8.91
50 mm range					

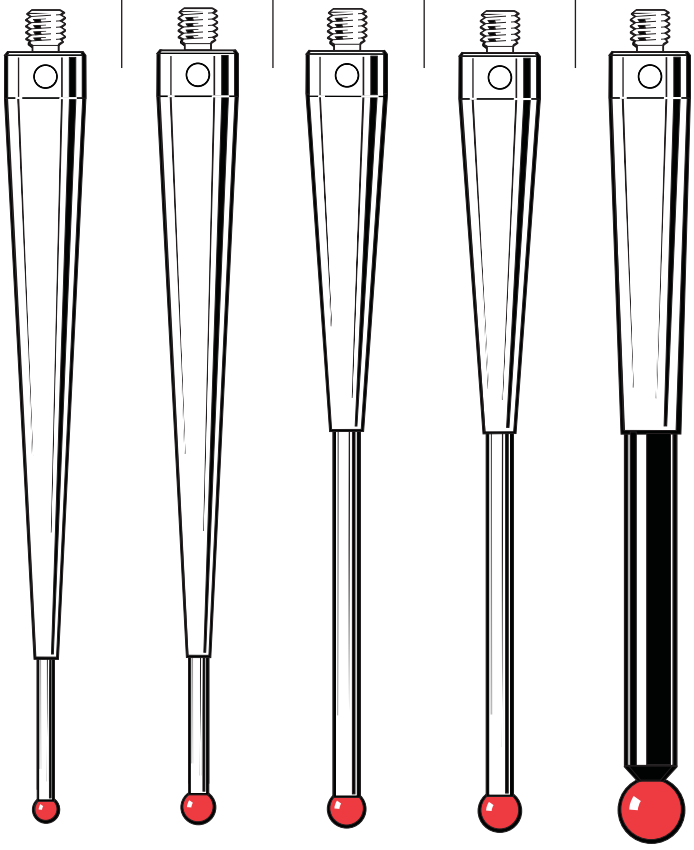


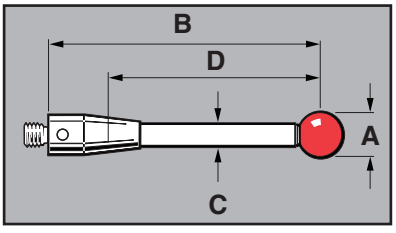
Ruby ball styli (1 mm – 10 mm ball diameter)

Part number		A-5003-5243 Tungsten carbide	A-5003-5244 Tungsten carbide	A-5003-5248 Tungsten carbide	A-5003-5249 Tungsten carbide	A-5003-5250 Carbon fibre	A-5003-5251 Carbon fibre	A-5003-5252 Carbon fibre
A	Ball dia. mm (in.)	1.0 (0.04)	1.5 (0.06)	4.0 (0.16)	5.0 (0.20)	6.0 (0.24)	8.0 (0.32)	10.0 (0.40)
B	Length mm (in.)	75.0 (2.96)	75.0 (2.96)	75.0 (2.96)	75.0 (2.96)	75.0 (2.96)	75.0 (2.96)	75.0 (2.96)
C	Stem dia. mm (in.)	0.7 (0.028)	1.0 (0.04)	3.0 (0.12)	3.0 (0.12)	4.0 (0.16)	6.0 (0.24)	6.0 (0.24)
D	EWL* mm (in.)	5.0 (0.20)	5.0 (0.20)	66.0 (2.60)	66.0 (2.60)	65.1 (2.56)	64.5 (2.54)	69.5 (2.74)
	Mass grammes	23.86	23.90	11.61	11.80	6.59	9.06	10.01
75 mm range								

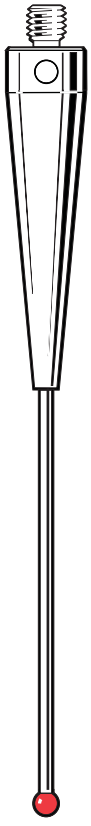
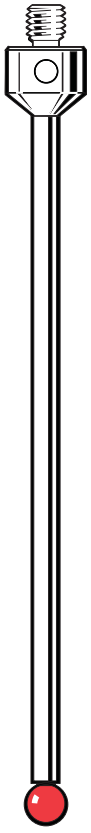
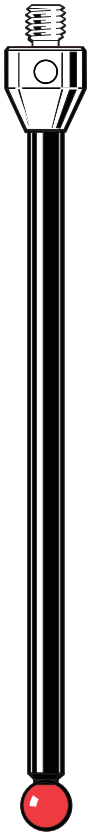
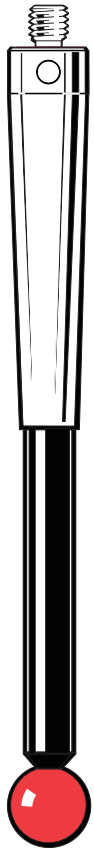
*Effective working length

Ruby ball styli (≤50 mm EWL)

Ball material		Part number				
Ruby Silicon nitride Zirconia		A-5003-5253 Tungsten carbide	A-5003-5255 Tungsten carbide	A-5003-5256 Tungsten carbide	A-5003-5257 Tungsten carbide	A-5003-5261 Carbon fibre
A	Ball dia. mm (in.)	3.0 (0.12)	4.0 (0.16)	4.0 (0.16)	5.0 (0.20)	8.0 (0.32)
B	Length mm (in.)	100.0 (3.94)	100.0 (3.94)	100.0 (3.94)	100.0 (3.94)	100.0 (3.94)
C	Stem dia. mm (in.)	2.0 (0.08)	2.0 (0.08)	3.0 (0.12)	3.0 (0.12)	6.0 (0.24)
D	EWL* mm (in.)	20.0 (0.79)	30.5 (1.20)	50.0 (1.97)	50.0 (1.97)	50.0 (1.97)
	Mass grammes	25.71	25.75	23.07	23.31	22.97
100 mm range						



Ruby ball styli (>50 mm EWL)

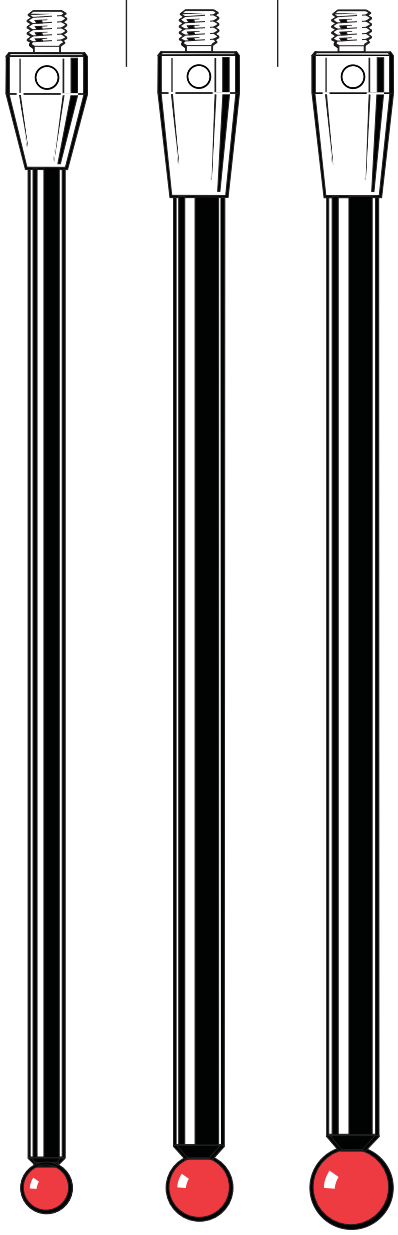
Ball material		Part number						
Ruby Silicon nitride Zirconia		A-5003-5254 Tungsten carbide	A-5003-5258 Tungsten carbide	A-5003-5259 A-5003-5735 A-5003-5749 Carbon fibre	A-5003-5260 Carbon fibre	A-5003-5262 Carbon fibre	A-5003-5264 Carbon fibre	A-5003-5263 Carbon fibre
A	Ball dia. mm (in.)	3.0 (0.12)	5.0 (0.20)	6.0 (0.24)	6.0 (0.24)	8.0 (0.32)	10.0 (0.40)	10.0 (0.40)
B	Length mm (in.)	100.0 (3.94)	100.0 (3.94)	100.0 (3.94)	100.0 (3.94)	100.0 (3.94)	100.0 (3.94)	100.0 (3.94)
C	Stem dia. mm (in.)	1.5 (0.06)	3.0 (0.12)	4.0 (0.16)	4.0 (0.16)	6.0 (0.24)	6.0 (0.24)	6.0 (0.24)
D	EWL* mm (in.)	55.0 (2.17)	91.0 (3.59)	58.9 (2.32)	90.1 (3.55)	89.5 (3.52)	94.5 (3.72)	95.5 (3.76)
	Mass grammes	16.30	14.40	19.66	7.08	10.17	11.11	23.91
100 mm range								

*Effective working length

Ruby ball styli (carbon fibre stems)

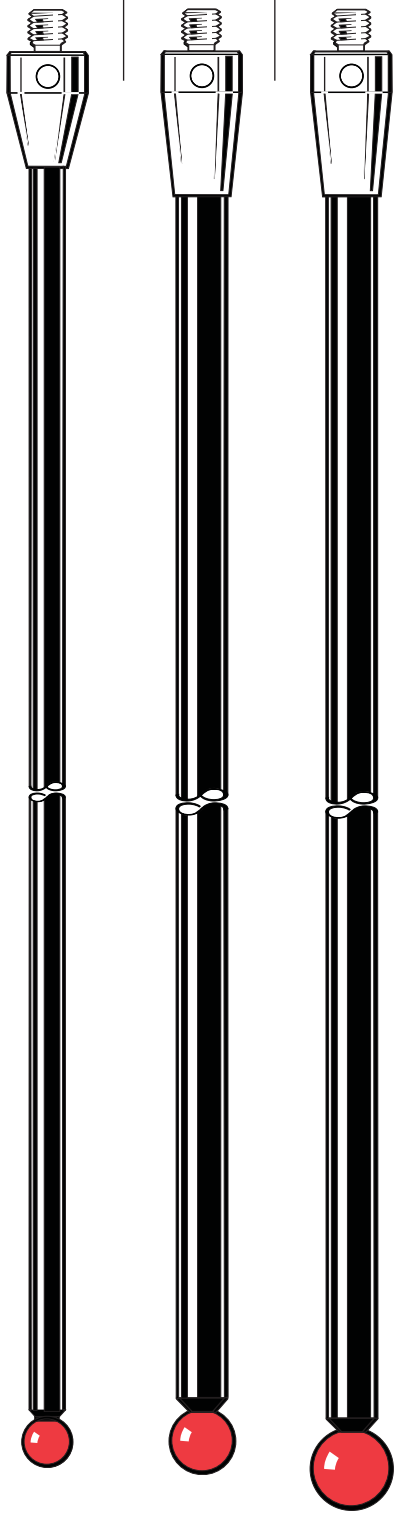
Part number		A-5003-5265	A-5003-5266	A-5003-5267
A	Ball dia. mm (in.)	6.0 (0.24)	8.0 (0.32)	10.0 (0.40)
B	Length mm (in.)	150.0 (5.91)	150.0 (5.91)	150.0 (5.91)
C	Stem dia. mm (in.)	4.0 (0.16)	6.0 (0.24)	6.0 (0.24)
D	EWL* mm (in.)	137.0 (5.39)	135.0 (5.31)	144.5 (5.69)
	Mass grammes	9.09	13.71	14.66

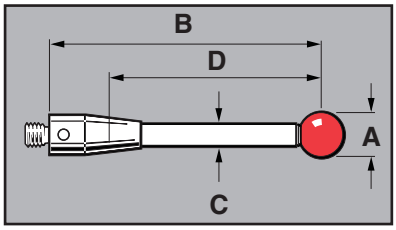
150 mm range



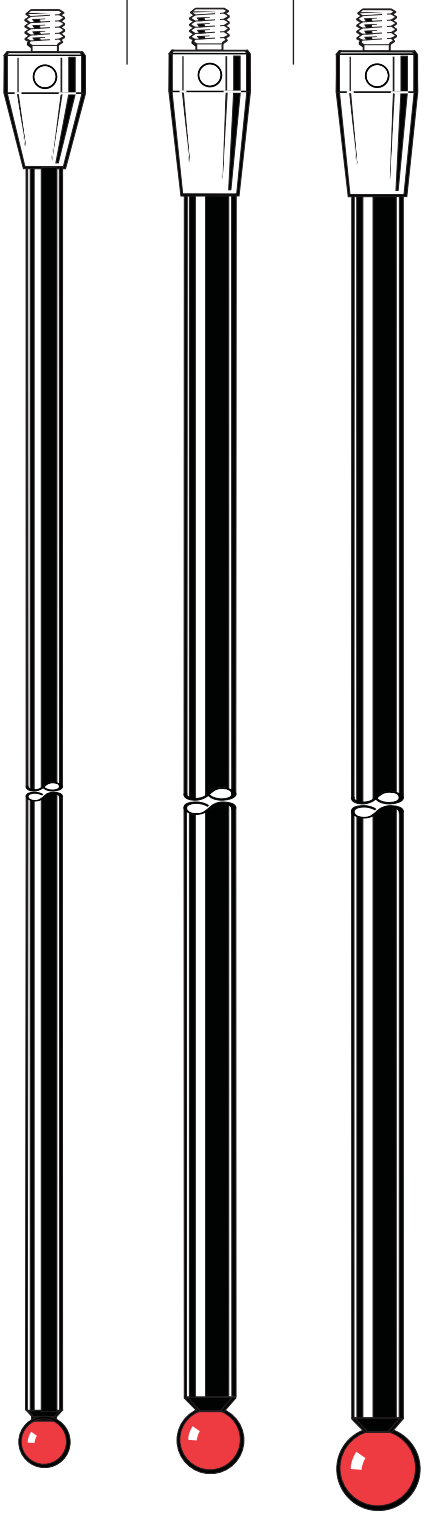
	A-5003-5268	A-5003-5269	A-5003-5270
	6.0 (0.24)	8.0 (0.32)	10.0 (0.40)
	200.0 (7.88)	200.0 (7.88)	200.0 (7.88)
	4.0 (0.16)	6.0 (0.24)	6.0 (0.24)
	187.0 (7.36)	180.0 (7.09)	194.5 (7.66)
	10.07	15.92	16.87

200 mm range





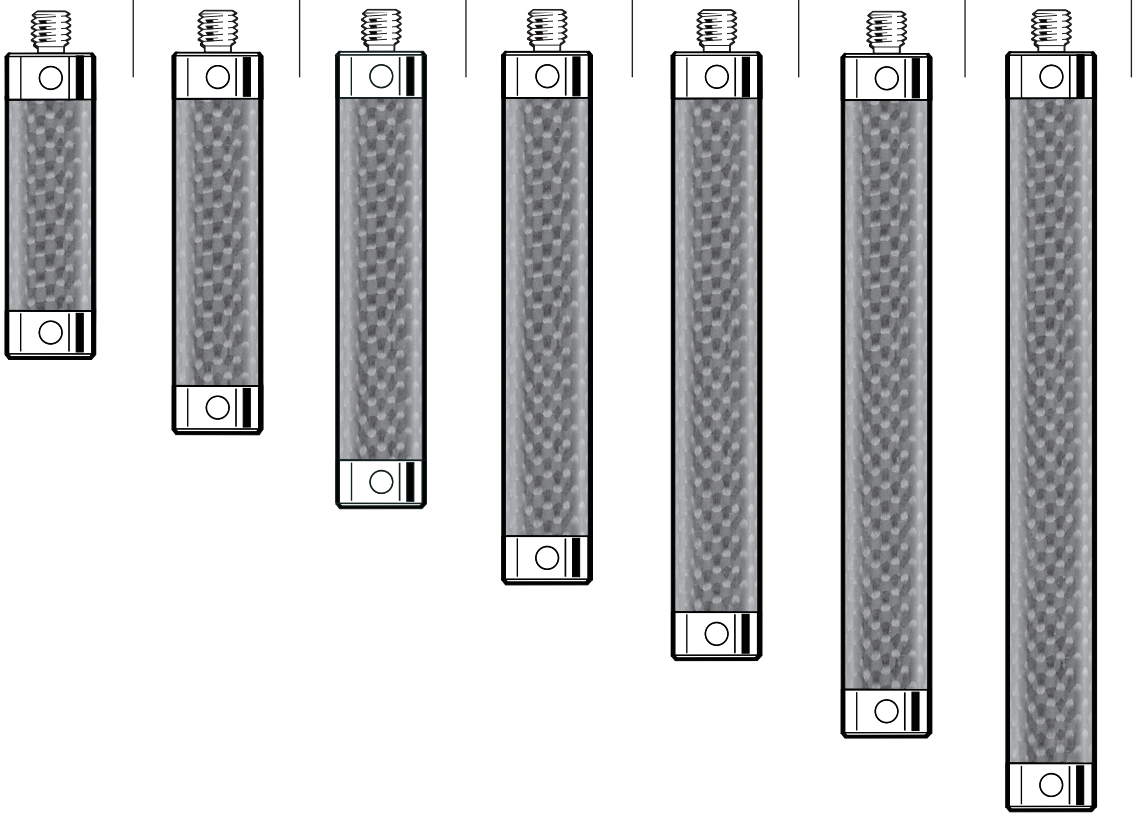
Ruby ball styli (carbon fibre stems)

Part number		A-5003-5271	A-5003-5272	A-5003-5273
A	Ball dia. mm (in.)	6.0 (0.24)	8.0 (0.32)	10.0 (0.40)
B	Length mm (in.)	300.0 (11.82)	300.0 (11.82)	300.0 (11.82)
C	Stem dia. mm (in.)	4.0 (0.16)	6.0 (0.24)	6.0 (0.24)
D	EWL* mm (in.)	287.0 (11.30)	280.0 (11.03)	294.5 (11.59)
	Mass grammes	12.02	20.33	21.28
300 mm range				

* Effective working length

Stylus extensions – thermo stable carbon fibre stems, titanium ends (stem dia. 11 mm)

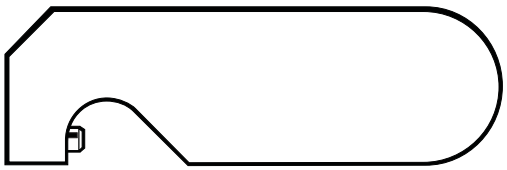
Part number	A-5555-0647	A-5555-0648	A-5555-0649	A-5555-0623	A-5555-0650	A-5555-0651	A-5555-0652
Length mm (in.)	40.0 (1.58)	50.0 (1.97)	60.0 (2.37)	70.0 (2.76)	80.0 (3.15)	90.0 (3.55)	100.0 (3.94)
Stem dia. mm (in.)	11.0 (0.44)	11.0 (0.44)	11.0 (0.44)	11.0 (0.44)	11.0 (0.44)	11.0 (0.44)	11.0 (0.44)
Mass grammes	7.6	8.3	9.0	9.7	10.4	11.1	11.8



M5 extension tools

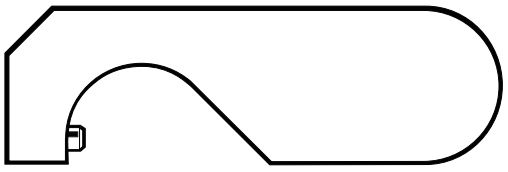
A-5003-6134

For M5 threaded extensions with 11 mm (0.44 in.) stem diameter



A-5003-6135

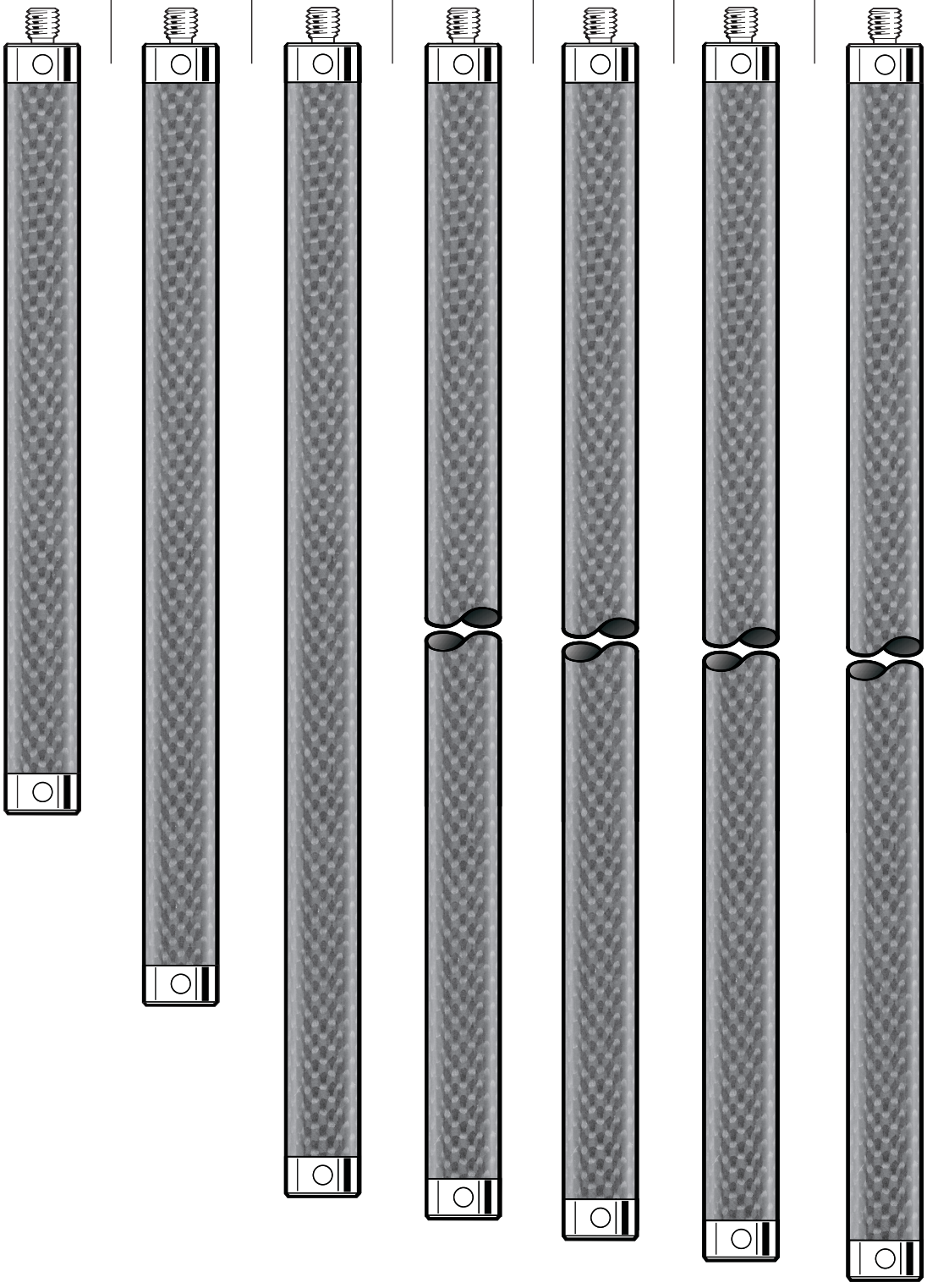
For M5 threaded extensions with 20 mm (0.79 in.) stem diameter



These tools are designed to fit styli extensions to Renishaw probes without causing internal damage

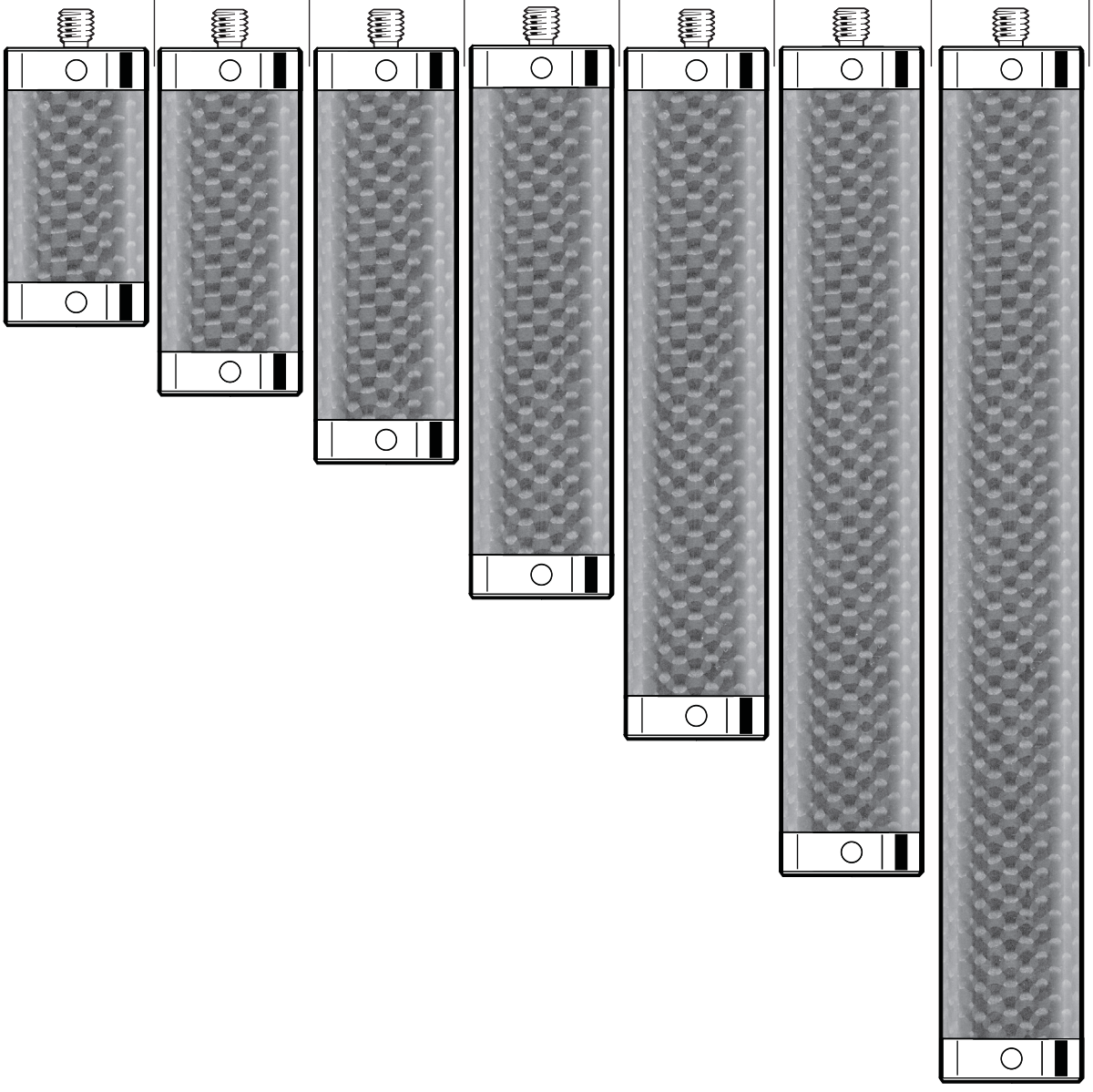
Stylus extensions – thermo stable carbon fibre stems, titanium ends (stem dia. 11 mm)

Part number	A-5555-0425	A-5555-0424	A-5555-0653	A-5555-0654	A-5555-0655	A-5555-0642	A-5555-0656
Length mm (in.)	120.0 (4.73)	150.0 (5.91)	180.0 (7.09)	200.0 (7.88)	250.0 (9.85)	300.0 (11.82)	400.0 (15.76)
Stem dia. mm (in.)	11.0 (0.44)	11.0 (0.44)	11.0 (0.44)	11.0 (0.44)	11.0 (0.44)	11.0 (0.44)	11.0 (0.44)
Mass grammes	13.2	15.4	17.5	18.9	22.4	25.9	33.0



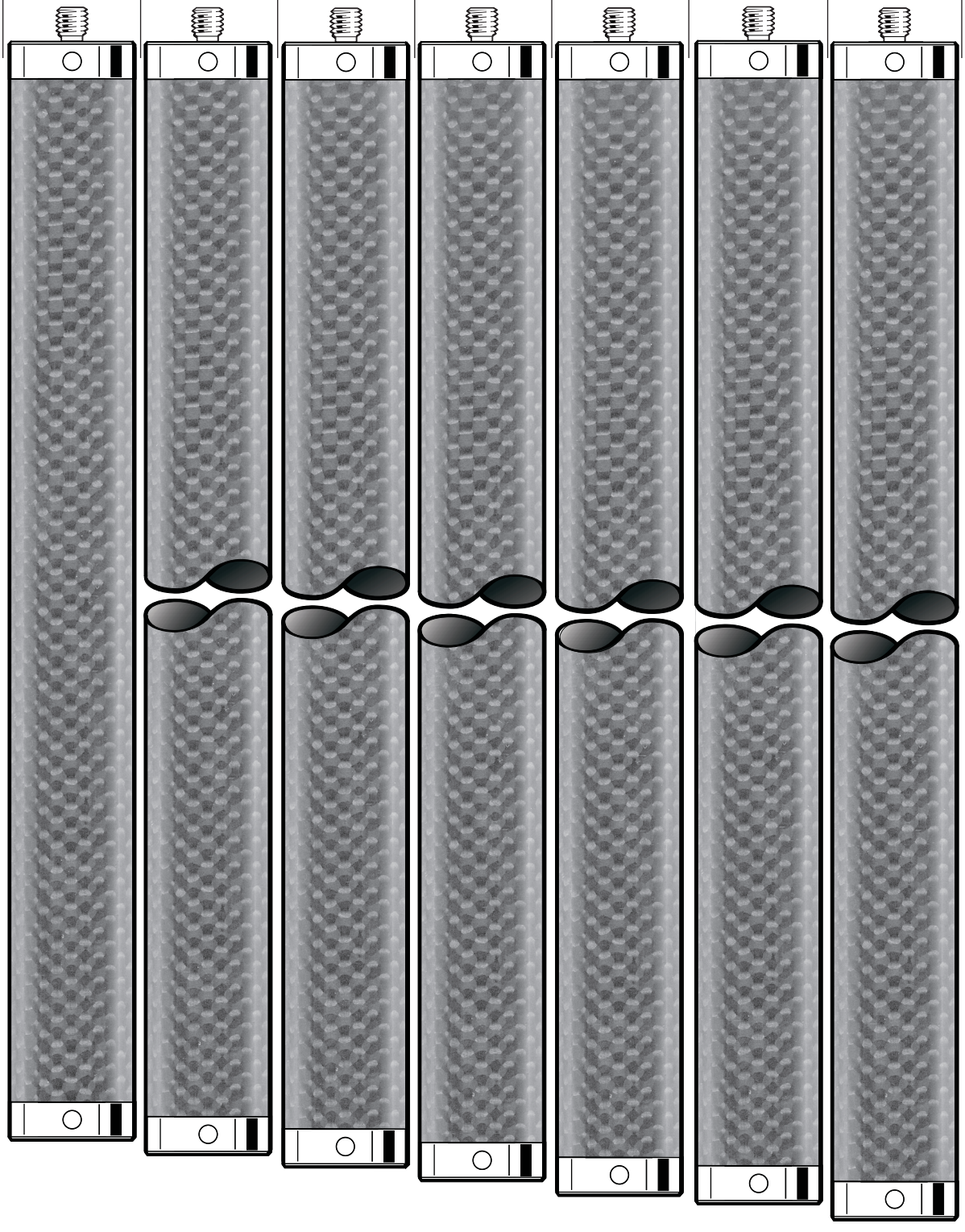
Stylus extensions – thermo stable carbon fibre stems, titanium ends (stem dia. 20 mm)

Part number	A-5555-0620	A-5555-0657	A-5555-0658	A-5555-0621	A-5555-0659	A-5555-0660	A-5555-0661
Length mm (in.)	40.0 (1.58)	50.0 (1.97)	60.0 (2.37)	80.0 (3.15)	100.0 (3.94)	120.0 (4.73)	150.0 (5.91)
Stem dia. mm (in.)	20.0 (0.79)	20.0 (0.79)	20.0 (0.79)	20.0 (0.79)	20.0 (0.79)	20.0 (0.79)	20.0 (0.79)
Mass grammes	23.8	25.1	26.5	29.3	32.1	34.9	39.0



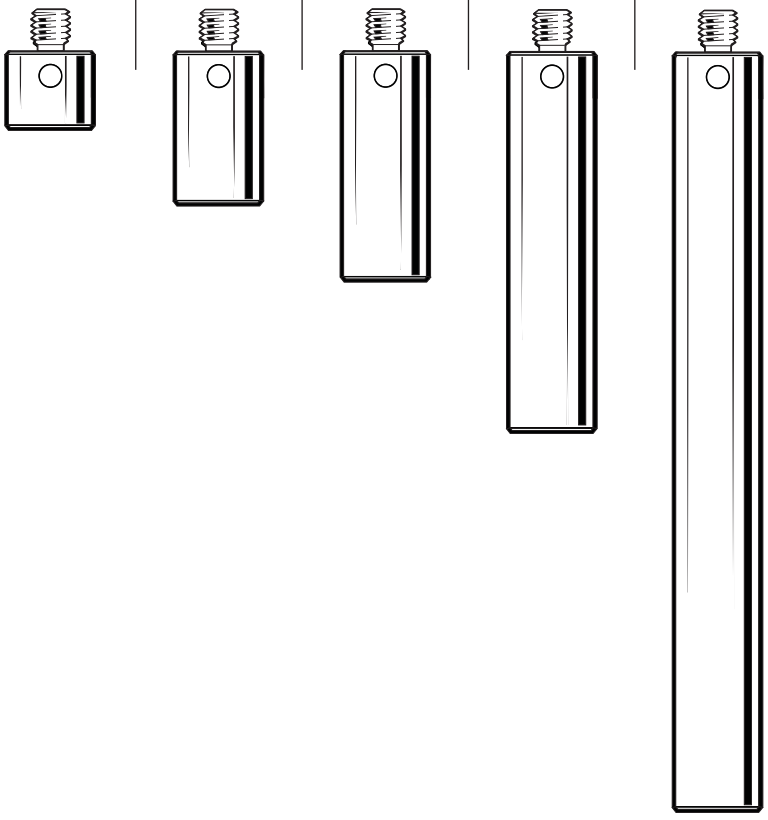
Stylus extensions – thermo stable carbon fibre stems, titanium ends (stem dia. 20 mm)

Part number	A-5555-0662	A-5555-0663	A-5555-0427	A-5555-0664	A-5555-0665	A-5555-0667	A-5555-0668
Length mm (in.)	180.0 (7.09)	200.0 (7.88)	250.0 (9.85)	300.0 (11.82)	400.0 (15.76)	500.0 (19.70)	600.0 (23.64)
Stem dia. mm (in.)	20.0 (0.79)	20.0 (0.79)	20.0 (0.79)	20.0 (0.79)	20.0 (0.79)	20.0 (0.79)	20.0 (0.79)
Mass grammes	43.2	46.0	52.9	59.9	73.8	87.7	101.5



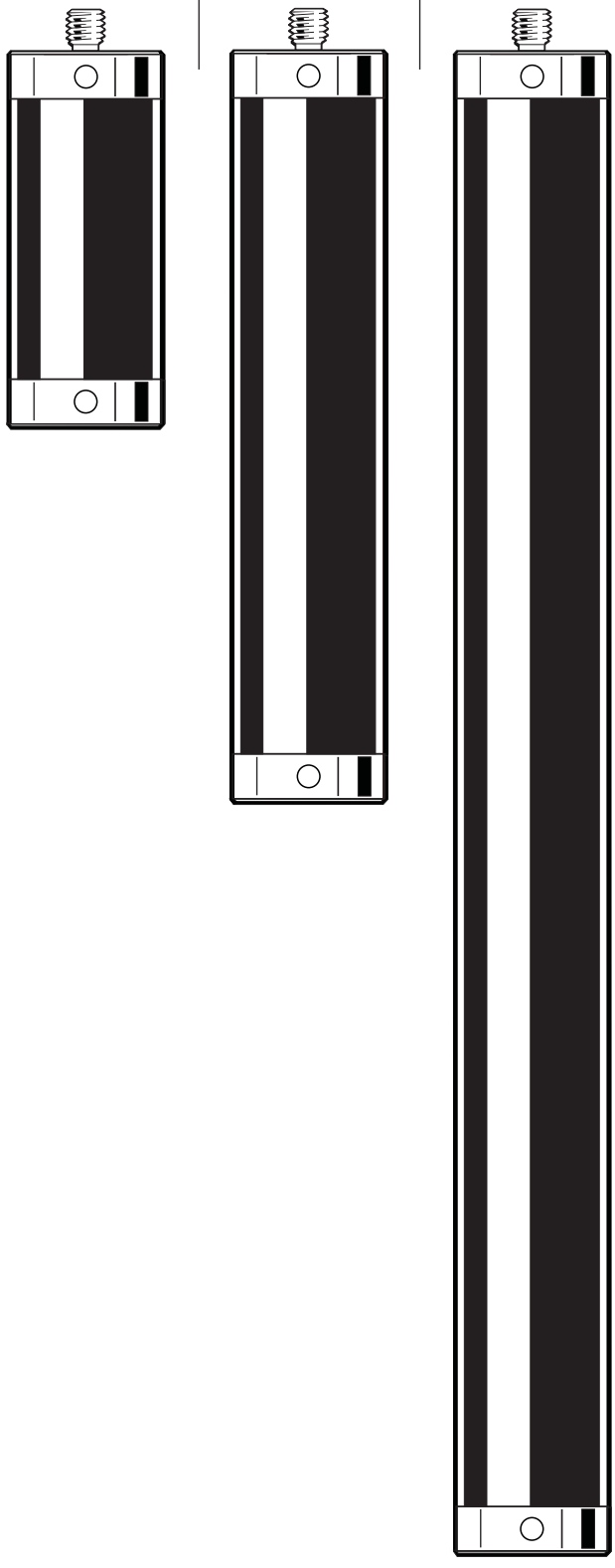
Stylus extensions – stainless steel

Part number	A-5555-0142	A-5555-0140	A-5555-0669	A-5555-0670	A-5555-0136
Length mm (in.)	10.0 (0.40)	20.0 (0.79)	30.0 (1.19)	50.0 (1.97)	100.0 (3.94)
Stem dia. mm (in.)	11.0 (0.44)	11.0 (0.44)	11.0 (0.44)	11.0 (0.44)	11.0 (0.44)
Mass grammes	6.0	13.0	20.0	34.8	73.0

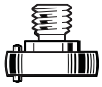
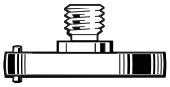
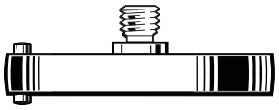
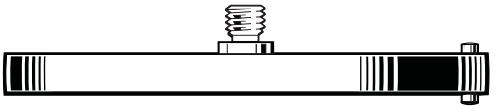


Stylus extensions – aluminium

Part number	A-5555-0671	A-5555-0127	A-5555-0125
Length mm (in.)	50.0 (1.97)	100.0 (3.94)	200.0 (7.88)
Stem dia. mm (in.)	20.0 (0.79)	20.0 (0.79)	20.0 (0.79)
Mass grammes	47.2	50.0	85.0



Disc styli – silver steel

Part number	A-5003-5288	A-5003-5289	A-5003-5290	A-5003-5291
Disc dia. mm (in.)	12.0 (0.48)	21.0 (0.83)	35.0 (1.38)	63.5 (2.51)
Disc depth mm (in.)	3.0 (0.12)	3.0 (0.12)	5.0 (0.20)	5.0 (0.20)
Roller depth mm (in.)	5.0 (0.20)	5.0 (0.20)	8.0 (0.31)	8.0 (0.31)
Mass grammes	2.52	5.23	14.0	51.0
				

Hemispherical styli – ceramic

Part number	A-5003-5275	A-5003-5276	A-5003-5277
Ball dia. mm (in.)	16.0 (0.63)	22.0 (0.87)	30.0 (1.18)
Length mm (in.)	19.5 (0.77)	20.5 (0.81)	24.5 (0.96)
Mass grammes	7.0	14.0	19.7
	