

# M5 threaded stylus range

M5 threaded  
stylus range

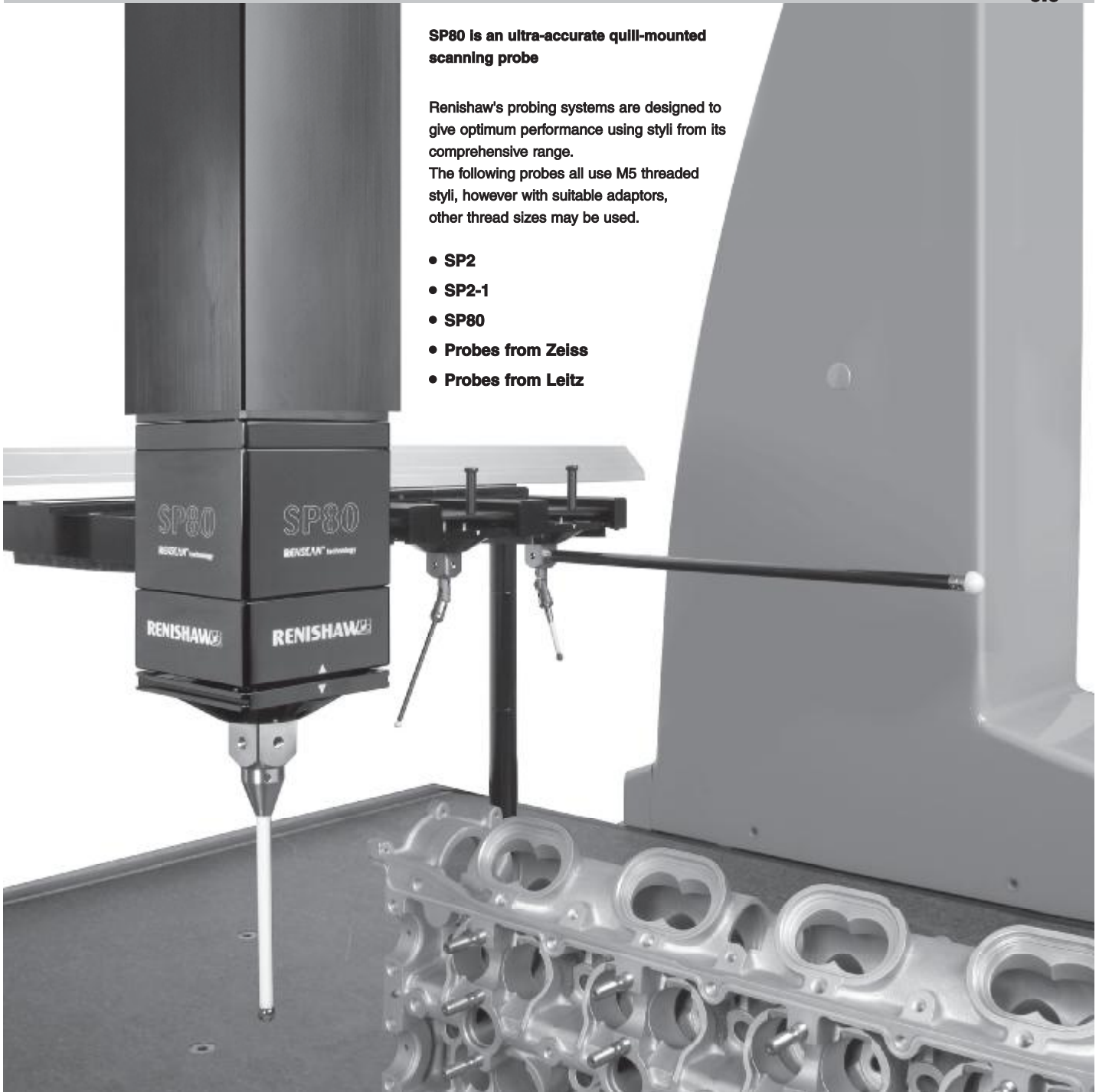
6.0

**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.

- SP2
- SP2-1
- SP80
- Probes from Zeiss
- Probes from Leitz



## Styli and accessories

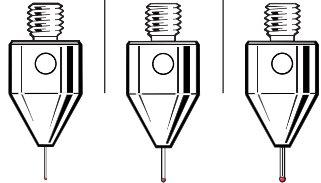
M5 threaded  
stylus range

6.1

### Ruby micro ball styli (T.C. stems)

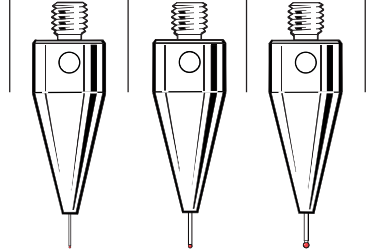
Part number	A-5003-5201	A-5003-5202	A-5003-5203
<b>A</b> Ball dia. mm (Inch)	0.3 (0.012)	0.5 (0.02)	0.7 (0.03)
<b>B</b> Length mm (Inch)	20.0 (0.79)	20.0 (0.79)	20.0 (0.79)
<b>C</b> Stem dia. mm (Inch)	0.2 (0.01)	0.4 (0.02)	0.5 (0.02)
<b>D</b> EWL* mm (Inch)	3.0 (0.12)	4.0 (0.16)	5.0 (0.20)
Mass grammes	6.5	6.5	6.5

20 mm range



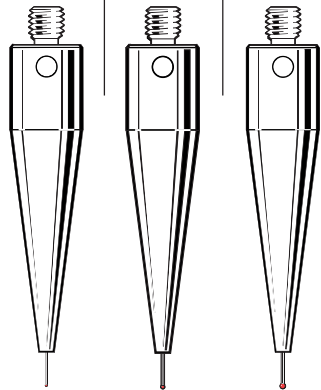
A-5003-5211	A-5003-5212	A-5003-5213
0.3 (0.012)	0.5 (0.02)	0.7 (0.03)
30.0 (1.19)	30.0 (1.19)	30.0 (1.19)
0.2 (0.01)	0.4 (0.02)	0.5 (0.02)
3.0 (0.12)	4.0 (0.16)	5.0 (0.20)
8.95	8.95	8.98

30 mm range



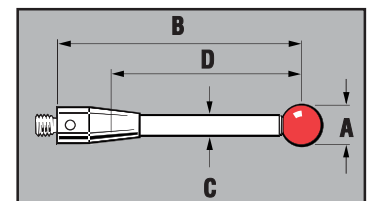
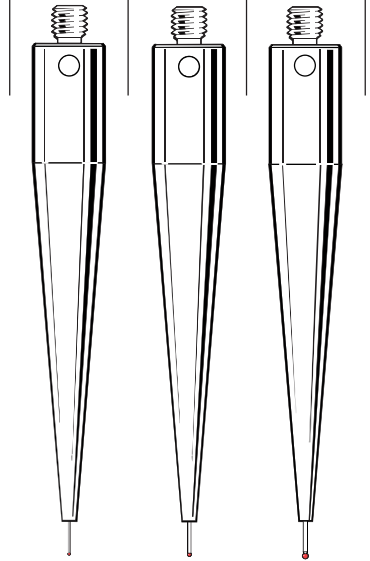
Part number	A-5003-5225	A-5003-5226	A-5003-5227
<b>A</b> Ball dia. mm (Inch)	0.3 (0.012)	0.5 (0.02)	0.7 (0.03)
<b>B</b> Length mm (Inch)	50.0 (1.97)	50.0 (1.97)	50.0 (1.97)
<b>C</b> Stem dia. mm (Inch)	0.2 (0.01)	0.4 (0.02)	0.5 (0.02)
<b>D</b> EWL* mm (Inch)	3.0 (0.12)	4.0 (0.16)	5.0 (0.20)
Mass grammes	15.79	15.79	15.79

50 mm range



A-5003-5240	A-5003-5241	A-5003-5242
0.3 (0.012)	0.5 (0.02)	0.7 (0.03)
75.0 (2.96)	75.0 (2.96)	75.0 (2.96)
0.2 (0.01)	0.4 (0.02)	0.5 (0.02)
3.0 (0.12)	4.0 (0.16)	5.0 (0.20)
23.84	23.84	23.84

75 mm range

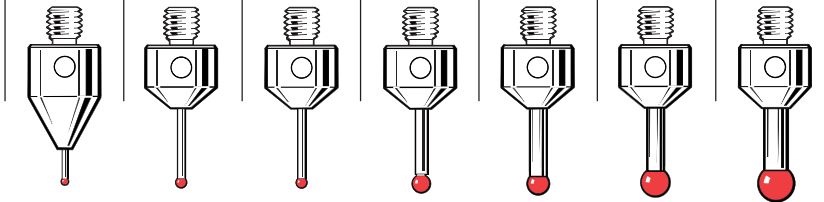


## Ruby ball styli

M5 threaded  
stylus range  
**6.2**

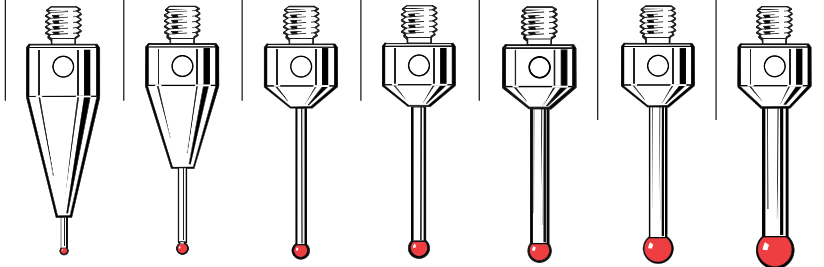
Part number	A-5003-5204	A-5003-5205	A-5003-5206	A-5003-5207	A-5003-5208	A-5003-5209	A-5003-5210
	Tungsten carbide	Tungsten carbide	Tungsten carbide	Tungsten carbide	Tungsten carbide	Tungsten carbide	Tungsten carbide
<b>A</b> Ball dia. mm (Inch)	1.0 (0.04)	1.5 (0.06)	2.0 (0.08)	2.5 (0.10)	3.0 (0.12)	4.0 (0.16)	5.0 (0.20)
<b>B</b> Length mm (Inch)	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)
<b>C</b> Stem dia. mm (Inch)	0.7 (0.03)	1.0 (0.04)	1.0 (0.04)	1.5 (0.06)	2.0 (0.08)	2.0 (0.08)	3.0 (0.12)
<b>D</b> EWL* mm (Inch)	5.0 (0.20)	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	6.52	4.68	4.70	4.84	5.12	5.19	6.06

20 mm range



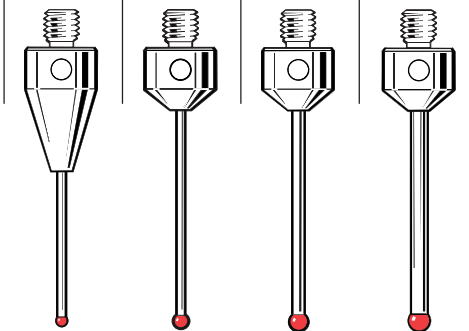
Part number	A-5003-5214	A-5003-5215	A-5003-5216	A-5003-5217	A-5003-5218	A-5003-5219	A-5003-5220
	Tungsten carbide	Tungsten carbide	Tungsten carbide	Tungsten carbide	Tungsten carbide	Tungsten carbide	Tungsten carbide
<b>A</b> Ball dia. mm (Inch)	1.0 (0.04)	1.5 (0.06)	2.0 (0.08)	2.5 (0.10)	3.0 (0.12)	4.0 (0.16)	5.0 (0.20)
<b>B</b> Length mm (Inch)	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)
<b>C</b> Stem dia. mm (Inch)	0.7 (0.03)	1.0 (0.04)	1.0 (0.04)	1.5 (0.06)	2.0 (0.08)	2.0 (0.08)	3.0 (0.12)
<b>D</b> EWL* mm (Inch)	5.0 (0.20)	12.0 (0.48)	21.0 (0.83)	21.0 (0.83)	21.0 (0.83)	21.0 (0.83)	21.0 (0.83)
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
	Tungsten carbide	Tungsten carbide	Tungsten carbide	Tungsten carbide
<b>A</b> Ball dia. mm (Inch)	1.5 (0.06)	2.0 (0.08)	2.5 (0.10)	3.0 (0.12)
<b>B</b> Length mm (Inch)	40.0 (1.58)	40.0 (1.58)	40.0 (1.58)	40.0 (1.58)
<b>C</b> Stem dia. mm (Inch)	1.0 (0.04)	1.0 (0.04)	1.5 (0.06)	2.0 (0.08)
<b>D</b> EWL* mm (Inch)	20.0 (0.79)	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



These styli are also available with specialist ball materials – see Section 7

\*Effective working length

## Styli and accessories

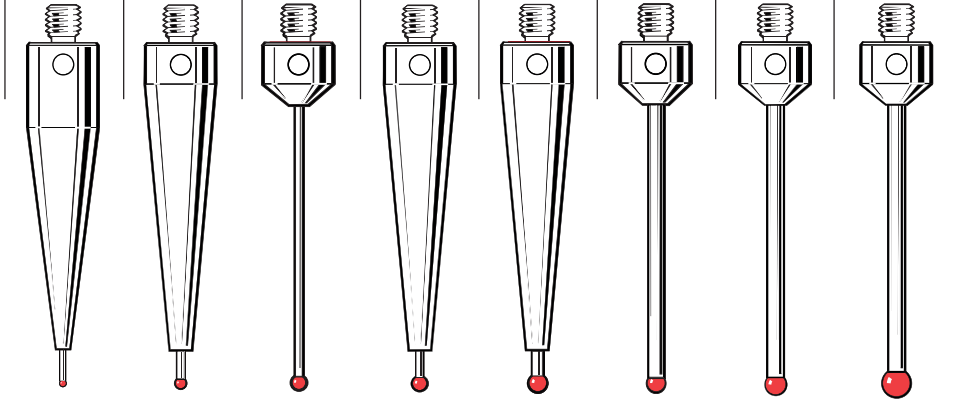
M5 threaded  
stylus range

6.3

### Ruby ball styli (<5 mm ball dia.)

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
	Tungsten carbide	Tungsten carbide	Tungsten carbide	Tungsten carbide	Tungsten carbide	Tungsten carbide	Tungsten carbide	Tungsten carbide
<b>A</b> Ball dia. mm (Inch)	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>B</b> Length mm (Inch)	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)
<b>C</b> Stem dia. mm (In.)	0.7 (0.03)	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)
<b>D</b> EWL* mm (Inch)	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)	41.0 (1.62)
Mass grammes	15.81	14.82	5.05	14.85	14.94	6.48	6.50	6.55

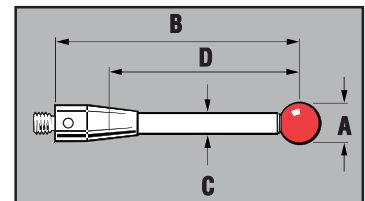
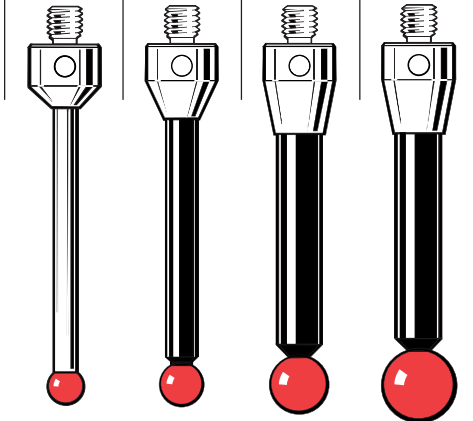
50 mm range



### Ruby ball styli (>5 mm ball dia.)

Part number	A-5003-5236	A-5003-5237	A-5003-5238	A-5003-5239
	Tungsten carbide	Carbon fibre	Carbon fibre	Carbon fibre
<b>A</b> Ball dia. mm (Inch)	5.0 (0.20)	6.0 (0.24)	8.0 (0.32)	10.0 (0.40)
<b>B</b> Length mm (Inch)	50.0 (1.97)	50.0 (1.97)	50.0 (1.97)	50.0 (1.97)
<b>C</b> Stem dia. mm (Inch)	3.0 (0.12)	4.0 (0.16)	6.0 (0.24)	6.0 (0.24)
<b>D</b> EWL* mm (Inch)	41.0 (1.62)	39.0 (1.54)	37.0 (1.46)	37.0 (1.46)
Mass grammes	9.19	6.10	7.96	8.91

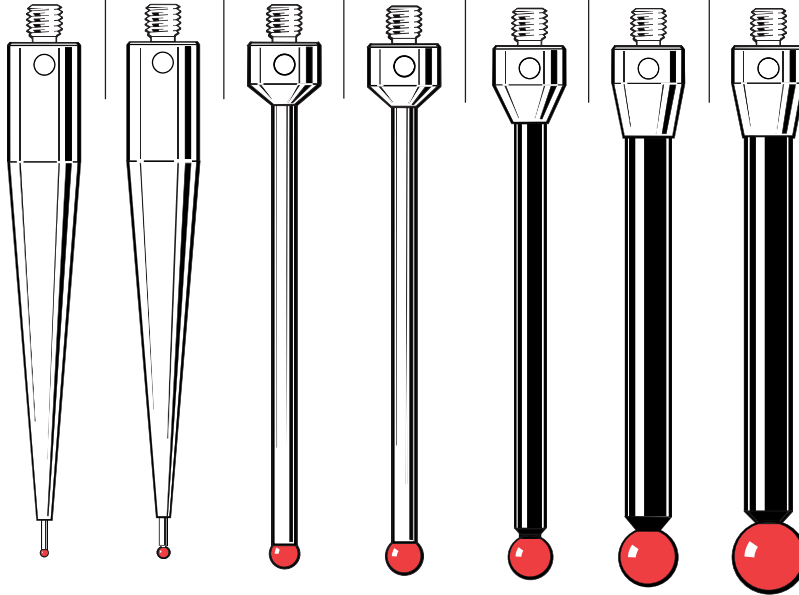
50 mm range



**Ruby ball styli (1 mm – 10 mm ball dia.)**

Part number	A-5003-5243	A-5003-5244	A-5003-5248	A-5003-5249	A-5003-5250	A-5003-5251	A-5003-5252
	Tungsten carbide	Tungsten carbide	Tungsten carbide	Tungsten carbide	Carbon fibre	Carbon fibre	Carbon fibre
<b>A</b> Ball dia. mm (inch)	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>B</b> Length mm (inch)	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)
<b>C</b> Stem dia. mm (inch)	0.7 (0.03)	1.0 (0.04)	3.0 (0.12)	3.0 (0.12)	4.0 (0.16)	6.0 (0.24)	6.0 (0.24)
<b>D</b> EWL* mm (inch)	5.0 (0.20)	5.0 (0.20)	65.0 (2.56)	65.0 (2.56)	64.0 (2.52)	62.0 (2.45)	62.0 (2.45)
Mass grammes	23.86	23.90	11.61	11.80	6.59	9.06	10.01

75 mm range



M5 threaded  
stylus range

6.4

These styli are also available with specialist ball materials – see Section 7

\*Effective working length

## Styli and accessories

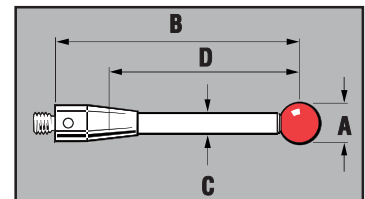
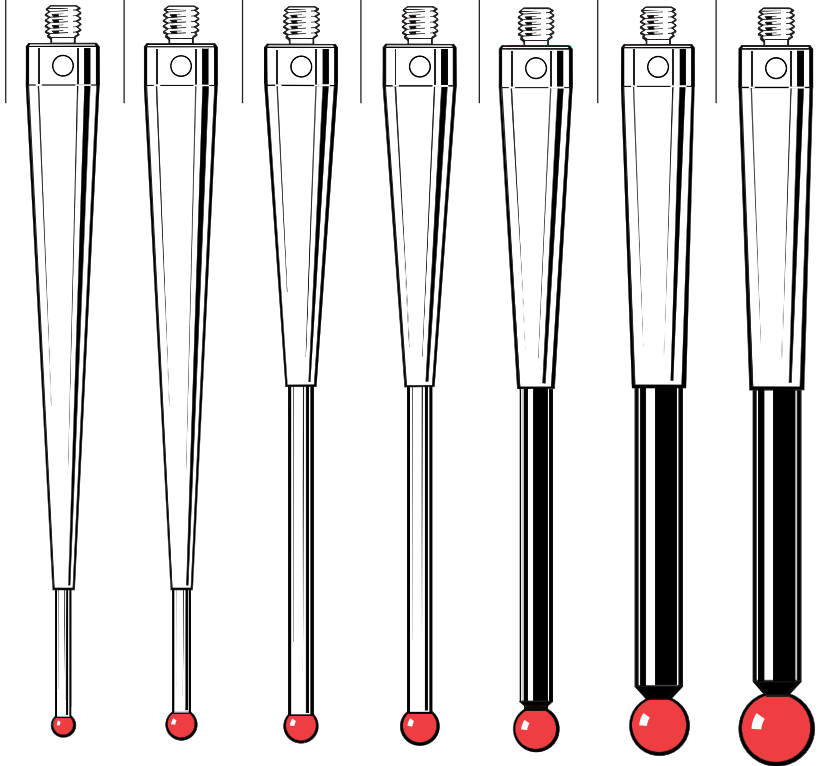
### Ruby ball styli ( $\leq 50$ mm EWL)

M5 threaded  
stylus range

6.5

Part number	A-5003-5253	A-5003-5255	A-5003-5256	A-5003-5257	A-5003-5259	A-5003-5261	A-5003-5263
	Tungsten carbide	Tungsten carbide	Tungsten carbide	Tungsten carbide	Carbon fibre	Carbon fibre	Carbon fibre
<b>A</b> Ball dia. mm (Inch)	3.0 (0.12)	4.0 (0.16)	4.0 (0.16)	5.0 (0.20)	6.0 (0.24)	8.0 (0.32)	10.0 (0.40)
<b>B</b> Length mm (Inch)	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)
<b>C</b> Stem dia. mm (Inch)	2.0 (0.08)	2.0 (0.08)	3.0 (0.12)	3.0 (0.12)	4.0 (0.16)	6.0 (0.24)	6.0 (0.24)
<b>D</b> EWL* mm (Inch)	20.0 (0.79)	20.0 (0.79)	50.0 (1.97)	50.0 (1.97)	50.0 (1.97)	50.0 (1.97)	50.0 (1.97)
Mass grammes	25.71	25.75	23.07	23.31	19.66	22.97	23.91

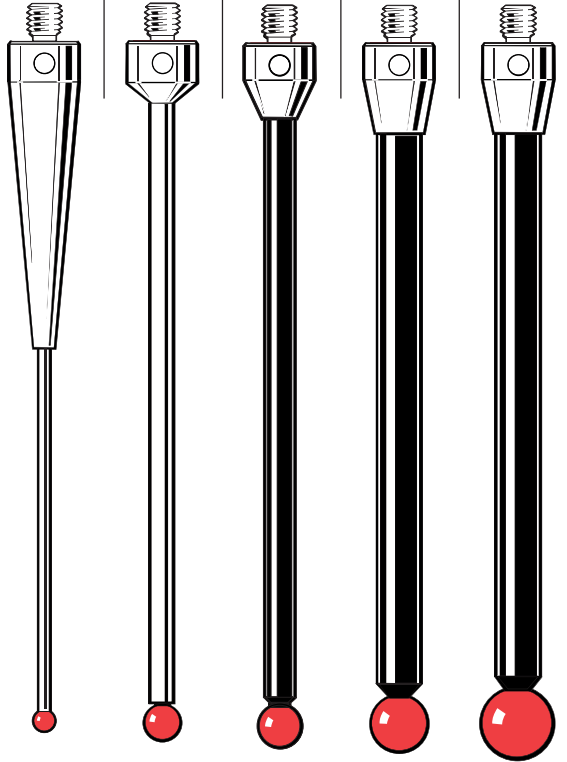
100 mm range



**Ruby ball styli (>50 mm EWL)**

Part number	A-5003-5254	A-5003-5258	A-5003-5260	A-5003-5262	A-5003-5264
	Tungsten carbide	Tungsten carbide	Carbon fibre	Carbon fibre	Carbon fibre
<b>A</b> Ball dia. mm (inch)	3.0 (0.12)	5.0 (0.20)	6.0 (0.24)	8.0 (0.32)	10.0 (0.40)
<b>B</b> Length mm (inch)	100.0 (3.94)	100.0 (3.94)	100.0 (3.94)	100.0 (3.94)	100.0 (3.94)
<b>C</b> Stem dia. mm (inch)	1.5 (0.06)	3.0 (0.12)	4.0 (0.16)	6.0 (0.24)	6.0 (0.24)
<b>D</b> EWL* mm (inch)	55.0 (2.17)	91.0 (3.59)	89.0 (3.51)	87.0 (3.43)	87.0 (3.43)
Mass grammes	16.30	14.40	7.08	10.17	11.11

100 mm range



M5 threaded  
 stylus range

6.6

These styli are also available with specialist ball materials – see Section 7

\*Effective working length

## Styli and accessories

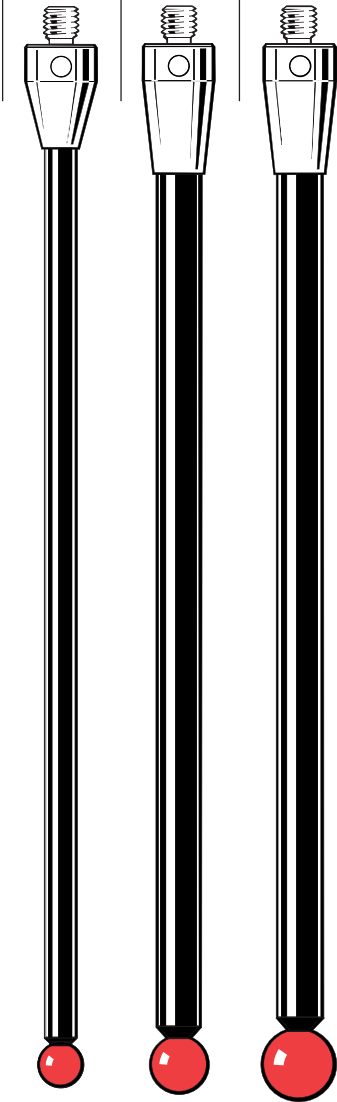
M5 threaded  
stylus range

6.7

### Ruby ball styli (carbon fibre stems)

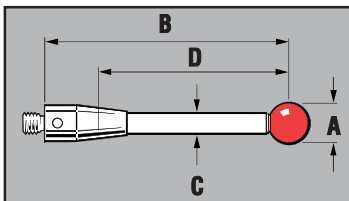
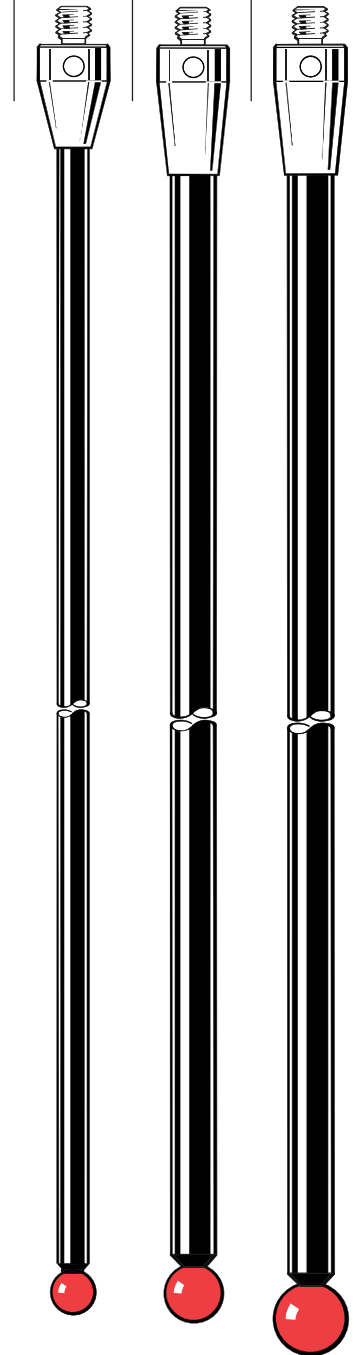
Part number	A-5003-5265	A-5003-5266	A-5003-5267
<b>A</b> Ball dia. mm (Inch)	6.0 (0.24)	8.0 (0.32)	10.0 (0.40)
<b>B</b> Length mm (Inch)	150.0 (5.91)	150.0 (5.91)	150.0 (5.91)
<b>C</b> Stem dia. mm (Inch)	4.0 (0.16)	6.0 (0.24)	6.0 (0.24)
<b>D</b> EWL* mm (Inch)	120.0 (4.73)	120.0 (4.73)	120.0 (4.73)
Mass grammes	9.09	13.71	14.66

150 mm range



200 mm range

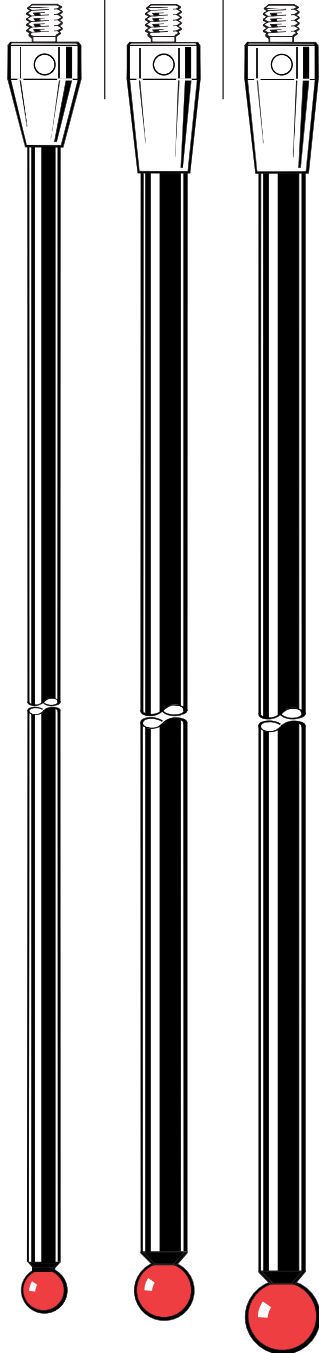
A-5003-5268	A-5003-5269	A-5003-5270
6.0 (0.24)	8.0 (0.32)	10.0 (0.40)
200.0 (7.88)	200.0 (7.88)	200.0 (7.88)
4.0 (0.16)	6.0 (0.24)	6.0 (0.24)
180.0 (7.09)	180.0 (7.09)	180.0 (7.09)
10.07	15.92	16.87



**Ruby ball styli (carbon fibre stems)**

Part number	A-5003-5271	A-5003-5272	A-5003-5273
<b>A</b> Ball dia. mm (Inch)	6.0 (0.24)	8.0 (0.32)	10.0 (0.40)
<b>B</b> Length mm (Inch)	300.0 (11.82)	300.0 (11.82)	300.0 (11.82)
<b>C</b> Stem dia. mm (Inch)	4.0 (0.16)	6.0 (0.24)	6.0 (0.24)
<b>D</b> EWL* mm (Inch)	280.0 (11.03)	280.0 (11.03)	280.0 (11.03)
Mass grammes	12.02	20.33	21.28

**300 mm range**



M5 threaded  
stylus range

**6.8**

\*Effective working length

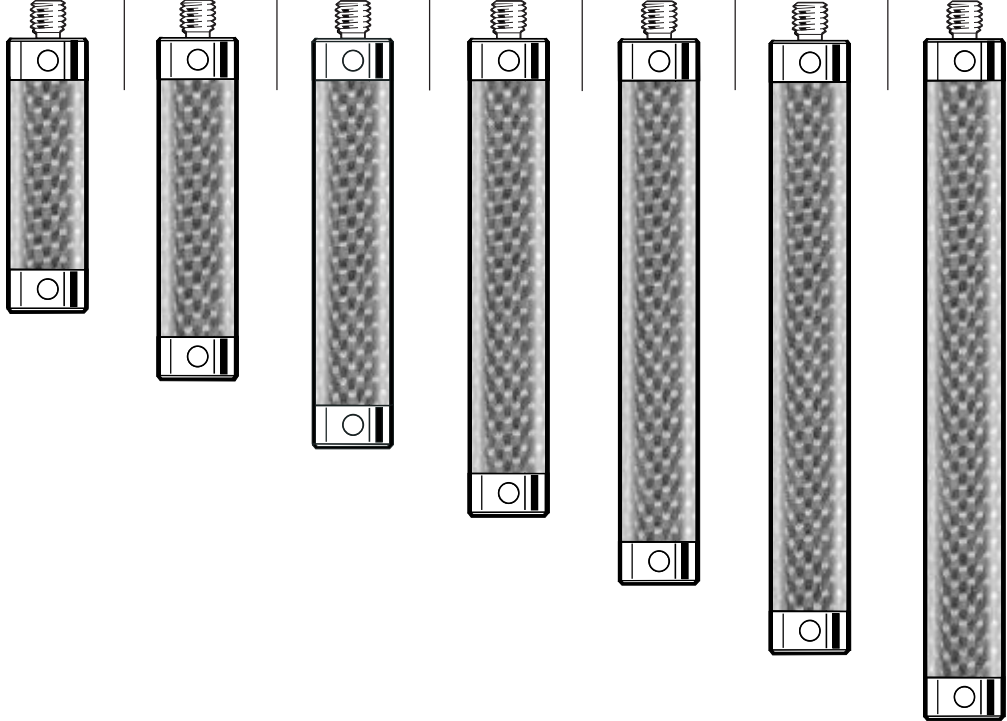
## Styli and accessories

M5 threaded  
stylus range

6.9

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

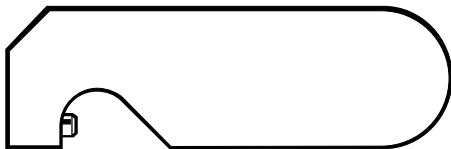
Part number	A-5003-4953	A-5003-4954	A-5003-4955	A-5003-4956	A-5003-4957	A-5003-4958	A-5003-4959
Length mm (Inch)	40.0 (1.58)	50.0 (1.97)	60.0 (2.37)	70.0 (2.76)	80.0 (3.15)	90.0 (3.55)	100.0 (3.94)
Stem dia. mm (Inch)	11.0 (0.44)	11.0 (0.44)	11.0 (0.44)	11.0 (0.44)	11.0 (0.44)	11.0 (0.44)	11.0 (0.44)
Mass grammes	7.6	8.3	9.0	9.7	10.4	11.1	11.8



### M5 extension tools

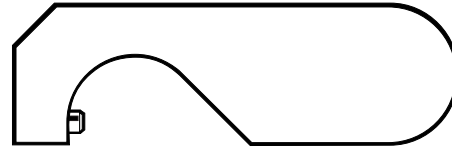
#### A-5003-6134

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



#### A-5003-6135

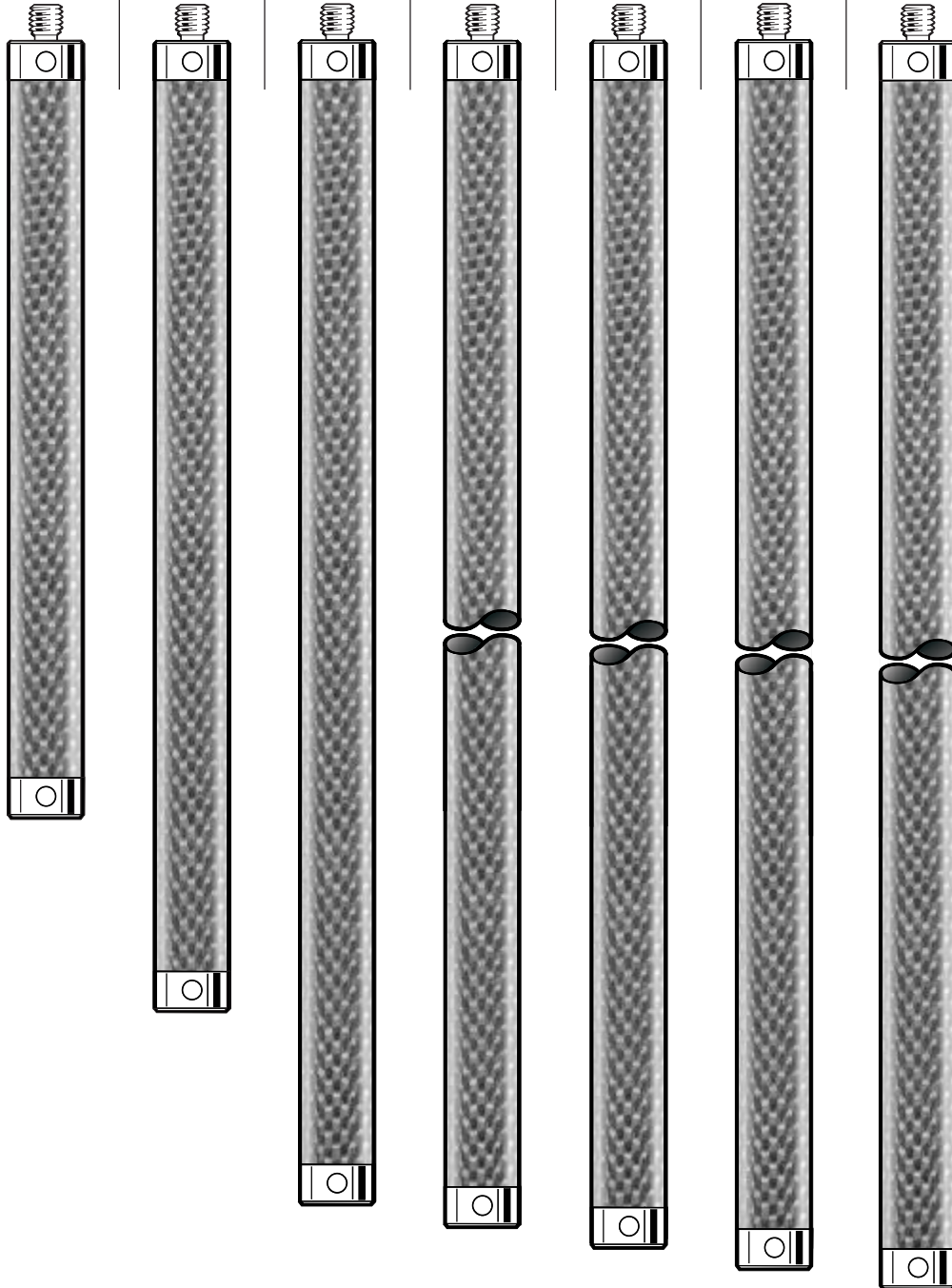
For M5 threaded extensions with  
20 mm (0.79 in) stem diameter



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

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

Part number	A-5003-4960	A-5003-4961	A-5003-4962	A-5003-4963	A-5003-4964	A-5003-4965	A-5003-4966
Length mm (Inch)	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 (Inch)	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



M5 threaded  
stylus range  
**6.10**

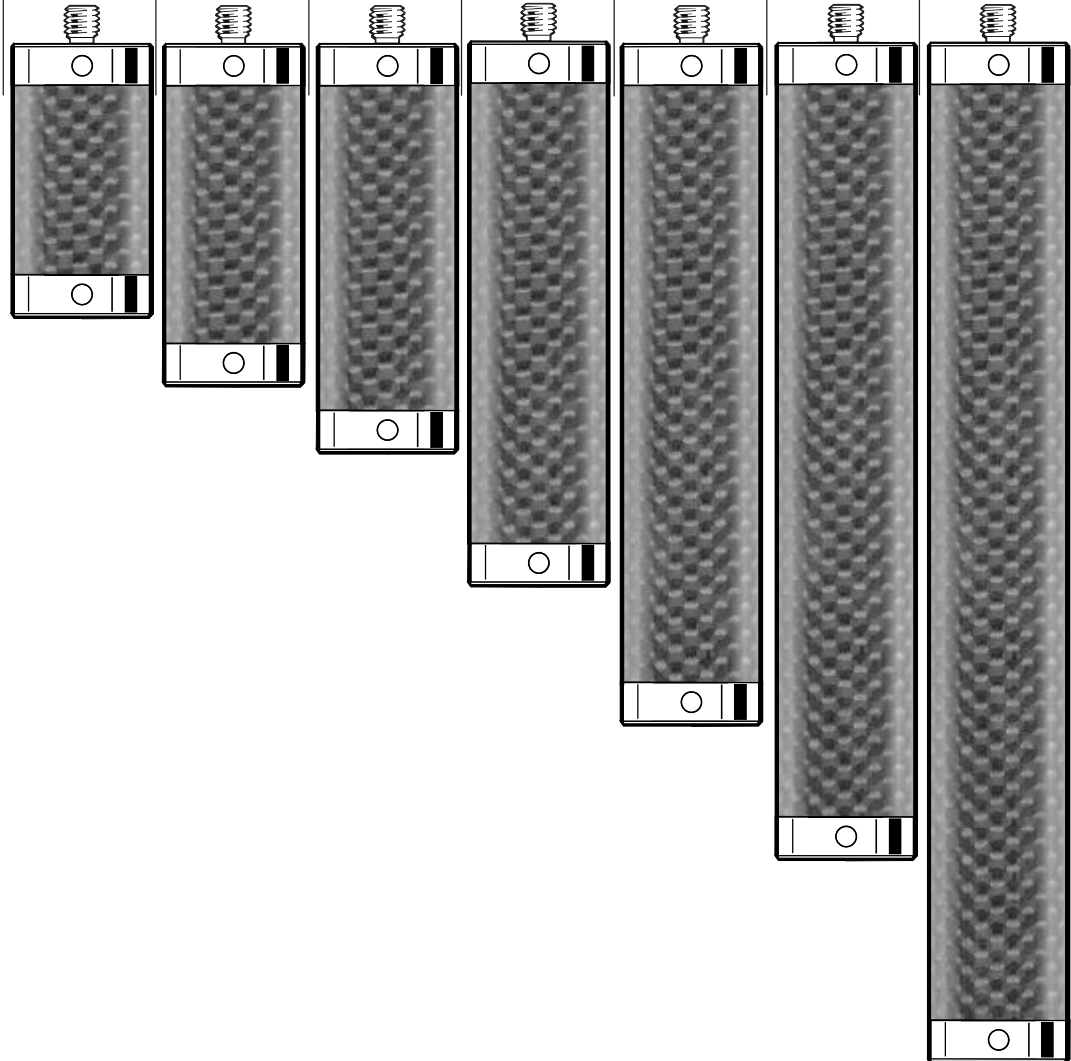
## Styli and accessories

M5 threaded  
stylus range

6.11

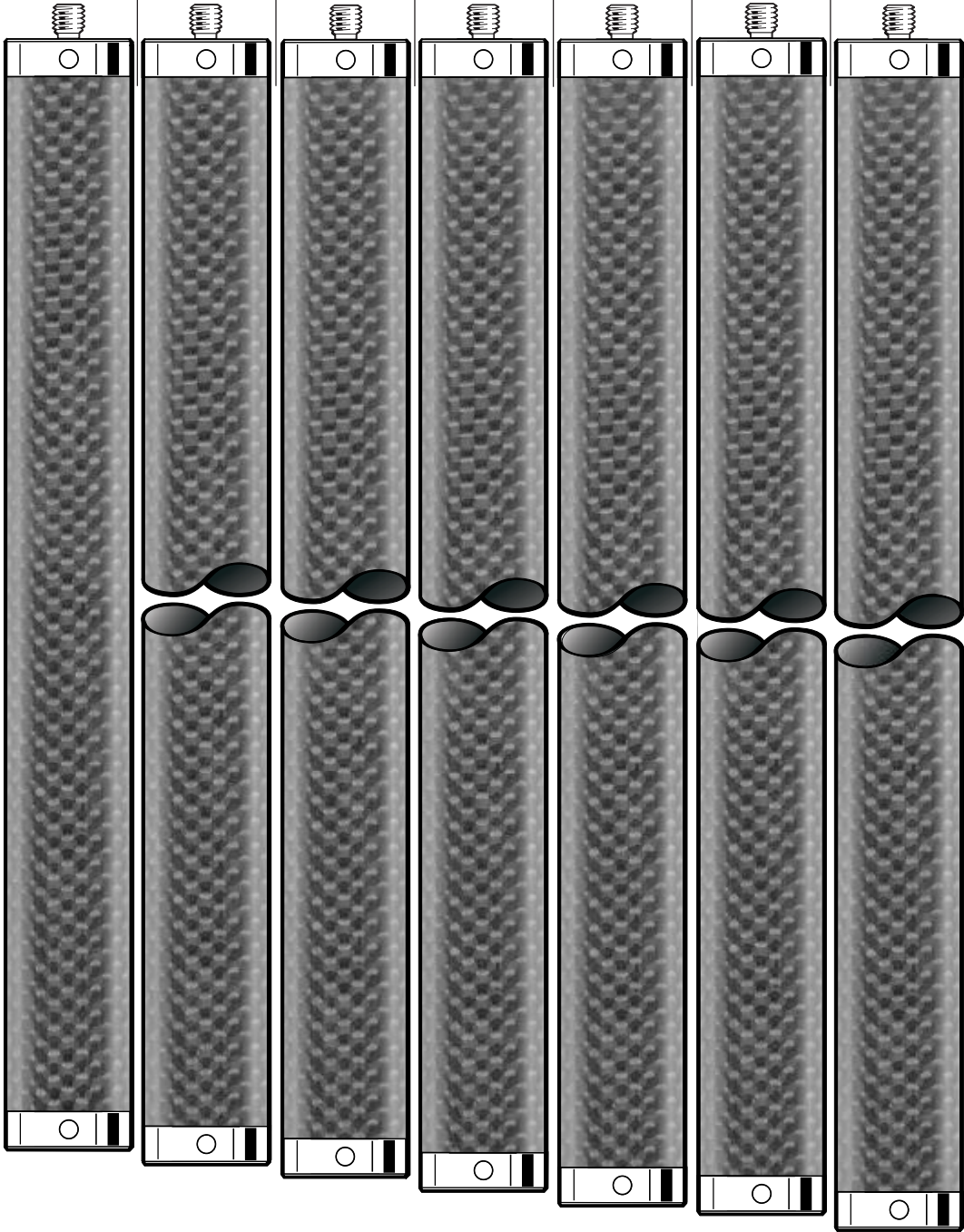
### Stylus extensions – carbon fibre stems, titanium ends (stem dia. 20 mm)

Part number	A-5003-4993	A-5003-4994	A-5003-4995	A-5003-4996	A-5003-4997	A-5003-4998	A-5003-4999
Length mm (inch)	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 (inch)	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 – carbon fibre stems, titanium ends (stem dia. 20 mm)**

Part number	A-5003-5000	A-5003-5001	A-5003-5002	A-5003-5003	A-5003-5004	A-5003-5005	A-5003-5006
Length mm (inch)	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 (inch)	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

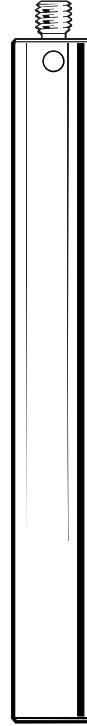
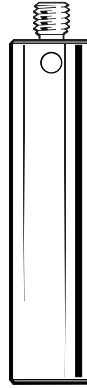
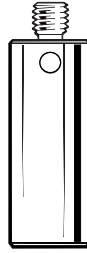
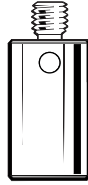


M5 threaded  
stylus range  
**6.12**

## Styli and accessories

### Stylus extensions – stainless steel

Part number	A-5003-0839	A-5003-0840	A-5003-5282	A-5003-5283	A-5003-0844
Length mm (inch)	10.0 (0.40)	20.0 (0.79)	30.0 (1.19)	50.0 (1.97)	100.0 (3.94)
Stem dia. mm (inch)	11.0 (0.44)	11.0 (0.44)	11.0 (0.44)	11.0 (0.44)	11.0 (0.44)
Mass grammes	6.4	13.2	20.0	34.8	72.9

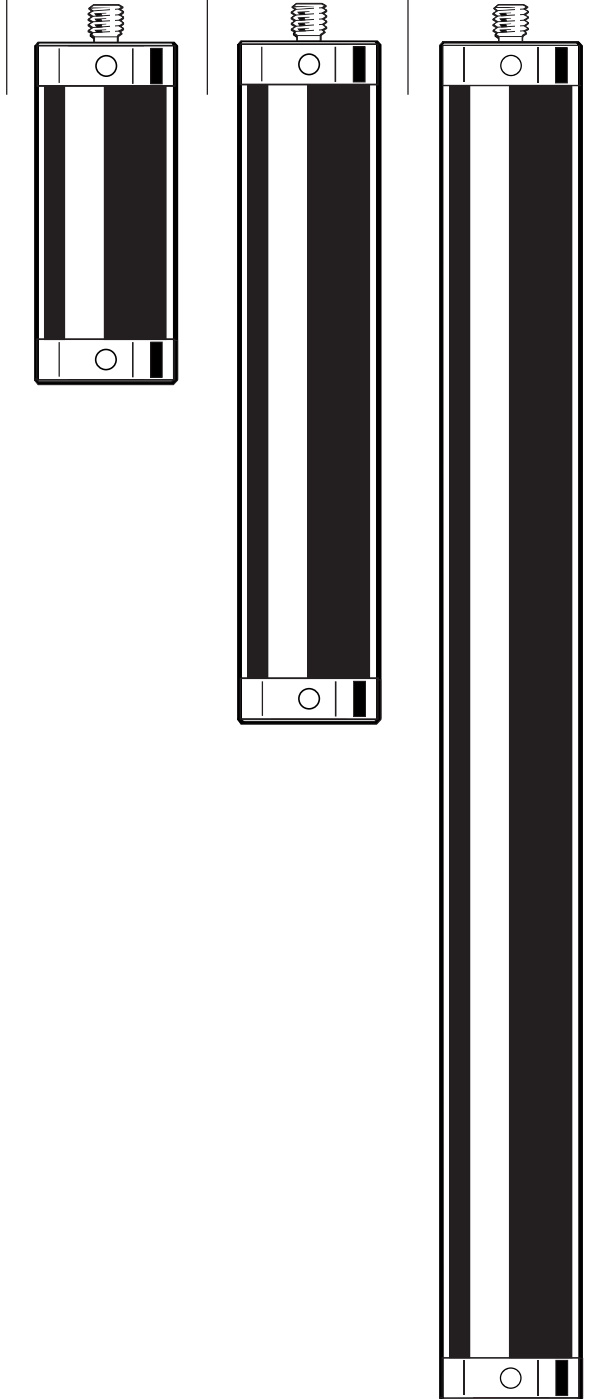


M5 threaded  
stylus range

6.13

**Stylus extensions – aluminium**

Part number	A-5003-5285	A-5003-0831	A-5003-0833
Length mm (inch)	50.0 (1.97)	100.0 (3.94)	200.0 (7.88)
Stem dia. mm (inch)	20.0 (0.79)	20.0 (0.79)	20.0 (0.79)
Mass grammes	47.2	67.6	110.3




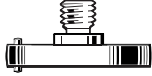
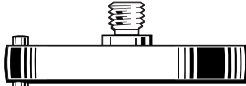
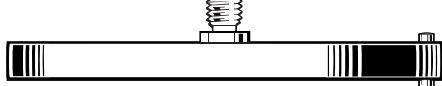
M5 threaded  
stylus range  
**6.14**

## Styli and accessories

M5 threaded  
stylus range

6.15

### Disc styli

Part number	A-5003-5288	A-5003-5289	A-5003-5290	A-5003-5291
	Silver steel	Silver steel	Silver steel	Silver steel
Disc dia. mm (Inch)	12.0 (0.48)	21.0 (0.83)	35.0 (1.38)	63.5 (2.51)
Disc depth mm (Inch)	3.0 (0.12)	3.0 (0.12)	5.0 (0.20)	5.0 (0.20)
Roller depth mm (Inch)	5.0 (0.20)	5.0 (0.20)	8.0 (0.32)	8.0 (0.32)
Mass grammes	2.52	5.23	14.00	51.00
				

### Hemispherical styli

Part number	A-5003-5275	A-5003-5276	A-5003-5277
	Ceramic	Ceramic	Ceramic
Ball dia. mm (Inch)	16.0 (0.63)	22.0 (0.87)	30.0 (1.19)
Length mm (Inch)	19.5 (0.77)	20.5 (0.89)	24.5 (0.97)
Mass grammes	7.0	10.0	15.5
	