

# M2 threaded stylus range

## Ruby ball styli (stainless steel stems)

Part number	A-5000-7806	A-5000-7802	A-5000-7807	A-5000-7803	A-5000-3604	A-5000-4154	A-5000-4155	A-5000-4156	A-5000-4158
A 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)	6.0 (0.24)	8.0 (0.32)
B Length mm (inch)	10.0 (0.40)	10.0 (0.40)	10.0 (0.40)	10.0 (0.40)	10.0 (0.40)	10.0 (0.40)	10.0 (0.40)	10.0 (0.40)	11.0 (0.44)
C Stem dia. mm (in.)	0.7 (0.03)	0.7 (0.03)	1.0 (0.04)	1.0 (0.04)	1.5 (0.06)	1.5 (0.06)	2.5 (0.10)	2.5 (0.10)	2.5 (0.10)
D EWL* mm (inch)	4.5 (0.18)	4.5 (0.18)	6.0 (0.24)	6.0 (0.24)	7.5 (0.30)	10.0 (0.40)	10.0 (0.40)	10.0 (0.40)	11.0 (0.44)
Mass grammes	0.3	0.3	0.3	0.3	0.4	0.4	0.7	0.9	1.

10 mm range

Part number	A-5000-3603	A-5000-7804	A-5000-4160	A-5000-4161
A Ball dia. mm (inch)	2.0 (0.08)	2.5 (0.10)	3.0 (0.12)	4.0 (0.16)
B Length mm (inch)	20.0 (0.79)	20.0 (0.79)	20.0 (0.79)	20.0 (0.79)
C Stem dia. mm (in.)	1.4 (0.06)	1.4 (0.06)	1.5 (0.06)	1.5 (0.06)
D EWL* mm (inch)	14.0 (0.56)	14.0 (0.56)	17.5 (0.69)	20.0 (0.79)
Mass grammes	0.4	0.4	0.5	0.6

20 mm range

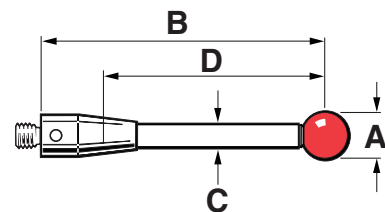
## Ruby ball styli (tungsten carbide stems)

Part number	A-5000-7800	A-5000-7805	A-5000-7801	A-5003-1325
A Ball dia. mm (inch)	0.3 (0.012)	0.5 (0.02)	0.7 (0.03)	1.0 (0.04)
B Length mm (inch)	10.0 (0.40)	10.0 (0.40)	10.0 (0.40)	10.0 (0.40)
C Stem dia. mm (in.)	0.2 (0.01)	0.4 (0.02)	0.5 (0.02)	0.7 (0.03)
D EWL* mm (inch)	2.0 (0.08)	3.0 (0.12)	4.0 (0.16)	4.0 (0.16)
Mass grammes	0.3	0.3	0.3	0.3

10 mm range

Part number	A-5003-1345	A-5003-0577	A-5000-7808	A-5003-0033	A-5003-0034
A Ball dia. mm (inch)	0.5 (0.02)	0.7 (0.03)	1.0 (0.04)	1.0 (0.04)	1.5 (0.06)
B Length mm (inch)	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.)	0.3 (0.02)	0.5 (0.02)	0.7 (0.03)	0.8 (0.04)	1.0 (0.04)
D EWL* mm (inch)	7.0 (0.28)	12.0 (0.48)	7.0 (0.28)	12.5 (0.50)	12.5 (0.50)
Mass grammes	0.48	0.32	0.50	0.41	0.50

20 mm range



\* Effective working length

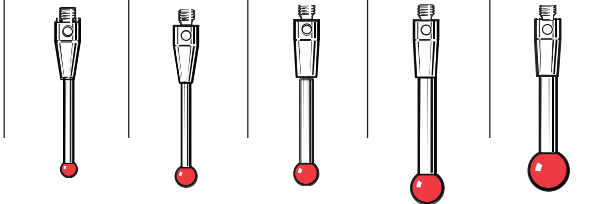
## M2 styli

### Ruby ball styli (tungsten carbide stems) – continued

Part number A-5003-3822 A-5003-1896 A-5003-0938 A-5003-1029 A-5003-0046

	A-5003-3822	A-5003-1896	A-5003-0938	A-5003-1029	A-5003-0046
<b>A</b> Ball dia. mm (inch)	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)	22.0 (0.87)	20.0 (0.79)
<b>C</b> Stem dia. mm (in.)	1.0 (0.04)	1.0 (0.04)	1.5 (0.06)	2.0 (0.08)	2.5 (0.10)
<b>D</b> EWL* mm (inch)	12.0 (0.48)	15.5 (0.62)	20.0 (0.79)	22.0 (0.87)	20.0 (0.79)
Mass grammes	0.48	0.50	0.77	1.24	1.98

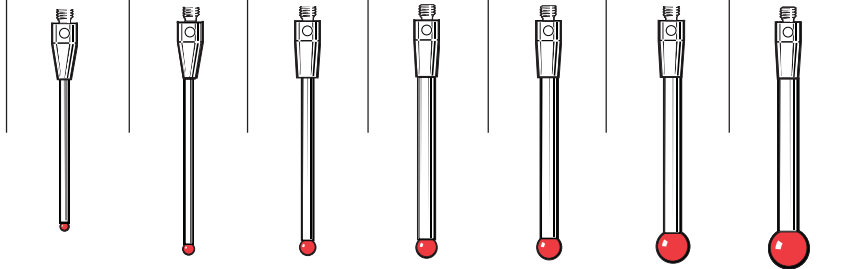
20 mm range



Part number A-5000-8663 A-5003-0035 A-5003-0036 A-5003-0038 A-5003-0040 A-5003-0043 A-5003-0047

	A-5000-8663	A-5003-0035	A-5003-0036	A-5003-0038	A-5003-0040	A-5003-0043	A-5003-0047
<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)	27.0 (1.07)	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 (in.)	0.7 (0.03)	1.0 (0.04)	1.5 (0.06)	2.0 (0.08)	2.0 (0.08)	2.0 (0.08)	2.5 (0.10)
<b>D</b> EWL* mm (inch)	20.5 (0.81)	25.0 (0.99)	25.0 (0.99)	25.0 (0.99)	25.0 (0.99)	30.0 (1.19)	30.0 (1.19)
Mass grammes	0.40	0.58	0.99	1.48	1.49	1.57	2.57

30 mm range

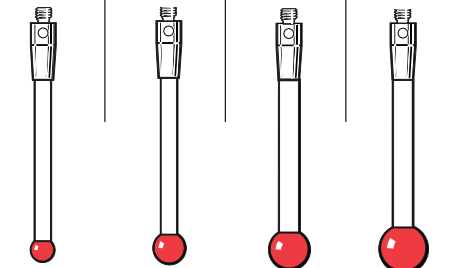


### Ruby ball styli (ceramic stems)

Part number A-5003-4177 A-5003-1370 A-5003-4779 A-5003-4780

	A-5003-4177	A-5003-1370	A-5003-4779	A-5003-4780
<b>A</b> Ball dia. mm (in)	3.0 (0.12)	4.0 (0.16)	5.0 (0.20)	6.0 (0.24)
<b>B</b> Length mm (in)	30.0 (1.19)	30.0 (1.19)	30.0 (1.19)	30.0 (1.19)
<b>C</b> Stem dia mm (in)	2.0 (0.08)	2.0 (0.08)	2.5 (0.10)	2.5 (0.10)
<b>D</b> EWL* mm (in)	27.5 (1.09)	30.0 (1.19)	30.0 (1.19)	30.0 (1.19)
Mass grammes	0.44	0.68	0.93	1.11

30 mm range

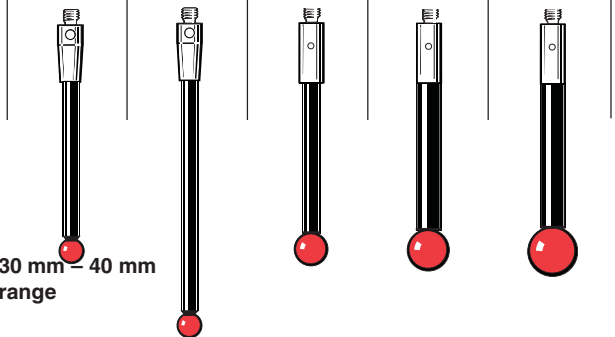


### Ruby ball styli (carbon fiber stems)

A-5003-3584 A-5003-3877 A-5003-4241 A-5003-4781 A-5003-4782

	A-5003-3584	A-5003-3877	A-5003-4241	A-5003-4781	A-5003-4782
Ball dia. mm (in)	3.0 (0.12)	3.0 (0.12)	4.0 (0.16)	5.0 (0.20)	6.0 (0.24)
Length mm (in)	30.0 (1.19)	40.0 (1.58)	30.0 (1.19)	30.0 (1.19)	30.0 (1.19)
Stem dia mm (in)	2.0 (0.08)	2.0 (0.08)	2.0 (0.08)	3.0 (0.12)	3.0 (0.12)
EWL* mm (in)	27.0 (1.06)	36.0 (1.42)	30.0 (1.19)	30.0 (1.19)	30.0 (1.19)
Mass grammes	0.40	0.50	0.57	0.79	0.96

30 mm – 40 mm range



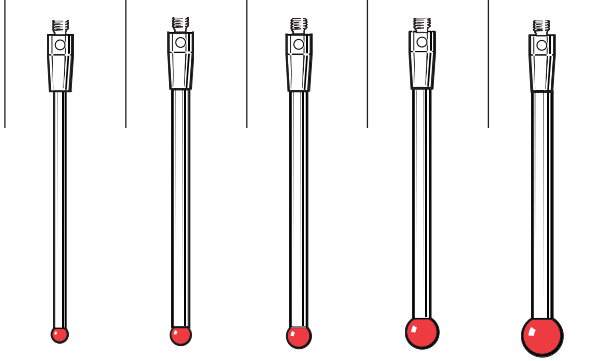
\* Effective working length

## Ruby ball styli (tungsten carbide stems)

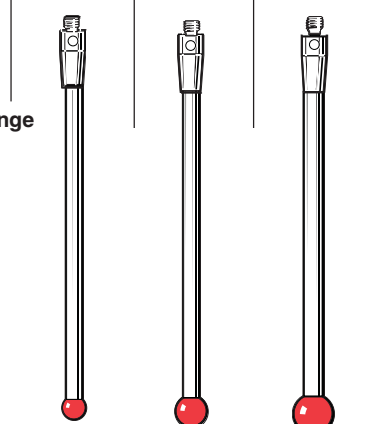
Part number	A-5003-0037	A-5003-0039	A-5003-0041	A-5003-0044	A-5003-0048	A-5003-0042	A-5003-0045	A-5003-0049	
A	Ball dia. mm (inch)	2.0 (0.08)	2.5 (0.10)	3.0 (0.12)	4.0 (0.16)	5.0 (0.20)	3.0 (0.12)	4.0 (0.16)	5.0 (0.20)
B	Length mm (inch)	40.0 (1.58)	40.0 (1.58)	40.0 (1.58)	40.0 (1.58)	40.0 (1.58)	50.0 (1.97)	50.0 (1.97)	50.0 (1.97)
C	Stem dia. mm (in.)	1.5 (0.06)	2.0 (0.08)	2.0 (0.08)	2.0 (0.08)	2.5 (0.10)	2.0 (0.08)	2.0 (0.08)	2.5 (0.10)
D	EWL* mm (inch)	35.0 (1.38)	35.0 (1.38)	35.0 (1.38)	40.0 (1.58)	40.0 (1.58)	42.5 (1.68)	50.0 (1.97)	50.0 (1.97)
	Mass grammes	1.29	1.95	1.97	2.04	3.17	2.44	2.52	3.75

**40 mm range**



**50 mm range**

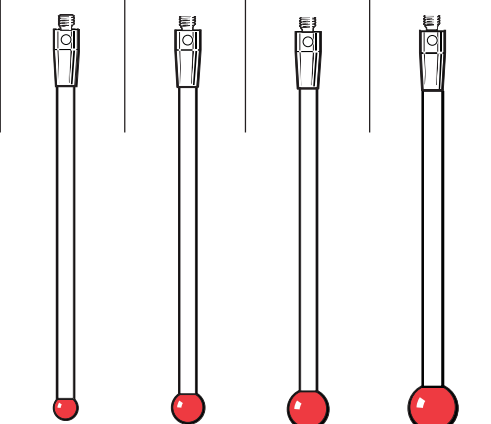


## Ruby ball styli (ceramic stems)

Part number	A-5003-0064	A-5003-0065	A-5003-0066	A-5003-0470	
A	Ball dia. mm (in)	3.0 (0.12)	4.0 (0.16)	5.0 (0.20)	6.0 (0.24)
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)	2.0 (0.08)	2.0 (0.08)	2.5 (0.10)	2.5 (0.10)
D	EWL* mm (in)	42.5 (1.68)	50.0 (1.97)	50.0 (1.97)	50.0 (1.97)
	Mass grammes	0.83	0.91	1.31	1.49

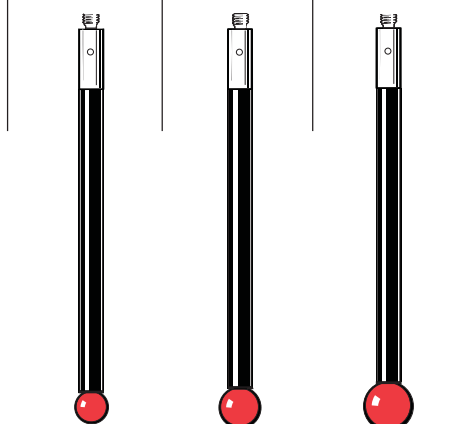
  

**50 mm range**

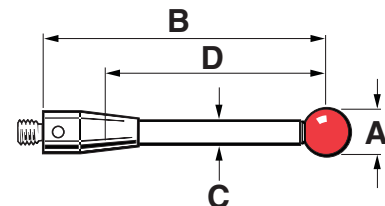


## Ruby ball styli (carbon fiber stems)

Part number	A-5003-2285	A-5003-2286	A-5003-2287
	4.0 (0.16)	5.0 (0.20)	6.0 (0.24)
	50.0 (1.97)	50.0 (1.97)	50.0 (1.97)
	3.0 (0.12)	3.0 (0.12)	3.0 (0.12)
	50.0 (1.97)	50.0 (1.97)	50.0 (1.97)
	1.0	1.1	1.2

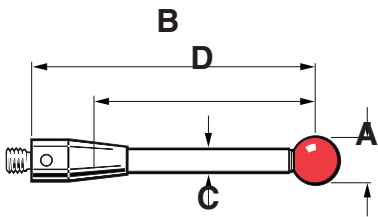
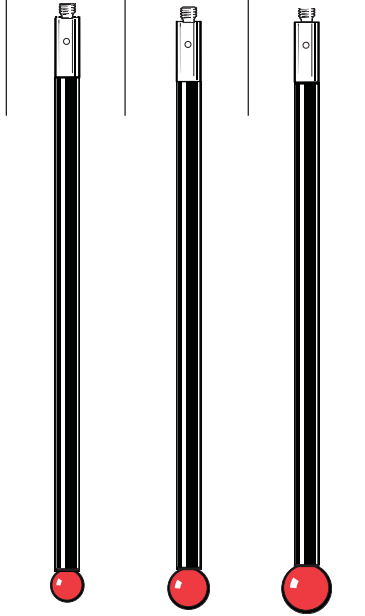
\* Effective working length



Ruby ball styli (carbon fiber stems)

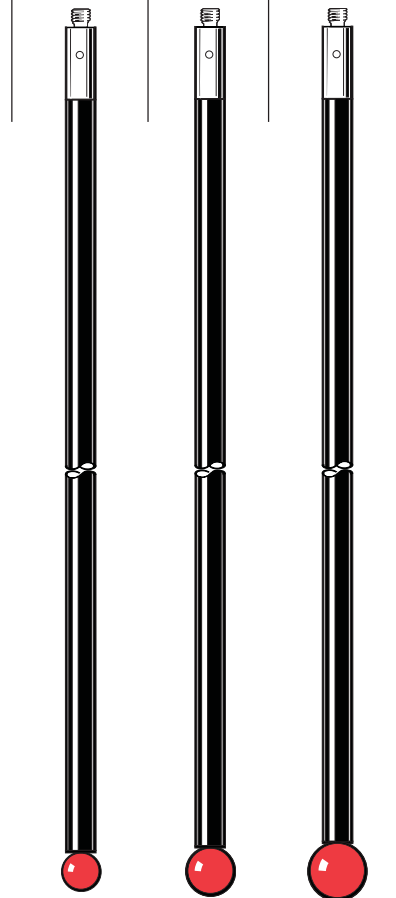
Part number	A-5003-4784	A-5003-4785	A-5003-4786	
A	Ball dia. mm (inch)	4.0 (0.16)	5.0 (0.20)	6.0 (0.24)
B	Length mm (inch)	75.0 (2.96)	75.0 (2.96)	75.0 (2.96)
C	Stem dia. mm (in.)	2.0 (0.08)	3.0 (0.12)	3.0 (0.12)
D	EWL* mm (inch)	75.0 (2.96)	75.0 (2.96)	75.0 (2.96)
	Mass grammes	0.78	1.27	1.45

75 mm range



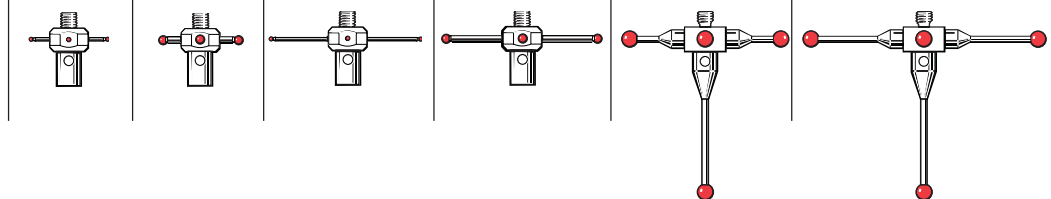
A-5003-2289	A-5003-2290	A-5003-2291
4.0 (0.16)	5.0 (0.20)	6.0 (0.24)
100.0 (3.94)	100.0 (3.94)	100.0 (3.94)
3.0 (0.12)	3.0 (0.12)	3.0 (0.12)
100.0 (3.94)	100.0 (3.94)	100.0 (3.94)
1.50	1.59	1.78

100 mm range



Star styli (fixed)

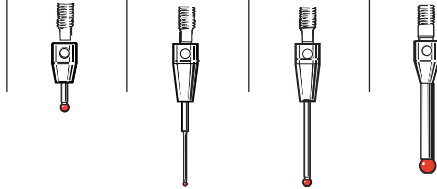
Part number	A-5003-4011	A-5000-7811	A-5003-4787	A-5003-4788	A-5000-7629	A-5000-3626
Span mm (inch)	10.0 (0.40)	10.0 (0.40)	20.0 (0.79)	20.0 (0.79)	18.0 (0.71)	30.0 (1.19)
Ball mm (inch)	0.5 (0.02)	1.0 (0.04)	0.5 (0.02)	1.0 (0.04)	2.0 (0.08)	2.0 (0.08)
Stem dia. mm (inch)	0.3 (0.02)	0.7 (0.03)	0.3 (0.02)	0.7 (0.03)	1.4 (0.06)	1.4 (0.06)
EWL* mm (inch)	N/A	N/A	N/A	N/A	12.0 (0.48)	12.0 (0.48)
Mass grammes	0.7	0.5	0.7	0.9	1.3	1.8



\* Effective working length

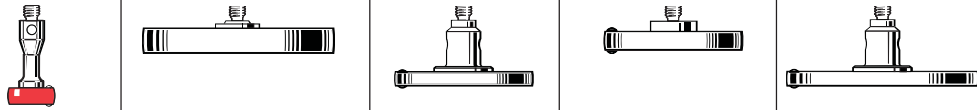
## Star stylus centers

Part number	A-5003-4789	A-5003-4790	A-5003-4791	A-5000-3609
Ball mm (inch)	1.0 (0.04)	0.5 (0.02)	1.0 (0.04)	2.0 (0.08)
Stem dia. mm (inch)	0.7 (0.03)	0.4 (0.02)	0.7 (0.03)	1.4 (0.06)
EWL* mm (inch)	4.0 (0.16)	7.0 (0.28)	11.0 (0.44)	12.0 (0.48)
Mass grammes	0.31	0.43	0.45	0.44



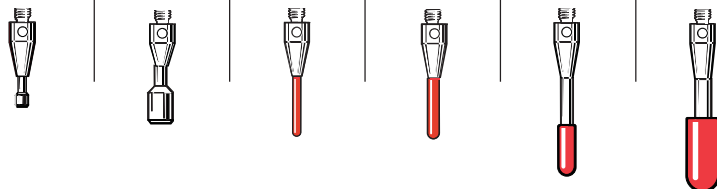
## Disc styli

Part number	A-5000-3611 Ruby	A-5000-4187 Silver steel	A-5000-7809 Silver steel	A-5000-3613 Silver steel	A-5000-7810 Silver steel
Disc dia. mm (inch)	6.0 (0.24)	25.0 (0.99)	18.0 (0.71)	18.0 (0.71)	25.0 (0.99)
Disc depth mm (inch)	1.2 (0.05)	3.0 (0.12)	1.5 (0.06)	2.2 (0.09)	1.5 (0.06)
Roller depth mm (inch)	2.0 (0.08)	NA	2.5 (0.10)	3.0 (0.12)	2.5 (0.10)
Stem dia. mm (inch)	2.0 (0.08)	NA	3.0 (0.12)	NA	3.0 (0.12)
Mass grammes	0.6	3.8	3.0	2.7	4.0



## Cylinder styli

Part number	M-5000-4152 Silver steel	M-5000-4153 Silver steel	A-5000-8876 Ruby	A-5000-8877 Ruby	A-5000-7812 Ruby	A-5003-0073 Ruby
Cylinder dia. mm (inch)	1.5 (0.06)	3.0 (0.12)	1.0 (0.04)	1.5 (0.06)	2.0 (0.08)	4.0 (0.16)
Overall length mm (inch)	11.0 (0.44)	13.0 (0.52)	15.0 (0.60)	15.0 (0.60)	20.0 (0.79)	20.0 (0.79)
Stem dia. mm (inch)	1.0 (0.04)	1.5 (0.06)	NA	NA	1.6 (0.07)	2.0 (0.08)
EWL* mm (inch)	1.5 (0.06)	3.8 (0.15)	8.0 (0.32)	8.0 (0.32)	7.2 (0.29)	10.0 (0.40)
Mass grammes	0.3	0.6	0.3	0.3	0.5	0.9

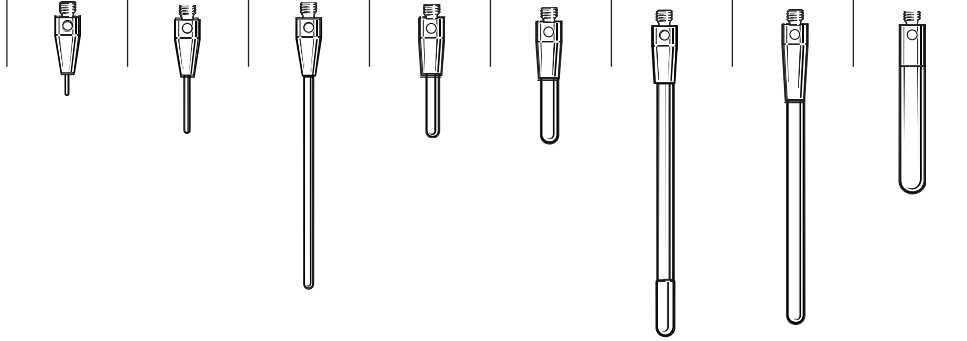


\* Effective working length

# M2 styli

## Parallel hemispherical-ended styli (tungsten carbide)

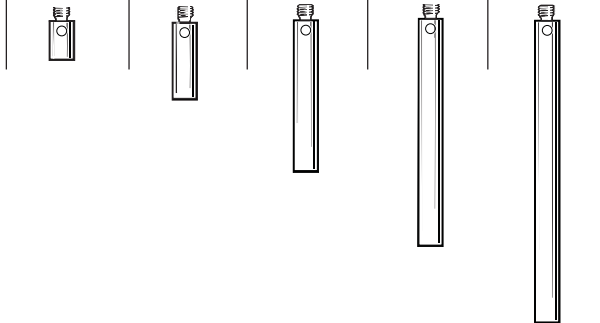
Part number	A-5003-1208	A-5003-1210	A-5003-1218	A-5003-1219	A-5003-1228	A-5003-3545	A-5003-0074	A-5003-1258
Cylinder dia. mm (inch)	0.3 (0.012)	0.5 (0.02)	1.0 (0.04)	1.5 (0.06)	2.0 (0.08)	2.0 (0.08)	2.0 (0.08)	3.0 (0.12)
Overall length mm (inch)	10.2 (0.41)	15.3 (0.61)	35.5 (1.40)	15.8 (0.63)	16.0 (0.63)	40.0 (1.58)	40.0 (1.58)	22.5 (0.89)
Stem dia. mm (inch)	NA	NA	NA	NA	NA	1.9 (0.07)	NA	NA
EWL* mm (inch)	2.7 (0.11)	7.8 (0.31)	29.8 (1.18)	8.3 (0.33)	8.5 (0.34)	7.0 (0.26)	32.0 (1.26)	22.5 (0.89)
Mass grammes	0.3	0.3	0.7	0.6	0.8	0.7	2.0	2.0



## Stylus extensions (stainless steel)

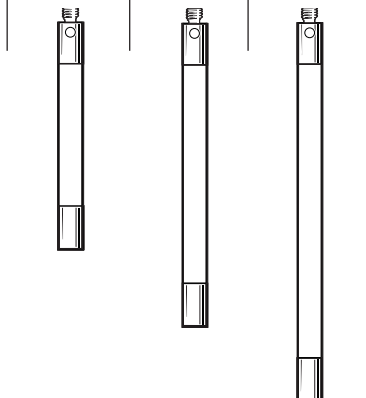
Part number	M-5000-7634	M-5000-3647	M-5000-3648	M-5000-4162	M-5000-7779
Length mm (inch)	5.0 (0.20)	10.0 (0.40)	20.0 (0.79)	30.0 (1.19)	40.0 (1.58)
Stem dia. mm (inch)	3.0 (0.12)	3.0 (0.12)	3.0 (0.12)	3.0 (0.12)	3.0 (0.12)
Mass grammes	0.2	0.4	0.9	1.4	1.8

1.8



## Stylus extensions (ceramic)

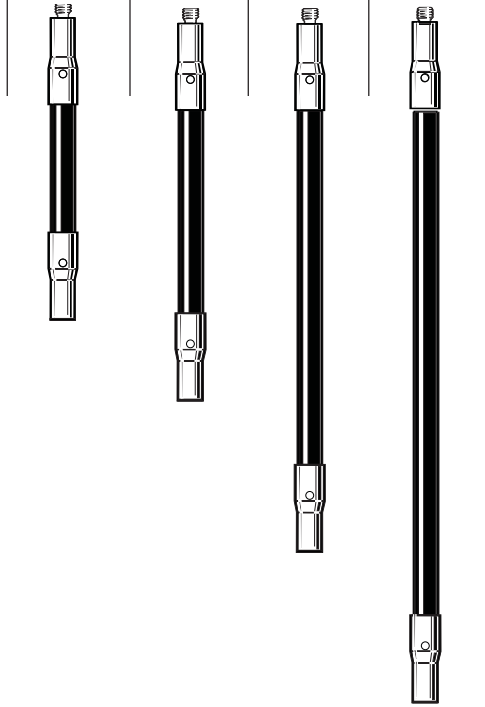
Part number	A-5003-0070	A-5003-0071	A-5003-0072
Length mm (inch)	30.0 (1.19)	40.0 (1.58)	50.0 (1.97)
Stem dia. mm (inch)	3.0 (0.12)	3.0 (0.12)	3.0 (0.12)
Mass grammes	0.97	1.22	1.51



\* Effective working length

## Stylus extensions (carbon fiber)

Part number	A-5003-2280	A-5003-2281	A-5003-2282	A-5003-2283
Length mm (inch)	40.0 (1.58)	50.0 (1.97)	70.0 (2.76)	90.0 (3.55)
Stem dia. mm (inch)	3.0 (0.12)	3.0 (0.12)	3.0 (0.12)	3.0 (0.12)
Outer dia. mm (inch)	3.5 (0.14)	3.5 (0.14)	3.5 (0.14)	3.5 (0.14)
Mass grammes	0.9	1.0	1.3	1.5



## Special purpose styli

Part number	M-5000-4150 Silver steel	A-5000-7813 Tungsten carbide	A-5000-3614 Ceramic
Length mm (inch)	15.0 (0.60)	10.0 (0.40)	11.0 (0.44)
Ball dia. mm (inch)	NA	NA	18.0 (0.71)
Mass grammes	0.7	0.7	3.3



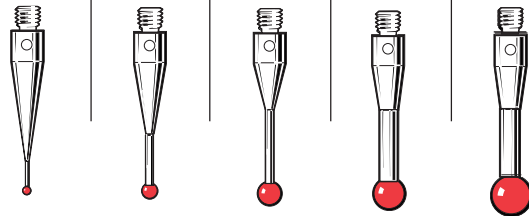
## M3 styli

### M3 threaded stylus range

#### Ruby ball styli (stainless steel stems)

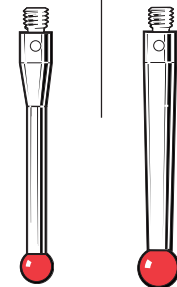
Part number	A-5000-3551	A-5000-3552	A-5000-3553	A-5000-7606	A-5000-7630	
A	Ball dia. mm (inch)	1.0 (0.04)	2.0 (0.08)	3.0 (0.12)	4.0 (0.16)	5.0 (0.20)
B	Length mm (inch)	21.0 (0.83)	21.0 (0.83)	21.0 (0.83)	21.0 (0.83)	21.0 (0.83)
C	Stem dia. mm (in.)	0.6 (0.03)	1.4 (0.06)	1.5 (0.06)	2.5 (0.10)	2.5 (0.10)
D	EWL* mm (inch)	4.0 (0.16)	8.0 (0.32)	12.0 (0.48)	17.2 (0.68)	21.0 (0.83)
	Mass grammes	1.0	1.0	1.0	1.3	1.5

21 mm range



31 mm range

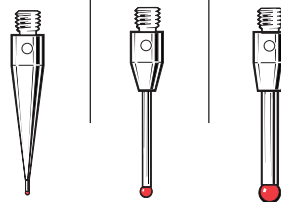
Part number	A-5000-3554	A-5000-7648	
A	Ball dia. mm (inch)	4.0 (0.16)	5.0 (0.20)
B	Length mm (inch)	31.0 (1.23)	31.0 (1.23)
C	Stem dia. mm (in.)	2.5 (0.10)	3.5 (0.14)
D	EWL* mm (inch)	27.0 (1.07)	31.0 (1.23)
	Mass grammes	2.5	3.0



#### Ruby ball styli (tungsten carbide stems)

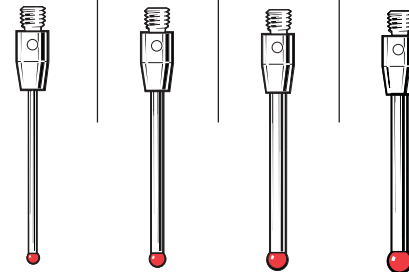
Part number	A-5000-7632	A-5003-0050	A-5003-0054	
A	Ball dia. mm (inch)	0.5 (0.02)	1.5 (0.06)	2.5 (0.10)
B	Length mm (inch)	21.0 (0.83)	21.0 (0.83)	21.0 (0.83)
C	Stem dia. mm (in.)	0.4 (0.02)	1.0 (0.04)	2.0 (0.08)
D	EWL* mm (inch)	2.0 (0.08)	12.5 (0.50)	12.5 (0.50)
	Mass grammes	1.0	0.8	1.3

21 mm range



30 mm range

Part number	A-5003-0051	A-5003-0052	A-5003-0055	A-5003-0057	
A	Ball dia. mm (inch)	1.5 (0.06)	2.0 (0.08)	2.5 (0.10)	3.0 (0.12)
B	Length mm (inch)	30.0 (1.19)	30.0 (1.19)	30.0 (1.19)	30.0 (1.19)
C	Stem dia. mm (in.)	1.0 (0.04)	1.5 (0.06)	2.0 (0.08)	2.0 (0.08)
D	EWL* mm (inch)	22.5 (0.89)	22.5 (0.89)	22.5 (0.89)	22.5 (0.89)
	Mass grammes	0.93	1.32	1.81	1.83



\* Effective working length

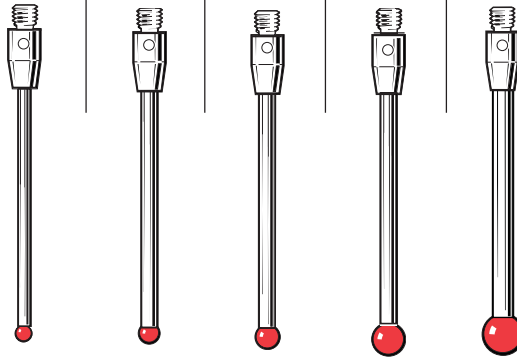
These styli are also available with specialist ball materials – see pages 6-46 to 6-49



## Ruby ball styli (tungsten carbide stems)

Part number	A-5003-0053	A-5003-0056	A-5003-0058	A-5003-0060	A-5003-0062
<b>A</b> Ball dia. mm (inch)	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)	40.0 (1.58)	40.0 (1.58)	40.0 (1.58)	40.0 (1.58)	40.0 (1.58)
<b>C</b> Stem dia. mm (in.)	1.5 (0.06)	2.0 (0.08)	2.0 (0.08)	2.0 (0.08)	2.5 (0.10)
<b>D</b> EWL* mm (inch)	32.5 (1.28)	32.5 (1.28)	32.5 (1.28)	36.0 (1.42)	40.0 (1.58)
Mass grammes	1.58	2.28	2.30	2.38	3.50

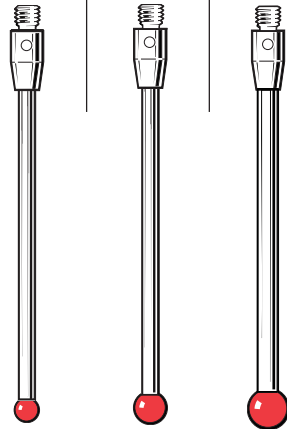
40 mm range



## Ruby ball styli (tungsten carbide stems)

Part number	A-5003-0059	A-5003-0061	A-5003-0063
<b>A</b> Ball dia. mm (inch)	3.0 (0.12)	4.0 (0.16)	5.0 (0.20)
<b>B</b> Length mm (inch)	50.0 (1.97)	50.0 (1.97)	50.0 (1.97)
<b>C</b> Stem dia. mm (in.)	2.0 (0.08)	2.0 (0.08)	2.5 (0.10)
<b>D</b> EWL* mm (inch)	42.5 (1.68)	46.0 (1.82)	50.0 (1.97)
Mass grammes	2.78	2.85	4.10

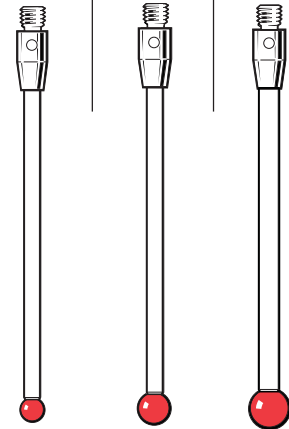
50 mm range



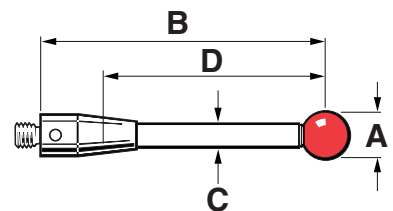
## Ruby ball styli (ceramic stems)

Part number	A-5003-0067	A-5003-0068	A-5003-0069
<b>A</b> Ball dia. mm (inch)	3.0 (0.12)	4.0 (0.16)	5.0 (0.20)
<b>B</b> Length mm (inch)	50.0 (1.97)	50.0 (1.97)	50.0 (1.97)
<b>C</b> Stem dia. mm (in.)	2.0 (0.08)	2.0 (0.08)	2.5 (0.10)
<b>D</b> EWL* mm (inch)	42.5 (1.68)	46.0 (1.82)	50.0 (1.97)
Mass grammes	1.17	1.24	1.33

50 mm range



\* Effective working length

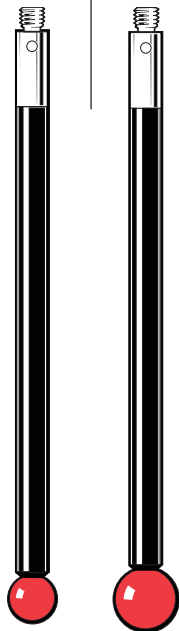


## M3 styli

### Ruby ball styli (carbon fiber stems)

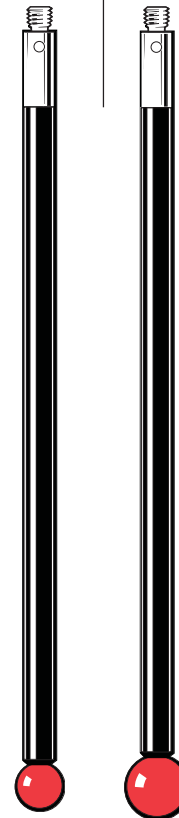
Part number	A-5003-4860	A-5003-4862
A	Ball dia. mm (inch)	6.0 (0.24) 8.0 (0.32)
B	Length mm (inch)	75.0 (2.96) 75.0 (2.96)
C	Stem dia. mm (in.)	4.0 (0.16) 4.0 (0.16)
D	EWL* mm (inch)	75.0 (2.96) 75.0 (2.96)
	Mass grammes	2.40 2.98

75 mm range



A-5003-4861	A-5003-4863
6.0 (0.24)	8.0 (0.32)
100.0 (3.94)	100.0 (3.94)
4.0 (0.16)	4.0 (0.16)
100.0 (3.94)	100.0 (3.94)
2.89	3.47

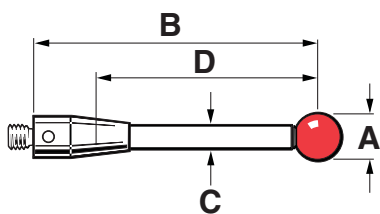
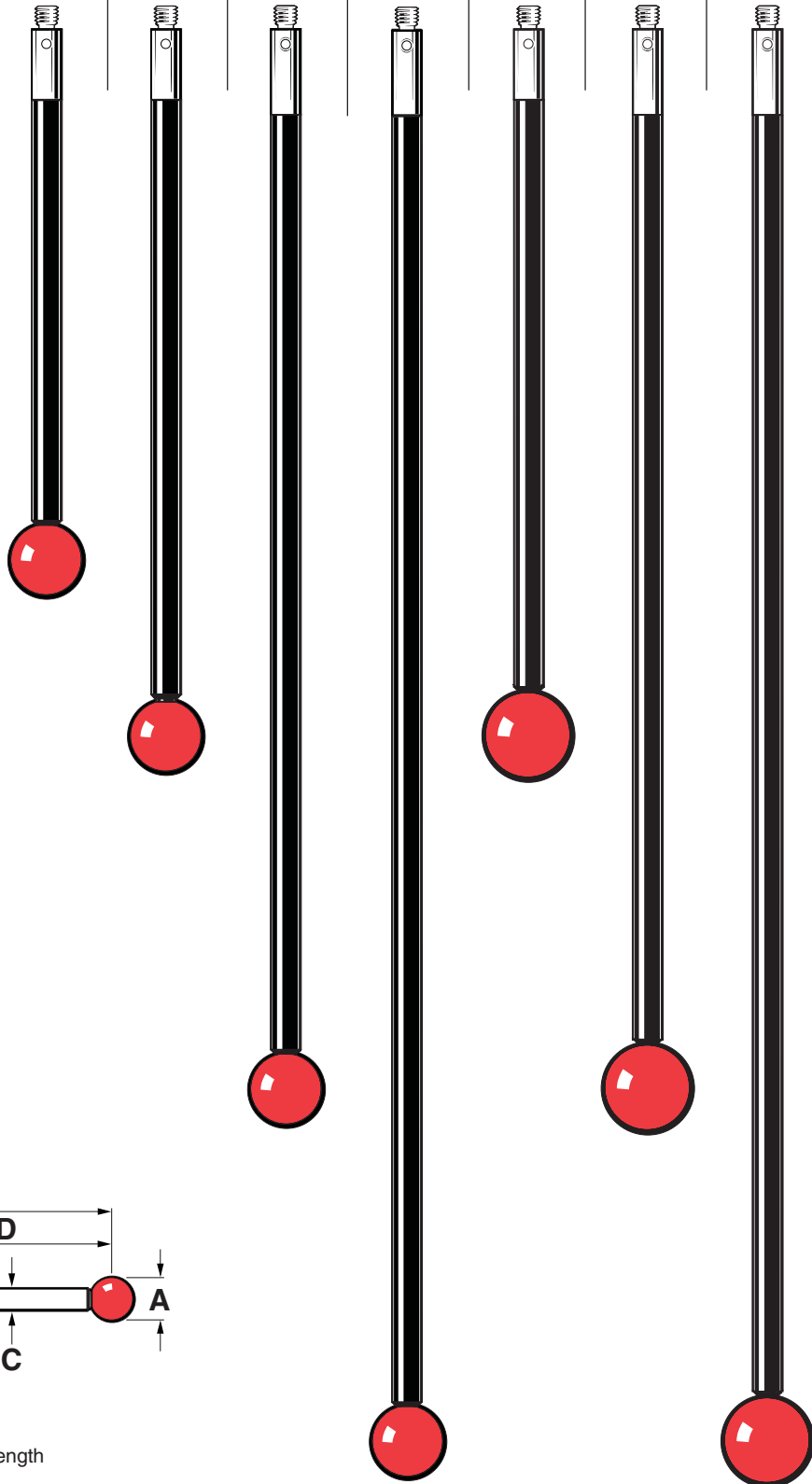
100 mm range



\* Effective working length

## Ruby ball styli (carbon fiber stems)

Part number	A-5003-7057	A-5003-7056	A-5003-7055	A-5003-7054	A-5003-7445	A-5003-7446	A-5003-7447
A	Ball dia. mm (inch)	10.0 (0.40)	10.0 (0.40)	10.0 (0.40)	10.0 (0.40)	12.0 (0.48)	12.0 (0.48)
B	Length mm (inch)	75.0 (2.96)	100.0 (3.94)	150.0 (5.91)	200.0 (7.88)	100.0 (3.94)	200.0 (7.88)
C	Stem dia. mm (in.)	4.0 (0.16)	4.0 (0.16)	4.0 (0.16)	4.0 (0.16)	4.0 (0.16)	4.0 (0.16)
D	EWL* mm (inch)	75.0 (2.96)	100.0 (3.94)	150.0 (5.91)	200.0 (7.88)	100.0 (3.94)	200.0 (7.88)
	Mass grammes	4.05	4.53	5.49	6.47	5.9	6.9

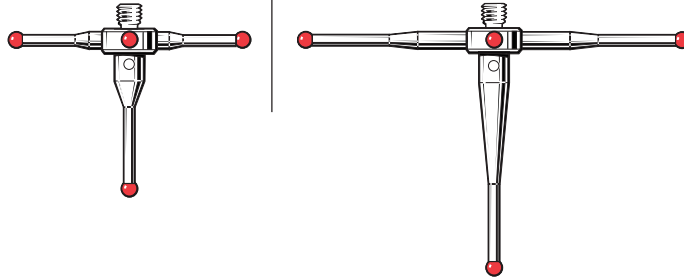


\* Effective working length

# M3 styli

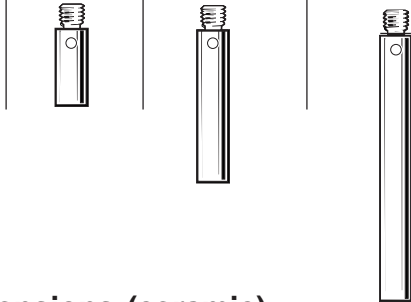
## Star styli (fixed)

Part number	A-5003-0076	A-5003-0077
Span mm (inch)	30.0 (1.19)	50.0 (1.97)
Ball mm (inch)	2.0 (0.08)	2.0 (0.08)
Stem dia. mm (inch)	1.4 (0.06)	1.4 (0.06)
EWL* mm (inch)	11.0 (0.44)	11.0 (0.44)
Mass grammes	2.38	5.25



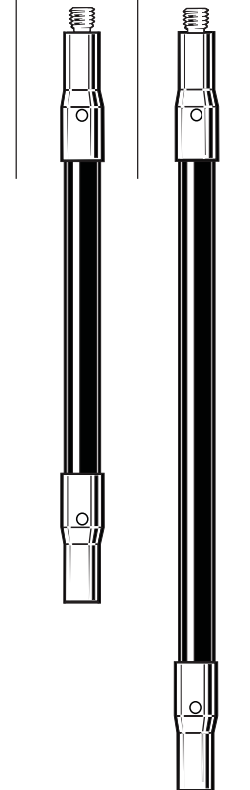
## Stylus extensions (stainless steel)

Part number	M-5000-7633	M-5000-3592	M-5000-3593
Length mm (inch)	10.0 (0.40)	20.0 (0.79)	35.0 (1.38)
Stem dia. mm (inch)	4.0 (0.16)	4.0 (0.16)	4.0 (0.16)
Mass grammes	0.9	1.6	2.9



## Stylus extensions (carbon fiber)

Part number	A-5003-4864	A-5003-4865
Length mm (inch)	75.0 (2.96)	100.0 (3.94)
Stem dia. mm (inch)	4.0 (0.16)	4.0 (0.16)
Mass grammes	2.53	3.02



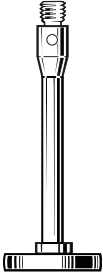
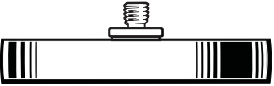

## Stylus extensions (ceramic)

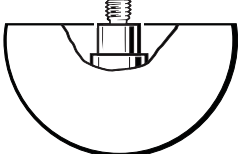
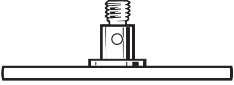
Part number	A-5003-0075
Length mm (inch)	50.0 (1.97)
Stem dia. mm (inch)	4.0 (0.16)
Mass grammes	2.95



\* Effective working length

## Disc and hollow ball styli

Part number	A-5000-3615 Silver steel	A-5000-7612 Silver steel	A-5000-7669 Carbon steel
Disc dia. mm (inch)	12.7 (0.50)	35.0 (1.38)	63.5 (2.51)
Disc depth mm (inch)	2 (0.08)	5.0 (0.20)	6.0 (0.24)
Stem dia. mm (inch)	3.5 (0.14)	NA	NA
Mass grammes	5.0	10.0	45.0
			

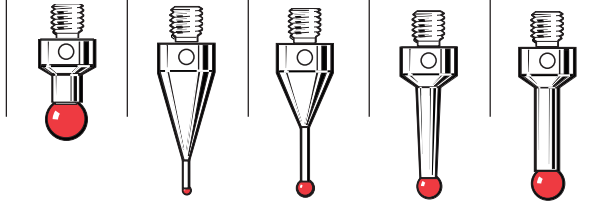
Part number	A-5000-7814 Ceramic	A-5003-7098 Ceramic
Disc dia. mm (inch)	30.0 (1.19)	30.0 (1.19)
Disc depth mm (inch)	17.0 (0.67)	1.5 (0.06)
Stem dia. mm (inch)	NA	4.0 (0.16)
Mass grammes	13.0	3.6
		

## M4 styli

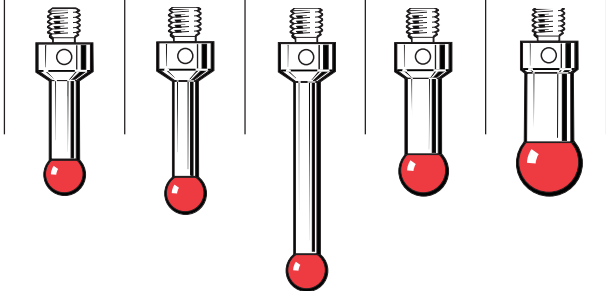
### M4 threaded stylus range

#### Ruby ball styli (stainless steel stems)

Part number	A-5003-3550	A-5000-7545	A-5000-7547	A-5000-7549	A-5000-7551
A Ball dia. mm (inch)	5.0 (0.20)	1.0 (0.04)	2.0 (0.08)	3.0 (0.12)	4.0 (0.16)
B Length mm (inch)	10.5 (0.42)	19.5 (0.77)	19.0 (0.75)	18.5 (0.73)	18.0 (0.71)
C Stem dia. mm (in.)	3.5 (0.14)	0.7 (0.03)	1.4 (0.05)	2.0 (0.08)	3.0 (0.12)
D EWL* mm (inch)	5.5 (0.22)	4.0 (0.16)	8.0 (0.32)	13.0 (0.52)	13.0 (0.52)
Mass grammes	2.0	2.5	2.3	2.0	2.1



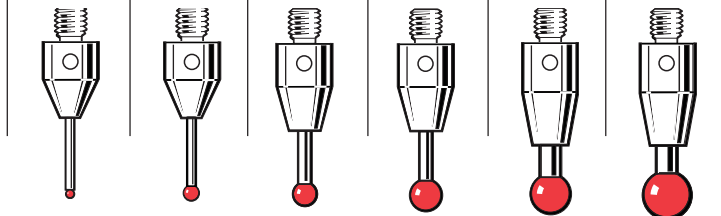
Part number	A-5000-7553	A-5000-6731	A-5000-6352	A-5000-7555	A-5000-7557
A Ball dia. mm (inch)	5.0 (0.20)	5.0 (0.20)	5.0 (0.20)	6.0 (0.24)	8.0 (0.32)
B Length mm (inch)	18.0 (0.71)	20.0 (0.79)	30.0 (1.19)	17.5 (0.69)	16.0 (0.63)
C Stem dia. mm (in.)	3.5 (0.14)	3.0 (0.12)	3.0 (0.12)	4.5 (0.18)	6.0 (0.24)
D EWL* mm (inch)	13.5 (0.54)	16.0 (0.63)	26.0 (1.03)	13.5 (0.54)	16.0 (0.63)
Mass grammes	2.3	2.4	3.0	3.0	3.9



10 mm – 30 mm range

#### Ruby ball styli (tungsten carbide stems)

Part number	A-5003-4792	A-5003-2932	A-5003-4793	A-5003-4794	A-5003-4795	A-5003-4796
A Ball dia. mm (inch)	1.0 (0.04)	2.0 (0.08)	3.0 (0.12)	4.0 (0.16)	5.0 (0.20)	6.0 (0.24)
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)
C Stem dia. mm (in.)	0.7 (0.03)	1.5 (0.06)	1.5 (0.06)	1.5 (0.06)	2.5 (0.10)	2.5 (0.10)
D EWL* mm (inch)	10.0 (0.40)	10.0 (0.40)	10.0 (0.40)	10.0 (0.40)	6.0 (0.24)	6.0 (0.24)
Mass grammes	2.39	3.01	3.53	3.53	4.52	4.66



20 mm range

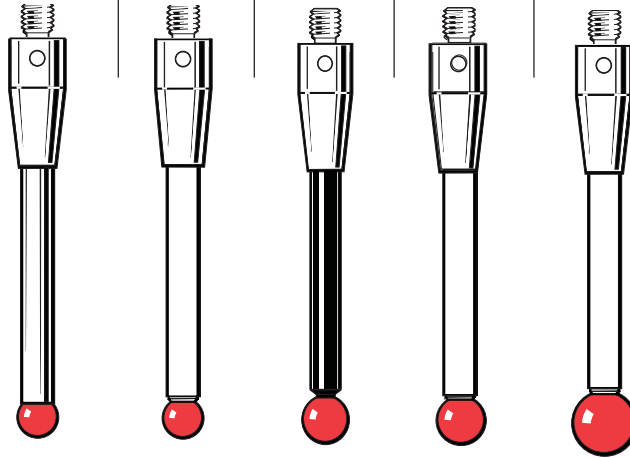
\* Effective working length

These styli are also available with specialist ball materials – see pages 6-46 to 6-49

## Ruby ball styli

Part number	A-5000-7521 Stainless steel	A-5003-0235 Ceramic	A-5003-1436 Carbon fiber (MP700 only)	A-5000-3709 Ceramic	A-5000-7795 Ceramic
A	Ball dia. mm (inch)	5.0 (0.20)	5.0 (0.20)	6.0 (0.24)	8.0 (0.32)
B	Length mm (inch)	50.0 (1.97)	50.0 (1.97)	50.0 (1.97)	50.0 (1.97)
C	Stem dia. mm (in.)	4.5 (0.18)	3.8 (0.15)	4.4 (0.18)	4.5 (0.18)
D	EWL* mm (inch)	35.0 (1.38)	34.0 (1.34)	36.0 (1.42)	50.0 (1.97)
	Mass grammes	5.8	5.0	4.8	5.4

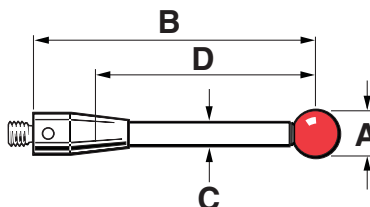
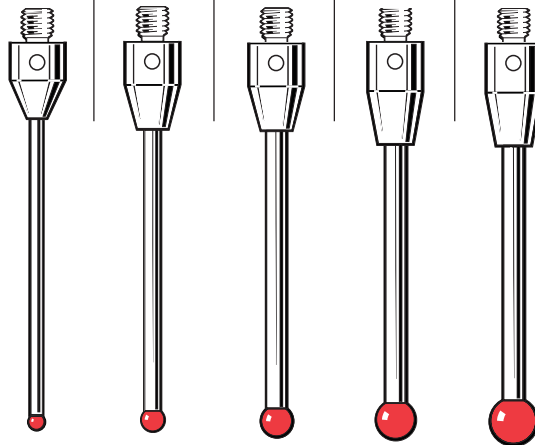
50 mm range



## (Tungsten carbide stems)

Part number	A-5003-4797	A-5003-3680	A-5003-4799	A-5003-4800	A-5003-4801	
A	Ball dia. mm (inch)	2.0 (0.08)	3.0 (0.12)	4.0 (0.16)	5.0 (0.20)	6.0 (0.24)
B	Length mm (inch)	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.)	1.5 (0.06)	2.0 (0.08)	2.5 (0.10)	2.5 (0.10)	2.5 (0.10)
D	EWL* mm (inch)	40.0 (1.58)	38.0 (1.50)	38.0 (1.50)	36.0 (1.42)	36.0 (1.42)
	Mass grammes	3.80	4.94	4.99	6.72	6.86

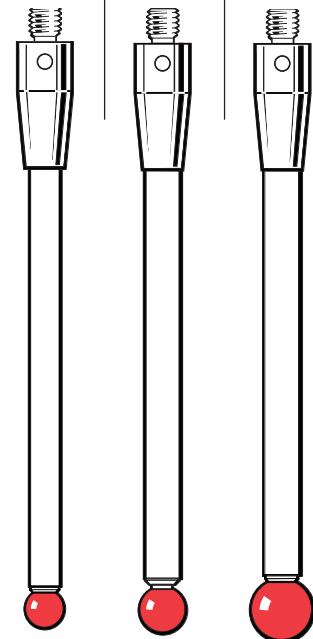
50 mm range



## (Ceramic stems)

Part number	A-5003-0236	A-5003-2764	A-5003-4802	
A	Ball dia. mm (inch)	5.0 (0.20)	6.0 (0.24)	8.0 (0.32)
B	Length mm (inch)	75.0 (2.96)	75.0 (2.96)	75.0 (2.96)
C	Stem dia. mm (in.)	3.8 (0.15)	4.4 (0.18)	4.5 (0.18)
D	EWL* mm (inch)	59.0 (2.33)	63.5 (2.51)	75.0 (2.96)
	Mass grammes	5.63	5.64	6.20

75 mm range

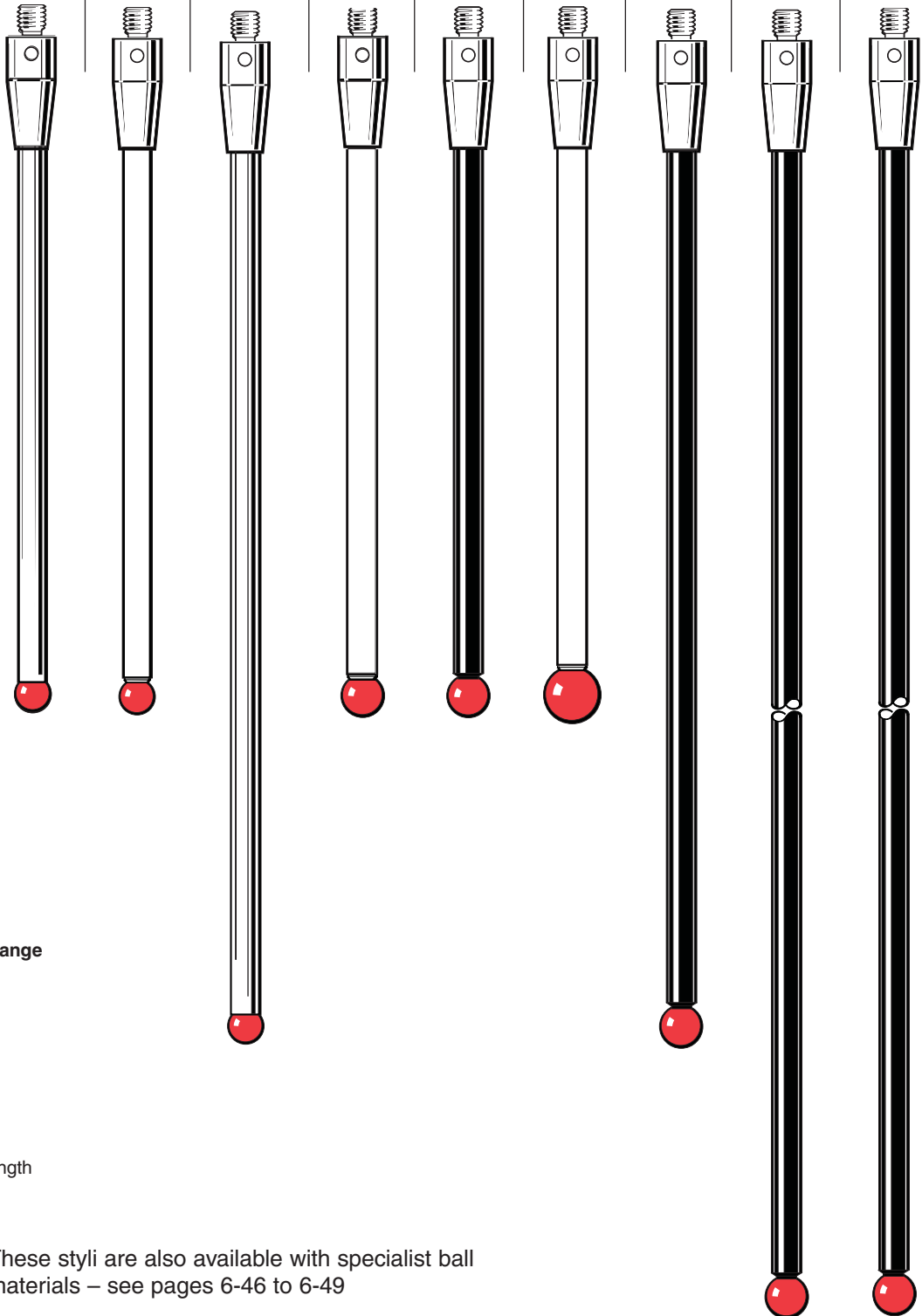


\* Effective working length

# M4 styli

## Ruby ball styli

Part number	A-5000-7522 Stainless steel	A-5000-9761 Ceramic	A-5000-7523 Stainless steel	A-5000-3712 Ceramic	A-5003-1358 Carbon fiber (MP700 only)	A-5000-7796 Ceramic	A-5003-1255 Carbon fiber (MP700 only)	A-5003-1075 Carbon fiber (MP700 only)	A-5003-4179 Carbon fiber
<b>A</b> Ball dia. mm (in)	5.0 (0.20)	5.0 (0.20)	5.0 (0.20)	6.0 (0.24)	6.0 (0.24)	8.0 (0.32)	6.0 (0.24)	6.0 (0.24)	6.0 (0.24)
<b>B</b> Length mm (in)	100.0 (3.94)	100.0 (3.94)	150.0 (5.91)	100.0 (3.94)	100.0 (3.94)	100.0 (3.94)	150.0 (5.91)	200.0 (7.88)	300.0 (11.82)
<b>C</b> Stem dia mm (in)	4.5 (0.18)	3.8 (0.15)	4.5 (0.18)	4.5 (0.18)	4.4 (0.18)	4.5 (0.18)	4.4 (0.18)	4.5 (0.18)	4.5 (0.18)
<b>D</b> EWL* mm (in)	85.0 (3.35)	86.0 (3.39)	133.00 (5.24)	86.0 (3.39)	88.5 (3.49)	100.0 (3.94)	138.5 (5.46)	186.0 (7.33)	288.5 (11.37)
Mass grammes	11.3	6.4	18.2	6.4	6.2	7.0	7.5	8.7	10.4



100 mm – 300 mm range

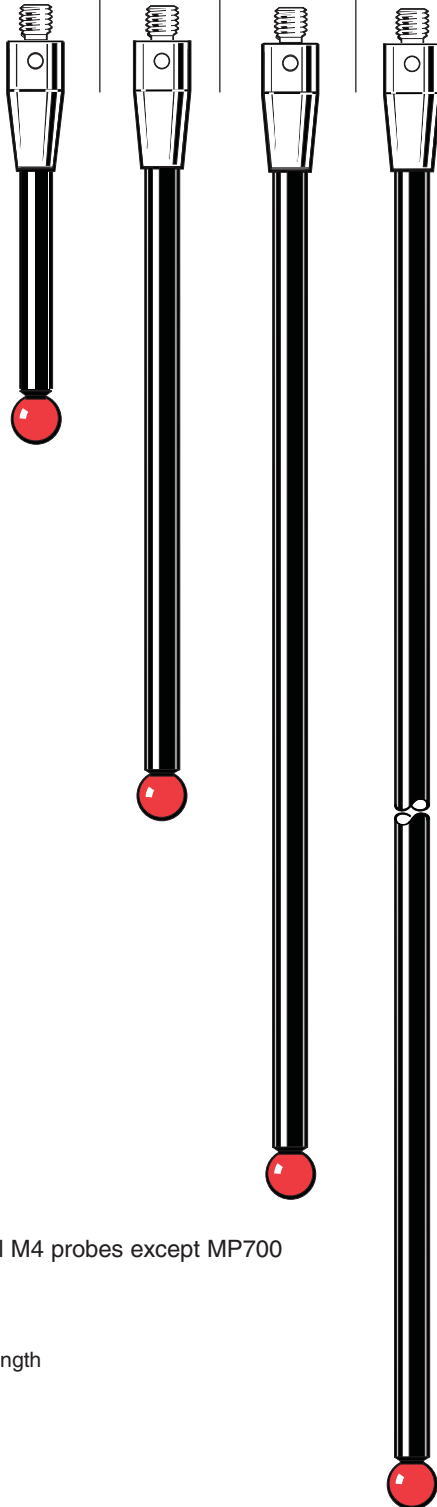
\* Effective working length

These styli are also available with specialist ball materials – see pages 6-46 to 6-49



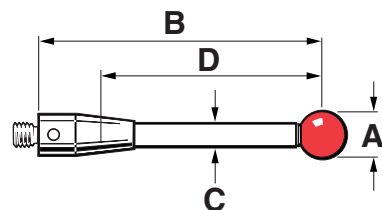
## Ruby ball styli

Part number	A-5003-7306 Carbon fiber	A-5003-6510 Carbon fiber	A-5003-6511 Carbon fiber	A-5003-6512 Carbon fiber
<b>A</b> Ball dia. mm (in)	6.0 (0.24)	6.0 (0.24)	6.0 (0.24)	6.0 (0.24)
<b>B</b> Length mm (in)	50.0 (1.97)	100.0 (3.94)	150.0 (5.91)	200.0 (7.88)
<b>C</b> Stem dia mm (in)	4.5 (0.18)	4.5 (0.18)	4.5 (0.18)	4.5 (0.18)
<b>D</b> EWL* mm (in)	36.0 (1.42)	88.0 (3.39)	138.0 (5.46)	186.0 (7.33)
Mass grammes	4.1	6.2	7.5	8.7



Can be used on all M4 probes except MP700

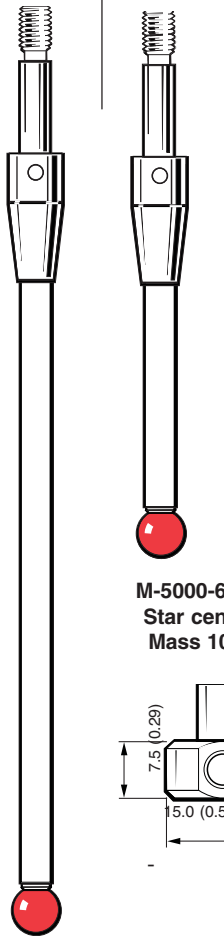
\* Effective working length



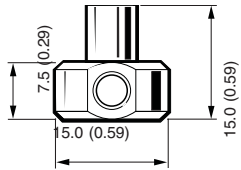
# M4 styli

## Star styli

Part number	A-5000-6462 Ceramic	A-5000-7098 Ceramic
Ball mm (inch)	6.0 (0.24)	6.0 (0.24)
Length mm (inch)	100.0 (3.94)	50.0 (1.97)
Stem dia. mm (in.)	4.5 (0.18)	4.5 (0.18)
EWL* mm (inch)	86.0 (3.39)	36.0 (1.42)
Mass grammes	7.5	6.0



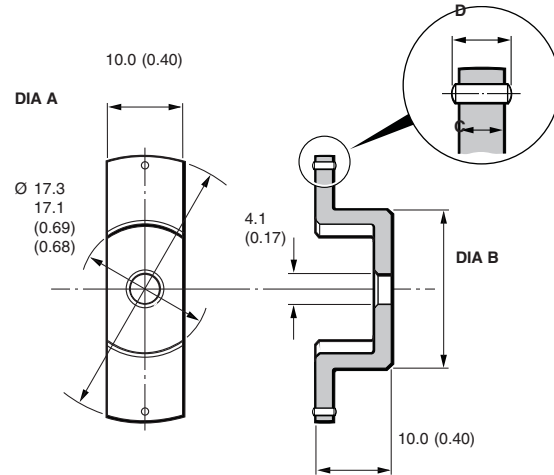
**M-5000-6460**  
**Star center**  
**Mass 10 g**



\* Effective working length

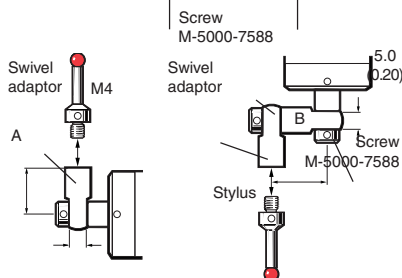
## Disc styli

Part number	A-5000-7596	A-5000-7597	A-5000-7598
Diameter A mm (inch)	Ø30.0 (1.19)	Ø35.0 (1.38)	Ø50.0 (1.97)
Diameter B mm (inch)	Ø21.0 (0.83)	Ø21.0 (0.83)	Ø23.0 (0.91)
C mm (inch)	2.2 (0.09)	2.2 (0.09)	3.0 (0.12)
D mm (inch)	3.0 (0.12)	3.0 (0.12)	4.0 (0.16)
Mass grammes	8.01	9.57	13.55



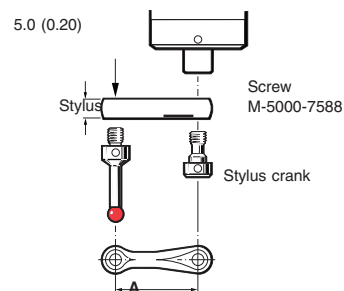
## Swivel adaptor

Part number	M-5000-7591	M-5000-7592
Length A mm (inch)	10.0 (0.40)	13.5 (0.54)
Length B mm (inch)	12.5 (0.50)	16.0 (0.63)
Mass grammes	2.76	3.70










## Stylus crank

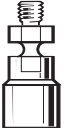
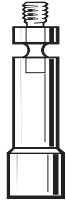



Part number	M-5000-7589	M-5000-7590
Length A mm (in)	21.9 (0.86)	27.6 (1.09)
Mass grammes	6.07	6.94



## Crash protection devices

Part number	M-5000-7582 Stainless steel	M-5000-7587 Stainless steel	M-5000-7588 Stainless steel	M-2085-0069 Silver steel	A-5003-5171 Silver steel	M-2197-0156 Silver steel	M-2197-0150 Silver steel
Length mm (inch)	8.0 (0.32)	8.0 (0.32)	10.0 (0.40)	12.0 (0.48)	15.2 (0.60)	9.0 (0.36)	16.0 (0.63)
Mass grammes	1.8	1.4	1.5	2.7	4.6	1.5	2.1
For use on	LP2	LP2	LP2	MP10 MP12 MP700 MP18 MP16 MP3 MP11	TS27R	HPMA HPRA HPPA	HPMA HPRA HPPA
							

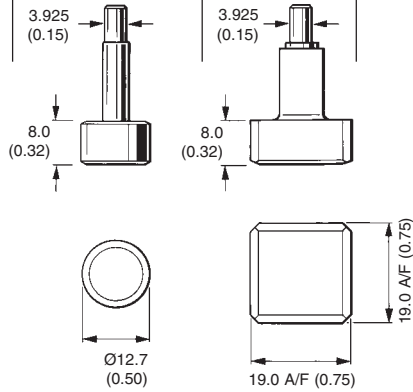
Use P-TL09-0003  
to tighten

Part number	M-2008-0333 Silver steel	M-2008-0604 Silver steel	M-2008-0605 Silver steel	M-2048-2093 Silver steel	M-2116-0127 Silver steel
Length mm (inch)	13.3 (0.52)	22.3 (0.88)	30.3 (1.19)	13.5 (0.53)	19.0 (0.75)
Mass grammes	2.43	3.6	4.5	1.37	2.2
For use on	TS20	TS20	TS20	RP1/RP2	TSA
					

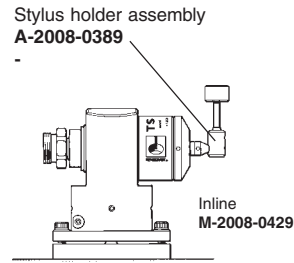
# M4 styli

## TS27R styli – parallel shafted (not M4) – not compatible with TS27 probes

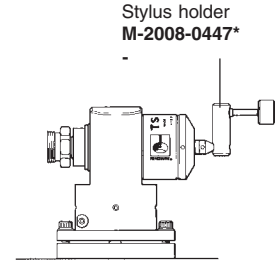
Part number	A-2008-0382 Tungsten carbide	A-2008-0384 Ceramic
Overall length mm (inch)	23.0 (0.91)	22.0 (0.87)
Mass grammes	12.1	7.1



Stylus conversion kit for TS27R to allow horizontal machining applications (**A-2008-0448**)



Vertical machining applications

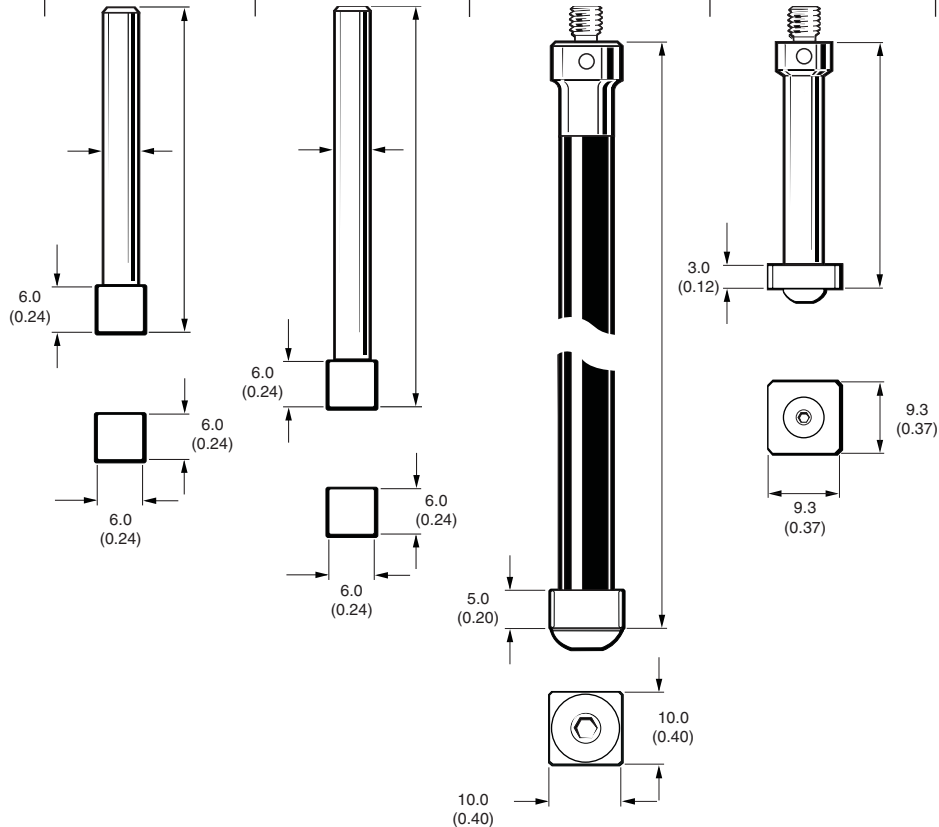


Horizontal machining applications

\* Order also requires 3 x P-SC13-0403

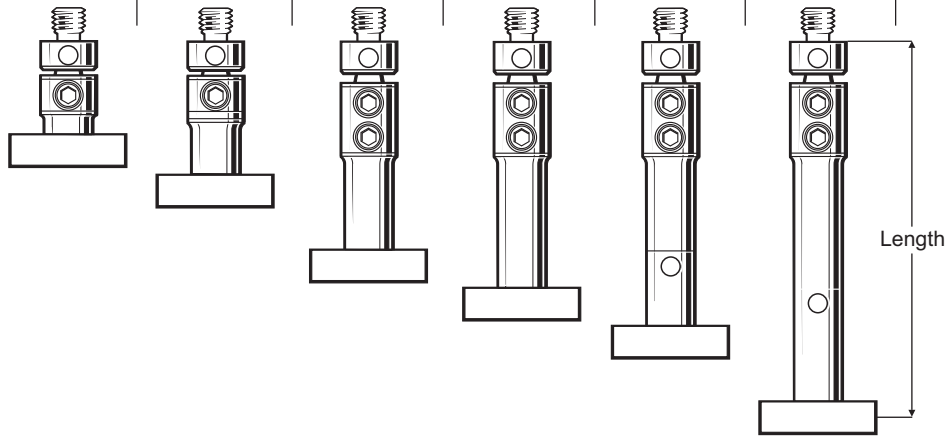
## Tool datuming styli

Part number	A-5000-3212 Stainless steel	A-5000-6701 Stainless steel	A-5000-6713 Aluminum	A-5000-6403 Stainless steel
Overall length mm (inch)	53.0 (2.09)	43.0 (1.70)	96.5 (3.80)	32.5 (1.28)
Stem dia. mm (inch)	4.5 (0.18)	4.5 (0.18)	7.5 (0.30)	5.4 (0.22)
Mass grammes	4.5	4.3	21.9	11.0

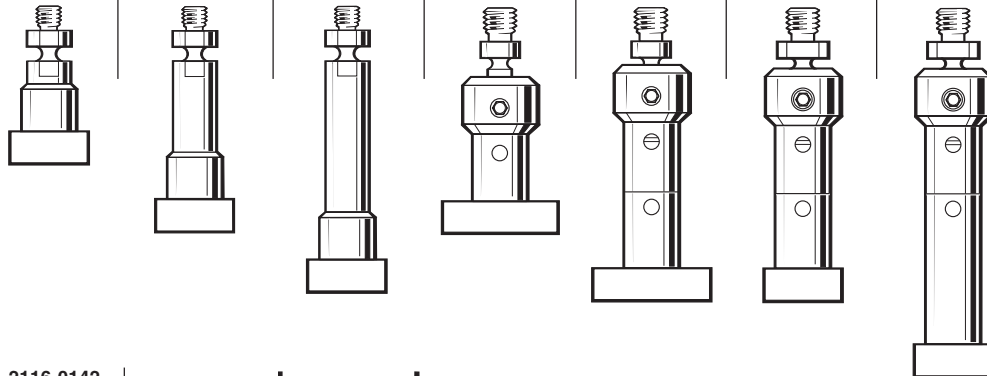


## Tool datuming styli

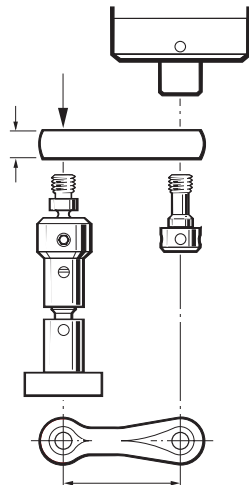
Part number	A-2197-0157 Tungsten steel	A-2197-0158 Tungsten steel	A-2197-0159 Tungsten steel	A-2197-0160 Tungsten steel	A-2197-0161 Tungsten steel	A-2197-0162 Tungsten steel
Length mm (inch)	14.2 (0.56)	19.5 (0.77)	29.5 (1.16)	34.5 (1.36)	39.5 (1.55)	49.5 (1.95)
Mass grammes	14.86	16.0	18.3	19.6	20.17	20.9
For use on	HPPA	HPPA	HPPA	HPPA	HPPA	HPPA
	HPMA	HPMA	HPMA	HPMA	HPMA	HPMA
	HPRA	HPRA	HPRA	HPRA	HPRA	HPRA



Part number	A-2008-0601 Tungsten steel	A-2008-0602 Tungsten steel	A-2008-0603 Tungsten steel	A-2048-2050 Tungsten steel	A-2048-2051 Tungsten steel	A-2116-0140 Tungsten steel	A-2116-0141 Tungsten steel
Length mm (inch)	15.4 (0.61)	24.0 (0.96)	32.4 (1.27)	23.2 (0.91)	32.0 (1.26)	32.0 (1.26)	42.0 (1.65)
Mass grammes	9.1	8.0	8.95	18.14	20.64	13.56	16.05
For use on	TS20	TS20	TS20	HPA (M6 MTG)	HPA (M6 MTG)	TSA	TSA



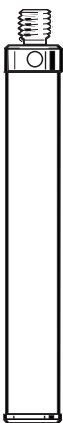
Part number	A-2116-0142
Length mm (inch)	30.3 (0.40)
Mass grammes	1.5
For use on	TSA



# M4 styli

## Stylus extensions

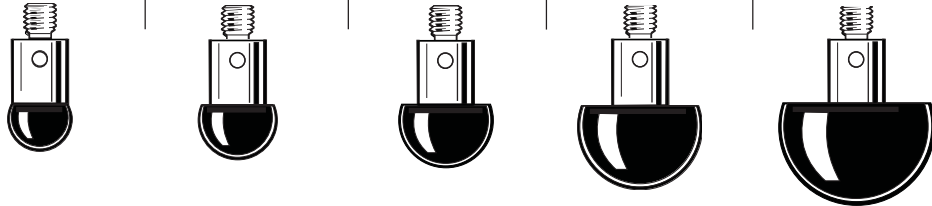
Part number	M-5000-7583 Stainless steel	M-5000-7584 Stainless steel	M-5000-7585 Stainless steel	M-5000-7586 Stainless steel	A-5000-7754 Ceramic	A-5000-7755 Ceramic	A-5000-7727 Ceramic
Length mm (inch)	10.0 (0.40)	15.0 (0.60)	20.0 (0.79)	30.0 (1.19)	30.0 (1.19)	50.0 (1.97)	100.0 (3.94)
Stem dia. mm (in.)	7.0 (0.28)	7.0 (0.28)	7.0 (0.28)	7.0 (0.28)	7.4 (0.30)	7.4 (0.30)	7.4 (0.30)
Mass grammes	2.4	3.7	4.8	7.4	5.1	6.7	10.6



## Digitizing styli

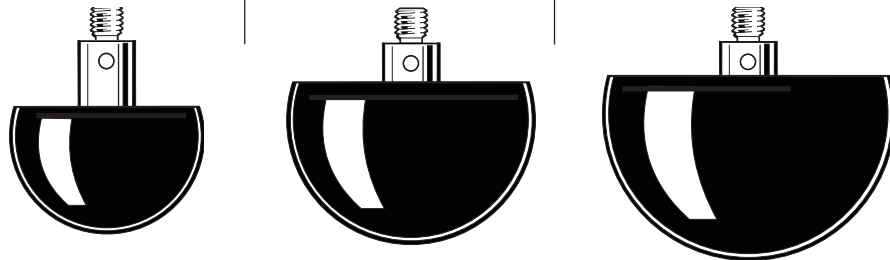
### Hemispherical anodized aluminum ball styli (metric)

Part number	A-5000-7718	A-5000-7719	A-5000-7720	A-5000-7721	A-5000-7722
Ball dia. mm (inch)	8.0 (0.32)	10.0 (0.40)	12.0 (0.48)	16.0 (0.63)	20.0 (0.79)
Length mm (inch)	10.5 (0.42)	10.5 (0.42)	10.5 (0.42)	11.5 (0.46)	11.5 (0.46)
Mass grammes	3.4	3.9	4.6	7.2	10.9



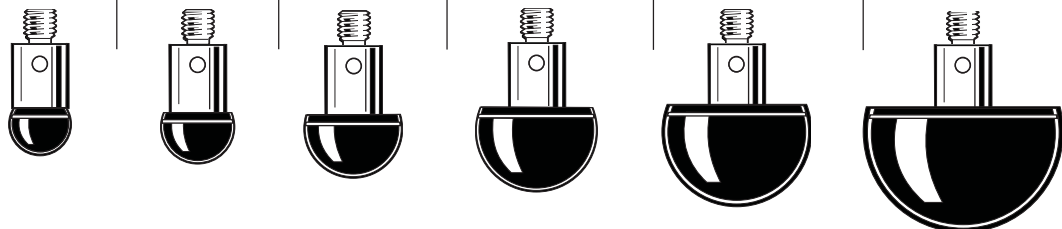
Complete stylus kit available – Part number A-5000-7676 – Price \$864

Part number	A-5000-7723	A-5000-7724	A-5000-7725
Ball diameter mm (inch)	25.0 (0.99)	32.0 (1.26)	38.0 (1.50)
Length mm (inch)	12.5 (0.50)	9.5 (0.38)	9.5 (0.38)
Mass grammes	18.7	19.6	28.5



### Hemispherical anodized aluminum ball styli (imperial)

Part number	A-5000-7710	A-5000-7711	A-5000-7712	A-5000-7713	A-5000-7714	A-5000-7715
Ball dia. mm (inch)	5/16 (8.0)	3/8 (9.6)	1/2 (12.7)	5/8 (15.9)	3/4 (19.1)	1 (25.4)
Length mm (inch)	10.5 (0.42)	10.5 (0.42)	10.5 (0.42)	11.5 (0.46)	11.5 (0.46)	12.5 (0.50)
Mass grammes	3.4	3.8	4.9	7.1	9.9	19.6

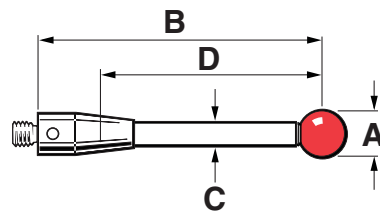
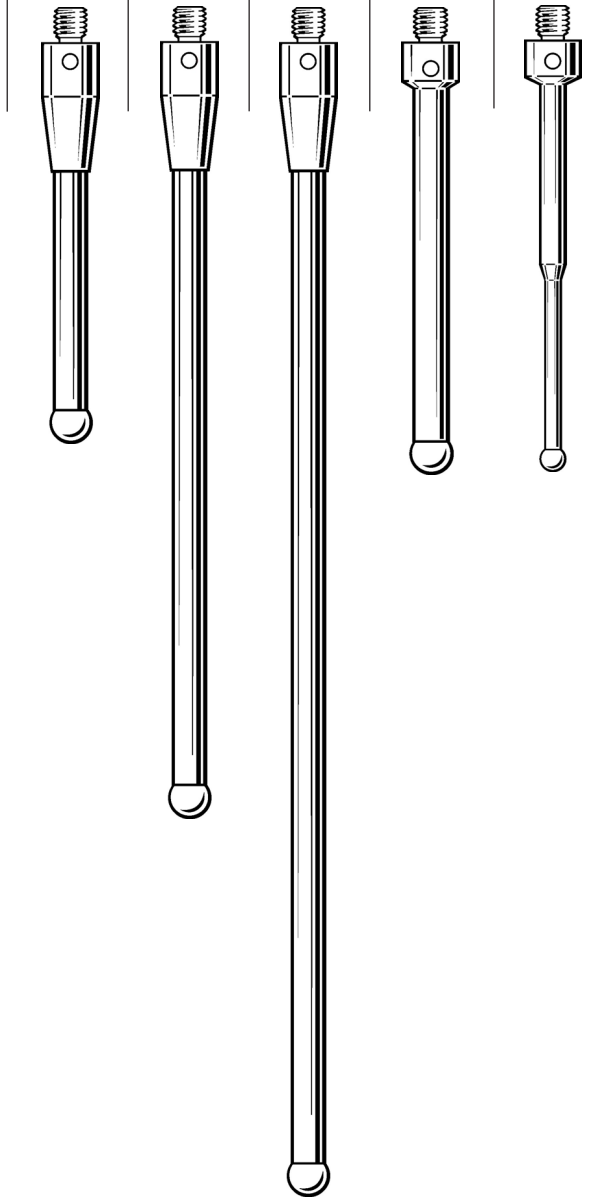


Complete stylus kit available – Part number A-5000-7677 – Price \$864

# M4 styli

## Tungsten carbide styli (stainless steel stems)

Part number	A-5000-7670	A-5000-7671	A-5000-7672	A-5000-9685	A-5000-9697	
A	Ball dia. mm (inch)	5.0 (0.20)	5.0 (0.20)	5.0 (0.20)	3.0 (0.12)	
B	Length mm (inch)	50.0 (1.97)	100.0 (3.94)	150.0 (5.91)	54.0 (2.12)	55.0 (2.17)
C	Stem dia. mm (in.)	4.4 (0.17)	4.4 (0.17)	4.4 (0.17)	3.9 (0.15)	1.9 (0.07)
D	EWL* mm (inch)	32.0 (1.26)	85.0 (3.35)	120.0 (4.73)	50.0 (1.97)	25.0 (0.99)
	Mass grammes	6.2	11.9	18.2	6.9	3.8



\* Effective working length

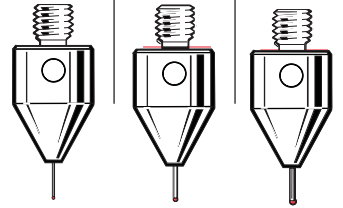


# M5 threaded stylus range

## Ruby micro ball styli (tungsten carbide stems)

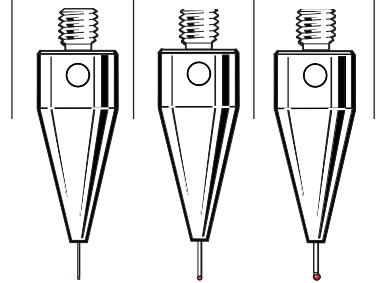
Part number	A-5003-5201	A-5003-5202	A-5003-5203	
A	Ball dia. mm (inch)	0.3 (0.012)	0.5 (0.02)	0.7 (0.03)
B	Length mm (inch)	20.0 (0.79)	20.0 (0.79)	20.0 (0.79)
C	Stem dia. mm (in.)	0.2 (0.01)	0.4 (0.02)	0.5 (0.02)
D	EWL* mm (inch)	3.0 (0.12)	4.0 (0.16)	5.0 (0.20)
	Mass grammes	6.5	6.5	6.5

20 mm range



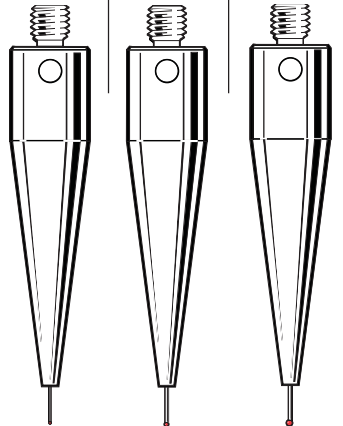
A-5003-5211	A-5003-5212	A-5003-5213
0.3 (0.012)	0.5 (0.02)	0.7 (0.03)
30.0 (1.19)	30.0 (1.19)	30.0 (1.19)
0.2 (0.01)	0.4 (0.02)	0.5 (0.02)
3.0 (0.12)	4.0 (0.16)	5.0 (0.20)
8.95	8.95	8.98

30 mm range



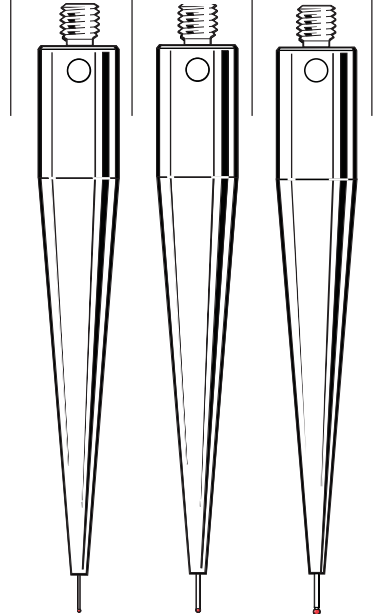
Part number	A-5003-5225	A-5003-5226	A-5003-5227	
A	Ball dia. mm (inch)	0.3 (0.012)	0.5 (0.02)	0.7 (0.03)
B	Length mm (inch)	50.0 (1.97)	50.0 (1.97)	50.0 (1.97)
C	Stem dia. mm (in.)	0.2 (0.01)	0.4 (0.02)	0.5 (0.02)
D	EWL* mm (inch)	3.0 (0.12)	4.0 (0.16)	5.0 (0.20)
	Mass grammes	15.79	15.79	15.79

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



# M5 styli

## Ruby ball styli (tungsten carbide stems)

Part number	A-5003-5204	A-5003-5205	A-5003-5206	A-5003-5207	A-5003-5208	A-5003-5209	A-5003-5210
A 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 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)
C Stem dia. mm (in.)	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)
D 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	4.57	4.65	4.82

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 (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 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)
C Stem dia. mm (in.)	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)
D 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	4.62	4.69	4.92

30 mm range

Part number	A-5003-5221	A-5003-5222	A-5003-5223	A-5003-5224
A Ball dia. mm (inch)	1.5 (0.06)	2.0 (0.08)	2.5 (0.10)	3.0 (0.12)
B Length mm (inch)	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 (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	4.67

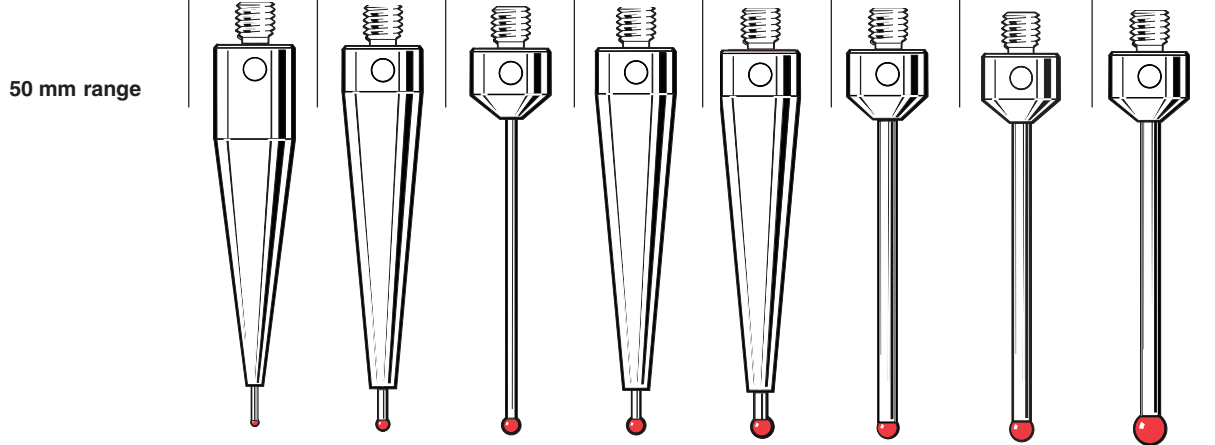
40 mm range

\* Effective working length

These styli are also available with specialist ball materials – see pages 6-46 to 6-49

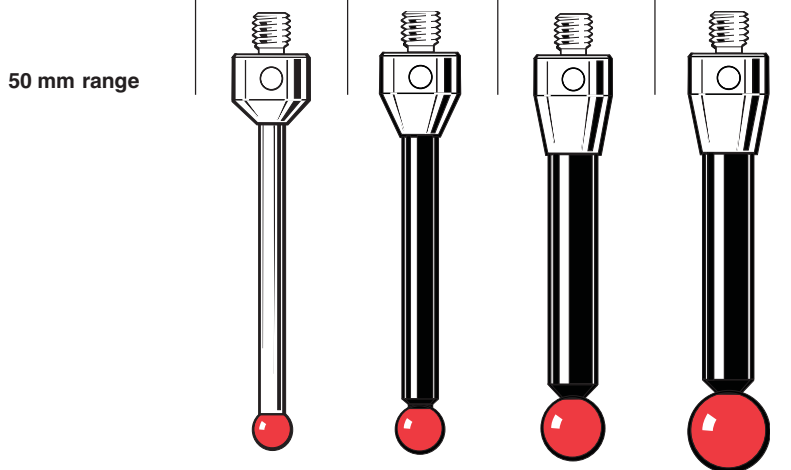
## Ruby ball styli (<5 mm ball diameter)

Part number	A-5003-5228 Tungsten carbide	A-5003-5229 Tungsten carbide	A-5003-5230 Tungsten carbide	A-5003-5231 Tungsten carbide	A-5003-5233 Tungsten carbide	A-5003-5232 Tungsten carbide	A-5003-5234 Tungsten carbide	A-5003-5235 Tungsten carbide	
A	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	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)
C	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)
D	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	4.71	4.72	4.79

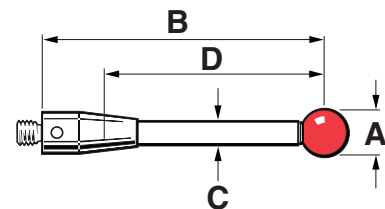


## Ruby ball styli (>5 mm ball diameter)

Part number	A-5003-5236 Tungsten carbide	A-5003-5237 Carbon fiber	A-5003-5238 Carbon fiber	A-5003-5239 Carbon fiber	
A	Ball dia. mm (inch)	5.0 (0.20)	6.0 (0.24)	8.0 (0.32)	10.0 (0.40)
B	Length mm (inch)	50.0 (1.97)	50.0 (1.97)	50.0 (1.97)	50.0 (1.97)
C	Stem dia. mm (inch)	3.0 (0.12)	4.0 (0.16)	6.0 (0.24)	6.0 (0.24)
D	EWL* mm (inch)	41.0 (1.62)	39.0 (1.54)	37.0 (1.46)	37.0 (1.46)
	Mass grammes	5.14	6.10	7.96	8.91



\* Effective working length

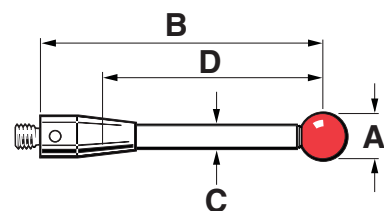
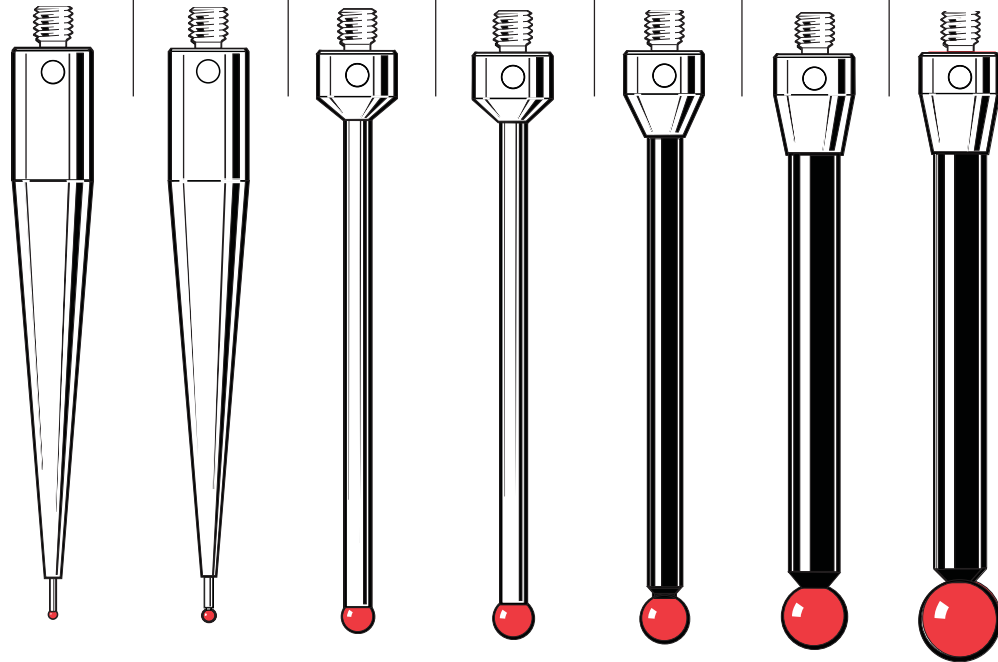


# M5 styli

## 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 fiber	A-5003-5251 Carbon fiber	A-5003-5252 Carbon fiber
<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	5.32	5.42	6.59	9.06	10.01

75 mm range

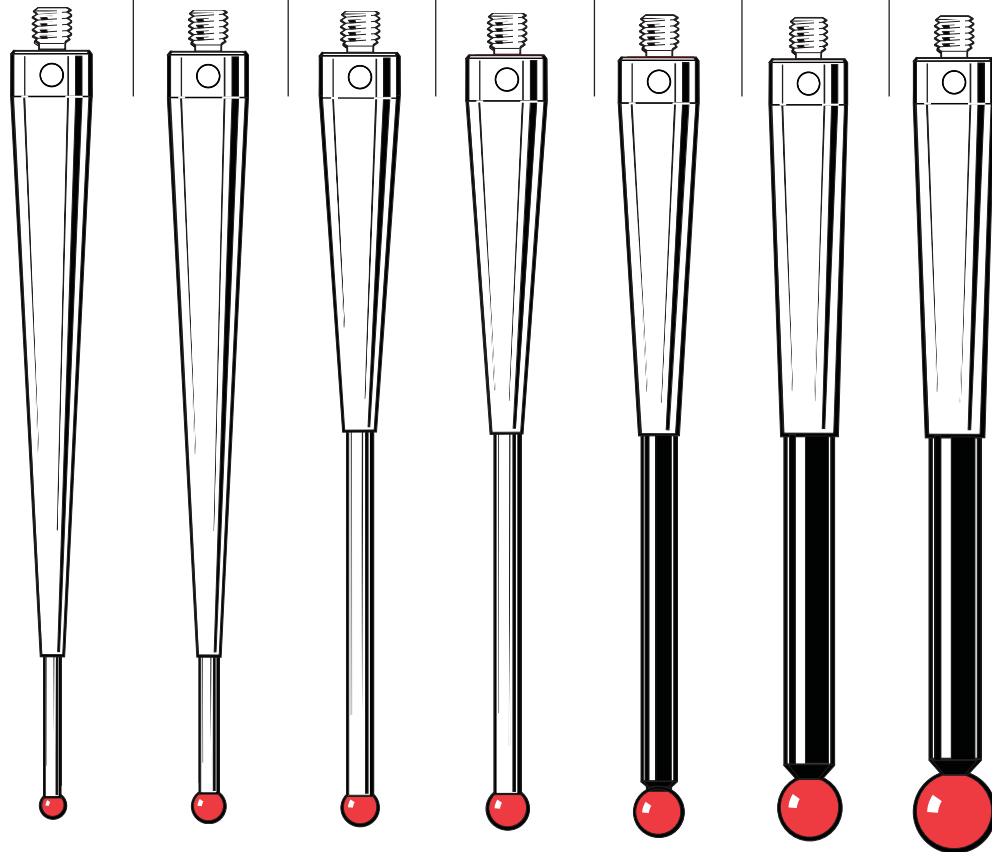


\* Effective working length

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

Part number	A-5003-5253 Tungsten carbide	A-5003-5255 Tungsten carbide	A-5003-5256 Tungsten carbide	A-5003-5257 Tungsten carbide	A-5003-5259 Carbon fiber	A-5003-5261 Carbon fiber	A-5003-5263 Carbon fiber
<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	24.76	24.80	18.00	18.15	19.66	22.97	23.91

100 mm range



\* Effective working length

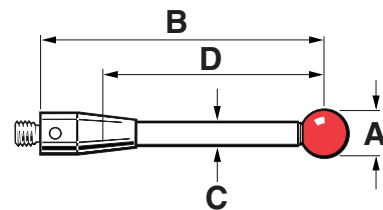
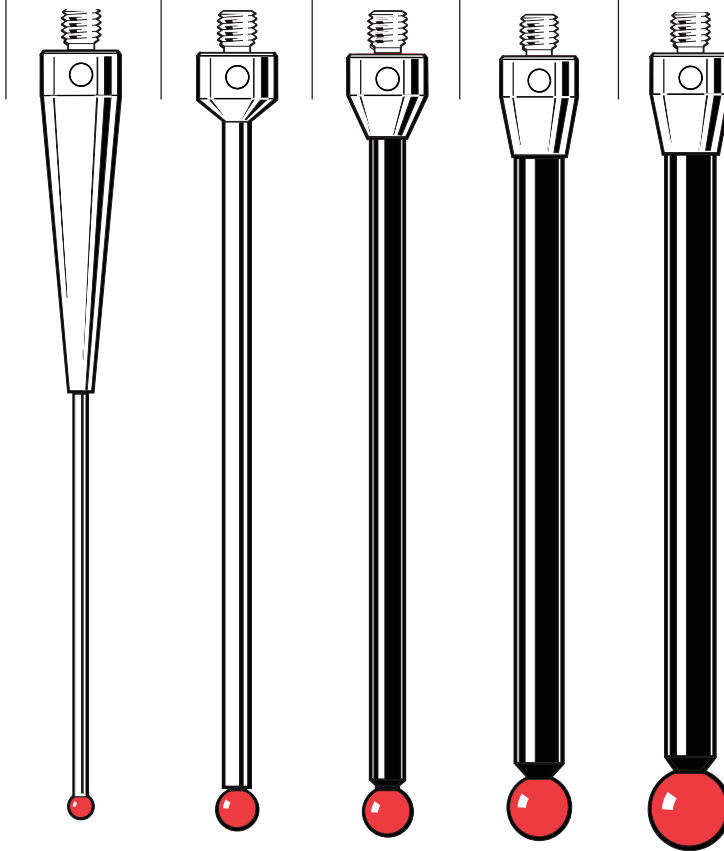
These styli are also available with specialist ball materials – see pages 6-46 to 6-49

# M5 styli

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

Part number	A-5003-5254 Tungsten carbide	A-5003-5258 Tungsten carbide	A-5003-5260 Carbon fiber	A-5003-5262 Carbon fiber	A-5003-5264 Carbon fiber
<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	5.69	7.08	10.17	11.11

100 mm range

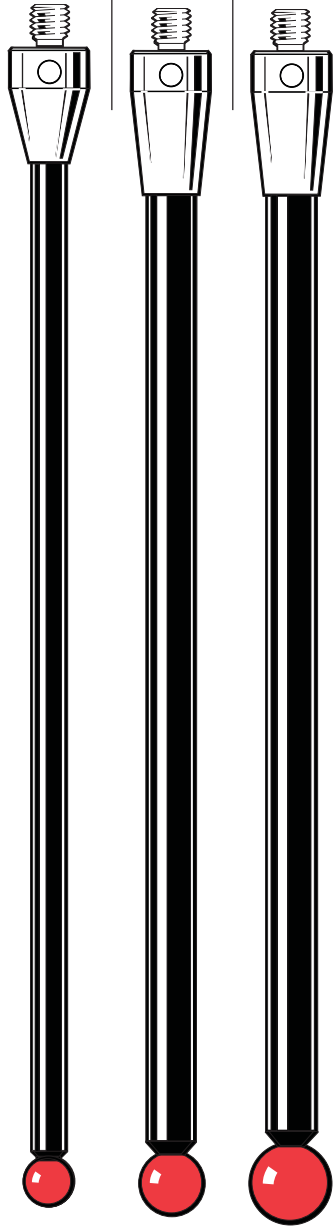


\* Effective working length

## Ruby ball styli (carbon fiber stems)

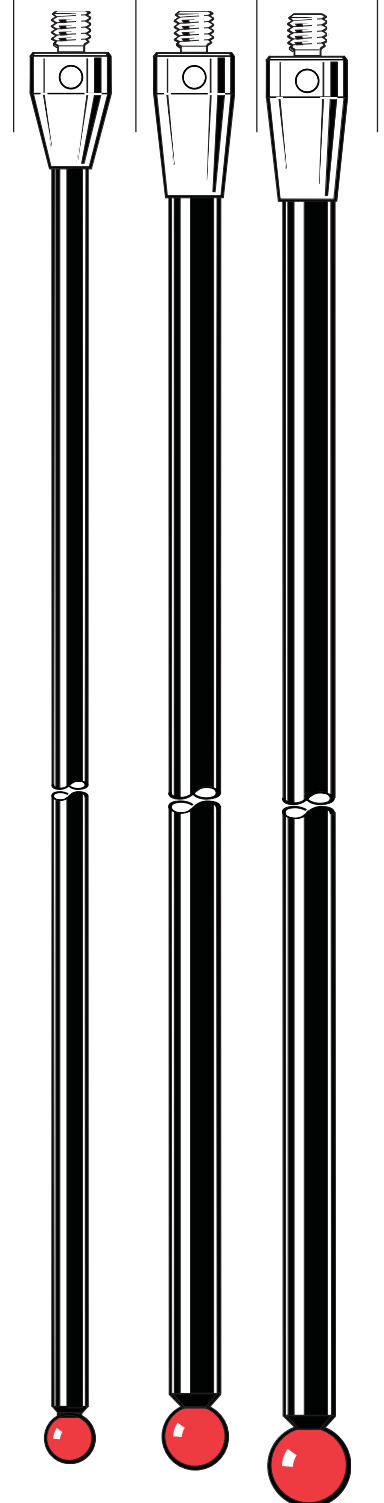
Part number	A-5003-5265	A-5003-5266	A-5003-5267	
A	Ball dia. mm (inch)	6.0 (0.24)	8.0 (0.32)	10.0 (0.40)
B	Length mm (inch)	150.0 (5.91)	150.0 (5.91)	150.0 (5.91)
C	Stem dia. mm (in.)	4.0 (0.16)	6.0 (0.24)	6.0 (0.24)
D	EWL* mm (inch)	120.0 (4.73)	120.0 (4.73)	120.0 (4.73)
	Mass grammes	9.09	13.71	14.66

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)
180.0 (7.09)	180.0 (7.09)	180.0 (7.09)
10.07	15.92	16.87

200 mm range



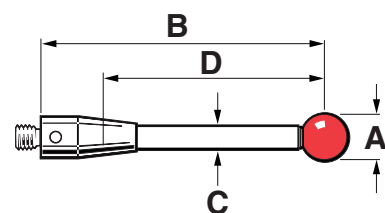
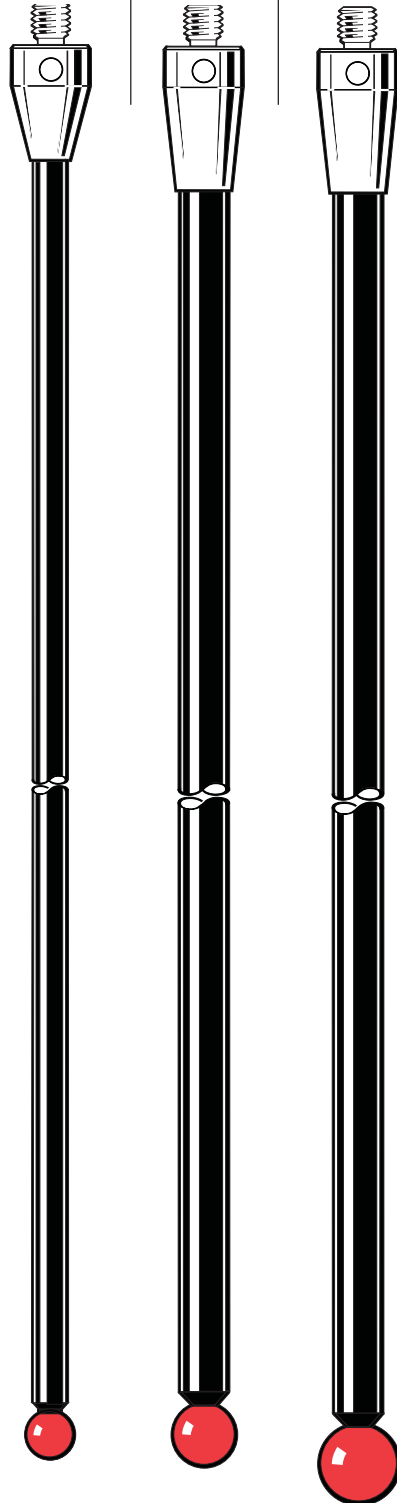
\* Effective working length

# M5 styli

## Ruby ball styli (carbon fiber stems)

Part number	A-5003-5271	A-5003-5272	A-5003-5273	
A	Ball dia. mm (inch)	6.0 (0.24)	8.0 (0.32)	10.0 (0.40)
B	Length mm (inch)	300.0 (11.82)	300.0 (11.82)	300.0 (11.82)
C	Stem dia. mm (inch)	4.0 (0.16)	6.0 (0.24)	6.0 (0.24)
D	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



\* Effective working length



# Specialist ball materials

## Zirconia ball styli (M3)

Part number	A-5003-5736 Stainless steel	A-5003-5737 Stainless steel	A-5003-5738 Tungsten carbide	A-5003-5739 Ceramic	A-5003-5740 Carbon fiber	A-5003-5741 Carbon fiber
Thread size	M3	M3	M3	M3	M3	M3
<b>A</b> Ball diameter mm (inch)	2.0 (0.08)	4.0 (0.16)	2.0 (0.08)	4.0 (0.16)	6.0 (0.24)	6.0 (0.24)
<b>B</b> Length mm (inch)	21.0 (0.83)	21.0 (0.83)	30.0 (1.19)	50.0 (1.97)	75.0 (2.96)	100.0 (3.94)
<b>C</b> Stem dia. mm (inch)	1.4 (0.06)	2.5 (0.10)	1.5 (0.06)	2.0 (0.08)	4.0 (0.16)	4.0 (0.16)
<b>D</b> EWL* mm (inch)	8.0 (0.32)	17.2 (0.68)	22.5 (0.89)	46.0 (1.82)	75.0 (2.96)	100.0 (3.94)
Mass grammes	1.03	1.60	1.35	1.54	3.39	3.88

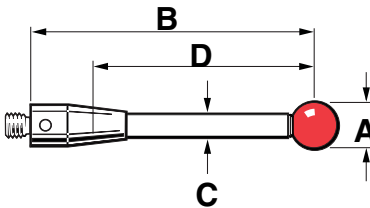
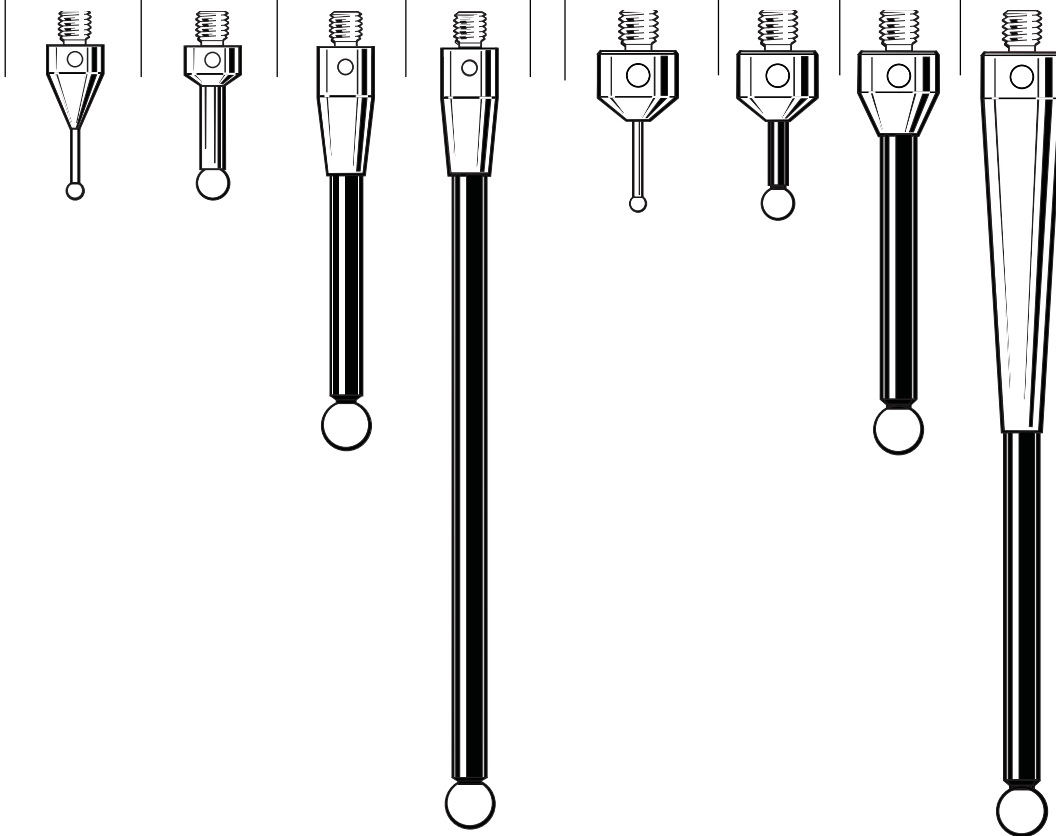


**Zirconia** is a particularly tough ceramic material with hardness and wear characteristics approaching those of ruby. Its surface properties, however, make it an ideal material for aggressive scanning applications on cast iron components.

\* Effective working length

## Z irconia ball styli (M4 and M5)

Part number	A-5003-5742 Stainless steel	A-5003-5743 Stainless steel	A-5003-5744 Carbon fiber	A-5003-5745 Carbon fiber	A-5003-5746 Tungsten carbide	A-5003-5747 Carbon fiber	A-5003-5748 Carbon fiber	A-5003-5749 Carbon fiber
Thread size	M4	M4	M4	M4	M5	M5	M5	M5
<b>A</b> Ball dia. mm (inch)	2.0 (0.08)	4.0 (0.16)	6.0 (0.24)	6.0 (0.24)	2.0 (0.08)	4.0 (0.16)	6.0 (0.24)	6.0 (0.24)
<b>B</b> Length mm (inch)	19.0 (0.75)	18.0 (0.71)	50.0 (1.97)	100.0 (3.94)	20.0 (0.79)	20.0 (0.79)	50.0 (1.97)	100.0 (3.94)
<b>C</b> Stem dia. mm (in.)	1.4 (0.05)	3.0 (0.12)	4.4 (0.18)	4.4 (0.18)	1.0 (0.04)	2.0 (0.08)	4.0 (0.16)	4.0 (0.16)
<b>D</b> EWL* mm (inch)	8.0 (0.32)	13.0 (0.52)	36.0 (1.42)	86.0 (3.39)	11.0 (0.44)	11.0 (0.44)	39.0 (1.54)	50.0 (1.97)
Mass grammes	2.33	2.40	6.09	7.19	4.73	4.95	7.09	20.65



**Z irconia** is a particularly tough ceramic material with hardness and wear characteristics approaching those of ruby. Its surface properties, however, make it an ideal material for aggressive scanning applications on cast iron components.

\* Effective working length