

M2 threaded stylus range

3.1

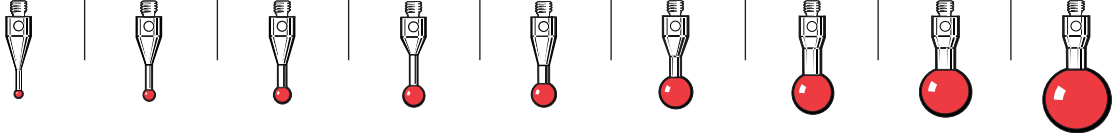


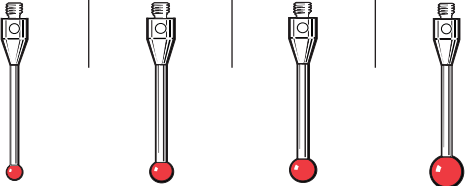
TP 200 with a SCR 200 stylus changing rack

Renishaw's probing systems are designed to give optimum performance using styli from Renishaw's comprehensive range. The following probes all use M2 threaded styli, however with suitable adaptors, other thread sizes may be used.

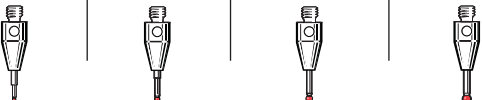
- TP 2
- TP 20
- TP 200
- R evo™

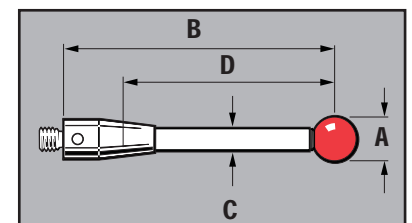
Ruby ball styli (stainless steel stems)

Ball material		Part number								
Ruby		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
Silicon nitride		A-5004-0210	A-5004-1918	A-5003-6120	A-5004-1920	A-5003-2138	A-5003-9524	A-5004-1921	A-5004-0237	A-5004-1922
Zirconia		A-5003-7757	A-5004-0165	A-5003-7723	A-5004-2913	A-5004-2914	A-5003-7261	A-5003-2186	A-5004-2203	A-5004-2915
A	Ball dia. mm (in.)	1.0 (Q04)	1.5 (Q06)	2.0 (Q08)	2.5 (Q10)	3.0 (Q12)	4.0 (Q16)	5.0 (Q20)	6.0 (Q24)	8.0 (Q32)
B	Length mm (in.)	100 (Q40)	100 (Q40)	100 (Q40)	100 (Q40)	100 (Q40)	100 (Q40)	100 (Q40)	100 (Q40)	11.0 (Q44)
C	Stem dia. mm (in.)	0.7 (Q028)	0.7 (Q028)	1.0 (Q04)	1.0 (Q04)	1.5 (Q06)	1.5 (Q06)	2.5 (Q10)	2.5 (Q10)	2.5 (Q10)
D	EWL* mm (in.)	4.5 (Q18)	4.5 (Q18)	6.0 (Q24)	6.5 (Q25)	7.0 (Q28)	10.0 (Q40)	10.0 (Q40)	10.0 (Q40)	11.0 (Q44)
	Mass grammes	0.3	0.3	0.3	0.3	0.4	0.4	0.7	0.9	1.5
10 mm range										

Ball material		Part number			
Ruby		A-5000-3603	A-5000-7804	A-5000-4160	A-5000-4161
Silicon nitride		A-5003-1730	A-5004-1923	A-5003-6691	A-5004-0236
Zirconia		A-5004-2916	A-5004-2917	A-5004-1057	A-5004-2918
A	Ball dia. mm (in.)	2.0 (Q08)	2.5 (Q10)	3.0 (Q12)	4.0 (Q16)
B	Length mm (in.)	200 (Q79)	200 (Q79)	200 (Q79)	200 (Q79)
C	Stem dia. mm (in.)	1.4 (Q05)	1.4 (Q05)	1.5 (Q06)	1.5 (Q06)
D	EWL* mm (in.)	14.0 (Q56)	16.4 (Q64)	17.0 (Q67)	20.0 (Q79)
	Mass grammes	0.4	0.4	0.5	0.6
20 mm range					






Ruby ball styli (tungsten carbide stems)






Ball material		Part number			
Ruby		A-5000-7800	A-5000-7805	A-5000-7801	A-5003-1325
Silicon nitride		A-5004-2016	A-5003-2020		A-5004-2018
Zirconia			A-5003-7672	A-5004-2632**	A-5004-2919**
A	Ball dia. mm (in.)	0.3 (Q012)	0.5 (Q020)	0.7 (Q028)	1.0 (Q04)
B	Length mm (in.)	100 (Q40)	100 (Q40)	100 (Q40)	100 (Q40)
C	Stem dia. mm (in.)	0.2 (Q01)	0.4 (Q02)	0.5 (Q020)	0.7 (Q028)
D	EWL* mm (in.)	2.0 (Q08)	3.0 (Q12)	4.0 (Q16)	4.0 (Q16)
	Mass grammes	0.3	0.3	0.3	0.3
10 mm range					










**Special

Ruby ball styli (tungsten carbide stems) - continued

Ball Material		Part number				
Ruby		A-5003-1345	A-5003-0577	A-5000-7808	A-5003-0033	A-5003-0034
Silicon nitride		A-5004-2019		A-5004-1508	A-5004-2021	A-5004-1925
Zirconia		A-5004-2920	A-5004-1714**	A-5004-0435	A-5004-2921	A-5004-2922
A	Ball dia. mm (in.)	0.5 (0.020)	0.7 (0.028)	1.0 (0.04)	1.0 (0.04)	1.5 (0.06)
B	Length mm (in.)	20.0 (0.79)	20.0 (0.79)	20.0 (0.79)	20.0 (0.76)	20.0 (0.76)
C	Stem dia. mm (in.)	0.3 (0.012)	0.5 (0.020)	0.7 (0.028)	0.8 (0.04)	1.0 (0.04)
D	EVL* mm (in.)	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						

Ball material		Part number				
Ruby		A-5003-3822	A-5003-1896	A-5003-0938	A-5003-1029	A-5003-0046
Silicon nitride		A-5004-1017	A-5004-1928	A-5004-1021	A-5004-1929	A-5004-1930
Zirconia		A-5004-2923	A-5004-2924	A-5004-0437	A-5004-2925	A-5004-2926
A	Ball dia. mm (in.)	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)	22.0 (0.87)	20.0 (0.79)
C	Stem dia. mm (in.)	1.0 (0.04)	1.0 (0.04)	1.5 (0.06)	2.0 (0.08)	2.5 (0.10)
D	EVL* mm (in.)	14.0 (0.55)	15.5 (0.62)	17.0 (0.67)	22.0 (0.87)	20.0 (0.79)
	Mass grammes	0.48	0.50	0.77	1.24	1.98
20 mm range						

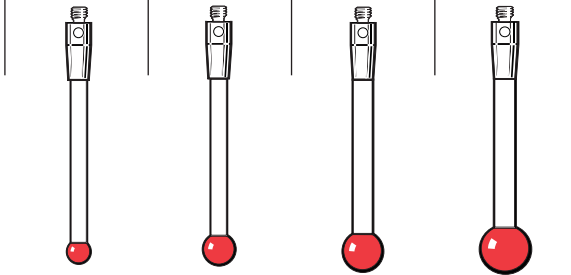
Ball material		Part number						
Ruby		A-5000-8663	A-5003-0035	A-5003-0036	A-5003-0038	A-5003-0040	A-5003-0043	A-5003-0047
Silicon nitride		A-5004-2022	A-5004-1931	A-5003-7573	A-5004-1932	A-5004-1933	A-5004-1944	A-5004-1945
Zirconia		A-5004-2927	A-5004-1711	A-5004-1058	A-5004-2928	A-5004-0264	A-5004-2929	A-5004-2930
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.)	27.5 (1.08)	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)	1.5 (0.06)	2.0 (0.08)	2.0 (0.08)	2.0 (0.08)	2.5 (0.10)
D	EVL* mm (in.)	20.5 (0.81)	22.5 (0.89)	22.5 (0.89)	22.5 (0.89)	27.0 (1.06)	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								

*Effective working length

Ruby ball styli (ceramic stems)

Ball material		Part number			
Ruby		A-5003-4177	A-5003-1370	A-5003-4779	A-5003-4780
Silicon nitride		A-5004-1946	A-5004-1952	A-5004-1953	A-5004-1954
Zirconia		A-5004-2931	A-5004-2932	A-5004-2933	A-5004-2934
A	Ball dia. mm (in.)	3.0 (Q12)	4.0 (Q16)	5.0 (Q20)	6.0 (Q24)
B	Length mm (in.)	30.0 (1.19)	30.0 (1.19)	30.0 (1.19)	30.0 (1.19)
C	Stem dia. mm (in.)	2.0 (Q08)	2.0 (Q08)	2.5 (Q10)	2.5 (Q10)
D	EWL* mm (in.)	27.0 (1.06)	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



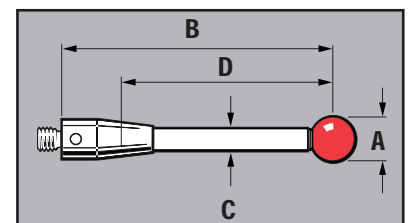
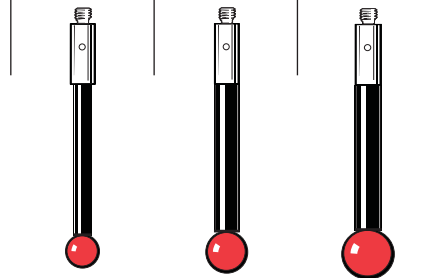
M2 threaded
stylus range

3.4

Ruby ball styli (carbon fibre stems)

Ball material		Part number		
Ruby		A-5003-4241	A-5003-4781	A-5003-4782
Silicon nitride		A-5004-1955	A-5004-1956	A-5004-1957
Zirconia		A-5004-2935	A-5004-2936	A-5004-0618
A	Ball dia. mm (in.)	4.0 (Q16)	5.0 (Q20)	6.0 (Q24)
B	Length mm (in.)	30.0 (1.19)	30.0 (1.19)	30.0 (1.19)
C	Stem dia. mm (in.)	2.0 (Q08)	3.0 (Q12)	3.0 (Q12)
D	EWL* mm (in.)	30.0 (1.19)	30.0 (1.19)	30.0 (1.19)
	Mass grammes	0.57	0.79	0.96

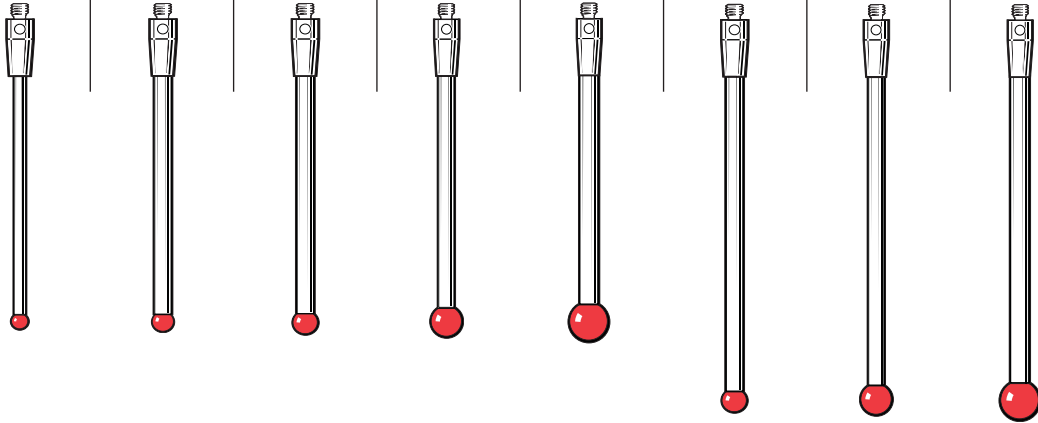
30 mm range



Ruby ball styli (tungsten carbide stems)

Ball material		Part number							
Ruby		A-5003-0037	A-5003-0039	A-5003-0041	A-5003-0044	A-5003-0048	A-5003-0042	A-5003-0045	A-5003-0049
Silicon nitride		A-5003-7269	A-5003-1959	A-5004-1960	A-5004-1961	A-5004-1962	A-5004-1963	A-5004-1964	A-5004-1965
Zirconia		A-5004-2937	A-5004-2938	A-5004-1059	A-5004-2939	A-5004-2940	A-5004-2942	A-5004-2943	A-5004-2944
A	Ball dia. mm (in.)	20 (0.08)	25 (0.10)	30 (0.12)	40 (0.16)	50 (0.20)	30 (0.12)	40 (0.16)	50 (0.20)
B	Length mm (in.)	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	EVL* mm (in.)	32.5 (1.28)	32.5 (1.28)	37.0 (1.46)	40.0 (1.58)	40.0 (1.58)	47.0 (1.85)	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 - 50 mm
range



M2 threaded
stylus range

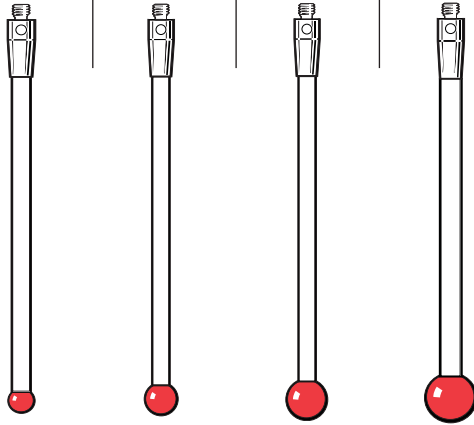
3.5

*Effective working length

Ruby ball styli (ceramic stems)

Ball material		Part number			
Ruby		A -5003-0064	A -5003-0065	A -5003-0066	A -5003-0470
Silicon nitride		A -5004-1967	A -5004-1519	A -5004-1968	A -5004-1969
Zirconia		A -5004-2945	A -5004-2946	A -5004-2947	A -5004-2948
A	Ball dia. mm (in.)	30 (Q12)	40 (Q16)	50 (Q20)	60 (Q24)
B	Length mm (in.)	500 (1.97)	500 (1.97)	500 (1.97)	500 (1.97)
C	Stem dia. mm (in.)	20 (Q08)	20 (Q08)	25 (Q10)	25 (Q10)
D	EVL* mm (in.)	47.0 (1.85)	50.0 (1.97)	50.0 (1.97)	50.0 (1.97)
	Mass grammes	0.83	0.91	1.31	1.49

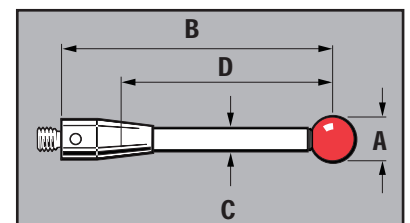
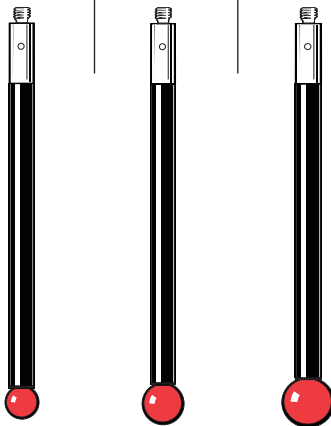
50 mm range



Ruby ball styli (carbon fibre stems)

Ball material		Part number		
Ruby		A -5003-2285	A -5003-2286	A -5003-2287
Silicon nitride		A -5004-1970	A -5004-1971	A -5004-1972
Zirconia		A -5004-1331	A -5004-1330	A -5004-1329
A	Ball dia. mm (in.)	40 (Q16)	50 (Q20)	60 (Q24)
B	Length mm (in.)	500 (1.97)	500 (1.97)	500 (1.97)
C	Stem dia. mm (in.)	30 (Q12)	30 (Q12)	30 (Q12)
D	EVL* mm (in.)	50.0 (1.97)	50.0 (1.97)	50.0 (1.97)
	Mass grammes	1.00	1.10	1.20

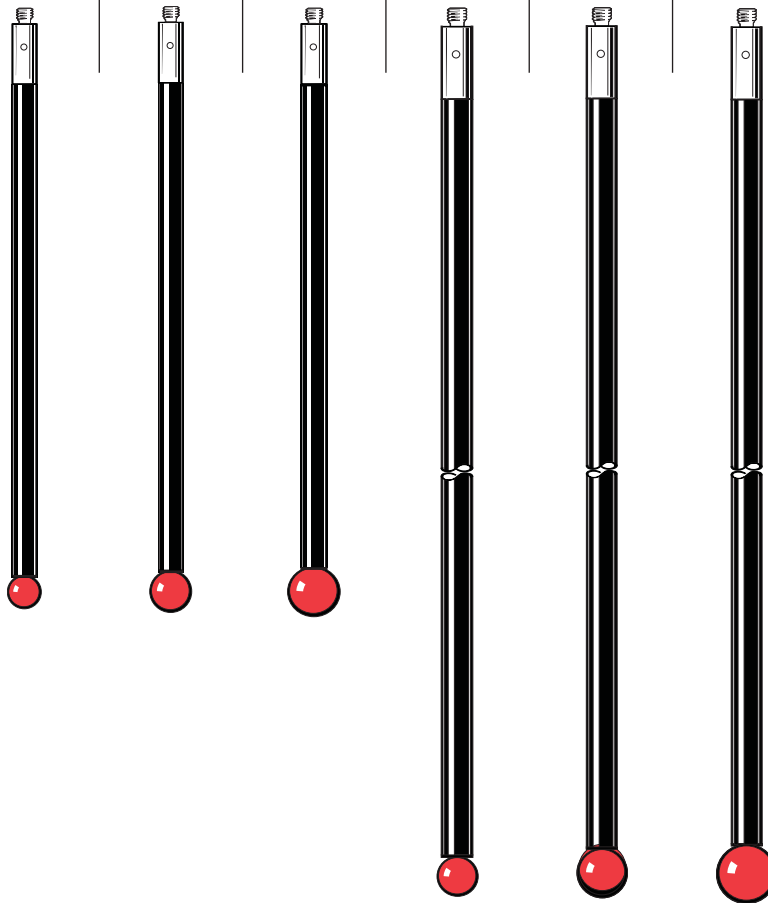
50 mm range



Ruby ball styli (carbon fibre stems)

Ball material		Part number					
Ruby		A-5003-4784	A-5003-4785	A-5003-4786	A-5003-2289	A-5003-2290	A-5003-2291
Silicon nitride		A-5004-1973	A-5004-1974	A-5004-1975	A-5004-1976	A-5004-1977	A-5004-1978
Zirconia		A-5004-2949	A-5004-2950	A-5004-2951	A-5004-2952	A-5004-2953	A-5004-2954
A	Ball dia. mm (in.)	4.0 (0.16)	5.0 (0.20)	6.0 (0.24)	4.0 (0.16)	5.0 (0.20)	6.0 (0.24)
B	Length mm (in.)	75.0 (2.96)	75.0 (2.96)	75.0 (2.96)	100.0 (3.94)	100.0 (3.94)	100.0 (3.94)
C	Stem dia. mm (in.)	2.0 (0.8)	3.0 (0.12)	3.0 (0.12)	3.0 (0.12)	3.0 (0.12)	3.0 (0.12)
D	EVL* mm (in.)	75.0 (2.96)	75.0 (2.96)	75.0 (2.96)	100.0 (3.94)	100.0 (3.94)	100.0 (3.94)
	Mass grammes	0.75	1.35	1.45	1.50	1.59	1.78

75 mm -
100 mm range



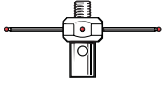
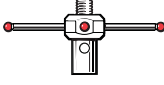
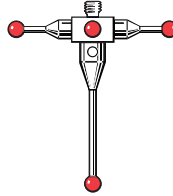
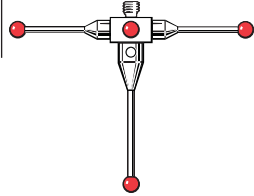


Styli and accessories





M2 threaded
stylus range

3.8





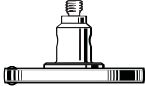
Star styli (fixed)

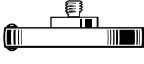

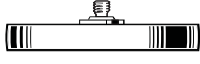
Part number	A-5003-4011	A-5000-7811	A-5003-4787	A-5003-4788	A-5000-7629	A-5000-3626
Span mm (in.)	100 (Q40)	100 (Q40)	200 (Q79)	200 (Q79)	180 (Q71)	300 (1.19)
Ball dia. mm (in.)	0.5 (Q020)	1.0 (Q04)	0.5 (Q020)	1.0 (Q04)	2.0 (Q08)	2.0 (Q08)
Stem dia. mm (in.)	0.3 (Q012)	0.7 (Q028)	0.3 (Q012)	0.7 (Q028)	1.4 (Q05)	1.4 (Q05)
EWL* mm (in.)	NA	NA	NA	NA	120 (Q48)	120 (Q48)
Mass grammes	0.7	0.5	0.7	0.9	1.3	1.8
						

Star styli centres

Part number	A-5003-4789	A-5003-4790	A-5003-4791	A-5000-3609
Ball dia mm (in.)	1.0 (Q04)	0.5 (Q020)	1.0 (Q04)	2.0 (Q08)
Stem dia. mm (in.)	0.7 (Q028)	0.4 (Q02)	0.7 (Q028)	1.4 (Q05)
EWL* mm (in.)	3.5 (Q14)	7.0 (Q28)	11.0 (Q44)	12.0 (Q48)
Mass grammes	0.31	0.43	0.45	0.44
				

Disc styli







Part number	A -5000-3611 Ruby	A -5004-1387 Silver steel	A -5004-1395 Silver steel	A -5004-1396 Silver steel	A -5000-7809 Silver steel
Disc dia mm (in.)	6.0 (Q.24)	10.0 (Q.40)	12.0 (Q.47)	14.0 (Q.55)	18.0 (Q.71)
Disc depth mm (in.)	1.2 (Q.05)	1.2 (Q.05)	1.6 (Q.06)	1.6 (Q.06)	1.6 (Q.07)
Roller depth mm (in.)	2.0 (Q.08)	2.0 (Q.08)	2.5 (Q.10)	2.5 (Q.10)	2.5 (Q.10)
Stem dia. mm (in.)	2.0 (Q.08)	2.0 (Q.08)	4.2 (Q.17)	4.2 (Q.17)	4.2 (Q.17)
Mass grammes	0.6	1.0	2.0	2.5	3.0
					

Part number	A -5000-3613 Silver steel	A -5000-7810 Silver steel	A -5000-4187 Silver steel
Disc dia mm (in.)	18.0 (Q.71)	25.0 (Q.99)	25.0 (Q.99)
Disc depth mm (in.)	2.3 (Q.10)	1.6 (Q.07)	3.1 (Q.13)
Roller depth mm (in.)	3.0 (Q.12)	2.5 (Q.10)	NA
Stem dia. mm (in.)	NA	4.2 (Q.17)	NA
Mass grammes	2.7	4.0	3.8
			

M2 threaded
stylus range

3.9

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 (in.)	1.5 (Q.06)	3.0 (Q.12)	1.0 (Q.04)	1.5 (Q.06)	2.0 (Q.08)	4.0 (Q.16)
Overall length mm (in.)	10.75 (Q.42)	12.75 (Q.50)	15.0 (Q.60)	15.0 (Q.60)	20.0 (Q.79)	22.0 (Q.87)
Stem dia. mm (in.)	1.0 (Q.04)	1.5 (Q.06)	NA	NA	1.6 (Q.07)	2.0 (Q.08)
EVL* mm (in.)	1.25 (Q.05)	3.8 (Q.15)	8.0 (Q.32)	8.0 (Q.32)	7.2 (Q.29)	10.0 (Q.40)
Mass grammes	0.3	0.6	0.3	0.3	0.5	0.9
						

*Effective working length

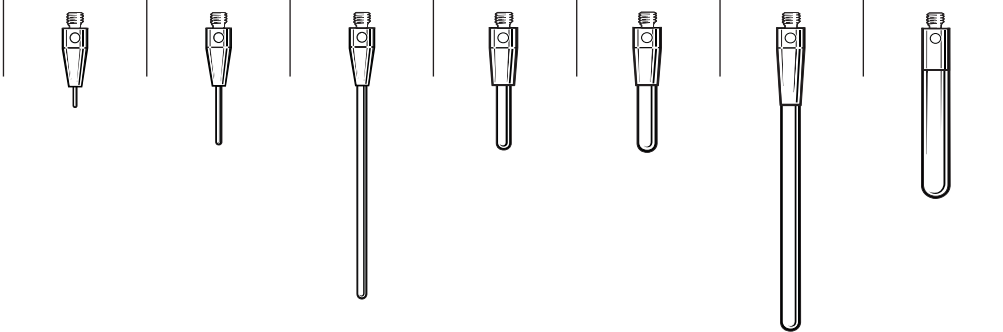
Styli and accessories

M2 threaded
stylus range

3.10

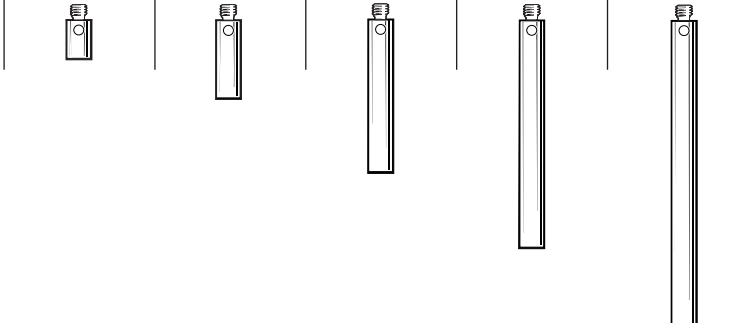
Parallel hemispherical ended styli (tungsten carbide)

Part number	A-5003-1208	A-5003-1210	A-5003-1218	A-5003-1219	A-5003-1228	A-5003-0074	A-5003-1258
Cylinder dia mm (in.)	0.3 (0.012)	0.5 (0.020)	1.0 (0.04)	1.5 (0.06)	2.0 (0.08)	2.0 (0.08)	3.0 (0.12)
Overall length mm (in.)	10.2 (0.41)	15.3 (0.61)	35.5 (1.40)	15.8 (0.63)	16.0 (0.63)	40.0 (1.58)	22.5 (0.89)
EVL* mm (in.)	2.7 (0.11)	7.8 (0.31)	28.0 (1.10)	8.3 (0.33)	8.5 (0.34)	32.0 (1.26)	22.5 (0.89)
Mass grammes	0.3	0.3	0.7	0.6	0.8	2.0	2.0



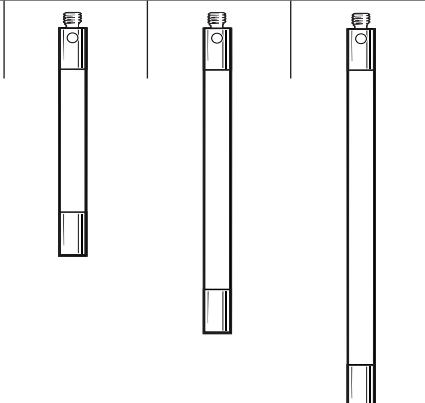
Stylus extensions (stainless steel)

Part number	M-5000-7634	M-5000-3647	M-5000-3648	M-5000-4162	M-5000-7779
Length mm (in.)	5.0 (0.20)	10.0 (0.40)	20.0 (0.79)	30.0 (1.19)	40.0 (1.58)
Stem dia. mm (in.)	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



Stylus extensions (ceramic)

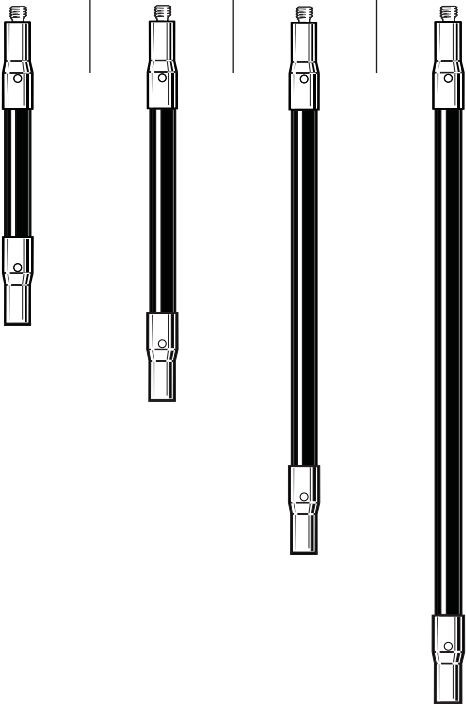
Part number	A-5003-0070	A-5003-0071	A-5003-0072
Length mm (in.)	30.0 (1.19)	40.0 (1.58)	50.0 (1.97)
Stem dia. mm (in.)	3.0 (0.12)	3.0 (0.12)	3.0 (0.12)
Mass grammes	0.97	1.22	1.51



*E effective working length

Stylus extensions (carbon fibre)

Part number	A -5003-2280	A -5003-2281	A -5003-2282	A -5003-2283
Length mm (in.)	40.0 (1.58)	50.0 (1.97)	70.0 (2.76)	90.0 (3.55)
Stem dia. mm (in.)	3.0 (Q12)	3.0 (Q12)	3.0 (Q12)	3.0 (Q12)
Outer dia. mm (in.)	3.5 (Q14)	3.5 (Q14)	3.5 (Q14)	3.5 (Q14)
Mass grammes	0.9	1.0	1.3	1.5


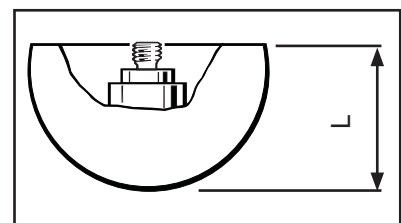


M2 threaded
stylus range

3.11

Special purpose styli

Part number	M-5000-4150 Silver steel	A -5000-7813 Tungsten carbide	A -5000-3614 Ceramic
Length mm (in.)	15.0 (Q60)	10.0 (Q40)	11.0 (Q44)
Ball dia. mm (in.)	N/A	N/A	18.0 (Q71)
End feature mm (in.)	Flat Rad Q05 (Q002)	Spherical Rad Q1 (Q004)	N/A
Mass grammes	0.7	0.7	3.3
Angles	30° inclusive	30° inclusive	N/A

M2 threaded
stylus range

3.12