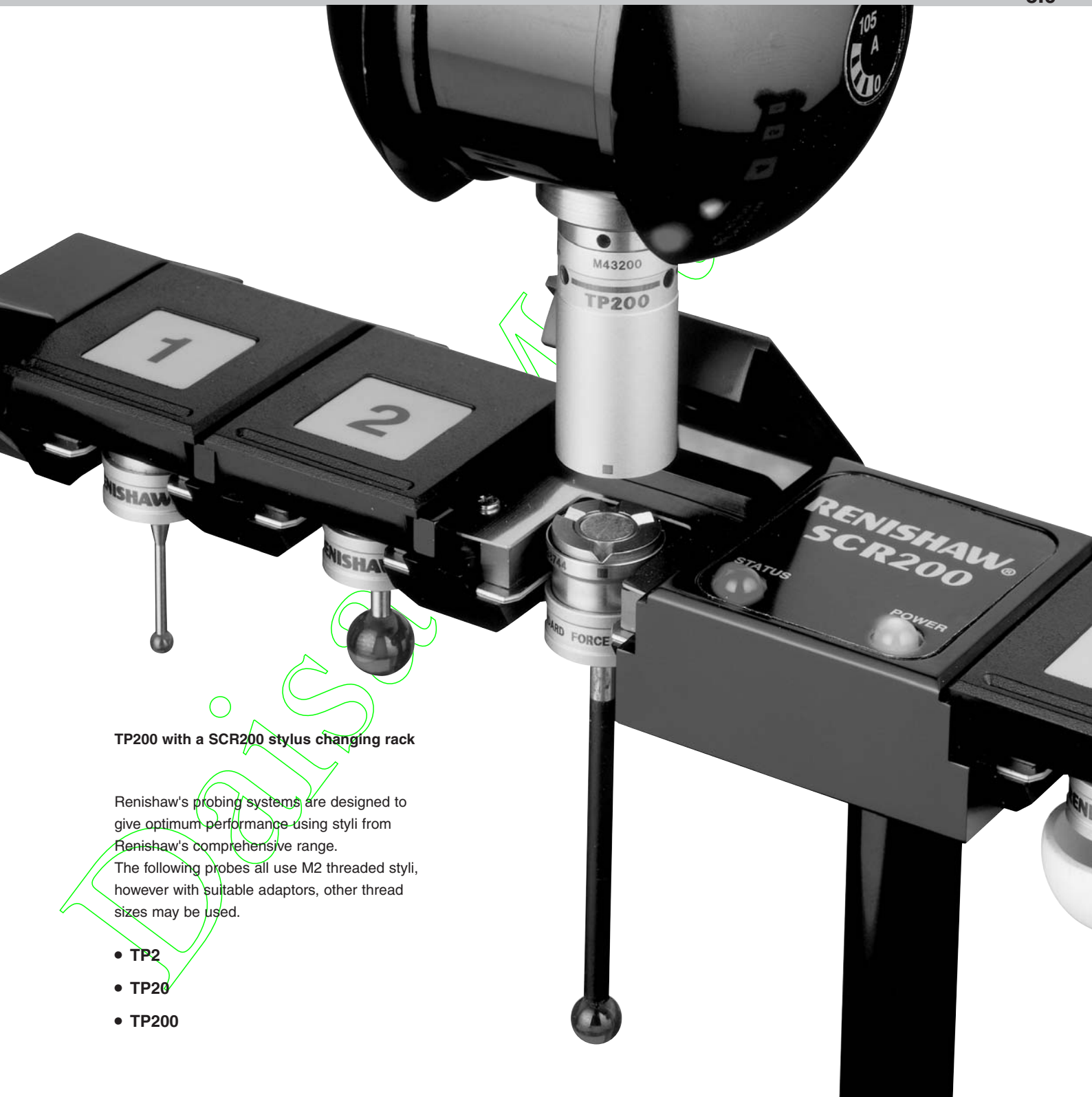


M2 threaded stylus range



TP200 with a SCR200 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.

- TP2
- TP20
- TP200

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 | 1.5 |

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

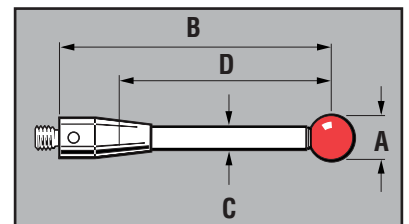
Ruby ball styli (tungsten carbide stems)

| Part number | A-5000-7800 | A-5000-7805 | A-5000-7801 | A-5000-1325 |
|------------------------------|-------------|-------------|-------------|-------------|
| 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-5003-7808 | 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 (0.76) | 20.0 (0.76) |
| C Stem dia. mm (in.) | 0.3 (0.012) | 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 |

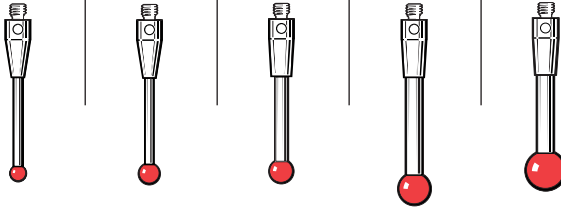
20 mm range



Ruby ball styli (tungsten carbide stems) – continued

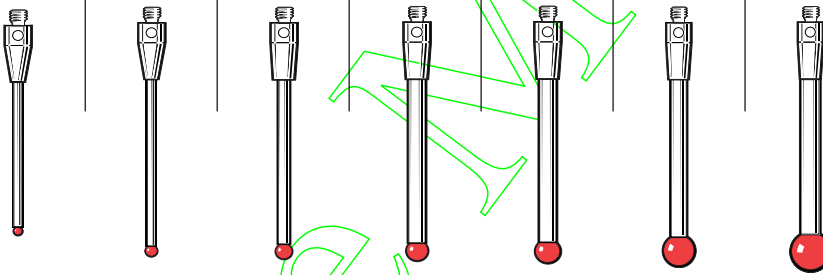
| Part number | A-5003-3822 | A-5003-1896 | A-5003-0938 | A-5003-1029 | A-5003-0046 |
|------------------------------|-------------|-------------|-------------|-------------|-------------|
| A Ball dia. mm (inch) | 2.0 (0.08) | 2.5 (0.10) | 3.0 (0.12) | 4.0 (0.16) | 5.0 (0.20) |
| B Length mm (inch) | 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 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 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) | 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) |
| C 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) |
| D 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 |

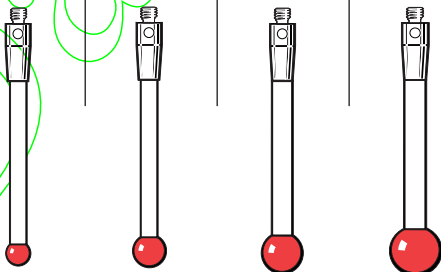
30 mm range



Ruby ball styli (ceramic stems)

| Part number | A-5003-4177 | A-5003-1370 | A-5003-4779 | A-5003-4780 |
|------------------------------|-------------|-------------|-------------|-------------|
| A Ball dia. mm (inch) | 3.0 (0.12) | 4.0 (0.16) | 5.0 (0.20) | 6.0 (0.24) |
| 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.) | 2.0 (0.08) | 2.0 (0.08) | 2.5 (0.10) | 2.5 (0.10) |
| D EWL* mm (inch) | 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 |

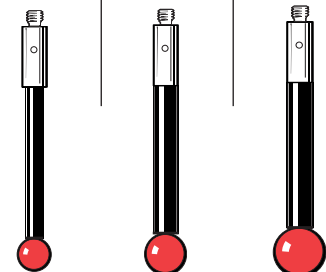
30 mm range



Ruby ball styli (carbon fibre stems)

| Part number | A-5003-4241 | A-5003-4781 | A-5003-4782 |
|------------------------------|-------------|-------------|-------------|
| A Ball dia. mm (inch) | 4.0 (0.16) | 5.0 (0.20) | 6.0 (0.24) |
| B Length mm (inch) | 30.0 (1.19) | 30.0 (1.19) | 30.0 (1.19) |
| C Stem dia. mm (in.) | 2.0 (0.08) | 3.0 (0.12) | 3.0 (0.12) |
| D EWL* mm (inch) | 30.0 (1.19) | 30.0 (1.19) | 30.0 (1.19) |
| Mass grammes | 0.57 | 0.79 | 0.96 |

30 mm range

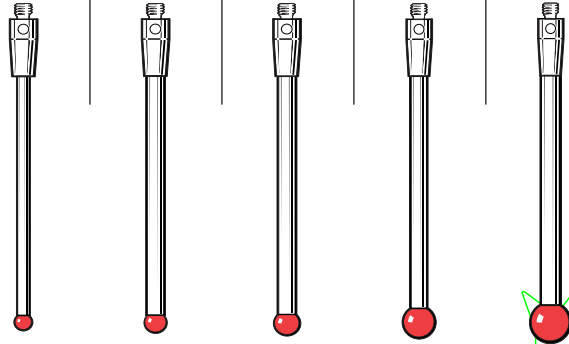


*Effective working length

Ruby ball styli (tungsten carbide stems)

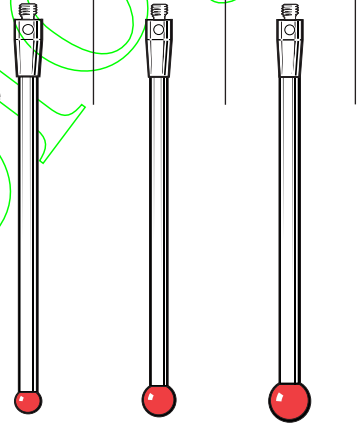
| Part number | A-5003-0037 | A-5003-0039 | A-5003-0041 | A-5003-0044 | A-5003-0048 |
|------------------------------|-------------|-------------|-------------|-------------|-------------|
| A Ball dia. mm (inch) | 2.0 (0.08) | 2.5 (0.10) | 3.0 (0.12) | 4.0 (0.16) | 5.0 (0.20) |
| B Length mm (inch) | 40.0 (1.58) | 40.0 (1.58) | 40.0 (1.58) | 40.0 (1.58) | 40.0 (1.58) |
| 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) |
| D EWL* mm (inch) | 35.0 (1.38) | 35.0 (1.38) | 35.0 (1.38) | 40.0 (1.58) | 40.0 (1.58) |
| Mass grammes | 1.29 | 1.95 | 1.97 | 2.04 | 3.17 |

40 mm range



| Part number | A-5003-0042 | A-5003-0045 | A-5003-0049 |
|------------------------------|-------------|-------------|-------------|
| A Ball dia. mm (inch) | 3.0 (0.12) | 4.0 (0.16) | 5.0 (0.20) |
| B Length mm (inch) | 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) |
| D EWL* mm (inch) | 42.5 (1.68) | 50.0 (1.97) | 50.0 (1.97) |
| Mass grammes | 2.44 | 2.52 | 3.75 |

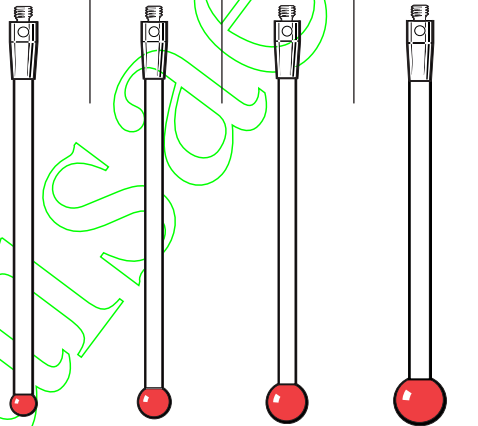
50 mm range



Ruby ball styli (ceramic stems)

| Part number | A-5003-0064 | A-5003-0065 | A-5003-0066 | A-5003-0470 |
|------------------------------|-------------|-------------|-------------|-------------|
| A Ball dia. mm (inch) | 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) |
| C Stem dia. mm (in.) | 2.0 (0.08) | 2.0 (0.08) | 2.5 (0.10) | 2.5 (0.10) |
| D EWL* mm (inch) | 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 |

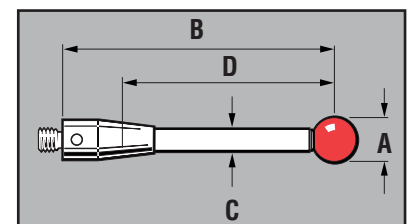
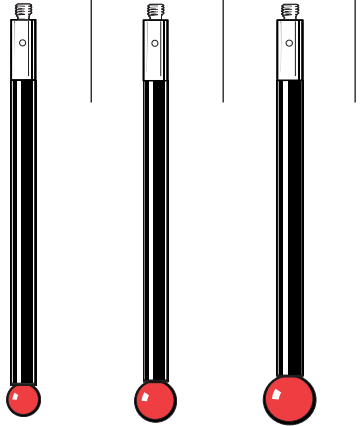
50 mm range



Ruby ball styli (carbon fibre stems)

| Part number | A-5003-2285 | A-5003-2286 | A-5003-2287 |
|------------------------------|-------------|-------------|-------------|
| A Ball dia. mm (inch) | 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) |
| C Stem dia. mm (in.) | 3.0 (0.12) | 3.0 (0.12) | 3.0 (0.12) |
| D EWL* mm (inch) | 50.0 (1.97) | 50.0 (1.97) | 50.0 (1.97) |
| Mass grammes | 1.00 | 1.10 | 1.20 |

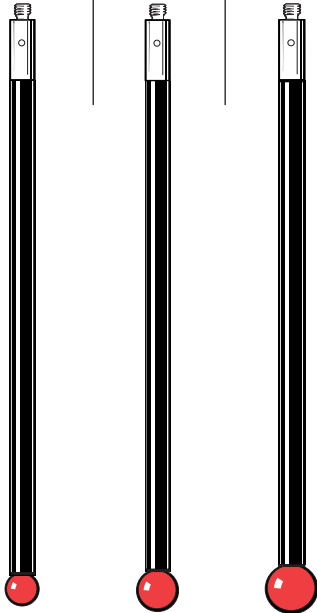
50 mm range



Ruby ball styli (carbon fibre stems)

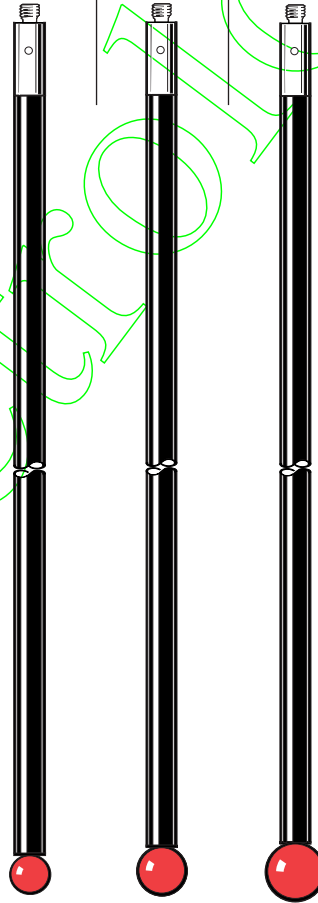
| Part number | A-5003-4784 | A-5003-4785 | A-5003-4786 |
|------------------------------|-------------|-------------|-------------|
| A Ball dia. mm (inch) | 4.0 (0.16) | 5.0 (0.20) | 6.0 (0.24) |
| B Length mm (inch) | 75.0 (2.96) | 75.0 (2.96) | 75.0 (2.96) |
| C Stem dia. mm (in.) | 3.0 (0.12) | 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



| Part number | A-5003-2289 | A-5003-2290 | A-5003-2291 |
|---------------------|--------------|--------------|--------------|
| Ball dia. mm (inch) | 4.0 (0.16) | 5.0 (0.20) | 6.0 (0.24) |
| Length mm (inch) | 100.0 (3.94) | 100.0 (3.94) | 100.0 (3.94) |
| Stem dia. mm (in.) | 3.0 (0.12) | 3.0 (0.12) | 3.0 (0.12) |
| EWL* mm (inch) | 100.0 (3.94) | 100.0 (3.94) | 100.0 (3.94) |
| Mass grammes | 1.50 | 1.59 | 1.78 |

100 mm range

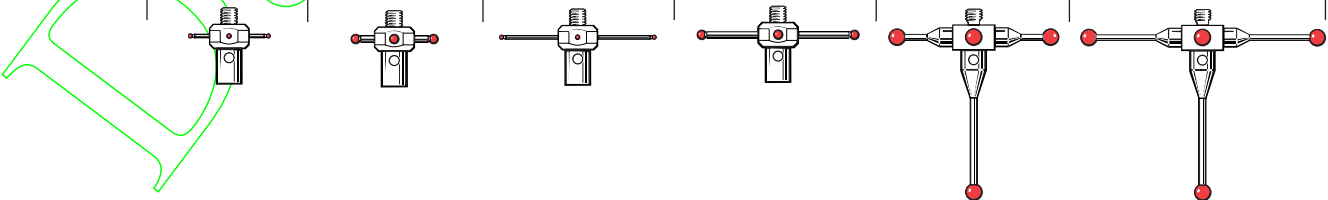


M2 threaded
stylus range

3.4

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 (in.) | 0.3 (0.012) | 0.7 (0.03) | 0.3 (0.012) | 0.7 (0.03) | 1.4 (0.06) | 1.4 (0.06) |
| EWL* mm (inch) | NA | NA | NA | NA | 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

Styli and accessories

M2 threaded
stylus range

3.5

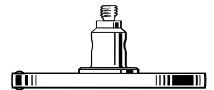
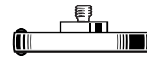
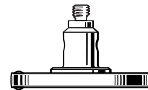
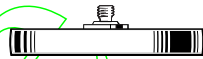
Star styli centres

| Part number | A-5003-4789 | A-5003-4790 | A-5003-4791 | A-5000-3609 |
|---------------------|-------------|-------------|-------------|-------------|
| Ball dia. 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 |



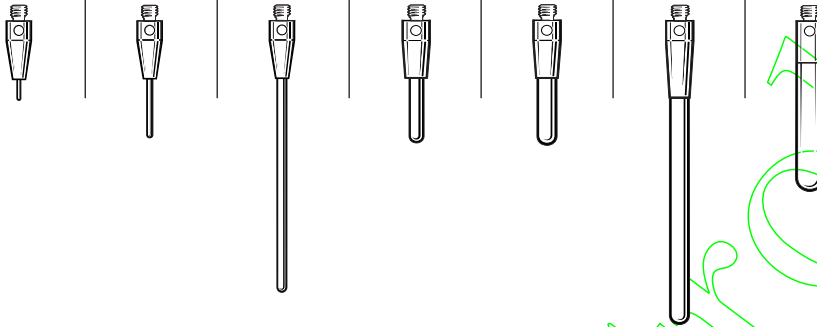
Cylinder styli

| 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 (in.) | 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 |



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 (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) | 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) |
| EWL* mm (inch) | 2.7 (0.11) | 7.8 (0.31) | 29.8 (1.18) | 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 |

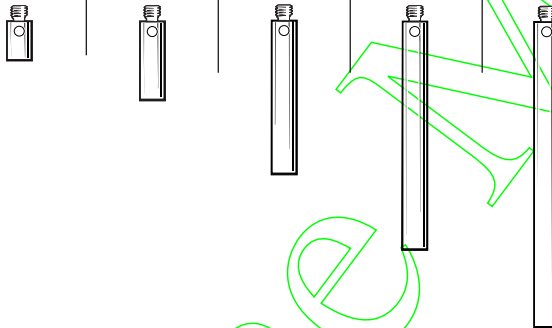


M2 threaded
stylus range

3.6

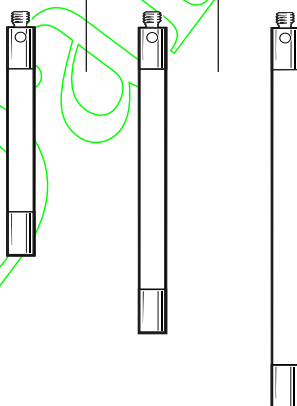
Stylus extensions (stainless steel)

| 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 |



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

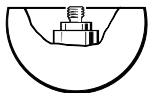
Stylus extensions (carbon fibre)

| 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 (in.) | 3.0 (0.12) | 3.0 (0.12) | 3.0 (0.12) | 3.0 (0.12) |
| Outer dia. mm (in.) | 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) |
| End feature mm (inch) | Flat Rad 0.05 (0.002) | Spherical Rad 0.1 (0.004) | NA |
| Mass grammes | 0.7 | 0.7 | 3.3 |
| Angles | 30° inclusive | 30° inclusive | NA |



Metrology

Data