elcometer®
inspection equipment

# Viscosity - Flow Cups

## Elcometer 2350 & 2354

# Viscosity Flow Cups

**STANDARDS:**
**ISO:** ISO 2431
**AS/NZS:** AS/NZS 1580.214.2 (cup 4), AS/NSZ 1580.214.6:1995
**BS:** BS 3900-A6:1971
**FORD/ASTM:** ASTM D 1200, D 5125
**DIN:** DIN 53211 (cup 4)
**AFNOR:** NF T30-014

Viscosity Flow Cups are very easy to use instruments made of anodized aluminium with a stainless steel orifice, for measuring the consistency of paints, varnishes and similar products. The measured kinematic viscosity is generally expressed in seconds(s) flow time. If the Standards stipulate conversion methods the flow time can be converted into Centistokes (cSt) using the Elcometer ElcoCalc™ Mobile App.

Calibration certificates which offer traceability and assurance that each viscosity cup has been individually tested and comply to Standards are also available.

The cups can be supplied separately or with an adjustable stand which includes a precision level and an overflow glass draw plate. They can also be supplied with a flow jacket for temperature control (thermojacket), see page 5 for more information.

compatible with ElcoCalc™

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## Technical Specification C

| BS Viscosity Flow Cups<br>Part Number | Description | Orifice Diameter | Range[1] (cSt) | Certificate |
|---|---|---|---|---|
| K0002354M003 | Elcometer 2354/3 BS Viscosity Cup 4 | 3.97mm | 89 - 340 | ◇ |
| K0002354M004 | Elcometer 2354/4 BS Viscosity Cup 5 | 4.76mm | 79 - 441 | ◇ |
| K0002354M003C | Elcometer 2354/3 with calibration certificate | 3.97mm | 89 - 340 | ● (e) |
| K0002354M004C | Elcometer 2354/4 with calibration certificate | 4.76mm | 79 - 441 | ● (e) |

| DIN Viscosity Cups<br>Part Number | Description | Orifice Diameter | Range[1] (cSt) | Certificate |
|---|---|---|---|---|
| K0002350M001 | Elcometer 2350/1 DIN Viscosity Cup 2 | 2mm | - | |
| K0002350M002 | Elcometer 2350/2 DIN Viscosity Cup 4 | 4mm | 96 - 683 | ◇ |
| K0002350M003 | Elcometer 2350/3 DIN Viscosity Cup 6 | 6mm | - | |
| K0002350M004 | Elcometer 2350/4 DIN Viscosity Cup 8 | 8mm | - | |
| K0002350M001C | Elcometer 2350/1 with calibration certificate | 2mm | - | ● (d) |
| K0002350M002C | Elcometer 2350/2 with calibration certificate | 4mm | 96 - 683 | ● (e) |
| K0002350M003C | Elcometer 2350/3 with calibration certificate | 6mm | - | ● (d) |
| K0002350M004C | Elcometer 2350/4 with calibration certificate | 8mm | - | ● (d) |

[1] For Information Only (d) Dimensional Certificate (e) Efflux Time Certificate

● Calibration Certificate supplied as standard. ◇ Batch Calibration Certificate supplied as standard.

# Viscosity Flow Cups

## Elcometer 2351, 2352 & 2353

Technical Specification C

### ISO Viscosity Flow Cups

| Part Number | Description | Orifice Diameter | Range[1] (cSt) | Certificate |
|---|---|---|---|---|
| K0002353M001 | Elcometer 2353/1 ISO Viscosity Cup 3 | 3mm | 7 - 42 | ◇ |
| K0002353M002 | Elcometer 2353/2 ISO Viscosity Cup 4 | 4mm | 34 - 135 | ◇ |
| K0002353M003 | Elcometer 2353/3 ISO Viscosity Cup 5 | 5mm | 91 - 326 | ◇ |
| K0002353M004 | Elcometer 2353/4 ISO Viscosity Cup 6 | 6mm | 188 - 684 | ◇ |
| K0002353M005 | Elcometer 2353/5 ISO Viscosity Cup 8 | 8mm | - | |
| K0002353M001C | Elcometer 2353/1 with calibration certificate | 3mm | 7 - 42 | ● (e) |
| K0002353M002C | Elcometer 2353/2 with calibration certificate | 4mm | 34 - 135 | ● (e) |
| K0002353M003C | Elcometer 2353/3 with calibration certificate | 5mm | 91 - 326 | ● (e) |
| K0002353M004C | Elcometer 2353/4 with calibration certificate | 6mm | 188 - 684 | ● (e) |
| K0002353M005C | Elcometer 2353/5 with calibration certificate | 8mm | - | ● (d) |

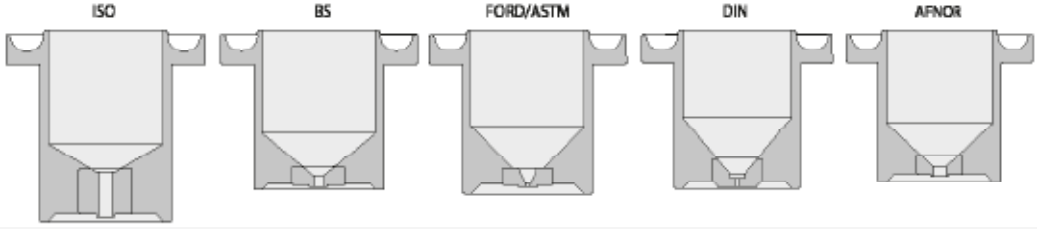
### FORD/ASTM Viscosity Cups

| Part Number | Description | Orifice Diameter | Range[1] (cSt) | Certificate |
|---|---|---|---|---|
| K0002351M001 | Elcometer 2351/1 FORD/ASTM Viscosity Cup 1 | 1.90mm | 10 - 35 | ◇ |
| K0002351M002 | Elcometer 2351/2 FORD/ASTM Viscosity Cup 2 | 2.53mm | 25 - 120 | ◇ |
| K0002351M003 | Elcometer 2351/3 FORD/ASTM Viscosity Cup 3 | 3.40mm | 49 - 220 | ◇ |
| K0002351M004 | Elcometer 2351/4 FORD/ASTM Viscosity Cup 4 | 4.12mm | 70 - 370 | ◇ |
| K0002351M005 | Elcometer 2351/5 FORD/ASTM Viscosity Cup 5 | 5.20mm | 200 - 1200 | ◇ |
| K0002351M001C | Elcometer 2351/1 with calibration certificate | 1.90mm | 10 - 35 | ● (e) |
| K0002351M002C | Elcometer 2351/2 with calibration certificate | 2.53mm | 25 - 120 | ● (e) |
| K0002351M003C | Elcometer 2351/3 with calibration certificate | 3.40mm | 49 - 220 | ● (e) |
| K0002351M004C | Elcometer 2351/4 with calibration certificate | 4.12mm | 70 - 370 | ● (e) |
| K0002351M005C | Elcometer 2351/5 with calibration certificate | 5.20mm | 200 - 1200 | ● (e) |

### AFNOR Viscosity Cups

| Part Number | Description | Orifice Diameter | Range[1] | Certificate |
|---|---|---|---|---|
| K0002352M001 | Elcometer 2352/1 AFNOR Viscosity Cup 2.5 | 2.46mm | 5 - 140 | |
| K0002352M002 | Elcometer 2352/2 AFNOR Viscosity Cup 4 | 4mm | 50 - 1100 | |
| K0002352M003 | Elcometer 2352/3 AFNOR Viscosity Cup 6 | 6mm | 510 - 5100 | |
| K0002352M001C | Elcometer 2352/1 with calibration certificate | 2.46mm | 5 - 140 | ● (d) |
| K0002352M002C | Elcometer 2352/2 with calibration certificate | 4mm | 50 - 1100 | ● (d) |
| K0002352M003C | Elcometer 2352/3 with calibration certificate | 6mm | 510 - 5100 | ● (d) |

### Viscosity Flow Cups - Cup Designs



## Viscosity Cup Conversion



The table below lists the major flow cup types together with a conversion chart of Efflux Time (in seconds) to Viscosity in Centistokes (cSt). It has been constructed from the various International Standard Calculators.

Each cup design is unique, care must be taken when comparing viscosity values between different cup types. These values are the absolute values and do not include the allowed tolerances, as these differ considerably between each of the Standards.

Viscosity Cup Type

| Time (seconds) | DIN | BS | | | | | ISO | | | | FORD / ASTM | | | | ZAHN | | | | | SHELL | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 4 | 2 | 3 | 4 | 5 | 6 | 3 | 4 | 5 | 6 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 | 6 |
| 15 | 38 | 6.4 | | 19 | 40 | 234 | | | 35 | 66 | | | 19 | 40 | | 4 | 88 | 148 | 322 | | | 20 | 48 | 91 | 235 |
| 16 | 45 | 6.8 | 3 | 24 | 48 | 262 | | | 39 | 75 | | | 22 | 44 | | 7 | 99 | 163 | 345 | | | 21 | 52 | 98 | 251 |
| 17 | 51 | 7.3 | 5 | 28 | 56 | 290 | | | 43 | 84 | | | 24 | 48 | | 11 | 111 | 178 | 368 | | | 23 | 55 | 104 | 267 |
| 18 | 57 | 7.7 | 7 | 32 | 64 | 317 | | | 47 | 93 | | | 26 | 52 | | 14 | 123 | 192 | 391 | 1.1 | 7.5 | 24 | 59 | 111 | 284 |
| 19 | 63 | 8.1 | 9 | 35 | 72 | 343 | | | 51 | 101 | | 1 | 29 | 56 | | 18 | 135 | 207 | 414 | 1.4 | 8.1 | 26 | 62 | 117 | 300 |
| 20 | 69 | 8.6 | 11 | 39 | 79 | 369 | | | 55 | 110 | | 3 | 31 | 60 | | 21 | 146 | 222 | 437 | 1.6 | 8.6 | 27 | 66 | 124 | 316 |
| 21 | 74 | 9.0 | 13 | 43 | 86 | 395 | | | 58 | 118 | | 4 | 33 | 64 | | 25 | 158 | 237 | 460 | 1.8 | 9.2 | 29 | 69 | 130 | 332 |
| 22 | 80 | 9.4 | 15 | 47 | 93 | 420 | | | 62 | 126 | | 6 | 36 | 67 | | 28 | 170 | 252 | 483 | 2.0 | 9.8 | 30 | 72 | 137 | 348 |
| 23 | 85 | 9.8 | 17 | 50 | 100 | 445 | 1 | | 66 | 134 | | 7 | 38 | 71 | | 32 | 181 | 266 | 506 | 2.3 | 10.4 | 32 | 76 | 143 | 365 |
| 24 | 91 | 10.3 | 18 | 54 | 107 | 470 | 2 | | 70 | 142 | | 9 | 40 | 75 | | 35 | 193 | 281 | 529 | 2.5 | 10.9 | 33 | 79 | 150 | 381 |
| 25 | 96 | 10.7 | 20 | 57 | 114 | 494 | 3 | | 73 | 150 | | 10 | 43 | 79 | | 39 | 205 | 296 | 552 | 2.7 | 11.5 | 35 | 83 | 156 | 397 |
| 26 | 101 | 11.1 | 22 | 60 | 120 | 519 | 4 | | 77 | 157 | | 12 | 45 | 83 | | 42 | 216 | 311 | 575 | 2.9 | 12.1 | 36 | 86 | 163 | 413 |
| 27 | 107 | 11.5 | 23 | 64 | 127 | 543 | 4.5 | | 80 | 165 | | 13 | 47 | 87 | | 46 | 228 | 326 | 598 | 3.2 | 12.7 | 38 | 90 | 169 | 429 |
| 28 | 112 | 12.0 | 25 | 67 | 133 | 567 | 5 | | 84 | 173 | | 14 | 49 | 91 | | 49 | 240 | 340 | 621 | 3.4 | 13.2 | 39 | 93 | 176 | 446 |
| 29 | 117 | 12.4 | 26 | 70 | 140 | 591 | 6 | | 88 | 180 | | 16 | 52 | 94 | | 53 | 252 | 355 | 644 | 3.6 | 13.8 | 41 | 97 | 182 | 462 |
| 30 | 122 | 12.8 | 28 | 73 | 146 | 614 | 6.6 | 34.5 | 91 | 188 | | 17 | 54 | 98 | 1 | 56 | 263 | 370 | 667 | 3.8 | 14.4 | 42 | 100 | 189 | 478 |
| 31 | 127 | 13.3 | 30 | 77 | 153 | 638 | 7.3 | 36.0 | 95 | 196 | | 19 | 56 | 102 | 2 | 60 | 275 | 385 | 690 | 4.1 | 15.0 | 44 | 104 | 195 | 494 |
| 32 | 132 | 13.7 | 31 | 80 | 159 | 662 | 7.9 | 37.5 | 98 | 203 | | 20 | 59 | 106 | 3 | 63 | 287 | 400 | 713 | 4.3 | 15.6 | 45 | 107 | 202 | 510 |
| 33 | 137 | 14.1 | 33 | 83 | 165 | 685 | 8.6 | 38.0 | 102 | 210 | | 22 | 61 | 110 | 4 | 67 | 298 | 414 | 736 | 4.5 | 16.1 | 47 | 110 | 208 | 527 |
| 34 | 142 | 14.5 | 34 | 86 | 171 | 709 | 9.2 | 41.0 | 105 | 218 | | 23 | 63 | 114 | 6 | 70 | 310 | 429 | 759 | 4.7 | 16.7 | 48 | 114 | 215 | 543 |
| 35 | 147 | 15.0 | 35 | 89 | 177 | 732 | 9.8 | 42.0 | 109 | 225 | | 24 | 66 | 117 | 7 | 74 | 322 | 444 | 782 | 5.0 | 17.3 | 50 | 117 | 221 | 559 |
| 36 | 152 | 15.4 | 37 | 92 | 184 | 755 | 10.4 | 44.0 | 112 | 233 | | 26 | 68 | 121 | 8 | 77 | 333 | 459 | 805 | 5.2 | 17.9 | 51 | 121 | 228 | 575 |
| 37 | 157 | 15.8 | 38 | 96 | 190 | 778 | 11.0 | 45.2 | 115 | 240 | | 27 | 70 | 125 | 9 | 81 | 345 | 474 | 828 | 5.4 | 18.4 | 53 | 124 | 234 | 591 |
| 38 | 162 | 16.3 | 40 | 99 | 196 | 801 | 11.6 | 47.0 | 119 | 247 | 1 | 29 | 73 | 129 | 10 | 84 | 357 | 488 | 851 | 5.6 | 19.0 | 54 | 128 | 241 | 608 |
| 39 | 167 | 16.7 | 41 | 102 | 202 | 825 | 12.1 | 48.0 | 122 | 254 | 2 | 30 | 75 | 133 | 11 | 88 | 369 | 503 | 874 | 5.9 | 19.6 | 56 | 131 | 247 | 624 |
| 40 | 172 | 17.1 | 43 | 105 | 208 | 848 | 12.7 | 50.0 | 126 | 262 | 2 | 32 | 77 | 137 | 12 | 91 | 380 | 518 | 897 | 6.1 | 20.2 | 57 | 135 | 254 | 640 |
| 41 | 176 | 17.5 | 44 | 108 | 214 | 871 | 13.3 | 51.2 | 129 | 269 | 3 | 33 | 80 | 141 | 13 | 95 | 392 | 533 | 920 | 6.3 | 20.7 | 59 | 138 | 260 | 656 |
| 42 | 181 | 18.0 | 45 | 111 | 220 | 893 | 13.8 | 53.0 | 133 | 276 | 4 | 35 | 82 | 144 | 14 | 98 | 404 | 548 | 943 | 6.6 | 21.3 | 60 | 141 | 267 | 672 |
| 43 | 186 | 18.4 | 47 | 114 | 226 | 916 | 14.4 | 54.0 | 136 | 283 | 4 | 36 | 84 | 148 | 15 | 102 | 415 | 562 | 966 | 6.8 | 21.9 | 62 | 145 | 273 | 689 |
| 44 | 191 | 18.8 | 48 | 117 | 232 | 939 | 14.9 | 56.0 | 139 | 291 | 5 | 37 | 86 | 152 | 17 | 105 | 427 | 577 | 989 | 7.0 | 22.5 | 63 | 148 | 280 | 705 |
| 45 | 196 | 19.2 | 50 | 120 | 238 | 962 | 15.5 | 57.0 | 143 | 298 | 5 | 39 | 89 | 156 | 18 | 109 | 439 | 592 | 1012 | 7.2 | 23.0 | 65 | 152 | 286 | 721 |
| 46 | 200 | 19.7 | 51 | 123 | 244 | 985 | 16.0 | 59.0 | 146 | 305 | 6 | 40 | 91 | 160 | 19 | 112 | 450 | 607 | 1035 | 7.5 | 23.6 | 66 | 155 | 293 | 737 |
| 47 | 205 | 20.1 | 52 | 126 | 250 | 1008 | 16.6 | 60.0 | 149 | 312 | 6 | 42 | 93 | 164 | 20 | 116 | 462 | 622 | 1058 | 7.7 | 24.2 | 68 | 159 | 299 | 753 |
| 48 | 210 | 20.5 | 54 | 129 | 255 | 1030 | 17.1 | 62.0 | 153 | 319 | 7 | 43 | 96 | 168 | 21 | 119 | 474 | 636 | 1081 | 7.9 | 24.8 | 69 | 162 | 306 | 770 |
| 49 | 215 | 21.0 | 55 | 132 | 261 | 1053 | 17.6 | 63.5 | 156 | 326 | 7 | 45 | 98 | 171 | 22 | 123 | 486 | 651 | 1104 | 8.1 | 25.3 | 71 | 166 | 312 | 786 |
| 50 | 219 | 21.4 | 56 | 135 | 267 | 1076 | 18.2 | 64.5 | 160 | 334 | 8 | 46 | 100 | 175 | 23 | 126 | 497 | 666 | 1127 | 8.4 | 25.9 | 72 | 169 | 319 | 802 |
| 51 | 224 | 21.8 | 58 | 138 | 273 | 1099 | 18.7 | 66.0 | 163 | 341 | 8 | 48 | 103 | 179 | 24 | 130 | 509 | 681 | 1150 | 8.6 | 26.5 | 74 | 173 | 325 | 818 |
| 52 | 229 | 22.2 | 59 | 141 | 279 | 1121 | 19.2 | 67.5 | 166 | 348 | 8 | 49 | 105 | 183 | 25 | 133 | 521 | 696 | 1173 | 8.8 | 27.1 | 76 | 176 | 332 | 834 |
| 53 | 234 | 22.7 | 60 | 144 | 285 | 1144 | 19.7 | 69.0 | 170 | 355 | 9 | 50 | 107 | 187 | 26 | 137 | 532 | 710 | 1196 | 9.0 | 27.6 | 77 | 179 | 338 | 851 |
| 54 | 238 | 23.1 | 62 | 147 | 291 | 1166 | 20.2 | 70.0 | 173 | 362 | 9 | 52 | 110 | 191 | 28 | 140 | 544 | 725 | 1219 | 9.3 | 28.2 | 79 | 183 | 345 | 867 |
| 55 | 243 | 23.5 | 63 | 150 | 297 | 1189 | 20.7 | 71.5 | 176 | 369 | 10 | 53 | 112 | 194 | 29 | 144 | 556 | 740 | 1242 | 9.5 | 28.8 | 80 | 186 | 351 | 883 |
| 56 | 248 | 24.0 | 64 | 153 | 302 | 1212 | 21.2 | 73.0 | 180 | 376 | 10 | 55 | 114 | 198 | 30 | 147 | 567 | 755 | 1265 | 9.7 | 29.4 | 82 | 190 | 358 | 899 |
| 57 | 253 | 24.4 | 66 | 156 | 308 | 1234 | 21.7 | 75.0 | 183 | 383 | 11 | 56 | 116 | 202 | 31 | 151 | 579 | 770 | 1288 | 9.9 | 30.0 | 83 | 193 | 364 | 915 |
| 58 | 257 | 24.8 | 67 | 159 | 314 | 1257 | 22.2 | 76.0 | 186 | 390 | 11 | 58 | 119 | 206 | 32 | 154 | 591 | 784 | 1311 | 10.2 | 30.5 | 85 | 197 | 371 | 932 |
| 59 | 262 | 25.2 | 68 | 162 | 320 | 1279 | 22.7 | 77.0 | 190 | 397 | 12 | 59 | 121 | 210 | 33 | 158 | 603 | 799 | 1334 | 10.4 | 31.1 | 86 | 200 | 377 | 948 |
| 60 | 267 | 25.7 | 70 | 165 | 326 | 1302 | 23.2 | 79.0 | 193 | 405 | 12 | 60 | 123 | 214 | 34 | 161 | 614 | 814 | 1357 | 10.6 | 31.7 | 88 | 204 | 384 | 964 |
| 65 | 290 | 27.8 | 76 | 179 | 354 | 1414 | 26 | 86.0 | 210 | 440 | 15 | 68 | 135 | 233 | 40 | 179 | 673 | 888 | 1472 | 11.8 | 34.6 | 95 | 221 | 416 | 1045 |
| 70 | 313 | 29.9 | 83 | 194 | 383 | 1526 | 28 | 93.0 | 226 | 475 | 17 | 75 | 147 | 252 | 45 | 196 | 731 | 962 | 1587 | 12.9 | 37.4 | 103 | 238 | 449 | 1126 |
| 75 | 337 | 32.1 | 89 | 208 | 412 | 1638 | 31 | 100 | 243 | 510 | 20 | 82 | 158 | 271 | 51 | 214 | 790 | 1036 | 1702 | 14.0 | 40.3 | 110 | 255 | 481 | 1207 |
| 80 | 360 | 34.2 | 96 | 223 | 441 | 1750 | 33 | 108 | 260 | 545 | 22 | 89 | 170 | 291 | 56 | 231 | 848 | 1110 | 1817 | 15.1 | 43.2 | 118 | 273 | 514 | 1288 |
| 85 | 383 | 36.4 | 102 | 237 | 469 | 1861 | 35 | 115 | 276 | 580 | 25 | 96 | 181 | 310 | 61.6 | 249 | 907 | 1184 | 1932 | 16.3 | 46.1 | 125 | 290 | 546 | 1369 |
| 90 | 406 | 38.5 | 108 | 252 | 498 | 1973 | 38 | 122 | 293 | 615 | 27 | 104 | 193 | 329 | 67 | 266 | 965 | 1258 | 2047 | 17.4 | 49.0 | 133 | 307 | 579 | 1450 |
| 100 | 452 | 42.8 | 121 | 280 | 554 | 2195 | 42 | 135 | 326 | 684 | 32 | 118 | 216 | 368 | 78 | 301 | 1082 | 1406 | 2277 | 19.7 | 54.7 | 148 | 342 | 644 | 1612 |
| 110 | 499 | 47.0 | 134 | 309 | 611 | 2418 | 47 | | 359 | 754 | 37 | 132 | 239 | 406 | 89 | 336 | 1199 | 1554 | 2507 | 21.9 | 60.5 | 163 | 376 | 709 | 1774 |
| 120 | 545 | 51.3 | 146 | 338 | 668 | 2640 | 51 | | 392 | 823 | 42 | 147 | 262 | 445 | 100 | 371 | 1316 | 1702 | 2737 | 24.2 | 66.2 | 178 | 411 | 774 | 1936 |
| 130 | 591 | 55.6 | 159 | 366 | 724 | 2862 | 56 | | 425 | 893 | 47 | 161 | 285 | 483 | 111 | 406 | 1433 | 1850 | 2967 | 26.4 | 72.0 | 193 | 445 | 839 | 2098 |
| 140 | 637 | 59.9 | 171 | 395 | 781 | 3084 | 61 | | 458 | 962 | 51 | 176 | 308 | 522 | 122 | 441 | 1550 | 1998 | 3197 | 28.7 | 77.8 | 208 | 480 | 904 | 2260 |
| 150 | 682 | 64.2 | 184 | 424 | 837 | 3305 | 65 | | 491 | 1031 | 56 | 190 | 331 | 560 | 133 | 476 | 1667 | 2146 | 3427 | 31.0 | 83.5 | 223 | 514 | 969 | 2422 |

All measurements are in Centistokes (cSt). Centipoise (cP) = cSt x product density

# Viscosity Flow Cup Accessories

Elcometer

## Accessories

| | |
|---|---|
| KT002400N201 | Viscosity Cup Stand with Bubble Level and Glass Draw Plate<br>To ensure the viscosity cup is positioned correctly to carry out the test. |

| | |
|---|---|
| KT002400N001 | Viscosity Cup Precision Stand with Bubble Level and Glass Draw Plate<br>To ensure the viscosity cup is positioned correctly to carry out the test. |
| KT002400P001 | Bubble Level for Viscosity Cup<br>To ensure the viscosity cup is parallel to the surface. |
| KT002400P999 | Viscosity Glass Draw Plate<br>To retain test sample until operator is ready to commence test and provides surface for bubble level. |

| | |
|---|---|
| KT002400N202 | Viscosity Cup Precision Stand with Thermojacket |
| KT002400N002 | Thermojacket for Viscosity Cup Precision Stand<br>For heating test samples for viscosity measurement at specific elevated temperatures. |

| | |
|---|---|
| K0007300M201 | Elcometer 7300 High Precision Stopwatch |

| | |
|---|---|
| KT002400N003 | Elcometer 2400 Conversion Disc<br>Allowing viscosity (cSt) and flow times of different cups to be calculated.<br>Front: No.4 cups according to AFNOR, BS, NF, ASTM, DIN, Zahn 2<br>Back: No.3-4-5-6 cups according to ISO and Zahn 3 |

## Thermometers

To accurately measure flow for viscosity the temperature needs to be 23°C ± 2°C (73.4°F). Here are a range of thermometers from Elcometer.

| | |
|---|---|
| T1164441- | Spirit Thermometer in °C |
| T1164442- | Spirit Thermometer in °F |
| G212----1A | Elcometer 212 Digital Pocket Thermometer (°C/°F) with Liquid Probe |
| G213----2 | Elcometer 213/2 Digital Thermometer (°C/°F) |
| T9996390- | Elcometer 213/2 Liquid Probe |

**For a full range of Certified Calibration Oils see page 6**

## Elcometer 2410

# Elcometer Viscosity Cup Standard Calibration Oils

In order to check the viscosity cup's calibration or to certify it for ISO purposes, it is imperative that viscosity cup standard calibration oils are used.

Standard oils have a specific drain time, dependent upon the viscosity cup type (Ford, Shell, Zahn etc.) and the orifice or cup number used.

To check the viscosity cup, use the standard viscosity oils in place of the liquid and measure the drain time.

Specific calibration oils can only be used with specific flow cups. Please use the table below to determine which calibration oil is required for your cup, or contact Elcometer. Viscosity oils are supplied in ½ litre (1 pint) bottles.

## Technical Specification C

| Part Number | Description | Flow Cups DIN | Flow Cups ASTM/FORD | Flow Cups ISO | Kinematic Viscosity at 25°C (77°F)† | Certificate |
|---|---|---|---|---|---|---|
| K0002410M021 | Certified Calibration Oil | | 2 | 3 | 34cSt | ● |
| K0002410M022 | Certified Calibration Oil | 4 | 3 | 4 | 120cSt | ● |
| K0002410M023 | Certified Calibration Oil | 4 | 4 | 6 | 230cSt | ● |
| K0002410M024 | Certified Calibration Oil | 4 | | 6 | 460cSt | ● |
| K0002410M025 | Certified Calibration Oil | | | | 850cSt | ● |
| K0002410M026 | Certified Calibration Oil | | | | 1600cSt | ● |

† Nominal Value

● Calibration certificate supplied as standard.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