



## PP-RCT/Solidwall Pipe - Cold Water

### Longitudinal Expansion in mm (rounded)

0.15 mm/m/degC

| Pipe length<br>in metres | Temperature Difference in °C |     |     |     |     |     |     |     |     |
|--------------------------|------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|
|                          | 10                           | 20  | 30  | 40  | 50  | 60  | 70  | 80  | 90  |
| 5                        | 8                            | 15  | 23  | 30  | 38  | 45  | 53  | 60  | 68  |
| 6                        | 9                            | 18  | 27  | 36  | 45  | 54  | 63  | 72  | 81  |
| 7                        | 11                           | 21  | 32  | 42  | 53  | 63  | 74  | 84  | 95  |
| 8                        | 12                           | 24  | 36  | 48  | 60  | 72  | 84  | 96  | 108 |
| 9                        | 14                           | 27  | 41  | 54  | 68  | 81  | 95  | 108 | 122 |
| 10                       | 15                           | 30  | 45  | 60  | 75  | 90  | 105 | 120 | 135 |
| 11                       | 17                           | 33  | 50  | 66  | 83  | 99  | 116 | 132 | 149 |
| 12                       | 18                           | 36  | 54  | 72  | 90  | 108 | 126 | 144 | 162 |
| 13                       | 20                           | 39  | 59  | 78  | 98  | 117 | 137 | 156 | 176 |
| 14                       | 21                           | 42  | 63  | 84  | 105 | 126 | 147 | 168 | 189 |
| 15                       | 23                           | 45  | 68  | 90  | 113 | 135 | 158 | 180 | 203 |
| 16                       | 24                           | 48  | 72  | 96  | 120 | 144 | 168 | 192 | 216 |
| 17                       | 26                           | 51  | 77  | 102 | 128 | 153 | 179 | 204 | 230 |
| 18                       | 27                           | 54  | 81  | 108 | 135 | 162 | 189 | 216 | 243 |
| 19                       | 29                           | 57  | 86  | 114 | 143 | 171 | 200 | 228 | 257 |
| 20                       | 30                           | 60  | 90  | 120 | 150 | 180 | 210 | 240 | 270 |
| 21                       | 32                           | 63  | 95  | 126 | 158 | 189 | 221 | 252 | 284 |
| 22                       | 33                           | 66  | 99  | 132 | 165 | 198 | 231 | 264 | 297 |
| 23                       | 35                           | 69  | 104 | 138 | 173 | 207 | 242 | 276 | 311 |
| 24                       | 36                           | 72  | 108 | 144 | 180 | 216 | 252 | 288 | 324 |
| 25                       | 38                           | 75  | 113 | 150 | 188 | 225 | 263 | 300 | 338 |
| 26                       | 39                           | 78  | 117 | 156 | 195 | 234 | 273 | 312 | 351 |
| 27                       | 41                           | 81  | 122 | 162 | 203 | 243 | 284 | 324 | 365 |
| 28                       | 42                           | 84  | 126 | 168 | 210 | 252 | 294 | 336 | 378 |
| 29                       | 44                           | 87  | 131 | 174 | 218 | 261 | 305 | 348 | 392 |
| 30                       | 45                           | 90  | 135 | 180 | 225 | 270 | 315 | 360 | 405 |
| 31                       | 47                           | 93  | 140 | 186 | 233 | 279 | 326 | 372 | 419 |
| 32                       | 48                           | 96  | 144 | 192 | 240 | 288 | 336 | 384 | 432 |
| 33                       | 50                           | 99  | 149 | 198 | 248 | 297 | 347 | 396 | 446 |
| 34                       | 51                           | 102 | 153 | 204 | 255 | 306 | 357 | 408 | 459 |
| 35                       | 53                           | 105 | 158 | 210 | 263 | 315 | 368 | 420 | 473 |
| 36                       | 54                           | 108 | 162 | 216 | 270 | 324 | 378 | 432 | 486 |
| 37                       | 56                           | 111 | 167 | 222 | 278 | 333 | 389 | 444 | 500 |
| 38                       | 57                           | 114 | 171 | 228 | 285 | 342 | 399 | 456 | 513 |
| 39                       | 59                           | 117 | 176 | 234 | 293 | 351 | 410 | 468 | 527 |
| 40                       | 60                           | 120 | 180 | 240 | 300 | 360 | 420 | 480 | 540 |
| 41                       | 62                           | 123 | 185 | 246 | 308 | 369 | 431 | 492 | 554 |
| 42                       | 63                           | 126 | 189 | 252 | 315 | 378 | 441 | 504 | 567 |
| 43                       | 65                           | 129 | 194 | 258 | 323 | 387 | 452 | 516 | 581 |
| 44                       | 66                           | 132 | 198 | 264 | 330 | 396 | 462 | 528 | 594 |

**Notes:**

1. Temperature difference is the difference between the ambient temperature at installation, and the system operating temperature.
2. To calculate the expansion for a run, simply add or multiply the data shown above, eg. to calculate the expansion on 50m of pipe at 40°C, 40m (240) + 10m (60) = 300mm.



**PP-RCT Fibre/Faser Pipe - Hot Water**  
**Longitudinal Expansion in mm (rounded)**  
 0.035 mm/m/degC

| Pipe length<br>in metres | Temperature Difference in °C |     |     |     |     |     |     |     |     |
|--------------------------|------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|
|                          | 10                           | 20  | 30  | 40  | 50  | 60  | 70  | 80  | 90  |
| 10                       | 15                           | 30  | 45  | 60  | 75  | 90  | 105 | 120 | 135 |
| 11                       | 17                           | 33  | 50  | 66  | 83  | 99  | 116 | 132 | 149 |
| 12                       | 18                           | 36  | 54  | 72  | 90  | 108 | 126 | 144 | 162 |
| 13                       | 20                           | 39  | 59  | 78  | 98  | 117 | 137 | 156 | 176 |
| 14                       | 21                           | 42  | 63  | 84  | 105 | 126 | 147 | 168 | 189 |
| 15                       | 23                           | 45  | 68  | 90  | 113 | 135 | 158 | 180 | 203 |
| 16                       | 24                           | 48  | 72  | 96  | 120 | 144 | 168 | 192 | 216 |
| 17                       | 26                           | 51  | 77  | 102 | 128 | 153 | 179 | 204 | 230 |
| 18                       | 27                           | 54  | 81  | 108 | 135 | 162 | 189 | 216 | 243 |
| 19                       | 29                           | 57  | 86  | 114 | 143 | 171 | 200 | 228 | 257 |
| 20                       | 30                           | 60  | 90  | 120 | 150 | 180 | 210 | 240 | 270 |
| 21                       | 32                           | 63  | 95  | 126 | 158 | 189 | 221 | 252 | 284 |
| 22                       | 33                           | 66  | 99  | 132 | 165 | 198 | 231 | 264 | 297 |
| 23                       | 35                           | 69  | 104 | 138 | 173 | 207 | 242 | 276 | 311 |
| 24                       | 36                           | 72  | 108 | 144 | 180 | 216 | 252 | 288 | 324 |
| 25                       | 38                           | 75  | 113 | 150 | 188 | 225 | 263 | 300 | 338 |
| 26                       | 39                           | 78  | 117 | 156 | 195 | 234 | 273 | 312 | 351 |
| 27                       | 41                           | 81  | 122 | 162 | 203 | 243 | 284 | 324 | 365 |
| 28                       | 42                           | 84  | 126 | 168 | 210 | 252 | 294 | 336 | 378 |
| 29                       | 44                           | 87  | 131 | 174 | 218 | 261 | 305 | 348 | 392 |
| 30                       | 45                           | 90  | 135 | 180 | 225 | 270 | 315 | 360 | 405 |
| 31                       | 47                           | 93  | 140 | 186 | 233 | 279 | 326 | 372 | 419 |
| 32                       | 48                           | 96  | 144 | 192 | 240 | 288 | 336 | 384 | 432 |
| 33                       | 50                           | 99  | 149 | 198 | 248 | 297 | 347 | 396 | 446 |
| 34                       | 51                           | 102 | 153 | 204 | 255 | 306 | 357 | 408 | 459 |
| 35                       | 53                           | 105 | 158 | 210 | 263 | 315 | 368 | 420 | 473 |
| 36                       | 54                           | 108 | 162 | 216 | 270 | 324 | 378 | 432 | 486 |
| 37                       | 56                           | 111 | 167 | 222 | 278 | 333 | 389 | 444 | 500 |
| 38                       | 57                           | 114 | 171 | 228 | 285 | 342 | 399 | 456 | 513 |
| 39                       | 59                           | 117 | 176 | 234 | 293 | 351 | 410 | 468 | 527 |
| 40                       | 60                           | 120 | 180 | 240 | 300 | 360 | 420 | 480 | 540 |
| 41                       | 62                           | 123 | 185 | 246 | 308 | 369 | 431 | 492 | 554 |
| 42                       | 63                           | 126 | 189 | 252 | 315 | 378 | 441 | 504 | 567 |
| 43                       | 65                           | 129 | 194 | 258 | 323 | 387 | 452 | 516 | 581 |
| 44                       | 66                           | 132 | 198 | 264 | 330 | 396 | 462 | 528 | 594 |
| 45                       | 68                           | 135 | 203 | 270 | 338 | 405 | 473 | 540 | 608 |
| 46                       | 69                           | 138 | 207 | 276 | 345 | 414 | 483 | 552 | 621 |
| 47                       | 71                           | 141 | 212 | 282 | 353 | 423 | 494 | 564 | 635 |
| 48                       | 72                           | 144 | 216 | 288 | 360 | 432 | 504 | 576 | 648 |
| 49                       | 74                           | 147 | 221 | 294 | 368 | 441 | 515 | 588 | 662 |
| 50                       | 75                           | 150 | 225 | 300 | 375 | 450 | 525 | 600 | 675 |

- Notes:**
1. Temperature difference is the difference between the ambient temperature at installation, and the system operating temperature.
  2. To calculate the expansion for a run, simply add or multiply the data shown above, eg. to calculate the expansion on 70m of pipe at 40°C, 40m (56) + 30m (42) = 98mm.