

Pressure loss per foot, 3/4" hePEX and AquaPEX (50% Glycol)

| | | Head (Feet of Water) Per Foot of Tubing | | | | | | | |
|------|-----------------|---|-------------|--------------|--------------|--------------|--------------|--------------|--------------|
| gpm | Velocity (ft/s) | 60°F / 16°C | 80°F / 27°C | 100°F / 38°C | 120°F / 49°C | 140°F / 60°C | 160°F / 71°C | 180°F / 82°C | 200°F / 93°C |
| 0.5 | 0.45 | 0.0018 | 0.0017 | 0.0017 | 0.0016 | 0.0015 | 0.0015 | 0.0015 | 0.0010 |
| 0.6 | 0.54 | 0.0027 | 0.0026 | 0.0025 | 0.0024 | 0.0023 | 0.0023 | 0.0022 | 0.0016 |
| 0.7 | 0.64 | 0.0038 | 0.0036 | 0.0035 | 0.0034 | 0.0033 | 0.0032 | 0.0031 | 0.0022 |
| 0.8 | 0.73 | 0.0051 | 0.0048 | 0.0047 | 0.0045 | 0.0043 | 0.0043 | 0.0042 | 0.0029 |
| 0.9 | 0.82 | 0.0065 | 0.0062 | 0.0060 | 0.0057 | 0.0056 | 0.0054 | 0.0053 | 0.0037 |
| 1.0 | 0.91 | 0.0081 | 0.0077 | 0.0074 | 0.0071 | 0.0069 | 0.0068 | 0.0066 | 0.0046 |
| 1.1 | 1.00 | 0.0099 | 0.0094 | 0.0091 | 0.0086 | 0.0084 | 0.0082 | 0.0081 | 0.0056 |
| 1.2 | 1.09 | 0.0118 | 0.0112 | 0.0108 | 0.0103 | 0.0100 | 0.0098 | 0.0096 | 0.0067 |
| 1.3 | 1.18 | 0.0138 | 0.0131 | 0.0127 | 0.0121 | 0.0118 | 0.0115 | 0.0113 | 0.0079 |
| 1.4 | 1.27 | 0.0160 | 0.0152 | 0.0147 | 0.0140 | 0.0136 | 0.0134 | 0.0131 | 0.0092 |
| 1.5 | 1.36 | 0.0184 | 0.0175 | 0.0169 | 0.0161 | 0.0156 | 0.0153 | 0.0150 | 0.0105 |
| 2.0 | 1.81 | 0.0209 | 0.0199 | 0.0192 | 0.0183 | 0.0178 | 0.0174 | 0.0171 | 0.0119 |
| 2.5 | 2.27 | 0.0236 | 0.0224 | 0.0216 | 0.0206 | 0.0200 | 0.0196 | 0.0192 | 0.0135 |
| 3.0 | 2.72 | 0.0264 | 0.0250 | 0.0242 | 0.0231 | 0.0224 | 0.0220 | 0.0215 | 0.0151 |
| 3.5 | 3.18 | 0.0293 | 0.0278 | 0.0269 | 0.0256 | 0.0249 | 0.0244 | 0.0239 | 0.0167 |
| 4.0 | 3.63 | 0.0324 | 0.0308 | 0.0297 | 0.0283 | 0.0275 | 0.0270 | 0.0264 | 0.0185 |
| 4.5 | 4.08 | 0.0356 | 0.0338 | 0.0326 | 0.0311 | 0.0303 | 0.0297 | 0.0291 | 0.0203 |
| 5.0 | 4.54 | 0.0390 | 0.0370 | 0.0357 | 0.0341 | 0.0331 | 0.0325 | 0.0318 | 0.0223 |
| 6.0 | 5.44 | 0.0425 | 0.0403 | 0.0389 | 0.0372 | 0.0361 | 0.0354 | 0.0347 | 0.0243 |
| 7.0 | 6.35 | 0.0461 | 0.0438 | 0.0423 | 0.0403 | 0.0392 | 0.0384 | 0.0377 | 0.0263 |
| 8.0 | 7.26 | 0.0499 | 0.0474 | 0.0457 | 0.0436 | 0.0424 | 0.0416 | 0.0407 | 0.0285 |
| 9.0 | 8.17 | 0.0538 | 0.0511 | 0.0493 | 0.0471 | 0.0457 | 0.0448 | 0.0439 | 0.0307 |
| 10.0 | 9.07 | 0.0754 | 0.0716 | 0.0691 | 0.0660 | 0.0641 | 0.0628 | 0.0616 | 0.0431 |
| 11.0 | 9.98 | 0.1002 | 0.0952 | 0.0919 | 0.0877 | 0.0852 | 0.0835 | 0.0819 | 0.0573 |
| 12.0 | 10.89 | 0.1283 | 0.1219 | 0.1176 | 0.1123 | 0.1091 | 0.1069 | 0.1048 | 0.0733 |

Pressure loss per foot, ¾" hePEX and AquaPEX (40% Glycol)

| | | Head (Feet of Water) Per Foot of Tubing | | | | | | | |
|------|-----------------|---|-------------|--------------|--------------|--------------|--------------|--------------|--------------|
| gpm | Velocity (ft/s) | 60°F / 16°C | 80°F / 27°C | 100°F / 38°C | 120°F / 49°C | 140°F / 60°C | 160°F / 71°C | 180°F / 82°C | 200°F / 93°C |
| 0.5 | 0.45 | 0.0017 | 0.0016 | 0.0016 | 0.0015 | 0.0015 | 0.0014 | 0.0014 | 0.0010 |
| 0.6 | 0.54 | 0.0026 | 0.0025 | 0.0024 | 0.0023 | 0.0022 | 0.0022 | 0.0021 | 0.0016 |
| 0.7 | 0.64 | 0.0036 | 0.0035 | 0.0033 | 0.0032 | 0.0031 | 0.0030 | 0.0030 | 0.0022 |
| 0.8 | 0.73 | 0.0048 | 0.0046 | 0.0044 | 0.0042 | 0.0041 | 0.0040 | 0.0040 | 0.0029 |
| 0.9 | 0.82 | 0.0062 | 0.0059 | 0.0057 | 0.0054 | 0.0053 | 0.0052 | 0.0051 | 0.0037 |
| 1.0 | 0.91 | 0.0077 | 0.0073 | 0.0071 | 0.0068 | 0.0066 | 0.0064 | 0.0063 | 0.0046 |
| 1.1 | 1.00 | 0.0094 | 0.0089 | 0.0086 | 0.0082 | 0.0080 | 0.0078 | 0.0077 | 0.0056 |
| 1.2 | 1.09 | 0.0112 | 0.0106 | 0.0103 | 0.0098 | 0.0095 | 0.0093 | 0.0091 | 0.0067 |
| 1.3 | 1.18 | 0.0131 | 0.0125 | 0.0120 | 0.0115 | 0.0112 | 0.0110 | 0.0107 | 0.0079 |
| 1.4 | 1.27 | 0.0152 | 0.0145 | 0.0140 | 0.0133 | 0.0130 | 0.0127 | 0.0124 | 0.0092 |
| 1.5 | 1.36 | 0.0175 | 0.0166 | 0.0160 | 0.0153 | 0.0149 | 0.0146 | 0.0143 | 0.0105 |
| 2.0 | 1.81 | 0.0199 | 0.0189 | 0.0182 | 0.0174 | 0.0169 | 0.0166 | 0.0162 | 0.0119 |
| 2.5 | 2.27 | 0.0224 | 0.0213 | 0.0205 | 0.0196 | 0.0190 | 0.0187 | 0.0183 | 0.0135 |
| 3.0 | 2.72 | 0.0250 | 0.0238 | 0.0230 | 0.0219 | 0.0213 | 0.0209 | 0.0204 | 0.0151 |
| 3.5 | 3.18 | 0.0278 | 0.0264 | 0.0255 | 0.0244 | 0.0237 | 0.0232 | 0.0227 | 0.0167 |
| 4.0 | 3.63 | 0.0308 | 0.0292 | 0.0282 | 0.0269 | 0.0261 | 0.0256 | 0.0251 | 0.0185 |
| 4.5 | 4.08 | 0.0338 | 0.0321 | 0.0310 | 0.0296 | 0.0287 | 0.0282 | 0.0276 | 0.0203 |
| 5.0 | 4.54 | 0.0370 | 0.0352 | 0.0339 | 0.0324 | 0.0315 | 0.0308 | 0.0302 | 0.0223 |
| 6.0 | 5.44 | 0.0403 | 0.0383 | 0.0370 | 0.0353 | 0.0343 | 0.0336 | 0.0329 | 0.0243 |
| 7.0 | 6.35 | 0.0438 | 0.0416 | 0.0401 | 0.0383 | 0.0372 | 0.0365 | 0.0358 | 0.0263 |
| 8.0 | 7.26 | 0.0474 | 0.0450 | 0.0434 | 0.0415 | 0.0403 | 0.0395 | 0.0387 | 0.0285 |
| 9.0 | 8.17 | 0.0511 | 0.0485 | 0.0468 | 0.0447 | 0.0434 | 0.0426 | 0.0417 | 0.0307 |
| 10.0 | 9.07 | 0.0716 | 0.0680 | 0.0656 | 0.0627 | 0.0609 | 0.0597 | 0.0585 | 0.0431 |
| 11.0 | 9.98 | 0.0952 | 0.0905 | 0.0873 | 0.0833 | 0.0809 | 0.0794 | 0.0778 | 0.0573 |
| 12.0 | 10.89 | 0.1219 | 0.1158 | 0.1118 | 0.1067 | 0.1036 | 0.1016 | 0.0996 | 0.0733 |

Pressure loss per foot, 3/4" hePEX and AquaPEX (30% Glycol)

| | | Head (Feet of Water) Per Foot of Tubing | | | | | | | |
|------|-----------------|---|-------------|--------------|--------------|--------------|--------------|--------------|--------------|
| gpm | Velocity (ft/s) | 60°F / 16°C | 80°F / 27°C | 100°F / 38°C | 120°F / 49°C | 140°F / 60°C | 160°F / 71°C | 180°F / 82°C | 200°F / 93°C |
| 0.5 | 0.45 | 0.0016 | 0.0015 | 0.0015 | 0.0014 | 0.0014 | 0.0013 | 0.0013 | 0.0010 |
| 0.6 | 0.54 | 0.0024 | 0.0023 | 0.0022 | 0.0021 | 0.0021 | 0.0020 | 0.0020 | 0.0016 |
| 0.7 | 0.64 | 0.0034 | 0.0032 | 0.0031 | 0.0030 | 0.0029 | 0.0028 | 0.0028 | 0.0022 |
| 0.8 | 0.73 | 0.0045 | 0.0043 | 0.0041 | 0.0040 | 0.0038 | 0.0038 | 0.0037 | 0.0029 |
| 0.9 | 0.82 | 0.0058 | 0.0055 | 0.0053 | 0.0051 | 0.0049 | 0.0048 | 0.0047 | 0.0037 |
| 1.0 | 0.91 | 0.0072 | 0.0068 | 0.0066 | 0.0063 | 0.0061 | 0.0060 | 0.0059 | 0.0046 |
| 1.1 | 1.00 | 0.0087 | 0.0083 | 0.0080 | 0.0077 | 0.0074 | 0.0073 | 0.0071 | 0.0056 |
| 1.2 | 1.09 | 0.0104 | 0.0099 | 0.0096 | 0.0091 | 0.0089 | 0.0087 | 0.0085 | 0.0067 |
| 1.3 | 1.18 | 0.0123 | 0.0116 | 0.0112 | 0.0107 | 0.0104 | 0.0102 | 0.0100 | 0.0079 |
| 1.4 | 1.27 | 0.0142 | 0.0135 | 0.0130 | 0.0124 | 0.0121 | 0.0118 | 0.0116 | 0.0092 |
| 1.5 | 1.36 | 0.0163 | 0.0155 | 0.0149 | 0.0143 | 0.0139 | 0.0136 | 0.0133 | 0.0105 |
| 2.0 | 1.81 | 0.0185 | 0.0176 | 0.0170 | 0.0162 | 0.0157 | 0.0154 | 0.0151 | 0.0119 |
| 2.5 | 2.27 | 0.0209 | 0.0198 | 0.0191 | 0.0183 | 0.0177 | 0.0174 | 0.0170 | 0.0135 |
| 3.0 | 2.72 | 0.0233 | 0.0222 | 0.0214 | 0.0204 | 0.0198 | 0.0195 | 0.0191 | 0.0151 |
| 3.5 | 3.18 | 0.0259 | 0.0246 | 0.0238 | 0.0227 | 0.0221 | 0.0216 | 0.0212 | 0.0167 |
| 4.0 | 3.63 | 0.0287 | 0.0272 | 0.0263 | 0.0251 | 0.0244 | 0.0239 | 0.0234 | 0.0185 |
| 4.5 | 4.08 | 0.0315 | 0.0300 | 0.0289 | 0.0276 | 0.0268 | 0.0263 | 0.0257 | 0.0203 |
| 5.0 | 4.54 | 0.0345 | 0.0328 | 0.0316 | 0.0302 | 0.0293 | 0.0288 | 0.0282 | 0.0223 |
| 6.0 | 5.44 | 0.0376 | 0.0357 | 0.0345 | 0.0329 | 0.0320 | 0.0313 | 0.0307 | 0.0243 |
| 7.0 | 6.35 | 0.0408 | 0.0388 | 0.0374 | 0.0357 | 0.0347 | 0.0340 | 0.0333 | 0.0263 |
| 8.0 | 7.26 | 0.0442 | 0.0420 | 0.0405 | 0.0387 | 0.0376 | 0.0368 | 0.0361 | 0.0285 |
| 9.0 | 8.17 | 0.0476 | 0.0453 | 0.0437 | 0.0417 | 0.0405 | 0.0397 | 0.0389 | 0.0307 |
| 10.0 | 9.07 | 0.0668 | 0.0634 | 0.0612 | 0.0584 | 0.0567 | 0.0556 | 0.0545 | 0.0431 |
| 11.0 | 9.98 | 0.0888 | 0.0843 | 0.0814 | 0.0777 | 0.0755 | 0.0740 | 0.0725 | 0.0573 |
| 12.0 | 10.89 | 0.1137 | 0.1080 | 0.1042 | 0.0995 | 0.0966 | 0.0947 | 0.0928 | 0.0733 |

Pressure loss per foot, 3/4" hePEX and AquaPEX (100 % Water)

| gpm | Velocity (ft/s) | Head (Feet of Water) Per Foot of Tubing | | | | | | | |
|------|--------------------|---|----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| | | 60°F / 16°C | 80°F / 27°C | 100°F / 38°C | 120°F / 49°C | 140°F / 60°C | 160°F / 71°C | 180°F / 82°C | 200°F / 93°C |
| 0.5 | 0.45 | 0.0013 | 0.0012 | 0.0012 | 0.0011 | 0.0011 | 0.0011 | 0.0011 | 0.0010 |
| 0.6 | 0.54 | 0.0020 | 0.0019 | 0.0018 | 0.0017 | 0.0017 | 0.0016 | 0.0016 | 0.0016 |
| 0.7 | 0.64 | 0.0027 | 0.0026 | 0.0025 | 0.0024 | 0.0023 | 0.0023 | 0.0022 | 0.0022 |
| 0.8 | 0.73 | 0.0036 | 0.0035 | 0.0033 | 0.0032 | 0.0031 | 0.0030 | 0.0030 | 0.0029 |
| 0.9 | 0.82 | 0.0047 | 0.0044 | 0.0043 | 0.0041 | 0.0040 | 0.0039 | 0.0038 | 0.0037 |
| 1.0 | 0.91 | 0.0058 | 0.0055 | 0.0053 | 0.0051 | 0.0049 | 0.0048 | 0.0047 | 0.0046 |
| 1.1 | 1.00 | 0.0071 | 0.0067 | 0.0065 | 0.0062 | 0.0060 | 0.0059 | 0.0058 | 0.0056 |
| 1.2 | 1.09 | 0.0084 | 0.0080 | 0.0077 | 0.0074 | 0.0072 | 0.0070 | 0.0069 | 0.0067 |
| 1.3 | 1.18 | 0.0099 | 0.0094 | 0.0091 | 0.0086 | 0.0084 | 0.0082 | 0.0081 | 0.0079 |
| 1.4 | 1.27 | 0.0115 | 0.0109 | 0.0105 | 0.0100 | 0.0097 | 0.0096 | 0.0094 | 0.0092 |
| 1.5 | 1.36 | 0.0131 | 0.0125 | 0.0120 | 0.0115 | 0.0112 | 0.0110 | 0.0107 | 0.0105 |
| 2.0 | 1.81 | 0.0149 | 0.0142 | 0.0137 | 0.0131 | 0.0127 | 0.0124 | 0.0122 | 0.0119 |
| 2.5 | 2.27 | 0.0168 | 0.0160 | 0.0154 | 0.0147 | 0.0143 | 0.0140 | 0.0137 | 0.0135 |
| 3.0 | 2.72 | 0.0188 | 0.0179 | 0.0173 | 0.0165 | 0.0160 | 0.0157 | 0.0154 | 0.0151 |
| 3.5 | 3.18 | 0.0209 | 0.0199 | 0.0192 | 0.0183 | 0.0178 | 0.0174 | 0.0171 | 0.0167 |
| 4.0 | 3.63 | 0.0231 | 0.0220 | 0.0212 | 0.0202 | 0.0197 | 0.0193 | 0.0189 | 0.0185 |
| 4.5 | 4.08 | 0.0254 | 0.0242 | 0.0233 | 0.0222 | 0.0216 | 0.0212 | 0.0208 | 0.0203 |
| 5.0 | 4.54 | 0.0278 | 0.0264 | 0.0255 | 0.0244 | 0.0237 | 0.0232 | 0.0227 | 0.0223 |
| 6.0 | 5.44 | 0.0303 | 0.0288 | 0.0278 | 0.0265 | 0.0258 | 0.0253 | 0.0248 | 0.0243 |
| 7.0 | 6.35 | 0.0329 | 0.0313 | 0.0302 | 0.0288 | 0.0280 | 0.0274 | 0.0269 | 0.0263 |
| 8.0 | 7.26 | 0.0356 | 0.0338 | 0.0327 | 0.0312 | 0.0303 | 0.0297 | 0.0291 | 0.0285 |
| 9.0 | 8.17 | 0.0384 | 0.0365 | 0.0352 | 0.0336 | 0.0327 | 0.0320 | 0.0314 | 0.0307 |
| 10.0 | 9.07 | 0.0538 | 0.0511 | 0.0494 | 0.0471 | 0.0458 | 0.0449 | 0.0440 | 0.0431 |
| 11.0 | 9.98 | 0.0716 | 0.0680 | 0.0656 | 0.0627 | 0.0609 | 0.0597 | 0.0585 | 0.0573 |
| 12.0 | 10.89 | 0.0917 | 0.0871 | 0.0840 | 0.0802 | 0.0779 | 0.0764 | 0.0749 | 0.0733 |

Pressure loss per foot, 1" hePEX and AquaPEX (100 % Water)

| | | Head (Feet of Water) Per Foot of Tubing | | | | | | | |
|------|-----------------|---|-------------|--------------|--------------|--------------|--------------|--------------|--------------|
| gpm | Velocity (ft/s) | 60°F / 16°C | 80°F / 27°C | 100°F / 38°C | 120°F / 49°C | 140°F / 60°C | 160°F / 71°C | 180°F / 82°C | 200°F / 93°C |
| 0.1 | 0.05 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 0.2 | 0.11 | 0.0001 | 0.0001 | 0.0001 | 0.0001 | 0.0001 | 0.0001 | 0.0001 | 0.0001 |
| 0.3 | 0.16 | 0.0002 | 0.0002 | 0.0002 | 0.0002 | 0.0002 | 0.0002 | 0.0002 | 0.0002 |
| 0.4 | 0.22 | 0.0004 | 0.0004 | 0.0004 | 0.0003 | 0.0003 | 0.0003 | 0.0003 | 0.0003 |
| 0.5 | 0.27 | 0.0006 | 0.0005 | 0.0005 | 0.0005 | 0.0005 | 0.0005 | 0.0005 | 0.0005 |
| 0.6 | 0.33 | 0.0008 | 0.0008 | 0.0007 | 0.0007 | 0.0007 | 0.0007 | 0.0007 | 0.0006 |
| 0.7 | 0.38 | 0.0011 | 0.0010 | 0.0010 | 0.0009 | 0.0009 | 0.0009 | 0.0009 | 0.0009 |
| 0.8 | 0.44 | 0.0014 | 0.0013 | 0.0013 | 0.0012 | 0.0012 | 0.0011 | 0.0011 | 0.0011 |
| 0.9 | 0.49 | 0.0017 | 0.0016 | 0.0016 | 0.0015 | 0.0015 | 0.0014 | 0.0014 | 0.0014 |
| 1.0 | 0.55 | 0.0021 | 0.0020 | 0.0019 | 0.0018 | 0.0018 | 0.0017 | 0.0017 | 0.0017 |
| 1.1 | 0.60 | 0.0025 | 0.0024 | 0.0023 | 0.0022 | 0.0021 | 0.0021 | 0.0020 | 0.0020 |
| 1.2 | 0.66 | 0.0029 | 0.0028 | 0.0027 | 0.0026 | 0.0025 | 0.0024 | 0.0024 | 0.0023 |
| 1.3 | 0.71 | 0.0034 | 0.0032 | 0.0031 | 0.0030 | 0.0029 | 0.0028 | 0.0028 | 0.0027 |
| 1.4 | 0.77 | 0.0039 | 0.0037 | 0.0036 | 0.0034 | 0.0033 | 0.0032 | 0.0032 | 0.0031 |
| 1.5 | 0.82 | 0.0044 | 0.0042 | 0.0040 | 0.0039 | 0.0038 | 0.0037 | 0.0036 | 0.0035 |
| 2.0 | 1.10 | 0.0075 | 0.0071 | 0.0069 | 0.0066 | 0.0064 | 0.0063 | 0.0061 | 0.0060 |
| 2.5 | 1.37 | 0.0114 | 0.0108 | 0.0104 | 0.0099 | 0.0097 | 0.0095 | 0.0093 | 0.0091 |
| 3.0 | 1.65 | 0.0159 | 0.0151 | 0.0146 | 0.0139 | 0.0135 | 0.0133 | 0.0130 | 0.0127 |
| 3.5 | 1.92 | 0.0212 | 0.0201 | 0.0194 | 0.0185 | 0.0180 | 0.0176 | 0.0173 | 0.0169 |
| 4.0 | 2.20 | 0.0271 | 0.0257 | 0.0248 | 0.0237 | 0.0230 | 0.0226 | 0.0221 | 0.0217 |
| 4.5 | 2.47 | 0.0337 | 0.0320 | 0.0309 | 0.0295 | 0.0286 | 0.0281 | 0.0275 | 0.0270 |
| 5.0 | 2.75 | 0.0409 | 0.0389 | 0.0375 | 0.0358 | 0.0348 | 0.0341 | 0.0334 | 0.0328 |
| 6.0 | 3.30 | 0.0574 | 0.0545 | 0.0526 | 0.0502 | 0.0488 | 0.0478 | 0.0469 | 0.0459 |
| 7.0 | 3.85 | 0.0763 | 0.0725 | 0.0699 | 0.0668 | 0.0649 | 0.0636 | 0.0623 | 0.0610 |
| 8.0 | 4.40 | 0.0977 | 0.0928 | 0.0895 | 0.0855 | 0.0830 | 0.0814 | 0.0798 | 0.0781 |
| 9.0 | 4.95 | 0.1215 | 0.1154 | 0.1113 | 0.1063 | 0.1032 | 0.1012 | 0.0992 | 0.0972 |
| 10.0 | 5.50 | 0.1476 | 0.1402 | 0.1353 | 0.1292 | 0.1255 | 0.1230 | 0.1205 | 0.1181 |
| 11.0 | 6.05 | 0.1761 | 0.1673 | 0.1614 | 0.1541 | 0.1497 | 0.1467 | 0.1438 | 0.1409 |
| 12.0 | 6.60 | 0.2068 | 0.1965 | 0.1896 | 0.1810 | 0.1758 | 0.1724 | 0.1689 | 0.1655 |
| 13.0 | 7.15 | 0.2398 | 0.2278 | 0.2198 | 0.2099 | 0.2039 | 0.1999 | 0.1959 | 0.1919 |
| 14.0 | 7.70 | 0.2751 | 0.2613 | 0.2522 | 0.2407 | 0.2338 | 0.2292 | 0.2246 | 0.2201 |
| 15.0 | 8.25 | 0.3125 | 0.2969 | 0.2865 | 0.2735 | 0.2656 | 0.2604 | 0.2552 | 0.2500 |
| 16.0 | 8.80 | 0.3522 | 0.3345 | 0.3228 | 0.3081 | 0.2993 | 0.2935 | 0.2876 | 0.2817 |
| 17.0 | 9.35 | 0.3940 | 0.3743 | 0.3611 | 0.3447 | 0.3349 | 0.3283 | 0.3217 | 0.3152 |
| 18.0 | 9.90 | 0.4379 | 0.4160 | 0.4014 | 0.3832 | 0.3722 | 0.3649 | 0.3576 | 0.3503 |
| 19.0 | 10.45 | 0.4840 | 0.4598 | 0.4436 | 0.4235 | 0.4114 | 0.4033 | 0.3952 | 0.3872 |
| 20.0 | 11.00 | 0.5321 | 0.5055 | 0.4878 | 0.4656 | 0.4523 | 0.4434 | 0.4346 | 0.4257 |

Pressure loss per foot, 1" hePEX and AquaPEX (30% Glycol)

| | | Head (Feet of Water) Per Foot of Tubing | | | | | | | |
|------|-----------------|---|-------------|--------------|--------------|--------------|--------------|--------------|--------------|
| gpm | Velocity (ft/s) | 60°F / 16°C | 80°F / 27°C | 100°F / 38°C | 120°F / 49°C | 140°F / 60°C | 160°F / 71°C | 180°F / 82°C | 200°F / 93°C |
| 0.1 | 0.05 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 0.2 | 0.11 | 0.0001 | 0.0001 | 0.0001 | 0.0001 | 0.0001 | 0.0001 | 0.0001 | 0.0001 |
| 0.3 | 0.16 | 0.0003 | 0.0003 | 0.0003 | 0.0002 | 0.0002 | 0.0002 | 0.0002 | 0.0002 |
| 0.4 | 0.22 | 0.0005 | 0.0005 | 0.0004 | 0.0004 | 0.0004 | 0.0004 | 0.0004 | 0.0004 |
| 0.5 | 0.27 | 0.0007 | 0.0007 | 0.0007 | 0.0006 | 0.0006 | 0.0006 | 0.0006 | 0.0006 |
| 0.6 | 0.33 | 0.0010 | 0.0010 | 0.0009 | 0.0009 | 0.0009 | 0.0008 | 0.0008 | 0.0008 |
| 0.7 | 0.38 | 0.0013 | 0.0013 | 0.0012 | 0.0012 | 0.0011 | 0.0011 | 0.0011 | 0.0011 |
| 0.8 | 0.44 | 0.0017 | 0.0016 | 0.0016 | 0.0015 | 0.0015 | 0.0014 | 0.0014 | 0.0014 |
| 0.9 | 0.49 | 0.0021 | 0.0020 | 0.0020 | 0.0019 | 0.0018 | 0.0018 | 0.0017 | 0.0017 |
| 1.0 | 0.55 | 0.0026 | 0.0025 | 0.0024 | 0.0023 | 0.0022 | 0.0022 | 0.0021 | 0.0021 |
| 1.1 | 0.60 | 0.0031 | 0.0029 | 0.0028 | 0.0027 | 0.0026 | 0.0026 | 0.0025 | 0.0025 |
| 1.2 | 0.66 | 0.0036 | 0.0034 | 0.0033 | 0.0032 | 0.0031 | 0.0030 | 0.0030 | 0.0029 |
| 1.3 | 0.71 | 0.0042 | 0.0040 | 0.0039 | 0.0037 | 0.0036 | 0.0035 | 0.0034 | 0.0034 |
| 1.4 | 0.77 | 0.0048 | 0.0046 | 0.0044 | 0.0042 | 0.0041 | 0.0040 | 0.0039 | 0.0039 |
| 1.5 | 0.82 | 0.0055 | 0.0052 | 0.0050 | 0.0048 | 0.0047 | 0.0046 | 0.0045 | 0.0044 |
| 2.0 | 1.10 | 0.0093 | 0.0089 | 0.0085 | 0.0082 | 0.0079 | 0.0078 | 0.0076 | 0.0075 |
| 2.5 | 1.37 | 0.0141 | 0.0134 | 0.0129 | 0.0123 | 0.0120 | 0.0117 | 0.0115 | 0.0113 |
| 3.0 | 1.65 | 0.0197 | 0.0187 | 0.0181 | 0.0173 | 0.0168 | 0.0164 | 0.0161 | 0.0158 |
| 3.5 | 1.92 | 0.0262 | 0.0249 | 0.0241 | 0.0230 | 0.0223 | 0.0219 | 0.0214 | 0.0210 |
| 4.0 | 2.20 | 0.0336 | 0.0319 | 0.0308 | 0.0294 | 0.0286 | 0.0280 | 0.0274 | 0.0269 |
| 4.5 | 2.47 | 0.0418 | 0.0397 | 0.0383 | 0.0366 | 0.0355 | 0.0348 | 0.0341 | 0.0334 |
| 5.0 | 2.75 | 0.0508 | 0.0482 | 0.0465 | 0.0444 | 0.0432 | 0.0423 | 0.0415 | 0.0406 |
| 6.0 | 3.30 | 0.0711 | 0.0676 | 0.0652 | 0.0622 | 0.0605 | 0.0593 | 0.0581 | 0.0569 |
| 7.0 | 3.85 | 0.0946 | 0.0899 | 0.0867 | 0.0828 | 0.0804 | 0.0788 | 0.0773 | 0.0757 |
| 8.0 | 4.40 | 0.1211 | 0.1151 | 0.1110 | 0.1060 | 0.1030 | 0.1009 | 0.0989 | 0.0969 |
| 9.0 | 4.95 | 0.1506 | 0.1431 | 0.1381 | 0.1318 | 0.1280 | 0.1255 | 0.1230 | 0.1205 |
| 10.0 | 5.50 | 0.1830 | 0.1739 | 0.1678 | 0.1602 | 0.1556 | 0.1525 | 0.1495 | 0.1464 |
| 11.0 | 6.05 | 0.2183 | 0.2074 | 0.2001 | 0.1910 | 0.1856 | 0.1819 | 0.1783 | 0.1747 |
| 12.0 | 6.60 | 0.2565 | 0.2436 | 0.2351 | 0.2244 | 0.2180 | 0.2137 | 0.2094 | 0.2052 |
| 13.0 | 7.15 | 0.2974 | 0.2825 | 0.2726 | 0.2602 | 0.2528 | 0.2478 | 0.2429 | 0.2379 |
| 14.0 | 7.70 | 0.3411 | 0.3240 | 0.3127 | 0.2985 | 0.2899 | 0.2842 | 0.2786 | 0.2729 |
| 15.0 | 8.25 | 0.3875 | 0.3682 | 0.3552 | 0.3391 | 0.3294 | 0.3229 | 0.3165 | 0.3100 |
| 16.0 | 8.80 | 0.4367 | 0.4148 | 0.4003 | 0.3821 | 0.3712 | 0.3639 | 0.3566 | 0.3493 |
| 17.0 | 9.35 | 0.4885 | 0.4641 | 0.4478 | 0.4274 | 0.4152 | 0.4071 | 0.3989 | 0.3908 |
| 18.0 | 9.90 | 0.5430 | 0.5158 | 0.4977 | 0.4751 | 0.4615 | 0.4525 | 0.4434 | 0.4344 |
| 19.0 | 10.45 | 0.6001 | 0.5701 | 0.5501 | 0.5251 | 0.5101 | 0.5001 | 0.4901 | 0.4801 |
| 20.0 | 11.00 | 0.6598 | 0.6268 | 0.6049 | 0.5774 | 0.5609 | 0.5499 | 0.5389 | 0.5279 |

Pressure loss per foot, 1" hePEX and AquaPEX (40% Glycol)

| | | Head (Feet of Water) Per Foot of Tubing | | | | | | | |
|------|-----------------|---|-------------|--------------|--------------|--------------|--------------|--------------|--------------|
| gpm | Velocity (ft/s) | 60°F / 16°C | 80°F / 27°C | 100°F / 38°C | 120°F / 49°C | 140°F / 60°C | 160°F / 71°C | 180°F / 82°C | 200°F / 93°C |
| 0.1 | 0.05 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 0.2 | 0.11 | 0.0001 | 0.0001 | 0.0001 | 0.0001 | 0.0001 | 0.0001 | 0.0001 | 0.0001 |
| 0.3 | 0.16 | 0.0003 | 0.0003 | 0.0003 | 0.0003 | 0.0003 | 0.0002 | 0.0002 | 0.0002 |
| 0.4 | 0.22 | 0.0005 | 0.0005 | 0.0005 | 0.0004 | 0.0004 | 0.0004 | 0.0004 | 0.0004 |
| 0.5 | 0.27 | 0.0008 | 0.0007 | 0.0007 | 0.0007 | 0.0007 | 0.0006 | 0.0006 | 0.0006 |
| 0.6 | 0.33 | 0.0011 | 0.0010 | 0.0010 | 0.0009 | 0.0009 | 0.0009 | 0.0009 | 0.0009 |
| 0.7 | 0.38 | 0.0014 | 0.0014 | 0.0013 | 0.0013 | 0.0012 | 0.0012 | 0.0012 | 0.0011 |
| 0.8 | 0.44 | 0.0018 | 0.0017 | 0.0017 | 0.0016 | 0.0016 | 0.0015 | 0.0015 | 0.0015 |
| 0.9 | 0.49 | 0.0023 | 0.0022 | 0.0021 | 0.0020 | 0.0019 | 0.0019 | 0.0019 | 0.0018 |
| 1.0 | 0.55 | 0.0028 | 0.0026 | 0.0025 | 0.0024 | 0.0024 | 0.0023 | 0.0023 | 0.0022 |
| 1.1 | 0.60 | 0.0033 | 0.0031 | 0.0030 | 0.0029 | 0.0028 | 0.0028 | 0.0027 | 0.0026 |
| 1.2 | 0.66 | 0.0039 | 0.0037 | 0.0036 | 0.0034 | 0.0033 | 0.0032 | 0.0032 | 0.0031 |
| 1.3 | 0.71 | 0.0045 | 0.0043 | 0.0041 | 0.0039 | 0.0038 | 0.0038 | 0.0037 | 0.0036 |
| 1.4 | 0.77 | 0.0052 | 0.0049 | 0.0047 | 0.0045 | 0.0044 | 0.0043 | 0.0042 | 0.0041 |
| 1.5 | 0.82 | 0.0059 | 0.0056 | 0.0054 | 0.0051 | 0.0050 | 0.0049 | 0.0048 | 0.0047 |
| 2.0 | 1.10 | 0.0100 | 0.0095 | 0.0092 | 0.0087 | 0.0085 | 0.0083 | 0.0082 | 0.0080 |
| 2.5 | 1.37 | 0.0151 | 0.0144 | 0.0138 | 0.0132 | 0.0128 | 0.0126 | 0.0123 | 0.0121 |
| 3.0 | 1.65 | 0.0212 | 0.0201 | 0.0194 | 0.0185 | 0.0180 | 0.0176 | 0.0173 | 0.0169 |
| 3.5 | 1.92 | 0.0282 | 0.0267 | 0.0258 | 0.0246 | 0.0239 | 0.0235 | 0.0230 | 0.0225 |
| 4.0 | 2.20 | 0.0360 | 0.0342 | 0.0330 | 0.0315 | 0.0306 | 0.0300 | 0.0294 | 0.0288 |
| 4.5 | 2.47 | 0.0448 | 0.0426 | 0.0411 | 0.0392 | 0.0381 | 0.0373 | 0.0366 | 0.0359 |
| 5.0 | 2.75 | 0.0545 | 0.0517 | 0.0499 | 0.0477 | 0.0463 | 0.0454 | 0.0445 | 0.0436 |
| 6.0 | 3.30 | 0.0763 | 0.0725 | 0.0699 | 0.0668 | 0.0649 | 0.0636 | 0.0623 | 0.0610 |
| 7.0 | 3.85 | 0.1015 | 0.0964 | 0.0930 | 0.0888 | 0.0863 | 0.0846 | 0.0829 | 0.0812 |
| 8.0 | 4.40 | 0.1299 | 0.1234 | 0.1191 | 0.1137 | 0.1104 | 0.1083 | 0.1061 | 0.1039 |
| 9.0 | 4.95 | 0.1616 | 0.1535 | 0.1481 | 0.1414 | 0.1373 | 0.1346 | 0.1319 | 0.1292 |
| 10.0 | 5.50 | 0.1963 | 0.1865 | 0.1800 | 0.1718 | 0.1669 | 0.1636 | 0.1603 | 0.1571 |
| 11.0 | 6.05 | 0.2342 | 0.2225 | 0.2147 | 0.2049 | 0.1990 | 0.1951 | 0.1912 | 0.1873 |
| 12.0 | 6.60 | 0.2751 | 0.2613 | 0.2522 | 0.2407 | 0.2338 | 0.2292 | 0.2246 | 0.2201 |
| 13.0 | 7.15 | 0.3190 | 0.3030 | 0.2924 | 0.2791 | 0.2711 | 0.2658 | 0.2605 | 0.2552 |
| 14.0 | 7.70 | 0.3658 | 0.3476 | 0.3354 | 0.3201 | 0.3110 | 0.3049 | 0.2988 | 0.2927 |
| 15.0 | 8.25 | 0.4157 | 0.3949 | 0.3810 | 0.3637 | 0.3533 | 0.3464 | 0.3395 | 0.3325 |
| 16.0 | 8.80 | 0.4684 | 0.4449 | 0.4293 | 0.4098 | 0.3981 | 0.3903 | 0.3825 | 0.3747 |
| 17.0 | 9.35 | 0.5240 | 0.4978 | 0.4803 | 0.4585 | 0.4454 | 0.4366 | 0.4279 | 0.4192 |
| 18.0 | 9.90 | 0.5824 | 0.5533 | 0.5339 | 0.5096 | 0.4950 | 0.4853 | 0.4756 | 0.4659 |
| 19.0 | 10.45 | 0.6437 | 0.6115 | 0.5900 | 0.5632 | 0.5471 | 0.5364 | 0.5257 | 0.5149 |
| 20.0 | 11.00 | 0.7077 | 0.6723 | 0.6488 | 0.6193 | 0.6016 | 0.5898 | 0.5780 | 0.5662 |

Pressure loss per foot, 1" hePEX and AquaPEX (50% Glycol)

| | | Head (Feet of Water) Per Foot of Tubing | | | | | | | |
|------|-----------------|---|-------------|--------------|--------------|--------------|--------------|--------------|--------------|
| gpm | Velocity (ft/s) | 60°F / 16°C | 80°F / 27°C | 100°F / 38°C | 120°F / 49°C | 140°F / 60°C | 160°F / 71°C | 180°F / 82°C | 200°F / 93°C |
| 0.1 | 0.05 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 0.2 | 0.11 | 0.0001 | 0.0001 | 0.0001 | 0.0001 | 0.0001 | 0.0001 | 0.0001 | 0.0001 |
| 0.3 | 0.16 | 0.0003 | 0.0003 | 0.0003 | 0.0003 | 0.0003 | 0.0003 | 0.0003 | 0.0003 |
| 0.4 | 0.22 | 0.0005 | 0.0005 | 0.0005 | 0.0005 | 0.0005 | 0.0004 | 0.0004 | 0.0004 |
| 0.5 | 0.27 | 0.0008 | 0.0008 | 0.0007 | 0.0007 | 0.0007 | 0.0007 | 0.0007 | 0.0006 |
| 0.6 | 0.33 | 0.0011 | 0.0011 | 0.0010 | 0.0010 | 0.0010 | 0.0009 | 0.0009 | 0.0009 |
| 0.7 | 0.38 | 0.0015 | 0.0014 | 0.0014 | 0.0013 | 0.0013 | 0.0013 | 0.0012 | 0.0012 |
| 0.8 | 0.44 | 0.0019 | 0.0018 | 0.0018 | 0.0017 | 0.0016 | 0.0016 | 0.0016 | 0.0015 |
| 0.9 | 0.49 | 0.0024 | 0.0023 | 0.0022 | 0.0021 | 0.0020 | 0.0020 | 0.0020 | 0.0019 |
| 1.0 | 0.55 | 0.0029 | 0.0028 | 0.0027 | 0.0026 | 0.0025 | 0.0024 | 0.0024 | 0.0023 |
| 1.1 | 0.60 | 0.0035 | 0.0033 | 0.0032 | 0.0030 | 0.0030 | 0.0029 | 0.0028 | 0.0028 |
| 1.2 | 0.66 | 0.0041 | 0.0039 | 0.0037 | 0.0036 | 0.0035 | 0.0034 | 0.0033 | 0.0033 |
| 1.3 | 0.71 | 0.0047 | 0.0045 | 0.0043 | 0.0041 | 0.0040 | 0.0040 | 0.0039 | 0.0038 |
| 1.4 | 0.77 | 0.0054 | 0.0052 | 0.0050 | 0.0048 | 0.0046 | 0.0045 | 0.0044 | 0.0044 |
| 1.5 | 0.82 | 0.0062 | 0.0059 | 0.0057 | 0.0054 | 0.0053 | 0.0052 | 0.0050 | 0.0049 |
| 2.0 | 1.10 | 0.0105 | 0.0100 | 0.0096 | 0.0092 | 0.0089 | 0.0088 | 0.0086 | 0.0084 |
| 2.5 | 1.37 | 0.0159 | 0.0151 | 0.0146 | 0.0139 | 0.0135 | 0.0133 | 0.0130 | 0.0127 |
| 3.0 | 1.65 | 0.0223 | 0.0212 | 0.0204 | 0.0195 | 0.0189 | 0.0186 | 0.0182 | 0.0178 |
| 3.5 | 1.92 | 0.0296 | 0.0282 | 0.0272 | 0.0259 | 0.0252 | 0.0247 | 0.0242 | 0.0237 |
| 4.0 | 2.20 | 0.0379 | 0.0360 | 0.0348 | 0.0332 | 0.0322 | 0.0316 | 0.0310 | 0.0303 |
| 4.5 | 2.47 | 0.0472 | 0.0448 | 0.0432 | 0.0413 | 0.0401 | 0.0393 | 0.0385 | 0.0377 |
| 5.0 | 2.75 | 0.0573 | 0.0545 | 0.0525 | 0.0502 | 0.0487 | 0.0478 | 0.0468 | 0.0459 |
| 6.0 | 3.30 | 0.0803 | 0.0763 | 0.0736 | 0.0703 | 0.0683 | 0.0669 | 0.0656 | 0.0643 |
| 7.0 | 3.85 | 0.1068 | 0.1015 | 0.0979 | 0.0935 | 0.0908 | 0.0890 | 0.0872 | 0.0855 |
| 8.0 | 4.40 | 0.1368 | 0.1299 | 0.1254 | 0.1197 | 0.1162 | 0.1140 | 0.1117 | 0.1094 |
| 9.0 | 4.95 | 0.1701 | 0.1616 | 0.1559 | 0.1488 | 0.1445 | 0.1417 | 0.1389 | 0.1360 |
| 10.0 | 5.50 | 0.2067 | 0.1963 | 0.1894 | 0.1808 | 0.1757 | 0.1722 | 0.1688 | 0.1653 |
| 11.0 | 6.05 | 0.2465 | 0.2342 | 0.2260 | 0.2157 | 0.2095 | 0.2054 | 0.2013 | 0.1972 |
| 12.0 | 6.60 | 0.2896 | 0.2751 | 0.2654 | 0.2534 | 0.2461 | 0.2413 | 0.2365 | 0.2316 |
| 13.0 | 7.15 | 0.3358 | 0.3190 | 0.3078 | 0.2938 | 0.2854 | 0.2798 | 0.2742 | 0.2686 |
| 14.0 | 7.70 | 0.3851 | 0.3658 | 0.3530 | 0.3370 | 0.3273 | 0.3209 | 0.3145 | 0.3081 |
| 15.0 | 8.25 | 0.4375 | 0.4157 | 0.4011 | 0.3828 | 0.3719 | 0.3646 | 0.3573 | 0.3500 |
| 16.0 | 8.80 | 0.4930 | 0.4684 | 0.4519 | 0.4314 | 0.4191 | 0.4108 | 0.4026 | 0.3944 |
| 17.0 | 9.35 | 0.5515 | 0.5240 | 0.5056 | 0.4826 | 0.4688 | 0.4596 | 0.4504 | 0.4412 |
| 18.0 | 9.90 | 0.6130 | 0.5824 | 0.5620 | 0.5364 | 0.5211 | 0.5109 | 0.5007 | 0.4904 |
| 19.0 | 10.45 | 0.6775 | 0.6437 | 0.6211 | 0.5928 | 0.5759 | 0.5646 | 0.5533 | 0.5420 |
| 20.0 | 11.00 | 0.7450 | 0.7077 | 0.6829 | 0.6519 | 0.6332 | 0.6208 | 0.6084 | 0.5960 |

Pressure loss per foot, 1¼" hePEX and AquaPEX (100 % Water)

| | | Head (Feet of Water) Per Foot of Tubing | | | | | | | |
|-------|-----------------|---|-------------|--------------|--------------|--------------|--------------|--------------|--------------|
| gpm | Velocity (ft/s) | 60°F / 16°C | 80°F / 27°C | 100°F / 38°C | 120°F / 49°C | 140°F / 60°C | 160°F / 71°C | 180°F / 82°C | 200°F / 93°C |
| 1.00 | 0.37 | 0.0008 | 0.0007 | 0.0007 | 0.0007 | 0.0007 | 0.0007 | 0.0006 | 0.0006 |
| 1.50 | 0.55 | 0.0017 | 0.0016 | 0.0015 | 0.0015 | 0.0014 | 0.0014 | 0.0014 | 0.0013 |
| 2.00 | 0.74 | 0.0028 | 0.0027 | 0.0026 | 0.0025 | 0.0024 | 0.0024 | 0.0023 | 0.0023 |
| 2.50 | 0.92 | 0.0043 | 0.0041 | 0.0039 | 0.0037 | 0.0036 | 0.0036 | 0.0035 | 0.0034 |
| 3.00 | 1.10 | 0.0060 | 0.0057 | 0.0055 | 0.0052 | 0.0051 | 0.0050 | 0.0049 | 0.0048 |
| 3.50 | 1.29 | 0.0080 | 0.0076 | 0.0073 | 0.0070 | 0.0068 | 0.0066 | 0.0065 | 0.0064 |
| 4.00 | 1.47 | 0.0102 | 0.0097 | 0.0093 | 0.0089 | 0.0087 | 0.0085 | 0.0083 | 0.0081 |
| 4.50 | 1.65 | 0.0127 | 0.0120 | 0.0116 | 0.0111 | 0.0108 | 0.0106 | 0.0103 | 0.0101 |
| 5.00 | 1.84 | 0.0154 | 0.0146 | 0.0141 | 0.0135 | 0.0131 | 0.0128 | 0.0126 | 0.0123 |
| 6.00 | 2.21 | 0.0216 | 0.0205 | 0.0198 | 0.0189 | 0.0183 | 0.0180 | 0.0176 | 0.0173 |
| 7.00 | 2.57 | 0.0287 | 0.0272 | 0.0263 | 0.0251 | 0.0244 | 0.0239 | 0.0234 | 0.0229 |
| 8.00 | 2.94 | 0.0367 | 0.0349 | 0.0337 | 0.0321 | 0.0312 | 0.0306 | 0.0300 | 0.0294 |
| 9.00 | 3.31 | 0.0457 | 0.0434 | 0.0419 | 0.0400 | 0.0388 | 0.0381 | 0.0373 | 0.0365 |
| 10.00 | 3.68 | 0.0555 | 0.0527 | 0.0509 | 0.0486 | 0.0472 | 0.0462 | 0.0453 | 0.0444 |
| 11.00 | 4.04 | 0.0662 | 0.0629 | 0.0607 | 0.0579 | 0.0563 | 0.0552 | 0.0541 | 0.0529 |
| 12.00 | 4.41 | 0.0777 | 0.0739 | 0.0713 | 0.0680 | 0.0661 | 0.0648 | 0.0635 | 0.0622 |
| 13.00 | 4.78 | 0.0902 | 0.0856 | 0.0826 | 0.0789 | 0.0766 | 0.0751 | 0.0736 | 0.0721 |
| 14.00 | 5.15 | 0.1034 | 0.0982 | 0.0948 | 0.0905 | 0.0879 | 0.0862 | 0.0844 | 0.0827 |
| 15.00 | 5.52 | 0.1175 | 0.1116 | 0.1077 | 0.1028 | 0.0999 | 0.0979 | 0.0959 | 0.0940 |
| 16.00 | 5.88 | 0.1324 | 0.1258 | 0.1213 | 0.1158 | 0.1125 | 0.1103 | 0.1081 | 0.1059 |
| 17.00 | 6.25 | 0.1481 | 0.1407 | 0.1357 | 0.1296 | 0.1259 | 0.1234 | 0.1209 | 0.1185 |
| 18.00 | 6.62 | 0.1646 | 0.1564 | 0.1509 | 0.1440 | 0.1399 | 0.1372 | 0.1344 | 0.1317 |
| 19.00 | 6.99 | 0.1819 | 0.1728 | 0.1668 | 0.1592 | 0.1546 | 0.1516 | 0.1486 | 0.1455 |
| 20.00 | 7.35 | 0.2000 | 0.1900 | 0.1834 | 0.1750 | 0.1700 | 0.1667 | 0.1634 | 0.1600 |
| 21.00 | 7.72 | 0.2189 | 0.2080 | 0.2007 | 0.1916 | 0.1861 | 0.1824 | 0.1788 | 0.1751 |
| 22.00 | 8.09 | 0.2386 | 0.2267 | 0.2187 | 0.2088 | 0.2028 | 0.1988 | 0.1949 | 0.1909 |
| 23.00 | 8.46 | 0.2591 | 0.2461 | 0.2375 | 0.2267 | 0.2202 | 0.2159 | 0.2116 | 0.2072 |
| 24.00 | 8.83 | 0.2803 | 0.2663 | 0.2569 | 0.2452 | 0.2382 | 0.2336 | 0.2289 | 0.2242 |
| 25.00 | 9.19 | 0.3023 | 0.2871 | 0.2771 | 0.2645 | 0.2569 | 0.2519 | 0.2468 | 0.2418 |
| 26.00 | 9.56 | 0.3250 | 0.3088 | 0.2979 | 0.2844 | 0.2763 | 0.2708 | 0.2654 | 0.2600 |
| 27.00 | 9.93 | 0.3485 | 0.3311 | 0.3195 | 0.3049 | 0.2962 | 0.2904 | 0.2846 | 0.2788 |
| 28.00 | 10.30 | 0.3728 | 0.3541 | 0.3417 | 0.3262 | 0.3169 | 0.3106 | 0.3044 | 0.2982 |

Pressure loss per foot, 1¼" hePEX and AquaPEX (30% Glycol)

| | | Head (Feet of Water) Per Foot of Tubing | | | | | | | |
|------|-----------------|---|-------------|--------------|--------------|--------------|--------------|--------------|--------------|
| gpm | Velocity (ft/s) | 60°F / 16°C | 80°F / 27°C | 100°F / 38°C | 120°F / 49°C | 140°F / 60°C | 160°F / 71°C | 180°F / 82°C | 200°F / 93°C |
| 1.0 | 0.37 | 0.0010 | 0.0009 | 0.0009 | 0.0009 | 0.0008 | 0.0008 | 0.0008 | 0.0008 |
| 1.5 | 0.55 | 0.0021 | 0.0020 | 0.0019 | 0.0018 | 0.0017 | 0.0017 | 0.0017 | 0.0016 |
| 2.0 | 0.74 | 0.0035 | 0.0033 | 0.0032 | 0.0031 | 0.0030 | 0.0029 | 0.0029 | 0.0028 |
| 2.5 | 0.92 | 0.0053 | 0.0050 | 0.0049 | 0.0046 | 0.0045 | 0.0044 | 0.0043 | 0.0042 |
| 3.0 | 1.10 | 0.0074 | 0.0070 | 0.0068 | 0.0065 | 0.0063 | 0.0062 | 0.0061 | 0.0059 |
| 3.5 | 1.29 | 0.0099 | 0.0094 | 0.0090 | 0.0086 | 0.0084 | 0.0082 | 0.0081 | 0.0079 |
| 4.0 | 1.47 | 0.0126 | 0.0120 | 0.0116 | 0.0111 | 0.0107 | 0.0105 | 0.0103 | 0.0101 |
| 4.5 | 1.65 | 0.0157 | 0.0149 | 0.0144 | 0.0137 | 0.0133 | 0.0131 | 0.0128 | 0.0126 |
| 5.0 | 1.84 | 0.0191 | 0.0181 | 0.0175 | 0.0167 | 0.0162 | 0.0159 | 0.0156 | 0.0153 |
| 6.0 | 2.21 | 0.0267 | 0.0254 | 0.0245 | 0.0234 | 0.0227 | 0.0223 | 0.0218 | 0.0214 |
| 7.0 | 2.57 | 0.0356 | 0.0338 | 0.0326 | 0.0311 | 0.0302 | 0.0296 | 0.0290 | 0.0285 |
| 8.0 | 2.94 | 0.0455 | 0.0433 | 0.0417 | 0.0398 | 0.0387 | 0.0379 | 0.0372 | 0.0364 |
| 9.0 | 3.31 | 0.0566 | 0.0538 | 0.0519 | 0.0495 | 0.0481 | 0.0472 | 0.0462 | 0.0453 |
| 10.0 | 3.68 | 0.0688 | 0.0654 | 0.0631 | 0.0602 | 0.0585 | 0.0573 | 0.0562 | 0.0550 |
| 11.0 | 4.04 | 0.0821 | 0.0780 | 0.0752 | 0.0718 | 0.0698 | 0.0684 | 0.0670 | 0.0657 |
| 12.0 | 4.41 | 0.0964 | 0.0916 | 0.0884 | 0.0844 | 0.0819 | 0.0803 | 0.0787 | 0.0771 |
| 13.0 | 4.78 | 0.1118 | 0.1062 | 0.1025 | 0.0978 | 0.0950 | 0.0932 | 0.0913 | 0.0894 |
| 14.0 | 5.15 | 0.1282 | 0.1218 | 0.1175 | 0.1122 | 0.1090 | 0.1068 | 0.1047 | 0.1026 |
| 15.0 | 5.52 | 0.1457 | 0.1384 | 0.1335 | 0.1275 | 0.1238 | 0.1214 | 0.1190 | 0.1165 |
| 16.0 | 5.88 | 0.1641 | 0.1559 | 0.1505 | 0.1436 | 0.1395 | 0.1368 | 0.1341 | 0.1313 |
| 17.0 | 6.25 | 0.1836 | 0.1744 | 0.1683 | 0.1607 | 0.1561 | 0.1530 | 0.1500 | 0.1469 |
| 18.0 | 6.62 | 0.2041 | 0.1939 | 0.1871 | 0.1786 | 0.1735 | 0.1701 | 0.1667 | 0.1633 |
| 19.0 | 6.99 | 0.2256 | 0.2143 | 0.2068 | 0.1974 | 0.1917 | 0.1880 | 0.1842 | 0.1805 |
| 20.0 | 7.35 | 0.2480 | 0.2356 | 0.2274 | 0.2170 | 0.2108 | 0.2067 | 0.2026 | 0.1984 |
| 21.0 | 7.72 | 0.2715 | 0.2579 | 0.2488 | 0.2375 | 0.2307 | 0.2262 | 0.2217 | 0.2172 |
| 22.0 | 8.09 | 0.2959 | 0.2811 | 0.2712 | 0.2589 | 0.2515 | 0.2466 | 0.2416 | 0.2367 |
| 23.0 | 8.46 | 0.3212 | 0.3052 | 0.2945 | 0.2811 | 0.2730 | 0.2677 | 0.2623 | 0.2570 |
| 24.0 | 8.83 | 0.3475 | 0.3302 | 0.3186 | 0.3041 | 0.2954 | 0.2896 | 0.2838 | 0.2780 |
| 25.0 | 9.19 | 0.3748 | 0.3561 | 0.3436 | 0.3280 | 0.3186 | 0.3123 | 0.3061 | 0.2998 |
| 26.0 | 9.56 | 0.4030 | 0.3829 | 0.3694 | 0.3526 | 0.3426 | 0.3358 | 0.3291 | 0.3224 |
| 27.0 | 9.93 | 0.4322 | 0.4105 | 0.3961 | 0.3781 | 0.3673 | 0.3601 | 0.3529 | 0.3457 |
| 28.0 | 10.30 | 0.4622 | 0.4391 | 0.4237 | 0.4044 | 0.3929 | 0.3852 | 0.3775 | 0.3698 |

Pressure loss per foot, 1¼" hePEX and AquaPEX (40% Glycol)

| | | Head (Feet of Water) Per Foot of Tubing | | | | | | | |
|------|-----------------|---|-------------|--------------|--------------|--------------|--------------|--------------|--------------|
| gpm | Velocity (ft/s) | 60°F / 16°C | 80°F / 27°C | 100°F / 38°C | 120°F / 49°C | 140°F / 60°C | 160°F / 71°C | 180°F / 82°C | 200°F / 93°C |
| 1.0 | 0.37 | 0.0010 | 0.0010 | 0.0010 | 0.0009 | 0.0009 | 0.0009 | 0.0009 | 0.0008 |
| 1.5 | 0.55 | 0.0022 | 0.0021 | 0.0020 | 0.0019 | 0.0019 | 0.0018 | 0.0018 | 0.0018 |
| 2.0 | 0.74 | 0.0038 | 0.0036 | 0.0034 | 0.0033 | 0.0032 | 0.0031 | 0.0031 | 0.0030 |
| 2.5 | 0.92 | 0.0057 | 0.0054 | 0.0052 | 0.0050 | 0.0048 | 0.0047 | 0.0046 | 0.0045 |
| 3.0 | 1.10 | 0.0080 | 0.0076 | 0.0073 | 0.0070 | 0.0068 | 0.0066 | 0.0065 | 0.0064 |
| 3.5 | 1.29 | 0.0106 | 0.0101 | 0.0097 | 0.0093 | 0.0090 | 0.0088 | 0.0086 | 0.0085 |
| 4.0 | 1.47 | 0.0135 | 0.0129 | 0.0124 | 0.0119 | 0.0115 | 0.0113 | 0.0111 | 0.0108 |
| 4.5 | 1.65 | 0.0168 | 0.0160 | 0.0154 | 0.0147 | 0.0143 | 0.0140 | 0.0138 | 0.0135 |
| 5.0 | 1.84 | 0.0205 | 0.0194 | 0.0188 | 0.0179 | 0.0174 | 0.0171 | 0.0167 | 0.0164 |
| 6.0 | 2.21 | 0.0287 | 0.0272 | 0.0263 | 0.0251 | 0.0244 | 0.0239 | 0.0234 | 0.0229 |
| 7.0 | 2.57 | 0.0381 | 0.0362 | 0.0350 | 0.0334 | 0.0324 | 0.0318 | 0.0312 | 0.0305 |
| 8.0 | 2.94 | 0.0488 | 0.0464 | 0.0448 | 0.0427 | 0.0415 | 0.0407 | 0.0399 | 0.0391 |
| 9.0 | 3.31 | 0.0607 | 0.0577 | 0.0557 | 0.0531 | 0.0516 | 0.0506 | 0.0496 | 0.0486 |
| 10.0 | 3.68 | 0.0738 | 0.0701 | 0.0676 | 0.0646 | 0.0627 | 0.0615 | 0.0603 | 0.0590 |
| 11.0 | 4.04 | 0.0880 | 0.0836 | 0.0807 | 0.0770 | 0.0748 | 0.0734 | 0.0719 | 0.0704 |
| 12.0 | 4.41 | 0.1034 | 0.0982 | 0.0948 | 0.0905 | 0.0879 | 0.0862 | 0.0844 | 0.0827 |
| 13.0 | 4.78 | 0.1199 | 0.1139 | 0.1099 | 0.1049 | 0.1019 | 0.0999 | 0.0979 | 0.0959 |
| 14.0 | 5.15 | 0.1375 | 0.1306 | 0.1261 | 0.1203 | 0.1169 | 0.1146 | 0.1123 | 0.1100 |
| 15.0 | 5.52 | 0.1562 | 0.1484 | 0.1432 | 0.1367 | 0.1328 | 0.1302 | 0.1276 | 0.1250 |
| 16.0 | 5.88 | 0.1761 | 0.1673 | 0.1614 | 0.1541 | 0.1497 | 0.1467 | 0.1438 | 0.1408 |
| 17.0 | 6.25 | 0.1970 | 0.1871 | 0.1805 | 0.1723 | 0.1674 | 0.1641 | 0.1608 | 0.1576 |
| 18.0 | 6.62 | 0.2189 | 0.2080 | 0.2007 | 0.1916 | 0.1861 | 0.1824 | 0.1788 | 0.1751 |
| 19.0 | 6.99 | 0.2420 | 0.2299 | 0.2218 | 0.2117 | 0.2057 | 0.2016 | 0.1976 | 0.1936 |
| 20.0 | 7.35 | 0.2660 | 0.2527 | 0.2439 | 0.2328 | 0.2261 | 0.2217 | 0.2173 | 0.2128 |
| 21.0 | 7.72 | 0.2912 | 0.2766 | 0.2669 | 0.2548 | 0.2475 | 0.2426 | 0.2378 | 0.2329 |
| 22.0 | 8.09 | 0.3173 | 0.3015 | 0.2909 | 0.2777 | 0.2697 | 0.2645 | 0.2592 | 0.2539 |
| 23.0 | 8.46 | 0.3445 | 0.3273 | 0.3158 | 0.3015 | 0.2929 | 0.2871 | 0.2814 | 0.2756 |
| 24.0 | 8.83 | 0.3728 | 0.3541 | 0.3417 | 0.3262 | 0.3169 | 0.3106 | 0.3044 | 0.2982 |
| 25.0 | 9.19 | 0.4020 | 0.3819 | 0.3685 | 0.3518 | 0.3417 | 0.3350 | 0.3283 | 0.3216 |
| 26.0 | 9.56 | 0.4323 | 0.4106 | 0.3962 | 0.3782 | 0.3674 | 0.3602 | 0.3530 | 0.3458 |
| 27.0 | 9.93 | 0.4635 | 0.4403 | 0.4249 | 0.4056 | 0.3940 | 0.3863 | 0.3785 | 0.3708 |
| 28.0 | 10.30 | 0.4958 | 0.4710 | 0.4545 | 0.4338 | 0.4214 | 0.4131 | 0.4049 | 0.3966 |

Pressure loss per foot, 1¼" hePEX and AquaPEX (50% Glycol)

| | | Head (Feet of Water) Per Foot of Tubing | | | | | | | |
|------|-----------------|---|-------------|--------------|--------------|--------------|--------------|--------------|--------------|
| gpm | Velocity (ft/s) | 60°F / 16°C | 80°F / 27°C | 100°F / 38°C | 120°F / 49°C | 140°F / 60°C | 160°F / 71°C | 180°F / 82°C | 200°F / 93°C |
| 1.0 | 0.37 | 0.0011 | 0.0010 | 0.0010 | 0.0010 | 0.0009 | 0.0009 | 0.0009 | 0.0009 |
| 1.5 | 0.55 | 0.0023 | 0.0022 | 0.0021 | 0.0020 | 0.0020 | 0.0019 | 0.0019 | 0.0019 |
| 2.0 | 0.74 | 0.0040 | 0.0038 | 0.0036 | 0.0035 | 0.0034 | 0.0033 | 0.0032 | 0.0032 |
| 2.5 | 0.92 | 0.0060 | 0.0057 | 0.0055 | 0.0052 | 0.0051 | 0.0050 | 0.0049 | 0.0048 |
| 3.0 | 1.10 | 0.0084 | 0.0080 | 0.0077 | 0.0073 | 0.0071 | 0.0070 | 0.0068 | 0.0067 |
| 3.5 | 1.29 | 0.0111 | 0.0106 | 0.0102 | 0.0097 | 0.0095 | 0.0093 | 0.0091 | 0.0089 |
| 4.0 | 1.47 | 0.0143 | 0.0135 | 0.0131 | 0.0125 | 0.0121 | 0.0119 | 0.0116 | 0.0114 |
| 4.5 | 1.65 | 0.0177 | 0.0168 | 0.0163 | 0.0155 | 0.0151 | 0.0148 | 0.0145 | 0.0142 |
| 5.0 | 1.84 | 0.0215 | 0.0205 | 0.0198 | 0.0189 | 0.0183 | 0.0180 | 0.0176 | 0.0172 |
| 6.0 | 2.21 | 0.0302 | 0.0287 | 0.0277 | 0.0264 | 0.0257 | 0.0252 | 0.0247 | 0.0242 |
| 7.0 | 2.57 | 0.0402 | 0.0381 | 0.0368 | 0.0351 | 0.0341 | 0.0335 | 0.0328 | 0.0321 |
| 8.0 | 2.94 | 0.0514 | 0.0488 | 0.0471 | 0.0450 | 0.0437 | 0.0428 | 0.0420 | 0.0411 |
| 9.0 | 3.31 | 0.0639 | 0.0607 | 0.0586 | 0.0559 | 0.0543 | 0.0533 | 0.0522 | 0.0511 |
| 10.0 | 3.68 | 0.0777 | 0.0738 | 0.0712 | 0.0680 | 0.0660 | 0.0647 | 0.0634 | 0.0621 |
| 11.0 | 4.04 | 0.0927 | 0.0880 | 0.0849 | 0.0811 | 0.0788 | 0.0772 | 0.0757 | 0.0741 |
| 12.0 | 4.41 | 0.1088 | 0.1034 | 0.0998 | 0.0952 | 0.0925 | 0.0907 | 0.0889 | 0.0871 |
| 13.0 | 4.78 | 0.1262 | 0.1199 | 0.1157 | 0.1104 | 0.1073 | 0.1052 | 0.1031 | 0.1010 |
| 14.0 | 5.15 | 0.1448 | 0.1375 | 0.1327 | 0.1267 | 0.1230 | 0.1206 | 0.1182 | 0.1158 |
| 15.0 | 5.52 | 0.1645 | 0.1562 | 0.1508 | 0.1439 | 0.1398 | 0.1371 | 0.1343 | 0.1316 |
| 16.0 | 5.88 | 0.1853 | 0.1761 | 0.1699 | 0.1622 | 0.1575 | 0.1544 | 0.1514 | 0.1483 |
| 17.0 | 6.25 | 0.2073 | 0.1970 | 0.1900 | 0.1814 | 0.1762 | 0.1728 | 0.1693 | 0.1659 |
| 18.0 | 6.62 | 0.2304 | 0.2189 | 0.2112 | 0.2016 | 0.1959 | 0.1920 | 0.1882 | 0.1844 |
| 19.0 | 6.99 | 0.2547 | 0.2420 | 0.2335 | 0.2229 | 0.2165 | 0.2122 | 0.2080 | 0.2038 |
| 20.0 | 7.35 | 0.2800 | 0.2660 | 0.2567 | 0.2450 | 0.2380 | 0.2334 | 0.2287 | 0.2240 |
| 21.0 | 7.72 | 0.3065 | 0.2912 | 0.2810 | 0.2682 | 0.2605 | 0.2554 | 0.2503 | 0.2452 |
| 22.0 | 8.09 | 0.3340 | 0.3173 | 0.3062 | 0.2923 | 0.2839 | 0.2784 | 0.2728 | 0.2672 |
| 23.0 | 8.46 | 0.3627 | 0.3445 | 0.3325 | 0.3173 | 0.3083 | 0.3022 | 0.2962 | 0.2901 |
| 24.0 | 8.83 | 0.3924 | 0.3728 | 0.3597 | 0.3433 | 0.3335 | 0.3270 | 0.3204 | 0.3139 |
| 25.0 | 9.19 | 0.4232 | 0.4020 | 0.3879 | 0.3703 | 0.3597 | 0.3526 | 0.3456 | 0.3385 |
| 26.0 | 9.56 | 0.4550 | 0.4323 | 0.4171 | 0.3981 | 0.3868 | 0.3792 | 0.3716 | 0.3640 |
| 27.0 | 9.93 | 0.4879 | 0.4635 | 0.4473 | 0.4269 | 0.4147 | 0.4066 | 0.3985 | 0.3903 |
| 28.0 | 10.30 | 0.5219 | 0.4958 | 0.4784 | 0.4566 | 0.4436 | 0.4349 | 0.4262 | 0.4175 |

Pressure loss per foot, 1½" hePEX and AquaPEX (100 % Water)

| gpm | Velocity (ft/s) | Head (Feet of Water) Per Foot of Tubing | | | | | | | |
|-------|--------------------|---|----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| | | 60°F / 16°C | 80°F / 27°C | 100°F / 38°C | 120°F / 49°C | 140°F / 60°C | 160°F / 71°C | 180°F / 82°C | 200°F / 93°C |
| 3.00 | 0.79 | 0.0027 | 0.0025 | 0.0024 | 0.0023 | 0.0023 | 0.0022 | 0.0022 | 0.0021 |
| 3.50 | 0.92 | 0.0036 | 0.0034 | 0.0033 | 0.0031 | 0.0030 | 0.0030 | 0.0029 | 0.0028 |
| 4.00 | 1.06 | 0.0045 | 0.0043 | 0.0042 | 0.0040 | 0.0039 | 0.0038 | 0.0037 | 0.0036 |
| 4.50 | 1.19 | 0.0057 | 0.0054 | 0.0052 | 0.0049 | 0.0048 | 0.0047 | 0.0046 | 0.0045 |
| 5.00 | 1.32 | 0.0069 | 0.0065 | 0.0063 | 0.0060 | 0.0058 | 0.0057 | 0.0056 | 0.0055 |
| 6.00 | 1.58 | 0.0096 | 0.0091 | 0.0088 | 0.0084 | 0.0082 | 0.0080 | 0.0079 | 0.0077 |
| 7.00 | 1.85 | 0.0128 | 0.0122 | 0.0117 | 0.0112 | 0.0109 | 0.0107 | 0.0105 | 0.0102 |
| 8.00 | 2.11 | 0.0164 | 0.0156 | 0.0150 | 0.0143 | 0.0139 | 0.0137 | 0.0134 | 0.0131 |
| 9.00 | 2.38 | 0.0204 | 0.0194 | 0.0187 | 0.0178 | 0.0173 | 0.0170 | 0.0166 | 0.0163 |
| 10.00 | 2.64 | 0.0248 | 0.0235 | 0.0227 | 0.0217 | 0.0211 | 0.0206 | 0.0202 | 0.0198 |
| 11.00 | 2.90 | 0.0295 | 0.0281 | 0.0271 | 0.0259 | 0.0251 | 0.0246 | 0.0241 | 0.0236 |
| 12.00 | 3.17 | 0.0347 | 0.0330 | 0.0318 | 0.0304 | 0.0295 | 0.0289 | 0.0283 | 0.0278 |
| 13.00 | 3.43 | 0.0403 | 0.0382 | 0.0369 | 0.0352 | 0.0342 | 0.0335 | 0.0329 | 0.0322 |
| 14.00 | 3.70 | 0.0462 | 0.0439 | 0.0423 | 0.0404 | 0.0392 | 0.0385 | 0.0377 | 0.0369 |
| 15.00 | 3.96 | 0.0524 | 0.0498 | 0.0481 | 0.0459 | 0.0446 | 0.0437 | 0.0428 | 0.0420 |
| 16.00 | 4.22 | 0.0591 | 0.0561 | 0.0542 | 0.0517 | 0.0502 | 0.0493 | 0.0483 | 0.0473 |
| 17.00 | 4.49 | 0.0661 | 0.0628 | 0.0606 | 0.0579 | 0.0562 | 0.0551 | 0.0540 | 0.0529 |
| 18.00 | 4.75 | 0.0735 | 0.0698 | 0.0674 | 0.0643 | 0.0625 | 0.0612 | 0.0600 | 0.0588 |
| 19.00 | 5.02 | 0.0812 | 0.0772 | 0.0745 | 0.0711 | 0.0690 | 0.0677 | 0.0663 | 0.0650 |
| 20.00 | 5.28 | 0.0893 | 0.0848 | 0.0819 | 0.0781 | 0.0759 | 0.0744 | 0.0729 | 0.0714 |
| 21.00 | 5.54 | 0.0977 | 0.0929 | 0.0896 | 0.0855 | 0.0831 | 0.0815 | 0.0798 | 0.0782 |
| 22.00 | 5.81 | 0.1065 | 0.1012 | 0.0976 | 0.0932 | 0.0905 | 0.0888 | 0.0870 | 0.0852 |
| 23.00 | 6.07 | 0.1157 | 0.1099 | 0.1060 | 0.1012 | 0.0983 | 0.0964 | 0.0945 | 0.0925 |
| 24.00 | 6.34 | 0.1251 | 0.1189 | 0.1147 | 0.1095 | 0.1064 | 0.1043 | 0.1022 | 0.1001 |
| 25.00 | 6.60 | 0.1349 | 0.1282 | 0.1237 | 0.1181 | 0.1147 | 0.1125 | 0.1102 | 0.1080 |
| 26.00 | 6.86 | 0.1451 | 0.1378 | 0.1330 | 0.1270 | 0.1233 | 0.1209 | 0.1185 | 0.1161 |
| 27.00 | 7.13 | 0.1556 | 0.1478 | 0.1426 | 0.1361 | 0.1323 | 0.1297 | 0.1271 | 0.1245 |
| 28.00 | 7.39 | 0.1664 | 0.1581 | 0.1526 | 0.1456 | 0.1415 | 0.1387 | 0.1359 | 0.1331 |
| 29.00 | 7.66 | 0.1776 | 0.1687 | 0.1628 | 0.1554 | 0.1509 | 0.1480 | 0.1450 | 0.1421 |
| 30.00 | 7.92 | 0.1891 | 0.1796 | 0.1733 | 0.1654 | 0.1607 | 0.1576 | 0.1544 | 0.1513 |
| 31.00 | 8.18 | 0.2009 | 0.1909 | 0.1842 | 0.1758 | 0.1708 | 0.1674 | 0.1641 | 0.1607 |
| 32.00 | 8.45 | 0.2131 | 0.2024 | 0.1953 | 0.1864 | 0.1811 | 0.1776 | 0.1740 | 0.1704 |
| 33.00 | 8.71 | 0.2255 | 0.2143 | 0.2067 | 0.1973 | 0.1917 | 0.1880 | 0.1842 | 0.1804 |
| 34.00 | 8.97 | 0.2383 | 0.2264 | 0.2185 | 0.2086 | 0.2026 | 0.1986 | 0.1947 | 0.1907 |
| 35.00 | 9.24 | 0.2515 | 0.2389 | 0.2305 | 0.2200 | 0.2138 | 0.2096 | 0.2054 | 0.2012 |
| 36.00 | 9.50 | 0.2649 | 0.2517 | 0.2429 | 0.2318 | 0.2252 | 0.2208 | 0.2164 | 0.2119 |
| 37.00 | 9.77 | 0.2787 | 0.2648 | 0.2555 | 0.2439 | 0.2369 | 0.2323 | 0.2276 | 0.2230 |
| 38.00 | 10.03 | 0.2928 | 0.2782 | 0.2684 | 0.2562 | 0.2489 | 0.2440 | 0.2391 | 0.2342 |

Pressure loss per foot, 1½" hePEX and AquaPEX (30% Glycol)

| | | Head (Feet of Water) Per Foot of Tubing | | | | | | | |
|------|-----------------|---|-------------|--------------|--------------|--------------|--------------|--------------|--------------|
| gpm | Velocity (ft/s) | 60°F / 16°C | 80°F / 27°C | 100°F / 38°C | 120°F / 49°C | 140°F / 60°C | 160°F / 71°C | 180°F / 82°C | 200°F / 93°C |
| 3.0 | 0.79 | 0.0033 | 0.0031 | 0.0030 | 0.0029 | 0.0028 | 0.0028 | 0.0027 | 0.0026 |
| 3.5 | 0.92 | 0.0044 | 0.0042 | 0.0040 | 0.0039 | 0.0037 | 0.0037 | 0.0036 | 0.0035 |
| 4.0 | 1.06 | 0.0056 | 0.0054 | 0.0052 | 0.0049 | 0.0048 | 0.0047 | 0.0046 | 0.0045 |
| 4.5 | 1.19 | 0.0070 | 0.0067 | 0.0064 | 0.0061 | 0.0060 | 0.0058 | 0.0057 | 0.0056 |
| 5.0 | 1.32 | 0.0085 | 0.0081 | 0.0078 | 0.0075 | 0.0072 | 0.0071 | 0.0070 | 0.0068 |
| 6.0 | 1.58 | 0.0119 | 0.0113 | 0.0109 | 0.0104 | 0.0101 | 0.0099 | 0.0098 | 0.0096 |
| 7.0 | 1.85 | 0.0159 | 0.0151 | 0.0146 | 0.0139 | 0.0135 | 0.0132 | 0.0130 | 0.0127 |
| 8.0 | 2.11 | 0.0203 | 0.0193 | 0.0186 | 0.0178 | 0.0173 | 0.0169 | 0.0166 | 0.0163 |
| 9.0 | 2.38 | 0.0253 | 0.0240 | 0.0232 | 0.0221 | 0.0215 | 0.0211 | 0.0206 | 0.0202 |
| 10.0 | 2.64 | 0.0307 | 0.0292 | 0.0282 | 0.0269 | 0.0261 | 0.0256 | 0.0251 | 0.0246 |
| 11.0 | 2.90 | 0.0366 | 0.0348 | 0.0336 | 0.0321 | 0.0311 | 0.0305 | 0.0299 | 0.0293 |
| 12.0 | 3.17 | 0.0430 | 0.0409 | 0.0395 | 0.0377 | 0.0366 | 0.0359 | 0.0352 | 0.0344 |
| 13.0 | 3.43 | 0.0499 | 0.0474 | 0.0458 | 0.0437 | 0.0424 | 0.0416 | 0.0408 | 0.0399 |
| 14.0 | 3.70 | 0.0572 | 0.0544 | 0.0525 | 0.0501 | 0.0487 | 0.0477 | 0.0467 | 0.0458 |
| 15.0 | 3.96 | 0.0650 | 0.0618 | 0.0596 | 0.0569 | 0.0553 | 0.0542 | 0.0531 | 0.0520 |
| 16.0 | 4.22 | 0.0733 | 0.0696 | 0.0672 | 0.0641 | 0.0623 | 0.0611 | 0.0598 | 0.0586 |
| 17.0 | 4.49 | 0.0820 | 0.0779 | 0.0752 | 0.0717 | 0.0697 | 0.0683 | 0.0670 | 0.0656 |
| 18.0 | 4.75 | 0.0911 | 0.0866 | 0.0835 | 0.0797 | 0.0775 | 0.0759 | 0.0744 | 0.0729 |
| 19.0 | 5.02 | 0.1007 | 0.0957 | 0.0923 | 0.0881 | 0.0856 | 0.0839 | 0.0822 | 0.0806 |
| 20.0 | 5.28 | 0.1107 | 0.1052 | 0.1015 | 0.0969 | 0.0941 | 0.0923 | 0.0904 | 0.0886 |
| 21.0 | 5.54 | 0.1212 | 0.1151 | 0.1111 | 0.1060 | 0.1030 | 0.1010 | 0.0990 | 0.0970 |
| 22.0 | 5.81 | 0.1321 | 0.1255 | 0.1211 | 0.1156 | 0.1123 | 0.1101 | 0.1079 | 0.1057 |
| 23.0 | 6.07 | 0.1434 | 0.1362 | 0.1315 | 0.1255 | 0.1219 | 0.1195 | 0.1171 | 0.1147 |
| 24.0 | 6.34 | 0.1552 | 0.1474 | 0.1422 | 0.1358 | 0.1319 | 0.1293 | 0.1267 | 0.1241 |
| 25.0 | 6.60 | 0.1673 | 0.1590 | 0.1534 | 0.1464 | 0.1422 | 0.1394 | 0.1367 | 0.1339 |
| 26.0 | 6.86 | 0.1799 | 0.1709 | 0.1649 | 0.1574 | 0.1529 | 0.1499 | 0.1469 | 0.1439 |
| 27.0 | 7.13 | 0.1929 | 0.1833 | 0.1769 | 0.1688 | 0.1640 | 0.1608 | 0.1576 | 0.1544 |
| 28.0 | 7.39 | 0.2064 | 0.1960 | 0.1892 | 0.1806 | 0.1754 | 0.1720 | 0.1685 | 0.1651 |
| 29.0 | 7.66 | 0.2202 | 0.2092 | 0.2019 | 0.1927 | 0.1872 | 0.1835 | 0.1798 | 0.1762 |
| 30.0 | 7.92 | 0.2345 | 0.2227 | 0.2149 | 0.2052 | 0.1993 | 0.1954 | 0.1915 | 0.1876 |
| 31.0 | 8.18 | 0.2491 | 0.2367 | 0.2284 | 0.2180 | 0.2118 | 0.2076 | 0.2035 | 0.1993 |
| 32.0 | 8.45 | 0.2642 | 0.2510 | 0.2422 | 0.2312 | 0.2246 | 0.2202 | 0.2158 | 0.2114 |
| 33.0 | 8.71 | 0.2797 | 0.2657 | 0.2564 | 0.2447 | 0.2377 | 0.2331 | 0.2284 | 0.2237 |
| 34.0 | 8.97 | 0.2956 | 0.2808 | 0.2709 | 0.2586 | 0.2512 | 0.2463 | 0.2414 | 0.2364 |
| 35.0 | 9.24 | 0.3118 | 0.2962 | 0.2858 | 0.2729 | 0.2651 | 0.2599 | 0.2547 | 0.2495 |
| 36.0 | 9.50 | 0.3285 | 0.3121 | 0.3011 | 0.2875 | 0.2792 | 0.2738 | 0.2683 | 0.2628 |
| 37.0 | 9.77 | 0.3456 | 0.3283 | 0.3168 | 0.3024 | 0.2938 | 0.2880 | 0.2822 | 0.2765 |
| 38.0 | 10.03 | 0.3631 | 0.3449 | 0.3328 | 0.3177 | 0.3086 | 0.3026 | 0.2965 | 0.2905 |

Pressure loss per foot, 1½" hePEX and AquaPEX (40% Glycol)

| | | Head (Feet of Water) Per Foot of Tubing | | | | | | | |
|------|-----------------|---|-------------|--------------|--------------|--------------|--------------|--------------|--------------|
| gpm | Velocity (ft/s) | 60°F / 16°C | 80°F / 27°C | 100°F / 38°C | 120°F / 49°C | 140°F / 60°C | 160°F / 71°C | 180°F / 82°C | 200°F / 93°C |
| 3.0 | 0.79 | 0.0036 | 0.0034 | 0.0033 | 0.0031 | 0.0030 | 0.0030 | 0.0029 | 0.0028 |
| 3.5 | 0.92 | 0.0047 | 0.0045 | 0.0043 | 0.0041 | 0.0040 | 0.0039 | 0.0039 | 0.0038 |
| 4.0 | 1.06 | 0.0060 | 0.0057 | 0.0055 | 0.0053 | 0.0051 | 0.0050 | 0.0049 | 0.0048 |
| 4.5 | 1.19 | 0.0075 | 0.0071 | 0.0069 | 0.0066 | 0.0064 | 0.0063 | 0.0061 | 0.0060 |
| 5.0 | 1.32 | 0.0091 | 0.0087 | 0.0084 | 0.0080 | 0.0078 | 0.0076 | 0.0075 | 0.0073 |
| 6.0 | 1.58 | 0.0128 | 0.0122 | 0.0117 | 0.0112 | 0.0109 | 0.0107 | 0.0105 | 0.0102 |
| 7.0 | 1.85 | 0.0170 | 0.0162 | 0.0156 | 0.0149 | 0.0145 | 0.0142 | 0.0139 | 0.0136 |
| 8.0 | 2.11 | 0.0218 | 0.0207 | 0.0200 | 0.0191 | 0.0185 | 0.0182 | 0.0178 | 0.0174 |
| 9.0 | 2.38 | 0.0271 | 0.0258 | 0.0249 | 0.0237 | 0.0230 | 0.0226 | 0.0221 | 0.0217 |
| 10.0 | 2.64 | 0.0329 | 0.0313 | 0.0302 | 0.0288 | 0.0280 | 0.0275 | 0.0269 | 0.0264 |
| 11.0 | 2.90 | 0.0393 | 0.0373 | 0.0360 | 0.0344 | 0.0334 | 0.0328 | 0.0321 | 0.0314 |
| 12.0 | 3.17 | 0.0462 | 0.0439 | 0.0423 | 0.0404 | 0.0392 | 0.0385 | 0.0377 | 0.0369 |
| 13.0 | 3.43 | 0.0535 | 0.0509 | 0.0491 | 0.0468 | 0.0455 | 0.0446 | 0.0437 | 0.0428 |
| 14.0 | 3.70 | 0.0614 | 0.0583 | 0.0563 | 0.0537 | 0.0522 | 0.0512 | 0.0501 | 0.0491 |
| 15.0 | 3.96 | 0.0698 | 0.0663 | 0.0639 | 0.0610 | 0.0593 | 0.0581 | 0.0570 | 0.0558 |
| 16.0 | 4.22 | 0.0786 | 0.0747 | 0.0721 | 0.0688 | 0.0668 | 0.0655 | 0.0642 | 0.0629 |
| 17.0 | 4.49 | 0.0879 | 0.0835 | 0.0806 | 0.0769 | 0.0747 | 0.0733 | 0.0718 | 0.0703 |
| 18.0 | 4.75 | 0.0977 | 0.0929 | 0.0896 | 0.0855 | 0.0831 | 0.0815 | 0.0798 | 0.0782 |
| 19.0 | 5.02 | 0.1080 | 0.1026 | 0.0990 | 0.0945 | 0.0918 | 0.0900 | 0.0882 | 0.0864 |
| 20.0 | 5.28 | 0.1188 | 0.1128 | 0.1089 | 0.1039 | 0.1010 | 0.0990 | 0.0970 | 0.0950 |
| 21.0 | 5.54 | 0.1300 | 0.1235 | 0.1192 | 0.1137 | 0.1105 | 0.1083 | 0.1062 | 0.1040 |
| 22.0 | 5.81 | 0.1417 | 0.1346 | 0.1299 | 0.1240 | 0.1204 | 0.1181 | 0.1157 | 0.1133 |
| 23.0 | 6.07 | 0.1538 | 0.1461 | 0.1410 | 0.1346 | 0.1308 | 0.1282 | 0.1256 | 0.1231 |
| 24.0 | 6.34 | 0.1664 | 0.1581 | 0.1526 | 0.1456 | 0.1415 | 0.1387 | 0.1359 | 0.1331 |
| 25.0 | 6.60 | 0.1795 | 0.1705 | 0.1645 | 0.1570 | 0.1526 | 0.1496 | 0.1466 | 0.1436 |
| 26.0 | 6.86 | 0.1930 | 0.1833 | 0.1769 | 0.1689 | 0.1640 | 0.1608 | 0.1576 | 0.1544 |
| 27.0 | 7.13 | 0.2069 | 0.1966 | 0.1897 | 0.1811 | 0.1759 | 0.1725 | 0.1690 | 0.1656 |
| 28.0 | 7.39 | 0.2213 | 0.2103 | 0.2029 | 0.1937 | 0.1881 | 0.1845 | 0.1808 | 0.1771 |
| 29.0 | 7.66 | 0.2362 | 0.2244 | 0.2165 | 0.2067 | 0.2008 | 0.1968 | 0.1929 | 0.1890 |
| 30.0 | 7.92 | 0.2515 | 0.2389 | 0.2305 | 0.2200 | 0.2138 | 0.2096 | 0.2054 | 0.2012 |
| 31.0 | 8.18 | 0.2672 | 0.2538 | 0.2449 | 0.2338 | 0.2271 | 0.2227 | 0.2182 | 0.2138 |
| 32.0 | 8.45 | 0.2834 | 0.2692 | 0.2598 | 0.2479 | 0.2409 | 0.2361 | 0.2314 | 0.2267 |
| 33.0 | 8.71 | 0.3000 | 0.2850 | 0.2750 | 0.2625 | 0.2550 | 0.2500 | 0.2450 | 0.2400 |
| 34.0 | 8.97 | 0.3170 | 0.3012 | 0.2906 | 0.2774 | 0.2695 | 0.2642 | 0.2589 | 0.2536 |
| 35.0 | 9.24 | 0.3345 | 0.3177 | 0.3066 | 0.2927 | 0.2843 | 0.2787 | 0.2731 | 0.2676 |
| 36.0 | 9.50 | 0.3524 | 0.3347 | 0.3230 | 0.3083 | 0.2995 | 0.2936 | 0.2878 | 0.2819 |
| 37.0 | 9.77 | 0.3707 | 0.3521 | 0.3398 | 0.3243 | 0.3151 | 0.3089 | 0.3027 | 0.2965 |
| 38.0 | 10.03 | 0.3894 | 0.3700 | 0.3570 | 0.3407 | 0.3310 | 0.3245 | 0.3180 | 0.3115 |

Pressure loss per foot, 1½" hePEX and AquaPEX (50% Glycol)

| | | Head (Feet of Water) Per Foot of Tubing | | | | | | | |
|------|-----------------|---|-------------|--------------|--------------|--------------|--------------|--------------|--------------|
| gpm | Velocity (ft/s) | 60°F / 16°C | 80°F / 27°C | 100°F / 38°C | 120°F / 49°C | 140°F / 60°C | 160°F / 71°C | 180°F / 82°C | 200°F / 93°C |
| 3.0 | 0.79 | 0.0037 | 0.0036 | 0.0034 | 0.0033 | 0.0032 | 0.0031 | 0.0031 | 0.0030 |
| 3.5 | 0.92 | 0.0050 | 0.0047 | 0.0046 | 0.0044 | 0.0042 | 0.0041 | 0.0041 | 0.0040 |
| 4.0 | 1.06 | 0.0064 | 0.0060 | 0.0058 | 0.0056 | 0.0054 | 0.0053 | 0.0052 | 0.0051 |
| 4.5 | 1.19 | 0.0079 | 0.0075 | 0.0073 | 0.0069 | 0.0067 | 0.0066 | 0.0065 | 0.0063 |
| 5.0 | 1.32 | 0.0096 | 0.0091 | 0.0088 | 0.0084 | 0.0082 | 0.0080 | 0.0079 | 0.0077 |
| 6.0 | 1.58 | 0.0135 | 0.0128 | 0.0124 | 0.0118 | 0.0115 | 0.0112 | 0.0110 | 0.0108 |
| 7.0 | 1.85 | 0.0179 | 0.0170 | 0.0164 | 0.0157 | 0.0152 | 0.0149 | 0.0146 | 0.0143 |
| 8.0 | 2.11 | 0.0230 | 0.0218 | 0.0210 | 0.0201 | 0.0195 | 0.0191 | 0.0187 | 0.0184 |
| 9.0 | 2.38 | 0.0285 | 0.0271 | 0.0262 | 0.0250 | 0.0243 | 0.0238 | 0.0233 | 0.0228 |
| 10.0 | 2.64 | 0.0347 | 0.0329 | 0.0318 | 0.0303 | 0.0295 | 0.0289 | 0.0283 | 0.0277 |
| 11.0 | 2.90 | 0.0414 | 0.0393 | 0.0379 | 0.0362 | 0.0352 | 0.0345 | 0.0338 | 0.0331 |
| 12.0 | 3.17 | 0.0486 | 0.0462 | 0.0445 | 0.0425 | 0.0413 | 0.0405 | 0.0397 | 0.0389 |
| 13.0 | 3.43 | 0.0564 | 0.0535 | 0.0517 | 0.0493 | 0.0479 | 0.0470 | 0.0460 | 0.0451 |
| 14.0 | 3.70 | 0.0646 | 0.0614 | 0.0592 | 0.0566 | 0.0549 | 0.0539 | 0.0528 | 0.0517 |
| 15.0 | 3.96 | 0.0734 | 0.0698 | 0.0673 | 0.0643 | 0.0624 | 0.0612 | 0.0600 | 0.0587 |
| 16.0 | 4.22 | 0.0827 | 0.0786 | 0.0758 | 0.0724 | 0.0703 | 0.0690 | 0.0676 | 0.0662 |
| 17.0 | 4.49 | 0.0926 | 0.0879 | 0.0848 | 0.0810 | 0.0787 | 0.0771 | 0.0756 | 0.0740 |
| 18.0 | 4.75 | 0.1029 | 0.0977 | 0.0943 | 0.0900 | 0.0875 | 0.0857 | 0.0840 | 0.0823 |
| 19.0 | 5.02 | 0.1137 | 0.1080 | 0.1042 | 0.0995 | 0.0967 | 0.0948 | 0.0929 | 0.0910 |
| 20.0 | 5.28 | 0.1250 | 0.1188 | 0.1146 | 0.1094 | 0.1063 | 0.1042 | 0.1021 | 0.1000 |
| 21.0 | 5.54 | 0.1368 | 0.1300 | 0.1254 | 0.1197 | 0.1163 | 0.1140 | 0.1118 | 0.1095 |
| 22.0 | 5.81 | 0.1491 | 0.1417 | 0.1367 | 0.1305 | 0.1268 | 0.1243 | 0.1218 | 0.1193 |
| 23.0 | 6.07 | 0.1619 | 0.1538 | 0.1484 | 0.1417 | 0.1376 | 0.1349 | 0.1322 | 0.1295 |
| 24.0 | 6.34 | 0.1752 | 0.1664 | 0.1606 | 0.1533 | 0.1489 | 0.1460 | 0.1431 | 0.1401 |
| 25.0 | 6.60 | 0.1889 | 0.1795 | 0.1732 | 0.1653 | 0.1606 | 0.1574 | 0.1543 | 0.1511 |
| 26.0 | 6.86 | 0.2031 | 0.1930 | 0.1862 | 0.1778 | 0.1727 | 0.1693 | 0.1659 | 0.1625 |
| 27.0 | 7.13 | 0.2178 | 0.2069 | 0.1997 | 0.1906 | 0.1852 | 0.1815 | 0.1779 | 0.1743 |
| 28.0 | 7.39 | 0.2330 | 0.2213 | 0.2136 | 0.2039 | 0.1980 | 0.1942 | 0.1903 | 0.1864 |
| 29.0 | 7.66 | 0.2486 | 0.2362 | 0.2279 | 0.2175 | 0.2113 | 0.2072 | 0.2030 | 0.1989 |
| 30.0 | 7.92 | 0.2647 | 0.2515 | 0.2427 | 0.2316 | 0.2250 | 0.2206 | 0.2162 | 0.2118 |
| 31.0 | 8.18 | 0.2813 | 0.2672 | 0.2578 | 0.2461 | 0.2391 | 0.2344 | 0.2297 | 0.2250 |
| 32.0 | 8.45 | 0.2983 | 0.2834 | 0.2734 | 0.2610 | 0.2535 | 0.2486 | 0.2436 | 0.2386 |
| 33.0 | 8.71 | 0.3158 | 0.3000 | 0.2894 | 0.2763 | 0.2684 | 0.2631 | 0.2579 | 0.2526 |
| 34.0 | 8.97 | 0.3337 | 0.3170 | 0.3059 | 0.2920 | 0.2836 | 0.2781 | 0.2725 | 0.2669 |
| 35.0 | 9.24 | 0.3521 | 0.3345 | 0.3227 | 0.3081 | 0.2993 | 0.2934 | 0.2875 | 0.2817 |
| 36.0 | 9.50 | 0.3709 | 0.3524 | 0.3400 | 0.3245 | 0.3153 | 0.3091 | 0.3029 | 0.2967 |
| 37.0 | 9.77 | 0.3902 | 0.3707 | 0.3577 | 0.3414 | 0.3317 | 0.3252 | 0.3187 | 0.3122 |
| 38.0 | 10.03 | 0.4099 | 0.3894 | 0.3758 | 0.3587 | 0.3484 | 0.3416 | 0.3348 | 0.3279 |

Pressure loss per foot, 2" hePEX and AquaPEX (100 % Water)

| | | Head (Feet of Water) Per Foot of Tubing | | | | | | | | |
|-------|--------------------|---|----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--|
| gpm | Velocity (ft/s) | 60°F / 16°C | 80°F / 27°C | 100°F / 38°C | 120°F / 49°C | 140°F / 60°C | 160°F / 71°C | 180°F / 82°C | 200°F / 93°C | |
| 9.00 | 1.39 | 0.0055 | 0.0052 | 0.0050 | 0.0048 | 0.0047 | 0.0046 | 0.0045 | 0.0044 | |
| 10.00 | 1.54 | 0.0067 | 0.0063 | 0.0061 | 0.0058 | 0.0057 | 0.0056 | 0.0054 | 0.0053 | |
| 11.00 | 1.69 | 0.0080 | 0.0076 | 0.0073 | 0.0070 | 0.0068 | 0.0066 | 0.0065 | 0.0064 | |
| 12.00 | 1.85 | 0.0093 | 0.0089 | 0.0086 | 0.0082 | 0.0079 | 0.0078 | 0.0076 | 0.0075 | |
| 13.00 | 2.00 | 0.0108 | 0.0103 | 0.0099 | 0.0095 | 0.0092 | 0.0090 | 0.0089 | 0.0087 | |
| 14.00 | 2.16 | 0.0124 | 0.0118 | 0.0114 | 0.0109 | 0.0106 | 0.0104 | 0.0102 | 0.0099 | |
| 15.00 | 2.31 | 0.0141 | 0.0134 | 0.0129 | 0.0124 | 0.0120 | 0.0118 | 0.0115 | 0.0113 | |
| 16.00 | 2.46 | 0.0159 | 0.0151 | 0.0146 | 0.0139 | 0.0135 | 0.0133 | 0.0130 | 0.0127 | |
| 17.00 | 2.62 | 0.0178 | 0.0169 | 0.0163 | 0.0156 | 0.0151 | 0.0148 | 0.0145 | 0.0142 | |
| 18.00 | 2.77 | 0.0198 | 0.0188 | 0.0181 | 0.0173 | 0.0168 | 0.0165 | 0.0162 | 0.0158 | |
| 19.00 | 2.92 | 0.0219 | 0.0208 | 0.0201 | 0.0191 | 0.0186 | 0.0182 | 0.0179 | 0.0175 | |
| 20.00 | 3.08 | 0.0241 | 0.0228 | 0.0220 | 0.0210 | 0.0204 | 0.0200 | 0.0196 | 0.0192 | |
| 21.00 | 3.23 | 0.0263 | 0.0250 | 0.0241 | 0.0230 | 0.0224 | 0.0219 | 0.0215 | 0.0211 | |
| 22.00 | 3.39 | 0.0287 | 0.0273 | 0.0263 | 0.0251 | 0.0244 | 0.0239 | 0.0234 | 0.0230 | |
| 23.00 | 3.54 | 0.0311 | 0.0296 | 0.0286 | 0.0273 | 0.0265 | 0.0260 | 0.0254 | 0.0249 | |
| 24.00 | 3.69 | 0.0337 | 0.0320 | 0.0309 | 0.0295 | 0.0286 | 0.0281 | 0.0275 | 0.0270 | |
| 25.00 | 3.85 | 0.0363 | 0.0345 | 0.0333 | 0.0318 | 0.0309 | 0.0303 | 0.0297 | 0.0291 | |
| 26.00 | 4.00 | 0.0391 | 0.0371 | 0.0358 | 0.0342 | 0.0332 | 0.0326 | 0.0319 | 0.0313 | |
| 27.00 | 4.16 | 0.0419 | 0.0398 | 0.0384 | 0.0367 | 0.0356 | 0.0349 | 0.0342 | 0.0335 | |
| 28.00 | 4.31 | 0.0448 | 0.0426 | 0.0411 | 0.0392 | 0.0381 | 0.0373 | 0.0366 | 0.0359 | |
| 29.00 | 4.46 | 0.0478 | 0.0454 | 0.0438 | 0.0418 | 0.0407 | 0.0399 | 0.0391 | 0.0383 | |
| 30.00 | 4.62 | 0.0509 | 0.0484 | 0.0467 | 0.0446 | 0.0433 | 0.0424 | 0.0416 | 0.0407 | |
| 31.00 | 4.77 | 0.0541 | 0.0514 | 0.0496 | 0.0473 | 0.0460 | 0.0451 | 0.0442 | 0.0433 | |
| 32.00 | 4.93 | 0.0574 | 0.0545 | 0.0526 | 0.0502 | 0.0488 | 0.0478 | 0.0469 | 0.0459 | |
| 33.00 | 5.08 | 0.0607 | 0.0577 | 0.0557 | 0.0531 | 0.0516 | 0.0506 | 0.0496 | 0.0486 | |
| 34.00 | 5.23 | 0.0642 | 0.0610 | 0.0588 | 0.0562 | 0.0546 | 0.0535 | 0.0524 | 0.0514 | |
| 35.00 | 5.39 | 0.0677 | 0.0643 | 0.0621 | 0.0593 | 0.0576 | 0.0564 | 0.0553 | 0.0542 | |
| 36.00 | 5.54 | 0.0713 | 0.0678 | 0.0654 | 0.0624 | 0.0606 | 0.0595 | 0.0583 | 0.0571 | |
| 37.00 | 5.70 | 0.0751 | 0.0713 | 0.0688 | 0.0657 | 0.0638 | 0.0625 | 0.0613 | 0.0600 | |
| 38.00 | 5.85 | 0.0789 | 0.0749 | 0.0723 | 0.0690 | 0.0670 | 0.0657 | 0.0644 | 0.0631 | |
| 39.00 | 6.00 | 0.0827 | 0.0786 | 0.0758 | 0.0724 | 0.0703 | 0.0689 | 0.0676 | 0.0662 | |
| 40.00 | 6.16 | 0.0867 | 0.0824 | 0.0795 | 0.0759 | 0.0737 | 0.0723 | 0.0708 | 0.0694 | |
| 41.00 | 6.31 | 0.0908 | 0.0862 | 0.0832 | 0.0794 | 0.0771 | 0.0756 | 0.0741 | 0.0726 | |
| 42.00 | 6.47 | 0.0949 | 0.0901 | 0.0870 | 0.0830 | 0.0807 | 0.0791 | 0.0775 | 0.0759 | |
| 43.00 | 6.62 | 0.0991 | 0.0942 | 0.0909 | 0.0867 | 0.0842 | 0.0826 | 0.0809 | 0.0793 | |
| 44.00 | 6.77 | 0.1034 | 0.0982 | 0.0948 | 0.0905 | 0.0879 | 0.0862 | 0.0845 | 0.0827 | |
| 45.00 | 6.93 | 0.1078 | 0.1024 | 0.0988 | 0.0943 | 0.0916 | 0.0898 | 0.0880 | 0.0862 | |
| 46.00 | 7.08 | 0.1123 | 0.1067 | 0.1029 | 0.0982 | 0.0954 | 0.0936 | 0.0917 | 0.0898 | |
| 47.00 | 7.24 | 0.1168 | 0.1110 | 0.1071 | 0.1022 | 0.0993 | 0.0974 | 0.0954 | 0.0935 | |
| 48.00 | 7.39 | 0.1215 | 0.1154 | 0.1114 | 0.1063 | 0.1033 | 0.1012 | 0.0992 | 0.0972 | |
| 49.00 | 7.54 | 0.1262 | 0.1199 | 0.1157 | 0.1104 | 0.1073 | 0.1052 | 0.1031 | 0.1010 | |
| 50.00 | 7.70 | 0.1310 | 0.1245 | 0.1201 | 0.1146 | 0.1114 | 0.1092 | 0.1070 | 0.1048 | |
| 52.00 | 8.00 | 0.1409 | 0.1338 | 0.1291 | 0.1233 | 0.1197 | 0.1174 | 0.1150 | 0.1127 | |
| 54.00 | 8.31 | 0.1511 | 0.1435 | 0.1385 | 0.1322 | 0.1284 | 0.1259 | 0.1234 | 0.1208 | |
| 56.00 | 8.62 | 0.1616 | 0.1535 | 0.1481 | 0.1414 | 0.1373 | 0.1346 | 0.1320 | 0.1293 | |
| 58.00 | 8.93 | 0.1724 | 0.1638 | 0.1580 | 0.1509 | 0.1465 | 0.1437 | 0.1408 | 0.1379 | |
| 60.00 | 9.24 | 0.1836 | 0.1744 | 0.1683 | 0.1606 | 0.1560 | 0.1530 | 0.1499 | 0.1469 | |
| 62.00 | 9.54 | 0.1951 | 0.1853 | 0.1788 | 0.1707 | 0.1658 | 0.1625 | 0.1593 | 0.1560 | |
| 64.00 | 9.85 | 0.2068 | 0.1965 | 0.1896 | 0.1810 | 0.1758 | 0.1724 | 0.1689 | 0.1655 | |
| 66.00 | 10.16 | 0.2190 | 0.2080 | 0.2007 | 0.1916 | 0.1861 | 0.1825 | 0.1788 | 0.1752 | |

Pressure loss per foot, 2" hePEX and AquaPEX (30% Glycol)

| Head (Feet of Water) Per Foot of Tubing | | | | | | | | | |
|---|-----------------|-------------|-------------|--------------|--------------|--------------|--------------|--------------|--------------|
| gpm | Velocity (ft/s) | 60°F / 16°C | 80°F / 27°C | 100°F / 38°C | 120°F / 49°C | 140°F / 60°C | 160°F / 71°C | 180°F / 82°C | 200°F / 93°C |
| 9.0 | 1.39 | 0.0068 | 0.0065 | 0.0062 | 0.0060 | 0.0058 | 0.0057 | 0.0056 | 0.0054 |
| 10.0 | 1.54 | 0.0083 | 0.0079 | 0.0076 | 0.0072 | 0.0070 | 0.0069 | 0.0068 | 0.0066 |
| 11.0 | 1.69 | 0.0099 | 0.0094 | 0.0090 | 0.0086 | 0.0084 | 0.0082 | 0.0081 | 0.0079 |
| 12.0 | 1.85 | 0.0116 | 0.0110 | 0.0106 | 0.0101 | 0.0099 | 0.0097 | 0.0095 | 0.0093 |
| 13.0 | 2.00 | 0.0134 | 0.0128 | 0.0123 | 0.0118 | 0.0114 | 0.0112 | 0.0110 | 0.0108 |
| 14.0 | 2.16 | 0.0154 | 0.0146 | 0.0141 | 0.0135 | 0.0131 | 0.0128 | 0.0126 | 0.0123 |
| 15.0 | 2.31 | 0.0175 | 0.0166 | 0.0161 | 0.0153 | 0.0149 | 0.0146 | 0.0143 | 0.0140 |
| 16.0 | 2.46 | 0.0197 | 0.0187 | 0.0181 | 0.0173 | 0.0168 | 0.0164 | 0.0161 | 0.0158 |
| 17.0 | 2.62 | 0.0221 | 0.0210 | 0.0202 | 0.0193 | 0.0188 | 0.0184 | 0.0180 | 0.0177 |
| 18.0 | 2.77 | 0.0245 | 0.0233 | 0.0225 | 0.0215 | 0.0209 | 0.0205 | 0.0200 | 0.0196 |
| 19.0 | 2.92 | 0.0271 | 0.0258 | 0.0249 | 0.0237 | 0.0231 | 0.0226 | 0.0222 | 0.0217 |
| 20.0 | 3.08 | 0.0298 | 0.0283 | 0.0273 | 0.0261 | 0.0253 | 0.0249 | 0.0244 | 0.0239 |
| 21.0 | 3.23 | 0.0326 | 0.0310 | 0.0299 | 0.0286 | 0.0277 | 0.0272 | 0.0267 | 0.0261 |
| 22.0 | 3.39 | 0.0356 | 0.0338 | 0.0326 | 0.0311 | 0.0302 | 0.0296 | 0.0291 | 0.0285 |
| 23.0 | 3.54 | 0.0386 | 0.0367 | 0.0354 | 0.0338 | 0.0328 | 0.0322 | 0.0315 | 0.0309 |
| 24.0 | 3.69 | 0.0418 | 0.0397 | 0.0383 | 0.0366 | 0.0355 | 0.0348 | 0.0341 | 0.0334 |
| 25.0 | 3.85 | 0.0451 | 0.0428 | 0.0413 | 0.0394 | 0.0383 | 0.0376 | 0.0368 | 0.0361 |
| 26.0 | 4.00 | 0.0485 | 0.0460 | 0.0444 | 0.0424 | 0.0412 | 0.0404 | 0.0396 | 0.0388 |
| 27.0 | 4.16 | 0.0520 | 0.0494 | 0.0476 | 0.0455 | 0.0442 | 0.0433 | 0.0424 | 0.0416 |
| 28.0 | 4.31 | 0.0556 | 0.0528 | 0.0509 | 0.0486 | 0.0472 | 0.0463 | 0.0454 | 0.0445 |
| 29.0 | 4.46 | 0.0593 | 0.0563 | 0.0544 | 0.0519 | 0.0504 | 0.0494 | 0.0484 | 0.0474 |
| 30.0 | 4.62 | 0.0631 | 0.0600 | 0.0579 | 0.0552 | 0.0537 | 0.0526 | 0.0516 | 0.0505 |
| 31.0 | 4.77 | 0.0671 | 0.0637 | 0.0615 | 0.0587 | 0.0570 | 0.0559 | 0.0548 | 0.0537 |
| 32.0 | 4.93 | 0.0711 | 0.0676 | 0.0652 | 0.0623 | 0.0605 | 0.0593 | 0.0581 | 0.0569 |
| 33.0 | 5.08 | 0.0753 | 0.0716 | 0.0690 | 0.0659 | 0.0640 | 0.0628 | 0.0615 | 0.0603 |
| 34.0 | 5.23 | 0.0796 | 0.0756 | 0.0730 | 0.0696 | 0.0677 | 0.0663 | 0.0650 | 0.0637 |
| 35.0 | 5.39 | 0.0840 | 0.0798 | 0.0770 | 0.0735 | 0.0714 | 0.0700 | 0.0686 | 0.0672 |
| 36.0 | 5.54 | 0.0885 | 0.0840 | 0.0811 | 0.0774 | 0.0752 | 0.0737 | 0.0723 | 0.0708 |
| 37.0 | 5.70 | 0.0931 | 0.0884 | 0.0853 | 0.0814 | 0.0791 | 0.0776 | 0.0760 | 0.0745 |
| 38.0 | 5.85 | 0.0978 | 0.0929 | 0.0896 | 0.0856 | 0.0831 | 0.0815 | 0.0799 | 0.0782 |
| 39.0 | 6.00 | 0.1026 | 0.0975 | 0.0940 | 0.0898 | 0.0872 | 0.0855 | 0.0838 | 0.0821 |
| 40.0 | 6.16 | 0.1075 | 0.1021 | 0.0986 | 0.0941 | 0.0914 | 0.0896 | 0.0878 | 0.0860 |
| 41.0 | 6.31 | 0.1125 | 0.1069 | 0.1032 | 0.0985 | 0.0957 | 0.0938 | 0.0919 | 0.0900 |
| 42.0 | 6.47 | 0.1177 | 0.1118 | 0.1079 | 0.1030 | 0.1000 | 0.0981 | 0.0961 | 0.0941 |
| 43.0 | 6.62 | 0.1229 | 0.1168 | 0.1127 | 0.1075 | 0.1045 | 0.1024 | 0.1004 | 0.0983 |
| 44.0 | 6.77 | 0.1282 | 0.1218 | 0.1176 | 0.1122 | 0.1090 | 0.1069 | 0.1047 | 0.1026 |
| 45.0 | 6.93 | 0.1337 | 0.1270 | 0.1225 | 0.1170 | 0.1136 | 0.1114 | 0.1092 | 0.1069 |
| 46.0 | 7.08 | 0.1392 | 0.1323 | 0.1276 | 0.1218 | 0.1183 | 0.1160 | 0.1137 | 0.1114 |
| 47.0 | 7.24 | 0.1449 | 0.1376 | 0.1328 | 0.1268 | 0.1232 | 0.1207 | 0.1183 | 0.1159 |
| 48.0 | 7.39 | 0.1506 | 0.1431 | 0.1381 | 0.1318 | 0.1280 | 0.1255 | 0.1230 | 0.1205 |
| 49.0 | 7.54 | 0.1565 | 0.1487 | 0.1435 | 0.1369 | 0.1330 | 0.1304 | 0.1278 | 0.1252 |
| 50.0 | 7.70 | 0.1625 | 0.1543 | 0.1489 | 0.1421 | 0.1381 | 0.1354 | 0.1327 | 0.1300 |
| 52.0 | 8.00 | 0.1747 | 0.1659 | 0.1601 | 0.1528 | 0.1485 | 0.1456 | 0.1427 | 0.1397 |
| 54.0 | 8.31 | 0.1873 | 0.1779 | 0.1717 | 0.1639 | 0.1592 | 0.1561 | 0.1530 | 0.1499 |
| 56.0 | 8.62 | 0.2004 | 0.1903 | 0.1837 | 0.1753 | 0.1703 | 0.1670 | 0.1636 | 0.1603 |
| 58.0 | 8.93 | 0.2138 | 0.2031 | 0.1960 | 0.1871 | 0.1817 | 0.1782 | 0.1746 | 0.1710 |
| 60.0 | 9.24 | 0.2276 | 0.2162 | 0.2087 | 0.1992 | 0.1935 | 0.1897 | 0.1859 | 0.1821 |
| 62.0 | 9.54 | 0.2419 | 0.2298 | 0.2217 | 0.2116 | 0.2056 | 0.2016 | 0.1975 | 0.1935 |
| 64.0 | 9.85 | 0.2565 | 0.2437 | 0.2351 | 0.2244 | 0.2180 | 0.2137 | 0.2095 | 0.2052 |
| 66.0 | 10.16 | 0.2715 | 0.2579 | 0.2489 | 0.2376 | 0.2308 | 0.2263 | 0.2217 | 0.2172 |

Pressure loss per foot, 2" hePEX and AquaPEX (40% Glycol)

| | | Head (Feet of Water) Per Foot of Tubing | | | | | | | |
|------|--------------------|---|----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| gpm | Velocity (ft/s) | 60°F / 16°C | 80°F / 27°C | 100°F / 38°C | 120°F / 49°C | 140°F / 60°C | 160°F / 71°C | 180°F / 82°C | 200°F / 93°C |
| 9.0 | 1.39 | 0.0073 | 0.0069 | 0.0067 | 0.0064 | 0.0062 | 0.0061 | 0.0060 | 0.0058 |
| 10.0 | 1.54 | 0.0089 | 0.0084 | 0.0081 | 0.0078 | 0.0075 | 0.0074 | 0.0072 | 0.0071 |
| 11.0 | 1.69 | 0.0106 | 0.0101 | 0.0097 | 0.0093 | 0.0090 | 0.0088 | 0.0086 | 0.0085 |
| 12.0 | 1.85 | 0.0124 | 0.0118 | 0.0114 | 0.0109 | 0.0106 | 0.0104 | 0.0102 | 0.0099 |
| 13.0 | 2.00 | 0.0144 | 0.0137 | 0.0132 | 0.0126 | 0.0123 | 0.0120 | 0.0118 | 0.0115 |
| 14.0 | 2.16 | 0.0165 | 0.0157 | 0.0152 | 0.0145 | 0.0141 | 0.0138 | 0.0135 | 0.0132 |
| 15.0 | 2.31 | 0.0188 | 0.0178 | 0.0172 | 0.0164 | 0.0160 | 0.0157 | 0.0153 | 0.0150 |
| 16.0 | 2.46 | 0.0212 | 0.0201 | 0.0194 | 0.0185 | 0.0180 | 0.0176 | 0.0173 | 0.0169 |
| 17.0 | 2.62 | 0.0237 | 0.0225 | 0.0217 | 0.0207 | 0.0201 | 0.0197 | 0.0193 | 0.0189 |
| 18.0 | 2.77 | 0.0263 | 0.0250 | 0.0241 | 0.0230 | 0.0224 | 0.0219 | 0.0215 | 0.0211 |
| 19.0 | 2.92 | 0.0291 | 0.0276 | 0.0267 | 0.0255 | 0.0247 | 0.0242 | 0.0238 | 0.0233 |
| 20.0 | 3.08 | 0.0320 | 0.0304 | 0.0293 | 0.0280 | 0.0272 | 0.0267 | 0.0261 | 0.0256 |
| 21.0 | 3.23 | 0.0350 | 0.0333 | 0.0321 | 0.0306 | 0.0298 | 0.0292 | 0.0286 | 0.0280 |
| 22.0 | 3.39 | 0.0382 | 0.0362 | 0.0350 | 0.0334 | 0.0324 | 0.0318 | 0.0312 | 0.0305 |
| 23.0 | 3.54 | 0.0414 | 0.0394 | 0.0380 | 0.0362 | 0.0352 | 0.0345 | 0.0338 | 0.0331 |
| 24.0 | 3.69 | 0.0448 | 0.0426 | 0.0411 | 0.0392 | 0.0381 | 0.0373 | 0.0366 | 0.0359 |
| 25.0 | 3.85 | 0.0483 | 0.0459 | 0.0443 | 0.0423 | 0.0411 | 0.0403 | 0.0395 | 0.0387 |
| 26.0 | 4.00 | 0.0520 | 0.0494 | 0.0476 | 0.0455 | 0.0442 | 0.0433 | 0.0424 | 0.0416 |
| 27.0 | 4.16 | 0.0557 | 0.0529 | 0.0511 | 0.0488 | 0.0474 | 0.0464 | 0.0455 | 0.0446 |
| 28.0 | 4.31 | 0.0596 | 0.0566 | 0.0546 | 0.0522 | 0.0507 | 0.0497 | 0.0487 | 0.0477 |
| 29.0 | 4.46 | 0.0636 | 0.0604 | 0.0583 | 0.0557 | 0.0541 | 0.0530 | 0.0519 | 0.0509 |
| 30.0 | 4.62 | 0.0677 | 0.0643 | 0.0621 | 0.0593 | 0.0576 | 0.0564 | 0.0553 | 0.0542 |
| 31.0 | 4.77 | 0.0720 | 0.0684 | 0.0660 | 0.0630 | 0.0612 | 0.0600 | 0.0588 | 0.0576 |
| 32.0 | 4.93 | 0.0763 | 0.0725 | 0.0700 | 0.0668 | 0.0649 | 0.0636 | 0.0623 | 0.0611 |
| 33.0 | 5.08 | 0.0808 | 0.0767 | 0.0741 | 0.0707 | 0.0687 | 0.0673 | 0.0660 | 0.0646 |
| 34.0 | 5.23 | 0.0854 | 0.0811 | 0.0783 | 0.0747 | 0.0726 | 0.0711 | 0.0697 | 0.0683 |
| 35.0 | 5.39 | 0.0901 | 0.0856 | 0.0826 | 0.0788 | 0.0766 | 0.0751 | 0.0736 | 0.0721 |
| 36.0 | 5.54 | 0.0949 | 0.0901 | 0.0870 | 0.0830 | 0.0807 | 0.0791 | 0.0775 | 0.0759 |
| 37.0 | 5.70 | 0.0998 | 0.0948 | 0.0915 | 0.0873 | 0.0849 | 0.0832 | 0.0815 | 0.0799 |
| 38.0 | 5.85 | 0.1049 | 0.0996 | 0.0961 | 0.0918 | 0.0891 | 0.0874 | 0.0856 | 0.0839 |
| 39.0 | 6.00 | 0.1100 | 0.1045 | 0.1009 | 0.0963 | 0.0935 | 0.0917 | 0.0899 | 0.0880 |
| 40.0 | 6.16 | 0.1153 | 0.1095 | 0.1057 | 0.1009 | 0.0980 | 0.0961 | 0.0942 | 0.0923 |
| 41.0 | 6.31 | 0.1207 | 0.1147 | 0.1106 | 0.1056 | 0.1026 | 0.1006 | 0.0986 | 0.0966 |
| 42.0 | 6.47 | 0.1262 | 0.1199 | 0.1157 | 0.1104 | 0.1073 | 0.1052 | 0.1031 | 0.1010 |
| 43.0 | 6.62 | 0.1318 | 0.1252 | 0.1208 | 0.1153 | 0.1120 | 0.1099 | 0.1077 | 0.1055 |
| 44.0 | 6.77 | 0.1375 | 0.1307 | 0.1261 | 0.1204 | 0.1169 | 0.1146 | 0.1123 | 0.1100 |
| 45.0 | 6.93 | 0.1434 | 0.1362 | 0.1314 | 0.1255 | 0.1219 | 0.1195 | 0.1171 | 0.1147 |
| 46.0 | 7.08 | 0.1493 | 0.1419 | 0.1369 | 0.1307 | 0.1269 | 0.1244 | 0.1220 | 0.1195 |
| 47.0 | 7.24 | 0.1554 | 0.1476 | 0.1425 | 0.1360 | 0.1321 | 0.1295 | 0.1269 | 0.1243 |
| 48.0 | 7.39 | 0.1616 | 0.1535 | 0.1481 | 0.1414 | 0.1373 | 0.1346 | 0.1320 | 0.1293 |
| 49.0 | 7.54 | 0.1679 | 0.1595 | 0.1539 | 0.1469 | 0.1427 | 0.1399 | 0.1371 | 0.1343 |
| 50.0 | 7.70 | 0.1742 | 0.1655 | 0.1597 | 0.1525 | 0.1481 | 0.1452 | 0.1423 | 0.1394 |
| 52.0 | 8.00 | 0.1874 | 0.1780 | 0.1717 | 0.1639 | 0.1593 | 0.1561 | 0.1530 | 0.1499 |
| 54.0 | 8.31 | 0.2009 | 0.1909 | 0.1842 | 0.1758 | 0.1708 | 0.1674 | 0.1641 | 0.1607 |
| 56.0 | 8.62 | 0.2149 | 0.2041 | 0.1970 | 0.1880 | 0.1827 | 0.1791 | 0.1755 | 0.1719 |
| 58.0 | 8.93 | 0.2293 | 0.2178 | 0.2102 | 0.2006 | 0.1949 | 0.1911 | 0.1873 | 0.1834 |
| 60.0 | 9.24 | 0.2441 | 0.2319 | 0.2238 | 0.2136 | 0.2075 | 0.2035 | 0.1994 | 0.1953 |
| 62.0 | 9.54 | 0.2594 | 0.2464 | 0.2378 | 0.2270 | 0.2205 | 0.2162 | 0.2119 | 0.2075 |
| 64.0 | 9.85 | 0.2751 | 0.2614 | 0.2522 | 0.2407 | 0.2338 | 0.2293 | 0.2247 | 0.2201 |
| 66.0 | 10.16 | 0.2912 | 0.2767 | 0.2670 | 0.2548 | 0.2475 | 0.2427 | 0.2378 | 0.2330 |

Pressure loss per foot, 2" hePEX and AquaPEX (50% Glycol)

| | | Head (Feet of Water) Per Foot of Tubing | | | | | | | |
|------|-----------------|---|-------------|--------------|--------------|--------------|--------------|--------------|--------------|
| gpm | Velocity (ft/s) | 60°F / 16°C | 80°F / 27°C | 100°F / 38°C | 120°F / 49°C | 140°F / 60°C | 160°F / 71°C | 180°F / 82°C | 200°F / 93°C |
| 9.0 | 1.39 | 0.0077 | 0.0073 | 0.0070 | 0.0067 | 0.0065 | 0.0064 | 0.0063 | 0.0061 |
| 10.0 | 1.54 | 0.0093 | 0.0089 | 0.0086 | 0.0082 | 0.0079 | 0.0078 | 0.0076 | 0.0075 |
| 11.0 | 1.69 | 0.0111 | 0.0106 | 0.0102 | 0.0097 | 0.0095 | 0.0093 | 0.0091 | 0.0089 |
| 12.0 | 1.85 | 0.0131 | 0.0124 | 0.0120 | 0.0115 | 0.0111 | 0.0109 | 0.0107 | 0.0105 |
| 13.0 | 2.00 | 0.0152 | 0.0144 | 0.0139 | 0.0133 | 0.0129 | 0.0126 | 0.0124 | 0.0121 |
| 14.0 | 2.16 | 0.0174 | 0.0165 | 0.0160 | 0.0152 | 0.0148 | 0.0145 | 0.0142 | 0.0139 |
| 15.0 | 2.31 | 0.0198 | 0.0188 | 0.0181 | 0.0173 | 0.0168 | 0.0165 | 0.0161 | 0.0158 |
| 16.0 | 2.46 | 0.0223 | 0.0212 | 0.0204 | 0.0195 | 0.0189 | 0.0186 | 0.0182 | 0.0178 |
| 17.0 | 2.62 | 0.0249 | 0.0237 | 0.0229 | 0.0218 | 0.0212 | 0.0208 | 0.0204 | 0.0199 |
| 18.0 | 2.77 | 0.0277 | 0.0263 | 0.0254 | 0.0242 | 0.0236 | 0.0231 | 0.0226 | 0.0222 |
| 19.0 | 2.92 | 0.0306 | 0.0291 | 0.0281 | 0.0268 | 0.0260 | 0.0255 | 0.0250 | 0.0245 |
| 20.0 | 3.08 | 0.0337 | 0.0320 | 0.0309 | 0.0295 | 0.0286 | 0.0281 | 0.0275 | 0.0269 |
| 21.0 | 3.23 | 0.0369 | 0.0350 | 0.0338 | 0.0322 | 0.0313 | 0.0307 | 0.0301 | 0.0295 |
| 22.0 | 3.39 | 0.0402 | 0.0382 | 0.0368 | 0.0351 | 0.0341 | 0.0335 | 0.0328 | 0.0321 |
| 23.0 | 3.54 | 0.0436 | 0.0414 | 0.0400 | 0.0382 | 0.0371 | 0.0363 | 0.0356 | 0.0349 |
| 24.0 | 3.69 | 0.0472 | 0.0448 | 0.0432 | 0.0413 | 0.0401 | 0.0393 | 0.0385 | 0.0377 |
| 25.0 | 3.85 | 0.0509 | 0.0483 | 0.0466 | 0.0445 | 0.0432 | 0.0424 | 0.0416 | 0.0407 |
| 26.0 | 4.00 | 0.0547 | 0.0520 | 0.0501 | 0.0479 | 0.0465 | 0.0456 | 0.0447 | 0.0438 |
| 27.0 | 4.16 | 0.0587 | 0.0557 | 0.0538 | 0.0513 | 0.0499 | 0.0489 | 0.0479 | 0.0469 |
| 28.0 | 4.31 | 0.0627 | 0.0596 | 0.0575 | 0.0549 | 0.0533 | 0.0523 | 0.0512 | 0.0502 |
| 29.0 | 4.46 | 0.0670 | 0.0636 | 0.0614 | 0.0586 | 0.0569 | 0.0558 | 0.0547 | 0.0536 |
| 30.0 | 4.62 | 0.0713 | 0.0677 | 0.0653 | 0.0624 | 0.0606 | 0.0594 | 0.0582 | 0.0570 |
| 31.0 | 4.77 | 0.0757 | 0.0720 | 0.0694 | 0.0663 | 0.0644 | 0.0631 | 0.0619 | 0.0606 |
| 32.0 | 4.93 | 0.0803 | 0.0763 | 0.0736 | 0.0703 | 0.0683 | 0.0669 | 0.0656 | 0.0643 |
| 33.0 | 5.08 | 0.0850 | 0.0808 | 0.0779 | 0.0744 | 0.0723 | 0.0709 | 0.0694 | 0.0680 |
| 34.0 | 5.23 | 0.0899 | 0.0854 | 0.0824 | 0.0786 | 0.0764 | 0.0749 | 0.0734 | 0.0719 |
| 35.0 | 5.39 | 0.0948 | 0.0901 | 0.0869 | 0.0830 | 0.0806 | 0.0790 | 0.0774 | 0.0759 |
| 36.0 | 5.54 | 0.0999 | 0.0949 | 0.0916 | 0.0874 | 0.0849 | 0.0832 | 0.0816 | 0.0799 |
| 37.0 | 5.70 | 0.1051 | 0.0998 | 0.0963 | 0.0919 | 0.0893 | 0.0876 | 0.0858 | 0.0841 |
| 38.0 | 5.85 | 0.1104 | 0.1049 | 0.1012 | 0.0966 | 0.0938 | 0.0920 | 0.0902 | 0.0883 |
| 39.0 | 6.00 | 0.1158 | 0.1100 | 0.1062 | 0.1014 | 0.0985 | 0.0965 | 0.0946 | 0.0927 |
| 40.0 | 6.16 | 0.1214 | 0.1153 | 0.1113 | 0.1062 | 0.1032 | 0.1012 | 0.0991 | 0.0971 |
| 41.0 | 6.31 | 0.1271 | 0.1207 | 0.1165 | 0.1112 | 0.1080 | 0.1059 | 0.1038 | 0.1016 |
| 42.0 | 6.47 | 0.1328 | 0.1262 | 0.1218 | 0.1162 | 0.1129 | 0.1107 | 0.1085 | 0.1063 |
| 43.0 | 6.62 | 0.1388 | 0.1318 | 0.1272 | 0.1214 | 0.1179 | 0.1156 | 0.1133 | 0.1110 |
| 44.0 | 6.77 | 0.1448 | 0.1375 | 0.1327 | 0.1267 | 0.1231 | 0.1207 | 0.1182 | 0.1158 |
| 45.0 | 6.93 | 0.1509 | 0.1434 | 0.1384 | 0.1321 | 0.1283 | 0.1258 | 0.1233 | 0.1207 |
| 46.0 | 7.08 | 0.1572 | 0.1493 | 0.1441 | 0.1375 | 0.1336 | 0.1310 | 0.1284 | 0.1258 |
| 47.0 | 7.24 | 0.1636 | 0.1554 | 0.1499 | 0.1431 | 0.1390 | 0.1363 | 0.1336 | 0.1309 |
| 48.0 | 7.39 | 0.1701 | 0.1616 | 0.1559 | 0.1488 | 0.1446 | 0.1417 | 0.1389 | 0.1361 |
| 49.0 | 7.54 | 0.1767 | 0.1679 | 0.1620 | 0.1546 | 0.1502 | 0.1472 | 0.1443 | 0.1414 |
| 50.0 | 7.70 | 0.1834 | 0.1742 | 0.1681 | 0.1605 | 0.1559 | 0.1528 | 0.1498 | 0.1467 |
| 52.0 | 8.00 | 0.1972 | 0.1874 | 0.1808 | 0.1726 | 0.1676 | 0.1644 | 0.1611 | 0.1578 |
| 54.0 | 8.31 | 0.2115 | 0.2009 | 0.1939 | 0.1850 | 0.1798 | 0.1762 | 0.1727 | 0.1692 |
| 56.0 | 8.62 | 0.2262 | 0.2149 | 0.2074 | 0.1979 | 0.1923 | 0.1885 | 0.1847 | 0.1810 |
| 58.0 | 8.93 | 0.2414 | 0.2293 | 0.2213 | 0.2112 | 0.2052 | 0.2011 | 0.1971 | 0.1931 |
| 60.0 | 9.24 | 0.2570 | 0.2441 | 0.2356 | 0.2249 | 0.2184 | 0.2142 | 0.2099 | 0.2056 |
| 62.0 | 9.54 | 0.2731 | 0.2594 | 0.2503 | 0.2389 | 0.2321 | 0.2276 | 0.2230 | 0.2185 |
| 64.0 | 9.85 | 0.2896 | 0.2751 | 0.2655 | 0.2534 | 0.2462 | 0.2413 | 0.2365 | 0.2317 |
| 66.0 | 10.16 | 0.3066 | 0.2912 | 0.2810 | 0.2682 | 0.2606 | 0.2555 | 0.2504 | 0.2452 |

Pressure loss per foot, 2½" hePEX and AquaPEX (100 % Water)

| | | Head (Feet of Water) Per Foot of Tubing | | | | | | | |
|-------|-----------------|---|-------------|--------------|--------------|--------------|--------------|--------------|--------------|
| gpm | Velocity (ft/s) | 60°F / 16°C | 80°F / 27°C | 100°F / 38°C | 120°F / 49°C | 140°F / 60°C | 160°F / 71°C | 180°F / 82°C | 200°F / 93°C |
| 14.00 | 1.41 | 0.0045 | 0.0042 | 0.0041 | 0.0039 | 0.0038 | 0.0037 | 0.0036 | 0.0036 |
| 15.00 | 1.52 | 0.0051 | 0.0048 | 0.0046 | 0.0044 | 0.0043 | 0.0042 | 0.0041 | 0.0041 |
| 16.00 | 1.62 | 0.0057 | 0.0054 | 0.0052 | 0.0050 | 0.0049 | 0.0048 | 0.0047 | 0.0046 |
| 17.00 | 1.72 | 0.0064 | 0.0061 | 0.0059 | 0.0056 | 0.0054 | 0.0053 | 0.0052 | 0.0051 |
| 18.00 | 1.82 | 0.0071 | 0.0067 | 0.0065 | 0.0062 | 0.0060 | 0.0059 | 0.0058 | 0.0057 |
| 19.00 | 1.92 | 0.0078 | 0.0075 | 0.0072 | 0.0069 | 0.0067 | 0.0065 | 0.0064 | 0.0063 |
| 20.00 | 2.02 | 0.0086 | 0.0082 | 0.0079 | 0.0076 | 0.0073 | 0.0072 | 0.0070 | 0.0069 |
| 21.00 | 2.12 | 0.0094 | 0.0090 | 0.0087 | 0.0083 | 0.0080 | 0.0079 | 0.0077 | 0.0076 |
| 22.00 | 2.22 | 0.0103 | 0.0098 | 0.0094 | 0.0090 | 0.0087 | 0.0086 | 0.0084 | 0.0082 |
| 23.00 | 2.32 | 0.0112 | 0.0106 | 0.0102 | 0.0098 | 0.0095 | 0.0093 | 0.0091 | 0.0089 |
| 24.00 | 2.42 | 0.0121 | 0.0115 | 0.0111 | 0.0106 | 0.0103 | 0.0101 | 0.0099 | 0.0097 |
| 25.00 | 2.53 | 0.0130 | 0.0124 | 0.0120 | 0.0114 | 0.0111 | 0.0109 | 0.0106 | 0.0104 |
| 26.00 | 2.63 | 0.0140 | 0.0133 | 0.0129 | 0.0123 | 0.0119 | 0.0117 | 0.0115 | 0.0112 |
| 27.00 | 2.73 | 0.0150 | 0.0143 | 0.0138 | 0.0132 | 0.0128 | 0.0125 | 0.0123 | 0.0120 |
| 28.00 | 2.83 | 0.0161 | 0.0153 | 0.0147 | 0.0141 | 0.0137 | 0.0134 | 0.0131 | 0.0129 |
| 29.00 | 2.93 | 0.0172 | 0.0163 | 0.0157 | 0.0150 | 0.0146 | 0.0143 | 0.0140 | 0.0137 |
| 30.00 | 3.03 | 0.0183 | 0.0174 | 0.0167 | 0.0160 | 0.0155 | 0.0152 | 0.0149 | 0.0146 |
| 31.00 | 3.13 | 0.0194 | 0.0184 | 0.0178 | 0.0170 | 0.0165 | 0.0162 | 0.0159 | 0.0155 |
| 32.00 | 3.23 | 0.0206 | 0.0196 | 0.0189 | 0.0180 | 0.0175 | 0.0172 | 0.0168 | 0.0165 |
| 33.00 | 3.33 | 0.0218 | 0.0207 | 0.0200 | 0.0191 | 0.0185 | 0.0182 | 0.0178 | 0.0174 |
| 34.00 | 3.43 | 0.0230 | 0.0219 | 0.0211 | 0.0202 | 0.0196 | 0.0192 | 0.0188 | 0.0184 |
| 35.00 | 3.54 | 0.0243 | 0.0231 | 0.0223 | 0.0213 | 0.0207 | 0.0202 | 0.0198 | 0.0194 |
| 36.00 | 3.64 | 0.0256 | 0.0243 | 0.0235 | 0.0224 | 0.0218 | 0.0213 | 0.0209 | 0.0205 |
| 37.00 | 3.74 | 0.0269 | 0.0256 | 0.0247 | 0.0236 | 0.0229 | 0.0224 | 0.0220 | 0.0215 |
| 38.00 | 3.84 | 0.0283 | 0.0269 | 0.0259 | 0.0248 | 0.0240 | 0.0236 | 0.0231 | 0.0226 |
| 39.00 | 3.94 | 0.0297 | 0.0282 | 0.0272 | 0.0260 | 0.0252 | 0.0247 | 0.0242 | 0.0237 |

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Pressure loss per foot, 2½" hePEX and AquaPEX (100 % Water)

| Head (Feet of Water) Per Foot of Tubing | | | | | | | | | |
|---|-------|--------|--------|--------|--------|--------|--------|--------|--------|
| 40.00 | 4.04 | 0.0311 | 0.0296 | 0.0285 | 0.0272 | 0.0264 | 0.0259 | 0.0254 | 0.0249 |
| 41.00 | 4.14 | 0.0326 | 0.0309 | 0.0298 | 0.0285 | 0.0277 | 0.0271 | 0.0266 | 0.0261 |
| 42.00 | 4.24 | 0.0340 | 0.0323 | 0.0312 | 0.0298 | 0.0289 | 0.0284 | 0.0278 | 0.0272 |
| 43.00 | 4.34 | 0.0356 | 0.0338 | 0.0326 | 0.0311 | 0.0302 | 0.0296 | 0.0290 | 0.0284 |
| 44.00 | 4.44 | 0.0371 | 0.0353 | 0.0340 | 0.0325 | 0.0315 | 0.0309 | 0.0303 | 0.0297 |
| 45.00 | 4.55 | 0.0387 | 0.0367 | 0.0355 | 0.0338 | 0.0329 | 0.0322 | 0.0316 | 0.0309 |
| 46.00 | 4.65 | 0.0403 | 0.0383 | 0.0369 | 0.0353 | 0.0342 | 0.0336 | 0.0329 | 0.0322 |
| 47.00 | 4.75 | 0.0419 | 0.0398 | 0.0384 | 0.0367 | 0.0356 | 0.0349 | 0.0342 | 0.0335 |
| 48.00 | 4.85 | 0.0436 | 0.0414 | 0.0400 | 0.0381 | 0.0370 | 0.0363 | 0.0356 | 0.0349 |
| 49.00 | 4.95 | 0.0453 | 0.0430 | 0.0415 | 0.0396 | 0.0385 | 0.0377 | 0.0370 | 0.0362 |
| 50.00 | 5.05 | 0.0470 | 0.0447 | 0.0431 | 0.0411 | 0.0400 | 0.0392 | 0.0384 | 0.0376 |
| 52.00 | 5.25 | 0.0505 | 0.0480 | 0.0463 | 0.0442 | 0.0430 | 0.0421 | 0.0413 | 0.0404 |
| 54.00 | 5.45 | 0.0542 | 0.0515 | 0.0497 | 0.0474 | 0.0461 | 0.0452 | 0.0443 | 0.0434 |
| 56.00 | 5.66 | 0.0580 | 0.0551 | 0.0531 | 0.0507 | 0.0493 | 0.0483 | 0.0473 | 0.0464 |
| 58.00 | 5.86 | 0.0619 | 0.0588 | 0.0567 | 0.0541 | 0.0526 | 0.0516 | 0.0505 | 0.0495 |
| 60.00 | 6.06 | 0.0659 | 0.0626 | 0.0604 | 0.0576 | 0.0560 | 0.0549 | 0.0538 | 0.0527 |
| 62.00 | 6.26 | 0.0700 | 0.0665 | 0.0642 | 0.0612 | 0.0595 | 0.0583 | 0.0572 | 0.0560 |
| 64.00 | 6.46 | 0.0742 | 0.0705 | 0.0680 | 0.0649 | 0.0631 | 0.0618 | 0.0606 | 0.0594 |
| 66.00 | 6.67 | 0.0786 | 0.0746 | 0.0720 | 0.0687 | 0.0668 | 0.0655 | 0.0642 | 0.0629 |
| 68.00 | 6.87 | 0.0830 | 0.0789 | 0.0761 | 0.0726 | 0.0706 | 0.0692 | 0.0678 | 0.0664 |
| 70.00 | 7.07 | 0.0876 | 0.0832 | 0.0803 | 0.0766 | 0.0745 | 0.0730 | 0.0715 | 0.0701 |
| 72.00 | 7.27 | 0.0923 | 0.0877 | 0.0846 | 0.0808 | 0.0784 | 0.0769 | 0.0754 | 0.0738 |
| 74.00 | 7.47 | 0.0971 | 0.0922 | 0.0890 | 0.0849 | 0.0825 | 0.0809 | 0.0793 | 0.0777 |
| 76.00 | 7.68 | 0.1020 | 0.0969 | 0.0935 | 0.0892 | 0.0867 | 0.0850 | 0.0833 | 0.0816 |
| 78.00 | 7.88 | 0.1070 | 0.1017 | 0.0981 | 0.0936 | 0.0910 | 0.0892 | 0.0874 | 0.0856 |
| 80.00 | 8.08 | 0.1121 | 0.1065 | 0.1028 | 0.0981 | 0.0953 | 0.0935 | 0.0916 | 0.0897 |
| 82.00 | 8.28 | 0.1174 | 0.1115 | 0.1076 | 0.1027 | 0.0998 | 0.0978 | 0.0959 | 0.0939 |
| 84.00 | 8.48 | 0.1227 | 0.1166 | 0.1125 | 0.1074 | 0.1043 | 0.1023 | 0.1002 | 0.0982 |
| 86.00 | 8.69 | 0.1282 | 0.1218 | 0.1175 | 0.1122 | 0.1090 | 0.1068 | 0.1047 | 0.1026 |
| 88.00 | 8.89 | 0.1338 | 0.1271 | 0.1226 | 0.1171 | 0.1137 | 0.1115 | 0.1092 | 0.1070 |
| 90.00 | 9.09 | 0.1395 | 0.1325 | 0.1278 | 0.1220 | 0.1185 | 0.1162 | 0.1139 | 0.1116 |
| 92.00 | 9.29 | 0.1452 | 0.1380 | 0.1331 | 0.1271 | 0.1235 | 0.1210 | 0.1186 | 0.1162 |
| 94.00 | 9.49 | 0.1511 | 0.1436 | 0.1385 | 0.1322 | 0.1285 | 0.1259 | 0.1234 | 0.1209 |
| 96.00 | 9.70 | 0.1571 | 0.1493 | 0.1440 | 0.1375 | 0.1336 | 0.1309 | 0.1283 | 0.1257 |
| 98.00 | 9.90 | 0.1632 | 0.1551 | 0.1496 | 0.1428 | 0.1388 | 0.1360 | 0.1333 | 0.1306 |
| 100.00 | 10.10 | 0.1695 | 0.1610 | 0.1553 | 0.1483 | 0.1440 | 0.1412 | 0.1384 | 0.1356 |

Pressure loss per foot, 2½" hePEX and AquaPEX (30% Glycol)

| | | Head (Feet of Water) Per Foot of Tubing | | | | | | | |
|------|-----------------|---|-------------|--------------|--------------|--------------|--------------|--------------|--------------|
| gpm | Velocity (ft/s) | 60°F / 16°C | 80°F / 27°C | 100°F / 38°C | 120°F / 49°C | 140°F / 60°C | 160°F / 71°C | 180°F / 82°C | 200°F / 93°C |
| 14.0 | 1.41 | 0.0055 | 0.0053 | 0.0051 | 0.0048 | 0.0047 | 0.0046 | 0.0045 | 0.0044 |
| 15.0 | 1.52 | 0.0063 | 0.0060 | 0.0058 | 0.0055 | 0.0053 | 0.0052 | 0.0051 | 0.0050 |
| 16.0 | 1.62 | 0.0071 | 0.0067 | 0.0065 | 0.0062 | 0.0060 | 0.0059 | 0.0058 | 0.0057 |
| 17.0 | 1.72 | 0.0079 | 0.0075 | 0.0073 | 0.0069 | 0.0067 | 0.0066 | 0.0065 | 0.0063 |
| 18.0 | 1.82 | 0.0088 | 0.0084 | 0.0081 | 0.0077 | 0.0075 | 0.0073 | 0.0072 | 0.0070 |
| 19.0 | 1.92 | 0.0097 | 0.0092 | 0.0089 | 0.0085 | 0.0083 | 0.0081 | 0.0079 | 0.0078 |
| 20.0 | 2.02 | 0.0107 | 0.0102 | 0.0098 | 0.0094 | 0.0091 | 0.0089 | 0.0087 | 0.0086 |
| 21.0 | 2.12 | 0.0117 | 0.0111 | 0.0107 | 0.0102 | 0.0100 | 0.0098 | 0.0096 | 0.0094 |
| 22.0 | 2.22 | 0.0128 | 0.0121 | 0.0117 | 0.0112 | 0.0108 | 0.0106 | 0.0104 | 0.0102 |
| 23.0 | 2.32 | 0.0139 | 0.0132 | 0.0127 | 0.0121 | 0.0118 | 0.0115 | 0.0113 | 0.0111 |
| 24.0 | 2.42 | 0.0150 | 0.0142 | 0.0137 | 0.0131 | 0.0127 | 0.0125 | 0.0122 | 0.0120 |
| 25.0 | 2.53 | 0.0162 | 0.0154 | 0.0148 | 0.0141 | 0.0137 | 0.0135 | 0.0132 | 0.0129 |
| 26.0 | 2.63 | 0.0174 | 0.0165 | 0.0159 | 0.0152 | 0.0148 | 0.0145 | 0.0142 | 0.0139 |
| 27.0 | 2.73 | 0.0186 | 0.0177 | 0.0171 | 0.0163 | 0.0158 | 0.0155 | 0.0152 | 0.0149 |
| 28.0 | 2.83 | 0.0199 | 0.0189 | 0.0183 | 0.0174 | 0.0169 | 0.0166 | 0.0163 | 0.0160 |
| 29.0 | 2.93 | 0.0213 | 0.0202 | 0.0195 | 0.0186 | 0.0181 | 0.0177 | 0.0174 | 0.0170 |
| 30.0 | 3.03 | 0.0227 | 0.0215 | 0.0208 | 0.0198 | 0.0193 | 0.0189 | 0.0185 | 0.0181 |
| 31.0 | 3.13 | 0.0241 | 0.0229 | 0.0221 | 0.0211 | 0.0205 | 0.0201 | 0.0197 | 0.0193 |
| 32.0 | 3.23 | 0.0255 | 0.0243 | 0.0234 | 0.0223 | 0.0217 | 0.0213 | 0.0208 | 0.0204 |
| 33.0 | 3.33 | 0.0270 | 0.0257 | 0.0248 | 0.0236 | 0.0230 | 0.0225 | 0.0221 | 0.0216 |
| 34.0 | 3.43 | 0.0286 | 0.0271 | 0.0262 | 0.0250 | 0.0243 | 0.0238 | 0.0233 | 0.0228 |
| 35.0 | 3.54 | 0.0301 | 0.0286 | 0.0276 | 0.0264 | 0.0256 | 0.0251 | 0.0246 | 0.0241 |
| 36.0 | 3.64 | 0.0317 | 0.0302 | 0.0291 | 0.0278 | 0.0270 | 0.0265 | 0.0259 | 0.0254 |
| 37.0 | 3.74 | 0.0334 | 0.0317 | 0.0306 | 0.0292 | 0.0284 | 0.0278 | 0.0273 | 0.0267 |
| 38.0 | 3.84 | 0.0351 | 0.0333 | 0.0322 | 0.0307 | 0.0298 | 0.0292 | 0.0287 | 0.0281 |
| 39.0 | 3.94 | 0.0368 | 0.0350 | 0.0337 | 0.0322 | 0.0313 | 0.0307 | 0.0301 | 0.0294 |

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Pressure loss per foot, 2½" hePEX and AquaPEX (30% Glycol)

| | | Head (Feet of Water) Per Foot of Tubing | | | | | | | |
|-------|-----------------|---|-------------|--------------|--------------|--------------|--------------|--------------|--------------|
| gpm | Velocity (ft/s) | 60°F / 16°C | 80°F / 27°C | 100°F / 38°C | 120°F / 49°C | 140°F / 60°C | 160°F / 71°C | 180°F / 82°C | 200°F / 93°C |
| 40.0 | 4.04 | 0.0386 | 0.0366 | 0.0354 | 0.0338 | 0.0328 | 0.0321 | 0.0315 | 0.0309 |
| 41.0 | 4.14 | 0.0404 | 0.0384 | 0.0370 | 0.0353 | 0.0343 | 0.0336 | 0.0330 | 0.0323 |
| 42.0 | 4.24 | 0.0422 | 0.0401 | 0.0387 | 0.0369 | 0.0359 | 0.0352 | 0.0345 | 0.0338 |
| 43.0 | 4.34 | 0.0441 | 0.0419 | 0.0404 | 0.0386 | 0.0375 | 0.0367 | 0.0360 | 0.0353 |
| 44.0 | 4.44 | 0.0460 | 0.0437 | 0.0422 | 0.0403 | 0.0391 | 0.0383 | 0.0376 | 0.0368 |
| 45.0 | 4.55 | 0.0480 | 0.0456 | 0.0440 | 0.0420 | 0.0408 | 0.0400 | 0.0392 | 0.0384 |
| 46.0 | 4.65 | 0.0500 | 0.0475 | 0.0458 | 0.0437 | 0.0425 | 0.0416 | 0.0408 | 0.0400 |
| 47.0 | 4.75 | 0.0520 | 0.0494 | 0.0477 | 0.0455 | 0.0442 | 0.0433 | 0.0425 | 0.0416 |
| 48.0 | 4.85 | 0.0540 | 0.0513 | 0.0495 | 0.0473 | 0.0459 | 0.0450 | 0.0441 | 0.0432 |
| 49.0 | 4.95 | 0.0562 | 0.0533 | 0.0515 | 0.0491 | 0.0477 | 0.0468 | 0.0459 | 0.0449 |
| 50.0 | 5.05 | 0.0583 | 0.0554 | 0.0534 | 0.0510 | 0.0495 | 0.0486 | 0.0476 | 0.0466 |
| 52.0 | 5.25 | 0.0627 | 0.0595 | 0.0575 | 0.0548 | 0.0533 | 0.0522 | 0.0512 | 0.0501 |
| 54.0 | 5.45 | 0.0672 | 0.0638 | 0.0616 | 0.0588 | 0.0571 | 0.0560 | 0.0549 | 0.0538 |
| 56.0 | 5.66 | 0.0719 | 0.0683 | 0.0659 | 0.0629 | 0.0611 | 0.0599 | 0.0587 | 0.0575 |
| 58.0 | 5.86 | 0.0767 | 0.0729 | 0.0703 | 0.0671 | 0.0652 | 0.0639 | 0.0626 | 0.0614 |
| 60.0 | 6.06 | 0.0817 | 0.0776 | 0.0749 | 0.0715 | 0.0694 | 0.0681 | 0.0667 | 0.0653 |
| 62.0 | 6.26 | 0.0868 | 0.0824 | 0.0795 | 0.0759 | 0.0738 | 0.0723 | 0.0709 | 0.0694 |
| 64.0 | 6.46 | 0.0920 | 0.0874 | 0.0844 | 0.0805 | 0.0782 | 0.0767 | 0.0752 | 0.0736 |
| 66.0 | 6.67 | 0.0974 | 0.0925 | 0.0893 | 0.0852 | 0.0828 | 0.0812 | 0.0796 | 0.0779 |
| 68.0 | 6.87 | 0.1030 | 0.0978 | 0.0944 | 0.0901 | 0.0875 | 0.0858 | 0.0841 | 0.0824 |
| 70.0 | 7.07 | 0.1086 | 0.1032 | 0.0996 | 0.0950 | 0.0923 | 0.0905 | 0.0887 | 0.0869 |
| 72.0 | 7.27 | 0.1144 | 0.1087 | 0.1049 | 0.1001 | 0.0973 | 0.0954 | 0.0935 | 0.0915 |
| 74.0 | 7.47 | 0.1204 | 0.1144 | 0.1104 | 0.1053 | 0.1023 | 0.1003 | 0.0983 | 0.0963 |
| 76.0 | 7.68 | 0.1265 | 0.1201 | 0.1159 | 0.1107 | 0.1075 | 0.1054 | 0.1033 | 0.1012 |
| 78.0 | 7.88 | 0.1327 | 0.1261 | 0.1216 | 0.1161 | 0.1128 | 0.1106 | 0.1084 | 0.1062 |
| 80.0 | 8.08 | 0.1391 | 0.1321 | 0.1275 | 0.1217 | 0.1182 | 0.1159 | 0.1136 | 0.1113 |
| 82.0 | 8.28 | 0.1456 | 0.1383 | 0.1334 | 0.1274 | 0.1237 | 0.1213 | 0.1189 | 0.1164 |
| 84.0 | 8.48 | 0.1522 | 0.1446 | 0.1395 | 0.1332 | 0.1294 | 0.1268 | 0.1243 | 0.1218 |
| 86.0 | 8.69 | 0.1590 | 0.1510 | 0.1457 | 0.1391 | 0.1351 | 0.1325 | 0.1298 | 0.1272 |
| 88.0 | 8.89 | 0.1659 | 0.1576 | 0.1521 | 0.1451 | 0.1410 | 0.1382 | 0.1355 | 0.1327 |
| 90.0 | 9.09 | 0.1729 | 0.1643 | 0.1585 | 0.1513 | 0.1470 | 0.1441 | 0.1412 | 0.1383 |
| 92.0 | 9.29 | 0.1801 | 0.1711 | 0.1651 | 0.1576 | 0.1531 | 0.1501 | 0.1471 | 0.1441 |
| 94.0 | 9.49 | 0.1874 | 0.1780 | 0.1718 | 0.1640 | 0.1593 | 0.1562 | 0.1530 | 0.1499 |
| 96.0 | 9.70 | 0.1948 | 0.1851 | 0.1786 | 0.1705 | 0.1656 | 0.1624 | 0.1591 | 0.1559 |
| 98.0 | 9.90 | 0.2024 | 0.1923 | 0.1856 | 0.1771 | 0.1721 | 0.1687 | 0.1653 | 0.1619 |
| 100.0 | 10.10 | 0.2101 | 0.1996 | 0.1926 | 0.1839 | 0.1786 | 0.1751 | 0.1716 | 0.1681 |

Pressure loss per foot, 2½" hePEX and AquaPEX (40% Glycol)

| | | Head (Feet of Water) Per Foot of Tubing | | | | | | | |
|------|-----------------|---|-------------|--------------|--------------|--------------|--------------|--------------|--------------|
| gpm | Velocity (ft/s) | 60°F / 16°C | 80°F / 27°C | 100°F / 38°C | 120°F / 49°C | 140°F / 60°C | 160°F / 71°C | 180°F / 82°C | 200°F / 93°C |
| 14.0 | 1.41 | 0.0059 | 0.0056 | 0.0054 | 0.0052 | 0.0050 | 0.0049 | 0.0048 | 0.0047 |
| 15.0 | 1.52 | 0.0067 | 0.0064 | 0.0062 | 0.0059 | 0.0057 | 0.0056 | 0.0055 | 0.0054 |
| 16.0 | 1.62 | 0.0076 | 0.0072 | 0.0070 | 0.0066 | 0.0065 | 0.0063 | 0.0062 | 0.0061 |
| 17.0 | 1.72 | 0.0085 | 0.0081 | 0.0078 | 0.0074 | 0.0072 | 0.0071 | 0.0069 | 0.0068 |
| 18.0 | 1.82 | 0.0094 | 0.0090 | 0.0087 | 0.0083 | 0.0080 | 0.0079 | 0.0077 | 0.0076 |
| 19.0 | 1.92 | 0.0104 | 0.0099 | 0.0096 | 0.0091 | 0.0089 | 0.0087 | 0.0085 | 0.0084 |
| 20.0 | 2.02 | 0.0115 | 0.0109 | 0.0105 | 0.0100 | 0.0098 | 0.0096 | 0.0094 | 0.0092 |
| 21.0 | 2.12 | 0.0126 | 0.0119 | 0.0115 | 0.0110 | 0.0107 | 0.0105 | 0.0103 | 0.0100 |
| 22.0 | 2.22 | 0.0137 | 0.0130 | 0.0125 | 0.0120 | 0.0116 | 0.0114 | 0.0112 | 0.0110 |
| 23.0 | 2.32 | 0.0149 | 0.0141 | 0.0136 | 0.0130 | 0.0126 | 0.0124 | 0.0121 | 0.0119 |
| 24.0 | 2.42 | 0.0161 | 0.0153 | 0.0147 | 0.0141 | 0.0137 | 0.0134 | 0.0131 | 0.0129 |
| 25.0 | 2.53 | 0.0173 | 0.0165 | 0.0159 | 0.0152 | 0.0147 | 0.0145 | 0.0142 | 0.0139 |
| 26.0 | 2.63 | 0.0186 | 0.0177 | 0.0171 | 0.0163 | 0.0159 | 0.0155 | 0.0152 | 0.0149 |
| 27.0 | 2.73 | 0.0200 | 0.0190 | 0.0183 | 0.0175 | 0.0170 | 0.0167 | 0.0163 | 0.0160 |
| 28.0 | 2.83 | 0.0214 | 0.0203 | 0.0196 | 0.0187 | 0.0182 | 0.0178 | 0.0175 | 0.0171 |
| 29.0 | 2.93 | 0.0228 | 0.0217 | 0.0209 | 0.0200 | 0.0194 | 0.0190 | 0.0186 | 0.0183 |
| 30.0 | 3.03 | 0.0243 | 0.0231 | 0.0223 | 0.0213 | 0.0207 | 0.0202 | 0.0198 | 0.0194 |
| 31.0 | 3.13 | 0.0258 | 0.0245 | 0.0237 | 0.0226 | 0.0219 | 0.0215 | 0.0211 | 0.0207 |
| 32.0 | 3.23 | 0.0274 | 0.0260 | 0.0251 | 0.0240 | 0.0233 | 0.0228 | 0.0224 | 0.0219 |
| 33.0 | 3.33 | 0.0290 | 0.0275 | 0.0266 | 0.0254 | 0.0246 | 0.0242 | 0.0237 | 0.0232 |
| 34.0 | 3.43 | 0.0306 | 0.0291 | 0.0281 | 0.0268 | 0.0260 | 0.0255 | 0.0250 | 0.0245 |
| 35.0 | 3.54 | 0.0323 | 0.0307 | 0.0296 | 0.0283 | 0.0275 | 0.0269 | 0.0264 | 0.0259 |
| 36.0 | 3.64 | 0.0340 | 0.0323 | 0.0312 | 0.0298 | 0.0289 | 0.0284 | 0.0278 | 0.0272 |
| 37.0 | 3.74 | 0.0358 | 0.0340 | 0.0328 | 0.0313 | 0.0304 | 0.0298 | 0.0293 | 0.0287 |
| 38.0 | 3.84 | 0.0376 | 0.0357 | 0.0345 | 0.0329 | 0.0320 | 0.0314 | 0.0307 | 0.0301 |
| 39.0 | 3.94 | 0.0395 | 0.0375 | 0.0362 | 0.0345 | 0.0336 | 0.0329 | 0.0322 | 0.0316 |

Continued on next page

Continued from previous page

Pressure loss per foot, 2½" hePEX and AquaPEX (40% Glycol)

| gpm | Velocity (ft/s) | Head (Feet of Water) Per Foot of Tubing | | | | | | | |
|-------|-----------------|---|-------------|--------------|--------------|--------------|--------------|--------------|--------------|
| | | 60°F / 16°C | 80°F / 27°C | 100°F / 38°C | 120°F / 49°C | 140°F / 60°C | 160°F / 71°C | 180°F / 82°C | 200°F / 93°C |
| 40.0 | 4.04 | 0.0414 | 0.0393 | 0.0379 | 0.0362 | 0.0352 | 0.0345 | 0.0338 | 0.0331 |
| 41.0 | 4.14 | 0.0433 | 0.0411 | 0.0397 | 0.0379 | 0.0368 | 0.0361 | 0.0354 | 0.0346 |
| 42.0 | 4.24 | 0.0453 | 0.0430 | 0.0415 | 0.0396 | 0.0385 | 0.0377 | 0.0370 | 0.0362 |
| 43.0 | 4.34 | 0.0473 | 0.0449 | 0.0434 | 0.0414 | 0.0402 | 0.0394 | 0.0386 | 0.0378 |
| 44.0 | 4.44 | 0.0494 | 0.0469 | 0.0452 | 0.0432 | 0.0419 | 0.0411 | 0.0403 | 0.0395 |
| 45.0 | 4.55 | 0.0514 | 0.0489 | 0.0472 | 0.0450 | 0.0437 | 0.0429 | 0.0420 | 0.0412 |
| 46.0 | 4.65 | 0.0536 | 0.0509 | 0.0491 | 0.0469 | 0.0455 | 0.0447 | 0.0438 | 0.0429 |
| 47.0 | 4.75 | 0.0558 | 0.0530 | 0.0511 | 0.0488 | 0.0474 | 0.0465 | 0.0455 | 0.0446 |
| 48.0 | 4.85 | 0.0580 | 0.0551 | 0.0531 | 0.0507 | 0.0493 | 0.0483 | 0.0473 | 0.0464 |
| 49.0 | 4.95 | 0.0602 | 0.0572 | 0.0552 | 0.0527 | 0.0512 | 0.0502 | 0.0492 | 0.0482 |
| 50.0 | 5.05 | 0.0625 | 0.0594 | 0.0573 | 0.0547 | 0.0531 | 0.0521 | 0.0511 | 0.0500 |
| 52.0 | 5.25 | 0.0672 | 0.0639 | 0.0616 | 0.0588 | 0.0571 | 0.0560 | 0.0549 | 0.0538 |
| 54.0 | 5.45 | 0.0721 | 0.0685 | 0.0661 | 0.0631 | 0.0613 | 0.0601 | 0.0589 | 0.0577 |
| 56.0 | 5.66 | 0.0771 | 0.0732 | 0.0707 | 0.0675 | 0.0655 | 0.0643 | 0.0630 | 0.0617 |
| 58.0 | 5.86 | 0.0823 | 0.0782 | 0.0754 | 0.0720 | 0.0699 | 0.0686 | 0.0672 | 0.0658 |
| 60.0 | 6.06 | 0.0876 | 0.0832 | 0.0803 | 0.0766 | 0.0745 | 0.0730 | 0.0715 | 0.0701 |
| 62.0 | 6.26 | 0.0931 | 0.0884 | 0.0853 | 0.0814 | 0.0791 | 0.0776 | 0.0760 | 0.0745 |
| 64.0 | 6.46 | 0.0987 | 0.0938 | 0.0905 | 0.0864 | 0.0839 | 0.0823 | 0.0806 | 0.0790 |
| 66.0 | 6.67 | 0.1045 | 0.0993 | 0.0958 | 0.0914 | 0.0888 | 0.0871 | 0.0853 | 0.0836 |
| 68.0 | 6.87 | 0.1104 | 0.1049 | 0.1012 | 0.0966 | 0.0939 | 0.0920 | 0.0902 | 0.0883 |
| 70.0 | 7.07 | 0.1165 | 0.1107 | 0.1068 | 0.1019 | 0.0990 | 0.0971 | 0.0951 | 0.0932 |
| 72.0 | 7.27 | 0.1227 | 0.1166 | 0.1125 | 0.1074 | 0.1043 | 0.1023 | 0.1002 | 0.0982 |
| 74.0 | 7.47 | 0.1291 | 0.1227 | 0.1184 | 0.1130 | 0.1098 | 0.1076 | 0.1055 | 0.1033 |
| 76.0 | 7.68 | 0.1357 | 0.1289 | 0.1243 | 0.1187 | 0.1153 | 0.1130 | 0.1108 | 0.1085 |
| 78.0 | 7.88 | 0.1423 | 0.1352 | 0.1305 | 0.1245 | 0.1210 | 0.1186 | 0.1162 | 0.1139 |
| 80.0 | 8.08 | 0.1492 | 0.1417 | 0.1367 | 0.1305 | 0.1268 | 0.1243 | 0.1218 | 0.1193 |
| 82.0 | 8.28 | 0.1561 | 0.1483 | 0.1431 | 0.1366 | 0.1327 | 0.1301 | 0.1275 | 0.1249 |
| 84.0 | 8.48 | 0.1632 | 0.1551 | 0.1496 | 0.1428 | 0.1388 | 0.1360 | 0.1333 | 0.1306 |
| 86.0 | 8.69 | 0.1705 | 0.1620 | 0.1563 | 0.1492 | 0.1449 | 0.1421 | 0.1392 | 0.1364 |
| 88.0 | 8.89 | 0.1779 | 0.1690 | 0.1631 | 0.1557 | 0.1512 | 0.1483 | 0.1453 | 0.1423 |
| 90.0 | 9.09 | 0.1855 | 0.1762 | 0.1700 | 0.1623 | 0.1576 | 0.1546 | 0.1515 | 0.1484 |
| 92.0 | 9.29 | 0.1932 | 0.1835 | 0.1771 | 0.1690 | 0.1642 | 0.1610 | 0.1578 | 0.1545 |
| 94.0 | 9.49 | 0.2010 | 0.1910 | 0.1843 | 0.1759 | 0.1709 | 0.1675 | 0.1642 | 0.1608 |
| 96.0 | 9.70 | 0.2090 | 0.1985 | 0.1916 | 0.1829 | 0.1776 | 0.1742 | 0.1707 | 0.1672 |
| 98.0 | 9.90 | 0.2171 | 0.2063 | 0.1990 | 0.1900 | 0.1845 | 0.1809 | 0.1773 | 0.1737 |
| 100.0 | 10.10 | 0.2254 | 0.2141 | 0.2066 | 0.1972 | 0.1916 | 0.1878 | 0.1841 | 0.1803 |

Pressure loss per foot, 2½" hePEX and AquaPEX (50% Glycol)

| gpm | Velocity (ft/s) | Head (Feet of Water) Per Foot of Tubing | | | | | | | |
|------|--------------------|---|----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| | | 60°F / 16°C | 80°F / 27°C | 100°F / 38°C | 120°F / 49°C | 140°F / 60°C | 160°F / 71°C | 180°F / 82°C | 200°F / 93°C |
| 14.0 | 1.41 | 0.0062 | 0.0059 | 0.0057 | 0.0055 | 0.0053 | 0.0052 | 0.0051 | 0.0050 |
| 15.0 | 1.52 | 0.0071 | 0.0067 | 0.0065 | 0.0062 | 0.0060 | 0.0059 | 0.0058 | 0.0057 |
| 16.0 | 1.62 | 0.0080 | 0.0076 | 0.0073 | 0.0070 | 0.0068 | 0.0067 | 0.0065 | 0.0064 |
| 17.0 | 1.72 | 0.0089 | 0.0085 | 0.0082 | 0.0078 | 0.0076 | 0.0075 | 0.0073 | 0.0072 |
| 18.0 | 1.82 | 0.0099 | 0.0094 | 0.0091 | 0.0087 | 0.0085 | 0.0083 | 0.0081 | 0.0080 |
| 19.0 | 1.92 | 0.0110 | 0.0104 | 0.0101 | 0.0096 | 0.0093 | 0.0092 | 0.0090 | 0.0088 |
| 20.0 | 2.02 | 0.0121 | 0.0115 | 0.0111 | 0.0106 | 0.0103 | 0.0101 | 0.0099 | 0.0097 |
| 21.0 | 2.12 | 0.0132 | 0.0126 | 0.0121 | 0.0116 | 0.0112 | 0.0110 | 0.0108 | 0.0106 |
| 22.0 | 2.22 | 0.0144 | 0.0137 | 0.0132 | 0.0126 | 0.0122 | 0.0120 | 0.0118 | 0.0115 |
| 23.0 | 2.32 | 0.0156 | 0.0149 | 0.0143 | 0.0137 | 0.0133 | 0.0130 | 0.0128 | 0.0125 |
| 24.0 | 2.42 | 0.0169 | 0.0161 | 0.0155 | 0.0148 | 0.0144 | 0.0141 | 0.0138 | 0.0135 |
| 25.0 | 2.53 | 0.0183 | 0.0173 | 0.0167 | 0.0160 | 0.0155 | 0.0152 | 0.0149 | 0.0146 |
| 26.0 | 2.63 | 0.0196 | 0.0186 | 0.0180 | 0.0172 | 0.0167 | 0.0164 | 0.0160 | 0.0157 |
| 27.0 | 2.73 | 0.0210 | 0.0200 | 0.0193 | 0.0184 | 0.0179 | 0.0175 | 0.0172 | 0.0168 |
| 28.0 | 2.83 | 0.0225 | 0.0214 | 0.0206 | 0.0197 | 0.0191 | 0.0188 | 0.0184 | 0.0180 |
| 29.0 | 2.93 | 0.0240 | 0.0228 | 0.0220 | 0.0210 | 0.0204 | 0.0200 | 0.0196 | 0.0192 |
| 30.0 | 3.03 | 0.0256 | 0.0243 | 0.0234 | 0.0224 | 0.0217 | 0.0213 | 0.0209 | 0.0205 |
| 31.0 | 3.13 | 0.0272 | 0.0258 | 0.0249 | 0.0238 | 0.0231 | 0.0226 | 0.0222 | 0.0217 |
| 32.0 | 3.23 | 0.0288 | 0.0274 | 0.0264 | 0.0252 | 0.0245 | 0.0240 | 0.0235 | 0.0231 |
| 33.0 | 3.33 | 0.0305 | 0.0290 | 0.0280 | 0.0267 | 0.0259 | 0.0254 | 0.0249 | 0.0244 |
| 34.0 | 3.43 | 0.0322 | 0.0306 | 0.0296 | 0.0282 | 0.0274 | 0.0269 | 0.0263 | 0.0258 |
| 35.0 | 3.54 | 0.0340 | 0.0323 | 0.0312 | 0.0298 | 0.0289 | 0.0283 | 0.0278 | 0.0272 |
| 36.0 | 3.64 | 0.0358 | 0.0340 | 0.0329 | 0.0314 | 0.0305 | 0.0299 | 0.0293 | 0.0287 |
| 37.0 | 3.74 | 0.0377 | 0.0358 | 0.0346 | 0.0330 | 0.0320 | 0.0314 | 0.0308 | 0.0302 |
| 38.0 | 3.84 | 0.0396 | 0.0376 | 0.0363 | 0.0347 | 0.0337 | 0.0330 | 0.0323 | 0.0317 |
| 39.0 | 3.94 | 0.0416 | 0.0395 | 0.0381 | 0.0364 | 0.0353 | 0.0346 | 0.0339 | 0.0332 |

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Pressure loss per foot, 2½" hePEX and AquaPEX (50% Glycol)

| | | Head (Feet of Water) Per Foot of Tubing | | | | | | | |
|-------|-----------------|---|-------------|--------------|--------------|--------------|--------------|--------------|--------------|
| gpm | Velocity (ft/s) | 60°F / 16°C | 80°F / 27°C | 100°F / 38°C | 120°F / 49°C | 140°F / 60°C | 160°F / 71°C | 180°F / 82°C | 200°F / 93°C |
| 40.0 | 4.04 | 0.0436 | 0.0414 | 0.0399 | 0.0381 | 0.0370 | 0.0363 | 0.0356 | 0.0348 |
| 41.0 | 4.14 | 0.0456 | 0.0433 | 0.0418 | 0.0399 | 0.0387 | 0.0380 | 0.0372 | 0.0365 |
| 42.0 | 4.24 | 0.0477 | 0.0453 | 0.0437 | 0.0417 | 0.0405 | 0.0397 | 0.0389 | 0.0381 |
| 43.0 | 4.34 | 0.0498 | 0.0473 | 0.0456 | 0.0436 | 0.0423 | 0.0415 | 0.0407 | 0.0398 |
| 44.0 | 4.44 | 0.0520 | 0.0494 | 0.0476 | 0.0455 | 0.0442 | 0.0433 | 0.0424 | 0.0416 |
| 45.0 | 4.55 | 0.0542 | 0.0514 | 0.0496 | 0.0474 | 0.0460 | 0.0451 | 0.0442 | 0.0433 |
| 46.0 | 4.65 | 0.0564 | 0.0536 | 0.0517 | 0.0494 | 0.0479 | 0.0470 | 0.0461 | 0.0451 |
| 47.0 | 4.75 | 0.0587 | 0.0558 | 0.0538 | 0.0514 | 0.0499 | 0.0489 | 0.0479 | 0.0470 |
| 48.0 | 4.85 | 0.0610 | 0.0580 | 0.0559 | 0.0534 | 0.0519 | 0.0509 | 0.0498 | 0.0488 |
| 49.0 | 4.95 | 0.0634 | 0.0602 | 0.0581 | 0.0555 | 0.0539 | 0.0528 | 0.0518 | 0.0507 |
| 50.0 | 5.05 | 0.0658 | 0.0625 | 0.0603 | 0.0576 | 0.0559 | 0.0548 | 0.0537 | 0.0526 |
| 52.0 | 5.25 | 0.0708 | 0.0672 | 0.0649 | 0.0619 | 0.0601 | 0.0590 | 0.0578 | 0.0566 |
| 54.0 | 5.45 | 0.0759 | 0.0721 | 0.0696 | 0.0664 | 0.0645 | 0.0632 | 0.0620 | 0.0607 |
| 56.0 | 5.66 | 0.0812 | 0.0771 | 0.0744 | 0.0710 | 0.0690 | 0.0676 | 0.0663 | 0.0649 |
| 58.0 | 5.86 | 0.0866 | 0.0823 | 0.0794 | 0.0758 | 0.0736 | 0.0722 | 0.0707 | 0.0693 |
| 60.0 | 6.06 | 0.0922 | 0.0876 | 0.0845 | 0.0807 | 0.0784 | 0.0768 | 0.0753 | 0.0738 |
| 62.0 | 6.26 | 0.0980 | 0.0931 | 0.0898 | 0.0857 | 0.0833 | 0.0816 | 0.0800 | 0.0784 |
| 64.0 | 6.46 | 0.1039 | 0.0987 | 0.0952 | 0.0909 | 0.0883 | 0.0866 | 0.0849 | 0.0831 |
| 66.0 | 6.67 | 0.1100 | 0.1045 | 0.1008 | 0.0962 | 0.0935 | 0.0917 | 0.0898 | 0.0880 |
| 68.0 | 6.87 | 0.1162 | 0.1104 | 0.1065 | 0.1017 | 0.0988 | 0.0969 | 0.0949 | 0.0930 |
| 70.0 | 7.07 | 0.1226 | 0.1165 | 0.1124 | 0.1073 | 0.1042 | 0.1022 | 0.1002 | 0.0981 |
| 72.0 | 7.27 | 0.1292 | 0.1227 | 0.1184 | 0.1131 | 0.1098 | 0.1077 | 0.1055 | 0.1034 |
| 74.0 | 7.47 | 0.1359 | 0.1291 | 0.1246 | 0.1189 | 0.1155 | 0.1133 | 0.1110 | 0.1087 |
| 76.0 | 7.68 | 0.1428 | 0.1357 | 0.1309 | 0.1249 | 0.1214 | 0.1190 | 0.1166 | 0.1142 |
| 78.0 | 7.88 | 0.1498 | 0.1423 | 0.1373 | 0.1311 | 0.1273 | 0.1249 | 0.1224 | 0.1199 |
| 80.0 | 8.08 | 0.1570 | 0.1492 | 0.1439 | 0.1374 | 0.1335 | 0.1308 | 0.1282 | 0.1256 |
| 82.0 | 8.28 | 0.1643 | 0.1561 | 0.1506 | 0.1438 | 0.1397 | 0.1370 | 0.1342 | 0.1315 |
| 84.0 | 8.48 | 0.1718 | 0.1632 | 0.1575 | 0.1504 | 0.1461 | 0.1432 | 0.1403 | 0.1375 |
| 86.0 | 8.69 | 0.1795 | 0.1705 | 0.1645 | 0.1570 | 0.1526 | 0.1496 | 0.1466 | 0.1436 |
| 88.0 | 8.89 | 0.1873 | 0.1779 | 0.1717 | 0.1639 | 0.1592 | 0.1561 | 0.1529 | 0.1498 |
| 90.0 | 9.09 | 0.1952 | 0.1855 | 0.1790 | 0.1708 | 0.1659 | 0.1627 | 0.1594 | 0.1562 |
| 92.0 | 9.29 | 0.2033 | 0.1932 | 0.1864 | 0.1779 | 0.1728 | 0.1694 | 0.1661 | 0.1627 |
| 94.0 | 9.49 | 0.2116 | 0.2010 | 0.1940 | 0.1851 | 0.1798 | 0.1763 | 0.1728 | 0.1693 |
| 96.0 | 9.70 | 0.2200 | 0.2090 | 0.2017 | 0.1925 | 0.1870 | 0.1833 | 0.1797 | 0.1760 |
| 98.0 | 9.90 | 0.2285 | 0.2171 | 0.2095 | 0.2000 | 0.1943 | 0.1905 | 0.1866 | 0.1828 |
| 100.0 | 10.10 | 0.2372 | 0.2254 | 0.2175 | 0.2076 | 0.2017 | 0.1977 | 0.1938 | 0.1898 |

Pressure loss per foot, 3" hePEX and AquaPEX (100 % Water)

| | | Head (Feet of Water) Per Foot of Tubing | | | | | | | |
|-------|-----------------|---|-------------|--------------|--------------|--------------|--------------|--------------|--------------|
| gpm | Velocity (ft/s) | 60°F / 16°C | 80°F / 27°C | 100°F / 38°C | 120°F / 49°C | 140°F / 60°C | 160°F / 71°C | 180°F / 82°C | 200°F / 93°C |
| 21.00 | 1.49 | 0.0040 | 0.0038 | 0.0037 | 0.0035 | 0.0034 | 0.0033 | 0.0033 | 0.0032 |
| 22.00 | 1.56 | 0.0044 | 0.0042 | 0.0040 | 0.0038 | 0.0037 | 0.0036 | 0.0036 | 0.0035 |
| 23.00 | 1.63 | 0.0047 | 0.0045 | 0.0044 | 0.0042 | 0.0040 | 0.0040 | 0.0039 | 0.0038 |
| 24.00 | 1.70 | 0.0051 | 0.0049 | 0.0047 | 0.0045 | 0.0044 | 0.0043 | 0.0042 | 0.0041 |
| 25.00 | 1.78 | 0.0055 | 0.0053 | 0.0051 | 0.0048 | 0.0047 | 0.0046 | 0.0045 | 0.0044 |
| 26.00 | 1.85 | 0.0060 | 0.0057 | 0.0055 | 0.0052 | 0.0051 | 0.0050 | 0.0049 | 0.0048 |
| 27.00 | 1.92 | 0.0064 | 0.0061 | 0.0059 | 0.0056 | 0.0054 | 0.0053 | 0.0052 | 0.0051 |
| 28.00 | 1.99 | 0.0068 | 0.0065 | 0.0063 | 0.0060 | 0.0058 | 0.0057 | 0.0056 | 0.0055 |
| 29.00 | 2.06 | 0.0073 | 0.0069 | 0.0067 | 0.0064 | 0.0062 | 0.0061 | 0.0060 | 0.0058 |
| 30.00 | 2.13 | 0.0078 | 0.0074 | 0.0071 | 0.0068 | 0.0066 | 0.0065 | 0.0063 | 0.0062 |
| 31.00 | 2.20 | 0.0082 | 0.0078 | 0.0076 | 0.0072 | 0.0070 | 0.0069 | 0.0067 | 0.0066 |
| 32.00 | 2.27 | 0.0087 | 0.0083 | 0.0080 | 0.0077 | 0.0074 | 0.0073 | 0.0071 | 0.0070 |
| 33.00 | 2.34 | 0.0093 | 0.0088 | 0.0085 | 0.0081 | 0.0079 | 0.0077 | 0.0076 | 0.0074 |
| 34.00 | 2.42 | 0.0098 | 0.0093 | 0.0090 | 0.0086 | 0.0083 | 0.0082 | 0.0080 | 0.0078 |
| 35.00 | 2.49 | 0.0103 | 0.0098 | 0.0095 | 0.0090 | 0.0088 | 0.0086 | 0.0084 | 0.0083 |
| 36.00 | 2.56 | 0.0109 | 0.0103 | 0.0100 | 0.0095 | 0.0092 | 0.0091 | 0.0089 | 0.0087 |
| 37.00 | 2.63 | 0.0114 | 0.0109 | 0.0105 | 0.0100 | 0.0097 | 0.0095 | 0.0093 | 0.0092 |
| 38.00 | 2.70 | 0.0120 | 0.0114 | 0.0110 | 0.0105 | 0.0102 | 0.0100 | 0.0098 | 0.0096 |
| 39.00 | 2.77 | 0.0126 | 0.0120 | 0.0116 | 0.0110 | 0.0107 | 0.0105 | 0.0103 | 0.0101 |
| 40.00 | 2.84 | 0.0132 | 0.0126 | 0.0121 | 0.0116 | 0.0112 | 0.0110 | 0.0108 | 0.0106 |
| 41.00 | 2.91 | 0.0138 | 0.0131 | 0.0127 | 0.0121 | 0.0118 | 0.0115 | 0.0113 | 0.0111 |
| 42.00 | 2.98 | 0.0145 | 0.0137 | 0.0133 | 0.0127 | 0.0123 | 0.0121 | 0.0118 | 0.0116 |
| 43.00 | 3.05 | 0.0151 | 0.0143 | 0.0138 | 0.0132 | 0.0128 | 0.0126 | 0.0123 | 0.0121 |
| 44.00 | 3.13 | 0.0158 | 0.0150 | 0.0144 | 0.0138 | 0.0134 | 0.0131 | 0.0129 | 0.0126 |
| 45.00 | 3.20 | 0.0164 | 0.0156 | 0.0151 | 0.0144 | 0.0140 | 0.0137 | 0.0134 | 0.0131 |
| 46.00 | 3.27 | 0.0171 | 0.0163 | 0.0157 | 0.0150 | 0.0145 | 0.0143 | 0.0140 | 0.0137 |
| 47.00 | 3.34 | 0.0178 | 0.0169 | 0.0163 | 0.0156 | 0.0151 | 0.0148 | 0.0145 | 0.0142 |
| 48.00 | 3.41 | 0.0185 | 0.0176 | 0.0170 | 0.0162 | 0.0157 | 0.0154 | 0.0151 | 0.0148 |
| 49.00 | 3.48 | 0.0192 | 0.0183 | 0.0176 | 0.0168 | 0.0163 | 0.0160 | 0.0157 | 0.0154 |
| 50.00 | 3.55 | 0.0200 | 0.0190 | 0.0183 | 0.0175 | 0.0170 | 0.0166 | 0.0163 | 0.0160 |
| 52.00 | 3.69 | 0.0215 | 0.0204 | 0.0197 | 0.0188 | 0.0182 | 0.0179 | 0.0175 | 0.0172 |
| 54.00 | 3.84 | 0.0230 | 0.0219 | 0.0211 | 0.0201 | 0.0196 | 0.0192 | 0.0188 | 0.0184 |
| 56.00 | 3.98 | 0.0246 | 0.0234 | 0.0226 | 0.0215 | 0.0209 | 0.0205 | 0.0201 | 0.0197 |
| 58.00 | 4.12 | 0.0263 | 0.0250 | 0.0241 | 0.0230 | 0.0223 | 0.0219 | 0.0215 | 0.0210 |
| 60.00 | 4.26 | 0.0280 | 0.0266 | 0.0256 | 0.0245 | 0.0238 | 0.0233 | 0.0228 | 0.0224 |
| 62.00 | 4.40 | 0.0297 | 0.0282 | 0.0272 | 0.0260 | 0.0253 | 0.0248 | 0.0243 | 0.0238 |
| 64.00 | 4.55 | 0.0315 | 0.0299 | 0.0289 | 0.0276 | 0.0268 | 0.0263 | 0.0257 | 0.0252 |
| 66.00 | 4.69 | 0.0334 | 0.0317 | 0.0306 | 0.0292 | 0.0284 | 0.0278 | 0.0273 | 0.0267 |
| 68.00 | 4.83 | 0.0353 | 0.0335 | 0.0323 | 0.0309 | 0.0300 | 0.0294 | 0.0288 | 0.0282 |

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Pressure loss per foot, 3" hePEX and AquaPEX (100 % Water)

| | | Head (Feet of Water) Per Foot of Tubing | | | | | | | |
|------------|------------------------|--|--------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| gpm | Velocity (ft/s) | 60°F / 16°C | 80°F / 27°C | 100°F / 38°C | 120°F / 49°C | 140°F / 60°C | 160°F / 71°C | 180°F / 82°C | 200°F / 93°C |
| 70.00 | 4.97 | 0.0372 | 0.0353 | 0.0341 | 0.0326 | 0.0316 | 0.0310 | 0.0304 | 0.0298 |
| 72.00 | 5.11 | 0.0392 | 0.0372 | 0.0359 | 0.0343 | 0.0333 | 0.0327 | 0.0320 | 0.0314 |
| 74.00 | 5.26 | 0.0412 | 0.0392 | 0.0378 | 0.0361 | 0.0350 | 0.0344 | 0.0337 | 0.0330 |
| 76.00 | 5.40 | 0.0433 | 0.0412 | 0.0397 | 0.0379 | 0.0368 | 0.0361 | 0.0354 | 0.0347 |
| 78.00 | 5.54 | 0.0455 | 0.0432 | 0.0417 | 0.0398 | 0.0386 | 0.0379 | 0.0371 | 0.0364 |
| 80.00 | 5.68 | 0.0476 | 0.0452 | 0.0437 | 0.0417 | 0.0405 | 0.0397 | 0.0389 | 0.0381 |
| 82.00 | 5.83 | 0.0499 | 0.0474 | 0.0457 | 0.0436 | 0.0424 | 0.0415 | 0.0407 | 0.0399 |
| 84.00 | 5.97 | 0.0521 | 0.0495 | 0.0478 | 0.0456 | 0.0443 | 0.0434 | 0.0426 | 0.0417 |
| 86.00 | 6.11 | 0.0544 | 0.0517 | 0.0499 | 0.0476 | 0.0463 | 0.0454 | 0.0445 | 0.0436 |
| 88.00 | 6.25 | 0.0568 | 0.0540 | 0.0521 | 0.0497 | 0.0483 | 0.0473 | 0.0464 | 0.0455 |
| 90.00 | 6.39 | 0.0592 | 0.0563 | 0.0543 | 0.0518 | 0.0503 | 0.0494 | 0.0484 | 0.0474 |
| 92.00 | 6.54 | 0.0617 | 0.0586 | 0.0565 | 0.0540 | 0.0524 | 0.0514 | 0.0504 | 0.0493 |
| 94.00 | 6.68 | 0.0642 | 0.0610 | 0.0588 | 0.0562 | 0.0546 | 0.0535 | 0.0524 | 0.0514 |
| 96.00 | 6.82 | 0.0667 | 0.0634 | 0.0612 | 0.0584 | 0.0567 | 0.0556 | 0.0545 | 0.0534 |
| 98.00 | 6.96 | 0.0693 | 0.0659 | 0.0636 | 0.0607 | 0.0589 | 0.0578 | 0.0566 | 0.0555 |
| 100.00 | 7.10 | 0.0720 | 0.0684 | 0.0660 | 0.0630 | 0.0612 | 0.0600 | 0.0588 | 0.0576 |
| 102.00 | 7.25 | 0.0747 | 0.0709 | 0.0684 | 0.0653 | 0.0635 | 0.0622 | 0.0610 | 0.0597 |
| 104.00 | 7.39 | 0.0774 | 0.0735 | 0.0709 | 0.0677 | 0.0658 | 0.0645 | 0.0632 | 0.0619 |
| 106.00 | 7.53 | 0.0802 | 0.0762 | 0.0735 | 0.0701 | 0.0681 | 0.0668 | 0.0655 | 0.0641 |
| 108.00 | 7.67 | 0.0830 | 0.0788 | 0.0761 | 0.0726 | 0.0705 | 0.0692 | 0.0678 | 0.0664 |
| 110.00 | 7.81 | 0.0859 | 0.0816 | 0.0787 | 0.0751 | 0.0730 | 0.0715 | 0.0701 | 0.0687 |
| 112.00 | 7.96 | 0.0888 | 0.0843 | 0.0814 | 0.0777 | 0.0754 | 0.0740 | 0.0725 | 0.0710 |
| 114.00 | 8.10 | 0.0917 | 0.0871 | 0.0841 | 0.0803 | 0.0780 | 0.0764 | 0.0749 | 0.0734 |
| 116.00 | 8.24 | 0.0947 | 0.0900 | 0.0868 | 0.0829 | 0.0805 | 0.0789 | 0.0773 | 0.0758 |
| 118.00 | 8.38 | 0.0978 | 0.0929 | 0.0896 | 0.0855 | 0.0831 | 0.0815 | 0.0798 | 0.0782 |
| 120.00 | 8.52 | 0.1008 | 0.0958 | 0.0924 | 0.0882 | 0.0857 | 0.0840 | 0.0824 | 0.0807 |
| 122.00 | 8.67 | 0.1040 | 0.0988 | 0.0953 | 0.0910 | 0.0884 | 0.0866 | 0.0849 | 0.0832 |
| 124.00 | 8.81 | 0.1072 | 0.1018 | 0.0982 | 0.0938 | 0.0911 | 0.0893 | 0.0875 | 0.0857 |
| 126.00 | 8.95 | 0.1104 | 0.1049 | 0.1012 | 0.0966 | 0.0938 | 0.0920 | 0.0901 | 0.0883 |
| 128.00 | 9.09 | 0.1136 | 0.1080 | 0.1042 | 0.0994 | 0.0966 | 0.0947 | 0.0928 | 0.0909 |
| 130.00 | 9.23 | 0.1169 | 0.1111 | 0.1072 | 0.1023 | 0.0994 | 0.0974 | 0.0955 | 0.0936 |
| 132.00 | 9.38 | 0.1203 | 0.1143 | 0.1103 | 0.1053 | 0.1022 | 0.1002 | 0.0982 | 0.0962 |
| 134.00 | 9.52 | 0.1237 | 0.1175 | 0.1134 | 0.1082 | 0.1051 | 0.1031 | 0.1010 | 0.0989 |
| 136.00 | 9.66 | 0.1271 | 0.1208 | 0.1165 | 0.1112 | 0.1081 | 0.1059 | 0.1038 | 0.1017 |
| 138.00 | 9.80 | 0.1306 | 0.1241 | 0.1197 | 0.1143 | 0.1110 | 0.1088 | 0.1067 | 0.1045 |
| 140.00 | 9.95 | 0.1341 | 0.1274 | 0.1229 | 0.1174 | 0.1140 | 0.1118 | 0.1095 | 0.1073 |
| 142.00 | 10.09 | 0.1377 | 0.1308 | 0.1262 | 0.1205 | 0.1170 | 0.1147 | 0.1124 | 0.1102 |

Pressure loss per foot, 3" hePEX and AquaPEX (30% Glycol)

| | | Head (Feet of Water) Per Foot of Tubing | | | | | | | |
|------|-----------------|---|-------------|--------------|--------------|--------------|--------------|--------------|--------------|
| gpm | Velocity (ft/s) | 60°F / 16°C | 80°F / 27°C | 100°F / 38°C | 120°F / 49°C | 140°F / 60°C | 160°F / 71°C | 180°F / 82°C | 200°F / 93°C |
| 21.0 | 1.49 | 0.0050 | 0.0047 | 0.0046 | 0.0044 | 0.0042 | 0.0041 | 0.0041 | 0.0040 |
| 22.0 | 1.56 | 0.0054 | 0.0051 | 0.0050 | 0.0047 | 0.0046 | 0.0045 | 0.0044 | 0.0043 |
| 23.0 | 1.63 | 0.0059 | 0.0056 | 0.0054 | 0.0051 | 0.0050 | 0.0049 | 0.0048 | 0.0047 |
| 24.0 | 1.70 | 0.0064 | 0.0060 | 0.0058 | 0.0056 | 0.0054 | 0.0053 | 0.0052 | 0.0051 |
| 25.0 | 1.78 | 0.0069 | 0.0065 | 0.0063 | 0.0060 | 0.0058 | 0.0057 | 0.0056 | 0.0055 |
| 26.0 | 1.85 | 0.0074 | 0.0070 | 0.0068 | 0.0065 | 0.0063 | 0.0062 | 0.0060 | 0.0059 |
| 27.0 | 1.92 | 0.0079 | 0.0075 | 0.0073 | 0.0069 | 0.0067 | 0.0066 | 0.0065 | 0.0063 |
| 28.0 | 1.99 | 0.0085 | 0.0080 | 0.0078 | 0.0074 | 0.0072 | 0.0071 | 0.0069 | 0.0068 |
| 29.0 | 2.06 | 0.0090 | 0.0086 | 0.0083 | 0.0079 | 0.0077 | 0.0075 | 0.0074 | 0.0072 |
| 30.0 | 2.13 | 0.0096 | 0.0091 | 0.0088 | 0.0084 | 0.0082 | 0.0080 | 0.0079 | 0.0077 |
| 31.0 | 2.20 | 0.0102 | 0.0097 | 0.0094 | 0.0089 | 0.0087 | 0.0085 | 0.0083 | 0.0082 |
| 32.0 | 2.27 | 0.0108 | 0.0103 | 0.0099 | 0.0095 | 0.0092 | 0.0090 | 0.0089 | 0.0087 |
| 33.0 | 2.34 | 0.0115 | 0.0109 | 0.0105 | 0.0100 | 0.0098 | 0.0096 | 0.0094 | 0.0092 |
| 34.0 | 2.42 | 0.0121 | 0.0115 | 0.0111 | 0.0106 | 0.0103 | 0.0101 | 0.0099 | 0.0097 |
| 35.0 | 2.49 | 0.0128 | 0.0122 | 0.0117 | 0.0112 | 0.0109 | 0.0107 | 0.0105 | 0.0102 |
| 36.0 | 2.56 | 0.0135 | 0.0128 | 0.0124 | 0.0118 | 0.0115 | 0.0112 | 0.0110 | 0.0108 |
| 37.0 | 2.63 | 0.0142 | 0.0135 | 0.0130 | 0.0124 | 0.0121 | 0.0118 | 0.0116 | 0.0113 |
| 38.0 | 2.70 | 0.0149 | 0.0142 | 0.0137 | 0.0130 | 0.0127 | 0.0124 | 0.0122 | 0.0119 |
| 39.0 | 2.77 | 0.0156 | 0.0149 | 0.0143 | 0.0137 | 0.0133 | 0.0130 | 0.0128 | 0.0125 |
| 40.0 | 2.84 | 0.0164 | 0.0156 | 0.0150 | 0.0143 | 0.0139 | 0.0137 | 0.0134 | 0.0131 |
| 41.0 | 2.91 | 0.0171 | 0.0163 | 0.0157 | 0.0150 | 0.0146 | 0.0143 | 0.0140 | 0.0137 |
| 42.0 | 2.98 | 0.0179 | 0.0170 | 0.0164 | 0.0157 | 0.0152 | 0.0149 | 0.0146 | 0.0143 |
| 43.0 | 3.05 | 0.0187 | 0.0178 | 0.0172 | 0.0164 | 0.0159 | 0.0156 | 0.0153 | 0.0150 |
| 44.0 | 3.13 | 0.0195 | 0.0186 | 0.0179 | 0.0171 | 0.0166 | 0.0163 | 0.0160 | 0.0156 |
| 45.0 | 3.20 | 0.0204 | 0.0194 | 0.0187 | 0.0178 | 0.0173 | 0.0170 | 0.0166 | 0.0163 |
| 46.0 | 3.27 | 0.0212 | 0.0202 | 0.0194 | 0.0186 | 0.0180 | 0.0177 | 0.0173 | 0.0170 |
| 47.0 | 3.34 | 0.0221 | 0.0210 | 0.0202 | 0.0193 | 0.0188 | 0.0184 | 0.0180 | 0.0177 |
| 48.0 | 3.41 | 0.0230 | 0.0218 | 0.0210 | 0.0201 | 0.0195 | 0.0191 | 0.0187 | 0.0184 |
| 49.0 | 3.48 | 0.0238 | 0.0227 | 0.0219 | 0.0209 | 0.0203 | 0.0199 | 0.0195 | 0.0191 |
| 50.0 | 3.55 | 0.0248 | 0.0235 | 0.0227 | 0.0217 | 0.0210 | 0.0206 | 0.0202 | 0.0198 |
| 52.0 | 3.69 | 0.0266 | 0.0253 | 0.0244 | 0.0233 | 0.0226 | 0.0222 | 0.0217 | 0.0213 |
| 54.0 | 3.84 | 0.0285 | 0.0271 | 0.0262 | 0.0250 | 0.0243 | 0.0238 | 0.0233 | 0.0228 |
| 56.0 | 3.98 | 0.0305 | 0.0290 | 0.0280 | 0.0267 | 0.0260 | 0.0254 | 0.0249 | 0.0244 |
| 58.0 | 4.12 | 0.0326 | 0.0309 | 0.0299 | 0.0285 | 0.0277 | 0.0271 | 0.0266 | 0.0261 |
| 60.0 | 4.26 | 0.0347 | 0.0330 | 0.0318 | 0.0304 | 0.0295 | 0.0289 | 0.0283 | 0.0277 |
| 62.0 | 4.40 | 0.0369 | 0.0350 | 0.0338 | 0.0322 | 0.0313 | 0.0307 | 0.0301 | 0.0295 |
| 64.0 | 4.55 | 0.0391 | 0.0371 | 0.0358 | 0.0342 | 0.0332 | 0.0326 | 0.0319 | 0.0313 |
| 66.0 | 4.69 | 0.0414 | 0.0393 | 0.0379 | 0.0362 | 0.0352 | 0.0345 | 0.0338 | 0.0331 |
| 68.0 | 4.83 | 0.0437 | 0.0415 | 0.0401 | 0.0383 | 0.0372 | 0.0364 | 0.0357 | 0.0350 |

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Pressure loss per foot, 3" hePEX and AquaPEX (30% Glycol)

| gpm | Velocity (ft/s) | Head (Feet of Water) Per Foot of Tubing | | | | | | | |
|-------|--------------------|---|----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| | | 60°F / 16°C | 80°F / 27°C | 100°F / 38°C | 120°F / 49°C | 140°F / 60°C | 160°F / 71°C | 180°F / 82°C | 200°F / 93°C |
| 70.0 | 4.97 | 0.0461 | 0.0438 | 0.0423 | 0.0404 | 0.0392 | 0.0384 | 0.0377 | 0.0369 |
| 72.0 | 5.11 | 0.0486 | 0.0462 | 0.0446 | 0.0425 | 0.0413 | 0.0405 | 0.0397 | 0.0389 |
| 74.0 | 5.26 | 0.0511 | 0.0486 | 0.0469 | 0.0447 | 0.0435 | 0.0426 | 0.0418 | 0.0409 |
| 76.0 | 5.40 | 0.0537 | 0.0510 | 0.0492 | 0.0470 | 0.0457 | 0.0448 | 0.0439 | 0.0430 |
| 78.0 | 5.54 | 0.0564 | 0.0535 | 0.0517 | 0.0493 | 0.0479 | 0.0470 | 0.0460 | 0.0451 |
| 80.0 | 5.68 | 0.0591 | 0.0561 | 0.0541 | 0.0517 | 0.0502 | 0.0492 | 0.0482 | 0.0472 |
| 82.0 | 5.83 | 0.0618 | 0.0587 | 0.0567 | 0.0541 | 0.0525 | 0.0515 | 0.0505 | 0.0495 |
| 84.0 | 5.97 | 0.0646 | 0.0614 | 0.0593 | 0.0566 | 0.0549 | 0.0539 | 0.0528 | 0.0517 |
| 86.0 | 6.11 | 0.0675 | 0.0641 | 0.0619 | 0.0591 | 0.0574 | 0.0563 | 0.0551 | 0.0540 |
| 88.0 | 6.25 | 0.0705 | 0.0669 | 0.0646 | 0.0616 | 0.0599 | 0.0587 | 0.0575 | 0.0564 |
| 90.0 | 6.39 | 0.0734 | 0.0698 | 0.0673 | 0.0643 | 0.0624 | 0.0612 | 0.0600 | 0.0588 |
| 92.0 | 6.54 | 0.0765 | 0.0727 | 0.0701 | 0.0669 | 0.0650 | 0.0637 | 0.0625 | 0.0612 |
| 94.0 | 6.68 | 0.0796 | 0.0756 | 0.0730 | 0.0696 | 0.0677 | 0.0663 | 0.0650 | 0.0637 |
| 96.0 | 6.82 | 0.0828 | 0.0786 | 0.0759 | 0.0724 | 0.0703 | 0.0690 | 0.0676 | 0.0662 |
| 98.0 | 6.96 | 0.0860 | 0.0817 | 0.0788 | 0.0752 | 0.0731 | 0.0716 | 0.0702 | 0.0688 |
| 100.0 | 7.10 | 0.0892 | 0.0848 | 0.0818 | 0.0781 | 0.0759 | 0.0744 | 0.0729 | 0.0714 |
| 102.0 | 7.25 | 0.0926 | 0.0879 | 0.0849 | 0.0810 | 0.0787 | 0.0771 | 0.0756 | 0.0741 |
| 104.0 | 7.39 | 0.0960 | 0.0912 | 0.0880 | 0.0840 | 0.0816 | 0.0800 | 0.0784 | 0.0768 |
| 106.0 | 7.53 | 0.0994 | 0.0944 | 0.0911 | 0.0870 | 0.0845 | 0.0828 | 0.0812 | 0.0795 |
| 108.0 | 7.67 | 0.1029 | 0.0978 | 0.0943 | 0.0900 | 0.0875 | 0.0858 | 0.0840 | 0.0823 |
| 110.0 | 7.81 | 0.1065 | 0.1011 | 0.0976 | 0.0931 | 0.0905 | 0.0887 | 0.0869 | 0.0852 |
| 112.0 | 7.96 | 0.1101 | 0.1046 | 0.1009 | 0.0963 | 0.0936 | 0.0917 | 0.0899 | 0.0881 |
| 114.0 | 8.10 | 0.1137 | 0.1080 | 0.1042 | 0.0995 | 0.0967 | 0.0948 | 0.0929 | 0.0910 |
| 116.0 | 8.24 | 0.1174 | 0.1116 | 0.1077 | 0.1028 | 0.0998 | 0.0979 | 0.0959 | 0.0940 |
| 118.0 | 8.38 | 0.1212 | 0.1152 | 0.1111 | 0.1061 | 0.1030 | 0.1010 | 0.0990 | 0.0970 |
| 120.0 | 8.52 | 0.1250 | 0.1188 | 0.1146 | 0.1094 | 0.1063 | 0.1042 | 0.1021 | 0.1000 |
| 122.0 | 8.67 | 0.1289 | 0.1225 | 0.1182 | 0.1128 | 0.1096 | 0.1074 | 0.1053 | 0.1031 |
| 124.0 | 8.81 | 0.1329 | 0.1262 | 0.1218 | 0.1163 | 0.1129 | 0.1107 | 0.1085 | 0.1063 |
| 126.0 | 8.95 | 0.1369 | 0.1300 | 0.1255 | 0.1198 | 0.1163 | 0.1140 | 0.1118 | 0.1095 |
| 128.0 | 9.09 | 0.1409 | 0.1339 | 0.1292 | 0.1233 | 0.1198 | 0.1174 | 0.1151 | 0.1127 |
| 130.0 | 9.23 | 0.1450 | 0.1378 | 0.1329 | 0.1269 | 0.1233 | 0.1208 | 0.1184 | 0.1160 |
| 132.0 | 9.38 | 0.1492 | 0.1417 | 0.1367 | 0.1305 | 0.1268 | 0.1243 | 0.1218 | 0.1193 |
| 134.0 | 9.52 | 0.1534 | 0.1457 | 0.1406 | 0.1342 | 0.1304 | 0.1278 | 0.1252 | 0.1227 |
| 136.0 | 9.66 | 0.1576 | 0.1497 | 0.1445 | 0.1379 | 0.1340 | 0.1314 | 0.1287 | 0.1261 |
| 138.0 | 9.80 | 0.1619 | 0.1538 | 0.1484 | 0.1417 | 0.1377 | 0.1350 | 0.1323 | 0.1296 |
| 140.0 | 9.95 | 0.1663 | 0.1580 | 0.1525 | 0.1455 | 0.1414 | 0.1386 | 0.1358 | 0.1331 |
| 142.0 | 10.09 | 0.1707 | 0.1622 | 0.1565 | 0.1494 | 0.1451 | 0.1423 | 0.1394 | 0.1366 |

Pressure loss per foot, 3" hePEX and AquaPEX (40% Glycol)

| | | Head (Feet of Water) Per Foot of Tubing | | | | | | | |
|------|-----------------|---|-------------|--------------|--------------|--------------|--------------|--------------|--------------|
| gpm | Velocity (ft/s) | 60°F / 16°C | 80°F / 27°C | 100°F / 38°C | 120°F / 49°C | 140°F / 60°C | 160°F / 71°C | 180°F / 82°C | 200°F / 93°C |
| 21.0 | 1.49 | 0.0053 | 0.0051 | 0.0049 | 0.0047 | 0.0045 | 0.0044 | 0.0044 | 0.0043 |
| 22.0 | 1.56 | 0.0058 | 0.0055 | 0.0053 | 0.0051 | 0.0049 | 0.0048 | 0.0047 | 0.0047 |
| 23.0 | 1.63 | 0.0063 | 0.0060 | 0.0058 | 0.0055 | 0.0054 | 0.0053 | 0.0052 | 0.0051 |
| 24.0 | 1.70 | 0.0068 | 0.0065 | 0.0063 | 0.0060 | 0.0058 | 0.0057 | 0.0056 | 0.0055 |
| 25.0 | 1.78 | 0.0074 | 0.0070 | 0.0068 | 0.0064 | 0.0063 | 0.0061 | 0.0060 | 0.0059 |
| 26.0 | 1.85 | 0.0079 | 0.0075 | 0.0073 | 0.0069 | 0.0067 | 0.0066 | 0.0065 | 0.0063 |
| 27.0 | 1.92 | 0.0085 | 0.0081 | 0.0078 | 0.0074 | 0.0072 | 0.0071 | 0.0069 | 0.0068 |
| 28.0 | 1.99 | 0.0091 | 0.0086 | 0.0083 | 0.0079 | 0.0077 | 0.0076 | 0.0074 | 0.0073 |
| 29.0 | 2.06 | 0.0097 | 0.0092 | 0.0089 | 0.0085 | 0.0082 | 0.0081 | 0.0079 | 0.0078 |
| 30.0 | 2.13 | 0.0103 | 0.0098 | 0.0095 | 0.0090 | 0.0088 | 0.0086 | 0.0084 | 0.0083 |
| 31.0 | 2.20 | 0.0110 | 0.0104 | 0.0101 | 0.0096 | 0.0093 | 0.0091 | 0.0090 | 0.0088 |
| 32.0 | 2.27 | 0.0116 | 0.0110 | 0.0107 | 0.0102 | 0.0099 | 0.0097 | 0.0095 | 0.0093 |
| 33.0 | 2.34 | 0.0123 | 0.0117 | 0.0113 | 0.0108 | 0.0105 | 0.0103 | 0.0101 | 0.0098 |
| 34.0 | 2.42 | 0.0130 | 0.0124 | 0.0119 | 0.0114 | 0.0111 | 0.0108 | 0.0106 | 0.0104 |
| 35.0 | 2.49 | 0.0137 | 0.0130 | 0.0126 | 0.0120 | 0.0117 | 0.0114 | 0.0112 | 0.0110 |
| 36.0 | 2.56 | 0.0145 | 0.0137 | 0.0133 | 0.0127 | 0.0123 | 0.0121 | 0.0118 | 0.0116 |
| 37.0 | 2.63 | 0.0152 | 0.0145 | 0.0139 | 0.0133 | 0.0129 | 0.0127 | 0.0124 | 0.0122 |
| 38.0 | 2.70 | 0.0160 | 0.0152 | 0.0146 | 0.0140 | 0.0136 | 0.0133 | 0.0131 | 0.0128 |
| 39.0 | 2.77 | 0.0168 | 0.0159 | 0.0154 | 0.0147 | 0.0143 | 0.0140 | 0.0137 | 0.0134 |
| 40.0 | 2.84 | 0.0176 | 0.0167 | 0.0161 | 0.0154 | 0.0149 | 0.0146 | 0.0144 | 0.0141 |
| 41.0 | 2.91 | 0.0184 | 0.0175 | 0.0169 | 0.0161 | 0.0156 | 0.0153 | 0.0150 | 0.0147 |
| 42.0 | 2.98 | 0.0192 | 0.0183 | 0.0176 | 0.0168 | 0.0163 | 0.0160 | 0.0157 | 0.0154 |
| 43.0 | 3.05 | 0.0201 | 0.0191 | 0.0184 | 0.0176 | 0.0171 | 0.0167 | 0.0164 | 0.0161 |
| 44.0 | 3.13 | 0.0210 | 0.0199 | 0.0192 | 0.0183 | 0.0178 | 0.0175 | 0.0171 | 0.0168 |
| 45.0 | 3.20 | 0.0219 | 0.0208 | 0.0200 | 0.0191 | 0.0186 | 0.0182 | 0.0178 | 0.0175 |
| 46.0 | 3.27 | 0.0228 | 0.0216 | 0.0209 | 0.0199 | 0.0193 | 0.0190 | 0.0186 | 0.0182 |
| 47.0 | 3.34 | 0.0237 | 0.0225 | 0.0217 | 0.0207 | 0.0201 | 0.0197 | 0.0193 | 0.0189 |
| 48.0 | 3.41 | 0.0246 | 0.0234 | 0.0226 | 0.0215 | 0.0209 | 0.0205 | 0.0201 | 0.0197 |
| 49.0 | 3.48 | 0.0256 | 0.0243 | 0.0234 | 0.0224 | 0.0217 | 0.0213 | 0.0209 | 0.0205 |
| 50.0 | 3.55 | 0.0266 | 0.0252 | 0.0243 | 0.0232 | 0.0226 | 0.0221 | 0.0217 | 0.0212 |
| 52.0 | 3.69 | 0.0286 | 0.0271 | 0.0262 | 0.0250 | 0.0243 | 0.0238 | 0.0233 | 0.0228 |
| 54.0 | 3.84 | 0.0306 | 0.0291 | 0.0281 | 0.0268 | 0.0260 | 0.0255 | 0.0250 | 0.0245 |
| 56.0 | 3.98 | 0.0327 | 0.0311 | 0.0300 | 0.0287 | 0.0278 | 0.0273 | 0.0267 | 0.0262 |
| 58.0 | 4.12 | 0.0349 | 0.0332 | 0.0320 | 0.0306 | 0.0297 | 0.0291 | 0.0285 | 0.0280 |
| 60.0 | 4.26 | 0.0372 | 0.0353 | 0.0341 | 0.0326 | 0.0316 | 0.0310 | 0.0304 | 0.0298 |
| 62.0 | 4.40 | 0.0395 | 0.0376 | 0.0362 | 0.0346 | 0.0336 | 0.0329 | 0.0323 | 0.0316 |
| 64.0 | 4.55 | 0.0419 | 0.0398 | 0.0384 | 0.0367 | 0.0356 | 0.0349 | 0.0342 | 0.0335 |
| 66.0 | 4.69 | 0.0444 | 0.0422 | 0.0407 | 0.0388 | 0.0377 | 0.0370 | 0.0362 | 0.0355 |
| 68.0 | 4.83 | 0.0469 | 0.0446 | 0.0430 | 0.0410 | 0.0399 | 0.0391 | 0.0383 | 0.0375 |

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Continued from previous page

Pressure loss per foot, 3" hePEX and AquaPEX (40% Glycol)

| | Velocity | Head (Feet of Water) Per Foot of Tubing | | | | | | | |
|-------|----------|---|--------|---------|---------|---------|---------|---------|---------|
| | | 60°F / | 80°F / | 100°F / | 120°F / | 140°F / | 160°F / | 180°F / | 200°F / |
| 70.0 | 4.97 | 0.0495 | 0.0470 | 0.0454 | 0.0433 | 0.0421 | 0.0412 | 0.0404 | 0.0396 |
| 72.0 | 5.11 | 0.0521 | 0.0495 | 0.0478 | 0.0456 | 0.0443 | 0.0434 | 0.0426 | 0.0417 |
| 74.0 | 5.26 | 0.0548 | 0.0521 | 0.0503 | 0.0480 | 0.0466 | 0.0457 | 0.0448 | 0.0439 |
| 76.0 | 5.40 | 0.0576 | 0.0547 | 0.0528 | 0.0504 | 0.0490 | 0.0480 | 0.0471 | 0.0461 |
| 78.0 | 5.54 | 0.0604 | 0.0574 | 0.0554 | 0.0529 | 0.0514 | 0.0504 | 0.0494 | 0.0484 |
| 80.0 | 5.68 | 0.0633 | 0.0602 | 0.0581 | 0.0554 | 0.0538 | 0.0528 | 0.0517 | 0.0507 |
| 82.0 | 5.83 | 0.0663 | 0.0630 | 0.0608 | 0.0580 | 0.0564 | 0.0553 | 0.0542 | 0.0530 |
| 84.0 | 5.97 | 0.0693 | 0.0659 | 0.0636 | 0.0607 | 0.0589 | 0.0578 | 0.0566 | 0.0555 |
| 86.0 | 6.11 | 0.0724 | 0.0688 | 0.0664 | 0.0634 | 0.0616 | 0.0603 | 0.0591 | 0.0579 |
| 88.0 | 6.25 | 0.0756 | 0.0718 | 0.0693 | 0.0661 | 0.0642 | 0.0630 | 0.0617 | 0.0605 |
| 90.0 | 6.39 | 0.0788 | 0.0748 | 0.0722 | 0.0689 | 0.0670 | 0.0656 | 0.0643 | 0.0630 |
| 92.0 | 6.54 | 0.0820 | 0.0779 | 0.0752 | 0.0718 | 0.0697 | 0.0684 | 0.0670 | 0.0656 |
| 94.0 | 6.68 | 0.0854 | 0.0811 | 0.0783 | 0.0747 | 0.0726 | 0.0711 | 0.0697 | 0.0683 |
| 96.0 | 6.82 | 0.0888 | 0.0843 | 0.0814 | 0.0777 | 0.0754 | 0.0740 | 0.0725 | 0.0710 |
| 98.0 | 6.96 | 0.0922 | 0.0876 | 0.0845 | 0.0807 | 0.0784 | 0.0768 | 0.0753 | 0.0738 |
| 100.0 | 7.10 | 0.0957 | 0.0909 | 0.0877 | 0.0838 | 0.0814 | 0.0798 | 0.0782 | 0.0766 |
| 102.0 | 7.25 | 0.0993 | 0.0943 | 0.0910 | 0.0869 | 0.0844 | 0.0827 | 0.0811 | 0.0794 |
| 104.0 | 7.39 | 0.1029 | 0.0978 | 0.0944 | 0.0901 | 0.0875 | 0.0858 | 0.0841 | 0.0823 |
| 106.0 | 7.53 | 0.1066 | 0.1013 | 0.0977 | 0.0933 | 0.0906 | 0.0888 | 0.0871 | 0.0853 |
| 108.0 | 7.67 | 0.1104 | 0.1049 | 0.1012 | 0.0966 | 0.0938 | 0.0920 | 0.0901 | 0.0883 |
| 110.0 | 7.81 | 0.1142 | 0.1085 | 0.1047 | 0.0999 | 0.0971 | 0.0952 | 0.0932 | 0.0913 |
| 112.0 | 7.96 | 0.1181 | 0.1121 | 0.1082 | 0.1033 | 0.1003 | 0.0984 | 0.0964 | 0.0944 |
| 114.0 | 8.10 | 0.1220 | 0.1159 | 0.1118 | 0.1067 | 0.1037 | 0.1017 | 0.0996 | 0.0976 |
| 116.0 | 8.24 | 0.1260 | 0.1197 | 0.1155 | 0.1102 | 0.1071 | 0.1050 | 0.1029 | 0.1008 |
| 118.0 | 8.38 | 0.1300 | 0.1235 | 0.1192 | 0.1138 | 0.1105 | 0.1083 | 0.1062 | 0.1040 |
| 120.0 | 8.52 | 0.1341 | 0.1274 | 0.1229 | 0.1174 | 0.1140 | 0.1118 | 0.1095 | 0.1073 |
| 122.0 | 8.67 | 0.1383 | 0.1314 | 0.1268 | 0.1210 | 0.1175 | 0.1152 | 0.1129 | 0.1106 |
| 124.0 | 8.81 | 0.1425 | 0.1354 | 0.1306 | 0.1247 | 0.1211 | 0.1188 | 0.1164 | 0.1140 |
| 126.0 | 8.95 | 0.1468 | 0.1395 | 0.1346 | 0.1284 | 0.1248 | 0.1223 | 0.1199 | 0.1174 |
| 128.0 | 9.09 | 0.1511 | 0.1436 | 0.1385 | 0.1322 | 0.1285 | 0.1259 | 0.1234 | 0.1209 |
| 130.0 | 9.23 | 0.1555 | 0.1478 | 0.1426 | 0.1361 | 0.1322 | 0.1296 | 0.1270 | 0.1244 |
| 132.0 | 9.38 | 0.1600 | 0.1520 | 0.1467 | 0.1400 | 0.1360 | 0.1333 | 0.1307 | 0.1280 |
| 134.0 | 9.52 | 0.1645 | 0.1563 | 0.1508 | 0.1439 | 0.1398 | 0.1371 | 0.1343 | 0.1316 |
| 136.0 | 9.66 | 0.1691 | 0.1606 | 0.1550 | 0.1479 | 0.1437 | 0.1409 | 0.1381 | 0.1353 |
| 138.0 | 9.80 | 0.1737 | 0.1650 | 0.1592 | 0.1520 | 0.1476 | 0.1447 | 0.1419 | 0.1390 |
| 140.0 | 9.95 | 0.1784 | 0.1695 | 0.1635 | 0.1561 | 0.1516 | 0.1487 | 0.1457 | 0.1427 |
| 142.0 | 10.09 | 0.1831 | 0.1740 | 0.1679 | 0.1602 | 0.1557 | 0.1526 | 0.1496 | 0.1465 |

Pressure loss per foot, 3" hePEX and AquaPEX (50% Glycol)

| | | Head (Feet of Water) Per Foot of Tubing | | | | | | | |
|------|-----------------|---|-------------|--------------|--------------|--------------|--------------|--------------|--------------|
| gpm | Velocity (ft/s) | 60°F / 16°C | 80°F / 27°C | 100°F / 38°C | 120°F / 49°C | 140°F / 60°C | 160°F / 71°C | 180°F / 82°C | 200°F / 93°C |
| 21.0 | 1.49 | 0.0056 | 0.0053 | 0.0051 | 0.0049 | 0.0048 | 0.0047 | 0.0046 | 0.0045 |
| 22.0 | 1.56 | 0.0061 | 0.0058 | 0.0056 | 0.0054 | 0.0052 | 0.0051 | 0.0050 | 0.0049 |
| 23.0 | 1.63 | 0.0066 | 0.0063 | 0.0061 | 0.0058 | 0.0056 | 0.0055 | 0.0054 | 0.0053 |
| 24.0 | 1.70 | 0.0072 | 0.0068 | 0.0066 | 0.0063 | 0.0061 | 0.0060 | 0.0059 | 0.0058 |
| 25.0 | 1.78 | 0.0078 | 0.0074 | 0.0071 | 0.0068 | 0.0066 | 0.0065 | 0.0063 | 0.0062 |
| 26.0 | 1.85 | 0.0083 | 0.0079 | 0.0076 | 0.0073 | 0.0071 | 0.0069 | 0.0068 | 0.0067 |
| 27.0 | 1.92 | 0.0089 | 0.0085 | 0.0082 | 0.0078 | 0.0076 | 0.0074 | 0.0073 | 0.0072 |
| 28.0 | 1.99 | 0.0096 | 0.0091 | 0.0088 | 0.0084 | 0.0081 | 0.0080 | 0.0078 | 0.0076 |
| 29.0 | 2.06 | 0.0102 | 0.0097 | 0.0094 | 0.0089 | 0.0087 | 0.0085 | 0.0083 | 0.0082 |
| 30.0 | 2.13 | 0.0109 | 0.0103 | 0.0100 | 0.0095 | 0.0092 | 0.0091 | 0.0089 | 0.0087 |
| 31.0 | 2.20 | 0.0115 | 0.0110 | 0.0106 | 0.0101 | 0.0098 | 0.0096 | 0.0094 | 0.0092 |
| 32.0 | 2.27 | 0.0122 | 0.0116 | 0.0112 | 0.0107 | 0.0104 | 0.0102 | 0.0100 | 0.0098 |
| 33.0 | 2.34 | 0.0130 | 0.0123 | 0.0119 | 0.0113 | 0.0110 | 0.0108 | 0.0106 | 0.0104 |
| 34.0 | 2.42 | 0.0137 | 0.0130 | 0.0126 | 0.0120 | 0.0116 | 0.0114 | 0.0112 | 0.0110 |
| 35.0 | 2.49 | 0.0144 | 0.0137 | 0.0132 | 0.0126 | 0.0123 | 0.0120 | 0.0118 | 0.0116 |
| 36.0 | 2.56 | 0.0152 | 0.0145 | 0.0140 | 0.0133 | 0.0129 | 0.0127 | 0.0124 | 0.0122 |
| 37.0 | 2.63 | 0.0160 | 0.0152 | 0.0147 | 0.0140 | 0.0136 | 0.0133 | 0.0131 | 0.0128 |
| 38.0 | 2.70 | 0.0168 | 0.0160 | 0.0154 | 0.0147 | 0.0143 | 0.0140 | 0.0137 | 0.0135 |
| 39.0 | 2.77 | 0.0177 | 0.0168 | 0.0162 | 0.0154 | 0.0150 | 0.0147 | 0.0144 | 0.0141 |
| 40.0 | 2.84 | 0.0185 | 0.0176 | 0.0170 | 0.0162 | 0.0157 | 0.0154 | 0.0151 | 0.0148 |
| 41.0 | 2.91 | 0.0194 | 0.0184 | 0.0177 | 0.0169 | 0.0165 | 0.0161 | 0.0158 | 0.0155 |
| 42.0 | 2.98 | 0.0202 | 0.0192 | 0.0186 | 0.0177 | 0.0172 | 0.0169 | 0.0165 | 0.0162 |
| 43.0 | 3.05 | 0.0211 | 0.0201 | 0.0194 | 0.0185 | 0.0180 | 0.0176 | 0.0173 | 0.0169 |
| 44.0 | 3.13 | 0.0221 | 0.0210 | 0.0202 | 0.0193 | 0.0188 | 0.0184 | 0.0180 | 0.0177 |
| 45.0 | 3.20 | 0.0230 | 0.0219 | 0.0211 | 0.0201 | 0.0196 | 0.0192 | 0.0188 | 0.0184 |
| 46.0 | 3.27 | 0.0240 | 0.0228 | 0.0220 | 0.0210 | 0.0204 | 0.0200 | 0.0196 | 0.0192 |
| 47.0 | 3.34 | 0.0249 | 0.0237 | 0.0229 | 0.0218 | 0.0212 | 0.0208 | 0.0204 | 0.0199 |
| 48.0 | 3.41 | 0.0259 | 0.0246 | 0.0238 | 0.0227 | 0.0220 | 0.0216 | 0.0212 | 0.0207 |
| 49.0 | 3.48 | 0.0269 | 0.0256 | 0.0247 | 0.0236 | 0.0229 | 0.0224 | 0.0220 | 0.0215 |
| 50.0 | 3.55 | 0.0280 | 0.0266 | 0.0256 | 0.0245 | 0.0238 | 0.0233 | 0.0228 | 0.0224 |
| 52.0 | 3.69 | 0.0301 | 0.0286 | 0.0275 | 0.0263 | 0.0255 | 0.0250 | 0.0245 | 0.0240 |
| 54.0 | 3.84 | 0.0322 | 0.0306 | 0.0295 | 0.0282 | 0.0274 | 0.0269 | 0.0263 | 0.0258 |
| 56.0 | 3.98 | 0.0345 | 0.0327 | 0.0316 | 0.0302 | 0.0293 | 0.0287 | 0.0282 | 0.0276 |
| 58.0 | 4.12 | 0.0368 | 0.0349 | 0.0337 | 0.0322 | 0.0313 | 0.0307 | 0.0300 | 0.0294 |
| 60.0 | 4.26 | 0.0392 | 0.0372 | 0.0359 | 0.0343 | 0.0333 | 0.0326 | 0.0320 | 0.0313 |
| 62.0 | 4.40 | 0.0416 | 0.0395 | 0.0381 | 0.0364 | 0.0354 | 0.0347 | 0.0340 | 0.0333 |
| 64.0 | 4.55 | 0.0441 | 0.0419 | 0.0405 | 0.0386 | 0.0375 | 0.0368 | 0.0360 | 0.0353 |
| 66.0 | 4.69 | 0.0467 | 0.0444 | 0.0428 | 0.0409 | 0.0397 | 0.0389 | 0.0382 | 0.0374 |
| 68.0 | 4.83 | 0.0494 | 0.0469 | 0.0453 | 0.0432 | 0.0420 | 0.0411 | 0.0403 | 0.0395 |

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Pressure loss per foot, 3" hePEX and AquaPEX (50% Glycol)

| | | Head (Feet of Water) Per Foot of Tubing | | | | | | | |
|-------|-----------------|---|-------------|--------------|--------------|--------------|--------------|--------------|--------------|
| gpm | Velocity (ft/s) | 60°F / 16°C | 80°F / 27°C | 100°F / 38°C | 120°F / 49°C | 140°F / 60°C | 160°F / 71°C | 180°F / 82°C | 200°F / 93°C |
| 70.0 | 4.97 | 0.0521 | 0.0495 | 0.0477 | 0.0456 | 0.0443 | 0.0434 | 0.0425 | 0.0417 |
| 72.0 | 5.11 | 0.0549 | 0.0521 | 0.0503 | 0.0480 | 0.0466 | 0.0457 | 0.0448 | 0.0439 |
| 74.0 | 5.26 | 0.0577 | 0.0548 | 0.0529 | 0.0505 | 0.0491 | 0.0481 | 0.0471 | 0.0462 |
| 76.0 | 5.40 | 0.0606 | 0.0576 | 0.0556 | 0.0531 | 0.0515 | 0.0505 | 0.0495 | 0.0485 |
| 78.0 | 5.54 | 0.0636 | 0.0604 | 0.0583 | 0.0557 | 0.0541 | 0.0530 | 0.0520 | 0.0509 |
| 80.0 | 5.68 | 0.0667 | 0.0633 | 0.0611 | 0.0583 | 0.0567 | 0.0556 | 0.0545 | 0.0533 |
| 82.0 | 5.83 | 0.0698 | 0.0663 | 0.0640 | 0.0611 | 0.0593 | 0.0582 | 0.0570 | 0.0558 |
| 84.0 | 5.97 | 0.0730 | 0.0693 | 0.0669 | 0.0639 | 0.0620 | 0.0608 | 0.0596 | 0.0584 |
| 86.0 | 6.11 | 0.0762 | 0.0724 | 0.0699 | 0.0667 | 0.0648 | 0.0635 | 0.0623 | 0.0610 |
| 88.0 | 6.25 | 0.0795 | 0.0756 | 0.0729 | 0.0696 | 0.0676 | 0.0663 | 0.0650 | 0.0636 |
| 90.0 | 6.39 | 0.0829 | 0.0788 | 0.0760 | 0.0726 | 0.0705 | 0.0691 | 0.0677 | 0.0663 |
| 92.0 | 6.54 | 0.0864 | 0.0820 | 0.0792 | 0.0756 | 0.0734 | 0.0720 | 0.0705 | 0.0691 |
| 94.0 | 6.68 | 0.0899 | 0.0854 | 0.0824 | 0.0786 | 0.0764 | 0.0749 | 0.0734 | 0.0719 |
| 96.0 | 6.82 | 0.0934 | 0.0888 | 0.0856 | 0.0818 | 0.0794 | 0.0779 | 0.0763 | 0.0747 |
| 98.0 | 6.96 | 0.0971 | 0.0922 | 0.0890 | 0.0849 | 0.0825 | 0.0809 | 0.0793 | 0.0777 |
| 100.0 | 7.10 | 0.1008 | 0.0957 | 0.0924 | 0.0882 | 0.0856 | 0.0840 | 0.0823 | 0.0806 |
| 102.0 | 7.25 | 0.1045 | 0.0993 | 0.0958 | 0.0915 | 0.0888 | 0.0871 | 0.0854 | 0.0836 |
| 104.0 | 7.39 | 0.1083 | 0.1029 | 0.0993 | 0.0948 | 0.0921 | 0.0903 | 0.0885 | 0.0867 |
| 106.0 | 7.53 | 0.1122 | 0.1066 | 0.1029 | 0.0982 | 0.0954 | 0.0935 | 0.0917 | 0.0898 |
| 108.0 | 7.67 | 0.1162 | 0.1104 | 0.1065 | 0.1017 | 0.0988 | 0.0968 | 0.0949 | 0.0929 |
| 110.0 | 7.81 | 0.1202 | 0.1142 | 0.1102 | 0.1052 | 0.1022 | 0.1002 | 0.0982 | 0.0962 |
| 112.0 | 7.96 | 0.1243 | 0.1181 | 0.1139 | 0.1087 | 0.1056 | 0.1036 | 0.1015 | 0.0994 |
| 114.0 | 8.10 | 0.1284 | 0.1220 | 0.1177 | 0.1124 | 0.1091 | 0.1070 | 0.1049 | 0.1027 |
| 116.0 | 8.24 | 0.1326 | 0.1260 | 0.1215 | 0.1160 | 0.1127 | 0.1105 | 0.1083 | 0.1061 |
| 118.0 | 8.38 | 0.1369 | 0.1300 | 0.1255 | 0.1198 | 0.1163 | 0.1141 | 0.1118 | 0.1095 |
| 120.0 | 8.52 | 0.1412 | 0.1341 | 0.1294 | 0.1235 | 0.1200 | 0.1177 | 0.1153 | 0.1129 |
| 122.0 | 8.67 | 0.1456 | 0.1383 | 0.1334 | 0.1274 | 0.1237 | 0.1213 | 0.1189 | 0.1165 |
| 124.0 | 8.81 | 0.1500 | 0.1425 | 0.1375 | 0.1313 | 0.1275 | 0.1250 | 0.1225 | 0.1200 |
| 126.0 | 8.95 | 0.1545 | 0.1468 | 0.1416 | 0.1352 | 0.1313 | 0.1288 | 0.1262 | 0.1236 |
| 128.0 | 9.09 | 0.1591 | 0.1511 | 0.1458 | 0.1392 | 0.1352 | 0.1326 | 0.1299 | 0.1273 |
| 130.0 | 9.23 | 0.1637 | 0.1555 | 0.1501 | 0.1433 | 0.1392 | 0.1364 | 0.1337 | 0.1310 |
| 132.0 | 9.38 | 0.1684 | 0.1600 | 0.1544 | 0.1474 | 0.1431 | 0.1403 | 0.1375 | 0.1347 |
| 134.0 | 9.52 | 0.1732 | 0.1645 | 0.1587 | 0.1515 | 0.1472 | 0.1443 | 0.1414 | 0.1385 |
| 136.0 | 9.66 | 0.1780 | 0.1691 | 0.1631 | 0.1557 | 0.1513 | 0.1483 | 0.1453 | 0.1424 |
| 138.0 | 9.80 | 0.1828 | 0.1737 | 0.1676 | 0.1600 | 0.1554 | 0.1524 | 0.1493 | 0.1463 |
| 140.0 | 9.95 | 0.1878 | 0.1784 | 0.1721 | 0.1643 | 0.1596 | 0.1565 | 0.1533 | 0.1502 |
| 142.0 | 10.09 | 0.1928 | 0.1831 | 0.1767 | 0.1687 | 0.1639 | 0.1606 | 0.1574 | 0.1542 |

Pressure loss per foot, 3½" hePEX and AquaPEX (100 % Water)

| Head (Feet of Water) Per Foot of Tubing | | | | | | | | | |
|---|-----------------|-------------|-------------|--------------|--------------|--------------|--------------|--------------|--------------|
| gpm | Velocity (ft/s) | 60°F / 16°C | 80°F / 27°C | 100°F / 38°C | 120°F / 49°C | 140°F / 60°C | 160°F / 71°C | 180°F / 82°C | 200°F / 93°C |
| 30.00 | 1.58 | 0.0038 | 0.0036 | 0.0034 | 0.0033 | 0.0032 | 0.0031 | 0.0031 | 0.0030 |
| 31.00 | 1.63 | 0.0040 | 0.0038 | 0.0037 | 0.0035 | 0.0034 | 0.0033 | 0.0033 | 0.0032 |
| 32.00 | 1.69 | 0.0042 | 0.0040 | 0.0039 | 0.0037 | 0.0036 | 0.0035 | 0.0035 | 0.0034 |
| 33.00 | 1.74 | 0.0045 | 0.0043 | 0.0041 | 0.0039 | 0.0038 | 0.0037 | 0.0037 | 0.0036 |
| 34.00 | 1.79 | 0.0047 | 0.0045 | 0.0043 | 0.0041 | 0.0040 | 0.0039 | 0.0039 | 0.0038 |
| 35.00 | 1.84 | 0.0050 | 0.0047 | 0.0046 | 0.0044 | 0.0042 | 0.0042 | 0.0041 | 0.0040 |
| 36.00 | 1.90 | 0.0053 | 0.0050 | 0.0048 | 0.0046 | 0.0045 | 0.0044 | 0.0043 | 0.0042 |
| 37.00 | 1.95 | 0.0055 | 0.0053 | 0.0051 | 0.0048 | 0.0047 | 0.0046 | 0.0045 | 0.0044 |
| 38.00 | 2.00 | 0.0058 | 0.0055 | 0.0053 | 0.0051 | 0.0049 | 0.0048 | 0.0047 | 0.0047 |
| 39.00 | 2.06 | 0.0061 | 0.0058 | 0.0056 | 0.0053 | 0.0052 | 0.0051 | 0.0050 | 0.0049 |
| 40.00 | 2.11 | 0.0064 | 0.0061 | 0.0059 | 0.0056 | 0.0054 | 0.0053 | 0.0052 | 0.0051 |
| 41.00 | 2.16 | 0.0067 | 0.0064 | 0.0061 | 0.0059 | 0.0057 | 0.0056 | 0.0055 | 0.0054 |
| 42.00 | 2.21 | 0.0070 | 0.0066 | 0.0064 | 0.0061 | 0.0059 | 0.0058 | 0.0057 | 0.0056 |
| 43.00 | 2.27 | 0.0073 | 0.0069 | 0.0067 | 0.0064 | 0.0062 | 0.0061 | 0.0060 | 0.0058 |
| 44.00 | 2.32 | 0.0076 | 0.0072 | 0.0070 | 0.0067 | 0.0065 | 0.0064 | 0.0062 | 0.0061 |
| 45.00 | 2.37 | 0.0079 | 0.0076 | 0.0073 | 0.0070 | 0.0068 | 0.0066 | 0.0065 | 0.0064 |
| 46.00 | 2.42 | 0.0083 | 0.0079 | 0.0076 | 0.0072 | 0.0070 | 0.0069 | 0.0068 | 0.0066 |
| 47.00 | 2.48 | 0.0086 | 0.0082 | 0.0079 | 0.0075 | 0.0073 | 0.0072 | 0.0070 | 0.0069 |
| 48.00 | 2.53 | 0.0090 | 0.0085 | 0.0082 | 0.0078 | 0.0076 | 0.0075 | 0.0073 | 0.0072 |
| 49.00 | 2.58 | 0.0093 | 0.0088 | 0.0085 | 0.0081 | 0.0079 | 0.0078 | 0.0076 | 0.0074 |
| 50.00 | 2.64 | 0.0097 | 0.0092 | 0.0089 | 0.0085 | 0.0082 | 0.0080 | 0.0079 | 0.0077 |
| 52.00 | 2.74 | 0.0104 | 0.0099 | 0.0095 | 0.0091 | 0.0088 | 0.0087 | 0.0085 | 0.0083 |
| 54.00 | 2.85 | 0.0111 | 0.0106 | 0.0102 | 0.0097 | 0.0095 | 0.0093 | 0.0091 | 0.0089 |
| 56.00 | 2.95 | 0.0119 | 0.0113 | 0.0109 | 0.0104 | 0.0101 | 0.0099 | 0.0097 | 0.0095 |
| 58.00 | 3.06 | 0.0127 | 0.0121 | 0.0117 | 0.0111 | 0.0108 | 0.0106 | 0.0104 | 0.0102 |
| 60.00 | 3.16 | 0.0135 | 0.0129 | 0.0124 | 0.0118 | 0.0115 | 0.0113 | 0.0111 | 0.0108 |
| 62.00 | 3.27 | 0.0144 | 0.0137 | 0.0132 | 0.0126 | 0.0122 | 0.0120 | 0.0117 | 0.0115 |
| 64.00 | 3.37 | 0.0152 | 0.0145 | 0.0140 | 0.0133 | 0.0130 | 0.0127 | 0.0125 | 0.0122 |
| 66.00 | 3.48 | 0.0161 | 0.0153 | 0.0148 | 0.0141 | 0.0137 | 0.0135 | 0.0132 | 0.0129 |
| 68.00 | 3.58 | 0.0171 | 0.0162 | 0.0156 | 0.0149 | 0.0145 | 0.0142 | 0.0139 | 0.0136 |
| 70.00 | 3.69 | 0.0180 | 0.0171 | 0.0165 | 0.0157 | 0.0153 | 0.0150 | 0.0147 | 0.0144 |
| 72.00 | 3.79 | 0.0190 | 0.0180 | 0.0174 | 0.0166 | 0.0161 | 0.0158 | 0.0155 | 0.0152 |
| 74.00 | 3.90 | 0.0199 | 0.0189 | 0.0183 | 0.0175 | 0.0170 | 0.0166 | 0.0163 | 0.0160 |
| 76.00 | 4.01 | 0.0210 | 0.0199 | 0.0192 | 0.0183 | 0.0178 | 0.0175 | 0.0171 | 0.0168 |
| 78.00 | 4.11 | 0.0220 | 0.0209 | 0.0202 | 0.0192 | 0.0187 | 0.0183 | 0.0180 | 0.0176 |
| 80.00 | 4.22 | 0.0230 | 0.0219 | 0.0211 | 0.0202 | 0.0196 | 0.0192 | 0.0188 | 0.0184 |
| 82.00 | 4.32 | 0.0241 | 0.0229 | 0.0221 | 0.0211 | 0.0205 | 0.0201 | 0.0197 | 0.0193 |
| 84.00 | 4.43 | 0.0252 | 0.0240 | 0.0231 | 0.0221 | 0.0214 | 0.0210 | 0.0206 | 0.0202 |
| 86.00 | 4.53 | 0.0263 | 0.0250 | 0.0241 | 0.0230 | 0.0224 | 0.0219 | 0.0215 | 0.0211 |
| 88.00 | 4.64 | 0.0275 | 0.0261 | 0.0252 | 0.0240 | 0.0234 | 0.0229 | 0.0224 | 0.0220 |

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Continued from previous page

Pressure loss per foot, 3½" hePEX and AquaPEX (100 % Water)

| | | Head (Feet of Water) Per Foot of Tubing | | | | | | | |
|--------|-----------------|---|-------------|--------------|--------------|--------------|--------------|--------------|--------------|
| gpm | Velocity (ft/s) | 60°F / 16°C | 80°F / 27°C | 100°F / 38°C | 120°F / 49°C | 140°F / 60°C | 160°F / 71°C | 180°F / 82°C | 200°F / 93°C |
| 90.00 | 4.74 | 0.0287 | 0.0272 | 0.0263 | 0.0251 | 0.0244 | 0.0239 | 0.0234 | 0.0229 |
| 92.00 | 4.85 | 0.0298 | 0.0283 | 0.0274 | 0.0261 | 0.0254 | 0.0249 | 0.0244 | 0.0239 |
| 94.00 | 4.95 | 0.0311 | 0.0295 | 0.0285 | 0.0272 | 0.0264 | 0.0259 | 0.0254 | 0.0248 |
| 96.00 | 5.06 | 0.0323 | 0.0307 | 0.0296 | 0.0282 | 0.0274 | 0.0269 | 0.0264 | 0.0258 |
| 98.00 | 5.17 | 0.0335 | 0.0319 | 0.0307 | 0.0293 | 0.0285 | 0.0279 | 0.0274 | 0.0268 |
| 100.00 | 5.27 | 0.0348 | 0.0331 | 0.0319 | 0.0305 | 0.0296 | 0.0290 | 0.0284 | 0.0279 |
| 102.00 | 5.38 | 0.0361 | 0.0343 | 0.0331 | 0.0316 | 0.0307 | 0.0301 | 0.0295 | 0.0289 |
| 104.00 | 5.48 | 0.0374 | 0.0356 | 0.0343 | 0.0328 | 0.0318 | 0.0312 | 0.0306 | 0.0299 |
| 106.00 | 5.59 | 0.0388 | 0.0368 | 0.0355 | 0.0339 | 0.0330 | 0.0323 | 0.0317 | 0.0310 |
| 108.00 | 5.69 | 0.0401 | 0.0381 | 0.0368 | 0.0351 | 0.0341 | 0.0335 | 0.0328 | 0.0321 |
| 110.00 | 5.80 | 0.0415 | 0.0395 | 0.0381 | 0.0363 | 0.0353 | 0.0346 | 0.0339 | 0.0332 |
| 112.00 | 5.90 | 0.0429 | 0.0408 | 0.0394 | 0.0376 | 0.0365 | 0.0358 | 0.0351 | 0.0344 |
| 114.00 | 6.01 | 0.0444 | 0.0421 | 0.0407 | 0.0388 | 0.0377 | 0.0370 | 0.0362 | 0.0355 |
| 116.00 | 6.11 | 0.0458 | 0.0435 | 0.0420 | 0.0401 | 0.0389 | 0.0382 | 0.0374 | 0.0367 |
| 118.00 | 6.22 | 0.0473 | 0.0449 | 0.0433 | 0.0414 | 0.0402 | 0.0394 | 0.0386 | 0.0378 |
| 120.00 | 6.32 | 0.0488 | 0.0463 | 0.0447 | 0.0427 | 0.0415 | 0.0407 | 0.0398 | 0.0390 |
| 122.00 | 6.43 | 0.0503 | 0.0478 | 0.0461 | 0.0440 | 0.0428 | 0.0419 | 0.0411 | 0.0402 |
| 124.00 | 6.54 | 0.0518 | 0.0492 | 0.0475 | 0.0454 | 0.0441 | 0.0432 | 0.0423 | 0.0415 |
| 126.00 | 6.64 | 0.0534 | 0.0507 | 0.0489 | 0.0467 | 0.0454 | 0.0445 | 0.0436 | 0.0427 |
| 128.00 | 6.75 | 0.0550 | 0.0522 | 0.0504 | 0.0481 | 0.0467 | 0.0458 | 0.0449 | 0.0440 |
| 130.00 | 6.85 | 0.0566 | 0.0537 | 0.0519 | 0.0495 | 0.0481 | 0.0471 | 0.0462 | 0.0453 |
| 132.00 | 6.96 | 0.0582 | 0.0553 | 0.0533 | 0.0509 | 0.0495 | 0.0485 | 0.0475 | 0.0466 |
| 134.00 | 7.06 | 0.0598 | 0.0568 | 0.0548 | 0.0524 | 0.0509 | 0.0499 | 0.0489 | 0.0479 |
| 136.00 | 7.17 | 0.0615 | 0.0584 | 0.0564 | 0.0538 | 0.0523 | 0.0512 | 0.0502 | 0.0492 |
| 138.00 | 7.27 | 0.0632 | 0.0600 | 0.0579 | 0.0553 | 0.0537 | 0.0526 | 0.0516 | 0.0505 |
| 140.00 | 7.38 | 0.0649 | 0.0616 | 0.0595 | 0.0568 | 0.0551 | 0.0541 | 0.0530 | 0.0519 |
| 142.00 | 7.48 | 0.0666 | 0.0633 | 0.0611 | 0.0583 | 0.0566 | 0.0555 | 0.0544 | 0.0533 |
| 144.00 | 7.59 | 0.0684 | 0.0649 | 0.0627 | 0.0598 | 0.0581 | 0.0570 | 0.0558 | 0.0547 |
| 146.00 | 7.69 | 0.0701 | 0.0666 | 0.0643 | 0.0614 | 0.0596 | 0.0584 | 0.0573 | 0.0561 |
| 148.00 | 7.80 | 0.0719 | 0.0683 | 0.0659 | 0.0629 | 0.0611 | 0.0599 | 0.0587 | 0.0575 |
| 150.00 | 7.91 | 0.0737 | 0.0700 | 0.0676 | 0.0645 | 0.0627 | 0.0614 | 0.0602 | 0.0590 |
| 155.00 | 8.17 | 0.0783 | 0.0744 | 0.0718 | 0.0685 | 0.0666 | 0.0653 | 0.0640 | 0.0627 |
| 160.00 | 8.43 | 0.0831 | 0.0789 | 0.0761 | 0.0727 | 0.0706 | 0.0692 | 0.0678 | 0.0665 |
| 165.00 | 8.70 | 0.0879 | 0.0835 | 0.0806 | 0.0769 | 0.0747 | 0.0733 | 0.0718 | 0.0703 |
| 170.00 | 8.96 | 0.0929 | 0.0883 | 0.0852 | 0.0813 | 0.0790 | 0.0774 | 0.0759 | 0.0743 |
| 175.00 | 9.22 | 0.0980 | 0.0931 | 0.0899 | 0.0858 | 0.0833 | 0.0817 | 0.0801 | 0.0784 |
| 180.00 | 9.49 | 0.1033 | 0.0981 | 0.0947 | 0.0904 | 0.0878 | 0.0861 | 0.0843 | 0.0826 |
| 185.00 | 9.75 | 0.1087 | 0.1032 | 0.0996 | 0.0951 | 0.0924 | 0.0905 | 0.0887 | 0.0869 |
| 190.00 | 10.01 | 0.1142 | 0.1084 | 0.1046 | 0.0999 | 0.0970 | 0.0951 | 0.0932 | 0.0913 |

Pressure loss per foot, 3½" hePEX and AquaPEX (30% Glycol)

| | | Head (Feet of Water) Per Foot of Tubing | | | | | | | |
|------------|------------------------|--|--------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| gpm | Velocity (ft/s) | 60°F / 16°C | 80°F / 27°C | 100°F / 38°C | 120°F / 49°C | 140°F / 60°C | 160°F / 71°C | 180°F / 82°C | 200°F / 93°C |
| 30.0 | 1.58 | 0.0047 | 0.0044 | 0.0043 | 0.0041 | 0.0040 | 0.0039 | 0.0038 | 0.0037 |
| 31.0 | 1.63 | 0.0049 | 0.0047 | 0.0045 | 0.0043 | 0.0042 | 0.0041 | 0.0040 | 0.0040 |
| 32.0 | 1.69 | 0.0052 | 0.0050 | 0.0048 | 0.0046 | 0.0045 | 0.0044 | 0.0043 | 0.0042 |
| 33.0 | 1.74 | 0.0056 | 0.0053 | 0.0051 | 0.0049 | 0.0047 | 0.0046 | 0.0045 | 0.0044 |
| 34.0 | 1.79 | 0.0059 | 0.0056 | 0.0054 | 0.0051 | 0.0050 | 0.0049 | 0.0048 | 0.0047 |
| 35.0 | 1.84 | 0.0062 | 0.0059 | 0.0057 | 0.0054 | 0.0053 | 0.0052 | 0.0051 | 0.0050 |
| 36.0 | 1.90 | 0.0065 | 0.0062 | 0.0060 | 0.0057 | 0.0055 | 0.0054 | 0.0053 | 0.0052 |
| 37.0 | 1.95 | 0.0069 | 0.0065 | 0.0063 | 0.0060 | 0.0058 | 0.0057 | 0.0056 | 0.0055 |
| 38.0 | 2.00 | 0.0072 | 0.0068 | 0.0066 | 0.0063 | 0.0061 | 0.0060 | 0.0059 | 0.0058 |
| 39.0 | 2.06 | 0.0076 | 0.0072 | 0.0069 | 0.0066 | 0.0064 | 0.0063 | 0.0062 | 0.0061 |
| 40.0 | 2.11 | 0.0079 | 0.0075 | 0.0073 | 0.0069 | 0.0067 | 0.0066 | 0.0065 | 0.0063 |
| 41.0 | 2.16 | 0.0083 | 0.0079 | 0.0076 | 0.0073 | 0.0071 | 0.0069 | 0.0068 | 0.0066 |
| 42.0 | 2.21 | 0.0087 | 0.0082 | 0.0080 | 0.0076 | 0.0074 | 0.0072 | 0.0071 | 0.0069 |
| 43.0 | 2.27 | 0.0091 | 0.0086 | 0.0083 | 0.0079 | 0.0077 | 0.0075 | 0.0074 | 0.0072 |
| 44.0 | 2.32 | 0.0095 | 0.0090 | 0.0087 | 0.0083 | 0.0080 | 0.0079 | 0.0077 | 0.0076 |
| 45.0 | 2.37 | 0.0099 | 0.0094 | 0.0090 | 0.0086 | 0.0084 | 0.0082 | 0.0080 | 0.0079 |
| 46.0 | 2.42 | 0.0103 | 0.0098 | 0.0094 | 0.0090 | 0.0087 | 0.0086 | 0.0084 | 0.0082 |
| 47.0 | 2.48 | 0.0107 | 0.0101 | 0.0098 | 0.0093 | 0.0091 | 0.0089 | 0.0087 | 0.0085 |
| 48.0 | 2.53 | 0.0111 | 0.0105 | 0.0102 | 0.0097 | 0.0094 | 0.0093 | 0.0091 | 0.0089 |
| 49.0 | 2.58 | 0.0115 | 0.0110 | 0.0106 | 0.0101 | 0.0098 | 0.0096 | 0.0094 | 0.0092 |
| 50.0 | 2.64 | 0.0120 | 0.0114 | 0.0110 | 0.0105 | 0.0102 | 0.0100 | 0.0098 | 0.0096 |
| 52.0 | 2.74 | 0.0129 | 0.0122 | 0.0118 | 0.0113 | 0.0109 | 0.0107 | 0.0105 | 0.0103 |
| 54.0 | 2.85 | 0.0138 | 0.0131 | 0.0127 | 0.0121 | 0.0117 | 0.0115 | 0.0113 | 0.0110 |
| 56.0 | 2.95 | 0.0148 | 0.0140 | 0.0135 | 0.0129 | 0.0126 | 0.0123 | 0.0121 | 0.0118 |
| 58.0 | 3.06 | 0.0158 | 0.0150 | 0.0144 | 0.0138 | 0.0134 | 0.0131 | 0.0129 | 0.0126 |
| 60.0 | 3.16 | 0.0168 | 0.0159 | 0.0154 | 0.0147 | 0.0143 | 0.0140 | 0.0137 | 0.0134 |
| 62.0 | 3.27 | 0.0178 | 0.0169 | 0.0163 | 0.0156 | 0.0152 | 0.0149 | 0.0146 | 0.0143 |
| 64.0 | 3.37 | 0.0189 | 0.0180 | 0.0173 | 0.0165 | 0.0161 | 0.0158 | 0.0154 | 0.0151 |
| 66.0 | 3.48 | 0.0200 | 0.0190 | 0.0183 | 0.0175 | 0.0170 | 0.0167 | 0.0163 | 0.0160 |
| 68.0 | 3.58 | 0.0212 | 0.0201 | 0.0194 | 0.0185 | 0.0180 | 0.0176 | 0.0173 | 0.0169 |
| 70.0 | 3.69 | 0.0223 | 0.0212 | 0.0205 | 0.0195 | 0.0190 | 0.0186 | 0.0182 | 0.0179 |
| 72.0 | 3.79 | 0.0235 | 0.0223 | 0.0216 | 0.0206 | 0.0200 | 0.0196 | 0.0192 | 0.0188 |
| 74.0 | 3.90 | 0.0247 | 0.0235 | 0.0227 | 0.0216 | 0.0210 | 0.0206 | 0.0202 | 0.0198 |
| 76.0 | 4.01 | 0.0260 | 0.0247 | 0.0238 | 0.0227 | 0.0221 | 0.0217 | 0.0212 | 0.0208 |
| 78.0 | 4.11 | 0.0273 | 0.0259 | 0.0250 | 0.0239 | 0.0232 | 0.0227 | 0.0223 | 0.0218 |
| 80.0 | 4.22 | 0.0286 | 0.0271 | 0.0262 | 0.0250 | 0.0243 | 0.0238 | 0.0233 | 0.0229 |
| 82.0 | 4.32 | 0.0299 | 0.0284 | 0.0274 | 0.0262 | 0.0254 | 0.0249 | 0.0244 | 0.0239 |
| 84.0 | 4.43 | 0.0313 | 0.0297 | 0.0287 | 0.0274 | 0.0266 | 0.0261 | 0.0255 | 0.0250 |
| 86.0 | 4.53 | 0.0327 | 0.0310 | 0.0299 | 0.0286 | 0.0278 | 0.0272 | 0.0267 | 0.0261 |
| 88.0 | 4.64 | 0.0341 | 0.0324 | 0.0312 | 0.0298 | 0.0290 | 0.0284 | 0.0278 | 0.0273 |

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Pressure loss per foot, 3½" hePEX and AquaPEX (30% Glycol)

| gpm | Velocity (ft/s) | Head (Feet of Water) Per Foot of Tubing | | | | | | | |
|-------|--------------------|---|----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| | | 60°F / 16°C | 80°F / 27°C | 100°F / 38°C | 120°F / 49°C | 140°F / 60°C | 160°F / 71°C | 180°F / 82°C | 200°F / 93°C |
| 90.0 | 4.74 | 0.0355 | 0.0338 | 0.0326 | 0.0311 | 0.0302 | 0.0296 | 0.0290 | 0.0284 |
| 92.0 | 4.85 | 0.0370 | 0.0352 | 0.0339 | 0.0324 | 0.0315 | 0.0308 | 0.0302 | 0.0296 |
| 94.0 | 4.95 | 0.0385 | 0.0366 | 0.0353 | 0.0337 | 0.0327 | 0.0321 | 0.0314 | 0.0308 |
| 96.0 | 5.06 | 0.0400 | 0.0380 | 0.0367 | 0.0350 | 0.0340 | 0.0334 | 0.0327 | 0.0320 |
| 98.0 | 5.17 | 0.0416 | 0.0395 | 0.0381 | 0.0364 | 0.0354 | 0.0347 | 0.0340 | 0.0333 |
| 100.0 | 5.27 | 0.0432 | 0.0410 | 0.0396 | 0.0378 | 0.0367 | 0.0360 | 0.0353 | 0.0345 |
| 102.0 | 5.38 | 0.0448 | 0.0425 | 0.0411 | 0.0392 | 0.0381 | 0.0373 | 0.0366 | 0.0358 |
| 104.0 | 5.48 | 0.0464 | 0.0441 | 0.0426 | 0.0406 | 0.0395 | 0.0387 | 0.0379 | 0.0371 |
| 106.0 | 5.59 | 0.0481 | 0.0457 | 0.0441 | 0.0421 | 0.0409 | 0.0401 | 0.0393 | 0.0385 |
| 108.0 | 5.69 | 0.0498 | 0.0473 | 0.0456 | 0.0436 | 0.0423 | 0.0415 | 0.0407 | 0.0398 |
| 110.0 | 5.80 | 0.0515 | 0.0489 | 0.0472 | 0.0451 | 0.0438 | 0.0429 | 0.0421 | 0.0412 |
| 112.0 | 5.90 | 0.0532 | 0.0506 | 0.0488 | 0.0466 | 0.0453 | 0.0444 | 0.0435 | 0.0426 |
| 114.0 | 6.01 | 0.0550 | 0.0523 | 0.0504 | 0.0481 | 0.0468 | 0.0458 | 0.0449 | 0.0440 |
| 116.0 | 6.11 | 0.0568 | 0.0540 | 0.0521 | 0.0497 | 0.0483 | 0.0473 | 0.0464 | 0.0455 |
| 118.0 | 6.22 | 0.0586 | 0.0557 | 0.0538 | 0.0513 | 0.0498 | 0.0489 | 0.0479 | 0.0469 |
| 120.0 | 6.32 | 0.0605 | 0.0575 | 0.0555 | 0.0529 | 0.0514 | 0.0504 | 0.0494 | 0.0484 |
| 122.0 | 6.43 | 0.0624 | 0.0593 | 0.0572 | 0.0546 | 0.0530 | 0.0520 | 0.0509 | 0.0499 |
| 124.0 | 6.54 | 0.0643 | 0.0611 | 0.0589 | 0.0562 | 0.0546 | 0.0536 | 0.0525 | 0.0514 |
| 126.0 | 6.64 | 0.0662 | 0.0629 | 0.0607 | 0.0579 | 0.0563 | 0.0552 | 0.0541 | 0.0530 |
| 128.0 | 6.75 | 0.0682 | 0.0648 | 0.0625 | 0.0596 | 0.0579 | 0.0568 | 0.0557 | 0.0545 |
| 130.0 | 6.85 | 0.0701 | 0.0666 | 0.0643 | 0.0614 | 0.0596 | 0.0585 | 0.0573 | 0.0561 |
| 132.0 | 6.96 | 0.0722 | 0.0685 | 0.0661 | 0.0631 | 0.0613 | 0.0601 | 0.0589 | 0.0577 |
| 134.0 | 7.06 | 0.0742 | 0.0705 | 0.0680 | 0.0649 | 0.0631 | 0.0618 | 0.0606 | 0.0594 |
| 136.0 | 7.17 | 0.0763 | 0.0724 | 0.0699 | 0.0667 | 0.0648 | 0.0635 | 0.0623 | 0.0610 |
| 138.0 | 7.27 | 0.0783 | 0.0744 | 0.0718 | 0.0685 | 0.0666 | 0.0653 | 0.0640 | 0.0627 |
| 140.0 | 7.38 | 0.0805 | 0.0764 | 0.0737 | 0.0704 | 0.0684 | 0.0670 | 0.0657 | 0.0644 |
| 142.0 | 7.48 | 0.0826 | 0.0785 | 0.0757 | 0.0723 | 0.0702 | 0.0688 | 0.0675 | 0.0661 |
| 144.0 | 7.59 | 0.0848 | 0.0805 | 0.0777 | 0.0742 | 0.0720 | 0.0706 | 0.0692 | 0.0678 |
| 146.0 | 7.69 | 0.0869 | 0.0826 | 0.0797 | 0.0761 | 0.0739 | 0.0725 | 0.0710 | 0.0696 |
| 148.0 | 7.80 | 0.0892 | 0.0847 | 0.0817 | 0.0780 | 0.0758 | 0.0743 | 0.0728 | 0.0713 |
| 150.0 | 7.91 | 0.0914 | 0.0868 | 0.0838 | 0.0800 | 0.0777 | 0.0762 | 0.0746 | 0.0731 |
| 155.0 | 8.17 | 0.0971 | 0.0923 | 0.0890 | 0.0850 | 0.0826 | 0.0809 | 0.0793 | 0.0777 |
| 160.0 | 8.43 | 0.1030 | 0.0978 | 0.0944 | 0.0901 | 0.0875 | 0.0858 | 0.0841 | 0.0824 |
| 165.0 | 8.70 | 0.1090 | 0.1036 | 0.0999 | 0.0954 | 0.0927 | 0.0909 | 0.0890 | 0.0872 |
| 170.0 | 8.96 | 0.1152 | 0.1095 | 0.1056 | 0.1008 | 0.0979 | 0.0960 | 0.0941 | 0.0922 |
| 175.0 | 9.22 | 0.1216 | 0.1155 | 0.1114 | 0.1064 | 0.1033 | 0.1013 | 0.0993 | 0.0973 |
| 180.0 | 9.49 | 0.1281 | 0.1217 | 0.1174 | 0.1121 | 0.1089 | 0.1067 | 0.1046 | 0.1025 |
| 185.0 | 9.75 | 0.1347 | 0.1280 | 0.1235 | 0.1179 | 0.1145 | 0.1123 | 0.1100 | 0.1078 |
| 190.0 | 10.01 | 0.1415 | 0.1345 | 0.1298 | 0.1239 | 0.1203 | 0.1180 | 0.1156 | 0.1132 |

Pressure loss per foot, 3½" hePEX and AquaPEX (40% Glycol)

| | | Head (Feet of Water) Per Foot of Tubing | | | | | | | |
|------|-----------------|---|-------------|--------------|--------------|--------------|--------------|--------------|--------------|
| gpm | Velocity (ft/s) | 60°F / 16°C | 80°F / 27°C | 100°F / 38°C | 120°F / 49°C | 140°F / 60°C | 160°F / 71°C | 180°F / 82°C | 200°F / 93°C |
| 30.0 | 1.58 | 0.0050 | 0.0047 | 0.0046 | 0.0044 | 0.0042 | 0.0042 | 0.0041 | 0.0040 |
| 31.0 | 1.63 | 0.0053 | 0.0050 | 0.0049 | 0.0046 | 0.0045 | 0.0044 | 0.0043 | 0.0042 |
| 32.0 | 1.69 | 0.0056 | 0.0053 | 0.0052 | 0.0049 | 0.0048 | 0.0047 | 0.0046 | 0.0045 |
| 33.0 | 1.74 | 0.0060 | 0.0057 | 0.0055 | 0.0052 | 0.0051 | 0.0050 | 0.0049 | 0.0048 |
| 34.0 | 1.79 | 0.0063 | 0.0060 | 0.0058 | 0.0055 | 0.0053 | 0.0052 | 0.0051 | 0.0050 |
| 35.0 | 1.84 | 0.0066 | 0.0063 | 0.0061 | 0.0058 | 0.0056 | 0.0055 | 0.0054 | 0.0053 |
| 36.0 | 1.90 | 0.0070 | 0.0066 | 0.0064 | 0.0061 | 0.0059 | 0.0058 | 0.0057 | 0.0056 |
| 37.0 | 1.95 | 0.0074 | 0.0070 | 0.0067 | 0.0064 | 0.0063 | 0.0061 | 0.0060 | 0.0059 |
| 38.0 | 2.00 | 0.0077 | 0.0073 | 0.0071 | 0.0068 | 0.0066 | 0.0064 | 0.0063 | 0.0062 |
| 39.0 | 2.06 | 0.0081 | 0.0077 | 0.0074 | 0.0071 | 0.0069 | 0.0068 | 0.0066 | 0.0065 |
| 40.0 | 2.11 | 0.0085 | 0.0081 | 0.0078 | 0.0074 | 0.0072 | 0.0071 | 0.0069 | 0.0068 |
| 41.0 | 2.16 | 0.0089 | 0.0085 | 0.0082 | 0.0078 | 0.0076 | 0.0074 | 0.0073 | 0.0071 |
| 42.0 | 2.21 | 0.0093 | 0.0088 | 0.0085 | 0.0081 | 0.0079 | 0.0078 | 0.0076 | 0.0074 |
| 43.0 | 2.27 | 0.0097 | 0.0092 | 0.0089 | 0.0085 | 0.0083 | 0.0081 | 0.0079 | 0.0078 |
| 44.0 | 2.32 | 0.0101 | 0.0096 | 0.0093 | 0.0089 | 0.0086 | 0.0084 | 0.0083 | 0.0081 |
| 45.0 | 2.37 | 0.0106 | 0.0100 | 0.0097 | 0.0092 | 0.0090 | 0.0088 | 0.0086 | 0.0085 |
| 46.0 | 2.42 | 0.0110 | 0.0105 | 0.0101 | 0.0096 | 0.0094 | 0.0092 | 0.0090 | 0.0088 |
| 47.0 | 2.48 | 0.0115 | 0.0109 | 0.0105 | 0.0100 | 0.0097 | 0.0095 | 0.0094 | 0.0092 |
| 48.0 | 2.53 | 0.0119 | 0.0113 | 0.0109 | 0.0104 | 0.0101 | 0.0099 | 0.0097 | 0.0095 |
| 49.0 | 2.58 | 0.0124 | 0.0118 | 0.0113 | 0.0108 | 0.0105 | 0.0103 | 0.0101 | 0.0099 |
| 50.0 | 2.64 | 0.0128 | 0.0122 | 0.0118 | 0.0112 | 0.0109 | 0.0107 | 0.0105 | 0.0103 |
| 52.0 | 2.74 | 0.0138 | 0.0131 | 0.0127 | 0.0121 | 0.0117 | 0.0115 | 0.0113 | 0.0110 |
| 54.0 | 2.85 | 0.0148 | 0.0141 | 0.0136 | 0.0130 | 0.0126 | 0.0123 | 0.0121 | 0.0118 |
| 56.0 | 2.95 | 0.0158 | 0.0150 | 0.0145 | 0.0139 | 0.0135 | 0.0132 | 0.0129 | 0.0127 |
| 58.0 | 3.06 | 0.0169 | 0.0161 | 0.0155 | 0.0148 | 0.0144 | 0.0141 | 0.0138 | 0.0135 |
| 60.0 | 3.16 | 0.0180 | 0.0171 | 0.0165 | 0.0157 | 0.0153 | 0.0150 | 0.0147 | 0.0144 |
| 62.0 | 3.27 | 0.0191 | 0.0182 | 0.0175 | 0.0167 | 0.0163 | 0.0159 | 0.0156 | 0.0153 |
| 64.0 | 3.37 | 0.0203 | 0.0193 | 0.0186 | 0.0177 | 0.0172 | 0.0169 | 0.0166 | 0.0162 |
| 66.0 | 3.48 | 0.0215 | 0.0204 | 0.0197 | 0.0188 | 0.0182 | 0.0179 | 0.0175 | 0.0172 |
| 68.0 | 3.58 | 0.0227 | 0.0216 | 0.0208 | 0.0199 | 0.0193 | 0.0189 | 0.0185 | 0.0181 |
| 70.0 | 3.69 | 0.0239 | 0.0227 | 0.0219 | 0.0209 | 0.0203 | 0.0199 | 0.0195 | 0.0191 |
| 72.0 | 3.79 | 0.0252 | 0.0240 | 0.0231 | 0.0221 | 0.0214 | 0.0210 | 0.0206 | 0.0202 |
| 74.0 | 3.90 | 0.0265 | 0.0252 | 0.0243 | 0.0232 | 0.0225 | 0.0221 | 0.0217 | 0.0212 |
| 76.0 | 4.01 | 0.0279 | 0.0265 | 0.0255 | 0.0244 | 0.0237 | 0.0232 | 0.0228 | 0.0223 |
| 78.0 | 4.11 | 0.0292 | 0.0278 | 0.0268 | 0.0256 | 0.0249 | 0.0244 | 0.0239 | 0.0234 |
| 80.0 | 4.22 | 0.0306 | 0.0291 | 0.0281 | 0.0268 | 0.0260 | 0.0255 | 0.0250 | 0.0245 |
| 82.0 | 4.32 | 0.0321 | 0.0305 | 0.0294 | 0.0281 | 0.0273 | 0.0267 | 0.0262 | 0.0257 |
| 84.0 | 4.43 | 0.0335 | 0.0319 | 0.0307 | 0.0293 | 0.0285 | 0.0279 | 0.0274 | 0.0268 |
| 86.0 | 4.53 | 0.0350 | 0.0333 | 0.0321 | 0.0307 | 0.0298 | 0.0292 | 0.0286 | 0.0280 |
| 88.0 | 4.64 | 0.0366 | 0.0347 | 0.0335 | 0.0320 | 0.0311 | 0.0305 | 0.0299 | 0.0292 |

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Pressure loss per foot, 3½" hePEX and AquaPEX (40% Glycol)

| | | Head (Feet of Water) Per Foot of Tubing | | | | | | | |
|-------|-----------------|---|-------------|--------------|--------------|--------------|--------------|--------------|--------------|
| gpm | Velocity (ft/s) | 60°F / 16°C | 80°F / 27°C | 100°F / 38°C | 120°F / 49°C | 140°F / 60°C | 160°F / 71°C | 180°F / 82°C | 200°F / 93°C |
| 90.0 | 4.74 | 0.0381 | 0.0362 | 0.0349 | 0.0333 | 0.0324 | 0.0318 | 0.0311 | 0.0305 |
| 92.0 | 4.85 | 0.0397 | 0.0377 | 0.0364 | 0.0347 | 0.0337 | 0.0331 | 0.0324 | 0.0317 |
| 94.0 | 4.95 | 0.0413 | 0.0392 | 0.0379 | 0.0361 | 0.0351 | 0.0344 | 0.0337 | 0.0330 |
| 96.0 | 5.06 | 0.0429 | 0.0408 | 0.0394 | 0.0376 | 0.0365 | 0.0358 | 0.0351 | 0.0344 |
| 98.0 | 5.17 | 0.0446 | 0.0424 | 0.0409 | 0.0390 | 0.0379 | 0.0372 | 0.0364 | 0.0357 |
| 100.0 | 5.27 | 0.0463 | 0.0440 | 0.0424 | 0.0405 | 0.0394 | 0.0386 | 0.0378 | 0.0370 |
| 102.0 | 5.38 | 0.0480 | 0.0456 | 0.0440 | 0.0420 | 0.0408 | 0.0400 | 0.0392 | 0.0384 |
| 104.0 | 5.48 | 0.0498 | 0.0473 | 0.0456 | 0.0436 | 0.0423 | 0.0415 | 0.0407 | 0.0398 |
| 106.0 | 5.59 | 0.0516 | 0.0490 | 0.0473 | 0.0451 | 0.0438 | 0.0430 | 0.0421 | 0.0413 |
| 108.0 | 5.69 | 0.0534 | 0.0507 | 0.0489 | 0.0467 | 0.0454 | 0.0445 | 0.0436 | 0.0427 |
| 110.0 | 5.80 | 0.0552 | 0.0525 | 0.0506 | 0.0483 | 0.0469 | 0.0460 | 0.0451 | 0.0442 |
| 112.0 | 5.90 | 0.0571 | 0.0543 | 0.0523 | 0.0500 | 0.0485 | 0.0476 | 0.0466 | 0.0457 |
| 114.0 | 6.01 | 0.0590 | 0.0561 | 0.0541 | 0.0516 | 0.0502 | 0.0492 | 0.0482 | 0.0472 |
| 116.0 | 6.11 | 0.0609 | 0.0579 | 0.0559 | 0.0533 | 0.0518 | 0.0508 | 0.0498 | 0.0487 |
| 118.0 | 6.22 | 0.0629 | 0.0598 | 0.0577 | 0.0550 | 0.0535 | 0.0524 | 0.0514 | 0.0503 |
| 120.0 | 6.32 | 0.0649 | 0.0616 | 0.0595 | 0.0568 | 0.0551 | 0.0541 | 0.0530 | 0.0519 |
| 122.0 | 6.43 | 0.0669 | 0.0636 | 0.0613 | 0.0585 | 0.0569 | 0.0557 | 0.0546 | 0.0535 |
| 124.0 | 6.54 | 0.0689 | 0.0655 | 0.0632 | 0.0603 | 0.0586 | 0.0574 | 0.0563 | 0.0552 |
| 126.0 | 6.64 | 0.0710 | 0.0675 | 0.0651 | 0.0621 | 0.0604 | 0.0592 | 0.0580 | 0.0568 |
| 128.0 | 6.75 | 0.0731 | 0.0695 | 0.0670 | 0.0640 | 0.0621 | 0.0609 | 0.0597 | 0.0585 |
| 130.0 | 6.85 | 0.0752 | 0.0715 | 0.0690 | 0.0658 | 0.0640 | 0.0627 | 0.0614 | 0.0602 |
| 132.0 | 6.96 | 0.0774 | 0.0735 | 0.0709 | 0.0677 | 0.0658 | 0.0645 | 0.0632 | 0.0619 |
| 134.0 | 7.06 | 0.0796 | 0.0756 | 0.0729 | 0.0696 | 0.0676 | 0.0663 | 0.0650 | 0.0637 |
| 136.0 | 7.17 | 0.0818 | 0.0777 | 0.0750 | 0.0716 | 0.0695 | 0.0682 | 0.0668 | 0.0654 |
| 138.0 | 7.27 | 0.0840 | 0.0798 | 0.0770 | 0.0735 | 0.0714 | 0.0700 | 0.0686 | 0.0672 |
| 140.0 | 7.38 | 0.0863 | 0.0820 | 0.0791 | 0.0755 | 0.0733 | 0.0719 | 0.0705 | 0.0690 |
| 142.0 | 7.48 | 0.0886 | 0.0842 | 0.0812 | 0.0775 | 0.0753 | 0.0738 | 0.0723 | 0.0709 |
| 144.0 | 7.59 | 0.0909 | 0.0864 | 0.0833 | 0.0795 | 0.0773 | 0.0758 | 0.0742 | 0.0727 |
| 146.0 | 7.69 | 0.0933 | 0.0886 | 0.0855 | 0.0816 | 0.0793 | 0.0777 | 0.0762 | 0.0746 |
| 148.0 | 7.80 | 0.0956 | 0.0909 | 0.0877 | 0.0837 | 0.0813 | 0.0797 | 0.0781 | 0.0765 |
| 150.0 | 7.91 | 0.0980 | 0.0931 | 0.0899 | 0.0858 | 0.0833 | 0.0817 | 0.0801 | 0.0784 |
| 155.0 | 8.17 | 0.1042 | 0.0990 | 0.0955 | 0.0912 | 0.0885 | 0.0868 | 0.0851 | 0.0833 |
| 160.0 | 8.43 | 0.1105 | 0.1050 | 0.1013 | 0.0967 | 0.0939 | 0.0921 | 0.0902 | 0.0884 |
| 165.0 | 8.70 | 0.1169 | 0.1111 | 0.1072 | 0.1023 | 0.0994 | 0.0975 | 0.0955 | 0.0936 |
| 170.0 | 8.96 | 0.1236 | 0.1174 | 0.1133 | 0.1081 | 0.1050 | 0.1030 | 0.1009 | 0.0989 |
| 175.0 | 9.22 | 0.1304 | 0.1239 | 0.1195 | 0.1141 | 0.1108 | 0.1087 | 0.1065 | 0.1043 |
| 180.0 | 9.49 | 0.1374 | 0.1305 | 0.1259 | 0.1202 | 0.1168 | 0.1145 | 0.1122 | 0.1099 |
| 185.0 | 9.75 | 0.1445 | 0.1373 | 0.1325 | 0.1264 | 0.1228 | 0.1204 | 0.1180 | 0.1156 |
| 190.0 | 10.01 | 0.1518 | 0.1442 | 0.1392 | 0.1328 | 0.1290 | 0.1265 | 0.1240 | 0.1215 |

Pressure loss per foot, 3½" hePEX and AquaPEX (50% Glycol)

Head (Feet of Water) Per Foot of Tubing

| | | | | | | | | | |
|------|------|--------|--------|--------|--------|--------|--------|--------|--------|
| 30.0 | 1.58 | 0.0053 | 0.0050 | 0.0048 | 0.0046 | 0.0045 | 0.0044 | 0.0043 | 0.0042 |
| 31.0 | 1.63 | 0.0056 | 0.0053 | 0.0051 | 0.0049 | 0.0047 | 0.0047 | 0.0046 | 0.0045 |
| 32.0 | 1.69 | 0.0059 | 0.0056 | 0.0054 | 0.0052 | 0.0050 | 0.0049 | 0.0048 | 0.0047 |
| 33.0 | 1.74 | 0.0063 | 0.0060 | 0.0057 | 0.0055 | 0.0053 | 0.0052 | 0.0051 | 0.0050 |
| 34.0 | 1.79 | 0.0066 | 0.0063 | 0.0061 | 0.0058 | 0.0056 | 0.0055 | 0.0054 | 0.0053 |
| 35.0 | 1.84 | 0.0070 | 0.0066 | 0.0064 | 0.0061 | 0.0059 | 0.0058 | 0.0057 | 0.0056 |
| 36.0 | 1.90 | 0.0074 | 0.0070 | 0.0067 | 0.0064 | 0.0063 | 0.0061 | 0.0060 | 0.0059 |
| 37.0 | 1.95 | 0.0077 | 0.0074 | 0.0071 | 0.0068 | 0.0066 | 0.0065 | 0.0063 | 0.0062 |
| 38.0 | 2.00 | 0.0081 | 0.0077 | 0.0075 | 0.0071 | 0.0069 | 0.0068 | 0.0066 | 0.0065 |
| 39.0 | 2.06 | 0.0085 | 0.0081 | 0.0078 | 0.0075 | 0.0073 | 0.0071 | 0.0070 | 0.0068 |
| 40.0 | 2.11 | 0.0089 | 0.0085 | 0.0082 | 0.0078 | 0.0076 | 0.0075 | 0.0073 | 0.0072 |
| 41.0 | 2.16 | 0.0094 | 0.0089 | 0.0086 | 0.0082 | 0.0080 | 0.0078 | 0.0076 | 0.0075 |
| 42.0 | 2.21 | 0.0098 | 0.0093 | 0.0090 | 0.0086 | 0.0083 | 0.0082 | 0.0080 | 0.0078 |
| 43.0 | 2.27 | 0.0102 | 0.0097 | 0.0094 | 0.0090 | 0.0087 | 0.0085 | 0.0084 | 0.0082 |
| 44.0 | 2.32 | 0.0107 | 0.0101 | 0.0098 | 0.0093 | 0.0091 | 0.0089 | 0.0087 | 0.0085 |
| 45.0 | 2.37 | 0.0111 | 0.0106 | 0.0102 | 0.0097 | 0.0095 | 0.0093 | 0.0091 | 0.0089 |
| 46.0 | 2.42 | 0.0116 | 0.0110 | 0.0106 | 0.0101 | 0.0098 | 0.0097 | 0.0095 | 0.0093 |
| 47.0 | 2.48 | 0.0121 | 0.0115 | 0.0111 | 0.0106 | 0.0102 | 0.0100 | 0.0098 | 0.0096 |
| 48.0 | 2.53 | 0.0125 | 0.0119 | 0.0115 | 0.0110 | 0.0107 | 0.0104 | 0.0102 | 0.0100 |
| 49.0 | 2.58 | 0.0130 | 0.0124 | 0.0119 | 0.0114 | 0.0111 | 0.0109 | 0.0106 | 0.0104 |
| 50.0 | 2.64 | 0.0135 | 0.0128 | 0.0124 | 0.0118 | 0.0115 | 0.0113 | 0.0110 | 0.0108 |
| 52.0 | 2.74 | 0.0145 | 0.0138 | 0.0133 | 0.0127 | 0.0124 | 0.0121 | 0.0119 | 0.0116 |
| 54.0 | 2.85 | 0.0156 | 0.0148 | 0.0143 | 0.0136 | 0.0133 | 0.0130 | 0.0127 | 0.0125 |
| 56.0 | 2.95 | 0.0167 | 0.0158 | 0.0153 | 0.0146 | 0.0142 | 0.0139 | 0.0136 | 0.0133 |
| 58.0 | 3.06 | 0.0178 | 0.0169 | 0.0163 | 0.0156 | 0.0151 | 0.0148 | 0.0145 | 0.0142 |
| 60.0 | 3.16 | 0.0189 | 0.0180 | 0.0174 | 0.0166 | 0.0161 | 0.0158 | 0.0155 | 0.0152 |
| 62.0 | 3.27 | 0.0201 | 0.0191 | 0.0185 | 0.0176 | 0.0171 | 0.0168 | 0.0164 | 0.0161 |
| 64.0 | 3.37 | 0.0213 | 0.0203 | 0.0196 | 0.0187 | 0.0181 | 0.0178 | 0.0174 | 0.0171 |
| 66.0 | 3.48 | 0.0226 | 0.0215 | 0.0207 | 0.0198 | 0.0192 | 0.0188 | 0.0185 | 0.0181 |
| 68.0 | 3.58 | 0.0239 | 0.0227 | 0.0219 | 0.0209 | 0.0203 | 0.0199 | 0.0195 | 0.0191 |
| 70.0 | 3.69 | 0.0252 | 0.0239 | 0.0231 | 0.0220 | 0.0214 | 0.0210 | 0.0206 | 0.0202 |
| 72.0 | 3.79 | 0.0265 | 0.0252 | 0.0243 | 0.0232 | 0.0226 | 0.0221 | 0.0217 | 0.0212 |
| 74.0 | 3.90 | 0.0279 | 0.0265 | 0.0256 | 0.0244 | 0.0237 | 0.0233 | 0.0228 | 0.0223 |
| 76.0 | 4.01 | 0.0293 | 0.0279 | 0.0269 | 0.0257 | 0.0249 | 0.0244 | 0.0240 | 0.0235 |
| 78.0 | 4.11 | 0.0308 | 0.0292 | 0.0282 | 0.0269 | 0.0262 | 0.0257 | 0.0251 | 0.0246 |
| 80.0 | 4.22 | 0.0323 | 0.0306 | 0.0296 | 0.0282 | 0.0274 | 0.0269 | 0.0263 | 0.0258 |
| 82.0 | 4.32 | 0.0338 | 0.0321 | 0.0310 | 0.0295 | 0.0287 | 0.0281 | 0.0276 | 0.0270 |
| 84.0 | 4.43 | 0.0353 | 0.0335 | 0.0324 | 0.0309 | 0.0300 | 0.0294 | 0.0288 | 0.0282 |
| 86.0 | 4.53 | 0.0369 | 0.0350 | 0.0338 | 0.0323 | 0.0313 | 0.0307 | 0.0301 | 0.0295 |
| 88.0 | 4.64 | 0.0385 | 0.0366 | 0.0353 | 0.0337 | 0.0327 | 0.0321 | 0.0314 | 0.0308 |

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Pressure loss per foot, 3½" hePEX and AquaPEX (50% Glycol)

Head (Feet of Water) Per Foot of Tubing

| gpm | Velocity (ft/s) | 60°F / 16°C | 80°F / 27°C | 100°F / 38°C | 120°F / 49°C | 140°F / 60°C | 160°F / 71°C | 180°F / 82°C | 200°F / 93°C |
|------------|----------------------------|------------------------|------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| 90.0 | 4.74 | 0.0401 | 0.0381 | 0.0368 | 0.0351 | 0.0341 | 0.0334 | 0.0328 | 0.0321 |
| 92.0 | 4.85 | 0.0418 | 0.0397 | 0.0383 | 0.0366 | 0.0355 | 0.0348 | 0.0341 | 0.0334 |
| 94.0 | 4.95 | 0.0435 | 0.0413 | 0.0398 | 0.0380 | 0.0370 | 0.0362 | 0.0355 | 0.0348 |
| 96.0 | 5.06 | 0.0452 | 0.0429 | 0.0414 | 0.0395 | 0.0384 | 0.0377 | 0.0369 | 0.0362 |
| 98.0 | 5.17 | 0.0470 | 0.0446 | 0.0430 | 0.0411 | 0.0399 | 0.0391 | 0.0383 | 0.0376 |
| 100.0 | 5.27 | 0.0487 | 0.0463 | 0.0447 | 0.0427 | 0.0414 | 0.0406 | 0.0398 | 0.0390 |
| 102.0 | 5.38 | 0.0506 | 0.0480 | 0.0463 | 0.0442 | 0.0430 | 0.0421 | 0.0413 | 0.0404 |
| 104.0 | 5.48 | 0.0524 | 0.0498 | 0.0480 | 0.0459 | 0.0445 | 0.0437 | 0.0428 | 0.0419 |
| 106.0 | 5.59 | 0.0543 | 0.0516 | 0.0498 | 0.0475 | 0.0461 | 0.0452 | 0.0443 | 0.0434 |
| 108.0 | 5.69 | 0.0562 | 0.0534 | 0.0515 | 0.0492 | 0.0478 | 0.0468 | 0.0459 | 0.0450 |
| 110.0 | 5.80 | 0.0581 | 0.0552 | 0.0533 | 0.0509 | 0.0494 | 0.0485 | 0.0475 | 0.0465 |
| 112.0 | 5.90 | 0.0601 | 0.0571 | 0.0551 | 0.0526 | 0.0511 | 0.0501 | 0.0491 | 0.0481 |
| 114.0 | 6.01 | 0.0621 | 0.0590 | 0.0569 | 0.0543 | 0.0528 | 0.0518 | 0.0507 | 0.0497 |
| 116.0 | 6.11 | 0.0641 | 0.0609 | 0.0588 | 0.0561 | 0.0545 | 0.0535 | 0.0524 | 0.0513 |
| 118.0 | 6.22 | 0.0662 | 0.0629 | 0.0607 | 0.0579 | 0.0563 | 0.0552 | 0.0541 | 0.0530 |
| 120.0 | 6.32 | 0.0683 | 0.0649 | 0.0626 | 0.0598 | 0.0581 | 0.0569 | 0.0558 | 0.0546 |
| 122.0 | 6.43 | 0.0704 | 0.0669 | 0.0645 | 0.0616 | 0.0599 | 0.0587 | 0.0575 | 0.0563 |
| 124.0 | 6.54 | 0.0726 | 0.0689 | 0.0665 | 0.0635 | 0.0617 | 0.0605 | 0.0593 | 0.0581 |
| 126.0 | 6.64 | 0.0747 | 0.0710 | 0.0685 | 0.0654 | 0.0635 | 0.0623 | 0.0610 | 0.0598 |
| 128.0 | 6.75 | 0.0770 | 0.0731 | 0.0705 | 0.0673 | 0.0654 | 0.0641 | 0.0628 | 0.0616 |
| 130.0 | 6.85 | 0.0792 | 0.0752 | 0.0726 | 0.0693 | 0.0673 | 0.0660 | 0.0647 | 0.0634 |
| 132.0 | 6.96 | 0.0815 | 0.0774 | 0.0747 | 0.0713 | 0.0692 | 0.0679 | 0.0665 | 0.0652 |
| 134.0 | 7.06 | 0.0838 | 0.0796 | 0.0768 | 0.0733 | 0.0712 | 0.0698 | 0.0684 | 0.0670 |
| 136.0 | 7.17 | 0.0861 | 0.0818 | 0.0789 | 0.0753 | 0.0732 | 0.0717 | 0.0703 | 0.0689 |
| 138.0 | 7.27 | 0.0884 | 0.0840 | 0.0811 | 0.0774 | 0.0752 | 0.0737 | 0.0722 | 0.0708 |
| 140.0 | 7.38 | 0.0908 | 0.0863 | 0.0833 | 0.0795 | 0.0772 | 0.0757 | 0.0742 | 0.0727 |
| 142.0 | 7.48 | 0.0932 | 0.0886 | 0.0855 | 0.0816 | 0.0793 | 0.0777 | 0.0762 | 0.0746 |
| 144.0 | 7.59 | 0.0957 | 0.0909 | 0.0877 | 0.0837 | 0.0813 | 0.0797 | 0.0781 | 0.0766 |
| 146.0 | 7.69 | 0.0982 | 0.0933 | 0.0900 | 0.0859 | 0.0834 | 0.0818 | 0.0802 | 0.0785 |
| 148.0 | 7.80 | 0.1007 | 0.0956 | 0.0923 | 0.0881 | 0.0856 | 0.0839 | 0.0822 | 0.0805 |
| 150.0 | 7.91 | 0.1032 | 0.0980 | 0.0946 | 0.0903 | 0.0877 | 0.0860 | 0.0843 | 0.0826 |
| 155.0 | 8.17 | 0.1097 | 0.1042 | 0.1005 | 0.0959 | 0.0932 | 0.0914 | 0.0896 | 0.0877 |
| 160.0 | 8.43 | 0.1163 | 0.1105 | 0.1066 | 0.1018 | 0.0988 | 0.0969 | 0.0950 | 0.0930 |
| 165.0 | 8.70 | 0.1231 | 0.1169 | 0.1128 | 0.1077 | 0.1046 | 0.1026 | 0.1005 | 0.0985 |
| 170.0 | 8.96 | 0.1301 | 0.1236 | 0.1192 | 0.1138 | 0.1106 | 0.1084 | 0.1062 | 0.1041 |
| 175.0 | 9.22 | 0.1373 | 0.1304 | 0.1258 | 0.1201 | 0.1167 | 0.1144 | 0.1121 | 0.1098 |
| 180.0 | 9.49 | 0.1446 | 0.1374 | 0.1325 | 0.1265 | 0.1229 | 0.1205 | 0.1181 | 0.1157 |
| 185.0 | 9.75 | 0.1521 | 0.1445 | 0.1394 | 0.1331 | 0.1293 | 0.1268 | 0.1242 | 0.1217 |
| 190.0 | 10.01 | 0.1598 | 0.1518 | 0.1465 | 0.1398 | 0.1358 | 0.1332 | 0.1305 | 0.1278 |

Pressure loss per foot, 4" hePEX and AquaPEX (100 % Water)

| | | Head (Feet of Water) Per Foot of Tubing | | | | | | | |
|------------|------------------------|--|--------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| gpm | Velocity (ft/s) | 60°F / 16°C | 80°F / 27°C | 100°F / 38°C | 120°F / 49°C | 140°F / 60°C | 160°F / 71°C | 180°F / 82°C | 200°F / 93°C |
| 37.00 | 1.51 | 0.0029 | 0.0028 | 0.0027 | 0.0026 | 0.0025 | 0.0025 | 0.0024 | 0.0024 |
| 38.00 | 1.55 | 0.0031 | 0.0029 | 0.0028 | 0.0027 | 0.0026 | 0.0026 | 0.0025 | 0.0025 |
| 39.00 | 1.59 | 0.0032 | 0.0031 | 0.0030 | 0.0028 | 0.0028 | 0.0027 | 0.0027 | 0.0026 |
| 40.00 | 1.63 | 0.0034 | 0.0032 | 0.0031 | 0.0030 | 0.0029 | 0.0028 | 0.0028 | 0.0027 |
| 41.00 | 1.67 | 0.0036 | 0.0034 | 0.0033 | 0.0031 | 0.0030 | 0.0030 | 0.0029 | 0.0028 |
| 42.00 | 1.71 | 0.0037 | 0.0035 | 0.0034 | 0.0033 | 0.0032 | 0.0031 | 0.0030 | 0.0030 |
| 43.00 | 1.75 | 0.0039 | 0.0037 | 0.0036 | 0.0034 | 0.0033 | 0.0032 | 0.0032 | 0.0031 |
| 44.00 | 1.79 | 0.0041 | 0.0039 | 0.0037 | 0.0036 | 0.0035 | 0.0034 | 0.0033 | 0.0032 |
| 45.00 | 1.83 | 0.0042 | 0.0040 | 0.0039 | 0.0037 | 0.0036 | 0.0035 | 0.0035 | 0.0034 |
| 46.00 | 1.87 | 0.0044 | 0.0042 | 0.0040 | 0.0039 | 0.0037 | 0.0037 | 0.0036 | 0.0035 |
| 47.00 | 1.91 | 0.0046 | 0.0044 | 0.0042 | 0.0040 | 0.0039 | 0.0038 | 0.0037 | 0.0037 |
| 48.00 | 1.95 | 0.0048 | 0.0045 | 0.0044 | 0.0042 | 0.0041 | 0.0040 | 0.0039 | 0.0038 |
| 49.00 | 1.99 | 0.0050 | 0.0047 | 0.0045 | 0.0043 | 0.0042 | 0.0041 | 0.0040 | 0.0040 |
| 50.00 | 2.03 | 0.0051 | 0.0049 | 0.0047 | 0.0045 | 0.0044 | 0.0043 | 0.0042 | 0.0041 |
| 52.00 | 2.12 | 0.0055 | 0.0053 | 0.0051 | 0.0048 | 0.0047 | 0.0046 | 0.0045 | 0.0044 |
| 54.00 | 2.20 | 0.0059 | 0.0056 | 0.0054 | 0.0052 | 0.0050 | 0.0049 | 0.0048 | 0.0047 |
| 56.00 | 2.28 | 0.0063 | 0.0060 | 0.0058 | 0.0055 | 0.0054 | 0.0053 | 0.0052 | 0.0051 |
| 58.00 | 2.36 | 0.0068 | 0.0064 | 0.0062 | 0.0059 | 0.0058 | 0.0056 | 0.0055 | 0.0054 |
| 60.00 | 2.44 | 0.0072 | 0.0068 | 0.0066 | 0.0063 | 0.0061 | 0.0060 | 0.0059 | 0.0058 |
| 62.00 | 2.52 | 0.0077 | 0.0073 | 0.0070 | 0.0067 | 0.0065 | 0.0064 | 0.0063 | 0.0061 |
| 64.00 | 2.60 | 0.0081 | 0.0077 | 0.0074 | 0.0071 | 0.0069 | 0.0068 | 0.0066 | 0.0065 |
| 66.00 | 2.68 | 0.0086 | 0.0082 | 0.0079 | 0.0075 | 0.0073 | 0.0072 | 0.0070 | 0.0069 |
| 68.00 | 2.77 | 0.0091 | 0.0086 | 0.0083 | 0.0079 | 0.0077 | 0.0076 | 0.0074 | 0.0073 |
| 70.00 | 2.85 | 0.0096 | 0.0091 | 0.0088 | 0.0084 | 0.0081 | 0.0080 | 0.0078 | 0.0077 |
| 72.00 | 2.93 | 0.0101 | 0.0096 | 0.0093 | 0.0088 | 0.0086 | 0.0084 | 0.0082 | 0.0081 |
| 74.00 | 3.01 | 0.0106 | 0.0101 | 0.0097 | 0.0093 | 0.0090 | 0.0089 | 0.0087 | 0.0085 |
| 76.00 | 3.09 | 0.0112 | 0.0106 | 0.0102 | 0.0098 | 0.0095 | 0.0093 | 0.0091 | 0.0089 |
| 78.00 | 3.17 | 0.0117 | 0.0111 | 0.0107 | 0.0102 | 0.0100 | 0.0098 | 0.0096 | 0.0094 |
| 80.00 | 3.25 | 0.0123 | 0.0117 | 0.0112 | 0.0107 | 0.0104 | 0.0102 | 0.0100 | 0.0098 |
| 82.00 | 3.34 | 0.0128 | 0.0122 | 0.0118 | 0.0112 | 0.0109 | 0.0107 | 0.0105 | 0.0103 |
| 84.00 | 3.42 | 0.0134 | 0.0128 | 0.0123 | 0.0117 | 0.0114 | 0.0112 | 0.0110 | 0.0107 |
| 86.00 | 3.50 | 0.0140 | 0.0133 | 0.0129 | 0.0123 | 0.0119 | 0.0117 | 0.0115 | 0.0112 |
| 88.00 | 3.58 | 0.0146 | 0.0139 | 0.0134 | 0.0128 | 0.0124 | 0.0122 | 0.0120 | 0.0117 |
| 90.00 | 3.66 | 0.0153 | 0.0145 | 0.0140 | 0.0133 | 0.0130 | 0.0127 | 0.0125 | 0.0122 |
| 92.00 | 3.74 | 0.0159 | 0.0151 | 0.0146 | 0.0139 | 0.0135 | 0.0132 | 0.0130 | 0.0127 |
| 94.00 | 3.82 | 0.0165 | 0.0157 | 0.0152 | 0.0145 | 0.0141 | 0.0138 | 0.0135 | 0.0132 |
| 96.00 | 3.90 | 0.0172 | 0.0163 | 0.0158 | 0.0150 | 0.0146 | 0.0143 | 0.0140 | 0.0138 |
| 98.00 | 3.99 | 0.0179 | 0.0170 | 0.0164 | 0.0156 | 0.0152 | 0.0149 | 0.0146 | 0.0143 |

Continues on next 2 pages (page 1 of 3)

Continued from previous page (page 2 of 3)

Pressure loss per foot, 4" hePEX and AquaPEX (100 % Water)

| gpm | Velocity (ft/s) | Head (Feet of Water) Per Foot of Tubing | | | | | | | |
|--------|-----------------|---|-------------|--------------|--------------|--------------|--------------|--------------|--------------|
| | | 60°F / 16°C | 80°F / 27°C | 100°F / 38°C | 120°F / 49°C | 140°F / 60°C | 160°F / 71°C | 180°F / 82°C | 200°F / 93°C |
| 100.00 | 4.07 | 0.0185 | 0.0176 | 0.0170 | 0.0162 | 0.0158 | 0.0154 | 0.0151 | 0.0148 |
| 102.00 | 4.15 | 0.0192 | 0.0183 | 0.0176 | 0.0168 | 0.0163 | 0.0160 | 0.0157 | 0.0154 |
| 104.00 | 4.23 | 0.0199 | 0.0189 | 0.0183 | 0.0174 | 0.0169 | 0.0166 | 0.0163 | 0.0159 |
| 106.00 | 4.31 | 0.0206 | 0.0196 | 0.0189 | 0.0181 | 0.0176 | 0.0172 | 0.0169 | 0.0165 |
| 108.00 | 4.39 | 0.0214 | 0.0203 | 0.0196 | 0.0187 | 0.0182 | 0.0178 | 0.0175 | 0.0171 |
| 110.00 | 4.47 | 0.0221 | 0.0210 | 0.0203 | 0.0193 | 0.0188 | 0.0184 | 0.0181 | 0.0177 |
| 112.00 | 4.56 | 0.0229 | 0.0217 | 0.0210 | 0.0200 | 0.0194 | 0.0191 | 0.0187 | 0.0183 |
| 114.00 | 4.64 | 0.0236 | 0.0224 | 0.0217 | 0.0207 | 0.0201 | 0.0197 | 0.0193 | 0.0189 |
| 116.00 | 4.72 | 0.0244 | 0.0232 | 0.0224 | 0.0213 | 0.0207 | 0.0203 | 0.0199 | 0.0195 |
| 118.00 | 4.80 | 0.0252 | 0.0239 | 0.0231 | 0.0220 | 0.0214 | 0.0210 | 0.0206 | 0.0201 |
| 120.00 | 4.88 | 0.0260 | 0.0247 | 0.0238 | 0.0227 | 0.0221 | 0.0216 | 0.0212 | 0.0208 |
| 122.00 | 4.96 | 0.0268 | 0.0254 | 0.0246 | 0.0234 | 0.0228 | 0.0223 | 0.0219 | 0.0214 |
| 124.00 | 5.04 | 0.0276 | 0.0262 | 0.0253 | 0.0242 | 0.0235 | 0.0230 | 0.0225 | 0.0221 |
| 126.00 | 5.13 | 0.0284 | 0.0270 | 0.0261 | 0.0249 | 0.0242 | 0.0237 | 0.0232 | 0.0227 |
| 128.00 | 5.21 | 0.0293 | 0.0278 | 0.0268 | 0.0256 | 0.0249 | 0.0244 | 0.0239 | 0.0234 |
| 130.00 | 5.29 | 0.0301 | 0.0286 | 0.0276 | 0.0264 | 0.0256 | 0.0251 | 0.0246 | 0.0241 |
| 132.00 | 5.37 | 0.0310 | 0.0294 | 0.0284 | 0.0271 | 0.0263 | 0.0258 | 0.0253 | 0.0248 |
| 134.00 | 5.45 | 0.0319 | 0.0303 | 0.0292 | 0.0279 | 0.0271 | 0.0265 | 0.0260 | 0.0255 |
| 136.00 | 5.53 | 0.0327 | 0.0311 | 0.0300 | 0.0287 | 0.0278 | 0.0273 | 0.0267 | 0.0262 |
| 138.00 | 5.61 | 0.0336 | 0.0320 | 0.0308 | 0.0294 | 0.0286 | 0.0280 | 0.0275 | 0.0269 |
| 140.00 | 5.69 | 0.0345 | 0.0328 | 0.0317 | 0.0302 | 0.0294 | 0.0288 | 0.0282 | 0.0276 |
| 142.00 | 5.78 | 0.0355 | 0.0337 | 0.0325 | 0.0310 | 0.0301 | 0.0296 | 0.0290 | 0.0284 |
| 144.00 | 5.86 | 0.0364 | 0.0346 | 0.0334 | 0.0318 | 0.0309 | 0.0303 | 0.0297 | 0.0291 |
| 146.00 | 5.94 | 0.0373 | 0.0355 | 0.0342 | 0.0327 | 0.0317 | 0.0311 | 0.0305 | 0.0299 |
| 148.00 | 6.02 | 0.0383 | 0.0364 | 0.0351 | 0.0335 | 0.0325 | 0.0319 | 0.0313 | 0.0306 |
| 150.00 | 6.10 | 0.0393 | 0.0373 | 0.0360 | 0.0343 | 0.0334 | 0.0327 | 0.0321 | 0.0314 |
| 155.00 | 6.30 | 0.0417 | 0.0396 | 0.0382 | 0.0365 | 0.0355 | 0.0348 | 0.0341 | 0.0334 |
| 160.00 | 6.51 | 0.0442 | 0.0420 | 0.0405 | 0.0387 | 0.0376 | 0.0369 | 0.0361 | 0.0354 |
| 165.00 | 6.71 | 0.0468 | 0.0445 | 0.0429 | 0.0410 | 0.0398 | 0.0390 | 0.0382 | 0.0375 |
| 170.00 | 6.92 | 0.0495 | 0.0470 | 0.0454 | 0.0433 | 0.0421 | 0.0412 | 0.0404 | 0.0396 |
| 175.00 | 7.12 | 0.0522 | 0.0496 | 0.0479 | 0.0457 | 0.0444 | 0.0435 | 0.0426 | 0.0418 |
| 180.00 | 7.32 | 0.0550 | 0.0522 | 0.0504 | 0.0481 | 0.0467 | 0.0458 | 0.0449 | 0.0440 |
| 185.00 | 7.53 | 0.0579 | 0.0550 | 0.0530 | 0.0506 | 0.0492 | 0.0482 | 0.0472 | 0.0463 |
| 190.00 | 7.73 | 0.0608 | 0.0577 | 0.0557 | 0.0532 | 0.0517 | 0.0507 | 0.0496 | 0.0486 |
| 195.00 | 7.93 | 0.0638 | 0.0606 | 0.0585 | 0.0558 | 0.0542 | 0.0531 | 0.0521 | 0.0510 |

Continued from previous page (page 3 of 3)

Pressure loss per foot, 4" hePEX and AquaPEX (100 % Water)

| | | Head (Feet of Water) Per Foot of Tubing | | | | | | | |
|--------|-------|--|--------|--------|--------|--------|--------|--------|--------|
| 200.00 | 8.14 | 0.0668 | 0.0635 | 0.0613 | 0.0585 | 0.0568 | 0.0557 | 0.0546 | 0.0535 |
| 205.00 | 8.34 | 0.0700 | 0.0665 | 0.0641 | 0.0612 | 0.0595 | 0.0583 | 0.0571 | 0.0560 |
| 210.00 | 8.54 | 0.0731 | 0.0695 | 0.0671 | 0.0640 | 0.0622 | 0.0610 | 0.0597 | 0.0585 |
| 215.00 | 8.75 | 0.0764 | 0.0726 | 0.0700 | 0.0669 | 0.0649 | 0.0637 | 0.0624 | 0.0611 |
| 220.00 | 8.95 | 0.0797 | 0.0757 | 0.0731 | 0.0698 | 0.0678 | 0.0664 | 0.0651 | 0.0638 |
| 225.00 | 9.15 | 0.0831 | 0.0789 | 0.0762 | 0.0727 | 0.0706 | 0.0693 | 0.0679 | 0.0665 |
| 230.00 | 9.36 | 0.0866 | 0.0822 | 0.0793 | 0.0757 | 0.0736 | 0.0721 | 0.0707 | 0.0692 |
| 235.00 | 9.56 | 0.0901 | 0.0856 | 0.0826 | 0.0788 | 0.0766 | 0.0751 | 0.0736 | 0.0721 |
| 240.00 | 9.76 | 0.0936 | 0.0890 | 0.0858 | 0.0819 | 0.0796 | 0.0780 | 0.0765 | 0.0749 |
| 245.00 | 9.97 | 0.0973 | 0.0924 | 0.0892 | 0.0851 | 0.0827 | 0.0811 | 0.0794 | 0.0778 |
| 250.00 | 10.17 | 0.1010 | 0.0959 | 0.0926 | 0.0884 | 0.0858 | 0.0842 | 0.0825 | 0.0808 |
| 260.00 | 10.58 | 0.1086 | 0.1032 | 0.0995 | 0.0950 | 0.0923 | 0.0905 | 0.0887 | 0.0869 |
| 270.00 | 10.98 | 0.1164 | 0.1106 | 0.1067 | 0.1019 | 0.0990 | 0.0970 | 0.0951 | 0.0932 |
| 280.00 | 11.39 | 0.1245 | 0.1183 | 0.1142 | 0.1090 | 0.1059 | 0.1038 | 0.1017 | 0.0996 |
| 290.00 | 11.80 | 0.1329 | 0.1263 | 0.1218 | 0.1163 | 0.1130 | 0.1107 | 0.1085 | 0.1063 |
| 300.00 | 12.20 | 0.1415 | 0.1344 | 0.1297 | 0.1238 | 0.1203 | 0.1179 | 0.1156 | 0.1132 |
| 310.00 | 12.61 | 0.1504 | 0.1428 | 0.1378 | 0.1316 | 0.1278 | 0.1253 | 0.1228 | 0.1203 |
| 320.00 | 13.02 | 0.1594 | 0.1515 | 0.1462 | 0.1395 | 0.1355 | 0.1329 | 0.1302 | 0.1276 |
| 330.00 | 13.42 | 0.1688 | 0.1603 | 0.1547 | 0.1477 | 0.1435 | 0.1407 | 0.1378 | 0.1350 |
| 340.00 | 13.83 | 0.1784 | 0.1695 | 0.1635 | 0.1561 | 0.1516 | 0.1486 | 0.1457 | 0.1427 |
| 350.00 | 14.24 | 0.1882 | 0.1788 | 0.1725 | 0.1647 | 0.1600 | 0.1568 | 0.1537 | 0.1506 |
| 360.00 | 14.64 | 0.1983 | 0.1884 | 0.1817 | 0.1735 | 0.1685 | 0.1652 | 0.1619 | 0.1586 |
| 370.00 | 15.05 | 0.2086 | 0.1981 | 0.1912 | 0.1825 | 0.1773 | 0.1738 | 0.1703 | 0.1669 |
| 380.00 | 15.46 | 0.2191 | 0.2082 | 0.2009 | 0.1917 | 0.1863 | 0.1826 | 0.1789 | 0.1753 |
| 390.00 | 15.86 | 0.2299 | 0.2184 | 0.2107 | 0.2012 | 0.1954 | 0.1916 | 0.1878 | 0.1839 |
| 400.00 | 16.27 | 0.2409 | 0.2289 | 0.2209 | 0.2108 | 0.2048 | 0.2008 | 0.1968 | 0.1927 |

Pressure loss per foot, 4" hePEX and AquaPEX (30% Glycol)

| | | Head (Feet of Water) Per Foot of Tubing | | | | | | | |
|------------|------------------------|--|--------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| gpm | Velocity (ft/s) | 60°F / 16°C | 80°F / 27°C | 100°F / 38°C | 120°F / 49°C | 140°F / 60°C | 160°F / 71°C | 180°F / 82°C | 200°F / 93°C |
| 37.0 | 1.51 | 0.0037 | 0.0035 | 0.0033 | 0.0032 | 0.0031 | 0.0030 | 0.0030 | 0.0029 |
| 38.0 | 1.55 | 0.0038 | 0.0036 | 0.0035 | 0.0034 | 0.0033 | 0.0032 | 0.0031 | 0.0031 |
| 39.0 | 1.59 | 0.0040 | 0.0038 | 0.0037 | 0.0035 | 0.0034 | 0.0034 | 0.0033 | 0.0032 |
| 40.0 | 1.63 | 0.0042 | 0.0040 | 0.0039 | 0.0037 | 0.0036 | 0.0035 | 0.0034 | 0.0034 |
| 41.0 | 1.67 | 0.0044 | 0.0042 | 0.0040 | 0.0039 | 0.0038 | 0.0037 | 0.0036 | 0.0035 |
| 42.0 | 1.71 | 0.0046 | 0.0044 | 0.0042 | 0.0040 | 0.0039 | 0.0038 | 0.0038 | 0.0037 |
| 43.0 | 1.75 | 0.0048 | 0.0046 | 0.0044 | 0.0042 | 0.0041 | 0.0040 | 0.0039 | 0.0039 |
| 44.0 | 1.79 | 0.0050 | 0.0048 | 0.0046 | 0.0044 | 0.0043 | 0.0042 | 0.0041 | 0.0040 |
| 45.0 | 1.83 | 0.0052 | 0.0050 | 0.0048 | 0.0046 | 0.0045 | 0.0044 | 0.0043 | 0.0042 |
| 46.0 | 1.87 | 0.0055 | 0.0052 | 0.0050 | 0.0048 | 0.0046 | 0.0046 | 0.0045 | 0.0044 |
| 47.0 | 1.91 | 0.0057 | 0.0054 | 0.0052 | 0.0050 | 0.0048 | 0.0047 | 0.0046 | 0.0045 |
| 48.0 | 1.95 | 0.0059 | 0.0056 | 0.0054 | 0.0052 | 0.0050 | 0.0049 | 0.0048 | 0.0047 |
| 49.0 | 1.99 | 0.0061 | 0.0058 | 0.0056 | 0.0054 | 0.0052 | 0.0051 | 0.0050 | 0.0049 |
| 50.0 | 2.03 | 0.0064 | 0.0061 | 0.0058 | 0.0056 | 0.0054 | 0.0053 | 0.0052 | 0.0051 |
| 52.0 | 2.12 | 0.0069 | 0.0065 | 0.0063 | 0.0060 | 0.0058 | 0.0057 | 0.0056 | 0.0055 |
| 54.0 | 2.20 | 0.0074 | 0.0070 | 0.0067 | 0.0064 | 0.0062 | 0.0061 | 0.0060 | 0.0059 |
| 56.0 | 2.28 | 0.0079 | 0.0075 | 0.0072 | 0.0069 | 0.0067 | 0.0066 | 0.0064 | 0.0063 |
| 58.0 | 2.36 | 0.0084 | 0.0080 | 0.0077 | 0.0073 | 0.0071 | 0.0070 | 0.0069 | 0.0067 |
| 60.0 | 2.44 | 0.0089 | 0.0085 | 0.0082 | 0.0078 | 0.0076 | 0.0074 | 0.0073 | 0.0071 |
| 62.0 | 2.52 | 0.0095 | 0.0090 | 0.0087 | 0.0083 | 0.0081 | 0.0079 | 0.0078 | 0.0076 |
| 64.0 | 2.60 | 0.0101 | 0.0096 | 0.0092 | 0.0088 | 0.0086 | 0.0084 | 0.0082 | 0.0081 |
| 66.0 | 2.68 | 0.0107 | 0.0101 | 0.0098 | 0.0093 | 0.0091 | 0.0089 | 0.0087 | 0.0085 |
| 68.0 | 2.77 | 0.0113 | 0.0107 | 0.0103 | 0.0099 | 0.0096 | 0.0094 | 0.0092 | 0.0090 |
| 70.0 | 2.85 | 0.0119 | 0.0113 | 0.0109 | 0.0104 | 0.0101 | 0.0099 | 0.0097 | 0.0095 |
| 72.0 | 2.93 | 0.0125 | 0.0119 | 0.0115 | 0.0110 | 0.0106 | 0.0104 | 0.0102 | 0.0100 |
| 74.0 | 3.01 | 0.0132 | 0.0125 | 0.0121 | 0.0115 | 0.0112 | 0.0110 | 0.0108 | 0.0105 |
| 76.0 | 3.09 | 0.0138 | 0.0131 | 0.0127 | 0.0121 | 0.0118 | 0.0115 | 0.0113 | 0.0111 |
| 78.0 | 3.17 | 0.0145 | 0.0138 | 0.0133 | 0.0127 | 0.0123 | 0.0121 | 0.0119 | 0.0116 |
| 80.0 | 3.25 | 0.0152 | 0.0145 | 0.0139 | 0.0133 | 0.0129 | 0.0127 | 0.0124 | 0.0122 |
| 82.0 | 3.34 | 0.0159 | 0.0151 | 0.0146 | 0.0139 | 0.0135 | 0.0133 | 0.0130 | 0.0127 |
| 84.0 | 3.42 | 0.0167 | 0.0158 | 0.0153 | 0.0146 | 0.0142 | 0.0139 | 0.0136 | 0.0133 |
| 86.0 | 3.50 | 0.0174 | 0.0165 | 0.0159 | 0.0152 | 0.0148 | 0.0145 | 0.0142 | 0.0139 |
| 88.0 | 3.58 | 0.0181 | 0.0172 | 0.0166 | 0.0159 | 0.0154 | 0.0151 | 0.0148 | 0.0145 |
| 90.0 | 3.66 | 0.0189 | 0.0180 | 0.0173 | 0.0166 | 0.0161 | 0.0158 | 0.0154 | 0.0151 |
| 92.0 | 3.74 | 0.0197 | 0.0187 | 0.0181 | 0.0172 | 0.0167 | 0.0164 | 0.0161 | 0.0158 |
| 94.0 | 3.82 | 0.0205 | 0.0195 | 0.0188 | 0.0179 | 0.0174 | 0.0171 | 0.0167 | 0.0164 |
| 96.0 | 3.90 | 0.0213 | 0.0203 | 0.0195 | 0.0187 | 0.0181 | 0.0178 | 0.0174 | 0.0171 |
| 98.0 | 3.99 | 0.0221 | 0.0210 | 0.0203 | 0.0194 | 0.0188 | 0.0185 | 0.0181 | 0.0177 |
| 100.0 | 4.07 | 0.0230 | 0.0218 | 0.0211 | 0.0201 | 0.0195 | 0.0192 | 0.0188 | 0.0184 |

Continues on next 2 pages

Continued from previous page

Pressure loss per foot, 4" hePEX and AquaPEX (30% Glycol)

| gpm | Velocity (ft/s) | Head (Feet of Water) Per Foot of Tubing | | | | | | | |
|-------|-----------------|---|-------------|--------------|--------------|--------------|--------------|--------------|--------------|
| | | 60°F / 16°C | 80°F / 27°C | 100°F / 38°C | 120°F / 49°C | 140°F / 60°C | 160°F / 71°C | 180°F / 82°C | 200°F / 93°C |
| 102.0 | 4.15 | 0.0238 | 0.0227 | 0.0219 | 0.0209 | 0.0203 | 0.0199 | 0.0195 | 0.0191 |
| 104.0 | 4.23 | 0.0247 | 0.0235 | 0.0227 | 0.0216 | 0.0210 | 0.0206 | 0.0202 | 0.0198 |
| 106.0 | 4.31 | 0.0256 | 0.0243 | 0.0235 | 0.0224 | 0.0218 | 0.0213 | 0.0209 | 0.0205 |
| 108.0 | 4.39 | 0.0265 | 0.0252 | 0.0243 | 0.0232 | 0.0225 | 0.0221 | 0.0216 | 0.0212 |
| 110.0 | 4.47 | 0.0274 | 0.0261 | 0.0251 | 0.0240 | 0.0233 | 0.0229 | 0.0224 | 0.0219 |
| 112.0 | 4.56 | 0.0284 | 0.0269 | 0.0260 | 0.0248 | 0.0241 | 0.0236 | 0.0232 | 0.0227 |
| 114.0 | 4.64 | 0.0293 | 0.0278 | 0.0269 | 0.0256 | 0.0249 | 0.0244 | 0.0239 | 0.0234 |
| 116.0 | 4.72 | 0.0303 | 0.0287 | 0.0277 | 0.0265 | 0.0257 | 0.0252 | 0.0247 | 0.0242 |
| 118.0 | 4.80 | 0.0312 | 0.0297 | 0.0286 | 0.0273 | 0.0265 | 0.0260 | 0.0255 | 0.0250 |
| 120.0 | 4.88 | 0.0322 | 0.0306 | 0.0295 | 0.0282 | 0.0274 | 0.0268 | 0.0263 | 0.0258 |
| 122.0 | 4.96 | 0.0332 | 0.0315 | 0.0304 | 0.0291 | 0.0282 | 0.0277 | 0.0271 | 0.0266 |
| 124.0 | 5.04 | 0.0342 | 0.0325 | 0.0314 | 0.0299 | 0.0291 | 0.0285 | 0.0280 | 0.0274 |
| 126.0 | 5.13 | 0.0353 | 0.0335 | 0.0323 | 0.0308 | 0.0300 | 0.0294 | 0.0288 | 0.0282 |
| 128.0 | 5.21 | 0.0363 | 0.0345 | 0.0333 | 0.0318 | 0.0309 | 0.0302 | 0.0296 | 0.0290 |
| 130.0 | 5.29 | 0.0374 | 0.0355 | 0.0342 | 0.0327 | 0.0317 | 0.0311 | 0.0305 | 0.0299 |
| 132.0 | 5.37 | 0.0384 | 0.0365 | 0.0352 | 0.0336 | 0.0327 | 0.0320 | 0.0314 | 0.0307 |
| 134.0 | 5.45 | 0.0395 | 0.0375 | 0.0362 | 0.0346 | 0.0336 | 0.0329 | 0.0323 | 0.0316 |
| 136.0 | 5.53 | 0.0406 | 0.0386 | 0.0372 | 0.0355 | 0.0345 | 0.0338 | 0.0332 | 0.0325 |
| 138.0 | 5.61 | 0.0417 | 0.0396 | 0.0382 | 0.0365 | 0.0355 | 0.0348 | 0.0341 | 0.0334 |
| 140.0 | 5.69 | 0.0428 | 0.0407 | 0.0393 | 0.0375 | 0.0364 | 0.0357 | 0.0350 | 0.0343 |
| 142.0 | 5.78 | 0.0440 | 0.0418 | 0.0403 | 0.0385 | 0.0374 | 0.0366 | 0.0359 | 0.0352 |
| 144.0 | 5.86 | 0.0451 | 0.0429 | 0.0414 | 0.0395 | 0.0384 | 0.0376 | 0.0369 | 0.0361 |
| 146.0 | 5.94 | 0.0463 | 0.0440 | 0.0424 | 0.0405 | 0.0394 | 0.0386 | 0.0378 | 0.0370 |
| 148.0 | 6.02 | 0.0475 | 0.0451 | 0.0435 | 0.0415 | 0.0404 | 0.0396 | 0.0388 | 0.0380 |
| 150.0 | 6.10 | 0.0487 | 0.0462 | 0.0446 | 0.0426 | 0.0414 | 0.0406 | 0.0397 | 0.0389 |
| 155.0 | 6.30 | 0.0517 | 0.0491 | 0.0474 | 0.0453 | 0.0440 | 0.0431 | 0.0422 | 0.0414 |
| 160.0 | 6.51 | 0.0548 | 0.0521 | 0.0503 | 0.0480 | 0.0466 | 0.0457 | 0.0448 | 0.0439 |
| 165.0 | 6.71 | 0.0581 | 0.0552 | 0.0532 | 0.0508 | 0.0493 | 0.0484 | 0.0474 | 0.0464 |
| 170.0 | 6.92 | 0.0614 | 0.0583 | 0.0562 | 0.0537 | 0.0522 | 0.0511 | 0.0501 | 0.0491 |
| 175.0 | 7.12 | 0.0647 | 0.0615 | 0.0593 | 0.0566 | 0.0550 | 0.0539 | 0.0529 | 0.0518 |
| 180.0 | 7.32 | 0.0682 | 0.0648 | 0.0625 | 0.0597 | 0.0580 | 0.0568 | 0.0557 | 0.0546 |
| 185.0 | 7.53 | 0.0717 | 0.0682 | 0.0658 | 0.0628 | 0.0610 | 0.0598 | 0.0586 | 0.0574 |
| 190.0 | 7.73 | 0.0754 | 0.0716 | 0.0691 | 0.0659 | 0.0641 | 0.0628 | 0.0616 | 0.0603 |
| 195.0 | 7.93 | 0.0791 | 0.0751 | 0.0725 | 0.0692 | 0.0672 | 0.0659 | 0.0646 | 0.0633 |

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Continued from previous page (page 3 of 3)

Pressure loss per foot, 4" hePEX and AquaPEX (30% Glycol)

| | | Head (Feet of Water) Per Foot of Tubing | | | | | | | |
|-------|-----------------|--|---------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | Velocity | 60°F / | 80°F / | 100°F / | 120°F / | 140°F / | 160°F / | 180°F / | 200°F / |
| 200.0 | 8.14 | 0.0829 | 0.0787 | 0.0760 | 0.0725 | 0.0704 | 0.0691 | 0.0677 | 0.0663 |
| 205.0 | 8.34 | 0.0867 | 0.0824 | 0.0795 | 0.0759 | 0.0737 | 0.0723 | 0.0708 | 0.0694 |
| 210.0 | 8.54 | 0.0907 | 0.0862 | 0.0831 | 0.0794 | 0.0771 | 0.0756 | 0.0741 | 0.0726 |
| 215.0 | 8.75 | 0.0947 | 0.0900 | 0.0868 | 0.0829 | 0.0805 | 0.0789 | 0.0774 | 0.0758 |
| 220.0 | 8.95 | 0.0989 | 0.0939 | 0.0906 | 0.0865 | 0.0840 | 0.0824 | 0.0807 | 0.0791 |
| 225.0 | 9.15 | 0.1030 | 0.0979 | 0.0945 | 0.0902 | 0.0876 | 0.0859 | 0.0842 | 0.0824 |
| 230.0 | 9.36 | 0.1073 | 0.1020 | 0.0984 | 0.0939 | 0.0912 | 0.0894 | 0.0876 | 0.0859 |
| 235.0 | 9.56 | 0.1117 | 0.1061 | 0.1024 | 0.0977 | 0.0949 | 0.0931 | 0.0912 | 0.0893 |
| 240.0 | 9.76 | 0.1161 | 0.1103 | 0.1064 | 0.1016 | 0.0987 | 0.0968 | 0.0948 | 0.0929 |
| 245.0 | 9.97 | 0.1206 | 0.1146 | 0.1106 | 0.1056 | 0.1025 | 0.1005 | 0.0985 | 0.0965 |
| 250.0 | 10.17 | 0.1252 | 0.1190 | 0.1148 | 0.1096 | 0.1064 | 0.1044 | 0.1023 | 0.1002 |
| 260.0 | 10.58 | 0.1347 | 0.1279 | 0.1234 | 0.1178 | 0.1145 | 0.1122 | 0.1100 | 0.1077 |
| 270.0 | 10.98 | 0.1444 | 0.1372 | 0.1324 | 0.1263 | 0.1227 | 0.1203 | 0.1179 | 0.1155 |
| 280.0 | 11.39 | 0.1544 | 0.1467 | 0.1416 | 0.1351 | 0.1313 | 0.1287 | 0.1261 | 0.1235 |
| 290.0 | 11.80 | 0.1648 | 0.1566 | 0.1511 | 0.1442 | 0.1401 | 0.1373 | 0.1346 | 0.1318 |
| 300.0 | 12.20 | 0.1755 | 0.1667 | 0.1608 | 0.1535 | 0.1491 | 0.1462 | 0.1433 | 0.1404 |
| 310.0 | 12.61 | 0.1864 | 0.1771 | 0.1709 | 0.1631 | 0.1585 | 0.1554 | 0.1523 | 0.1491 |
| 320.0 | 13.02 | 0.1977 | 0.1878 | 0.1812 | 0.1730 | 0.1681 | 0.1648 | 0.1615 | 0.1582 |
| 330.0 | 13.42 | 0.2093 | 0.1988 | 0.1919 | 0.1831 | 0.1779 | 0.1744 | 0.1709 | 0.1674 |
| 340.0 | 13.83 | 0.2212 | 0.2101 | 0.2027 | 0.1935 | 0.1880 | 0.1843 | 0.1806 | 0.1769 |
| 350.0 | 14.24 | 0.2334 | 0.2217 | 0.2139 | 0.2042 | 0.1984 | 0.1945 | 0.1906 | 0.1867 |
| 360.0 | 14.64 | 0.2458 | 0.2336 | 0.2254 | 0.2151 | 0.2090 | 0.2049 | 0.2008 | 0.1967 |
| 370.0 | 15.05 | 0.2586 | 0.2457 | 0.2371 | 0.2263 | 0.2198 | 0.2155 | 0.2112 | 0.2069 |
| 380.0 | 15.46 | 0.2717 | 0.2581 | 0.2491 | 0.2377 | 0.2310 | 0.2264 | 0.2219 | 0.2174 |
| 390.0 | 15.86 | 0.2851 | 0.2708 | 0.2613 | 0.2495 | 0.2423 | 0.2376 | 0.2328 | 0.2281 |
| 400.0 | 16.27 | 0.2988 | 0.2838 | 0.2739 | 0.2614 | 0.2539 | 0.2490 | 0.2440 | 0.2390 |

Pressure loss per foot, 4" hePEX and AquaPEX (40% Glycol)

| | | Head (Feet of Water) Per Foot of Tubing | | | | | | | |
|------------|------------------------|--|--------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| gpm | Velocity (ft/s) | 60°F / 16°C | 80°F / 27°C | 100°F / 38°C | 120°F / 49°C | 140°F / 60°C | 160°F / 71°C | 180°F / 82°C | 200°F / 93°C |
| 37.0 | 1.51 | 0.0039 | 0.0037 | 0.0036 | 0.0034 | 0.0033 | 0.0033 | 0.0032 | 0.0031 |
| 38.0 | 1.55 | 0.0041 | 0.0039 | 0.0038 | 0.0036 | 0.0035 | 0.0034 | 0.0034 | 0.0033 |
| 39.0 | 1.59 | 0.0043 | 0.0041 | 0.0040 | 0.0038 | 0.0037 | 0.0036 | 0.0035 | 0.0035 |
| 40.0 | 1.63 | 0.0045 | 0.0043 | 0.0041 | 0.0040 | 0.0038 | 0.0038 | 0.0037 | 0.0036 |
| 41.0 | 1.67 | 0.0047 | 0.0045 | 0.0043 | 0.0041 | 0.0040 | 0.0039 | 0.0039 | 0.0038 |
| 42.0 | 1.71 | 0.0050 | 0.0047 | 0.0045 | 0.0043 | 0.0042 | 0.0041 | 0.0040 | 0.0040 |
| 43.0 | 1.75 | 0.0052 | 0.0049 | 0.0047 | 0.0045 | 0.0044 | 0.0043 | 0.0042 | 0.0041 |
| 44.0 | 1.79 | 0.0054 | 0.0051 | 0.0049 | 0.0047 | 0.0046 | 0.0045 | 0.0044 | 0.0043 |
| 45.0 | 1.83 | 0.0056 | 0.0053 | 0.0052 | 0.0049 | 0.0048 | 0.0047 | 0.0046 | 0.0045 |
| 46.0 | 1.87 | 0.0059 | 0.0056 | 0.0054 | 0.0051 | 0.0050 | 0.0049 | 0.0048 | 0.0047 |
| 47.0 | 1.91 | 0.0061 | 0.0058 | 0.0056 | 0.0053 | 0.0052 | 0.0051 | 0.0050 | 0.0049 |
| 48.0 | 1.95 | 0.0063 | 0.0060 | 0.0058 | 0.0055 | 0.0054 | 0.0053 | 0.0052 | 0.0051 |
| 49.0 | 1.99 | 0.0066 | 0.0063 | 0.0060 | 0.0058 | 0.0056 | 0.0055 | 0.0054 | 0.0053 |
| 50.0 | 2.03 | 0.0068 | 0.0065 | 0.0063 | 0.0060 | 0.0058 | 0.0057 | 0.0056 | 0.0055 |
| 52.0 | 2.12 | 0.0074 | 0.0070 | 0.0067 | 0.0064 | 0.0063 | 0.0061 | 0.0060 | 0.0059 |
| 54.0 | 2.20 | 0.0079 | 0.0075 | 0.0072 | 0.0069 | 0.0067 | 0.0066 | 0.0064 | 0.0063 |
| 56.0 | 2.28 | 0.0084 | 0.0080 | 0.0077 | 0.0074 | 0.0072 | 0.0070 | 0.0069 | 0.0067 |
| 58.0 | 2.36 | 0.0090 | 0.0086 | 0.0083 | 0.0079 | 0.0077 | 0.0075 | 0.0074 | 0.0072 |
| 60.0 | 2.44 | 0.0096 | 0.0091 | 0.0088 | 0.0084 | 0.0081 | 0.0080 | 0.0078 | 0.0077 |
| 62.0 | 2.52 | 0.0102 | 0.0097 | 0.0093 | 0.0089 | 0.0087 | 0.0085 | 0.0083 | 0.0081 |
| 64.0 | 2.60 | 0.0108 | 0.0103 | 0.0099 | 0.0094 | 0.0092 | 0.0090 | 0.0088 | 0.0086 |
| 66.0 | 2.68 | 0.0114 | 0.0109 | 0.0105 | 0.0100 | 0.0097 | 0.0095 | 0.0093 | 0.0091 |
| 68.0 | 2.77 | 0.0121 | 0.0115 | 0.0111 | 0.0106 | 0.0103 | 0.0101 | 0.0099 | 0.0097 |
| 70.0 | 2.85 | 0.0127 | 0.0121 | 0.0117 | 0.0112 | 0.0108 | 0.0106 | 0.0104 | 0.0102 |
| 72.0 | 2.93 | 0.0134 | 0.0128 | 0.0123 | 0.0117 | 0.0114 | 0.0112 | 0.0110 | 0.0107 |
| 74.0 | 3.01 | 0.0141 | 0.0134 | 0.0129 | 0.0124 | 0.0120 | 0.0118 | 0.0115 | 0.0113 |
| 76.0 | 3.09 | 0.0148 | 0.0141 | 0.0136 | 0.0130 | 0.0126 | 0.0124 | 0.0121 | 0.0119 |
| 78.0 | 3.17 | 0.0156 | 0.0148 | 0.0143 | 0.0136 | 0.0132 | 0.0130 | 0.0127 | 0.0125 |
| 80.0 | 3.25 | 0.0163 | 0.0155 | 0.0150 | 0.0143 | 0.0139 | 0.0136 | 0.0133 | 0.0131 |
| 82.0 | 3.34 | 0.0171 | 0.0162 | 0.0157 | 0.0149 | 0.0145 | 0.0142 | 0.0139 | 0.0137 |
| 84.0 | 3.42 | 0.0179 | 0.0170 | 0.0164 | 0.0156 | 0.0152 | 0.0149 | 0.0146 | 0.0143 |
| 86.0 | 3.50 | 0.0187 | 0.0177 | 0.0171 | 0.0163 | 0.0159 | 0.0155 | 0.0152 | 0.0149 |
| 88.0 | 3.58 | 0.0195 | 0.0185 | 0.0178 | 0.0170 | 0.0165 | 0.0162 | 0.0159 | 0.0156 |
| 90.0 | 3.66 | 0.0203 | 0.0193 | 0.0186 | 0.0178 | 0.0172 | 0.0169 | 0.0166 | 0.0162 |
| 92.0 | 3.74 | 0.0211 | 0.0201 | 0.0194 | 0.0185 | 0.0180 | 0.0176 | 0.0173 | 0.0169 |
| 94.0 | 3.82 | 0.0220 | 0.0209 | 0.0202 | 0.0192 | 0.0187 | 0.0183 | 0.0180 | 0.0176 |
| 96.0 | 3.90 | 0.0229 | 0.0217 | 0.0210 | 0.0200 | 0.0194 | 0.0191 | 0.0187 | 0.0183 |
| 98.0 | 3.99 | 0.0238 | 0.0226 | 0.0218 | 0.0208 | 0.0202 | 0.0198 | 0.0194 | 0.0190 |

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Continued from previous page (page 2 of 3)

Pressure loss per foot, 4" hePEX and AquaPEX (40% Glycol)

| gpm | Velocity (ft/s) | Head (Feet of Water) Per Foot of Tubing | | | | | | | |
|-------|-----------------|---|-------------|--------------|--------------|--------------|--------------|--------------|--------------|
| | | 60°F / 16°C | 80°F / 27°C | 100°F / 38°C | 120°F / 49°C | 140°F / 60°C | 160°F / 71°C | 180°F / 82°C | 200°F / 93°C |
| 100.0 | 4.07 | 0.0247 | 0.0234 | 0.0226 | 0.0216 | 0.0210 | 0.0205 | 0.0201 | 0.0197 |
| 102.0 | 4.15 | 0.0256 | 0.0243 | 0.0234 | 0.0224 | 0.0217 | 0.0213 | 0.0209 | 0.0205 |
| 104.0 | 4.23 | 0.0265 | 0.0252 | 0.0243 | 0.0232 | 0.0225 | 0.0221 | 0.0217 | 0.0212 |
| 106.0 | 4.31 | 0.0275 | 0.0261 | 0.0252 | 0.0240 | 0.0233 | 0.0229 | 0.0224 | 0.0220 |
| 108.0 | 4.39 | 0.0284 | 0.0270 | 0.0261 | 0.0249 | 0.0242 | 0.0237 | 0.0232 | 0.0227 |
| 110.0 | 4.47 | 0.0294 | 0.0279 | 0.0270 | 0.0257 | 0.0250 | 0.0245 | 0.0240 | 0.0235 |
| 112.0 | 4.56 | 0.0304 | 0.0289 | 0.0279 | 0.0266 | 0.0258 | 0.0253 | 0.0248 | 0.0243 |
| 114.0 | 4.64 | 0.0314 | 0.0298 | 0.0288 | 0.0275 | 0.0267 | 0.0262 | 0.0257 | 0.0251 |
| 116.0 | 4.72 | 0.0324 | 0.0308 | 0.0297 | 0.0284 | 0.0276 | 0.0270 | 0.0265 | 0.0260 |
| 118.0 | 4.80 | 0.0335 | 0.0318 | 0.0307 | 0.0293 | 0.0285 | 0.0279 | 0.0274 | 0.0268 |
| 120.0 | 4.88 | 0.0345 | 0.0328 | 0.0317 | 0.0302 | 0.0294 | 0.0288 | 0.0282 | 0.0276 |
| 122.0 | 4.96 | 0.0356 | 0.0338 | 0.0327 | 0.0312 | 0.0303 | 0.0297 | 0.0291 | 0.0285 |
| 124.0 | 5.04 | 0.0367 | 0.0349 | 0.0336 | 0.0321 | 0.0312 | 0.0306 | 0.0300 | 0.0294 |
| 126.0 | 5.13 | 0.0378 | 0.0359 | 0.0347 | 0.0331 | 0.0321 | 0.0315 | 0.0309 | 0.0302 |
| 128.0 | 5.21 | 0.0389 | 0.0370 | 0.0357 | 0.0341 | 0.0331 | 0.0324 | 0.0318 | 0.0311 |
| 130.0 | 5.29 | 0.0401 | 0.0381 | 0.0367 | 0.0351 | 0.0341 | 0.0334 | 0.0327 | 0.0320 |
| 132.0 | 5.37 | 0.0412 | 0.0391 | 0.0378 | 0.0361 | 0.0350 | 0.0343 | 0.0337 | 0.0330 |
| 134.0 | 5.45 | 0.0424 | 0.0403 | 0.0388 | 0.0371 | 0.0360 | 0.0353 | 0.0346 | 0.0339 |
| 136.0 | 5.53 | 0.0435 | 0.0414 | 0.0399 | 0.0381 | 0.0370 | 0.0363 | 0.0356 | 0.0348 |
| 138.0 | 5.61 | 0.0447 | 0.0425 | 0.0410 | 0.0391 | 0.0380 | 0.0373 | 0.0365 | 0.0358 |
| 140.0 | 5.69 | 0.0459 | 0.0437 | 0.0421 | 0.0402 | 0.0391 | 0.0383 | 0.0375 | 0.0368 |
| 142.0 | 5.78 | 0.0472 | 0.0448 | 0.0432 | 0.0413 | 0.0401 | 0.0393 | 0.0385 | 0.0377 |
| 144.0 | 5.86 | 0.0484 | 0.0460 | 0.0444 | 0.0424 | 0.0411 | 0.0403 | 0.0395 | 0.0387 |
| 146.0 | 5.94 | 0.0497 | 0.0472 | 0.0455 | 0.0435 | 0.0422 | 0.0414 | 0.0406 | 0.0397 |
| 148.0 | 6.02 | 0.0509 | 0.0484 | 0.0467 | 0.0446 | 0.0433 | 0.0424 | 0.0416 | 0.0407 |
| 150.0 | 6.10 | 0.0522 | 0.0496 | 0.0479 | 0.0457 | 0.0444 | 0.0435 | 0.0426 | 0.0418 |
| 155.0 | 6.30 | 0.0555 | 0.0527 | 0.0508 | 0.0485 | 0.0471 | 0.0462 | 0.0453 | 0.0444 |
| 160.0 | 6.51 | 0.0588 | 0.0559 | 0.0539 | 0.0515 | 0.0500 | 0.0490 | 0.0480 | 0.0471 |
| 165.0 | 6.71 | 0.0623 | 0.0592 | 0.0571 | 0.0545 | 0.0529 | 0.0519 | 0.0509 | 0.0498 |
| 170.0 | 6.92 | 0.0658 | 0.0625 | 0.0603 | 0.0576 | 0.0559 | 0.0548 | 0.0537 | 0.0526 |
| 175.0 | 7.12 | 0.0694 | 0.0660 | 0.0636 | 0.0608 | 0.0590 | 0.0579 | 0.0567 | 0.0555 |
| 180.0 | 7.32 | 0.0731 | 0.0695 | 0.0671 | 0.0640 | 0.0622 | 0.0610 | 0.0597 | 0.0585 |
| 185.0 | 7.53 | 0.0769 | 0.0731 | 0.0705 | 0.0673 | 0.0654 | 0.0641 | 0.0628 | 0.0616 |
| 190.0 | 7.73 | 0.0808 | 0.0768 | 0.0741 | 0.0707 | 0.0687 | 0.0674 | 0.0660 | 0.0647 |
| 195.0 | 7.93 | 0.0848 | 0.0806 | 0.0778 | 0.0742 | 0.0721 | 0.0707 | 0.0693 | 0.0679 |

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Continued from previous page (page 3 of 3)

Pressure loss per foot, 4" hePEX and AquaPEX (40% Glycol)

| | | Head (Feet of Water) Per Foot of Tubing | | | | | | | |
|-------|-----------------|---|-------------|--------------|--------------|--------------|--------------|--------------|--------------|
| gpm | Velocity (ft/s) | 60°F / 16°C | 80°F / 27°C | 100°F / 38°C | 120°F / 49°C | 140°F / 60°C | 160°F / 71°C | 180°F / 82°C | 200°F / 93°C |
| 200.0 | 8.14 | 0.0889 | 0.0844 | 0.0815 | 0.0778 | 0.0756 | 0.0741 | 0.0726 | 0.0711 |
| 205.0 | 8.34 | 0.0930 | 0.0884 | 0.0853 | 0.0814 | 0.0791 | 0.0775 | 0.0760 | 0.0744 |
| 210.0 | 8.54 | 0.0973 | 0.0924 | 0.0892 | 0.0851 | 0.0827 | 0.0811 | 0.0794 | 0.0778 |
| 215.0 | 8.75 | 0.1016 | 0.0965 | 0.0931 | 0.0889 | 0.0864 | 0.0847 | 0.0830 | 0.0813 |
| 220.0 | 8.95 | 0.1060 | 0.1007 | 0.0972 | 0.0928 | 0.0901 | 0.0884 | 0.0866 | 0.0848 |
| 225.0 | 9.15 | 0.1105 | 0.1050 | 0.1013 | 0.0967 | 0.0939 | 0.0921 | 0.0903 | 0.0884 |
| 230.0 | 9.36 | 0.1151 | 0.1094 | 0.1055 | 0.1007 | 0.0978 | 0.0959 | 0.0940 | 0.0921 |
| 235.0 | 9.56 | 0.1198 | 0.1138 | 0.1098 | 0.1048 | 0.1018 | 0.0998 | 0.0978 | 0.0958 |
| 240.0 | 9.76 | 0.1245 | 0.1183 | 0.1142 | 0.1090 | 0.1059 | 0.1038 | 0.1017 | 0.0996 |
| 245.0 | 9.97 | 0.1294 | 0.1229 | 0.1186 | 0.1132 | 0.1100 | 0.1078 | 0.1057 | 0.1035 |
| 250.0 | 10.17 | 0.1343 | 0.1276 | 0.1231 | 0.1175 | 0.1142 | 0.1119 | 0.1097 | 0.1075 |
| 260.0 | 10.58 | 0.1444 | 0.1372 | 0.1324 | 0.1264 | 0.1228 | 0.1204 | 0.1179 | 0.1155 |
| 270.0 | 10.98 | 0.1549 | 0.1471 | 0.1420 | 0.1355 | 0.1316 | 0.1291 | 0.1265 | 0.1239 |
| 280.0 | 11.39 | 0.1656 | 0.1574 | 0.1518 | 0.1449 | 0.1408 | 0.1380 | 0.1353 | 0.1325 |
| 290.0 | 11.80 | 0.1768 | 0.1679 | 0.1620 | 0.1547 | 0.1502 | 0.1473 | 0.1444 | 0.1414 |
| 300.0 | 12.20 | 0.1882 | 0.1788 | 0.1725 | 0.1647 | 0.1600 | 0.1568 | 0.1537 | 0.1506 |
| 310.0 | 12.61 | 0.2000 | 0.1900 | 0.1833 | 0.1750 | 0.1700 | 0.1666 | 0.1633 | 0.1600 |
| 320.0 | 13.02 | 0.2121 | 0.2015 | 0.1944 | 0.1856 | 0.1803 | 0.1767 | 0.1732 | 0.1697 |
| 330.0 | 13.42 | 0.2245 | 0.2133 | 0.2058 | 0.1964 | 0.1908 | 0.1871 | 0.1833 | 0.1796 |
| 340.0 | 13.83 | 0.2372 | 0.2254 | 0.2175 | 0.2076 | 0.2016 | 0.1977 | 0.1937 | 0.1898 |
| 350.0 | 14.24 | 0.2503 | 0.2378 | 0.2294 | 0.2190 | 0.2128 | 0.2086 | 0.2044 | 0.2002 |
| 360.0 | 14.64 | 0.2637 | 0.2505 | 0.2417 | 0.2307 | 0.2241 | 0.2197 | 0.2153 | 0.2110 |
| 370.0 | 15.05 | 0.2774 | 0.2635 | 0.2543 | 0.2427 | 0.2358 | 0.2312 | 0.2265 | 0.2219 |
| 380.0 | 15.46 | 0.2914 | 0.2769 | 0.2671 | 0.2550 | 0.2477 | 0.2429 | 0.2380 | 0.2331 |
| 390.0 | 15.86 | 0.3058 | 0.2905 | 0.2803 | 0.2676 | 0.2599 | 0.2548 | 0.2497 | 0.2446 |
| 400.0 | 16.27 | 0.3204 | 0.3044 | 0.2937 | 0.2804 | 0.2724 | 0.2670 | 0.2617 | 0.2564 |

Pressure loss per foot, 4" hePEX and AquaPEX (50% Glycol)

| | | Head (Feet of Water) Per Foot of Tubing | | | | | | | |
|------------|------------------------|--|--------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| gpm | Velocity (ft/s) | 60°F / 16°C | 80°F / 27°C | 100°F / 38°C | 120°F / 49°C | 140°F / 60°C | 160°F / 71°C | 180°F / 82°C | 200°F / 93°C |
| 37.0 | 1.51 | 0.0041 | 0.0039 | 0.0038 | 0.0036 | 0.0035 | 0.0034 | 0.0034 | 0.0033 |
| 38.0 | 1.55 | 0.0043 | 0.0041 | 0.0040 | 0.0038 | 0.0037 | 0.0036 | 0.0035 | 0.0035 |
| 39.0 | 1.59 | 0.0045 | 0.0043 | 0.0042 | 0.0040 | 0.0039 | 0.0038 | 0.0037 | 0.0036 |
| 40.0 | 1.63 | 0.0048 | 0.0045 | 0.0044 | 0.0042 | 0.0040 | 0.0040 | 0.0039 | 0.0038 |
| 41.0 | 1.67 | 0.0050 | 0.0047 | 0.0046 | 0.0044 | 0.0042 | 0.0042 | 0.0041 | 0.0040 |
| 42.0 | 1.71 | 0.0052 | 0.0050 | 0.0048 | 0.0046 | 0.0044 | 0.0043 | 0.0043 | 0.0042 |
| 43.0 | 1.75 | 0.0054 | 0.0052 | 0.0050 | 0.0048 | 0.0046 | 0.0045 | 0.0044 | 0.0044 |
| 44.0 | 1.79 | 0.0057 | 0.0054 | 0.0052 | 0.0050 | 0.0048 | 0.0047 | 0.0046 | 0.0045 |
| 45.0 | 1.83 | 0.0059 | 0.0056 | 0.0054 | 0.0052 | 0.0050 | 0.0049 | 0.0048 | 0.0047 |
| 46.0 | 1.87 | 0.0062 | 0.0059 | 0.0057 | 0.0054 | 0.0052 | 0.0051 | 0.0050 | 0.0049 |
| 47.0 | 1.91 | 0.0064 | 0.0061 | 0.0059 | 0.0056 | 0.0055 | 0.0054 | 0.0052 | 0.0051 |
| 48.0 | 1.95 | 0.0067 | 0.0063 | 0.0061 | 0.0058 | 0.0057 | 0.0056 | 0.0055 | 0.0053 |
| 49.0 | 1.99 | 0.0069 | 0.0066 | 0.0064 | 0.0061 | 0.0059 | 0.0058 | 0.0057 | 0.0055 |
| 50.0 | 2.03 | 0.0072 | 0.0068 | 0.0066 | 0.0063 | 0.0061 | 0.0060 | 0.0059 | 0.0058 |
| 52.0 | 2.12 | 0.0077 | 0.0074 | 0.0071 | 0.0068 | 0.0066 | 0.0065 | 0.0063 | 0.0062 |
| 54.0 | 2.20 | 0.0083 | 0.0079 | 0.0076 | 0.0073 | 0.0071 | 0.0069 | 0.0068 | 0.0066 |
| 56.0 | 2.28 | 0.0089 | 0.0084 | 0.0081 | 0.0078 | 0.0075 | 0.0074 | 0.0073 | 0.0071 |
| 58.0 | 2.36 | 0.0095 | 0.0090 | 0.0087 | 0.0083 | 0.0081 | 0.0079 | 0.0077 | 0.0076 |
| 60.0 | 2.44 | 0.0101 | 0.0096 | 0.0092 | 0.0088 | 0.0086 | 0.0084 | 0.0082 | 0.0081 |
| 62.0 | 2.52 | 0.0107 | 0.0102 | 0.0098 | 0.0094 | 0.0091 | 0.0089 | 0.0088 | 0.0086 |
| 64.0 | 2.60 | 0.0114 | 0.0108 | 0.0104 | 0.0099 | 0.0097 | 0.0095 | 0.0093 | 0.0091 |
| 66.0 | 2.68 | 0.0120 | 0.0114 | 0.0110 | 0.0105 | 0.0102 | 0.0100 | 0.0098 | 0.0096 |
| 68.0 | 2.77 | 0.0127 | 0.0121 | 0.0117 | 0.0111 | 0.0108 | 0.0106 | 0.0104 | 0.0102 |
| 70.0 | 2.85 | 0.0134 | 0.0127 | 0.0123 | 0.0117 | 0.0114 | 0.0112 | 0.0110 | 0.0107 |
| 72.0 | 2.93 | 0.0141 | 0.0134 | 0.0130 | 0.0124 | 0.0120 | 0.0118 | 0.0115 | 0.0113 |
| 74.0 | 3.01 | 0.0149 | 0.0141 | 0.0136 | 0.0130 | 0.0126 | 0.0124 | 0.0121 | 0.0119 |
| 76.0 | 3.09 | 0.0156 | 0.0148 | 0.0143 | 0.0137 | 0.0133 | 0.0130 | 0.0128 | 0.0125 |
| 78.0 | 3.17 | 0.0164 | 0.0156 | 0.0150 | 0.0143 | 0.0139 | 0.0137 | 0.0134 | 0.0131 |
| 80.0 | 3.25 | 0.0172 | 0.0163 | 0.0157 | 0.0150 | 0.0146 | 0.0143 | 0.0140 | 0.0137 |
| 82.0 | 3.34 | 0.0180 | 0.0171 | 0.0165 | 0.0157 | 0.0153 | 0.0150 | 0.0147 | 0.0144 |
| 84.0 | 3.42 | 0.0188 | 0.0179 | 0.0172 | 0.0164 | 0.0160 | 0.0157 | 0.0154 | 0.0150 |
| 86.0 | 3.50 | 0.0196 | 0.0187 | 0.0180 | 0.0172 | 0.0167 | 0.0164 | 0.0160 | 0.0157 |
| 88.0 | 3.58 | 0.0205 | 0.0195 | 0.0188 | 0.0179 | 0.0174 | 0.0171 | 0.0167 | 0.0164 |
| 90.0 | 3.66 | 0.0214 | 0.0203 | 0.0196 | 0.0187 | 0.0182 | 0.0178 | 0.0174 | 0.0171 |
| 92.0 | 3.74 | 0.0222 | 0.0211 | 0.0204 | 0.0195 | 0.0189 | 0.0185 | 0.0182 | 0.0178 |
| 94.0 | 3.82 | 0.0231 | 0.0220 | 0.0212 | 0.0203 | 0.0197 | 0.0193 | 0.0189 | 0.0185 |
| 96.0 | 3.90 | 0.0241 | 0.0229 | 0.0221 | 0.0211 | 0.0205 | 0.0201 | 0.0197 | 0.0193 |
| 98.0 | 3.99 | 0.0250 | 0.0238 | 0.0229 | 0.0219 | 0.0213 | 0.0208 | 0.0204 | 0.0200 |

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Continued from previous page (page 2 of 3)

Pressure loss per foot, 4" hePEX and AquaPEX (50% Glycol)

| gpm | Velocity (ft/s) | Head (Feet of Water) Per Foot of Tubing | | | | | | | |
|-------|-----------------|---|-------------|--------------|--------------|--------------|--------------|--------------|--------------|
| | | 60°F / 16°C | 80°F / 27°C | 100°F / 38°C | 120°F / 49°C | 140°F / 60°C | 160°F / 71°C | 180°F / 82°C | 200°F / 93°C |
| 100.0 | 4.07 | 0.0260 | 0.0247 | 0.0238 | 0.0227 | 0.0221 | 0.0216 | 0.0212 | 0.0208 |
| 102.0 | 4.15 | 0.0269 | 0.0256 | 0.0247 | 0.0236 | 0.0229 | 0.0224 | 0.0220 | 0.0215 |
| 104.0 | 4.23 | 0.0279 | 0.0265 | 0.0256 | 0.0244 | 0.0237 | 0.0233 | 0.0228 | 0.0223 |
| 106.0 | 4.31 | 0.0289 | 0.0275 | 0.0265 | 0.0253 | 0.0246 | 0.0241 | 0.0236 | 0.0231 |
| 108.0 | 4.39 | 0.0299 | 0.0284 | 0.0274 | 0.0262 | 0.0254 | 0.0249 | 0.0244 | 0.0239 |
| 110.0 | 4.47 | 0.0310 | 0.0294 | 0.0284 | 0.0271 | 0.0263 | 0.0258 | 0.0253 | 0.0248 |
| 112.0 | 4.56 | 0.0320 | 0.0304 | 0.0293 | 0.0280 | 0.0272 | 0.0267 | 0.0261 | 0.0256 |
| 114.0 | 4.64 | 0.0331 | 0.0314 | 0.0303 | 0.0289 | 0.0281 | 0.0276 | 0.0270 | 0.0265 |
| 116.0 | 4.72 | 0.0342 | 0.0324 | 0.0313 | 0.0299 | 0.0290 | 0.0285 | 0.0279 | 0.0273 |
| 118.0 | 4.80 | 0.0353 | 0.0335 | 0.0323 | 0.0308 | 0.0300 | 0.0294 | 0.0288 | 0.0282 |
| 120.0 | 4.88 | 0.0364 | 0.0345 | 0.0333 | 0.0318 | 0.0309 | 0.0303 | 0.0297 | 0.0291 |
| 122.0 | 4.96 | 0.0375 | 0.0356 | 0.0344 | 0.0328 | 0.0319 | 0.0312 | 0.0306 | 0.0300 |
| 124.0 | 5.04 | 0.0386 | 0.0367 | 0.0354 | 0.0338 | 0.0328 | 0.0322 | 0.0316 | 0.0309 |
| 126.0 | 5.13 | 0.0398 | 0.0378 | 0.0365 | 0.0348 | 0.0338 | 0.0332 | 0.0325 | 0.0318 |
| 128.0 | 5.21 | 0.0410 | 0.0389 | 0.0376 | 0.0359 | 0.0348 | 0.0341 | 0.0335 | 0.0328 |
| 130.0 | 5.29 | 0.0422 | 0.0401 | 0.0387 | 0.0369 | 0.0358 | 0.0351 | 0.0344 | 0.0337 |
| 132.0 | 5.37 | 0.0434 | 0.0412 | 0.0398 | 0.0380 | 0.0369 | 0.0361 | 0.0354 | 0.0347 |
| 134.0 | 5.45 | 0.0446 | 0.0424 | 0.0409 | 0.0390 | 0.0379 | 0.0372 | 0.0364 | 0.0357 |
| 136.0 | 5.53 | 0.0458 | 0.0435 | 0.0420 | 0.0401 | 0.0390 | 0.0382 | 0.0374 | 0.0367 |
| 138.0 | 5.61 | 0.0471 | 0.0447 | 0.0432 | 0.0412 | 0.0400 | 0.0392 | 0.0385 | 0.0377 |
| 140.0 | 5.69 | 0.0484 | 0.0459 | 0.0443 | 0.0423 | 0.0411 | 0.0403 | 0.0395 | 0.0387 |
| 142.0 | 5.78 | 0.0497 | 0.0472 | 0.0455 | 0.0434 | 0.0422 | 0.0414 | 0.0406 | 0.0397 |
| 144.0 | 5.86 | 0.0510 | 0.0484 | 0.0467 | 0.0446 | 0.0433 | 0.0425 | 0.0416 | 0.0408 |
| 146.0 | 5.94 | 0.0523 | 0.0497 | 0.0479 | 0.0457 | 0.0444 | 0.0436 | 0.0427 | 0.0418 |
| 148.0 | 6.02 | 0.0536 | 0.0509 | 0.0491 | 0.0469 | 0.0456 | 0.0447 | 0.0438 | 0.0429 |
| 150.0 | 6.10 | 0.0550 | 0.0522 | 0.0504 | 0.0481 | 0.0467 | 0.0458 | 0.0449 | 0.0440 |
| 155.0 | 6.30 | 0.0584 | 0.0555 | 0.0535 | 0.0511 | 0.0496 | 0.0487 | 0.0477 | 0.0467 |
| 160.0 | 6.51 | 0.0619 | 0.0588 | 0.0568 | 0.0542 | 0.0526 | 0.0516 | 0.0506 | 0.0495 |
| 165.0 | 6.71 | 0.0655 | 0.0623 | 0.0601 | 0.0574 | 0.0557 | 0.0546 | 0.0535 | 0.0524 |
| 170.0 | 6.92 | 0.0693 | 0.0658 | 0.0635 | 0.0606 | 0.0589 | 0.0577 | 0.0566 | 0.0554 |
| 175.0 | 7.12 | 0.0731 | 0.0694 | 0.0670 | 0.0640 | 0.0621 | 0.0609 | 0.0597 | 0.0585 |
| 180.0 | 7.32 | 0.0770 | 0.0731 | 0.0706 | 0.0674 | 0.0654 | 0.0642 | 0.0629 | 0.0616 |
| 185.0 | 7.53 | 0.0810 | 0.0769 | 0.0742 | 0.0709 | 0.0688 | 0.0675 | 0.0661 | 0.0648 |
| 190.0 | 7.73 | 0.0851 | 0.0808 | 0.0780 | 0.0745 | 0.0723 | 0.0709 | 0.0695 | 0.0681 |
| 195.0 | 7.93 | 0.0893 | 0.0848 | 0.0818 | 0.0781 | 0.0759 | 0.0744 | 0.0729 | 0.0714 |

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Continued from previous page (page 3 of 3)

Pressure loss per foot, 4" hePEX and AquaPEX (50% Glycol)

| gpm | Velocity (ft/s) | Head (Feet of Water) Per Foot of Tubing | | | | | | | |
|-------|--------------------|---|----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| | | 60°F / 16°C | 80°F / 27°C | 100°F / 38°C | 120°F / 49°C | 140°F / 60°C | 160°F / 71°C | 180°F / 82°C | 200°F / 93°C |
| 200.0 | 8.14 | 0.0936 | 0.0889 | 0.0858 | 0.0819 | 0.0795 | 0.0780 | 0.0764 | 0.0749 |
| 205.0 | 8.34 | 0.0979 | 0.0930 | 0.0898 | 0.0857 | 0.0832 | 0.0816 | 0.0800 | 0.0784 |
| 210.0 | 8.54 | 0.1024 | 0.0973 | 0.0939 | 0.0896 | 0.0870 | 0.0853 | 0.0836 | 0.0819 |
| 215.0 | 8.75 | 0.1070 | 0.1016 | 0.0980 | 0.0936 | 0.0909 | 0.0891 | 0.0874 | 0.0856 |
| 220.0 | 8.95 | 0.1116 | 0.1060 | 0.1023 | 0.0977 | 0.0949 | 0.0930 | 0.0911 | 0.0893 |
| 225.0 | 9.15 | 0.1163 | 0.1105 | 0.1067 | 0.1018 | 0.0989 | 0.0970 | 0.0950 | 0.0931 |
| 230.0 | 9.36 | 0.1212 | 0.1151 | 0.1111 | 0.1060 | 0.1030 | 0.1010 | 0.0990 | 0.0969 |
| 235.0 | 9.56 | 0.1261 | 0.1198 | 0.1156 | 0.1103 | 0.1072 | 0.1051 | 0.1030 | 0.1009 |
| 240.0 | 9.76 | 0.1311 | 0.1245 | 0.1202 | 0.1147 | 0.1114 | 0.1093 | 0.1071 | 0.1049 |
| 245.0 | 9.97 | 0.1362 | 0.1294 | 0.1248 | 0.1192 | 0.1158 | 0.1135 | 0.1112 | 0.1090 |
| 250.0 | 10.17 | 0.1414 | 0.1343 | 0.1296 | 0.1237 | 0.1202 | 0.1178 | 0.1155 | 0.1131 |
| 260.0 | 10.58 | 0.1520 | 0.1444 | 0.1394 | 0.1330 | 0.1292 | 0.1267 | 0.1242 | 0.1216 |
| 270.0 | 10.98 | 0.1630 | 0.1549 | 0.1494 | 0.1426 | 0.1386 | 0.1358 | 0.1331 | 0.1304 |
| 280.0 | 11.39 | 0.1744 | 0.1656 | 0.1598 | 0.1526 | 0.1482 | 0.1453 | 0.1424 | 0.1395 |
| 290.0 | 11.80 | 0.1861 | 0.1768 | 0.1706 | 0.1628 | 0.1582 | 0.1550 | 0.1519 | 0.1488 |
| 300.0 | 12.20 | 0.1981 | 0.1882 | 0.1816 | 0.1733 | 0.1684 | 0.1651 | 0.1618 | 0.1585 |
| 310.0 | 12.61 | 0.2105 | 0.2000 | 0.1930 | 0.1842 | 0.1789 | 0.1754 | 0.1719 | 0.1684 |
| 320.0 | 13.02 | 0.2232 | 0.2121 | 0.2046 | 0.1953 | 0.1897 | 0.1860 | 0.1823 | 0.1786 |
| 330.0 | 13.42 | 0.2363 | 0.2245 | 0.2166 | 0.2068 | 0.2009 | 0.1969 | 0.1930 | 0.1890 |
| 340.0 | 13.83 | 0.2497 | 0.2372 | 0.2289 | 0.2185 | 0.2123 | 0.2081 | 0.2039 | 0.1998 |
| 350.0 | 14.24 | 0.2635 | 0.2503 | 0.2415 | 0.2305 | 0.2240 | 0.2196 | 0.2152 | 0.2108 |
| 360.0 | 14.64 | 0.2776 | 0.2637 | 0.2544 | 0.2429 | 0.2359 | 0.2313 | 0.2267 | 0.2221 |
| 370.0 | 15.05 | 0.2920 | 0.2774 | 0.2677 | 0.2555 | 0.2482 | 0.2433 | 0.2385 | 0.2336 |
| 380.0 | 15.46 | 0.3068 | 0.2914 | 0.2812 | 0.2684 | 0.2608 | 0.2556 | 0.2505 | 0.2454 |
| 390.0 | 15.86 | 0.3219 | 0.3058 | 0.2950 | 0.2816 | 0.2736 | 0.2682 | 0.2629 | 0.2575 |
| 400.0 | 16.27 | 0.3373 | 0.3204 | 0.3092 | 0.2951 | 0.2867 | 0.2811 | 0.2755 | 0.2698 |