

## APPROXIMATE PRESSURE LOSS\* IN PIPES PER 100M RUN

### Internal Diameter of Pipe

| I/min                      | CAPACITY |                   |      | gas<br>mm | 3/4"<br>20 | 1"<br>25 | 1 1/4"<br>32 | 1 5/8"<br>40 | 2"<br>50 | 2 1/2"<br>65 | 3 1/8"<br>80 | 4"<br>100 | 5"<br>125 | 6"<br>150 | 8"<br>200 | 10"<br>250 | 12"<br>300 |
|----------------------------|----------|-------------------|------|-----------|------------|----------|--------------|--------------|----------|--------------|--------------|-----------|-----------|-----------|-----------|------------|------------|
|                            | I/sec    | m <sup>3</sup> /h | gpm  |           |            |          |              |              |          |              |              |           |           |           |           |            |            |
| <b>Pressure Loss in mH</b> |          |                   |      |           |            |          |              |              |          |              |              |           |           |           |           |            |            |
| 10                         | 0.16     | 0.6               | 2.2  |           | 2.6        | 1        | 0.28         | 0.09         |          |              |              |           |           |           |           |            |            |
| 15                         | 0.25     | 0.9               | 3.3  |           | 6.5        | 2.15     | 0.6          | 0.18         |          |              |              |           |           |           |           |            |            |
| 20                         | 0.33     | 1.2               | 4.4  |           | 10         | 3.5      | 1            | 0.3          | 0.11     |              |              |           |           |           |           |            |            |
| 25                         | 0.41     | 1.5               | 5.5  |           | 15         | 5.5      | 1.6          | 0.5          | 0.16     |              |              |           |           |           |           |            |            |
| 30                         | 0.50     | 1.8               | 6.6  |           | 22         | 8        | 2.2          | 0.65         | 0.23     |              |              |           |           |           |           |            |            |
| 40                         | 0.66     | 2.4               | 8.8  |           | 40         | 13       | 4            | 1.2          | 0.4      | 0.1          |              |           |           |           |           |            |            |
| 50                         | 0.83     | 3                 | 11   |           | 60         | 21       | 6            | 1.8          | 0.6      | 0.16         |              |           |           |           |           |            |            |
| 60                         | 1        | 3.6               | 13.2 |           | 75         | 28       | 8            | 2.4          | 0.85     | 0.22         |              |           |           |           |           |            |            |
| 70                         | 1.16     | 4.2               | 15.4 |           | 40         | 11.5     | 3.2          | 1.15         | 0.3      | 0.11         |              |           |           |           |           |            |            |
| 80                         | 1.33     | 4.8               | 17.6 |           | 54         | 14.5     | 4.5          | 1.5          | 0.4      | 0.14         |              |           |           |           |           |            |            |
| 90                         | 1.5      | 5.4               | 19.8 |           | 65         | 18       | 5.3          | 1.8          | 0.48     | 0.16         |              |           |           |           |           |            |            |
| 100                        | 1.66     | 6                 | 22   |           | 77         | 22       | 6.5          | 2.2          | 0.52     | 0.2          |              |           |           |           |           |            |            |
| 120                        | 2        | 7.2               | 26.4 |           | 30         | 9        | 3            | 0.8          | 0.3      |              |              |           |           |           |           |            |            |
| 140                        | 2.33     | 8.4               | 30.7 |           | 42         | 12       | 4.2          | 1.1          | 0.38     | 0.13         |              |           |           |           |           |            |            |
| 160                        | 2.66     | 9.6               | 35.1 |           | 53         | 16       | 5.3          | 1.4          | 0.5      | 0.17         |              |           |           |           |           |            |            |
| 180                        | 3        | 10.8              | 39.5 |           | 65         | 20       | 6.5          | 1.7          | 0.6      | 0.21         |              |           |           |           |           |            |            |
| 200                        | 3.33     | 12                | 43.9 |           | 78         | 24       | 8            | 2.1          | 0.72     | 0.26         |              |           |           |           |           |            |            |
| 220                        | 3.66     | 13.2              | 48.3 |           | 90         | 26.5     | 9            | 2.4          | 0.84     | 0.3          | 0.1          |           |           |           |           |            |            |
| 240                        | 4        | 14.4              | 52.7 |           |            | 33       | 11.3         | 3            | 1.1      | 0.37         | 0.12         |           |           |           |           |            |            |
| 260                        | 4.33     | 15.6              | 57.1 |           |            | 40       | 13.5         | 3.5          | 1.22     | 0.43         | 0.14         |           |           |           |           |            |            |
| 280                        | 4.66     | 16.8              | 61.5 |           |            | 45       | 15           | 4            | 1.4      | 0.48         | 0.16         |           |           |           |           |            |            |
| 300                        | 5        | 18                | 65.9 |           |            | 51       | 17           | 4.5          | 1.6      | 0.51         | 0.18         |           |           |           |           |            |            |
| 350                        | 5.83     | 21                | 76.9 |           |            | 68       | 24           | 6            | 2.1      | 0.75         | 0.24         |           |           |           |           |            |            |
| 400                        | 6.66     | 24                | 87.8 |           |            | 87       | 29           | 7.8          | 2.65     | 0.95         | 0.31         | 0.12      |           |           |           |            |            |
| 450                        | 7.5      | 27                | 98.8 |           |            | 38       | 9.6          | 3.3          | 1.18     | 0.38         | 0.15         |           |           |           |           |            |            |
| 500                        | 8.33     | 30                | 110  |           |            | 45       | 11.8         | 4.2          | 1.4      | 0.47         | 0.18         |           |           |           |           |            |            |
| 550                        | 9.16     | 33                | 121  |           |            | 55       | 14           | 5            | 1.7      | 0.51         | 0.21         |           |           |           |           |            |            |
| 600                        | 10       | 36                | 132  |           |            | 64       | 16.5         | 5.5          | 2        | 0.65         | 0.25         |           |           |           |           |            |            |
| 700                        | 11.6     | 42                | 154  |           |            | 87       | 23           | 8            | 2.8      | 0.9          | 0.32         |           |           |           |           |            |            |
| 800                        | 13.3     | 48                | 176  |           |            |          | 30           | 10.5         | 3.5      | 1.18         | 0.44         | 0.11      |           |           |           |            |            |
| 1000                       | 16.6     | 60                | 220  |           |            |          | 44           | 15           | 5.3      | 1.8          | 0.65         | 0.16      |           |           |           |            |            |
| 1200                       | 20       | 72                | 264  |           |            |          | 62           | 22           | 7.5      | 2.5          | 0.95         | 0.22      |           |           |           |            |            |
| 1400                       | 23.3     | 84                | 307  |           |            |          | 81           | 28.5         | 10       | 3.25         | 1.25         | 0.3       | 0.1       |           |           |            |            |
| 1600                       | 26.6     | 96                | 351  |           |            |          |              | 37.5         | 13       | 4.3          | 1.6          | 0.38      | 0.13      |           |           |            |            |
| 1800                       | 30       | 108               | 395  |           |            |          |              | 46           | 16       | 5.3          | 2            | 0.47      | 0.16      |           |           |            |            |
| 2000                       | 33.3     | 120               | 439  |           |            |          |              | 56.5         | 19.5     | 6.5          | 2.4          | 0.58      | 0.19      |           |           |            |            |
| 2200                       | 36.6     | 132               | 483  |           |            |          |              | 65           | 23       | 7.7          | 2.9          | 0.7       | 0.23      |           |           |            |            |
| 2400                       | 40       | 144               | 527  |           |            |          |              | 75           | 27       | 9            | 3.3          | 0.81      | 0.27      | 0.11      |           |            |            |
| 2600                       | 43.3     | 156               | 571  |           |            |          |              |              | 32       | 10.7         | 4            | 0.98      | 0.32      | 0.13      |           |            |            |
| 2800                       | 46.6     | 168               | 615  |           |            |          |              |              | 37       | 12           | 4.5          | 1.1       | 0.37      | 0.15      |           |            |            |
| 3000                       | 50       | 180               | 659  |           |            |          |              |              | 42       | 14           | 5.25         | 1.22      | 0.42      | 0.17      |           |            |            |
| 3500                       | 58.3     | 210               | 769  |           |            |          |              |              | 56       | 18           | 6.8          | 1.65      | 0.55      | 0.22      |           |            |            |
| 4000                       | 66.6     | 240               | 878  |           |            |          |              |              | 73       | 24           | 8.8          | 2.15      | 0.7       | 0.29      |           |            |            |
| 4500                       | 75       | 270               | 988  |           |            |          |              |              |          | 30           | 11           | 2.7       | 0.9       | 0.37      |           |            |            |
| 5000                       | 83.3     | 300               | 1098 |           |            |          |              |              |          | 37           | 14           | 3.3       | 1.1       | 0.45      |           |            |            |

**\*Figures based on new cast iron pipe. Correction factors for other pipe materials and conditions.**

For pressure loss in PVC pipes multiply by 0.6 - New steel pipes multiply by 0.8

Slightly rusty steel pipes multiply by 1.25 - Encrusted pipes multiply by 1.7