



# Turbulent Flow Reference Chart

Approximate Minimum Flow required for turbulence in drilled water passages based on Reynolds Number of 4000

Passage Diameter	Nominal Pipe Size	Minimum Flow in GPM by Temperature		
		40°F	120°F	200°F
.44"	1/4"	0.88	0.31	0.18
.59"	3/8"	1.16	0.42	0.24
.72"	1/2"	1.41	0.51	0.29

Passage Diameter	Nominal Pipe Size	Minimum Flow in LPM by Temperature		
		4°C	49°C	93°C
11mm	1/4"	3.3	1.2	0.7
15mm	3/8"	4.4	1.6	0.9
18mm	1/2"	5.3	1.9	1.1

Try the on-line calculator

[www.smartflow-usa.com/turbulent-flow-rate-calculator](http://www.smartflow-usa.com/turbulent-flow-rate-calculator)

**burger &  
brown**  
engineering, inc.

4500 E 142nd Street  
Grandview, MO 64030 USA  
tel: 800-764-3518

[www.smartflow-usa.com](http://www.smartflow-usa.com)