



Smart solutions with Smartmeasurement

| Line Size | Fluid | Density | Normal Flow | Temperature | Pressure | β | Excess Energy Used | Energy Price | Energy Savings |
|-----------|-----------------|-------------------|--------------|-------------|----------|---------|--------------------|--------------|----------------|
| in (mm) | | kg/m ³ | m/s (ft/min) | °C (°F) | Kpa | | KW/hr | USD/KWH | USD/year |
| 1" (25) | water | 1000 | 5 (984.25) | 20 (68) | 100 | 0.65 | 0.034353173 | 0.13 | US\$38.59 |
| 2" (50) | water | 1000 | 5 (984.25) | 20 (68) | 1600 | 0.65 | 0.343531728 | 0.13 | US\$385.85 |
| 3" (80) | water | 1000 | 5 (984.25) | 20 (68) | 100 | 0.65 | 0.35177649 | 0.13 | US\$395.12 |
| 4" (100) | water | 1000 | 5 (984.25) | 20 (68) | 1600 | 0.65 | 1.374126914 | 0.13 | US\$1,543.42 |
| 8" (200) | water | 1000 | 5 (984.25) | 20 (68) | 100 | 0.65 | 2.198603062 | 0.13 | US\$2,469.47 |
| 12" (300) | water | 1000 | 5 (984.25) | 20 (68) | 1000 | 0.65 | 12.36714222 | 0.13 | US\$13,890.77 |
| 1" (25) | air | 12 | 20 (3937.0) | 20 (68) | 1000 | 0.65 | 0.137412691 | 0.13 | US\$154.34 |
| 2" (50) | air | 7.4 | 20 (3937.0) | 200 (392) | 1000 | 0.65 | 1.374126914 | 0.13 | US\$1,543.42 |
| 3" (80) | air | 12 | 20 (3937.0) | 20 (68) | 1000 | 0.65 | 1.40710596 | 0.13 | US\$1,580.46 |
| 4" (100) | air | 7.4 | 20 (3937.0) | 200 (392) | 1000 | 0.65 | 5.496507654 | 0.13 | US\$6,173.68 |
| 8" (200) | air | 12 | 20 (3937.0) | 20 (68) | 1000 | 0.65 | 8.794412247 | 0.13 | US\$9,877.88 |
| 12" (300) | air | 7.4 | 20 (3937.0) | 200 (392) | 1000 | 0.65 | 49.46856889 | 0.13 | US\$55,563.10 |
| 1" (25) | saturated steam | 5.16 | 20 (3937.0) | 180 (356) | 1000 | 0.65 | 0.109693235 | 0.13 | US\$123.21 |
| 2" (50) | saturated steam | 19.8 | 20 (3937.0) | 250 (482) | 4000 | 0.65 | 1.096932347 | 0.13 | US\$1,232.07 |
| 3" (80) | saturated steam | 5.16 | 20 (3937.0) | 180 (356) | 1000 | 0.65 | 1.123258723 | 0.13 | US\$1,261.64 |
| 4" (100) | saturated steam | 19.8 | 20 (3937.0) | 250 (482) | 4000 | 0.65 | 4.387729386 | 0.13 | US\$4,928.30 |
| 8" (200) | saturated steam | 5.16 | 20 (3937.0) | 180 (356) | 1000 | 0.65 | 7.020367018 | 0.13 | US\$7,885.28 |
| 12" (300) | saturated steam | 19.8 | 20 (3937.0) | 250 (482) | 4000 | 0.65 | 39.48956448 | 0.13 | US\$44,354.68 |

Notes: Orifice plates (DP @ Beta 0.65) versus Magnetic for water, Vortex for saturated steam and Thermal for air

[Contact your application engineer at sales@smartmeasurement.com](mailto:sales@smartmeasurement.com)