



JW7000S Series Wafer-Style Steam Flowmeter

The JW7000S series steam flowmeters offer a wide flow capability, excellent calibration stability, and no moving parts. Designed to withstand the harsh steam environment, these flowmeters provide reliable service where others often fail. Low-flow steam applications are measured using the ultrasonic vortex technology and the smallest strut in the industry.

Specifications

| | |
|------------------------------------|--|
| Measured: | Saturated steam |
| Flow rate measured: | See flow range table below |
| Operating temperature: | -40° to 400°F (-40° to 204°C) |
| Ambient temperature limits: | -40° to 155°F (-40° to 68°C) |
| Operating pressure: | -5 to 250 PSIG |
| Accuracy: | 1% of reading over dynamic range of meter |
| Repeatability: | 0.5% of reading |
| Input power: | 15-48 VDC |
| Signal output: | 2-wire, 4-20 mA loop |
| Construction: | Stainless steel wetted parts. NEMA 4X enclosures standard. |
| Communications: | HART Protocol |
| Certifications (Pending): | Factory Mutual (Class I, Div. 1, Groups C & D) CSA (Class I, Div. 1, Groups C & D) CENELEC (Eex ib IIB T3) CE |
| Display optional: | 2 line, 8 digit rate/totalizer |

FLOW RANGES

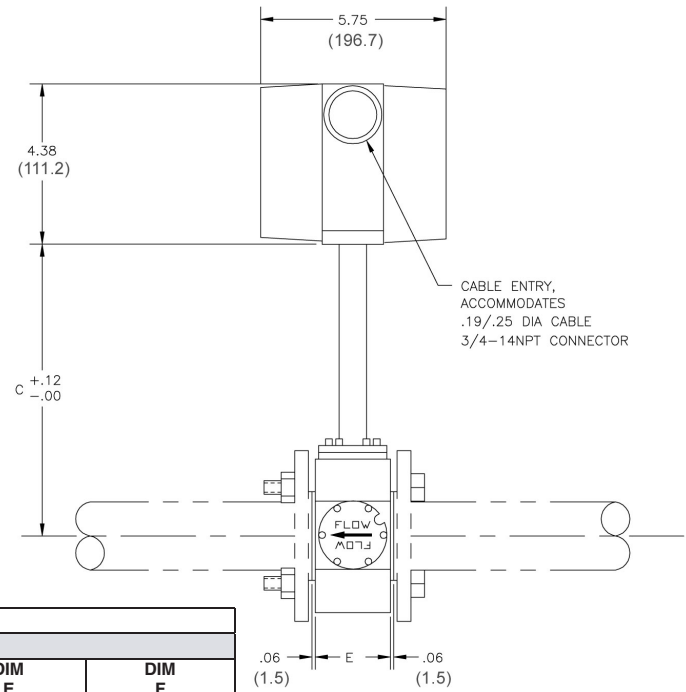
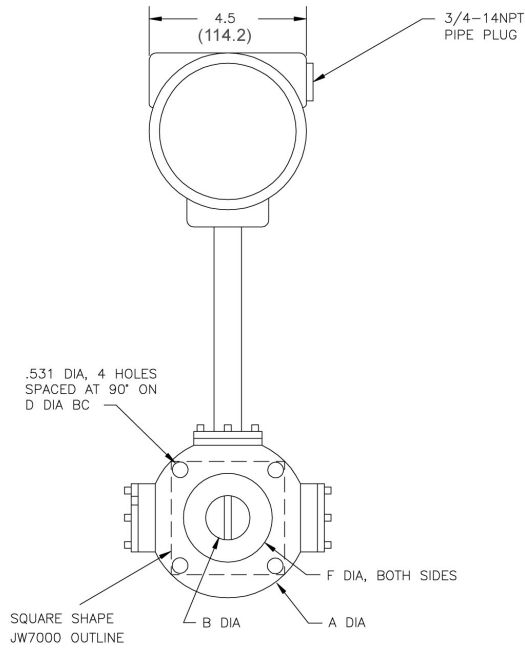
Consult J-TEC Flowmeter Sizing Software for temperature and pressure conditions other than those listed here

| Pipe Size | FLOW RANGE IN LBS/HR IN STEAM | | | | | | | | | | | | | | Pressure Drop (Ins. H2O) at 50% Max. Flow* |
|-----------------|-------------------------------|------|-----------|------|-----------|------|-----------|------|------------|-------|------------|-------|------------|-------|--|
| | FLOW RANGE IN KG/HR IN STEAM | | | | | | | | | | | | | | |
| | PRESSURE IN PSIG (BARg) | | | | | | | | | | | | | | |
| | 25 (1.7) | | 50 (3.4) | | 75 (5.2) | | 100 (6.9) | | 150 (10.3) | | 200 (13.8) | | 250 (17.2) | | |
| | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | |
| 1/2" 13 mm | 2 | 57 | 4 | 90 | 5 | 122 | 6 | 154 | 9 | 217 | 11 | 281 | 14 | 344 | 1.4 |
| | 1 | 26 | 2 | 41 | 2 | 55 | 3 | 70 | 4 | 99 | 5 | 128 | 6 | 156 | |
| 1" 25 mm | 7 | 199 | 11 | 315 | 15 | 428 | 19 | 540 | 27 | 762 | 35 | 983 | 43 | 1204 | 1 |
| | 3 | 90 | 5 | 143 | 7 | 194 | 9 | 245 | 12 | 346 | 16 | 446 | 20 | 547 | |
| 1-1/2" 38 mm | 14 | 568 | 22 | 899 | 31 | 1222 | 39 | 1542 | 54 | 2176 | 70 | 2808 | 86 | 3441 | 0.65 |
| | 6 | 258 | 10 | 408 | 14 | 555 | 18 | 700 | 25 | 988 | 32 | 1275 | 39 | 1562 | |
| 2" 51 mm | 28 | 908 | 45 | 1438 | 61 | 1955 | 77 | 2467 | 109 | 3482 | 140 | 4492 | 172 | 5506 | 0.35 |
| | 13 | 412 | 20 | 653 | 28 | 888 | 35 | 1120 | 49 | 1581 | 64 | 2040 | 78 | 2500 | |
| 3" 76 mm | 57 | 1816 | 90 | 2876 | 122 | 3910 | 154 | 4934 | 218 | 6964 | 281 | 8985 | 344 | 11013 | 0.25 |
| | 26 | 824 | 41 | 1306 | 56 | 1775 | 70 | 2240 | 99 | 3162 | 128 | 4079 | 156 | 5000 | |
| 4" 102 mm | 113 | 2723 | 180 | 4314 | 244 | 5865 | 308 | 7400 | 435 | 10446 | 562 | 13477 | 688 | 16519 | 0.25 |
| | 52 | 1236 | 82 | 1959 | 111 | 2668 | 140 | 3360 | 198 | 4743 | 255 | 6119 | 313 | 7500 | |
| Temp F° (C°) | 267 (130) | | 297 (147) | | 320 (160) | | 338 (170) | | 366 (186) | | 388 (198) | | 406 (208) | | |

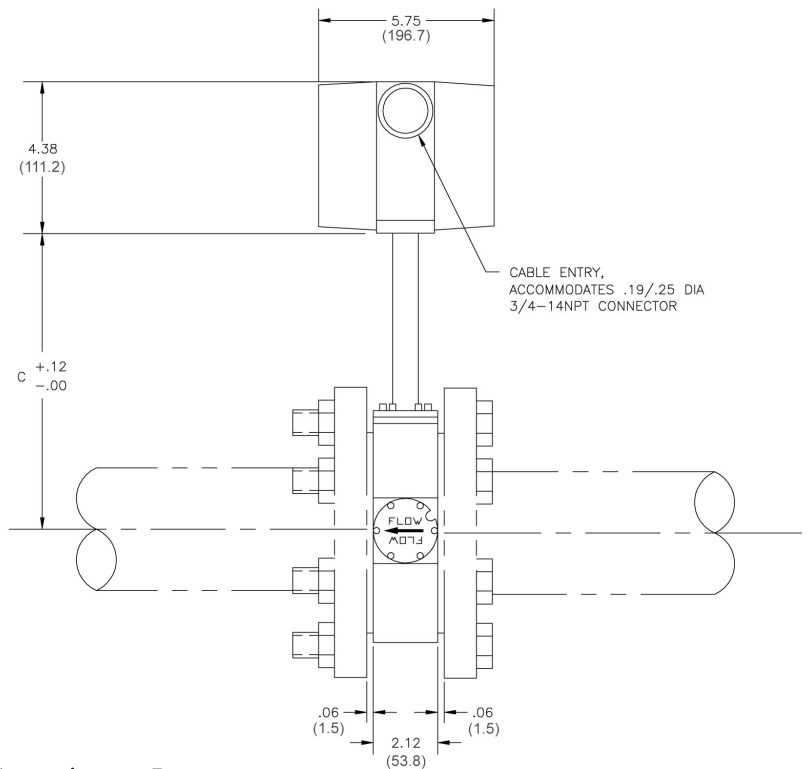
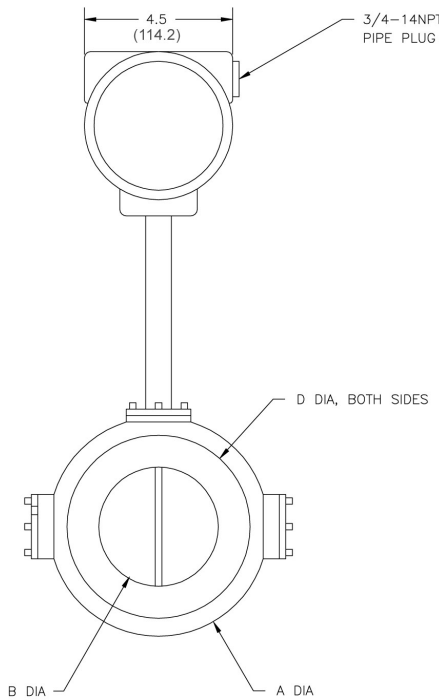
*Pressure drop data for air at 14.7 psi and 60°F (0 BARg and 16°C)

Dimensional Specifications

Wafer-Style Steam



| | | INCHES | | MILLIMETERS | | | |
|-----------|--------|--------|--------|-------------|-------|-------|--|
| Pipe Size | DIA A | DIA B | DIM C | DIM D | DIM E | DIM F | |
| 1/2" | 3.50 | 0.50 | 9.47 | 2.38 | 2.25 | 1.38 | |
| | 88.83 | 12.69 | 240.36 | 60.40 | 57.11 | 35.02 | |
| 1" | 3.97 | 0.88 | 9.65 | 3.12 | 2.12 | 2.00 | |
| | 100.76 | 22.34 | 244.92 | 79.19 | 53.81 | 50.76 | |
| 1-1/2" | 4.72 | 1.38 | 10.21 | 3.88 | 2.12 | 2.88 | |
| | 119.80 | 35.03 | 259.14 | 98.47 | 53.81 | 73.09 | |



| | | INCHES | | MILLIMETERS | | |
|-----------|--------|--------|--------|-------------|--|--|
| Pipe Size | DIA A | DIA B | DIM C | | | |
| 2" | 3.97 | 1.75 | 9.79 | | | |
| | 100.76 | 44.42 | 248.48 | | | |
| 3" | 5.22 | 2.75 | 10.49 | | | |
| | 132.49 | 69.80 | 266.24 | | | |
| 4" | 6.87 | 3.75 | 11.39 | | | |
| | 174.37 | 95.18 | 289.09 | | | |