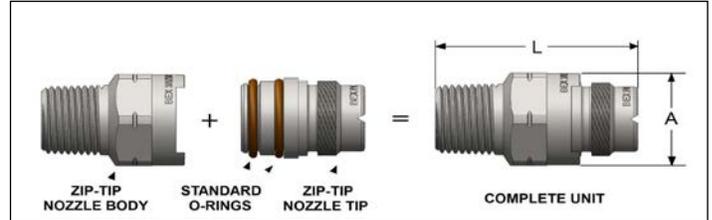




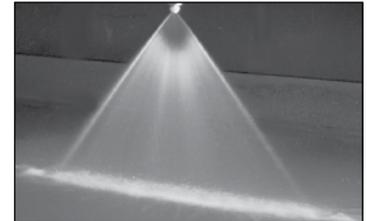
ZF50 SPRAY NOZZLE SPECIFICATIONS

| NOZZLE NPT PIPE SIZE | Length L (in) | Dim. A (in) |
|----------------------|---------------|-------------|
| 1/8 ZF | 1.60 | 0.97 |
| 1/4 ZF | 1.70 | 0.97 |
| 3/8 ZF | 1.73 | 0.97 |
| 1/2 ZF | 1.80 | 0.97 |
| 1/2 ZLF | 2.11 | 1.25 |
| 3/4 ZLF | 2.19 | 1.25 |



ZIP-TIP NOZZLE INSTALLATION & REMOVAL

- NO TOOLS REQUIRED for ZIP-TIP nozzle tip installation or removal
- POSITIVE ALIGNMENT of spray pattern
- "Light-lock" feature allows for easy removal
- Seals located on and removed with nozzle tip for easy flushing



Spray angle not exactly as shown.

SPRAY CHARACTERISTICS:

ZF-Series spray nozzles produce a flat, fan-shaped spray pattern with spray angles available from 5° to 110° measured at 40 psi. Spray angles generally increase with pressure, as shown in the capacity table.

Spray density tapers off toward the outside of these sprays, to permit overlapping of spray patterns while maintaining uniform spray density.

CONSTRUCTION:

The tip models listed are machined from bar stock and are one piece construction. Standard materials are brass, 303 stainless steel and 316 stainless steel. All bodies are available in either NPT or BSPT threaded bodies.

TYPICAL APPLICATIONS:

Suitable for a variety of washing and spraying applications.

- Parts Cleaning
- Metal Washing
- Foam Control
- Asphalt Spraying
- Gravel Washing
- Vehicle Washing
- Fertilizer Spraying
- Dishwashers

| Model | | Max. Free Passage (in) | CAPACITY AT VARIOUS PRESSURES (USGPM) | | | | | | | | | | | | | | SPRAY ANGLE @ (degrees) | | |
|----------|-----------|------------------------|---------------------------------------|-------|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|---------|--------|-------------------------|--------|--|
| ZF Model | ZLF Model | | 5 psi | 7 psi | 10 psi | 15 psi | 20 psi | 30 psi | 40 psi | 50 psi | 60 psi | 80 psi | 100 psi | 150 psi | 300 psi | 20 psi | 40 psi | 80 psi | |
| ZF5002 | | 0.034 | 0.07 | 0.08 | 0.10 | 0.12 | 0.14 | 0.17 | 0.20 | 0.22 | 0.25 | 0.28 | 0.32 | 0.39 | 0.55 | 43 | 50 | 57 | |
| ZF5003 | | 0.041 | 0.11 | 0.13 | 0.15 | 0.18 | 0.21 | 0.26 | 0.30 | 0.34 | 0.37 | 0.42 | 0.47 | 0.58 | 0.82 | 44 | 50 | 57 | |
| ZF5004 | | 0.047 | 0.14 | 0.17 | 0.20 | 0.25 | 0.28 | 0.35 | 0.40 | 0.45 | 0.49 | 0.57 | 0.63 | 0.77 | 1.10 | 44 | 50 | 56 | |
| ZF5005 | | 0.053 | 0.18 | 0.21 | 0.25 | 0.31 | 0.35 | 0.43 | 0.50 | 0.56 | 0.61 | 0.71 | 0.79 | 0.97 | 1.37 | 44 | 50 | 56 | |
| ZF5006 | | 0.058 | 0.21 | 0.25 | 0.30 | 0.37 | 0.42 | 0.52 | 0.60 | 0.67 | 0.73 | 0.85 | 0.95 | 1.16 | 1.64 | 45 | 50 | 56 | |
| ZF5008 | | 0.067 | 0.28 | 0.33 | 0.40 | 0.49 | 0.57 | 0.69 | 0.80 | 0.89 | 0.98 | 1.13 | 1.26 | 1.55 | 2.19 | 45 | 50 | 56 | |
| ZF5010 | | 0.075 | 0.35 | 0.42 | 0.50 | 0.61 | 0.71 | 0.87 | 1.00 | 1.12 | 1.22 | 1.41 | 1.58 | 1.94 | 2.74 | 43 | 50 | 55 | |
| ZF5012 | | 0.082 | 0.42 | 0.50 | 0.60 | 0.73 | 0.85 | 1.04 | 1.20 | 1.34 | 1.47 | 1.70 | 1.90 | 2.32 | 3.3 | 43 | 50 | 55 | |
| ZF5015 | | 0.091 | 0.53 | 0.63 | 0.75 | 0.92 | 1.06 | 1.30 | 1.50 | 1.68 | 1.84 | 2.12 | 2.37 | 2.90 | 4.1 | 43 | 50 | 55 | |
| ZF5020 | | 0.105 | 0.71 | 0.84 | 1.00 | 1.22 | 1.41 | 1.73 | 2.00 | 2.24 | 2.45 | 2.83 | 3.2 | 3.9 | 5.5 | 43 | 50 | 55 | |
| ZF5030 | | 0.129 | 1.06 | 1.26 | 1.50 | 1.84 | 2.12 | 2.60 | 3.00 | 3.4 | 3.7 | 4.2 | 4.7 | 5.8 | 8.2 | 43 | 50 | 54 | |
| ZF5040 | | 0.149 | 1.41 | 1.67 | 2.00 | 2.45 | 2.83 | 3.5 | 4.0 | 4.5 | 4.9 | 5.7 | 6.3 | 7.7 | 11.0 | 43 | 50 | 54 | |
| ZF5050 | | 0.167 | 1.77 | 2.09 | 2.50 | 3.06 | 3.5 | 4.3 | 5.0 | 5.6 | 6.1 | 7.1 | 7.9 | 9.7 | 13.7 | 43 | 50 | 53 | |
| ZF5060 | | 0.182 | 2.12 | 2.51 | 3.00 | 3.7 | 4.2 | 5.2 | 6.0 | 6.7 | 7.3 | 8.5 | 9.5 | 11.6 | 16.4 | 43 | 50 | 53 | |
| ZF5070 | | 0.197 | 2.47 | 2.93 | 3.5 | 4.3 | 4.9 | 6.1 | 7.0 | 7.8 | 8.6 | 9.9 | 11.1 | 13.6 | 19.2 | 44 | 50 | 53 | |
| | ZLF5080 | 0.211 | 2.83 | 3.3 | 4.0 | 4.9 | 5.7 | 6.9 | 8.0 | 8.9 | 9.8 | 11.3 | 12.6 | 15.5 | 21.9 | 44 | 50 | 52 | |
| | ZLF50100 | 0.236 | 3.5 | 4.2 | 5.0 | 6.1 | 7.1 | 8.7 | 10.0 | 11.2 | 12.2 | 14.1 | 15.8 | 19.4 | 27.4 | 44 | 50 | 52 | |
| | ZLF50120 | 0.258 | 4.2 | 5.0 | 6.0 | 7.3 | 8.5 | 10.4 | 12.0 | 13.4 | 14.7 | 17.0 | 19.0 | 23.2 | 33 | 44 | 50 | 53 | |
| | ZLF50150 | 0.289 | 5.3 | 6.3 | 7.5 | 9.2 | 10.6 | 13.0 | 15.0 | 16.8 | 18.4 | 21.2 | 23.7 | 29.0 | 41 | 46 | 50 | 52 | |
| | ZLF50200 | 0.333 | 7.1 | 8.4 | 10.0 | 12.2 | 14.1 | 17.3 | 20.0 | 22.4 | 24.5 | 28.3 | 32 | 39 | 55 | 46 | 50 | 54 | |
| | ZLF50300 | 0.408 | 10.6 | 12.5 | 15.0 | 18.4 | 21.2 | 26.0 | 30.0 | 34 | 37 | 42 | 47 | 58 | 82 | 47 | 50 | 54 | |
| | ZLF50400 | 0.466 | 14.1 | 16.7 | 20.0 | 24.5 | 28.3 | 35 | 40 | 45 | 49 | 57 | 63 | 77 | 110 | 47 | 50 | 54 | |