



## Application

The “3250” Series Flow Control Valves are specifically designed to accurately meter the flow of air in one direction and allow free flow in the opposite direction. The “3250” Series Flow Control Valves are also suitable for low pressure hydraulic service.

## Operation

When air is moving in the free flow direction through the valve, it forces the poppet off its seat and unrestricted air flow is permitted.

When air is moving in the metered direction through the valve, air pressure and the force of the poppet spring causes the poppet to close. Flow must then be through the orifice that is controlled by the metering screw. Opening this screw allows more flow; closing it, less flow.

## Technical Specifications

**Body** ..... **Brass**

**Port Size**..... 1/8", 1/4", 3/8", 1/2", 3/4"

**Internal Components** .....Brass, Stainless Steel

Seals.....Buna N

**Operating Temperature** .....Standard: 0°F to 180°F

Extended Options: 0°F to 300°F

### Operating Pressures:

Air..... 250 PSIG

Hydraulic..... 250 PSIG

Valve will operate mounted in any position.

Lock nut on metering screw prevents change in setting during operation.

### Flow Rating (SCFM)

| Flow Path                           | Valve Port Size |      |      |      |      |
|-------------------------------------|-----------------|------|------|------|------|
|                                     | 1/8"            | 1/4" | 3/8" | 1/2" | 3/4" |
| Maximum Flow in Metered Direction   | 70              | 130  | 220  | 295  | 420  |
| Maximum Flow in Free Flow Direction | 60              | 120  | 205  | 346  | 615  |

## Model Selection Information and Dimensions

| Model Number   | 03250 0119 |    | 03250 0219 |    | 03250 0319 |    | 03250 0419 |    | 03250 0519 |    |
|----------------|------------|----|------------|----|------------|----|------------|----|------------|----|
| Port Size NPTF | 1/8"       |    | 1/4"       |    | 3/8"       |    | 1/2"       |    | 3/4"       |    |
|                | Inches     | mm | Inches     | mm | Inches     | mm | Inches     | mm | Inches     | mm |
| A              | 1.75       | 45 | 2.33       | 59 | 2.66       | 68 | 3.11       | 79 | 3.56       | 90 |
| B              | 1.56       | 40 | 1.97       | 50 | 2.44       | 62 | 3.06       | 78 | 3.69       | 94 |
| C              | 0.37       | 9  | 0.44       | 11 | 0.56       | 14 | 0.75       | 19 | 0.88       | 22 |
| D              | 0.62       | 16 | 0.75       | 19 | 1.00       | 25 | 1.25       | 32 | 1.50       | 38 |
| E              | 0.81       | 21 | 1.09       | 28 | 1.38       | 35 | 1.63       | 41 | 2.00       | 51 |
| F              | 0.68       | 17 | 0.94       | 24 | 1.19       | 30 | 1.38       | 35 | 1.75       | 44 |