## **Spray Valves**

**SPRAY VALVES** have excellent, dependable performance in a compact design and are offered in flat or round spray patterns. The spray valves minimize objectional fogging. Any liquid that flows, up to a viscosity of 1000 SSU at 100° F., can be sprayed.

The spray valves are used for a multitude of applications such as lubrication of chains, cables, gears, punches, dies, drills, taps, reamers, milling cutters, grinding wheels, sheet stock, die casting molds --- applying liquid to food products, water to embossing rolls of paper machinery, etc. The amount of liquid sprayed is infinitely adjustable from a fine spray, invisible to the eye, to a coarse spray to suit most applications.

Spray valves are provided with a liquid inlet, (1/1/18" female NPT). Each unit has an extra-fine needle valve to meter or shut off the flow of liquid with a knurled hand wheel.

Spray valves with a larger orifice are also available for very heavy liquid, and for applications where large quantities are to be sprayed. Tamperproof construction is also available. Spray valves can be manifold mounted, if so desired. **SPECIFICATIONS:** 

• Liquid Pressure 5 P.S.I. Minimum

5 P.S.I. Minimum 20 P.S.I. Maximum 5 P.S.I. Minimum

20 P.S.I. Maximum

Air Pressure
Temperature

TemperatureBody

• Seals

NeedleNozzle

225° F. Maximum Aluminum Alloy Buna-N Stainless Steel



# 13/<sub>32</sub> A A Appro

Catalog Number

When Ordering Specify:

Catalog Number	Pattern	Α	Туре			
A-2748-1	Round	2 <sup>11</sup> / <sub>16</sub>	Handwheel			
A-3015-1	Flat	2 <sup>13</sup> / <sub>16</sub>				
A-2748-2	Round	2 <sup>7</sup> / <sub>16</sub>	Townserses			
A-3015-2	Flat	2 <sup>9</sup> / <sub>16</sub>	Tamperproof			

### OPERATING INSTRUCTIONS FOR SPRAY VALVES

- All spray valves should be operated with air operated dispensers having dual-pressure control, one for liquid and one for air. For best performance, the liquid pressure should equal or exceed the air pressure.
- Use the needle valve for adjustment only. This adjustment is sensitive; as little as ¼ turn either way may give desired results.
- Both liquid and air nozzles are readily removable for cleaning. They are machined to close limits, and the slightest change in shape, due to mishandling, may alter the spray pattern unacceptably.
- 4. When making adjustment on tamperproof valves, use two wrenches so that the packing nut is not disturbed. If the packing nut is over-tightened, it could force the stem against the seat and damage it.

#### PREVENTION OF AFTER-DRIP

- To minimize drip after shut-off, an individual shut-off or check valve should be located in the liquid line close to the nozzle.
- 2. Cycle liquid only and leave air on continuously.
- 3. Leave air on longer than liquid to purge spray valve.
- Use piping as small as possible (¹/₃OD tube) for liquid leading to spray valves from solenoid valves.
- Locate solenoid valve as close as possible to spray valve.
- Make sure no air is in liquid line. This will act as an accumulator and force liquid through spray valves after solenoid valve is shut off.
- Hoses will also act as accumulator, expanding during pressure cycle and contracting during pressure off, thereby forcing excess liquid through spray valves.

## HELPFUL SUGGESTIONS FOR REDUCING FOGGING AND ATMOSPHERIC CONTAMINATION

Excessive air volume and or air velocity.

Remedy: Lower air pressure at spray valve to an absolute minimum.

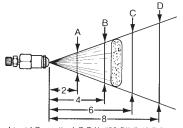
Nozzle too far from point of application, causing excessive air friction.

Remedy: Move spray nozzle closer to point of application. As a result, two or more valves may be required to compensate for the smaller pattern.

 Air movement and air turbulence caused by the movement of the material being sprayed can deflect spray into the atmosphere.

Remedy: Spray at an angle against material travel.Experiment to find best angle.

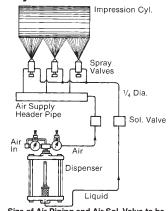
### PATTERN AND CAPACITY CHART GENERAL GUIDE ONLY



Liquid Capacity: 1 G.P.H. #20 Oil @ 40 P.S.I. Maximum Needle Valve Setting

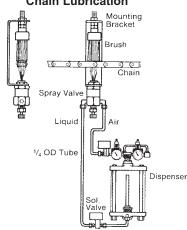
Air	Air	Pattern Size				
Pressure	Capacity	Α	В	С	D	
10 P.S.I.	.80 CFM	2 <sup>1</sup> / <sub>2</sub>	4 <sup>1</sup> / <sub>2</sub>	6 <sup>1</sup> / <sub>2</sub>	8 <sup>1</sup> / <sub>2</sub>	
15 P.S.I.	1.00 CFM	3	6	7	9	
20 P.S.I.	1.25 CFM	3 <sup>1</sup> / <sub>2</sub>	6 <sup>1</sup> / <sub>2</sub>	8 <sup>1</sup> / <sub>2</sub>	10 <sup>1</sup> / <sub>2</sub>	
25 P.S.I.	1.50 CFM	41/2	71/2	10 <sup>1</sup> / <sub>2</sub>	12 <sup>1</sup> / <sub>2</sub>	

#### **Cylinder Lubrication**



Size of Air Piping and Air Sol. Valve to be Determined by No. of Spray Valves used.

### **Chain Lubrication**



### Conveyor Chain Lubrication

