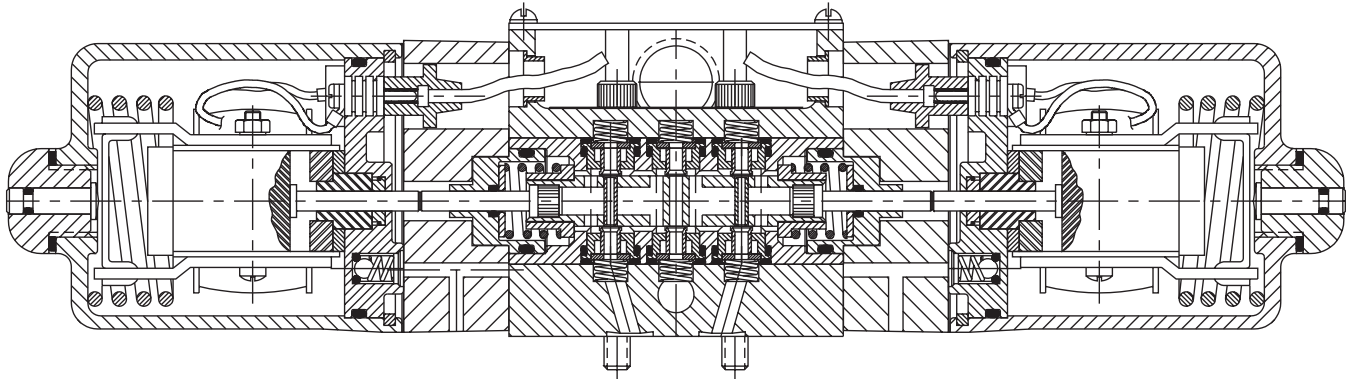


# Catalog Series 21100

## 3 GPM



### Features

- Shear-type positive seal.
- Zero leakage (1 drop per min. per pressurized port).
- Ideal for water soluble systems (95-5).
- Pressures up to 6000 PSI.
- Long life, easy maintenance.
- Standard valves are interflow.
- No packing to wear or cut.
- High tolerance to contamination.
- High tolerance to silting.
- Manual overrides are standard.

### Specifications

#### Service Applications:

Hydraulic oil. Water containing minimum of 5% soluble oil. Suggest water soluble oil with a sodium sulphonate-based emulsifier. Oil should have a viscosity of 250-350 SSU at 100° F. Others available on special order.

#### Pressure Range:

**Working:** To 6000 PSI  
**\*Proof:** 9000 PSI  
**\*Burst:** 15,000 PSI

\*Applicable to pressure and cylinder ports only.

**Note:** Installation of this valve should ensure that exhaust port pressure does not exceed cylinder port pressures by more than 50 PSI and never exceed 1000 PSI.

#### Temperature Range:

-40° to 225° F. (with Code 02 O-rings)

**CV Factor:** .28

**Rated Flow:** 3 GPM maximum.

**Internal Leakage:** 1 DPM per pressurized port.

**Mounting:** Sub-plate. Mounting bolts furnished.

#### Materials:

**Cover, Body, Bottom Plate,  
 Inserts, Washers,  
 Spring Retainer, Screws,  
 Retainer Plate:**

Steel.

**Name Plate, End Cap,  
 Retainer Plate:**

Aluminum alloy,  
 anodized.

**Slide, Seals, Springs,  
 Pilot Choke Plug:**

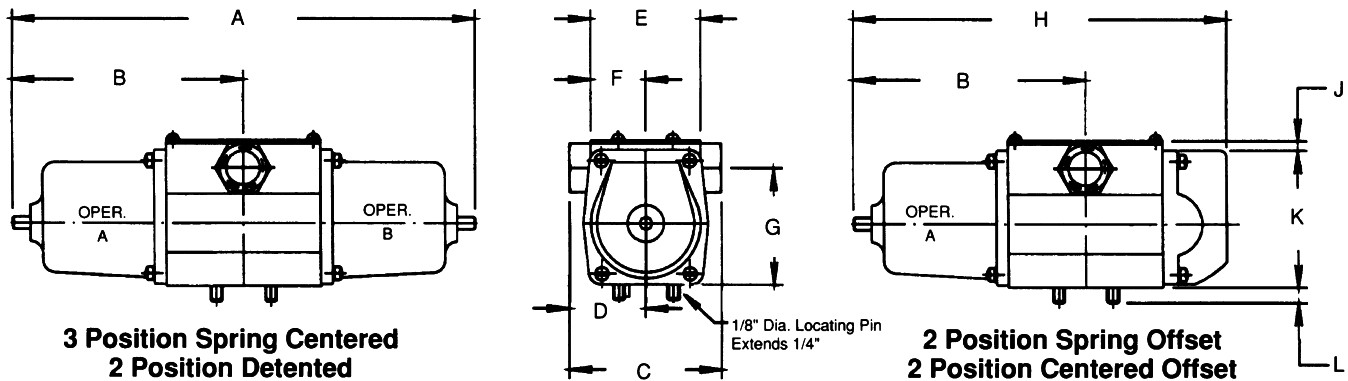
Stainless steel.

**O-Rings:**

Synthetic rubber.

Electrical Data		Weight	
Inrush Current	4.2 Amps Maximum	One Solenoid	Two Solenoids
Holding Current	.85 Amps Maximum		
Drop-Out Voltage	Approx. 75% Rated Voltage	9.2 Lbs.	12 Lbs.
Voltage Required to Pull Back After Drop-Out	Approx. 95% Rated Voltage		

### Dimensions



Power Source	Operating Type	All Dimensions are in Inches											Mounting Bolt Torque	
		A	B	C	D	E	F	G	H	J	K	L		
Double Solenoid A.C.	01 04	3-Position Spring Centered 2-Position Detented	12 <sup>3</sup> / <sub>4</sub>	6 <sup>3</sup> / <sub>8</sub>	3 <sup>1</sup> / <sub>8</sub>	1 <sup>9</sup> / <sub>16</sub>	2 <sup>3</sup> / <sub>4</sub>	1 <sup>3</sup> / <sub>8</sub>	2 <sup>7</sup> / <sub>16</sub>	—	1 <sup>1</sup> / <sub>8</sub>	3	5 <sup>5</sup> / <sub>16</sub>	160 to 180 Inch Lbs.
Single Solenoid A.C.	02+03 11+21	2-Position Spring Offset 2-Position Centered Offset	—	6 <sup>3</sup> / <sub>8</sub>	3 <sup>1</sup> / <sub>8</sub>	1 <sup>9</sup> / <sub>16</sub>	2 <sup>3</sup> / <sub>4</sub>	1 <sup>3</sup> / <sub>8</sub>	2 <sup>7</sup> / <sub>16</sub>	9 <sup>5</sup> / <sub>16</sub>	1 <sup>1</sup> / <sub>8</sub>	3	5 <sup>5</sup> / <sub>16</sub>	
Double Solenoid D.C.	01 04	3-Position Spring Centered 2-Position Detented	14 <sup>15</sup> / <sub>16</sub>	7 <sup>15</sup> / <sub>32</sub>	3 <sup>1</sup> / <sub>8</sub>	1 <sup>9</sup> / <sub>16</sub>	2 <sup>3</sup> / <sub>4</sub>	1 <sup>3</sup> / <sub>8</sub>	2 <sup>7</sup> / <sub>16</sub>	—	1 <sup>1</sup> / <sub>8</sub>	3	5 <sup>5</sup> / <sub>16</sub>	
Single Solenoid D.C.	02+03 11+21	2-Position Spring Offset 2-Position Centered Offset	—	7 <sup>15</sup> / <sub>32</sub>	3 <sup>1</sup> / <sub>8</sub>	1 <sup>9</sup> / <sub>16</sub>	2 <sup>3</sup> / <sub>4</sub>	1 <sup>3</sup> / <sub>8</sub>	2 <sup>7</sup> / <sub>16</sub>	10 <sup>3</sup> / <sub>8</sub>	1 <sup>1</sup> / <sub>8</sub>	3	5 <sup>5</sup> / <sub>16</sub>	
Pneu. or Hyd. Double Operator	01 04	3-Position Spring Centered 2-Position Detented	9 <sup>9</sup> / <sub>16</sub>	4 <sup>25</sup> / <sub>32</sub>	3 <sup>1</sup> / <sub>8</sub>	1 <sup>9</sup> / <sub>16</sub>	2 <sup>3</sup> / <sub>4</sub>	1 <sup>3</sup> / <sub>8</sub>	2 <sup>7</sup> / <sub>16</sub>	—	1 <sup>1</sup> / <sub>8</sub>	3	5 <sup>5</sup> / <sub>16</sub>	
Pneu. or Hyd. Single Operator	02+03 11+21	2-Position Spring Offset 2-Position Centered Offset	—	4 <sup>25</sup> / <sub>32</sub>	3 <sup>1</sup> / <sub>8</sub>	1 <sup>9</sup> / <sub>16</sub>	2 <sup>3</sup> / <sub>4</sub>	1 <sup>3</sup> / <sub>8</sub>	2 <sup>7</sup> / <sub>16</sub>	7 <sup>11</sup> / <sub>16</sub>	1 <sup>1</sup> / <sub>8</sub>	3	5 <sup>5</sup> / <sub>16</sub>	

Note: Pneumatic and hydraulic operators, operating pressure is 20 to 150 PSI.

### Interpretation of Valve Number

211	04	-73	01	-02	00
<b>Catalog Number</b>	<b>Flow Pattern</b>	<b>Power Source</b>	<b>Operating Type</b>	<b>O-Ring Code</b>	<b>Optional Features</b>
211 3 GPM	01 02 03 04 05 06 07 08 09 10	54 12V/D.C. 56 24V/D.C. 58 48V/D.C. 70 Air - Oil Operator 73 115V/60C A.C. 75 110V/50C A.C. 77 230V/60C A.C. 79 220V/50C A.C. 81 460V/60C A.C. 83 440V/50C A.C.	01 = 3-Position, Spring Centered, Flow Patterns 1-9, Double Solenoid or Air-Oil Operated 02 = 2-Position, Spring Offset, Flow Pattern 10, A Operated 03 = 2-Position, Spring Offset, Flow Pattern 10, B Operated 04 = 2-Position, Detented, Flow Pattern 10, Double Solenoid or Air-Oil Operated 11 = 2-Position, Centered Offset, Left & Center Positions of Flow Patterns 1-9, A Operated 21 = 2-Position, Centered Offset, Right & Center Positions of Flow Patterns 1-9, B Operated	02 Commercial Nitrile 03 Nitrile (MIL-P-5516) 27 Nitrile (MIL-P-25732) 28 Fluorocarbon A 52 EPR	00 No Options 02 Pilot Speed Control Valve 10 Single Tel-Lite 12 Single Tel-Lite Pilot Speed Control Valve 20 Double Tel-Lite 22 Double Tel-Lite Pilot Speed Control Valve

Note:  
1. See Page E-16 for sub-plate and mounting dimensions.  
2. Do not use these valves in series or tandem circuits.