SIEMENS

**Submittal Sheet**
Document No. 154-087
March 6, 2019

# Pressure Independent Control Series 2-Way Valves and Electronic Valve Actuators

## Description

The 1/2- to 1-1/4-inch Pressure Independent Control Valves have a 2.5, 5, or 5.5 mm stroke, and work with the SSD Series Electronic Actuators. The 1-1/2 to 2-inch normally open valves have a 15 mm stroke and work with the 599-0361XNX Series Rack and Pinion spring return actuators, and the SAY Series Electronic Actuators. SAY Actuators for 1-1/2- and 2-inch Normally Open Valves can also be set for Normally Closed operation (reverse acting). All actuators require a 24 Volt power supply to provide floating or 0 to 10 Vdc control.

Typical applications include control of hot or chilled water or water-glycol solutions up to 50% in closed loop systems.

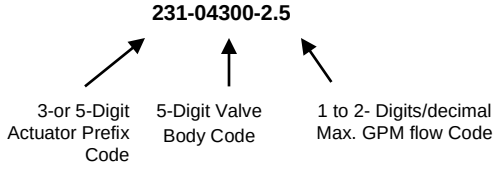
## Features

The Pressure Independent Control Valves include a pressure regulator, a flow limiter, and a control valve in a single device.

All actuators have a direct-coupled installation, manual override and visual position indication.

## Product Numbers

Use the product numbers in the tables to order the valve and the actuator assembled together. The product number consists of a 3- or 5-digit prefix code, a hyphen, a 5-digit code, a hyphen, and a 1 to 2-digit suffix with or without a decimal. The prefix specifies an actuator. The middle code specifies the valve body. The suffix specifies the factory preset maximum GPM flow setting. See Table 2 through Table 10.




## Technical Data

**Typical Specifications**

Flow shall be varied by actuator position. At any given position, flow through the valve shall not vary more that ±5% from 5 to 58 psi due to system pressure fluctuations across the valve in the selected operating range. Valves shall be pressure independent between a differential pressure of 2.3 or 5 PSID (depending on valve size) and 58 PSID. Length of stroke shall be consistent and independent of flow setting.

**Valve Specifications**

| | |
|---|---|
| Body material: | Brass (1/2- to 1-1/4-inch)<br>Ductile Iron (1-1/2- and 2-inch) |
| Stem: | Stainless Steel |
| Line size: | 1/2-inch to 2-inch<br>(15 mm to 50 mm) |
| Action: | 2-Way |
| Valve body rating: | ANSI 250 |
| Close-off pressure/Leakage rate: | |
| 1/2- to 1-1/4-inch, NO | 200 psi/ANSI Class IV (0.01%) |
| 1-1/2 and 2-inch NO/NC | 100 psi/ANSI Class IV (0.01%) |
| 1/2- to 1-1/4-inch, NC | 45 psi/ANSI Class IV (0.01%) |
| Medium temperature range: | 34°F to 248°F (1°C to 120°C) |
| Flow characteristic: | Linear |
| Connection: | NPT threaded |
| Rangeability | ≥ 100:1 |

**Actuator Specifications**

| | |
|---|---|
| Operating voltage: | |
| SSD81U/SSD81.5U | 24 Vac |
| SSD61U | 24 Vac/dc |
| SSD61.5U | 24 Vac |
| 599-0361XNX | 24 Vac/dc |
| SAY | 24 Vac/dc |
| Frequency: | 60 Hz |
| Power consumption (normal operation): | |
| SSD81U | 0.8 VA |
| SSD81.5U | 2 VA |
| SSD61U | 2.5 VA |
| SSD61.5U | 2 VA |
| SAY61.03U | 8 VA |
| SAY81.03U | 5 VA |
| 599-0361XNX | ≤ 3.5 VA |
| Signal: | |
| SSD81U, SSD81.5U SAY81.03U, 599-03616NX | Floating |
| SSD61U, SSD61.5U, 599-03617NX | 0 to 10 Vdc |
| SAY61.03U | 0 to 10 Vdc or 4 to 20 mA |

Run time (in seconds):

| | Stroke | | |
|---|---|---|---|
| | **2.5 mm** | **5/5.5 mm** | **15 mm** |
| SSD81U | 75 | 150 | — |
| SSD81.5U | 70 | 125 | — |
| SSD61U | 45 | 90 | — |
| SSD61.5U | 15 | 30 | — |
| SAY | — | — | 30 |
| 599-0361XNX | — | — | 60 |

| | |
|---|---|
| Force: | |
| SSD (NSR) | >56 lb (250 N) |
| SSD (SR) | 67 lb (300 N) |
| SAY | 45 lb (200 N) |
| 599-0361XNX | < 155 lb (622N) |

**Additional References:**

| | |
|---|---|
| Technical Instructions | |
| PICV Valves | 155-774 |
| SSD Actuators | 155-773 |
| SAY Actuators | 155-580, 155-581 |
| 599-0361XNX | A6V11637981 |
| Agency Certification: | |
| UL | Meets UL 873 |
| cUL | Certified to Canadian Standard C22.2 No. 24.93 |
| Mounting Location | NEMA 1 (Interior only) |

**Table 1. Valve Body Flow Range.**

| Action | Valve Body | Line Size, Inch (mm) | GPM Flow Range |
|---|---|---|---|
| Normally Closed | 599-04300 | 1/2 (15) | 0.3 to 2.7 |
| | 599-04301 | | 1.0 to 7.5 |
| | 599-04302 | 3/4 (20) | 0.5 to 4.5 |
| | 599-04303 | | 1.0 to 8.9 |
| | 599-04304 | 1 (25) | 1.0 to 8.9 |
| | 599-04305 | 1-1/4 (32) | 2.5 to 13.2 |
| Normally Open | 599-04310 | 1/2 (15) | 0.2 to 0.7 |
| | 599-04320* | | 0.3 to 1.6 |
| | 599-04321 | | 1.0 to 5.8 |
| | 599-04322 | 3/4 (20) | 1.3 to 8 |
| | 599-04323 | 1 (25) | 2.6 to 16 |
| | 599-04314 | 1-1/4 (32) | 3 to 18 |
| | 599-04315 | 1-1/2 (40) | 10 to 40 |
| | 599-04316 | 2 (50) | 10 to 50 |

* Available in late 2019.

**Table 2. 1/2-Inch 2-Way Normally Open Valve and Actuator Assemblies.**

| Valve Body | Line Size, Inch (mm) | Factory Preset Max. GPM | Non-Spring Return | | Spring Return | |
|---|---|---|---|---|---|---|
| | | | SSD81U Floating | SSD61U 0-10V | SSD81.5U Floating | SSD61.5U 0-10V |
| | | |  | |  | |
| | | | Actuator Prefix Code | | | |
| | | | 230 | 231 | 232 | 233 |
| 599-04310-0.5 | 1/2 (15) | 0.5 | 230-04310-0.5 | 231-04310-0.5 | 232-04310-0.5 | 233-04310-0.5 |
| 599-04320-0.5* | | | 230-04320-0.5* | 231-04320-0.5* | 232-04320-0.5* | 233-04320-0.5* |
| 599-04320-1* | | 1 | 230-04320-1* | 231-04320-1* | 232-04320-1* | 233-04320-1* |
| 599-04321-1 | | | 230-04321-1 | 231-04321-1 | 232-04321-1 | 233-04321-1 |
| 599-04320-1.5* | | 1.5 | 230-04320-1.5* | 231-04320-1.5* | 232-04320-1.5* | 233-04320-1.5* |
| 599-04321-1.5 | | | 230-04321-1.5 | 231-04321-1.5 | 232-04321-1.5 | 233-04321-1.5 |
| 599-04321-2 | | 2 | 230-04321-2 | 231-04321-2 | 232-04321-2 | 233-04321-2 |
| 599-04321-2.5 | | 2.5 | 230-04321-2.5 | 231-04321-2.5 | 232-04321-2.5 | 233-04321-2.5 |
| 599-04321-3 | | 3 | 230-04321-3 | 231-04321-3 | 232-04321-3 | 233-04321-3 |
| 599-04321-3.5 | | 3.5 | 230-04321-3.5 | 231-04321-3.5 | 232-04321-3.5 | 233-04321-3.5 |
| 599-04321-4 | | 4 | 230-04321-4 | 231-04321-4 | 232-04321-4 | 233-04321-4 |
| 599-04321-4.5 | | 4.5 | 230-04321-4.5 | 231-04321-4.5 | 232-04321-4.5 | 233-04321-4.5 |
| 599-04321-5 | | 5 | 230-04321-5 | 231-04321-5 | 232-04321-5 | 233-04321-5 |
| 599-04321-5.5 | | 5.5 | 230-04321-5.5 | 231-04321-5.5 | 232-04321-5.5 | 233-04321-5.5 |

* Available in late 2019.

**Table 3. 3/4-Inch 2-Way Normally Open Valve and Actuator Assemblies.**

| Valve Body | Line Size, Inch (mm) | Factory Preset Max. GPM | Non-Spring Return | | Spring Return | |
|---|---|---|---|---|---|---|
| | | | SSD81U Floating | SSD61U 0-10V | SSD81.5U Floating | SSD61.5U 0-10V |
| | | |  | |  | |
| | | | Actuator Prefix Code | | | |
| | | | 230 | 231 | 232 | 233 |
| 599-04322-2 | 3/4 (20) | 2 | 230-04322-2 | 231-04322-2 | 232-04322-2 | 233-04322-2 |
| 599-04322-2.5 | | 2.5 | 230-04322-2.5 | 231-04322-2.5 | 232-04322-2.5 | 233-04322-2.5 |
| 599-04322-3 | | 3 | 230-04322-3 | 231-04322-3 | 232-04322-3 | 233-04322-3 |
| 599-04322-3.5 | | 3.5 | 230-04322-3.5 | 231-04322-3.5 | 232-04322-3.5 | 233-04322-3.5 |
| 599-04322-4 | | 4 | 230-04322-4 | 231-04322-4 | 232-04322-4 | 233-04322-4 |
| 599-04322-4.5 | | 4.5 | 230-04322-4.5 | 231-04322-4.5 | 232-04322-4.5 | 233-04322-4.5 |
| 599-04322-5 | | 5 | 230-04322-5 | 231-04322-5 | 232-04322-5 | 233-04322-5 |
| 599-04322-5.5 | | 5.5 | 230-04322-5.5 | 231-04322-5.5 | 232-04322-5.5 | 233-0432-5.5 |
| 599-04322-6 | | 6 | 230-04322-6 | 231-04322-6 | 232-04322-6 | 233-04322-6 |
| 599-04322-6.5 | | 6.5 | 230-04322-6.5 | 231-04322-6.5 | 232-04322-6.5 | 233-04322-6.5 |
| 599-04322-7 | | 7 | 230-04322-7 | 231-04322-7 | 232-04322-7 | 233-04322-7 |
| 599-04322-7.5 | | 7.5 | 230-04322-7.5 | 231-04322-7.5 | 232-04322-7.5 | 233-04322-7.5 |
| 599-04322-8 | | 8 | 230-04322-8 | 231-04322-8 | 232-04322-8 | 233-04322-8 |

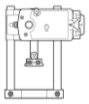
**Table 4. 1-Inch 2-Way Normally Open Valve and Actuator Assemblies.**

| Valve Body | Line Size, Inch (mm) | Factory Preset Max. GPM | Non-Spring Return | | Spring Return | |
|---|---|---|---|---|---|---|
| | | | SSD81U Floating | SSD61U 0-10V | SSD81.5U Floating | SSD61.5U 0-10V |
| | | |  | |  | |
| | | | Actuator Prefix Code | | | |
| | | | 230 | 231 | 232 | 233 |
| 599-04323-4 | 1 (25) | 4 | 230-04323-4 | 231-04323-4 | 232-04323-4 | 233-04323-4 |
| 599-04323-5 | | 5 | 230-04323-5 | 231-04323-5 | 232-04323-5 | 233-04323-5 |
| 599-04323-6 | | 6 | 230-04323-6 | 231-04323-6 | 232-04323-6 | 233-04323-6 |
| 599-04323-7 | | 7 | 230-04323-7 | 231-04323-7 | 232-04323-7 | 233-04323-7 |
| 599-04323-8 | | 8 | 230-04323-8 | 231-04323-8 | 232-04323-8 | 233-04323-8 |
| 599-04323-9 | | 9 | 230-04323-9 | 231-04323-9 | 232-04323-9 | 233-04323-9 |
| 599-04323-10 | | 10 | 230-04323-10 | 231-04323-10 | 232-04323-10 | 233-04323-10 |
| 599-04323-11 | | 11 | 230-04323-11 | 231-04323-11 | 232-04323-11 | 233-04323-11 |
| 599-04323-12 | | 12 | 230-04323-12 | 231-04323-12 | 232-04323-12 | 233-04323-12 |
| 599-04323-13 | | 13 | 230-04323-13 | 231-04323-13 | 232-04323-13 | 233-04323-13 |
| 599-04323-14 | | 14 | 230-04323-14 | 231-04323-14 | 232-04323-14 | 233-04323-14 |
| 599-04323-15 | | 15 | 230-04323-15 | 231-04323-15 | 232-04323-15 | 233-04323-15 |
| 599-04323-16 | | 16 | 230-04323-16 | 231-04323-16 | 232-04323-16 | 233-04323-16 |

**Table 5. 1-1/4-Inch 2-Way Normally Open Valve and Actuator Assemblies.**

| Valve Body | Line Size, Inch (mm) | Factory Preset Max. GPM | Non-Spring Return | | Spring Return | |
|---|---|---|---|---|---|---|
| | | | SSD81U Floating | SSD61U 0-10V | SSD81.5U Floating | SSD61.5U 0-10V |
| | | |  | |  | |
| | | | Actuator Prefix Code | | | |
| | | | 230 | 231 | 232 | 233 |
| 599-04314-9 | 1-1/4 (32) | 9 | 230-04314-9 | 231-04314-9 | 232-04314-9 | 233-04314-9 |
| 599-04314-10 | | 10 | 230-04314-10 | 231-04314-10 | 232-04314-10 | 233-04314-10 |
| 599-04314-11 | | 11 | 230-04314-11 | 231-04314-11 | 232-04314-11 | 233-04314-11 |
| 599-04314-12 | | 12 | 230-04314-12 | 231-04314-12 | 232-04314-12 | 233-04314-12 |
| 599-04314-13 | | 13 | 230-04314-13 | 231-04314-13 | 232-04314-13 | 233-04314-13 |
| 599-04314-14 | | 14 | 230-04314-14 | 231-04314-14 | 232-04314-14 | 233-04314-14 |
| 599-04314-15 | | 15 | 230-04314-15 | 231-04314-15 | 232-04314-15 | 233-04314-15 |
| 599-04314-16 | | 16 | 230-04314-16 | 231-04314-16 | 232-04314-16 | 233-04314-16 |
| 599-04314-17 | | 17 | 230-04314-17 | 231-04314-17 | 232-04314-17 | 233-04314-17 |
| 599-04314-18 | | 18 | 230-04314-18 | 231-04314-18 | 232-04314-18 | 233-04314-18 |

**Table 6. 1-1/2-Inch and 2-Inch 2-Way Normally Open Valve and Actuator Assemblies.**

| Valve Body | Line Size, Inch (mm) | Factory Preset Max. GPM | Non-Spring Return | | Spring Return | |
|---|---|---|---|---|---|---|
| | | | SAY81.03U Floating | SAY61.03U 0 to 10V and 4 to 20 mA | 599-03616NO Floating | 599-03617NO 0 – 10V |
| | | |  | |  | |
| | | | Actuator Prefix Code | | | |
| | | | 334 | 335 | 336NO | 337NO |
| 599-04315-15 | 1-1/2 (40) | 15 | 334-04315-15 | 335-04315-15 | 336NO-04315-15 | 337NO-04315-15 |
| 599-04315-20 | | 20 | 334-04315-20 | 335-04315-20 | 336NO-04315-20 | 337NO-04315-20 |
| 599-04315-25 | | 25 | 334-04315-25 | 335-04315-25 | 336NO-04315-25 | 337NO-04315-25 |
| 599-04315-30 | | 30 | 334-04315-30 | 335-04315-30 | 336NO-04315-30 | 337NO-04315-30 |
| 599-04315-35 | | 35 | 334-04315-35 | 335-04315-35 | 336NO-04315-35 | 337NO-04315-35 |
| 599-04315-40 | | 40 | 334-04315-40 | 335-04315-40 | 336NO-04315-40 | 337NO-04315-40 |
| 599-04316-20 | 2 (50) | 20 | 334-04316-20 | 335-04316-20 | 336NO-04316-20 | 337NO-04316-20 |
| 599-04316-25 | | 25 | 334-04316-25 | 335-04316-25 | 336NO-04316-25 | 337NO-04316-25 |
| 599-04316-30 | | 30 | 334-04316-30 | 335-04316-30 | 336NO-04316-30 | 337NO-04316-30 |
| 599-04316-35 | | 35 | 334-04316-35 | 335-04316-35 | 336NO-04316-35 | 337NO-04316-35 |
| 599-04316-40 | | 40 | 334-04316-40 | 335-04316-40 | 336NO-04316-40 | 337NO-04316-40 |
| 599-04316-45 | | 45 | 334-04316-45 | 335-04316-45 | 336NO-04316-45 | 337NO-04316-45 |
| 599-04316-50 | | 50 | 334-04316-50 | 335-04316-50 | 336NO-04316-50 | 337NO-04316-50 |

**NOTE:**
See *SAY Series Valve Actuators Technical Instructions* (155-580 and 155-581) and *Installation Instructions* (129-583) for reverse-acting (normally closed) operation.

**Table 7. 1/2-Inch 2-Way Normally Closed Valve and Actuator Assemblies.**

| Valve Body | Line Size, Inch (mm) | Factory Preset Max. GPM | Non-Spring Return | | Spring Return | |
|---|---|---|---|---|---|---|
| | | | SSD81U Floating | SSD61U 0-10V | SSD81.5U Floating | SSD61.5U 0-10V |
| | | |  | |  | |
| | | | Actuator Prefix Code | | | |
| | | | 230 | 231 | 232 | 233 |
| 599-04300-0.5 | 1/2 (15) | 0.5 | 230-04300-0.5 | 231-04300-0.5 | 232-04300-0.5 | 233-04300-0.5 |
| 599-04300-1 | | 1 | 230-04300-1 | 231-04300-1 | 232-04300-1 | 233-04300-1 |
| 599-04300-1.5 | | 1.5 | 230-04300-1.5 | 231-04300-1.5 | 232-04300-1.5 | 233-04300-1.5 |
| 599-04300-2 | | 2 | 230-04300-2 | 231-04300-2 | 232-04300-2 | 233-04300-2 |
| 599-04300-2.5 | | 2.5 | 230-04300-2.5 | 231-04300-2.5 | 232-04300-2.5 | 233-04300-2.5 |
| 599-04301-3 | | 3 | 230-04301-3 | 231-04301-3 | 232-04301-3 | 233-04301-3 |
| 599-04301-3.5 | | 3.5 | 230-04301-3.5 | 231-04301-3.5 | 232-04301-3.5 | 233-04301-3.5 |
| 599-04301-4 | | 4 | 230-04301-4 | 231-04301-4 | 232-04301-4 | 233-04301-4 |
| 599-04301-4.5 | | 4.5 | 230-04301-4.5 | 231-04301-4.5 | 232-04301-4.5 | 233-04301-4.5 |
| 599-04301-5 | | 5 | 230-04301-5 | 231-04301-5 | 232-04301-5 | 233-04301-5 |
| 599-04301-5.5 | | 5.5 | 230-04301-5.5 | 231-04301-5.5 | 232-04301-5.5 | 233-04301-5.5 |
| 599-04301-6 | | 6 | 230-04301-6 | 231-04301-6 | 232-04301-6 | 233-04301-6 |
| 599-04301-6.5 | | 6.5 | 230-04301-6.5 | 231-04301-6.5 | 232-04301-6.5 | 233-04301-6.5 |
| 599-04301-7 | | 7 | 230-04301-7 | 231-04301-7 | 232-04301-7 | 233-04301-7 |
| 599-04301-7.5 | | 7.5 | 230-04301-7.5 | 231-04301-7.5 | 232-04301-7.5 | 233-04301-7.5 |

**Table 8. 3/4-Inch 2-Way Normally Closed Valve and Actuator Assemblies.**

| Valve Body | Line Size, Inch (mm) | Factory Preset Max. GPM | Non-Spring Return | | Spring Return | |
|---|---|---|---|---|---|---|
| | | | SSD81U Floating | SSD61U 0-10V | SSD81.5U Floating | SSD61.5U 0-10V |
| | | |  | |  | |
| | | | Actuator Prefix Code | | | |
| | | | 230 | 231 | 232 | 233 |
| 599-04302-1 | 3/4 (20) | 1 | 230-04302-1 | 231-04302-1 | 232-04302-1 | 233-04302-1 |
| 599-04302-1.5 | | 1.5 | 230-04302-1.5 | 231-04302-1.5 | 232-04302-1.5 | 233-04302-1.5 |
| 599-04302-2 | | 2 | 230-04302-2 | 231-04302-2 | 232-04302-2 | 233-04302-2 |
| 599-04302-2.5 | | 2.5 | 230-04302-2.5 | 231-04302-2.5 | 232-04302-2.5 | 233-04302-2.5 |
| 599-04302-3 | | 3 | 230-04302-3 | 231-04302-3 | 232-04302-3 | 233-04302-3 |
| 599-04302-3.5 | | 3.5 | 230-04302-3.5 | 231-04302-3.5 | 232-04302-3.5 | 233-04302-3.5 |
| 599-04302-4 | | 4 | 230-04302-4 | 231-04302-4 | 232-04302-4 | 233-04302-4 |
| 599-04302-4.5 | | 4.5 | 230-04302-4.5 | 231-04302-4.5 | 232-04302-4.5 | 233-04302-4.5 |
| 599-04303-5 | | 5 | 230-04303-5 | 231-04303-5 | 232-04303-5 | 233-04303-5 |
| 599-04303-5.5 | | 5.5 | 230-04303-5.5 | 231-04303-5.5 | 232-04303-5.5 | 233-04303-5.5 |
| 599-04303-6 | | 6 | 230-04303-6 | 231-04303-6 | 232-04303-6 | 233-04303-6 |
| 599-04303-6.5 | | 6.5 | 230-04303-6.5 | 231-04303-6.5 | 232-04303-6.5 | 233-04303-6.5 |
| 599-04303-7 | | 7 | 230-04303-7 | 231-04303-7 | 232-04303-7 | 233-04303-7 |
| 599-04303-7.5 | | 7.5 | 230-04303-7.5 | 231-04303-7.5 | 232-04303-7.5 | 233-04303-7.5 |
| 599-04303-8 | | 8 | 230-04303-8 | 231-04303-8 | 232-04303-8 | 233-04303-8 |
| 599-04303-8.5 | | 8.5 | 230-04303-8.5 | 231-04303-8.5 | 232-04303-8.5 | 233-04303-8.5 |

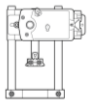
**Table 9. 1-Inch 2-Way Normally Closed Valve and Actuator Assemblies.**

| Valve Body | Line Size, Inch (mm) | Factory Preset Max. GPM | Non-Spring Return | | Spring Return | |
|---|---|---|---|---|---|---|
| | | | SSD81U Floating | SSD61U 0-10V | SSD81.5U Floating | SSD61.5U 0-10V |
| | | |  | |  | |
| | | | Actuator Prefix Code | | | |
| | | | 230 | 231 | 232 | 233 |
| 599-04304-1 | 1 (25) | 1 | 230-04304-1 | 231-04304-1 | 232-04304-1 | 233-04304-1 |
| 599-04304-2 | | 2 | 230-04304-2 | 231-04304-2 | 232-04304-2 | 233-04304-2 |
| 599-04304-3 | | 3 | 230-04304-3 | 231-04304-3 | 232-04304-3 | 233-04304-3 |
| 599-04304-4 | | 4 | 230-04304-4 | 231-04304-4 | 232-04304-4 | 233-04304-4 |
| 599-04304-5 | | 5 | 230-04304-5 | 231-04304-5 | 232-04304-5 | 233-04304-5 |
| 599-04304-6 | | 6 | 230-04304-6 | 231-04304-6 | 232-04304-6 | 233-04304-6 |
| 599-04304-7 | | 7 | 230-04304-7 | 231-04304-7 | 232-04304-7 | 233-04304-7 |
| 599-04304-8 | | 8 | 230-04304-8 | 231-04304-8 | 232-04304-8 | 233-04304-8 |
| 599-04304-9 | | 9 | 230-04304-9 | 231-04304-9 | 232-04304-9 | 233-04304-9 |

**Table 10. 1-1/4 Inch 2-Way Normally Closed Valve and Actuator Assemblies.**

| Valve Body | Line Size, Inch (mm) | Factory Preset Max. GPM | Non-Spring Return | | Spring Return | |
|---|---|---|---|---|---|---|
| | | | SSD81U Floating | SSD61U 0-10V | SSD81.5U Floating | SSD61.5U 0-10V |
| | | |  | |  | |
| | | | Actuator Prefix Code | | | |
| | | | 230 | 231 | 232 | 233 |
| 599-04305-3 | 1-1/4 (32) | 3 | 230-04305-3 | 231-04305-3 | 232-04305-3 | 233-04305-3 |
| 599-04305-4 | | 4 | 230-04305-4 | 231-04305-4 | 232-04305-4 | 233-04305-4 |
| 599-04305-5 | | 5 | 230-04305-5 | 231-04305-5 | 232-04305-5 | 233-04305-5 |
| 599-04305-6 | | 6 | 230-04305-6 | 231-04305-6 | 232-04305-6 | 233-04305-6 |
| 599-04305-7 | | 7 | 230-04305-7 | 231-04305-7 | 232-04305-7 | 233-04305-7 |
| 599-04305-8 | | 8 | 230-04305-8 | 231-04305-8 | 232-04305-8 | 233-04305-8 |
| 599-04305-9 | | 9 | 230-04305-9 | 231-04305-9 | 232-04305-9 | 233-04305-9 |
| 599-04305-10 | | 10 | 230-04305-10 | 231-04305-10 | 232-04305-10 | 233-04305-10 |
| 599-04305-11 | | 11 | 230-04305-11 | 231-04305-11 | 232-04305-11 | 233-04305-11 |
| 599-04305-12 | | 12 | 230-04305-12 | 231-04305-12 | 232-04305-12 | 233-04305-12 |
| 599-04305-13 | | 13 | 230-04305-13 | 231-04305-13 | 232-04305-13 | 233-04305-13 |

**Table 11. 1-1/2-Inch and 2-Inch 2-Way Normally Closed Valve and Actuator Assemblies.**

| Valve Body | Line Size, Inch (mm) | Factory Preset Max. GPM | Spring Return | |
|---|---|---|---|---|
| | | | 599-03616NC Floating | 599-03617NC 0 – 10V |
| | | |  | |
| | | | Actuator Prefix Code | |
| | | | 336NC | 337NC |
| 599-04315-15 | 1-1/2 (40) | 15 | 336NC-04315-15 | 337NC-04315-15 |
| 599-04315-20 | | 20 | 336NC-04315-20 | 337NC-04315-20 |
| 599-04315-25 | | 25 | 336NC-04315-25 | 337NC-04315-25 |
| 599-04315-30 | | 30 | 336NC-04315-30 | 337NC-04315-30 |
| 599-04315-35 | | 35 | 336NC-04315-35 | 337NC-04315-35 |
| 599-04315-40 | | 40 | 336NC-04315-40 | 337NC-04315-40 |
| 599-04316-20 | 2 (50) | 20 | 336NC-04316-20 | 337NC-04316-20 |
| 599-04316-25 | | 25 | 336NC-04316-25 | 337NC-04316-25 |
| 599-04316-30 | | 30 | 336NC-04316-30 | 337NC-04316-30 |
| 599-04316-35 | | 35 | 336NC-04316-35 | 337NC-04316-35 |
| 599-04316-40 | | 40 | 336NC-04316-40 | 337NC-04316-40 |
| 599-04316-45 | | 45 | 336NC-04316-45 | 337NC-04316-45 |
| 599-04316-50 | | 50 | 336NC-04316-50 | 337NC-04316-50 |

## Disposal



The actuators are considered electrical and electronic equipment for disposal in terms of the applicable European Directive and may not be disposed of as domestic garbage.

- Dispose of the actuataors through channels provided for this purpose.
- Comply with all local and currently applicable laws and regulations.

Do not dispose of valves as household waste.

- Special handling of individual components may be mandated by law or make ecological sense.
- Observe all local and currently applicable laws and regulations.

Information in this publication is based on current specifications. The company reserves the right to make changes in specifications and models as design improvements are introduced. Product or company names mentioned herein may be the trademarks of their respective owners. © 2019 Siemens Industry, Inc.