Automatic Control Valves

The Automatic Answer to Fluid Control

Watts.com

WATTS®

Trust Watts ACVs for Quality, Performance & Reliability

You need:

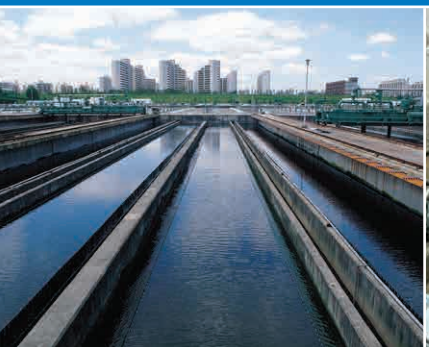
- Unquestionable confidence in the quality and performance of the valve
- Proof of the manufacturer's knowledge and hands-on expertise
- Our priority is that every product delivered will match your design parameters

Working with Watts

- Our focus on quality, high performance, positive control, reliability, and long product life is second to none
- Our factory-trained representatives offer detailed specification assistance, including expert analysis of system conditions, material needs, and application demands
- Our fusion-bonded, epoxy-coated ductile iron valves offer long life & minimal maintenance
- Our trustworthy reputation is backed by a long history of manufacturing superior valves for municipal, industrial, and reclaimed water markets
- Our ACVs are designed with standardized replacement parts, conform to industry standard lengths, and meet all applicable AWWA standards
- Our knowledgeable & trusted representatives can provide detailed information on our broad range of valve functions and sizes

Common Applications for Watts ACVs

- Plumbing & mechanical systems
- Commercial high-rise buildings
- Municipal waterworks
- Firefighting systems
- Industrial water
- Water reuse
- Irrigation




A Complete Line of Ductile Iron ACVs

LF110

Series 110
Float Control

Watts ACV Float Valves are available for either on-off or modulating service.

- On-off type valves controlled by float pilot equipped with adjustable high- and low-level stop collars allow for calculated level draw-down
- Modulating-type valves maintain constant water level proportional with tank draw
- Valve- or remote-mounted float controls
- Level operation can be reversed for special applications
- Additional feature combinations include pressure sustaining and solenoid (on-off)

LF113

Series 113
Solenoid (On-Off) Control

Watts ACV Solenoid Valves can be configured for either on-off or electric positioning service.

- Electric positioning type valve interfaces with SCADA systems and throttles open or closed to maintain desired process variable
- Valves can be configured to open, close, or hold-last-position with loss of electrical signal
- Common applications include pressure, level, or flow control
- Valves can be equipped with limit switches or 4-20 mA position feedback device

LF114

Series 114
Rate-of-Flow Control

Watts ACV Rate-of-Flow Valves are designed to limit flow rate to an adjustable maximum.

- Senses differential pressure across a factory-calibrated orifice plate, then accurately throttles to maintain field-adjustable flow rate
- Orifice plate can be installed downstream or upstream, making it ideal for pressurized pipeline or open reservoir water-blending applications
- Common feature combinations include pressure reducing, pressure sustaining, hydraulic check, or solenoid (on-off)

LF115

Series 115
Pressure Reducing Control

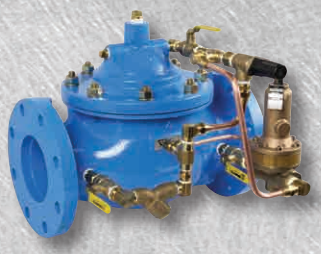
Watts ACV Pressure Reducing Valves reduce high inlet pressure to constant, lower, outlet pressure across a broad range of flow.

- Valves can be installed in parallel or series configurations for extended flow range or staged pressure reduction
- Field-adjustable downstream pressure set point
- Common feature combinations include pressure reducing with hydraulic check, solenoid (on-off), downstream surge protection, or upstream pressure sustaining

Series 116
Pressure Relief/Sustaining Control

Watts ACV Pressure Relief/Sustaining Valves open when inlet pressure is above the set point, and throttle when pressure is below the field-adjustable set point.

- Valves maintain desired settings with close pressure tolerances
- UL approved fire versions available
- Multiple set pressures
- Differential relief version available



LF116

Series 118
Non-Surge Check Valves

Watts ACV Non-Surge Check Valves are equipped with separate adjustable opening and closing speed controls to avoid pipeline surges.

- Valves close drip-tight upon flow reversal
- Can be equipped with limit switches or a position indicator
- Common feature applications include low-head and variable frequency drive pumping systems

LF118

Series 127
Altitude Control

The Watts Altitude Control valve is designed to control the water level in tanks or elevated storage reservoirs.

- Monitors tank head pressure through a field-installed sensing line that opens for tank fill and closes at the desired level
- Valves equipped with separate adjustable opening and closing speed controls
- Multiple variations available, including one-way flow with delayed opening feature, one-way flow with pressure-sustaining feature, and two-way flow designs

LF127

Series 513
Pump Control

Watts ACV Pump Control Valves are used to minimize surges commonly associated with the starting and stopping of pumps.

- Adjustable opening and closing speed controls
- Limit switch for electrical interface
- Hydraulic or mechanical check feature
- Can be configured with backpressure, rate-of-flow, or pressure reducing feature

LF513

A Long List of Advantages

Efficient design

The main valve (globe or angle pattern) is diaphragm-actuated and hydraulically operated. It includes only four major components: The body, cover, interior seat, and diaphragm/stem assembly, which is the only moving part in the valve.

Precise alignment and stable throttling

Cover bearings and integral seat bearings guide the stem assembly for precise alignment with the seat. When coupled with the seal retainer guide, this alignment ensures precise opening/closing flows, stable throttling, low-friction operation, and positive closure.

Fused epoxy prolongs life

Watts ACVs feature an NSF 61 certified fused epoxy coating applied under rigorous preparation and application standards. This non-porous coating seals the casting from interaction with the controlled liquid and simplifies maintenance. The epoxy also protects the valve from environmental attack and prevents mineral buildup and rust, both major factors in control valve failure.

Multiple function performance

By varying the control/piping arrangement, Watts ACVs can perform a range of functions, in turn adding system protection and lowering end-user cost. The variable control/piping arrangements also allow Watts ACVs to serve a variety of applications.

Simplified maintenance

The main valve and pilot system can be serviced without removing the valve from the line, greatly simplifying maintenance.

Right valve, right place, right time

Watts is committed to providing you with ideal function and material for your application requirements and prides itself on its accurate, calculated delivery schedules.

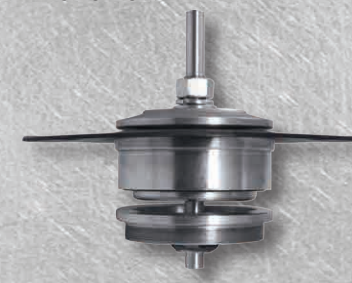
Trim Options

Standard

- Corrosion-resistant 316 stainless steel seat guide and seat ring
- Fusion epoxy-coated retainer and diaphragm washer

All Stainless

- Stainless Steel retainer and diaphragm washer extends valve life



Mechanical Check

Mechanical check

- Acts independently of diaphragm position or pilot control system,
- Provides immediate check action when flow ceases

Cavitation Control Trim

- Reduces damaging effects of cavitation using multi-staged energy-dissipating technology
- Proven design ideally suited for extreme differential situations, including pressure reducing, pressure relief, and reservoir fill applications

Do You Have a Demanding Application?

Consider Stainless Steel Star ACV!

Our stainless steel valves may provide reliable & cost-effective solutions for certain applications & environments.

- Fabricated in USA
- Suitable for demanding environment & water conditions
- Corrosion-resistant stainless steel
- Lighter weight than ductile iron
- Cast 1-1/4" to 4" – fabricated 4" to 24"
- Globe or angle patterns
- Wide range of options available
- NSF-listed main valve

See F-ACV-Stainless for more information

Partner with Watts

- Breadth & depth of offerings means you get the right product for the right application, all from a single vendor
- Industry leader for 140 years with the largest installed base
- Durability in design with high-grade material suited for even the most challenging application
- High performance and exceptional flow characteristics

WATTS®

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