

# WHEN CONTROL REALLY MATTERS

MAKE SURE IT IS SONTAY

ROTARY SHOE VALVES



ZONE VALVES & ACTUATORS



DAMPER, VALVE & FAILSAFE ACTUATORS



## VALVES & ACTUATORS

### BENEFITS

#### CONTROL STABILITY

Smooth modulation without hunting · Improved flow balance & response ·



#### ENERGY EFFICIENCY

· Better coil & circuit performance · Reduced pumping & overshoot losses

#### PRECISION

Correct sizing using Kv data · Accurate temperature control & comfort ·



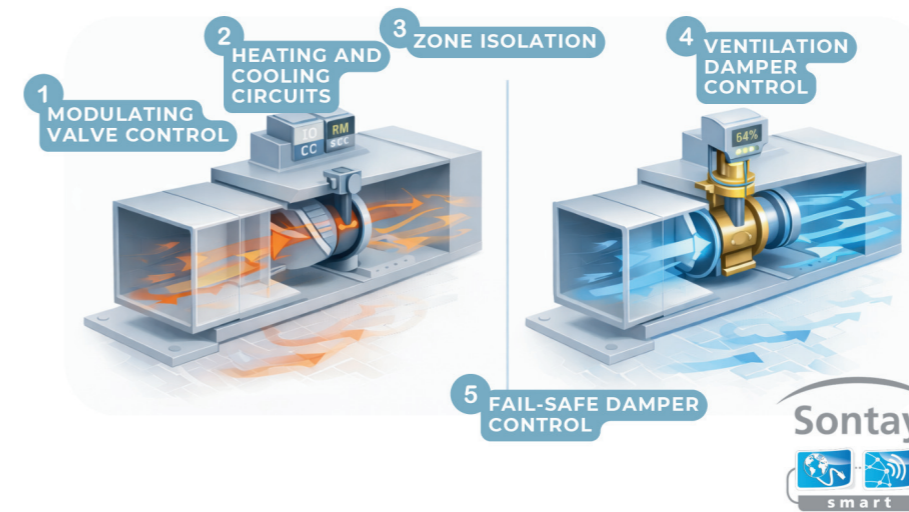
#### RELIABILITY

· Reduced wear, noise & callbacks · Strong foundation for commissioning

## Sontay Valves & Actuators for HVAC Systems

A wide range of actuators is available to suit different system requirements and control philosophies.

SCAN HERE



**Sontay Valves & Actuators for HVAC Systems.** Valves and actuators control water flow and air distribution in HVAC systems, converting control signals into precise mechanical movement. Correct selection and sizing are essential for stable control and energy efficiency.

#### Applications

- AHUs
- Ventilation & damper control
- Heating & cooling circuits
- Zone control
- Plant rooms

#### Valve Control

Supports modulating and ON / OFF control. Correct sizing using Kv data ensures smooth operation and efficient system performance.

#### Actuator Control Available with:

- 24V / 230V supply
- Modulating, ON / OFF, Raise / Lower
- Fail-safe and auxiliary switches

#### VA Damper Actuators

Reliable damper control with torque ratings from 5Nm to 30Nm.

#### System Integration

Integrates with Sontay temperature, pressure, flow, and smart communication ranges for efficient, stable HVAC control.

	Product Code	Applications	
1	VR-F	Modulating valve control	
2	VR-G	Heating & cooling circuits	
3	VZ	Zone isolation (ON / OFF)	
4	VA	Ventilation damper control	
5	VA-FS	Fail-safe damper control	



#### FLOW & BALANCING CONTROL

- Stable water flow
- Accurate temperature control



#### ZONE & CIRCUIT CONTROL

- ON / OFF and modulating control
- Supports zoning and demand control



#### VENTILATION & DAMPER CONTROL

- Controlled air volume
- Efficient air distribution

**VA Damper Actuators**

Sontay's range of damper actuators are suitable for many applications including motorised control of dampers in ventilation systems. They are available with either on/off, floating (raise/lower) or modulating control signal input and various torque ratings. A failsafe (spring return) damper actuator is also available in a 20Nm torque rating. All units can have optional auxiliary switch(es) fitted and the direction of rotation can be reversed and the angle of mechanical travel can be limited.

**FEATURES**

- Position indication
- Maintenance-free
- Mechanical set rotation limits
- Reversible rotation



**5NM TYPES**



Part code	Description
<b>5Nm Actuators</b>	
VA-05A-24	24V On/off, raise/lower
VA-05A-24S	24V On/off, raise/lower with auxillary switch
VA-05A-230	230V On/off, raise/lower
VA-05A-230S	230V On/off, raise/lower with auxillary switches
VA-05M-24	24V Modulating

**8NM, 10NM & 15NM TYPES**



Part code	Description
<b>8Nm Actuators</b>	
VA-08A-24	24V On/off, raise/lower
VA-08A-24S	24V On/off, raise/lower with auxillary switch
VA-08A-230	230V On/off, raise/lower
VA-08A-230S	230V On/off, raise/lower with auxillary switch
<b>10Nm Actuators</b>	
VA-10M-24	24V Modulating
VA-10M-24S	24V Modulating with auxillart switch
<b>15Nm Actuators</b>	
VA-15A-24	24V On/off, raise/lower
VA-15A-24S	24V On/off, raise/lower with auxillary switch
VA-15A-230	230V On/off, raise/lower
VA-15A-230S	230V On/off, raise/lower with auxillary switch
VA-15M-24	24V Modulating
VA-15M-24S	24V Modulating with auxillart switch

**20NM & 30NM & FAIL SAFE TYPES**



Part code	Description
<b>20Nm Actuators</b>	
VA-20A-24S	24V On/off, raise/lower with auxillary switch
VA-20A-230S	230V On/off, raise/lower with auxillary switch
VA-20M-24S	24V On/off, raise/lower with auxillary switch
<b>30Nm Actuators</b>	
VA-30A-24	24V On/off, raise/lower
VA-30A-24S	24V On/off, raise/lower with auxillary switch
VA-30A-230S	230V On/off, raise/lower with auxillary switch
VA-30M-24S	24V Modulating with auxillart switch
<b>Failsafe (Spring Return) Actuators</b>	
VA-FA-24-N	24V On/off, raise/lower
VA-FA-24S-N	24V On/off, raise/lower with auxillary switch
VA-FA-230-N	230V On/off, raise/lower
VA-FA-230S-N	230V On/off, raise/lower with auxillary switch

**SPECIFICATION**

Ambient relative humidity	5 to 95 RH
Ambient Temperature Range	-20 to +50°C
Angle of rotation	95° (mechanically limitable)
Aux. switch rating	240V @ 5(2.5)A
Control signals	On/off, raise/lower and modulating (0-10Vdc)
Drive times (seconds)	60 to 120
Power Supply	24Vac @ 50/60Hz or 24Vdc ±20%, 80 to 265Vac @ 50/60Hz
Protection	IP42
Weight	0.5kg

General Note for Torque Requirement	
<i>For air dampers the following rule of thumb can be used in the absence of damper manufacturers' guidelines.</i>	
Torque	Duct area
5Nm	Up to 1m <sup>2</sup>
8Nm	Up to 1.6m <sup>2</sup>
10Nm	Up to 2m <sup>2</sup>
15Nm	Up to 3m <sup>2</sup>
20Nm	Up to 4m <sup>2</sup>
30Nm	Up to 6m <sup>2</sup>

Data sheets online: [www.sontay.com](http://www.sontay.com)

**VR-G 3-Port Screwed Brass Rotary Shoe Valves**



VR-G-LKN-1



These brass rotary shoe valves are made of a special brass alloy (DZR) allowing use in heating and cooling systems, for both mixing and diverting applications. Valves are available from ½" to 2" sizes with internal threads. Note: These are not tight shut-off valves.

**FEATURES**

- PN10
- Internal threaded connections
- Compact size

Actuator Selection				
Valve Body	24V R/L On/Off	230V R/L On/Off	24V Mod.	Linkage
All VR-G	VA-05A-24	VA-05A-230x	VA-05M-24	VR-G-LKN-1

**SPECIFICATION**

Body material	Brass DZR, CW 602N
Diverting leak rate	<0.02% of flow
Flow type	Mixing or diverting
Fluid temperature	-10 to +110°C
Mixing leak rate	<0.05% of flow
Nominal pressure	PN10
O-ring material	EPDM
Rangeability	100:1
Required Motor torque	5Nm
Shaft & bushing material	PPS
Weight	2.05kg max.

Part code	Description
<b>3-port. Screwed Valves</b>	
VR-G-01	½" BSP, 0.4 Kvs¾
VR-G-02	½" BSP, 0.63 Kvs
VR-G-03	½" BSP, 1.0 Kvs
VR-G-04	½" BSP, 1.63 Kvs
VR-G-05	½" BSP, 2.5 Kvs
VR-G-06	½" BSP, 4.0 Kvs
VR-G-07	¾" BSP, 2.5 Kvs
VR-G-08	¾" BSP, 4.0 Kvs
VR-G-09	¾" BSP, 6.3 Kvs
VR-G-10	1" BSP, 6.3 Kvs
VR-G-12	1 ¼" BSP, 16.0 Kvs
VR-G-13	1½" BSP, 25.0 Kvs
VR-G-14	2" BSP, 40.0 Kvs
<b>Linkage Kit</b>	
VR-G-LKN-1	For VA 5Nm actuators

**VR-F 3-Port Flanged Iron Rotary Shoe Valves**



These cast iron rotary shoe valves are used in heating systems for mixing or diverting applications. Valves sizes from 50 to 150mm and PN6. Note: These are not tight shut-off valves.

Actuator Selection				
Valve Body	24V R/L On/Off	230V R/L On/Off	24V Mod.	Linkage
VR-F-P3-F50	VA-05A-24x	VA-05A-230x	VA-05M-24	VR-LKN-2
Others	VA-15A-24x	VA-15A-230x	VA-15M-24x	VR-LKN-2

**SPECIFICATION**

Body material	Cast Iron
Flow type	Mixing or diverting
Fluid temperature	-10 to +110°C
Max. pressure drop	DN50: 50kPa. DN65 to DN150: 30kPa
O-ring material	EPDM
Pressure class	PN6
Rangeability	100:1
Required Motor torque	10Nm
Spindle & slipper material	Brass DZR, CW 602N
Weight	37kg max.

Part code	Description
<b>3-port. Flanged Valves</b>	
VR-F-P3-F100-K225	100mm, 225 Kvs
VR-F-P3-F125-K280	125mm, 280 Kvs
VR-F-P3-F150-K400	150mm, 400 Kvs
VR-F-P3-F50-K60	50mm, 60 Kvs
VR-F-P3-F65-K90	65mm, 90 Kvs
VR-F-P3-F80-K150	80mm, 150 Kvs
<b>Linkage Kit</b>	
VR-LKN-2	For VA Actuators from 5 to 15Nm

Data sheets online: [www.sontay.com](http://www.sontay.com)

Valves & Actuators

Valves & Actuators

VZ Zone Valves and Actuators



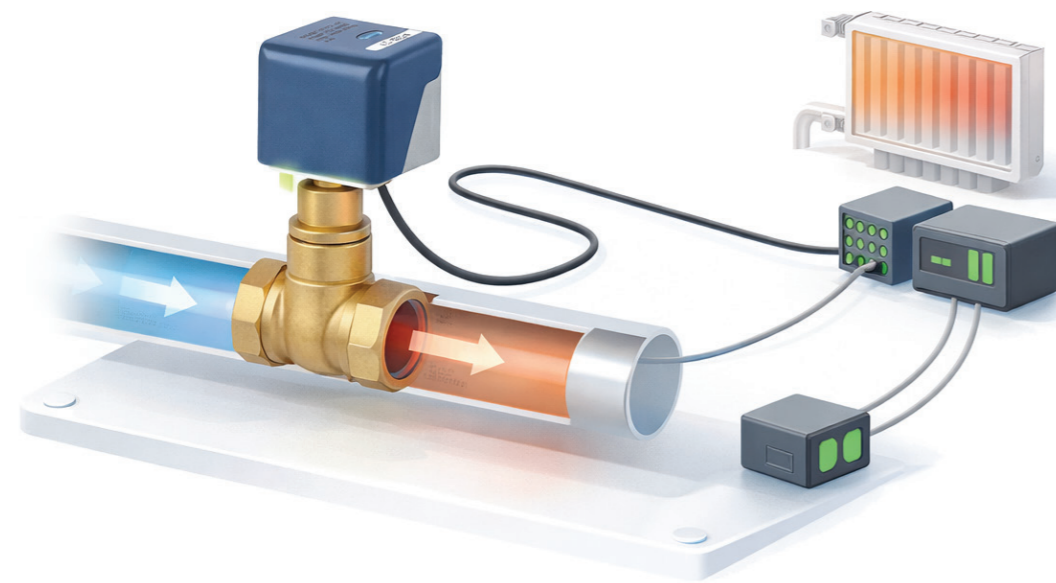
SPECIFICATION

Body rating	2.5Mpa
Close running time	5 seconds
Fluid temperature	0 to 94°C
Housing cover	Flame retardant ABS
Housing plate	Casting aluminium alloy
Max. electrical load	Aux. switch 3A, 125 to 250Vac
Open running time	10 seconds
Operation	Normally closed, spring return
Power Consumption	6W
Supply	230Vac and 24Vac options
Valve body material	Forged Brass
Voltage tolerance	±10%
Working Humidity	non-condensing
Working Temp	0 to 60°C

This series of zone valves are designed for on/off control of fluid flow in a variety of heating and cooling applications, including AHUs and FCUs. They feature a reliable synchronous motor and a spring return mechanism to provide power failsafe position and fitted with an auxiliary switch as standard.

Part code	Description
<b>2-port Valves</b>	
VZ-2N-15	½" BSP Zone Valve
VZ-2N-20	¾" BSP Zone Valve
VZ-2N-25	1" BSP Zone Valve
<b>3-port Valves</b>	
VZ-3-15	½" BSP Zone Valve
VZ-3-20	¾" BSP Zone Valve
VZ-3-25	1" BSP Zone Valve

Part code	Description
<b>Actuators</b>	
VZ-SM230	24Vac Actuator with Auxillary switch
VZ-SM24	230Vac Actuator with Auxillary switch



Data sheets online: [www.sontay.com](http://www.sontay.com)



WHEN PROTECTION IS CRITICAL

MAKE SURE IT IS SONTAY

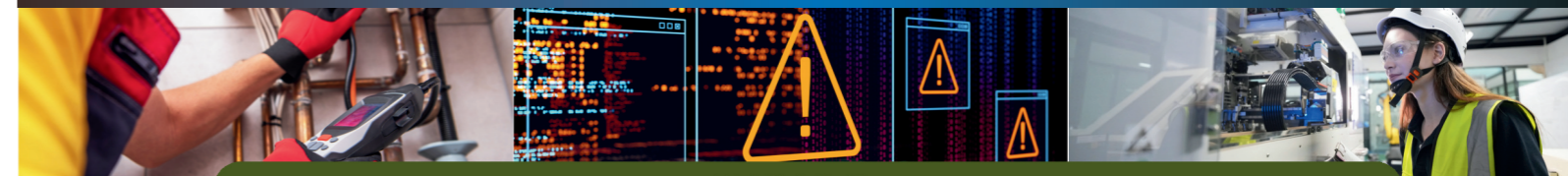


EMERGENCY PRODUCTS



WATER LEAK DETECTION

WATER DETECTION & EMERGENCY PRODUCTS



BENEFITS

EARLY LEAK DETECTION

Detect water leaks before damage occurs · Protect buildings, equipment & critical systems ·



FAST EMERGENCY RESPONSE

· Immediate alarm & shutdown capability · Limits spread of water and secondary damage

SYSTEM RELIABILITY

Continuous monitoring of high-risk areas · Minimises downtime & maintenance ·



INTEGRATION & CONTROL

· Easy integration with BMS and alarm systems · Supports local alerts and remote monitoring