

# POWERFUL INTELLIGENCE. BREAKTHROUGH FUNCTIONALITY.

SV2 Series Intelligent Safety Shut-off Valve



**Honeywell**

# MEET THE VALVE THAT CHANGES EVERYTHING

In a competitive industry, every advantage matters. The SV2 Series will change how you go to market. Improve how you deliver solutions. And dramatically increase the value you offer customers. So you can drive revenue and grow market share like never before.

## FROM ORDINARY TO EXTRAORDINARY

Valve trains today contain multiple components from multiple vendors. They require weeks to assemble, install and commission. Days to troubleshoot and service. And they're not exactly user friendly.

The Honeywell SV2 Series will redefine the entire valve category as you know it. Embedded intelligence helps you develop differentiated solutions. Modular components reduce assembly, install and commissioning time. The intuitive user interface speeds troubleshooting and service.

**And that's just the beginning.**

## SMARTER SOLUTIONS FOR MORE CUSTOMERS

### Commercial

- Make-up air
- Steam and hydronic boilers
- Schools and universities
- Multi-unit dwellings
- Hospitals

### Light industrial

- Paint booths
- Heat treat
- Ovens and kilns



# INTELLIGENT FEATURES ENABLE DIFFERENTIATED SOLUTIONS

We believe intelligence should address critical business issues and solve customer challenges. That's why we developed every single intelligent feature in the SV2 Series platform from voice-of-customer feedback. To help you deliver smarter solutions truly aligned with your audience's needs.

## IMPROVED ENERGY EFFICIENCY

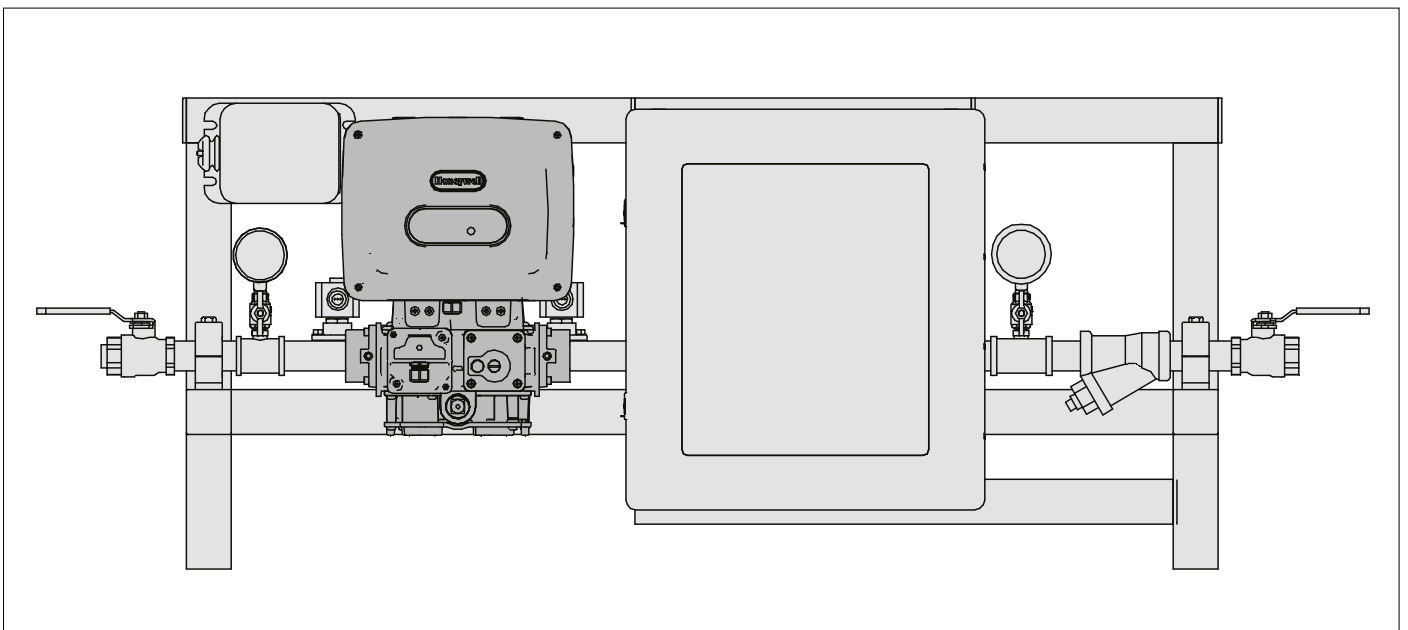
- Premix electronic regulation for higher turndown
- Premix flexible start eliminates ignition back-pulse issues for smoother light-off
- Variable fuel/air ratio across the whole firing curve for excess air reduction
- Power saving solenoid design reduces electrical energy usage

## INCREASED UPTIME AND PRODUCTIVITY

- Valve proving using Pressure Module simplifies setup and eliminates separate components
- Onboard diagnostics and remediation steps streamline troubleshooting
- Electronic sensors deliver accurate and repeatable control, eliminating the need to readjust (premix valves only)
- Open-protocol Modbus communication can interface with Thermal IQ or a Building Automation System (BAS) for real-time, remote system monitoring

## EASIER COMPLIANCE MANAGEMENT

- Smart Pressure Module facilitates valve proving to detect leaks and mitigate costly leaks and potential fines
- Proof of closure switch to help meet code requirements



*Impressive capabilities in one streamlined package*

# MODULAR DESIGN SIMPLIFIES AND SPEEDS PRODUCT DEVELOPMENT

Time to market is everything. But it can't come at the expense of cost management. With integrated functions and modular components, the SV2 Series delivers unparalleled business efficiencies that enable you to get solutions to market faster while also helping you control costs.

## REDUCED LABOR AND WARRANTY COSTS

- Embedded setup and test wizards streamline commissioning
- On-board diagnostics and historical data logs reduce need for service calls
- Intuitive, icon-based user interface for faster troubleshooting
- Field-replaceable electronics and components enable users to service or replace individual components instead of the entire valve

## FASTER ASSEMBLY, INSTALL AND COMMISSIONING

- 3-in-1 smart pressure module covers high gas, low gas and valve proving
- Normally open vent valve (NOVV) port in all bodies
- Side-flexible electronics, large wire terminals and robust connectors speed install
- Human machine interface (HMI) with setup and test wizards for easier setup and programming

## REDUCED INVENTORY AND CONVERSION COSTS

- V1 and V2 in a single body
- -40F/C minimum temperature (on/off function only) eliminates need for additional warming device
- Several integrated functions mean fewer SKUs, reducing inventory carrying costs
- Multiple global agency approvals including CE, CSA, FM, UL, and CSD-1 help contain conversion costs



HMI

## FLEXIBLE OPTIONS HELP YOU SERVE MORE MARKETS AND APPLICATIONS WITH ONE PLATFORM

*2 Levels of intelligence to meet a variety of customer needs*

### SV20

- C6097 or C60VR pressure switch
- Proof of closure
- NEMA 4/IP66 enclosure

### SV200

- External VPS using Pressure Module
- Premix efficiency
- BAS Interface
- Self-diagnostics
- HMI interface
- Communication BUS
- Smart pressure module
- Proof of closure
- NEMA 1/4 (IP20/66) enclosure

SELF DIAGNOSTICS

BUS INTEGRATION

UNIVERSAL  
STATUS  
SYMBOLS

3-IN-1 SMART  
PRESSURE MODULE

SIDE FLEXIBLE  
ELECTRONICS

UNIVERSAL  
FLANGES

NOV V PORT



## READY TO CONFIGURE?

Build your product SKU using one selection from each input below, and go to [combustion.honeywell.com/SV2](https://combustion.honeywell.com/SV2) for more information or <https://customer.honeywell.com> to order.

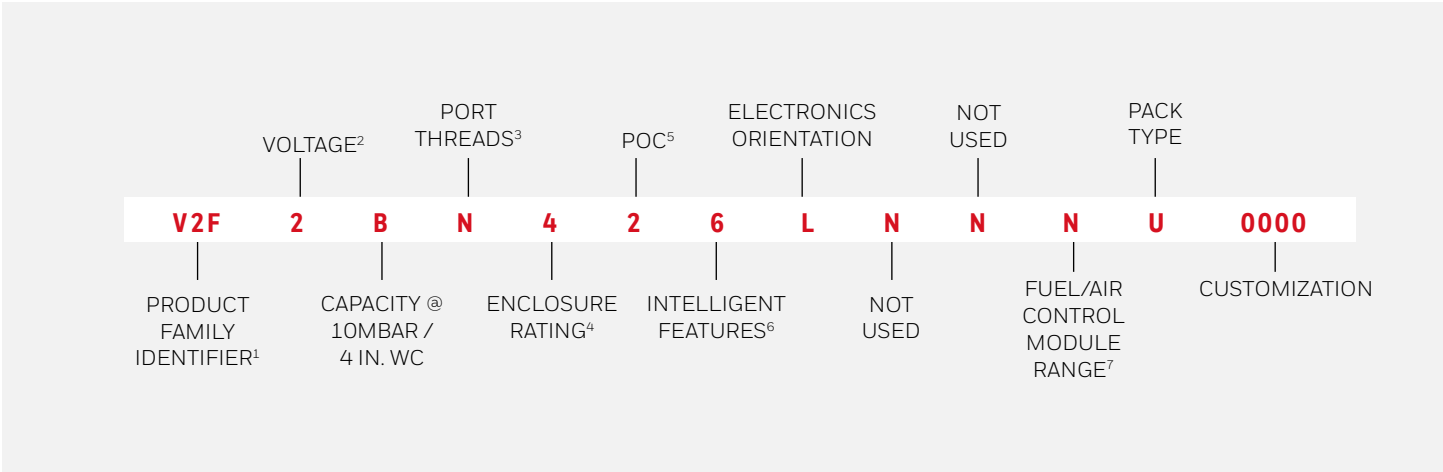
INPUT	SKU	DESCRIPTION
STEP 1: FUNCTION		
PRODUCT FAMILY IDENTIFIER <sup>1</sup>	V2F	On/off
	V2V	Fuel/air premix
STEP 2: GENERAL SPECIFICATIONS		
Voltage <sup>2</sup>	2	100-120 VAC, 50/60Hz
	4	200-240VAC, 50/60Hz
	8	24 VAC, 50/60Hz (1.0 in / DN25 only)
CAPACITY @10MBAR / 4IN. WC	B	300kW/1.0 MMBtu (1.0 in / DN25)
	C	750 kW/2.6 MMBtu (1.5 in / DN40)
	D	1.35MW/4.6MMBtu (2.0 in / DN50)
Port Threads <sup>3</sup>	N	NTP (24VAC and 100-120VAC only)
	B	BSP (200-240VAC only)
Enclosure Rating <sup>4</sup>	1	NEMA 1/IP20, No electrical connectors (EU only)
	2	NEMA 1/IP20 With electrical connectors
	3	NEMA 4/IP66 No electrical connectors With conduit connections (EU only)
	4	NEMA 4/IP66 With electrical connectors With conduit connections
STEP 3: ELECTRONICS		
PROOF OF CLOSURE (POC) + VISUAL INDICATION <sup>5</sup>	0	None (V2V only)
	1	POC on V1 only (V2V only)
	2	POC on V1 & V2 (all V2F)
INTELLIGENT FEATURES <sup>6</sup> Modbus, smart pressure switch interface +	5	BASIC; No Modbus or smart pressure Module (SV20)
	6	STANDARD; External VPS (SV200)
ELECTRONICS ORIENTATION As viewed from gas outlet end	L	Left hand
	R	Right hand
STEP 4: NOT USED		
Not used	N	
Not used	N	
STEP 5: FUEL/AIR		
FUEL/AIR CONTROL MODULE RANGE <sup>7</sup> Amplification factor	N	Not applicable
	4	Premix/0.3 – 0.9
	5	Future usage
	6	Future usage
STEP 6: PACK TYPE		
PACK TYPE	U	Unit
STEP 7: CUSTOMIZATION		
CUSTOMIZATION	0000	None/Honeywell
	000X	Customer specific

### NOTES

- V2F temperature range: -40°F to 145°F (-40°C to 63°C). Max Inlet Pressure: 10psi (0.7kg/mm<sup>2</sup>) (689mbar).  
V2V temperature range: +5°F to 145°F (-15°C to 63°C). Max Inlet Pressure: 7.25psi (0.5kg/mm<sup>2</sup>) (500mbar).
- Most voltages are -15% / +10% VAC. 100-120VAC voltage for C/D valves is -6% / +10% VAC. All voltages are Class A rated (EN161).
- Port thread includes NOVW port and pressure taps. NPT only available on 24 VAC and 100-120 VAC models. BSP only available on 200-240 VAC models.
- Options 1 and 2 only available on V2V models. Options 1 and 3 only available on 200-240 VAC models in EU (no electrical connectors included).
- POC not available on NEMA 1/IP20 enclosures or 200-240 VAC models. Only 1 POC available on V2V capacity D models with 100-120 VAC and NEMA 4/IP66 enclosures.
- Pressure Module required for VPS and Pressure Switch functionality. 5=Basic: Only available on V2F models.
- The required module depends on the gas quality range with a single size gas injector. Gas injector diameter will also determine the amplification factor.

EXAMPLE SKU BREAKDOWN

Once you’ve selected one SKU from each input, this is how your SV2 Series product SKU will look.



The above SKU shown (**V2F2BN426LNNNU0000**) is an on/off valve with 120 VAC, 2 proof of closure, NEMA 4 AND STANDARD INTELLIGENCE (SV200).

LEGACY VALVE EQUIVALENTS

It’s easy to migrate to the SV2 Series Intelligent Safety Shut-off valve from our legacy valves.

LEGACY VALVES		SV20	SV200
ON/OFF	(2) V4055/V5055 1", 120 VAC, POC, NEMA 4/IP66	V2F2BN425LNNNU0000	V2F2BN426LNNNU0000
		V2F2BN425RNNNU0000	V2F2BN426RNNNU0000
	(2) V4055/V5055 2", 220 VAC, POC, NEMA 4/IP66	V2F4DB425LNNNU0000	V2F4DB426LNNNU0000
		V2F4DB425RNNNU0000	V2F4DB426RNNNU0000
PREMIX	V4730, 120 VAC, 1", NEMA 1	-	V2V2BN206LNN4U0000
			V2V2BN206RNN4U0000
	V4370, 24 VAC, 1", NEMA 1	-	V2V8BN206LNN4U0000
			V2V8BN206RNN4U0000

NOTE: Opening time and characteristics may vary between legacy and SV2 Series valves.

**Learn More**

<http://www.combustion.honeywell.com/sv2>

**For more information**

The Honeywell Thermal Solutions family of products includes Honeywell Combustion Safety, Honeywell Combustion Service, Eclipse, Exothermics, Hauck, Kromschröder and Maxon. To learn more about our products, visit [ThermalSolutions.honeywell.com](http://ThermalSolutions.honeywell.com) or contact your Honeywell Sales Engineer.

**Honeywell Process Solutions**

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