

**Honeywell**

THE POWER OF **CONNECTED**

# Powerful intelligence. Breakthrough functionality.

SV2 Series Intelligent Safety Shut-off Valve



# MEET THE VALVE THAT CHANGES EVERYTHING

In a competitive industry, every advantage matters. It's about staying ahead of the curve. Giving customers a compelling reason to choose you. If you don't think a valve can give you that edge – think again.

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.

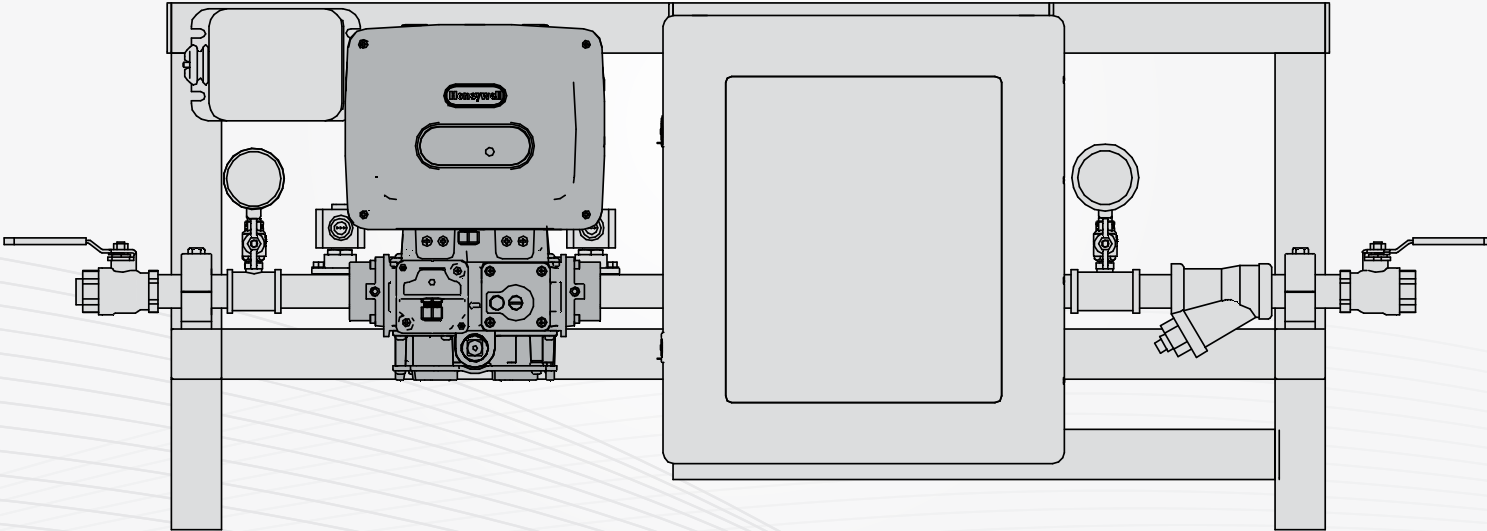
**And that's just the beginning.**



# 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.

## IMPRESSIVE CAPABILITIES IN ONE STREAMLINED PACKAGE





### **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

### **INCREASED UPTIME AND PRODUCTIVITY**

- Electronic leak detection can be completed in minutes instead of hours
- Embedded valve proving eliminates separate components and speeds setup
- Electronic mass flow sensor delivers accurate and repeatable control, eliminating the need to readjust (premix valves only)
- Open-protocol Modbus communication can interface with a Building Automation System (BAS) for real-time, remote system monitoring

### **EASIER COMPLIANCE MANAGEMENT**

- Embedded valve proving and leak detection helps mitigate costly leaks and potential fines
- Proof of closure switch to help meet code requirements

# 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

- Electronic leak detection eliminates time-consuming manual process
- 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
- Embedded valve proving, eliminates separate devices
- 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
- 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

EMBEDDED VPS, LEAK DETECTION

BUS INTEGRATION

Honeywell

UNIVERSAL  
STATUS SYMBOLS

SIDE FLEXIBLE  
ELECTRONICS

3-IN-1 SMART  
PRESSURE MODULE

UNIVERSAL FLANGES

NOVV PORT



# REDEFINE INTELLIGENCE

A black and white photograph of a modern office interior. The scene is viewed through a glass partition, showing a conference room with several white chairs and a table. The lighting is bright, creating strong reflections and shadows on the glass and the floor.

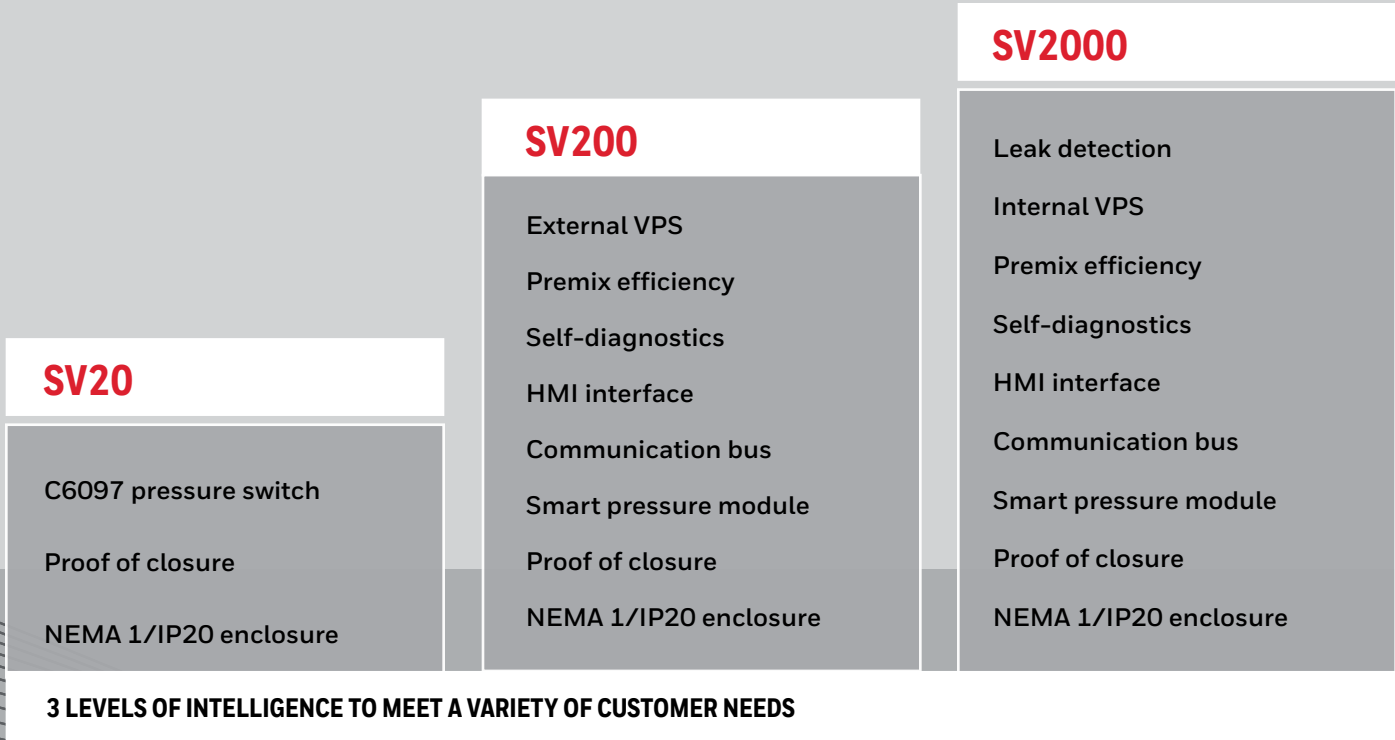
**Game changing features.**

**Compelling benefits.**

**It's the solution that delivers  
a competitive advantage.**



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



## 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



# READY TO CONFIGURE?

Build your product SKU using one selection from each input below, and go to [combustion.honeywell.com/SV2](http://combustion.honeywell.com/SV2) to order.

| INPUT | SKU | DESCRIPTION |
|-------|-----|-------------|
|-------|-----|-------------|

## STEP 1: FUNCTION

| PRODUCT FAMILY IDENTIFIER <sup>1</sup> | V2F | On/off          |
|--|-----|-----------------|
|  | V2V | Fuel/air premix |

## STEP 2: GENERAL SPECS

|                               |   |   |
|-------------------------------|---|---|
| VOLTAGE <sup>2</sup>          | 2 | 100-120 VAC, 50/60Hz  |
|                               |   | 200-240VAC, 50/60Hz   |
|                               | 8 | 24 VAC, 50/60Hz   |
|                               | B | 300kW/1.0 MMBtu   |
|                               | C | 750 kW/2.6 MMBtu  |
|                               | D | 1.35MW/4.6MMBtu   |
| PORT THREADS <sup>3</sup>     | N | NPT   |
|                               | B | BSP (200-240VAC only)   |
| ENCLOSURE RATING <sup>4</sup> | 1 | NEMA 1/IP20,<br>No electrical connectors (EU only)                            |
|                               | 2 | NEMA 1/IP20<br>With electrical connectors                                     |
|                               | 3 | NEMA 1/IP20<br>No electrical connectors<br>With conduit connections (EU only) |
|                               | 4 | NEMA 1/IP20<br>With electrical connectors<br>With conduit connections         |

## STEP 3: ELECTRONICS

|  |   |  |
|--|---|--|
| PROOF OF CLOSURE (POC)+ VISUAL INDICATION                                      | 0 | None (V2V only)                                  |
|  | 1 | POC on V1 only (V2V only)                        |
|  | 2 | POC on V1 & V2 (all V2F)                         |
| INTELLIGENT FEATURES <sup>6</sup><br>Modbus, smart pressure switch interface + | 5 | BASIC; No Modbus or smart pressure Module (SV20) |
|  | 6 | STANDARD; External VPS (SV200)                   |
|  | 9 | ELITE; Internal VPS + leak detection (SV2000)    |
| ELECTRONICS ORIENTATION<br>As viewed from gas outlet end                       | L | Left hand  |
|  | R | Right hand                                       |

## STEP 4: PRESSURE REGULATION

|                                 |   |                |
|---------------------------------|---|----------------|
| PRESSURE REGULATING VALVE RANGE | N | Not applicable |
| PRESSURE REGULATOR LOCATION     | N | Not applicable |

## STEP 5: FUEL/AIR

|  |   |                  |
|--|---|------------------|
| FUEL/AIR CONTROL MODULE RANGE <sup>7</sup><br>Amplification factor | N | Not applicable   |
|  | 4 | Premix/0.3 - 0.9 |
|  | 5 | TBD              |
|  | 6 | TBD              |

## STEP 6: PACK TYPE

|           |   |      |
|-----------|---|------|
| PACK TYPE | U | Unit |
|-----------|---|------|

## STEP 7: CUSTOMIZATION

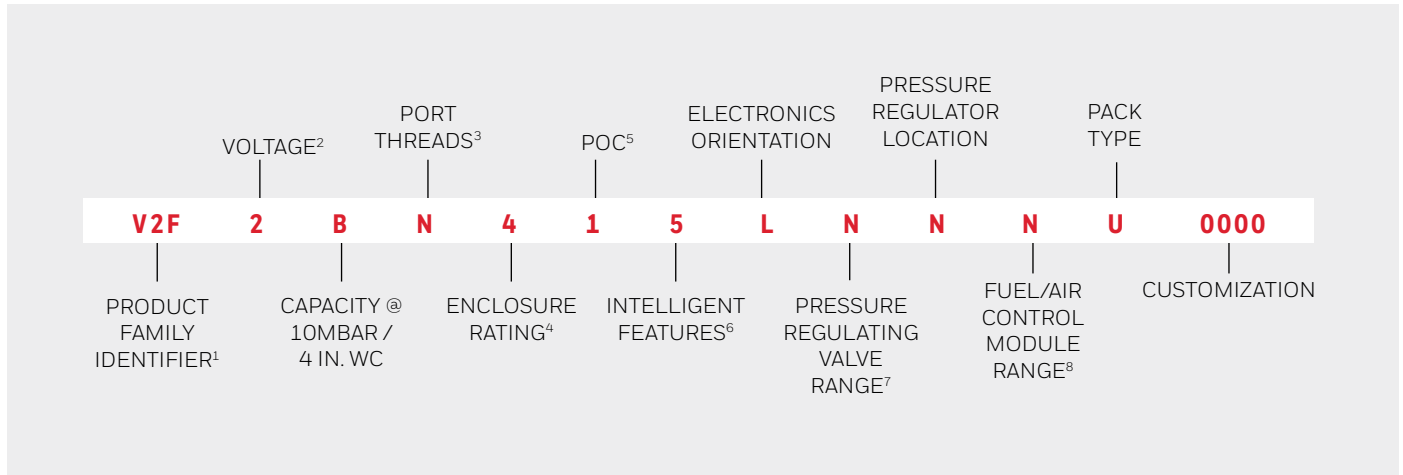
|               |      |                   |
|---------------|------|-------------------|
| CUSTOMIZATION | 0000 | None/Honeywell    |
|               | 000X | Customer specific |

### NOTES

- V2F TEMPERATURE RANGE: +5°F TO 145°F (-15°C TO 63°C)  
MAX INLET PRESSURE: 10PSI (0.7KG/MM2) (689MBAR)  
V2V TEMPERATURE RANGE: +5°F TO 145°F (-15°C TO 63°C)  
MAX INLET PRESSURE: 7.25PSI (0.5KG/MM2) (500MBAR)
- MOST VOLTAGES ARE -15% / +10% VAC  
100-120VAC VOLTAGE FOR C/D VALVES IS -6% / +10% VAC  
ALL VOLTAGES EXCEPT 24VAC ARE CLASS A
- PORT THREAD INCLUDES NOW 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 WITHOUT CONDUIT CONNECTIONS OR 200-240 VAC MODELS.  
ONLY 1 POC AVAILABLE ON V2V CAPACITY D MODELS WITH 24 VAC OR 100-120 VAC AND NEMA 1/IP20 ENCLOSURES WITH CONDUIT CONNECTIONS.
- PRESSURE MODULE REQUIRED FOR VPS AND LEAK DETECTION FUNCTIONALITY  
5-BASIC: ONLY AVAILABLE ON V2F MODELS  
9-ELITE: ONLY AVAILABLE WITH NEMA 1/IP20 WITH CONDUIT CONNECTIONS. CANNOT BE USED WITH NOWS.
- THE REQUIRED MODULE DEPENDS ON THE GAS QUALITY RANGE WITH A SINGLE SIZE GAS INJECTOR. GAS INJECTOR DIAMETE

## 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 (**V2F2BN415LNNNU0000**) is an on/off valve with 120 VAC, proof of closure, and NEMA 4.

## 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                                    | SV2000                                   |
|---------------|---|--|--|--|
| <b>ON/OFF</b> | (2) V4055/V5055 1", 120 VAC, POC, NEMA 1/IP20 | V2F2BN425LNNNU0000<br>V2F2BN425RNNNU0000 | V2F2BN426LNNNU0000<br>V2F2BN426RNNNU0000 | V2F2BN429LNNNU0000<br>V2F2BN4259NNNU0000 |
|               | (2) V4055/V5055 2", 220 VAC, POC, NEMA 1/IP20 | V2F4DB425LNNNU0000<br>V2F4DB425RNNNU0000 | V2F4DB426LNNNU0000<br>V2F4DB426RNNNU0000 | V2F4DB429LNNNU0000<br>V2F4DB429RNNNU0000 |
| <b>PREMIX</b> | V4730, 120 VAC, 1", NEMA 1                    | -  | V2V2BN206LNN4U0000<br>V2V2BN206RNN4U0000 | V2V2BN209LNN4U0000<br>V2V2BN209RNN4U0000 |
|               | V4370, 24 VAC, 1", NEMA 1                     | -  | V2V8BN206LNN4U0000<br>V2V8BN206RNN4U0000 | V2V2BN209LNN4U0000<br>V2V2BN209RNN4U0000 |

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

**Learn More**

[www.combustion.honeywell.com/SV2](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, Kromschöder 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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