

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.

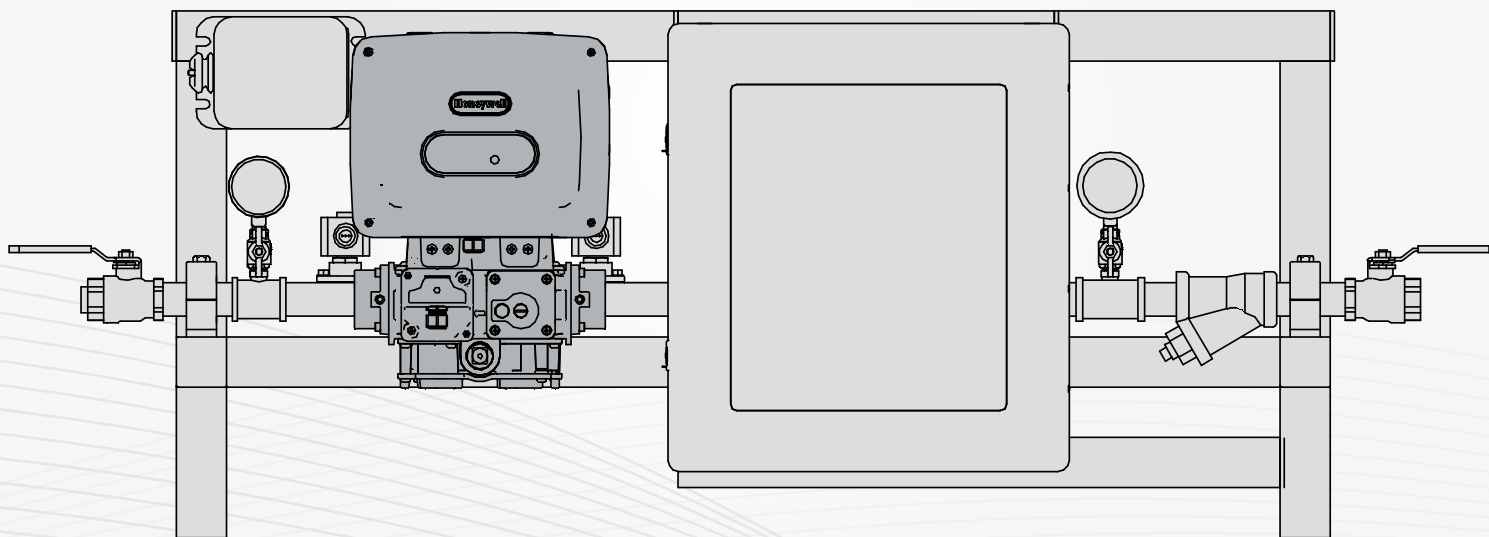
And that's just the beginning.



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

UNIVERSAL
STATUS SYMBOLS

SIDE FLEXIBLE
ELECTRONICS

3-IN-1 SMART
PRESSURE MODULE

UNIVERSAL FLANGES

NOVV PORT

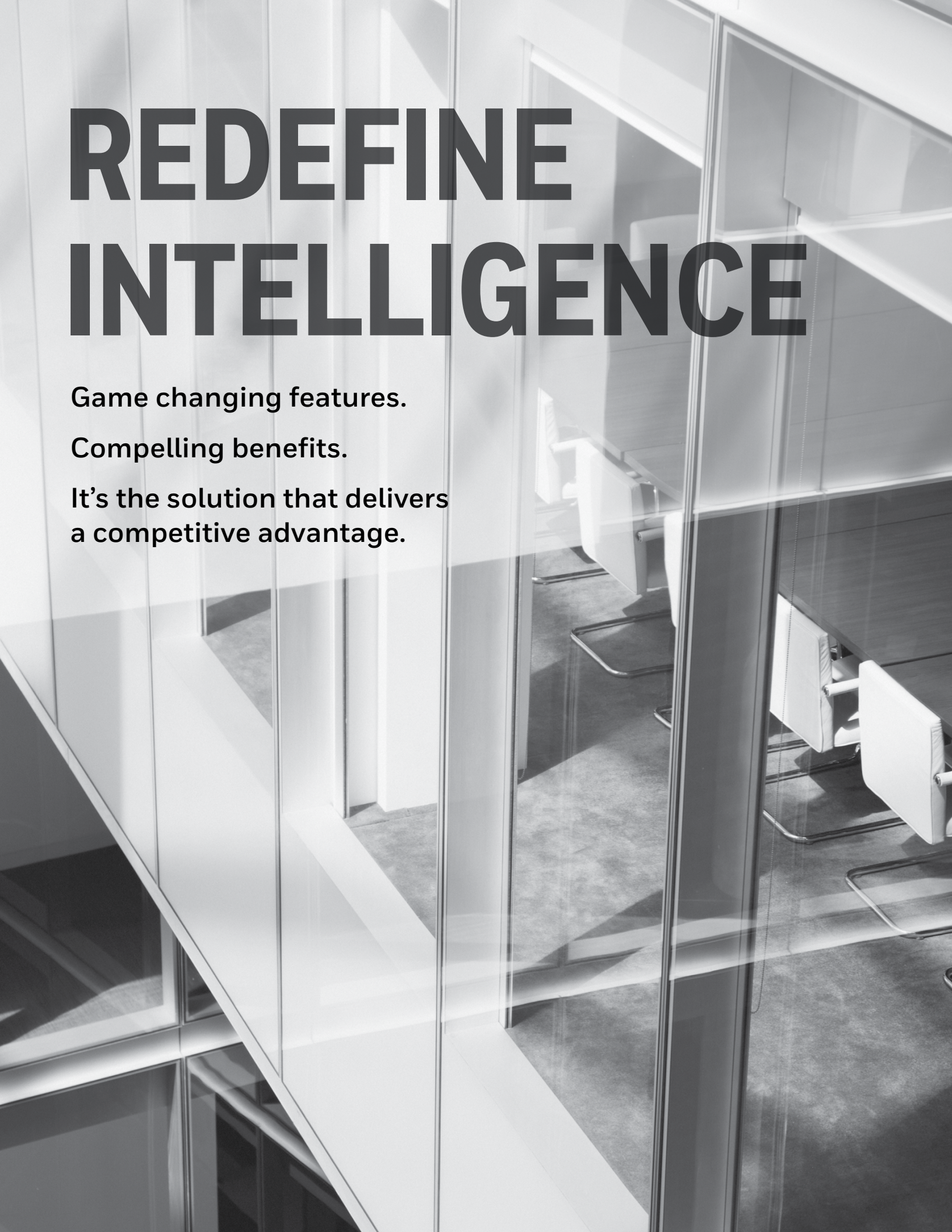


REDEFINE INTELLIGENCE

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

SV20

C6097 pressure switch

Proof of closure

NEMA 1/IP20 enclosure

SV200

External VPS

Premix efficiency

Self-diagnostics

HMI interface

Communication bus

Smart pressure module

Proof of closure

NEMA 1/IP20 enclosure

SV2000

Leak detection

Internal VPS

Premix efficiency

Self-diagnostics

HMI interface

Communication bus

Smart pressure module

Proof of closure

NEMA 1/IP20 enclosure

3 LEVELS OF INTELLIGENCE TO MEET A VARIETY OF CUSTOMER NEEDS

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** to order.

INPUT	SKU	DESCRIPTION
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STEP 1: FUNCTION

PRODUCT FAMILY IDENTIFIER ¹	V2F	On/off
	V2V	Fuel/air premix

STEP 2: GENERAL SPECS

VOLTAGE ²	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 ³	N	NPT
	B	BSP (200-240VAC only)
ENCLOSURE RATING ⁴	1	NEMA 1/IP20, No electrical connectors (EU only)
	2	NEMA 1/IP20 With electrical connectors
	3	NEMA 1/IP20 No electrical connectors With conduit connections (EU only)
	4	NEMA 1/IP20 With electrical connectors 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 ⁶ 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 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 ⁷ Amplification factor	N	Not applicable
	4	Premix/0.3 - 0.9
	5	TBD
	6	TBD

STEP 6: PACK TYPE

PACK TYPE	U	Unit
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STEP 7: CUSTOMIZATION

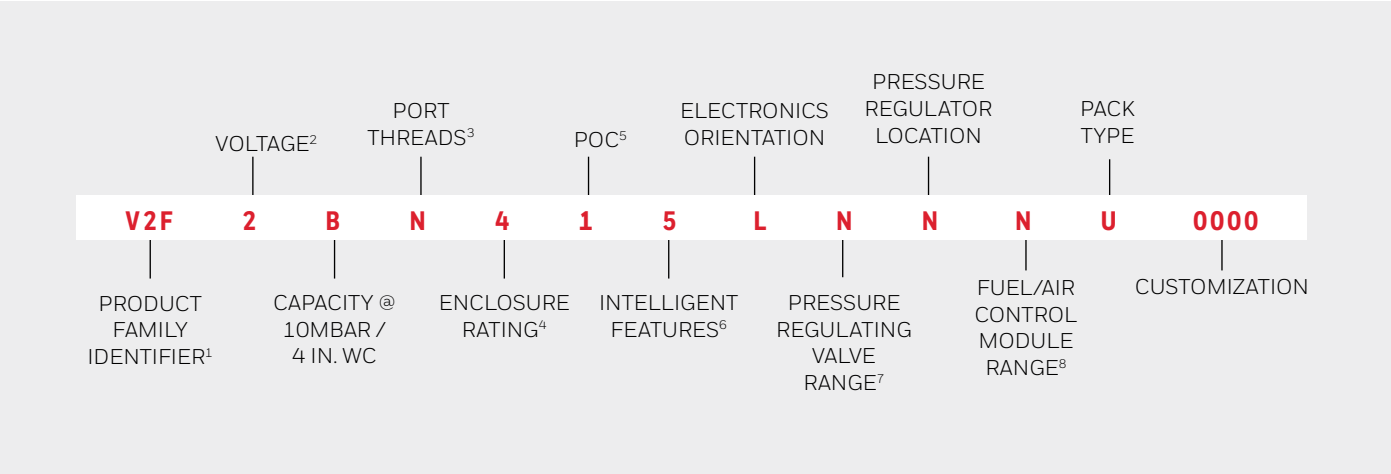
CUSTOMIZATION	0000	None/Honeywell
	000X	Customer specific

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

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

Learn More

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, Kromschroder and Maxon. To learn more about our products, visit ThermalSolutions.honeywell.com or contact your Honeywell Sales Engineer.

Honeywell Process Solutions

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