



**One Source For All Of Your  
Field Device Needs**

# Unitary Equipment



## Fan Coil Valves

VU Valve Family with VU Actuators

Cost effective two position spring return actuation

- Uses a field replaceable plug valve that closes against the flow
- Long service life with patented ball seal
- Corrosion proof construction due to stainless steel case, aluminum cover and optional nickel plated motors
- Wide Cv range and actuation to meet a variety of applications
- Easy to service valve or actuator without removing valve body from the pipe



## Cartridge Cage Valves

VC Valve Family with VC Actuators

Good control in a small package

- High close-off on all models
- Gate valve operates in a linear fashion across the flow, not against it, which results in high and consistent close-off
- Easy to select due to constant close-off (60 psi)
- Engineered plastic actuator for corrosion and humidity resistance
- Easy and quick to service due to field-replaceable cartridge design and twist lock/quick connect actuator



## Cartridge Globe Valves

V58 Valve Family with M64, 74, MP95 Actuators

High close off in a compact design

- Linear valve operation design provides high close off
- Brass body and stainless steel stem
- Plastic actuator construction doesn't transfer thermal heat and helps to prevent condensation, which leads to longer life
- Greater control with high turn-down ratio
- Easy to service due to field-replaceable seal and screw-on actuator

### UNITARY VALVE SELECTION GUIDE

Name	Valve Family	Size/Medium	Cv	2-way/3-way	Actuation	Close-off (psi)
VU	Fan Coil	½" - 1" for chilled or hot water	1 to 8	2-way or 3-way	2 position spring return (SR)	10 - 50
VC	Cartridge Cage	½" - 1¼" for chilled or hot water	.7 to 9	2-way or 3-way	2-position floating, modulating, non-spring return (NSR) and fail-safe	60
V58	Cartridge Globe	½" and ¾" in equal percentage, 1" - 1½" in linear and pressure balanced	.19 to 25	2-way or 3-way	Floating, modulating, pneumatic, 2 position, NSR and SR	37 - 232

# Air Handling Units



## Globe Valves

V5011, V5013 Threaded Valve Family with ML79, 69, 74 Actuators

Precise control for any application

- ANSI 150 body class rating
- High close-off allows valve to operate under wider range of differential pressures, which leads to tight control
- 50:1 rangeability in equal percentage or linear flow characteristics
- Offers best in class size, Cv range and close-off pressure
- Available with brass or stainless steel trim



## Control Ball Valves

VBN Threaded and VBF Flanged Valve Families

Great control in a small and affordable package

- Characterized insert is integral to the ball, not outside the ball: results in longer service life and higher operating differential pressure capabilities
- Parabolic flow insert provides equal percentage flow for better control
- Weather-proof enclosures available for outdoor rooftop applications
- Packless field-replaceable stem for easy service in pipe



## Pressure Regulated Flow Control Valves

VRN Threaded and VRW Flanged Valve Families

Deliver high efficiency in less time

- Controls flow exactly at all load conditions, resulting in tighter control at reduced energy consumption
- Integrated pressure control cartridge combines circuit balancing and control functions in one package, resulting in consistent temperature and comfort
- Field serviceable stem and pressure regulating cartridge allows for easy serviceability for reduced life cycle costs

### AIR HANDLING UNITS SELECTION GUIDE

Name	Valve Family	Size/Medium	Cv	2-way/3-way	Actuation	Close-off (psi)
V5011, V5013	Globe	1/2" - 2" for chilled, hot water and steam	.73 to 46.8	2-way or 3-way	Floating, 2 position, and modulating actuation	16 - 230
VBN, VBF	Control Ball	Threaded 1/2" - 3", Flanged 4" - 6" for closed-loop chilled or hot water	0.4 to 202	2-way or 3-way	Floating, 2 position, and modulating NSR and SR	0 - 130
VRN, VRW	Flow Control	1 1/2" - 6" for chilled or hot water	GPM	2-way	Floating, modulating, and 2 position SR	100 - 580



## Butterfly Valves

### VFF Flanged Valve Family

Large capacity, small dimensions

- Manufactured with corrosion resistant materials and coatings, which leads to long life
- The resilient seat design and nylon disk coating protects metal valve parts from chemicals in the water for longer life
- Compact size makes the valve easier to handle and fit easily into smaller spaces
- High flow and high close-off allow the valve to handle high-capacity applications



## Globe Valves

### VGF Flanged Valve Family

Precise control for any application

- ANSI 125 and ANSI 250 designs
- High close-off allows valve to operate under wider range of differential pressures, which leads to tight control
- Wide range of controllability
- Offers best in class size, Cv range and close-off pressure
- Available with brass or stainless steel trim
- Q5020/22 Tandem Actuator Linkage for higher close-off, reduced seat leakage and field-configurable fail-safe action



Q5022 Tandem Actuator Linkage

## CENTRAL PLANT SELECTION GUIDE

Name	Valve Family	Size/Medium	Cv	2-way/3-way	Actuation	Close-off (psi)
VFF	Butterfly	2" - 20" for chilled, hot, or fresh water	61 to 7144	2-way or 3-way	Electronic, pneumatic and SR	50 - 250
VGF	Globe	2½" - 6" for chilled, hot water and steam	70 to 370	2-way or 3-way	2 position, floating, modulating, and SR and NSR	11 - 87

# Honeywell Actuators

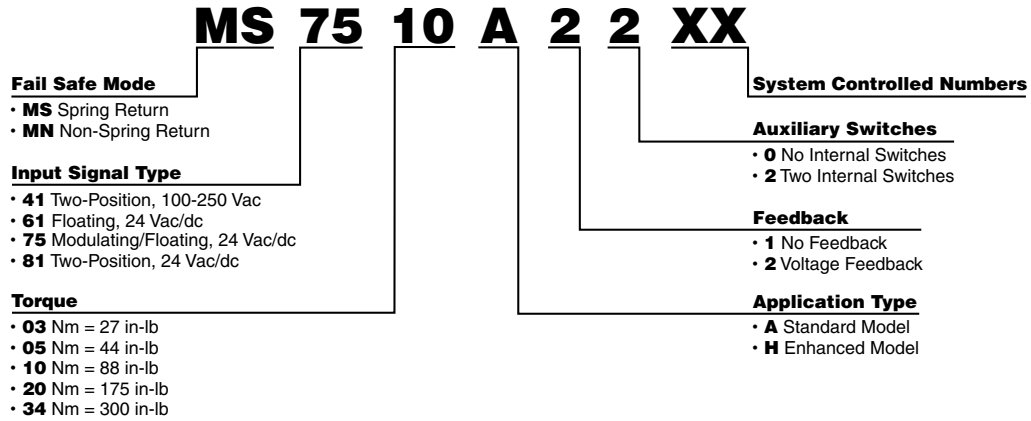
## MS, MN, ML Families

- Self centering shaft adaptor reduces installation time and provides greater clamping force
- Decreased material cost due to detachable access cover
- Reduce inventory and selection time with signal mode adaptor that adapts models to two position, floating and modulating applications

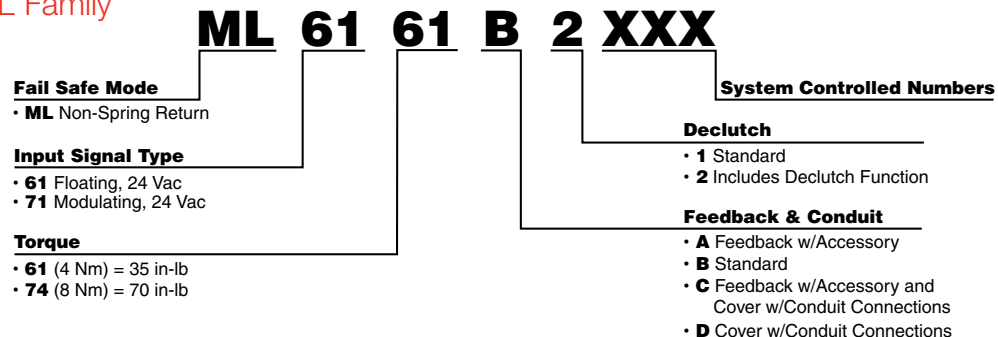
**5-YEAR  
LIMITED  
WARRANTY**

### EASY-TO-SELECT MODEL NUMBERS

#### MS and MN Families



#### ML Family



# Standard Rectangular Dampers

Built stronger to last longer



D2

Durable construction details are the cornerstone of Honeywell D1, D2 and D3 Volume Control Dampers. They feature heavy-duty hat channel frames for dependable operation inside ductwork. And all models have low-profile top and bottom frames, creating more free area while reducing pressure loss and reducing actuator torque.

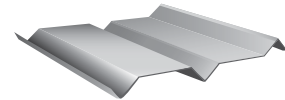
## Blade Design

### Airfoil Blades - D1 Dampers

Honeywell Airfoil Volume Control Dampers feature blades constructed of double skin galvanized steel. This design presents a lower resistance to airflow and has strength that is typically used in high pressure systems.

### 3-V Blades - D2 and D3 Dampers

Honeywell Volume Control Dampers feature a 3-V design that's proven to meet higher-level system requirements while minimizing flow-through system loss. Blades are fabricated from a single thickness of 16-gauge galvanized steel with three horizontal structural V-grooves running the length of the blade.



D1

## STANDARD RECTANGULAR DAMPERS SELECTION GUIDE

				Material			Frame Gauge		Blade Seals		Bearings		Axles		Linkage Material		Flange	
S — Standard O — Optional				Galvanized	Stainless	Aluminum	16	14, 12	Vinyl	Silicone	Synthetic	Bronze, Stainless	Steel	Stainless	Steel	Stainless	None	Single, Double, Reverse
D1 Airfoil Extremely Low Leakage	3	4000	8	S	O	n/a	S	O	n/a	S	S	O	S	O	S	O	S	O
D2 Ultra-Low Leakage	3	3000	5	S	O	O	S	O	S	O	S	O	S	O	S	O	S	O
D3 Low Leakage	120	3000	5	S	O	O	S	O	n/a	n/a	S	O	S	O	S	O	S	O

# Standard Round Dampers

Honeywell has a solution for all of your HVAC damper needs



D690

The 6" to 16" round dampers are used in zoning systems to control airflow in a round duct. These dampers come with neoprene and silicone seals for tight close off and low leakage. The DM7600 includes an actuator that is already attached to the round damper.

The D690 round damper is used in conventional air handling systems to control airflow in a round duct.

- Neoprene seal for tight closing and low leakage
- Oilite bearings for long life
- 90° damper travel for a variety of applications
- Single blade round dampers for use with ML6161 and ML7161 or W7751 VAV Controller
- Maximum approach velocity 2,500 ft/min
- Temperature range 32°F to 130°F (0°C to 54°C)



DM7600

## D690 ROUND DAMPERS SELECTION GUIDE

Product Number	Damper Diameter	
	(inch)	(mm)
D690A1002	6	152
D690A1010	8	203
D690A1028	10	254
D690A1036	12	305
D690A1044	14	356
D690A1051	16	406

## DM7600 ROUND DAMPERS SELECTION GUIDE

Product Number	Damper Diameter		Input Signal	Timing (sec, min.)
	(inch)	(mm)		
DM7600A1005	6	152	2 to 10 Vdc or 4 to 20 mA	90 sec
DM7600A1013	8	203	2 to 10 Vdc or 4 to 20 mA	90 sec
DM7600A1021	10	254	2 to 10 Vdc or 4 to 20 mA	90 sec
DM7600A1039	12	305	2 to 10 Vdc or 4 to 20 mA	90 sec
DM7600A1047	14	356	2 to 10 Vdc or 4 to 20 mA	90 sec
DM7600A1054	16	406	2 to 10 Vdc or 4 to 20 mA	90 sec
DM7600B1004	6	152	SPDT floating	90 sec
DM7600B1012	8	203	SPDT floating	90 sec
DM7600B1020	10	254	SPDT floating	90 sec
DM7600B1038	12	305	SPDT floating	90 sec
DM7600B1046	14	356	SPDT floating	90 sec
DM7600B1053	16	406	SPDT floating	90 sec

# Custom Dampers

## CUSTOM RECTANGULAR DAMPERS\*

Number	Description
VCD34	Galvanized Insulated Airfoil Damper
VCD40	Aluminum Narrow Frame Airfoil Damper
VCD42	Aluminum Airfoil Damper (Galvanized Frame)
VCD43	Aluminum Airfoil Damper
VCD45	Aluminum thermally broken insulated Damper

## CUSTOM ROUND DAMPERS\*

Number	Description
VCDR53	Galvanized Round Damper – to 24 inches
VCDRM53	Galvanized Round Multi-Blade Damper – to 36 inches

\* Contact Take-Off Service for quotes

# SmartVFD HVAC

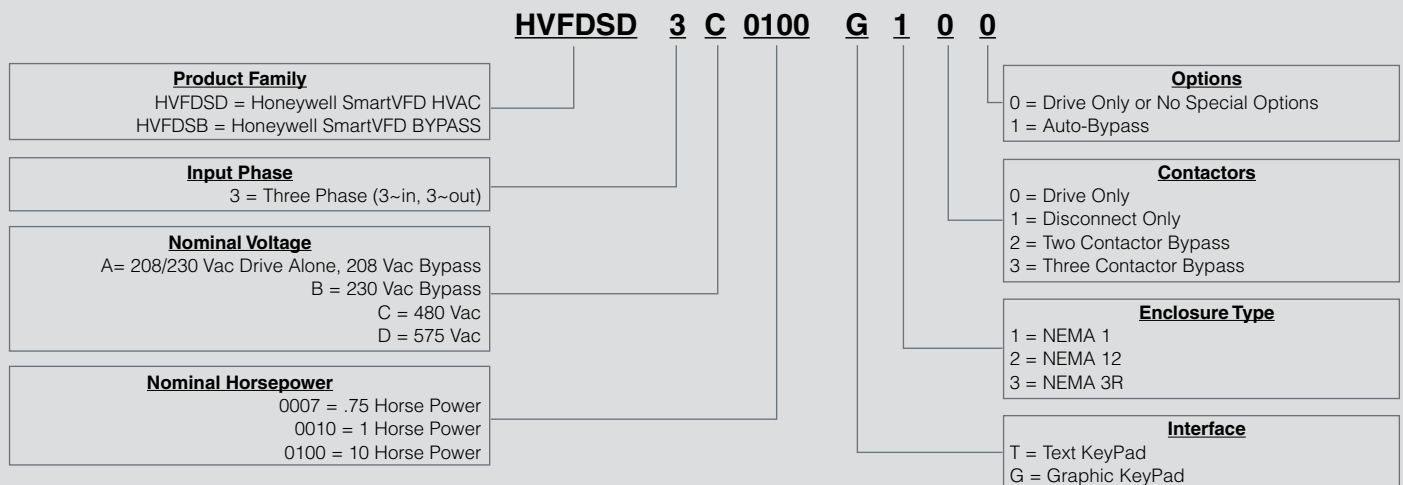
The Honeywell SmartVFD HVAC makes installation and commissioning easy, all while providing great energy savings!



## Features

- **Start-up Wizards** — All you have to do is tell the VFD whether you have a pump or a fan, enter nominal motor information, and you are up and running
- **Graphic Interface** — The easy-to-use keypad and interface deliver menu-driven programming and monitoring for fast, uniform commissioning. Plus, a manual is built into the keypad for easy access when needed
- **Built-In Communications** — With BACnet®, N2 and Modbus built in, you get a lower total installed cost and reliable communication with the building management system
- **PC Software Wizards** — Commissioning, programming and troubleshooting are all a snap thanks to these guided Startup and PID wizards
- **Built-In PLC** eliminates the need for an expensive external controller
- **DC Choke** for harmonic protection
- **Standard RFI Filter** — Ensures that EMC/RFI requirements are met
- **Real-Time Clock** — Battery included
- **Fire Mode** for safe operation
- **Motor Switch Ride-Through** — Easy, fault-free maintenance
- **Hand-Off-Auto** control built into the keypad

## SmartVFD HVAC/SmartVFD BYPASS NAMING STRUCTURE





# SmartVFD BYPASS

The SmartVFD BYPASS is easy to specify, select, install and commission and is the perfect complement to the advanced capabilities of the SmartVFD family.



## Features

Our five configurations make it easy to select the right bypass to complete your drive package. All bundles are available in NEMA 1, NEMA 12 and ventilated NEMA 3R.

### SmartVFD Disconnect

- Adds a fused disconnect to the VFD

### SmartVFD 2-Contactor

Provides an economical means of bypassing the VFD.

- No Main Disconnect
- Freeze/Fire/Smoke Interlock

### SmartVFD 3-Contactor

Commission, service or replace the VFD without affecting the operation of the motor. Provide additional bypass control capabilities with Auto-bypass option.

- Fused Disconnect
- Freeze/Fire/Smoke Interlock
- VFD can be isolated from power with motor running in bypass mode
- TEST position powers the VFD without sending power to the motor

### SmartVFD 3-Contactor Options

#### AUTO-BYPASS

- Any VFD fault will automatically send the bypass to bypass mode
- A contact closure sends the bypass to bypass mode
- Dry contacts indicate when the bypass is in bypass mode, alerting the building management system

# SmartVFD COMPACT

SmartVFD COMPACT VFDs aren't overloaded with features you won't use. Nor are you limited to just a few. Instead, they provide the perfect balance, with essential features like a standard PI Controller and the ability to program without the need for line voltage.



## Features

Choose the options you need to meet your application, which eliminates waste and saves money.

These options include:

- Interface
- Filter
- Enclosure
- Inputs
- Outputs

## Easy commissioning

- Intuitive User Interface
- PID controller included
- Program without the need for a main power supply

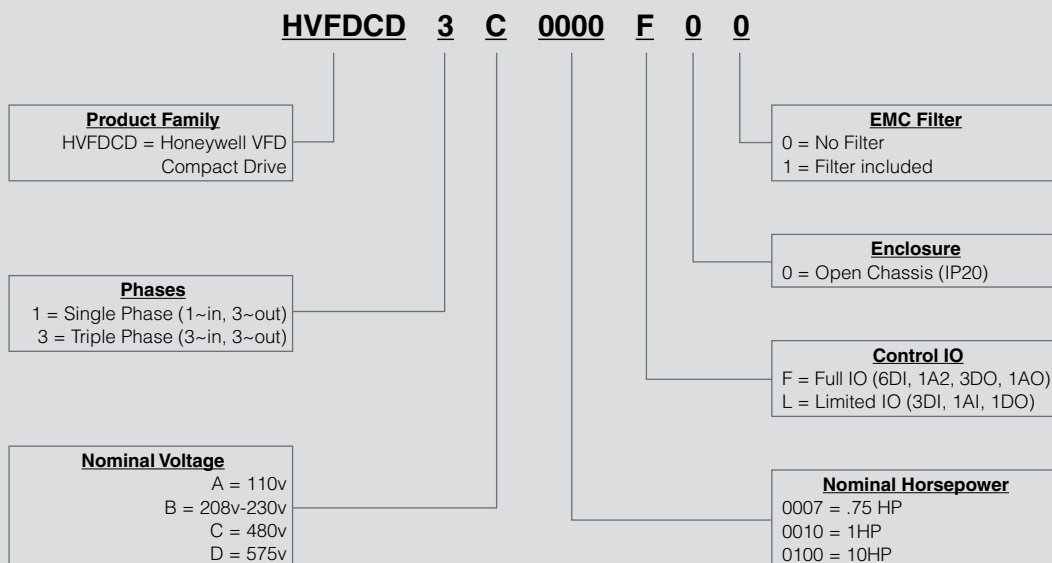
## Easy installation

- Among the smallest and most streamlined VFDs on the market
- DIN rail or screw mounting
- Side-by-side mounting

## Easy communication

- Up to seven programming control inputs
- Up to three programmable control outputs
- Modbus standard

## SmartVFD COMPACT NAMING STRUCTURE



## Damper, Valve and VFD Pricing/Job Estimating Tools:

These tools can be used for the selection and pricing of dampers, valves and VFDs. Click on the “Commercial Components Estimating Tools” link at [customer.honeywell.com](http://customer.honeywell.com).

## Specification Take-Off Service

The Honeywell Take-Off Service can create product schedules from:

- Product specifications
- Existing schedules
- Drawings
- Obsolete or competitive schedules

Our goal is to help provide you with the best possible solution for each job.

### Products Supported by the Take-Off Service

- Commercial Water and Steam Valves
- Valve Actuators (Electric or Pneumatic)
- Commercial Control Dampers
- Custom Dampers
- Damper Actuators (Electric or Pneumatic)
- Variable Frequency Drives

1. Submit your information in one of the following ways:
  - a) Email to [takeoff.service@honeywell.com](mailto:takeoff.service@honeywell.com) (preferred)
  - b) Fax toll-free to 1-877-880-3386
2. Include your desired turn-around time.
3. Take-Off Service staff will send you a confirmation that your email or fax was received. We always attempt to have your request finished as soon as possible. Please note, however, that the quality of the submitted information largely determines the turn-around time. We will work closely with you to ensure that we have enough information to move forward as quickly as possible.
4. A final product schedule document will be returned to you following take-off completion.

### Included In the Final Take-Off Document

We send a comprehensive spreadsheet, which contains:

- A complete product schedule
- Base price
- Directions on how to order Honeywell products
- Links to product submittals
- Quote identification number

### Questions

If you have questions about the Honeywell Take-Off Service, please call the dedicated Take-Off Service phone number at 1.888.664.4092 or email us at [takeoff.service@honeywell.com](mailto:takeoff.service@honeywell.com).

## Product Selection Tool

Available for sizing and estimating of valves, dampers and actuators. Click on the “Product Selection Tool” link at [customer.honeywell.com](http://customer.honeywell.com).



# Contact Information and Websites

## Main Customer Web Site

[customer.honeywell.com](http://customer.honeywell.com)

## Commercial Components Technical Hotline

763-954-6464 or 888-516-9347

[techmail@honeywell.com](mailto:techmail@honeywell.com)

## Product Drop Ship (PDS) Team (Dampers)

763-954-4140

[ECC-ProductDropShip@honeywell.com](mailto:ECC-ProductDropShip@honeywell.com)

## Consulting Engineer Site

[www.specifyhoneywell.com](http://www.specifyhoneywell.com)

## Literature Ordering

[literature.honeywell.com](http://literature.honeywell.com)

## Honeywell Promotional Materials

[honeywell.promocollection.com](http://honeywell.promocollection.com)

## Submittal Literature

Log in to [customer.honeywell.com](http://customer.honeywell.com) and go to the Welcome Box and select the "Submittal Literature" link.

## Online and Face to Face Training - Buildings University

[customer.honeywell.com/buildingsuniversity](http://customer.honeywell.com/buildingsuniversity)

## Dampers, Actuators and Valves Application and Selection Guide

#63-9271 at [literature.honeywell.com](http://literature.honeywell.com)

## Specification Take-Off Service

1.888.664.4092, [takeoff.service@honeywell.com](mailto:takeoff.service@honeywell.com)



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