

V4055A, B, D, E On-Off Fluid Power Gas Valve Actuator



Use in combination with V5055 or V5097 Gas Valves to control gas supply to commercial and industrial burners.

- Use where smooth light off is important.
- One-second maximum closing time.
- Continuously displays the valve position with a red indicator when open and a yellow indicator when closed.
- Mount in any position directly to valve bonnet with three setscrews.
- Provide final safety shutoff service when used with V5055 or V5097 Gas Valves.

Operating Temperature Ratings: 60 Hz Models: -40°F to +150°F (-40°C to +66°C). 50 Hz, 50/60 Hz Models: -10°F to +158°F (-23°C to +70°C).

Contact Ratings: V4055D, E ONLY-Proof of Closure (Factory Mutual) Switch – 9.8 AFL, 58.8 ALR, 1/2 hp; 4.9 AFL, 29.4 ALR, 1/2 hp

Used With: V5055; V5097 Gas Valves

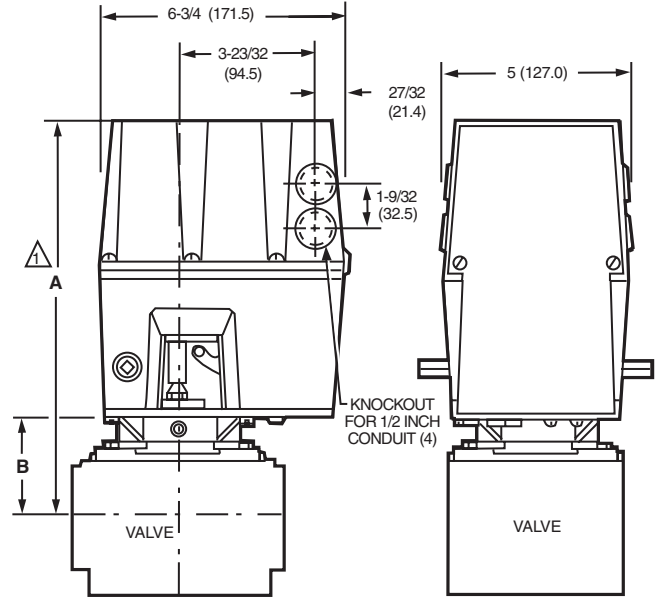
Approvals, CSA: When used with V5055 and V5097: Certified General listed File No. 158158, Class 3371 for USA and Canada

Approvals, Underwriters Laboratories Inc.: When used with V5055A-E (3/4 to 4 in.) or V5097A-E (3/4 to 3 in.): Listed, File No. MH1639 Guide No. YIOZ

Approvals, Factory Mutual: V4055A-When used with the V5055A, B or V5097A, B: Approved, Report Nos. 20698, 20835, 21172, and 24061; V4055B, D, E-When used with the V5055D or V5097D: Approved, Report Nos. 20698, 20835, 21172, and 24061

Approvals, Swiss RE: When used with V5055 or V5097: Acceptable

Dimensions in inches (millimeters)



△ ALLOW 4 IN. (101.6 MM) CLEARANCE FOR ACTUATOR REMOVAL.

VALVE SIZE INCH	V5055				V5097			
	DIM A		DIM B		DIM A		DIM B	
	IN.	MM	IN.	MM	IN.	MM	IN.	MM
3/4	11-1/8	282.6	2-3/4	69.9	11-1/8	283	2-3/4	70
1	11-1/8	282.6	2-3/4	69.9	11-1/8	283	2-3/4	70
1-1/4	11-1/8	282.6	2-3/4	69.9	11-1/8	283	2-3/4	70
1-1/2	11-1/8	282.6	2-3/4	69.9	11-1/8	283	2-3/4	70
2	11-1/4	285.8	2-7/8	73.0	11-3/4	298	3-3/8	86
2-1/2	11-3/4	298.5	3-3/8	85.7	11-3/4	298	3-3/8	86
3	11-3/4	298.5	3-3/8	85.7	11-3/4	298	3-3/8	86
4	14-1/8	358.8	5-13/16	147.6	—	—	—	—

M10981A

Material Number	Electrical Ratings	Frequency	Timing	Internal Auxiliary Switch	Maximum Safe Operating Pressure (psi)	Maximum Safe Operating Pressure (kPa)	Auxiliary Switch Ratings	Comments	Includes
V4055A1007/U	120 Vac	60 Hz	Opening – 26 sec; Closing – < 1 sec	No	5 psi	34 kPa			
V4055A1031/U	120 Vac	50 Hz; 60 Hz	Opening – 13 sec; Closing – < 1 sec	No	5 psi	34 kPa			
V4055A1064/U	120 Vac	50 Hz; 60 Hz	Opening – 26 sec; Closing – < 1 sec	No	5 psi	34 kPa			Damper Shaft
V4055A1080/U	240 Vac	50 Hz; 60 Hz	Opening – 26 sec; Closing – < 1 sec	No	5 psi	34 kPa			Damper Shaft
V4055A1098/U	120 Vac	50 Hz; 60 Hz	Opening – 13 sec; Closing – < 1 sec	No	5 psi	34 kPa			Damper Shaft
V4055A1114/U	240 Vac	50 Hz; 60 Hz	Opening – 13 sec; Closing – < 1 sec	No	5 psi	34 kPa			Damper Shaft
V4055A1296/U	120 Vac	60 Hz	Opening – 13 sec; Closing – < 1 sec	Yes - adjusted to 90% stroke	5 psi	34 kPa	120 Vac – 9.8 AFL, 58.8 ALR, 1/2 hp; 240 Vac – 4.9 AFL, 29.4 ALR, 1/2 hp		
V4055A1304/U	120 Vac	60 Hz	Opening – 26 sec; Closing – < 1 sec	No	5 psi	34 kPa			Damper Shaft with return spring installed
V4055A1312/U	120 Vac	60 Hz	Opening – 26 sec; Closing – < 1 sec	No	5 psi	34 kPa		Nema 4 Enclosure	
V4055B1021/U	120 Vac	60 Hz	Opening – 26 sec; Closing – < 1 sec	No	15 or 25 psi	103 or 172 kPa			Damper Shaft
V4055B1039/U	120 Vac	60 Hz	Opening – 13 sec; Closing – < 1 sec	No	15 or 25 psi	103 or 172 kPa			Damper Shaft

Gas Valve Actuators

Material Number	Electrical Ratings	Frequency	Timing	Internal Auxiliary Switch	Maximum Safe Operating Pressure (psi)	Maximum Safe Operating Pressure (kPa)	Auxiliary Switch Ratings	Comments	Includes
V4055B1088/U	220 Vac	50 Hz	Opening – 13 sec; Closing – < 1 sec	No	15 or 25 psi	103 or 172 kPa			
V4055D1001/U	120 Vac	60 Hz	Opening – 26 sec; Closing – < 1 sec	No	5 psi	34 kPa			Damper Shaft
V4055D1019/U	120 Vac	60 Hz	Opening – 13 sec; Closing – < 1 sec	No	5 psi	34 kPa			Damper Shaft
V4055D1027/U	120 Vac	60 Hz	Opening – 13 sec; Closing – < 1 sec	Yes	5 psi	34 kPa	120 Vac – 9.8 AFL, 58.8 ALR, 1/2 hp; 240 Vac – 4.9 AFL, 29.4 ALR, 1/2 hp	Nema 4 Enclosure	
V4055D1035/U	120 Vac	60 Hz	Opening – 13 sec; Closing – < 1 sec	Yes	5 psi	34 kPa	120 Vac – 9.8 AFL, 58.8 ALR, 1/2 hp; 240 Vac – 4.9 AFL, 29.4 ALR, 1/2 hp		
V4055D1043/U	120 Vac	60 Hz	Opening – 13 sec; Closing – < 1 sec	No	5 psi	34 kPa			
V4055E1016/U	120 Vac	60 Hz	Opening – 13 sec; Closing – < 1 sec	No	15 or 25 psi	103 or 172 kPa			Damper Shaft
V4055E1024/U	120 Vac	60 Hz	Opening – 26 sec; Closing – < 1 sec	Yes	15 or 25 psi	103 or 172 kPa	120 Vac – 9.8 AFL, 58.8 ALR, 1/2 hp; 240 Vac – 4.9 AFL, 29.4 ALR, 1/2 hp	Nema 4 Enclosure	Damper Shaft
V4055E1040/U	120 Vac	60 Hz	Opening – 13 sec; Closing – < 1 sec	No	15 or 25 psi	103 or 172 kPa		Nema 4 Enclosure	Damper Shaft

General Information

Order Specification Number System

TYPE LETTER	TYPE NUMBER	SUFFIX LETTER	OS NUMBER
V	4055	A	1007

The type letter is the single letter, or two letter group, which begins the model number. This letter usually indicates the general type of device involved, however, some product model numbers may not follow these designations exactly. If you have questions about a particular product designation, please contact your Honeywell sales representative. A list of type letters used is shown below (some may fit in more than one category):

A	— Testers.
AT	— Transformers.
BC	— Microcomputer burner control system.
C or CS	— Combustion controls; sensors.
D or DM	— Dampers.
DSP	— Demonstrators.
EL	— Lighting controls.
ER	— Energy recovery ventilators.
F	— Electronic air cleaners.
H	— Humidity controls, including combination temperature and humidity controllers.

L, LA or LS	— Limit controllers.
M	— Motors.
P	— Pressure controllers.
PM	— Program modules.
Q	— Accessories.
QS	— Communication interface modules.
R, RA or RW	— Relays.
RM	— Primary controls.
S	— Switches and ignition modules.
ST	— Electronic fan timers.
SV	— Integrated controls.
T, TA or TS	— Thermostats and remote bulb temperature controllers.
TG	— Thermostat guards.
V, VR, VS or VW	— Valves.
W	— Load control panels, accessories.
Y	— Package sets.
ZM	— Software packages.

Summary of Honeywell Control Series Designations

Series Designation	Controller Type	Controller Action	Relay or Valve Type	Motor Action	Example
Series 20	3-wire, low voltage (2-position)	Makes circuit to start; makes second circuit to stop.	—	Low voltage; rotates 180 to open, continues 180 to close; stops on power interruption.	V2045
Series 40	2-wire, line voltage (2-position)	Makes circuit to start; breaks it to stop.	Line voltage coil circuit; makes (opens) when powered; breaks (closes) when power interrupted.	Line voltage; motor drives open when powered; spring returns on power interruption.	T42, L4064, L4008
Series 50	Mechanical (nonelectrical) series.				V5011
Series 60	3-wire, line voltage (2-position)	Makes circuit to start; makes second circuit to stop.	—	Old style—line voltage equivalent to series 20. New style—line or low voltage drives open when powered open; reverses and drives closed when powered closed; stops on power interruption.	M6284
Series 70	Electronic series.				M7285, C7031
Series 80	2-wire, low voltage (2-position)	Makes circuit to start; breaks it to stop.	Low voltage coil circuit; makes (opens) when powered; breaks (closes) when power interrupted.	Low voltage; motor drives open when powered; spring return closed on power interruption.	T87, L8124
Series 90	3-wire, low voltage (modulating)	Varies resistance between common terminal and two end terminals in response to controlled variable.	—	Low voltage; motor modulates position in response to changes in controlled variable signaled by controller.	T921, M9164, W899

Approval Bodies

Most of the devices described in this catalog have been approved or listed by one or more of the approval bodies listed below.

Underwriters Laboratories Inc.

Underwriters Laboratories Inc., is a Limited Liability Corporation (LLC) that examines and tests devices, systems and materials. Its membership represents a broad cross section of industry, education, and government.

Field inspectors for Underwriters Laboratories Inc., do not normally inspect equipment installed on job sites, but restrict their activities entirely to periodic inspections of products coming off manufacturers' assembly lines.

The three general categories of acceptance of a product by Underwriters Laboratories Inc., are:

1. Listing
2. Component Recognition
3. Classification

Listed devices are structurally and functionally complete and suitable for field installation.

Component Recognized devices are incomplete in some way that makes them unsuitable for general field installation. They are intended to be factory installed as part of some other piece of equipment.

Classified devices or products have been evaluated as to specific hazards only.

Underwriters Laboratories of Canada can also provide certification services to Canadian standards, which is displayed as a "c" adjacent to the UL mark (cUL).

CSA - Canadian Standards Association

The Canadian Standards Association is a not-for-profit, membership-based, non-governmental organization which provides a national standardizing body for Canada.

The Canadian Standards Association Testing Laboratories, inaugurated in May 1940, is a division of the Canadian Standards Association, and is recognized as a testing and investigating agency by Inspection Authorities and by Fire Marshals and Fire Commissioners throughout Canada.

The Canadian Standards Association Laboratories test and examine electrical products submitted for approval in compliance with pertinent Canadian Standards Association codes and standards.

The Canadian Standards Association now includes International Approval Services (IAS).

CSA can also provide certification services to UL standards, which is indicated by a "US" adjacent to the CSA mark.

International Approval Services—U.S.

IAS, now part of CSA and no longer known as IAS, is the testing organization of the American gas industry with laboratories in Cleveland, Ohio and Irvine, Calif. The CSA sponsors the American National Standards Institute Z21 and Z83 Committees on standards for gas-fired equipment.

Any manufacturer of gas appliances or gas appliance accessories may submit their products to the Laboratories and secure certification of their designs upon compliance with the appropriate national standards. Upon such compliance, the manufacturer is granted an Appliance Certificate or an Accessory Certificate and is permitted to display the trademarked Laboratories' Certification Seal or trademarked Laboratories' Certification Symbol on the appliance or accessory.

International Approval Services—Canada

IAS, now part of CSA and no longer known as IAS, represents all segments of the Canadian gas industry, has been accredited by the Standards Council of Canada and the Standards Advisory Committee to prepare National Standards in the area of equipment for use with natural gas and propane. CSA has laboratories in Toronto, Canada.

Each standard is intended to be used within the scope of the standard by the manufacturing sector, those applying the equipment or those responsible for its application. It is the responsibility of the user to determine in each case that the standard is suitable for the application.

IAS operates a certification program for gas appliances, equipment, and accessories.

Canadian Gas Association (CGA), is now part of CSA and is no longer known as CGA, although some legacy products still may display the CGA mark.

American Gas Association (AGA) is also now part of CSA and is no longer known as AGA, although some legacy products still may display the AGA mark.

Factory Mutual

Factory Mutual is an association of mutual insurance companies dedicated to loss prevention. Through its research arm, the Factory Mutual Research Corporation, it investigates means of preventing and minimizing fire and other losses. Factory Mutual Laboratories test and approve two broad categories of devices and materials:

1. Those used for the control or prevention of property damage.
2. Those that in themselves would present serious hazards if not properly designed.

Factory Mutual Acceptance refers to a specific installation or arrangement of equipment. Installations using approved devices, if found satisfactory following review of plans and inspection of completed work, are "accepted."

A continuing follow-up program is carried out through periodic plant inspections and reports of performance in actual use.

CE Mark ("Conformité Européene" European Self-Certification mark)

CE marking is mandatory for products covered by one or more Directives. The manufacturer must apply the CE mark and declare conformity to the applicable Directives in order to bring a product on the market in the European Community. CE marking requirements vary from Directive to Directive, and even within Directives.

Some of the Directives (e.g. Gas Appliance Directive) require third party testing by Notified Bodies, in which case a product surveillance contract with a Notified Body is also mandatory. Other Directives can be satisfied by Declarations of Conformity provided by the manufacturer as a result of internal testing and documentation.

C-Tick

The Australian C-Tick mark is intended for use on products that comply with EMC standards. The C-Tick mark is a certification trademark registered to the ACA by the Trademarks Office and is only to be used in accordance with conditions laid down by the ACA (Australian Communications Authority). The C-Tick mark is valid for both countries and may be applied by either a New Zealand supplier or an Australian supplier.

AGA – Australia Gas Association

AGA reviews a product's CE Mark EMC report and/or Declarations and issues a certificate allowing import into Australia and New Zealand.

The approved product will bear the C-Tick mark with the assigned number of the importer.