General Information on the HMI HOYME Motorized Inline UNIVERSAL AIR CONTROL DAMPER – SERIES 'HAC' to

Control MAKE-UP, REPLACEMENT, VENTILATION, FLUE AND ZONE AIR FOR RESIDENTIAL AND COMMERCIAL USE

The following is general information on various series of Hoyme 'HAC' Universal Air Control Dampers. Dampers are made from galvanized sheet metal with special orders to include stainless steel. All Dampers have stainless steel shafts with nylon bearings and have foam rubber seals unless otherwise specified.

All Dampers come with wiring diagrams and/or approved Installation Instructions.



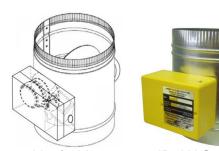




2C-24Vac motor

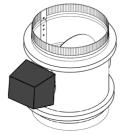
ID: HAC-0x1x-xPO/PC

The most common type of universal air control damper ranges from 4" diameter to 9" diameter. A controlled 2C-24Vac motor is used to power the damper open (PO) or power it closed (PC) and a damper spring for return. This damper is usually placed in-line with an air duct to control the flow of fresh or zone air and comes with a collar for ease of mounting to a supply plenum when required.



120Vac/24Vac motor ID: HAC-xx12-xPO/PC

If using 120Vac controlled power, choose damper HAC-0x12-xPO/PC which is the same as damper HAC-0x1x-xPO/PC but comes with its own 24Vac transformer and motor properly enclosed for 120Vac connections.





2C-24Vac Actuator ID: HAC-xx5x-xPO/PC.

Higher static pressures or dampers of larger **sizes** require a stronger motor and a stronger return spring. This damper is identified as an HAC-xx5x-xPO/PC and comes with a spring return Geared Actuator. A controlled 2C-24Vac supply is required to either power the damper open (PO) or power it closed (PC) with spring return.



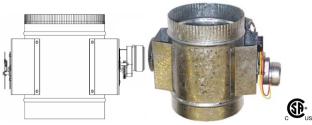


ID: HAC-xx3x-xPO/PC. ID: HAC-xx4x-xPO/PC.

Spring return Belimo actuators, 2C-24Vac/dc or 2C-120Vac/dc, are also available on most Hoyme dampers. Diameters range from 4" to 10" in increments of 1" and from 10" to 30" in increments of 2". Damper operates with an on/off switch. Identification of these dampers includes the HAC-xx40, 44, 80, 88, 90-xPO/PC.

Non-spring return Belimo actuators are also available requiring a continuous power supply and at least a 3C wire and an on/off switch for damper operation. The ID of these dampers includes the HAC-xx30, 34, 35, 60, 70,xPO/PC. All **Belimo actuators** are excellent for all Hoyme HAC dampers.

HOYME DAMPERS DESIGNED FOR HEAT, including FLUE DAMPERS, have the foam seals removed to allow for a 10% bypass. Wiring and nylon bearings are mounted 1" away from the damper for protection from heat.



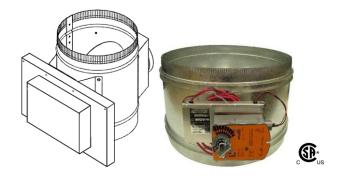
ID: HAC-xx1x-xxx- suffix "H" for heat.

The suffix letter 'H' designates the damper is for heat and has several options for wiring.

Flue Dampers have a suffix letter 'F' which includes a relay that provides non-intervention to the appliance safety control circuit. An end-switch is included to prove the dampers position before the appliance is allowed to fire. Approved strict wiring instructions are included.



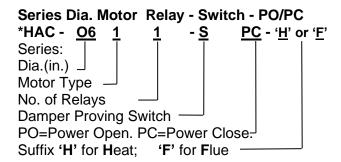
ID: HAC-xx11-SPC-"F" flue damper (4"-9").



ID: HAC-xx<u>4</u>1-SPC-"<u>F"</u> flue damper. Flue dampers up to 12"dia. are CSA Certified.

Regular universal HAC dampers for fresh air, zone air, as well as for hot air, may be ordered with an end switch to prove the position of the damper. The I.D. "HAC-xxxx-'S'xx" designates the end switch.

Nomenclature of Damper Identification:



Please note that the nomenclature of damper ID is not limited to this sample shown. For complete information, please refer to the Hoyme web page at www.hoyme.com and follow the links.

INTERFACE RELAY ADAPTORS are also manufactured by Hoyme and approved to interconnect and/or interlock to all Hoyme dampers with various voltages and safety control circuits. Following is a sample list of Interface Relay Adaptors available:

- For D.C voltage circuits, 250mVdc to 100Vdc use "ADP-0MV2-S5A"
- For 24Vac circuits use "ADP-0241-xxx"
- For **120**Vac circuits use "ADP-**110**1-xxx"
- For timing systems use "TMADP-1102-xxx"
- For a controlled receptacle: "RADP-1102-xxx"
- For a timed receptacle: "TRADP-1102-xxx".

All adaptors come complete with wiring diagrams and installation instructions. For additional **Colored Wiring Diagrams'**, please refer to www.hoyme.com.