





















**UACD SERIES | GENERAL PURPOSE VALVE** 

NEMA 4 protection class shown

# **MODE OF OPERATION**



2/2 Normally Closed Solenoid Pilot Operating

See page 74 for details on modes of operations.

#### **GENERAL INFORMATION**

#### **Valve Highlights**

- 3/8" 2" NPT ports
- Normally closed flow pattern
- Diaphragm operated
- Fully ported orifices for high Cv

# **Body Materials**

- Brass 3/8" 1" port sizes
- Bronze 1-1/4" 2" port sizes
- Stainless steel is optional for any size

## **Seal Options and Temperature Ranges**

- Nitrile (BunaN): 14°F to 176°F
- EPDM: -58°F to 248°F (Hot Water Series)
- Viton®: -4°F to 302°F

## **Electrical Connection Options**

- 1/2" NPT conduit hub with 18" leads (NEMA 2 protection class)
- 9mm din connector (NEMA 4 protection class)

## **Electrical Characteristics**

- Standard coil class: H (Suitable for continuous duty)
- Power consumption: 14.5 watts
- DC voltages: 12, or 24
- AC voltages: 24, 120, or 240

## **Operating Characteristics**

Approved ambient temperature range: 14°F to 122°F

#### PORT AND ORIFICE SELECTION GUIDE

#### SELECTION OF PORT AND ORIFICE SIZES WITH CORRESPONDING FLOW, PRESSURE, POWER AND WEIGHT SPECIFICATIONS

DODT CIZE	ORIFICE (MM)	CV	P. MAX¹ (PSI)	OPD <sup>2</sup> (PSI)		WEIGHT (LDC.)
PORT SIZE				AC COIL	DC COIL	WEIGHT (LBS.)
3/8"	16.0	3.5	725	0-150	0-150	2
1/2"	16.0	4.9	725	0-150	0-150	2
3/4"	16.0	5.4	725	0-150	0-150	2
I"	20.0	8.2	725	0-150	0-150	4
1-1/4"	40.0	30.0	725	0-60*	N/A	6.6
I-I/4"	40.0	30.0	725	5-150	5-150	6.6
I-I/2"	40.0	30.0	725	0-60*	N/A	6.6
I-I/2"	40.0	30.0	725	5-150	5-150	6.6
2"	40.0	33.0	725	0-60*	N/A	6.6
2"	40.0	33.0	725	5-150	5-150	6.6

<sup>&</sup>lt;sup>1</sup> P. Max: The maximum pressure a valve can be subjected to without causing damage to the valve components.

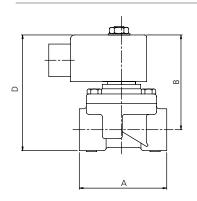
<sup>&</sup>lt;sup>2</sup> Operating Pressure Differential (OPD): The difference in pressure between the inlet and outlet ports at which the valve can safely operate. Catalog figures represent tests carried out at +/- 10% of rated voltage with ambient temperature of 80 °F.

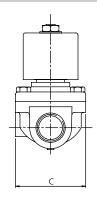
<sup>&</sup>lt;sup>2</sup> Zero Pressure Rated (refer to OPD figures): When the lower value of OPD is zero, the valve will operate without pressure differential. Otherwise this value represents the minimum pressure differential required to operate the valve.

<sup>\*</sup>To build a 1-1/4", 1-1/2" or 2" valve that is zero pressure rated, choose option H in the features section. If H is not selected for these sizes OPD will default to 5-150.



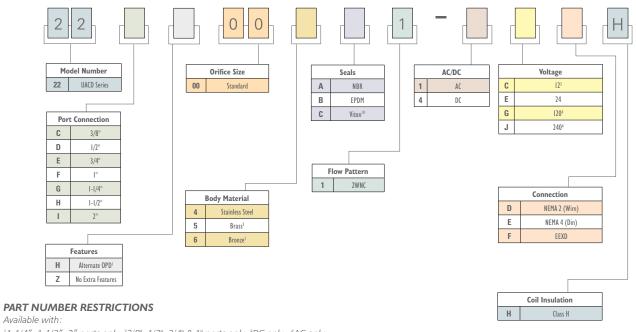
## **DIMENSIONAL DRAWINGS [INCHES]**





DIMENSIONAL DATA								
PORT SIZE	А	В	C	D				
3/8" - 3/4"	2-3/4"	3-7/16"	3"	4-3/8"				
I"	3-3/8"	3-7/16"	3"	5-3/8"				
I-I/4" - 2"	5-3/8"	4-5/8"	4-3/4"	5-7/8"				

#### PART NUMBER SELECTION GUIDE FOR UACD SERIES



 $^{1}$ 1-1/4", 1-1/2", 2" ports only,  $^{2}$ 3/8", 1/2", 3/4" & 1" ports only,  $^{3}$ DC only,  $^{4}$ AC only

# STANDARD FLOW DATA

- 1. Select the required flow.
- 2. Note the corresponding pressure drop.
- 3. Based on the point where the two intersect, identify the most appropriate flow curve.
- 4. The flow curve will be labeled with a flow rate in Cv. Using the Port and Orifice Selection Guide on the left side of the page, identify the orifice size that corresponds to the desired Cv. Choose a port size that corresponds to this orifice when building the part number.

