PND Series
Switching solenoid dump valve

FEATURES

- **2-way Normally Open exhaust valve in a small package size**
- **Works well in miniature applications such as in Non-Invasive Blood Pressure (NIBP) devices**
- **Provides small size and low cost**
- **Offers low holding voltage**

MEDIA COMPATIBILITY

Non-corrosive gases

WETTED MATERIALS

Elastomer:
Silicon; nickel-plated steel

Frame:
SPCC (treatment: MFZn2-c)

All other:
Polybutylene Terephthalate (PBT);
304 series stainless steel

ELECTRICAL

Power	0.5 W or less
Voltage	3, 6 or 12 V_{DC}

PHYSICAL PROPERTIES

Operating environment	0 to 45 °C
Storage temperature	-25 to 70 °C
Porting	1 port, 0.118 in (3 mm) O.D., suitable for 0.078 in I.D., Urethane tubing
Weight	7.7 g (0.27 oz)
Internal volume	0.026 cm^3
Filtration	None required
Lubrication	None required

PERFORMANCE CHARACTERISTICS

Part no.	Pressure	Vacuum	Orifice sizes/ Equivalent C_V [1]	Leak rate [2]	Response
PND-05D-...	0...6 psig holding	0...27 "Hg (0...13 psi)	0.030" (0.510 mm)/ 0.017 C_V	0.016 sccm (bubble tight)	<100 msec cycling
PND-05A-...			0.050" (1.270 mm)/ 0.035 C_V		

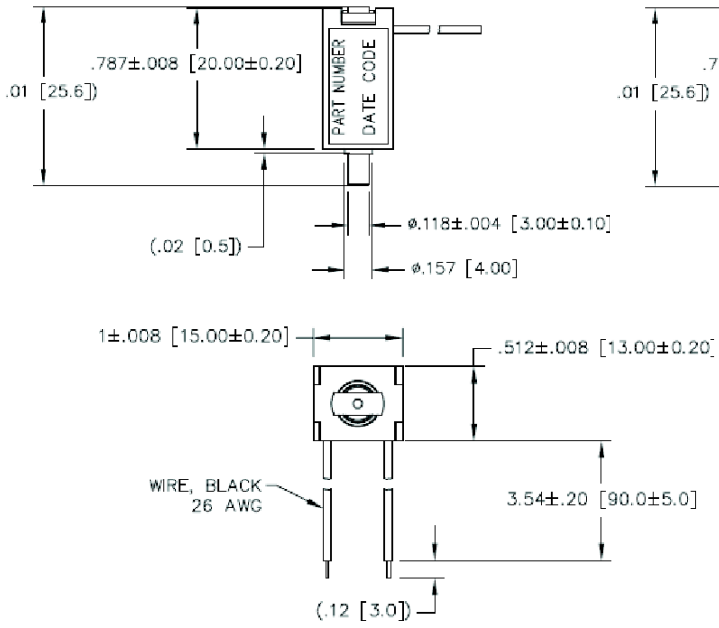
Notes:

[1] The C_V value is the volume flow in US gallons/min under specific flow conditions and describes the relative flow capacity of a valve. The equivalent european measure is the k_V value expressed in m^3/h ($k_V = 0.86\ C_V$).

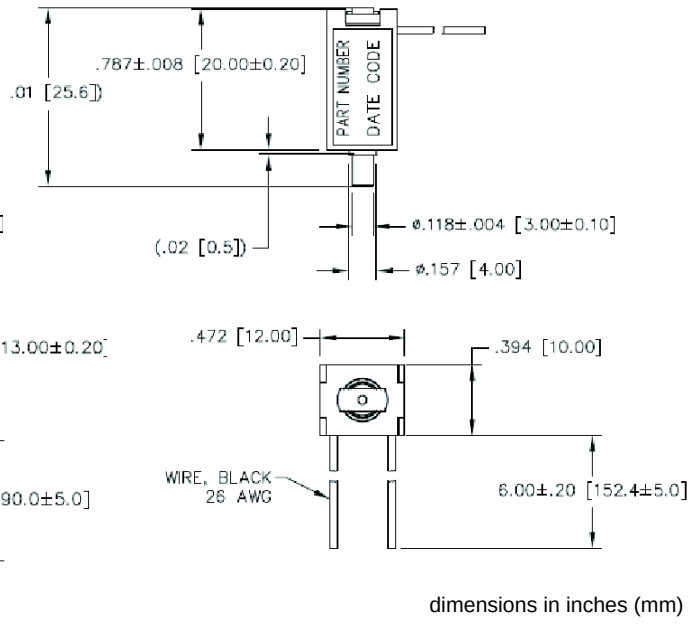
[2] sccm denotes Standard Cubic Centimeters per Minute. It is a unit for the flow rate at standard conditions of temperature and pressure.

OUTLINE DRAWING

PND-05A-...



PND-05D-...



dimensions in inches (mm)

ORDERING INFORMATION

	Series		Rated power at 20 °C		Orifice size		Voltage
Options	**PND**	**05**	0.5 W	**D**	0.030" (0.762 mm)	**3**	3 V_{DC}
				A	0.050" (1.270 mm)	**6**	6 V_{DC}
						12	12 V_{DC}
Example:	**PND**	**05**		**A**		**12**	