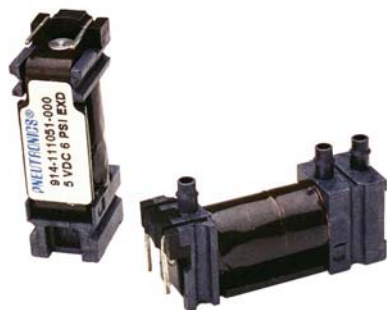


Ten-X®

## 10mm Solenoid Valve



Ten-X® is a 10mm solenoid valve with a two-position, two-way Normally Open (NO) design. Ten-X delivers repeatable "energized" and "de-energized" response times, low power, and flow capability to meet the specific performance requirements of Non-Invasive Blood Pressure (NIBP) devices.

#### Features

- ✦ Delivers fast and repeatable "open" and "drop-out" response times (<5 msec includes first shot "open" times) critical to step deflation algorithms over the entire environmental temperature range and continuous duty operation of the valve.
- ✦ Highest flow of any 10mm solenoid valve with a  $C_v$  of .032 and flow of 8 slpm @ 6 psig.
- ✦ Meets the demands for bleed and dump processes, ensuring comfortable and safe operation.
- ✦ Single piece body design reduces total size and part count. Fewer parts increase reliability and reduce both the number of potential leak points and the overall "stack-up" tolerances.
- ✦ Universal barb design allows for maximum installation flexibility using either a direct tubing connection or a radial seal for manifold assemblies.

#### Physical Properties

**Valve Type:**

2-Way, 2 Position, NO (NIBP)

**Media:**

Non-Reactive Gases

**Operating Environment:**

0 to 50°C

*Operating Coil Temp: Max 85°C*

**Storage Temperature:**

-40 to 70°C

**Length:**

32 mm (1.25 in)

**Width:**

9.9 mm (0.390 in)

**Height:**

12 mm (0.475 in)

**Spacing:**

10 mm (centerline)

**Porting:**

Barb fitting for 0.078" I.D. Polyurethane tubing

Manifold mount with Ten-X seal

**Weight:**

0.39 oz (11 grams)

**Internal Volume:**

0.131 cm<sup>3</sup> (0.0080 in<sup>3</sup>)

#### Electrical

**Power:**

0.5 Watt (2-Way, NO Model)

**Voltage:**

5, 12, 24 VDC

**Electrical Connections:**

PC Pins, 6 mm centers (all models)

#### Wetted Materials

LCP (Liquid Crystal Polymer);  
430 Series Stainless Steel;  
302 Series Stainless Steel/  
Nickel-Plated Silicone Elastomer

#### Performance Characteristics

**Leak Rate:**

≤0.016 sccm (bubble tight)

**Response:**

<5 msec on time

**Pressure:**

0 to 6 psig

**Minimum Flow:**

8 lpm @ 6 psi

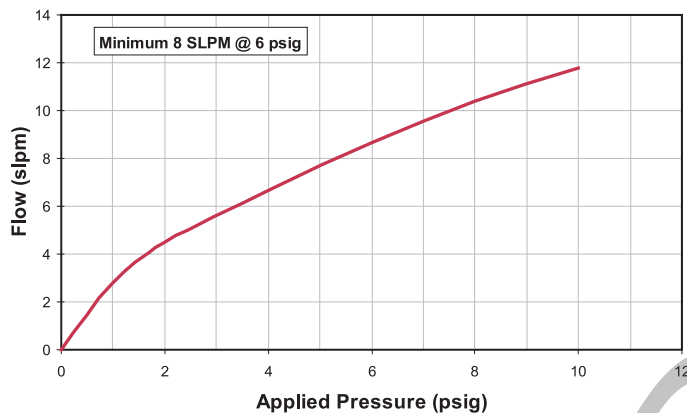
**Orifice Sizes/Equivalent  $C_v$ :**

0.060"/0.032  $C_v$

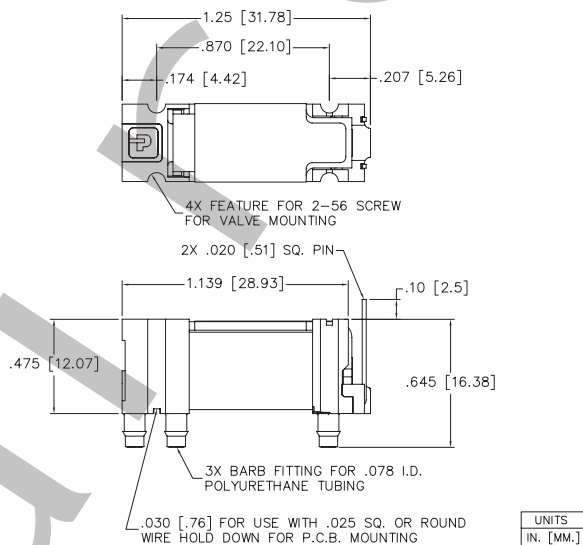
Ten-X is a registered trademark of Parker Hannifin Corporation

Flow

Ten-X NIBP Typical Air Flow

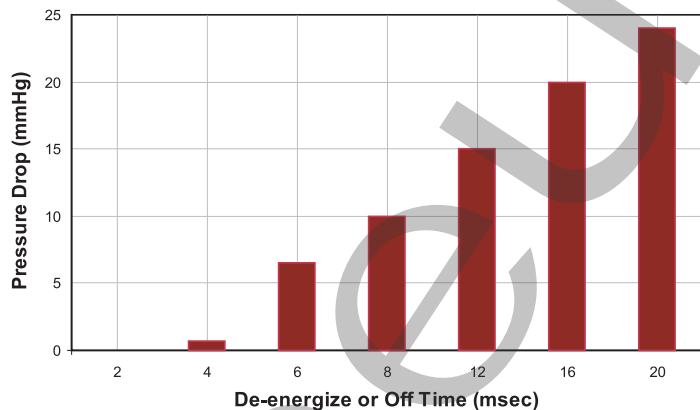


Dimensions



Pressure Decay

Ten-X NIBP Pressure Decay vs. Pulse Width  
(150 mmHg pressurized @ 40 ml volume - 2mmHg)



Ordering Information

Sample Part ID	914	-	1	1	05	1	-	000
Description	Series	-	Elastomer	Type	Voltage	Electrical Connection	-	Optional Accessories
Options			1: Silicon	1: 2-Way NO (NIBP Only)	05: 5 VDC 12: 12 VDC 24: 24 VDC	1: Short Pin 2: Long Pin		000: No Accessories Accessories may be ordered separately at no extra charge: Screw: 191-000112-010 Gasket: 195-000211-001

NOTE: Please consult Parker Life Sciences for other considerations. For more detailed information, visit us on the Web, or call and refer to Performance Spec. #790-002213-001 and Drawing #890-003150-001.