

**SERIES 900****STAINLESS STEEL BALL-VALVE DISTRIBUTION MANIFOLDS****HNL ENGINEERING LTD**  
Instruments & Controls  
Precision Machining  
**Manifolds & Valves**

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**MANUFACTURED IN THE U.K.**

Designed to complement our established ranges of aluminium and stainless steel distribution manifolds HNL now manufacture the Series 910 stainless steel ball valve Minifold offering the following features/benefits:-

**■ COMPACT AND COST EFFECTIVE**

Compared to the alternative of creating a distribution manifold using tube and fittings the Series 910 Minifold provides a tidier and more compact arrangement, there are fewer connections reducing the likelihood of leaking and it is more cost effective.

**■ BALL VALVES**

The use of ball valves have a number of advantages when compared to the screw type valves used on other Minifolds. Opening and closing of the valve is rapid with just a quarter turn of the handle and the position of the handle readily indicates if the valve is open or closed. In addition ball valves can be supplied with automatic back-venting or locking facilities.

**■ 4, 6 OR 10 OUTLETS**

Standard Series 910 Minifolds are available with either 4, 6 or 10 ball valves on a manifold block having tapped inlet connections at both ends. Typically one inlet is used for the supply and the other is plugged. Alternatively the 4, 6 or 10 way units can be connected in series using a barrel-nipple if more outlets are required (i.e. 8, 12, 20 etc.).

**■ CORROSION RESISTANT**

Both the Minifold block, valve body and ball are manufactured in 316 stainless steel making them suitable for use with a wide range of process media and for use in environments where aluminium Minifolds are unsuitable.

**■ COMPREHENSIVE RANGE**

The Series 910 Minifold is available with 1/2" & 3/4" BSP.T or NPT inputs and 1/4" & 1/2" BSP.T or NPT outputs. A wide range of accessories includes barrel-nipples, plugs, isolation and drain valves, back-venting valves and locking valves.

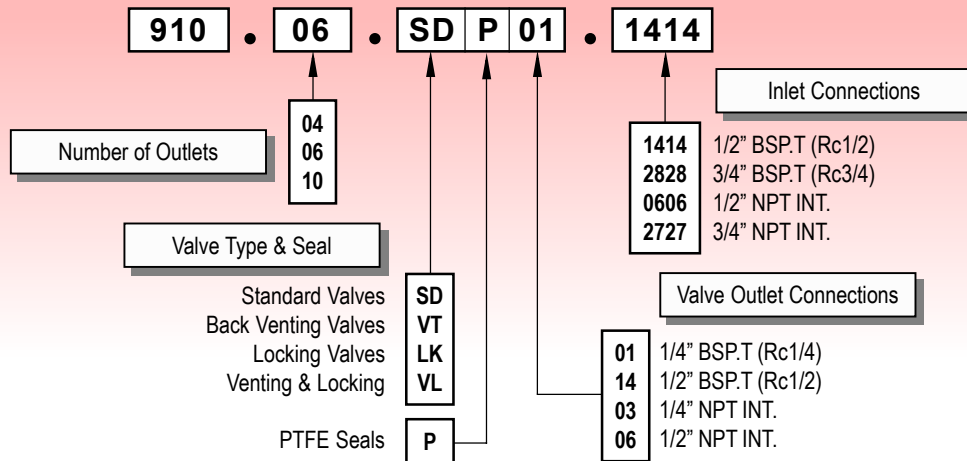
MINIFOLD® is a registered trademark of HNL.

**QUALITY ASSURANCE**

Designed and manufactured by HNL in accordance with BS EN ISO 9001:2000.



**CODING:**



**Materials:**

Manifold blocks: 316 stainless steel with a natural finish  
 Valve body & ball: 316 stainless steel  
 Valve handle: 304 stainless steel with red sleeve for BSP Minifold and black sleeve for NPT Minifold  
 Valve seals: PTFE

**Maximum Operating Pressure / Temperature:**

60 Bar / 40°C  
 40 Bar / 100°C  
 25 Bar / 150°C

**Dimensions (mm):**

4 way: 114 (L) x 175 (W)  
 6 way: 172 (L) x 175 (W)  
 10 way: 288 (L) x 175 (W)

Width is between ends of handles with the valves open.

Two mounting brackets are supplied with each 910 Minifold. Each bracket has 2 x 6.5 diameter holes on the following centres:

4 way: 99 (L) x 62 (W)  
 6 way: 157 (L) x 62 (W)  
 10 way: 273 (L) x 62 (W)

**Process Media:**

Air or any clean gas, vapour or liquid which is compatible with the materials of construction.

**Thread Standards:**

BSP.T threads to BS21.  
 NPT threads to ANSI B1.20.1

**Number of Outlets:**

Non-standard options can also be supplied.  
 e.g. only 3 valves on one side of a 6 way block and spare outlets plugged.  
 Please provide a complete description of your requirements.

**Back Venting Valves:**

These allow automatic back venting of the output pressure to atmosphere on valve closure.

**Locking Valves:**

A locking facility can be provided by means of a torx screw on the valve handle which allows the valve to be secured in both the fully open and fully closed positions.

**Flow Considerations:**

To minimise both output pressure drop and the possibility of output starvation, it is recommended that the the inlet thread to the block is larger than the thread on the output valves. i.e. for 1/4" valve outlets use either the 1/2" or 3/4" inlets (preferred), for 1/2" valve outlets use a 3/4" inlet.

Minifolds can be connected in series to provide more ways but it is essential that the largest possible inlet connections are used and if high flow is required, consider providing a supply from both ends of the Minifold.

**ACCESSORIES:**



Thread Size	Plug	Barrel-Nipple	Isolation / Drain Valve	Notes
1/2" BSP.T	<b>P15</b>	<b>N15</b>	<b>SDP15</b>	Valves are Male to Female
3/4" BSP.T	<b>P30</b>	<b>N30</b>	<b>SDP30</b>	A 1/2" isolation valve would be suitable for up to twelve 1/4" outlets.
1/2" NPT INT.	<b>P08</b>	<b>N08</b>	<b>SDP08</b>	A 3/4" isolation valve would be suitable for up to twelve 1/2" outlets.
3/4" NPT INT.	<b>P29</b>	<b>N29</b>	<b>SDP29</b>	Larger throughput valves are available on request