

# **Distribution Manifolds** For Process Instrumentation



ENGINEERING YOUR SUCCESS.

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## **Air Header Distribution Manifold**

LPAHM Series - up to 1000 psi

Parker's air header distribution manifolds are designed to distribute air from the compressor to the actuators on pneumatic instruments, such as steam flow meters, pressure controllers and valve positioners. These manifolds are widely used in industrial chemical processing, plastic processing and energy industries and are approved for low pressure applications up to 1000 psi (threaded end connections).

Manufactured from AISI 316 stainless steel the air header distribution manifold offers complete customer system compatibility that reduces installation time and potential leak paths. The coded welded construction with non destructive tested design minimises the number of potential leak paths, rather than fabricating with instrumentation connections with tubing, therefore reducing labour costs.

The air header distribution manifolds are designed for use with air only and are supplied with a number of lockable ball valves on opposite sides, right side or left side only to prevent unauthorized access.

#### **Product Features**

- Lockable handles as standard
- Lightweight ball valve design
- 316L Stainless Steel body
- 2" nominal bore header
- Welded body construction
- Flanged and threaded inlet options
- Four support feet welded for wall mounting

#### Application

• Air distribution for pneumatic actuation

#### **Product Benefits**

- Lockable handles prevent accidental manual actuation of outlet valve
- Reduction in assembly time
- 316L nominal bore body as standard removes the possibility of internal scaling
- Greater volume capacity supporting fluctuations in air compressor supply
- Guaranteed full penetration welds Coded welding and non destructive testing (NDT) as standard

#### Markets

- Petrochemical
- Chemical
- Plastic processing
- Industrial chemical processing
- Power generation
- Oil and gas offshore and onshore

#### How to Order

The correct part number is easily derived from the following number sequence

#### Flanged Inlet Style

LPAHM		S	6		8	F	1	50		8		N
Series		Material	Number of Distribution Valve Outlets	-	t Size Ich)	Inlet Connection	Flange Class		Drain Valve Outlet Size (inch)			Drain Valve Outlet Connection
LPAHM	S	Stainless	Insert Number	8	1/2	F Raised Face	150	150	8	1/2	Ν	Female NPT
Low Pressure		Steel	From 4-20*						16	1		

Air Header Distribution Manifold

#### Distribution Marinolu

#### **Threaded Connection Ends**

LPAHM	S	4	8	R	8	N
Series	Material	Number of Distribution Valve Outlets	Inlet Size (inch)	Inlet Connection	Drain Valve Outlet Size (inch)	Drain Valve Outlet Connection
LPAHM	S Stainless	Insert Number	<b>8</b> 1/2	N Female NPT	8 1/2	N Female NPT
Low Pressure	Steel	From 4-20*		K BSPT	<b>16</b> 1	
Air Header		1	1	R BSPP		1

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Distribution Manifold

\* Max. 10 valves on each side. Even numbers only when specifying Both Sides configuration.



Air Header Distribution Manifold with 6 distribution valve outlets and flanged inlet. Both sides configuration.

#### **Specifications**

Central Pipe Body Material	Stainless Steel AISI 316
Ball Material	Stainless Steel 316
Stem Material	Stainless Steel 316
Seat Material	PTFE
Working Pressure	<ul> <li>Threaded inlet style: Max. 1000 psi (69 bar)</li> <li>Flanged inlet style: Max. 275 psi (19 bar) at ambient temp.</li> </ul>
Temperature Rating	-40 °C to 180°C

8	N		BVO		
Distribution Valve Outlet Size (inch)	Distribution Valve Outlet Connection		Drain Options		Valve figuration
<b>8</b> 1/2	N Female NPT	BVO	Ball Valve Outlet	-	Both Sides
		BPBVO	Ball Valve Plugged Outlet	R	Right Side
		BP	Plugged Drain	L	Left Side
		СР	Plugged Distribution Outlets		

8	N		BVO		
Distribution Valve Outlet Size (inch)	Distribution Valve Outlet Connection		Drain Options	Con	Valve figuration
<b>8</b> 1/2	N Female NPT	BVO	Ball Valve Outlet	-	Both Sides
		BPBVO	Ball Valve Plugged Outlet	R	Right Side
		BP	Plugged Drain	L	Left Side
		СР	Plugged Distribution Outlets		



## **Hi-Pro Distribution Manifold**

### **HPAHM** Series

Parker's Hi-Pro distribution manifolds are designed for applications that use liquid or gas, low temperature steam and hydraulic actuation. The pressure rating of these manifolds is dictated by the inlet/outlet Flange Class or the thread connection.

These Hi-Pro distribution manifolds feature an ergonomic vinyl sleeve on the valve handle to provide positive grip and ensure ease of operation. Each nut has an innovative domed design, which prevents ingress of moisture and contamination of the thread, therefore preventing corrosion.

They feature a part-welded construction, with all welds carried out by coded welders, providing assurance of their robustness and performance. These manifolds are NDT (Non Destructive Testing) applied, giving the customer greater assurance.

#### **Product Features**

- Available with four support feet drilled for mounting for ease of installation.
- Nominal bore body manufactured from a wide thick gauge 316 Stainless Steel
- Domed nuts
- Ergonomic vinyl sleeve
- Coded welding and non-destructive testing (NDT) as standard - guaranteed full penetration welds
- Greater volume capacity

#### **Applications**

· Liquid, gas and steam distribution

#### **Product Benefits**

- Ease of installation
- Corrosion resistant, eliminated internal scaling
- Domed nuts lock handles into place and prevent dirt and corrosion affecting the threads
- Easy to grip and comfortable
- Reliable, durable and safe
- Supports fluctuations in air compressor supply

#### Markets

- Oil and gas
- Petrochemical
- Chemical

#### How to Order

The correct part number is easily derived from the following number sequence

#### **Flanged Inlet Style**

HPAHM		S	6		8		F	15	50		8		N
Series	Material		Number of Distribution Valve Outlets	Inlet Size (inch)		Inlet Connection		Flange Class		Drain Valve Outlet Size (inch)		Drain Valve Outlet Connection	
НРАНМ	s	Stainless Steel	Insert Number From 4-20*	8 12	1/2 3/4	F T	Raised Face Ring Type	150	150	8 12	1/2 3/4	N K	Female NPT BSPT
High Pressure Distribution Manifold			1		1 11/2			300	300	16 24	1 11/2	R	BSPP
				32	2					32	2		

#### **Threaded Inlet Style**

HPAHM		S	4		8		R		8		N	
Series		Material	Number of Distribution Valve Outlets	-	et Size nch)	Inl	et Connection	-	/alve Outlet e (inch)		in Valve Outlet Connection	
НРАНМ	s	Stainless	Insert Number	8	1/2	Ν	Female NPT	8	1/2	Ν	Female NPT	1
High Pressure		Steel	From 4-20*	12	3/4	κ	BSPT	12	3/4	к	BSPT	
Distribution Manifold			<u>I</u>	16	1	R	BSPP	16	1	R	BSPP	
				24	11/2			24	11/2			-
				32	2			32	2			

\* Max. 10 valves on each side. Even numbers only when specifying Both Sides configuration.



Hi-Pro distribution manifold with 10 distribution valve outlets.

#### **Specifications**

Central Pipe Body Material	Stainless Steel AISI 316
Ball Material	Stainless Steel 316
Stem Material	Stainless Steel 316
Seat Material	PTFE (standard), PEEK (o
Working Pressure	<ul> <li>Threaded inlet style: Ma psi (192 bar)</li> <li>Flanged inlet style: dep on Flange Class</li> </ul>
Temperature Rating	-54 °C to 180 °C (PTFE se -54 °C to 200 °C (PEEK se

M10	Α	BVO		
Distribution Valve Outlet Size	Distribution Valve Outlet Connection	Drain Options	Valve Configuration	High Temp. Option (PEEK seat)
<ul> <li>4 1/4"</li> <li>6 3/8"</li> <li>8 1/2"</li> </ul>	<ul><li>N Female NPT</li><li>K BSPT</li><li>R BSPP</li></ul>	BVOBall Valve OutletBPBVOBall Valve Plugged Outlet	- Both Sides <b>R</b> Right Side	HT High Temp.
4 1/4" 6 3/8" 8 1/2"	A A-LOK	BPPlugged Drain (Outlet)CPPlugged Distribution Outlets	L Left Side	
M6         6mm           M10         10mm           M12         12mm				
8	N	BVO		
Distribution Valve Outlet Size	Distribution Valve Outlet Connection	Drain Options	Valve Configuration	
4         1/4"           6         3/8"           8         1/2"	<ul><li>N Female NPT</li><li>K BSPT</li><li>R BSPP</li></ul>	BVOBall Valve OutletBPBVOBall Valve Plugged OutletBPPlugged Drain (Outlet)	<ul> <li>Both Sides</li> <li>R Right Side</li> <li>L Left Side</li> </ul>	
4 1/4" 6 3/8" 8 1/2" M6 6mm M10 10mm	A A-LOK	CP Plugged Distribution Outlets	L Leit Side	
M12 12mm		] 7		



## **Hi-Pro Modular Distribution Manifold**

HPDM Series - up to 6,000 psi

Parker's Hi-Pro modular distribution manifolds are the ideal choice when flexibility is required within a distribution manifold. They are approved to operate at pressures up to 6,000 PSI and are used extensively in the oil, gas, chemical and petrochemical industries to provide safety and performance.

These innovative Hi-Pro modular distribution manifolds can be easily arranged in a layout to suit a wide range of different applications to distribute liquid or gas. They use standard components, therefore making it more affordable for the customer.

The Hi-Pro modular distribution manifolds feature an ergonomic vinyl sleeve on the valve handle to provide positive grip and ensure ease of operation. Each nut is domed in shape, which prevents ingress of moisture and contamination of the thread, which could cause corrosion. This manifold is available in up to 20 valves (even numbers only - spare valves can be blanked off). Temperature range up to 232°C with PEEK seats.

#### **Product Features**

- Manufactured from AISI 316 stainless steel
- Ergonomic vinyl sleeve
- Domed nuts
- Standard wall mounting (also permits mounting to a 2" NB pipe stand)
- Offers flexibility of inlet, with the option to connect a single valve to the inlet to act as a primary isolate valve.



#### How to Order

The correct part number is easily derived from the following number sequence

HPDM		В	6	8	R	8	K		8	N	BP	
Series		Material	Number of Distribution Valve Outlets	Inlet Size (inch)	Inlet Connection	Drain Valve Outlet Size (inch)	Drain Valve Outlet Connection		Distribution Valve Outlet Size (inch)	Distribution Valve Outlet Connection	Drain Options	
HPDM		B Stainless	Insert Number	<b>8</b> 1/2	N Female NPT	<b>8</b> 1/2	N Female NPT		<b>4</b> 1/4	N Female NPT	BP Plugged Drain	
Hi-Pro Modu	ılar	Steel	From 4-20	<b>12</b> 3/4	K BSPT	<b>12</b> 3/4	K BSPT		<b>6</b> 3/8	K BSPT	CP Plugged Distrik	
Distribution	n		I	<b>16</b> 1	R BSPP	<b>16</b> 1	R BSPP		<b>8</b> 1/2	R BSPP	BCP All Outlets Plu	
Manifold				L	1	1		]		1		

#### **Product Benefits**

- Corrosion resistant
- Easy and comfortable to grip
- Domed nuts lock handles into place and prevent dirt or corrosion affecting the threads
- Ease of assembly
- Flexibility in design



Hi-Pro modular distribution manifold with 10 distribution valve outlets.

#### **Specifications**

Central Pipe Body Material	Stainless Steel AISI 316
Ball Material	Stainless Steel 316
Stem Material	Stainless Steel 316
Seat Material	PTFE/PEEK
Maximum Working Pressure	6,000 psi (414 bar)
Temperature Rating	-54 °C to 232 °C



#### Markets

- Oil and gas
- Petrochemical
- Chemical

#### **Applications**

• Liquid and gas distribution

ain (Outlet) tribution Outlets Plugged

## **Compact Distribution Manifold**

### **Complementary Products**

### HCDM Series - up to 6,000 psi

Parker's HCDM Series compact distribution manifolds offer a very compact design, making them suitable for space saving applications. They operate at pressures up to 6.000 PSI and feature all valves on the front face, for ease of accessibility.

These compact distribution manifolds utilise needle valves to enhance their compact design. They feature an anti-tamper key, which avoids unauthorised operator access.

The HCDM Series compact distribution manifolds are suitable for use with air and steam applications in the oil and gas, petrochemical and chemical industries. Ideal for panel mounting, these compact distribution manifolds feature all the valves on the front face, for ease of accessibility.

#### Product Features

- Valve style: globe style needle valve metal/ metal seat with retained operating key
- Material: AISI 316 stainless steel
- Main inlet: 1/2" female pipe thread (NPT)
- Main outlets: 1/2" female pipe thread (NPT)
- Distribution outlets: 1/4" female pipe thread (NPT) as standard.



#### How to Order

The correct part number is easily derived from the following number sequence

HCDM	S		5		3	PK		K		AT	NC	
Series		Material	Number of Distribution Valve Outlets		Packing Material		Tips Conn		nection	Anti Tamper	Compliance	
HCDM	s	Stainless	5	5	3 Graphite	9	Kel-F	κ	BSPT	AT Anti-tamper	NC	NACE
Compact		Steel	10	10		РК	PEEK	R	BSPP	bonnets and		
Distribution						ST	Stellite			loose operating		
Manifold						RT	Regulating			key		



#### Fittings & Materials (Catalogue 4190-FMTG)

#### Process to Instrumentation Valves

- TAMAP 2 star ball or needle valve class A or class B •
- Single block and bleed or double block and bleed ٠
- Available in the following materials 316, Duplex or alloy 625 ٠
- A-LOK ,CPI or BSPP connections •
- Flange classes: 600 (covers 150, 300 and 600) class 2500 (covers 900, 1500 and 2500)

#### H Series Instrument Needle Valves (Catalogue 4190-VMS)

- Compact needle valves For applications up to 10,000 psi (690 bar) ٠ Available with integral A-LOK<sup>®</sup> or CPI<sup>™</sup> connections, reducing leak paths and reducing
- installation costs
- ٠ Fire safe option

#### HBV Series Instrument Ball Valves (Catalogue 4190-HBV)

- Suitable for the most demanding applications in the oil, gas and process control industries • Integral compression ends available, eliminating taper threads and thread sealants ۰

  - Two piece barstock design reduces body leakage paths
- - NACE MR-01-75/ISO 15156 compliant materials available ٠
  - Fire safe option •

#### Parker Grade Tube (Catalogue 4190-FMTG)

٠ link, tubing





 A complete guide to Parker IPDE's fittings, tubing and materials. Including tubing charts, anti corrosion information together with a comprehensive guide to the complete range of fittings

Soft tipped optional seating available for gaseous applications

Complies with ANSI/ASME B16.34 requirements where applicable

Parker's Instrument tube fittings have been engineered and manufactured to consistently provide high levels of reliability, no systems integrity is complete without considering the critical

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