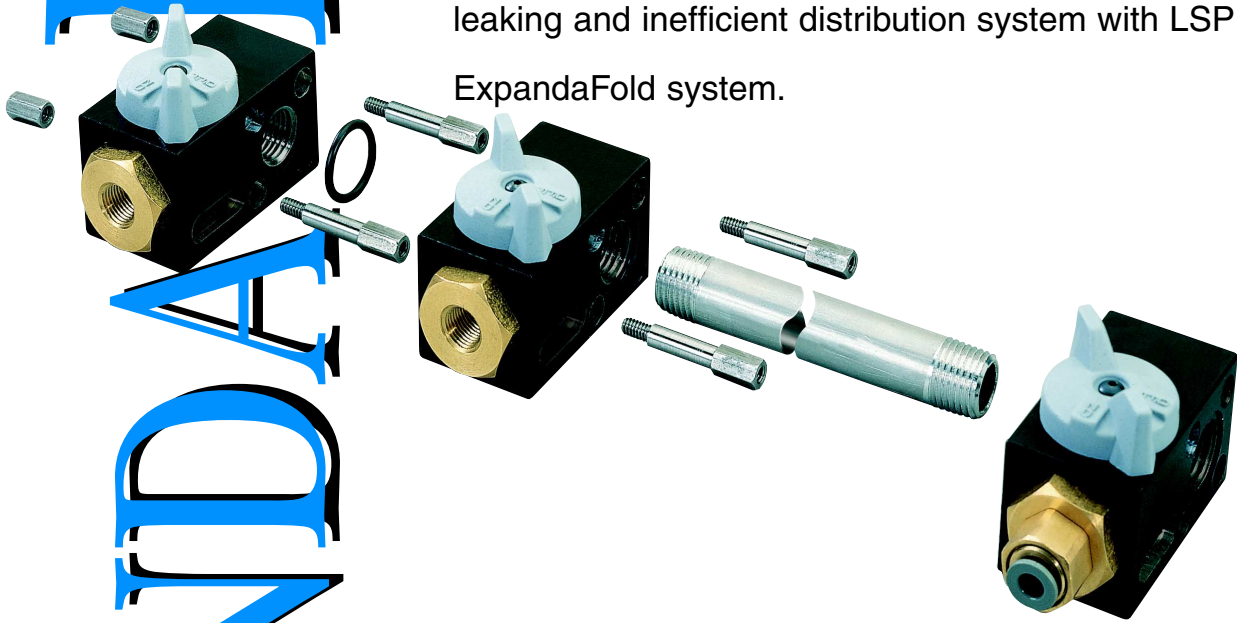


EXPANDAFOLD

THE ULTIMATE DISTRIBUTION SYSTEM

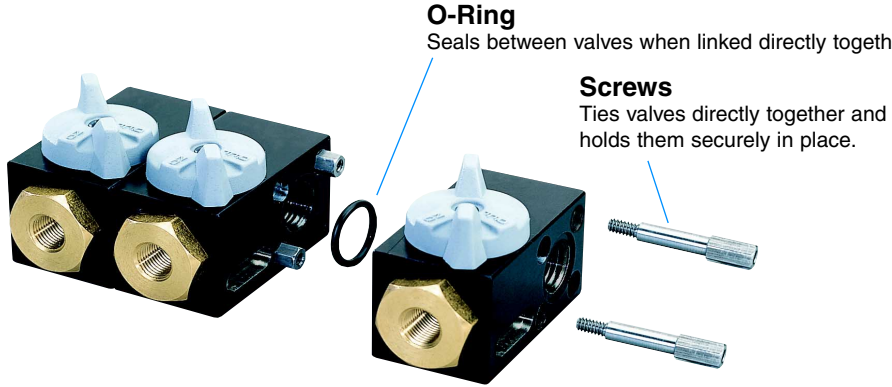
The ExpandaFold, a state-of-the-art manifold system that uses less fittings, has less joints, eliminates leaks and cleans up the unsightly messes associated with makeshift manifolds. Whether it is used to transport air or fluid, the ExpandaFold will transform manifold chaos to impeccable order. See how easy it is to replace that sloppy, leaking and inefficient distribution system with LSP Industries ExpandaFold system.



THE EXPANDAFOLD SYSTEM

THE EXPANDAVALVE AND OFF-THE-SHELF COMPONENTS

The heart of the Expandafold System, the Expandavalve comes ready to assemble into customized manifolds*. Expandavalves are designed to be assembled into manifolds with screws, pipes and/or tubing. It's that simple! They can be assembled in a variety of configurations as shown below.

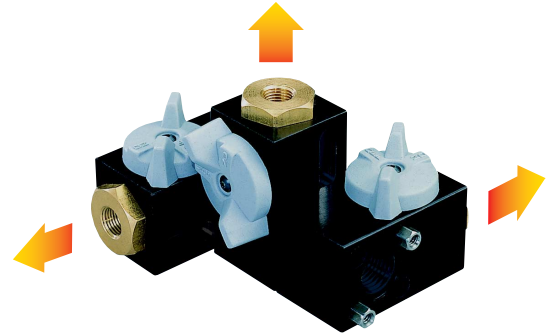


O-Ring

Seals between valves when linked directly together

Screws

Ties valves directly together and holds them securely in place.



Cluster Type Installations

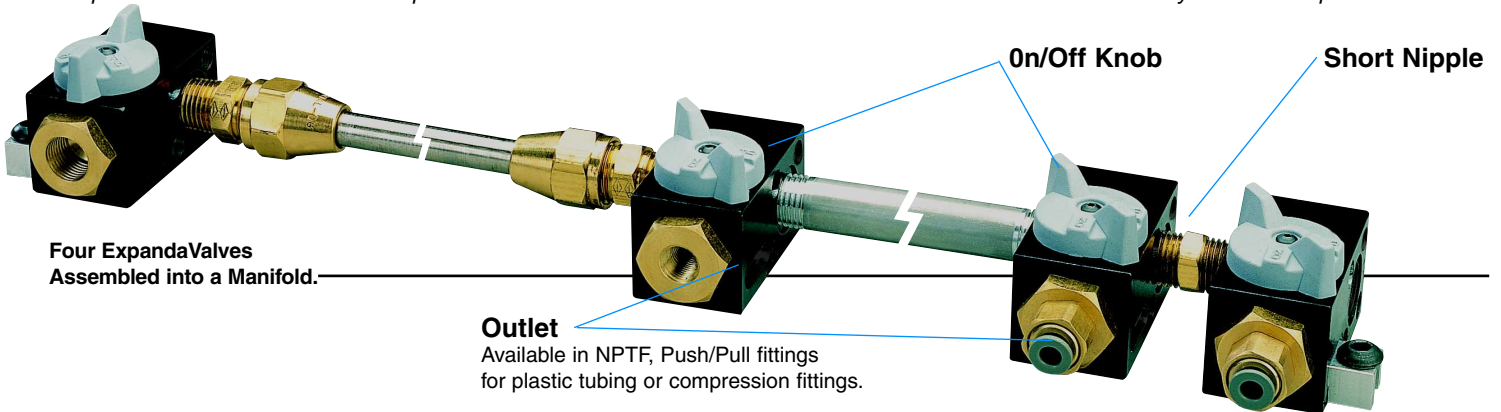
Expandavalves can be assembled in a tight cluster, one valve actually touching another. This arrangement conserves space and allows them to be mounted in

They are assembled with an o-ring between each valve and they are held together with interlocking screws, that thread into each other.

Angled Set-up

This method of assembly makes it possible for the Expandavalves to be mounted in a horizontal line or to aim each valve 90°, 180° or 270° from the adjoining one.

* Expandavalves can be ordered in pre-assembled clusters at an economical cost. Call LSP Industries Inc. with your custom specifications



Four Expandavalves Assembled into a Manifold.

On/Off Knob

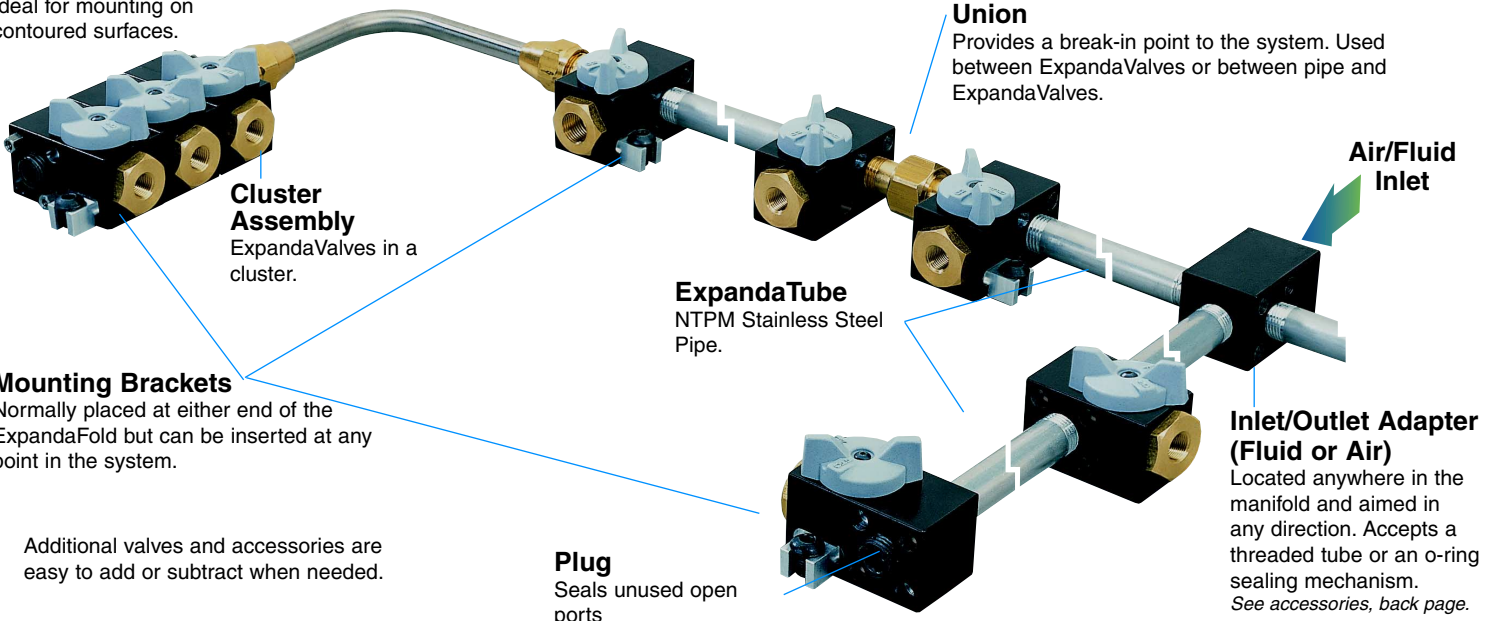
Short Nipple

Outlet

Available in NPTF, Push/Pull fittings for plastic tubing or compression fittings.

Tubing w/ Flared Fittings

Ideal for mounting on contoured surfaces.



Cluster Assembly

Expandavalves in a cluster.

Mounting Brackets

Normally placed at either end of the Expandafold but can be inserted at any point in the system.

Union

Provides a break-in point to the system. Used between Expandavalves or between pipe and Expandavalves.

ExpandaTube

NTPM Stainless Steel Pipe.

Air/Fluid Inlet

Inlet/Outlet Adapter (Fluid or Air)

Located anywhere in the manifold and aimed in any direction. Accepts a threaded tube or an o-ring sealing mechanism. See accessories, back page.

Plug

Seals unused open ports

Additional valves and accessories are easy to add or subtract when needed.

ORDERING



Part Number
VBS02x02F

VB

Item

VB - Valve,
Ball

S

Housing
Material

A - Aluminum
S - Stainless
Steel

02

Inlet
Thread Size

02 - 1/8" NPTF
04 - 1/4" NPTF
06 - 3/8" NPTF
08 - 1/2" NPTF

X

02

Outlet
Thread Size

02 - 1/8"
NPTF
04 - 1/4"
NPTF
04 - 1/4" Tube
06 - 3/8"

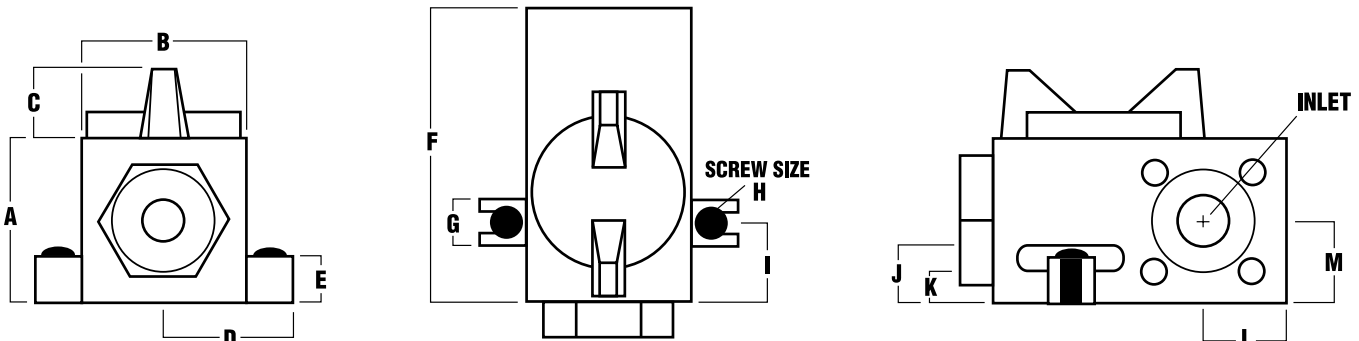
F

Outlet
Type

F - Female
P - Push/Pull
C -
Compression

ExpandValves are full flow relative to their inlets and are rated for pressures up to 1000 PSI. Push/Pull fittings are rated at **150 PSI** regardless of the ExpandValve ratings.

SPECIFICATIONS



Valve Specifications

ExpandValve	A	B	C	D	E	F	G	H	I	J	K	L	M
Valve w/1/8" or 1/4" NPTF Inlet	1.125	1.125	.500	.9685	.500	2.037	.500	1/4-20	.500	.250	.437	.5625	.5625
Valve w/3/8" or 1/2" NPTF Inlet	1.500	1.500	.625	.9685	.500	2.850	.500	1/4-20	1.450	.250	.437	.7500	.7500

ACCESSORIES



Stainless Steel Pipe

Length	1/8" NPTM	1/4" NPTM	3/8" NPTM	1/2" NPTM
6"	VPS06X02	VPS06X04	VPS06X06	VPS06X08
12"	VPS12X02	VPS12X04	VPS12X06	VPS12X08
18"	VPS18X02	VPS18X04	VPS18X06	VPS18X08
24"	VPS24X02	VPS24X04	VPS24X06	VPS24X08
30"	VPS30X02	VPS30X04	VPS30X06	VPS30X08
36"	VPS36X02	VPS36X04	VPS36X06	VPS36X08

**Special lengths available upon request.*



Unions

For use in ExpandaFold systems where multiple ExpandaValves are assembled in clusters or they are used in long assemblies connected by pipes. Allows for easy disengagement of the valves at strategic locations if changes have to be made. Can be used between two valves or between a valve and a pipe.

Unions for use between two ExpandaValves

Part Number	Material	Thread
VUB02Mx02M	Brass	1/8" NPTM x 1/8" NPTM
VUB04Mx04M	Brass	1/4" NPTM x 1/4" NPTM
VUB06Mx06M	Brass	3/8" NPTM x 3/8" NPTM
VUB08Mx08M	Brass	1/2" NPTM x 1/2" NPTM
VUS02Mx02M	Stainless Steel	1/8" NPTM x 1/8" NPTM
VUS04Mx04M	Stainless Steel	1/4" NPTM x 1/4" NPTM
VUS06Mx06M	Stainless Steel	3/8" NPTM x 3/8" NPTM
VUS08Mx08M	Stainless Steel	1/2" NPTM x 1/2" NPTM

Unions for use between two ExpandaValve and Pipe

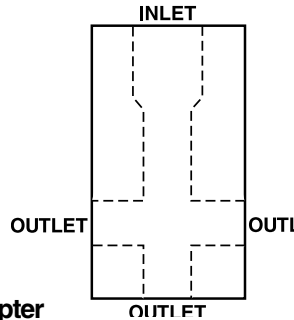
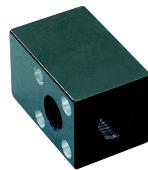
Part Number	Material	Thread
VUB02Mx02F	Brass	1/8" NPTM x 1/8" NPTF
VUB04Mx04F	Brass	1/4" NPTM x 1/4" NPTF
VUB06Mx06F	Brass	3/8" NPTM x 3/8" NPTF
VUB08Mx08F	Brass	1/2" NPTM x 1/2" NPTF
VUS02Mx02F	Stainless Steel	1/8" NPTM x 1/8" NPTF
VUS04Mx04F	Stainless Steel	1/4" NPTM x 1/4" NPTF
VUS06Mx06F	Stainless Steel	3/8" NPTM x 3/8" NPTF
VUS08Mx08F	Stainless Steel	1/2" NPTM x 1/2" NPTF



Nipples

For short connections

Thread	Brass
1/8" NPT	VNB02
1/4" NPT	VNB04
3/8" NPT	VNB06
1/2" NPT	VNB08



Inlet/Outlet Adapter

When on/off control is not needed, an inlet/outlet adapter is an efficient solution. There are four ports to the adapter. The main Inlet port is one NPT size larger than all other ports. The oversized inlet takes in a larger volume of air or liquid for redistribution to the ExpandaValves. This extra capacity aids in distributing adequate volume to the valves. If volume is not a consideration, any port may be used as an inlet port. Any or all of the remaining ports may be used as outlet ports. Any port not being used can be plugged. A manifold can be made completely out of inlet/outlet adapters or they can be located anywhere in an ExpandaFold system.

Sample Part Number **VAS04X02F**
Valve, Adapter

Inlet Size (one NPT size larger than outlet size)



Pipe Plug

Thread	Brass
1/8" NPT	VGB02
1/4" NPT	VGB04
3/8" NPT	VGB06
1/2" NPT	VGB08



Mounting Brackets

Adapts to an ExpandValve. Two to a package, screws included.

Part Number	NPTF Inlet Sizes
901ACY-01	1/8", 1/4", 3/8" & 1/2"



Screw and O-Ring Kits

Two screws, two nuts and one o-ring are included in each package.

Part Number	NPTF Inlet Sizes
901ACY-02	1/8" & 1/4"
901ACY-03	3/8" & 1/2"



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