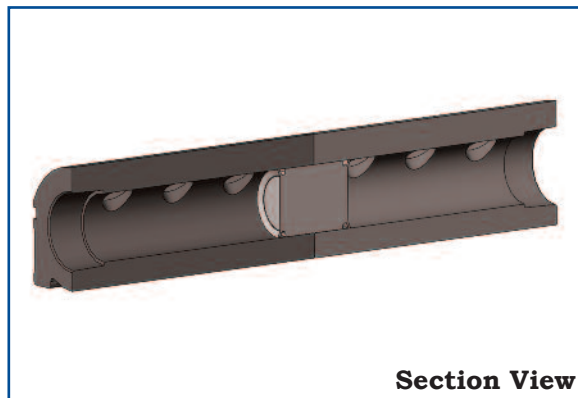


# SMARTFLOW® DUOFLOW® Aluminum Manifolds



Section View

## General Description

**SMARTFLOW® DUOFLOW®** Manifolds are robust extruded aluminum joined together by a stainless steel center plug. Red and blue color anodizing protects the manifolds from corrosion and denotes supply or return function. No end plug is needed.

The Duoflow design provides a shorter footprint specifically for mounting a manifold directly to an injection mold, or where space is limited. Port spacing is narrow for installation of hose barbs or quick disconnect fittings only. Custom manifolds are needed if ball valves will be installed.

Tool change time is significantly decreased by mounting manifolds directly to molds in storage. Water hookup is simplified to “Supply” and “Return” lines versus individual water lines for every circuit.

## Features and Benefits

- ◆ **Shorter Length** for easier mounting directly to injection molds
- ◆ **Mold-Mount** to speed mold changes
- ◆ **Economical, Proven Design** for reliability
- ◆ **Optional Quick Disconnect Fittings** for convenience and ease of installation
- ◆ **Supports Scientific Cooling<sup>sm</sup>** through consistent, repeatable water connections

## Specifications

Inlet Sizes .....	3/4", 1" or 1-1/2"
	NPT(F) standard
	British threads optional
Port Sizes .....	1/4", 3/8" & 1/2"
	NPT(F) standard
	British threads optional
	Contact the factory for special machining requirements
Operating Pressure max. ....	150 psi (10 bar)
Operating Temperature max. ....	210°F (99°C)
Body Material.....	Anodized Aluminum
Divider.....	Stainless Steel
O-Rings .....	EPDM

Galvanic corrosion may occur in anodized aluminum components when they are installed near piping or components made from more noble metals such as copper. Use appropriate installation practices to prevent corrosion.

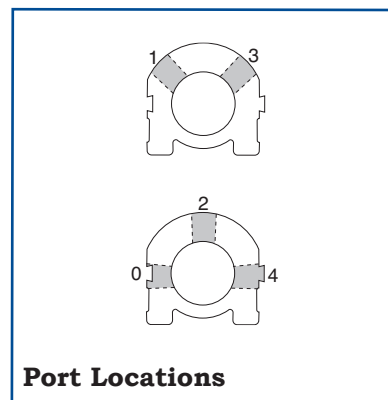
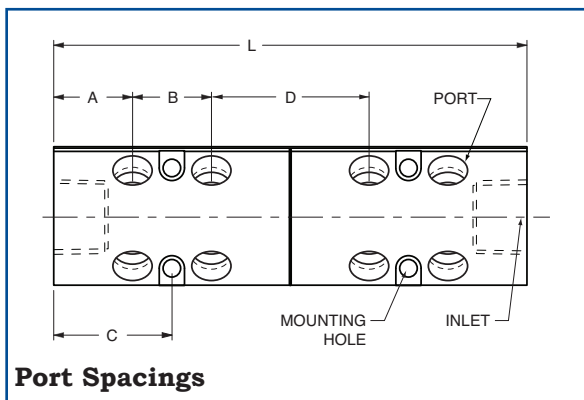
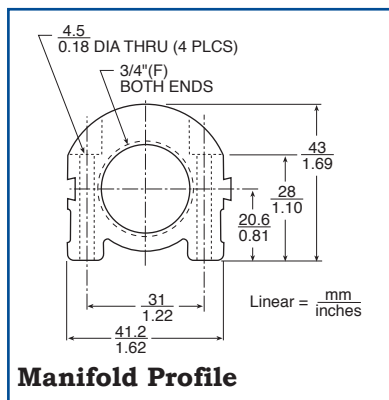
*Design and specifications are subject to change without notice.  
See page 19 for manifold testing and use.*

# SMARTFLOW® 3/4" DUOFLOW® Aluminum Manifolds

## Model Number

<b>Supply Threads</b>	6SDA -	16 -	2 -	13 -	YZ -	NA-H2
NPT British Parallel British Taper	6SDA 6BSDA 6TSDA	Total Number of Ports 4 to 24			Optional Brass Fittings NPT threaded manifolds only Omit suffix if no fittings are needed Hose Barb for 1/4"ID hose Hose Barb for 3/8"ID hose Quick Connect Plug 1/4"ID (200 Series) Quick Connect Plug 3/8"ID (300 Series)	
<b>Port Sizes</b>	*1/4"NPT(F) 1/4"BSPP(F) 1/4"BSPT(F) *stocked					
<b>Port Locations</b>	13 024		2 2B 2T		NOTE: For 3/4" and 1" Manifolds, use port locations 1 & 3 or 0, 2, & 4 in combination for proper port spacing. See diagram below. Manifolds with port locations 1&3 are stocked. Left & Right 45° Left, Center & Right	

Contact your distributor for custom manifolds.



### Stocked 3/4"NPT Manifolds

Model Number (without brass fittings)	Port Size	Total Ports	Ports Per End	A	B	C	D	Length L mm in.	Weight kg lbs.
6SDA- 8-2-13-YZ	1/4"NPT	8	4	25.4mm	25.4mm	38mm	50.8mm	152 6	.5 1.1
6SDA-12-2-13-YZ		12	6	1"	1"	1.5"	2"	203 8	.6 1.4
6SDA-16-2-13-YZ		16	8					254 10	.8 1.7

# SMARTFLOW<sup>®</sup> 1" DUOFLOW<sup>®</sup> Aluminum Manifolds

## Model Number

8SDA - 16 - 3 - 13 - YZ - NA-H3

### Supply Threads

NPT  
British Parallel  
British Taper

8SDA  
8BSDA  
8TSDA

### Total Number of Ports

4  
to  
24

### Port Sizes

1/4"NPT(F) 2  
1/4"BSPP(F) 2B  
1/4"BSPT(F) 2T  
\* 3/8"NPT(F) 3  
3/8"BSPP(F) 3B  
3/8"BSPT(F) 3T  
\*stocked

### Port Locations

NOTE: For 3/4" and 1" Manifolds, use port locations 1 & 3 or 0, 2, & 4 in combination for proper port spacing. See diagram below. Manifolds with port locations 1&3 are stocked.  
Left & Right 45°  
Left, Center & Right

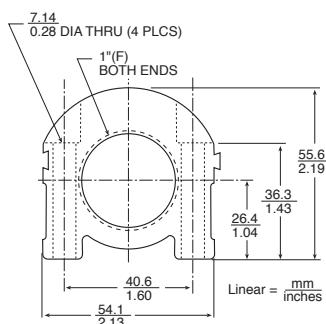
### Optional Brass Fittings

NPT threaded manifolds only

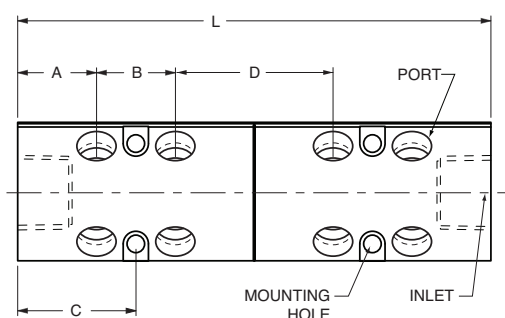
Omit suffix if no fittings are needed

NA-H2 Hose Barb for 1/4"ID hose  
NA-H3 Hose Barb for 3/8"ID hose  
NA-H4 Hose Barb for 1/2"ID hose  
NA-Q2 Quick Connect Plug 1/4"ID (200 Series)  
NA-Q3 Quick Connect Plug 3/8"ID (300 Series)  
NA-Q4 Quick Connect Plug 1/2"ID (500 Series)

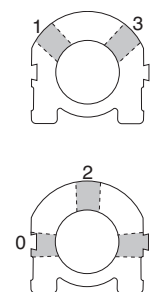
Contact your distributor for custom manifolds.



Manifold Profile



Port Spacings



Port Locations

### Stocked 1"NPT Manifolds

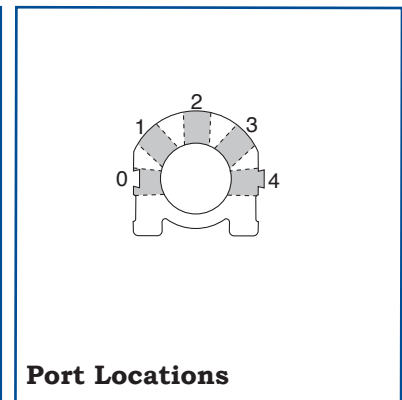
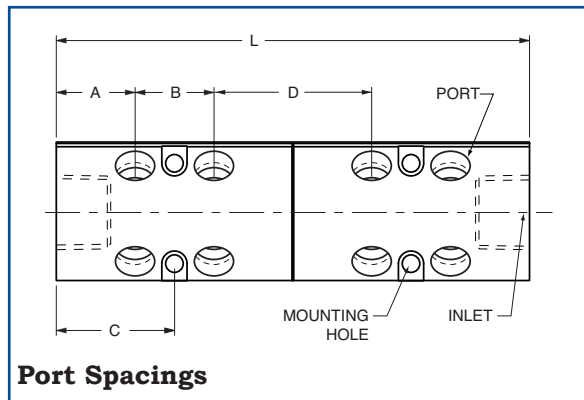
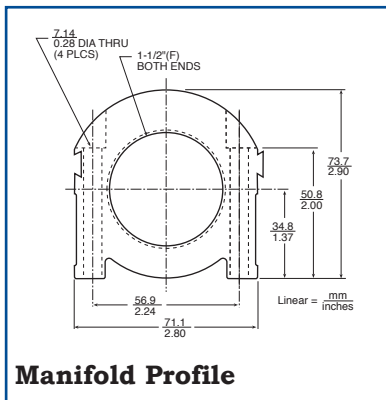
Model Number (without brass fittings)	Port Size	Total Ports	Ports Per End	A	B	C	D	Length L mm in.	Weight kg lbs.
8SDA- 8-3-13-YZ	3/8"NPT	8	4	32mm	32mm	47.6mm	57.2mm	184 7.25	1.1 2.4
8SDA-12-3-13-YZ		12	6	1.25"	1.25"	1.875"	2.25"	248 9.75	1.4 3
8SDA-16-3-13-YZ		16	8					311 12.25	1.7 3.7

# SMARTFLOW<sup>®</sup> 1-1/2" DUOFLOW<sup>®</sup> Aluminum Manifolds

## Model Number

<b>12SDA - 16 - 4 - 13 -YZ- NA-H4</b>	
<b>Supply Threads</b> NPT British Parallel British Taper	<b>12SDA</b> <b>12BSDA</b> <b>12TSDA</b>
<b>Total Number of Ports</b>	<b>4 to 80</b>
<b>Port Sizes</b> 3/8"NPT(F) 3/8"BSPP(F) 3/8"BSPT(F) * 1/2"NPT(F) 1/2"BSPP(F) 1/2"BSPT(F) *stocked	<b>3</b> <b>3B</b> <b>3T</b> <b>4</b> <b>4B</b> <b>4T</b>
	<b>0</b> <b>1</b> <b>2</b> <b>3</b> <b>4</b>
	<b>Port Locations</b> NOTE: Port locations 0 thru 4 may be used in any combination on 1-1/2" Aluminum Manifolds. Manifolds with port locations 1&3 are stocked. 0 Left Side 1 Left 45° 2 Center 3 Right 45° 4 Right Side
	<b>Optional Brass Fittings</b> NPT threaded manifolds only Omit suffix if no fittings are needed NA-H2 Hose Barb for 1/4"ID hose NA-H3 Hose Barb for 3/8"ID hose NA-H4 Hose Barb for 1/2"ID hose NA-Q2 Quick Connect Plug 1/4"ID (200 Series) NA-Q3 Quick Connect Plug 3/8"ID (300 Series) NA-Q4 Quick Connect Plug 1/2"ID (500 Series)

**Contact your distributor for custom manifolds.**



Stocked 1-1/2"NPT Manifolds									
Model Number (without brass fittings)	Port Size	Total Ports	Ports Per End	A	B	C	D	Length L mm in.	Weight kg lbs.
12SDA- 8-4-13-YZ	1/2"NPT	8	4	44.5mm	38mm	63.5mm	63.5mm	229 9	2.2 4.9
12SDA-12-4-13-YZ		12	6	1.75"	1.5"	2.5"	2.5"	305 12	2.8 6.2
12SDA-16-4-13-YZ		16	8					381 15	3.4 7.5