



# ALUMINUM Manifolds



## 4, 6, 8, 10, 12 and 16 Port Straight-Through Models

### SMARTFLOW ALUMINUM MANIFOLDS...

- **Extend Equipment Life and**
- **Stretch Your MRO Budget**

Add-on Ball Valves and Flowmeters increase versatility — **Inquire**

One-piece, extruded aluminum construction **WON'T LEAK / RESISTS CORROSION**

Slide channels along side of manifolds facilitate pairing

**1/4", 3/8" or 1/2" N.P.T. Inlet/Outlet**  
(Mold Supply or Return)

**Brass End Plug INCLUDED**



**3/4" 1", 1 1/2" or 2" N.P.T. Inlet/Outlet**

(Main Supply or Return)



**Pre-drilled Mounting Holes**  
(Screws INCLUDED)

### Specifications

<b>Material</b>	
3/4", 1", 1 1/2" .....	Aluminum (6105-T6)
2" .....	Aluminum (6005-T5)
<b>Inlet Size</b> .....	3/4", 1", 1 1/2" or 2" NPT(F) standard British threads optional
<b>Port Size</b> .....	1/4", 3/8" or 1/2" NPT
<b>Max. Pressure</b> .....	150 psig (10 bar)
<b>Max. Temperature</b> .....	300°F (149°C)
<b>Optional Ball Valves</b> .....	NPT only to match port size

Smartflow® aluminum manifolds are constructed from extruded material, machined, then anodized for corrosion protection. Many manifold sizes are stocked, however custom manifolds can be made to your specifications.

Standard red and blue anodizing denotes supply and return for cooling water lines. Green, black, clear and gold anodized manifolds are available. Call for pricing and delivery. 3/4", 1", and 1 1/2" manifolds are equipped with dovetail locking channels, pre-drilled mounting holes, and screws for ease in pairing and installation.

= Highest Quality & Value Products

= Industry Standard Quality Products

= Value-Priced Supplies



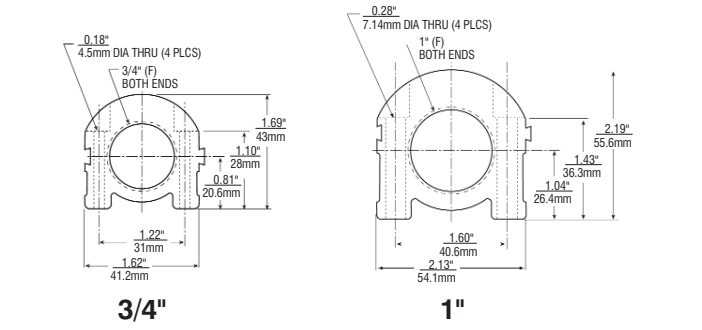
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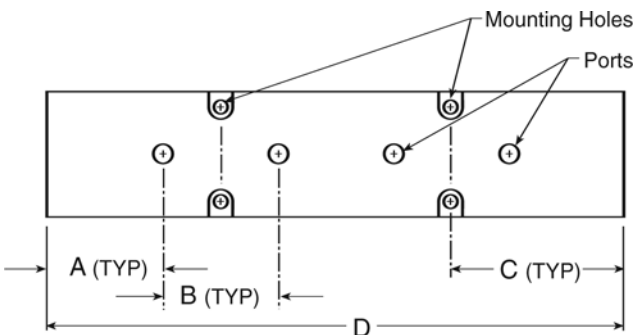
3/4" Manifolds					
Number of Ports		1/4" Ports		Weight	
	Model #	in.	mm	lbs.	kg
4	6SA-4-2-2	7.5	190	1.1	0.5
6	6SA-6-2-2	10.5	267	1.6	0.7
8	6SA-8-2-2	13.5	343	2.0	0.9
Number of Ports		3/8" Ports		Weight	
	Model #	in.	mm	lbs.	kg
4	6SA-4-3-2	9	229	1.4	0.6
6	6SA-6-3-2	13	330	2.0	0.9
8	6SA-8-3-2	17	432	2.6	1.2

1" Manifolds					
Number of Ports		1/4" Ports		Weight	
	Model #	in.	mm	lbs.	kg
4	SA-4-2-2	7.5	190	2.0	0.9
6	SA-6-2-2	10.5	267	2.8	1.3
8	SA-8-2-2	13.5	343	3.6	1.6
10	SA-10-2-2	16.5	419	4.5	2.0
12	SA-12-2-2	19.5	495	5.3	2.4
16	SA-16-2-2	25.5	648	6.9	3.1
Number of Ports		3/8" Ports		Weight	
	Model #	in.	mm	lbs.	kg
4	SA-4-3-2	9	229	2.4	1.1
6	SA-6-3-2	13	330	3.5	1.6
8	SA-8-3-2	17	432	4.6	2.1
10	SA-10-3-2	21	533	5.7	2.6
12	SA-12-3-2	25	635	6.8	3.1
16	SA-16-3-2	33	838	8.9	4.0



### Manifold Length (all sizes)

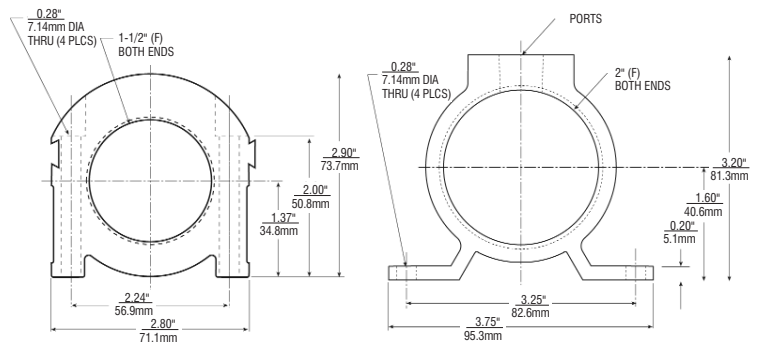
See chart at right



Total Manifold Length:  $D = [(number\ of\ ports - 1) \times B] + (2 \times A)$

1-1/2" Manifolds					
Number of Ports		1/2" Ports		Weight	
	Model #	in.	mm	lbs.	kg
4	12SA-4-4-2	10	254	4.4	2.0
6	12SA-6-4-2	14	356	6.2	2.8
8	12SA-8-4-2	18	457	7.9	3.6
10	12SA-10-4-2	22	559	9.7	4.4
12	12SA-12-4-2	26	660	11.4	5.1
16	12SA-16-4-2	34	864	15.0	6.7

2" Manifolds					
Number of Ports		1/2" Ports		Weight	
	Model #	in.	mm	lbs.	kg
4	A4-4	10	254	2.9	1.3
6	A6-4	14	356	4.1	1.8
8	A8-4	18	457	5.2	2.4
12	A12-4	26	660	7.5	3.4
16	A16-4	34	864	9.9	4.5



1-1/2"

2"

Dimension Chart (inches/mm)				
MANIFOLD SIZE	PORT SIZE	A	B	C
3/4" & 1"	1/8"	1.5" 38.1mm	1.0" 25.4mm	2.0" 50.8mm
	1/4"		1.5" 38.1mm	2.25" 57.2mm
	3/8"		2.0" 50.8mm	2.5" 63.5mm
	1/2"		2.0" 50.8mm	2.5" 63.5mm
1-1/2"	1/4"	1.5" 38.1mm	1.5" 38.1mm	2.25" 57.2mm
	3/8"		2.0" 50.8mm	2.5" 63.5mm
	1/2"		2.0" 50.8mm	3.0" 76.2mm
2"	3/4"	2.0" 50.8mm	3.0" 76.2mm	3.5" 88.9mm
	1"		2.0" 50.8mm	1.0" 25.4mm
	3/4"		3.0" 76.2mm	1.0" 25.4mm

continued on next page



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## ALUMINUM (3/4", 1", 1-1/2" & 2" Inlet/Outlet NPT)

Item #	Model #	Color	Inlet/Outlet NPT	Port NPT	# of Ports	Price
<b>Single Manifolds</b>						
143475	6SA-4-2-2-AY	Red	3/4"	1/4"	4	\$ 51.00
143476	6SA-4-2-2-AZ	Blue	3/4"	1/4"	4	51.00
143479	6SA-6-2-2-AY	Red	3/4"	1/4"	6	64.00
143480	6SA-6-2-2-AZ	Blue	3/4"	1/4"	6	64.00
143483	6SA-8-2-2-AY	Red	3/4"	1/4"	8	77.00
143484	6SA-8-2-2-AZ	Blue	3/4"	1/4"	8	77.00
143578	6SA-10-2-2-AY*	Red	3/4"	1/4"	10	90.00
143579	6SA-10-2-2-AZ*	Blue	3/4"	1/4"	10	90.00
143493	6SA-12-2-2-AY*	Red	3/4"	1/4"	12	120.00
143494	6SA-12-2-2-AZ*	Blue	3/4"	1/4"	12	120.00
143580	6SA-16-2-2-AY*	Red	3/4"	1/4"	16	129.00
143581	6SA-16-2-2-AZ*	Blue	3/4"	1/4"	16	129.00

Item #	Model #	Color	Inlet/Outlet NPT	Port NPT	# of Ports	Price
<b>Single Manifolds</b>						
143477	6SA-4-3-2-AY	Red	3/4"	3/8"	4	\$ 61.00
143478	6SA-4-3-2-AZ	Blue	3/4"	3/8"	4	61.00
143481	6SA-6-3-2-AY	Red	3/4"	3/8"	6	79.00
143482	6SA-6-3-2-AZ	Blue	3/4"	3/8"	6	79.00
143582	6SA-8-3-2-AY	Red	3/4"	3/8"	8	97.00
143583	6SA-8-3-2-AZ	Blue	3/4"	3/8"	8	97.00
143584	6SA-10-3-2-AY*	Red	3/4"	3/8"	10	115.00
143585	6SA-10-3-2-AZ*	Blue	3/4"	3/8"	10	115.00
143495	6SA-12-3-2-AY*	Red	3/4"	3/8"	12	138.00
143496	6SA-12-3-2-AZ*	Blue	3/4"	3/8"	12	138.00
143586	6SA-16-3-2-AY*	Red	3/4"	3/8"	16	169.00
143587	6SA-16-3-2-AZ*	Blue	3/4"	3/8"	16	169.00

Item #	Model #	Color	Inlet/Outlet NPT	Port NPT	# of Ports	Price
<b>Single Manifolds</b>						
143588	SA-4-2-2-AY	Red	1"	1/4"	4	\$ 60.00
143589	SA-4-2-2-AZ	Blue	1"	1/4"	4	60.00
143590	SA-6-2-2-AY	Red	1"	1/4"	6	75.00
143591	SA-6-2-2-AZ	Blue	1"	1/4"	6	75.00
143489	SA-8-2-2-AY	Red	1"	1/4"	8	90.00
143490	SA-8-2-2-AZ	Blue	1"	1/4"	8	90.00
143592	SA-10-2-2-AY	Red	1"	1/4"	10	105.00
143593	SA-10-2-2-AZ	Blue	1"	1/4"	10	105.00
143594	SA-12-2-2-AY	Red	1"	1/4"	12	120.00
143595	SA-12-2-2-AZ	Blue	1"	1/4"	12	120.00
143596	SA-16-2-2-AY	Red	1"	1/4"	16	180.00
143597	SA-16-2-2-AZ	Blue	1"	1/4"	16	180.00

Item #	Model #	Color	Inlet/Outlet NPT	Port NPT	# of Ports	Price
<b>Single Manifolds</b>						
143485	SA-4-3-2-AY	Red	1"	3/8"	4	\$ 66.00
143486	SA-4-3-2-AZ	Blue	1"	3/8"	4	66.00
143487	SA-6-3-2-AY	Red	1"	3/8"	6	84.00
143488	SA-6-3-2-AZ	Blue	1"	3/8"	6	84.00
143491	SA-8-3-2-AY	Red	1"	3/8"	8	102.00
143492	SA-8-3-2-AZ	Blue	1"	3/8"	8	102.00
143598	SA-10-3-2-AY	Red	1"	3/8"	10	120.00
143599	SA-10-3-2-AZ	Blue	1"	3/8"	10	120.00
143600	SA-12-3-2-AY	Red	1"	3/8"	12	138.00
143895	SA-12-3-2-AZ	Blue	1"	3/8"	12	138.00
143896	SA-16-3-2-AY	Red	1"	3/8"	16	174.00
143897	SA-16-3-2-AZ	Blue	1"	3/8"	16	174.00

\* Non-stock Items

Item #	Model #	Color	Inlet/Outlet NPT	Port NPT	# of Ports	Price
<b>Single Manifolds</b>						
143497	12SA-4-4-2-AY	Red	1-1/2"	1/2"	4	\$ 96.00
143498	12SA-4-4-2-AZ	Blue	1-1/2"	1/2"	4	96.00
143499	12SA-6-4-2-AY	Red	1-1/2"	1/2"	6	124.00
143500	12SA-6-4-2-AZ	Blue	1-1/2"	1/2"	6	124.00
143501	12SA-8-4-2-AY	Red	1-1/2"	1/2"	8	152.00
143502	12SA-8-4-2-AZ	Blue	1-1/2"	1/2"	8	152.00
143503	12SA-10-4-2-AY	Red	1-1/2"	1/2"	10	180.00
143504	12SA-10-4-2-AZ	Blue	1-1/2"	1/2"	10	180.00
143505	12SA-12-4-2-AY	Red	1-1/2"	1/2"	12	208.00
143506	12SA-12-4-2-AZ	Blue	1-1/2"	1/2"	12	208.00
143898	12SA-16-4-2-AY	Red	1-1/2"	1/2"	16	264.00
143899	12SA-16-4-2-AZ	Blue	1-1/2"	1/2"	16	264.00

Item #	Model #	Color	Inlet/Outlet NPT	Port NPT	# of Ports	Price
<b>Single Manifolds</b>						
143900	A4-4-AY	Red	2"	1/2"	4	\$ 98.00
143901	A4-4-AZ	Blue	2"	1/2"	4	98.00
143902	A6-4-AY	Red	2"	1/2"	6	122.00
143903	A6-4-AZ	Blue	2"	1/2"	6	122.00
143904	A8-4-AY	Red	2"	1/2"	8	146.00
143905	A8-4-AZ	Blue	2"	1/2"	8	146.00
143906	A12-4-AY	Red	2"	1/2"	12	194.00
143907	A12-4-AZ	Blue	2"	1/2"	12	194.00
143908	A16-4-AY	Red	2"	1/2"	16	242.00
143909	A16-4-AZ	Blue	2"	1/2"	16	242.00



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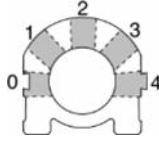


# Model Number Explanation

Example: **12SA-16-4-2-BY**

Would signify the Manifold is red, has 1-1/2" NPT Inlets and 16, 1/2" NPT Ports that are centered and include ball valves.

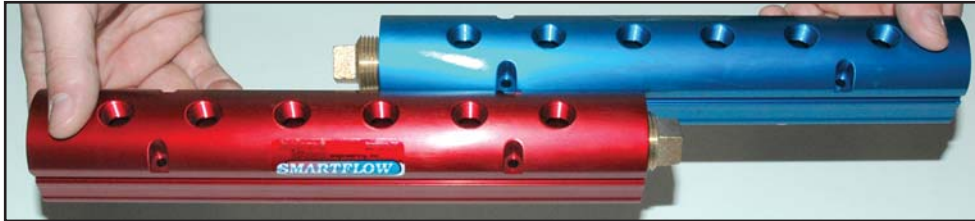
Inlet Thread Size & Type	# of Ports	Port Size	Port Location	Manifold Accessories	Color
<b>6SA</b> 3/4" NPT (F)	<b>4</b>	<b>2</b> 1/4" NPT (F)	<b>0</b> Left Side	<b>A</b> Manifold only	<b>Y</b> Red
<b>SA</b> 1" NPT (F)	<b>6</b>	<b>3</b> 3/8" NPT (F)	<b>1</b> Left 45°	<b>B</b> Ball Valves only	<b>Z</b> Blue
<b>12SA</b> 1-1/2" NPT (F)	<b>8</b>	<b>4</b> 1/2" NPT (F)	<b>2</b> Center	<b>C</b> Ball Valves and Plain Flowmeters	
<b>A</b> 2" NPT (F)*	<b>10</b>		<b>3</b> Right 45°	<b>D</b> Ball Valves and Flowmeters with Thermometers	
	<b>12</b>		<b>4</b> Right Side	<b>E</b> Ball valves and Flowmeters with Thermometers and Pressure Gauges	
	<b>16</b>			<b>F</b> Plain Flowmeters only	
				<b>H</b> Quick Connect Plugs	
				<b>J</b> Port Hose Barbs	
				<b>X</b> Special (consult the factory)	



\* NOTE: All manifolds with 2" Inlet/Outlet have centered ports

**Other thread styles and sizes available on request - INQUIRE**

For paired installation, slide manifolds together using dovetail lock along the side of each manifold



Manifold with flowmeters  
(Factory installation required.)



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