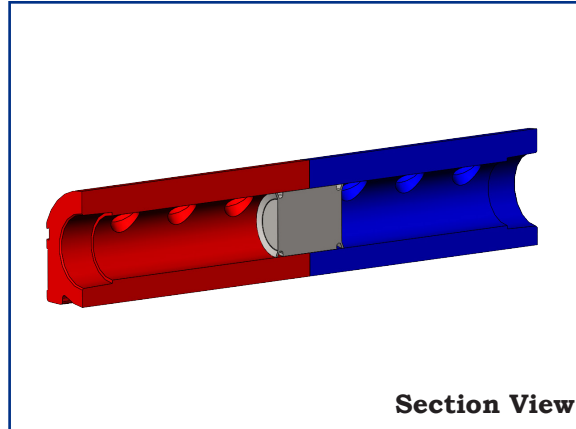


SMARTFLOW® DUOFLOW® Aluminum Manifolds



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 CoolingSM** 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 installed in electrical connection with 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

6SDA - 16 - 2 - 13 - YZ - NA-H2

Supply Threads
NPT
British Parallel
British Taper

6SDA
6BSDA
6TSDA

Total Number of Ports
4 to 24

Port Sizes

*1/4"NPT **2**
1/4"BSPP **2B**
1/4"BSPT **2T**
*stocked

13
024

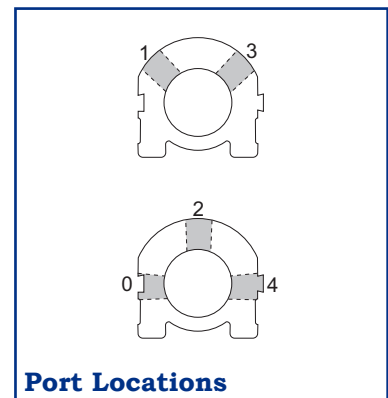
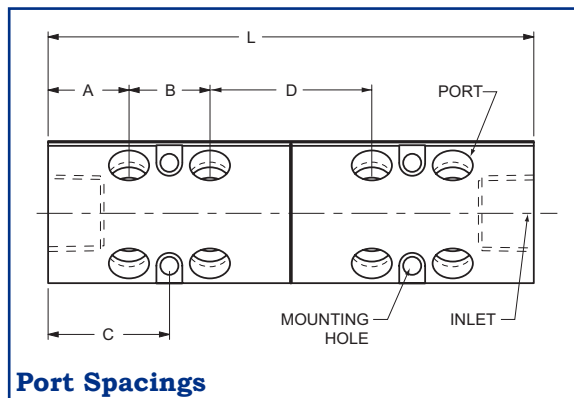
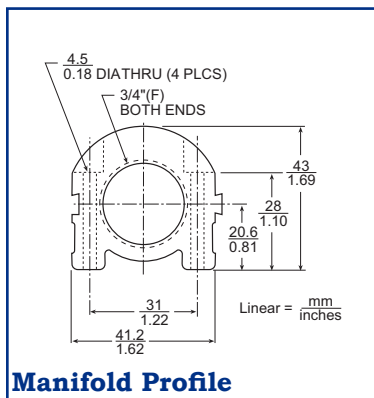
Port Locations

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-Q2 Quick Connect Plug 1/4"ID (200 Series)
NA-Q3 Quick Connect Plug 3/8"ID (300 Series)

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		Weight	
								mm	in.	kg	lbs.
6SDA- 8-2-13-YZ	1/4"NPT	8	4	25.4mm 1"	25.4mm 1"	38mm 1.5"	50.8mm 2"	152	6	.5	1.1
6SDA-12-2-13-YZ		12	6					203	8	.6	1.4
6SDA-16-2-13-YZ		16	8					254	10	.8	1.7

SMARTFLOW® 1" DUOFLOW® 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 2
1/4"BSPP 2B
1/4"BSPT 2T
*3/8"NPT 3
3/8"BSPP 3B
3/8"BSPT 3T
*stocked

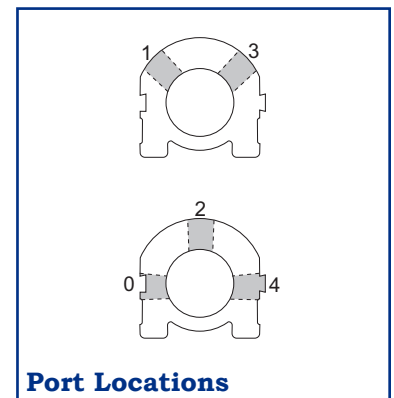
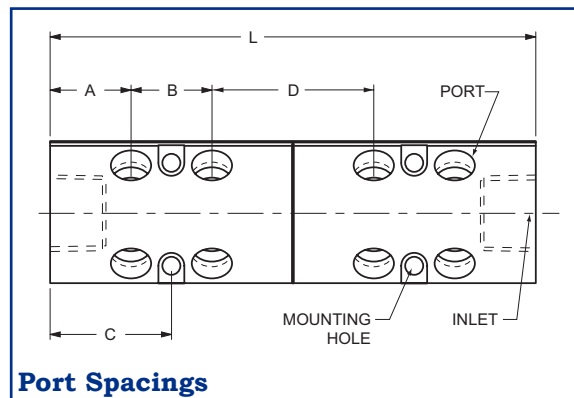
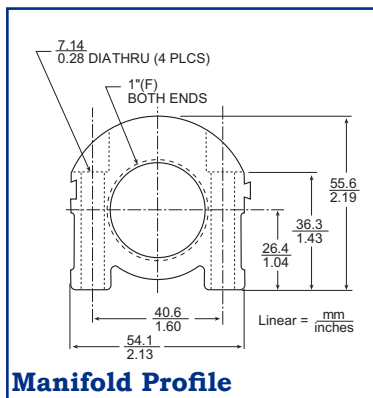
Port Locations

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°
13
024 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.



Stocked 1"NPT Manifolds											
Model Number (without brass fittings)	Port Size	Total Ports	Ports Per End	A	B	C	D	Length L		Weight	
								mm	in.	kg	lbs.
8SDA- 8-3-13-YZ	3/8"NPT	8	4	32mm 1.25"	32mm 1.25"	47.6mm 1.875"	57.2mm 2.25"	184	7.25	1.1	2.4
8SDA-12-3-13-YZ		12	6					248	9.75	1.4	3
8SDA-16-3-13-YZ		16	8					311	12.25	1.7	3.7

SMARTFLOW® 1-1/2" DUOFLOW® Aluminum Manifolds

Model Number

12SDA - 16 - 4 - 13 - YZ - NA-H4

Supply Threads
NPT
British Parallel
British Taper

12SDA
12BSDA
12TSDA

Total Number of Ports
4 to 80

Port Sizes

3/8"NPT 3
3/8"BSPP 3B
3/8"BSPT 3T
*1/2"NPT 4
1/2"BSPP 4B
1/2"BSPT 4T
*stocked

Port Locations

0 Left Side
1 Left 45°
2 Center
3 Right 45°
4 Right Side

Optional Brass Fittings

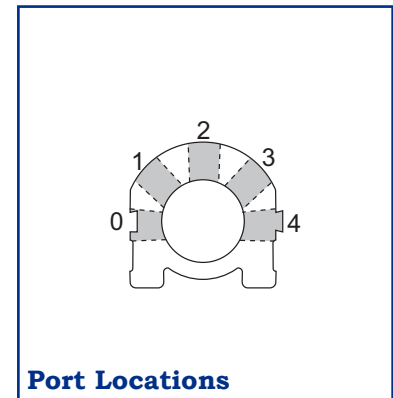
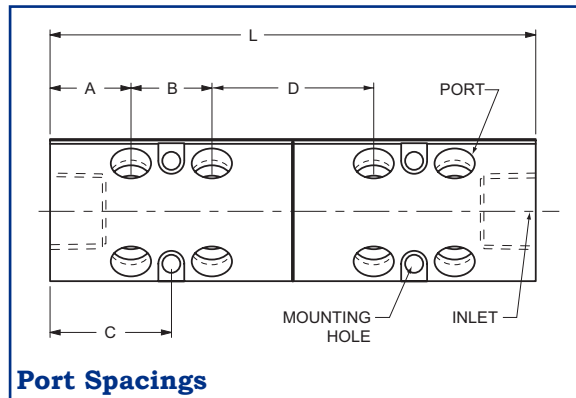
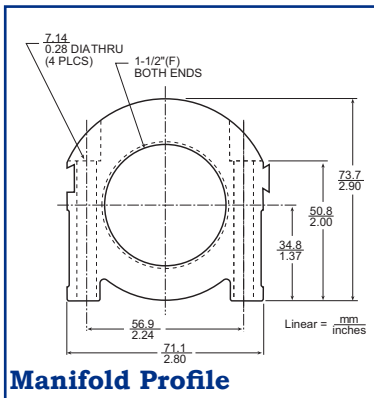
NPT threaded manifolds only

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)

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.

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		Weight	
								mm	in.	kg	lbs.
12SDA- 8-4-13-YZ	1/2"NPT	8	4	44.5mm 1.75"	38mm 1.5"	63.5mm 2.5"	63.5mm 2.5"	229	9	2.2	4.9
12SDA-12-4-13-YZ		12	6					305	12	2.8	6.2
12SDA-16-4-13-YZ		16	8					381	15	3.4	7.5