

## 52 Series Maniflex

The 52B, 52C and 52S series Maniflex are modular gas distribution systems that may be connected to regulators, dual regulator switchovers, IntelliSwitch and AutoSwitch systems. A modular gas distribution system allows the user to size the inlet capacity of a system so that cylinder changes will not be as frequent. The Maniflex system provides the user with the capability of purchasing an unlimited number of manifold stations connected to a single header. The Maniflex headers themselves may be purchased as a complete system (un-assembled) or as individual components.



52B-1232- shown

### Advanced Features

- Modular Design  
Flexible field installation
- Integral Diaphragm Valves  
Leak-tight integrity  
Independent shut-off capability
- Expandable System  
Future growth capability
- Brass, Chrome-Plated Brass or Stainless Steel  
No possibility of gas contamination
- Metal to Metal Field-Assembled Joints  
Easy leak-tight field assembly  
Ease of transportation
- Silver-Brazed or TIG Welded Connectors  
Contamination-free installation

### Specifications

- Maximum Inlet Pressure  
3000 PSIG (210 BAR)
- Temperature Range  
-40°F to 140°F
- Header  
0.625 OD x 0.188 wall (Brass)  
0.625 OD x 0.095 wall (Stainless)
- Diaphragm Valve  
Brass or stainless steel barstock (Body)  
PCTFE (Seat)  
303/304 stainless steel (Stems)  
Elgiloy® (Diaphragms)

## How to Order a Maniflex System

The Maniflex manifold systems are used either as a system with a regulator or as a part of an AutoSwitch automatic switchover system. Both options are depicted on page 33. Please note that 522, 523, 536, and 537 Series matrices already include Maniflex systems.

**Step One** Choose a material from those available in Series B, C, or S. Consult the table beginning on page 7 for information about gas compatibility.

**Step Two** Select a manifold orientation from those available in column A. Standard manifold headers space cylinders 12" apart; compact manifold headers space cylinders 6" apart. A single row manifold has one cylinder pigtail attached at each valve station; a double row manifold has two cylinder pigtails attached at each valve station; a duplex configuration includes two manifolds (one for each side of a switchover).

**Step Three** Determine the number of stations that will be used with the manifold system from Column B.

**Step Four** Choose a pigtail style from those available in column C.

**Step Five** To connect the outlet of the manifold system to an AutoSwitch, order the manifold connector assembly as the inlet connection for the AutoSwitch when ordering the AutoSwitch. To connect the outlet of the manifold system to a regulator, specify from Column D.

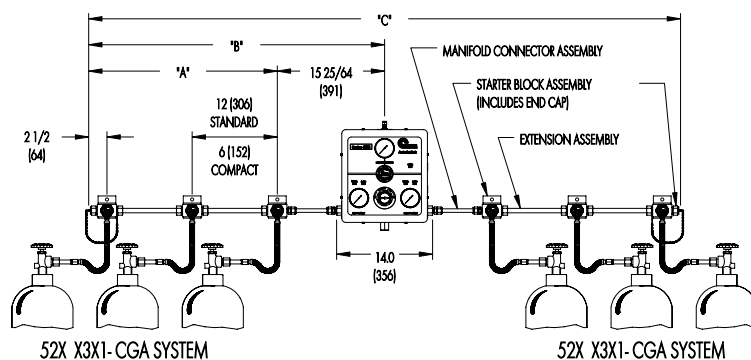
**Step Six** Specify the connection type for the pigtails from CON.

# 500 Series Distribution Systems

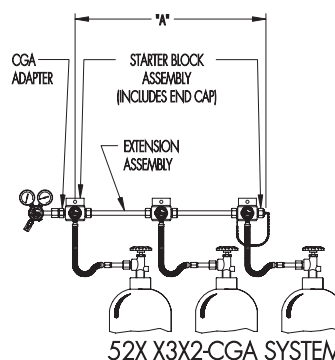


Dimensions ("A", "B", and "C" refer to the lengths specified on the diagram below.)

Cylinders per Side	1	2	3	4	5	6	7	8	9	10
"A" Standard (Single Row)	2.5"	14.5"	26.5"	38.5"	50.5"	62.5"	74.5"	86.5"	98.5"	110.5"
"B" Standard (Single Row)	17.891"	29.891"	41.891"	53.891"	65.891"	77.891"	89.891"	101.89"	113.89"	125.89"
"C" Standard (Single Row)	35.781"	59.781"	83.781"	107.78"	131.78"	155.78"	179.78"	203.78"	227.78"	251.78"
Weight Standard (Brass Single Row)	3.45 lbs	7.07 lbs	10.69 lbs	14.31 lbs	17.93 lbs	21.55 lbs	25.17 lbs	28.79 lbs	32.41 lbs	36.03 lbs
Weight Standard (SS Single Row)	3.33 lbs	6.45 lbs	9.57 lbs	12.69 lbs	15.81 lbs	18.93 lbs	22.05 lbs	25.17 lbs	28.29 lbs	31.41 lbs
"A" Compact (Single Row)	2.5"	8.5"	14.5"	20.5"	26.5"	32.5"	38.5"	44.5"	50.5"	56.5"
"B" Compact (Single Row)	17.891"	23.891"	29.891"	35.891"	41.891"	47.891"	53.891"	59.891"	65.891"	71.891"
"C" Compact (Single Row)	35.781"	47.781"	59.781"	71.781"	83.781"	95.781"	107.78"	119.78"	131.78"	143.78"
Weight Compact (Brass Single Row)	3.45 lbs	6.62 lbs	9.79 lbs	12.96 lbs	16.13 lbs	19.3 lbs	22.47 lbs	25.64 lbs	28.81 lbs	31.98 lbs
Weight Standard (SS Single Row)	3.33 lbs	6.27 lbs	9.21 lbs	12.15 lbs	15.09 lbs	18.03 lbs	20.97 lbs	23.91 lbs	26.85 lbs	29.79 lbs



Switchover System



Regulator System

## Ordering Information

52X	A	B	C	D	-CON
Series	Orientation	Stations	Pigtail Style	Outlet Connection	Pigtail Connection
52B Brass	1: Standard Single Row (right or left) (one cylinder/station)	0: 10 Stations	0: None	1: 1/4" FPT Connection	CGA DIN 477 BS 341 and others available
52C Chrome-Plated Brass	2: Standard Double Row (right or left) (two cylinders/stations)	1: 1 Station	2: 24" Flexible 316 Stainless Steel with Check Valve	2: Cylinder Connection Adapter	
	3: Standard Single Duplex (right and left) (one cylinder/station)	2: 2 Stations	3: 36" Flexible 316 Stainless Steel with Check Valve		
52S Stainless Steel	4: Compact Single Row (right or left) (one cylinder/station)	3: 3 Stations	6: 72" Flexible 316 Stainless Steel with Check Valve		
	5: Compact Double Row (right or left) (two cylinders/stations)	4: 4 Stations			
	6: Compact Single Duplex (right and left) (one cylinder/station)	5: 5 Stations			
		6: 6 Stations			
		7: 7 Stations			
	8: 8 Stations				
	9: 9 Stations				
	A: 11 Stations				
	B: 12 Stations				
	C: 13 Stations				
	D: 14 Stations				
	E: 15 Stations				