



# Manifolds

# 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 (unassembled) or as individual components.



52B 1232-580 shown

### 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**

Compatible with most gases

**Metal-to-Metal Field-Assembled Joints**

Easy leak-tight field assembly  
Ease of transportation

**Silver-Brazed or TIG-Welded Connectors**

Contamination-free installation

### Materials

**Diaphragm Valve**

Body: Brass or stainless steel barstock  
Seat: PCTFE  
Stems: 303/304 stainless steel  
Diaphragms: Elgiloy®

**Flexible Hoses**

316L stainless steel  
Monel® inner core for oxygen service

### Specifications

**Maximum Inlet Pressure**

3500 PSIG (240 BAR)

**Temperature Range**

-40°F to 140°F (-40°C to 60°C)

**Header**

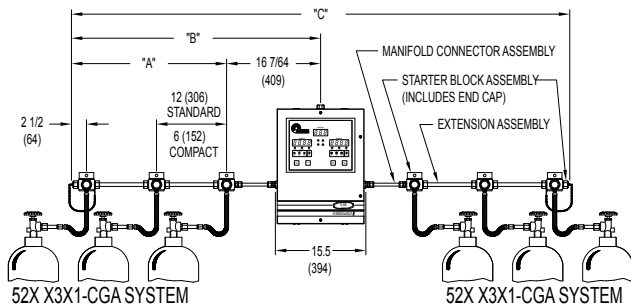
0.625 OD x 0.188 wall (brass)  
0.625 OD x 0.095 wall (stainless steel)

# Manifolds

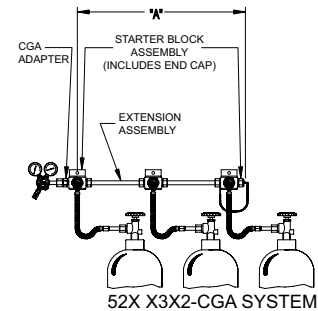


Dimensions ("A", "B", and "C" refer to the lengths specified on the diagram below.)

Cylinders per Side	1	2	3	4	5	6	7	8	9	10
"A" standard (single row)	2.5" (68mm)	14.5" (368mm)	26.5" (673mm)	38.5" (978mm)	50.5" (1283mm)	62.5" (1588mm)	74.5" (1892mm)	86.5" (2197mm)	98.5" (2502mm)	110.5" (2807mm)
"B" standard (single row)	18.6" (472mm)	29.6" (752mm)	42.6" (1082mm)	54.6" (1387mm)	66.6" (1692mm)	78.6" (1996mm)	90.6" (2301mm)	102.6" (2606mm)	114.6" (2911mm)	126.6" (3216mm)
"C" standard (single row)	37.3" (947mm)	59.3" (1506mm)	85.3" (2167mm)	109.3" (2776mm)	133.3" (3386mm)	157.3" (3995mm)	181.3" (4605mm)	205.3" (5215mm)	229.3" (5824mm)	253.3" (6434mm)
Weight standard (brass single row)	3.45 lbs (1.56 kg)	7.07 lbs (3.21 kg)	10.69 lbs (4.85 kg)	14.31 lbs (6.49 kg)	17.93 lbs (8.13 kg)	21.55 lbs (9.77 kg)	25.17 lbs (11.42 kg)	28.79 lbs (13.05 kg)	32.41 lbs (14.7 kg)	36.03 lbs (16.34 kg)
Weight standard (ss single row)	3.33 lbs (1.51 kg)	6.45 lbs (2.92 kg)	9.57 lbs (4.34 kg)	12.69 lbs (5.76 kg)	15.81 lbs (7.17 kg)	18.93 lbs (8.59 kg)	22.05 lbs (10 kg)	25.17 lbs (11.4 kg)	28.29 lbs (12.83 kg)	31.41 lbs (14.25 kg)
"A" compact (single row)	2.5" (68mm)	8.5" (216mm)	14.5" (368mm)	20.5" (521mm)	26.5" (673mm)	32.5" (826mm)	38.5" (978mm)	44.5" (1130mm)	50.5" (1283mm)	56.5" (1435mm)
"B" compact (single row)	18.6" (472mm)	24.6" (625mm)	29.6" (752mm)	36.6" (930mm)	42.6" (1082mm)	48.6" (1234mm)	54.6" (1372mm)	60.6" (1539mm)	66.6" (1692mm)	72.6" (1844mm)
"C" compact (single row)	37.3" (947mm)	49.3" (1252mm)	59.3" (1506mm)	73.3" (1862mm)	85.3" (2167mm)	97.3" (2471mm)	109.3" (2776mm)	121.3" (3081mm)	133.3" (3386mm)	145.3" (3691mm)
Weight compact (brass single row)	3.45 lbs (1.56 kg)	6.62 lbs (3.00 kg)	9.79 lbs (4.44 kg)	12.96 lbs (5.88 kg)	16.13 lbs (7.32 kg)	19.3 lbs (8.75 kg)	22.47 lbs (10.19 kg)	25.64 lbs (11.63 kg)	28.81 lbs (13.07 kg)	31.98 lbs (14.50 kg)
Weight compact (ss single row)	3.33 lbs (1.51 kg)	6.27 lbs (2.84 kg)	9.21 lbs (4.18 kg)	12.15 lbs (5.51 kg)	15.09 lbs (6.84 kg)	18.03 lbs (8.18 kg)	20.97 lbs (9.51 kg)	23.91 lbs (10.84 kg)	26.85 lbs (12.18 kg)	29.79 lbs (13.51 kg)



Switchover System



Regulator System

## Ordering Information

52X	A	B	C	D	-CON
Series	Orientation	Stations	Hose Style	Outlet Connection	Hose Connection
52B Brass	<b>1:</b> Standard single row (right or left) (one cylinder/station)	<b>0:</b> 10 stations	<b>0:</b> None	<b>1:</b> 1/4" FPT connection	CGA DIN 477 BS 341 and others available
52C Chrome-plated brass	<b>2:</b> Standard double row (right or left) (two cylinders/station)	<b>1:</b> 1 station	<b>2:</b> 24" (600mm) flexible 316 stainless steel with check valve	<b>2:</b> Cylinder connection adapter	
52S Stainless steel	<b>3:</b> Standard single duplex (right and left) (one cylinder/station)	<b>2:</b> 2 stations	<b>3:</b> 36" (900mm) flexible 316 stainless steel with check valve		
	<b>4:</b> Compact single row (right or left) (One cylinder/station)	<b>3:</b> 3 stations	<b>6:</b> 72" (1800mm) flexible 316 stainless steel with check valve		
	<b>5:</b> Compact double row (right or left) (two cylinders/station)	<b>4:</b> 4 stations			
	<b>6:</b> Compact single duplex (right and left) (one cylinder/station)	<b>5:</b> 5 stations			
		<b>6:</b> 6 stations			
		<b>7:</b> 7 Stations			
		<b>8:</b> 8 Stations			
		<b>9:</b> 9 Stations			
		<b>A:</b> 11 stations			
		<b>B:</b> 12 stations			
		<b>C:</b> 13 stations			
		<b>D:</b> 14 stations			
		<b>E:</b> 15 stations			