

# NA-4 Series

## Manifolds/Changeover Regulators

DNA042026X012

### Specifications

For other materials or modifications, please consult TESCOM.

#### OPERATING PARAMETERS

Pressure rating per criteria of ANSI/ASME B31.3

##### Maximum Inlet Pressure

3000 psig / 207 bar

##### Outlet Pressure Ranges

0-30 psig / 0-2.1 bar  
 0-60 psig / 0-4.1 bar  
 0-100 psig / 0-6.9 bar  
 0-150 psig / 0-10.3 bar  
 0-200 psig / 0-13.8 bar  
 0-300 psig / 0-20.7 bar  
 0-500 psig / 0-34.5 bar  
 0-750 psig / 0-51.7 bar  
 0-1000 psig / 0-68.9 bar  
 0-1500 psig / 0-103 bar

##### Design Proof Pressure

150% of rated pressure

##### Leakage

**Internal:** Bubble-tight

**External:** Bubble-tight

##### Operating Temperature

-40°F to 165°F / -40°C to 74°C

##### Flow Capacity

$C_v = 0.06$



TESCOM NA-4 Series Changeover System is designed to ensure a continuous supply of carrier and calibration gases with no interruption due to supply depletion or change out. Complete systems can include CGA connections, hoses, check valves, purge valves, pressure switches, alarms, etc.

#### MEDIA CONTACT MATERIALS

##### Seat

Teflon® (Regulators), CTFE (Valves)

##### Friction Sleeve (Inner)

Teflon®

##### Friction Sleeve (Outer)

316 Stainless Steel

##### Body

Brass, 316 Stainless Steel

##### Diaphragm (Outlet Option 0-5)

316 Stainless Steel

##### O-Rings (Outlet Option 6-9)

Buna-N

##### Remaining Parts

Brass, 316 Stainless Steel

#### OTHER

##### Panel

Brushed 304 Stainless Steel

##### Stems

316 Stainless Steel

##### Cleaning

CGA 4.1 and ASTM G93

##### Weight (approximate)

10 lbs / 4.5 kg

Teflon® is a registered trademark of E.I. du Pont de Nemours and Company.

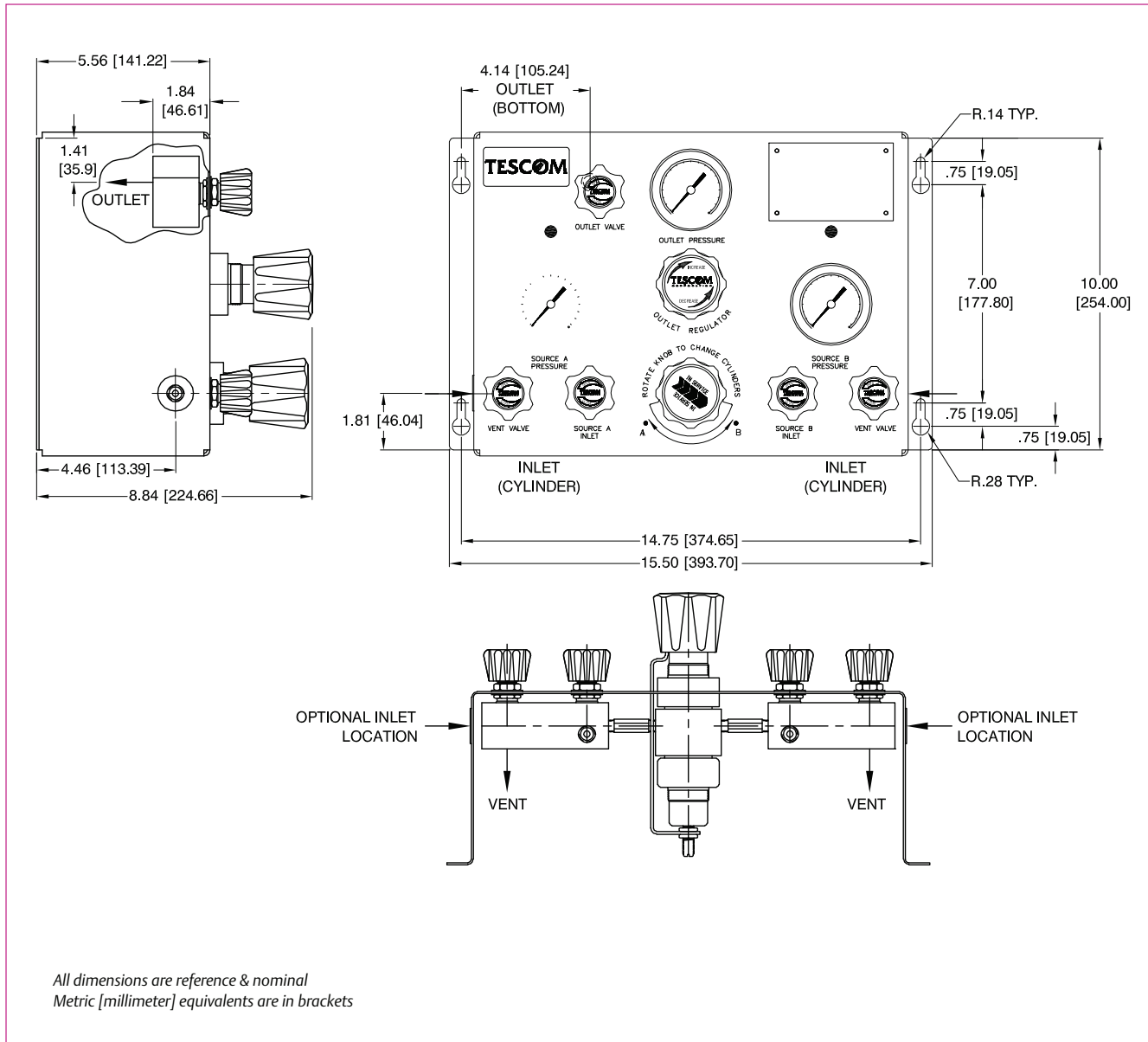
### Applications

- Petrochemical analyzer sampling systems
- Medical gas delivery systems
- Laboratories
- Welding gases

### Features and Benefits

- Supports up to eight cylinders per side - 16 total
- Brass or Stainless Steel regulators and valves
- Flexibility in shut-off valve type and location for increased customizing
- Available with either a low pressure or high pressure line regulator
- Optional remote mount annunciator

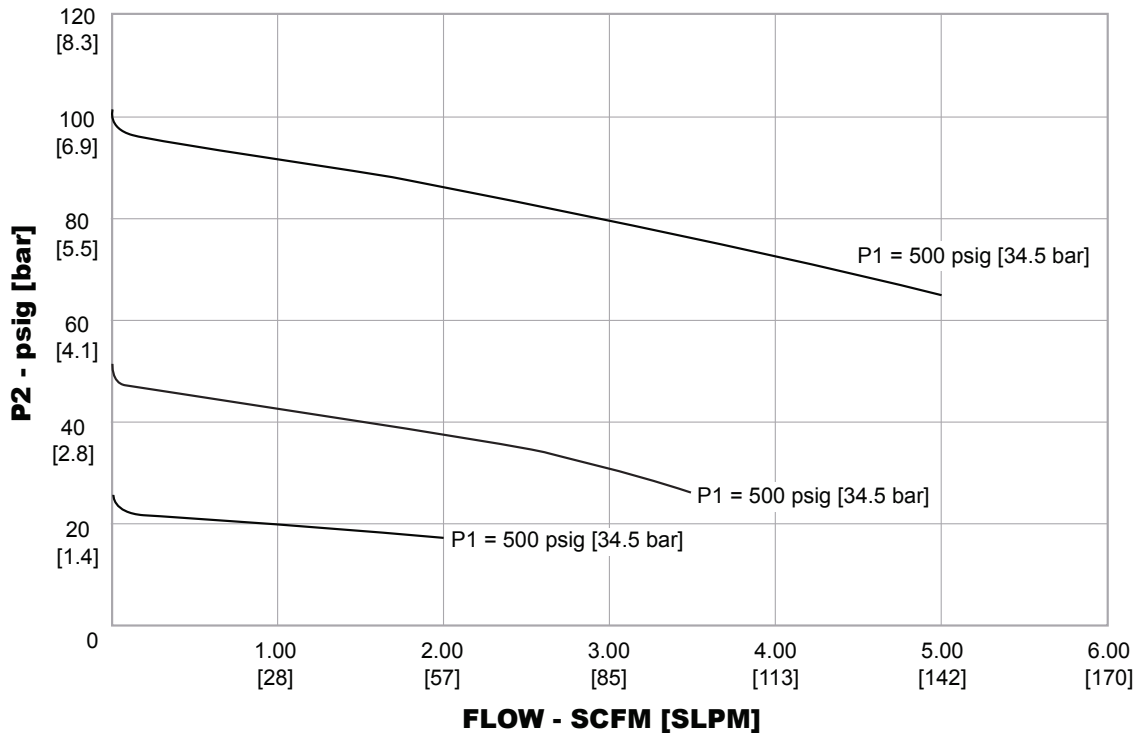
### NA-4 Series Changeover System Drawing



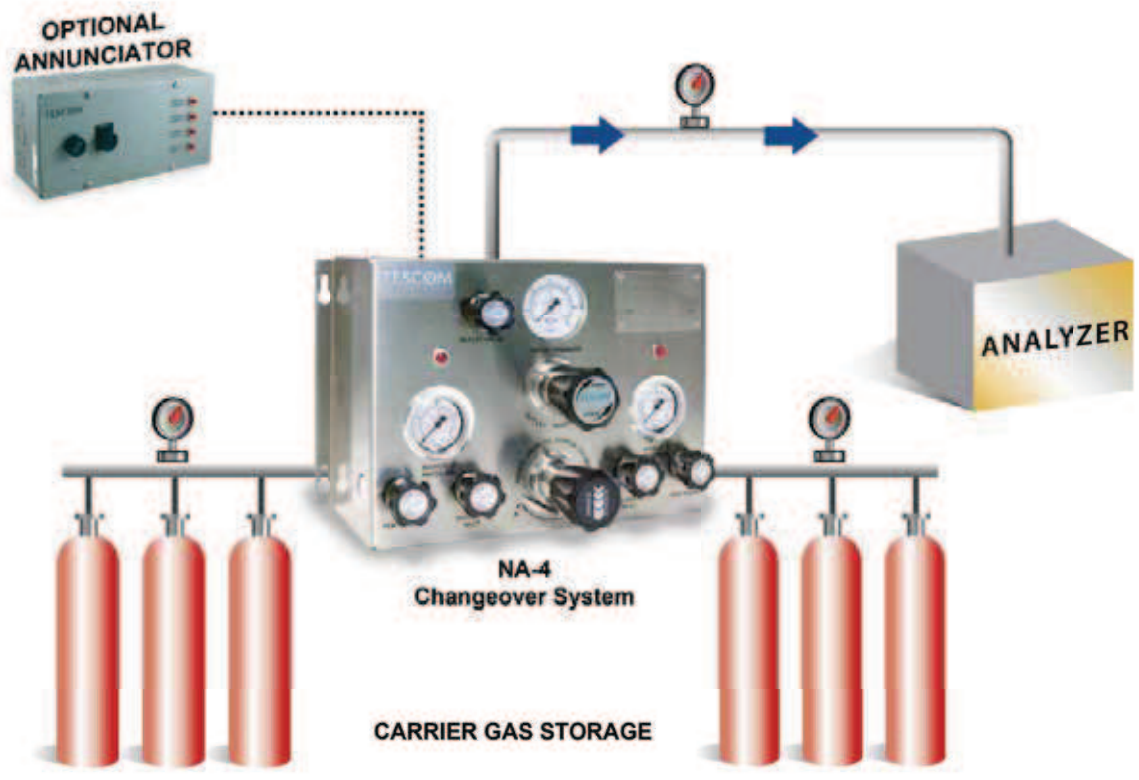
All dimensions are reference & nominal  
Metric [millimeter] equivalents are in brackets

## NA-4 Series Changeover System Flow Chart

For more information on how to read flow curves, please refer to the Flow Curves and Calculations document (debul2007x012) in the TESCOM catalog or on [www.tescom.com](http://www.tescom.com).



## NA-4 Series Typical Installations



## NA-4 Series Changeover System Part Number Selector

Repair Kits, Accessories & Modifications may be available for this product. Please contact TESCOM for more information.

Example for selecting a part number:

BASIC SERIES	INLET & OUTLET PORT SIZE & TYPE	BODY MATERIAL	OUTLET PRESSURE RANGE	MAXIMUM INLET PRESSURE	OUTLET RELIEF VALVE	REGULATOR TYPE	PRESSURE SWITCH OPTIONS	ANNUNCIATOR OPTIONS	CHECK/SHUT-OFF VALVE OPTIONS	CONNECTION TYPE	NUMBER OF BOTTLES
NA-4	1 - 1/4" NPTF	1 - Brass		1 - 3000 psig 206 bar	0 - No	0 - Non-Venting	4 - None	0 - None	0 - None		0
		6 - 316 Stainless Steel			1 - Yes	3 - Venting	0 - Gauge with integral switch on inlets; lights on panel	5 - Four channel remote mount annunciator with enclosure	1 - Standard check valves (at inlets of panel)		2
								2 - Check valves integrated with CGA or BS nipple on each hose	4		
								3 - Shut-off valve on each hose	8		
								4 - Shut-off valve and integrated check on each hose	10		
								5 - Standard check valves (at inlets of panel) and shut-off valve on each hose	12		
									14		
									16		

	OUTLET PRESSURE	CHANGEOVER DELIVERY	PRESSURE SWITCH SETTING	OUTLET GAUGE	RELIEF VALVE CRACK PRESSURE
0	0-30	270	300	60	45
1	0-50	270	300	160	90
2	0-100	270	300	200	150
3	0-150	270	300	300	225
4	0-200	450	500	600	300
5	0-300	450	500	600	450
6	0-500	700	770	1000	750
7	0-750	900	990	1500	1125
8	0-1000	1200	1320	2000	1500
9	0-1500	2000	2200	2000	2000

	CONNECTION TYPE	PRESSURE SWITCH AND RELIEF VALVE O-RING	HOSE CORE MATERIAL	HOSE JACKET MATERIAL
0	No CGA fittings, no hoses	N/A	N/A	N/A
1	1/4" female end	Buna	Teflon®	Stainless Steel Braid
2	1/4" female end	Buna	Nylon	Polyurethane
3	CGA 580 (Helium)	Buna	Nylon	Polyurethane
4	CGA 580 (Argon, Nitrogen)	Buna	Teflon®	Stainless Steel Braid
5	CGA 350 (Hydrogen)	Buna	Nylon	Polyurethane
6	CGA 320 (Carbon Dioxide)	Buna	Teflon®	Stainless Steel Braid
7	BS3 (Helium)	Buna	Nylon	Polyurethane
8	BS3 (Argon, Nitrogen)	Buna	Teflon®	Stainless Steel Braid
9	BS4 (Hydrogen)	Buna	Nylon	Polyurethane
A	BS8 (Carbon Dioxide)	Buna	Teflon®	Stainless Steel Braid