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

MEDIA CONTACT MATERIALS

Seat

PTFE (Regulators), CTFE (Valves) Friction Sleeve (Inner) PTFE 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) Nitrile, Buna-N Remaining Parts Brass, 316 Stainless Steel

OTHER

Panel Brushed 304 Stainless Steel Cleaning CGA 4.1 and ASTM G93 Weight (approximate) 10 lbs / 4.5 kg

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TESCOM NA4 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.

Applications

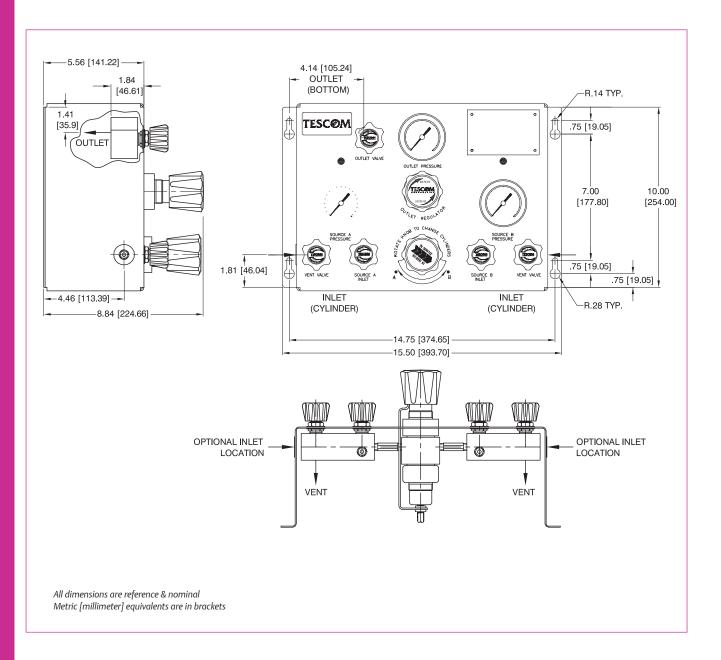
- Petrochemical analyzer sampling systems
- Gas delivery systems
- Laboratories
- Welding gases

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

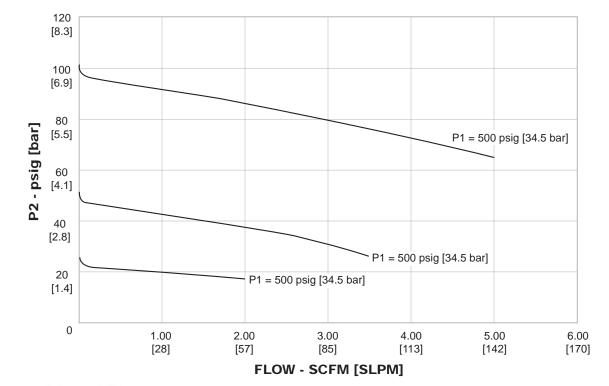


NA4 Series Changeover System Drawing



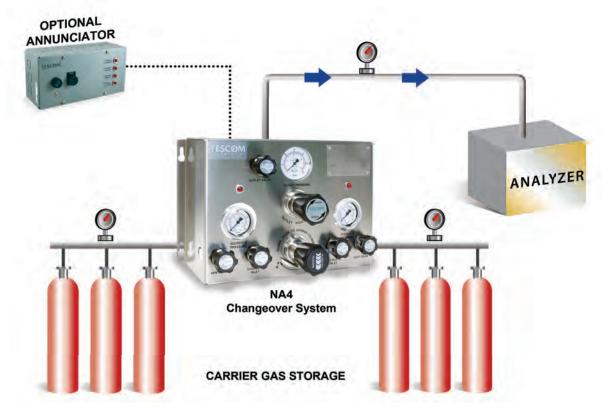


NA4 Series Changeover System Flow Chart



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.

NA4 Series Typical Installations





NA4 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 SERIEDILET & OUTLET PRESSUREBODY PRESSUREOUTLET PRESSUREMAXIMUM INLET PRESSUREOUTLET PRESSUREREGULATOR VALVEANNUNCIATOR OPTIONSCHECK/SHUT-OFF VALVE OPTIONSCONNET OPTIONSONMER OPTIONSNA41 - 1/4' NPTF1 - Brass 6 - 316 Stainless Steel1 - 3000 psig 206 bar0 - Non- 1 - Yes0 - None 0 - Non- Venting 1 - Yes0 - None 0 - None0 - None0 - None1 - Standard check valves (at inlets of panel)0 - None 2 4 0 - Cauge with integral switch on inlets; NO lights or light holes on panel0 - None0 - None0 - None0 - None0 - None0 - None0 - None1 - 1/4' NPTF1 - Brass 6 - 316 Stainless Steel1 - 3000 psig 206 bar0 - Non- 1 - Yes0 - None 0 - None 0 - None0 - No | NA4 | 1 | 6 | 2 | 1 | 1 | 0 | 0 | 5 | 4 | 6 | ; | 4 |
|---|-----|----------------------|-----------------------------|---------|-------|--------|-----------|--|--|---|---|---|------------------------------------|
| 6-316 Stainless 206 bar Venting 0-Gauge 5-Four channel 1-Standard check 4 Steel 1-Yes 3-Venting 0-Gauge 5-Four channel remote mount annunciator annunciator of panel) 8 Steel 1-Gauge switch on with enclosure CGA or BS nipple 14 0-Gauge 3-Shut-off valve on and integral switch on and integrated 16 1-Gauge 3-Shut-off valve on and integrated 4-Shut-off valve on and integrated and integrated 0rlight No lights orlight beson switch on shut-off valve on and integrated 0rlight beson panel beson shut-off valve on beson panel | | | | PRESSUR | INLET | RELIEF | REGULATOR | SWITCH | | | | | OF |
| | NA4 | 1 - 1/4" NPTF | 6 - 316 Stainless | | | | Venting | 0 - Gauge with integral switch on inlets; lights on panel 1 - Gauge with integral switch on inlets; NO lights or light holes on | 5 - Four channel remote mount annunciator | Standard check valves (at inlets of panel) Check valves integrated with CGA or BS nipple on each hose Shut-off valve on each hose Shut-off valve and integrated check on each hose Standard check valves (at inlets of panel) and shut-off valve on | | | 2 4 6 8 10 12 14 |

| NO. | OUTLET PRESSURE | CHANGEOVER DELIVERY | PRESSURE SWITCH SETTING | OUTLET GAUGE | RELIEF VALVE CRACK PRESSURE |
|-----|--------------------|------------------------|----------------------------|--------------|--------------------------------|
| | PRESSURE | DELIVERT | SWITCH SETTING | | CRACK PRESSURE |
| С | 0-30 | 150 | 200 | 60 | 45 |
| 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 |
| В | 0-200 | 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 |

| V | | | | | |
|-----|---------------------------|--|-----------------------|-------------------------|--|
| NO. | 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 | |
| Α | BS8 (Carbon Dioxide) | Buna | Teflon® | Stainless Steel Braid | |
| Е | 1/4" Female End | Buna | Stainless Steel | Stainless Steel Braid | |

