



Commercial Vehicles



**Commercial Vehicle
Product Catalog**
www.norgren.com

800.229.1975





Breakthrough Engineering for a Better World

Norgren is part of global engineering organisation IMI plc. IMI is at the forefront of delivering the solutions we need in a changing world and is focused on **creating tremendous value by solving key industry problems** in attractive markets and employing the best.

Norgren has a proud history of creating innovative engineering solutions in precise motion control and fluid technology, and we collaborate with our customers across more than 50 countries in critical areas such as Factory Automation, Material Handling, Rail, Energy, Process Control, Life Science and Commercial Vehicles.

From improving speed, productivity, reliability and efficiency of equipment, to generating significant energy and cost savings, or lowering total cost of ownership across many industries, Norgren's high-quality solutions are designed to help customers pursue progress, achieve new goals and overcome problems.

With market-leading industry expertise, we offer the capability, resources, engineering intelligence and global support infrastructure to tackle the largest project demands.

Our world-class portfolio of fluid and motion control products include Norgren, Buschjost, FAS, Herion, Kloehn, Maxseal and Thompson Valves. Supplied either individually or combined into powerful customised solutions to meet customer needs.

Breakthrough engineering you can count on.



Breakthrough Engineering for a Better World

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All the Products you Need- As Soon as you Need Them

From replacement parts to fully-integrated solutions, we offer a comprehensive range of **air, electric, and fuel management** products covering every major commercial vehicle system. By supporting every major truck OEM in North America we help our customers make their trucks more cost-effective, lighter and smarter

Air & Electric Management

Norgren air and electric components provide compactness, rigidity, and ease of installation built for every-day harsh environments. Made from durable zinc alloy die castings or engineering resins, our products offer excellent flow characteristics and lasting performance.

Fuel Management

An industry leader in the development of fuel system products for diesel and gas-powered trucks, our products hold a number of patents for design innovation. These include the first effective anti-spill fuel tank vent, breakaway fuel line valve, return flow splitter, and an array of fuel caps all specially designed with rollover protection, explosion prevention features and other safety components.

Custom Solutions

Our team of experienced engineers work with you to produce a solution. From modifying existing systems to building complete custom designs, we have the breadth of product knowledge and options to help create exactly what you need.

Breakthrough engineering you can count on.

[Air & Electric Management]



Fast Find Guide

Norgren manufactures a broad variety of pneumatic and electronic controls for heavy-duty vehicles. From pressure protection valves, dash valves, flipper valves, and wiper controls to height and lumbar seat control valves, each product is engineered to provide long life and reliable operation.

● Brake Valves

| | | |
|--------------------------------------------------|-----------------------------|-------------------|
| Fastbrake Quick Exhaust Valve 4000 Series | Park Brake Interlock | Work Brake |
| Page 10 | Page 11 | Page 12 |

● Cab Controls

| | | | | | |
|------------------------------------------------------------------|-------------------------------------------------|-----------------------------------------|----------------------------------------------------------------|--------------------------------------------------------------------------------|-------------------------------------------------------|
| Dash Valves Air Only 3266 Series | Horizontal Dash Valves 3281 Series | Vertical Dash Valves 3282 Series | Flipper Control Valve - Air Only 3222 & 3224 Series | Flipper Control Valve - Combination Air/Electric 3220 & 3223 Series | Toggle-Style Air Switch - Air Only 3202 Series |
| Page 14 | Page 15 | Page 16 | Page 17 | Page 18 | Page 19 |
| Toggle-Style Switch - Air/Electric 3200 & 3201 Series | Horn Valves 3300, 3301 & 3302 Series | Wiper Washer Controller | | | |
| Page 20 | Page 21 | Page 26 | | | |

● Filters/Regulators

| | | | |
|---------------------------------------------------------------------|-------------------------------------------------------------------|---------------------------------------------------------|-------------------------------------------------|
| Excelon® Modular System Pressure Regulators R72G, R73G, R74G | Excelon® Modular System Filter/Regulators B72G, B73G, B74G | Excelon® Modular System Filters F72G, F73G, F74G | Miniature General Purpose Regulators R07 |
| Page 28 | Page 30 | Page 32 | Page 34 |

Fast Find Guide

● Fittings

| |
|----------------------------------------------------------|
| FleetFit Vehicle push-in fittings Inch and Metric |
| Page 36 |

● Lift Axle Controls

| | | | |
|-------------------------------------------------|---------------------------------------------|----------------------------------------|-----------------------------------------------------------|
| Intelligent Lift Axle Control Module Kit | Lift Axle Control Module 5040 Series | Trailer Lift Axle Control Valve | Nugget 200 Solenoid & Air Actuated Spool Valve |
| Page 44 | Page 45 | Page 49 | Page 50 |

● Seat Controls

| | | | | | |
|--------------------------------------------|------------------------------------------------------------------|---------------------------------------------|---------------------------------------------------------------------|--------------------------------------------------------------|--------------------------------------------------|
| Paddle Seat Control Valves Air Only | Paddle Seat Control Valves Combination Electric/Pneumatic | Removable Knob Seat Valve 134 Series | Double End Ported Seat Valve Threaded Connections 251 Series | Combination Seat Valve Electric/Pneumatic 3000 Series | Seat Rocker Valves 3020 & 3277 Series |
| Page 58 | Page 59 | Page 60 | Page 61 | Page 62 | Page 63 |
| Seat Leveling Valve with Clutch | | | | | |
| Page 66 | | | | | |

Fast Find Guide

● Solenoids Valves

| | | | |
|------------------------|----------------------------------------|----------------------------------------|----------------------------------------|
| Solenoid Valves | Solenoid Valves 5030 Series | Solenoid Valves 5031 Series | Air Solenoid Accessory Pack |
| Page 70 | Page 77 | Page 82 | Page 83 |

● Valves

| | | | | | |
|-------------------------|------------------------------------------------------|-----------------------------------------------------------------|---------------------|-------------------------------------------------------------------|--------------------------|
| Rapid Dump Valve | Pressure Protection Valves 223 Series | Inline Pressure Protection Valves 5200-75 Series | Check Valves | Super X Manual and Mechanical Actuated Spool Valve | Kneeling Manifold |
| Page 86 | Page 87 | Page 89 | Page 90 | Page 91 | Page 98 |

● Cylinders

| | | | | |
|-----------------------------|--------------------------|--------------------------------|----------------------------|--------------------------|
| Round Body Cylinders | Tie Rod Cylinders | Extruded Body Cylinders | Roundline Cylinders | Compact Cylinders |
| Page 102 | Page 102 | Page 102 | Page 103 | Page 103 |

[Brake Valves]

1

Our brake valves are capable of withstanding aggressive environments and continued operation, with integrated tube connections to reduce costs, air usage and assembly time.



FASTBRAKE QUICK EXHAUST VALVE

4000 Series

- » Helps vehicle OEMs to comply with brake timing regulations
- » Enhances vehicle performance*
- » Durable zinc alloy provides excellent flow characteristics
- » *Requires properly plumbed air system

Technical Data

Operating pressure:
10 psi min
0.7 bar

Port size:
1/2" NPT

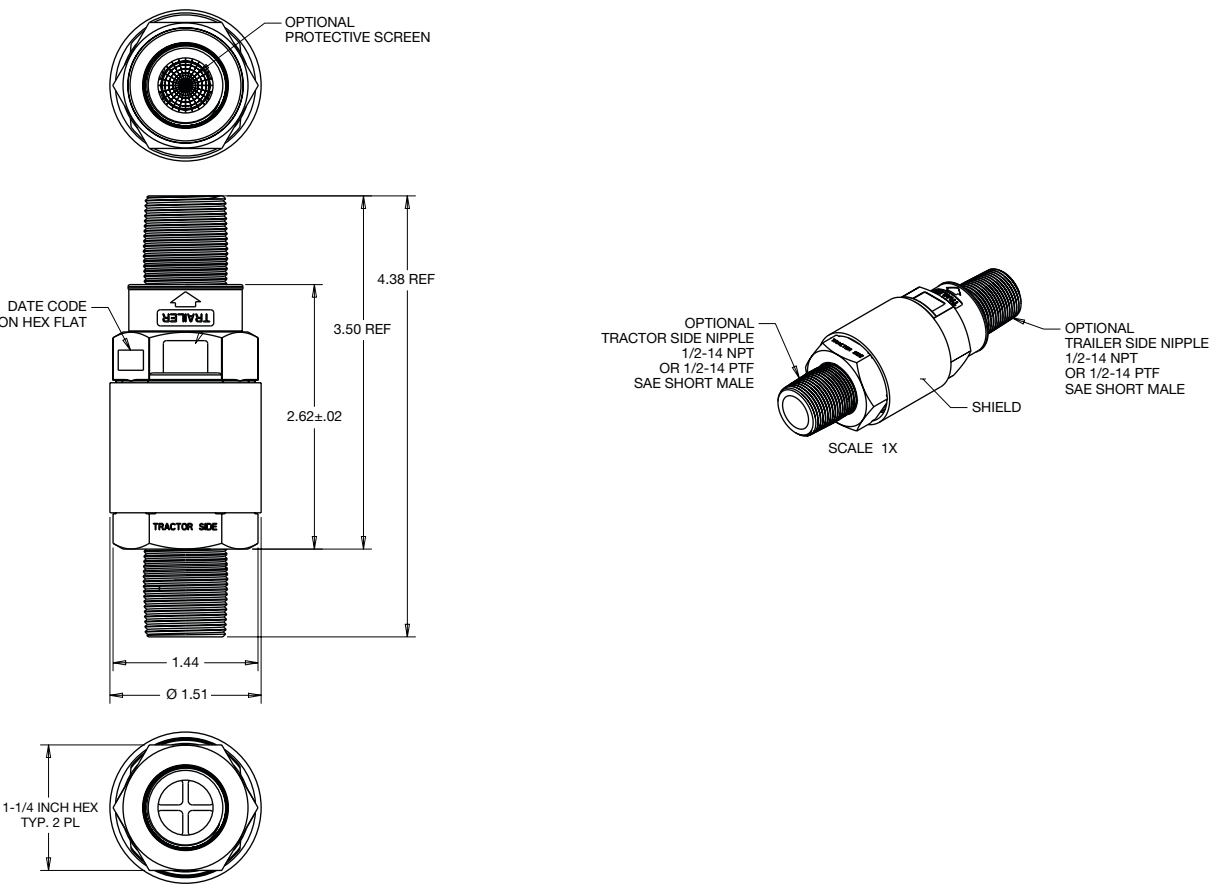
Nipple size:
1/2" PTF male



Models

| Model | Packaging | Nipple Side: 1/2" PTF | Port Side: 1/2" NPT |
|---------|------------|--------------------------|------------------------|
| 4000 | Bulk | Trailer | Tractor |
| 4000-1 | Individual | Trailer | Tractor |
| 4000-6 | Bulk | Trailer | Tractor |
| 4000-8 | Bulk | Tractor | Trailer |
| 4000-8D | Individual | Tractor | Trailer |
| 4000-11 | Bulk | N/A | N/A |

Dimensions



PARK BRAKE INTERLOCK

- » Prevents pressurization of the park brake circuit (release of park brakes) without service brake application
- » Integral Push-to-Connect fittings (PTC)
- » Material used meets DOT FMVSS 302 flammability requirements

Technical Data

Operating pressure:
0 – 150 psi

Operating temperature:
-40°F to 200°F

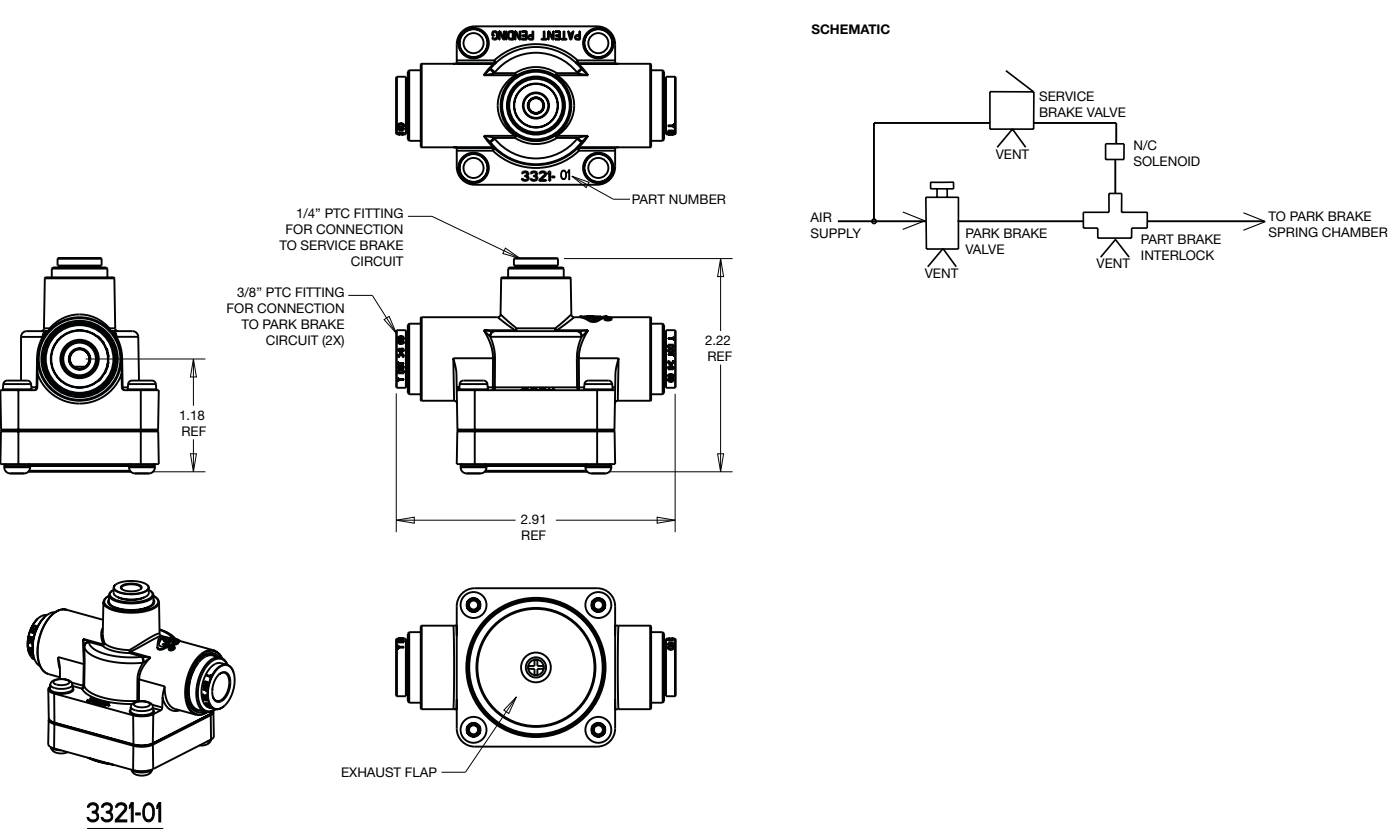
Flow:
3/8" PTC to 3/8" PTC, 0.20 min. equivalent orifice.
3/8" PTC to exhaust, 0.20 min. equivalent orifice.



Models

| Model | Description |
|---------|----------------------|
| 3321-01 | Park Brake Interlock |

Specifications



WORK BRAKE VALVE

- » Dual 3-way valve
- » Heavy duty dash-mounted valve to control/apply service brakes of vehicle with demanding applications
- » Energy efficient, robust design, proven track record

Technical Data

Operating pressure:

0 – 125 psi

Operating temperature:

-40°F - 200°F

Tube O/D:

1/4"

Material

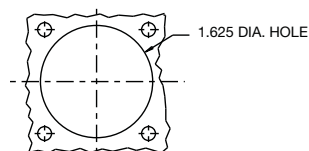
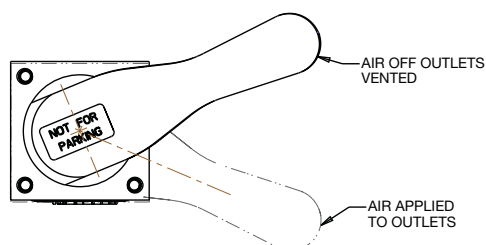
Aluminum



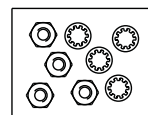
Models

| Model | Description | Port Size |
|--------|----------------------------------------------|-------------|
| 4040-3 | Work Brake Valve | 1/4-18 NPTF |
| 4040-1 | Work Brake Valve, Mounting Hardware Included | 1/4-18 NPTF |

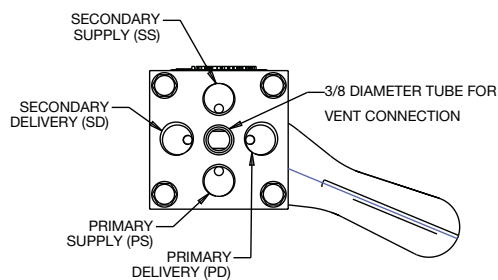
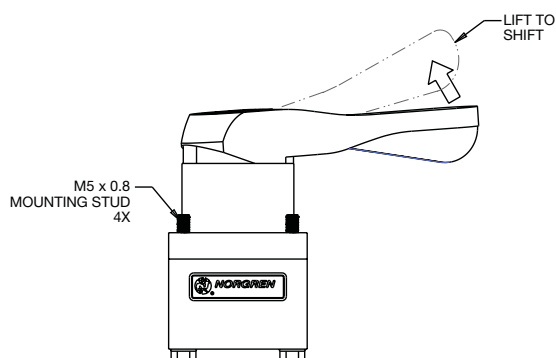
Specifications



MOUNTING PATTERN



MOUNTING HARDWARE



[Cab Controls]

2

Our pneumatic and electric cab controls are engineered for functionality, durability, and reliability. The compact designs occupy minimal space that blend in with the interior design and dashboard.



DASH VALVES AIR ONLY

3266 Series

- » 3-way air valve
- » Designed for dashboard operation of truck air system accessories
- » Engineered for functionality and durability
- » Integral Push-to-Connect fittings (PTC)
- » Material used meets DOT FMVSS 302 flammability requirements

Technical Data

Operating pressure:
0 to 150 psi

Operating temperature:
-10°F to +160°F

Tube O/D:
1/4"

Material

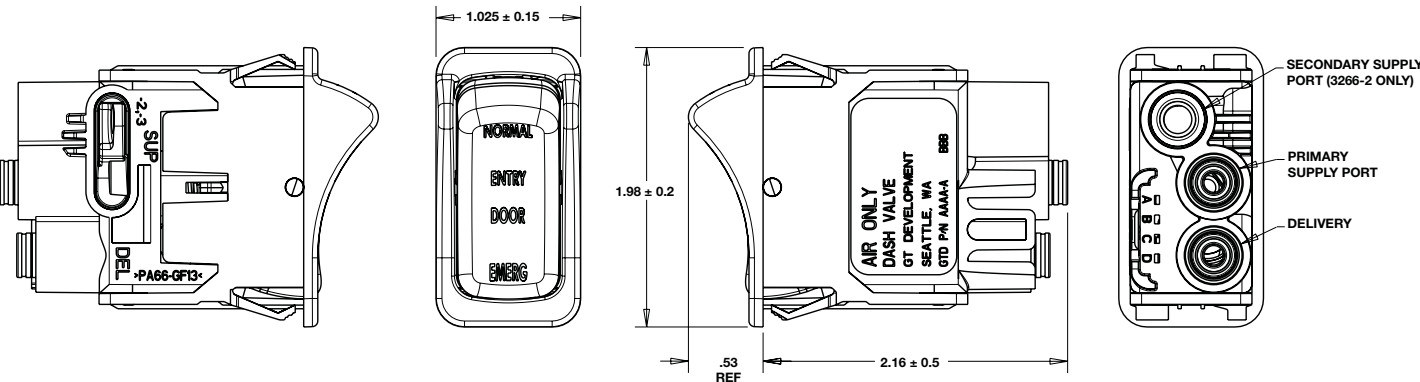
Nylon, glass filled



Models

| Model | Supply Port | Rocker Color |
|--------|-------------|--------------|
| 3266-1 | Single | Black |
| 3266-7 | Single | Red |

Specifications



HORIZONTAL DASH VALVES

3281 Series

- » 3-way air valve
- » Designed for dashboard operation of truck air system accessories
- » Engineered for functionality and durability
- » Integral Push-to-Connect fittings (PTC)
- » Material used meets DOT FMVSS 302 flammability requirements

Technical Data

Operating pressure:
0 to 150 psi (0 to 10 bar)

Operating temperature:
-20°F to +160°F (-20°C to +70°C)

Tube O/D:
1/4"

Status lighting:
Red LED oval only

Material

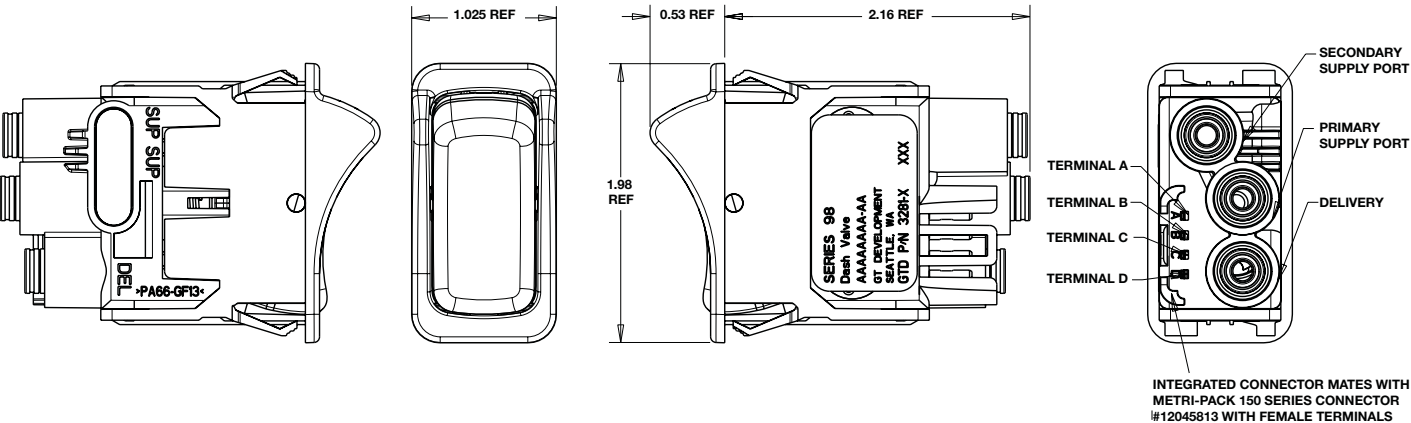
Nylon, glass filled



Models

| Model | Description | Rocker Symbol | Rocker Text |
|---------|------------------------------|---------------|-----------------|
| 3281-1 | Inter-Axle Differential Lock | | INTER AXLE |
| 3281-2 | 5th Wheel Slide | | 5TH WHEEL |
| 3281-3 | Air Suspension Dump | | SUSP HEIGHT |
| 3281-4 | Power Take Off | | P.T.O. |
| 3281-5 | Air Intake Routing | | AIR INTAKE |
| 3281-6 | Neutral Control | | NEUTRAL CONTROL |
| 3281-7 | King Pin | | KING PIN |
| 3281-8 | Air Tarp | | TARP |
| 3281-9 | Tail Gate Lock | | TAIL GATE |
| 3281-10 | Air Pintle Hook | | PINTLE HOOK |
| 3281-11 | Hyd Pump PTO | | P.T.O. |

Specifications



VERTICAL DASH VALVES

3282 Series

- » 3-way air valve
- » Designed for dashboard operation of truck air system accessories
- » Engineered for functionality and durability
- » Integral Push-to-Connect fittings (PTC)
- » Material used meets DOT FMVSS 302 flammability requirements

Technical Data

Operating pressure:
0 to 150 psi

Operating temperature:
-10°F to +160°F

Tube O/D:
1/4"

Status lighting:
Red LED oval only

Material

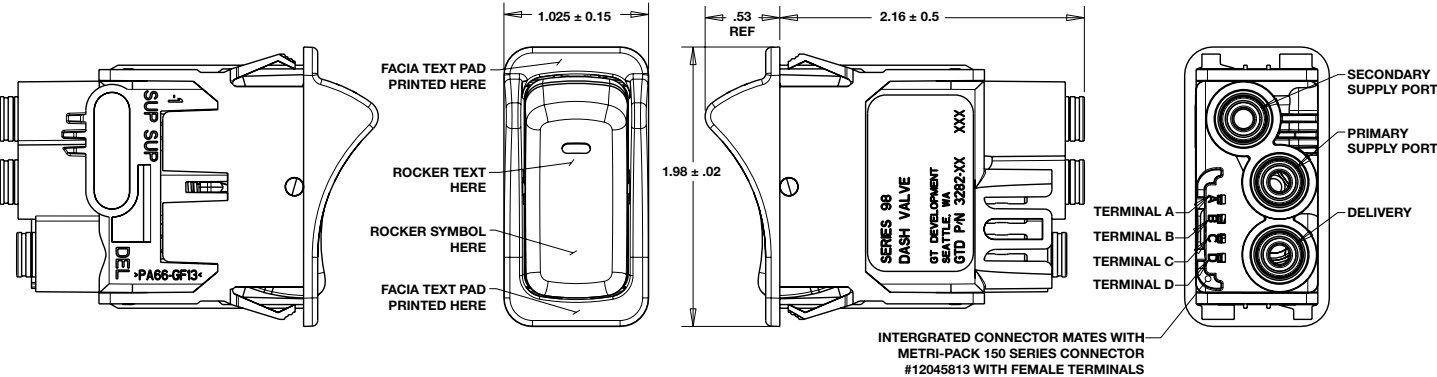
Nylon, glass filled



Models

| Model | Description | Rocker Symbol | Rocker Text |
|---------|------------------------------|---------------|----------------|
| 3282-01 | Differential Lock – Front | | DIFF LOCK |
| 3282-02 | Differential Lock – Rear | | DIFF LOCK |
| 3282-03 | Inter-Axle Differential Lock | | INTER AXLE |
| 3282-04 | 5 th Wheel Slide | | 5TH WHEEL |
| 3282-05 | Air Suspension Dump | | SUSP HEIGHT |
| 3282-06 | Power Take Off | | P.T.O. |
| 3282-07 | Neutral Control | | NTNL CTRL |
| 3282-08 | King Pin | | KING PIN |
| 3282-09 | Lift Axle | | LIFT AXLE |

Specifications



FLIPPER CONTROL VALVE - AIR ONLY

3222 & 3224 Series

- » 3-way air valve
- » Designed for dashboard operation of truck air system accessories
- » Integral Push-To-Connect fittings (PTC)

Technical Data

Operating pressure:
0 to 150 psi (0 to 10 bar)

Operating temperature:
-20°F to +160°F (-20°C to +70°C)

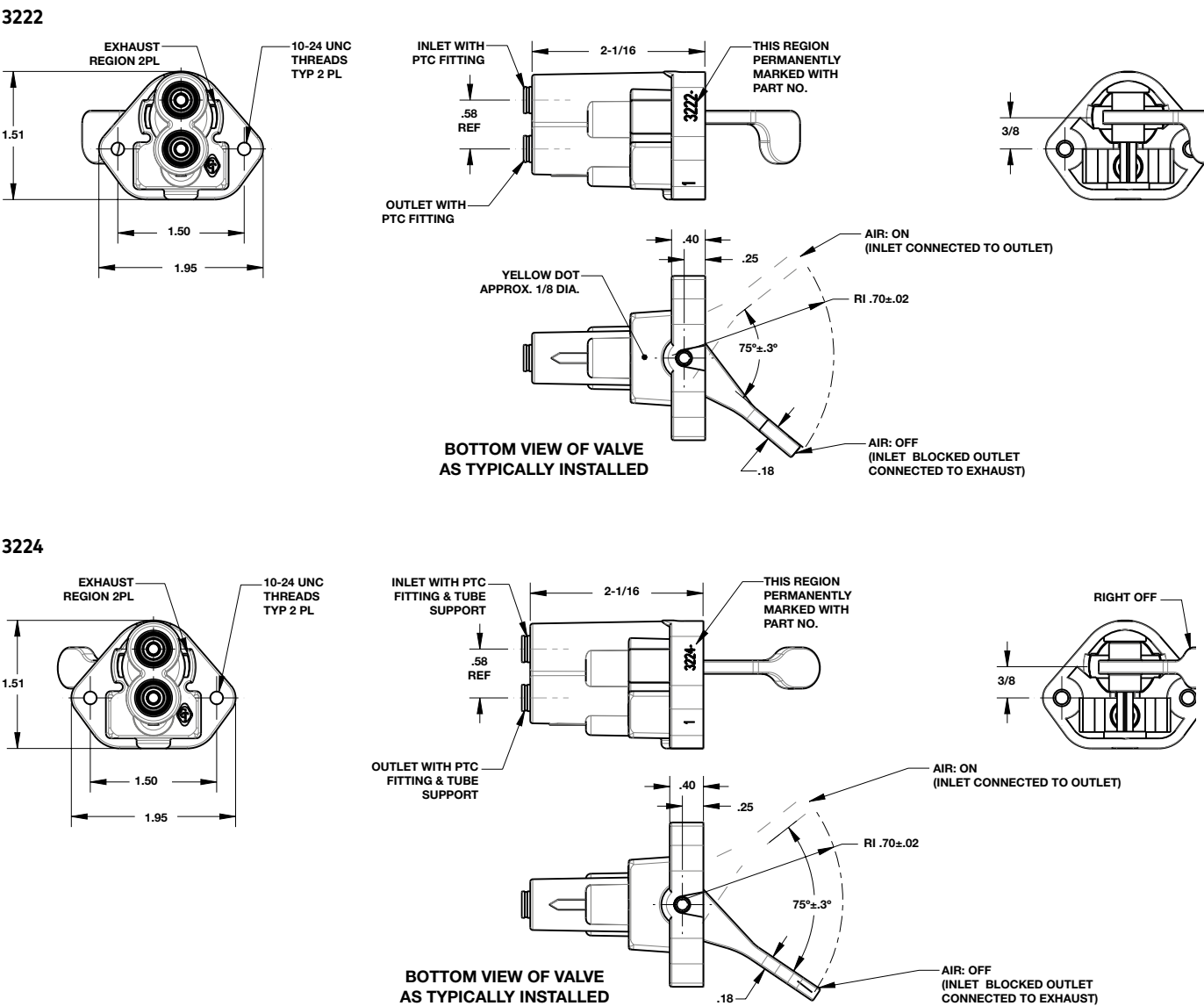
Tube O/D:
1/4"



Models

| Model | Tube O/D |
|--------|----------|
| 3222-1 | 1/4" |
| 3224-1 | 1/4" |

Specifications



FLIPPER CONTROL VALVE - AIR/ELECTRIC

3220 & 3223 Series

- » 3-way air valve combined with integral pressure switch
- » Designed for dashboard operation of truck air system accessories
- » Engineered for functionality and durability
- » Integral Push-To-Connect fittings (PTC)

Technical Data

Operating pressure:
0 to 150 psi (0 to 10 bar)

Operating temperature:
-20°F to +160°F (-20°C to +70°C)

Tube O/D:
1/4"

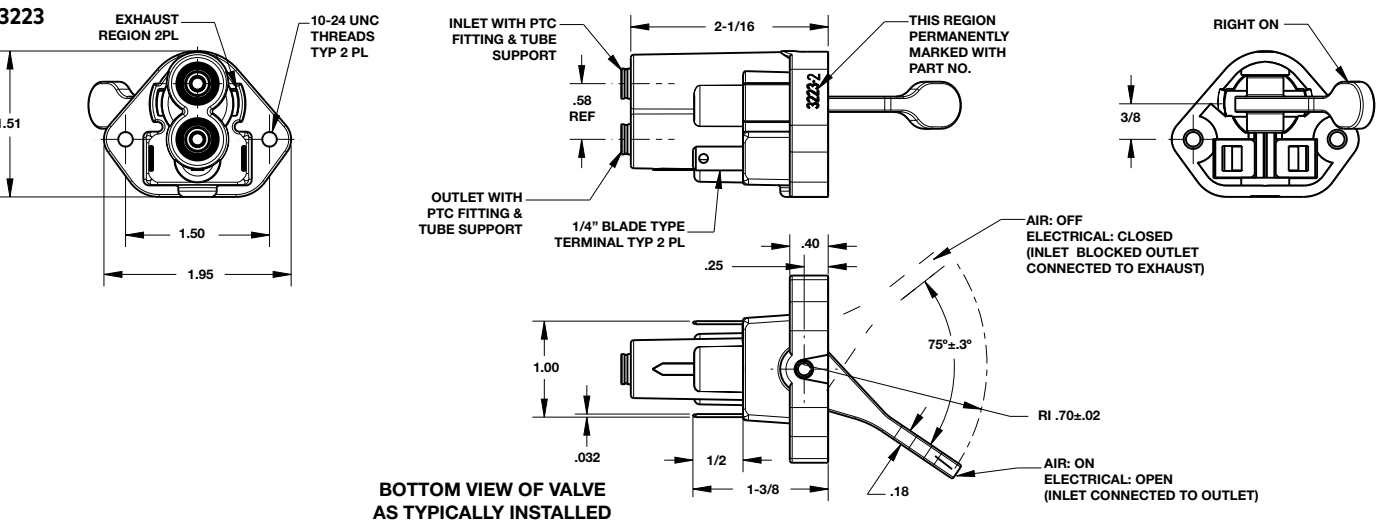
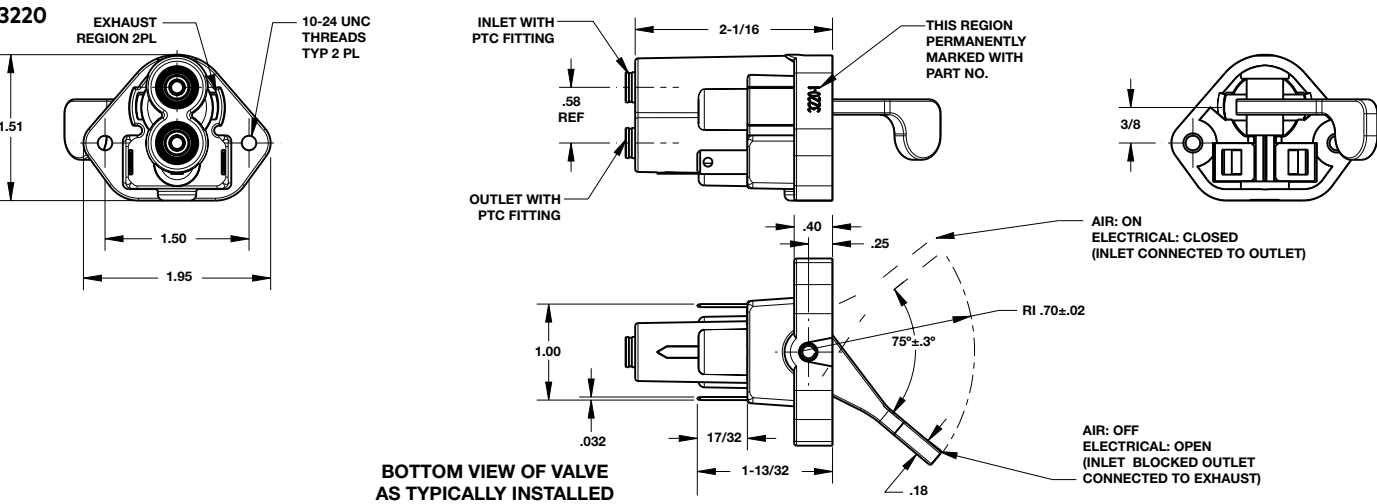
Electrical connection:
Two 1/4" blade type electrical terminals



Models

| Model | Tube O/D | Max Current | Pressure Switch Configuration |
|--------|----------|-------------|-------------------------------|
| 3220-1 | 1/4" | 5 amps | N/O |
| 3223-1 | 1/4" | 5 amps | N/O |
| 3223-2 | 1/4" | 5 amps | N/C |

Specifications



TOGGLE-STYLE AIR SWITCH - AIR ONLY

3202 Series

- » 3-way air valve
- » Designed for dashboard operation of truck air system accessories
- » Heavy-duty switch
- » Integral Push-To-Connect fittings (PTC)

Technical Data

Operating pressure:
0 to 150 psi (0 to 10 bar)

Operating temperature:
-20°F to +160°F (-20°C to +70°C)

Tube O/D:
1/4"

Material

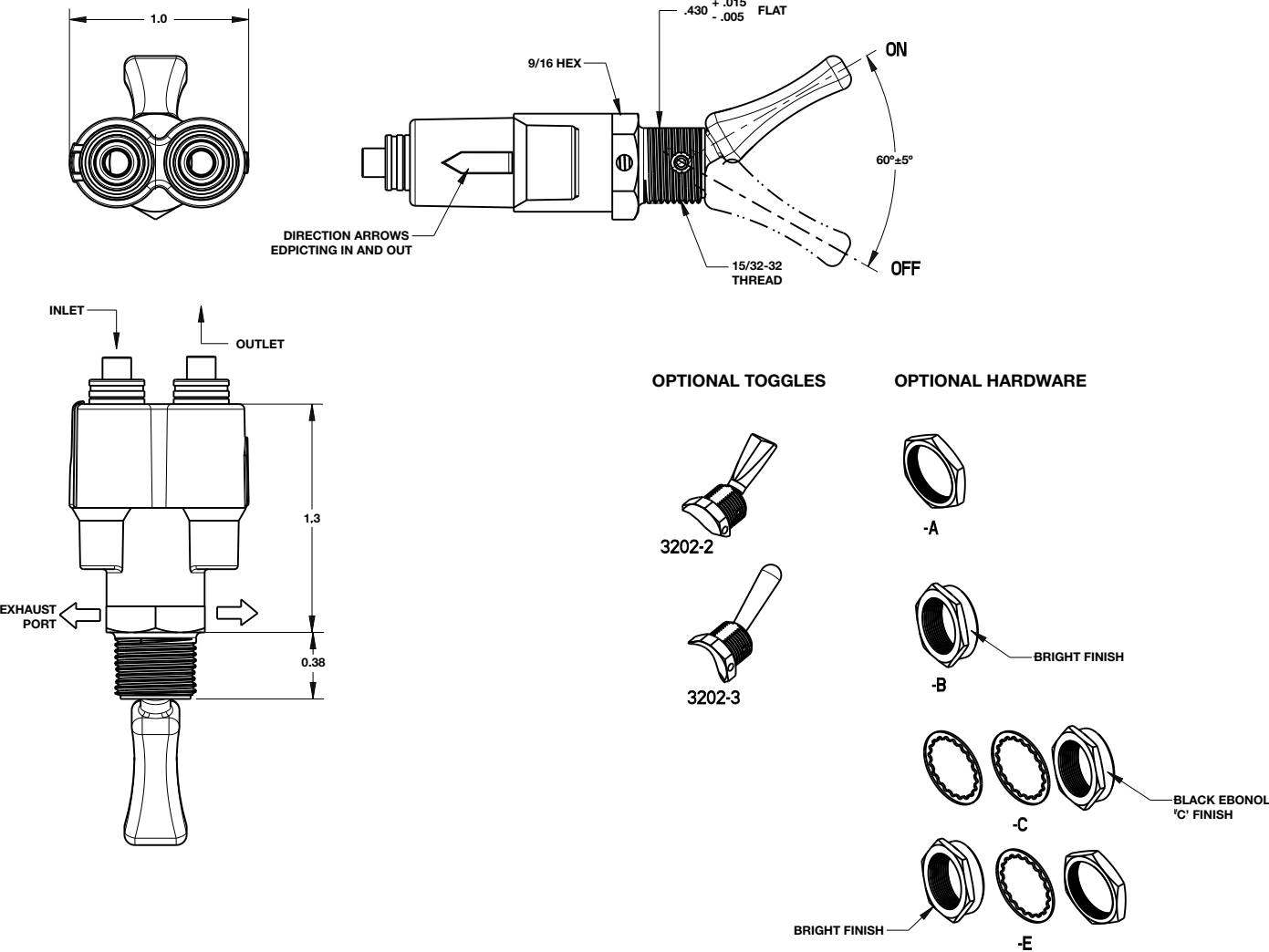
Zytel, Nylon glass filled



Models

| Model | Tube O/D |
|---------|----------|
| 3202-1A | 1/4" |
| 3202-1C | 1/4" |
| 3202-2E | 1/4" |

Specifications



TOGGLE-STYLE SWITCH - AIR/ELECTRIC

3200 & 3201 Series

- » 3-way valve combined with integral pressure switch
- » Designed for dashboard operation of truck air system accessories
- » Integral Push-To-Connect fittings (PTC)

Technical Data

Operating pressure:
0 to 150 psi (0 to 10 bar)

Operating temperature:
-20°F to +160°F (-20°C to +70°C)

Tube O/D:
1/4"

Electrical connection:
Two 1/4" blade type electrical terminals

Material

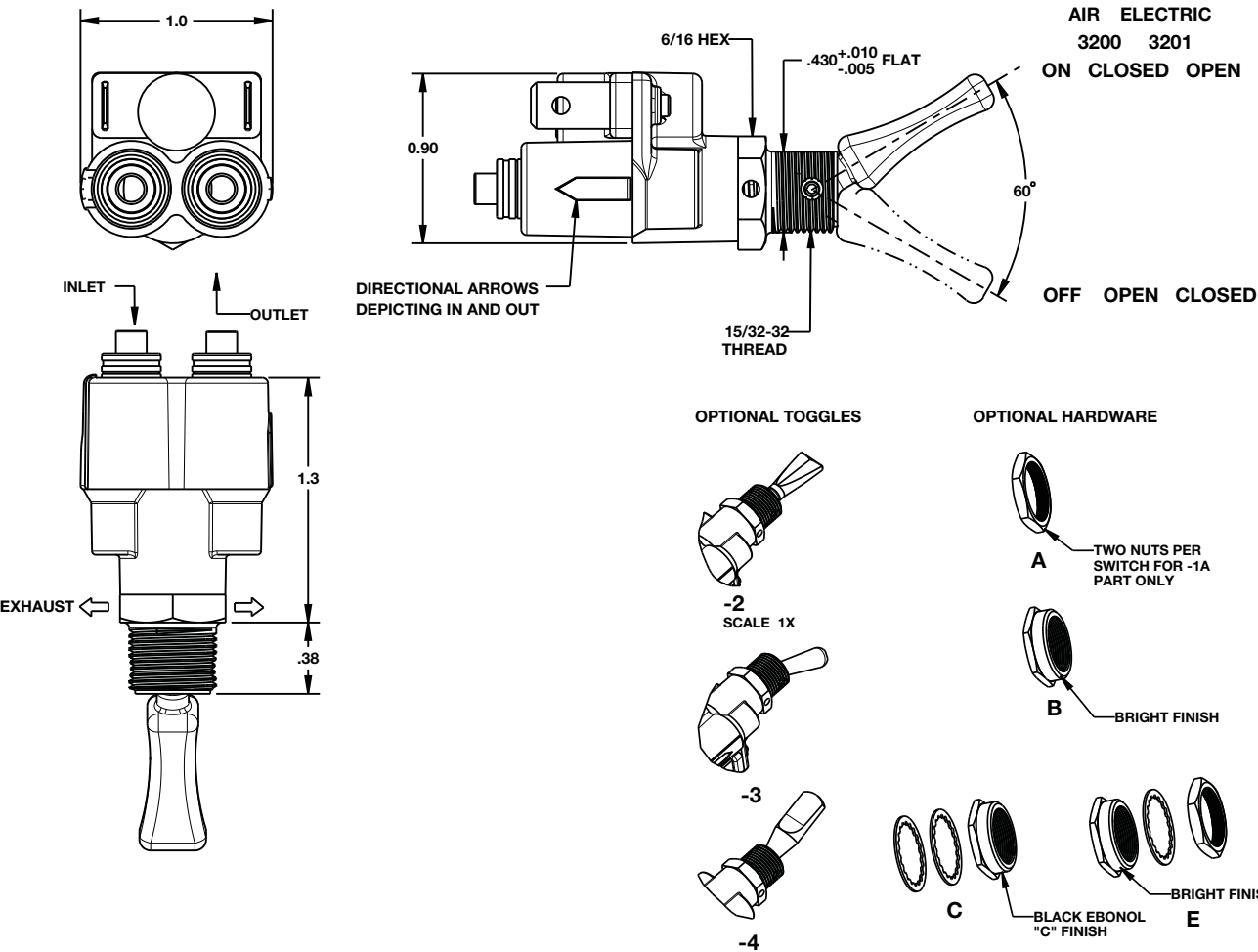
Zytel, Nylon glass filled



Models

| Model | Tube O/D | Nominal Voltage | Electrical Load | Configuration |
|---------|----------|-----------------|-----------------|---------------|
| 3200-1A | 1/4" | 12V | 5 amp | N/O |
| 3200-1C | 1/4" | 12V | 5 amp | N/O |
| 3200-2A | 1/4" | 12V | 5 amp | N/O |
| 3200-2E | 1/4" | 12V | 5 amp | N/O |
| 3200-3A | 1/4" | 12V | 5 amp | N/O |
| 3201-1A | 1/4" | 12V | 5 amp | N/C |

Specifications



HORN VALVES

3300, 3301 & 3302 Series

- » For use in air systems to actuate single or dual air horns
- » Integral Push-to-Connect fittings (PTC)
- » Material used meets DOT FMVSS Hot Pull Test requirements

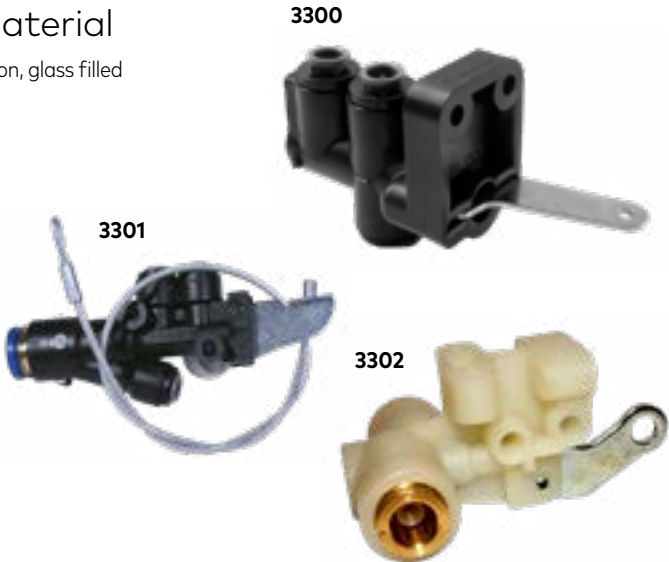
Technical Data

Operating pressure:
0 – 150 psi

Operating temperature:
-10°F to 185°F

Material

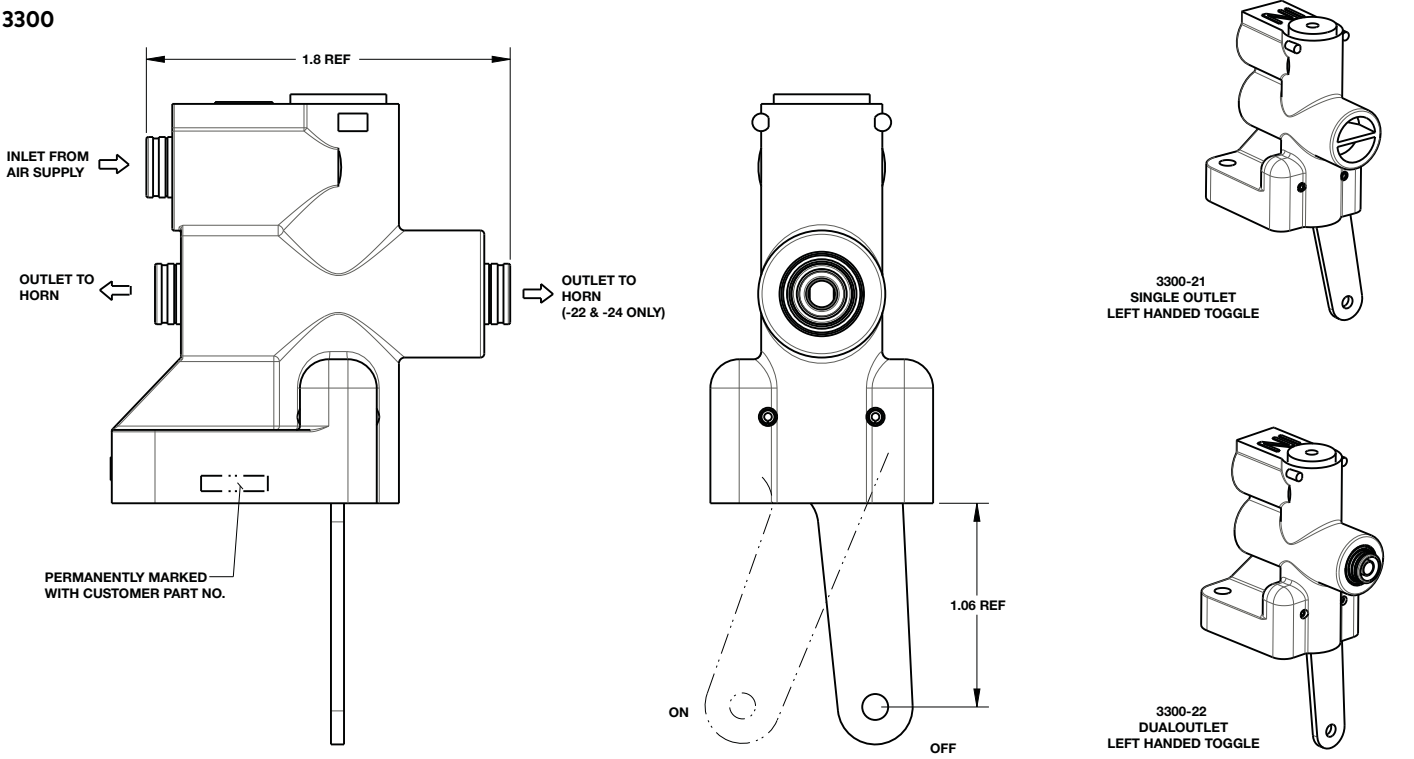
Nylon, glass filled



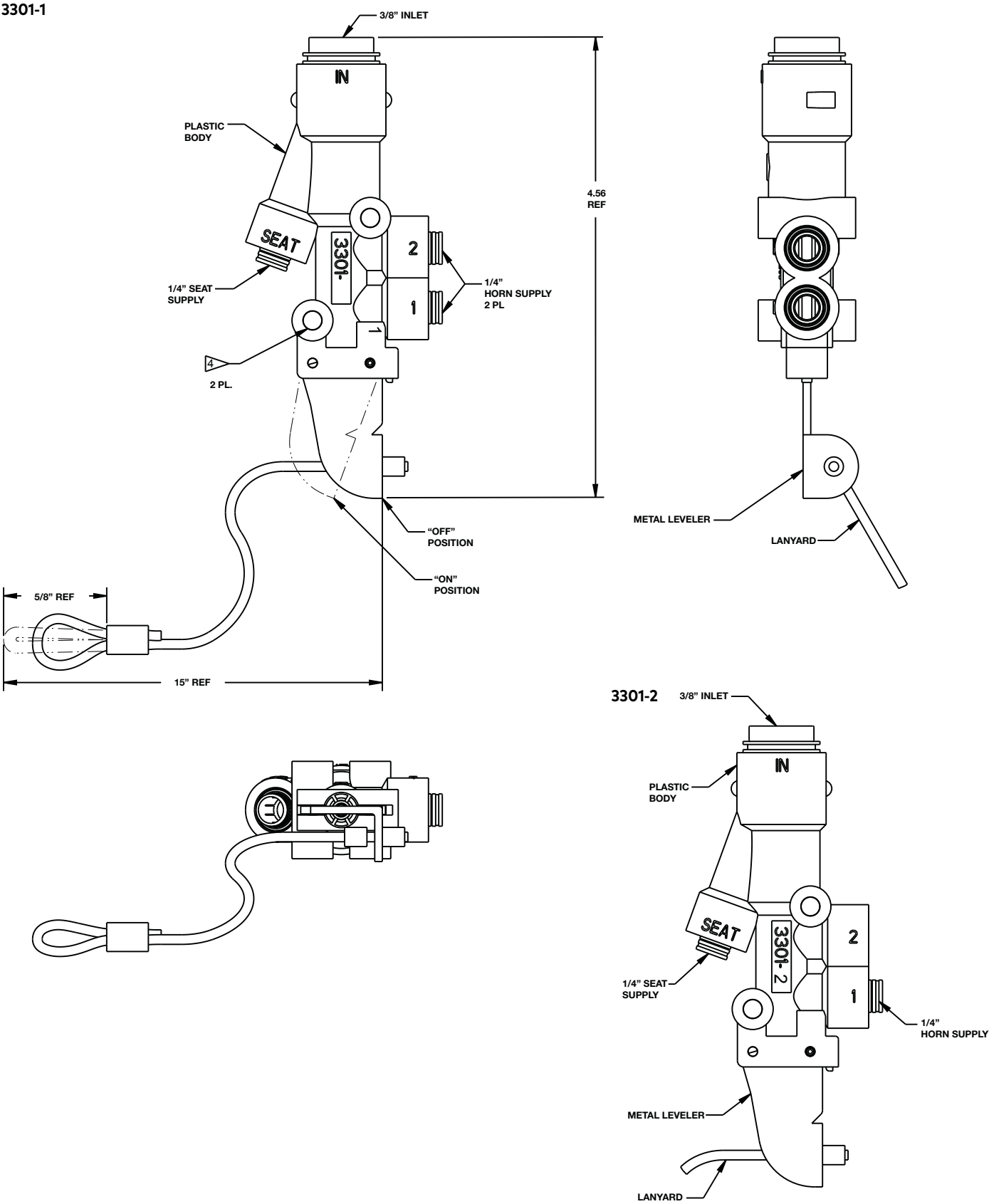
Models

| Model | Description | Tube O/D |
|---------|----------------------------------------|----------|
| 3300-21 | Single outlet, left hand toggle | 1/4" |
| 3300-22 | Dual outlet, left-handed toggle | 1/4" |
| 3301-1 | Dual outlet w/ lanyard lever assembly | 1/4" |
| 3301-2 | Single outlet w/lanyard lever assembly | 1/4" |
| 3302-1 | Medium duty | 3/8" |
| 3302-2 | Conventional cab | 3/8" |
| 3302-3 | Cabover | 3/8" |

Specifications

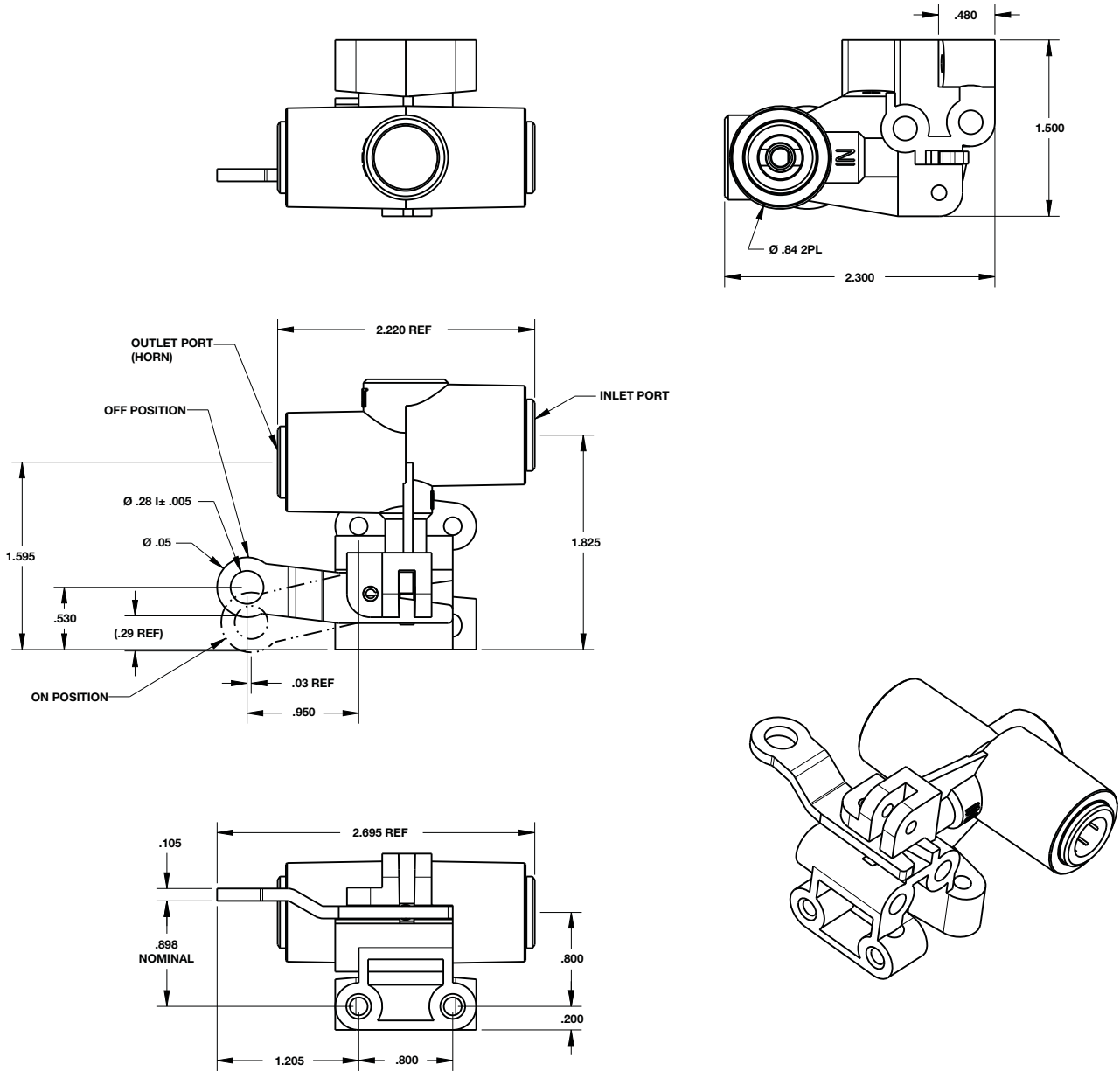


HORN VALVES
3300, 3301 & 3302 Series



HORN VALVES
3300, 3301 & 3302 Series

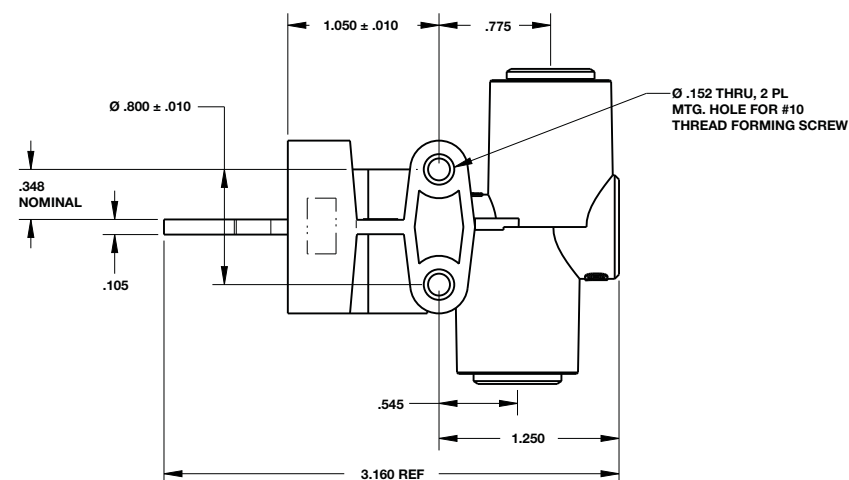
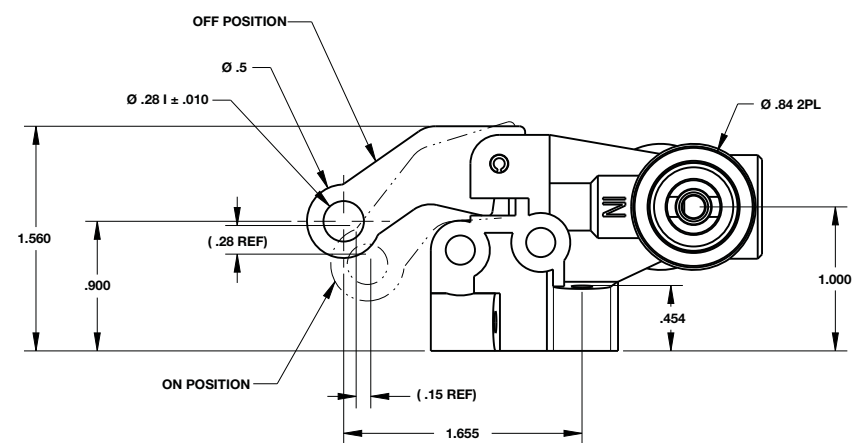
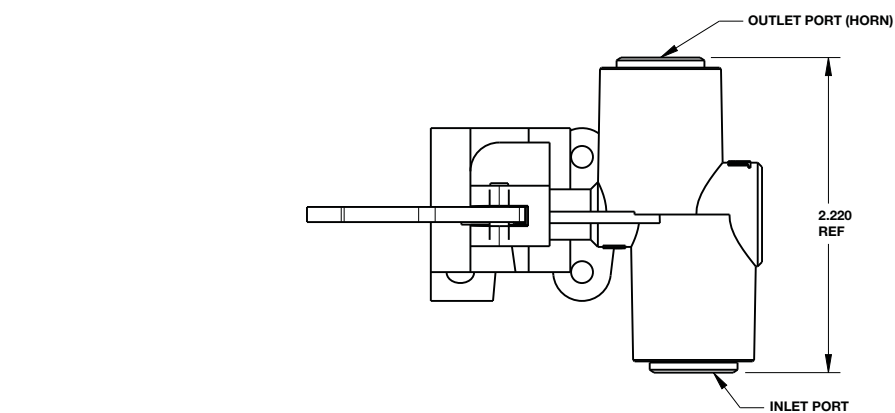
3302-1



HORN VALVES

3300, 3301 & 3302 Series

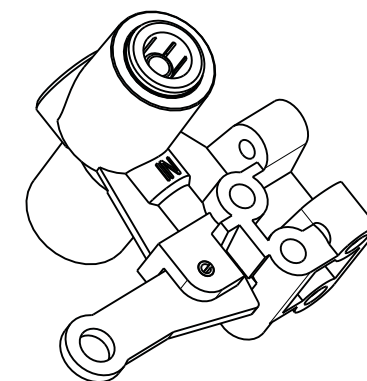
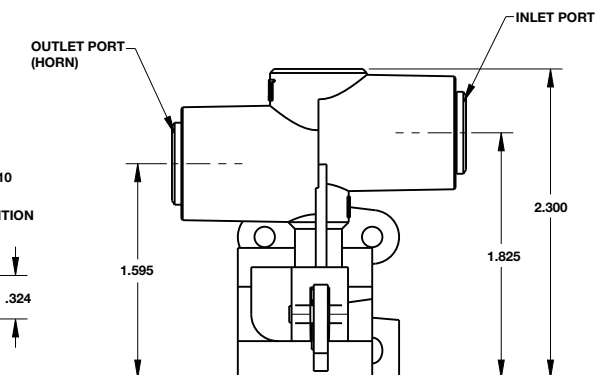
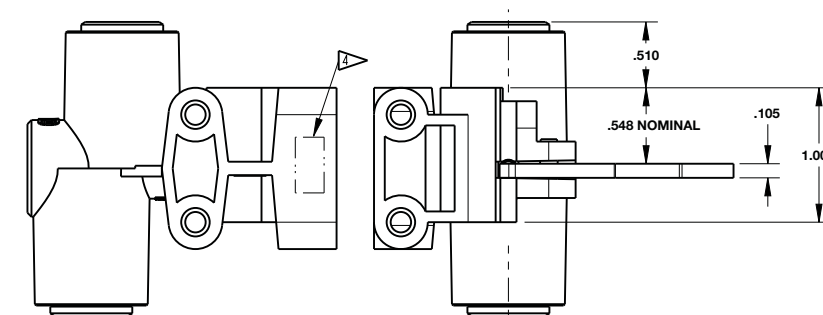
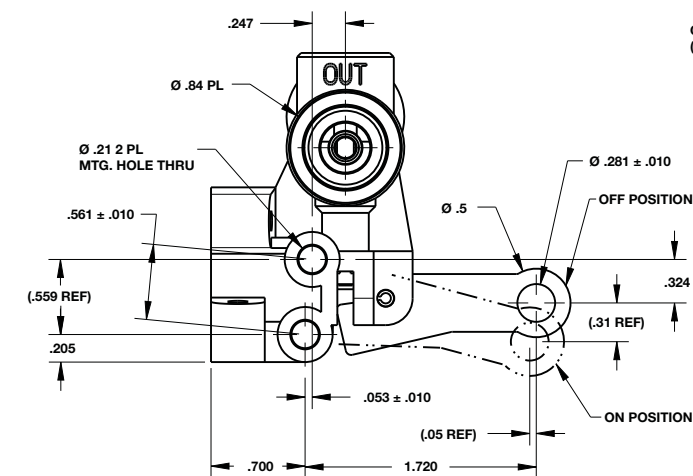
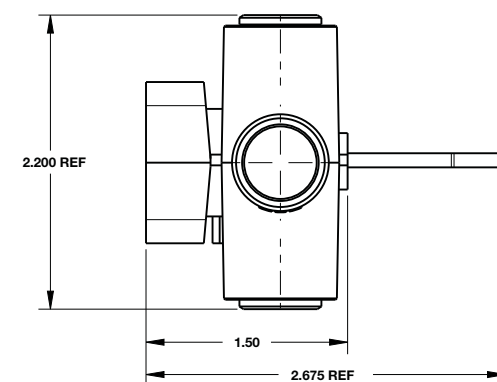
3302-2



HORN VALVES

3300, 3301 & 3302 Series

3302-3



WIPER WASHER CONTROLLER

- » Designed for installation on vehicle dashboards
- » Controls wiper speed and wash functions
- » Integrated wiper delay function
- » Microprocessor-based device

Technical Data

Mounting:

Mounts into a 22mm x 44mm dashboard opening

Operating temperature:

-20°F to +160°F (-20°C to +70°C)

Electrical connection:

8 Pin, PCB mounted amp connector

Material

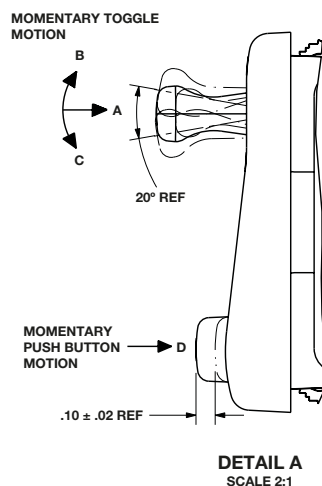
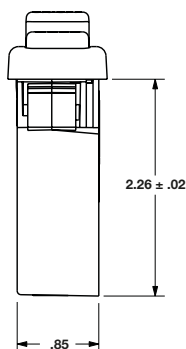
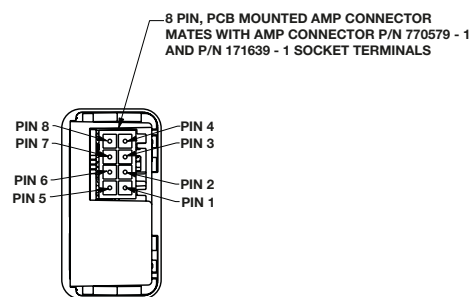
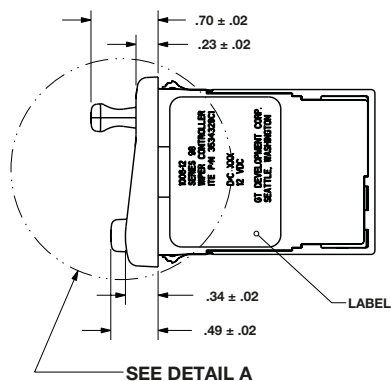
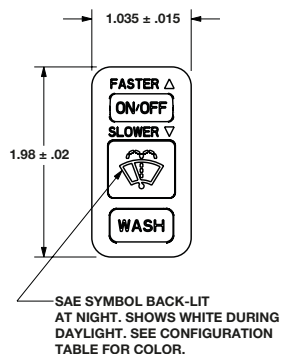
Zytel 72G13 HSIL BK black
nylon 6/6 13% glass



Models

| Model | Nominal Voltage | Backlight Color |
|---------|-----------------|-----------------|
| 1006-11 | 12V | Green |
| 1006-12 | 12V | Amber |
| 1006-13 | 12V | Red |
| 1006-14 | 12V | Blue |

Specifications



PIN - FUNCTION

- 1 Power (9 to 16VDC)
- 2 Night Illumination (0 to + 16VDC)
- 3 Low speed relay (GND) 1A max.
- 4 High speed relay (GND) 1A max.
- 5 Washer Pump (GND)
- 6 Ground
- 7 Ground
- 8 Ground

[Filters & Regulators]

3

Our filters, regulators, and combination filter/regulators offer accurate pressure adjustment and high efficiency water and particle removal to protect downstream components for longer-lasting performance.



EXCELON® MODULAR SYSTEM PRESSURE REGULATORS

R72G, R73G, R74G

- » Balanced valve design for optimum pressure control
- » Standard relieving models allow reduction of downstream pressure when the system is dead-ended
- » Push to lock adjusting knob with tamper evident accessory

Technical Data

Fluid:
Compressed air

Maximum pressure:
300 psig (20 bar)

Operating temperature*:
R72: -30° to 150°F
(-34° to 65°C)
R73 and R74: -30° to 175°F
(-34° to 80°C)
* Air supply must be dry enough to avoid ice formation at temperatures below 35°F (2°C).

Material

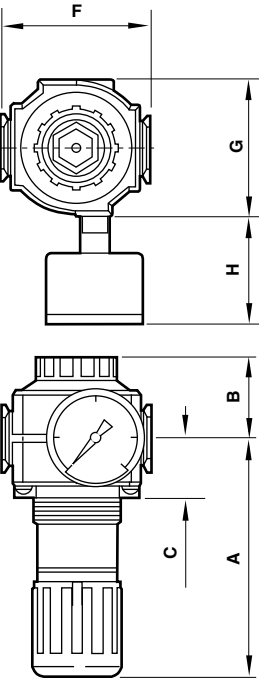
Elastomers: nitrile
Bottom plug: acetal
R72G
Body: zinc
Bonnet: acetal
Valve: Polypropylene and Geolast®
R73G, R74G
Body: aluminum
Bonnet: aluminum or zinc
Valve: Polypropylene and Geolast®



EXCELON® MODULAR SYSTEM PRESSURE REGULATORS










R72G, R73G, R74G

Specifications



Models

Accessories

| Model | Port size PTF | Flow SCFM* | Spring rate psig | Wall mounting bracket | Quick-mount pipe adapter | Quikclamp | Quikclamp and bracket | Neck mounting bracket | Tamper evident cover & wire | Gauge psig | Service kit** |
|-------------------------------------------------------------------------------------|---------------|------------|------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|  | | | |  |  |  |  |  |  |  |  |
| R72G-2AK-RMG | 1/4" | 70 | 5 to 150 | 4224-50 | 4215-02 | 4214-51 | 4214-52 | 74316-50 | 4255-51 | Gauge included | 4381-500 |
| R73G-2AK-RMG | 1/4" | 91 | 5 to 150 | 4424-50 | 4315-01 | 4314-51 | 4314-52 | 4461-50 | 4455-51 | Gauge included | 4381-600 |
| R73G-3AK-RMG | 3/8" | 144 | 5 to 150 | 4424-50 | 4315-02 | 4314-51 | 4314-52 | 4461-50 | 4455-51 | Gauge included | 4381-600 |
| R74G-3AK-RMG | 3/8" | 208 | 5 to 150 | 4324-50 | 4315-02 | 4314-51 | 4314-52 | 4368-51 | 4355-51 | Gauge included | 4381-700 |
| R74G-4AK-RMG | 1/2" | 220 | 5 to 150 | 4324-50 | 4315-03 | 4314-51 | 4314-52 | 4368-51 | 4355-51 | Gauge included | 4381-700 |
| R74G-6AK-RMG | 3/4" | 220 | 5 to 150 | 4324-50 | 4315-04 | 4314-51 | 4314-52 | 4368-51 | 4355-51 | Gauge included | 4381-700 |

Products may be special ordered to meet alternative technical specifications not listed here. Please call 1-800- 229-1875 to inquire.

* Typical flow with 150 psig inlet pressure, 90 psig set pressure and a 15 psig droop from set.

NOTE: Outlet pressure can be adjusted to pressures in excess of, and less than, those specified. Do not use these units to control pressures outside of the specified ranges.

** Kit includes: diaphragm, valve, valve spring, and o-rings.

| Series | A | B | C | F | G | H | Panel Ø | Panel depth |
|--------|------|------|------|------|------|------|---------|-------------|
| 72 | 2.87 | 1.30 | 1.02 | 1.97 | 1.89 | 1.38 | 1.57 | 0 to .16 |
| 73 | 3.78 | 1.54 | 1.22 | 2.68 | 2.44 | 2.20 | 1.89 | .07 to .25 |
| 74 | 5.00 | 1.69 | 1.22 | 3.15 | 2.91 | 2.20 | 2.05 | .07 to .25 |

EXCELON® MODULAR SYSTEM FILTER/REGULATORS

B72G, B73G, B74G

- » High efficiency water and particle removal
- » Quick release bayonet bowl
- » Push to lock adjusting knob with tamper evident accessory

Technical Data

Fluid:
Compressed air

Maximum pressure:
Transparent bowl: 150 psig (10 bar)
Metal bowl: 250 psig (17 bar)
B72G metal bowl w/ auto drain: 150 psig (10 bar)

Operating temperature*:
Transparent bowl:
(72) -30° to 125°F (-34° to 50°C)
Metal bowl:
(72) -30° to 150°F (-34° to 66°C)
(73, 74) -30° to 175°F (-34° to 80°C)

* Air supply must be dry enough to avoid ice formation at temperatures below 35°F (2°C).

Material

Elastomers: nitrile
Bottom plug: acetal
R72G
Body: zinc
Bonnet: acetal
Valve: Polypropylene and Geolast®
R73G, R74G
Body: aluminum
Bonnet: aluminum or zinc
Valve: Polypropylene and Geolast®



Models

Accessories

| Autodrain Model No. | Manual Drain Model No. | Port size PTF | Flow SCFM* | Bowl type | Element | Wall mounting bracket | Neck mounting bracket | Tamper evident cover wire | Gauge 0 to 160 psig | Replacement element | Service kit** |
|---------------------|------------------------|---------------|------------|-----------|---------|-----------------------|-----------------------|---------------------------|---------------------|---------------------|---------------|
| B72G-2AK-AE3-RMG | B72G-2AK-QD3-RMG | 1/4" | 80 | Metal | 40µ | 4224-50 | 74316-50 | 4255-51 | Gauge included | 5925-02 | 4383-500 |
| B73G-3AK-AD3-RMG | B73G-3AK-QD3-RMG | 3/8" | 123 | Metal | 40µ | 4424-50 | 4461-50 | 4455-51 | Gauge included | 4438-03 | 4383-600 |
| B73G-4AK-AD3-RMG | B73G-4AK-QD3-RMG | 3/8" | 123 | Metal | 40µ | 4424-50 | 4461-50 | 4455-51 | Gauge included | 4438-03 | 4383-600 |
| B74G-4AK-AD3-RMG | B74G-4AK-QD3-RMG | 3/8" | 212 | Metal | 40µ | 4324-50 | 4368-51 | 4355-51 | Gauge included | 4338-05 | 4383-700 |
| B74G-6AK-AD3-RMG | B74G-6AK-QD3-RMG | 3/4" | 212 | Metal | 40µ | 4324-50 | 4368-51 | 4355-51 | Gauge included | 4338-05 | 4383-700 |

Products may be special ordered to meet alternative technical specifications not listed here. Please call 1-800- 229-1875 to inquire.

* Typical flow with 150 psig inlet pressure, 90 psig set pressure a15 psig droop from set and 40 µm element.

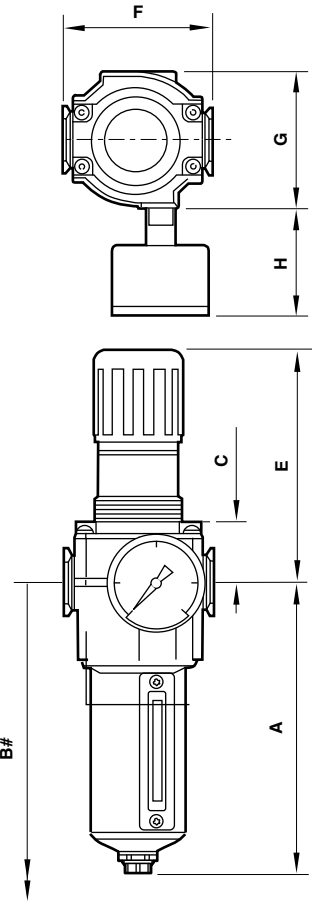
NOTE: Outlet pressure can be adjusted to pressures in excess of, and less than, those specified. Do not use these units to control pressures outside of the specified ranges.

** Kit includes: diaphragm, valve, valve spring, and o-rings.

EXCELON® MODULAR SYSTEM FILTER/REGULATORS

B72G, B73G, B74G

Specifications



Minimum clearance required to remove bowl

| Series | Drain | A | B | C | E | F | G | H | Panel Ø | Panel depth |
|--------|--------|------|------|------|------|------|------|------|---------|-------------|
| B72 | Auto | 5.51 | 7.52 | 1.02 | 2.87 | 1.97 | 1.89 | 1.38 | 1.57 | 0 to .16 |
| | Manual | 5.83 | 7.83 | 1.02 | 2.87 | 1.97 | 1.89 | 1.38 | 1.57 | 0 to .16 |
| B73 | Auto | 5.80 | 8.15 | 1.22 | 3.78 | 2.68 | 2.44 | 2.20 | 1.89 | .07 to .25 |
| | Manual | 6.15 | 8.50 | 1.22 | 3.78 | 2.68 | 2.44 | 2.20 | 1.89 | .07 to .25 |
| B74 | Auto | 6.35 | 9.06 | 1.22 | 5.00 | 3.15 | 2.91 | 2.20 | 2.05 | .07 to .25 |
| | Manual | 6.95 | 9.69 | 1.22 | 5.00 | 3.15 | 2.91 | 2.20 | 2.05 | .07 to .25 |

EXCELON® MODULAR SYSTEM FILTERS

F72G, F73G, F74G

- » Excelon® design allows in-line or modular installation with other Excelon® products
- » Quick release bayonet bowl
- » Highly visible prismatic liquid level indicator lens on metal bowls

Technical Data

Fluid:
Compressed air

Operating pressure:
Transparent bowl: 150 psig (10 bar)
Metal bowl: 250 psig (17 bar)
F72G w/metal bowl and automatic drain: 150 psig (10 bar)

Operating temperature*:
Transparent bowl: -30° to 125°F (-34° to 50°C)

Metal bowl:
(72) -30° to 150°F (-34° to 66°C)
(73, 74) -30° to 175°F (-34° to 80°C)
* Air supply must be dry enough to avoid ice formation at temperatures below 35°F (2°C).

Material

F72G
Body: zinc
Transparent bowl: polycarbonate
Metal bowl: zinc
Metal bowl liquid level indicator lens: transparent nylon
Element: sintered polypropylene
Elastomers: CR and nitrile

F73G & F74G:
Body: aluminum
Metal bowl: aluminum
Transparent bowl: Polycarbonate
Transparent bowl guard: 73: Steel
74: Aluminum
Metal bowl liquid level indicator lens: transparent nylon
Element: sintered polypropylene
Elastomers: CR and nitrile



Models

| Autodrain Model No. | Manual Drain Model No. | Port size PTF | Flow SCFM* | Bowl type | Element | Wall mounting bracket | Quickmount pipe adapter | Quikclamp | Quikclamp and bracket | Service kit** | Element |
|---------------------|------------------------|---------------|------------|-----------|---------|-----------------------|-------------------------|-----------|-----------------------|---------------|---------|
| F72G-2AN-AE3 | F72G-2AN-QD3 | 1/4" | 55 | Metal | 40µ | 4224-50 | 4215-02 | 4214-51 | 4214-52 | 4380-500 | 5925-02 |
| F73G-3AN-AD3 | F73G-3AN-QD3 | 3/8" | 63 | Metal | 40µ | 4424-50 | 4315-02 | 4314-51 | 4314-52 | 4380-600 | 4438-03 |
| F74G-4AN-AD3 | F74G-4AN-QD3 | 1/2" | 140 | Metal | 40µ | 4324-50 | 4315-03 | 4314-51 | 4314-52 | 4380-700 | 4338-05 |
| F74G-6AN-AD3 | F74G-6AN-QD3 | 3/4" | 140 | Metal | 40µ | 4324-50 | 4315-04 | 4314-51 | 4314-52 | 4380-700 | 4338-05 |
| F74G-6AN-AD1 | F74G-6AN-QD1 | 3/4" | 140 | Metal | 40µ | 4324-50 | 4315-04 | 4314-51 | 4314-52 | 4380-700 | 4338-05 |

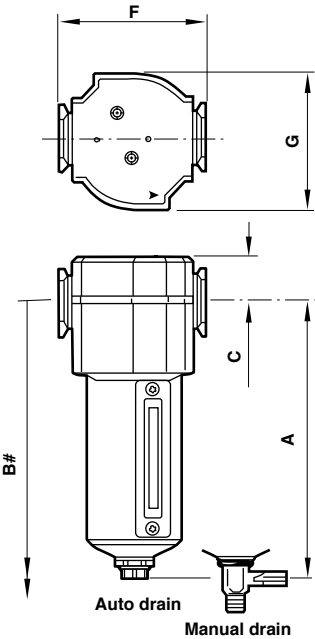


Products may be special ordered to meet alternative technical specifications not listed here. Please call 1-800- 229-1875 to inquire.
* Typical flow with 40 µm element at 90 psig inlet pressure and 5 psig pressure drop.
** Kit includes: diaphragm, valve, valve spring, and o-rings.

EXCELON® MODULAR SYSTEM FILTERS

F72G, F73G, F74G

Specifications



| Series | Drain type | A | B# | C | F | G |
|---------|------------|------|------|------|------|------|
| 72 | Auto | 5.51 | 7.52 | 0.75 | 1.97 | 1.89 |
| | Manual | 5.83 | 7.83 | 0.75 | 1.97 | 1.89 |
| 72 Long | Auto | 6.07 | 8.08 | 0.75 | 1.97 | 1.89 |
| | Manual | 6.39 | 8.39 | 0.75 | 1.97 | 1.89 |
| 73 | Auto | 5.80 | 8.15 | 0.98 | 2.68 | 2.44 |
| | Manual | 6.15 | 8.50 | 0.98 | 2.68 | 2.44 |
| 74 | Auto | 6.35 | 9.06 | 0.98 | 3.15 | 2.91 |
| | Manual | 6.95 | 9.69 | 0.98 | 3.15 | 2.91 |

B# - Minimum distance required to remove bowl.

MINIATURE GENERAL PURPOSE REGULATORS

R07

- » Snap action knob locks pressure setting when pushed down
- » Standard relieving models allow reduction of outlet pressure even when the system is dead-ended

Technical Data

Fluid:
Compressed air

Maximum pressure:
300 psig (20 bar)

Operating temperature:
-34°F to 150°F (-35°C to 65°C)*

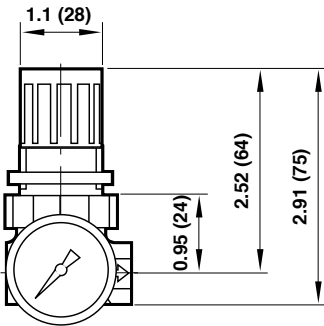
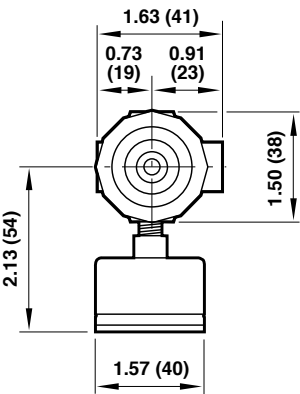


Models

| Model | Port Size | Flow SCFM* | Weight lbs (kg) |
|--------------|-----------|------------|-----------------|
| R07-100-RGLA | 1/8" | 14 | 0.31 (0.19) |
| R07-200-RGLA | 1/4" | 15 | 0.31 (0.19) |
| R07-100-RNLA | 1/8" | 14 | 0.31 (0.19) |
| R07-200-RNLA | 1/4" | 15 | 0.31 (0.19) |

* Typical flow with 150 psig inlet pressure, 90 psig set pressure and a 15 psig droop from set.

Specifications



DIMENSIONS IN INCHES (MM)

Alternative Models

| Port Size | Substitute |
|---------------|------------|
| 1/8" | 1 |
| 1/4" | 2 |
| Diaphragm | Substitute |
| Relieving | R |
| Non-Relieving | N |
| Gauges | Substitute |
| With | G |
| Without | N |

R07 - ★ 00 - ★ ★ ★ ★

| Threads | Substitute |
|--------------------------------|------------|
| PTF | A |
| ISO G parallel | G |
| Outlet Pressure | Substitute |
| Adjustment Ranges | Substitute |
| 1 to 10 psig (0.1 to 0.7 bar) | A |
| 5 to 50 psig (0.3 to 3.5 bar) | E |
| 5 to 100 psig (0.3 to 7 bar) | K |
| 5 to 125 psig (0.3 to 8.6 bar) | L |

[DOT Fittings]

4

Fittings are essential to any pneumatic system and choosing the right ones will improve performance and prevent leaks. Our fittings are fully certified and DOT/SAE/TUV approved for use with metric tubing.



DOT VEHICLE PUSH-TO-CONNECT FITTINGS

Fleetfit Series

- » Fittings comply to Department of Transport Federal Motor Vehicle Safety Standard, (DOT FMVSS 106) (Mandatory requirements for Inch tube fittings in U.S.A.)
- » Simple tube connection and disconnection – no tools required
- » Fewer component parts – Internally machined form in body to secure collet, reduces number of potential leak paths
- » Corrosion resistant
- » Reduced assembly and maintenance times provide time/labor savings
- » Greater reliability and reduced testing
- » Ease of tube insertion in areas of restricted access

Technical Data

Operating medium:
Compressed air

Maximum working pressure:
0 to 150 psi (0 to 10 bar)

Working temperature:
Standard: -40° to 219°F (-40° to 104°C)
HBNR: -49° to 302°F (-45° to +150°C)
FKM: -4° to 392°F (-20° to +200°C)

Additional temperature options are available. Please contact us directly for more information.

Custom Fittings

The following options are available for special colon orders:

A Thread Coated
M Bulk Packaging & Thread Coated
BP Bulk Packaging, No Thread Coat
PSBP Bulk Packaging and HBNR O Rings
PSM Thread Coated, Bulk Packaged, and HBNR O Rings
V FKM O Ring

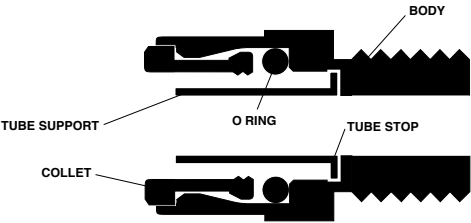
Material

Body (Straights), Tube support, Collet
Body (Elbows, Tees) – Brass
'O' Ring – Nitrile
Thread Sealant – Precoat 5
Tubing:
Tube should be to SAE J844 (Imperial) or DIN 74324 (Metric)

Standards and legislation:
Fittings and tubing comply to Department of Transport Federal Motor Vehicle Safety Standard, (DOT FMVSS 106) (Mandatory requirements for Inch tube fittings in U.S.A.)
Society for Automotive Engineers (SAE) J2494 (Inch tube and fittings) and meet DIN 74324 and German TÜV requirements (Metric tube and fittings)



Tube Connection/Disconnection

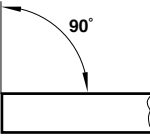


Body:
The body has an internally machined form to secure the Collet(s), O-ring(s) and Tube support(s). It also has internal and externally machined thread form(s) for connection to ports where applicable.

Collet:
The purpose of the collet is to grip the tube and ensure it is retained by the fitting at all times.

O-ring:
The O-ring is to ensure adequate interference between the tube and fitting body therefore providing a pneumatic seal at all times.

Tube Support:
The tube support prevents the tube collapsing during extreme tensile loading conditions. Such conditions are only encountered during performance testing and far exceed those experienced during normal use.



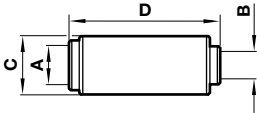
1. Ensure that the end of the tube is cut square and is free from burrs.
2. Push the tube through the collet into the fitting.
3. Continue pushing the tube through the O-ring until it bottoms on the tube stop. Then pull back on the tube to reinforce the collet teeth gripping action.
4. To disconnect: First ensure there is no air present. Push the tube into the fitting until it bottoms on the tube stop. Then hold down the collet and withdraw the tube.

DOT VEHICLE PUSH-TO-CONNECT FITTINGS

Fleetfit Series

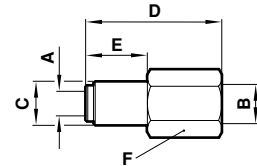
Union

| Models | A Tube O/D | ØB | C |
|--------------|------------|------|------|
| 94450313M | 3/16" | 0.47 | 1.36 |
| 94450304M | 1/4" | 0.51 | 1.4 |
| 94450304PSBP | 1/4" | 0.51 | 1.4 |
| 94450306M | 3/8" | 0.67 | 1.74 |
| 94450306PSBP | 3/8" | 0.67 | 1.74 |
| 94450307M | 1/2" | 0.81 | 2.01 |
| 94450307PSBP | 1/2" | 0.81 | 2.01 |
| 94450308M | 5/8" | 1 | 2.42 |
| 94450308PSBP | 5/8" | 1 | 2.42 |
| 94450309M | 3/4" | 1.18 | 2.48 |



Reducing Unions (Inch)

| Models | A Tube O/D | B Tube | ØC | D |
|-----------|------------|--------|------|------|
| 94450448M | 3/8" | 1/4" | 0.67 | 1.71 |
| 94450464M | 1/2" | 3/8" | 0.81 | 1.91 |

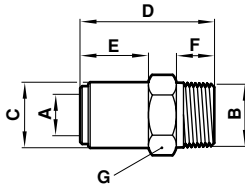


Female Connectors NPT

| Models | A Tube O/D | B NPT | ØC | D | E | F |
|-----------|------------|-------|------|------|------|---------|
| 95435504M | 1/4" | 1/8" | 0.51 | 1.31 | 0.72 | 9/16" |
| 95435510M | 1/4" | 1/4" | 0.51 | 1.59 | 0.72 | 11/16" |
| 95435512M | 3/8" | 1/4" | 0.65 | 1.74 | 0.88 | 11/16" |
| 95435520M | 3/8" | 3/8" | 0.65 | 1.78 | 0.88 | 7/8" |
| 95435530M | 1/2" | 1/2" | 0.91 | 2.11 | 0.96 | 1 1/16" |

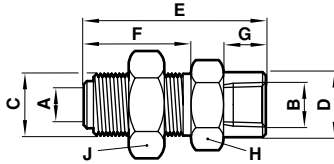
Male Connectors NPT

| Models | A Tube O/D | B NPT | ØC | D | E | F | G A/F |
|-------------|------------|-------|------|------|------|------|---------|
| 95453003M | 3/16" | 1/8" | 0.46 | 1.02 | 0.43 | 0.37 | 1/2" |
| 95453003BP | 3/16" | 1/8" | 0.46 | 1.02 | 0.43 | 0.37 | 1/2" |
| 95453004M | 1/4" | 1/8" | 0.5 | 1.04 | 0.43 | 0.37 | 1/2" |
| 95453004PSM | 1/4" | 1/8" | 0.5 | 1.04 | 0.43 | 0.37 | 1/2" |
| 95453010M | 1/4" | 1/4" | 0.5 | 1.17 | 0.37 | 0.56 | 9/16" |
| 95453010PSM | 1/4" | 1/4" | 0.5 | 1.17 | 0.37 | 0.56 | 9/16" |
| 95453018M | 1/4" | 3/8" | 0.5 | 1.2 | 0.31 | 0.56 | 1 1/16" |
| 95453006M | 3/8" | 1/8" | 0.65 | 1.32 | 0.67 | 0.37 | 1 1/16" |
| 95453009M | 3/16" | 1/4" | 0.46 | 1.15 | 0.35 | 0.56 | 9/16" |
| 95453012M | 3/8" | 1/4" | 0.66 | 1.48 | 0.63 | 0.56 | 1 1/16" |
| 95453012PSM | 3/8" | 1/4" | 0.66 | 1.48 | 0.63 | 0.56 | 1 1/16" |
| 95453020M | 3/8" | 3/8" | 0.66 | 1.42 | 0.54 | 0.56 | 1 1/16" |
| 95453020PSM | 3/8" | 3/8" | 0.66 | 1.42 | 0.54 | 0.56 | 1 1/16" |
| 95453029M | 3/8" | 1/2" | 0.66 | 1.46 | 0.36 | 0.75 | 7/8" |
| 95453029PSM | 3/8" | 1/2" | 0.66 | 1.46 | 0.36 | 0.75 | 7/8" |
| 95453013M | 1/2" | 1/4" | 0.79 | 1.68 | 0.75 | 0.56 | 7/8" |
| 95453013PSM | 1/2" | 1/4" | 0.79 | 1.68 | 0.75 | 0.56 | 7/8" |
| 95453021M | 1/2" | 3/8" | 0.79 | 1.64 | 0.71 | 0.56 | 7/8" |
| 95453021PSM | 1/2" | 3/8" | 0.79 | 1.64 | 0.71 | 0.56 | 7/8" |
| 95453030M | 1/2" | 1/2" | 0.79 | 1.72 | 0.61 | 0.75 | 7/8" |
| 95453030PSM | 1/2" | 1/2" | 0.79 | 1.72 | 0.61 | 0.75 | 7/8" |
| 95453022M | 5/8" | 3/8" | 0.98 | 1.87 | 0.89 | 0.56 | 1-1/6" |
| 95453022PSM | 5/8" | 3/8" | 0.98 | 1.87 | 0.89 | 0.56 | 1-1/6" |
| 95453031M | 5/8" | 1/2" | 0.98 | 2.12 | 0.93 | 0.75 | 1-1/6" |
| 95453049M | 3/4" | 1/2" | 1 | 2.11 | 0.89 | 0.75 | 1-3/16" |
| 95453055M | 3/4" | 3/4" | 1.16 | 2.03 | 0.81 | 0.75 | 1-3/16" |

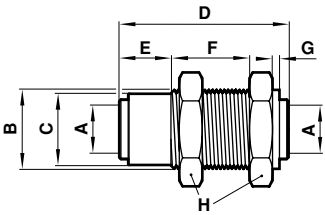


Female Bulkhead Connectors NPT Female, UNF

| Models | A Tube O/D | B NPT Female | C UNF | ØD | E | F | G | H | J |
|-----------|------------|--------------|-------|------|------|------|------|------|---------|
| 95457006M | 1/4" | 1/8" | 5/8" | 0.63 | 1.32 | 0.69 | 0.28 | 0.87 | 15/16" |
| 95457001M | 1/4" | 1/4" | 5/8" | 0.79 | 1.59 | 0.73 | 0.51 | 0.87 | 15/16" |
| 95457003M | 3/8" | 1/4" | 3/4" | 0.79 | 2.2 | 1.3 | 0.51 | 0.94 | 1-1/8" |
| 95457004M | 3/8" | 3/8" | 3/4" | 0.79 | 2.2 | 1.3 | 0.51 | 0.94 | 1-1/8" |
| 95457005M | 1/2" | 3/8" | 7/8" | - | 1.89 | 1.5 | - | 1.06 | 1-5/16" |
| 95457007M | 1/2" | 1/2" | 7/8" | - | 2.64 | 1.5 | - | 1.06 | 1-5/16" |

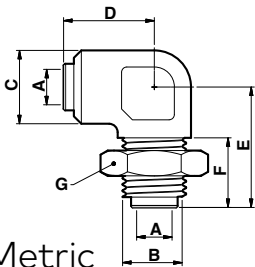


DOT VEHICLE PUSH-TO-CONNECT FITTINGS
Fleetfit Series



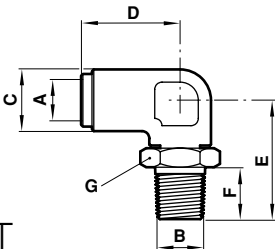
Bulkhead Unions

| Models | A Tube O/D | B Thread | D | F (Max) | G (Min) | H A/F |
|-----------|------------|-----------|------|---------|---------|-------|
| 94450704M | 1/4" | M15 x 1.0 | 1.41 | 0.87 | 0.08 | 0.87 |
| 94450706M | 3/8" | M20 x 1.5 | 1.75 | 1.10 | 0.08 | 1.06 |
| 94450707M | 1/2" | M24 x 1.5 | 2.02 | 1.38 | 0.08 | 1.18 |



Union Bulkhead Elbows Metric

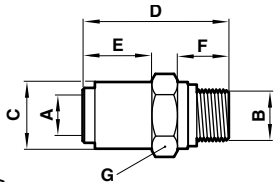
| Models | A Tube O/D | B Thread | ØC | D | E | F | G A/F |
|-----------|------------|----------|------|------|------|------|-------|
| 94459106M | 3/8" | M20x1.5 | 23.8 | 27.7 | 39.2 | 22.7 | 27 |



Male Swivel Elbows NPT

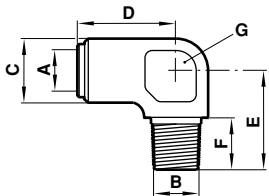
| Models | A Tube O/D | B NPT | ØC | D | E | F | G A/F |
|-------------|------------|-------|------|------|------|------|-------|
| 95411404M | 1/4" | 1/8" | 0.51 | 0.83 | 0.91 | 0.37 | 0.43 |
| 95411404PSM | 1/4" | 1/8" | 0.51 | 0.83 | 0.91 | 0.37 | 0.43 |
| 95411410M | 1/4" | 1/4" | 0.51 | 0.83 | 1.12 | 0.56 | 0.55 |
| 95411418M | 1/4" | 3/8" | 0.59 | 0.85 | 1.25 | 0.56 | 0.75 |
| 95411406M | 3/8" | 1/8" | 0.67 | 1.07 | 1.05 | 0.37 | 0.55 |
| 95411412M | 3/8" | 1/4" | 0.67 | 1.07 | 1.29 | 0.56 | 0.75 |
| 95411412PSM | 3/8" | 1/4" | 0.67 | 1.07 | 1.29 | 0.56 | 0.75 |
| 95411420M | 3/8" | 3/8" | 0.67 | 1.07 | 1.24 | 0.56 | 0.75 |
| 95411420PSM | 3/8" | 3/8" | 0.67 | 1.07 | 1.24 | 0.56 | 0.75 |
| 95411429M | 3/8" | 1/2" | 0.67 | 1.07 | 1.44 | 0.75 | 0.87 |
| 95411413M | 1/2" | 1/4" | 0.81 | 1.27 | 1.27 | 0.56 | 0.87 |
| 95411413PSM | 1/2" | 1/4" | 0.81 | 1.27 | 1.27 | 0.56 | 0.87 |
| 95411421M | 1/2" | 3/8" | 0.81 | 1.27 | 1.42 | 0.56 | 0.87 |
| 95411421PSM | 1/2" | 3/8" | 0.81 | 1.27 | 1.42 | 0.56 | 0.87 |
| 95411430M | 1/2" | 1/2" | 0.81 | 1.27 | 1.62 | 0.75 | 0.87 |
| 95411431M | 5/8" | 1/2" | 1.02 | 1.48 | 1.69 | 0.75 | 0.87 |
| 95411449M | 3/4" | 1/2" | 1.18 | 1.52 | 1.77 | 0.75 | 0.87 |

CAUTION: Swivel adapters are not suitable for use in continuously rotating



Metric Male Connectors

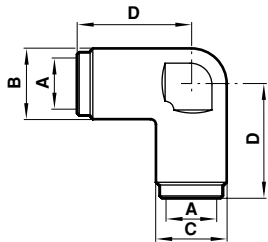
| Models | A Tube O/D | B Thread | ØC | D | E | F | G A/F |
|------------|------------|----------|------------|------------|------------|------------|----------|
| 94466631M | 1/4" | M10x1.0 | 0.51(13.0) | 1.12(28.5) | 0.53(13.5) | 0.39(10.0) | 0.55(14) |
| 94466633M | 1/4" | M12x1.5 | 0.51(13.0) | 1.12(28.5) | 0.53(13.5) | 0.39(10.0) | 0.67(17) |
| 94466633V | 1/4" | M12x1.5 | 0.51(13.0) | 1.12(28.5) | 0.53(13.5) | 0.39(10.0) | 0.67(17) |
| 94466653M | 3/8" | M12x1.5 | 0.51(13.0) | 1.12(28.5) | 0.53(13.5) | 0.39(10.0) | 0.67(17) |
| 94466655BP | 1/2" | M16x1.5 | 0.81(20.5) | 1.54(39.0) | 0.75(19.0) | 0.47(12.0) | 0.97(22) |
| 94466635M | 1/4" | M16x1.5 | 0.51(13.0) | 1.08(27.5) | 0.30(7.5) | 0.30(7.5) | 0.87(22) |
| 94466668BP | 1/2" | M22x1.5 | 0.81(20.5) | 1.38(35.0) | 0.37(9.5) | 0.37(9.5) | 1.06(27) |
| 94466675BP | 5/8" | M22x1.5 | 1.02(26.0) | 1.75(44.5) | 0.77(19.5) | 0.37(9.5) | 1.06(27) |



Male Elbows NPT

| Models | A Tube O/D | B NPT | ØC | D | E | F | G A/F |
|-------------|------------|-------|------|------|------|------|-------|
| 95433103M | 3/16" | 1/8" | 0.47 | 0.81 | 0.75 | 0.37 | 0.47 |
| 95433104M | 1/4" | 1/8" | 0.55 | 0.81 | 0.79 | 0.37 | 0.55 |
| 95433104PSM | 1/4" | 1/8" | 0.55 | 0.81 | 0.79 | 0.37 | 0.55 |
| 95433109M | 3/16" | 1/4" | 0.69 | 0.81 | 0.94 | 0.56 | 0.63 |
| 95433110M | 1/4" | 1/4" | 0.69 | 0.87 | 1.02 | 0.56 | 0.71 |
| 95433110PSM | 1/4" | 1/4" | 0.69 | 0.87 | 1.02 | 0.56 | 0.71 |
| 95433118M | 1/4" | 3/8" | 0.82 | 0.94 | 1.1 | 0.56 | 0.87 |
| 95433118PSM | 1/4" | 3/8" | 0.82 | 0.94 | 1.1 | 0.56 | 0.87 |
| 95433127M | 1/4" | 1/2" | 0.94 | 0.96 | 1.38 | 0.75 | 0.94 |
| 95433106M | 3/8" | 1/8" | 0.69 | 1.08 | 0.87 | 0.37 | 0.71 |
| 95433112M | 3/8" | 1/4" | 0.69 | 1.06 | 1.02 | 0.56 | 0.71 |
| 95433112PSM | 3/8" | 1/4" | 0.69 | 1.06 | 1.02 | 0.56 | 0.71 |
| 95433120M | 3/8" | 3/8" | 0.82 | 1.14 | 1.1 | 0.56 | 0.87 |
| 95433120PSM | 3/8" | 3/8" | 0.82 | 1.14 | 1.1 | 0.56 | 0.87 |
| 95433129M | 3/8" | 1/2" | 0.94 | 1.14 | 1.38 | 0.75 | 0.94 |
| 95433113M | 1/2" | 1/4" | 0.87 | 1.22 | 1.14 | 0.56 | 0.87 |
| 95433121M | 1/2" | 3/8" | 0.87 | 1.26 | 1.14 | 0.56 | 0.87 |
| 95433121PSM | 1/2" | 3/8" | 0.87 | 1.26 | 1.14 | 0.56 | 0.87 |
| 95433130M | 1/2" | 1/2" | 0.94 | 1.28 | 1.38 | 0.75 | 0.94 |
| 95433130PSM | 1/2" | 1/2" | 0.94 | 1.28 | 1.38 | 0.75 | 0.94 |
| 95433198M | 5/8" | 3/8" | 1.06 | 1.44 | 1.22 | 0.56 | 0.87 |
| 95433131M | 5/8" | 1/2" | 1.15 | 1.54 | 1.42 | 0.75 | 1.18 |
| 95433131PSM | 5/8" | 1/2" | 1.15 | 1.54 | 1.42 | 0.75 | 1.18 |
| 95433149M | 3/4" | 1/2" | 1.3 | 1.52 | 1.48 | 0.75 | 0.94 |
| 95433155M | 3/4" | 3/4" | 1.15 | 1.59 | 1.5 | 0.75 | 1.18 |

DOT VEHICLE PUSH-TO-CONNECT FITTINGS
Fleetfit Series



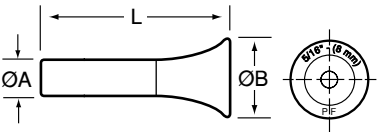
Union Elbows

| Models | A Tube O/D | ØB | ØC | D |
|------------|------------|------|------|------|
| 94451104BP | 1/4" | 0.43 | 0.51 | 0.83 |
| 94451106M | 3/8" | 0.57 | 0.67 | 1.07 |
| 94451107M | 1/2" | 0.71 | 0.81 | 1.26 |



45° Male Elbows NPT

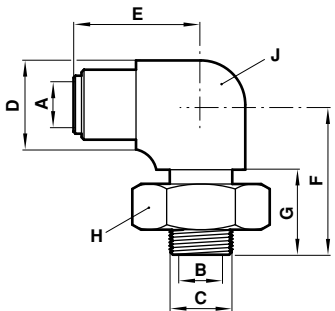
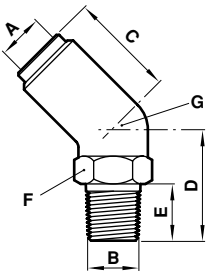
| Models | A Tube O/D | B NPT | C | D | E | F A/F | G A/F |
|--------------|------------|-------|------|------|------|-------|-------|
| 95460004M | 1/4" | 1/8" | 0.87 | 0.81 | 0.37 | 0.56 | - |
| 95460010M | 1/4" | 1/4" | 0.89 | 0.98 | 0.56 | 0.56 | - |
| 95460006M | 3/8" | 1/8" | 1.02 | 0.93 | 0.37 | 0.75 | - |
| 95460012M | 3/8" | 1/4" | 1.06 | 1.1 | 0.56 | 0.75 | - |
| 95460012PSM | 3/8" | 1/4" | 1.06 | 1.1 | 0.56 | 0.75 | - |
| 95460020M | 3/8" | 3/8" | 1.1 | 1.12 | 0.56 | 0.75 | - |
| 95460029M | 3/8" | 1/2" | 1.14 | 1.3 | 0.75 | 0.87 | - |
| 95460013M | 1/2" | 1/4" | 1.22 | 1.1 | 0.56 | 0.87 | - |
| 95460021M | 1/2" | 3/8" | 1.26 | 1.12 | 0.56 | 0.87 | - |
| 95460021PSM | 1/2" | 3/8" | 1.26 | 1.12 | 0.56 | 0.87 | - |
| 95460030M | 1/2" | 1/2" | 1.3 | 1.3 | 0.75 | 0.87 | - |
| 95460022M | 5/8" | 3/8" | 1.46 | 1.02 | 0.56 | - | 1.06 |
| 95460022PSBP | 5/8" | 3/8" | 1.46 | 1.02 | 0.56 | - | 1.06 |
| 95460031M | 5/8" | 1/2" | 1.46 | 1.22 | 0.75 | - | 1.06 |
| 95460049M | 3/4" | 1/2" | 1.52 | 1.3 | 0.75 | 1 | - |



DOT Plug*

| Models | A O/D Stem | ØB | L |
|------------|------------|------|------|
| 94050904BP | 1/4" | 0.46 | 1.12 |
| 94050906BP | 3/8" | 0.65 | 1.34 |

*Material: Thermoplastic



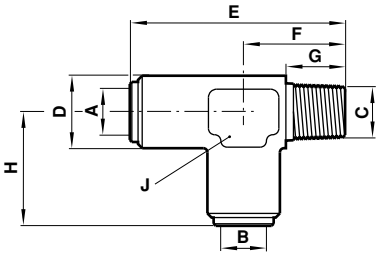
Male Bulkhead Elbows, NPT Female, UNF

| Models | A Tube O/D | B NPT Female | C UNF | ØD | E | F | G | H A/F | J A/F |
|-----------|------------|--------------|-------|------|------|------|------|---------|-------|
| 95459704M | 1/4" | 1/8" | 5/8" | 0.81 | 1 | 1.18 | 0.63 | 15/16" | 0.87 |
| 95459702M | 1/2" | 3/8" | 7/8" | 1.02 | 1.33 | 1.61 | 0.98 | 1-5/16" | 0.67 |

DOT VEHICLE PUSH-TO-CONNECT FITTINGS
Fleetfit Series



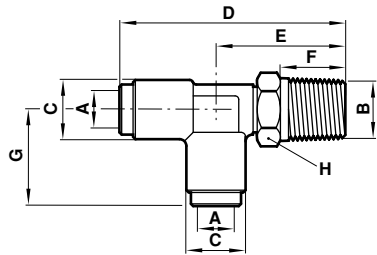
Male Run Tees NPT



| Models | A Tube O/D | B Tube O/D | C NPT | ØD | E | F | G | H | J A/F |
|-------------|------------|------------|-------|------|------|------|------|------|-------|
| 95458628M | 1/4" | 1/4" | 18" | 0.55 | 1.67 | 0.79 | 0.37 | 0.89 | 0.55 |
| 95458613M | 1/4" | 1/4" | 1/4" | 0.69 | 1.85 | 0.96 | 0.56 | 0.89 | 0.71 |
| 95458617M | 1/4" | 1/4" | 3/8" | 0.82 | 2.03 | 1.1 | 0.56 | 0.93 | 0.87 |
| 95458607M | 1/4" | 3/8" | 3/8" | 0.82 | 2.03 | 1.1 | 0.56 | 1.14 | 0.87 |
| 95458607PSM | 1/4" | 3/8" | 3/8" | 0.82 | 2.03 | 1.1 | 0.56 | 1.14 | 0.87 |
| 95458605M | 3/8" | 1/4" | 1/4" | 0.69 | 2.05 | 0.96 | 0.56 | 0.93 | 0.71 |
| 95458627M | 3/8" | 1/4" | 3/8" | 0.82 | 2.24 | 1.1 | 0.56 | 0.93 | 0.87 |
| 95458603M | 3/8" | 3/8" | 1/4" | 0.69 | 2.05 | 0.96 | 0.56 | 1.08 | 0.71 |
| 95458610M | 3/8" | 3/8" | 3/8" | 0.82 | 2.24 | 1.1 | 0.56 | 1.14 | 0.87 |
| 95458604M | 3/8" | 3/8" | 1/2" | 0.91 | 2.64 | 1.42 | 0.75 | 1.22 | 0.94 |
| 95458626M | 3/8" | 1/2" | 3/8" | 0.87 | 2.36 | 1.14 | 0.56 | 1.3 | 0.87 |
| 95458620M | 1/2" | 3/8" | 3/8" | 0.87 | 2.44 | 1.14 | 0.56 | 1.22 | 0.87 |
| 95458621M | 1/4" | 3/8" | 1/4" | 0.69 | 1.85 | 1.00 | 0.56 | 1.08 | 0.71 |
| 95458611M | 1/2" | 1/2" | 3/8" | 0.87 | 2.44 | 1.14 | 0.56 | 1.3 | 0.87 |



Male Swivel Run Tees NPT



| Models | A Tube O/D | B NPT | ØC | D | E | F | G | H A/F |
|-----------|------------|-------|------|------|------|------|------|-------|
| 95411204M | 1/4" | 1/8" | 0.51 | 1.75 | 0.91 | 0.37 | 0.83 | 0.43 |
| 95411210M | 1/4" | 1/4" | 0.51 | 1.95 | 1.12 | 0.56 | 0.83 | 0.55 |
| 95411212M | 3/8" | 1/4" | 0.67 | 2.36 | 1.29 | 0.56 | 1.07 | 0.75 |
| 95411220M | 3/8" | 3/8" | 0.67 | 2.32 | 1.24 | 0.56 | 1.07 | 0.75 |



90° Fixed Tee

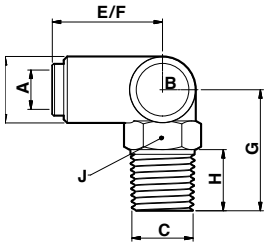
| Models | A Tube O/D | B NPT Female | C NPT | ØD | E | F | G | H |
|-----------|------------|--------------|-------|------|------|------|------|------|
| 95456503M | 3/8" | 1/8" | 3/8" | 0.83 | 1.12 | 1.1 | 0.56 | 0.87 |
| 95456502M | 1/2" | 1/4" | 1/2" | 0.94 | 1.28 | 1.38 | 0.75 | 0.94 |

Note: Ports are threaded on side shown.

DOT VEHICLE PUSH-TO-CONNECT FITTINGS
Fleetfit Series



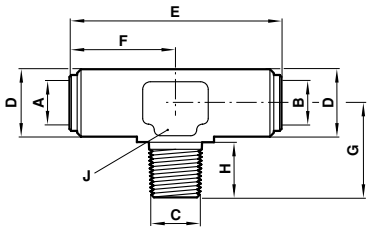
Special 90° Tees NPT



| Models | A Tube O/D | B Tube O/D | C NPT | ØD | E | F | G | H | J A/F |
|------------|------------|------------|-------|------|------|------|------|------|-------|
| 95458901A | 1/4" | 1/4" | 1/4" | 0.55 | 0.93 | 0.93 | 1.07 | 0.56 | 9/16" |
| 95458920M | 3/8" | 5/8" | 1/2" | 1.15 | 1.23 | 1.63 | 1.69 | 0.75 | 0.87 |
| 95458905BP | 1/2" | 5/8" | 1/2" | 1.15 | 1.46 | 1.63 | 1.69 | 0.75 | 0.87 |
| 95458906M | 5/8" | 5/8" | 1/2" | 1.15 | 1.63 | 1.63 | 1.69 | 0.75 | 0.87 |



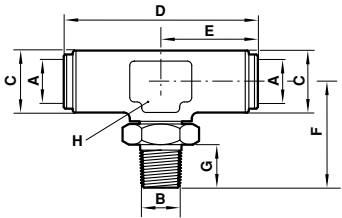
Male Branch Tees NPT



| Models | A Tube O/D | B Tube O/D | C NPT | ØD | E | F | G | H | J |
|-------------|------------|------------|-------|------|------|------|------|------|------|
| 95459002M | 1/4" | 1/4" | 18" | 0.55 | 1.69 | 0.85 | 0.79 | 0.37 | 0.55 |
| 95459012M | 1/4" | 1/4" | 1/4" | 0.69 | 1.77 | 0.89 | 0.96 | 0.56 | 0.71 |
| 95459012PSM | 1/4" | 1/4" | 1/4" | 0.69 | 1.77 | 0.89 | 0.96 | 0.56 | 0.71 |
| 95459016M | 3/8" | 1/4" | 1/4" | 0.69 | 1.97 | 0.89 | 0.96 | 0.56 | 0.71 |
| 95459010M | 3/8" | 3/8" | 1/4" | 0.69 | 2.17 | 1.08 | 0.96 | 0.56 | 0.71 |
| 95459004M | 1/2" | 1/2" | 1/2" | 0.91 | 2.68 | 1.34 | 1.42 | 0.75 | 0.94 |
| 95459001M | 3/8" | 3/8" | 3/8" | 0.82 | 2.28 | 1.14 | 1.10 | 0.56 | 0.87 |
| 95459013M | 1/2" | 1/2" | 1/4" | 0.87 | 2.44 | 1.22 | 1.14 | 0.56 | 0.87 |



Male Swivel Branch Tees NPT



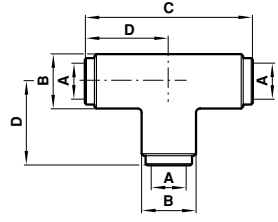
| Models | A Tube O/D | B NPT | ØC | D | E | F | G | H A/F |
|-----------|------------|-------|------|------|------|------|------|-------|
| 95411103M | 3/16" | 3/16" | 1/8" | 1.57 | 0.79 | 0.89 | 0.37 | 0.43 |
| 95411104M | 1/4" | 1/8" | 0.51 | 1.67 | 0.83 | 0.91 | 0.37 | 0.43 |
| 95411106M | 3/8" | 1/8" | 1/8" | 2.17 | 1.08 | 0.93 | 0.37 | 0.55 |
| 95411112M | 3/8" | 1/4" | 0.67 | 2.17 | 1.08 | 1.29 | 0.56 | 0.75 |
| 95411120M | 3/8" | 3/8" | 0.67 | 2.17 | 1.08 | 1.24 | 0.56 | 0.75 |
| 95411121M | 1/2" | 3/8" | 0.81 | 2.56 | 1.28 | 1.42 | 0.56 | 0.87 |
| 95411130M | 1/2" | 1/2" | 0.81 | 2.56 | 1.28 | 1.62 | 0.75 | 0.87 |

CAUTION: Swivel adapters are not suitable for use in continuously rotating or gyrating applications.

DOT VEHICLE PUSH-TO-CONNECT FITTINGS
Fleetfit Series



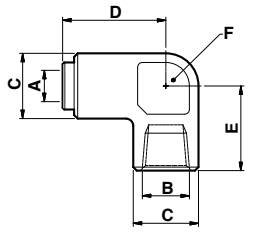
Union Tee



| Models | A Tube O/D | ØB | C | D |
|------------|------------|------|------|------|
| 94451404M | 1/4" | 0.51 | 1.65 | 0.83 |
| 94451406M | 3/8" | 0.67 | 2.13 | 1.07 |
| 94451407M | 1/2" | 0.81 | 2.53 | 1.26 |
| 94451408M | 5/8" | 1.06 | 3.07 | 1.54 |
| 94451409BP | 3/4" | 1.14 | 3.35 | 1.67 |



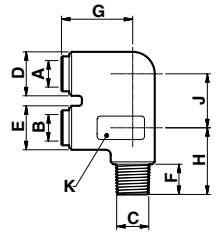
Female Elbows NPT



| Models | A Tube O/D | B NPT | C | D | E | F |
|------------|------------|-------|------|------|------|------|
| 95456401BP | 3/16" | 1/8" | 0.55 | 0.87 | 0.71 | 0.55 |
| 95456410BP | 1/4" | 1/4" | 0.69 | 0.91 | 0.71 | 0.71 |
| 95456420BP | 3/8" | 3/8" | 0.81 | 1.3 | 0.79 | 0.87 |



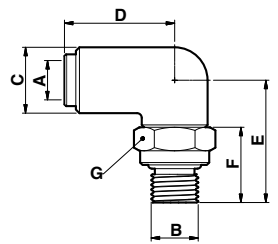
Double Elbow Adapters NPT



| Models | A Tube O/D | B Tube O/D | C NPT | D | E | F | G | H | J | K |
|-------------|------------|------------|-------|------|------|------|------|------|------|------|
| 95476101M | 1/4" | 1/4" | 1/8" | 0.55 | 0.55 | 0.37 | 0.89 | 0.83 | 0.67 | 0.54 |
| 95476101PSM | 1/4" | 1/4" | 1/8" | 0.55 | 0.55 | 0.37 | 0.89 | 0.83 | 0.67 | 0.54 |
| 95476113M | 3/8" | 1/4" | 3/8" | 0.85 | 0.85 | 0.56 | 1.18 | 1.14 | 1.06 | 0.74 |



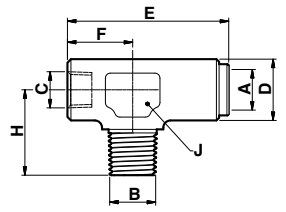
Male Hobbs Elbows Metric



| Models | A Tube O/D | B Tube O/D | C | D | E | F | G A/F |
|-------------|------------|------------|------|------|------|------|-------|
| 94413831BP | 1/4" | M10x1.5 | 0.55 | 0.93 | 1.02 | 0.63 | 0.59 |
| 94413833M | 1/4" | M12x1.5 | 0.55 | 0.93 | 1.14 | 0.75 | 0.55 |
| 94413835M | 1/4" | M16x1.5 | 0.69 | 0.96 | 1.34 | 0.85 | 0.94 |
| 94413838VBP | 1/4" | M22x1.5 | 1.02 | 1.12 | 1.63 | 0.98 | 1.18 |
| 94413868BP | 1/2" | M22x1.5 | 1.02 | 1.36 | 1.59 | 0.98 | 1.18 |
| 94413853M | 3/8" | M12x1.5 | 0.73 | 1.10 | 1.22 | 0.75 | 0.67 |
| 94413855BP | 3/8" | M16x1.5 | 0.73 | 1.10 | 1.32 | 0.85 | 0.94 |
| 94413879BP | 5/8" | M16x1.5 | 1.02 | 1.50 | 1.52 | 0.85 | 0.94 |
| 94413875BP | 5/8" | M22x1.5 | 1.02 | 1.50 | 1.59 | 0.98 | 1.18 |
| 94413898BP | 3/4" | M22x1.5 | 1.15 | 1.66 | 1.67 | 0.98 | 1.18 |



Special Tee Adapters NPT, NPT Female



| Models | A Tube O/D | B NPT | C NPT | D | E | F | H | J |
|-------------|------------|-------|-------|------|------|------|------|------|
| 95459312PSM | 3/8" | 1/8" | 1/4" | 0.68 | 1.08 | 0.73 | 0.56 | 0.71 |

[Lift Axle Controls]

5

Our lift axle products provide consistent and reliable performance of lift axles on commercial trucks and trailers. From equal weight distribution and rapid deployment to durable fittings and accessories, our fully-integrated solutions deliver superior quality, cost savings, and proven technology you can trust



INTELLIGENT LIFT AXLE CONTROL MODULE KIT

- » Provides automated electric over air control of lift axles on heavy trucks with air primary rear suspensions and 12-volt electrical system
- » Programmed with Android tablet through downloaded app via Bluetooth technology
- » Chassis mounted with in-cab override switch
- » Shifts reliably in cold temperatures

Technical Data

Operating voltage:
9 to 16 volts DC

Lift Axle Load Bag Control Range:
30 to 120 psi

Max. Operating Pressure:
150 psi

Operating Temperature Range:
-40°F to 185°F



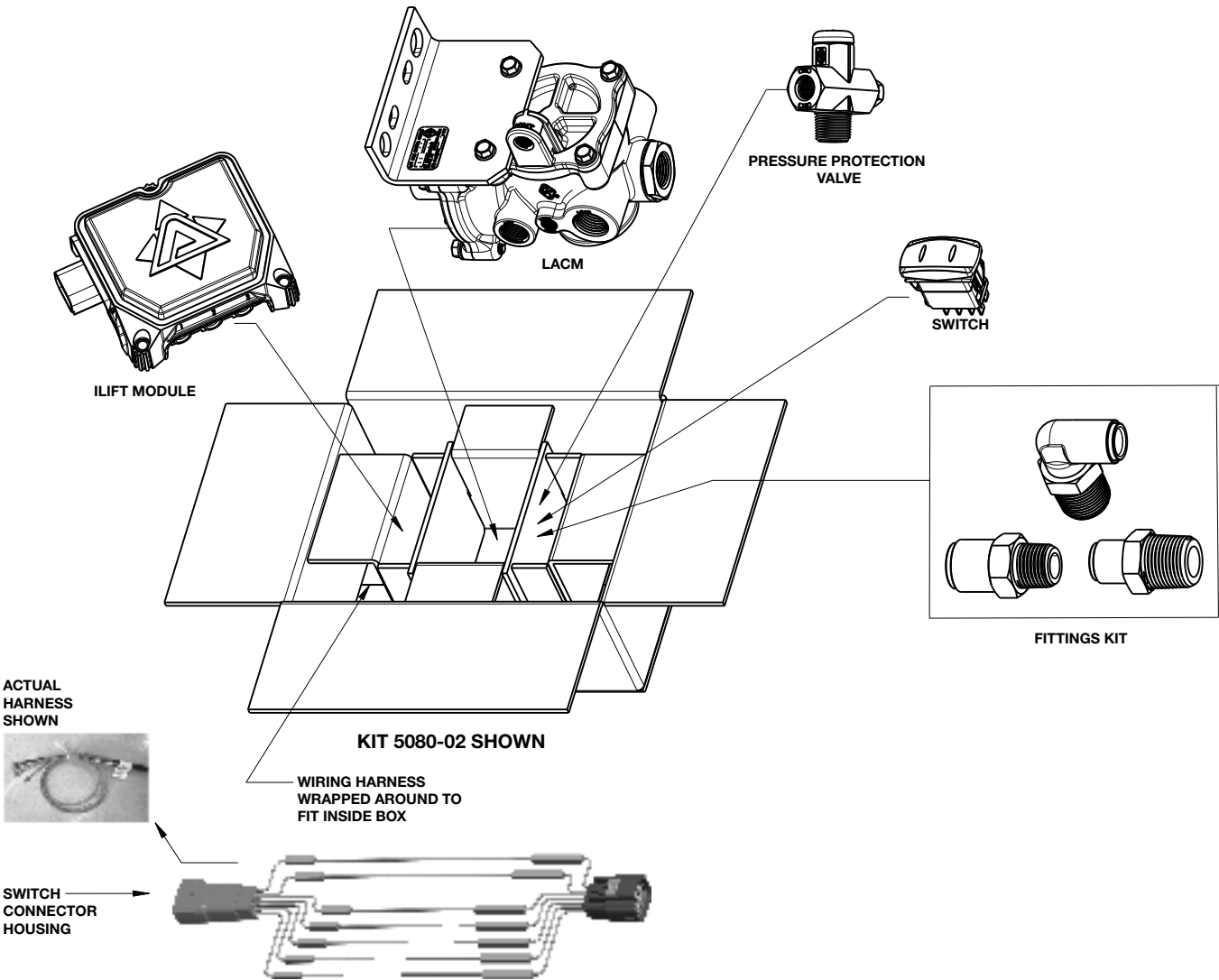
Models

| Model | Description | Kit Contents |
|---------|------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| 5080-01 | iLACM™ kit with Lift Axle Control Module (LACM) | LACM (Control Module), Pressure Protection Valve, Electronic Control Module, Switch, Harness, Fittings, Installation Manual |
| 5080-02 | iLACM™ Upgrade Kit without Lift Axle Control Module (LACM) | Electronic Control Module, Switch, Harness, Fittings, Installation Manual |

Replacement Parts

| Model | Description |
|----------|---------------------------|
| 50309-01 | Switch |
| 50310-01 | Harness |
| 50311-01 | Control Module |
| 50313-01 | Switch Connector Housing |
| 223-685V | Pressure Protection Valve |

Kit Content



LIFT AXLE CONTROL MODULE

5040 Series

- » Designed for the heavy duty truck and trailer industry
- » Industry proven design based on brake relay valve technology integrated into a single unit
- » Excellent flow capability for rapid axle actuation
- » Optional control solenoid for electric control

Technical Data

Operating pressure:
30 to 120 psi

Operating temperature:
-40°F to +190°F max.
-40°C to +87.7°C max.

Material

Cast aluminum body with thermoplastic pistons and low temperature nitrile seals



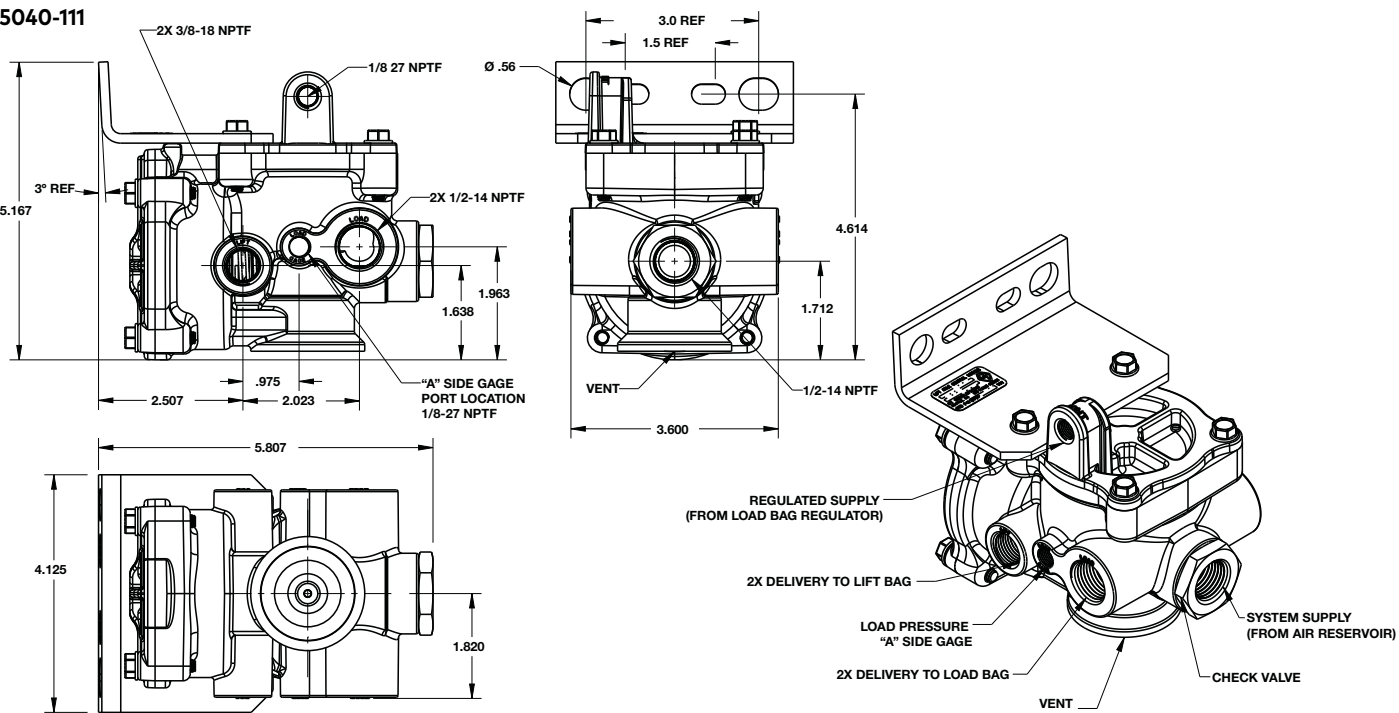
Models

| Model | Valve Type | Electrical Connection | Gage Port | Packaged |
|--------------|--------------------------------|---------------------------------------------------------------------|-----------|------------|
| 5040-111-01C | Air Actuation | N/A | A Side | Individual |
| 5040-111-06 | Air Actuation | N/A | A Side | Bulk |
| 5040-211-01C | N/O Solenoid | Delphi Metri-Pack Series ISO sealed female connector (P/N 12052644) | A Side | Individual |
| 5040-211-01 | N/O Solenoid | Delphi Metri-Pack Series ISO sealed female connector (P/N 12052644) | A Side | Bulk |
| 5040-311-01C | N/C Solenoid | Delphi Metri-Pack Series ISO sealed female connector (P/N 12052644) | A Side | Individual |
| 5040-311-01 | N/C Solenoid | Delphi Metri-Pack Series ISO sealed female connector (P/N 12052644) | A Side | Bulk |
| 5040-711-03 | N/C Solenoid w/out suppression | Flying Leads | A Side | Individual |
| 5040-811-01 | N/O Solenoid | Flying Leads | A Side | Individual |

Replacement Solenoids for Lift Axle Control Module

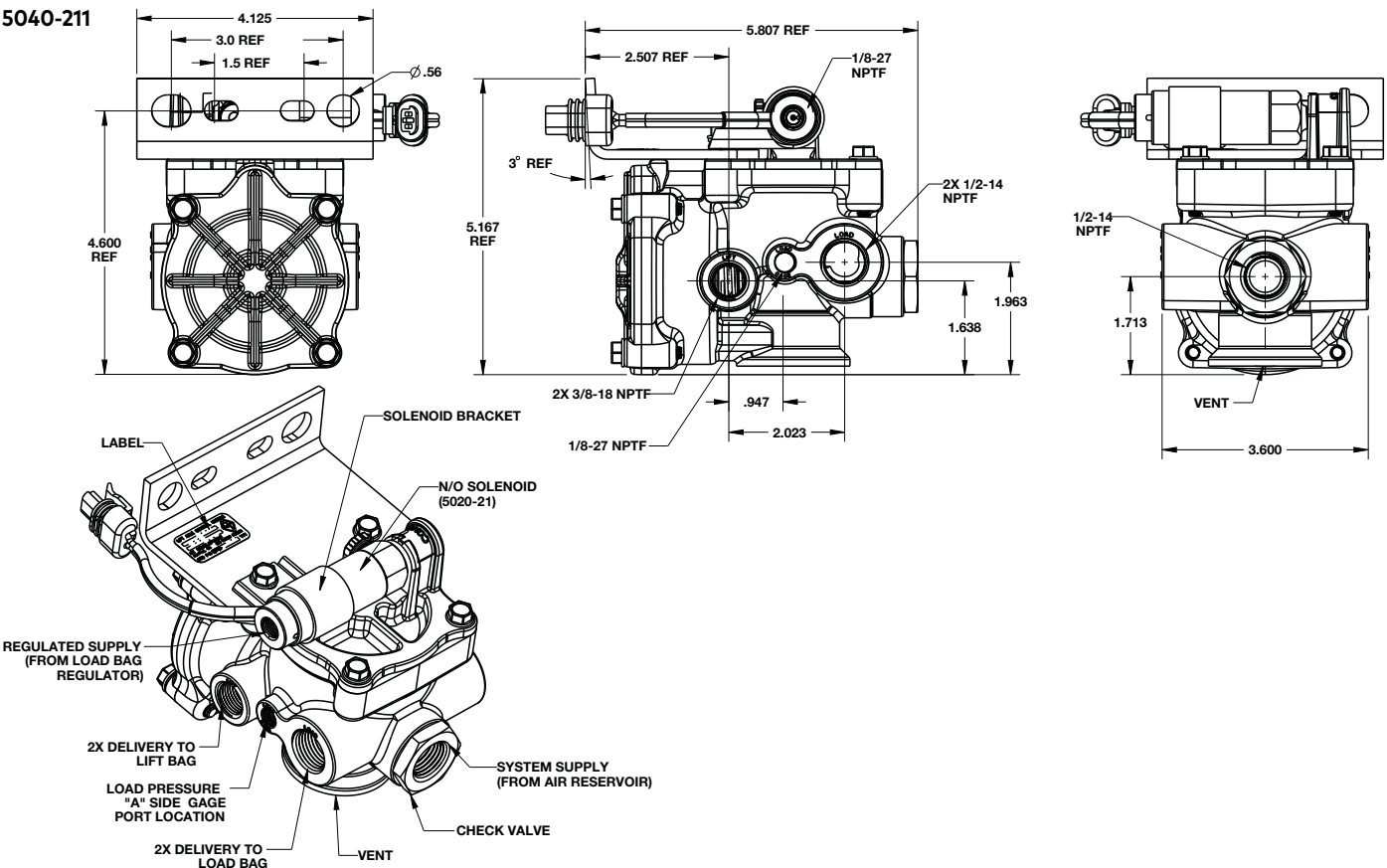
| Model | LACM | Electrical Termination | Inlet Port Size | Outlet Port Size | Voltage | Configuration |
|----------|------------------------------|---------------------------------------------------|-----------------|------------------|---------|---------------|
| 5020-20A | 5040-311-01C and 5040-311-01 | Machine Crimped, Metric pack 150 Series Connector | 1/8" -27 NPTF | 1/8" -27 NPTF | 12 | N/C |
| 5020-21A | 5040-211-01C and 5040-211-01 | Machine Crimped, Metric pack 150 Series Connector | 1/8" -27 NPTF | 1/8" -27 NPTF | 12 | N/O |
| 5020-25A | 5040-711-03 | Flying Leads | 1/8" -27 NPTF | 1/8" -27 NPTF | 12 | N/C |
| 5020-23A | 5040-411 | Metric pack 150 Series Connector | 1/8" -27 NPTF | 1/8" -27 NPTF | 12 | N/C |
| 5020-28A | 5040-811-01 | Flying Leads | 1/8" -27 NPTF | 1/8" -27 NPTF | 12 | N/O |

Specifications

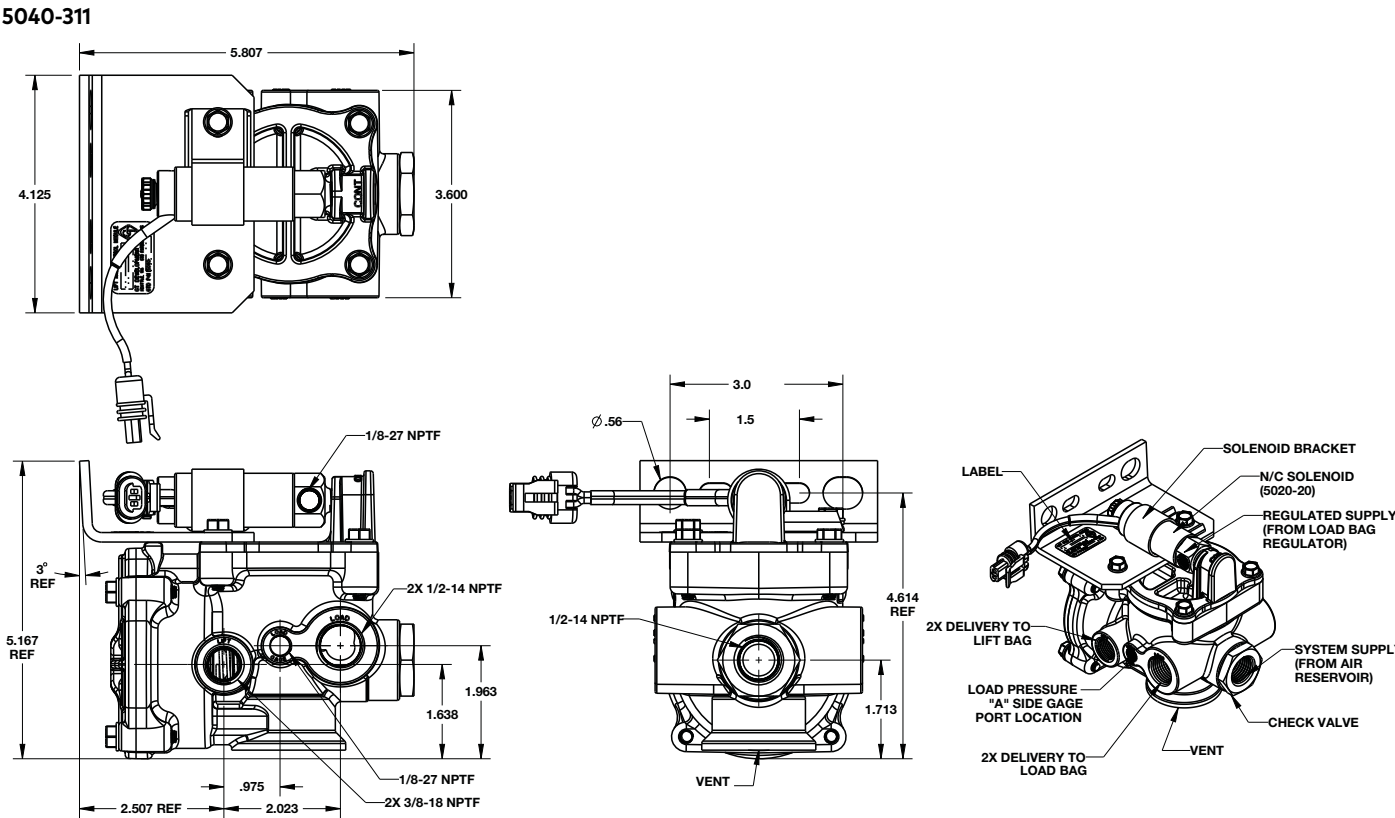


LIFT AXLE CONTROL MODULE 5040 Series

5040-211

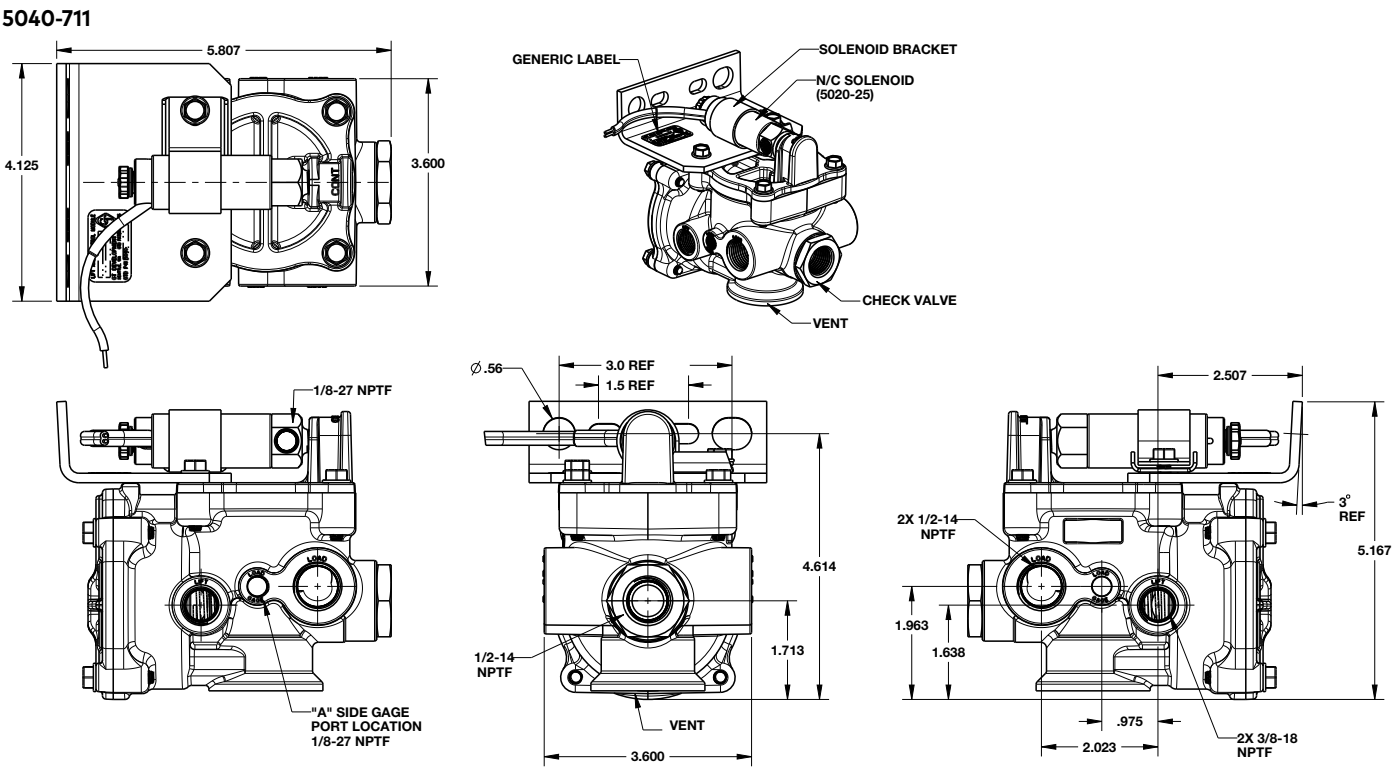


5040-311

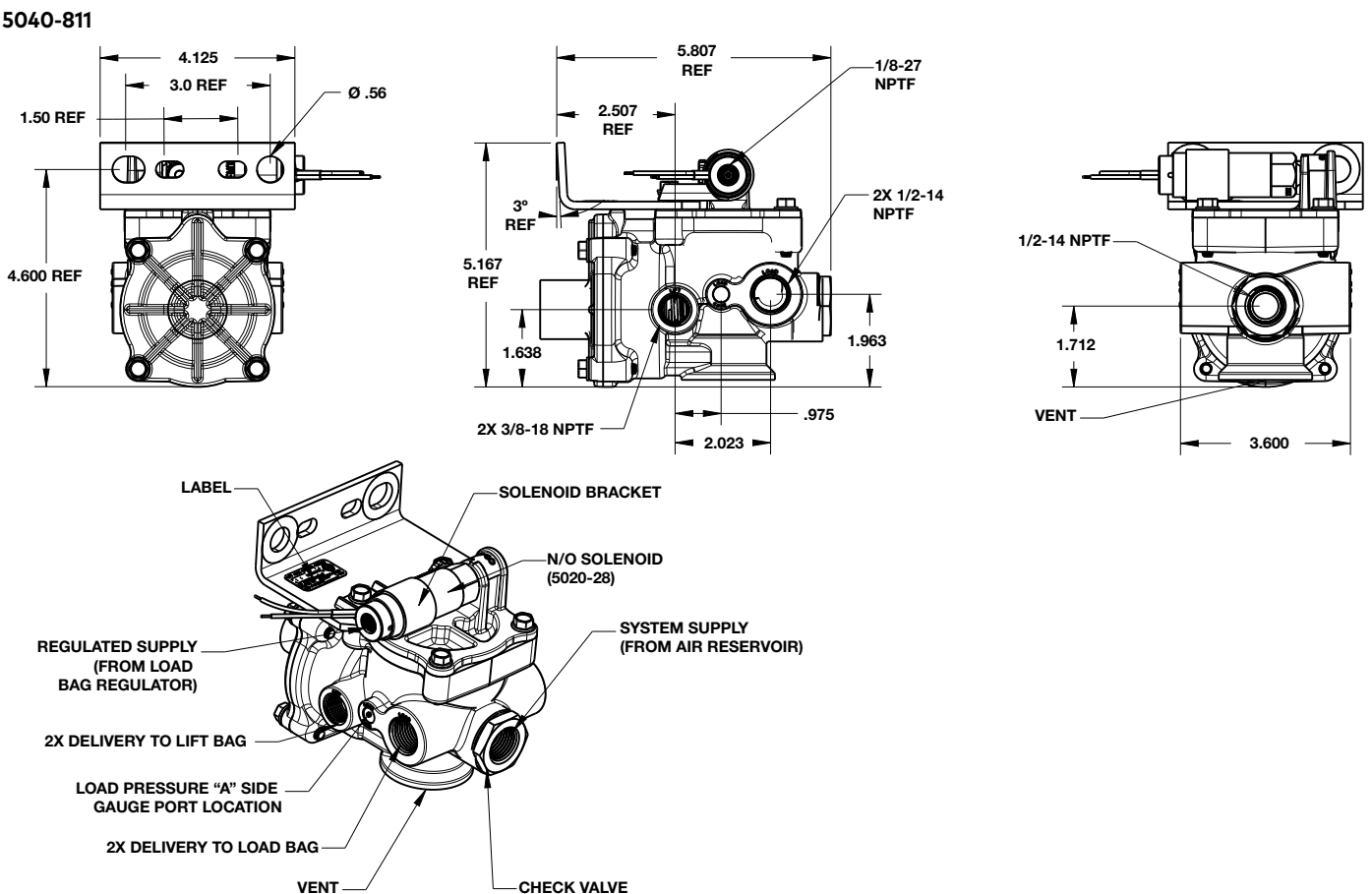


LIFT AXLE CONTROL MODULE 5040 Series

5040-711

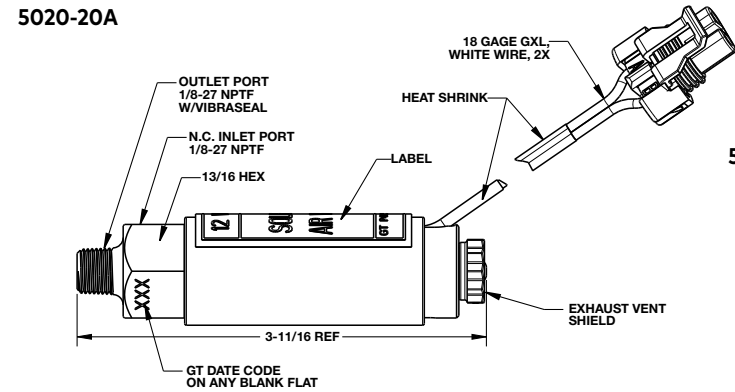


5040-811

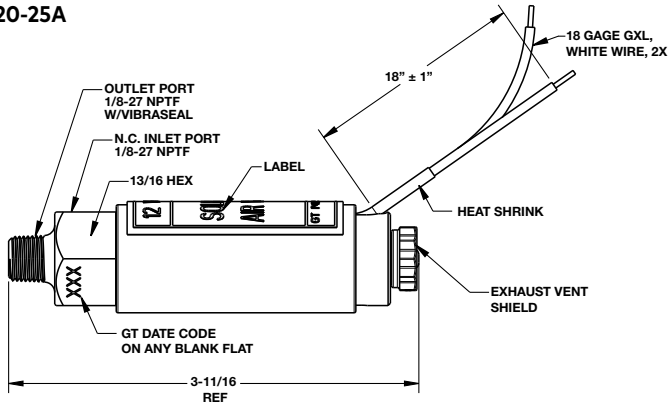


Replacement Solenoids

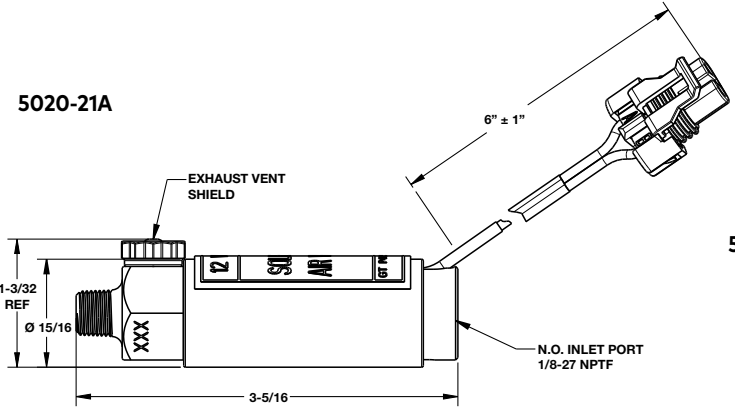
5020-20A



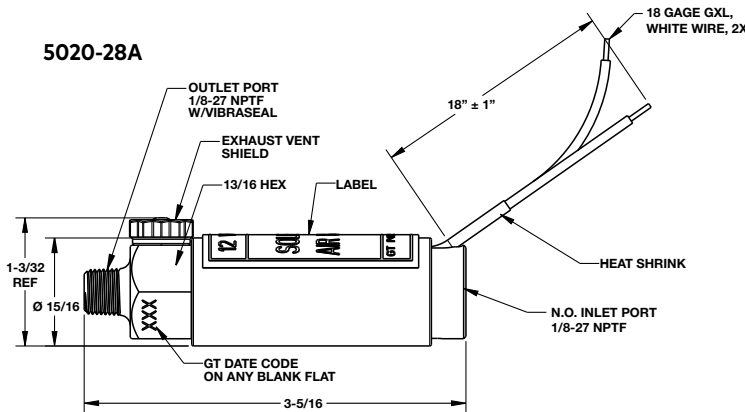
5020-25A



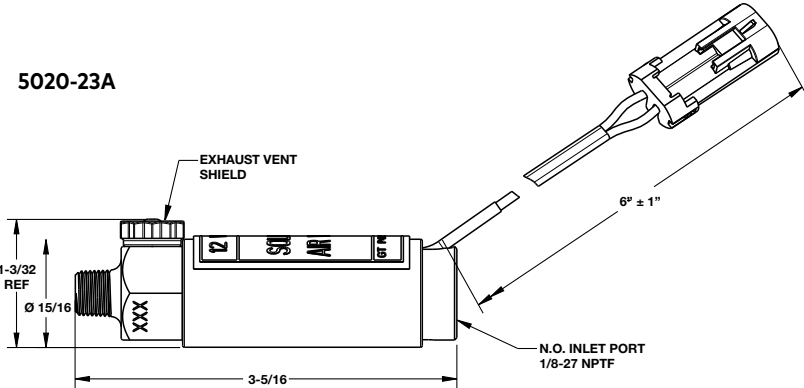
5020-21A



5020-28A



5020-23A



TRAILER LIFT AXLE CONTROL VALVE

- » Specially designed for reliable trailer lift axle application operation in hot and cold weather
- » Two industry-proven valves integrated into a single unit for compactness and ease of installation
- » Trailer cross-member mounted

Technical Data

Operating Pressure:
0 to 120 psi

Pilot Control Pressure:
Min 60 psi

Operating Temperature:
-40°F - 180°F

Port size:
1/8"-27

Material

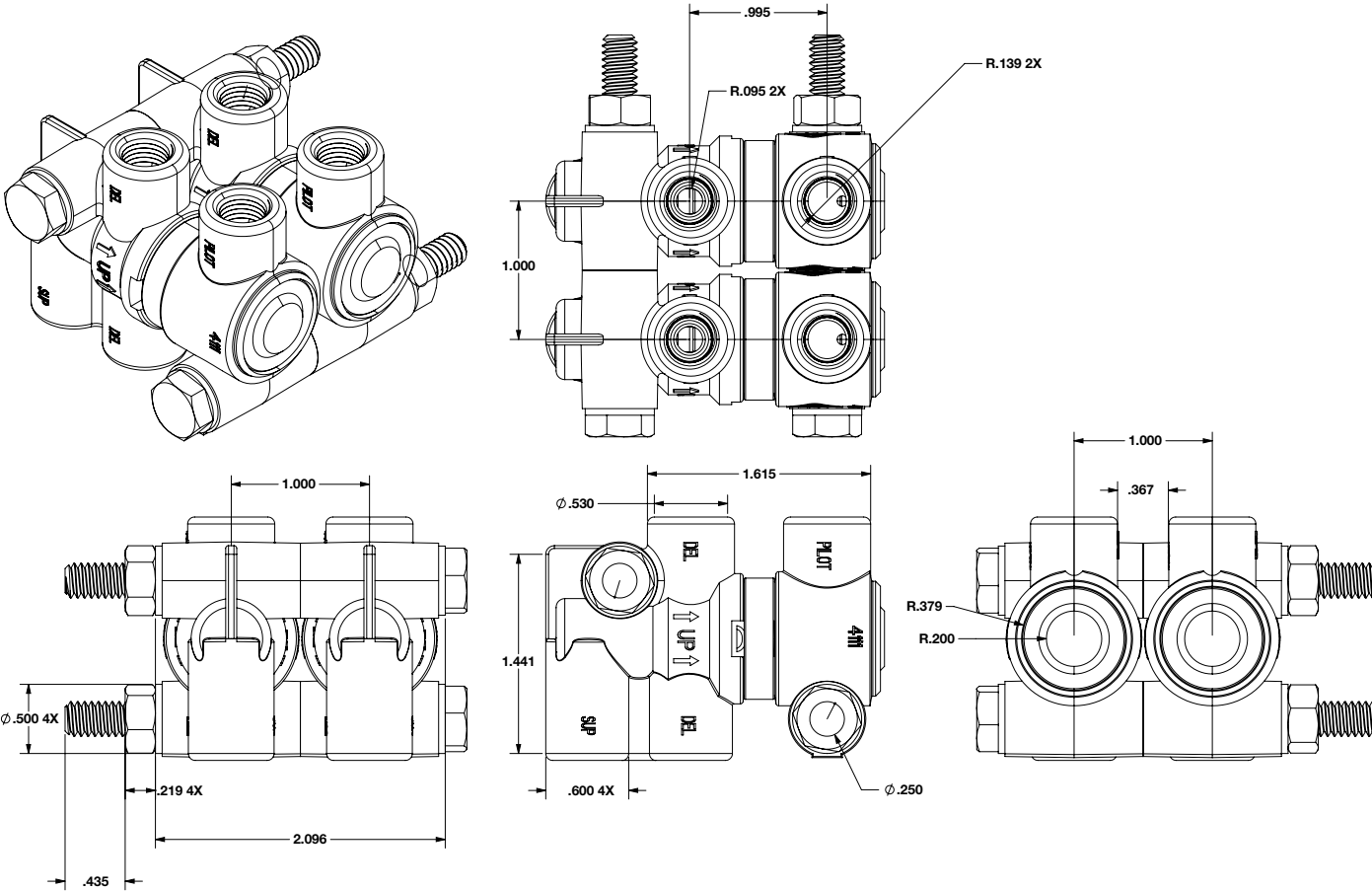
Die cast Zinc



Models

| Model | Port Size |
|---------|-----------|
| 5111-01 | 1/8" PTF |

Specifications



NUGGET 200 SOLENOID & AIR ACTUATED SPOOL VALVE

- » Long lasting spool design
- » High flow compact valves
- » Wide range of operators and voltages available
- » Three functional types: available in 3/2, 5/2, and 5/3 configurations

Technical Data

Medium:
Filtered and lubricated or non-lubricated compressed air or vacuum

Operation:
Spool valve solenoid pilot actuated

Mounting:
Stacking – through holes on manifold base
Inline – through holes in valve body

Port size:
PTF – 1/4", 3/8", 1/2"
ISO G – 1/4", 3/8"

Operating Pressure:
Maximum 150 psig (10.3 bar)

Operating Temperature:
-20° to 120°F (-29° to 50°C)
Consult Technical Service for use below 35°F























Voltage:
12 VDC available upon request

Material

Body: Aluminum
Spool: Anodized aluminum
Solenoid Operator Base: plastic
Plunger and spring: Stainless steel
Elastomers: Nitrile and special nitrile-based low-friction elastomers







Models - Lift Axle Control Spool Valves





| Model | Function | Description | Seal | Flow Cv | Port size (inch) | Operating pressure (psi) | Body & Spool | Operator | Repair kit |
|-------------------------------------------------------------------------------------|----------|---------------------------------------------------------------------------------------------------------------|---------|---------|------------------|--------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|  | 5/2 | Sol/Spring with Extended Manual override 12 VDC Connector down | Nitrile | 1.67 | 3/8 | 35 - 150 |  |  |  |
|  | 5/2 | Sol/Spring with Extended Manual override 12 VDC Connector up | Nitrile | 1.67 | 3/8 | 35 - 150 |  |  |  |
|  | 3/2 | Push/Pull 3/2 valve | Nitrile | 1.67 | 3/8 | 35 - 150 |  | N/A |  |
|  | 3/2 | Push Pull 3/2 valve with air pilot reset | Nitrile | 1.67 | 3/8 | 35 - 150 |  | N/A |  |
|  | 5/2 | 12 VDC Solenoid operated 5/2 spring return valve with large push/twist locking manual override | FKM | 1.67 | 3/8 | 35 - 150 |  | N/A |  |
|  | 5/2 | 12 VDC Solenoid operated 5/2 spring return valve with large push/twist locking manual override | Nitrile | 1.67 | 3/8 | 35 - 150 |  |  |  |
|  | 5/2 | 12 VDC Solenoid/Spring return with integrated manual regulator, for power down operation on Lift-axle control | Nitrile | 1.67 | 3/8 | 35 - 150 | N/A | N/A | N/A |

Nugget 200 Solenoid & Air Actuated Spool Valve





Models - 3/2 Valves - Air actuates/air return

| Model | Flow Cv | Port size (inch) | Operating pressure (psi) | Body and spool | Operator | Repair kit |
|-------------------------------------------------------------------------------------|---------|------------------|--------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | 1.67 | 1/4 | 35 - 150 |  |  |  |
| K41EA00KA2KA2 | 1.67 | 3/8 | 35 - 150 | K41EA00 | KA2 | 54237-59 |

Models - 3/2 Valves - Air actuated/spring return





| Model | Flow Cv | Port size (inch) | Operating pressure (psi) | Body and spool | Operator | Repair kit |
|-------------------------------------------------------------------------------------|---------|------------------|--------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | 1.67 | 1/4 | 45 - 150 |  |  |  |
| K41EA00KS6KA2 | 1.67 | 3/8 | 45 - 150 | K41EA00 | KA2 | 54237-59 |

Models - 5/2 Valves - Air actuates /spring return





| Model | Flow Cv | Port size (inch) | Operating pressure (psi) | Body and spool | Operator | Repair kit |
|--------------------------------------------------------------------------------------|---------|------------------|--------------------------|--------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
|  | 1.67 | 1/4 | 35 - 150 |  |  |  |
| K71EA00KS6KA2 | 1.67 | 3/8 | 35 - 150 | K71EA00 | KA2 | 54237-56 |
| K71EA01KS6KA1* | 1.67 | 3/8 | 35 - 150 | K71EA01 | KA1 | 54237-56 |

* Low profile

Models - 5/2 Valves - Air actuates/air return

| Model | Flow Cv | Port size (inch) | Operating pressure (psi) | Body and spool | Operator | Repair kit |
|---------------------------------------------------------------------------------------|---------|------------------|--------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|  | 1.67 | 1/4 | 15 - 150 |  |  |  |
| K71EA00KA2KA2 | 1.67 | 3/8 | 15 - 150 | K71EA00 | KA2 | 54237-56 |





Models - 5/3 Valves - Air actuates/air return

| Model | Flow Cv | Port size (inch) | Operating pressure (psi) | Body and spool | Operator | Repair kit |
|---------------------------------------------------------------------------------------|---------|------------------|--------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|  | 1.67 | 1/4 | 45 - 150 |  |  |  |
| K81EA00KACKAC3 | 1.67 | 3/8 | 45 - 150 | K81EA00 | KAC | 54237-56 |





3 All ports blocked

Nugget 200 Solenoid & Air Actuated Spool Valve





Models - 3/2 Valves - Solenoid actuates/spring return

| Model | Voltage | Connection | Manual override | Flow Cv | Port size inch | Operating pressure psig | Body and spool | Operator | Repair kit |
|-----------------------------------------------------------------------------------|---------|------------|-----------------|---------|----------------|-------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | | | | | | |  |  |  |
| K41DA00KS6KV21W² | 24 VDC | Cable grip | Locking | 1.67 | 1/4 | 35 - 150 | K41EA00 | KV21W2 | 54237-59 |
| K41EA00KS6KV21W² | 24 VDC | Cable grip | Locking | 1.67 | 3/8 | 35 - 150 | K41EA00 | KV21W2 | 54237-59 |

Models - 5/2 Valves - Solenoid actuated/spring return

| Model | Voltage | Connection | Manual override | Flow Cv | Port size inch | Operating pressure psig | Body and spool | Operator | Repair kit |
|-----------------------------------------------------------------------------------|---------|------------|-----------------|---------|----------------|-------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | | | | | | |  |  |  |
| K71DA00KS6KV21W2 | 24 VDC | Cable grip | Locking | 1.67 | 1/4 | 35 - 150 | K71DA00 | KV21W2 | 54237-56 |
| K71EA00KS6KV21W2 | 24 VDC | Cable grip | Locking | 1.67 | 3/8 | 35 - 150 | K71EA00 | KV21W2 | 54237-56 |
| K71FA00KS6KV21W2 | 24 VDC | Cable grip | Locking | 1.67 | 1/2 | 35 - 150 | K71FA00 | KV21W2 | 54237-56 |

Models - 5/2 Valves - Solenoid actuates/solenoid return

| Model | Voltage | Connection | Manual override | Flow Cv | Port size inch | Operating pressure psig | Body and spool | Operator | Repair kit |
|------------------------------------------------------------------------------------|---------|------------|-----------------|---------|----------------|-------------------------|--------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
|  | | | | | | |  |  |  |
| K71DA00KV2KV22W2 | 24 VDC | Cable grip | Locking | 1.67 | 1/4 | 15 to150 | K71DA00 | KV21W2 | 54237-56 |
| K71EA00KV2KV22W2 | 24 VDC | Cable grip | Locking | 1.67 | 3/8 | 15 to150 | K71EA00 | KV21W2 | 54237-56 |

Connectors

| Part number | Code |
|--------------------------------|-------------------------------------------------------------------------|
| 3-Pin Industrial Standard 22mm | |
| - | A = no connector |
| 54934-01 | B = Cable grip 0-240 VAC/ VDC |
| 54934-21 | C = 6 ft molded cable, 0-240 VAC/ VDC |
| 54934-08 | H = Cable grip w/indicator light 24 VDC |
| 54934-05 | Z = 1/2" Conduit 0-240 VAC/ VDC |
| 54934-30 | 5 = 6 ft molded cable w/indicator light, surge suppression, 24 VAC/ VDC |

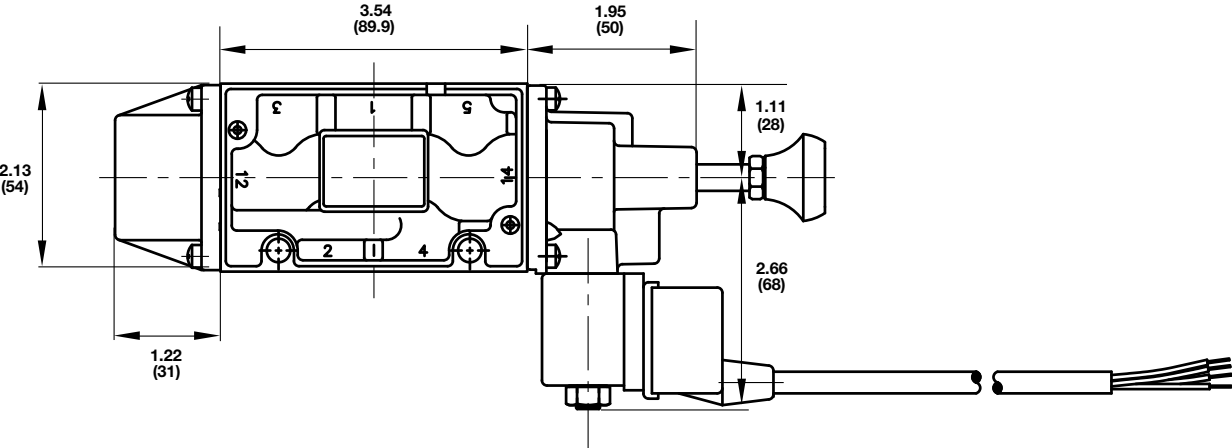
Solenoid Coils

| Model | Voltage |
|----------|--------------|
| 54452-02 | 12 VDC, 7.5W |
| 54452-03 | 24 VDC, 6W |
| 54452-05 | 24 VAC |

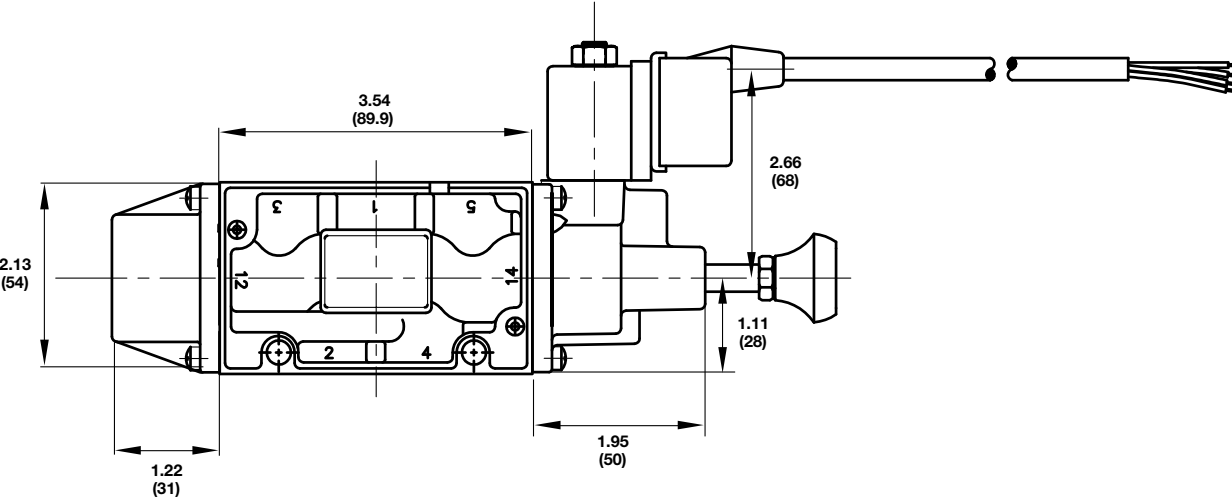
Nugget 200 Solenoid & Air Actuated Spool Valve

Specifications for Lift Axle Control Spool Valves

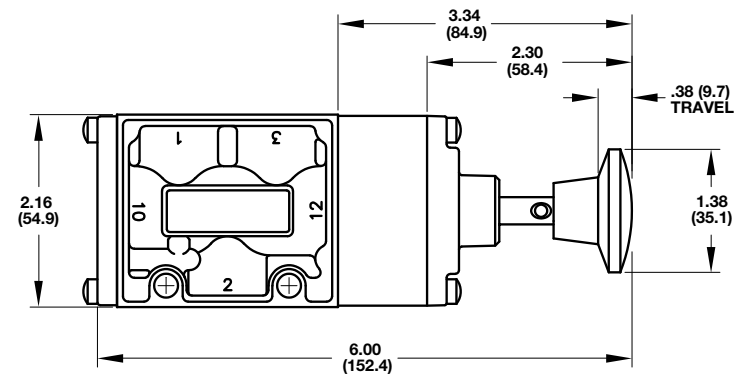
K910014



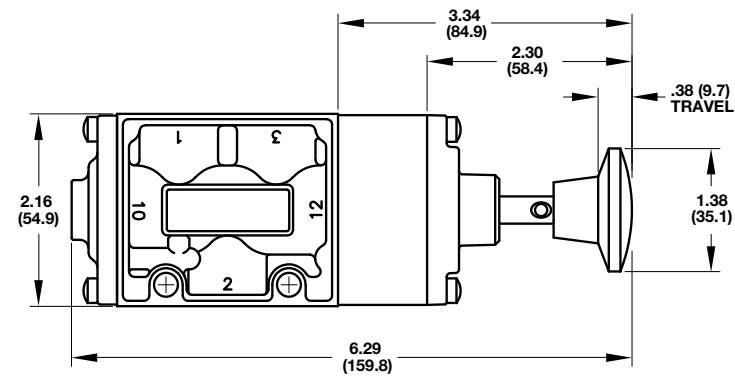
K910019



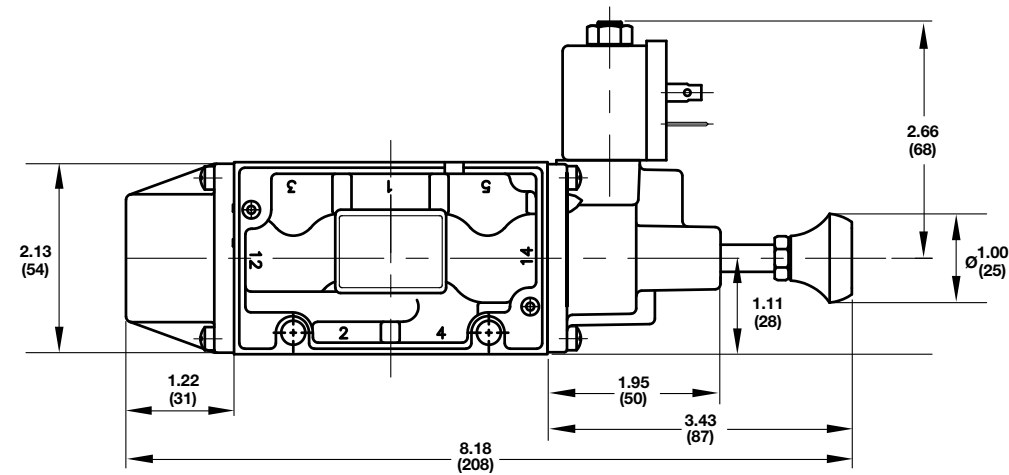
K910038



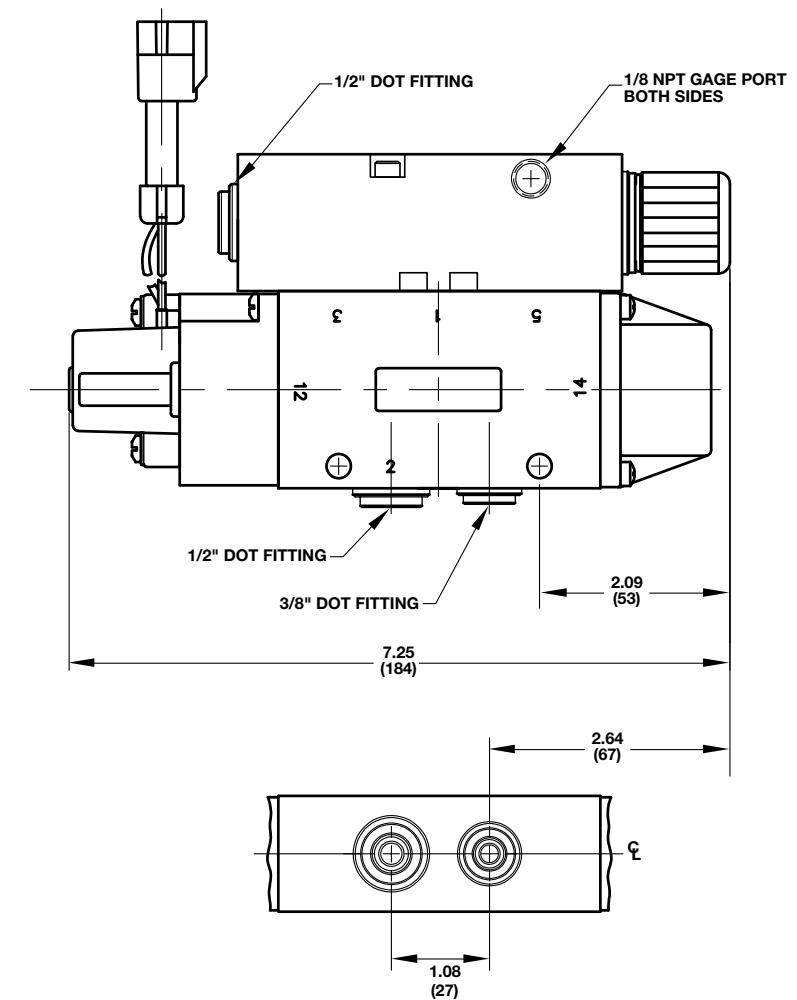
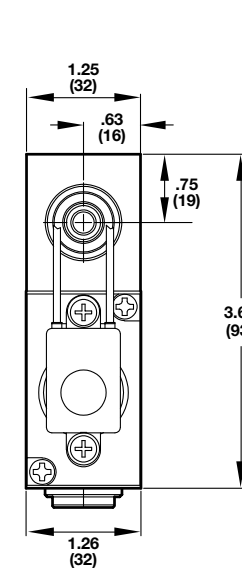
K910054



K910147, K910168

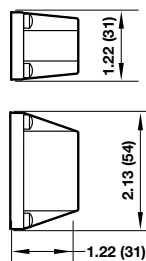


K990037

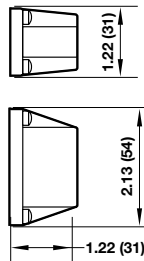


Specifications for Standard Models

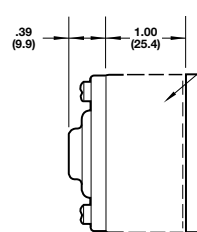
KS1 Spring Return & End Cap



KS6 Spring Return

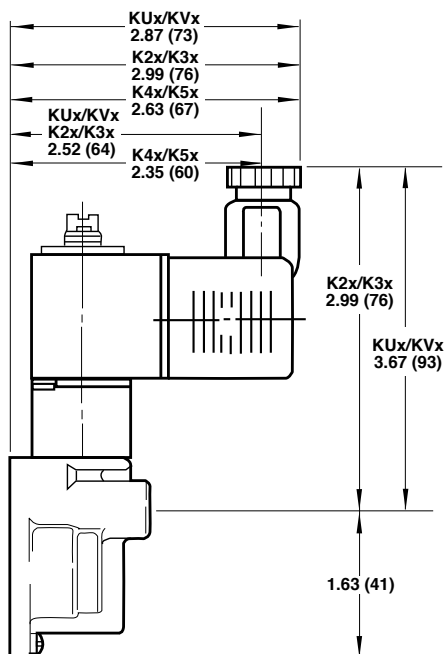
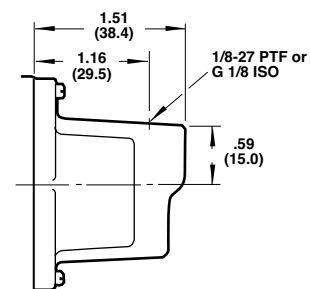
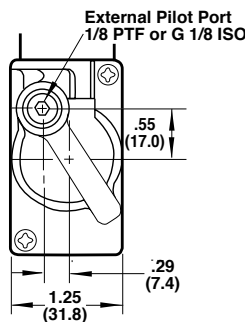
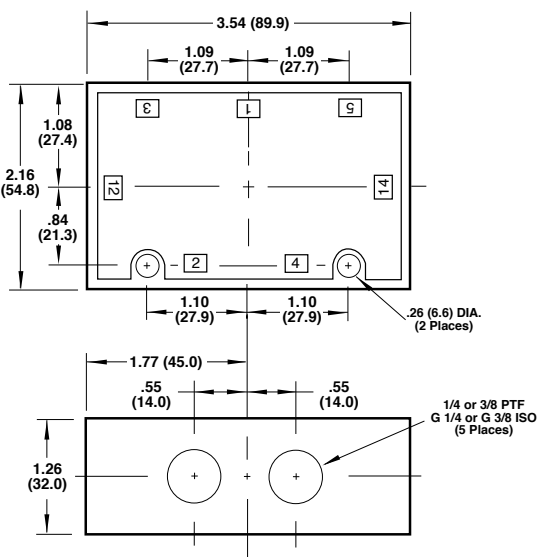
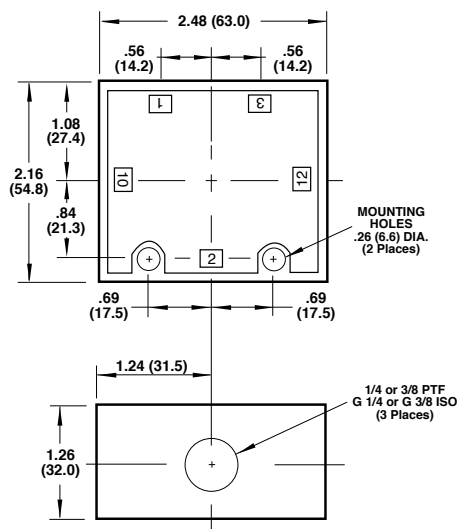


KCO End Cap



SPACER BLOCK – Used only with spring centered manual operators (KK2, KL2, KL7, KT2).

KA2

3-WAY – 1/4" & 3/8" PORTS
K414-WAY – 1/4" & 3/8" PORTS
K71 or K81

[Seat Controls]

6

Our pneumatic and electric seat valves control height and lumbar support functions for driving comfort.



PADDLE SEAT CONTROL VALVES AIR ONLY

- » Designed for the control of one seat bag
- » Paddle style actuation
- » 3-way valve
- » All plastic components meet FMVSS 302 flammability requirements
- » 1/4" barb connection

Technical Data

Operating pressure:
0 to 125 psi (0 to 8 bar)

Actuation:
3-way, dead center, paddle style actuation

Assembly:
Valve assembly snaps into seat side panel from the outside

Material

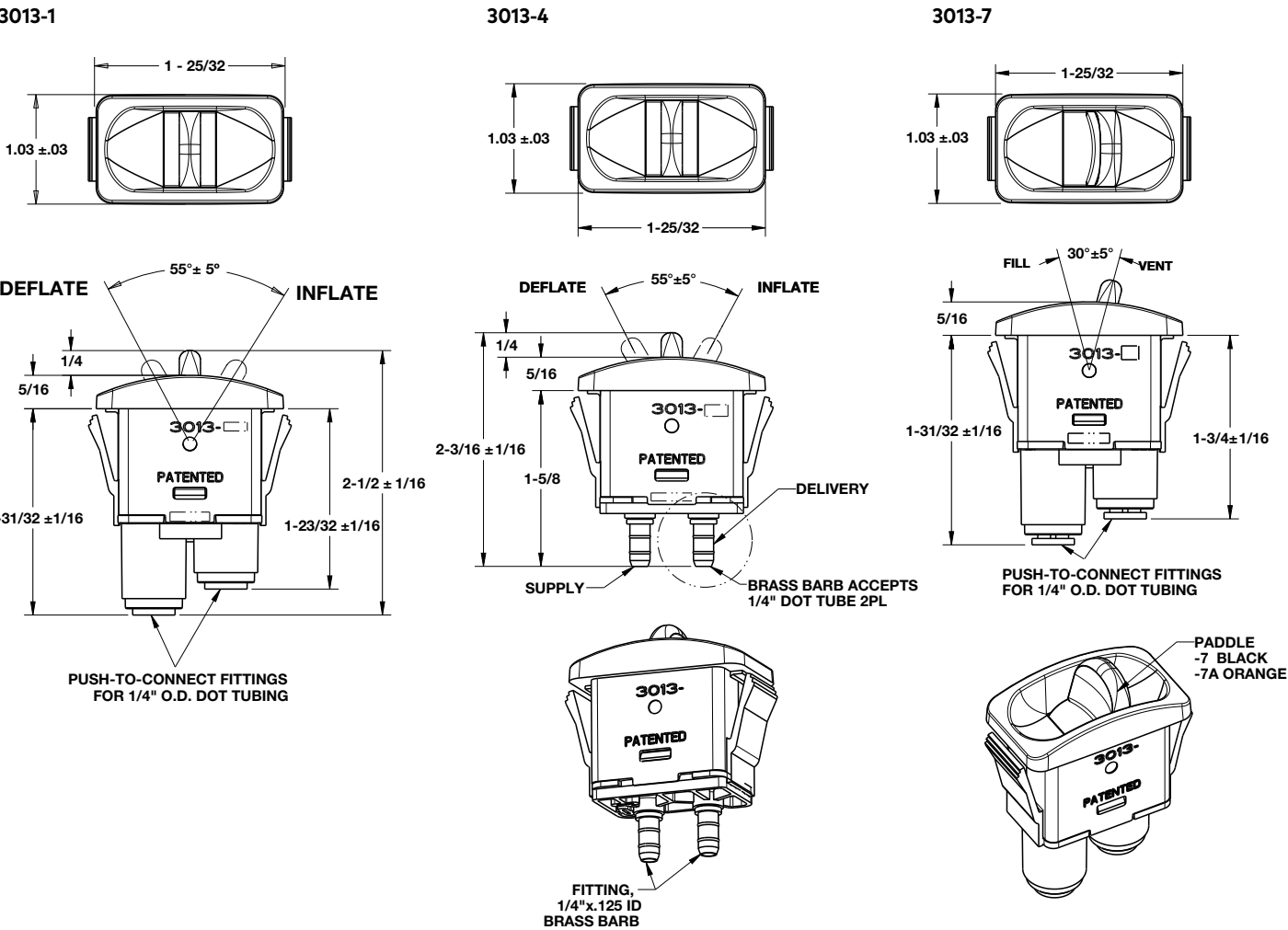
Black Thermoplastic



Models

| Model | Description | Fitting | Valve Type |
|--------|--------------------------------|-----------------------------|--------------------------------|
| 3013-1 | Paddle Valve, End Ported | 1/4" OD PTC | 3-way, dead center |
| 3013-4 | Paddle Valve, Barb Fitting | 1/4 x .125" ID Barb (Brass) | 3-way, dead center |
| 3013-7 | Paddle Valve, Momentary paddle | 1/4" OD PTC | Momentary, 3-way, two position |

Specifications



PADDLE SEAT CONTROL VALVES ELECTRIC/PNEUMATIC

- » Integrated electrical switch for pneumatic and electric control of air seats
- » Paddle style actuation
- » All plastic components meet FMVSS 302 flammability requirements
- » 1/4" barb connection

Technical Data

Operating pressure:
0 to 125 psi (0 to 8 bar)

Actuation:
Paddle style

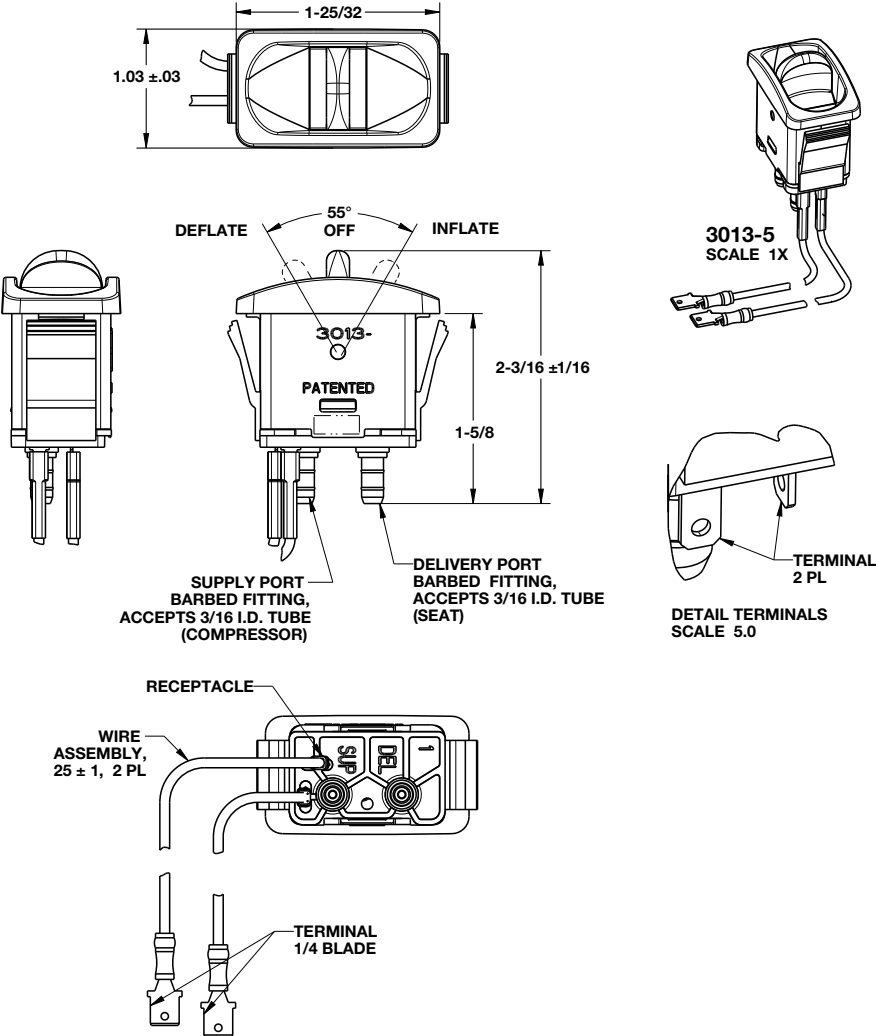
Electrical connection:
Wire assembly, terminal 1/4" blades



Models

| Model | Description | Fitting | Valve Type |
|--------|-------------------------------------------|------------------------------|--------------------|
| 3013-5 | Paddle Valve, barb fitting w/wire asembly | 3/16 ID Barb w/wire assembly | 3-way, dead center |

Specifications



REMOVABLE KNOB SEAT VALVE

134 Series

- » Controls seat height and lumbar support functions
- » Removable knob
- » Designed to operate air seat systems

Technical Data

Operating pressure:
0 to 200 psi (0 to 13 bar)

Actuation:
Push: Applies inlet pressure to outlet port
Pull: Vents outlet port

Leakage:
Valve cannot leak to outlet port in OFF position

Porting:
Outlet port configuration options:
1/8"-27 nptf female thread



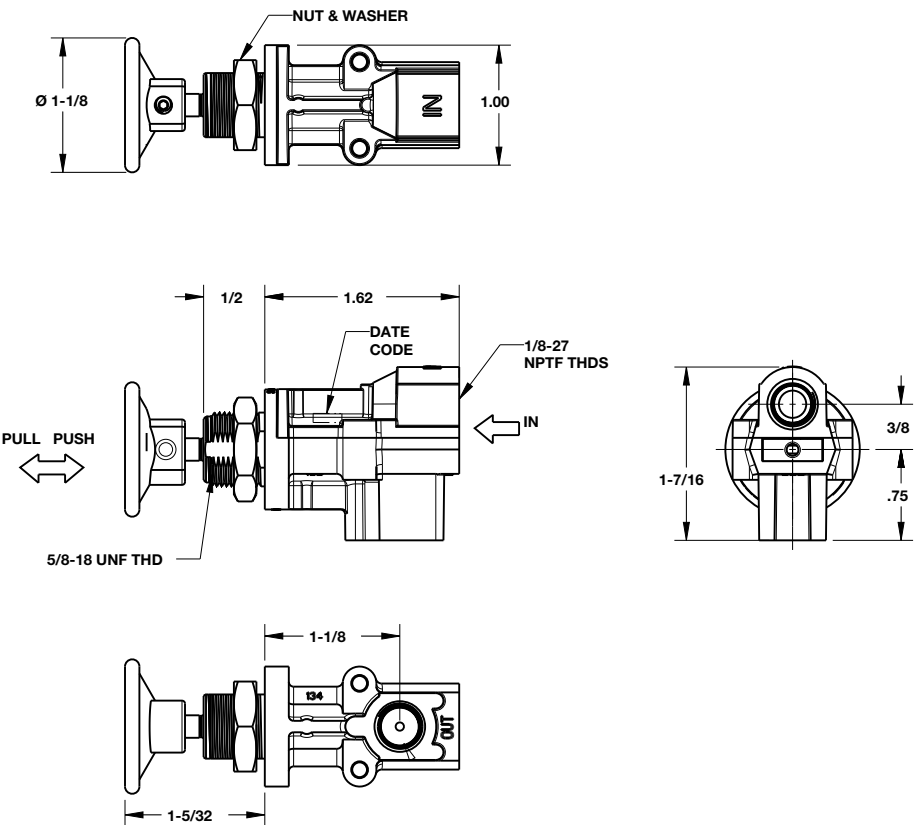
Models

| Model | Description | Port Size | Material |
|-------|----------------------|----------------|-------------------------------|
| 134-2 | Bulk | 1/8" - 27 NPTF | nickel plated - bright finish |
| 134-3 | Individual | 1/8" - 27 NPTF | nickel plated - bright finish |
| 134-4 | Individual (no logo) | 1/8" - 27 NPTF | nickel plated - bright finish |
| 134-5 | Individual | 1/8" - 27 NPTF | Black Knob |

Replacement Products

| Model | Description |
|----------|-------------------------------------------------------------------------|
| 11305 | Internal Tooth Lockwasher |
| 10726-2K | Nickel plated knob. Bulk packaged with self locking set screw installed |

Specifications



DOUBLE END PORTED SEAT VALVE THREADED

251 Series

- » Permanent knob
- » Push-To-Connect fittings (PTC) or threaded ports
- » Designed to operate air seat systems

Technical Data

Operating pressure:
0 to 200 psi (0 to 13 bar)

Actuation:
Push: Applies inlet pressure to outlet port
Pull: Vents outlet port

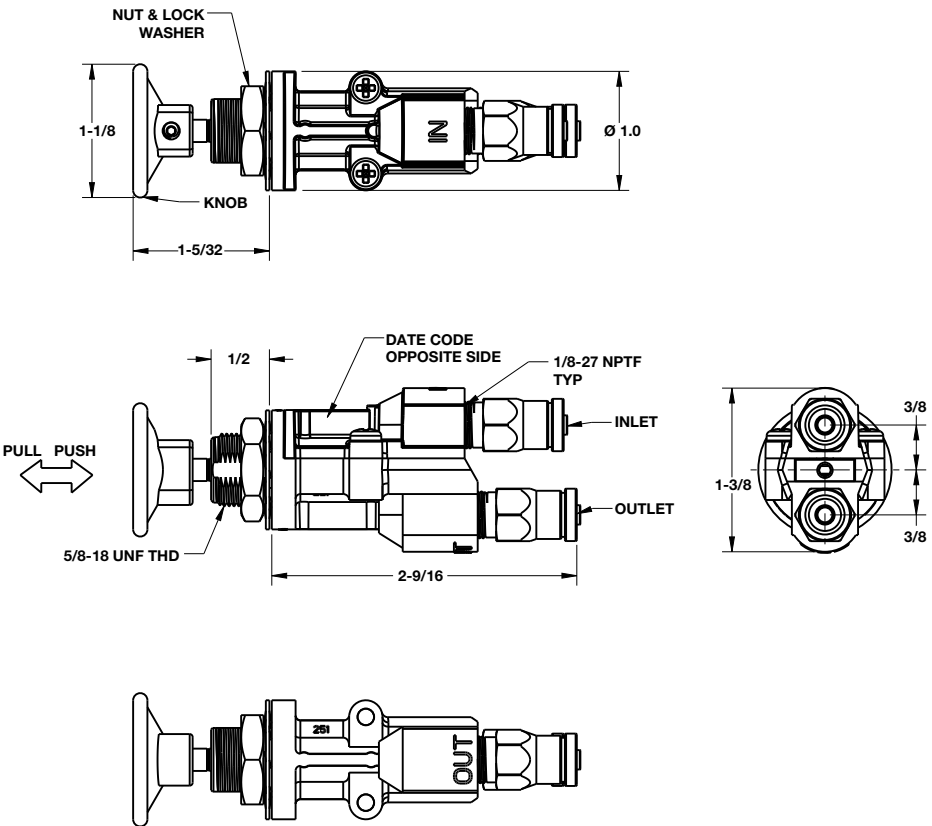
Leakage:
Valve cannot leak to outlet port in OFF position



Models

| Model | Port Size | Knob |
|---------|-------------------|-----------|
| 251-21A | 1/8-27 NPT Female | Removable |
| 251-22B | 1/4" PTC | Removable |
| 251-12B | 1/4" PTC | Permanent |

Specifications



COMBINATION SEAT VALVE ELECTRIC/PNEUMATIC

3000 Series

- » Integrated electrical switch for pneumatic and electric control of air seats
- » Removable knob
- » Push-To-Connect fittings (PTC)

Technical Data

Operating pressure:
0 to 200 psi (0 to 13 bar)

Actuation:
Push: Closes electrical switch.
Approved for use with RDH Enterprises # 64-00450 12 Vdc compressor or equivalent
Pull: OUT port is vented to atmosphere

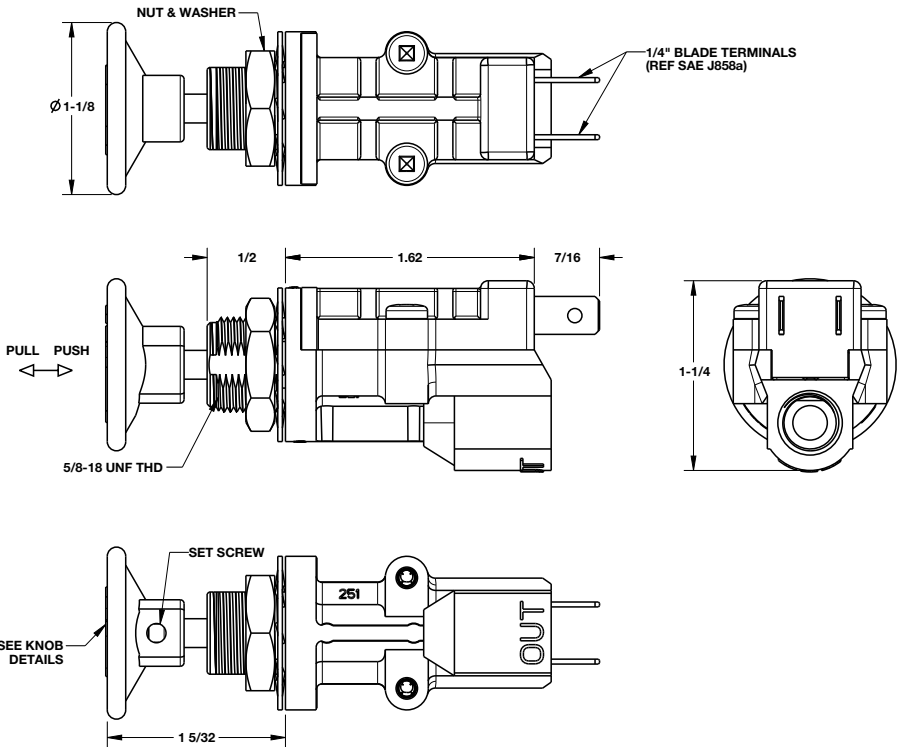
Port Size:
NPTF 1/8" -27



Models

| Model | Knob Color |
|--------|-----------------------------------------------|
| 3000-3 | Black with white symbol |
| 3000-5 | Light gray with dark gray symbol |
| 3000-8 | Black with white symbol, lock washer included |

Specifications



SEAT ROCKER VALVES

3020 Series

- » 3-way, dead center rocker style actuation
- » Single and dual valve seat control

Technical Data

Operating pressure:
0 - 150 psi

Operating Temperature:
-40° F to 185° F

Material

Black Thermoplastic

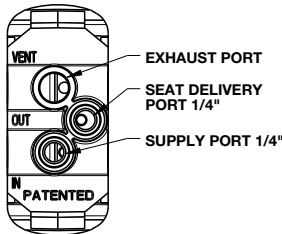
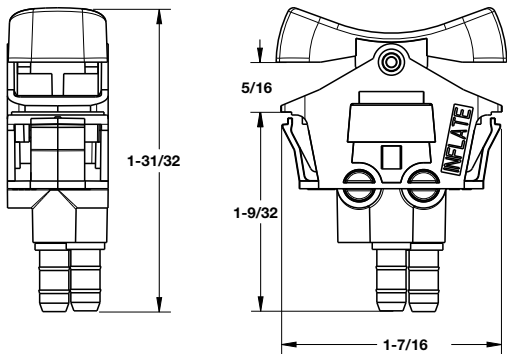
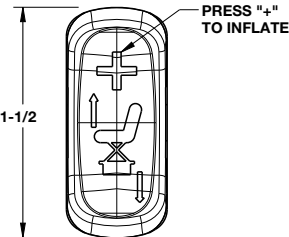


Models

| Model | Description | Fitting | Tube O/D |
|---------|--------------------------------------------|------------|----------|
| 3020-6 | Single Seat Valve | Barb Brass | 1/4" |
| 3020-7 | Dual Valve Seat Control, Lumbar and Height | Barb Brass | 1/4" |
| 3020-17 | Single Inlet Clutch Control Valve | Barb Brass | 1/4" |

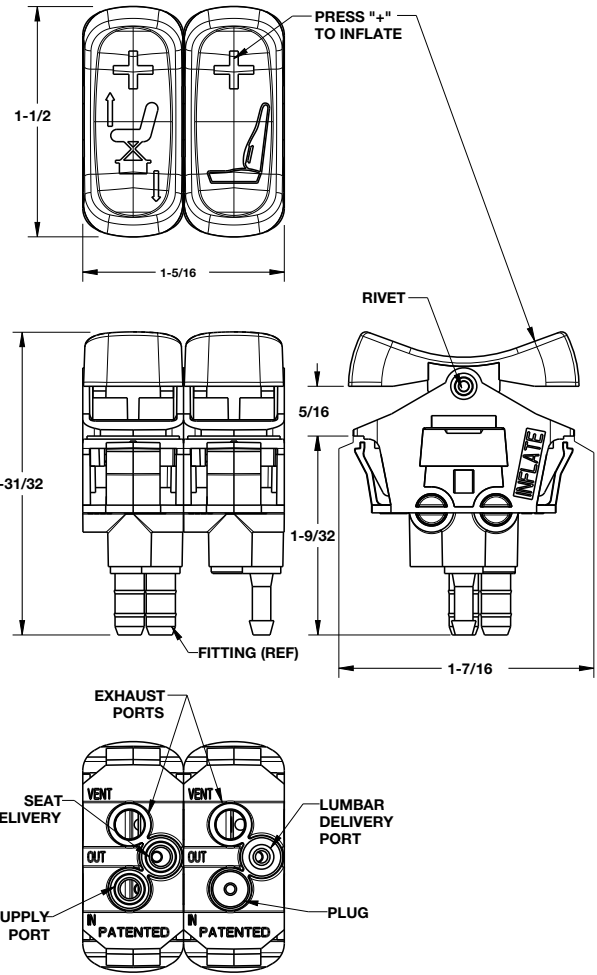
Specifications

3020-6

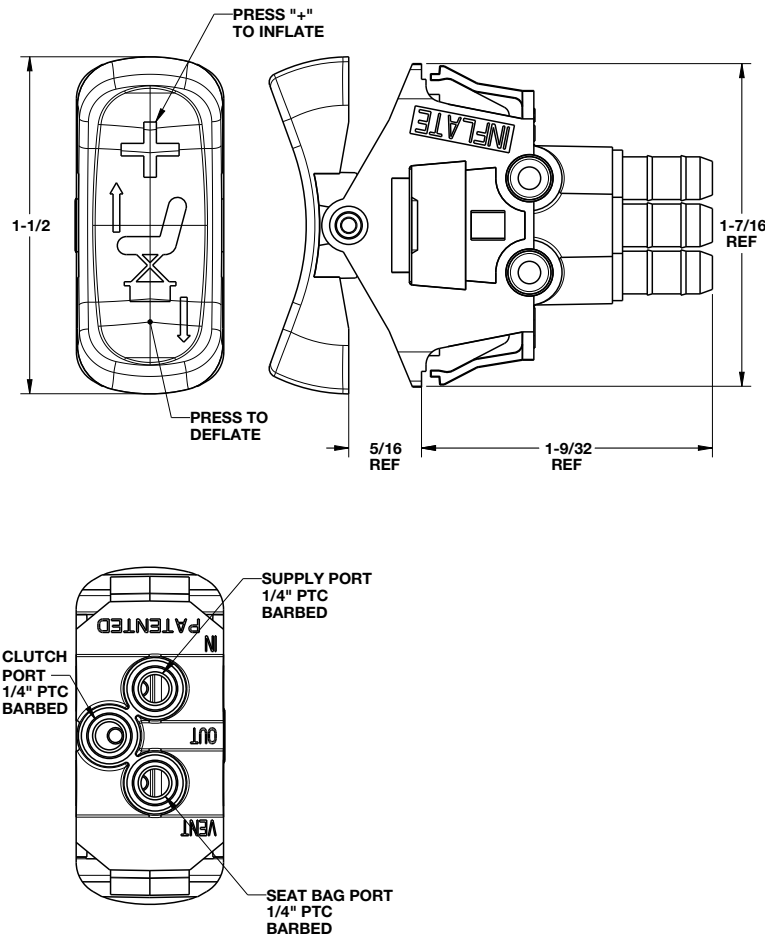


SEAT ROCKER VALVES
3020 Series

3020-7



3020-17



SEAT ROCKER VALVES

3277 Series

- » 3-way air valve for use with rotary leveling valve
- » Engineered for functionality and durability
- » Integral Push-to-Connect fittings (PTC)
- » Material used meets DOT FMVSS 302 flammability requirements

Technical Data

Operating pressure:
0 - 150 psi

Operating Temperature:
-10° F to 160° F

Tube O/D:
1/4"

Material

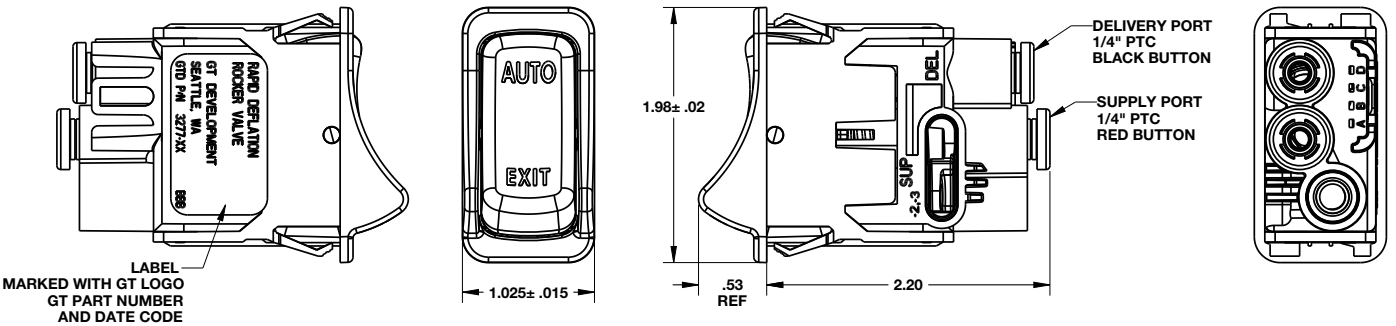
Nylon, glass filled



Models

| Model | Description | Rocker Color | Tube O/D |
|---------|--------------------------------------------|--------------|----------|
| 3277-1 | Auto/Exit, Air Only Rapid Deflation Rocker | Black | 1/4" |
| 3277-03 | Auto/Exit, Air Only Rapid Deflation Rocker | Gray | 1/4" |

Specifications



SEAT LEVELING VALVE WITH CLUTCH

- » 3-way rotary actuated pneumatic valve for seat leveling applications
- » Air disengaged, spring engaged clutch allows change to the off position location
- » Thermoplastic construction

Technical Data

Operating pressure:
0 - 150 psi

Operating Temperature:
-10°F to 130°F

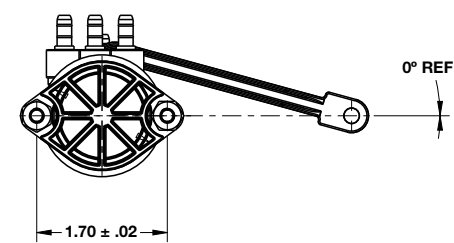
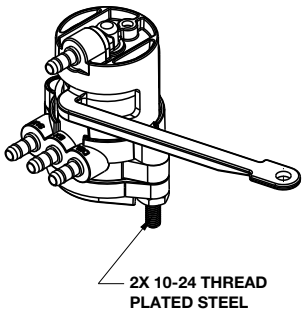
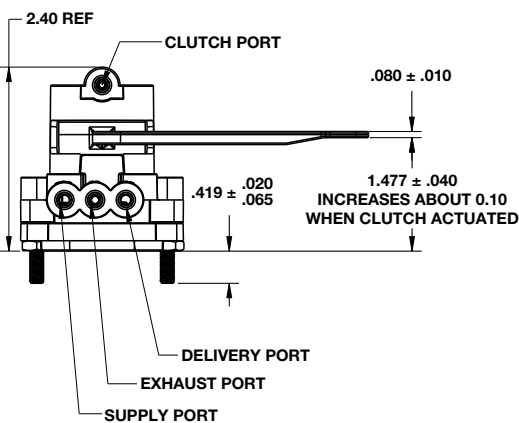
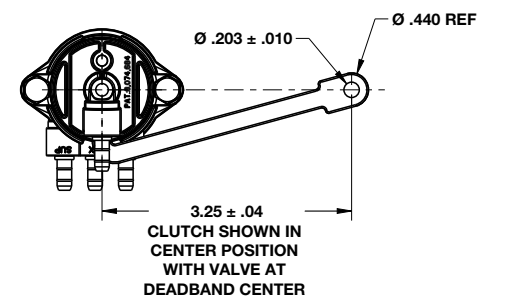
Tube O/D:
1/4"



Models

| Model | Fitting | Tube O/D |
|---------|---------|----------|
| 3111-01 | Barb | 1/4" |

Specifications



Seat Height Memory Control System



Find out more
norgren.com

The Seat Height Memory Control System provides driving comfort and convenience as a fully-pneumatic solution for automatic seat height adjustment based on weight, ride settings, road input and operator use of Easy Exit functionality.

- Features and Benefits
- » Allows for easier exit and entry from the truck.
 - » Eliminates the need to hold a button to re-adjust to the proper height after deflating to the floor.
 - » Automatically resumes operator set ride height after being switched back to auto mode.
 - » Provides protected buffer zone at the extremes of seat stroke to reduce back injuries.
 - » Self-compensates for any small air system leaks.

Technical Specs

- » Operating Pressure: 0 - 150 psi
- » Operating Temp: -10°F to 130°F
- » Tube O/D: 1/4"

Utilizes existing industry proven products for a complete seat control solution.

| Model | Desceiption |
|---------|--------------------------------------------|
| 3277-1 | Auto/Exit, Air Only Rapid Deflation Rocker |
| 3111-01 | Seat Leveling Valve with Clutch |
| 3020-17 | Single Inlet Clutch Control Valve |

Contact a Norgren commerical vehicle representative to learn more about the Seat Height Memory Control System.

[Solenoid Valves]

7

Our wide range of solenoid valves and arrays are engineered for numerous commercial vehicle applications all of which are designed to meet tough standards and extreme conditions of on-highway and off-highway vehicles.



SOLENOID VALVES

5020, 5022, 5023, 5025 & 85020 Series

- » Solenoid air valve
- » Designed for continuous duty in high temperature applications

Technical Data

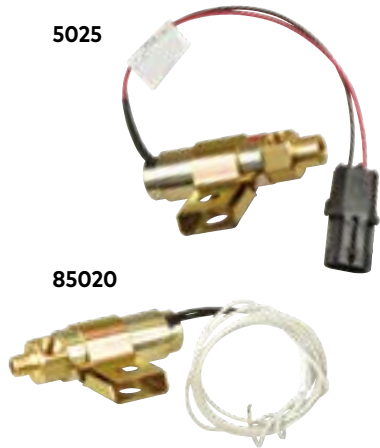
Thread type:
1/8" NPTF

Operating voltage:
12Vdc

Electrical connector:
Flying lead

Material

Steel body, Brass manifold, FPM seals



Models

| Model | Description | Package | Electrical Termination | Inlet Port Size | Outlet Port Size | Configuration |
|------------|------------------------------------------------------|------------|--------------------------------------------------------------|-----------------|----------------------|---------------|
| 5020-1 | Solenoid Valves | Bulk | Metric Pack 280 Series Connector (Packard 15300027) | 1/8" -27 NPTF | 1/8" -27 NPTF Male | N/O |
| 5020-4 | Solenoid Valves | Bulk | 3/8" ring terminal on 6" wire, #10 ring terminal on 28" wire | 1/8" -27 NPTF | 1/8" -27 NPTF Male | N/O |
| 5020-20A* | Solenoid Valve with 2 Diodes and Exhaust Vent Shield | Individual | Metric Pack 150 Series Connector (Packard 12052644) | 1/8" -27 NPTF | 1/8" -27 NPTF Male | N/C |
| 5020-21A* | Solenoid Valve with 2 Diodes | Individual | Metric Pack 150 Series Connector (Packard 12052644) | 1/8" -27 NPTF | 1/8" -27 NPTF Male | N/O |
| 5020-23A * | Solenoid Valves with Resistor | Individual | Metric Pack 150 Series Connector (Packard 12162000) | 1/8" -27 NPTF | 1/8" -27 NPTF Male | N/O |
| 5020-25A* | Solenoid Valve with Exhaust Vent Shield | Bulk | Flying Leads | 1/8" -27 NPTF | 1/8" -27 NPTF Male | N/C |
| 5020-28A* | Solenoid Valve with 2 Diodes and Exhaust Vent Shield | Individual | Flying Leads | 1/8" -27 NPTF | 1/8" -27 NPTF Male | N/O |
| 5022-106 | Solenoid Valve with Diode | Individual | Metric Pack 280 Series Connector (Packard 15300002) | 1/4" -18 NPTF | 1/8" -27 NPTF Female | N/C |
| 5023-1 | Solenoid Valve | Bulk | Flying Leads | 1/4" -18 NPTF | 1/8" -27 NPTF Female | N/O |
| 5025-1 | Solenoid Valve with Diode | Bulk | Weather Pack Series (Packard 12010973) | 1/8" -27 NPTF | 1/8" -27 NPTF | N/C |
| 5025-4 | Solenoid Valve with Diode, Top Bracket Placement | Individual | Metric Pack 280 Series Connector (Packard 15300002) | 1/8" -27 NPTF | 1/8" -27 NPTF Female | N/O |
| 5025-7 | Solenoid Valve with Diode, Bottom Bracket Placement | Individual | Metric Pack 280 Series Connector (Packard 15300002) | 1/8" -27 NPTF | 1/8" -27 NPTF Female | N/O |
| 85020-0 | Solenoid Valves with Mounting Hardware | Individual | Flying Leads | 1/8" -27 NPTF | 1/8" -27 NPTF Male | N/O |
| 85020-1 | Solenoid Valves with Mounting Hardware | Individual | Metric Pack 280 Series Connector (Packard 15300027) | 1/8" -27 NPTF | 1/8" -27 NPTF Male | N/O |
| 85020-4 | Solenoid Valves with Mounting Hardware | Individual | 3/8" ring terminal on 6" wire, #10 ring terminal on 28" wire | 1/8" -27 NPTF | 1/8" -27 NPTF Male | N/O |

* Replacement Solenoids for Lift Axle Control Module 5040 series.

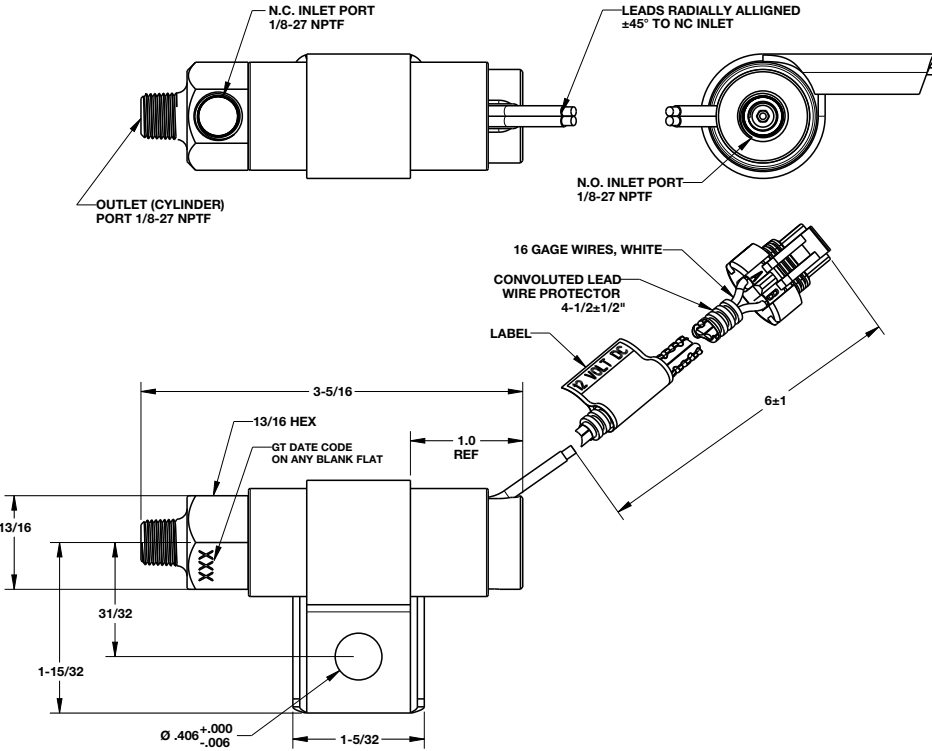
Accessories

| Accessories | Description |
|-------------|----------------------------------------|
| 5050 | Commerical In-Line Filter |
| 5060-1 | Commercial Vehicle Exhaust Vent Shield |

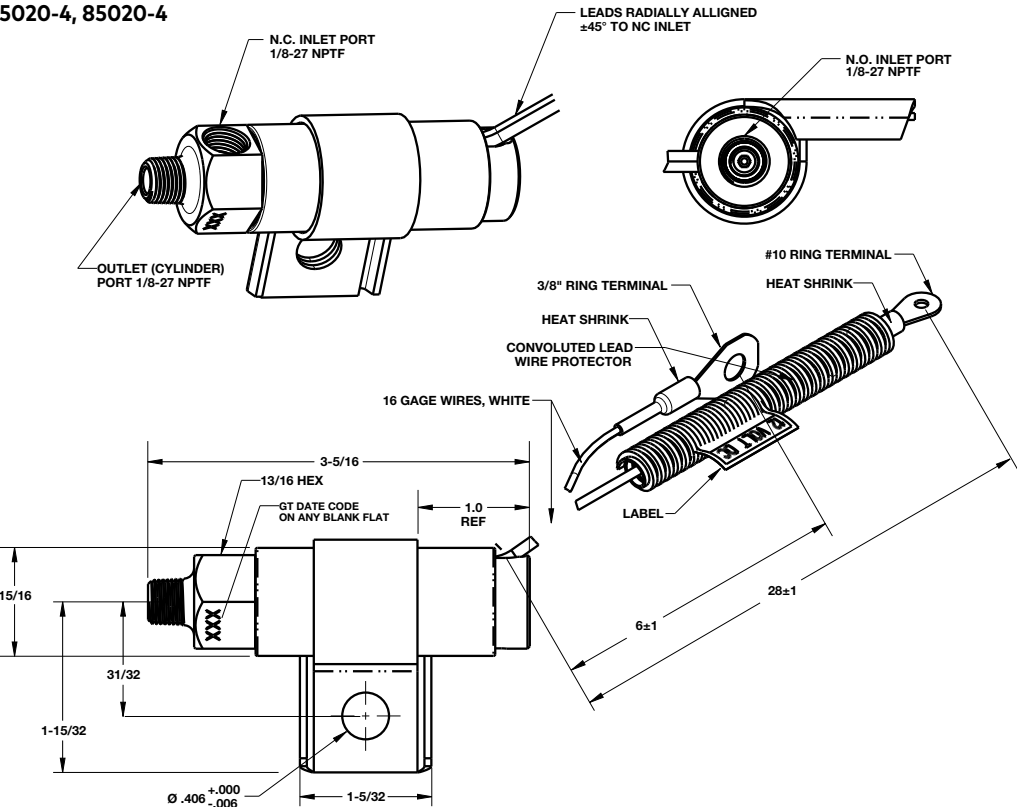
Solenoid Valves
5020, 5022, 5023, 5025 & 85020 Series

Specifications

5020-1, 85020-1

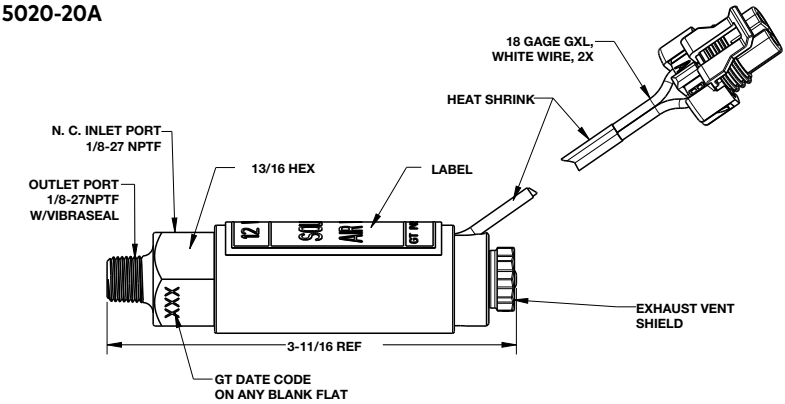


5020-4, 85020-4

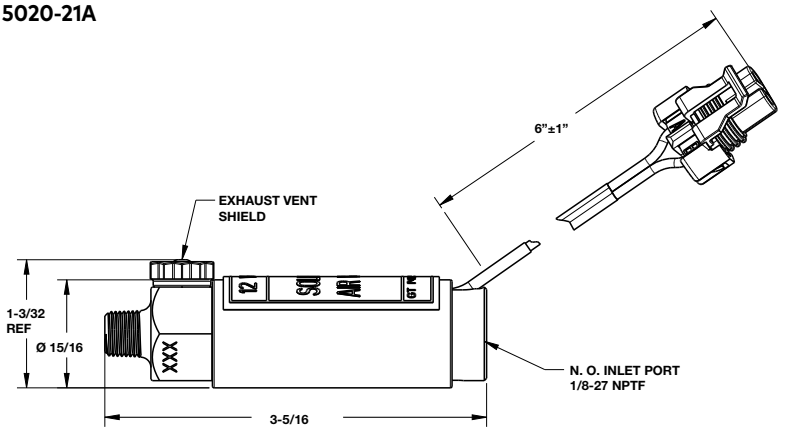


Solenoid Valves
5020, 5022, 5023, 5025 & 85020 Series

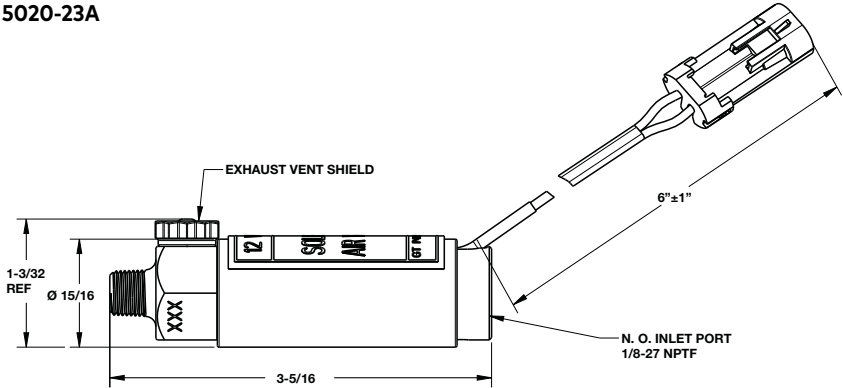
5020-20A



5020-21A

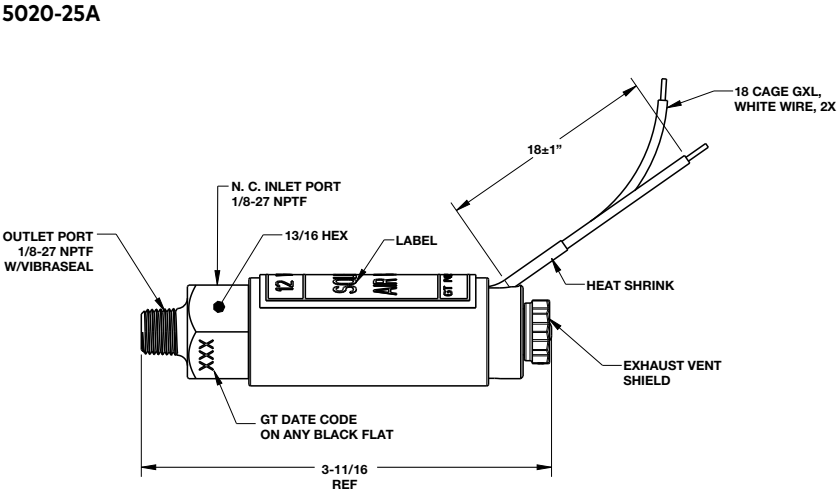


5020-23A

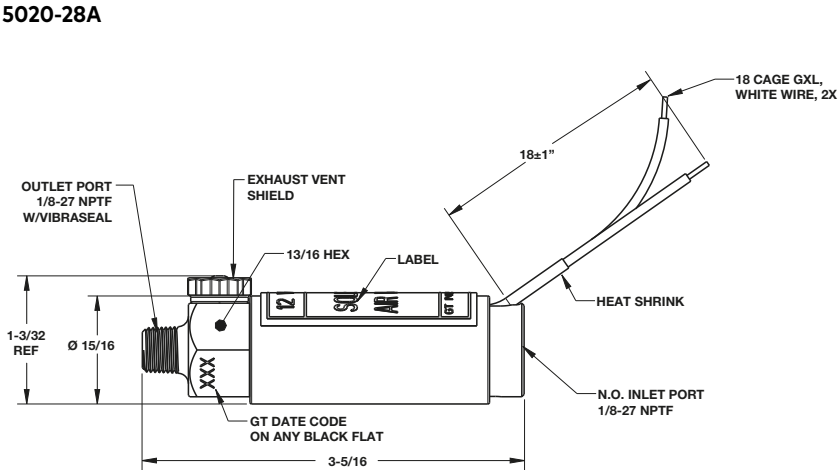


Solenoid Valves
5020, 5022, 5023, 5025 & 85020 Series

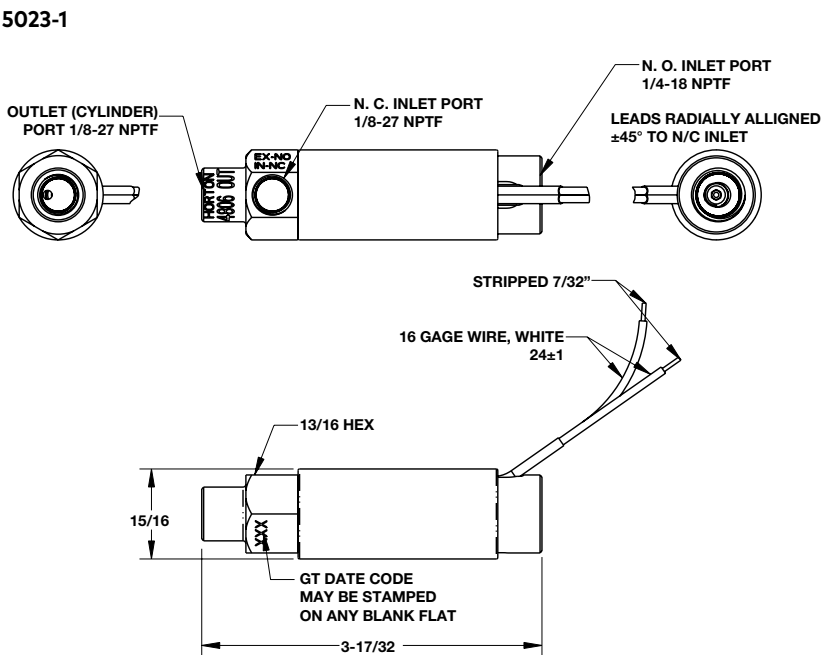
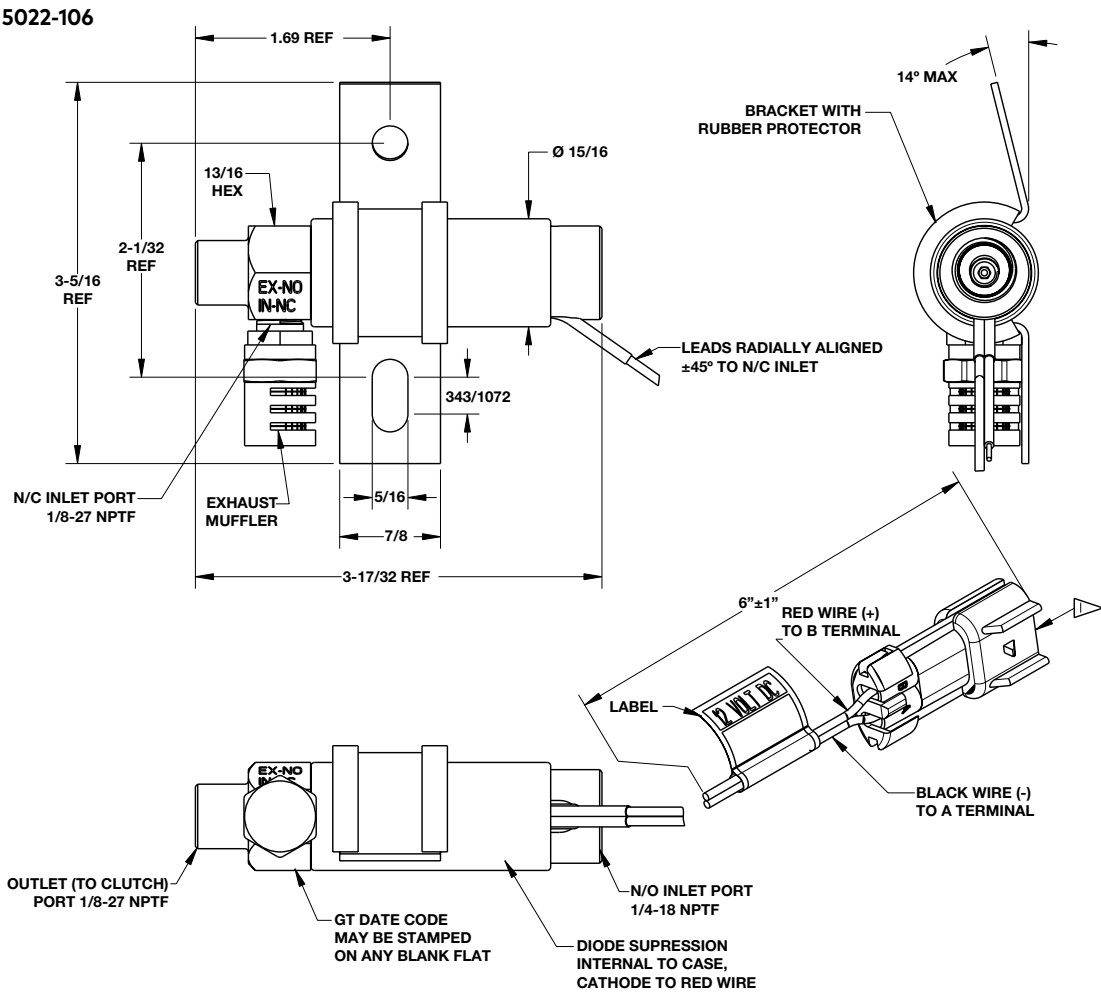
5020-25A



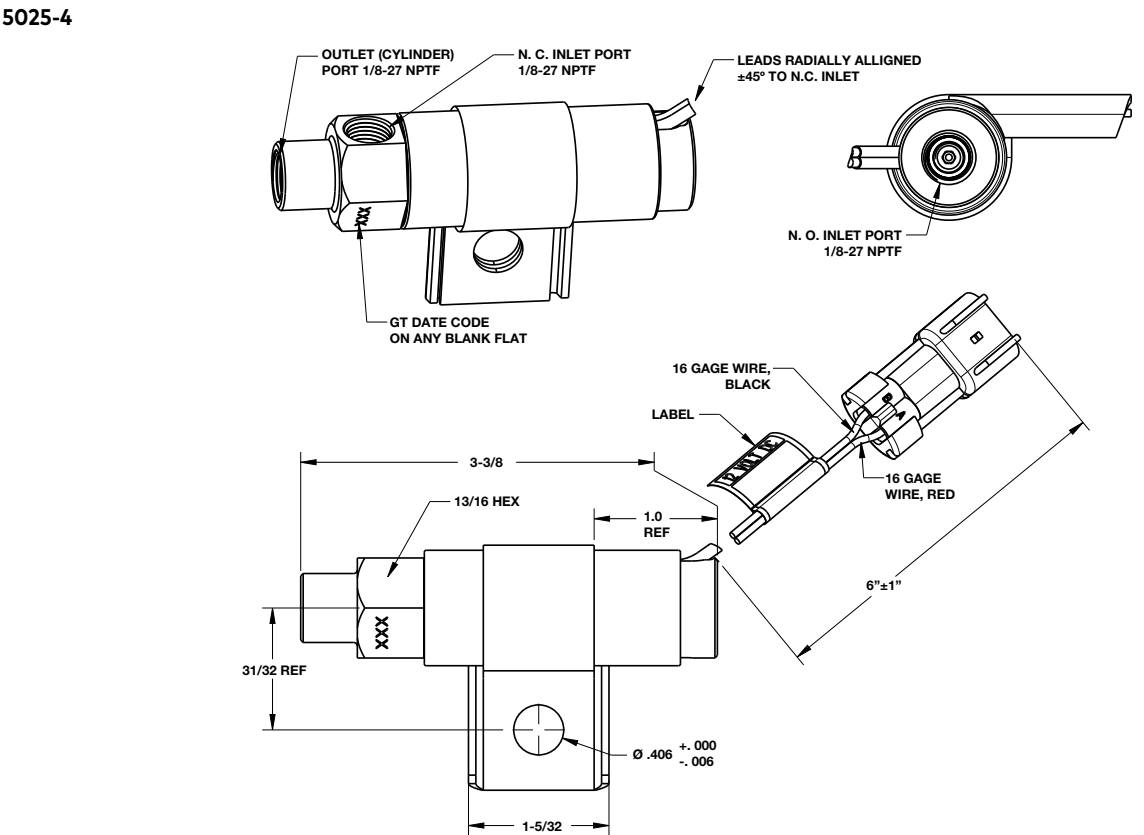
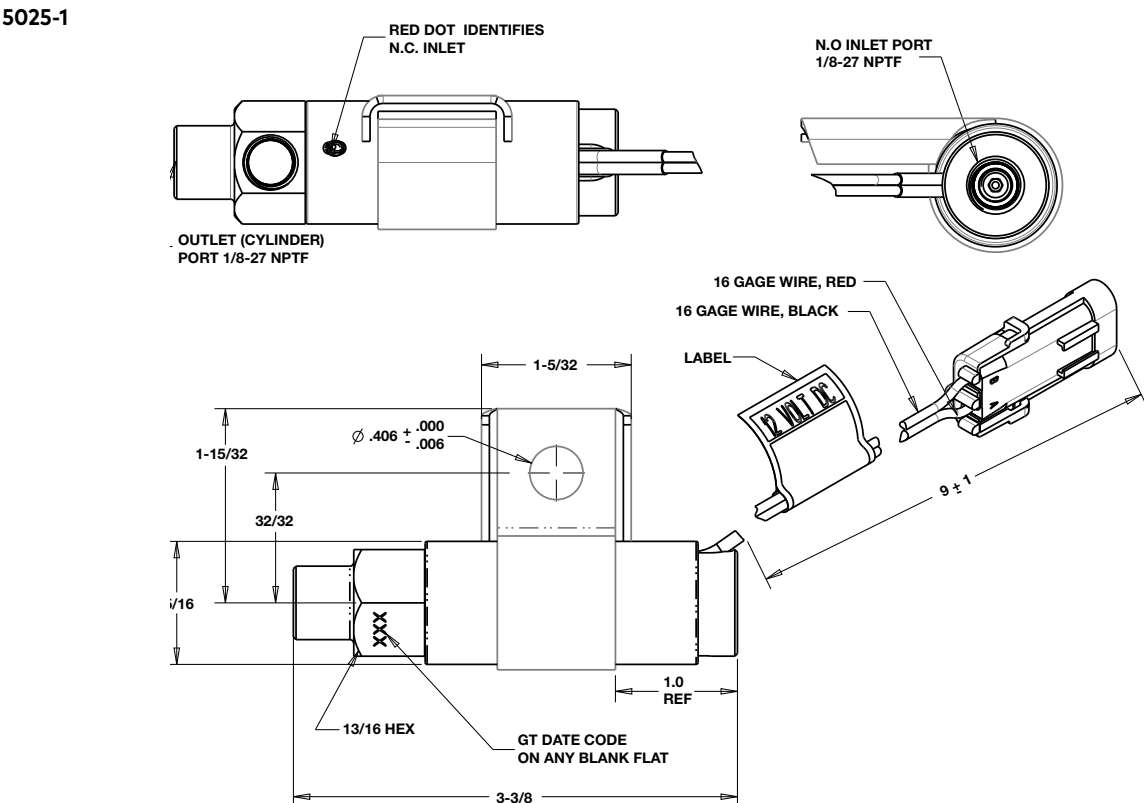
5020-28A



Solenoid Valves
5020, 5022, 5023, 5025 & 85020 Series

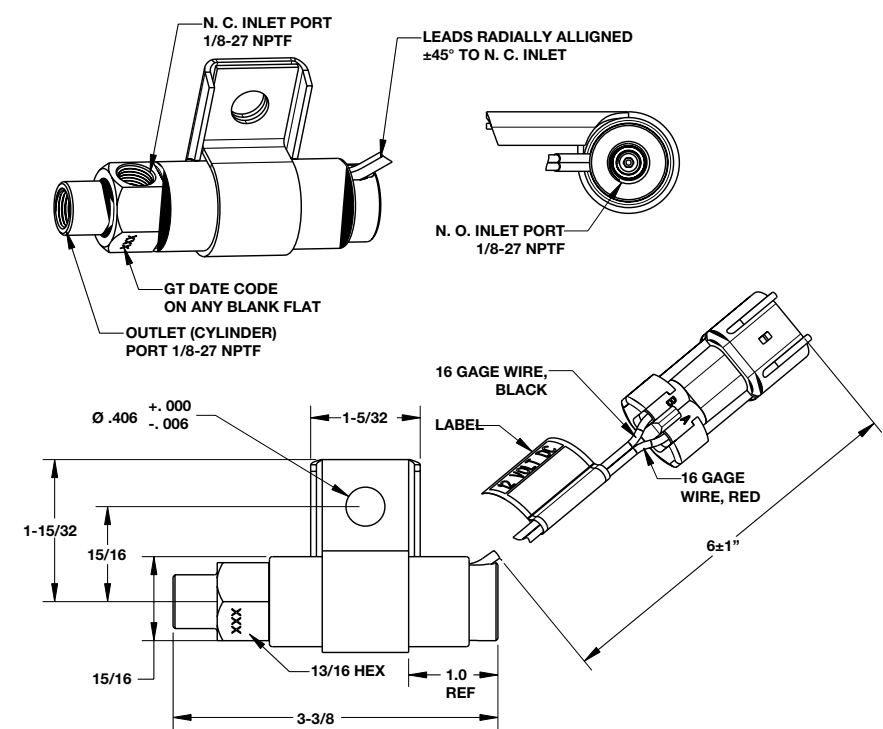


Solenoid Valves
5020, 5022, 5023, 5025 & 85020 Series

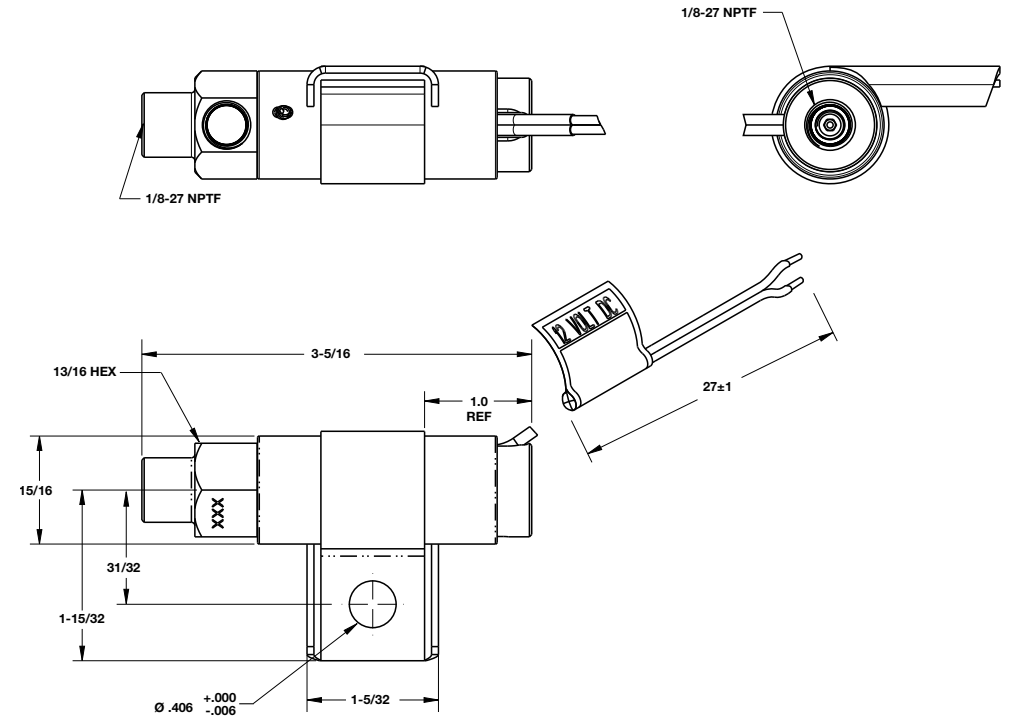


Solenoid Valves
5020, 5022, 5023, 5025 & 85020 Series

5025-7



85020-0



SOLENOID VALVES
5030 Series

- » Robust component parts for use on and around the engine
- » Designed for continuous duty in high temperature applications
- » Integral Push-To-Connect (PTC) fittings
- » Primarily used for Fan Clutch Control

Technical Data

Operating pressure:
60 to 150 psi (5 to 10 bar)

Operating temperature:
-40°F - 257°F (-40°C - 125°C)
-40°F to 200°F (5030 - 310B)

Operating voltage:
9 to 16 volts

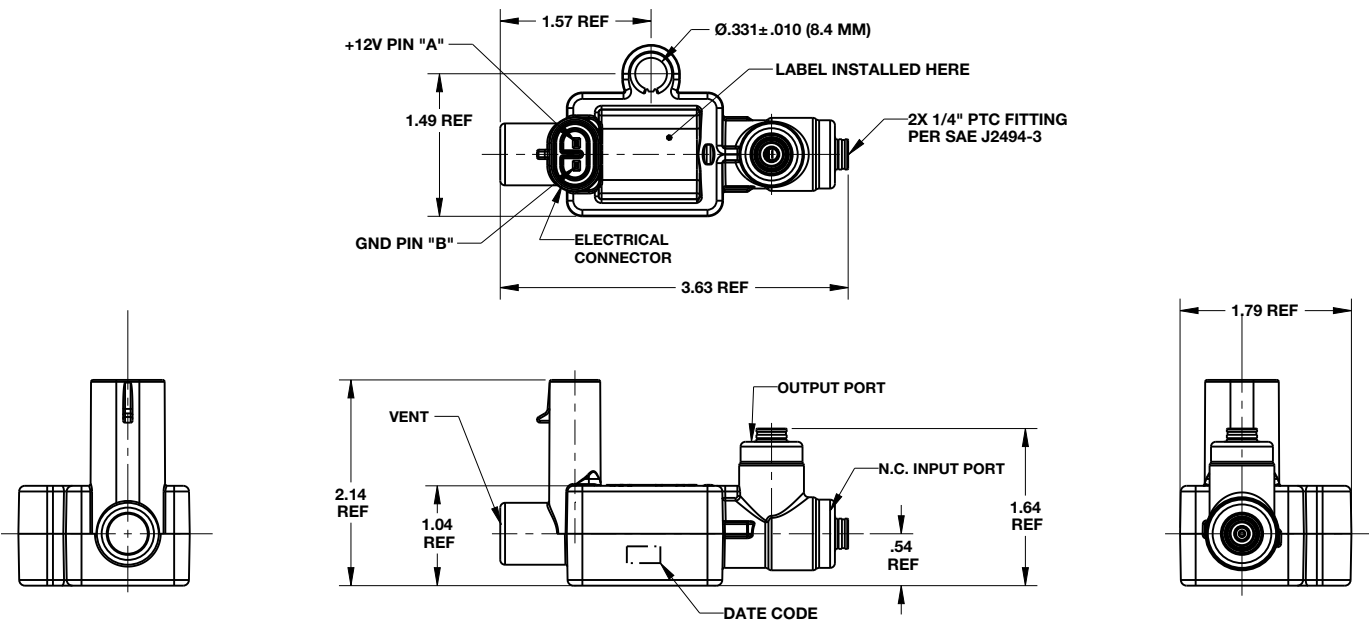


Models

| Model | Description | Configuration | Fitting | O/D Tube |
|------------|-------------------------------------------------------------------------------|---------------|-----------|----------|
| 5030-111 | Solenoid valve, 3-way, ptc fittings | N/C | PTC | 1/4" |
| 5030-111-1 | Solenoid valve, 3-way, ptc fittings, and bracket | N/C | PTC | 1/4" |
| 5030-121A | Solenoid valve, 3-way, nptf hex fittings | N/C | NPTF HEX | 1/4" |
| 5030-211 | Solenoid valve, 3-way, ptc fittings | N/O | PTC | 1/4" |
| 5030-310B | Solenoid, horn valve, 2-way, ptc fittings with jumper | N/C | PTC | 1/4" |
| 5030-411A | Solenoid valve, 3-way, resistor suppression and ptc fittings | N/C | PTC | 1/4" |
| 5030-451 | Solenoid valve, 3-way, resistor suppression with positional ptc elbow fitting | N/C | PTC Elbow | 1/4" |
| 5030-511A | Solenoid valve, 3 way, ptc fittings, resistor suppression | N/O | PTC Elbow | 1/4" |

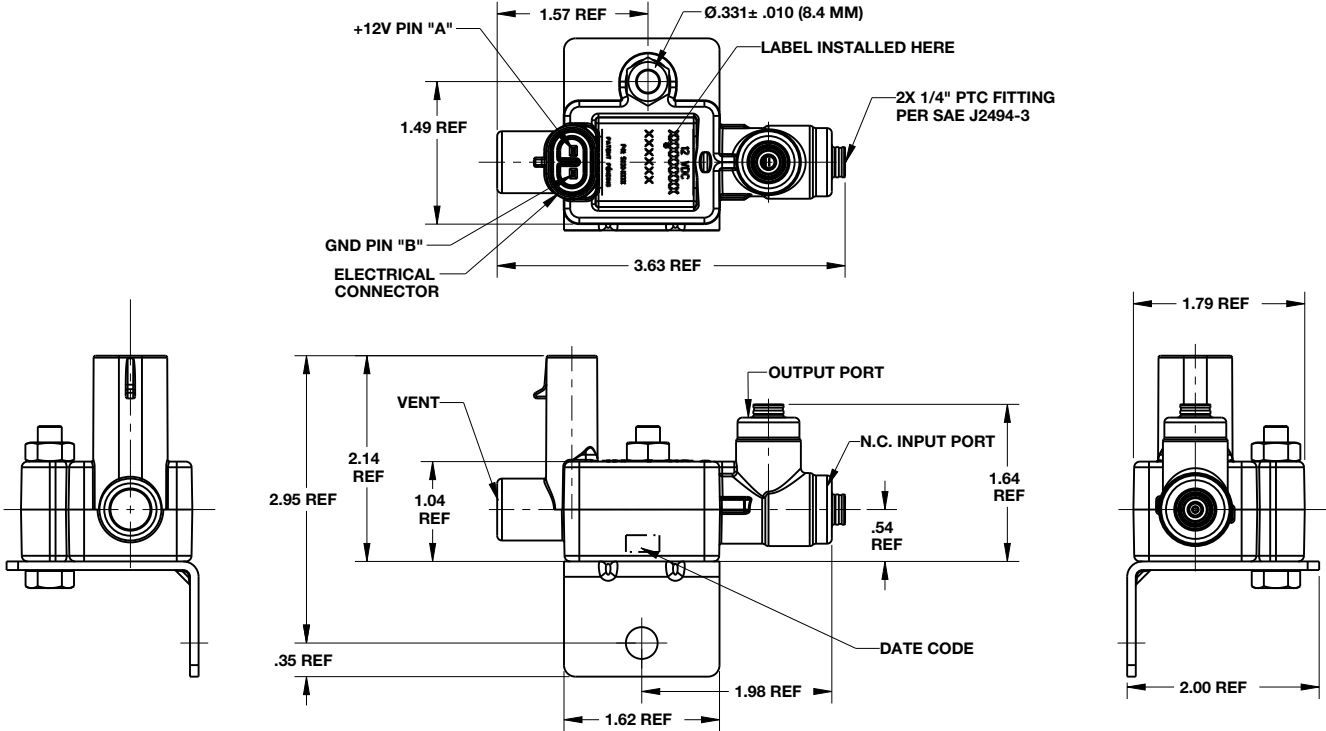
Specifications

5030-111

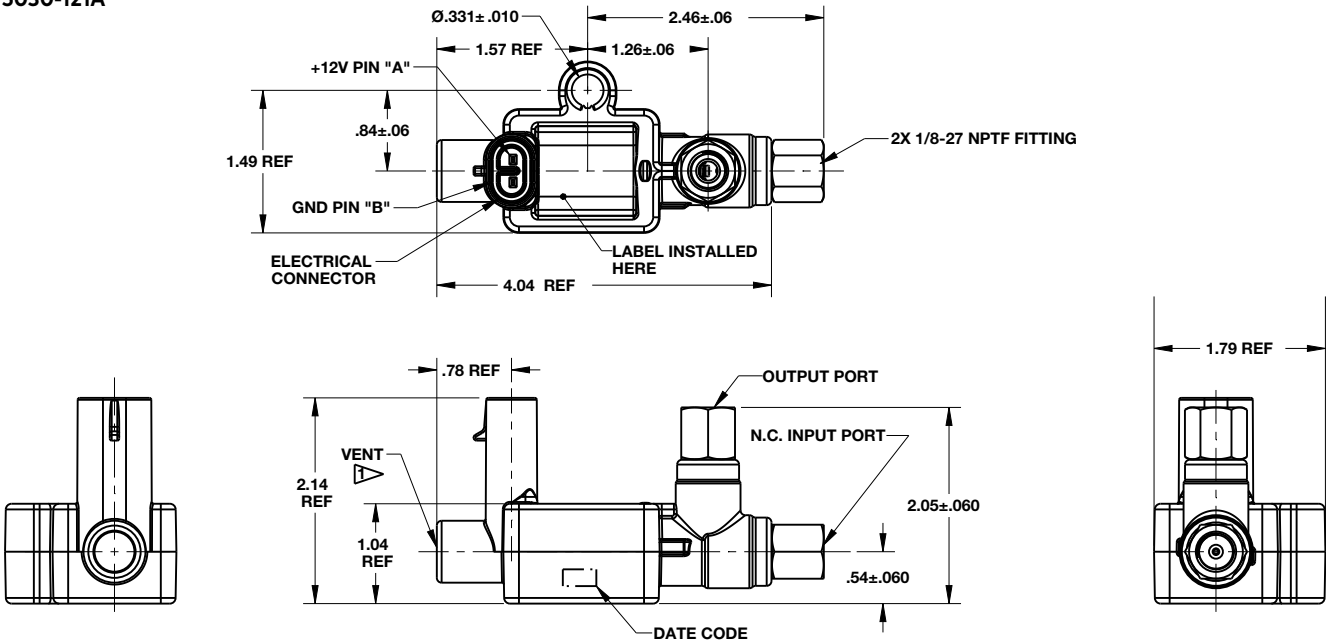


SOLENOID VALVES
5030 Series

5030-111-1

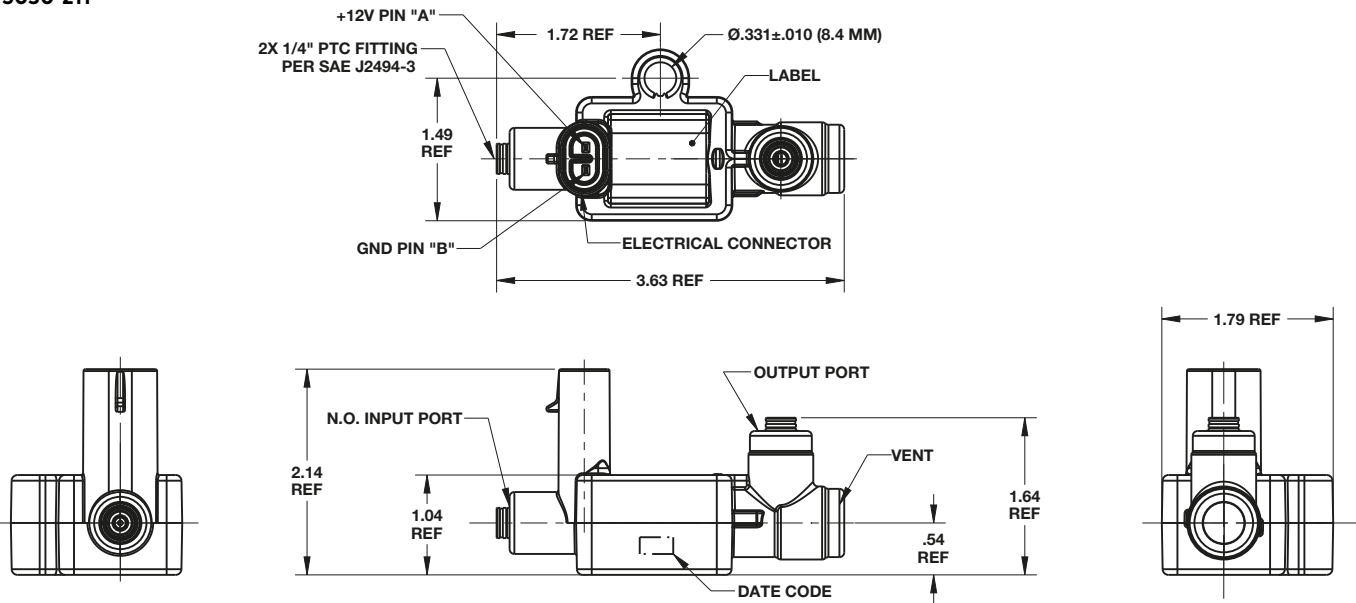


5030-121A

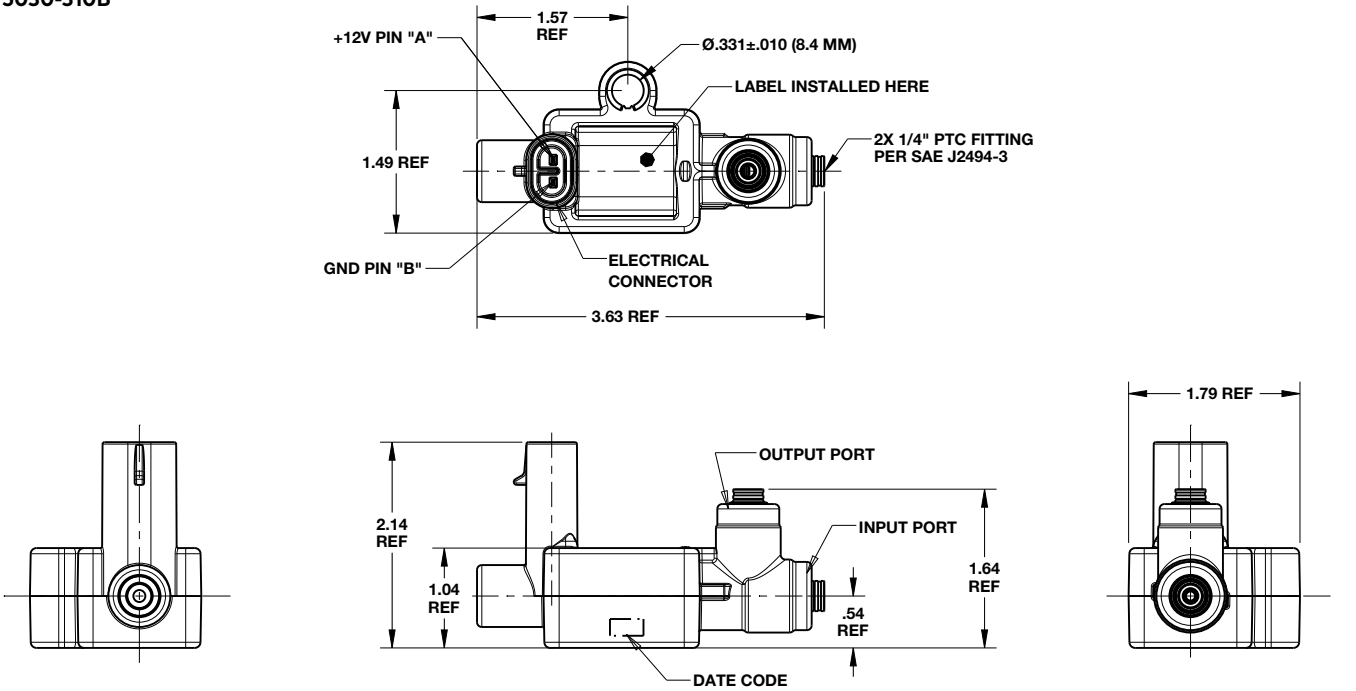


SOLENOID VALVES
5030 Series

5030-211

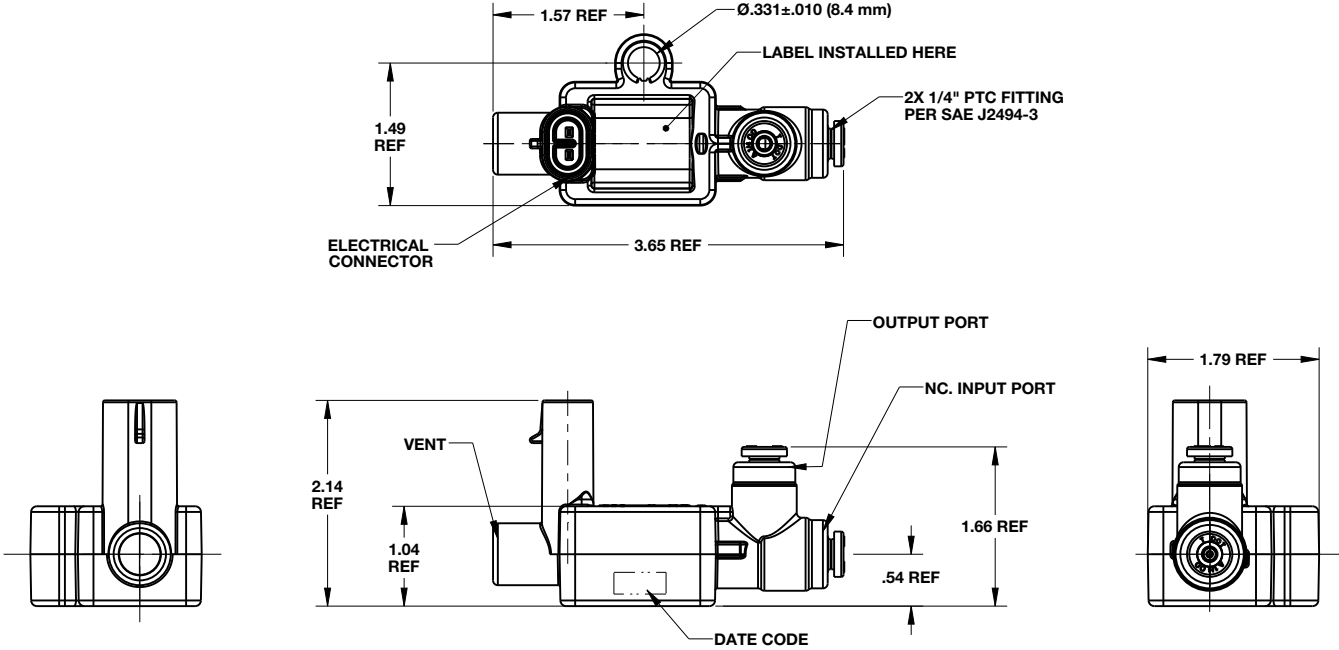


5030-310B

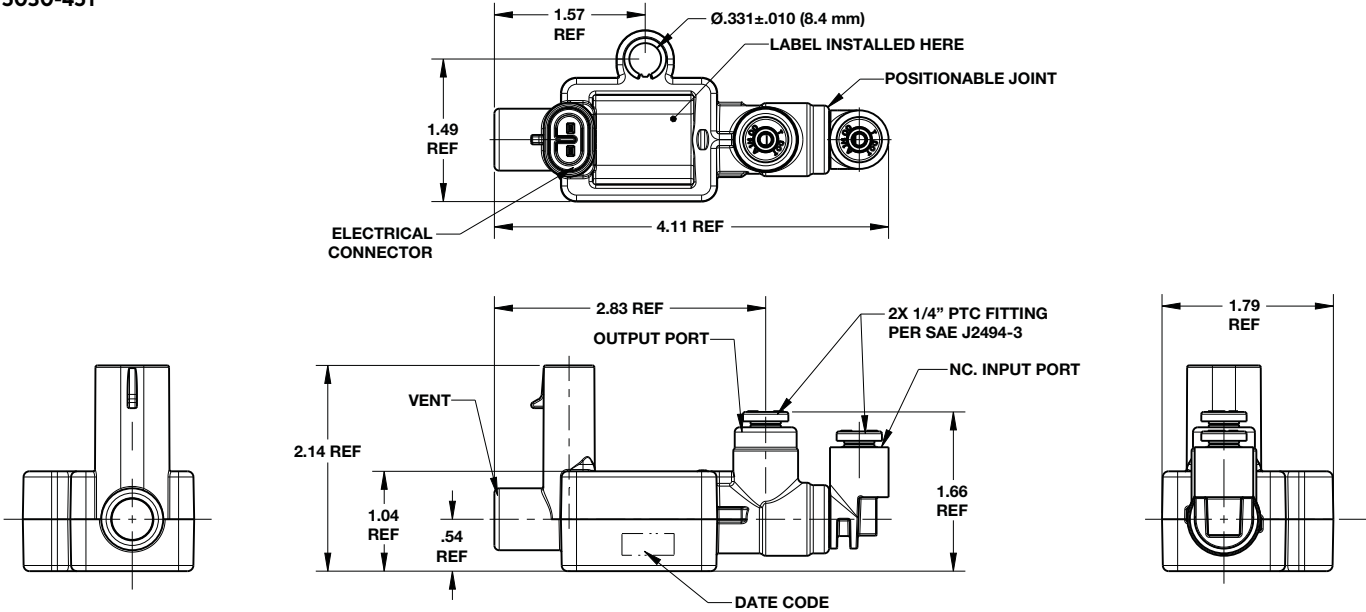


SOLENOID VALVES
5030 Series

5030-411A

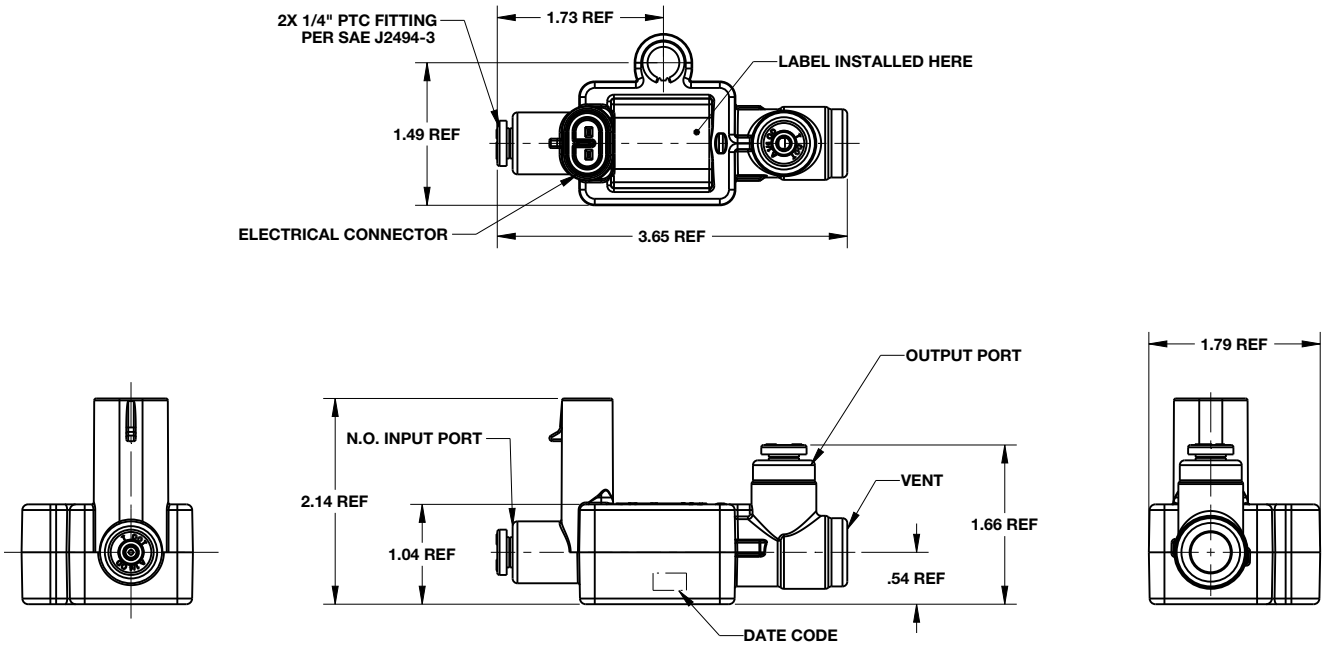


5030-451



SOLENOID VALVES
5030 Series

5030-511A



SOLENOID VALVES

5031 Series

- » 3-way normally closed solenoid operated air valve
- » Robust component parts for use on and around the engine
- » Designed for continuous duty in high temperature applications
- » Integral Push-To-Connect (PTC) fittings

Technical Data

Operating Pressure:
60 to 150 psi

Operating Temperature:
-40°F - 257°F

Tube O/D:
1/4"

Material

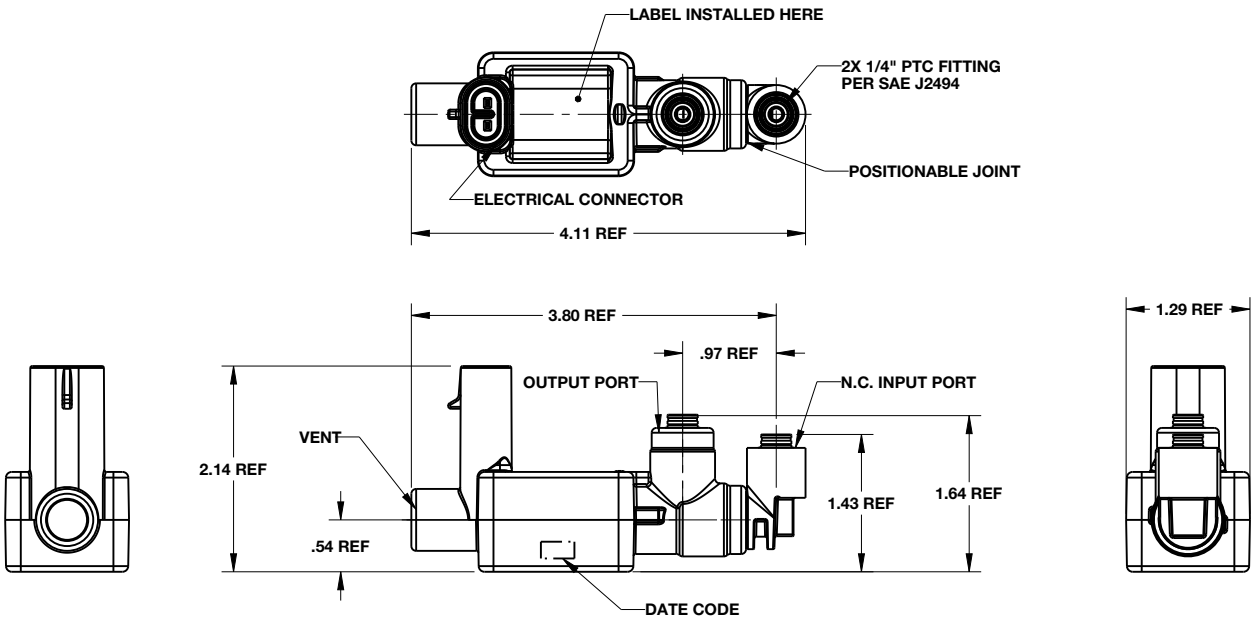
Nylon, glass filled



Models

| Model | Description | Configuration | Fitting |
|------------|--------------------------------------------------------|---------------|-----------|
| 5031-01-02 | Solenoid valve, 3-way, swivel, with positionable elbow | N/C | PTC Elbow |

Specifications



AIR SOLENOID ACCESSORY PACK

ASAP Series

- » Robust modular 3-way valve manifolding system
- » Patented design provides flexibility to exceed your application needs
- » Customizable electrical connection to meet your specific requirements
- » Integrated fittings provide faster build times
- » Quicker installation with color-coded fittings caps
- » Simple to connect design for building the manifold length you require
- » Mountable in any orientation
- » Fittings comply with US Department of Transportation, Federal Motor Vehicle Safety Standard (DOT FMVSS 106)
- » Integrated Push-To-Connect (PTC)

Technical Data

Medium:
Compressed air, filtered, lubricated, non-lubricated

Operation:
3/2 normally closed direct acting

Solenoid:
9 - 16Vdc or 20.4 - 26.4Vdc
7 Watts

Port Size:
3/8" Inlet – tube/push in fitting (PIF)
1/4" Outlet/Delivery – tube/push in fitting (PIF)

Operation pressure:
Maximum 150 psig (10.35 bar)

Flow characteristics:
3/8" Inlet Cv = 0.67
1/4" Delivery Cv = 0.14
Minimum orifice size: 0.078"

Temperature range:
-40° to 220°F (-40° to 100°C)

Material

Body and endcaps: 30% glass filled PBT
Exhaust cover cap: 30% glass filled Nylon 6/6
Coil overmold: 15% glass filled PET
Seals: Silicone, Nitrile, FKM, and HNBR
Springs, armature, and pole piece: Stainless Steel
Bobbin: 30% glass filled PPS
Valve and fittings: Brass
Mounting sleeve: Steel
Tubing: Tubing should be to SAE J844



Product shown with customer supplied connector.

Models

| Model | Function | Electrical Connection | Port Size | Voltage | Position |
|---------|----------|-----------------------|------------|---------|----------|
| 7201-70 | 3/2 NC | 19" Flying leads | (1/4" PIF) | 12 VDC | A |
| 7239-58 | 3/2 NC | 19" Flying leads | (1/4" PIF) | 24 VDC | A |

Configurable up to 8 stations,(B+A+A+A+A+A+A+A+C).
Please consult factory for configurations using more than 8 stations.

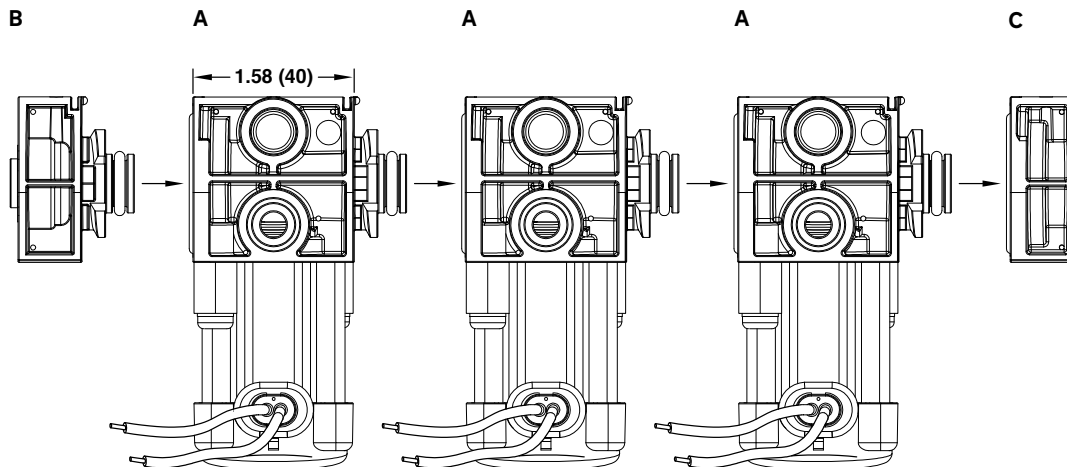
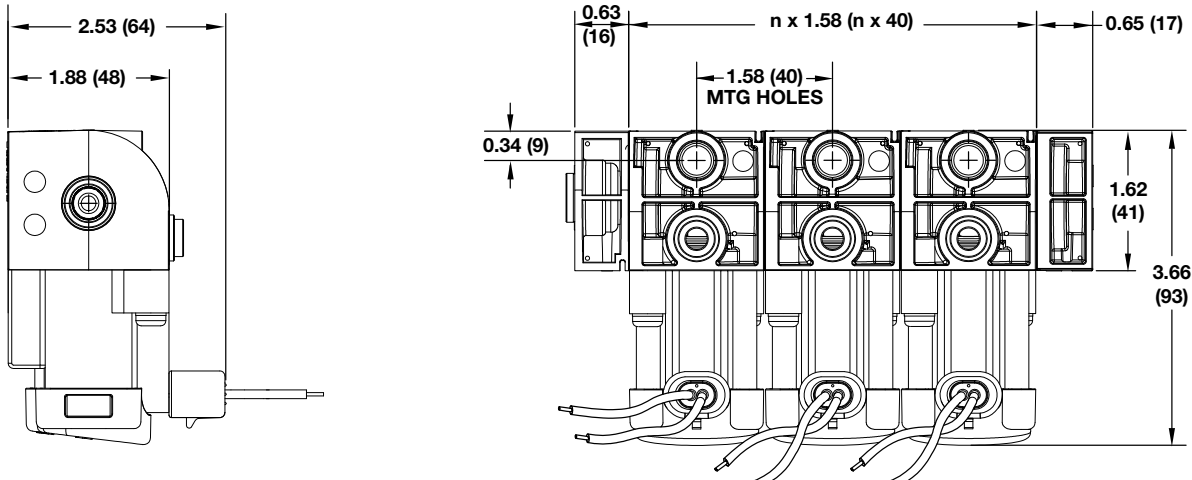
End Plates

| Model | Description | Position |
|---------|--------------------------------------|----------|
| 7202-70 | Inlet Left Hand End Plate (3/8" PIF) | B |
| 7203-70 | Cap Right Hand End Plate | C |

1/4" Colored caps

| Red | Yellow | Orange | Green | Black | Tan | Violet | Blue | White | Silver |
|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| | | | | | | | | | |
| 48C34901 | 48C34902 | 48C34903 | 48C34904 | 48C34905 | 48C34906 | 48C34907 | 48C34908 | 48C34909 | 48C34910 |

Specifications



[Valves]

8

Designed to enhance vehicle performance, our valves meet the highest engineering standards for air suspension pressure, flow control and leakage protection. Our valves are available in a variety of types and configurations and comply with federal safety regulations.



RAPID DUMP VALVE

4111 Series

- » 3-way, pilot-operated, normally open valve
- » 2 delivery ports
- » Chassis-mounted on heavy-duty highway vehicles with air-ride suspensions

Technical Data

Medium:
Compressed Air

Operating pressure:
90 to 120 psi
0 - 120 psi
Pilot Pressure Minimum: 60

Port size:
1/8"-27

Thread Type:
PTF

Material

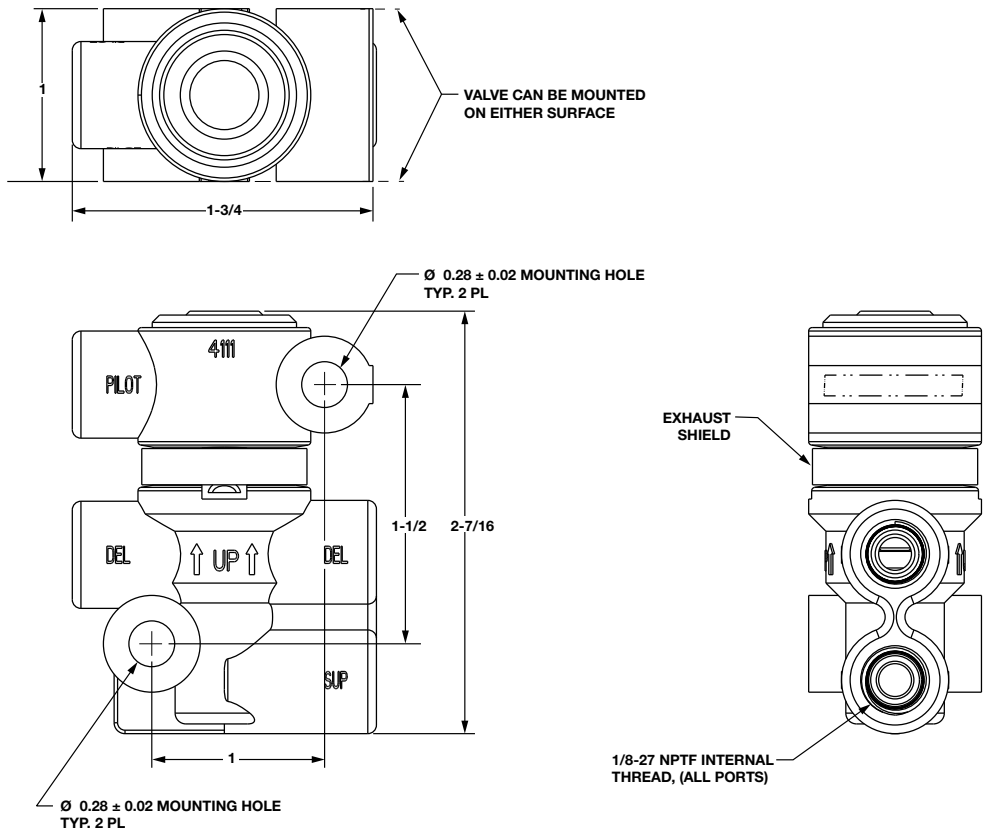
Die cast Zinc



Models

| Model | Port Size | Packaging |
|--------|-----------|------------|
| 4111 | 1/8" PTF | Bulk |
| 4111-2 | 1/8" PTF | Individual |

Specifications



PRESSURE PROTECTION VALVES (PPV)

223 Series

- » Designed to isolate vehicle air systems in case of leakage
- » Protects the integrity of the air supply
- » Convenient in tank mounting
- » Variety of closing pressure options to suit application

Technical Data

Operating pressure:
0 to 150 psi
0 to 10 bar

Operating temperature:
-40°F to +200°F max.
-40°C to +93°C max.

Material

Zamak 3

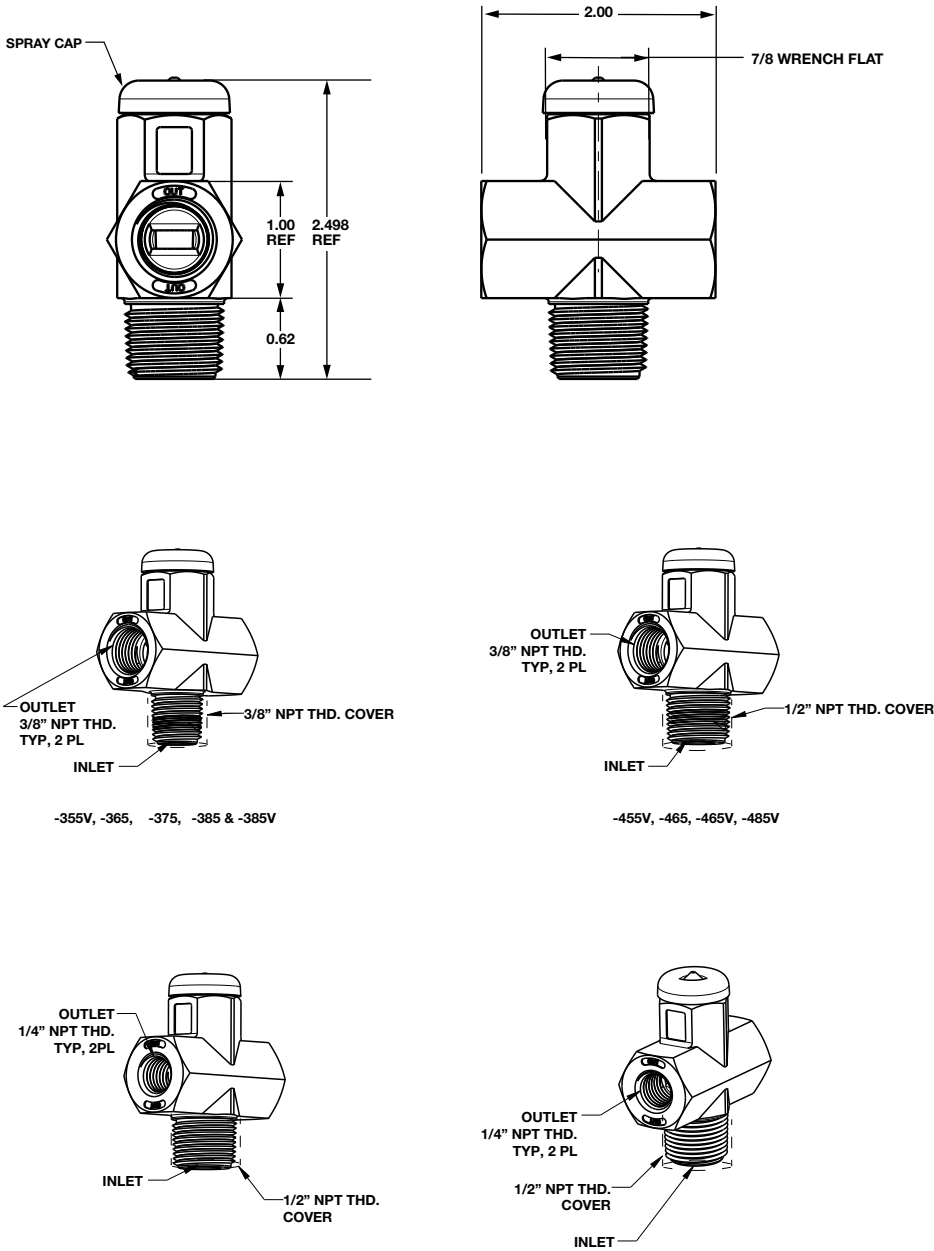


Models

| Model | Open Pressure | Close Pressure | Outlet Thread | Inlet Thread | Vibraseal | Cap Color |
|------------|---------------|----------------|-------------------------|-------------------------------|-----------|-----------|
| 223-355V | 55 | 45 | 3/8" NPT | 3/8" NPT | Yes | Black |
| 223-365 | 65 | 55 | 3/8" NPT | 3/8" NPT | No | Black |
| 223-375 | 75 | 60 | 3/8" NPT | 3/8" NPT | No | Black |
| 223-385 | 85 | 67 | 3/8" NPT | 3/8" NPT | No | Red |
| 223-385V | 85 | 67 | 3/8" NPT | 3/8" NPT | Yes | Black |
| 223-455V | 55 | 45 | 3/8" NPT | 1/2" PTF | Yes | Black |
| 223-465 | 65 | 55 | 3/8" NPT | 1/2" PTF | No | Black |
| 223-465V | 65 | 55 | 3/8" NPT | 1/2" PTF | Yes | Black |
| 223-485V | 85 | 67 | 3/8" NPT | 1/2" PTF | Yes | Red |
| 223-565 | 65 | 55 | 1/4" NPT | 1/2" PTF | No | Black |
| 223-585 | 100 | 70 | 1/4" NPT (port plugged) | 1/2" PTF | No | Red |
| 223-585-2 | 100 | 70 | 1/4" NPT | 1/2" PTF | No | Red |
| 223-585-2B | 85 | 67 | 1/4" NPT | 1/4" NPT | No | Black |
| 223-585N | 85 | 67 | 1/4" NPT | 1/4" NPT | Yes | Red |
| 223-585NP | 85 | 67 | 1/4" NPT (port plugged) | 1/4" NPT | Yes | Red |
| 223-585T | 85 | 67 | 1/4" NPT | Internal 1/4" NPT (no nipple) | No | Red |
| 223-685V | 85 | 67 | 1/4" NPT | 3/8" NPT | Yes | Red |

PRESSURE PROTECTION VALVES (PPV)
223 Series

Specifications



INLINE PRESSURE PROTECTION VALVES (PPV)
5200-75 Series

- » Designed to isolate vehicle air systems in case of leakage
- » Protects the integrity of the air supply
- » Inline mounting
- » Integral Push-To-Connect (PTC) fittings

Technical Data

Medium:
Compressed Air

Operating pressure:
0 to 150 psi
0 to 10 bar

Operating temperature:
-40°F to +200°F max.
-40°C to +93°C max.

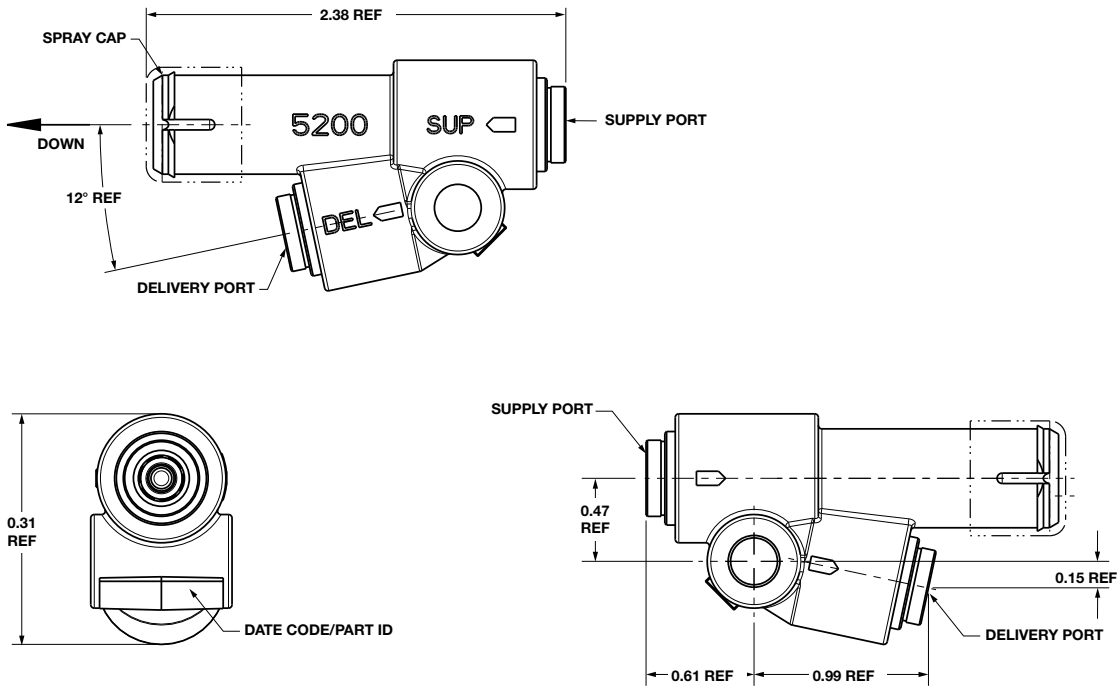
Material
Thermoplastic body with
Fluorosilicone seals



Models

| Model | Open Pressure | Close Pressure | PTC Connection |
|---------|---------------|----------------|----------------|
| 5200-75 | 75 | 60 | 1/4" OD tube |

Specifications



CHECK VALVES

- » Widely used by leading truck manufacturers around the world today, Norgren check valves are designed for strength and durability
- » Single and double check valves are available, with multiple port sizes
- » Incorporating standard Norgren check valve components and proven technology

Technical Data

Medium:
Compressed air

Operating pressure:
0 to 250*psig
-40°F to 212°F
*Depending on tubing limitations.



Models - Single Check Valves

| Model | Port 1 | Port 2 | Port 3 |
|-----------|----------|-----------|--------|
| 95403701M | 1/2" PIF | 1/2" NPTF | - |

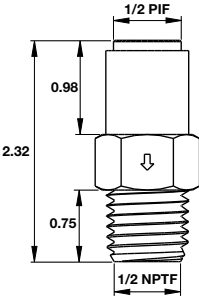
Models - Double Check Valves

| Model | Port 1 | Port 2 | Port 3 |
|---------------|----------|----------|----------|
| AI04000404074 | 1/4" PIF | 1/4" PIF | 1/4" PIF |
| AI06000606074 | 3/8" PIF | 3/8" PIF | 3/8" PIF |
| AI06000648473 | 3/8" PIF | 3/8" PIF | 1/2" PIF |
| AI38000404474 | 1/4" PIF | 3/8" NPT | 1/4" PIF |

Specifications

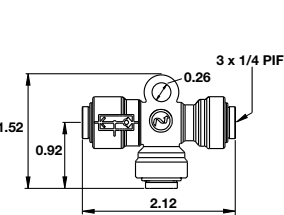
Single Check Valves

95403701M

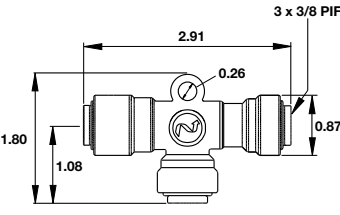


Double Check Valves

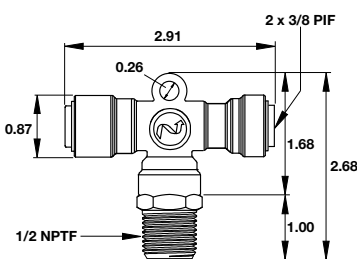
AI04000404074



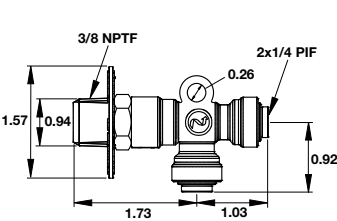
AI06000606074



AI06000648473



AI38000404474



MANUAL/MECHANICAL ACTUATED SPOOL VALVE

Super X

- » Wide range of operators
- » Suitable for multi-directional flow and dual supply applications
- » High flow capacity
- » Lightweight corrosion resistant materials

Technical Data

Medium:
Compressed air, filtered, lubricated and non-lubricated

Operation:
Spool Valve, directly and indirectly actuated

Mounting:
Through-holes in valve body

Port Size:
1/8" and 1/4" NPT

Operating Pressure:
Maximum 26.5" Hg to 145 psig

Flow Characteristics:

| | |
|----------|---------------|
| Size | Function |
| Cv | l/min |
| 1/8" NPT | 3/2, 5/2, 5/3 |
| 0.34 | 335 |
| 1/4" NPT | 3/2, 5/2, 5/3 |
| 0.98 | 965 |

Operating Temperature:
32°F* to 158°F
* Consult our Technical Service for use below 35°F

























Material

Diecast aluminum alloy body, aluminum or glass filled nylon end covers, nitrile rubber seals



Models - 3/2 Mechanical valves

























Accessories

| Model No. | Actuation | Port size NPT | Flow Cv | Drawing no. | Thread NPT | Tube size | Straight fitting | 90° swivel elbow | Muffler |
|---------------------------------------------------------------------------------------|-------------------------------|------------------|---------|-------------|---------------|-----------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|  | | | | | | |  |  |  |
| 030293221 ¹ | Roller lever (heavy duty)/Spg | 1/8 | 0.34 | A, 7 | 1/8 | 1/4 | 95453004M | 95433104M | MS001A |
|  | | | | | | |  |  |  |
| 030402221 ¹ | Roller/Spring | 1/8 | 0.34 | A, 2 | 1/8 | 1/4 | 95453004M | 95433104M | MS001A |
|  | | | | | | |  |  |  |
| 030400221 ¹ | Plunger Spring | 1/8 | 0.34 | A, 1 | 1/8 | 1/4 | 95453004M | 95433104M | MS001A |
|  | | | | | | |  |  |  |
| 030411221 ¹ | Roller lever/Spring | 1/8 | 0.34 | A, 3 | 1/8 | 1/4 | 95453004M | 95433104M | MS001A |
| 030611221 ¹ | Roller lever/Spring | 1/4 | 0.98 | B, 6 | 1/4 | 3/8 | 95453018M | 95433112M | MS002A |
|  | | | | | | |  |  |  |
| 030432221 ¹ | Antenna/Spring | 1/8 | 0.34 | A, 5 | 1/8 | 1/4 | 95453004M | 95433104M | MS001A |
|  | | | | | | |  |  |  |
| 030410221 ¹ | One-way trip | 1/8 | 0.34 | A, 23 | 1/8 | 1/4 | 95453004M | 95433104M | MS001A |













1 Normally closed

MANUAL AND MECHANICAL ACTUATED SPOOL VALVE
Super X

Models - 5/2 Mechanical valves





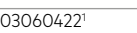















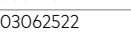







| | | | | | | | Accessories | | |
|-----------------------------------------------------------------------------------|-------------------------------|------------------|---------|-------------|---------------|-----------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Model no. | Actuation | Port size NPT | Flow Cv | Drawing no. | Thread NPT | Tube size | Straight fitting | 90° swivel elbow | Muffler |
|  | Roller lever (heavy duty)/Spg | 1/8 | 0.34 | D, 7 | 1/8 | 1/4 |  |  |  |
| X3039322 | | | | | | | 95453004M | 95433104M | MS001A |
|  | Roller lever/Spring | 1/8 | 0.34 | D, 3 | 1/8 | 1/4 |  |  |  |
| X3045122 | | | | | | | 95453004M | 95433104M | MS001A |
|  | Roller lever/Spring | 1/4 | 0.98 | E, 6 | 1/4 | 3/8 |  |  |  |
| X3065122 | | | | | | | 95453018M | 95433112M | MS002A |
|  | Roller/Spring | 1/8 | 0.34 | D, 2 | 1/8 | 1/4 |  |  |  |
| X3044222 | | | | | | | 95453004M | 95433104M | MS001A |
|  | Roller/Spring | 1/4 | 0.98 | E, 4 | 1/4 | 3/8 |  |  |  |
| X3064222 | | | | | | | 95453018M | 95433112M | MS002A |
|  | Antenna/Spring | 1/8 | 0.34 | D, 5 | 1/8 | 1/4 |  |  |  |
| X3047222 | | | | | | | 95453004M | 95433104M | MS001A |

Models - 3/2 Manual valves









| | | | | | | | Accessories | | |
|-------------------------------------------------------------------------------------|-------------------------|------------------|---------|-------------|---------------|-----------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Model no. | Actuation | Port size NPT | Flow Cv | Drawing no. | Thread NPT | Tube size | Straight fitting | 90° swivel elbow | Muffler |
|  | Lever/lever | 1/8 | 0.34 | D,16 | 1/8 | 1/4 |  |  |  |
| 03029622 | | | | | | | 95453004M | 95433104M | MS001A |
|  | Toggle/toggle | 1/8 | 0.34 | A,14 | 1/8 | 1/4 |  |  |  |
| 03040322 | | | | | | | 95453004M | 95433104M | MS001A |
|  | Rotary knob/rotary knob | 1/8 | 0.34 | A, 19 | 1/8 | 1/4 |  |  |  |
| 03041922 | | | | | | | 95453004M | 95433104M | MS001A |

MANUAL AND MECHANICAL ACTUATED SPOOL VALVE
Super X

Models - 3/2 Manual valves

| | | | | | | | Accessories | | |
|-------------------------------------------------------------------------------------|----------------------------------|------------------|---------|-------------|---------------|-----------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Model no. | Actuation | Port size NPT | Flow Cv | Drawing no. | Thread NPT | Tube size | Straight fitting | 90° swivel elbow | Muffler |
|  | Black – Button/spring | 1/8 | 0.34 | A, 9 | 1/8 | 1/4 |  |  |  |
| 03040422 ¹ | | | | | | | 95453004M | 95433104M | MS001A |
|  | Black – Button/Spring | 1/4 | 0.98 | B, 8 | 1/4 | 3/8 |  |  |  |
| 03060422 ¹ | | | | | | | 95453018M | 95433112M | MS002A |
|  | Button (palm) Key | 1/8 | 0.34 | A, 20 | 1/8 | 1/4 |  |  |  |
| 03041822801 | | | | | | | 95453004M | 95433104M | MS001A |
|  | Black – Button (shrouded) spring | 1/8 | 0.34 | A, 11 | 1/8 | 1/4 |  |  |  |
| 03041422 ¹ | | | | | | | 95453004M | 95433104M | MS001A |
|  | Knob/knob | 1/8 | 0.34 | A, 18 | 1/8 | 1/4 |  |  |  |
| 03042522 | | | | | | | 95453004M | 95433104M | MS001A |
|  | Knob/knob | 1/4 | 0.98 | B, 13 | 1/4 | 3/8 |  |  |  |
| 03062522 | | | | | | | 95453018M | 95433112M | MS002A |
|  | Knob/knob or pilot | 1/8 | 0.34 | A, 18 | 1/8 | 1/4 |  |  |  |
| 03042422 | | | | | | | 95453004M | 95433104M | MS001A |

















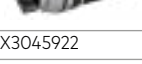















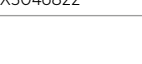



Models - 5/2 Manual valves

| | | | | | | | Accessories | | |
|---------------------------------------------------------------------------------------|-------------------|------------------|---------|-------------|---------------|-----------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Model no. | Actuation | Port size NPT | Flow Cv | Drawing no. | Thread NPT | Tube size | Straight fitting | 90° swivel elbow | Muffler |
|  | Black palm button | 1/8 | 0.34 | E, 9 | 1/8 | 1/8 |  |  |  |
| X3044422 | | | | | | | 95453004M | 95433104M | MS001A |
|  | Black palm button | 1/4 | 0.98 | E, 12 | 1/4 | 3/8 |  |  |  |
| X3064422 | | | | | | | 95453018M | 95433112M | MS002A |









1 Normally closed

MANUAL AND MECHANICAL ACTUATED SPOOL VALVE
Super X

Models - 5/2 Manual valves

| | | | | | | | Accessories | | |
|-------------------------------------------------------------------------------------|--------------------------------|------------------|---------|-------------|---------------|-----------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Model no. | Actuation | Port size NPT | Flow Cv | Drawing no. | Thread NPT | Tube size | Straight fitting | 90° swivel elbow | Muffler |
|  | Toggle/toggle | 1/8 | 0.34 | E, 14 | 1/8 | 1/4 |  |  |  |
| X3044322 | Toggle/toggle | 1/8 | 0.34 | E, 14 | 1/8 | 1/4 | 95453004M | 95433104M | MS001A |
|  | Lever/lever | 1/8 | 0.34 | E, 15 | 1/8 | 1/4 |  |  |  |
| X3047722 | Lever/lever | 1/8 | 0.34 | E, 15 | 1/8 | 1/4 | 95453004M | 95433104M | MS001A |
|  | Lever/lever | 1/4 | 0.98 | E, 15 | 1/4 | 3/8 |  |  |  |
| X3067722 | Lever/lever | 1/4 | 0.98 | E, 15 | 1/4 | 3/8 | 95453018M | 95433112M | MS002A |
|  | Heavy Duty Lever / Lever | 1/8 | 0.34 | E, 17 | 1/8 | 1/4 |  |  |  |
| X3029622 | Heavy Duty Lever / Lever | 1/8 | 0.34 | E, 17 | 1/8 | 1/4 | 95453004M | 95433104M | MS001A |
|  | Rotary knob/rotary knob | 1/8 | 0.34 | E, 19 | 1/8 | 1/4 |  |  |  |
| X3045922 | Rotary knob/rotary knob | 1/8 | 0.34 | E, 19 | 1/8 | 1/4 | 95453004M | 95433104M | MS001A |
|  | Knob, push/knob, pull | 1/8 | 0.34 | E, 13 | 1/8 | 1/4 |  |  |  |
| X3046522 | Knob, push/knob, pull | 1/8 | 0.34 | E, 13 | 1/8 | 1/4 | 95453004M | 95433104M | MS001A |
|  | Knob, push/knob, pull | 1/4 | 0.98 | G, 13 | 1/4 | 3/8 |  |  |  |
| X3066522 | Knob, push/knob, pull | 1/4 | 0.98 | G, 13 | 1/4 | 3/8 | 95453018M | 95433112M | MS002A |
|  | Button (palm) Key | 1/8 | 0.34 | E, 20 | 1/8 | 1/4 |  |  |  |
| X3045822801 | Button (palm) Key | 1/8 | 0.34 | E, 20 | 1/8 | 1/4 | 95453004M | 95433104M | MS001A |
|  | RED Emergency Stop /Twist ring | 1/8 | 0.98 | E, 10 | 1/4 | 3/8 |  |  |  |
| X3046822 | RED Emergency Stop /Twist ring | 1/8 | 0.98 | E, 10 | 1/4 | 3/8 | 95453018M | 95433112M | MS002A |

Models - 5/3 Manual valves

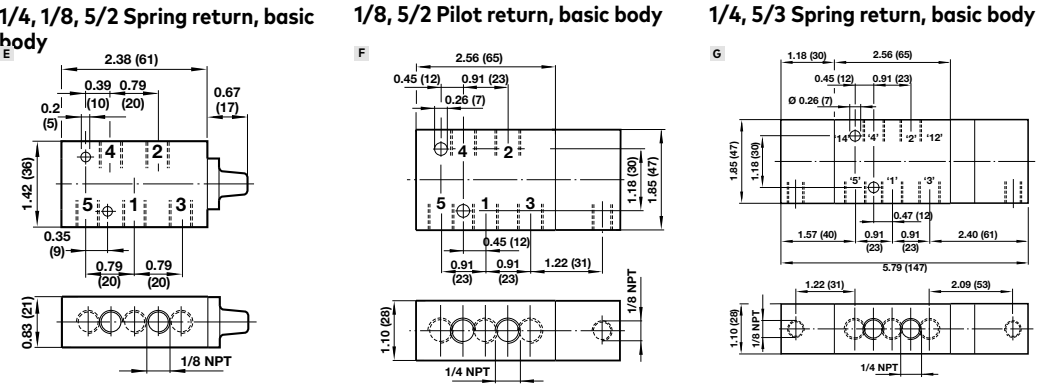
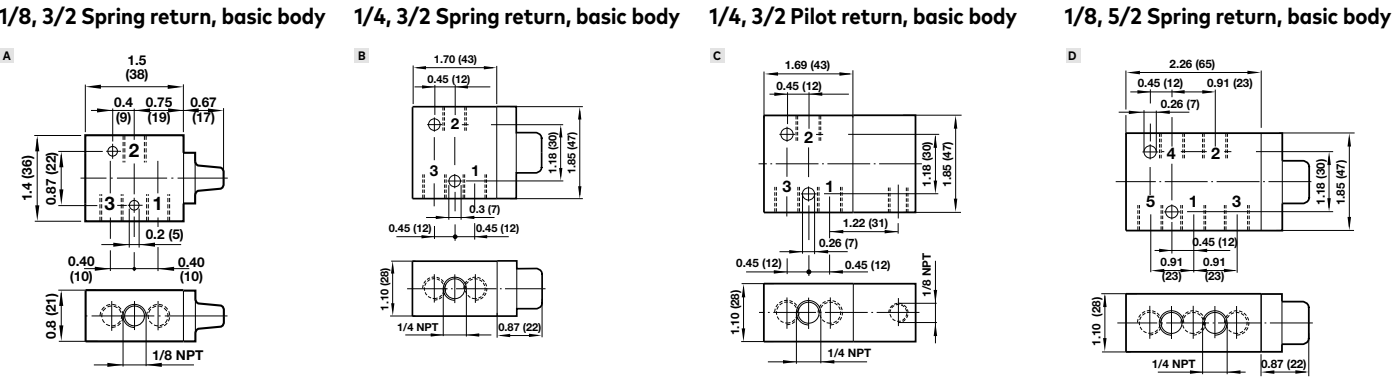
| | | | | | | | Accessories | | |
|-------------------------------------------------------------------------------------|--------------------|------------------|---------|-------------|---------------|-----------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Model no. | Actuation | Port size NPT | Flow Cv | Drawing no. | Thread NPT | Tube size | Straight fitting | 90° swivel elbow | Muffler |
|  | Lever/spring/lever | 1/8 | 0.34 | 21 | 1/8 | 1/4 |  |  |  |
| X3343822 ³ | Lever/spring/lever | 1/8 | 0.34 | 21 | 1/8 | 1/4 | 95453004M | 95433104M | MS001A |
|  | Lever/spring/lever | 1/4 | 0.98 | 22 | 1/4 | 3/8 |  |  |  |
| X3363822 ³ | Lever/spring/lever | 1/4 | 0.98 | 22 | 1/4 | 3/8 | 95453018M | 95433112M | MS002A |

3 All ports blocked

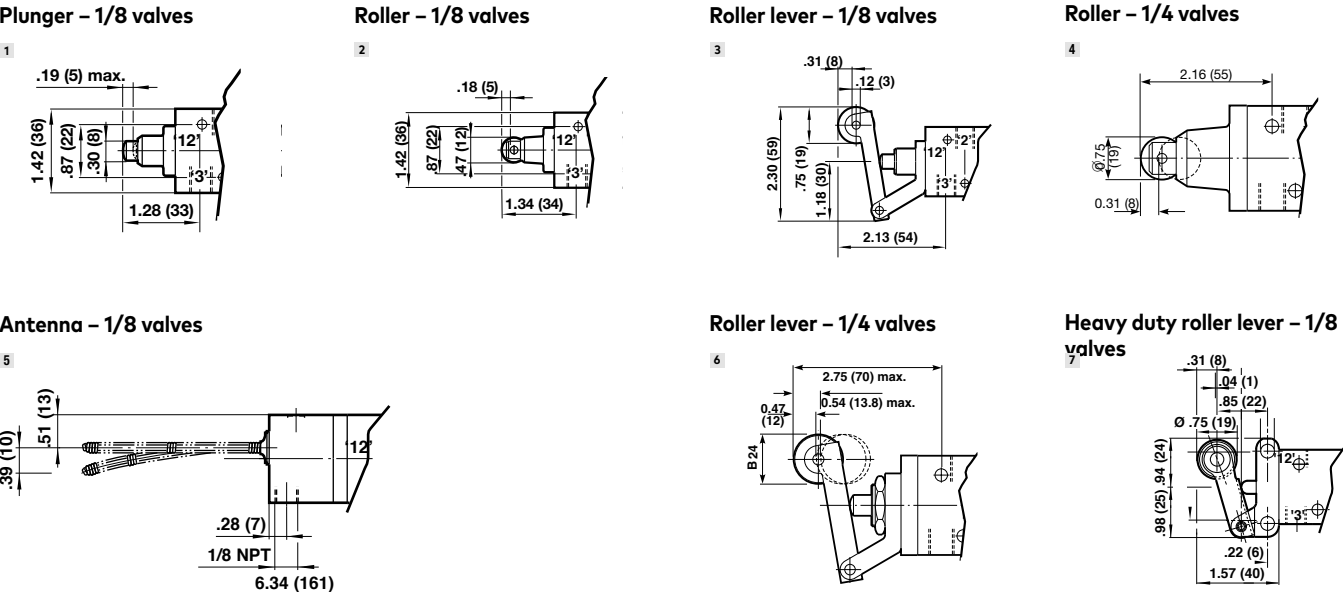
MANUAL AND MECHANICAL ACTUATED SPOOL VALVE
Super X

Specifications

Valve bodies



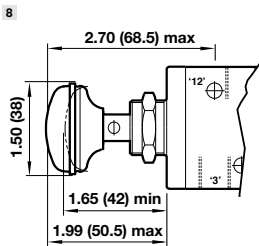
Mechanical valve actuators



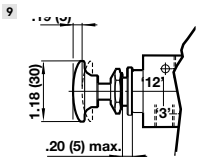
MANUAL AND MECHANICAL ACTUATED SPOOL VALVE Super X

Manual valve actuators

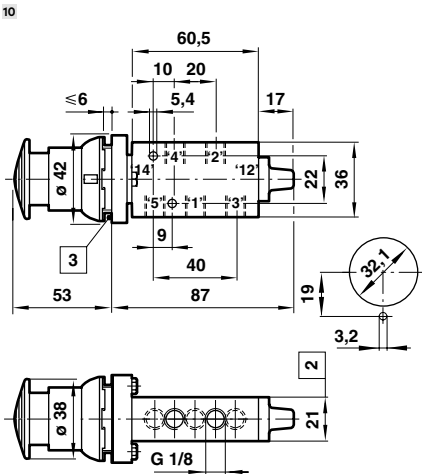
Button – 1/4 Valves



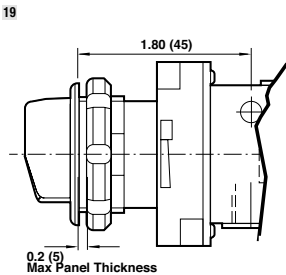
Button – 1/8 valves



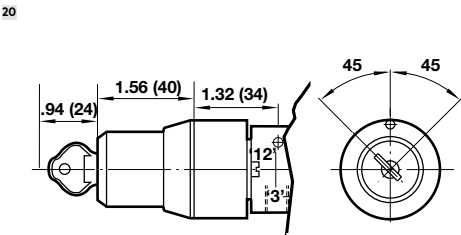
Emergency stop – 1/8 valves



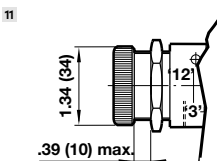
Rotary knob – 1/8 valves



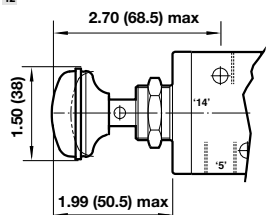
Key – 1/8 valves



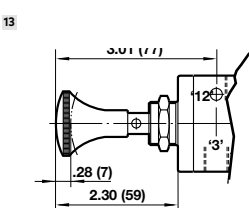
Button (shrouded) – 1/8 valves



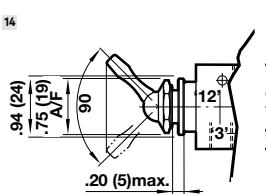
Button operated spring return valve – 1/4 valves



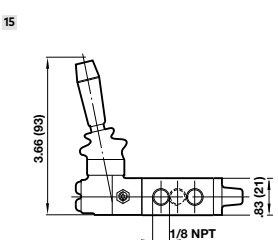
Knob – 1/4 and 1/8 valves



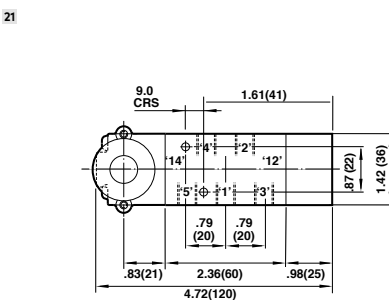
Lever operated spring return valve – 1/8 valves



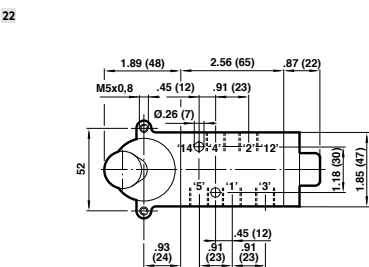
Lever operated spring return valve – 1/8, 1/4 valves



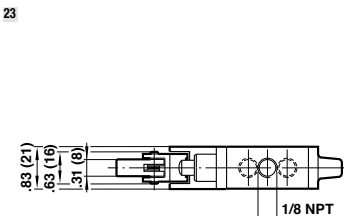
Lever/spring/lever – 1/8 valves



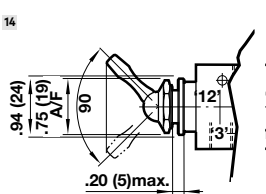
Lever/spring/lever – 1/4 valves



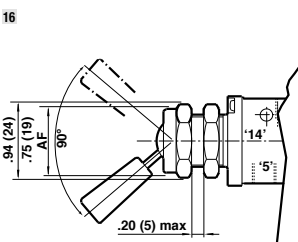
One-way trip – 1/8 valves



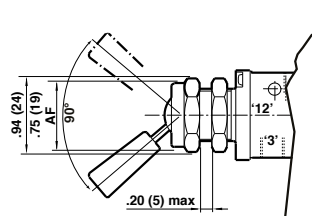
Lever operated lever return valve – 1/8 valves



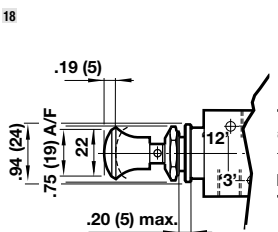
Lever operated lever return valve – 1/8 valves



5/2 Lever operated lever return valve – 1/8 valves



Knob operated knob return valve – 1/8 valves



Operating force: 12 N (X3 3638 02 & X3 3678 02), 15 N (X3 3637 02 & X3 3677 02)
Panel hole: Ø 31 mm
Panel thickness: 8 mm maximum

KNEELING MANIFOLD

K990073 Series

- » Compact, light weight
- » Fully integrated airbag control
- » Anodized for corrosion resistance
- » Packard Electrical connection options
- » Eliminates need for multiple valves

Technical Data

Medium:
Filtered and lubricated or non-lubricated compressed air

Operating pressure:
70 to 120 psig (4.8 to 8.3 bar)

Operating temperature:
-40°F to 160°F (-40° to 71°C)

Weight:
4 lbs. (1.8 kg)

Power/voltage:
24 Nominal (16-32) VDC
3.4 watt

Enclosure classification:
IP64 per DIN 40050

Operation:
Energize the level solenoid to block communication of the height control valve. Then energize the exhaust solenoid to initiate kneel. De-energize the exhaust solenoid and energize the fill solenoid to allow bus to quickly rise up. Then de-energize the fill solenoid and level solenoid to allow communication of the height control valve.
Note: HCV solenoid must be energized and remain on when kneeling the bus/coach.

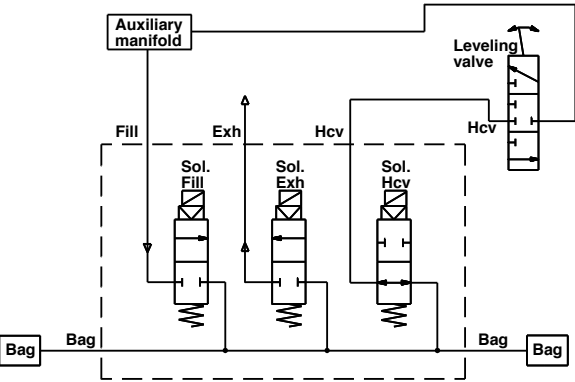
Material

Body: Aluminum
Elastomers: Carboxylated Nitrile



Models

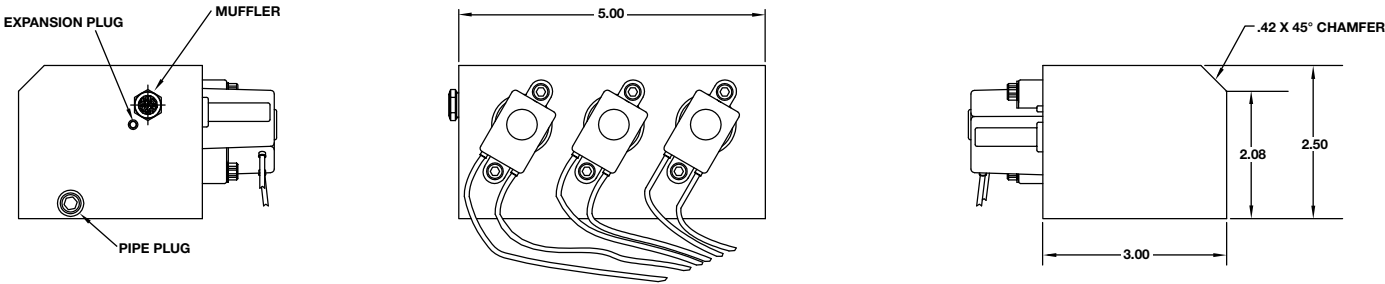
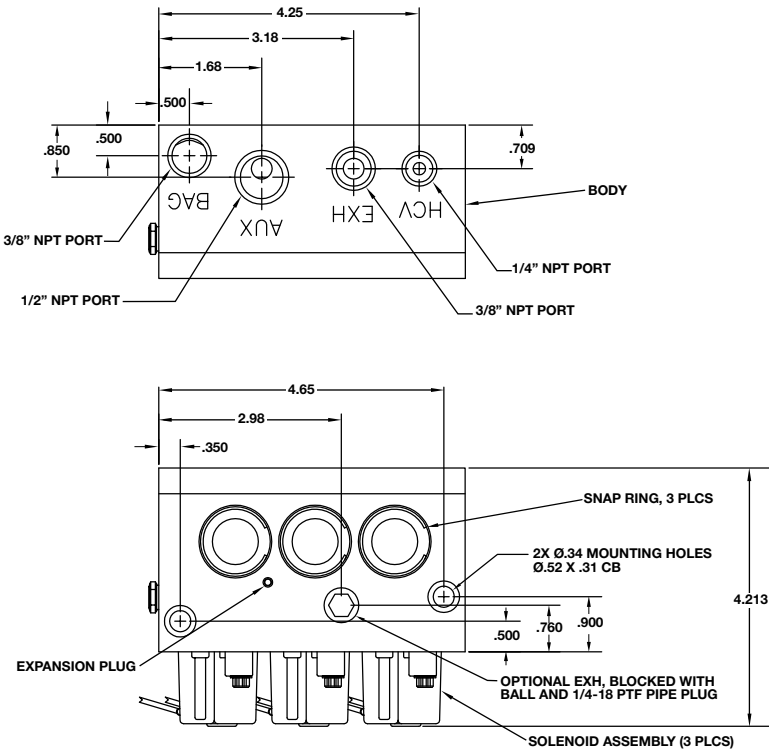
| Model | Power/voltage | Weight |
|---------|----------------------------------|-----------------|
| K990073 | 24 nominal (16-32) VDC, 3.4 watt | 4 lbs. (1.8 kg) |



KNEELING MANIFOLD

K990073 Series

Specifications



| Function | Port Size HCV | EXH | AUX | BAG |
|----------------------------|---------------|----------|----------|----------|
| Two 3/2 NC and one 3/2 N/O | 1/4" NPT | 3/8" NPT | 1/2" NPT | 3/8" NPT |



[Cylinders]

9

Pneumatic actuators keep things moving with a vast array of standard models that accommodate numerous commercial vehicle applications. Build the pneumatic circuit best suited to your needs with compact, roundline, and NFPA interchangeable actuators; unique standard options provide unparalleled versatility without customization.



NFPA Interchangeable

Round Body (dual-wall reinforced):

- » Built for the harshest environments with dual-wall protections; outer epoxy-coated aluminum shell shields the inner stainless steel body wall from impact
- » Most ideal cylinder for commercial vehicle applications

Tie Rods (aluminum, steel, & stainless steel):

- » Repairable cylinders in a variety of mounting options
- » Optional adjustable cushioning available

Extruded Body (aluminum):

- » Versatile and cost-effective solution for a variety of commercial vehicle applications
- » Lightweight construction and modern design matched with flexible mounting configurations
- » Adaptive cushioning simplifies installation

Roundline

- » Suited for lighter duty, lower force applications
- » Full range of bore sizes
- » Available in both single and double acting versions and aluminum or stainless steel construction
- » Long-lasting and corrosion-resistant designs

Compact

- » Compact design ideal for use in tight spaces
- » Cylinders have extended life and a repairable design for improved performance
- » Variety of model options with an array of stroke lengths, bore sizes, and mounting styles
- » Stainless steel body with clear anodized aluminum head and cap
- » Nitrile seals ensure low friction operation and long life



Our cylinders come in a wide range of sizes and specifications. Contact a Norgren representative to find the product that meets your specific commercial vehicle needs.



[Fuel Management]

10

11

12

Fast Find Guide

Norgren manufactures a broad variety of pneumatic and electronic controls for heavy-duty vehicles.

From pressure protection valves, dash valves, flipper valves, wiper controls to height and lumbar seat control valves, each product is engineered to provide long life and reliable operation.

● Caps

| |
|-------------------------------------------|
| Fuel & Hydraulic Tank Caps |
| Page 108 |

● Vents

| | |
|----------------------------------------------------|--------------------------------------------------------|
| Fuel Tank Vents 201 Series & 2113-1 | High-flow Fuel Tank Vents 2989-11, 2989-11V |
| Page 116 | Page 119 |

● Other Fuel Products

| | |
|---------------------------------------------|--------------------------------------------------|
| Return Flow Splitter 2252 Series | Linegard® Breakaway Valves 2200-1 |
| Page 122 | Page 123 |

[Fuel Caps]

10

Our range fuel caps offer a unique combination of thermal, venting, and pressure relief options and meet or exceed FHWA guidelines for leakage, drop tests and flame tests. Caps are available in various sizes with locking and non-locking functionality.



FUEL & HYDRAULIC TANK CAPS

- » Norgren fuel caps incorporate a unique combination of thermal, pressure relief, and breather type caps
- » Protect the fuel system in the event of fire or a roll over
- » Minimizes the opportunity for pressure to build up in the tank
- » All designs meet or exceed FHWA guidelines for leakage, drop tests and flame tests

Material
Aluminum die-casting

Options*:
Matching locking, venting, safety features*

* Please contact your Norgren technical representatives.



Models

Fuel Tank Caps

| Model | Description | Cap Size | Thermal Relief | Pressure Relief | Venting | Locking | Chrome | Chain Length | Drawing No. |
|----------|--------------------------------------------|----------------------|----------------|-----------------|---------|---------|--------|--------------|-------------|
| 31302-1 | 2" Closure only cap | 2"-11.5 NPSM | No | No | No | No | No | 10" | 6 |
| 8100 | 2" fuel cap for diesel fuel | 2"-11.5 NPSM | Yes | Yes | Yes | No | No | 12" | 9 |
| 253-2 | 2" fuel cap for diesel fuel | 2"-11.5 NPSM | Yes | Yes | Yes | No | No | 12" | 5 |
| 31307-1 | 2" fuel cap, single tank | 2"-11.5 NPSM | No | Yes | No | Yes | No | 9.5" | 8 |
| 8103 | 2" Full function cap, chrome | 2"-11.5 NPSM | Yes | Yes | Yes | No | Yes | 12" | 10 |
| 8105-2 | 2.5" Fuel cap for diesel fuel | 2.5"-8 UN | Yes | Yes | Yes | No | No | 12" | 10 |
| 31303-1 | 3" Closure-only cap | 3"-8 NPSL | No | Yes | No | No | No | 9.5" | 7 |
| 31303-2C | 3" Closure-only cap | 3"-8 NPSL | No | Yes | No | No | Yes | 8" | 7 |
| 249-1S | 3" Float style cap | 3"-8 NPSL | Yes | Yes | Yes | No | No | 5.75" | 2 |
| 249-3S | 3" Float style cap | 3"-8 NPSL | Yes | Yes | Yes | Yes | No | 5.75" | 3 |
| 8120 | 3" Float style cap | 3"-5.5 custom thread | Yes | Yes | Yes | No | No | 12" | 11 |
| 8121 | 3" Float style cap | 3"-5.5 custom thread | Yes | Yes | Yes | Yes | No | 12" | 12 |
| 8110-1 | 3" Float style cap, Blistered Packaged | 3"-8 NPLS | Yes | Yes | Yes | No | No | 12" | 11 |
| 8111-1 | 3" Float style cap, Blistered Packaged | 3"-8 NPLS | Yes | Yes | Yes | Yes | No | 12" | 12 |
| 8110 | 3" Float style cap, bulk | 3"-8 NPSL | Yes | Yes | Yes | No | No | 12" | 11 |
| 8111 | 3" Float style cap, bulk | 3"-8 NPSL | Yes | Yes | Yes | Yes | No | 12" | 12 |
| 249-5P | 3" fuel cap for diesel fuel | 3"-8 NPSL | Yes | Yes | No | Yes | No | 12" | 4 |
| 8131-1 | 4" Fuel cap for diesel fuel | 4"-8 NPSM | Yes | Yes | Yes | Yes | No | 12" | 14 |
| 8131 | 4" fuel cap for diesel fuel | 4"-8 NPSM | Yes | Yes | Yes | Yes | No | 12" | 14 |
| 2011-1C | 4" fuel cap for diesel fuel | 4"-8 NPSM | Yes | Yes | No | No | Yes | 12" | 1 |
| 8130 | 4" fuel cap for diesel fuel | 4"-8 NPSM | Yes | Yes | Yes | No | No | 12" | 13 |
| 2011-1 | 4" fuel cap for diesel fuel, female thread | 4"-8 NPSM | Yes | Yes | No | No | No | 12" | 1 |

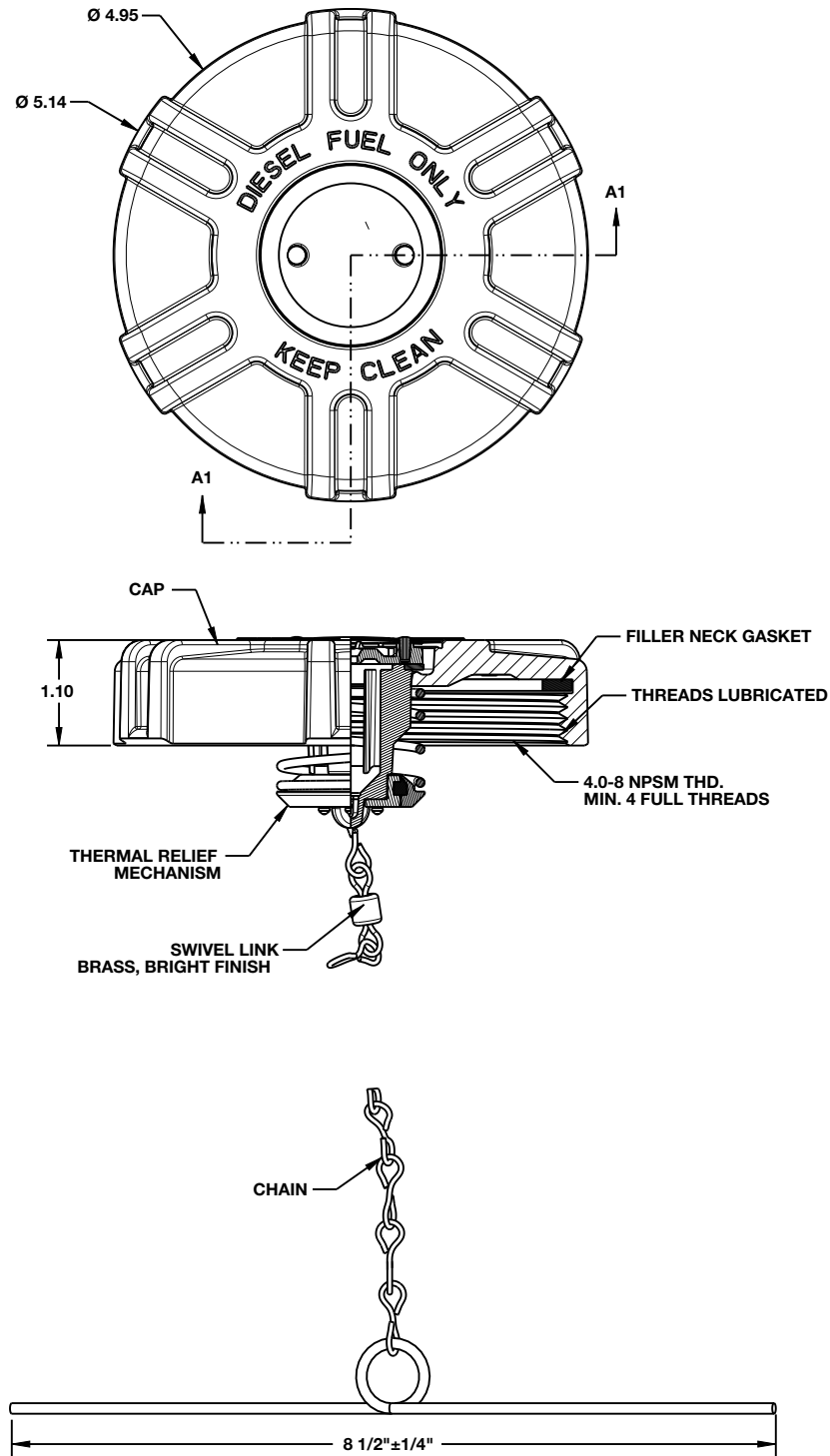
Other Caps

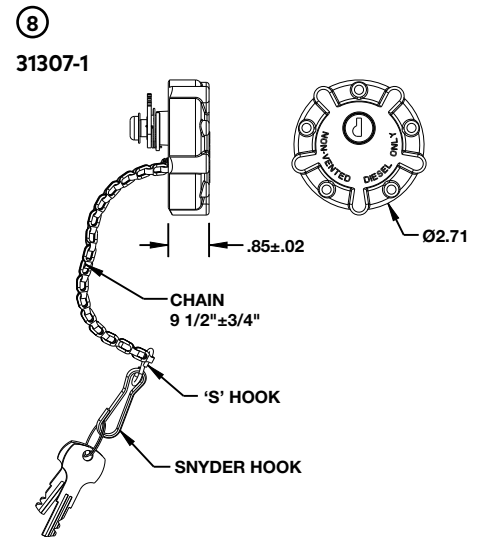
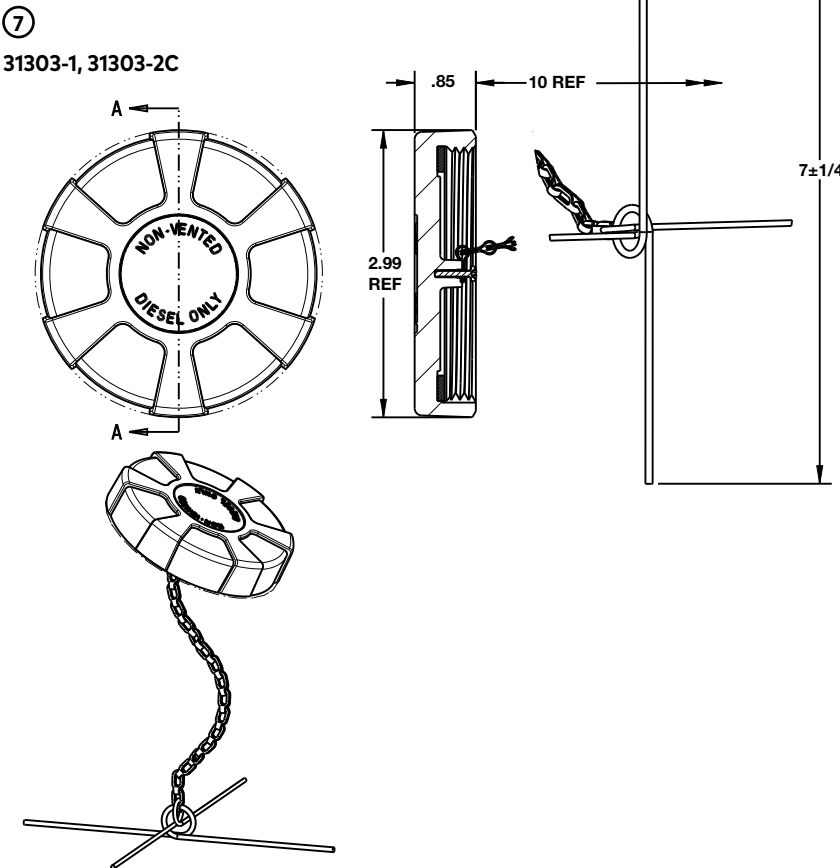
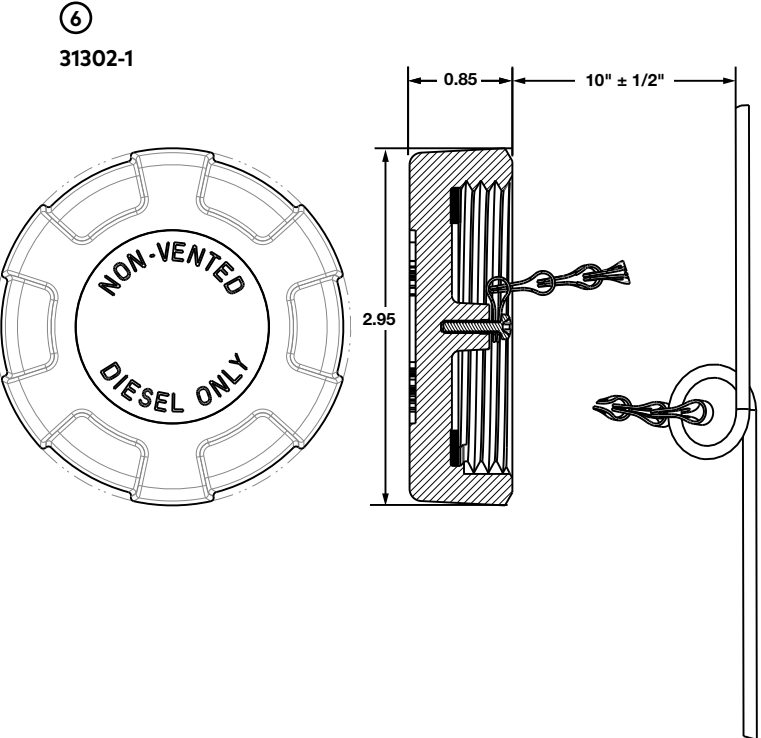
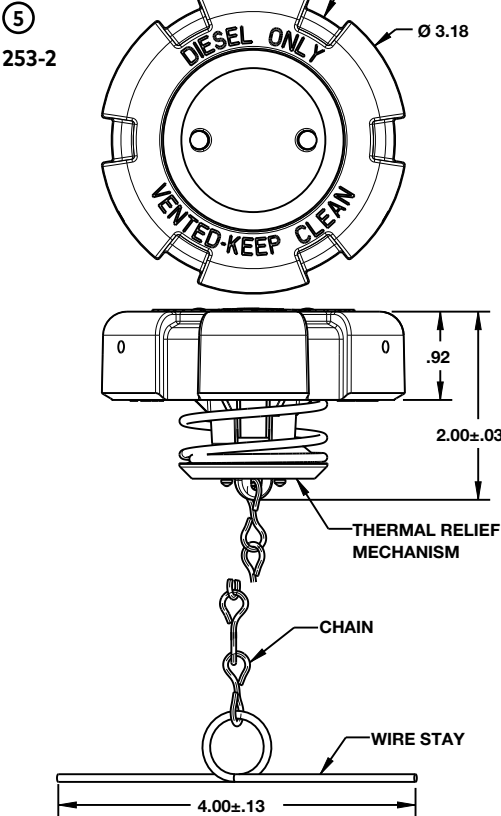
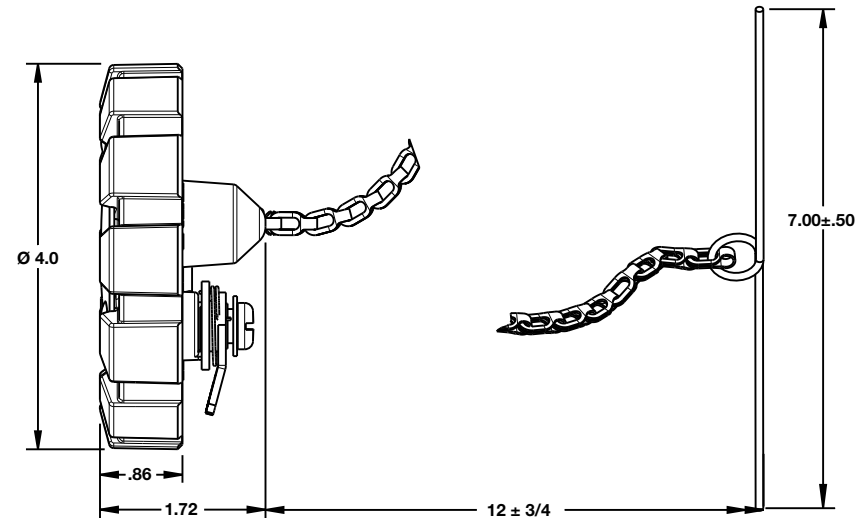
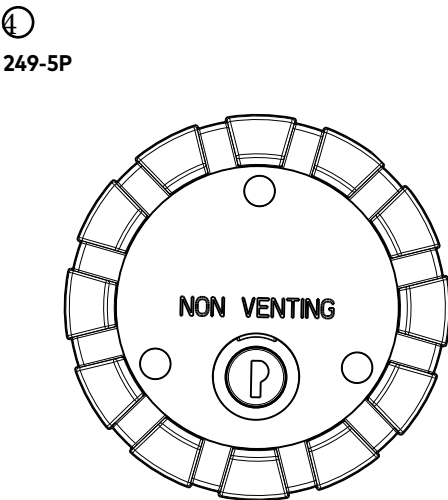
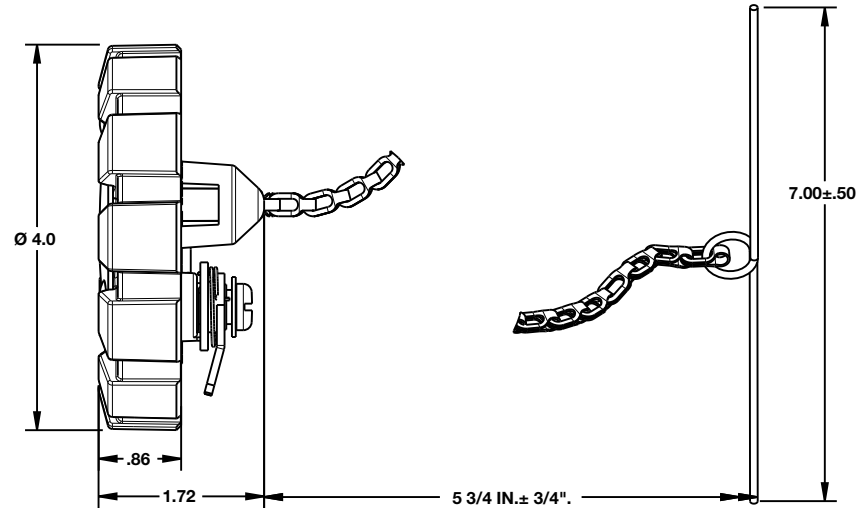
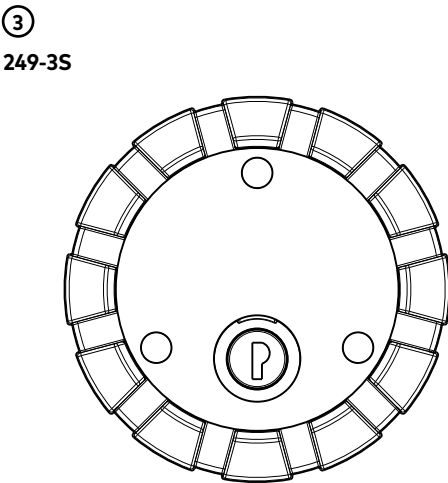
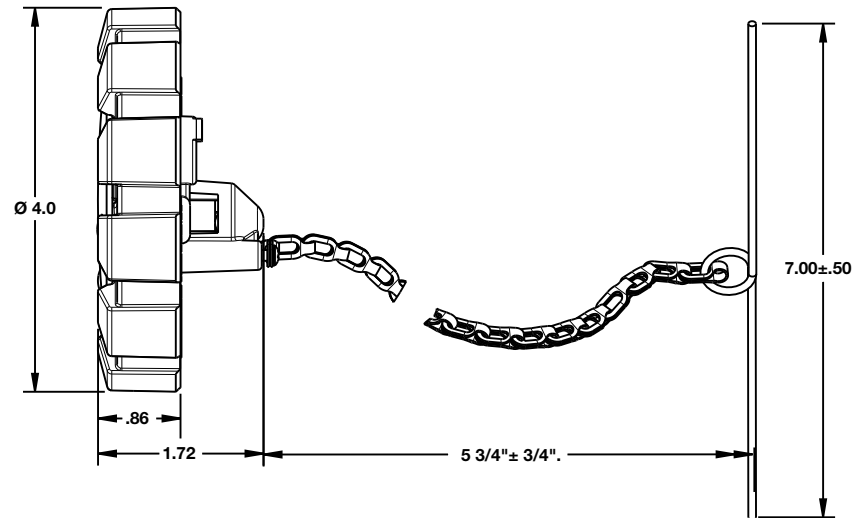
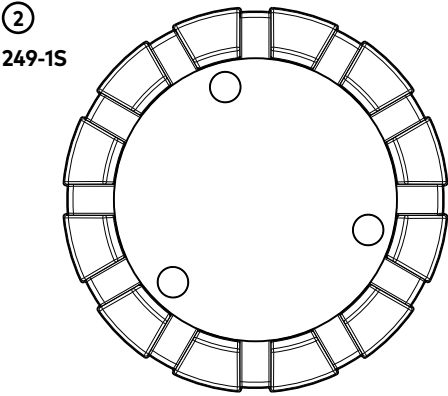
| Model | Description | Chain Length | Drawing No. |
|--------|-------------------------|--------------|-------------|
| 2017-1 | 2.5" Hydraulic Tank Cap | 12" | 16 |

Fuel Tank Caps

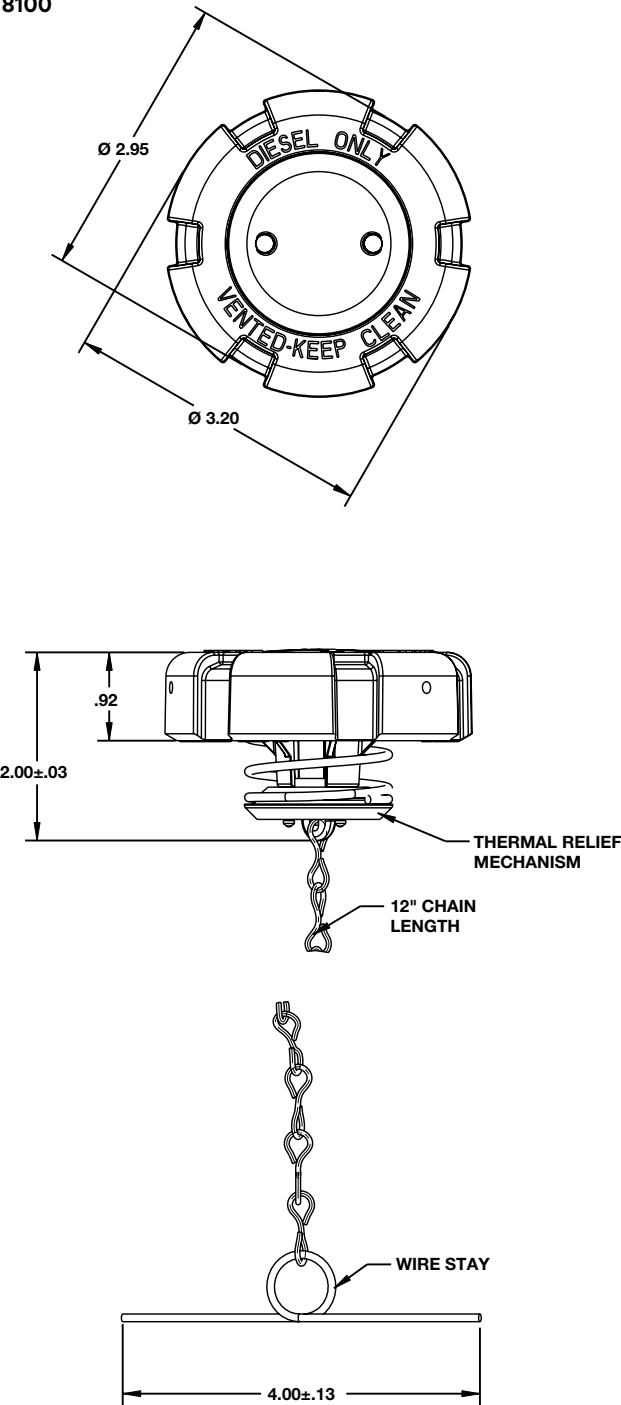
Specifications

①
2011-1, 2011-1C

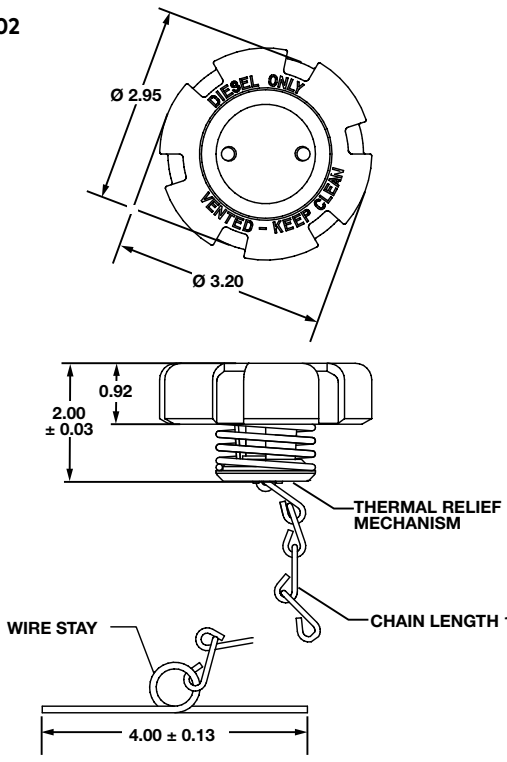




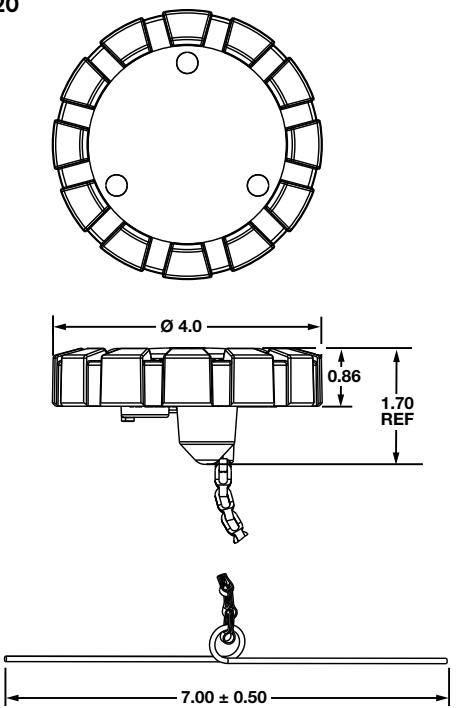
⑨
8100



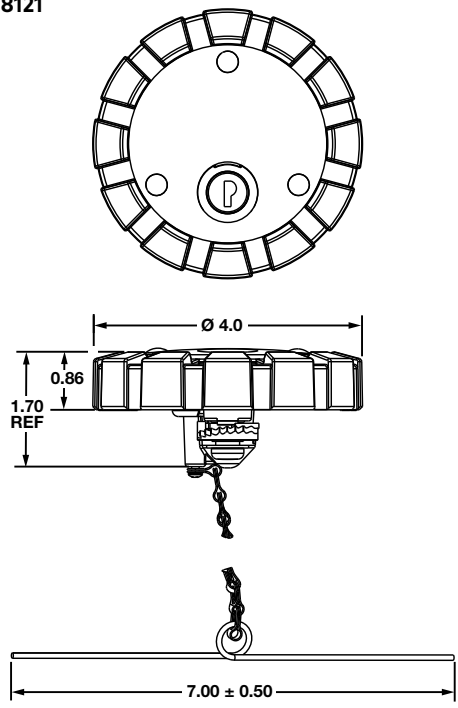
⑩
8103, 8105-02



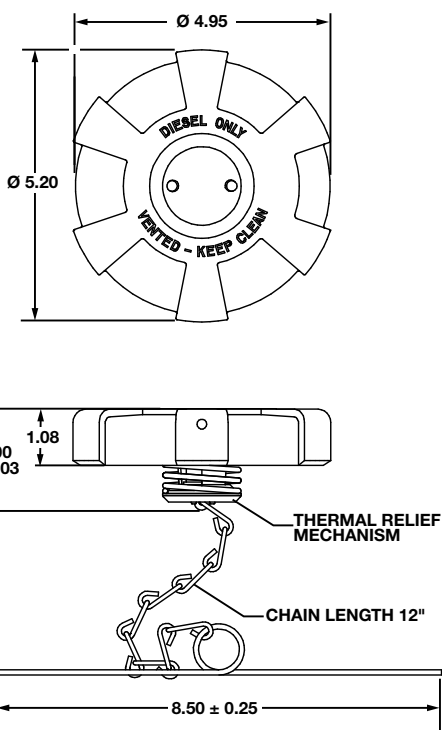
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8110, 8110-1, 8120



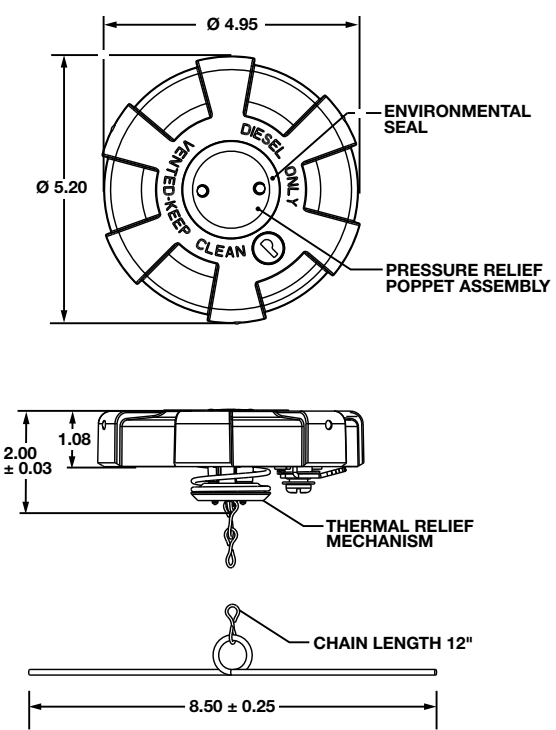
⑫
8111, 8111-1, 8121



⑬
8130

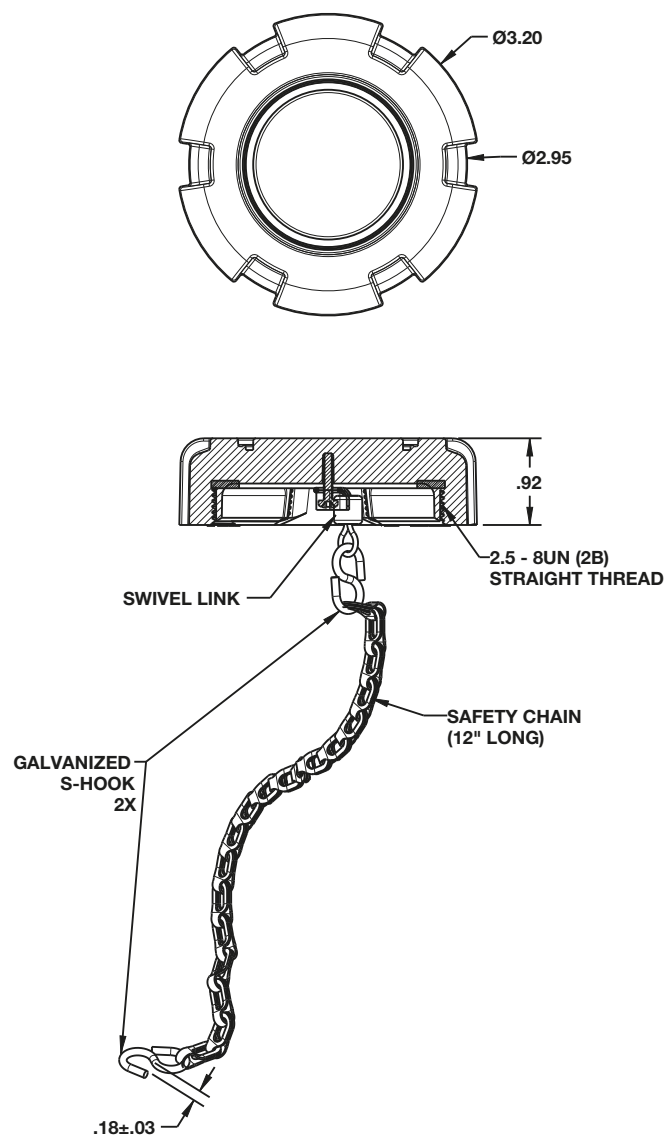


⑭
8131, 8131-1



①6

2017-1



[Tank Vents]

11

With safety in mind, our fuel tank vents deliver peace of mind, rollover protection, and other safety features to prevent excess pressure, fuel spillage and explosion of the fuel tank.



FUEL TANK VENT

201 Series & 2115-1

- » Anti-spill protection
- » Available with pressure relief and safety venting
- » Provides tank breathing
- » Corrosion resistant

Technical Data

Pipe thread:
1/4-1 B8 NPTF
1/2-14 NPTF
1-1/4 PTF

Hex size:
7/8"
9/16"
1/2"
1.0"
25.4 mm

Overflow hose diameter:
5/16" ID
1/4" ID
1/8" ID

Outward flow rate:
30 SCFH @ 8" water pressure
30 SCFH @ 6" water pressure
45 SCFH @ 4" water pressure
45 SCFH @ 4.5" water pressure



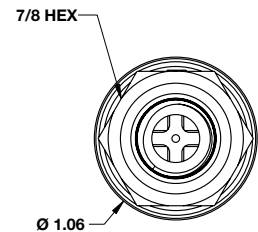
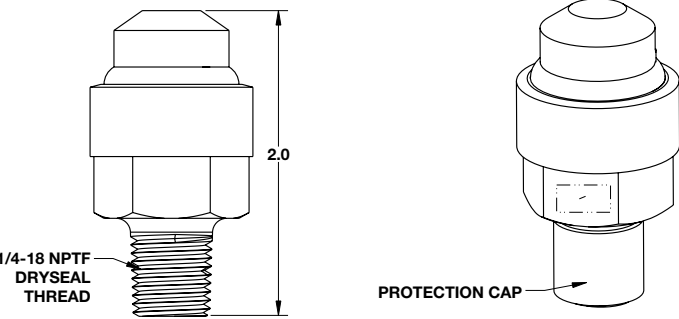
Models

| Model | Description | Thread | Diesel/Gas | Thermal Relief | Pressure Relief | Overflow hose diameter | Outward Flow rate | Hex Size |
|---------|------------------------------------------------|---------------|------------|----------------|-----------------|------------------------|-------------------------------|----------|
| 139-1 | Fuel Tank Vent, Bulk Packaged | 1/4"-18" NPTF | Diesel | Yes | Yes | N/A | 30 SCFH @ 8" water pressure | 7/8" |
| 150-5 | Fuel Tank Vent, Float Style with Barb & Cup | 1"-1/4" PTF | Diesel | No | No | 1/4" | 30 SCFH @ 6" water pressure | 1-3/4" |
| 201-1 | Fuel Tank Vent, Gasoline or Diesel | 1/2"-14" PTF | Diesel/Gas | No | No | 5/16" | 30 SCFH @ 6" water pressure | 1" |
| 201-3 | Fuel Tank Vent, Diesel Only | 1/2"-14" PTF | Diesel | No | No | 5/16" | 30 SCFH @ 6" water pressure | 1" |
| 218-1 | Fuel Tank Vent, Low Profile | 1/4"-18" NPTF | Diesel | No | No | 1/4" | 30 SCFH @ 6" water pressure | 9/16" |
| 261-3 | Fuel Tank Vent, Government | 1/2"-14" PTF | Diesel | No | No | 1/4" | 30 SCFH @ 6" water pressure | 1/2" |
| 2115-01 | Fuel Tank Vent, Full Function | 1/2"-14" PTF | Diesel | Yes | Yes | 5/16" | 45 SCFH @ 4.5" water pressure | 1" |
| 2115-02 | Fuel Tank Vent, Full Function w/ Vibraseal | 1/2"-14" PTF | Diesel | Yes | Yes | 5/16" | 45 SCFH @ 4.5" water pressure | 1" |
| 2115-03 | Fuel Tank Vent, Low Pressure & Thermal Relief* | 1/2"-14" PTF | Diesel | Yes | Yes | 5/16" | 45 SCFH @ 4.5" water pressure | 1" |

* For plastic diesel fuel tanks.

Specifications

139-1

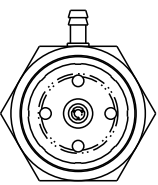
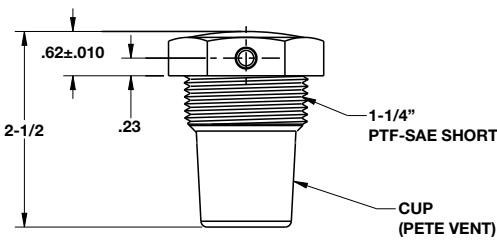
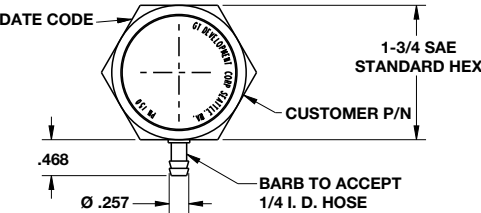


Special low pressure relief setting for use on plastic diesel fuel tanks.

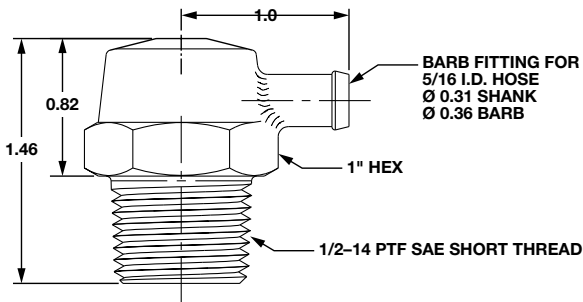
FUEL TANK VENT

201 SERIES & 2115-1

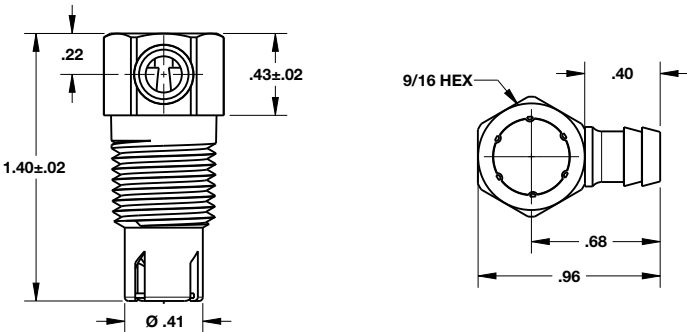
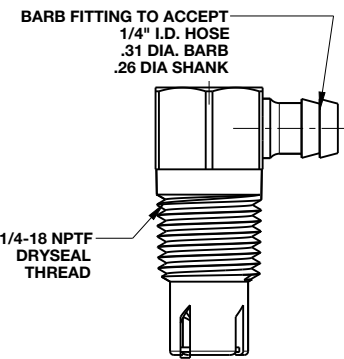
150-5



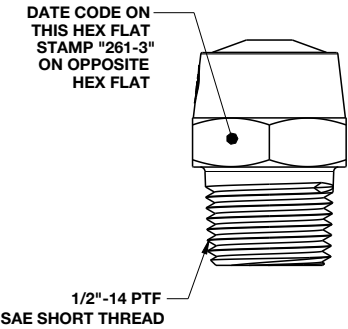
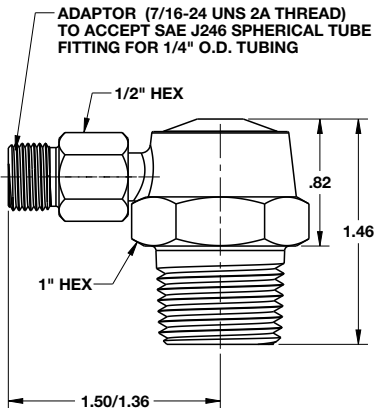
201-1, 201-3



218-1

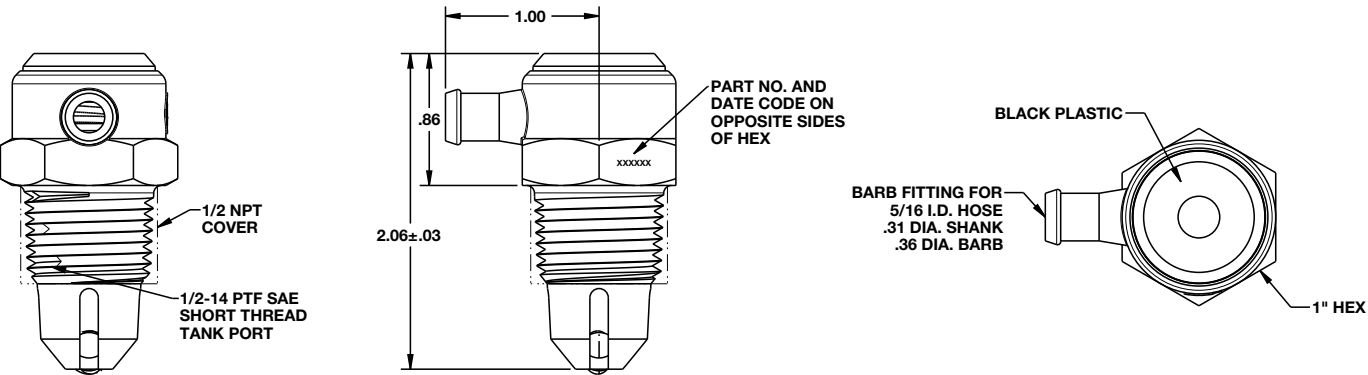


261-3

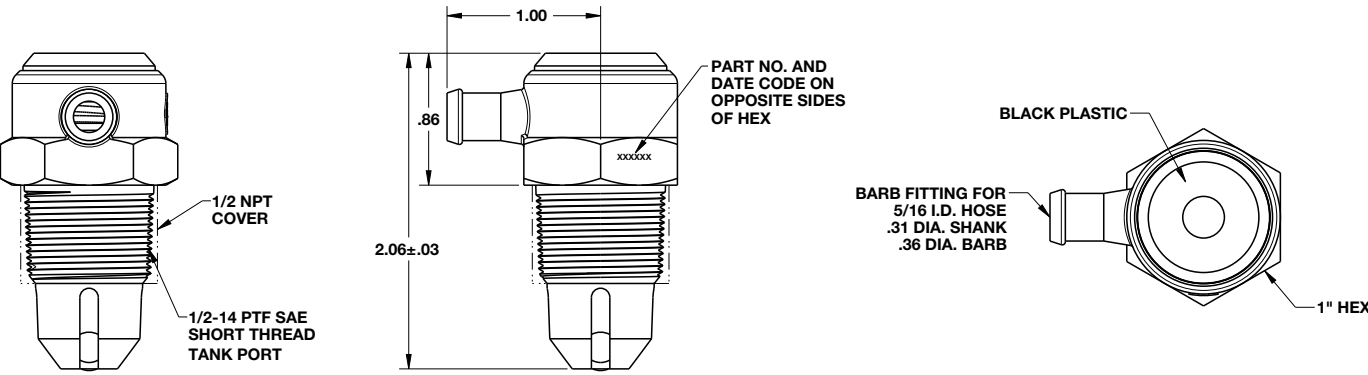


FUEL TANK VENT
201 Series & 2115-1

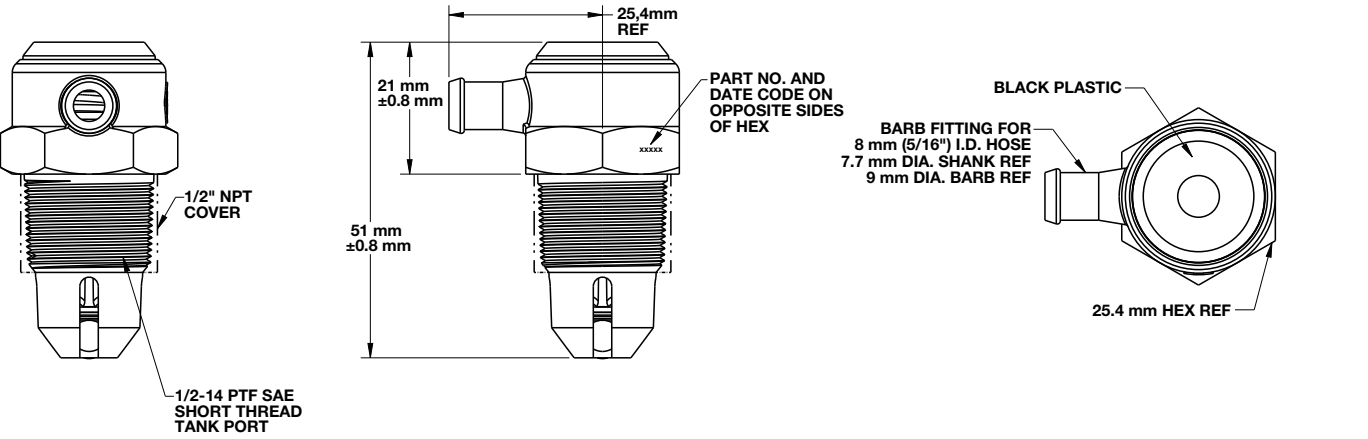
2115-01



2115-02



2115-03



HIGH-FLOW FUEL TANK VENT

2989-11, 2989-11V

- » 1/2" NPT male thread with 1/4" barb fitting
- » Anti-spill protection
- » Available with pressure relief and safety venting
- » Provides tank breathing
- » Thermal and pressure relief

Technical Data

Pipe thread:
1/2-14 PTF

Overflow hose diameter:
5/16" ID

Outward flow rate:
70 SCFH @ 18" water pressure

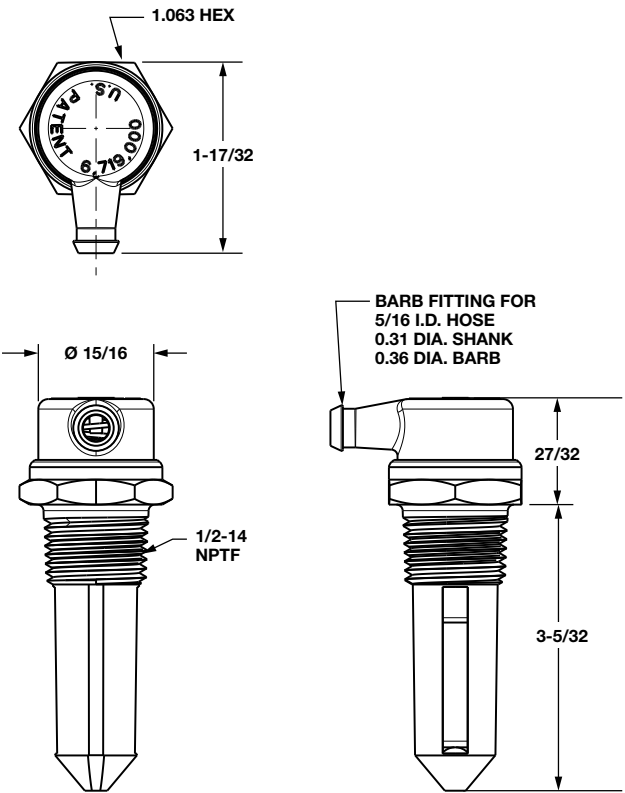
Hex size:
1.063"



Models

| Model | Description | Thread | Diesel/Gas | Thermal Relief | Pressure Relief |
|----------|---------------------------------------|----------------|------------|----------------|-----------------|
| 2989-11 | High Flow Fuel Tank Vent | 1/2" - 14 NPTF | Diesel | Yes | Yes |
| 2989-11V | High Flow Fuel Tank Vent w/ Vibraseal | 1/2" - 14 NPTF | Diesel | Yes | Yes |

Specifications





[Other Fuel Products]

12

Our fuel products are engineered for improved safety and enhanced performance for dual fuel tank systems.



RETURN FLOW SPLITTER

2252 Series

- » Evenly distributes return flow of fuel to the fuel tanks
- » Eliminates the need for a crossover line
- » Features identical variable flow openings to control return fuel flow
- » Provides proper fuel balance in dual tank systems

Technical Data

Operating Temperature:
-40°F to 180°F (-40°C to 82°C)

Port size:
1/2" NPT

Flow:
2252-1 and 2252-1D
60 GPH @ 20" water pressure
A2252-2 and A2252-2D
60 GPH @ 12" water pressure

Material

Heavy duty zinc die cast construction

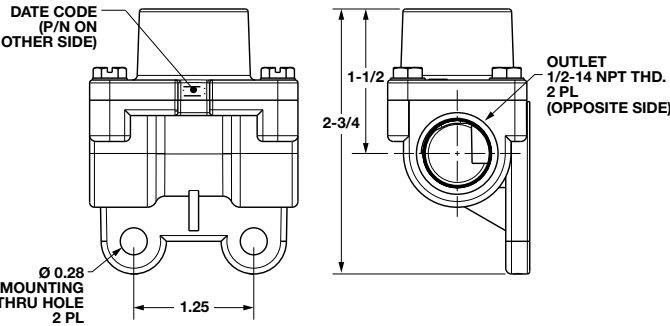
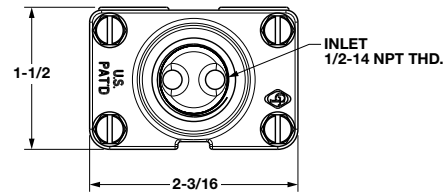


Models

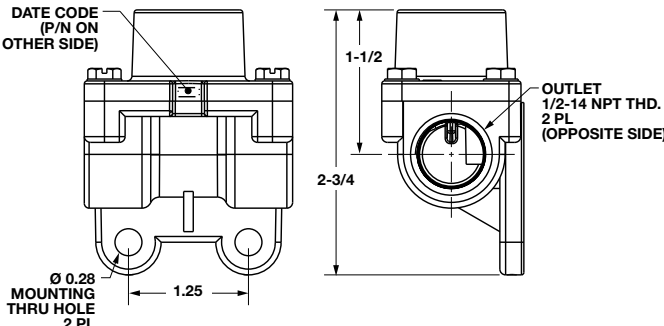
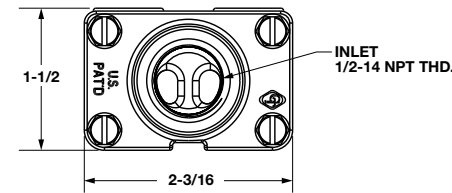
| Model | Port Size | Thread type | Flow | Packaged |
|----------|-----------|-------------|----------|------------|
| 2252-1 | 1/2"-14 | NPT | Standard | Bulk |
| 2252-1D | 1/2"-14 | NPT | Standard | Individual |
| A2252-2 | 1/2"-14 | NPT | High | Bulk |
| A2252-2D | 1/2"-14 | NPT | High | Individual |

Specifications

Return Flow Splitter
2252-1



High-flow Return Flow Splitter
A2252-2



LINEGARD® BREAKAWAY VALVES

2200-1

- » The valves separate in the event of an impact and seal off both the fuel tanks and bottom crossover lines
- » Prevents loss of fuel while leaving the system intact
- » Available in different mounting configurations for various applications
- » Valve shall flow less than 4.0 GPM of diesel fuel #2 at 70°F (21°C) at a different pressure of 1psi

Technical Data

Operation temperature:
-40°F to 185°F (-40°C to 85°C)

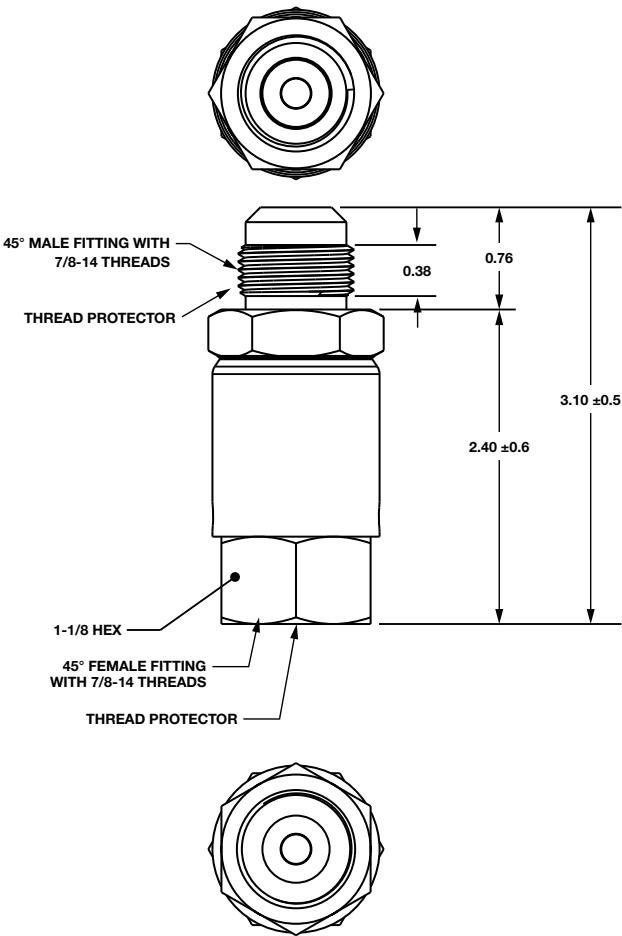
Port size:
Male end: 7/8"-14 NPT
Female end: 7/8"-14 NPT



Models

| Model | Port Size | Thread Type | Packaged |
|--------|-----------|-------------|------------|
| 2200 | 7/8"-14 | NPT | Bulk |
| 2200-1 | 7/8"-14 | NPT | Individual |

Specifications





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Notes



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CAB CONTROLS



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