



IMI NORGREN®

Comercial Vehicles



Commercial Vehicle Product Catalog

Quality. Solutions. Fast.

(800) 229-1875

www.imi-precision.com

IMI Precision
Engineering

Engineering
GREAT Solutions



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. With over 40 years of experience, IMI Norgren is a brand you can trust.

Air & Electric Management

IMI 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.

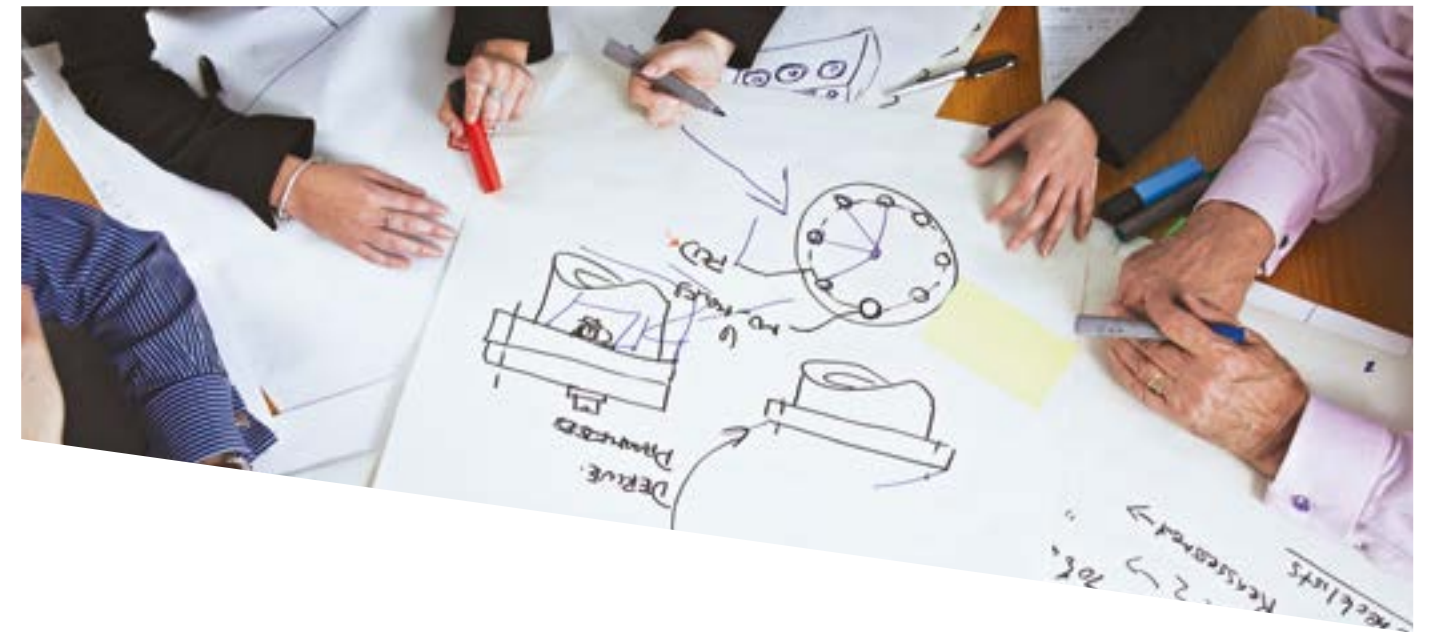
Our products include valves, seat and cab controls, filters and regulators, lift axle controls, solenoids, cylinders, DOT fittings, and more- all designed to deliver superior quality, cost savings, safety and comfort with proven technology you can trust.

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.



Engineering GREAT solutions through people, products, innovation and service

IMI Precision Engineering is a world-leader in fluid and motion control. Building close, collaborative relationships with our customers, we gain a deep understanding of their engineering needs and then mobilize our resources and expertise to deliver distinctive products and solutions.

Wherever precision, speed and engineering reliability are essential, our global footprint, problem-solving capability and portfolio of high performance products enables us to deliver GREAT solutions which help customers tackle the world's most demanding engineering challenges.

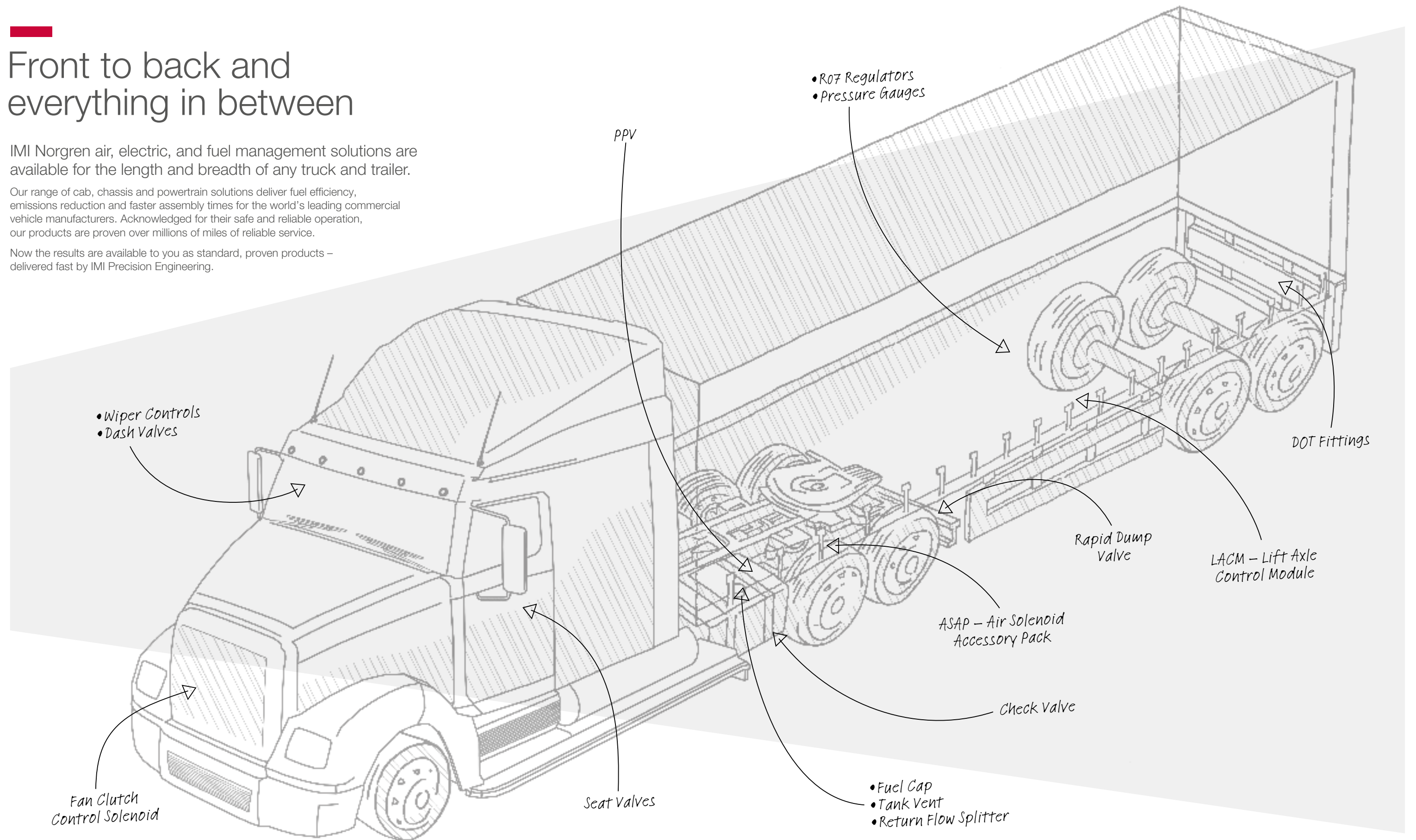
- > **Reliability**
We deliver and support our high quality products through our global service network.
- > **High performance products**
We offer a world-class portfolio of fluid and motion control products supplied by IMI Norgren, IMI Buschjost, IMI FAS, IMI Herion and IMI Maxseal. These parts can be supplied individually or combined in powerful customized solutions to improve performance and productivity.
- > **Partnership & Problem Solving**
We listen closely to our customers to best understand the challenges they face.

Front to back and everything in between

IMI Norgren air, electric, and fuel management solutions are available for the length and breadth of any truck and trailer.

Our range of cab, chassis and powertrain solutions deliver fuel efficiency, emissions reduction and faster assembly times for the world's leading commercial vehicle manufacturers. Acknowledged for their safe and reliable operation, our products are proven over millions of miles of reliable service.

Now the results are available to you as standard, proven products – delivered fast by IMI Precision Engineering.



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Fuel Management

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Air & Electric Management

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Fast Find Guide

IMI 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.

● Brake Valves

Fastbrake Quick Exhaust Valve 4000 Series	Park Brake Interlock	Work Brake
Page 12	Page 13	Page 14

● 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 16	Page 17	Page 18	Page 19	Page 20	Page 21
Toggle-Style Switch - Air/Electric 3200 & 3201 Series	Horn Valves 3300, 3301 & 3302 Series	Wiper Washer Controller			
Page 22	Page 23	Page 28			

● 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 30	Page 32	Page 34	Page 36

Fast Find Guide

● Fittings

FleetFit Vehicle push-in fittings Inch and Metric
Page 38

● 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 46	Page 47	Page 51	Page 52

● 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 60	Page 61	Page 62	Page 63	Page 64	Page 65
Seat Leveling Valve with Clutch					
Page 68					

Fast Find Guide

● Solenoids Valves

Solenoid Valves	Solenoid Valves 5030 Series	Solenoid Valves 5031 Series	Air Solenoid Accessory Pack
Page 72	Page 79	Page 84	Page 85

● 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 88	Page 89	Page 91	Page 92	Page 93	Page 100

● Cylinders

Round Body Cylinders	Tie Rod Cylinders	Extruded Body Cylinders	Roundline Cylinders	Compact Cylinders
Page 104	Page 104	Page 104	Page 105	Page 105

Brake Valves

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



Robust design

Prevents
pressurization



Enhance Vehicle
performance

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

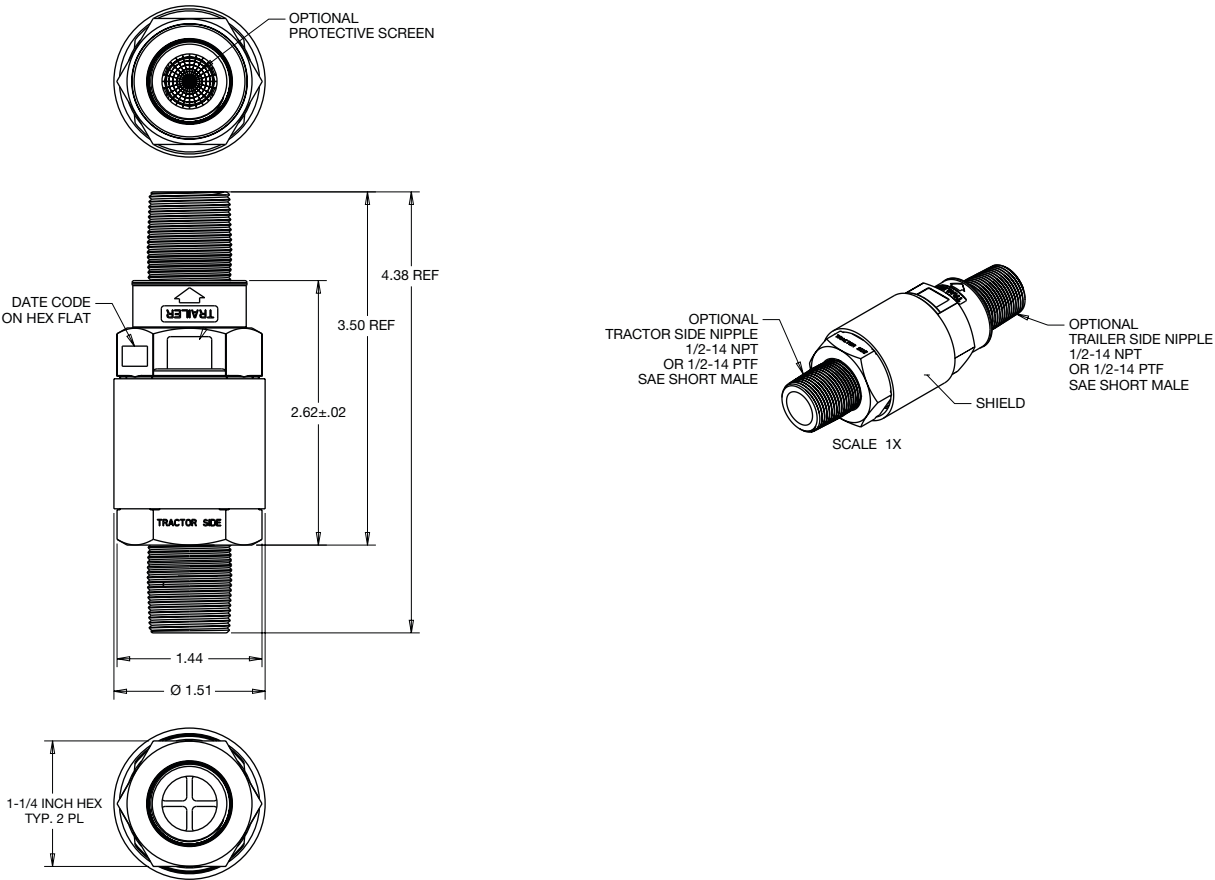
Nipple size:
1/2" PTF male



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

Specifications



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

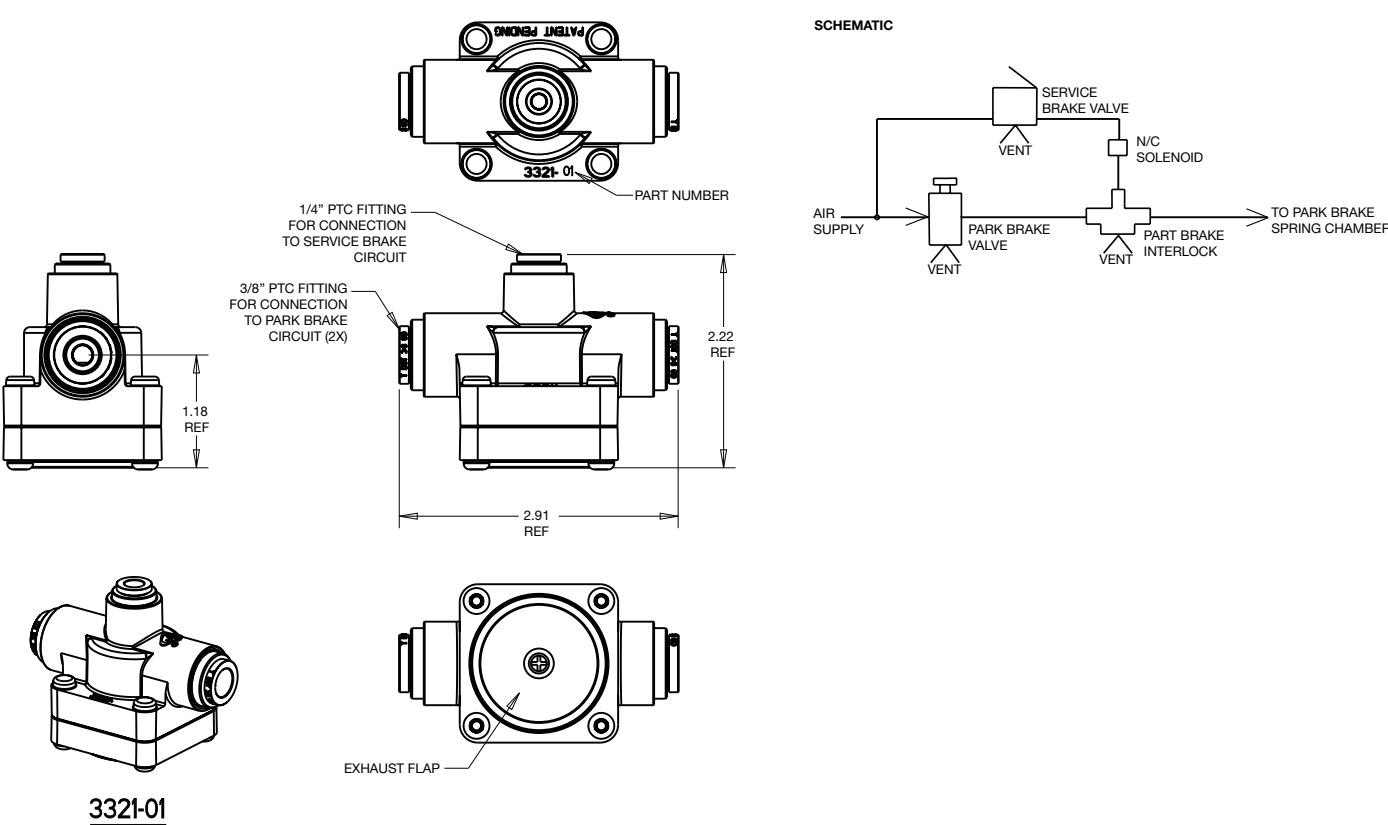
Flow:
3/8" PTC to 3/8" PTC, 0.20 min. equivalent orifice.
3/8" PTC to exhaust, 0.20 min. equivalent orifice.



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
- Prevents pressurization of the park brake circuit (release of park brakes) without service brake application
- 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

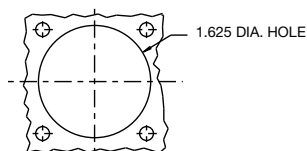
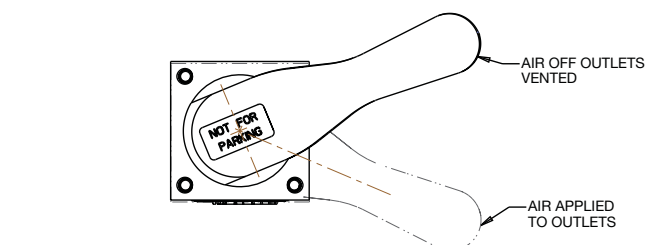
Aluminum



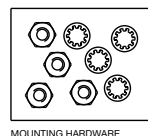
Models

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

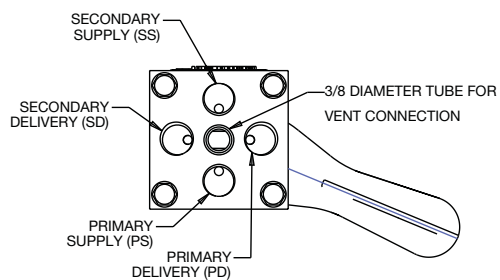
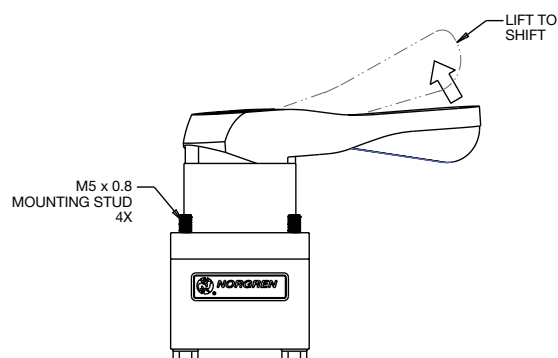
Specifications



MOUNTING PATTERN



MOUNTING HARDWARE



Cab Controls

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.



Engineered for durability



Compact design



Robust design to withstand heavy use

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

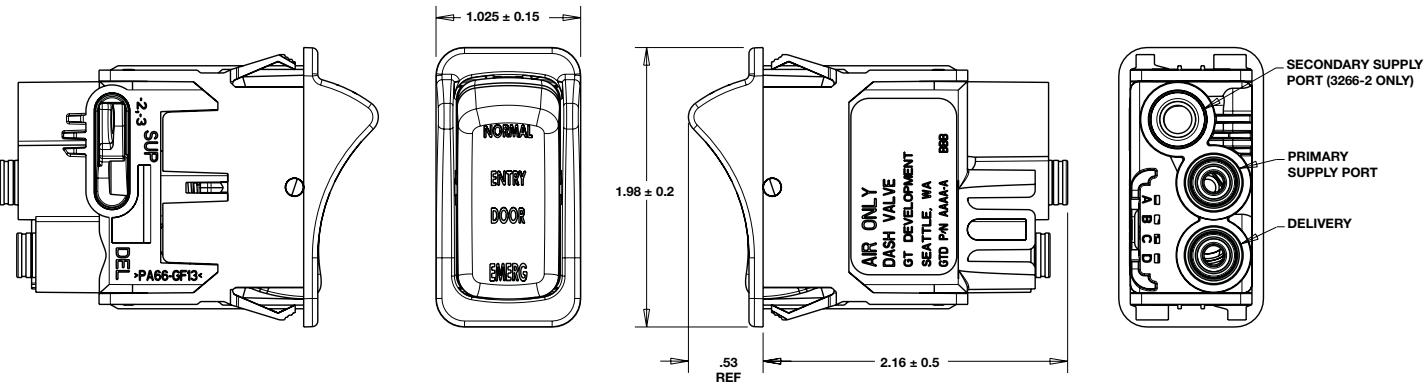
Nylon, glass filled



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

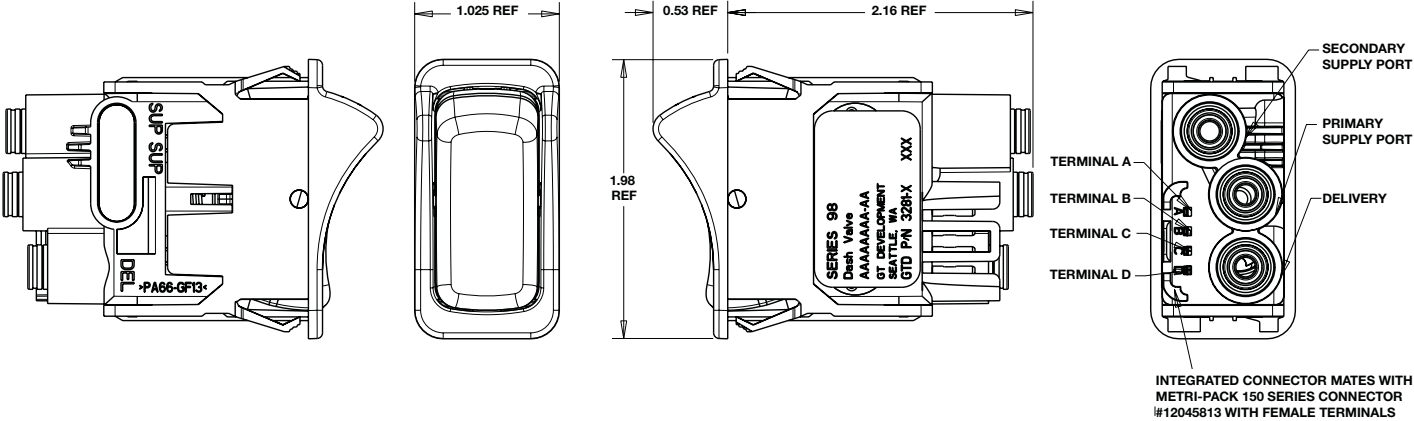
Nylon, glass filled



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

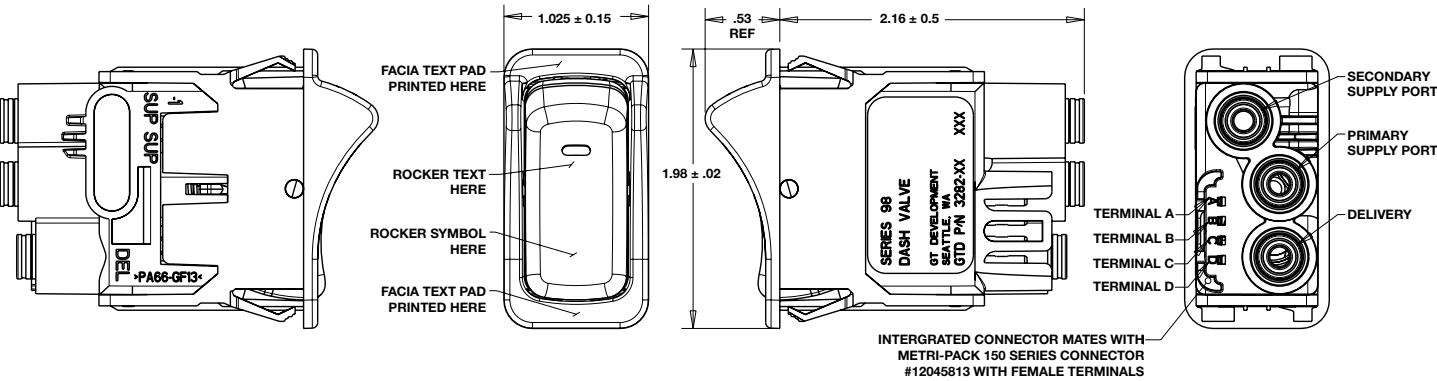
Nylon, glass filled



Models

Model	Description	Rocker Symbol	Rocker Text
3282-01	Differential Lock – Front		OFF LOCK
3282-02	Differential Lock – Rear		OFF 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"

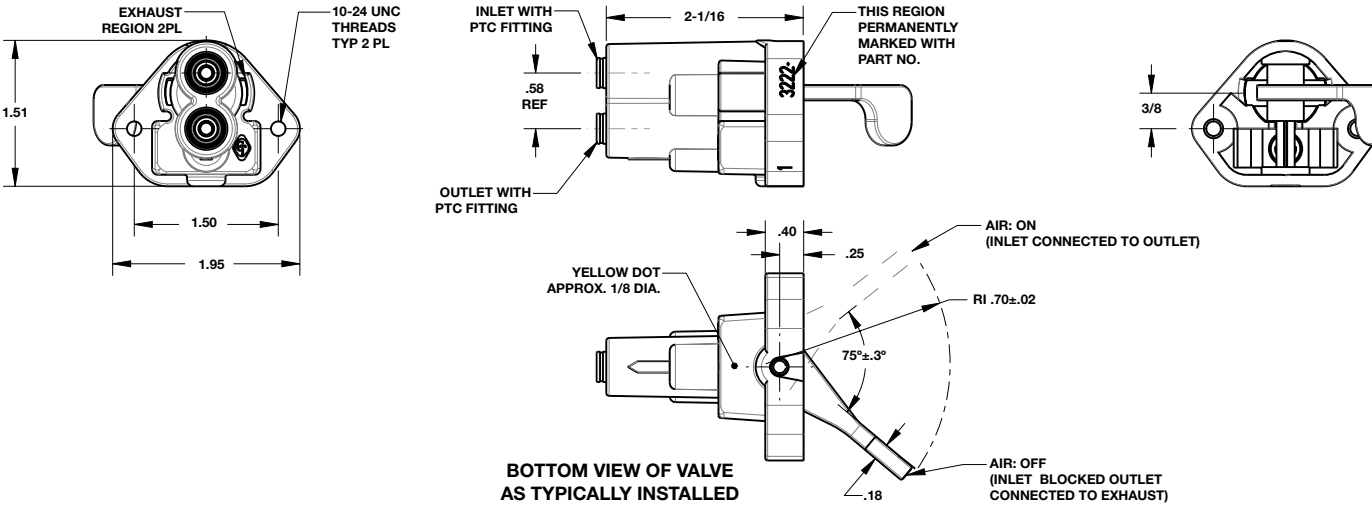


Models

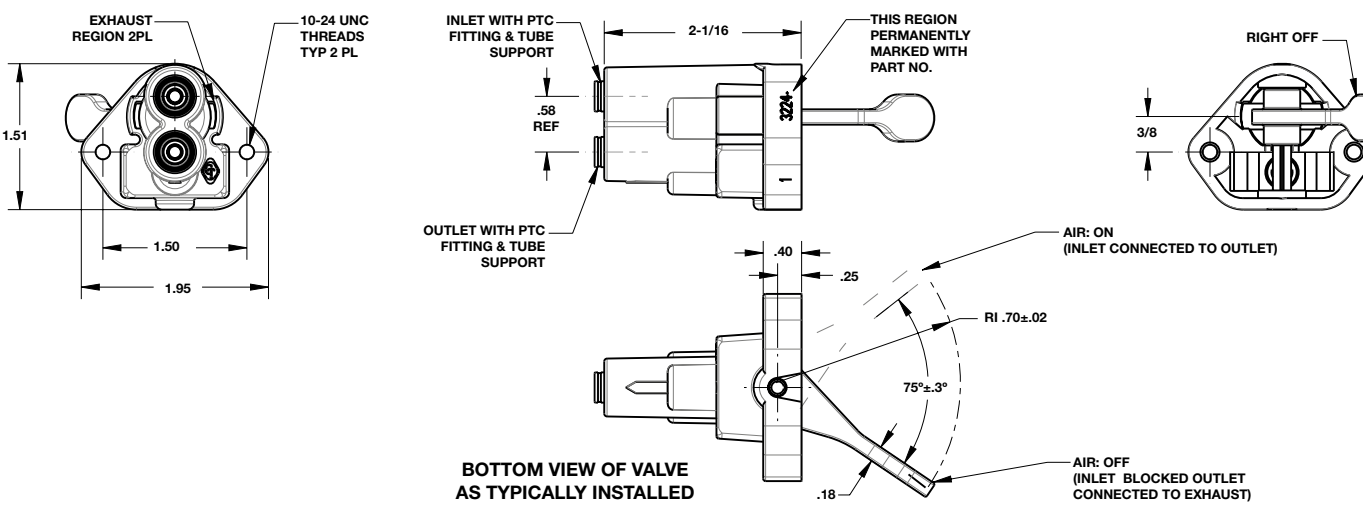
Model	Tube O/D
3222-1	1/4"
3224-1	1/4"

Specifications

3222



3224



FLIPPER CONTROL VALVE - COMBINATION 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"

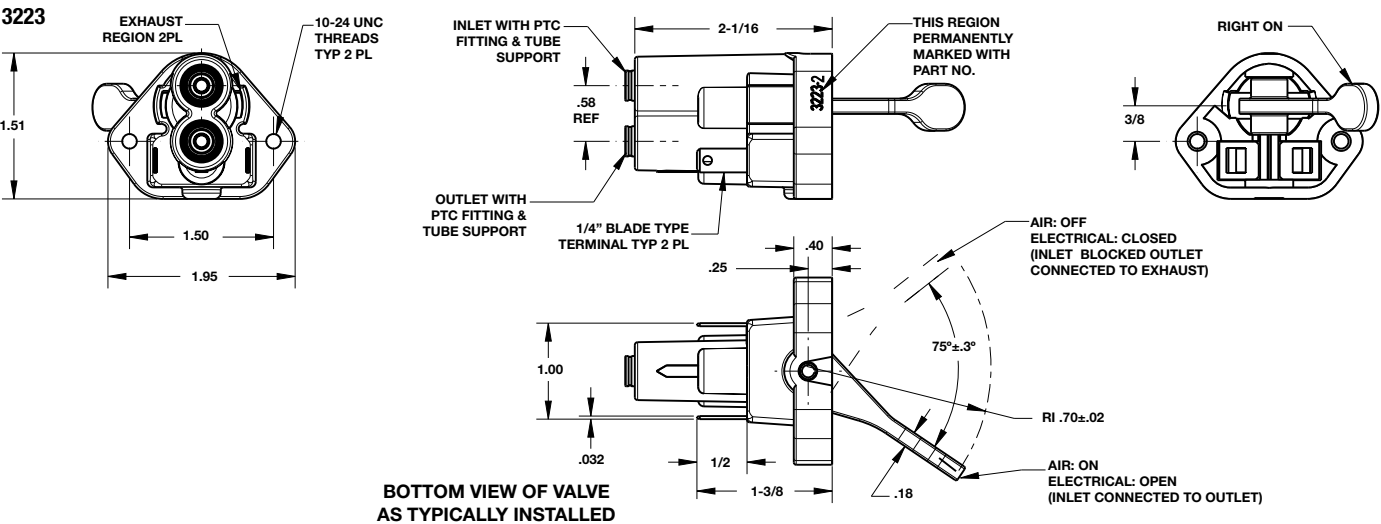
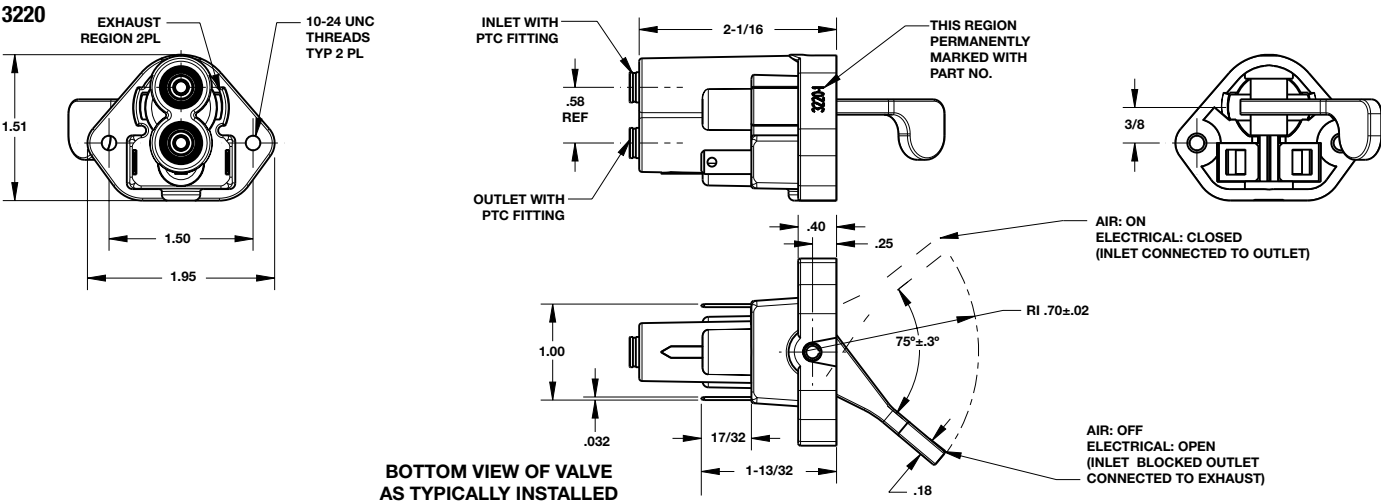
Electrical connection:
Two 1/4" blade type electrical terminals



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

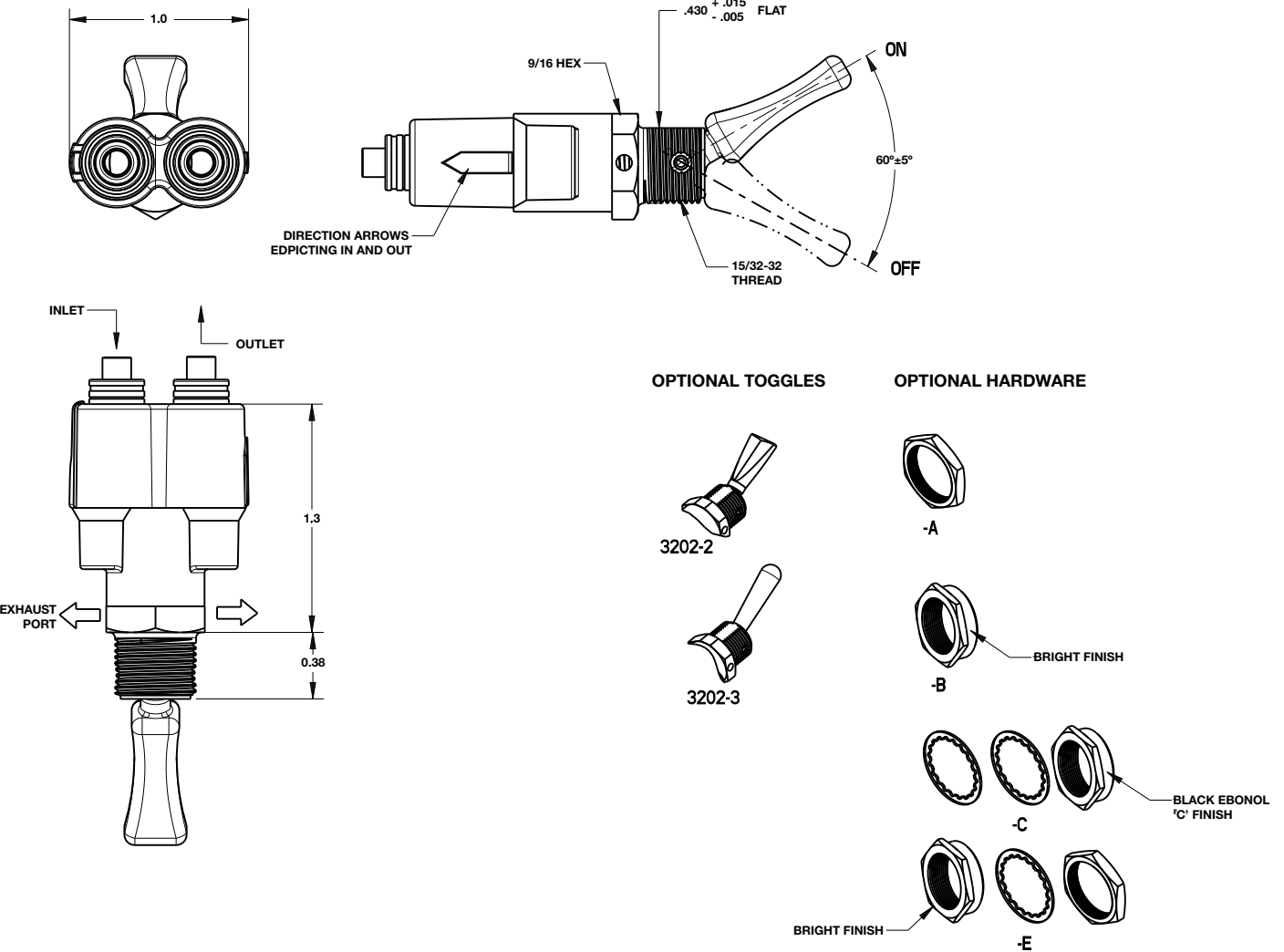
Zytel, Nylon glass filled



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

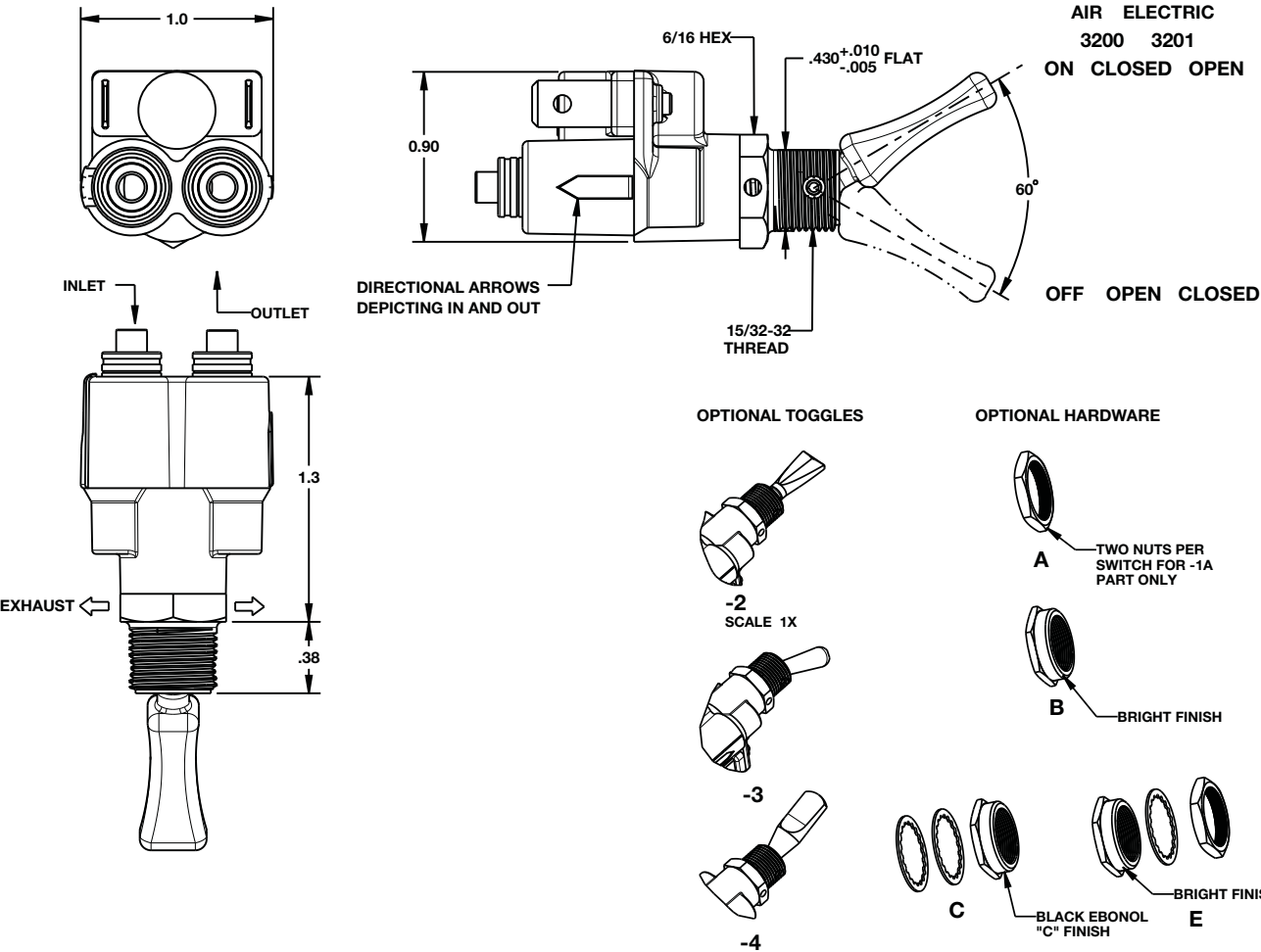
Zytel, Nylon glass filled



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

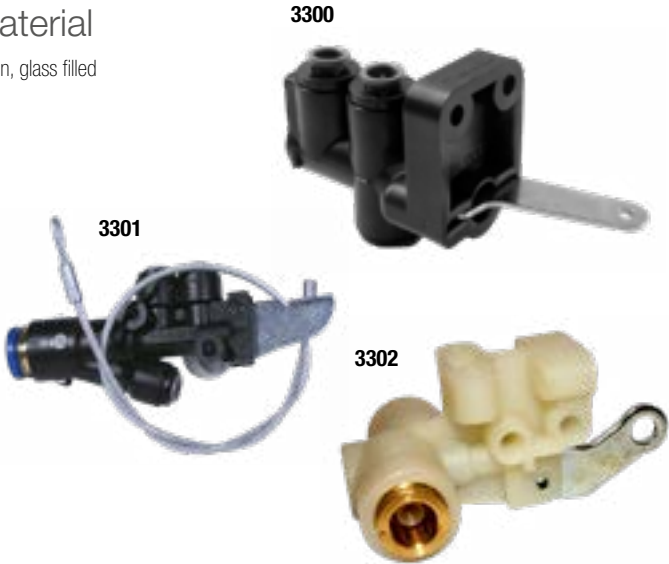
Technical Data

Operating pressure:
0 – 150 psi

Operating temperature:
-10°F to 185°F

Material

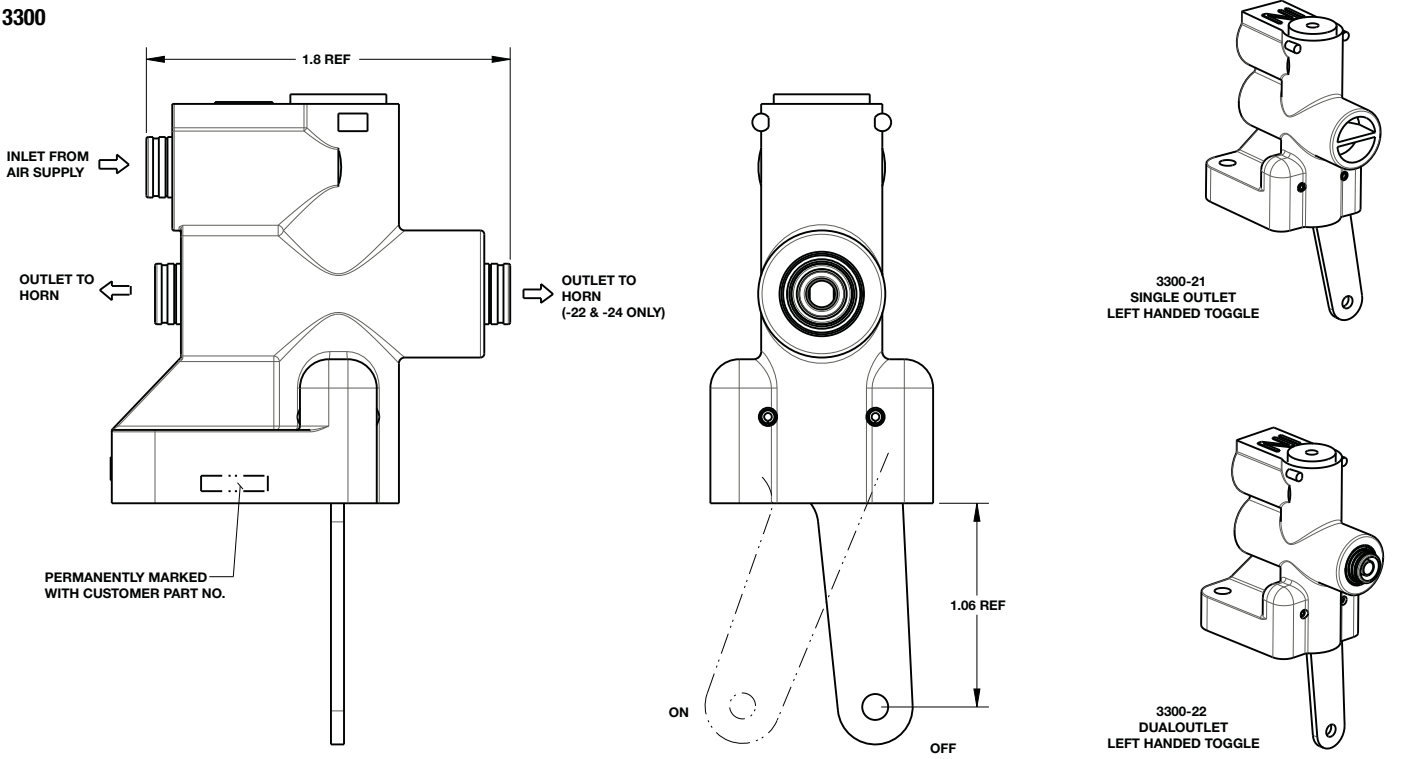
Nylon, glass filled



Models

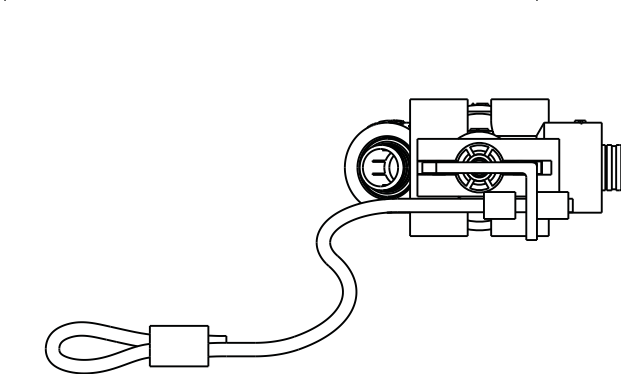
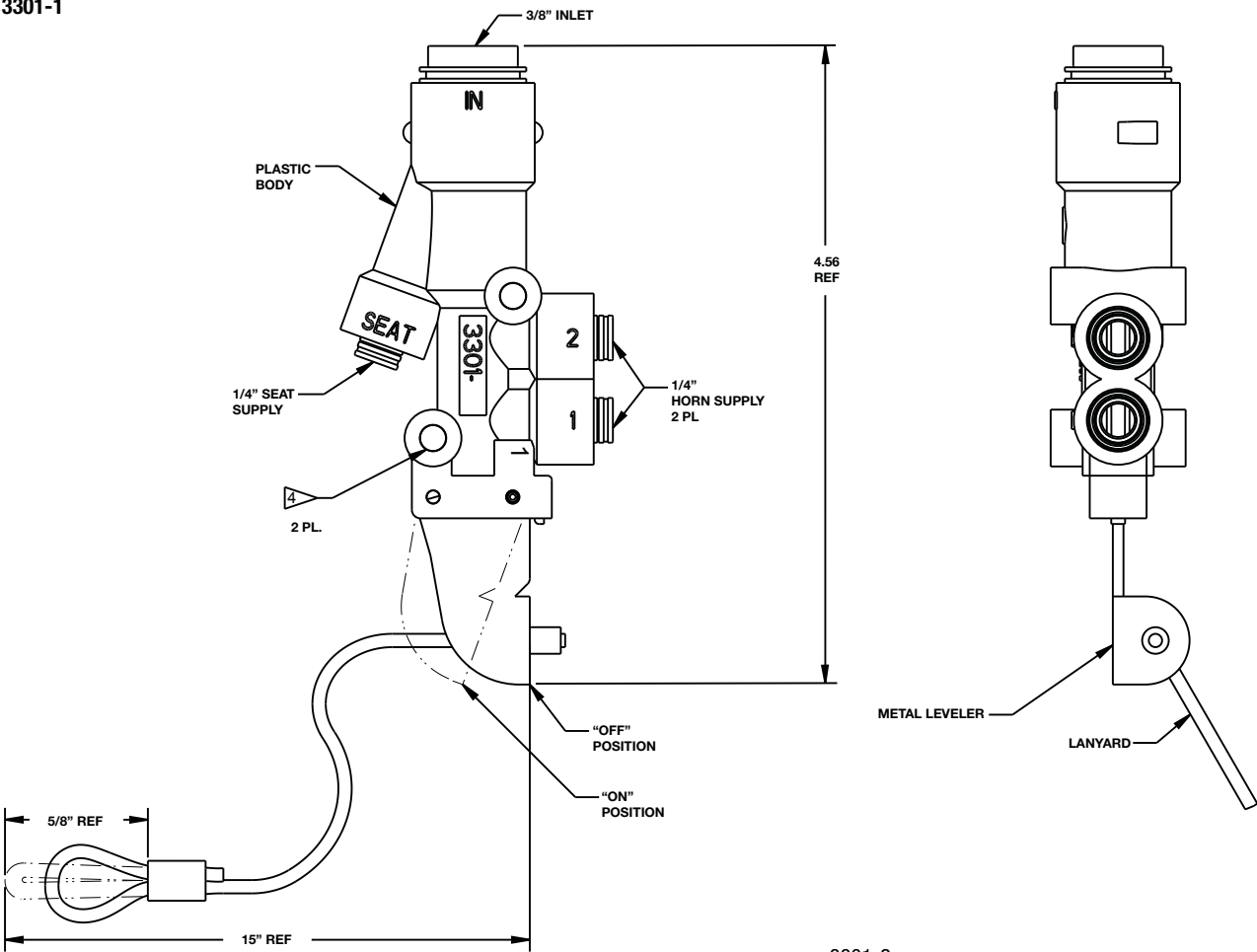
Model	Description	Tube O/D
3300-21	Single outlet, left hand toggle	1/4"
3300-22	Dual outlet, left-handed toggle	1/4"
3301-1	Dual outlet w/ lanyard lever assembly	1/4"
3301-2	Single outlet w/lanyard lever assembly	1/4"
3302-1	Medium duty	3/8"
3302-2	Conventional cab	3/8"
3302-3	Cabover	3/8"

Specifications

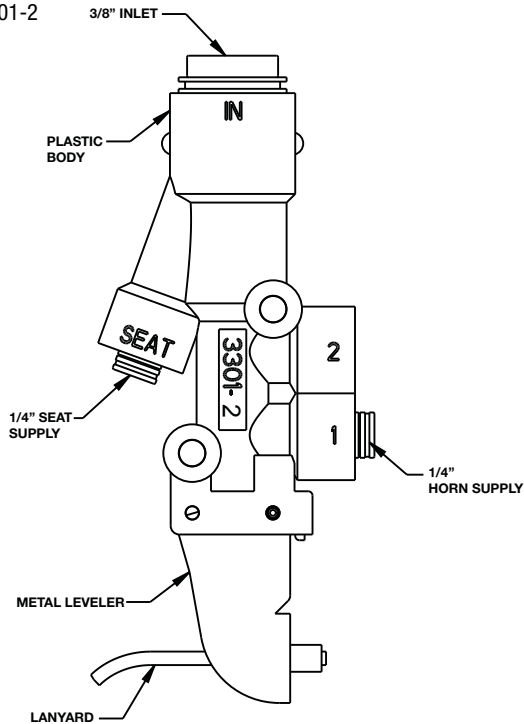


HORN VALVES 3300, 3301 & 3302 Series

3301-1

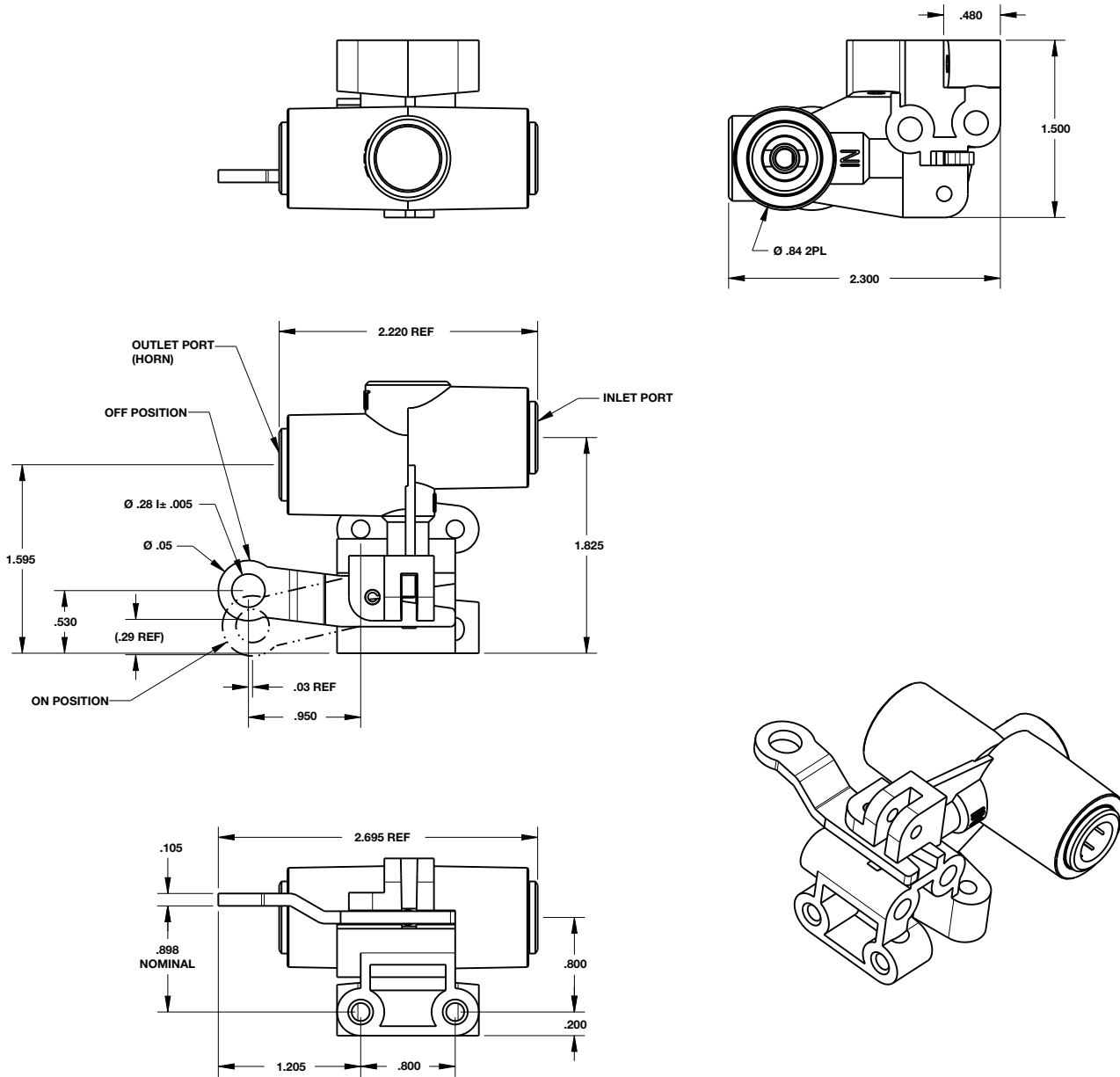


3301-2



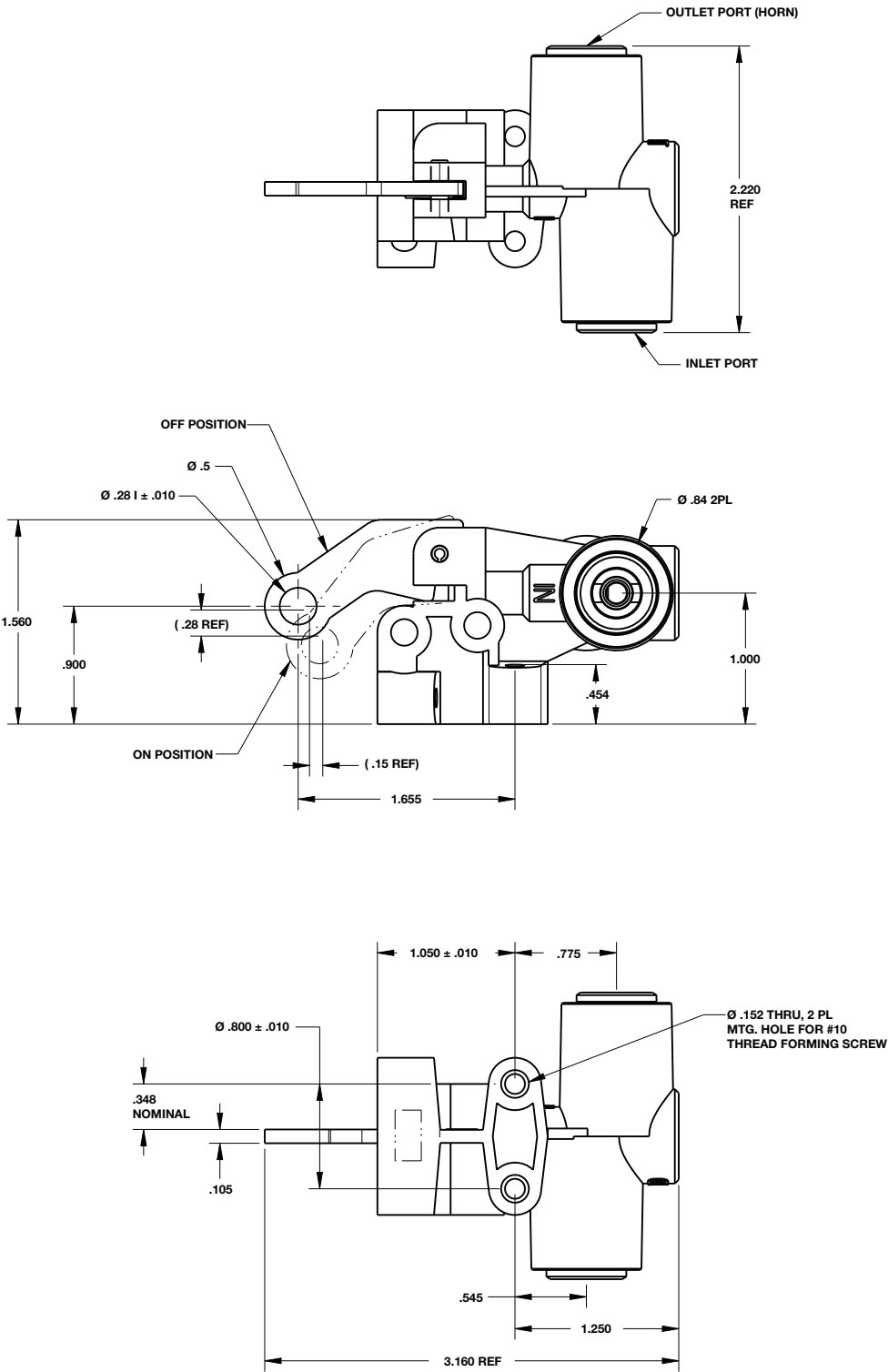
HORN VALVES 3300, 3301 & 3302 Series

3302-1



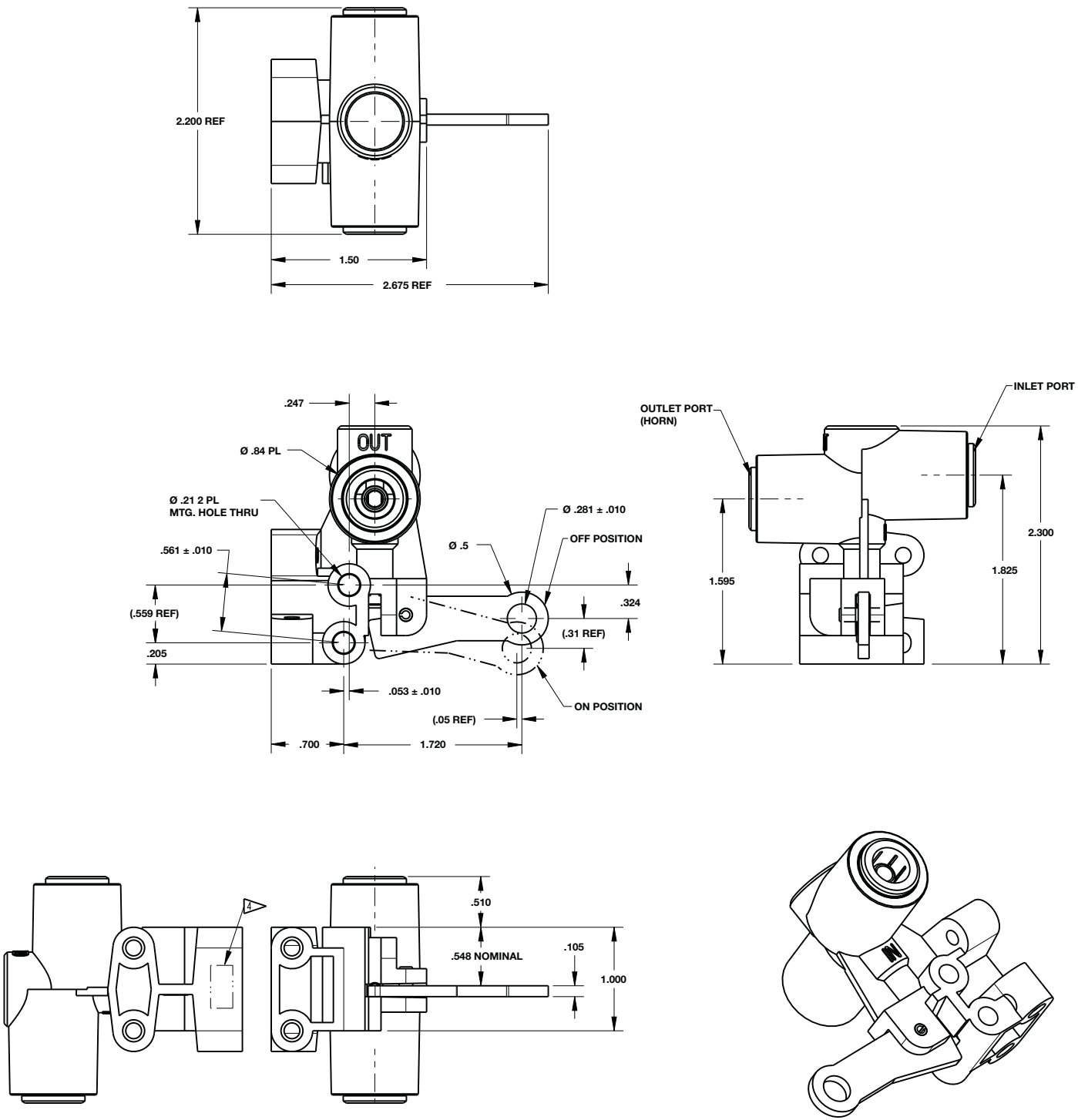
HORN VALVES
3300, 3301 & 3302 Series

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

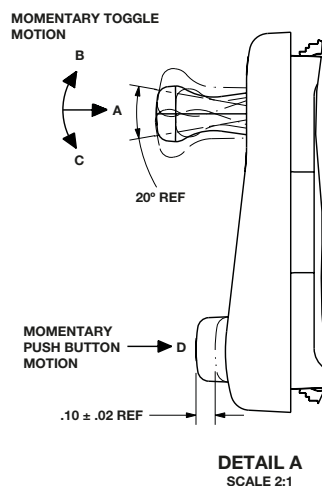
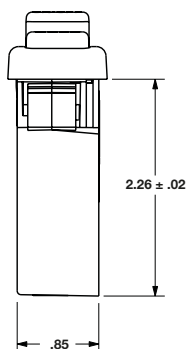
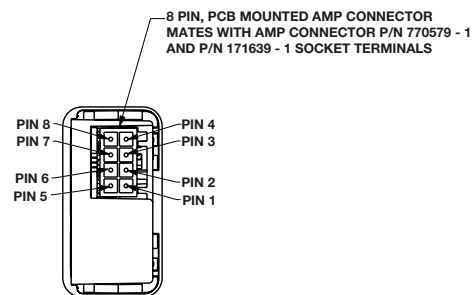
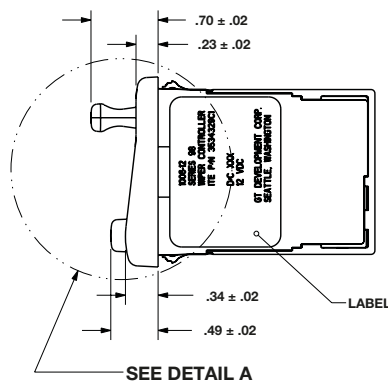
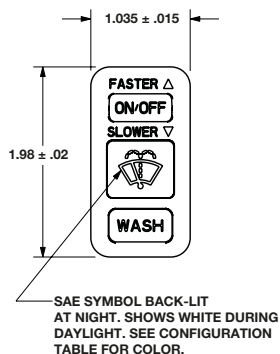
Zytel 72G13 HSIL BK black
nylon 6/6 13% glass



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) IA max.
- 4 High speed relay (GND) IA max.
- 5 Washer Pump (GND)
- 6 Ground
- 7 Ground
- 8 Ground

Filters/Regulators

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.



Full flow
gauge ports

High-efficiency
water and particle
removal



Protects air
operated devices



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®



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.

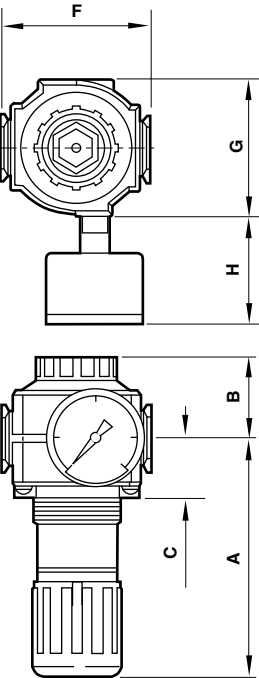
NOTE: Outlet pressure can be adjusted to pressures in excess of, and less than, those specified. Do not use these units to control pressures outside of the specified ranges.

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

EXCELON® MODULAR SYSTEM PRESSURE REGULATORS

R72G, R73G, R74G

Specifications



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

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.

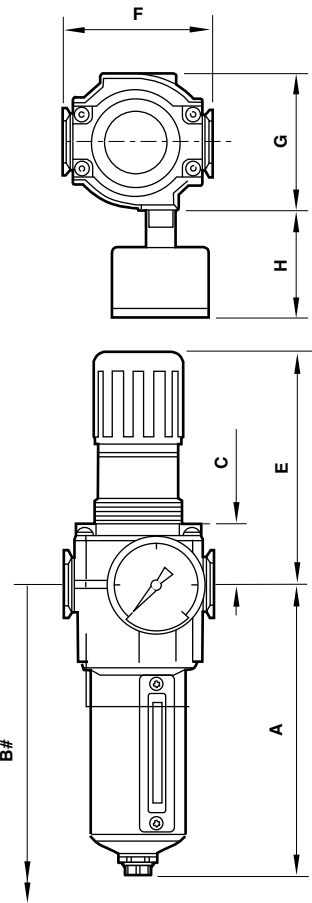
NOTE: Outlet pressure can be adjusted to pressures in excess of, and less than, those specified. Do not use these units to control pressures outside of the specified ranges.

** 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

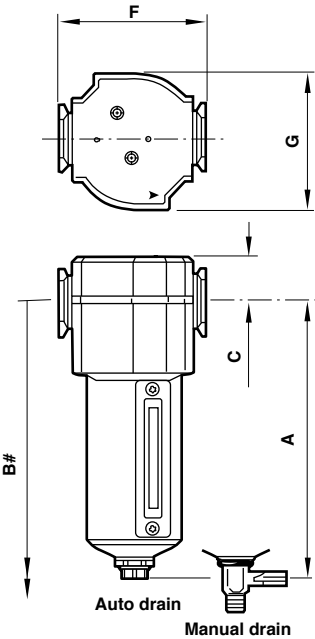
Autodrain Model No.	Manual Drain Model No.	Port size PTF	Flow SCFM*	Bowl type	Element	Wall mounting bracket	Quickmount pipe adapter	Quikclamp	Quikclamp and bracket	Service kit**	Element
F72G-2AN-AE3	F72G-2AN-QD3	1/4"	55	Metal	40µ	4224-50	4215-02	4214-51	4214-52	4380-500	5925-02
F73G-3AN-AD3	F73G-3AN-QD3	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)*

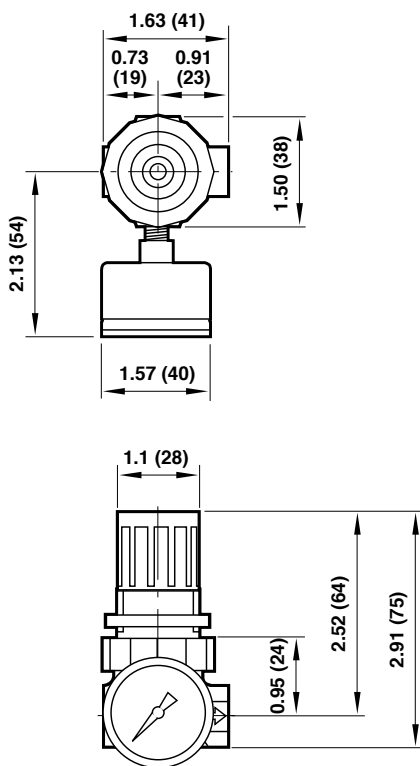


Models

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)

Fittings

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.

*Designed to last
life of vehicle*

*Fully certified
and DOT/SAE/TUV
approved*

*Simple tube
connection and
disconnection*

*Very robust brass
construction*



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.

Customized 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 HNBR O Rings
PSM Thread Coated, Bulk Packaged, and HNBR O Rings
V FKM O Ring

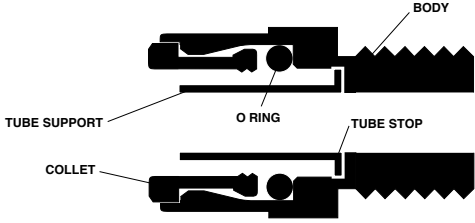
Material

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

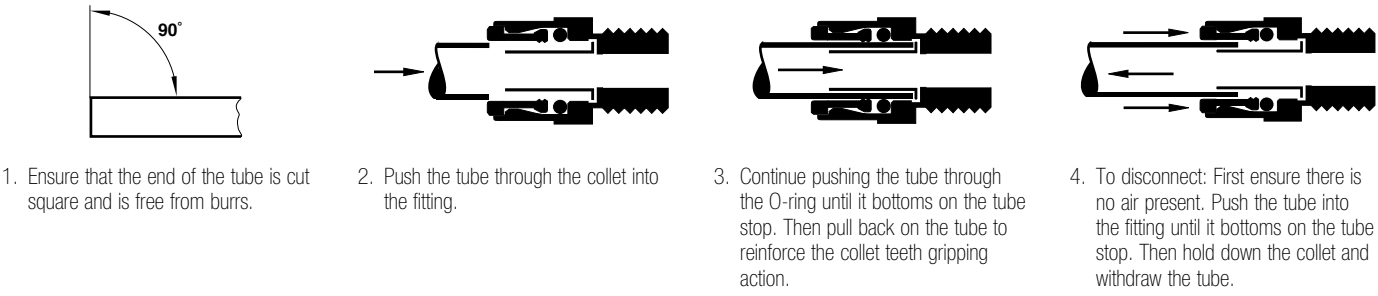


Body:
The body has an internally machined form to secure the Collet(s), O-ring(s) and Tube support(s): It also has internal and externally machined thread form(s) for connection to ports where applicable.

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.

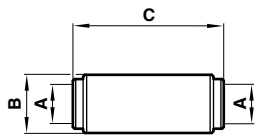
Tube Support:
The tube support prevents the tube collapsing during extreme tensile loading conditions. Such conditions are only encountered during performance testing and far exceed those experienced during normal use.



DOT VEHICLE PUSH-TO-CONNECT FITTINGS

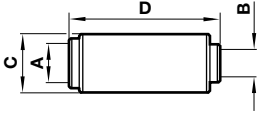
Fleetfit Series

● Union



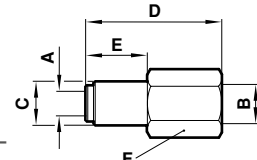
Models	A Tube O/D	ØB	C
94450313M	3/16"	0.47	1.36
94450304M	1/4"	0.51	1.4
94450304PSBP	1/4"	0.51	1.4
94450306M	3/8"	0.67	1.74
94450306PSBP	3/8"	0.67	1.74
94450307M	1/2"	0.81	2.01
94450307PSBP	1/2"	0.81	2.01
94450308M	5/8"	1	2.42
94450308PSBP	5/8"	1	2.42
94450309M	3/4"	1.18	2.48

● Reducing Unions (Inch)



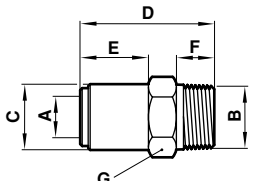
Models	A Tube O/D	B Tube	ØC	D
94450448M	3/8"	1/4"	0.67	1.71
94450464M	1/2"	3/8"	0.81	1.91

● Female Connectors NPT



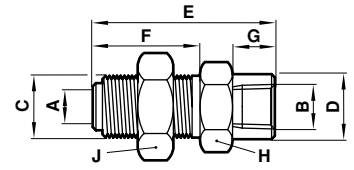
Models	A Tube O/D	B NPT	ØC	D	E	F
95435504M	1/4"	1/8"	0.51	1.31	0.72	9/16"
95435510M	1/4"	1/4"	0.51	1.59	0.72	11/16"
95435512M	3/8"	1/4"	0.65	1.74	0.88	11/16"
95435520M	3/8"	3/8"	0.65	1.78	0.88	7/8"
95435530M	1/2"	1/2"	0.91	2.11	0.96	11/16"

● 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	11/16"
95453006M	3/8"	1/8"	0.65	1.32	0.67	0.37	11/16"
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	11/16"
95453012PSM	3/8"	1/4"	0.66	1.48	0.63	0.56	11/16"
95453020M	3/8"	3/8"	0.66	1.42	0.54	0.56	11/16"
95453020PSM	3/8"	3/8"	0.66	1.42	0.54	0.56	11/16"
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	1-1/16"
95453022PSM	5/8"	3/8"	0.98	1.87	0.89	0.56	1-1/16"
95453031M	5/8"	1/2"	0.98	2.12	0.93	0.75	1-1/16"
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



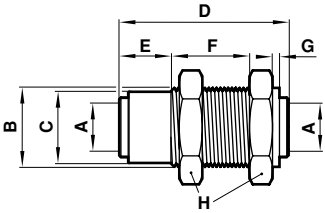
Models	A Tube O/D	B NPT Female	C UNF	ØD	E	F	G	H	J
95457006M	1/4"	1/8"	5/8"	0.63	1.32	0.69	0.28	0.87	15/16"
95457001M	1/4"	1/4"	5/8"	0.79	1.59	0.73	0.51	0.87	15/16"
95457003M	3/8"	1/4"	3/4"	0.79	2.2	1.3	0.51	0.94	1-1/8"
95457004M	3/8"	3/8"	3/4"	0.79	2.2	1.3	0.51	0.94	1-1/8"
95457005M	1/2"	3/8"	7/8"	–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



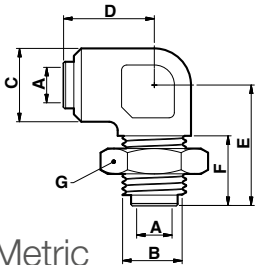
● Bulkhead Unions



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



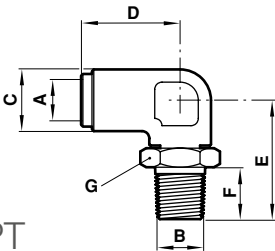
● Union Bulkhead Elbows Metric



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

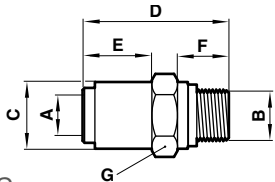


Models	A Tube O/D	B NPT	ØC	D	E	F	G A/F
95411404M	1/4"	1/8"	0.51	0.83	0.91	0.37	0.43
95411404PSM	1/4"	1/8"	0.51	0.83	0.91	0.37	0.43
95411410M	1/4"	1/4"	0.51	0.83	1.12	0.56	0.55
95411418M	1/4"	3/8"	0.59	0.85	1.25	0.56	0.75
95411406M	3/8"	1/8"	0.67	1.07	1.05	0.37	0.55
95411412M	3/8"	1/4"	0.67	1.07	1.29	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



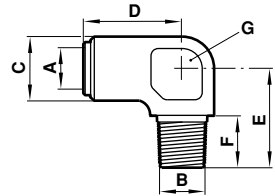
● Metric Male Connectors



Models	A Tube O/D	B Thread	ØC	D	E	F	G A/F
94466631M	1/4"	M10 x 1.0	0.51 (13.0)	1.12 (28.5)	0.53 (13.5)	0.39 (10.0)	0.55 (14)
94466633M	1/4"	M12 x 1.5	0.51 (13.0)	1.12 (28.5)	0.53 (13.5)	0.39 (10.0)	0.67 (17)
94466633V	1/4"	M12 x 1.5	0.51 (13.0)	1.12 (28.5)	0.53 (13.5)	0.39 (10.0)	0.67 (17)
94466653M	3/8"	M12 x 1.5	0.51 (13.0)	1.12 (28.5)	0.53 (13.5)	0.39 (10.0)	0.67 (17)
9446665BP	1/2"	M16 x 1.5	0.81 (20.5)	1.54 (39.0)	0.75 (19.0)	0.47 (12.0)	0.97 (22)
94466635M	1/4"	M16 x 1.5	0.51 (13.0)	1.08 (27.5)	0.30 (7.5)	0.30 (7.5)	0.87 (22)
9446666BP	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



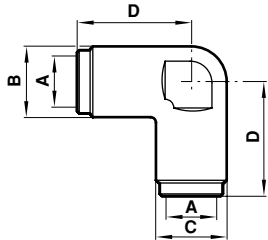
Models	A Tube O/D	B NPT	ØC	D	E	F	G A/F
95433103M	3/16"	1/8"	0.47	0.81	0.75	0.37	0.47
95433104M	1/4"	1/8"	0.55	0.81	0.79	0.37	0.55
95433104PSM	1/4"	1/8"	0.55	0.81	0.79	0.37	0.55
95433109M	3/16"	1/4"	0.69	0.81	0.94	0.56	0.63
95433110M	1/4"	1/4"	0.69	0.87	1.02	0.56	0.71
95433110PSM	1/4"	1/4"	0.69	0.87	1.02	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



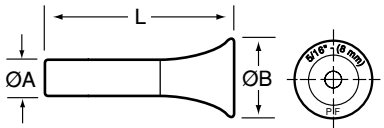
● 45° Male Elbows NPT

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	—



● Male Bulkhead Elbows, NPT Female, UNF

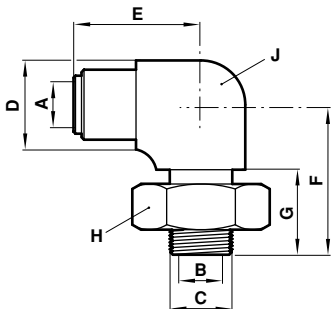
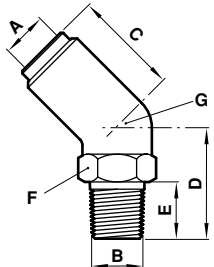
Models	A Tube O/D	B NPT Female	C UNF	ØD	E	F	G	H A/F	J A/F
95459704M	1/4"	1/8"	5/8"	0.81	1	1.18	0.63	15/16"	0.87
95459702M	1/2"	3/8"	7/8"	1.02	1.33	1.61	0.98	1-5/16"	0.67



● DOT Plug*

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

*Material: Thermoplastic

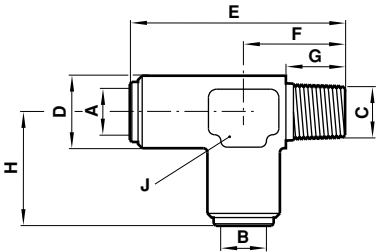


DOT VEHICLE PUSH-TO-CONNECT FITTINGS
Fleetfit Series



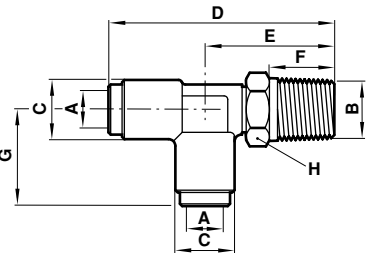
● Male Run Tees NPT

Models	A Tube O/D	B Tube O/D	C NPT	ØD	E	F	G	H	J A/F
95458628M	1/4"	1/4"	1/8"	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



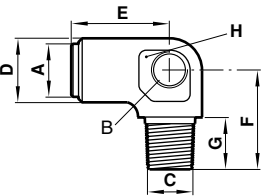
● Male Swivel Run Tees NPT

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



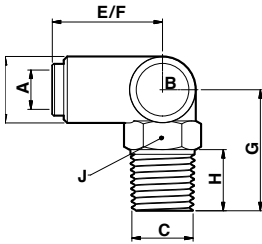
Note: Ports are threaded on side shown.

DOT VEHICLE PUSH-TO-CONNECT FITTINGS
Fleetfit Series



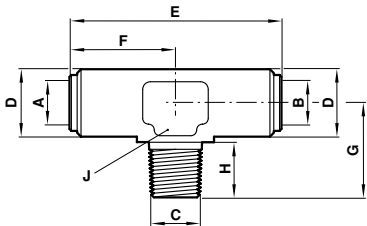
● Special 90° Tees NPT

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



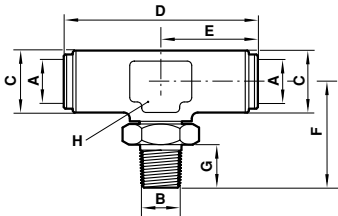
● Male Branch Tees NPT

Models	A Tube O/D	B Tube O/D	C NPT	ØD	E	F	G	H	J
95459002M	1/4"	1/4"	1/8"	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



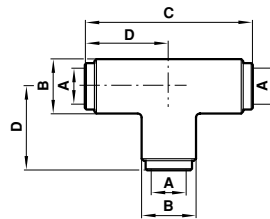
CAUTION: Swivel adapters are not suitable for use in continuously rotating or gyrating applications.

DOT VEHICLE PUSH-TO-CONNECT FITTINGS

Fleetfit Series



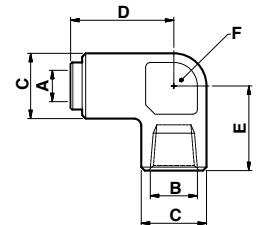
● Union Tee



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



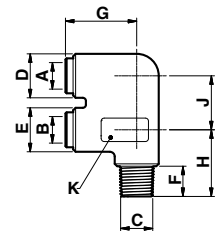
● Female Elbows NPT



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



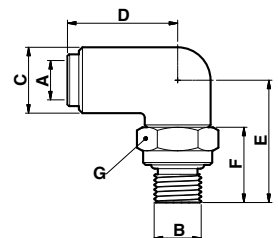
● Double Elbow Adapters NPT



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



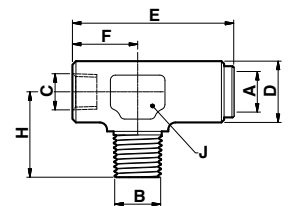
● Male Hobbs Elbows Metric



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

Integrated lift axle control solutions for chassis air systems on heavy duty trucks and trailers.



Rapid axle actuation



Helps prevent overload fines



Reliable

INTELLIGENT LIFT AXLE CONTROL MODULE KIT

- Provides automated electric over air control of lift axes on heavy trucks with air primary rear suspensions and 12-volt electrical system
- Controlled and operated with smart phone or 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

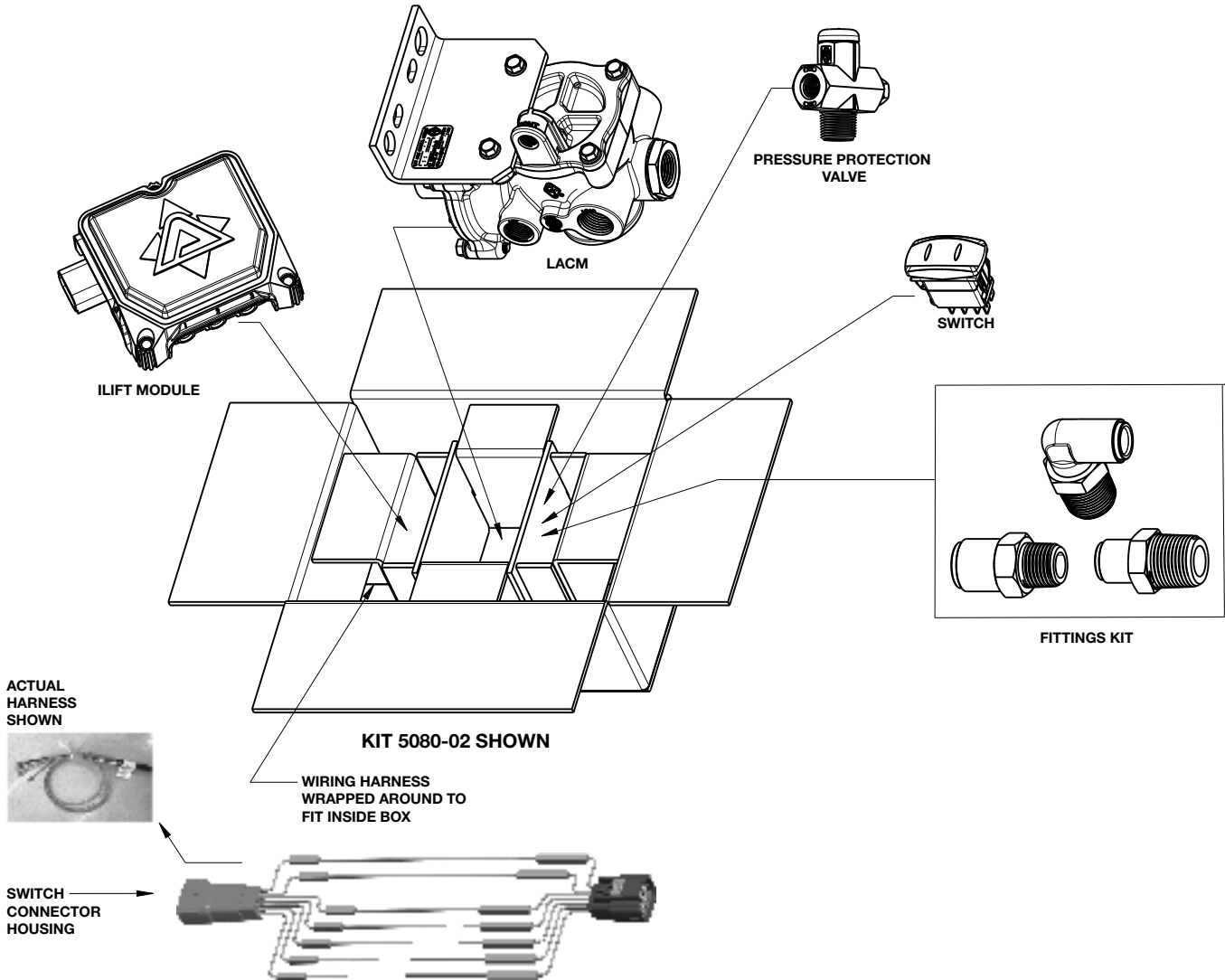
Operating Temperature Range:
-40°F to 185°F



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

Kit Content



Replacement Parts

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

LIFT AXLE CONTROL MODULE

5040 Series

- Designed for the heavy duty truck and trailer industry
- Includes two industry-proven brake-style relay valves integrated into a single unit for compactness and ease of installation
- 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



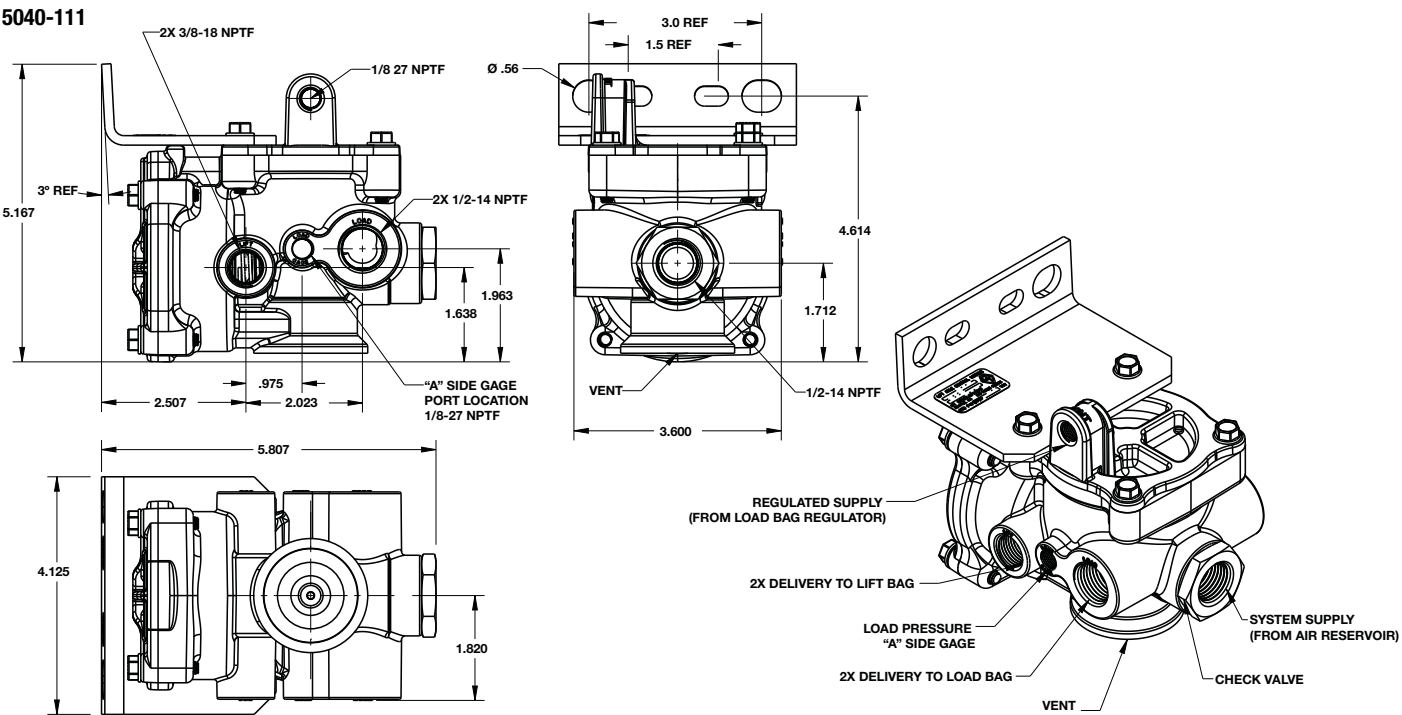
Models

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

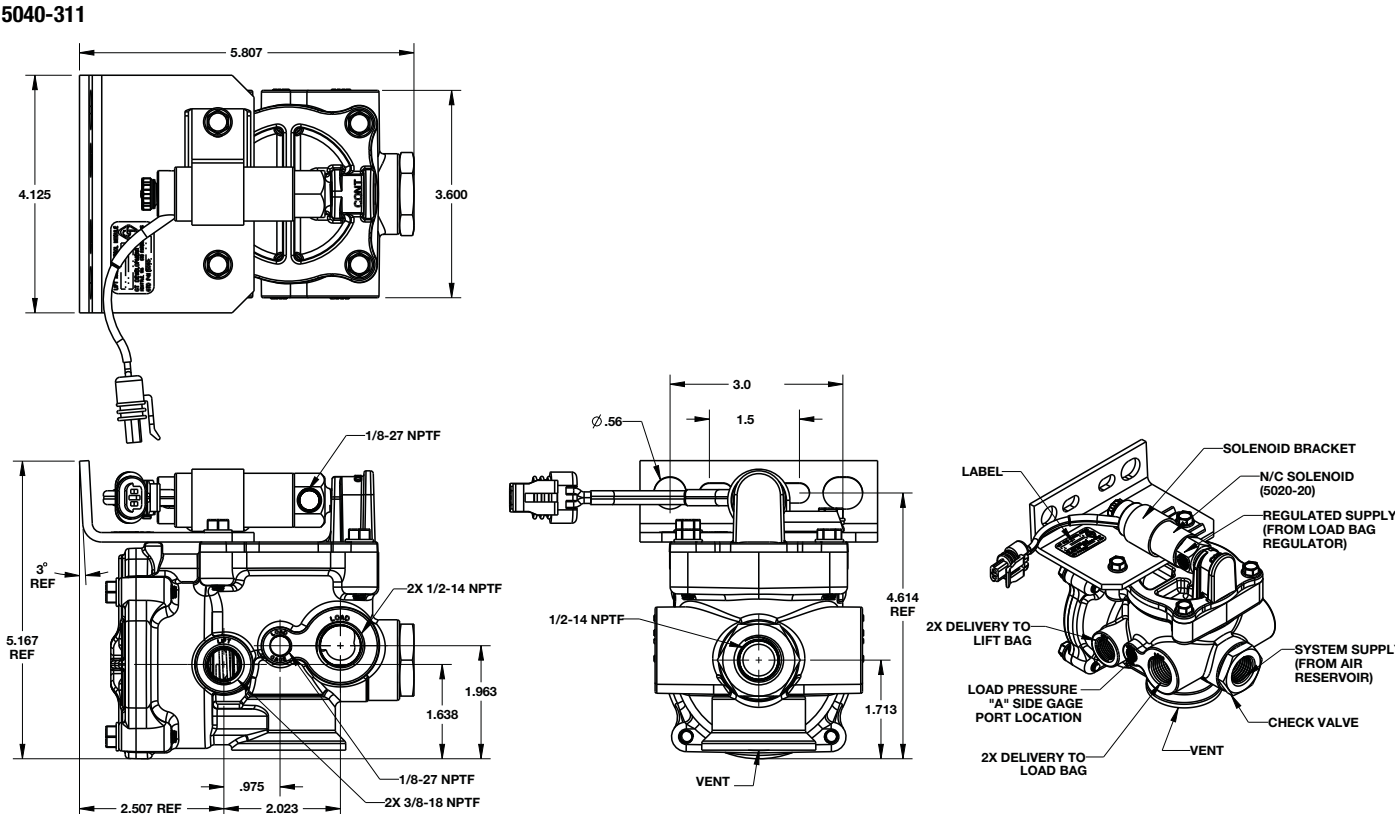
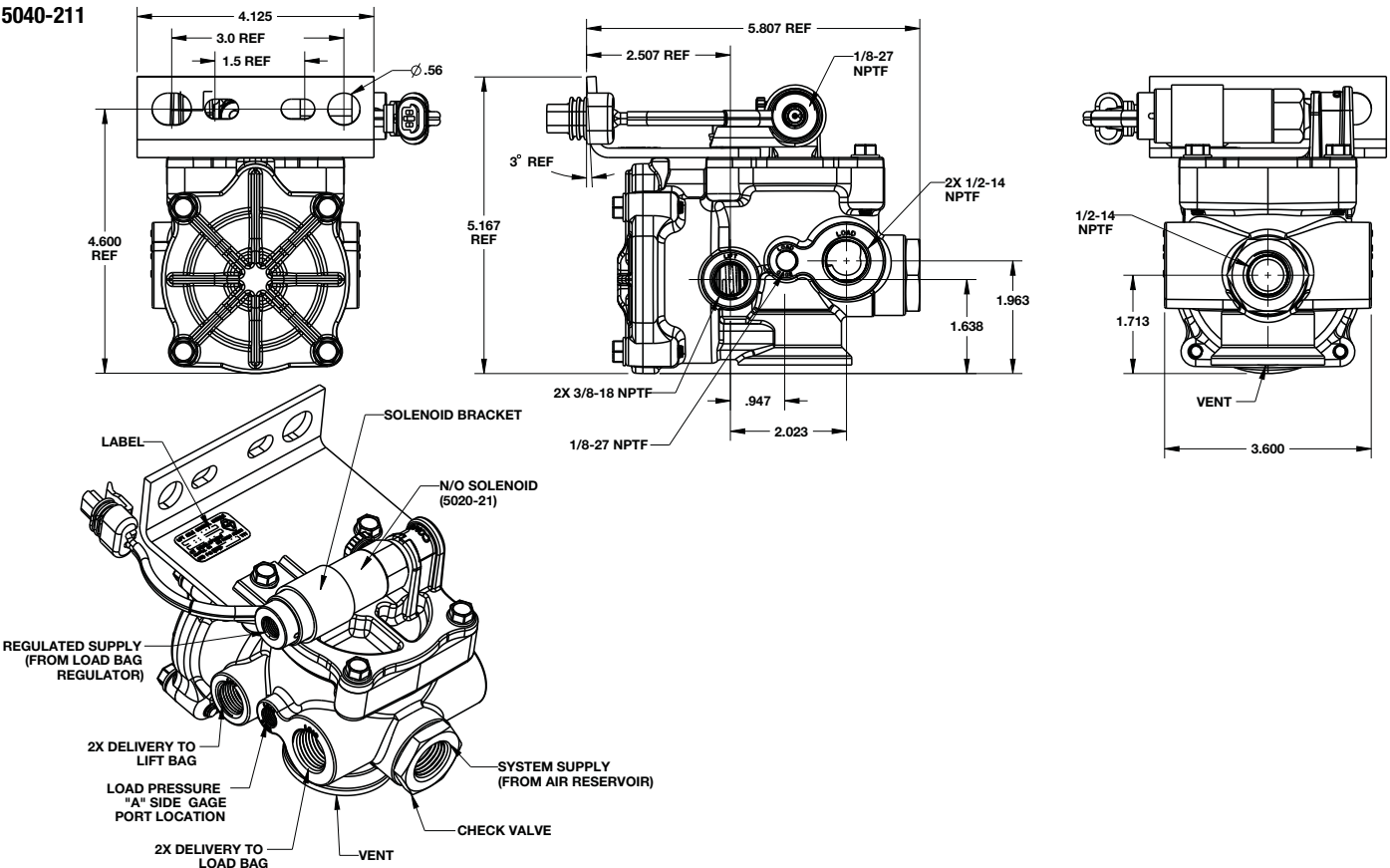
Replacement Solenoids for Lift Axle Control Module

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

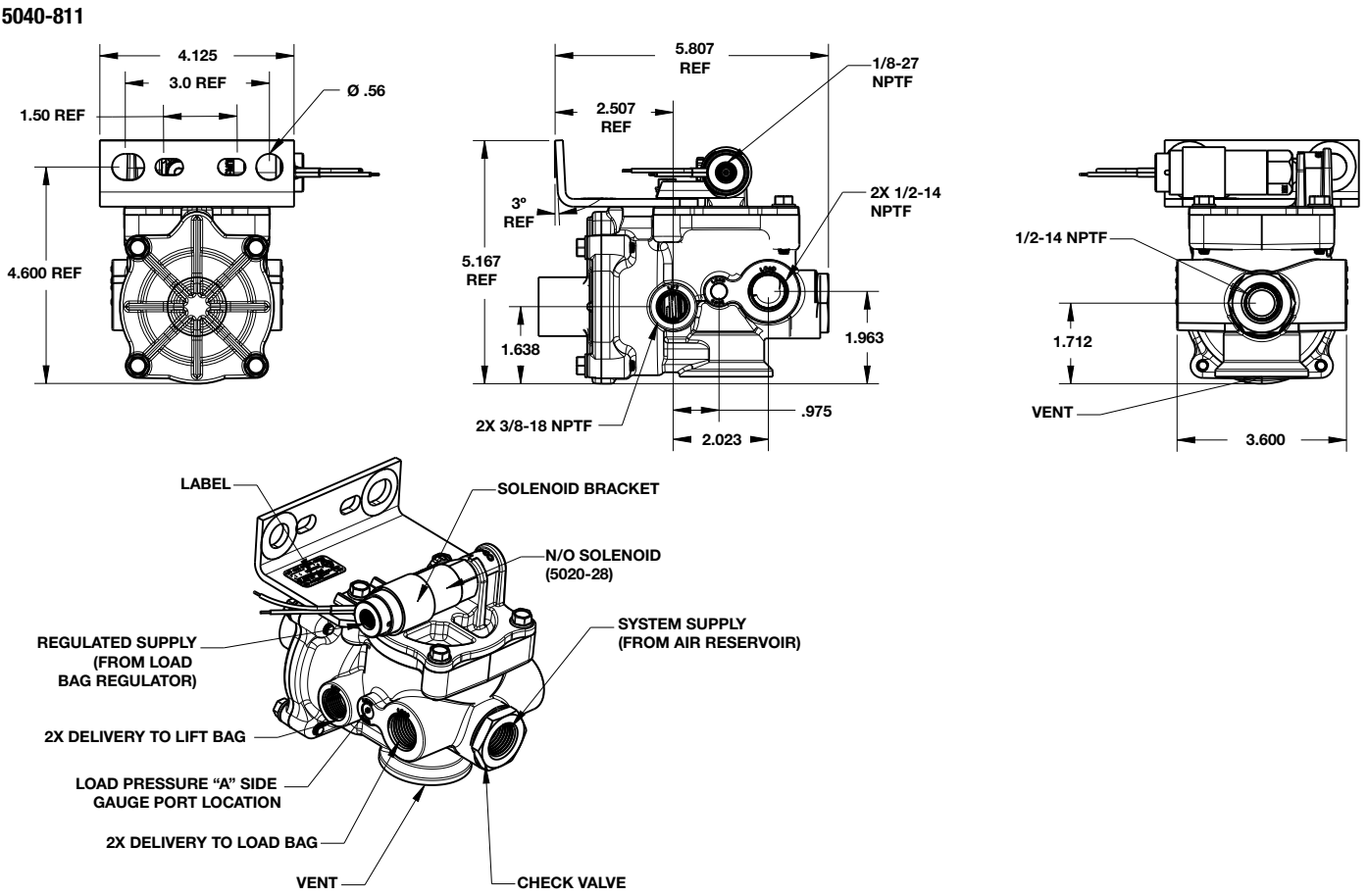
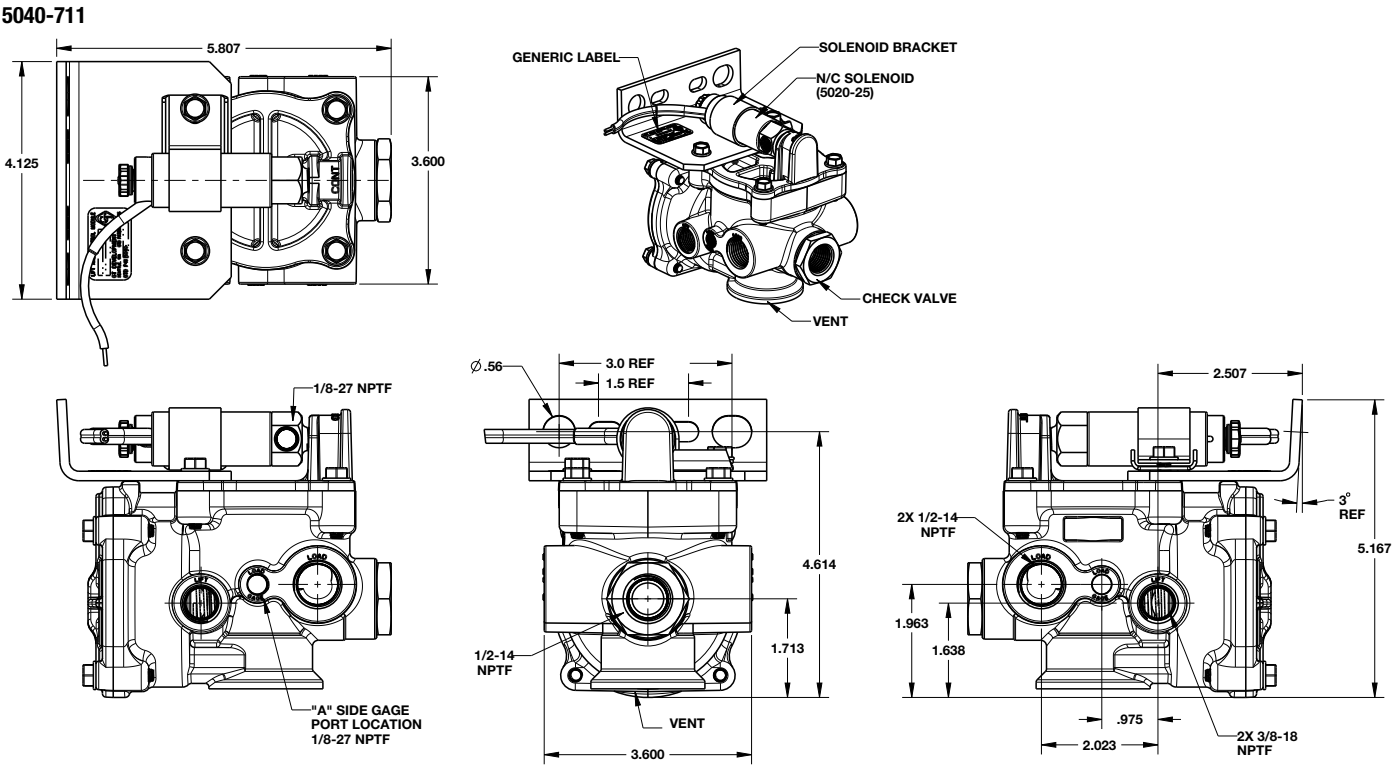
Specifications



LIFT AXLE CONTROL MODULE 5040 Series



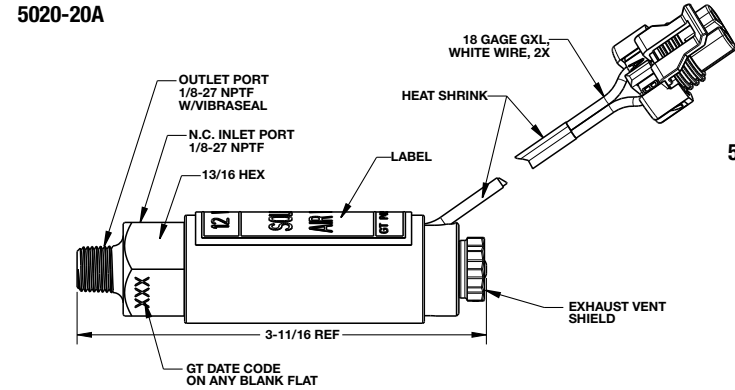
LIFT AXLE CONTROL MODULE 5040 Series



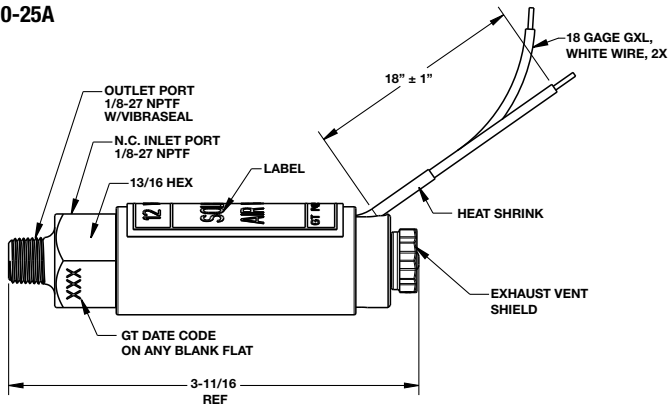
LIFT AXLE CONTROL MODULE
5040 Series

REPLACEMENT SOLENOIDS

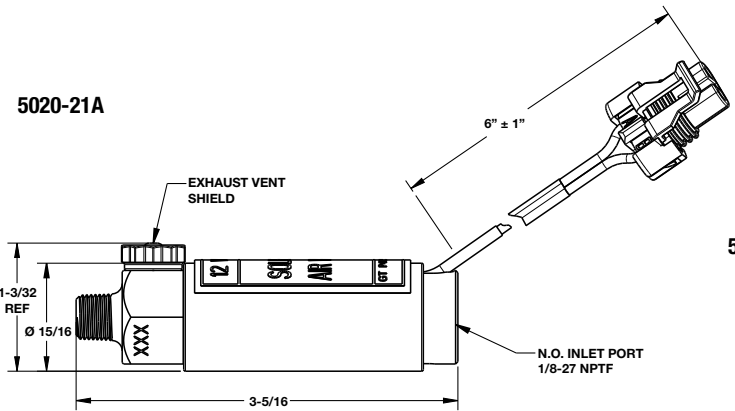
5020-20A



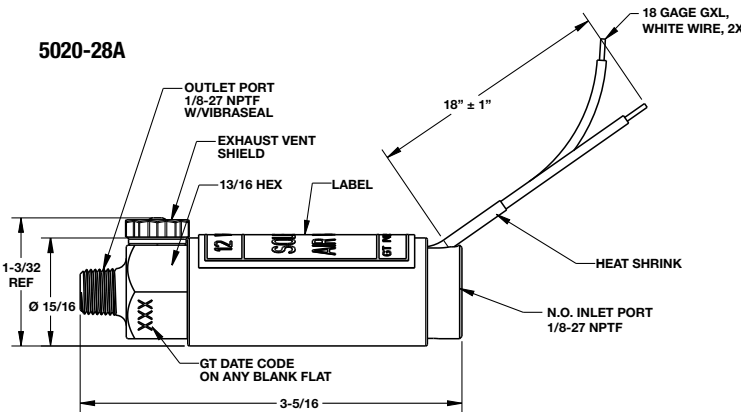
5020-25A



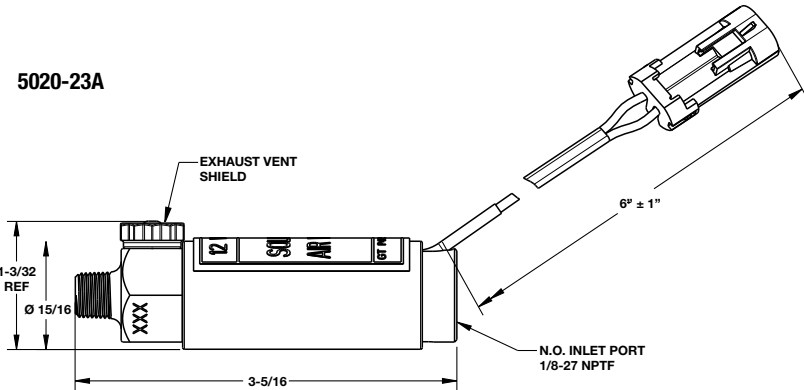
5020-21A



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

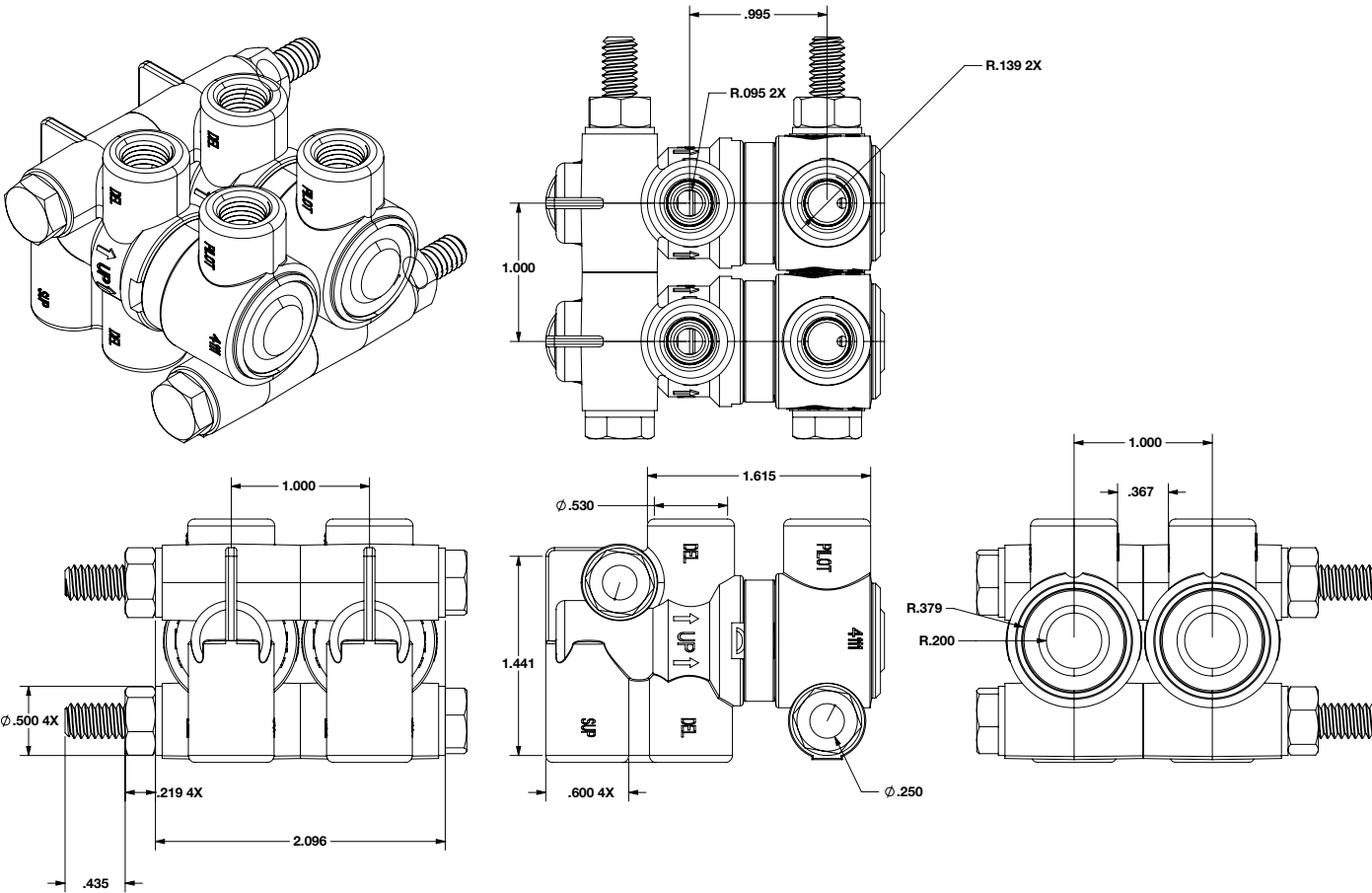
Die cast Zinc



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 (2°C)

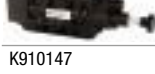
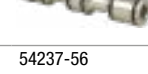
Voltage:
12 VDC available upon request

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

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

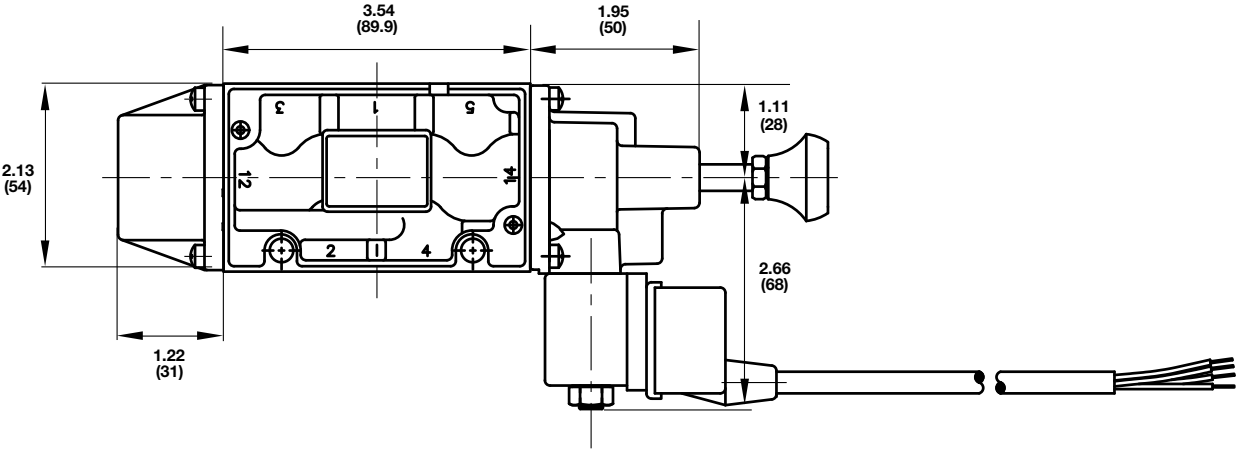
Part number	Code
3-Pin Industrial Standard 22mm	
-	A = no connector
54934-01	B = Cable grip 0-240 VAC/ VDC
54934-21	C = 6 ft molded cable, 0-240 VAC/ VDC
54934-08	H = Cable grip w/indicator light 24 VDC
54934-05	Z = 1/2" Conduit 0-240 VAC/ VDC
54934-30	5 = 6 ft molded cable w/indicator light, surge suppression,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

Solenoid Coils

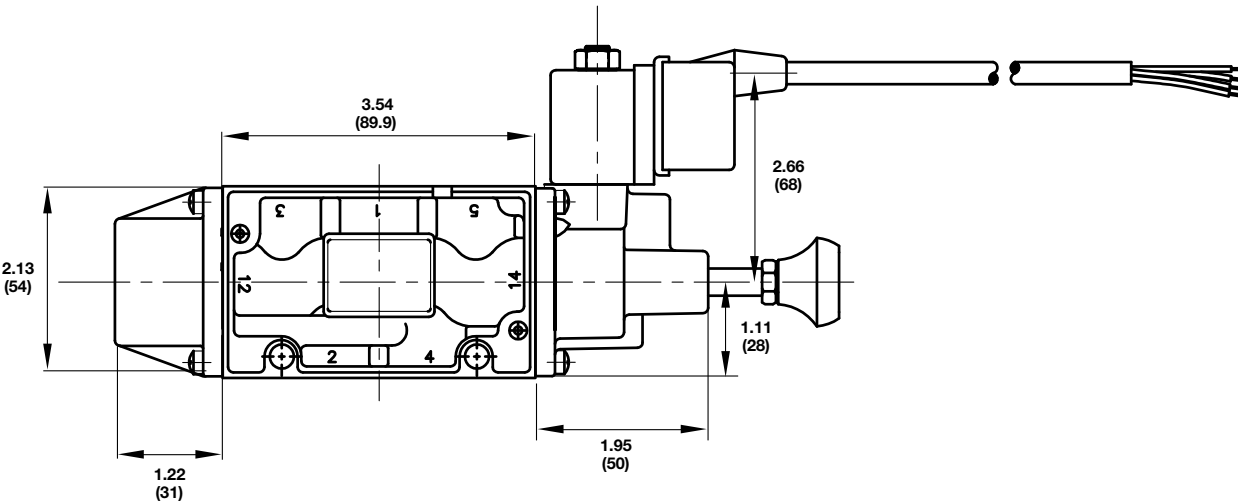
Model	Voltage
54452-02	12 VDC, 7.5W
54452-03	24 VDC, 6W
54452-05	24 VAC

Specifications for Lift Axle Control Spool Valves

K910014

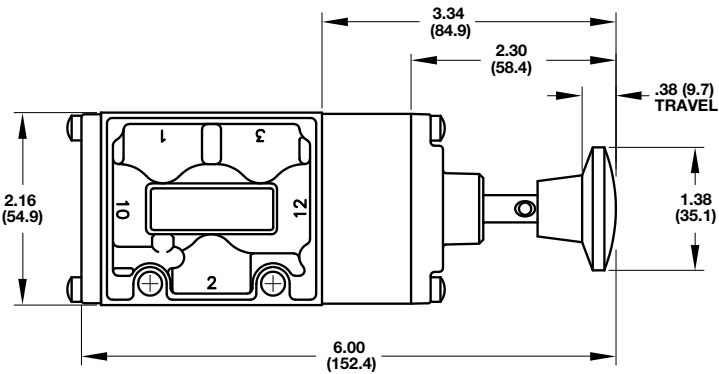


K910019

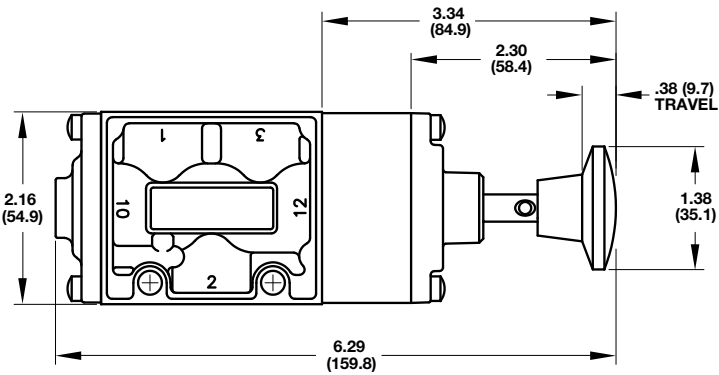


NUGGET 200 SOLENOID & AIR ACTUATED SPOOL VALVE

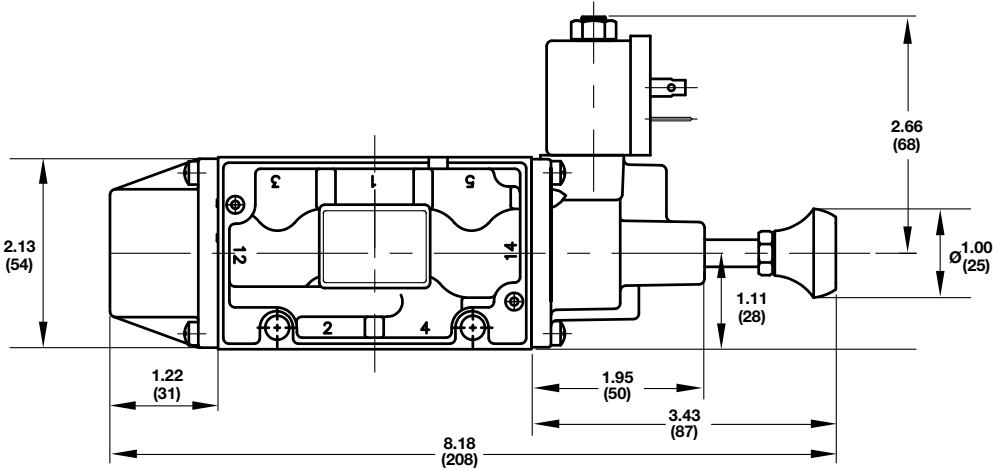
K910038



K910054

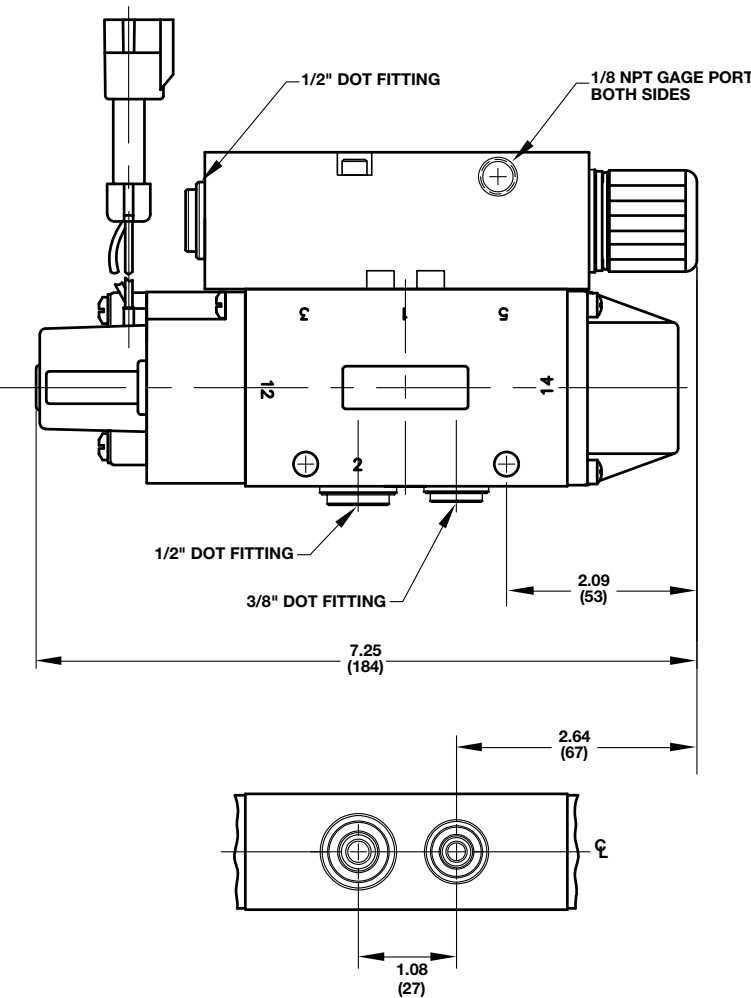
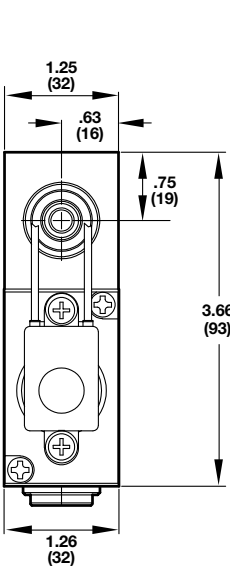


K910147, K910168



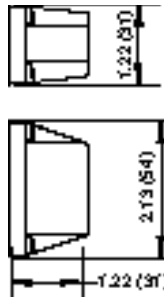
NUGGET 200 SOLENOID & AIR ACTUATED SPOOL VALVE

K990037

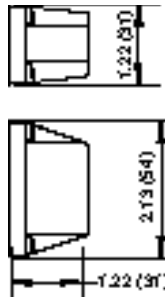


● Specifications for Standard Models

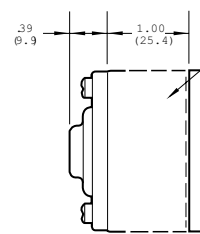
KS1 Spring Return & End Cap



KS6 Spring Return

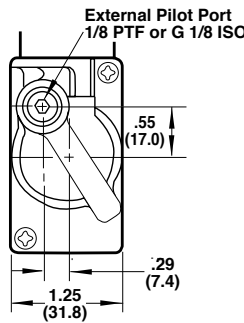
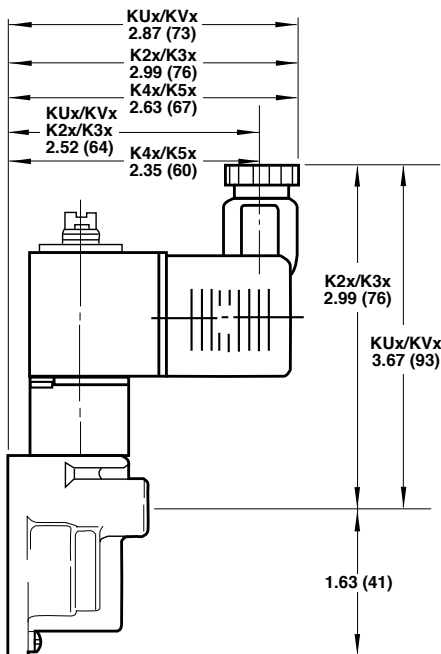
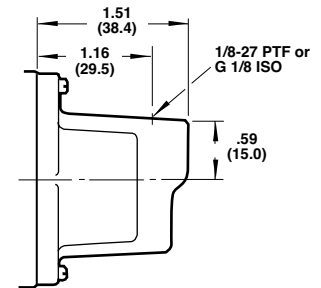


KC0 End Cap

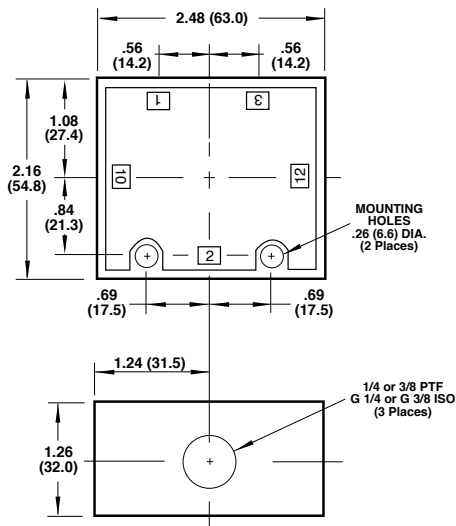


SPACER BLOCK - Used only with :
centered manual operators (KK2
KL7, KT2).

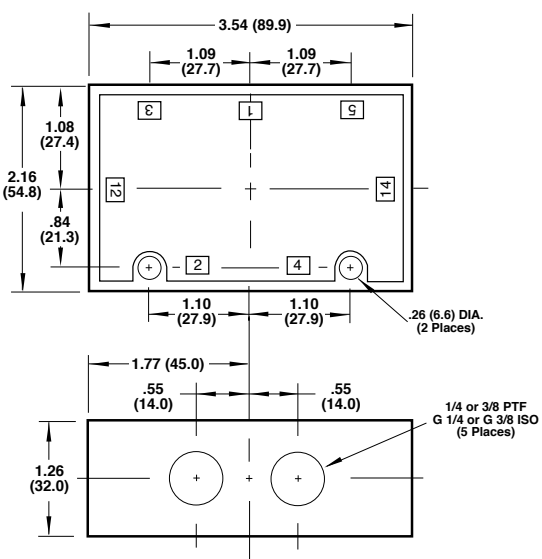
KA2



3-WAY - 1/4" & 3/8" PORTS
K41



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



Seat Controls

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



Height and
lumbar control

Low leakage and
compact design



Push/pull
functionality

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

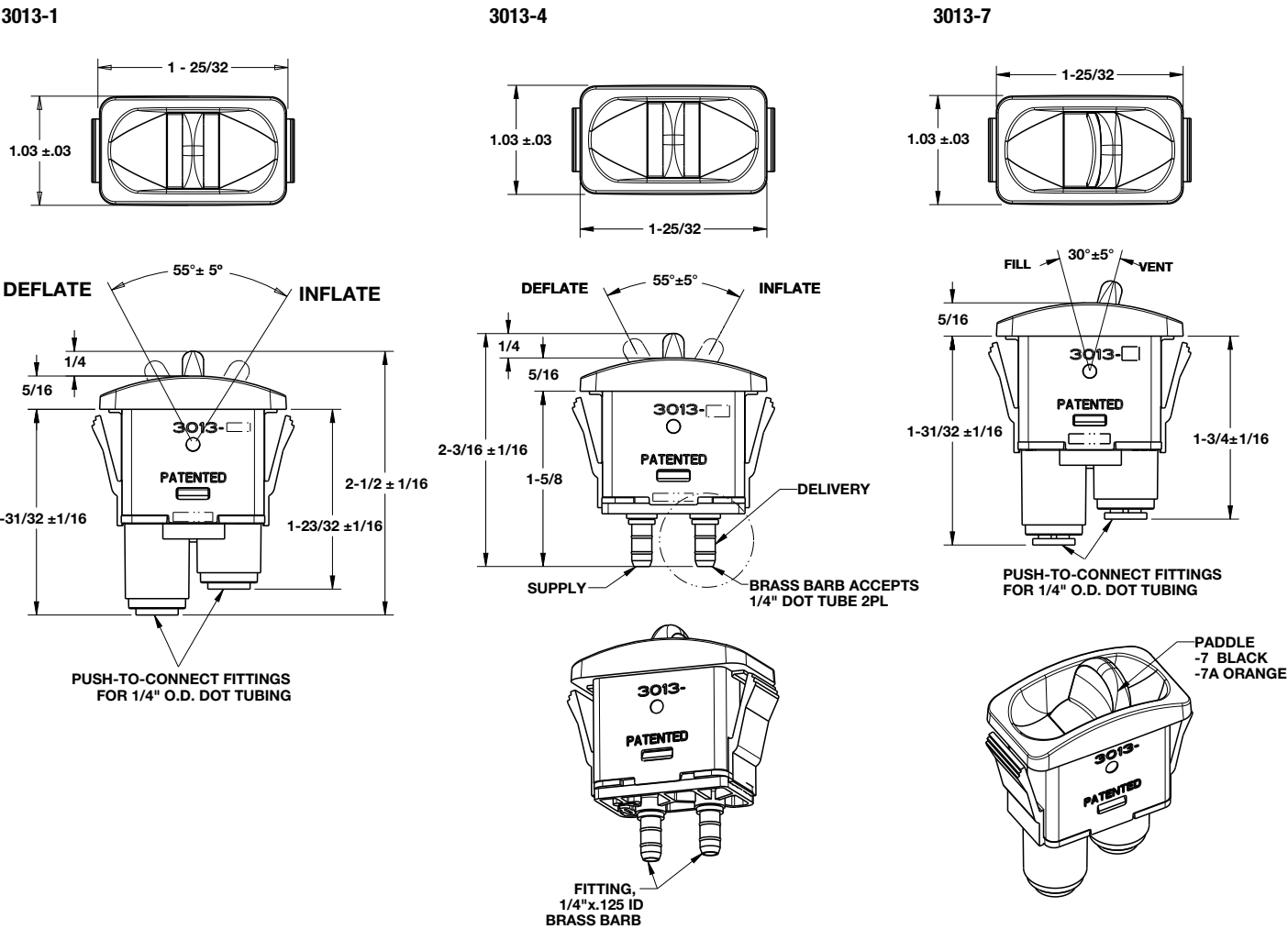
Black Thermoplastic



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

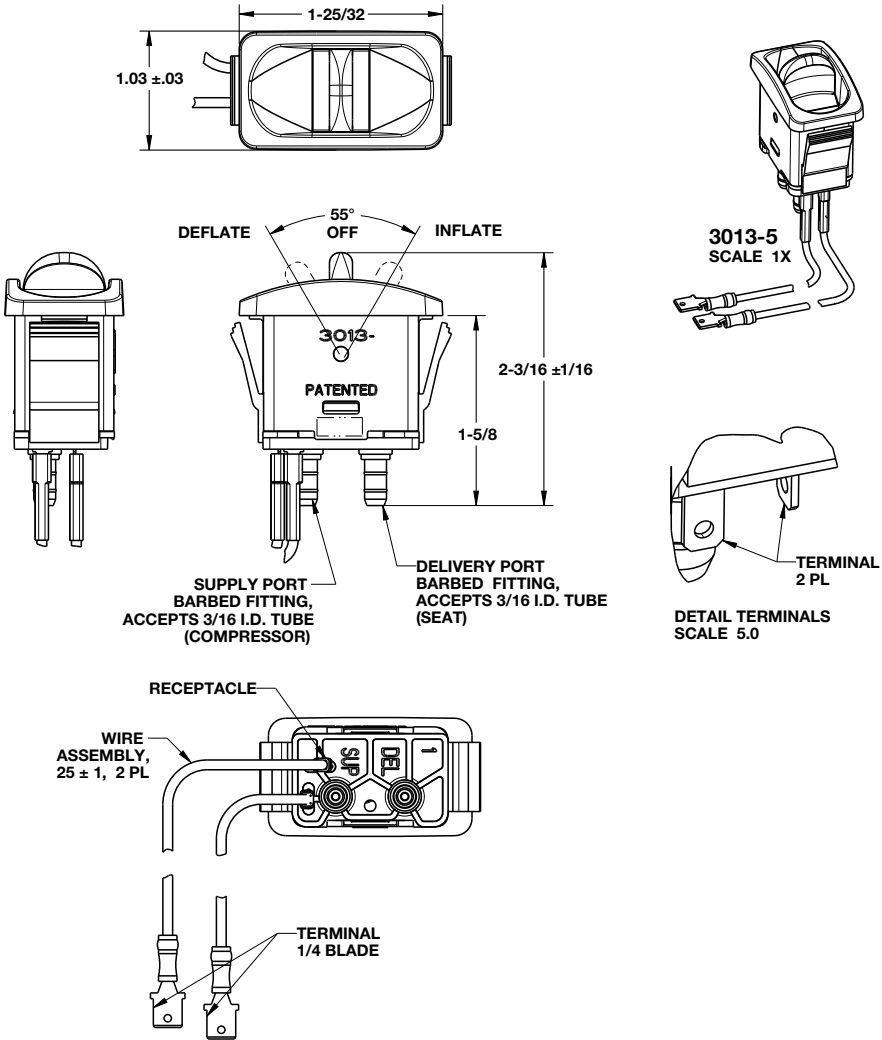
Electrical connection:
Wire assembly, terminal 1/4" blades



Models

Model	Description	Fitting	Valve Type
3013-5	Paddle Valve, barb fitting w/wire assembly	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



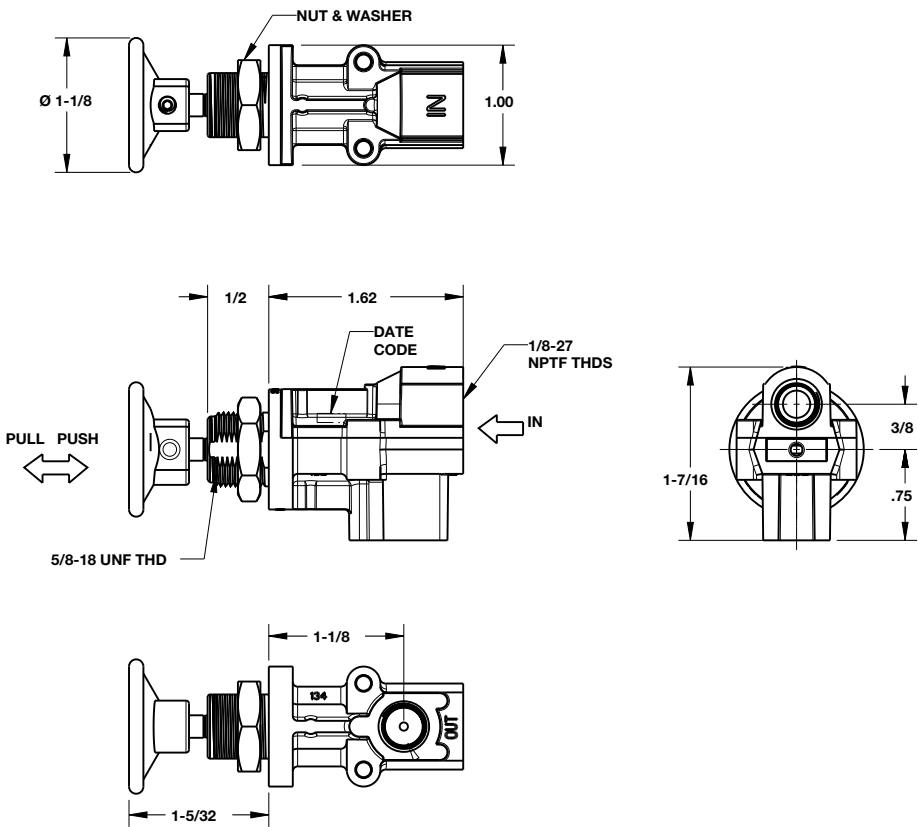
Models

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 CONNECTIONS

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

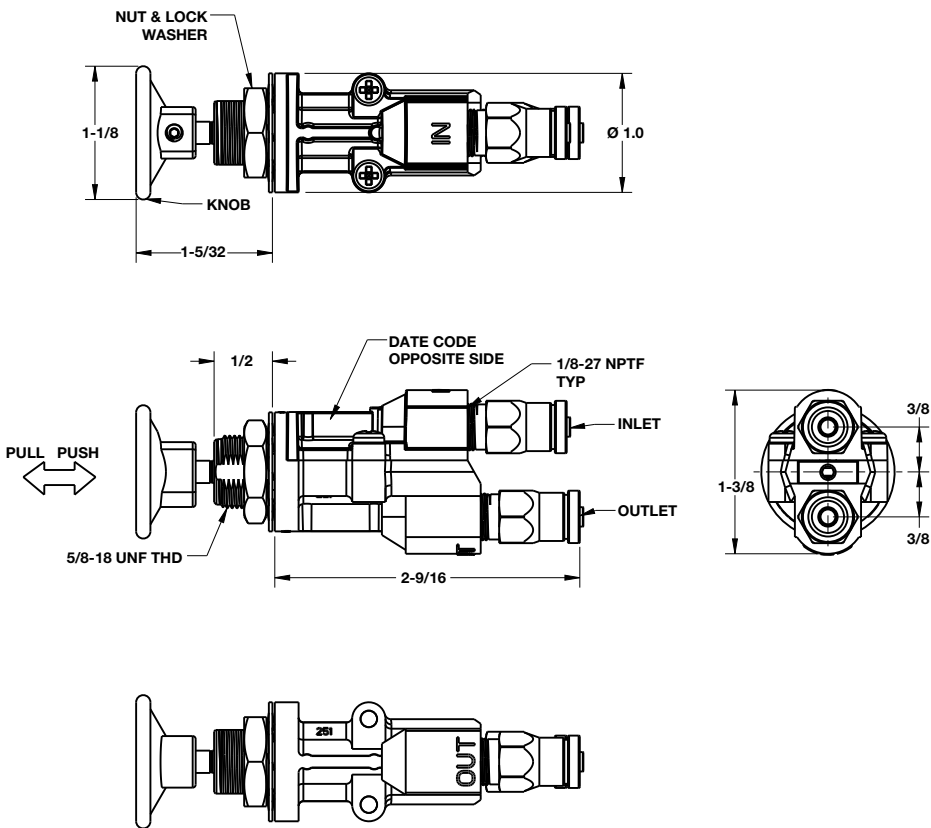
Leakage:
Valve cannot leak to outlet port in OFF position



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

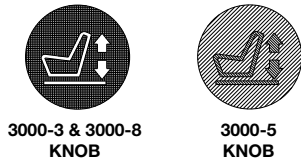
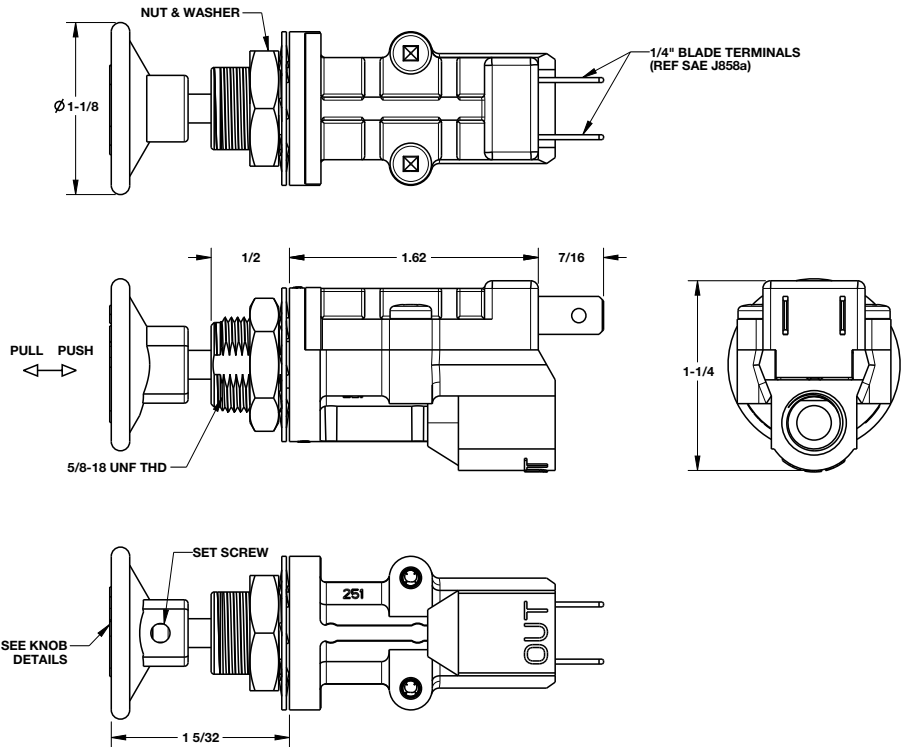
Port Size:
NPTF 1/8" -27



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

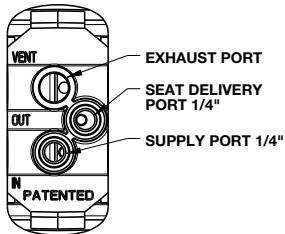
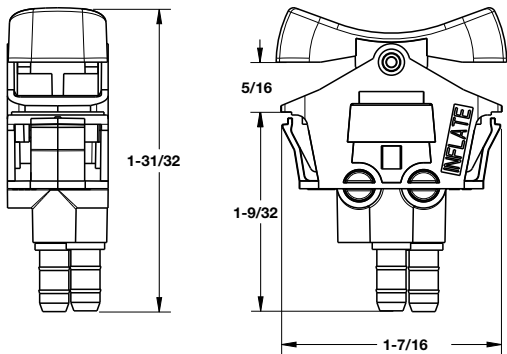
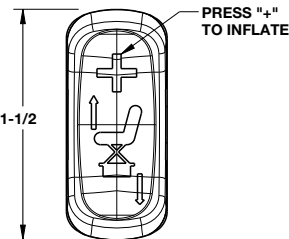


Models

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"

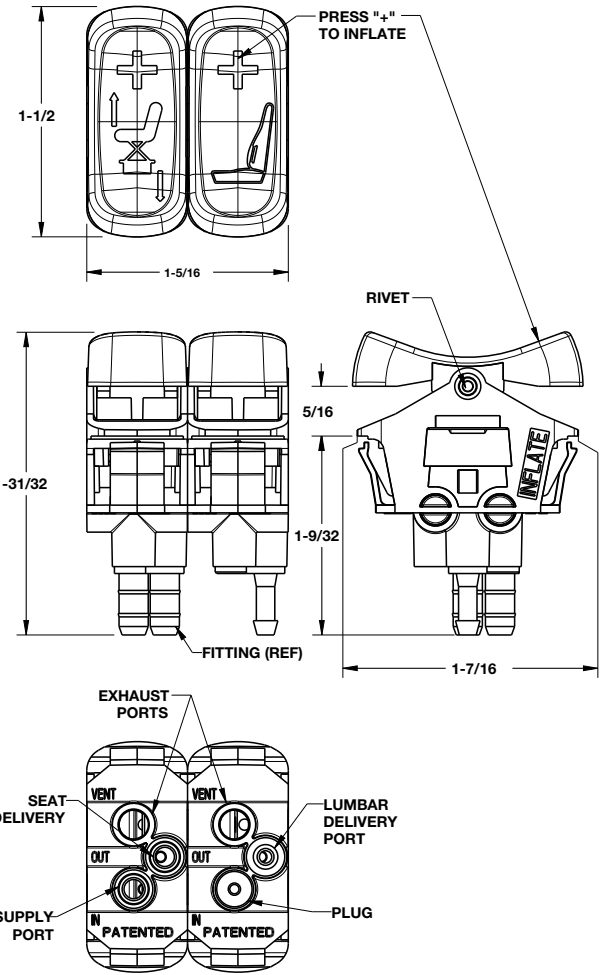
Specifications

3020-6

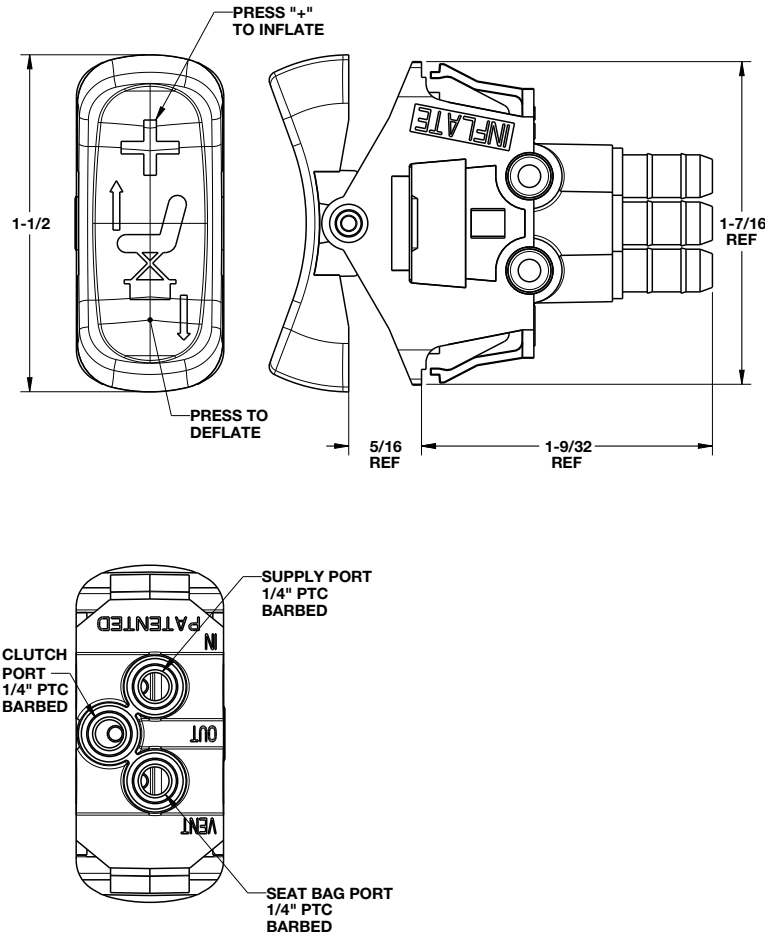


SEAT ROCKER VALVES
3020 Series

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

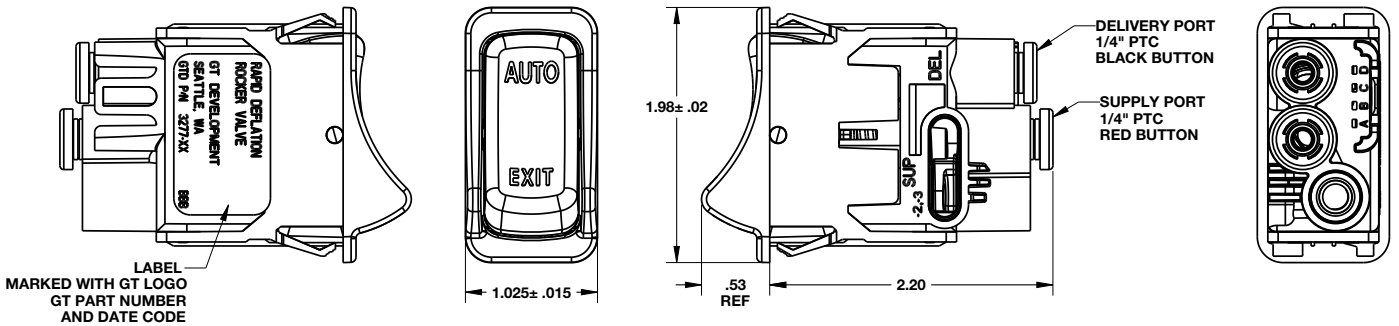
Nylon, glass filled



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

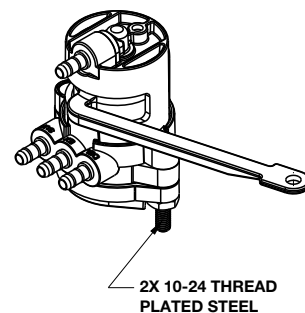
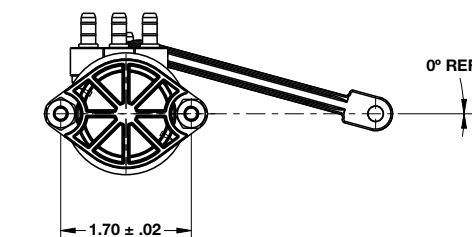
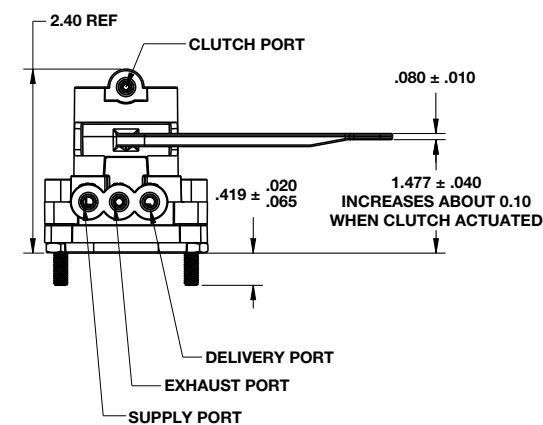
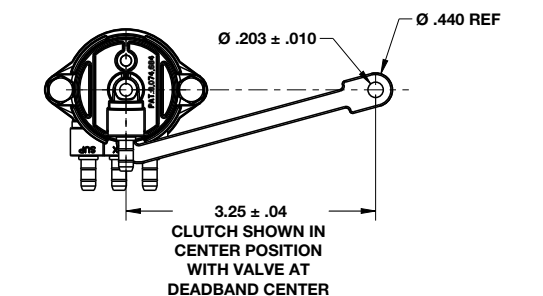
Tube O/D:
1/4"



Models

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

Specifications



SEAT HEIGHT MEMORY CONTROL SYSTEM

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 & 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 zones at the extremes of seat stroke to reduce back injuries
- > Self-compensates for any small air system leaks

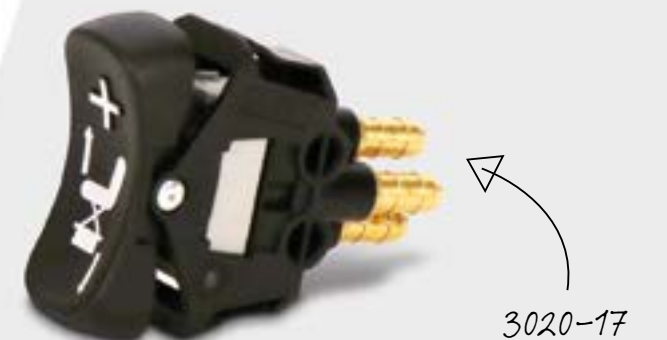
Technical Data:

- > Operating pressure: 0 - 150 psi
- > Operating Temperature: -10°F to 130°F
- > Tube O/D: 1/4"

Utilizes existing industry proven products for a complete seat control solution

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

Contact an IMI Norgren representative to learn more about the IMI Norgren Seat Height Memory Control System.



Solenoid Valves

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.

*Robust modular
3-way valve
manifolding system*



*Patented design
provides flexibility*



*Robust for use on and
around the engine*

SOLENOID VALVES

5020, 5022, 5023, 5025 & 85020 Series

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

Technical Data

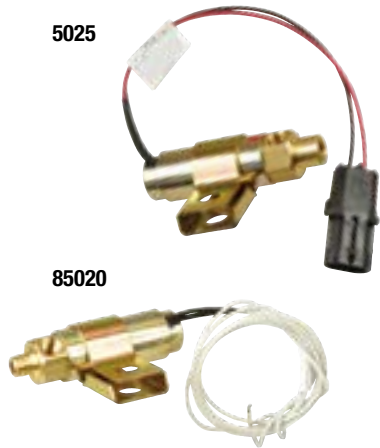
Thread type:
1/8" NPTF

Operating voltage:
12Vdc

Electrical connector:
Flying lead

Material

Steel body, Brass manifold, FPM seals



Models

Model	Description	Packaged	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

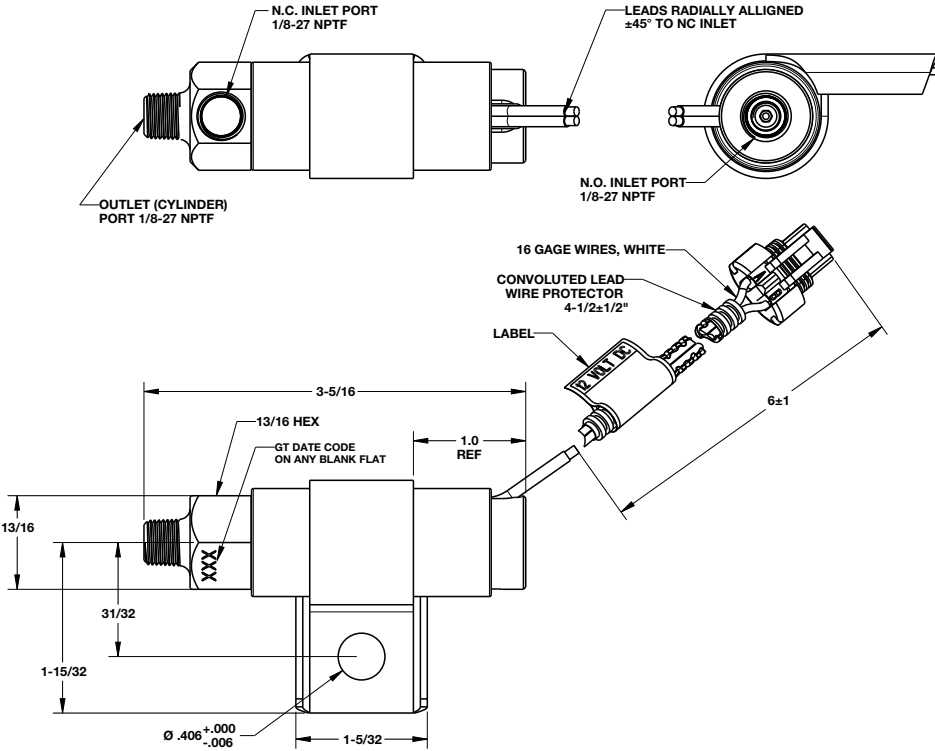
Accessories	Description
5050	 Commerical In-Line Filter
5060-1	 Commercial Vehicle Exhaust Vent Shield

SOLENOID VALVES

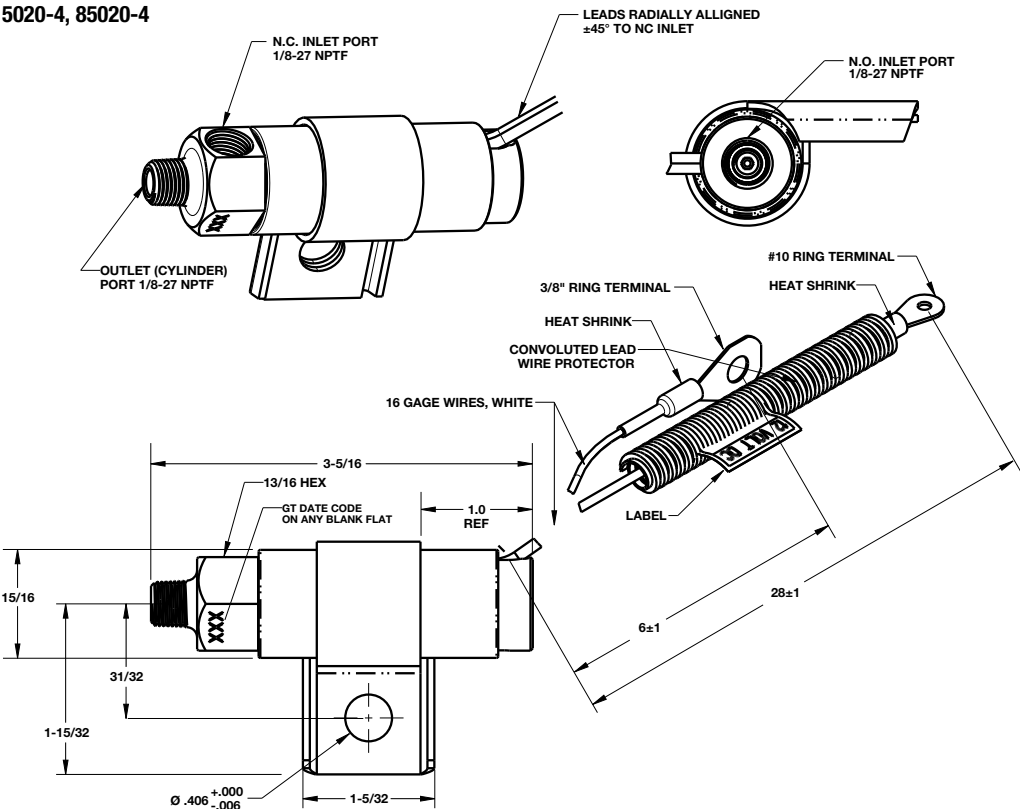
5020, 5022, 5023, 5025 & 85020 Series

Specifications

5020-1, 85020-1



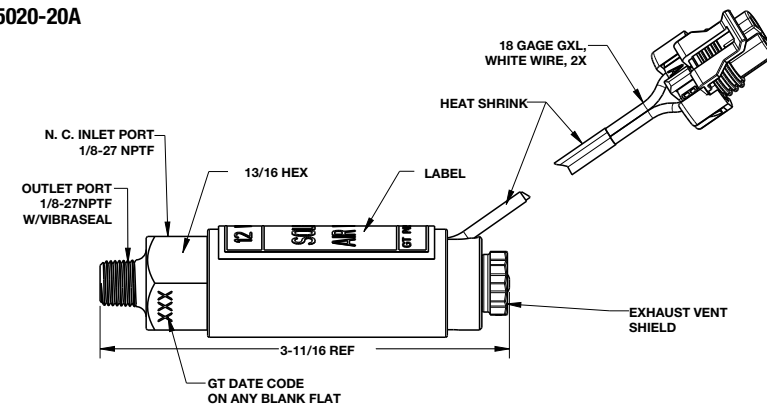
5020-4, 85020-4



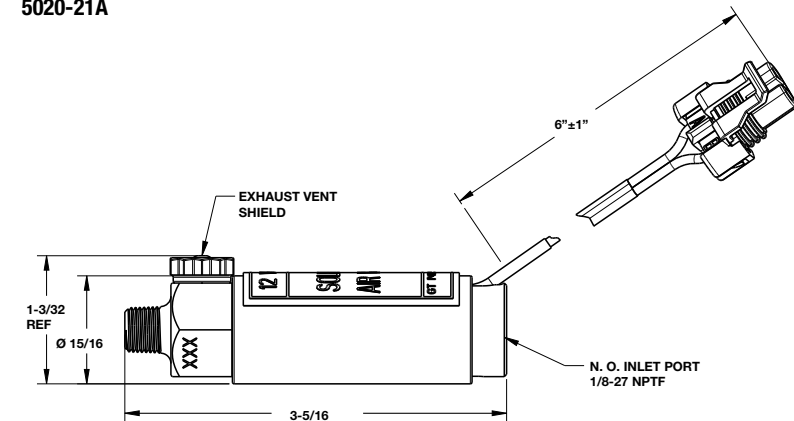
SOLENOID VALVES

5020, 5022, 5023, 5025 & 85020 Series

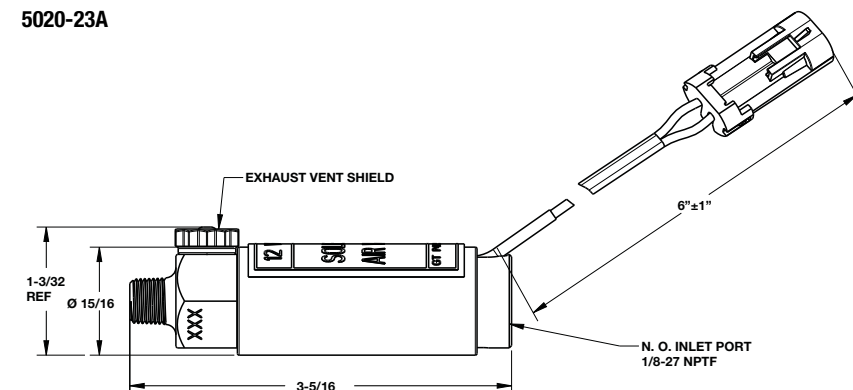
5020-20A



5020-21A



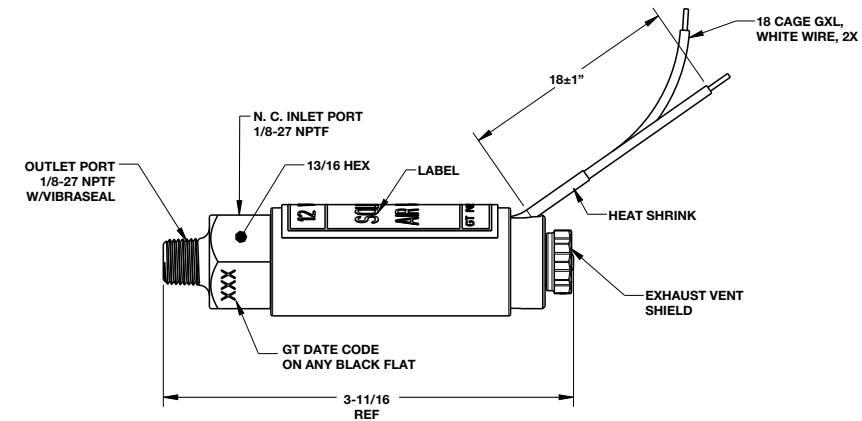
5020-23A



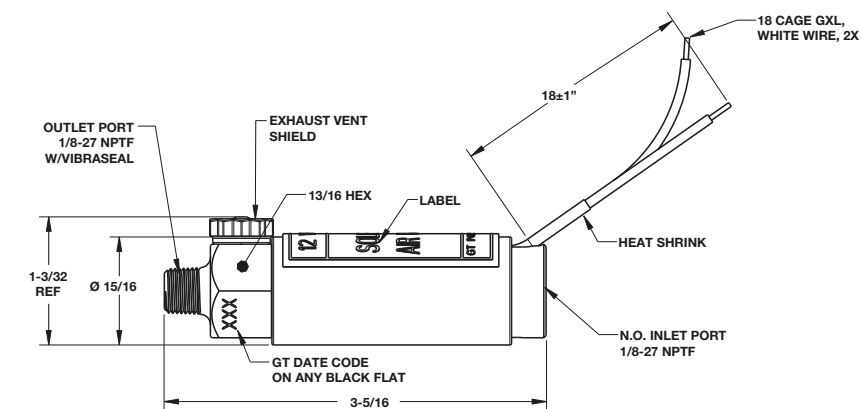
SOLENOID VALVES

5020, 5022, 5023, 5025 & 85020 Series

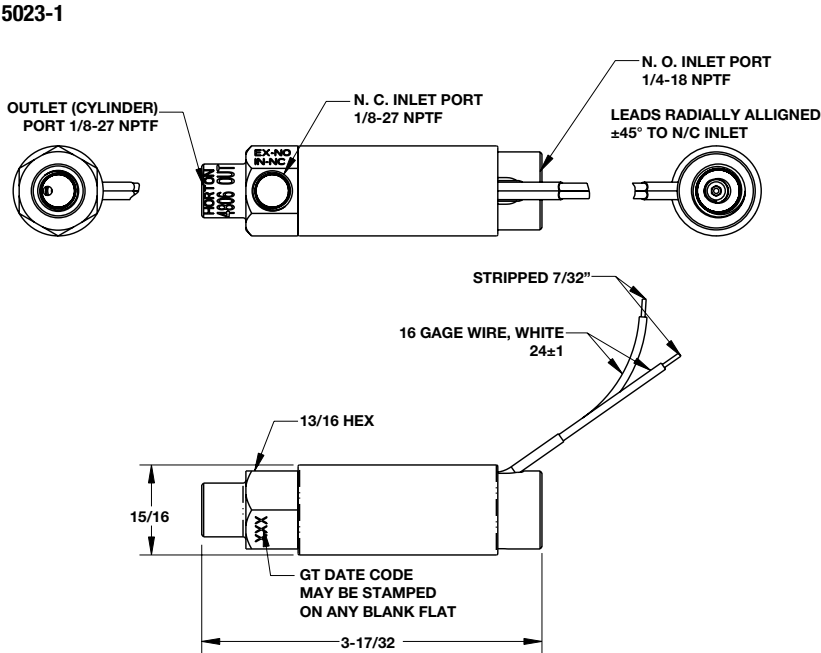
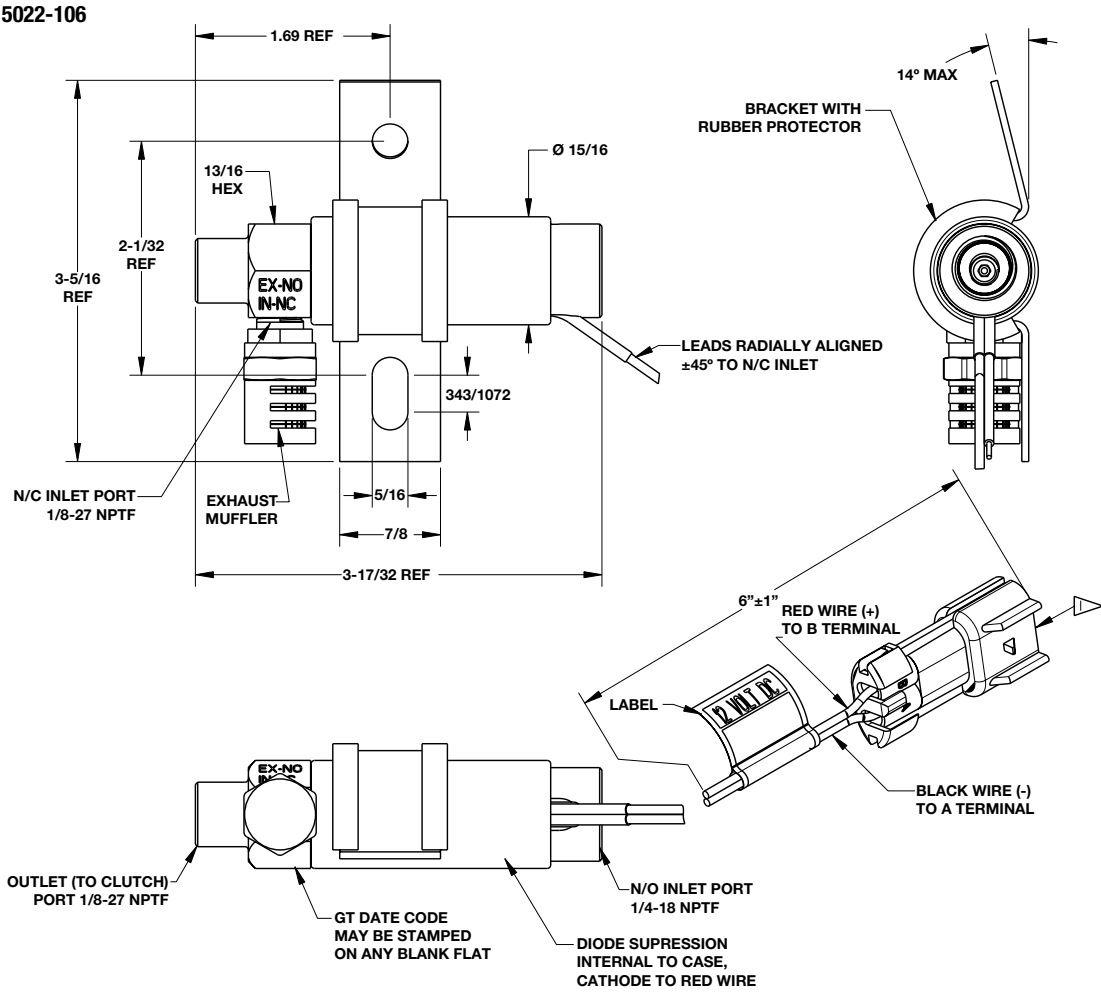
5020-25A



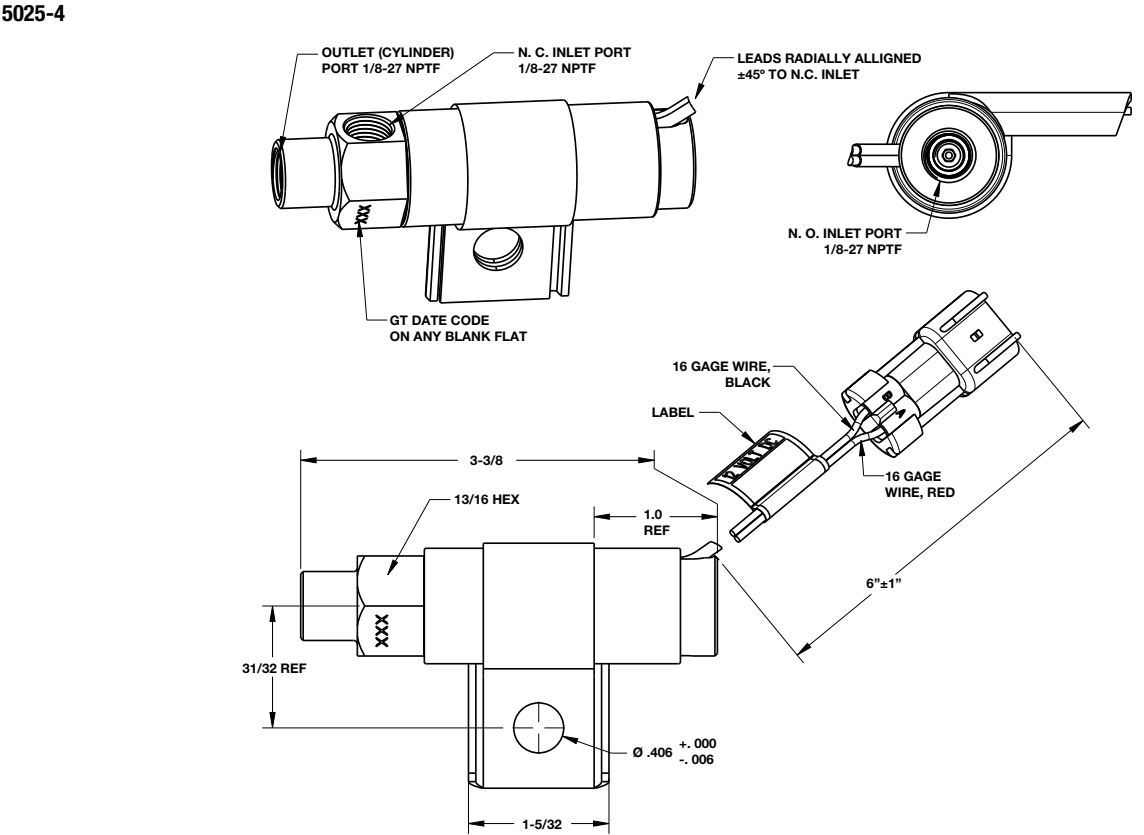
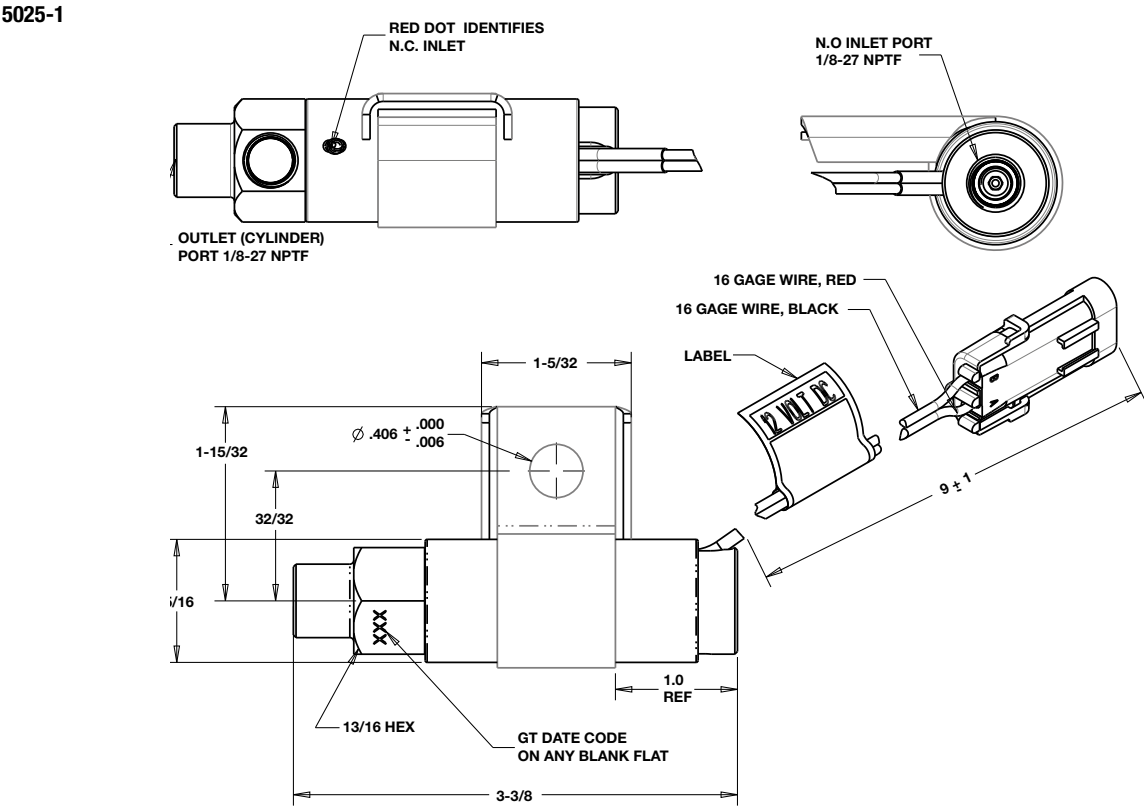
5020-28A



SOLENOID VALVES
5020, 5022, 5023, 5025 & 85020 Series

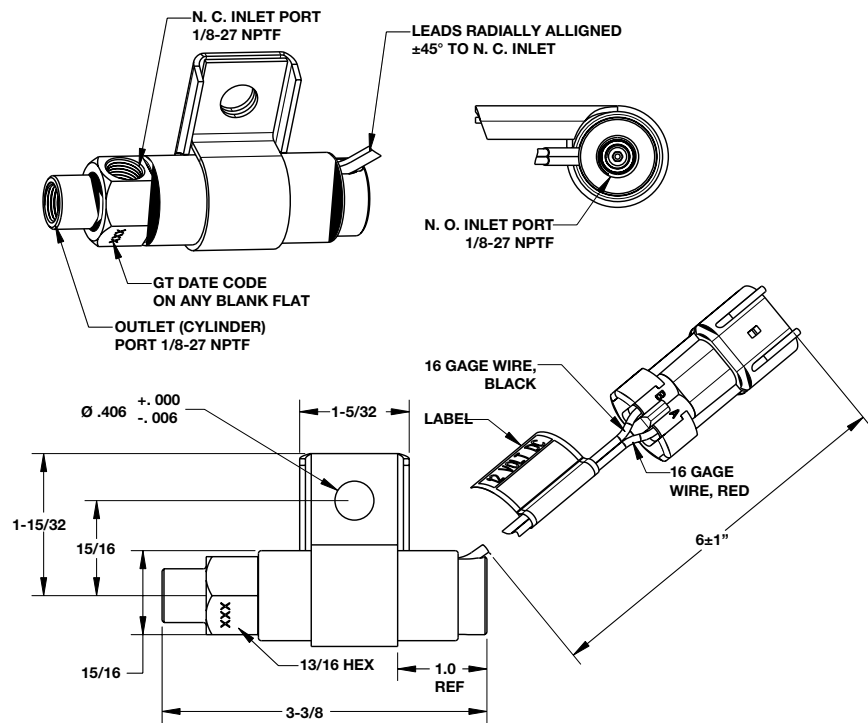


SOLENOID VALVES
5020, 5022, 5023, 5025 & 85020 Series

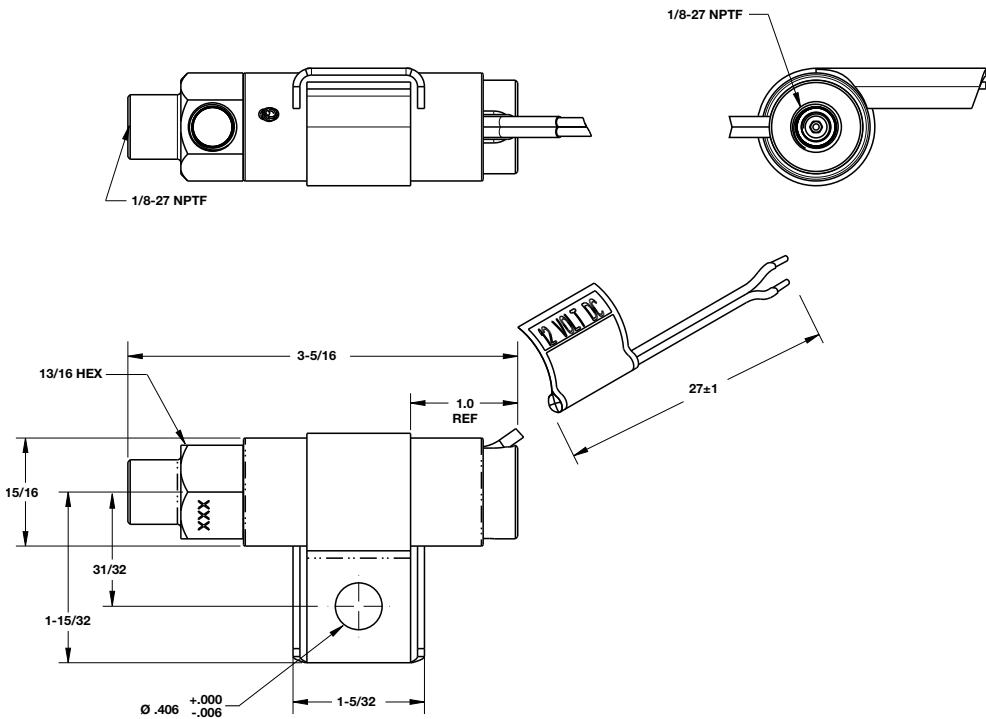


SOLENOID VALVES
5020, 5022, 5023, 5025 & 85020 Series

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

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

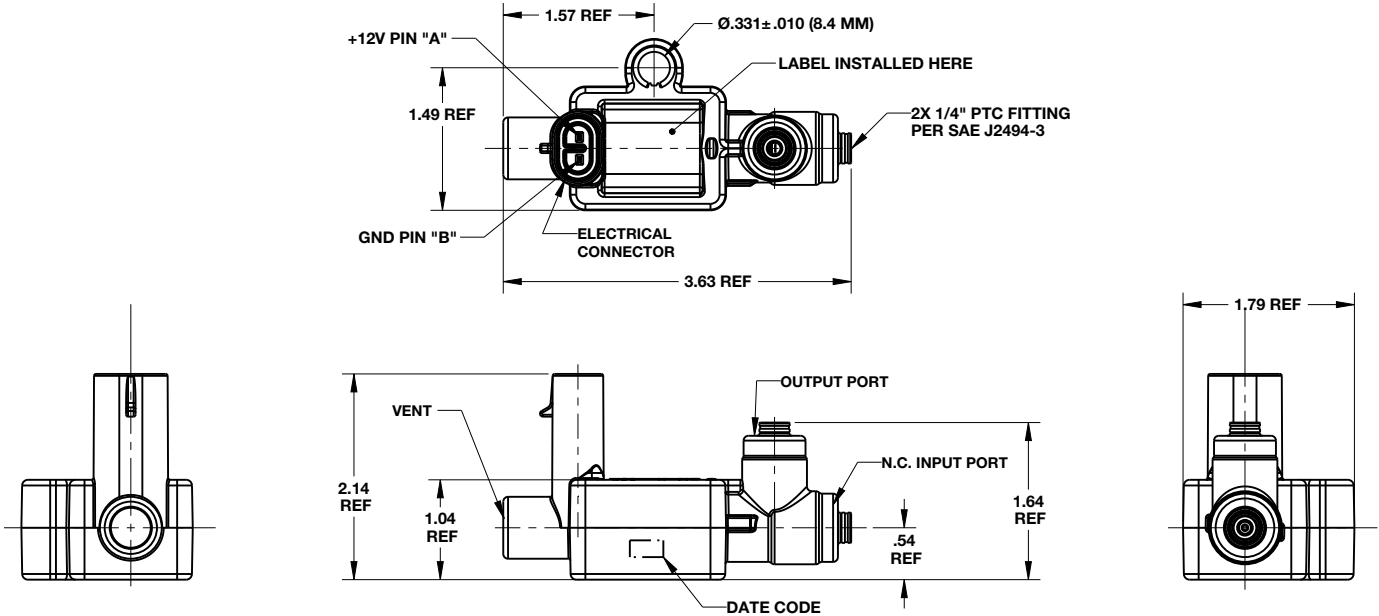


Models

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"

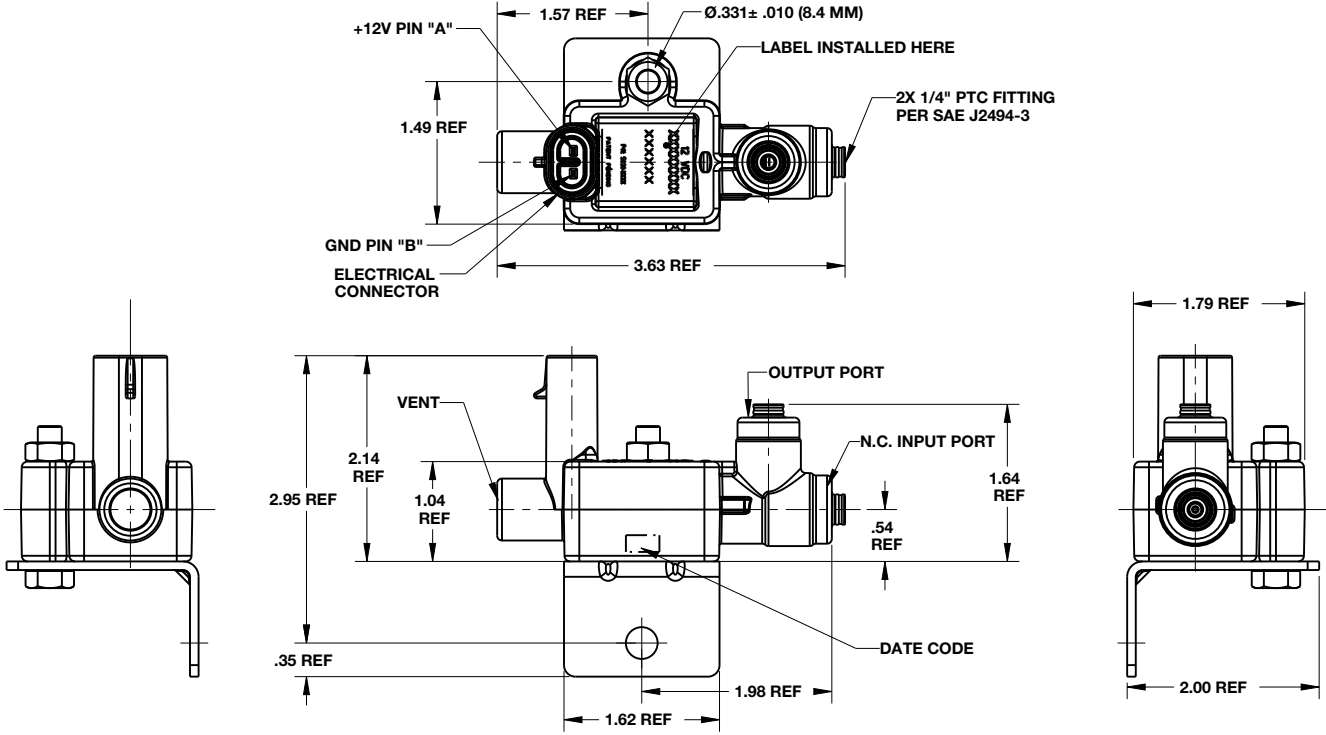
Specifications

5030-111

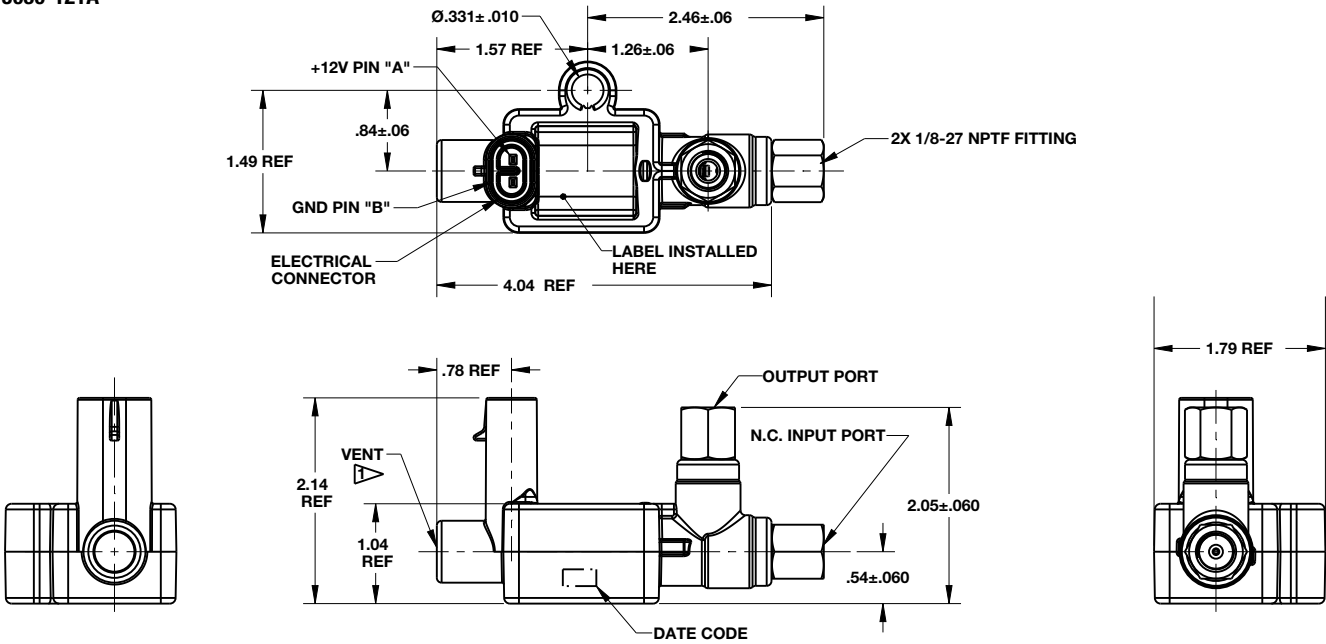


SOLENOID VALVES
5030 Series

5030-111-1

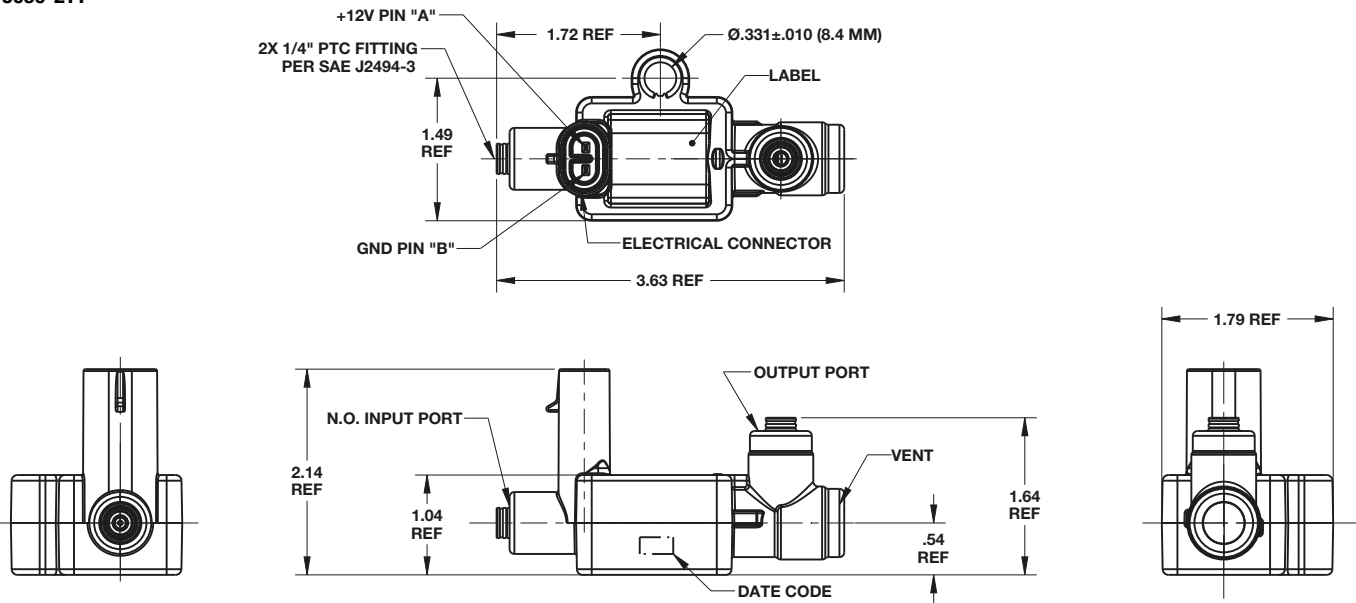


5030-121A

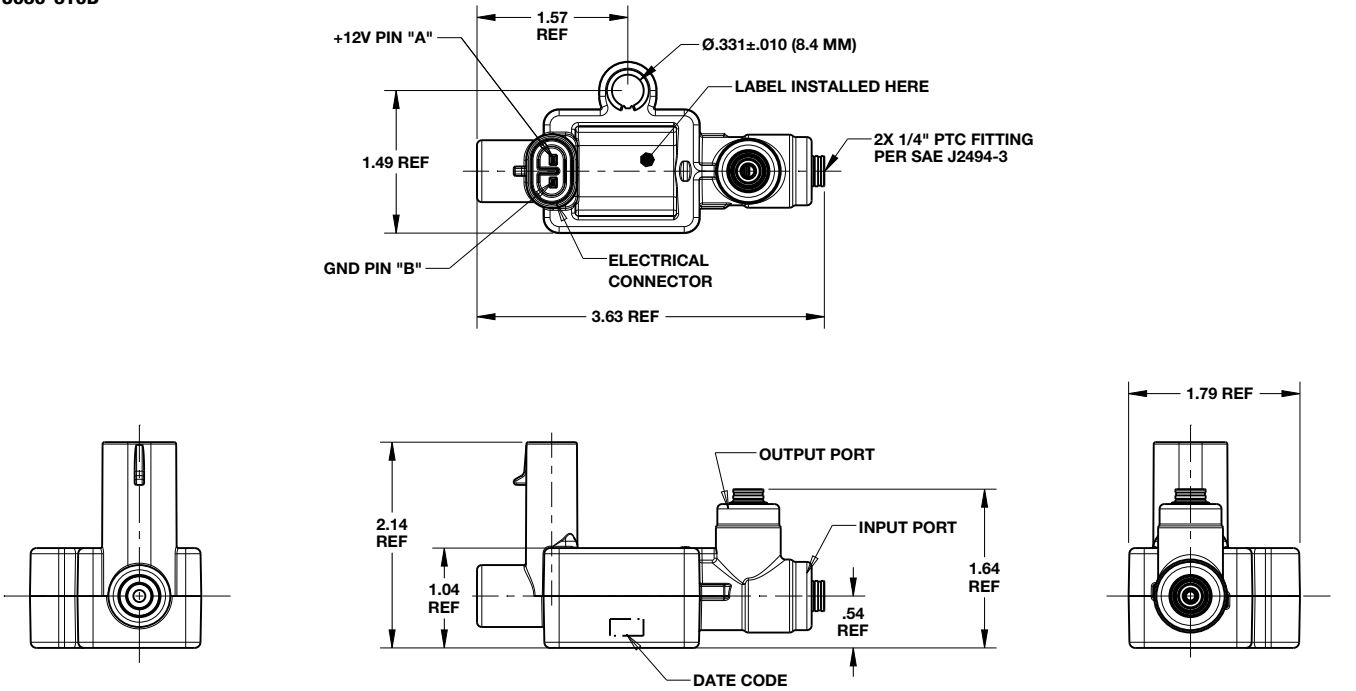


SOLENOID VALVES
5030 Series

5030-211



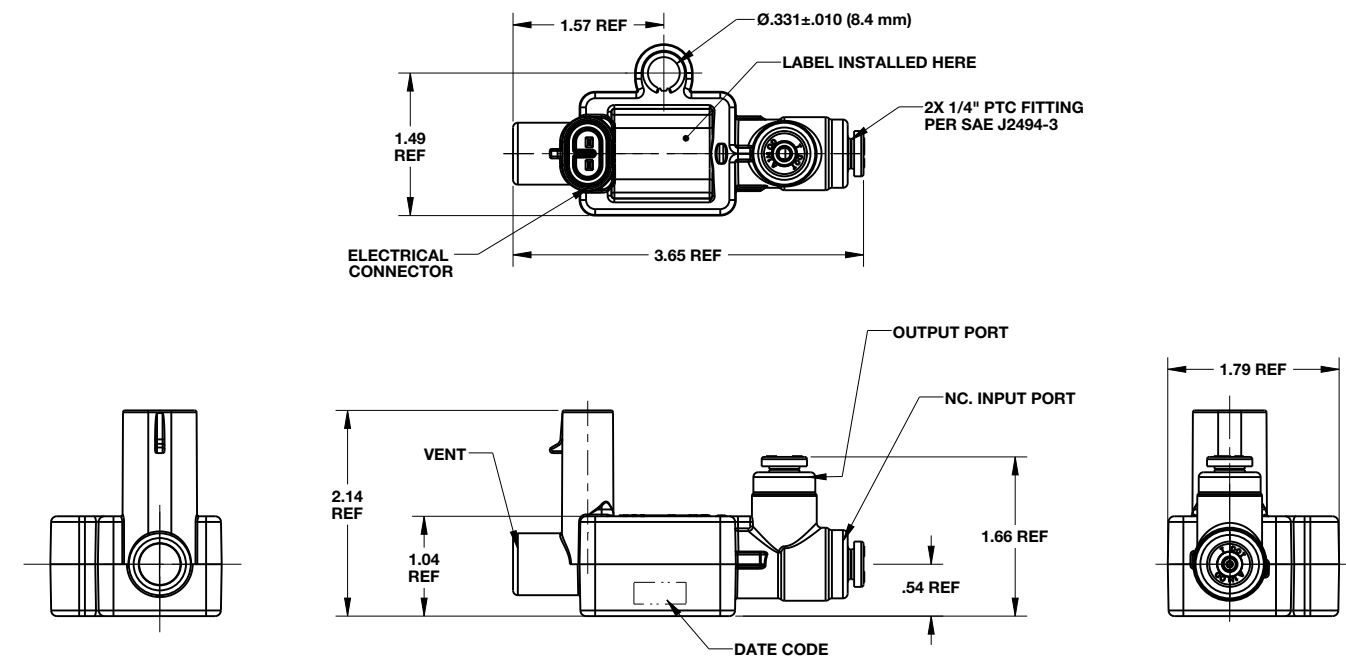
5030-310B



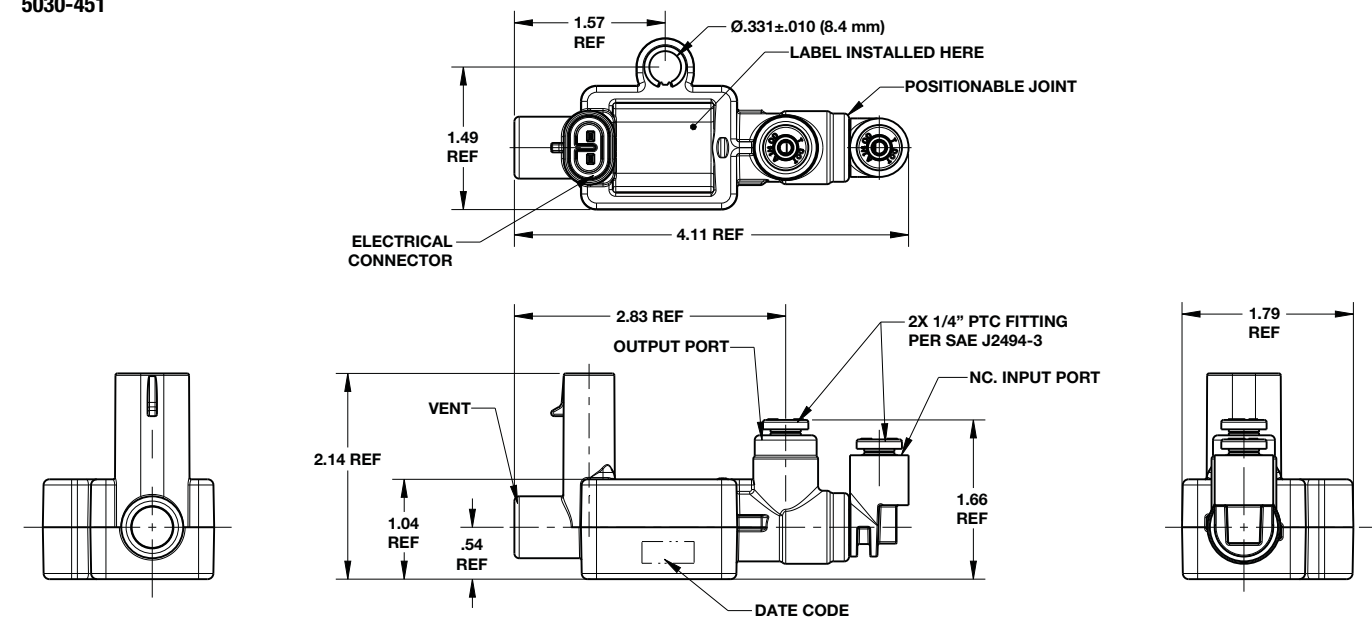
SOLENOID VALVES

5030 Series

5030-411A



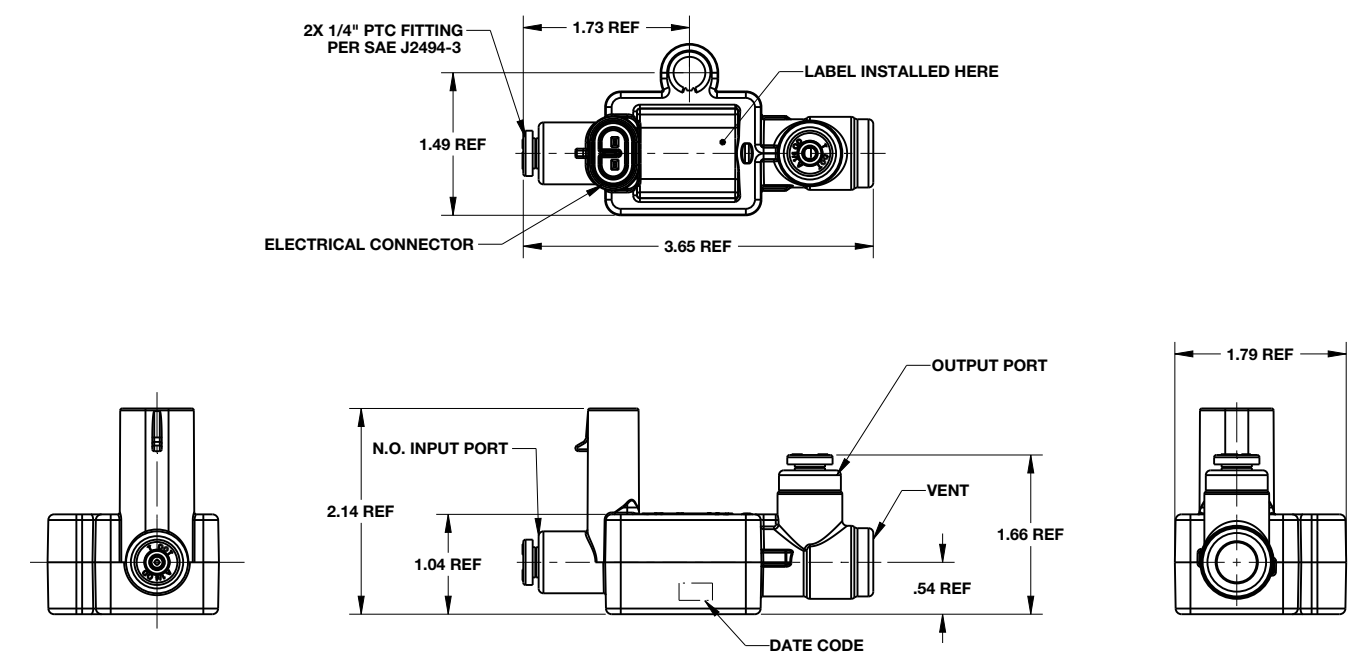
5030-451



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

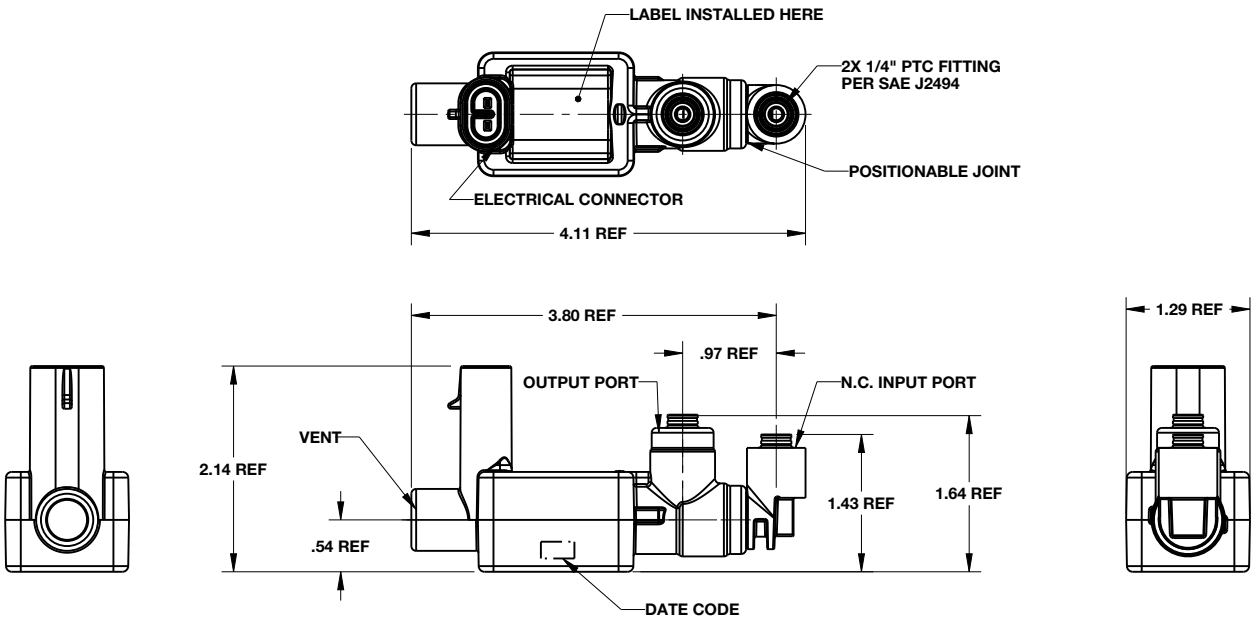
Nylon, glass filled



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+C).
Please consult factory for configurations using more than 8 stations.

End Plates

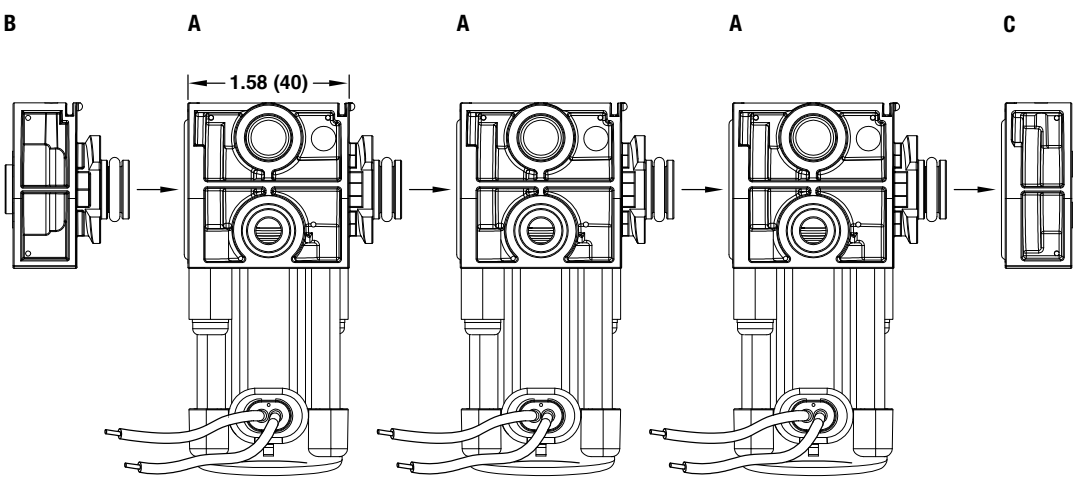
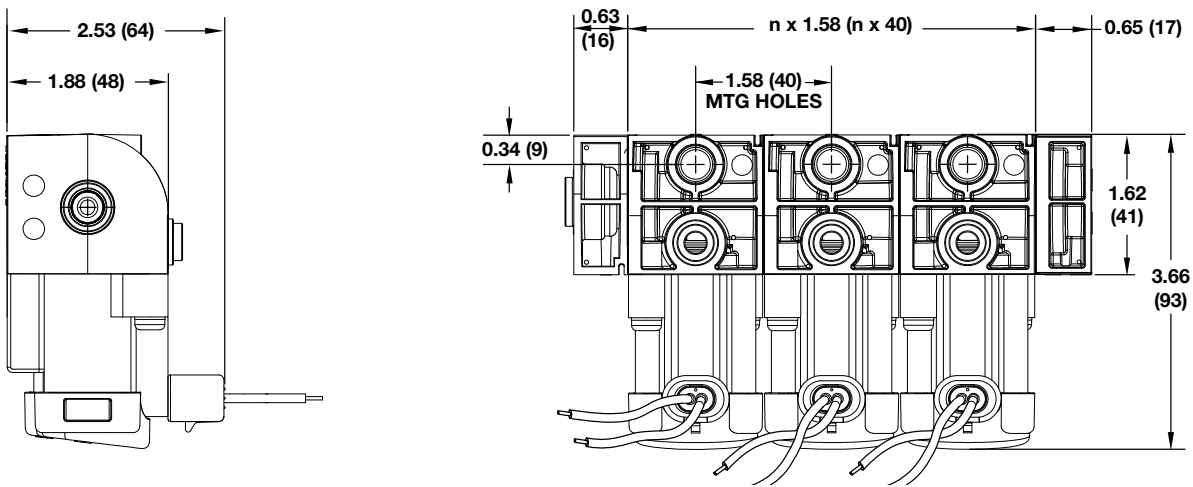
Model	Description	Position
7202-70	Inlet Left Hand End Plate (3/8" PIF)	B
7203-70	Cap Right Hand End Plate	C

1/4" Colored caps

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

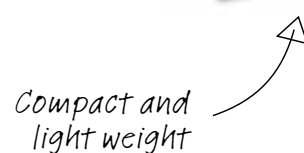
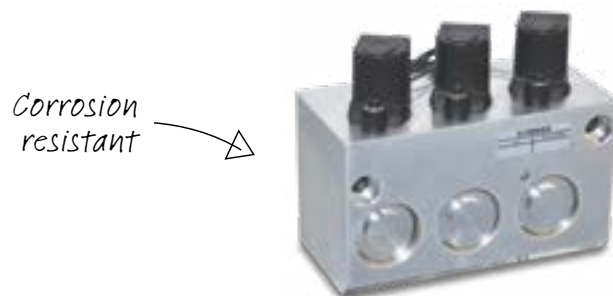
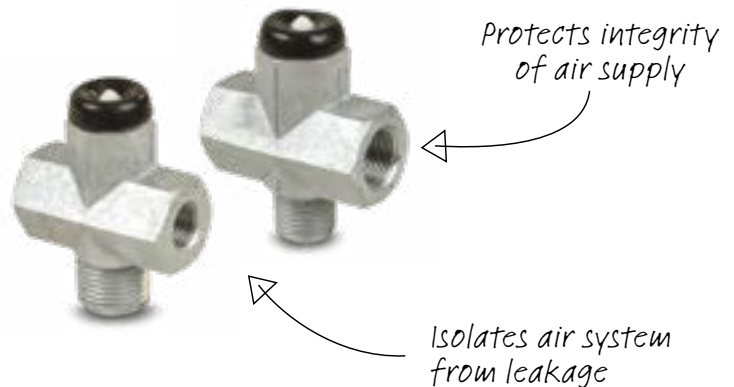
AIR SOLENOID ACCESSORY PACK
ASAP Series

● Specifications



Valves

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

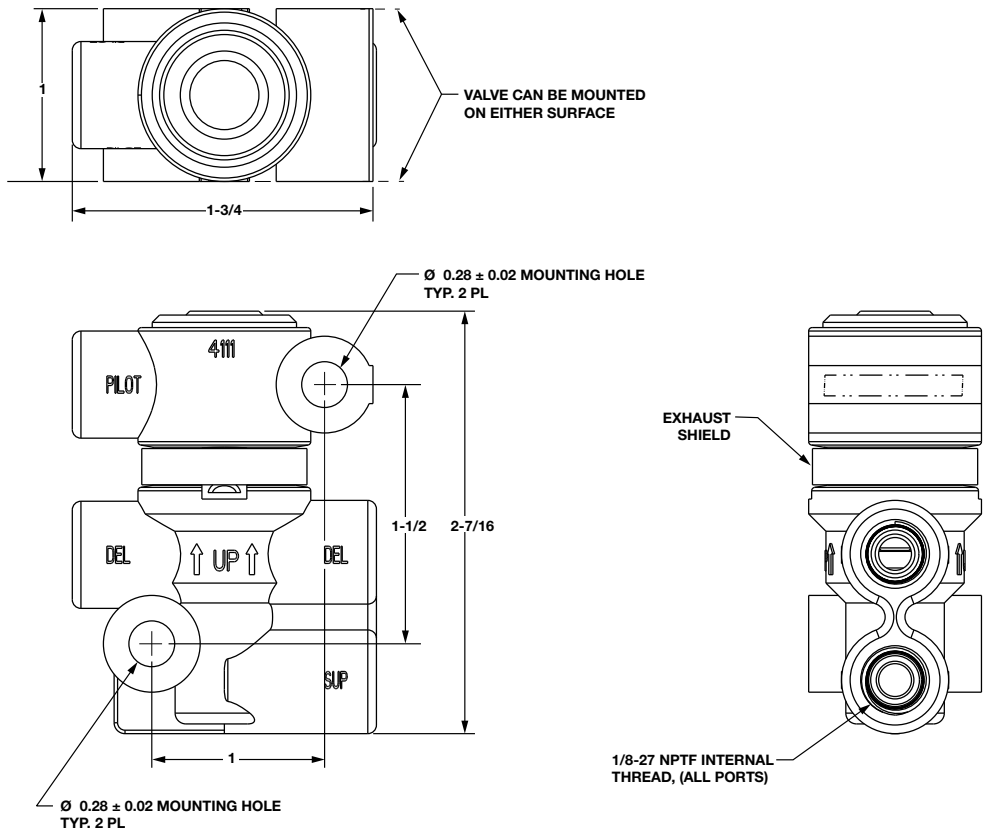
Die cast Zinc



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

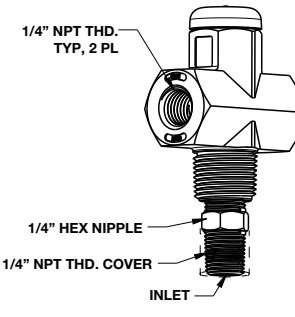
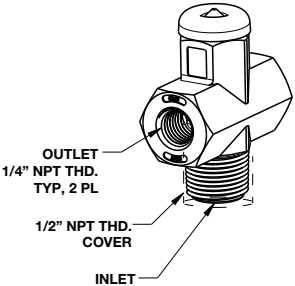
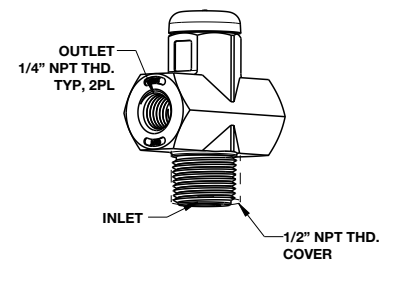
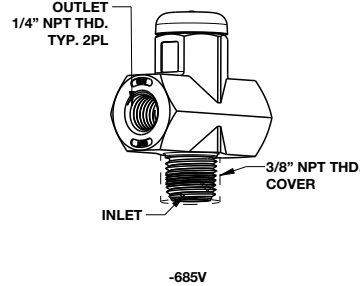
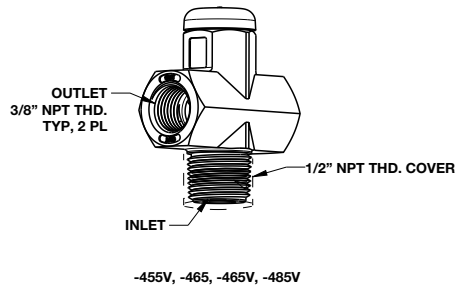
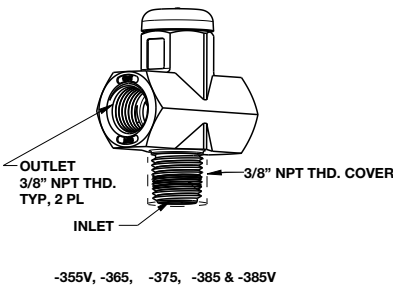
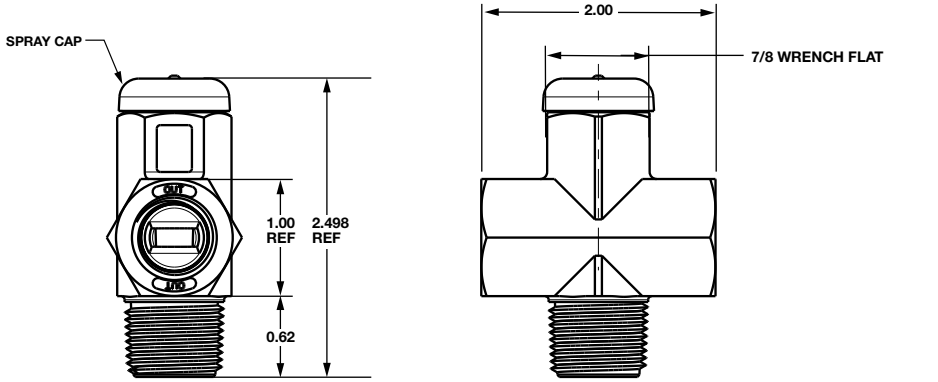


Models

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.

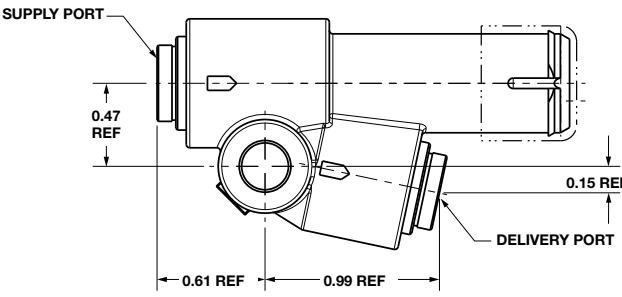
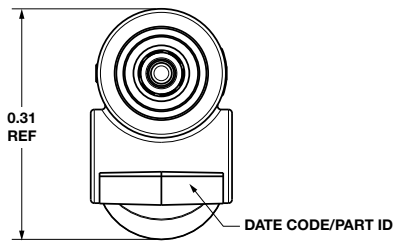
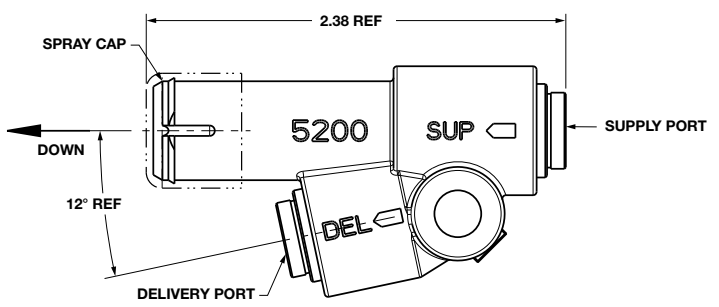
Material
Thermoplastic body with
Fluorosilicone seals



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, IMI Norgren check valves are designed for strength and durability
- Single and double check valves are available, with multiple port sizes
- Incorporating standard IMI 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	-

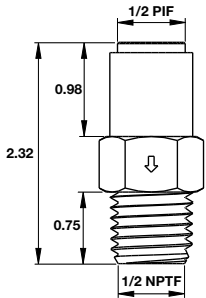
Models - Double Check Valves

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

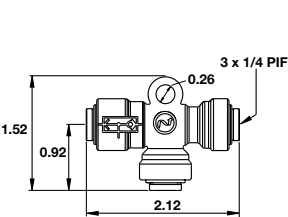
SINGLE CHECK VALVES

95403701M

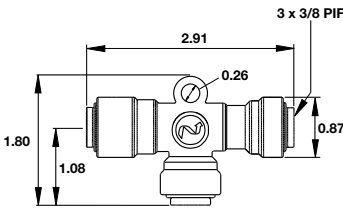


DOUBLE CHECK VALVES

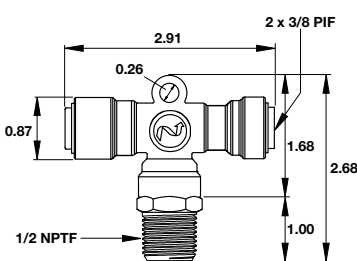
AI04000404074



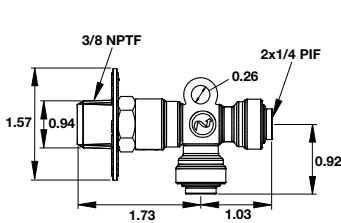
AI06000606074



AI06000648473



AI38000404474



MANUAL AND 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
									
03029322 ¹	Roller lever (heavy duty)/Spq	1/8	0.34	A, 7	1/8	1/4	95453004M	95433104M	MS001A
									
03040222 ¹	Roller/Spring	1/8	0.34	A, 2	1/8	1/4	95453004M	95433104M	MS001A
									
03040022 ¹	Plunger Spring	1/8	0.34	A, 1	1/8	1/4	95453004M	95433104M	MS001A
									
03041122 ¹	Roller lever/Spring	1/8	0.34	A, 3	1/8	1/4	95453004M	95433104M	MS001A
03061122 ¹	Roller lever/Spring	1/4	0.98	B, 6	1/4	3/8	95453018M	95433112M	MS002A
									
03043222 ¹	Antenna/Spring	1/8	0.34	A, 5	1/8	1/4	95453004M	95433104M	MS001A
									
03041022 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

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

Models - 3/2 Manual valves

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

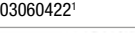
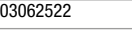
Accessories

Accessories

MANUAL AND MECHANICAL ACTUATED SPOOL VALVE

Super X

Models - 3/2 Manual valves

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

Models - 5/2 Manual valves

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

1 Normally closed

MANUAL AND MECHANICAL ACTUATED SPOOL VALVE
Super X

Models - 5/2 Manual valves

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

Accessories

Models - 5/3 Manual valves

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

3 All ports blocked

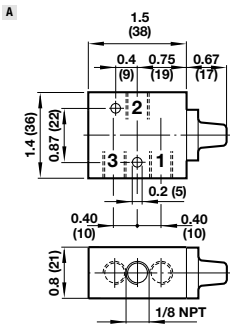
Accessories

MANUAL AND MECHANICAL ACTUATED SPOOL VALVE
Super X

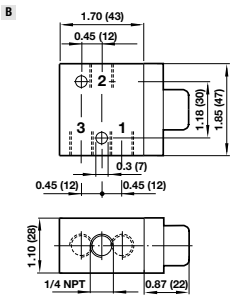
Specifications

VALVE BODIES

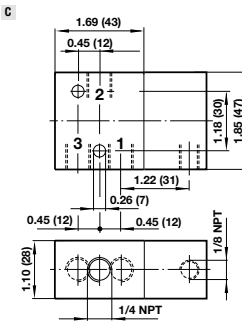
1/8, 3/2 Spring return, basic body



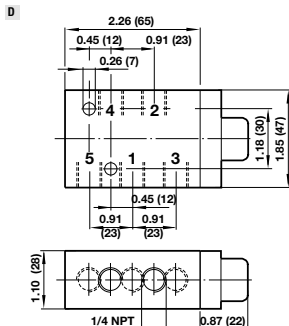
1/4, 3/2 Spring return, basic body



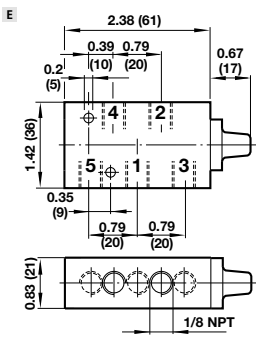
1/4, 3/2 Pilot return, basic body



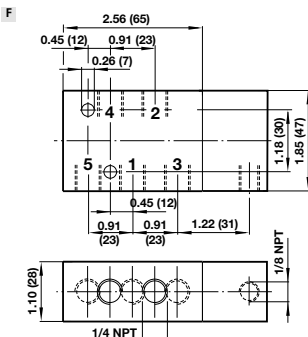
1/8, 5/2 Spring return, basic body



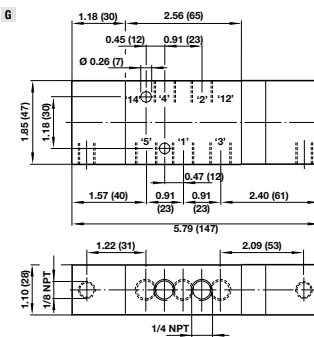
1/4 and 1/8, 5/2 Spring return, basic body



1/8, 5/2 Pilot return, basic body

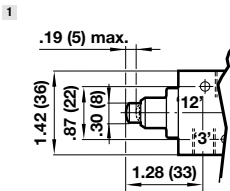


1/4, 5/3 Spring return, basic body

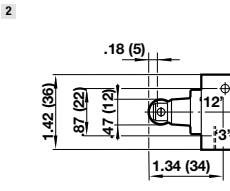


MECHANICAL VALVE ACTUATORS

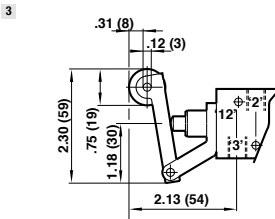
Plunger – 1/8 valves



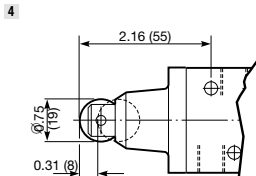
Roller – 1/8 valves



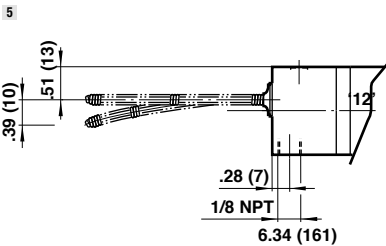
Roller lever – 1/8 valves



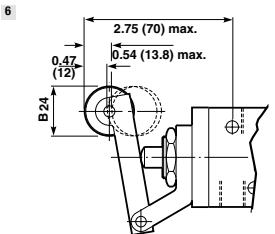
Roller – 1/4 valves



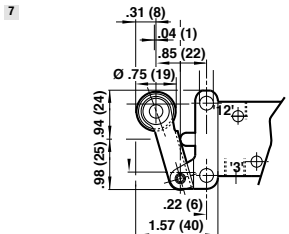
Antenna – 1/8 valves



Roller lever – 1/4 valves



Heavy duty roller lever – 1/8 valves



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

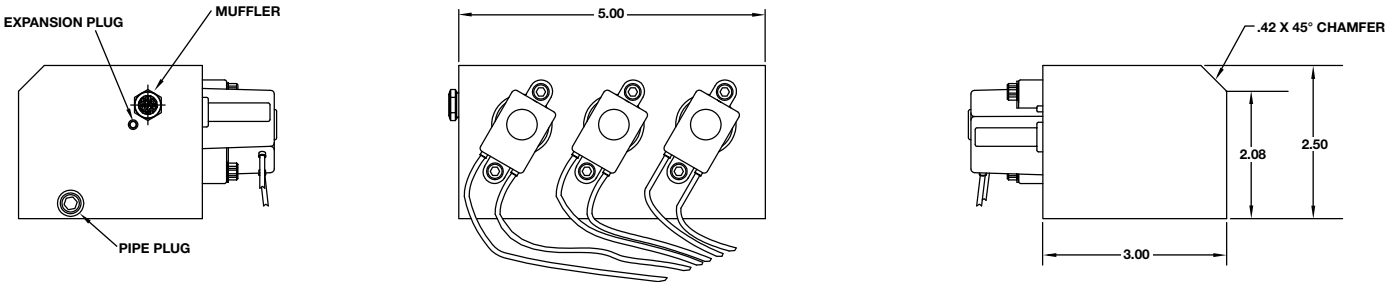
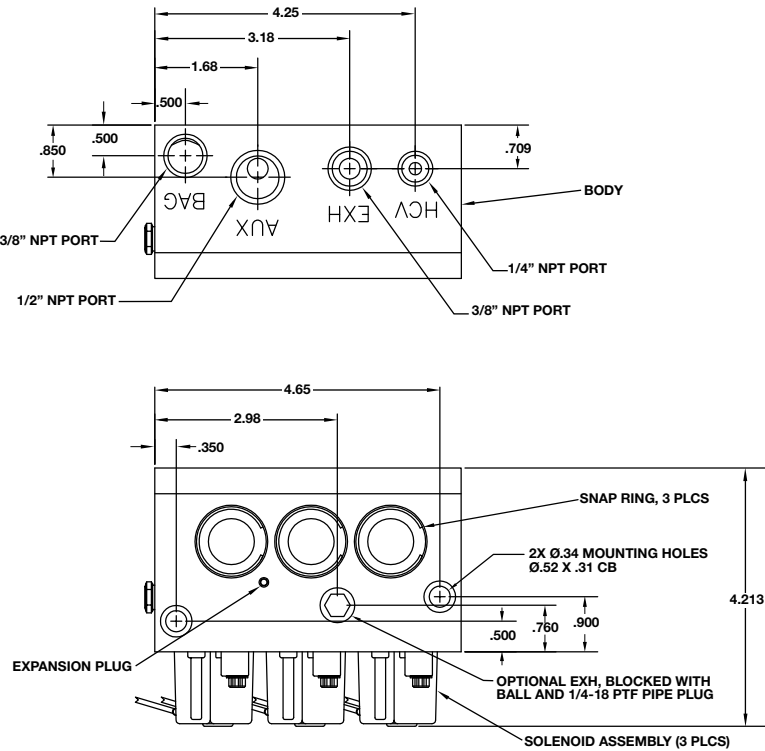
Body: Aluminum
Elastomers: Carboxylated Nitrile



KNEELING MANIFOLD

K990073 Series

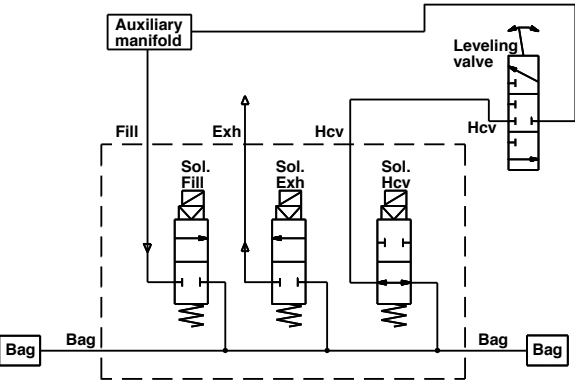
Specifications



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

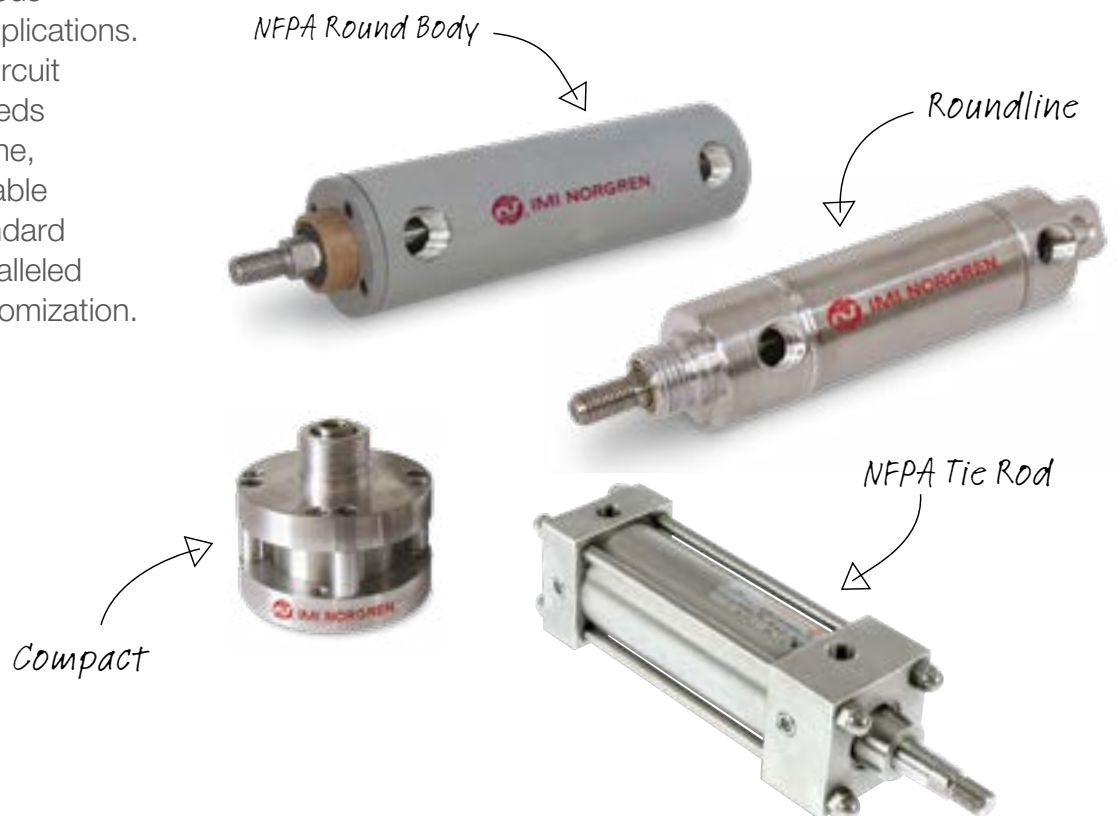
Models

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



Cylinders

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.



CYLINDERS

NFPA Interchangeable

Round Body (dual wall reinforced)

- > Built for the harshest environments with dual wall protection; 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, and stainless steel)

- > Repairable cylinders in a vareity of mounting options
- > Optional adjustable cushioning availalble

Extruded Body (aluminum)

- > Verastile 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 IMI Norgren representative to find the product that meets your specific commercial vehicle needs.

Fuel Management

10

11

12

Fast Find Guide

IMI 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 110

● Vents

Fuel Tank Vents 201 Series & 2113-1	High-flow Fuel Tank Vents 2989-11, 2989-11V
Page 118	Page 121

● Other Fuel Products

Return Flow Splitter 2252 Series	Linegard® Breakaway Valves 2200-1
Page 124	Page 125

Caps

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.

*Maximum fuel
system protection*



*Great safety
features*

FUEL & HYDRAULIC TANK CAPS

- IMI 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 local IMI 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

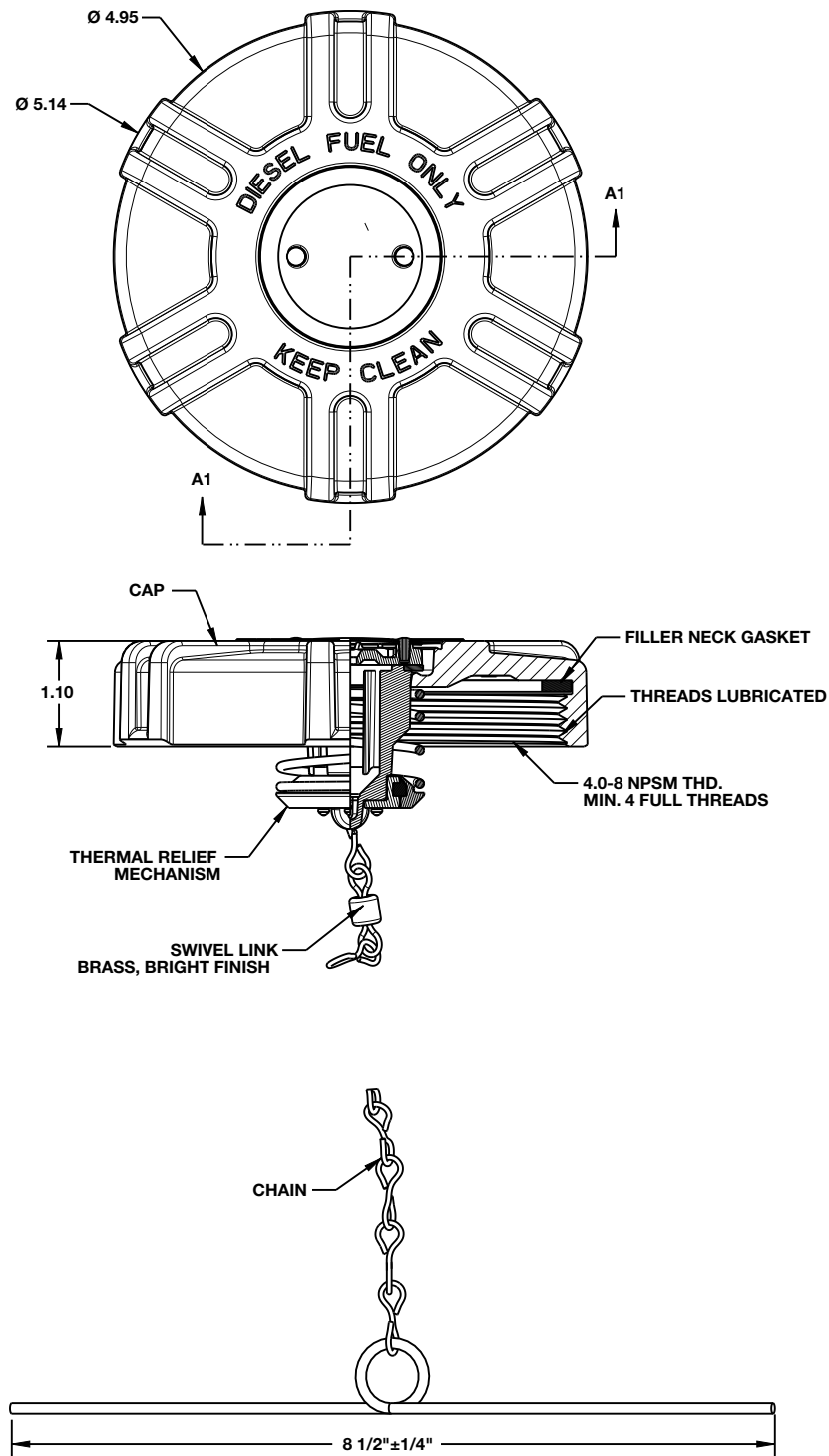
Other Caps

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

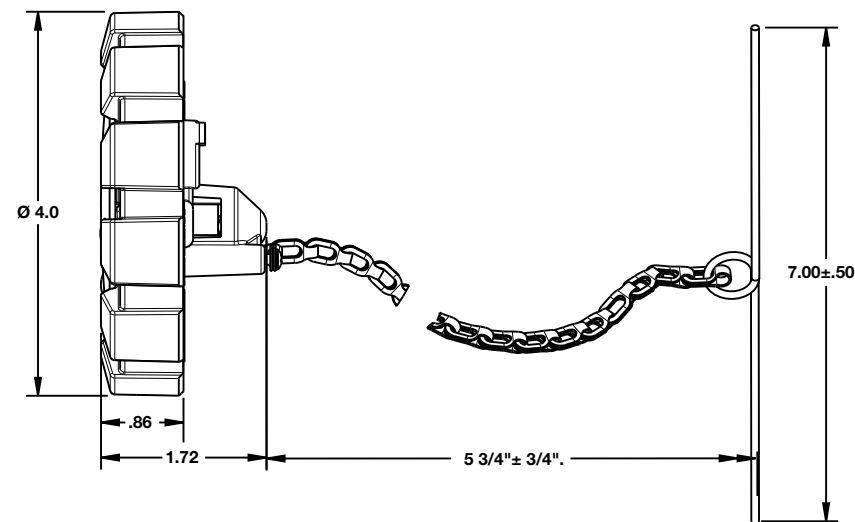
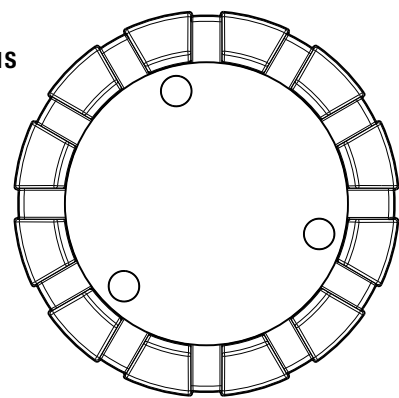
FUEL TANK CAPS

Specifications

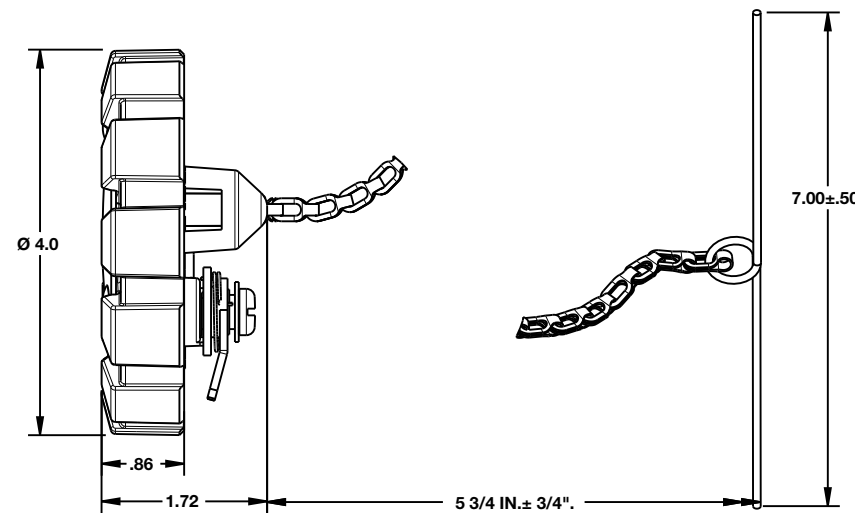
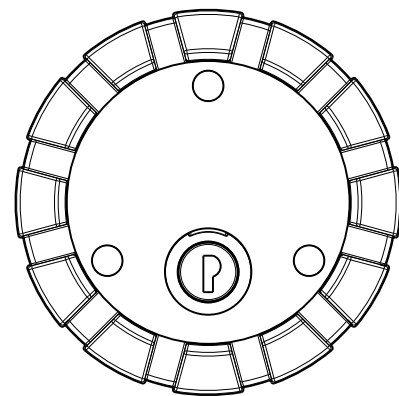
①
2011-1, 2011-1C



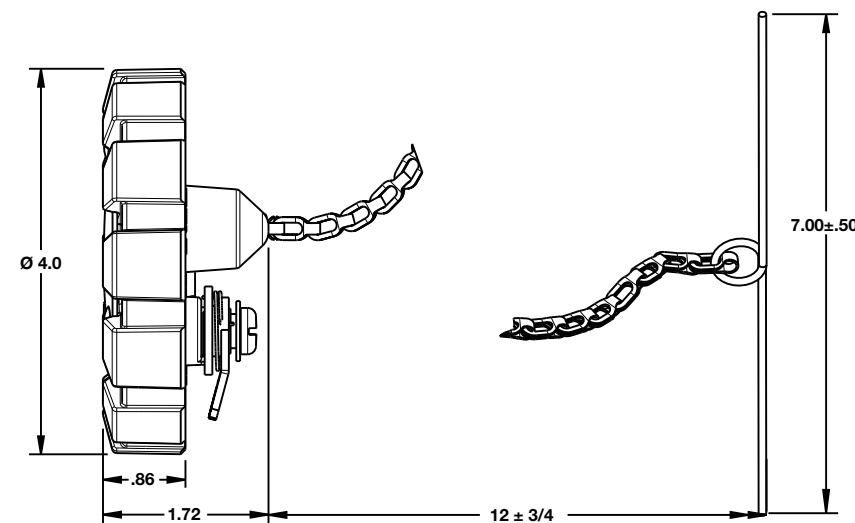
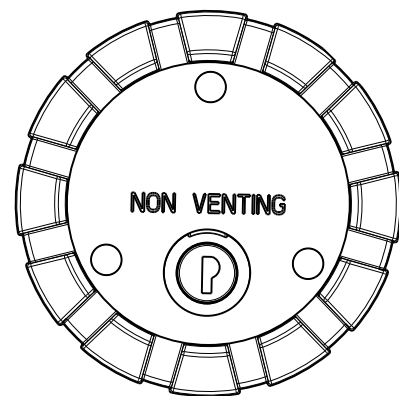
②
249-1S



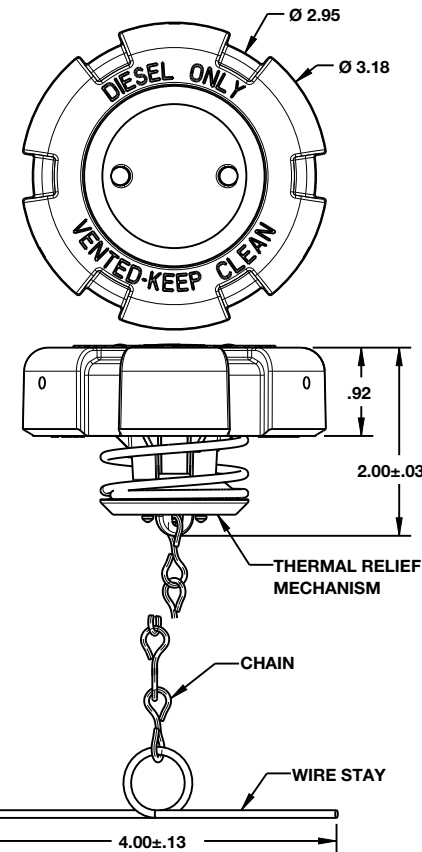
③
249-3S



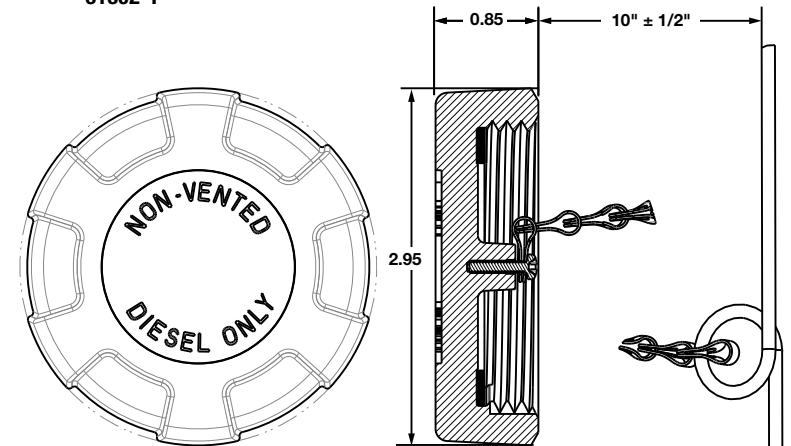
④
249-5P



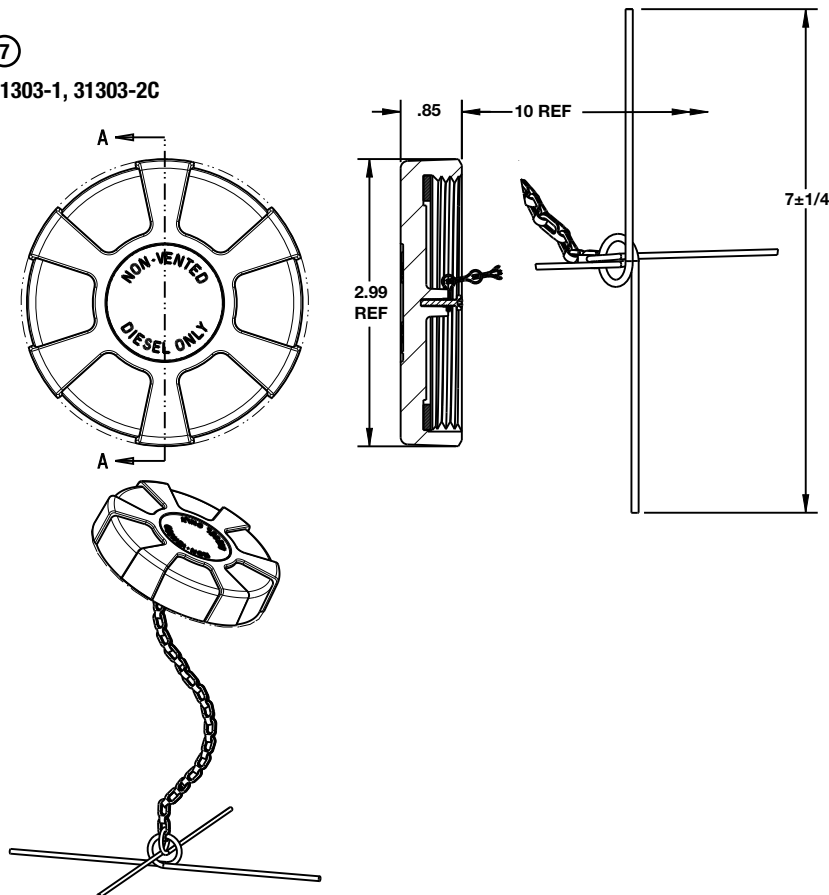
⑤
253-2



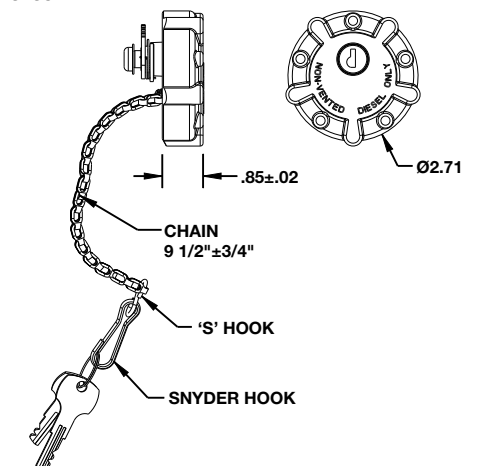
⑥
31302-1



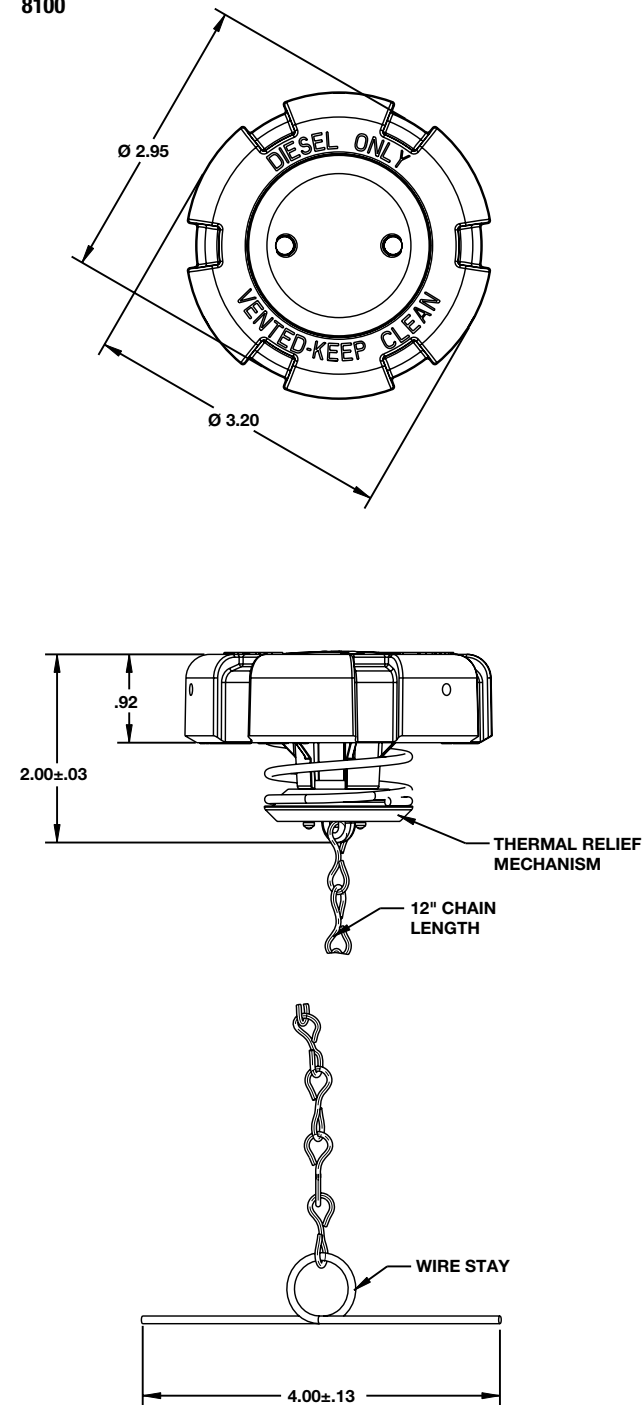
⑦
31303-1, 31303-2C



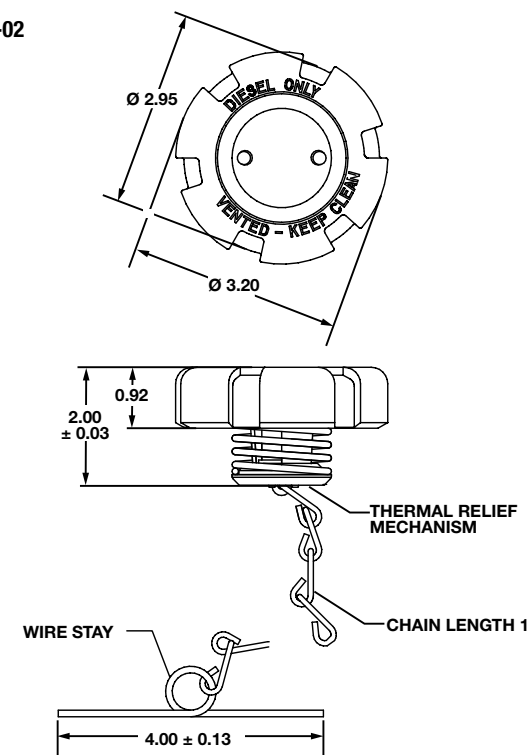
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31307-1



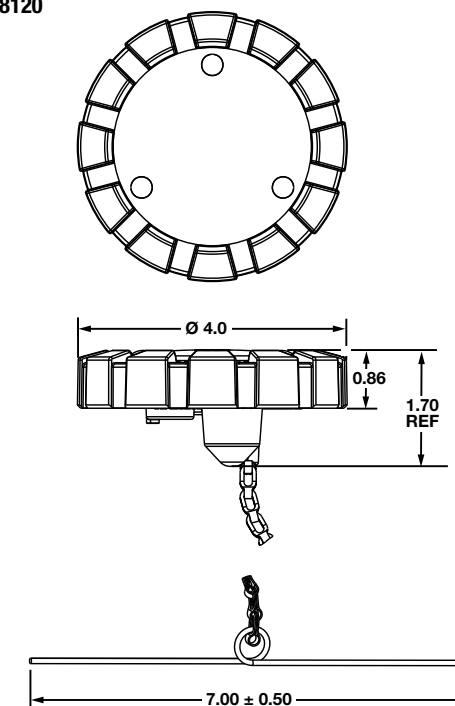
⑨
8100



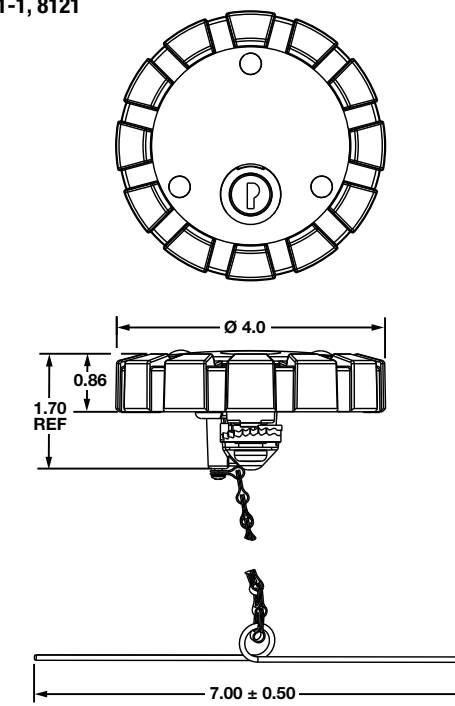
⑩
8103, 8105-02



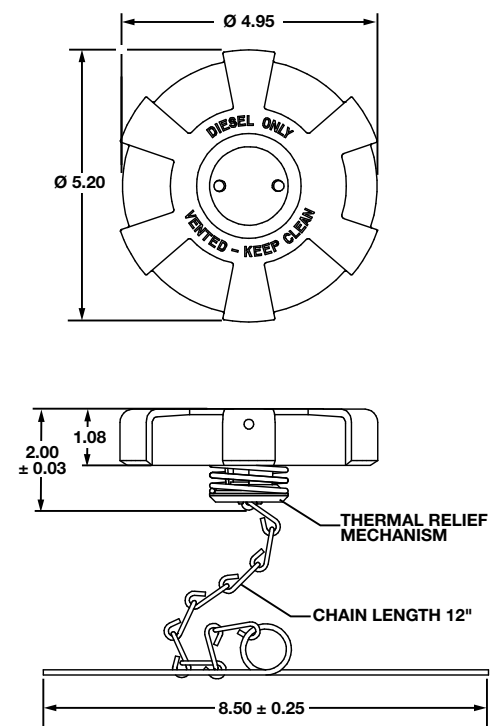
⑪
8110, 8110-1, 8120



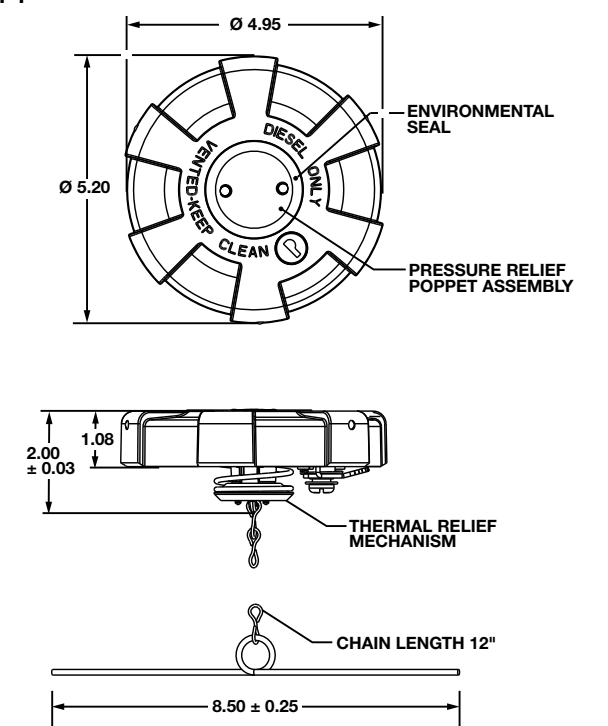
⑫
8111, 8111-1, 8121



⑬
8130



⑭
8131, 8131-1



Vents

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.

*Anti-spill
protection*



*Rollover
protection*



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:	Hex size:
1/4-18 NPTF	7/8"
1/2-14 NPTF	9/16"
1-1/4 PTF	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	



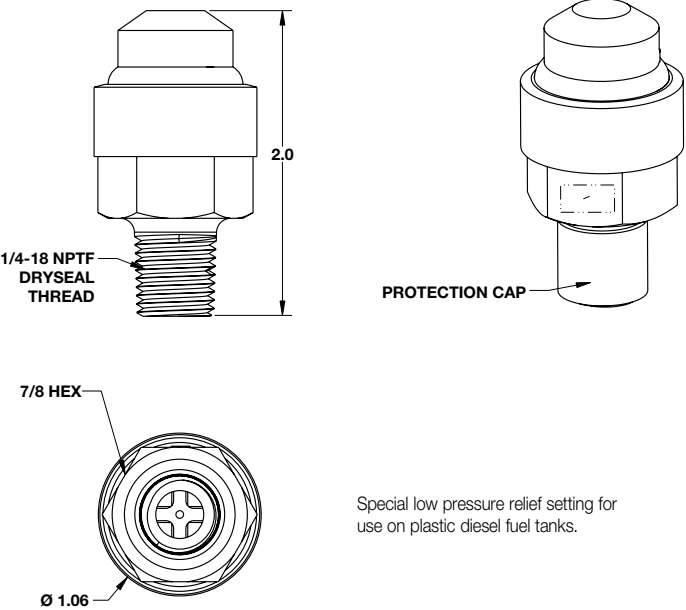
Models

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

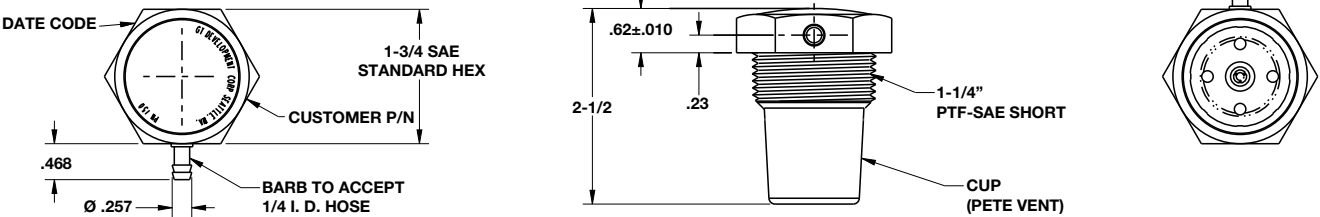
139-1



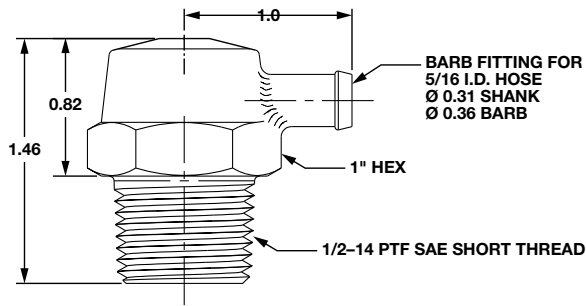
FUEL TANK VENT

201 SERIES & 2115-1

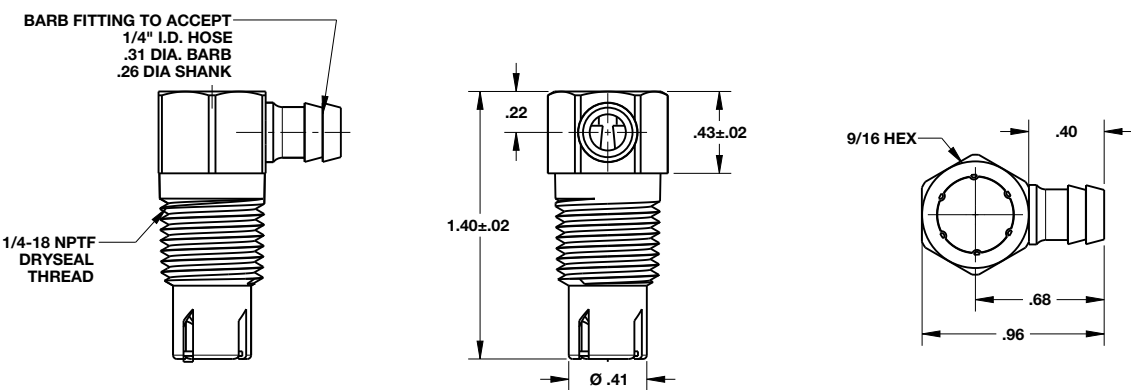
150-5



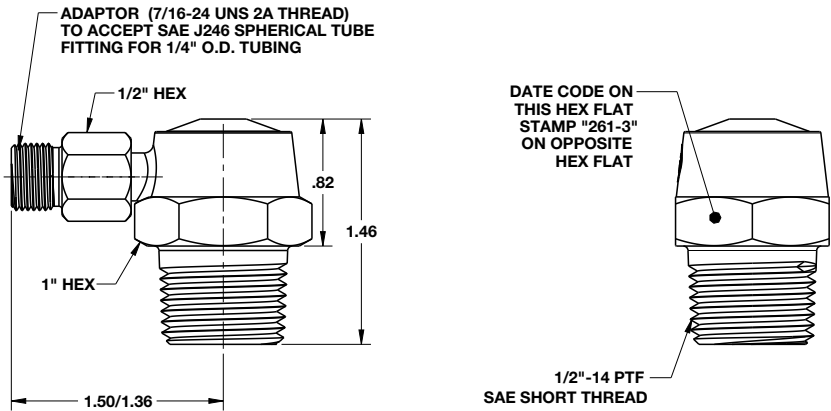
201-1, 201-3



218-1

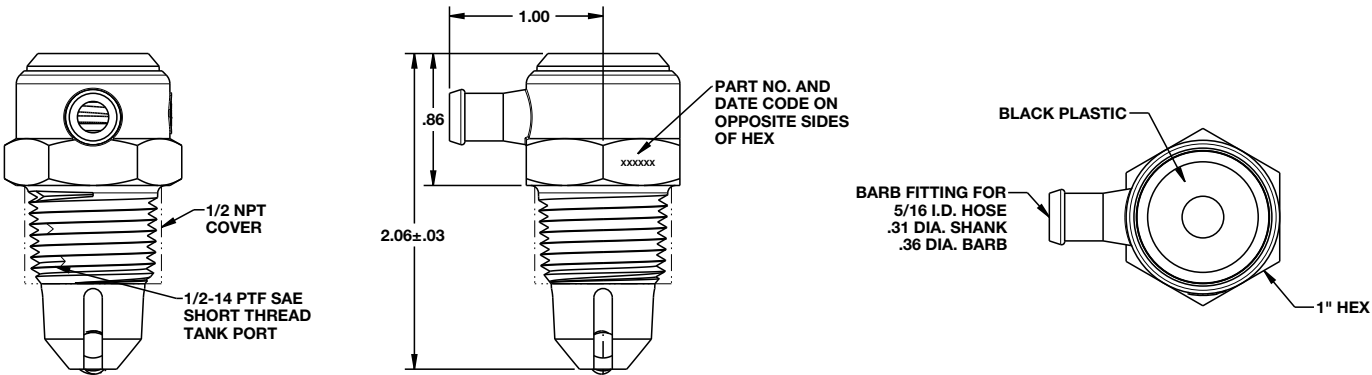


261-3

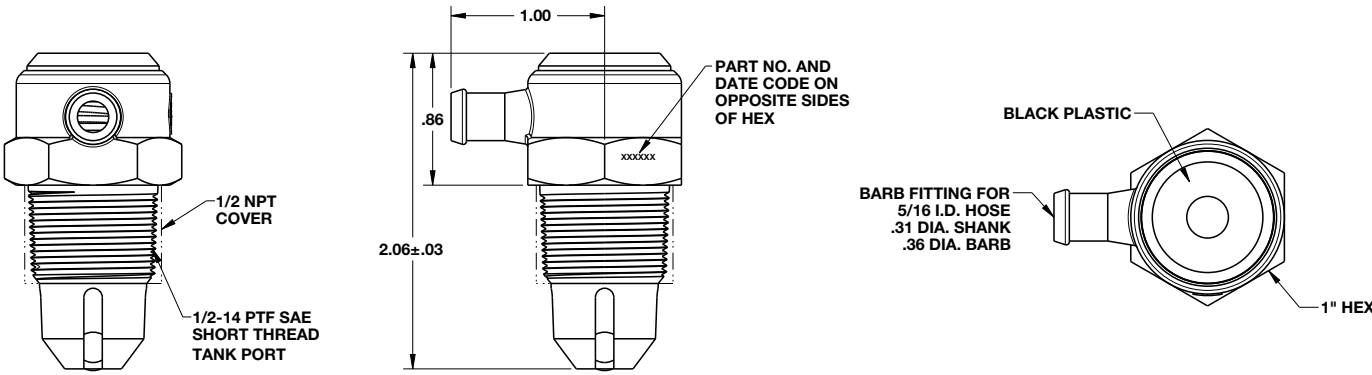


FUEL TANK VENT
201 SERIES & 2115-1

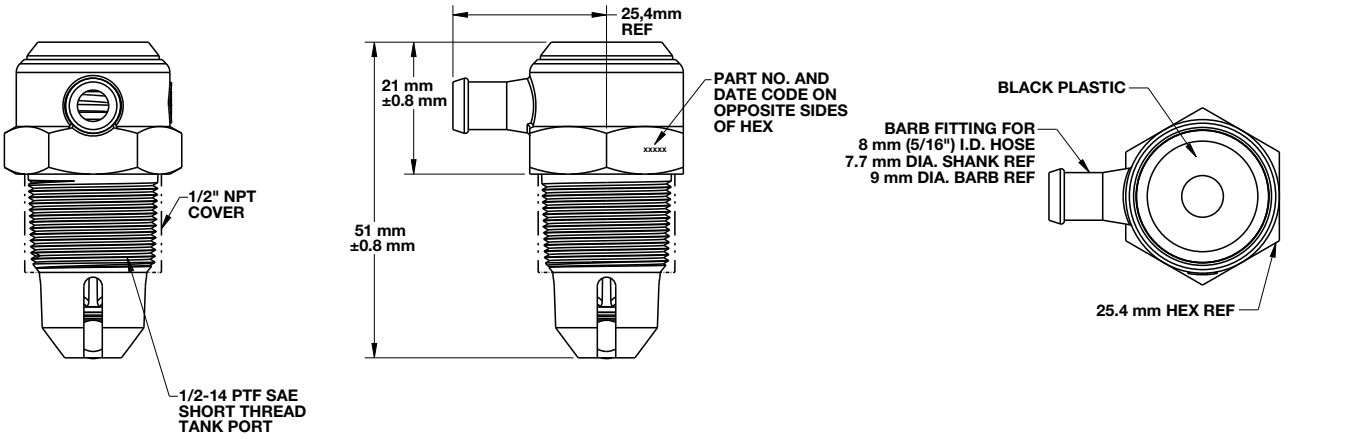
2115-01



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

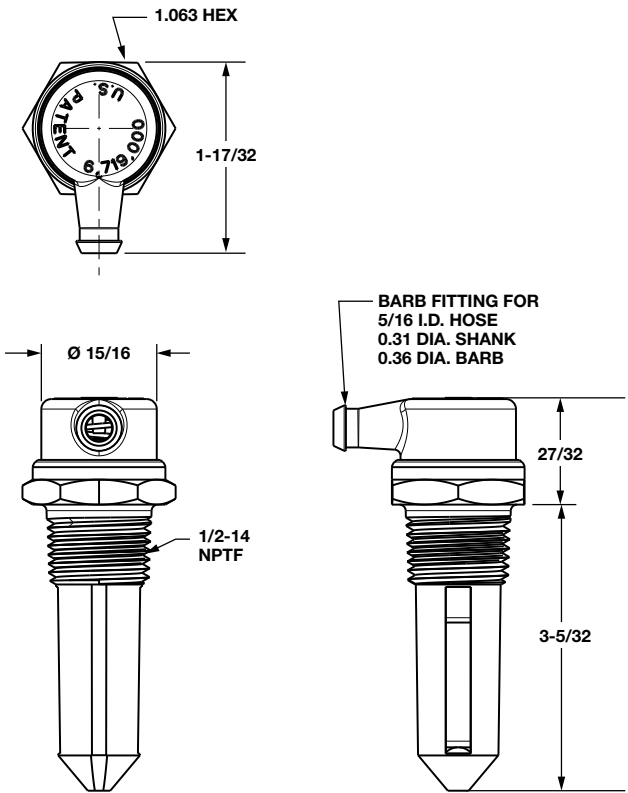
Hex size:
1.063"



Models

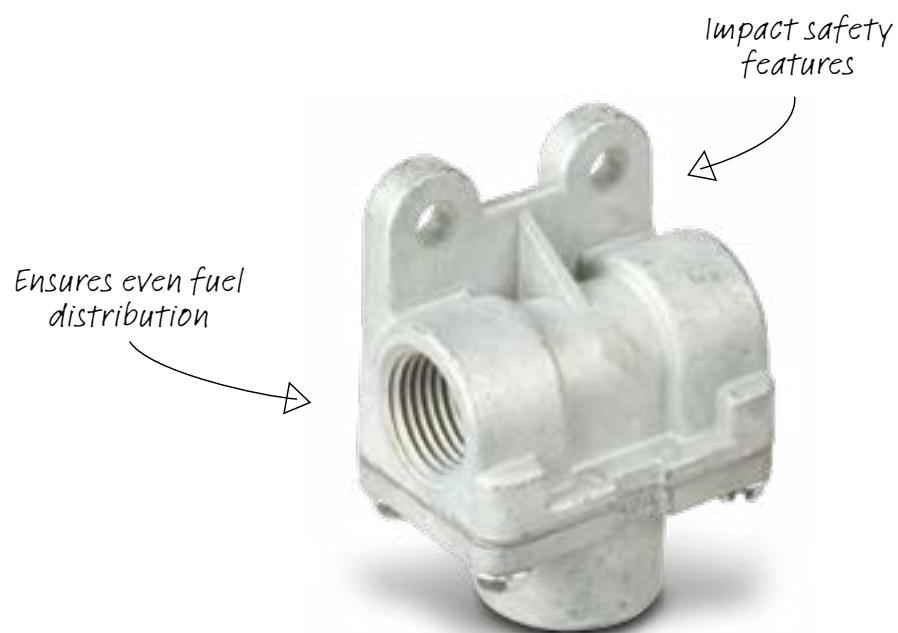
Model	Description	Thread	Diesel/Gas	Thermal Relief	Pressure Relief
2989-11	High Flow Fuel Tank Vent	1/2" - 14 NPTF	Diesel	Yes	Yes
2989-11V	High Flow Fuel Tank Vent w/ Vibraseal	1/2" - 14 NPTF	Diesel	Yes	Yes

Specifications



Other Fuel Products

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

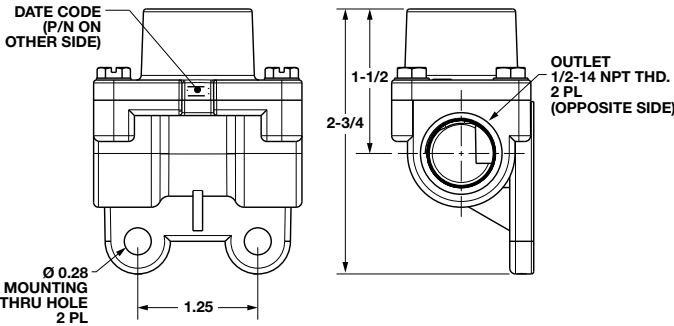
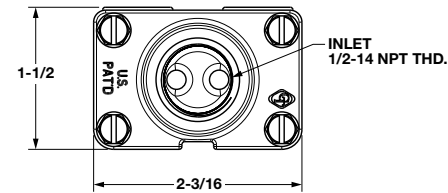


Models

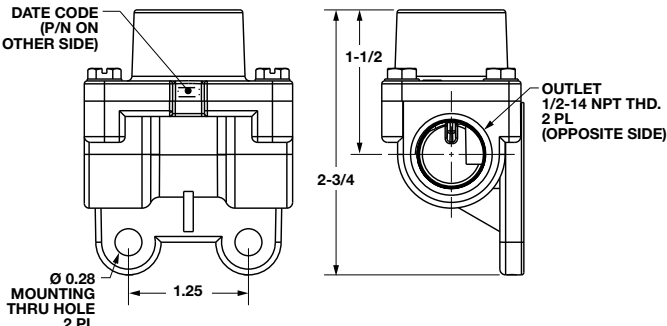
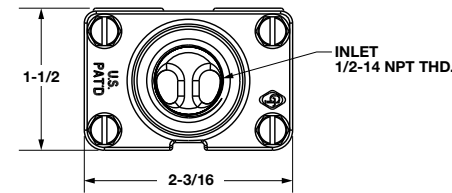
Model	Port Size	Thread type	Flow	Packaged
2252-1	1/2"-14	NPT	Standard	Bulk
2252-1D	1/2"-14	NPT	Standard	Individual
A2252-2	1/2"-14	NPT	High	Bulk
A2252-2D	1/2"-14	NPT	High	Individual

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)

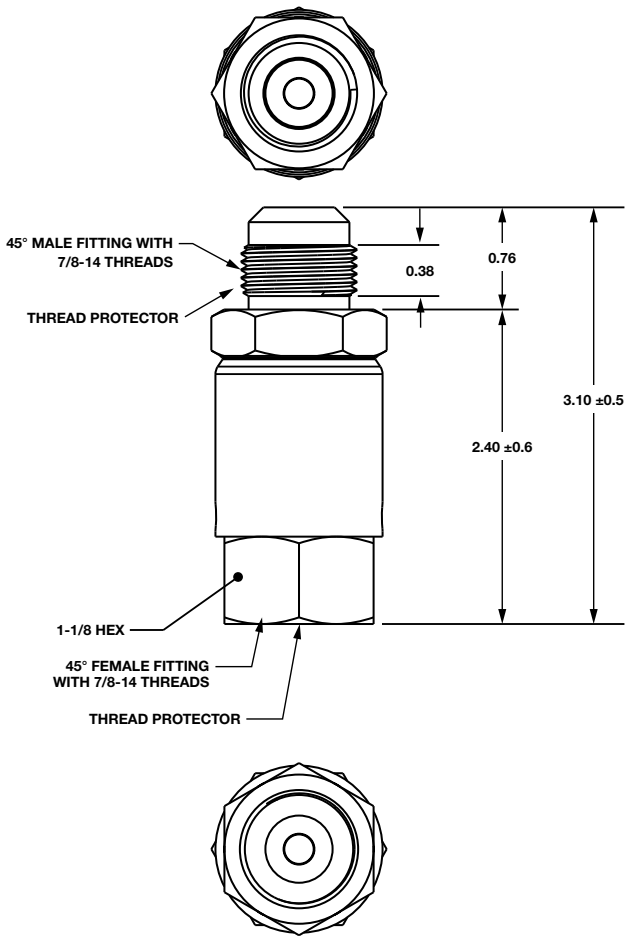
Port size:
Male end: 7/8"-14 NPT
Female end: 7/8"-14 NPT



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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Warning and Warranty

Warning

These products are intended for use in industrial systems only. Do not use these products where pressures and temperatures can exceed those listed under Specifications.

Before using these products with fluids other than those specified, for nonindustrial applications, life-support systems, or other applications not within published specifications, consult IMI Norgren.

Through misuse, age, or malfunction, components used in fluid power systems can fail in various modes. The system designer is warned to consider the failure modes of all component parts used in fluid power systems and to provide adequate safeguards to prevent personal injury or damage to equipment in the event of such failure modes.

System designers must provide a warning to end users in the system instructional manual if protection against a failure mode cannot be adequately provided. System designers and end users are cautioned to review specific warnings found in instruction sheets packed and shipped with these products, or posted on the IMI Norgren website under “Downloads.” System designers should also provide for all OSHA requirements including Title 29 CFR 1910.147 Lockout/Tagout.

It should be recognized that warnings are valid for any product, regardless of manufacturer, and are not restricted to products manufactured by IMI Norgren. IMI Norgren’s reputation for product quality and performance is well established. We feel we have the additional obligation to provide information or warnings to customers to assist them in applying our products in a reasonable and safe manner.

Proposition 65: This product contains chemicals known to the state of California to cause cancer, or birth defects, or other reproductive harm.

Warranty

Items sold by IMI Norgren are warranted to be free from defects in materials and workmanship for a period of two years* from the date of invoice, provided said items are used according to IMI Norgren’s recommended usages. IMI Norgren’s liability is limited to the repair of, refund of purchase price paid for, or replacement in kind of, at IMI Norgren’s sole option, any items proved defective, provided the allegedly defective items are returned to IMI Norgren prepaid. The warranties expressed above are in lieu of and exclusive of all other warranties. There are no other warranties, expressed or implied, except as stated herein.

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IMI Norgren reserves the right to discontinue manufacture of any product or change product materials, design, or specifications.

Disclaimer

Parts listed in this catalog all have functionality that are intended to provide solutions to our customers’ commercial vehicle applications. Our products are designed with proven technology and manufactured in ISO 9001 or IATF certified facilities. However, in order to meet the stringent commercial vehicle quality requirements, all new applications must be fully reviewed and potentially a new special part number will be required to ensure all customer specific requirements are achieved. Due to unlimited application and system conditions, it is the buyers responsibility to validate the product within their specific application. Please contact one of our sales team to discuss.



For further information, scan this QR code or visit
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Air & Electric Management

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BRAKE VALVES



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CAB CONTROLS



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FILTERS/
REGULATORS



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FITTINGS



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LIFT AXLE
CONTROLS



6

SEAT CONTROLS



7

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PRODUCTS



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