



Parker Legris: Connection Solutions for Railway Transportation

aerospace
climate control
electromechanical
filtration
fluid & gas handling
hydraulics
pneumatics
process control
sealing & shielding



ENGINEERING YOUR SUCCESS.

The Fluid System Connectors Division Europe (Legris) of Parker Hannifin, the global leader in motion and control technologies, has edited this Railway catalogue to promote the many different ranges of leak-free and compact push-in fittings, tubing, function fittings, valves and complementary products specific to railway applications.

All of the products included are tried-and-tested for the railway market; many have undergone additional, rigorous testing in order to adapt their technical performance to the ever-stricter requirements of railway applications.

Whether it's the inside or outside doors, seat or step controls, air or water supply, our range of products fits the bill.

Respecting stringent railway regulations for fire prevention, such as EN 45545, DIN 5510 and NF F16-101, our robust and reliable fittings and tubing combine excellent resistance not only to pressure and temperature, but also to flame.

For more information, please consult our web site: www.parkerlegris.com.

View products



www.parkerlegris.com

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Railway Directives and Regulations: the Parker Legris Offer

Parker Legris complies with the directives and regulations listed below and goes beyond its statutory obligations for the ranges in question.

Railway Regulations



EN 45545-2

Railway applications - fire protection on railway vehicles. Requirements for fire behavior of materials and components.

DIN 5510-2

Preventive fire protection in railway vehicles. Determines levels of protection, fire preventive measures and certification.

NF F16-101

Method of classification of materials for rolling stock obtained from the results of standardized tests. Takes into account the combustion of the materials as well as the opacity and toxicity of emissions.

Industrial Regulations



European RoHS directives: 2011/65/EC

Relating to the limitation of the use of 6 hazardous substances in electrical and electronic equipment (mercury, lead, cadmium, hexavalent chromium, PBB and PBDE).

REACH regulation: 1907/2006

As product manufacturer, we are subject to article 33 of the regulation which defines a duty to inform when a candidate substance is present at more than 0.1% weight for weight.



Pressurised equipment directive: 97/23/EC

This directive regulates the design, manufacture and assessment of pressurised equipment to ensure operating safety.

Machinery Directive 2006/42/EC

This directive harmonizes the safety and health requirements for machines with a high protection level. It also guarantees the free movement of machines on the European Union market.

Quality Management Certification



ISO TS 16949

Quality management systems - particular requirements for the application of ISO 9001:2000 for automotive production and relevant service part organizations.

ISO 14001

Environmental management systems. Requirements with guidance for use.

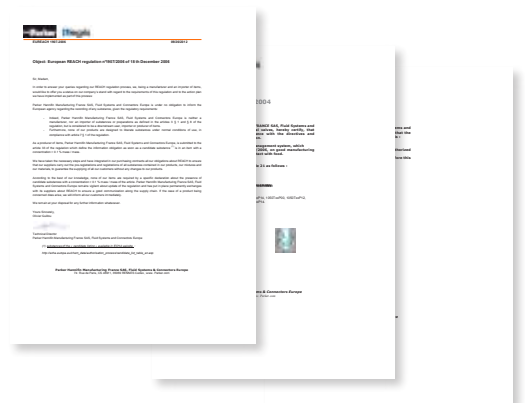
ISO 9001

This international standard specifies requirements for a quality management system when an organization needs to demonstrate its ability to consistently provide products that meet customer and applicable statutory and regulatory requirements.

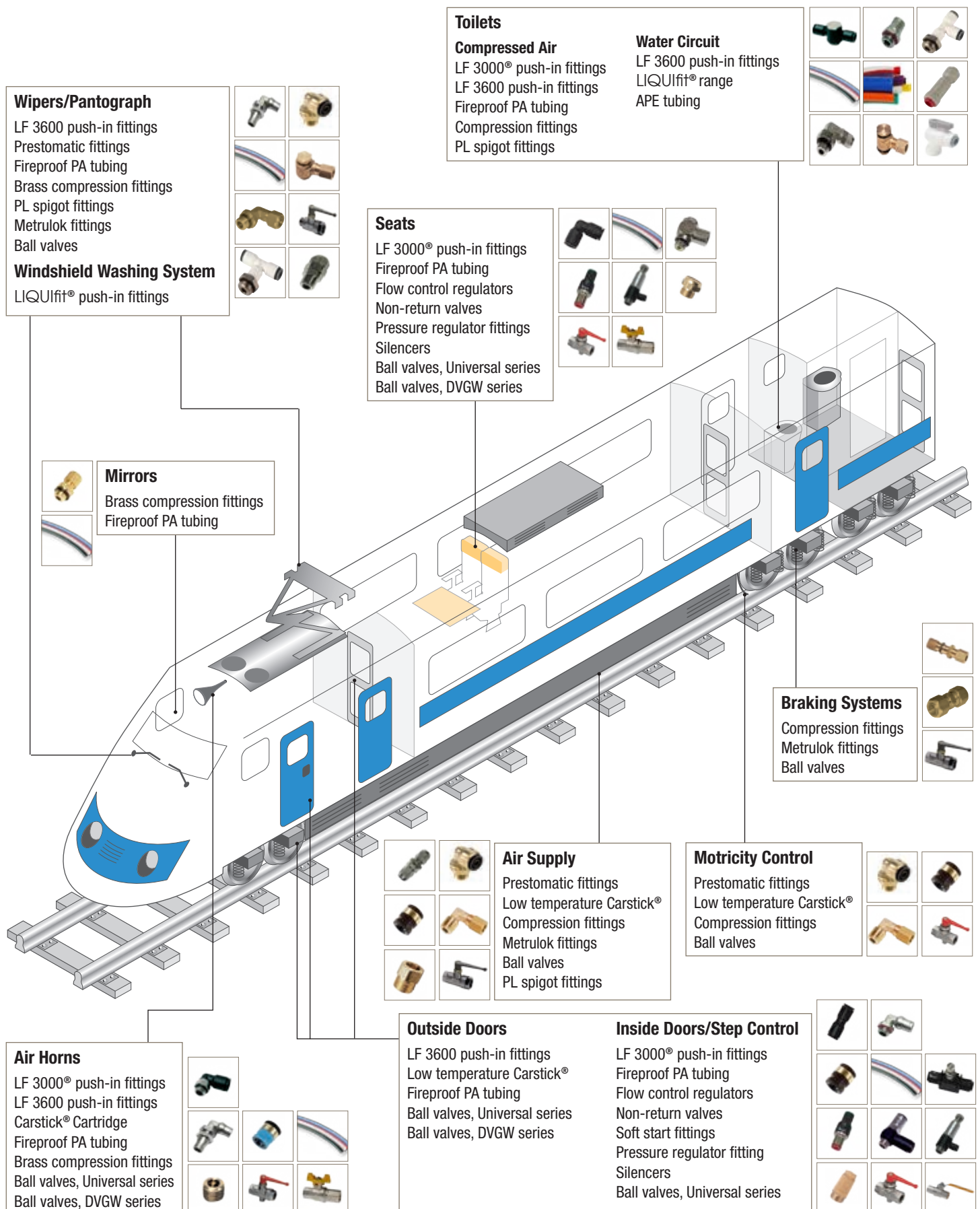
The Parker Legris product range offers compliance with numerous European standards associated in particular with the directives and regulations referred to above. The official texts of these directives are available on the site: <http://eur-lex.europa.eu>.

Certificates and Regulations

Certificates of conformity for our products are available on our web site. Contact us for any further information you require.



Our Connection Solutions for Railway Transportation





LF 3000® Push-In Fittings

The LF 3000® range, with its wide variety of shapes and configurations, allows you to find **the perfect product to meet your needs** and thus **optimise the use** of your equipment.

Product Advantages

World-Class Performance

- 40 years of expertise
- Full bore for optimum flow
- Ideal for vacuum or pressure applications
- Automatic sealing guaranteed, in both static and dynamic applications
- Materials with high resistance
- Durability of product and equipment

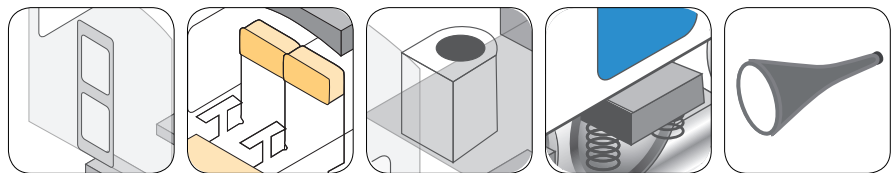
Optimal Design

- 100% leak-tested in production
- Date coding to guarantee quality and traceability
- Compact and aesthetic design: reduced dimensions for space-saving
- Tube fixed during connection, preventing leakage
- Conforms to ISO 14743
- Excellent vacuum performance thanks to the patented sealing technology
- Lightweight: reduced energy consumption of operating systems
- Parallel threaded fitting with a patented captive O-ring seal
- Maximum flexibility due to the wide product range



Inside Doors
Seat Control
Toilets
Step Control
Air Horns

Applications



Technical Characteristics

Compatible Fluids	Compressed air Other fluids: please consult us
Working Pressure	Vacuum to 20 bar
Working Temperature	-20°C to +80°C

Regulations

ISO 14743: Pneumatic fluid power, push-in connectors for thermoplastic tubes
 DI: 97/23/EC (PED)
 DI: 2011/65/EC (RoHS)
 DI: 1907/2006 (REACH)

Reliable performance is dependent upon the type of fluid conveyed, component materials and tubing being used.
 Use is guaranteed with a vacuum of 755 mm Hg (99% vacuum).

View products



www.parkerlegris.com/lf3000

LF 3600 Push-In Fittings

In order to meet your **technical and environment requirements**, Parker Legris designed this range of metal fittings, offering **robustness, reliability** and **resistance to industrial fluids** for the most demanding environments.

Product Advantages

High Performance

- Resistant up to +150°C at 30 bar
- Excellent mechanical performance
- Long threads to resist shock and vibration
- Excellent abrasion and corrosion resistance due to high phosphorus chemical nickel plating
- Full flow, minimal pressure drop

Versatility

- Materials conform to FDA standards
- Spring collet gripping system suitable for both metal (grooved) and polymer tubing
- Excellent resistance to high pressure and vacuum
- Excellent chemical compatibility
- More than 250 part numbers
- One fitting for numerous applications: stock optimisation
- Manual connection and disconnection
- Compact and ergonomic

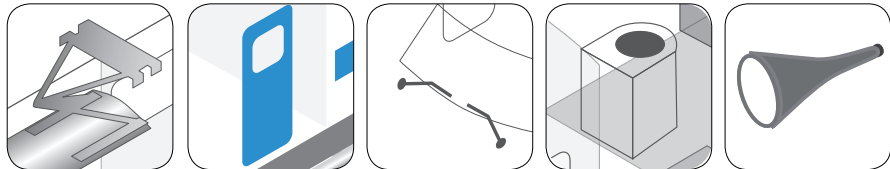
Reliability

- High performance brass for increased lifespan
- 100% leak-tested in production
- Date coding to guarantee quality and traceability



Pantograph
Outside Doors
Windshield Wipers
Toilets
Air Horns

Applications



Technical Characteristics

Compatible Fluids	Compressed air, grease, lubricant, water...
Working Pressure	Vacuum to 30 bar (20 bar: 3699, 3609)
Working Temperature	-25°C to +150°C

Regulations

ISO 14743: pneumatic transmissions, push-in fittings for thermoplastic tubing
 DI: 97/23/EC (PED)
 DI: 2011/65/EC (RoHS)
 RG: 1907/2006 (REACH)
 DI: 94/9/EC (ATEX)
 UL94 V-0: please consult us
 EN 4545-2

Reliable performance is dependent upon the type of fluid conveyed, component materials and tubing being used.
 Use is guaranteed with a vacuum of 755 mm Hg (99% vacuum).
 Technical performance tested at -25°C according to the ISO 14743 standard.

View products



www.parkerlegris.com/lf3600

LIQUIfit® Push-In Fittings with Metal Adaptors

The LIQUIfit® range now benefits from a range extension of **metal adaptors** designed for **liquid transfer applications**. These fittings ensure **reliable and compact** connections combined with **excellent robustness**.

Product Advantages

Innovative Technology & Concept

- Ergonomic and aesthetic design
- Compact product for water applications
- Easy-to-clean external surfaces
- Full flow
- Use with a pre-prepared metallic tubing
- Gripping system preventing any pumping effect

Optimal Performance

- Patented sealing technology
- 100% leak-tested in production
- Date coding to guarantee quality and traceability
- Wide range of shapes and numerous configurations
- Excellent robustness for a long lifespan

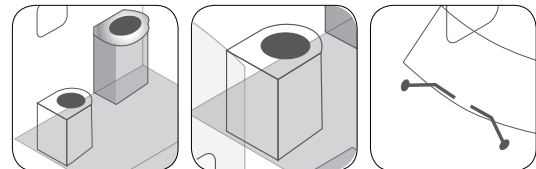
High Performance Material

- Bio-sourced polymer body meeting the most severe food process regulations
- Compatibility with beverages (stainless steel version)
- Unsurpassed chemical and mechanical resistance, even at high temperatures
- Free of bisphenol A and phtalates, conforming with regulations



Water Supply
Toilets
Windshield Washing System

Applications



Technical Characteristics

Compatible Fluids	Water, beverages, industrial fluids: stainless steel threads Industrial fluids: nickel-plated brass threads
Working Pressure	Vacuum to 16 bar
Working Temperature	-10°C to +95°C

Regulations
DI : 2011/65/EC (RoHS)
RG: 1935/2004/EC
FDA: 21 CFR
NSF 51 (pending, for stainless steel version only)
NSF/ANSI 61 (pending, for stainless steel version only)
RG : 1907/2006 (REACH)

Reliable performance is dependent upon the type of fluid conveyed, component materials and tubing being used.
Use is guaranteed with a vacuum of 755 mm Hg (99% vacuum).

Complementary LIQUIfit® Range Products

Other LIQUIfit® range products are presented on our website, www.parkerlegris.com, or in our master Catalogue : Non-Return Valves and Ball Valves.



Prestomatic 3 Push-In Fittings

In order to meet **severe** and **demanding** conditions of use in air circuits, this range of **lightweight** polyamide fittings offers **excellent technical performance** and respects the new environmental requirements.

Product Advantages

Optimum Design

- Extreme compactness for space saving
- Weight reduction over traditional airbrake fittings conforming with Euro 6
- Excellent mechanical properties adapted to demanding working conditions
- Integrated polymer tube support gives tube alignment and tube retention for:
 - excellent resistance to vibration
 - sealing ensured over time
- Fully re-usable; reduces maintenance costs

High Performance

- Positive hold by an innovative gripping ring design allowing absorption of vibration and pulsating pressure
- UV-resistant polymer guarantees a long lifespan
- Twist-free assembly allowing free tube rotation even under pressure and high resistance to tube expansion
- Extreme temperature resistance for increased lifespan

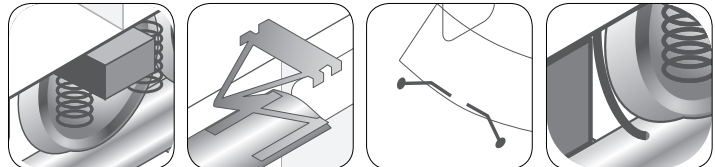
Reliability

- 100% leak-tested in production
- Date coding to guarantee quality and traceability
- Suitable with flexible tubing in braking system



Air Braking Systems*
Pantograph
Windshield Wipers
Motricity Control

Applications



**only in certain conditions*

Technical Characteristics

Compatible Fluids	Compressed air
Working Pressure	25 bar
Working Temperature	-50°C to +100°C

Regulations

Fully adapted to transportation braking system applications with tubing:
DIN 74324-1
DIN 73378
NF-R12-632-2

Technical performance tested at -50°C according to the ISO 14743 standard. Between -40°C and -50°C, the circuit must remain under pressure.

Prestomatic 2 Push-In Fittings

To meet **severe** and **demanding applications** such as pneumatic circuits, Prestomatic 2 fittings conform to the international standards offering **robustness**, **reliability** and **mechanical resistance**.

Product Advantages

Versatility | Extreme compactness for space saving
 High robustness, perfectly suitable for gravel spreading
 Excellent mechanical properties adapted to severe working conditions
 Integrated metallic tube support reinforces tube alignment and tube retention for:

- excellent resistance to vibration
- sealing ensured over time
- increased resistance to tube removal

Fully re-usable to reduce maintenance costs

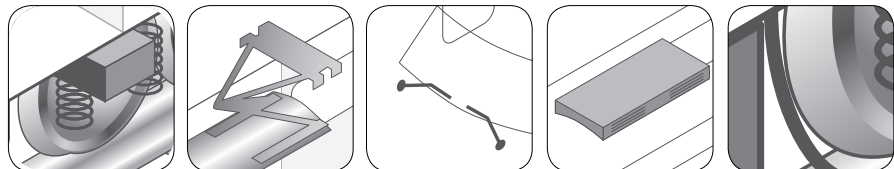
High Performance | Positive hold by an innovative gripping ring design allowing absorption of vibration and pulsating pressure
 Twist-free assembly allowing free tube rotation even under pressure and high resistance to tube expansion
 Extreme temperature resistance: up to -50°C for increased lifespan

Reliability | 100% leak-tested in production
 Date coding to guarantee quality and traceability
 Suitable with flexible tubing in braking system



Air Braking Systems*
 Pantograph
 Windshield Wipers
 Air Supply
 Motricity Control

Applications



**only in certain conditions*

Technical Characteristics

Compatible Fluids	Compressed air
Working Pressure	25 bar
Working Temperature	-50°C to +100°C

Regulations

EN 45545-2: HL3, R22, R24, R25 classification can be attained when used with fireproof tubing

Fully adapted to transportation braking system applications with tubing:
 DIN 74324-1
 DIN 73378
 NF-R12-632-2

Technical performance tested at -50°C according to the ISO 14743 standard. Between -40°C and -50°C, the circuit must remain under pressure.

Polymer Cartridges: LF 3000[®], LIQUIfit[®] and Low Temperature Carstick[®]

Parker Legris has developed the range of patented **Carstick[®]** cartridges guaranteeing **the integrity of the sealing system** before and after assembly in non-threaded cavities. The **compact design** of the one-piece Carstick[®] cartridge enables **automation** of your manufacturing process and improves the **reliability** of your system.

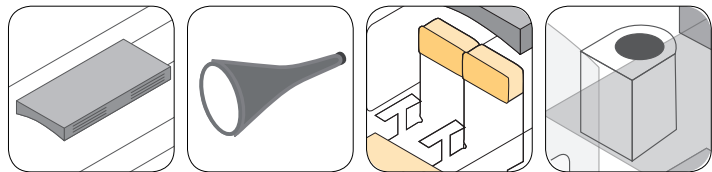
Product Advantages

- Time-Saving**
 - No thread to be machined for inserting the fitting into its cavity
 - Seal pre-assembled, greased and protected
 - Self-centring of the cartridge in the cavity
 - Product protected against contamination, from manufacture to installation
- Proven Technology**
 - Technical performances of the LF 3000[®]
 - Push-in connection
 - Full flow
 - Optimum flow at pressure and vacuum
 - LIQUIfit[®] Carstick[®] compatible with drinking water and food fluids
- Automated Installation**
 - Ensures that the product will be correctly assembled
 - Connection fully integrated in the cavity
 - Carstick[®] packaging designed for an automatic assembly process



Air Supply
Air Horns
Seats
Toilets

Applications



Technical Characteristics

	LF 3000 [®] and Low Temperature Carstick [®]	LIQUIfit [®] Carstick [®]
Compatible Fluids	Compressed air	Food fluids, inert gases
Working Pressure	Vacuum to 20 bar	Vacuum to 16 bar
Working Temperature	-20°C to +80°C (LF 3000 [®]) -40°C to +80°C (Low Temp.)	-10°C to +95°C

Reliable performance is dependent upon the type of fluid conveyed, component materials and tubing being used. Guaranteed for use with a vacuum of 755 mm Hg (99% vacuum).

Regulations

LF 3000[®] and Low Temperature Carstick[®]

ISO 14743: Pneumatic fluid power, push-in fittings for thermoplastic tubes
 DI: 2011/65/CE (RoHS)
 DI: 97/23/CE (PED)

LIQUIfit[®] Carstick[®]

RG: 1935/2004/CE
 FDA: 21 CFR 177.1550
 NSF 51 to 95°C
 ACS
 DM 174 (Italy)
 DI: 2011/65/CE (RoHS)
 DI: 97/23/CE (PED)
 WRAS
 NSF/ANSI 61 - C HOT

View products



www.parkerlegris.com/cartridge



Fireproof High Resistance PA Tubing

This **single layer fireproof** tubing not only combines excellent resistance to pressure, temperature and flame, but also guarantees **non-toxic smoke** resulting from burn-off. This tubing eliminates the need for a stripping tool, thus preventing the risk of tube damage prior to connection.

Product Advantages

Safety for On-Board Railway Equipment

- Designed for on-board equipment
- Excellent flame resistance: self-extinguishing
- Very little smoke generation
- Non-toxic combustion gases
- UV-resistant
- Extremely resistant to high pressure and temperature

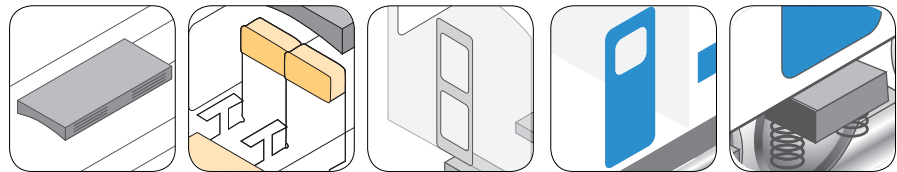
Innovative Single-Layer Solution

- Developed for demanding industrial applications
- Excellent spark resistance
- Economical alternative to PA tubing with PVC sheath
- Combines technical advantages of rigid and semi-rigid PA tubing
- 5 colours available
- Flow direction marking
- Silicone-free



Air Supply
Seat Control
Inside Doors
Outside Doors
Step Control

Applications



Technical Characteristics

Compatible Fluids	Compressed air, lubricants Other fluids: please consult us
Working Pressure	Vacuum to 50 bar
Working Temperature	-50°C to +100°C
Component Materials	Polyamide (63 shore D)

Regulations

- Railway**
EN 45545-2: HL3, R22, R24, R25
NF F16-101: I3 F2
DIN 5510-2: S4, SR2, ST2
ISO 4892
- Industrial**
DI: 97/23/EC (PED)
DI: 2011/65/CE (RoHS)
RG: 1907/2006/EC (REACH)
UL94 V-0 (Fire resistance)

Reliable performance is dependent upon the type of fluid conveyed and fittings being used. Use is guaranteed with a vacuum of 755 mm Hg (99% vacuum).

Packaging

Tubepack®: 25 m, 100 m
Drum: 500 m, 1 000 m

View products



www.parkerlegris.com/fireproof_tubing

PE Tubing

Parker Legris offers two types of polyethylene tubing: **"Advanced PE" 50% reticulated** and **Low Density PE**. Our range of "Advanced PE" is designed for demanding environments, especially that of water treatment, without compromising operator **safety**.

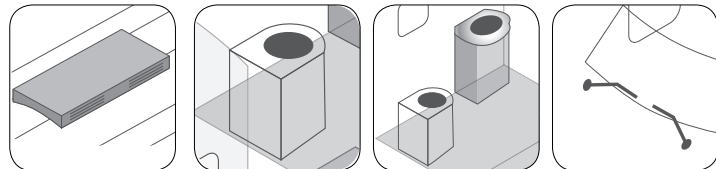
Product Advantages

- Advanced PE**
- 50% reticulated material
 - Best balance between flexibility and pressure/temperature resistance
 - Resistant to a wide range of aggressive chemicals
 - UV-stabilised: ideal for outdoor applications
 - Approved for permanent contact with food and beverages
 - Silicone-free



Cooling Systems
Toilets
Water Supply
Windshield Washing System

Applications



Technical Characteristics

Compatible Fluids	Water, beverages and other fluids
Working Pressure	Vacuum to 16 bar
Working Temperature	-40°C to +95°C
Component Materials	High quality polyethylene: 50% reticulated PE 50% low density PE (44 shore D)

Regulations

FDA: 21 CFR 177.1520
 RG: 1935/2004/EC
 DI: 97/23/EC (PED)
 DI : 2011/65/EC (RoHS), 2011/65/EC
 NSF 42/58 (1/4" and 3/8" approved for 10 bar and 1/2" approved for 8 bar at room temperature)
 NSF 51, 61 C-HOT
 ACS (except for purple colour)
 WRAS
 RG: 1907/2006 (REACH)

Reliable performance is dependent upon the type of fluid conveyed and fittings being used. Use is guaranteed with a vacuum of 755 mm Hg (99% vacuum).

Packaging

Tubepack®: 75 m, 150 m, 300 m
 250 feet, 500 feet, 1000 feet

View products



www.parkerlegris.com/pe_tubing



Flow Control Regulators

Parker Legris flow control regulators with polymer, nickel-plated brass or aluminium bodies, external or recessed adjustment screws, offer **precise adjustment, accuracy** and **compactness**, providing the solution for all applications.

Product Advantages

Improved Productivity

- Higher maximum flow than standard regulators
- Full flow with minimum pressure drop (model 7060)
- Optimal control of the cylinder rod speed
- 100% leak-tested in production
- Date coding to guarantee quality and traceability
- Reduce compressed air and energy consumption

Accuracy & Performance

- Precise adjustment for accurate flow regulation from initial to maximum opening
- Constant cylinder rod displacement speed
- Long-term stability of flow
- Reduced weight (polymer version)
- Mechanical strength and corrosion resistance with nickel-plated brass version

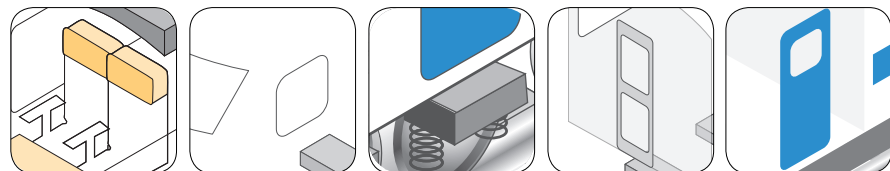
Ergonomics & Large Range

- External adjustment screw: easy to adjust without tooling and lockable
- Recessed adjustment screw: more compact and protects the adjustment mechanism
- Uni-directional: exhaust or inlet
- Bi-directional: adjustment of air flow in both directions
- 360° positioning
- NPT version on request



Seats
Mirrors
Step Control
Inside Doors
Outside Doors

Applications



Technical Characteristics

Compatible Fluids	Compressed air Other fluids: contact us
Working Pressure	1 to 10 bar
Working Temperature	0°C to +70°C (polymer version) -25°C to +70°C (metallic version)

Regulations

DI : 2011/65/EC (RoHS)
 RG: 1907/2006 (REACH)
 DI: 97/23/EC (PED)
 EN 45545-2 (metallic version): HL3, R22, R24, R25 classification can be attained when used with fireproof tubing

Perfect sealing is guaranteed in open position only.

View products



www.parkerlegris.com/regulators

Non-Return Valves

Non-return valves allow compressed air to flow in one direction and prevent it from flowing in the other. Fitted upstream of the circuit to be protected, they provide **total protection**.

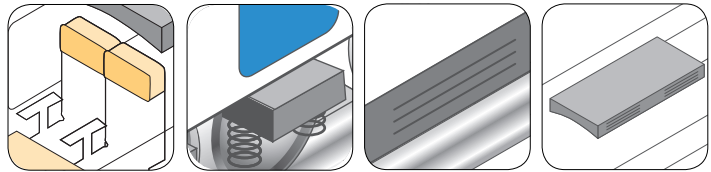
Product Advantages

- Variety of Applications**
 - Wide range
 - Push-in connection: ease of use
 - Available in threaded or push-in version
- Powerful Design**
 - Lip seals for improved sealing performance
 - Excellent vibration resistance
 - Compact
 - Lightweight
 - Symbol showing the operating direction of flow
 - Safe installation with colour codes:
 - green push-button: supply version
 - red push-button: exhaust version



Seats
Step Control
Ancillary Systems
Compressed Air Preparation

Applications



Technical Characteristics

Compatible Fluids	Compressed air
Working Pressure	1 to 10 bar
Working Temperature	0°C to +70°C
Cracking Pressure	0.3 bar

Regulations

DI : 2011/65/EC (RoHS)
RG: 1907/2006 (REACH)
DI: 97/23/EC (PED)

View products



www.parkerlegris.com/nrv

Soft Start Fittings

These fittings protect your system by preventing sudden shocks. On start-up, they control the **pressure increase** in the downstream circuit; this helps **prevent the risk** of industrial accidents.

Product Advantages

Protection of Equipment & Personnel

- Prevents the risk of damage after any stoppage which requires the system to be vented
- Returns the control valve to its initial position in total safety
- Adjustment of the pressurisation speed
- Protects the adjustment mechanism using a recessed adjustment screw



Mounted on FRL

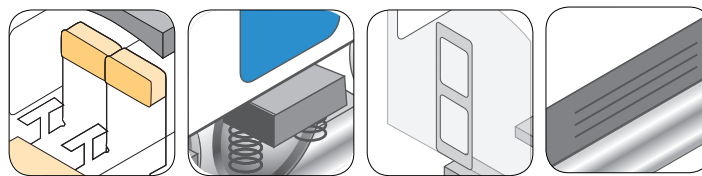
- Models 7860 and 7861: yellow identification washer
- Protection of the whole system
- Simultaneous pressurisation speed of the whole system

Mounted on Control Valve

- Models 7870 and 7871: black identification washer
- Protection of individual circuits
- Mounted on the control valve, it optimises the pressurisation speed of a specific cylinder

Seats
Step Control
Inside Doors
Ancillary Systems

Applications



Technical Characteristics

Compatible Fluids	Compressed air
Working Pressure	3 to 10 bar
Working Temperature	-15°C to +60°C

Regulations

- DI: 2011/65/EC (RoHS)
- RG: 1907/2006 (REACH)
- DI: 97/23/CE (PED)
- EN 45545-2 (metallic version): HL3, R22, R24, R25 classification can be attained when used with fireproof tubing

View products



www.parkerlegris.com/softstart

Pressure Regulators

Parker Legris pressure regulators **stabilise at the maximum determined value** the pressure delivered to the pneumatic equipment, whatever the fluctuations of the pressure upstream.

Product Advantages

Ergonomics

Easy adjustment of the output pressure through the knurled screw
 Lockable adjustment possible
 Output pressure adjustment options marked on the screw

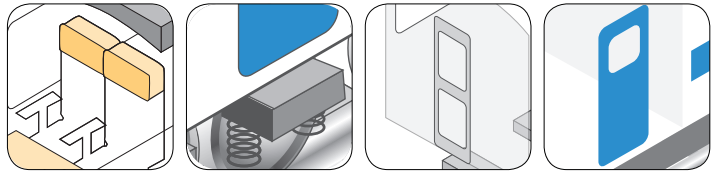
Energy Savings

Setting of the optimum pressure enables the equipment to function correctly
 Installation in a manifold allows optimum output pressures to be delivered to specific parts of the circuit
 Designed for applications where cylinder force needs to be controlled: marking, sleeving, crimping cylinders etc.



Seats
 Step Control
 Inside Doors
 Outside Doors

Applications



Technical Characteristics

Compatible Fluids	Compressed air
Working Pressure	Upstream pressure: 1 to 16 bar Downstream pressure: 1 to 8 bar
Working Temperature	-10°C to +70°C

Regulations

DI : 2011/65/EC (RoHS)
 RG: 1907/2006 (REACH)
 DI: 97/23/EC (PED)

View products



www.parkerlegris.com/pressurereg

Silencers

Silencers are designed for installation on exhaust circuits **to reduce the noise levels** of equipment while operating, thus improving user comfort.

Product Advantages

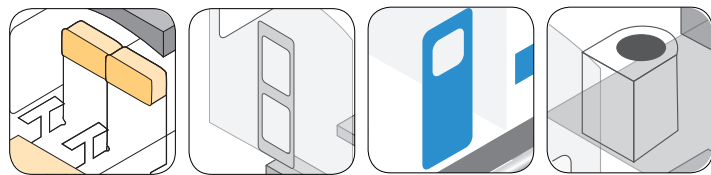
Variety of Applications

- 2 versions incorporating flow control regulation
- Extremely compact models available
- Polyethylene: excellent balance between exhaust flow rate and noise reduction
- Sintered bronze: robust and economic
- 316L stainless steel: increased chemical resistance and mechanical strength



Seats
Inside Doors
Outside Doors
Toilets

Applications



Technical Characteristics

Compatible Fluids	Compressed air
Working Pressure	Polyethylene: 0 to 10 bar Sintered bronze: 0 to 12 bar 316L stainless steel: 0 to 12 bar
Working Temperature	Polyethylene: -10°C to +80°C Sintered bronze: -20°C to +150°C 316L stainless steel: -20°C to +180°C

Regulations

- DI: 2011/65/EC (RoHS)
- RG: 1907/2006 (REACH)
- DI: 97/23/EC (PED)
- DI: 2003/10/EC (Noise Directive)
- Requirement to use ear protection if exposure > 8 hours (85 dBA)
- RG: 1910.95(b) (OSHA)
- Requirement to use ear protection if exposure > 8 hours (90 dBA)

View products



www.parkerlegris.com/silencers

Brass Compression Fittings

These **"universal"** fittings provide users with **numerous connection** options for a wide variety of tube materials without the need for tube threading or soldering. This range **guarantees** excellent long-term sealing and performance.

Product Advantages

Simple to Install and Use

- Suitable for pneumatic and medium pressure hydraulic applications
- Compatible with many industrial fluids
- Large product range: 22 configurations
- Excellent sealing due to the tightening of the olive onto the tube
- Metallic sealing guarantees maximum service life
- High strength brass for increased mechanical reliability

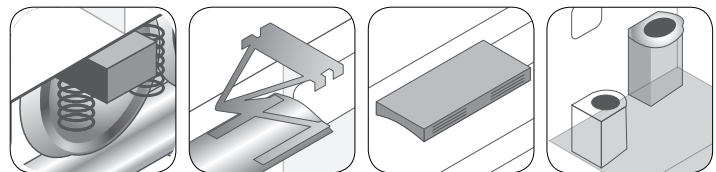


Wide Variety of Tubing

- Connection of different types of tubing and hose: metal, polymer, steel, rubber, etc.
- Multiple tube diameters can be connected using the Parker Legris reducer assembly system
- No insert required for rigid and semi-rigid polyamide tubing below 14 mm

Braking Systems
Pantograph
Compressed Air Preparation
Water Control

Applications



Technical Characteristics

Compatible Fluids	Water, machining oil, fuel, hydraulic oil, compressed air, chemical fluids, disinfectants
Working Pressure	Vacuum to 550 bar
Working Temperature	-60°C to +250°C

Regulations

CNOMO: E07.21.115N (for robotic equipment in the automotive industry)
DI: 97/23/EC (PED)
RG: 1907/2006 (REACH)
DI: 2011/65/EC (RoHS)
DI: 94/9/EC (ATEX)
EN 45545-2 (metallic version): HL3, R22, R24, R25 classification can be attained when used with fireproof tubing

Reliable performance is dependent upon the type of fluid conveyed, component materials and tubing being used.
 Guaranteed for use with a vacuum of 755 mm Hg (99% vacuum).

Related Products

Parker Legris also offers another type of brass compression fitting: **Metrulok** with a one-piece olive/nut.
 Do not hesitate to consult us.



View products



www.parkerlegris.com/ru

PL Nickel-Plated Brass Spigot Fittings

This Parker Legris range has a sealing system which guarantees **excellent sealing and full flow**. PL fittings for flexible tubing are **fully re-usable**. They provide excellent compatibility with a wide variety of fluids.

Product Advantages

Rapid Assembly

- Nut design allows hand tightening with soft tubing (PU, PE etc.)
- Quick to assemble and disassemble
- Compatible with all flexible tubes of hardness up to 90 shore A (polyurethane, polyamide, polyethylene, fluoropolymers, etc.)
- Mechanical stop on the body to prevent overtightening

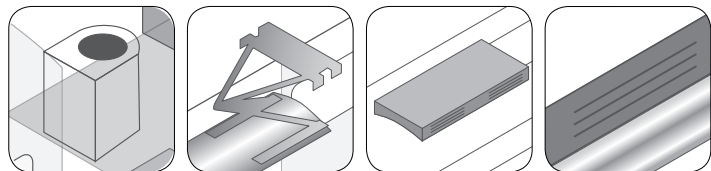
Performance

- Special spigot design ensures full flow and excellent tensile performance
- Reliable direct sealing system without the use of a seal or olive
- Low and medium pressure
- Nickel-plated for increased corrosion resistance



Toilets
Pantograph
Air Supply
Ancillary Systems

Applications



Technical Characteristics

Compatible Fluids	Compressed air Other fluids: contact us
Working Pressure	Vacuum to 40 bar
Working Temperature	-40°C to +100°C

Regulations

- DI: 97/23/EC (PED)
- RG: 1907/2006 (REACH)
- DI : 2011/65/EC (RoHS)

Reliable performance is dependent upon the type of fluid conveyed, component materials and tubing being used.
Guaranteed for use with a vacuum of 755 mm Hg (99% vacuum).

Related Products

This PL range is used with Parker Legris PU and PA tubing.
These ranges can be found on our web site, www.parkerlegris.com, or in our master Catalogue.



Ball Valves, Universal Series

This range of valves has patented **seal wear compensating** technology for **reliable** and **durable** sealing, **protecting** any system whether under pressure or **vacuum**.

Product Advantages

Durability & Reliability

- Automatic seal wear compensation for long-term reliability
- Robust, corrosion-resistant materials
- 100% leak-tested in production
- Date coding to guarantee quality and traceability

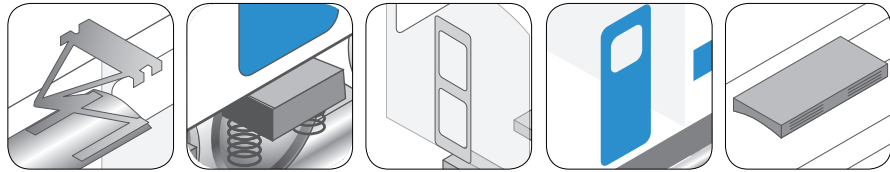
Versatility & Performance

- Ideal for ensuring the performance of pneumatic circuits
- Customised valves for all special applications
- Unequaled performance under vacuum
- Smooth operation thanks to self-lubricating seals
- Large range of working pressures and temperatures
- Lever can be repositioned and replaced
- Many configurations to satisfy all system requirements



Pantograph
Step Control
Inside Doors
Outside Doors
Ancillary Systems

Applications



Technical Characteristics

Compatible Fluids	Industrial fluids
Working Pressure	Vacuum to 40 bar
Working Temperature	-40°C to + 80°C

Regulations

DI: 97/23/EC (module PED A - diameters greater than 25 mm)
 DI: 2006/42/EC (Machinery Directive)
 DI : 2011/65/EC (RoHS)
 RG: 1907/2006 (REACH)
 EN 45545-2: HL3, R22, R24, R25 classification can be attained when used with fireproof tubing

Reliable performance is dependent upon the type of fluid conveyed, component materials and tubing being used.
 Guaranteed for use with a vacuum of 755 mm Hg (99 % vacuum).

View products



www.parkerlegris.com/ballvalves

Ball Valves, DVGW Series

The combination of long threads, a reinforced sealing system and **DVGW** certification makes this valve perfect for the **transmission of gas and water**.

Product Advantages

Reliability & Sealing

- Stem prevented from being ejected in the event of overpressure
- Two stem seals to prevent leakage
- Date coding to guarantee quality and traceability

Optimum Performance

- Full flow minimises pressure drop
- Nickel-plated brass provides improved corrosion resistance and increased chemical compatibility
- Can be operated at very low temperatures (-40°C)

Long Threads

- Excellent fitting compatibility:
 - dimensions compliant with DIN 3357
 - BSPP threads compliant with DIN 2999/ISO 228



Seats
Outside Doors
Air Horns

Applications



Technical Characteristics

Compatible Fluids	Compressed air, water, gas
Working Pressure	1/4" to 2": 0 to 40 bar
Working Temperature	-40°C to +170°C

Reliable performance is dependent upon the type of fluid conveyed.

Regulations

- Industrial**
 - DI: 97/23/EC (PED B+D module EC 1115)
 - DIN EN 45545
- Water**
 - DVGW: W 570-1
 - DIN EN 13228
 - BGA KTW
 - DVGW: W270
- Gas**
 - DIN EN 33

View products



www.parkerlegris.com/dvgw



Together, we can connect you to the best in technology. Better than ever before.

In the updated edition of the Parker Legris catalogue, we have developed the content, structure and layout to enable you to find the products and information you require as quickly as possible. 31 complementary ranges and more than 1000 additional part numbers have been included, widening the choice of solutions available in order to meet your requirements more effectively. By putting our knowledge and expertise at your fingertips, we strive to provide the day-to-day support you need when designing your industrial equipment.



aerospace
 climate control
 electromechanical
 filtration
 fluid & gas handling
 hydraulics
 pneumatics
 process control
 sealing & shielding



ENGINEERING YOUR SUCCESS.



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At Parker, we're guided by a relentless drive to help our customers become more productive and achieve higher levels of profitability by engineering the best systems for their requirements. It means looking at customer applications from many angles to find new ways to create value. Whatever the motion and control technology need, Parker has the experience, breadth of product and global reach to consistently deliver. No company knows more about motion and control technology than Parker. For further info call 00800 27 27 5374.



Aerospace

Key Markets

Aftermarket services
Commercial transports
Engines
General & business aviation
Helicopters
Launch vehicles
Military aircraft
Missiles
Power generation
Regional transports
Unmanned aerial vehicles

Key Products

Control systems & actuation products
Engine systems & components
Fluid conveyance systems & components
Fluid metering, delivery & atomization devices
Fuel systems & components
Fuel tank inerting systems
Hydraulic systems & components
Thermal management
Wheels & brakes



Climate Control

Key Markets

Agriculture
Air conditioning
Construction Machinery
Food & beverage
Industrial machinery
Life sciences
Oil & gas
Precision cooling
Process
Refrigeration
Transportation

Key Products

Accumulators
Advanced actuators
CO₂ controls
Electronic controllers
Filter driers
Hand shut-off valves
Heat exchangers
Hose & fittings
Pressure regulating valves
Refrigerant distributors
Safety relief valves
Smart pumps
Solenoid valves
Thermostatic expansion valves



Electromechanical

Key Markets

Aerospace
Factory automation
Life science & medical
Machine tools
Packaging machinery
Paper machinery
Plastics machinery & converting
Primary metals
Semiconductor & electronics
Textile
Wire & cable

Key Products

AC/DC drives & systems
Electric actuators, gantry robots & slides
Electrohydraulic actuation systems
Electromechanical actuation systems
Human machine interface
Linear motors
Stepper motors, servo motors, drives & controls
Structural extrusions



Filtration

Key Markets

Aerospace
Food & beverage
Industrial plant & equipment
Life sciences
Marine
Mobile equipment
Oil & gas
Power generation & renewable energy
Process
Transportation
Water Purification

Key Products

Analytical gas generators
Compressed air filters & dryers
Engine air, coolant, fuel & oil filtration systems
Fluid condition monitoring systems
Hydraulic & lubrication filters
Hydrogen, nitrogen & zero air generators
Instrumentation filters
Membrane & fiber filters
Microfiltration
Sterile air filtration
Water desalination & purification filters & systems



Fluid & Gas Handling

Key Markets

Aerial lift
Agriculture
Bulk chemical handling
Construction machinery
Food & beverage
Fuel & gas delivery
Industrial machinery
Life sciences
Marine
Mining
Mobile
Oil & gas
Renewable energy
Transportation

Key Products

Check valves
Connectors for low pressure fluid conveyance
Deep sea umbilicals
Diagnostic equipment
Hose couplings
Industrial hose
Mooring systems & power cables
PTFE hose & tubing
Quick couplings
Rubber & thermoplastic hose
Tube fittings & adapters
Tubing & plastic fittings



Hydraulics

Key Markets

Aerial lift
Agriculture
Alternative energy
Construction machinery
Forestry
Industrial machinery
Machine tools
Marine
Material handling
Mining
Oil & gas
Power generation
Refuse vehicles
Renewable energy
Truck hydraulics
Turf equipment

Key Products

Accumulators
Cartridge valves
Electrohydraulic actuators
Human machine interfaces
Hybrid drives
Hydraulic cylinders
Hydraulic motors & pumps
Hydraulic systems
Hydraulic valves & controls
Hydrostatic steering
Integrated hydraulic circuits
Power take-offs
Power units
Rotary actuators
Sensors



Pneumatics

Key Markets

Aerospace
Conveyor & material handling
Factory automation
Life science & medical
Machine tools
Packaging machinery
Transportation & automotive

Key Products

Air preparation
Brass fittings & valves
Manifolds
Pneumatic accessories
Pneumatic actuators & grippers
Pneumatic valves & controls
Quick disconnects
Rotary actuators
Rubber & thermoplastic hose & couplings
Structural extrusions
Thermoplastic tubing & fittings
Vacuum generators, cups & sensors



Process Control

Key Markets

Alternative fuels
Biopharmaceuticals
Chemical & refining
Food & beverage
Marine & shipbuilding
Medical & dental
Microelectronics
Nuclear Power
Offshore oil exploration
Oil & gas
Pharmaceuticals
Power generation
Pulp & paper
Steel
Water/wastewater

Key Products

Analytical Instruments
Analytical sample conditioning products & systems
Chemical injection fittings & valves
Fluoropolymer chemical delivery fittings, valves & pumps
High purity gas delivery fittings, valves, regulators & digital flow controllers
Industrial mass flow meters/ controllers
Permanent no-weld tube fittings
Precision industrial regulators & flow controllers
Process control double block & bleeds
Process control fittings, valves, regulators & manifold valves



Sealing & Shielding

Key Markets

Aerospace
Chemical processing
Consumer
Fluid power
General industrial
Information technology
Life sciences
Microelectronics
Military
Oil & gas
Power generation
Renewable energy
Telecommunications
Transportation

Key Products

Dynamic seals
Elastomeric o-rings
Electro-medical instrument design & assembly
EMI shielding
Extruded & precision-cut, fabricated elastomeric seals
High temperature metal seals
Homogeneous & inserted elastomeric shapes
Medical device fabrication & assembly
Metal & plastic retained composite seals
Shielded optical windows
Silicone tubing & extrusions
Thermal management
Vibration dampening

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