Parker Legris CleanFit:
Connection Solutions
for Life Sciences & Clean Rooms

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

Parker

ENGINEERING YOUR SUCCESS.

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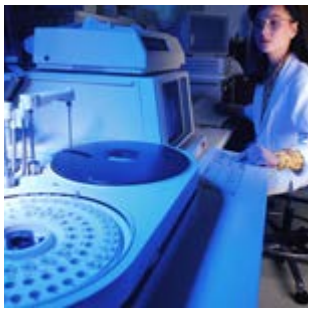
The Fluid System Connectors Division Europe (Legris) of Parker Hannifin, the global leader in motion and control technologies, has edited this catalogue to promote the many different ranges of clean and compact push-in fittings, tubing, function fittings, valves and complementary products specific to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

With more than 40 years of experience in the manufacturing and marketing of high quality fittings, Parker Legris today proposes a wide range of proven solutions for medical and clean room environments: bio-medical equipment, breathing systems, diagnosis devices, pharmaceutical process…

For advice or more information, please do not hesitate to contact us.

Visit our web site today: www.parkerlegris.com.





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Connection Solutions for Life Sciences & Clean Room Applications

MEDICAL

Respiratory

Oxygen Therapy/Oxygen Gas/Transfilling/Concentrators/
Oxygen Conserving Devices/Sleep Apnea/ICU/Aerosol

Preventative & Recovery

Perioperative Temperature Mgmt./Pre-OP/OR/Post-OP/
Therapeutic/Compression Therapy/Alternating Support Surfaces

Bio-Fluid Management

Dialysis/Medical Autoclaves/Dental/Hospital Infection Control/
Suction Therapy/Wound Therapy

Surgical & Diagnosis

Surgical Power Tools/Imaging Equipment/Home Diagnostic
Equipment/Advanced Prosthetics

INDUSTRIAL

Laboratory

Gas Control/AA Spectrometry/Thermal Conductivity Detector

Clean Rooms

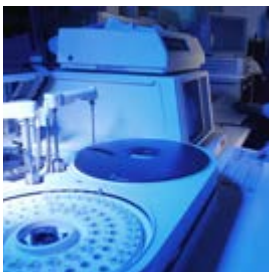
Air/Vacuum Conditioning Unit/Air Bearing Controller/
Semi-Conductor/Neonatal Ventilator/Filling & Packing

Pharmaceutical

Air & Nitrogen Supply/Buffer Preparation/Bioreactor Production/
Chromatography/Diafiltration & Concentration/Dosing/
Filling & Packing

Respiratory

Anti-Dust Systems/O_2 Delivery Systems



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Directives and Regulations: the Parker Legris Offer

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: no. 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.

ATEX Directive: 94/9/EC mandatory since 01/07/2003
This directive is mandatory for electrical and non-electrical equipment used in explosive gaseous or dusty atmospheres. The use of our products in these areas must be determined in accordance with the ATEX environment.

CFR 21: Code of Federal Regulation
Title 21: Food and Drugs
This code consists of lists of prohibited substances for materials intended to come into contact with foodstuffs.

Standard Practice for Cleaning Methods and Cleanliness Levels for Material and Equipment Used in Oxygen-Enriched Environments
This practice covers the selection of methods and apparatus for cleaning materials and equipment intended for service in oxygen-enriched environments. Contamination problems encountered in the use of enriched air, mixtures of oxygen with other gases, or any other oxidizing gas may be solved by the same cleaning procedures applicable to most metallic and non-metallic materials and equipment.

For grease used in fittings only.

ISO 14001
Environmental Management Systems: Requirements with Guidance for Use.

ISO 14644-1
Clean Rooms and Associated Controlled Environments. PART 1 : Classification of Air Cleanliness
The document covers the classification of air cleanliness in clean rooms and associated controlled environments exclusively in terms of concentration of airborne particles. Only particle populations having cumulative size distributions based on threshold (lower limit) size ranging from 0.1 µm to 5 µm are considered for classification purposes.

ISO 13485 (pending)
Medical Devices - Quality Management Systems: Requirements for Regulatory Purposes
This International Standard specifies requirements for a quality management system where an organization needs to demonstrate its ability to provide medical devices and related services that consistently meet customer requirements and regulatory requirements applicable to medical devices and related services.

ISO 15001:2010
Anaesthetic and Respiratory Equipment, Compatibility with Oxygen
ISO 15001:2010 specifies requirements for the oxygen compatibility of materials, components and devices for anaesthetic and respiratory applications, which can come into contact with oxygen in normal conditions or in single fault conditions at gas pressures greater than 50 kPa.

CGA G-4.1
Cleaning Equipment for Oxygen Service
The cleaning methods described in this publication are intended for cleaning equipment used in the production, storage, distribution, and use of liquid and gaseous oxygen.

Protecting natural resources: By saving energy through the performance of our production facilities.
Improving performance: By changing habits in order to promote new materials and concepts.
Asserting our values for the protection of the environment: By having all our sites ISO 14001 certified in order to unify all our employees around clear objectives regarding the management of the environment.

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.

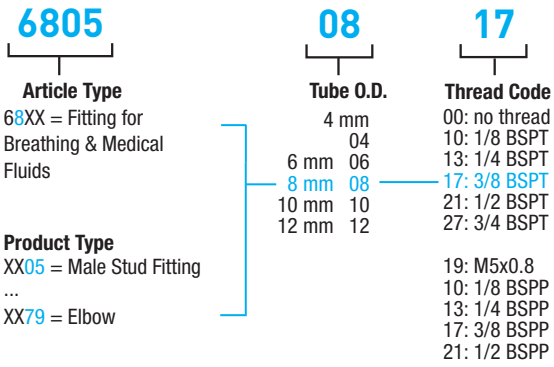
Part Number Identification

The part numbers used for our product ranges are coded in such a way as to make it easy to identify any particular item.

Part Number Construction for Fittings

The part numbers are selected using a technical mnemonic code.

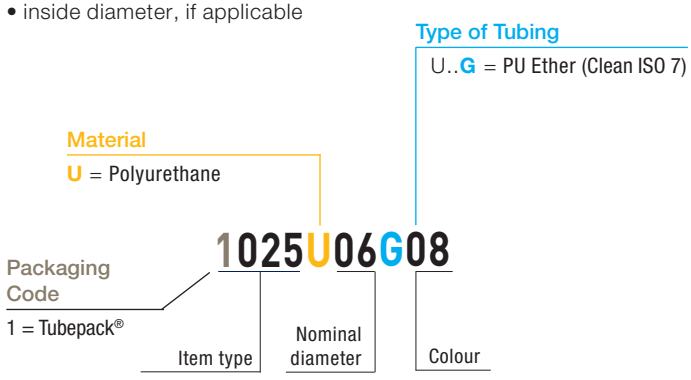
Each fitting and valve is identified by:
- model series (4 digits)
- nominal diameter (2 digits)
- thread or 2nd nominal diameter (2 digits)
- a suffix, if applicable



Part Number Construction for Tubing

The part numbers are selected using a technical mnemonic code.

Each tube is identified by:
- model series (4 digits and a letter)
- nominal diameter (2 digits)
- colour (2 digits)
- inside diameter, if applicable



Nominal diameter code: equates to the outside diameter.
Colour code: see below

08 = ☐ (clear)

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EVAPORATOR #2
AuGe-Ni-Au
EVAPORATOR #3

Product Ranges for Life Sciences & Clean Rooms

Push-In Fittings, with Polymer or Metal Adaptor (P.10)

Fluids: clean air, breathing and medical fluids

Materials: biopolymer, EPDM, FDA nickel-plated brass

Pressure: 15 bar

Temperature: -10°C to +95°C

Ø metric: 4 mm to 12 mm

PU Tubing (P.20)

Fluids: medical gases, ophthalmic gases, MEOPA, O_2, N_2, CO_2, NO_2, medical air, He, Ar, sensitive industrial fluids, compressed air, breathable air, cooling fluids, water

Materials: Polyurethane Ether Clean, ISO 7

Pressure: 10 bar

Temperature: -20°C to +90°C

O.D. metric: 4 mm to 12 mm

PFA Tubing (P.22)

Fluids: many fluids

Materials:
– High purity medical-grade, clear
– USP Class VI

Pressure: 36 bar

Temperature: -196°C to +260°C

O.D. metric: 4 mm to 12 mm

Clean Packaging

All fittings are packed in an antistatic and airtight bag, guaranteeing impeccable cleanliness for safe and easy use.

Product Ranges for Life Sciences & Clean Rooms

Stud Fittings

Straights

6805 BSPT Metal Page 11

6801 BSPP / Metric Metal Page 11

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Flexible Calibrated Tubing

Polyurethane Tubing

Semi-Rigid PU Ether Clean, ISO 7

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Fluoropolymer Tubing

Semi-Rigid PFA USP VI

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Push-In Fittings for Life Sciences & Clean Rooms

This "eco-designed" CleanFit range drives high-tech equipment beyond current connection limits in terms of **cleanliness, reliability** and **safety**. This **ultra-clean range** ensures **perfect compatibility** with most gases, and therefore complies with **demanding applications and standards**.

Customer Benefits

Ease of Use
- Ergonomic and aesthetic design
- Compact product fully adapted to portable devices
- Antistatic and airtight packaging to prevent contamination

Purity & Security
- Recommended for O_2 applications and pure gases
- High cleanliness level, according to ASTM G93: level B and particle size level 300
- 100% leak-tested in production
- Date coding to guarantee quality and traceability

Hi-Tech Materials Complying with Health Regulations
- Bio-sourced polymer, chemical nickel-plated brass
- Compatible with cleaning agents recommended for decontamination processes
- Excellent chemical and mechanical resistance, even at high temperatures
- Sterilisable using standard chemical and radiation procedures

Applications
- Respiratory
- Bio-Fluid Management
- Clean Rooms
- Pharmaceutical Process
- Laboratory
- O_2 Circuits

Technical Characteristics

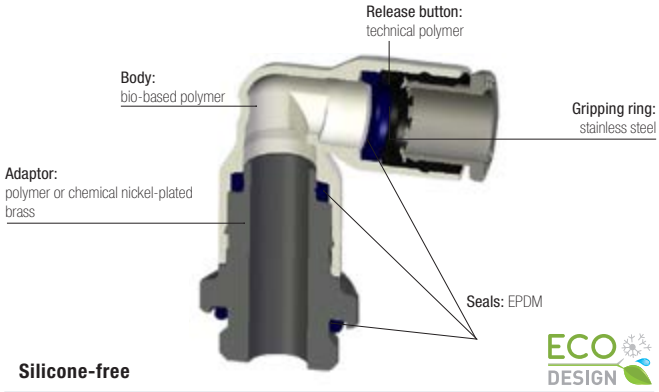
Compatible Fluids	Breathing, neutral & pure medical gases Other fluids: please consult us
Working Pressure	Vacuum to 15 bar Working pressure varies according to temperature (see below)
Working Temperature	-10°C to +95°C

Tightening Torques (BSPT/NPTF)	Thread	1/8" and 1/4"	3/8" and 1/2"
	daN.m	0.15	0.30

Tightening Torques (Metric & BSPP)	Thread	M5 x 0.8	G1/8	G1/4	G3/8	G1/2
	daN.m	0.16	0.8	1.2	3	3.5

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

Component Materials



Regulations

- DI: 2002/95/EC (RoHS), 2011/65/EC
- DI: 1907/2006 (REACH)
- ASTM G93-03.B-300
- ISO 15001 < 30 bar
- BAM (grease certification residue)
- CGA G4.1
- EN 12021 < 0,1 mg/m³
- VDI 2083-8 (in progress)

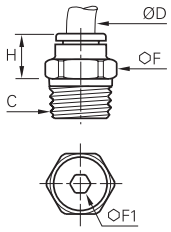
Pressure and Temperature Performance

-10°C	Pressure (bar)	+1°C	Pressure (bar)	+20°C	Pressure (bar)	+40°C	Pressure (bar)	+65°C	Pressure (bar)	+95°C	Pressure (bar)
mm Ø	Fittings	mm Ø	Fittings	mm Ø	Fittings	mm Ø	Fittings	mm Ø	Fittings	mm Ø	Fittings
4	15	4	15	4	15	4	15	4	10	4	4
6	15	6	15	6	15	6	15	6	10	6	4
8	15	8	15	8	15	8	15	8	10	8	4
10	13	10	13	10	13	10	13	10	7	10	4
12	11	12	11	12	11	12	11	12	7	12	4

Stud Fittings

6805 Stud Fitting, Male BSPT Thread

Chemical nickel-plated brass, EPDM

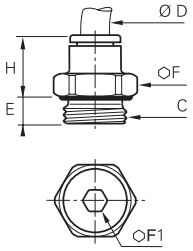


ØD	C		F	F1	H	kg
4	R1/8	6805 04 10	10	3	9.5	0.005
	R1/4	6805 04 13	14	3	6.5	0.012
6	R1/8	6805 06 10	10	4	11.5	0.005
	R1/4	6805 06 13	14	4	8.5	0.011
8	R1/8	6805 08 10	13	5	20	0.011
	R1/4	6805 08 13	14	6	17	0.014
	R3/8	6805 08 17	17	6	13	0.021
10	R1/4	6805 10 13	16	7	20	0.017
	R3/8	6805 10 17	17	8	16.5	0.019
	R1/2	6805 10 21	21	8	14	0.037
12	R3/8	6805 12 17	19	9	24	0.028
	R1/2	6805 12 21	21	10	19.5	0.036

Thread without pre-coating

6801 Stud Fitting, Male BSPP and Metric Thread

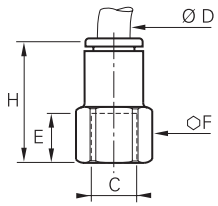
Chemical nickel-plated brass, EPDM



ØD	C		E	F	F1	H	kg
4	M5x0.8	6801 04 19	3	8	2.5	14	0.003
	G1/8	6801 04 10	5.5	13	3	11.5	0.007
	G1/4	6801 04 13	5.5	16	3	10.5	0.011
6	M5x0.8	6801 06 19	3	10	2.5	16	0.005
	G1/8	6801 06 10	4.5	13	4	13	0.007
	G1/4	6801 06 13	5.5	16	4	12.5	0.011
8	G1/8	6801 08 10	4.5	13	5	20.5	0.011
	G1/4	6801 08 13	5.5	16	6	19.5	0.016
	G3/8	6801 08 17	5.5	20	6	18	0.022
10	G1/4	6801 10 13	5.5	16	7	23	0.018
	G3/8	6801 10 17	5.5	20	8	19.5	0.021
	G1/2	6801 10 21	7	24	8	18	0.033
12	G3/8	6801 12 17	5.5	20	9	27	0.029
	G1/2	6801 12 21	7	24	10	22.5	0.035

6814 Stud Fitting, Female BSPP Thread

Chemical nickel-plated brass, EPDM

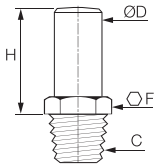


ØD	C		E	F	H	kg
4	G1/8	6814 04 10	9.5	13	22.5	0.010
6	G1/8	6814 06 10	9.5	13	24.5	0.011
	G1/4	6814 06 13	13.5	16	28.5	0.017
8	G1/8	6814 08 10	9.5	13	29	0.015
	G1/4	6814 08 13	13.5	16	33	0.021
	G3/8	6814 08 17	14	19	34	0.025
10	G1/4	6814 10 13	13.5	16	36	0.027
	G3/8	6814 10 17	14	19	36	0.027
	G1/2	6814 10 21	19.5	24	41.5	0.048
12	G3/8	6814 12 17	14	19	40	0.033
	G1/2	6814 12 21	19.5	24	45.5	0.052

Stud Fittings

6821 Stud Standpipe, Male BSPT Thread

Bio-based polymer

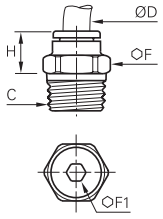


ØD	C		F	H	kg
6	R1/8	6821 06 10	13	19	0.002
	R1/4	6821 06 13	14	19	0.003
8	R1/8	6821 08 10	19	23	0.003
	R1/4	6821 08 13	19	23	0.004
	R3/8	6821 08 17	19	23	0.004
10	R1/4	6821 10 13	19	25	0.004
	R3/8	6821 10 17	19	25	0.005
	R1/2	6821 10 21	22	25	0.008
12	R3/8	6821 12 17	22	28	0.005
	R1/2	6821 12 21	22	28	0.007

Thread without pre-coating

6875 Stud Fitting, Male BSPT Thread

Bio-based polymer, EPDM

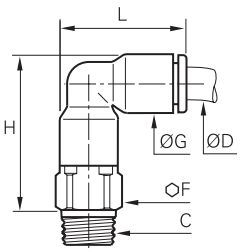


ØD	C		F	F1	H	kg
4	R1/8	6875 04 10	11	3	18	0.003
	R1/4	6875 04 13	14	3	18	0.004
6	R1/8	6875 06 10	11	4	18	0.002
	R1/4	6875 06 13	14	4	18	0.004
8	R1/8	6875 08 10	17	6	20	0.004
	R1/4	6875 08 13	14	6	20	0.004
	R3/8	6875 08 17	17	6	20	0.005
10	R1/4	6875 10 13	17	7	21.5	0.005
	R3/8	6875 10 17	19	7	21.5	0.007
	R1/2	6875 10 21	22	7	21.5	0.010
12	R3/8	6875 12 17	19	9	24.5	0.008
	R1/2	6875 12 21	22	9	24.5	0.012

Thread without pre-coating

6809 Stud Elbow, Male BSPT Thread

Bio-based polymer, chemical nickel-plated brass, EPDM



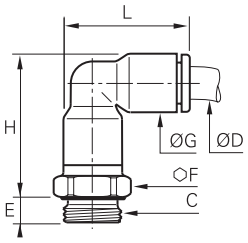
ØD	C		F	G	H	L	kg
4	R1/8	6809 04 10	10	8.5	23	19	0.008
	R1/4	6809 04 13	14	8.5	23.5	19	0.018
6	R1/8	6809 06 10	10	10.5	27	22.5	0.010
	R1/4	6809 06 13	14	10.5	27.5	22.5	0.020
8	R1/8	6809 08 10	13	13.5	33.5	29.5	0.018
	R1/4	6809 08 13	14	13.5	32.5	29.5	0.022
	R3/8	6809 08 17	17	13.5	33	29.5	0.032
10	R1/4	6809 10 13	15	16	39.5	34	0.031
	R3/8	6809 10 17	17	16	39.5	34	0.041
	R1/2	6809 10 21	21	16	39.5	34	0.060
12	R3/8	6809 12 17	19	19	45.5	40.5	0.051
	R1/2	6809 12 21	21	19	45.5	40.5	0.065

The body swivels for positioning purposes.

Stud Fittings

6899 Stud Elbow, Male BSPP and Metric Thread

Bio-based polymer, chemical nickel-plated brass, EPDM

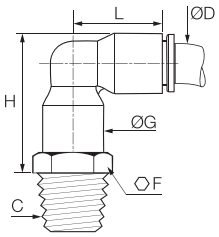


ØD	C		E	F	G	H	L	kg
4	M5x0.8	6899 04 19	3.5	8	8.5	23	19	0.002
	G1/8	6899 04 10	4.5	13	8.5	22.5	19	0.006
	G1/4	6899 04 13	5.5	16	8.5	22.5	19	0.011
6	M5x0.8	6899 06 19	3.5	10	10.5	26.5	22.5	0.003
	G1/8	6899 06 10	4.5	13	10.5	26.5	22.5	0.006
	G1/4	6899 06 13	5.5	16	10.5	26.5	22.5	0.011
8	G1/8	6899 08 10	4.5	13	13.5	35	29.5	0.009
	G1/4	6899 08 13	5.5	16	13.5	33	29.5	0.012
	G3/8	6899 08 17	5.5	20	13.5	33	29.5	0.017
10	G1/4	6899 10 13	5.5	16	16	40.5	34	0.014
	G3/8	6899 10 17	5.5	20	16	39	34	0.017
	G1/2	6899 10 21	7	24	16	39	34	0.026
12	G3/8	6899 12 17	5.5	20	19	42	40	0.019
	G1/2	6899 12 21	7	24	19	42	40	0.029

The body swivels for positioning purposes.

6879 Stud Elbow, Male BSPT Thread

Bio-based polymer, EPDM

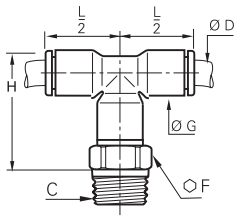


ØD	C		F	G	H	L	kg
6	R1/8	6879 06 10	13	10.5	28	24	0.037
	R1/4	6879 06 13	14	10.5	28	24	0.007
8	R1/8	6879 08 10	19	13.5	34	29.5	0.010
	R1/4	6879 08 13	19	13.5	34	29.5	0.011
	R3/8	6879 08 17	19	13.5	34	29.5	0.011
10	R1/4	6879 10 13	19	16	38	34.5	0.019
	R3/8	6879 10 17	19	16	38	34.5	0.020
	R1/2	6879 10 21	22	16	38	34.5	0.023
12	R3/8	6879 12 17	22	19	44	40	0.022
	R1/2	6879 12 21	22	19	44	40	0.024

Thread without pre-coating; the body swivels for positioning purposes.

6808 Stud Branch Tee, Male BSPT Thread

Bio-based polymer, chemical nickel-plated brass, EPDM



ØD	C		F	G	H	L/2	kg
4	R1/8	6808 04 10	10	8.5	23	14	0.007
	R1/4	6808 04 13	14	8.5	23	14	0.017
6	R1/8	6808 06 10	10	10.5	27	16	0.008
	R1/4	6808 06 13	14	10.5	27	16	0.018
8	R1/8	6808 08 10	13	13.5	33.5	23	0.010
	R1/4	6808 08 13	14	13.5	32	23	0.018
	R3/8	6808 08 17	17	13.5	33	23	0.022
10	R1/4	6808 10 13	15	16	39	26.5	0.019
	R3/8	6808 10 17	17	16	39	26.5	0.024
	R1/2	6808 10 21	21	16	39	26.5	0.036
12	R3/8	6808 12 17	19	19	45	31	0.029
	R1/2	6808 12 21	21	19	45	31	0.041

The body swivels for positioning purposes.

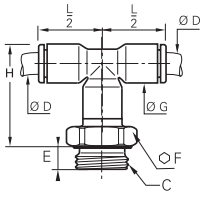
Clean Packaging

All fittings are packed in an antistatic and airtight bag, guaranteeing impeccable cleanliness for safe and easy use.

Stud Fittings

6898 Stud Branch Tee, Male BSPP and Metric Thread

Bio-based polymer, chemical nickel-plated brass, EPDM

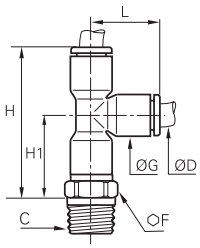


ØD	C		E	F	G	H	L/2	kg
4	M5x0.8	6898 04 19	3.5	8	8.5	24	14	0.003
	G1/8	6898 04 10	5	13	8.5	22	14	0.007
	G1/4	6898 04 13	5.5	16	8.5	22	14	0.012
6	M5x0.8	6898 06 19	3.5	10	10.5	28	16	0.004
	G1/8	6898 06 10	5	13	10.5	26	16	0.008
	G1/4	6898 06 13	5.5	16	10.5	26	16	0.013
8	G1/8	6898 08 10	4.5	13	13.5	35	23	0.012
	G1/4	6898 08 13	5.5	16	13.5	33	23	0.015
	G3/8	6898 08 17	5.5	20	13.5	33	23	0.021
10	G1/4	6898 10 13	5.5	16	16	43	26.5	0.019
	G3/8	6898 10 17	5.5	20	16	43	26.5	0.022
	G1/2	6898 10 21	7.5	24	16	39	26.5	0.032
12	G3/8	6898 12 17	5.5	20	19	42	31	0.026
	G1/2	6898 12 21	7	24	19	42	31	0.036

The body swivels for positioning purposes.

6803 Stud Run Tee, Male BSPT Thread

Bio-based polymer, chemical nickel-plated brass, EPDM

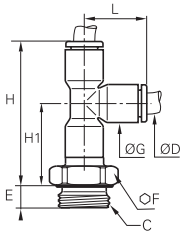


ØD	C		F	G	H	H1	L	kg
4	R1/8	6803 04 10	10	8.5	31	18	14.5	0.007
	R1/4	6803 04 13	14	8.5	31	19	14.5	0.017
6	R1/8	6803 06 10	10	10.5	38	22	17.5	0.008
	R1/4	6803 06 13	14	10.5	39	23	17.5	0.018
8	R1/8	6803 08 10	13	13.5	53	30	23	0.010
	R1/4	6803 08 13	14	13.5	52	29	23	0.017
	R3/8	6803 08 17	17	13.5	52	29	23	0.022
10	R1/4	6803 10 13	15	16	61	35	26.5	0.019
	R3/8	6803 10 17	17	16	61	35	26.5	0.024
	R1/2	6803 10 21	21	16	61	35	26.5	0.036
12	R3/8	6803 12 17	19	19	70	39	31	0.029
	R1/2	6803 12 21	21	19	70	39	31	0.041

The body swivels for positioning purposes.

6893 Stud Run Tee, Male BSPP and Metric Thread

Bio-based polymer, chemical nickel-plated brass, EPDM



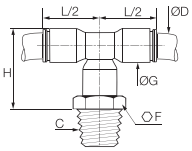
ØD	C		E	F	G	H	H1	L	kg
4	M5x0.8	6893 04 19	3.5	8	8.5	32	19	14.5	0.003
	G1/8	6893 04 10	5	13	8.5	30	18	14.5	0.007
	G1/4	6893 04 13	5.5	16	8.5	30	18	14.5	0.012
6	M5x0.8	6893 06 19	3.5	10	10.5	39	23	17.5	0.004
	G1/8	6893 06 10	5	13	10.5	38	22	17.5	0.008
	G1/4	6893 06 13	5.5	16	10.5	38	22	17.5	0.013
8	G1/8	6893 08 10	4.5	13	13.5	54	31	23	0.012
	G1/4	6893 08 13	5.5	16	13.5	52	29	23	0.015
	G3/8	6893 08 17	5.5	20	13.5	52	29	23	0.021
10	G1/4	6893 10 13	5.5	16	16	61	35	26.5	0.019
	G3/8	6893 10 17	5.5	20	16	61	35	26.5	0.022
	G1/2	6893 10 21	7.5	24	16	61	35	26.5	0.032
12	G3/8	6893 12 17	5.5	20	19	67	36	31	0.026
	G1/2	6893 12 21	7	24	19	67	36	31	0.042

The body swivels for positioning purposes.

Stud Fittings

6878 Branch Tee, Male BSPT Thread

Bio-based polymer, EPDM

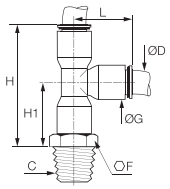


ØD	C		F	G	H	L/2	kg
6	R1/8	6878 06 10	13	10.5	28	18	0.008
	R1/4	6878 06 13	14	10.5	28	18	0.009
8	R1/8	6878 08 10	19	13.5	34	23	0.012
	R1/4	6878 08 13	19	13.5	34	23	0.013
	R3/8	6878 08 17	19	13.5	34	23	0.013
10	R1/4	6878 10 13	19	16	38	26.5	0.018
	R3/8	6878 10 17	19	16	38	26.5	0.019
	R1/2	6878 10 21	22	16	38	26.5	0.022
12	R3/8	6878 12 17	22	19	44	31	0.024
	R1/2	6878 12 21	22	19	44	31	0.026

Thread without pre-coating; the body swivels for positioning purposes.

6873 Run Tee, Male BSPT Thread

Bio-based polymer, EPDM



ØD	C		F	G	H	H1	L	kg
6	R1/8	6873 06 10	13	10.5	40	22	18.5	0.008
	R1/4	6873 06 13	14	10.5	40	22	18.5	0.009
8	R1/8	6873 08 10	19	13.5	50	27	23	0.012
	R1/4	6873 08 13	19	13.5	50	27	23	0.013
	R3/8	6873 08 17	19	13.5	50	27	23	0.013
10	R1/4	6873 10 13	19	16	56.5	30	26.5	0.018
	R3/8	6873 10 17	19	16	56.5	30	26.5	0.019
	R1/2	6873 10 21	22	16	56.5	30	26.5	0.022
12	R3/8	6873 12 17	22	19	65.5	34.5	31	0.024
	R1/2	6873 12 21	22	19	65.5	34.5	31	0.026

Thread without pre-coating; the body swivels for positioning purposes.

Our coloured safety clips and tubing allow for circuit identification for breathable fluids according to the normalized rules in medical environments. Please consult our general Catalogue for more information (page 1-37).

O_2 and CO_2

Vacuum

Medical Air

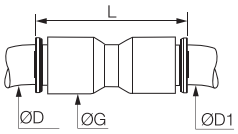
N_2

In all cases, to secure your circuits

Tube-to-Tube Fittings

6806 Equal and Unequal Tube-to-Tube Connector

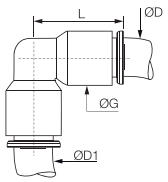
Bio-based polymer, EPDM



ØD	ØD1		G	L	kg
4	4	6806 04 00	8.5	26.5	0.002
	6	6806 04 06	10.5	29	0.002
6	6	6806 06 00	10.5	30	0.004
	8	6806 06 08	13.5	37	0.005
8	8	6806 08 00	13.5	37	0.004
	10	6806 08 10	16	42	0.007
10	10	6806 10 00	16	42	0.009
	12	6806 10 12	19	50	0.013
12	12	6806 12 00	19	50.5	0.009

6802 Equal and Unequal Elbow

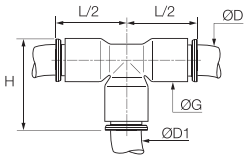
Bio-based polymer, EPDM



ØD	ØD1		G	L	kg
4	4	6802 04 00	8.5	19	0.002
	6	6802 04 06	10.5	24	0.004
6	6	6802 06 00	10.5	24	0.004
	8	6802 06 08	13.5	29.5	0.006
8	8	6802 08 00	13.5	29	0.004
	10	6802 08 10	16	34.5	0.008
10	10	6802 10 00	16	34.5	0.005
	12	6802 10 12	19	40.5	0.013
12	12	6802 12 00	19	40.5	0.010

6804 Equal Tee

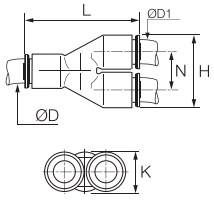
Bio-based polymer, EPDM



ØD	ØD1		G	H	L/2	kg
4	4	6804 04 00	8.5	20	15.5	0.004
6	6	6804 06 00	10.5	23	18	0.006
8	8	6804 08 00	13.5	29	22.5	0.006
10	10	6804 10 00	16	34.5	26.5	0.009
12	12	6804 12 00	19	40	31	0.014

6840 Equal Single Y Piece

Bio-based polymer, EPDM

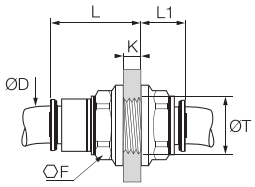


ØD	ØD1		H	K	L	N	kg
4	4	6840 04 00	17.5	8.5	30	9	0.004
6	6	6840 06 00	21.5	10.5	36.5	11	0.008
8	8	6840 08 00	28	13.5	44.5	14.5	0.007
10	10	6840 10 00	33	16	53	17	0.010
12	12	6840 12 00	39	19	60.5	20	0.025

Bulkhead Connectors and Plug-In Fittings

6816 Equal Bulkhead Connector

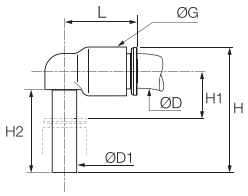
Bio-based polymer, EPDM



ØD		F	K max	L	L1	ØT min	kg
4	6816 04 00	13	5.5	15.5	10.5	10.5	0.018
6	6816 06 00	15	8.5	20	10	12.5	0.004
8	6816 08 00	18	14.5	27	10.5	15.5	0.007
10	6816 10 00	22	14.5	30	13	18.5	0.012
12	6816 12 00	26	18.5	35	15.5	22.5	0.020

6882 Equal and Unequal Plug-In Elbow

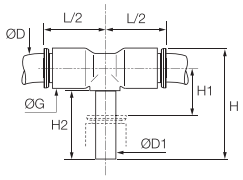
Bio-based polymer, EPDM



ØD	ØD1		G	H	H1	H2	L	kg
4	4	6882 04 00	8.5	23	6	15.5	15	0.003
	6	6882 04 06	10.5	26.5	7	17	16.5	0.002
6	6	6882 06 00	10.5	26.5	7	17	17	0.003
	4	6882 06 04	10.5	25	7	15.5	17	0.001
	8	6882 06 08	13.5	33.5	8	21.5	22.5	0.004
8	8	6882 08 00	13.5	33.5	8	21.5	22.5	0.004
10	10	6882 10 00	16	39	9.5	24.5	26.5	0.004
12	12	6882 12 00	19	44.5	10	27	31	0.012

6888 Plug-In Equal Branch Tee

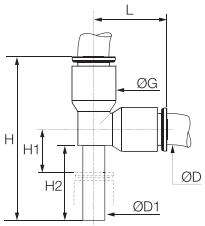
Bio-based polymer, EPDM



ØD	ØD1		G	H	H1	H2	L/2	kg
4	4	6888 04 00	8.5	25	6	15.5	15	0.005
6	6	6888 06 00	10.5	28.5	7	17	16	0.006
8	8	6888 08 00	13.5	33.5	8	21.5	23	0.005
10	10	6888 10 00	16	41	9.5	24.5	26.5	0.007
12	12	6888 12 00	19	46.5	10	27	31	0.016

6883 Plug-In Equal Run Tee

Bio-based polymer, EPDM

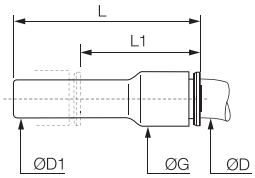


ØD	ØD1		G	H	H1	H2	L	kg
4	4	6883 04 00	8.5	33	6	15.5	15	0.002
6	6	6883 06 00	10.5	38.5	7	17	18	0.002
8	8	6883 08 00	13.5	49	8	21.5	23	0.005
10	10	6883 10 00	16	57	10.5	25.5	26.5	0.012
12	12	6883 12 00	19	65	36.5	27	31	0.016

Plug-In Fittings and Accessories

6866 Plug-In Reducer

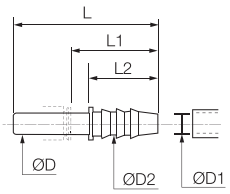
Bio-based polymer, EPDM



ØD	ØD1		G	L	L1	kg
4	6	6866 04 06	8.5	38	23.5	0.004
6	8	6866 06 08	10.5	38	20	0.004
	10	6866 06 10	10.5	39	17.5	0.002
8	10	6866 08 10	13.5	48.5	28.5	0.009
	12	6866 08 12	13.5	48.5	24.5	0.004
10	12	6866 10 12	16	52	33.5	0.005

6822 Plug-In Barb Connector

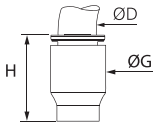
Bio-based polymer



ØD	ØD1	ØD2		L	L1	L2	kg
6	4	7	6822 06 04	39	25	17	0.004
8	6	8.5	6822 08 06	43	25	17	0.005
12	12.5	15.5	6822 12 62	56	32	27.5	0.004

6851 End Cap

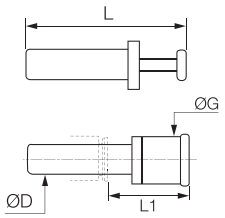
Bio-based polymer, EPDM



ØD		G	H	kg
4	6851 04 00	8.5	15	0.001
6	6851 06 00	10.5	17	0.002
8	6851 08 00	13.5	21.5	0.003
10	6851 10 00	16	22	0.003
12	6851 12 00	19	27.5	0.006

6826 Blanking Plug

Bio-based polymer



ØD		G	L	L1	kg
4	6826 04 00	6	30	15.5	0.001
6	6826 06 00	8	33	16.5	0.001
8	6826 08 00	10	35	17.5	0.002
10	6826 10 00	12	42	21	0.003
12	6826 12 00	14	45	22	0.004

PU Ether Tubing, Extruded in ISO 7 Clean Room

This range of PU tubing, which meets rigourous technical requirements and is also **bio-compatible**, **sterilisable** and **certified ISO 15001**, has been specifically designed for use in medical devices or clean room applications.

Customer Benefits

Safe & Long-Lasting Use of Equipment

- Biocompatible and very stable
- Sterilisable using standard chemical and radiation procedures
- Certified for medical applications and clean rooms
- High cleanliness level
- Microbial resistance

Maximum Reliability & Efficiency of Use

- Excellent mechanical properties
- Exceptional resistance to twisting and compression
- Wide chemical compatibility
- Very good flexibility ensuring ease of use and space saving
- Transparency to facilitate visibility of fluids
- Optimum life cycle management

Applications

Respiratory Devices
Pharmaceutical Process
Clean Rooms
Laboratory
Gas Sampling
O_2 Circuits
Medical Fluid Conveyance

Technical Characteristics

Compatible Fluids	Medical gases, ophthalmic gases, MEOPA, O_2, N_2, CO_2, NO_2, medical air, He, Ar, sensitive industrial fluids, compressed air, breathable air, cooling fluids, water, other
Working Pressure	Vacuum to 10 bar
Working Temperature	-20°C to +90°C
Component Materials	Semi-Rigid Polyurethane Ether Clean, ISO 7 (52 Shore D)

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

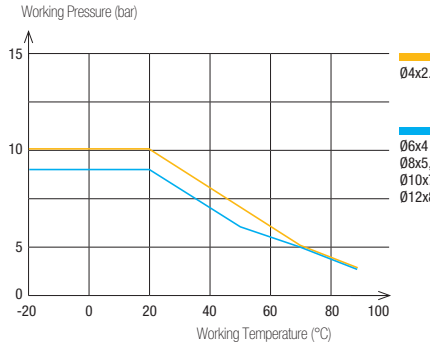
Regulations

Medical & Pharmaceutical
ISO 15001: Fully compatible with oxygen and respiratory fluids
ASTM G93-03 Classification sur demande

Industrial
DI: 2002/95/EC (RoHS), 2011/65/EC
DI: 97/23/EC (PED)
RG:1907/2006 (REACH)

Food Industry
FDA: 21 CFR 177.2600
RG: 1935/2004

Performance of PU Tubing



To calculate burst pressure, the values in this graph should be multiplied by 3.

Tube O.D.	Tube O.D. Tolerance
4 to 8 mm	+0.10 / -0.10
10 to 12 mm	+0.15 / -0.15

Connected to Parker Legris push-in fittings, the calibration of PU tubing ensures perfect sealing based on NF E49-101.

Packaging
Tubepack®: 25 m

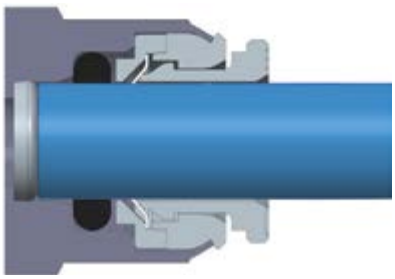
1025U..G Semi-Rigid PU Ether Tubing Clean, ISO 7

Tubepack® 25 m

O.D. (mm)	I.D. (mm)	R	Clear	kg
4	2,5	8	1025U04G08	0.310
6	4	12	1025U06G08	0.591
8	5,5	18	1025U08G08	0.971
10	7	23	1028U10G08	1.467
12	8	25	1025U12G08	2.406

Tube Insertion Length

For unmarked tubing, we recommend that the insertion length be determined prior to connection according to the guidelines mentioned below in order to guarantee correct connection.



ØD tube	L (mm)
4	13
6	14,5
8	18,5
10	20,5
12	24,5

The release button dimensions have a tolerance of +/-1. These values are in line with ISO 14743.

Clean Packaging

All tubing is packed in an antistatic and airtight bag, guaranteeing impeccable cleanliness for safe and easy use.

Medical-Grade PFA Tubing

Parker Legris **PFA** (perfluoroalkoxy) tubing offers **10 times greater durability** than other fluoropolymer tubings (PTFE, FEP and PVDF) under severe chemical and mechanical conditions. This ultra-pure and clean tubing range is **USP VI certified** and offers perfect compatibility with all applications, even in extreme environments.

Customer Benefits

Great Versatility

- A flexible alternative to stainless steel tubing
- Broad range of working temperatures, from cryogenic to extreme heat
- Non-stick properties allowing conveyance of many fluids & gases
- Fluoropolymer with the lowest permeability
- Tube marking on request

Outstanding Lifespan

- Exceptional chemical inertia
- Outstanding resistance to ageing
- Non-flammable
- UV-transparent
- Silicone-free

Applications

Fuel Cells
Electrical/Electronics
Aircraft
Pharmaceutical
Medical
Chemical
Clean Rooms

Technical Characteristics

Compatible Fluids	Medical, bio-compatible, food process, gas, compressed air
Working Pressure	Vacuum to 36 bar
Working Temperature	-196°C to +260°C
Component Materials	Perfluoroalkoxy - 55 Shore D High Purity PFA

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

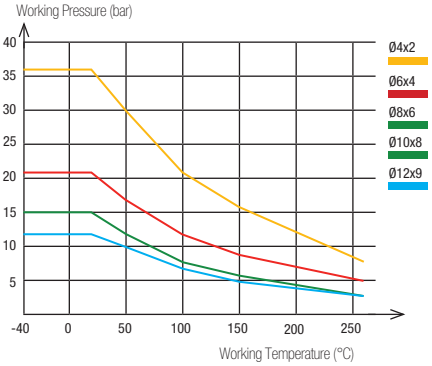
Regulations

Medical
USP: Class VI (A)
External communication devices

Industrial
UL94 V-0 (Fire resistance)
DI: 2002/95/EC (RoHS), 2011/65/EC
DI: 97/23/EC (PED)
RG: 1907/2006 (REACH)

Food Industry
FDA: 21 CFR 177.1550 (clear, translucent coloured)
RG: 1935/2004

Performance of PFA Tubing



To calculate burst pressure, the values in this graph should be multiplied by 3.

Tube O.D.	Tube O.D. Tolerance
4 to 8 mm	+0.10 / -0.10
10 to 12 mm	+0.15 / -0.15

Connected to Parker Legris push-in fittings, the calibration of Parker Legris tubing ensures perfect sealing based on NF E49-100.

Packaging
Tubepack®: 10 m, 50 m

1010T..P Fluoropolymer (PFA) Tubing — Tubepack® 10 m

O.D. (mm)	I.D. (mm)	R	High purity	kg
4	2	12	1010T04P00	0.087
6	4	34	1010T06P00	0.237
8	6	60	1010T08P00	0.410
10	8	95	1010T10P00	0.723
12	9	120	1010T12P00	1.148

1050T..P Fluoropolymer (PFA) Tubing — Tubepack® 50 m

O.D. (mm)	I.D. (mm)	R	High purity	kg
4	2	12	1050T04P00	0.435
6	4	34	1050T06P00	1.185
8	6	60	1050T08P00	2.050
10	8	95	1050T10P00	3.615
12	9	120	1050T12P00	5.740

Clean Packaging

All tubing is packed in an antistatic and airtight bag, guaranteeing impeccable cleanliness for safe and easy use.

Related Products

PE & Advanced PE Tubing

Fluids: many fluids

Materials:
– Low density polyethylene
– 50% reticulated polyethylene, food-grade
– 7 colours

Pressure: 20 bar

Temperature: -40°C to +95°C

O.D. metric: 4 mm to 12 mm
O.D. inch: 1/8" to 1/2"

For details on additional tubing ranges, consult our master Catalogue: **1015Y..F, 1030Y..F, 1075Y..F, 1096Y..F, 1098Y..F, 1099Y..F**

Cartridges for O_2 Applications

Upon Request Only

Fluids: O_2, compressed air

Materials: EPDM, NBR

Pressure: 20 bar

Temperature: -20°C to +80°C

Ø metric: 4 mm to 12 mm

Filter fittings, designed specifically for the filtration of air and gas, can also be made available.

Universal Customised Series Ball Valves, O_2 Applications

With Suffix 30

Fluids: O_2, compressed air, many fluids

Materials: nickel-plated forged brass, EPDM

Pressure: 40 bar

Temperature: -40°C to +100°C

DN : 4 mm to 40 mm

More than 20 different additional models are available in our master Catalogue, including: **0402, 0401, 0452, 0446, 0411, 0472, 0482, 0432**

Function Fittings for O_2 Applications

Upon Request Only

Fluids: O_2, compressed air, inert gases

Materials: polymer, nickel-plated brass, NBR

Pressure: 10 bar

Temperature: 0°C to +70°C

Ø metric: 4 mm to 12 mm

Threads: BSPP, BSPT, metric

Many more models are available in our master Catalogue: **7010, 7060, 7040, 7770, 7771, 7030, 7065, 7045**

Ball Valve Codification for O_2 Applications

These ball valves allow the valve to be adapted to specific needs. They are identified by the specific colour identification on the handle and are manufactured according to a special process (greased and degreased), guaranteeing perfect chemical compatibility with breathable fluids.

0414 04 10 30

- **04** — DN: 04 = 4 mm, 05 = 5 mm, ... 40 = 40 mm
- **10** — Thread or Tubing Ø: 10 = 1/8", 13 = 1/4", ... 48 = 2"
- **30** — Suffix: 30 = white/red

Easily identified by a colour marking on the lever:

Identification		Body	Lever	Ball	Stem and Wear-Compensation Seals	Seat Seals	Grease	Application Examples
Suffix on the body	Colour bands on the lever	Nickel-plated brass	Standard	Nickel-plated polished brass	EPDM	Rilsan: graphite-impregnated	Compatible Oxygen BAM certified	
30		●	●	●	●	●	●	Gaseous oxygen & breathable circuits


300
600
900
1200
1500
Pax100
(cmH2O)
Circle
Absorb
Expiration
APL valve
Close
Ventilation
Bag
Bag

Together, We Can Build Sustainable Development

Parker Legris, ISO 14001 certified, has made the conservation of resources and protection of the environment a major priority. We have incorporated improved environmental management as a permanent feature in the vision and mission of the company, aiming to benefit nature, technology and mankind.

Our actions are coupled with your environmental process

Reducing the impact on industrial sites

Parker Legris has integrated environmental protection management into the operation of its industrial sites. This approach has enabled 85% of waste to be recovered and has reduced energy consumption by 15%.

Offering ecologically responsible products

Under its continuous improvement process, Parker Legris has integrated ecological design as an input parameter to innovation and uses Life Cycle Assessment (LCA) to optimise the environmental impact of its products.

Providing information on the PEP (Product Environmental Profile)

This communication tool is common to all industries and professions and delivers a reliable and clear message for promoting ecological advances and incorporating this data within the LCA equipment.

Getting ahead of regulations

Parker Legris goes beyond its statutory obligations and endeavours to find a good match between choice of materials, limitation of hazardous substances, selection of recycling channels and industrial performance to encourage the recycling of products at end of life.

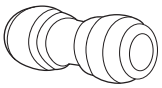
Using our technology reduces the environmental impact

CleanFit

Tube-to-Tube Connector

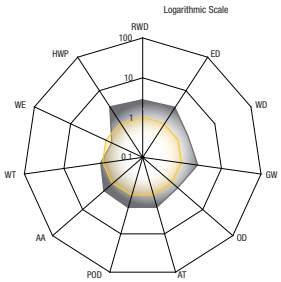
Market Standard

Tube-to-Tube Connector



Parker Legris
Market Standard in PP

Tube-to-Tube Connector



ECO DESIGN

RWD: Raw Material Depletion
ED: Energy Depletion
WD: Water Depletion
GW: Global Warming

OZ: Ozone Depletion
AT: Air Toxicity
POC: Photochemical Ozone Creation
AA: Air Acidification

WT: Water Toxicity
WE: Water Eutrophication
HWP: Hazardous Waste Production

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Parker's Motion & Control Technologies

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
CO_2 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
Electrohydrostatic 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

Parker

ENGINEERING YOUR SUCCESS.