

Transair®: the original aluminium pipework system for industrial fluids

Diameters 16.5, 25, 40, 50, 63, 76, 100 and 168 mm
Compressed air - Vacuum - Inert gases

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

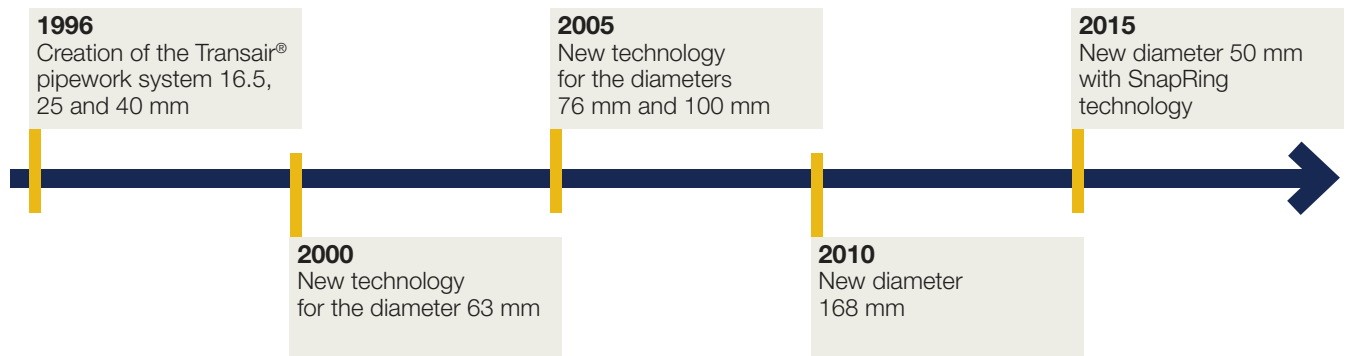


ENGINEERING YOUR SUCCESS.

Transair[®], the original modular aluminium pipework system

Transair[®], the original modular pipework system based on aluminium pipes and quick connectors, was launched in 1996. Since then, with almost 20 years experience, continual improvements have been made to **meet the compressed air, inert gases and vacuum network needs!**

Transair[®] history

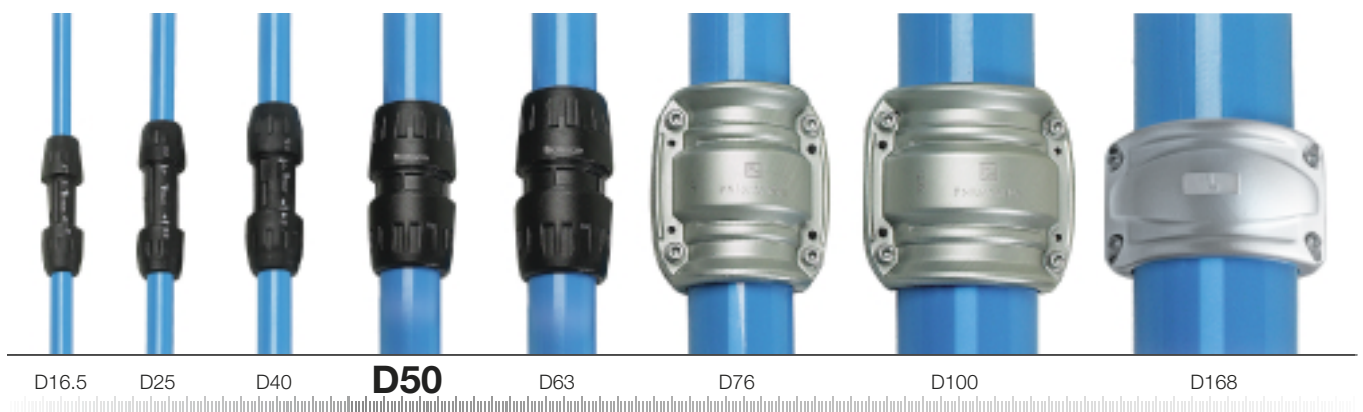


Reliable and safe connection technologies

Because users need versatile but reliable and safe solutions, Transair[®] has developed different technologies for the best compromise between safety, efficiency and adaptability.

- Gripping ring instant connection for diameters 16.5, 25 and 40 mm offers the maximum flexibility.
- SnapRing quick-fit connection for diameters 50 and 63 mm proposes the most secure technology while maintaining ease of handling: no possible errors during installation.
- Lug & Clamp quick-fit connection for diameters 76, 100 and 168 mm avoids any disconnection: the internal cartridge works as a fuse if a failure in the network causes an excessive pressure increase.

	Mechanical stress due to pressure	Frequency of modifications	Transair [®] Technology
Ø 16.5, 25 & 40 mm	+ (up to 250 kg)	+++++ (every quarter)	Gripping ring instant connection
Ø 50 & 63 mm	++ (up to 600 kg)	+++ (every year)	SnapRing quick-fit connection
Ø 76, 100 & 168 mm	+++++ (up to 3000 kg)	+ (every 3 years)	Lug & Clamp quick-fit connection



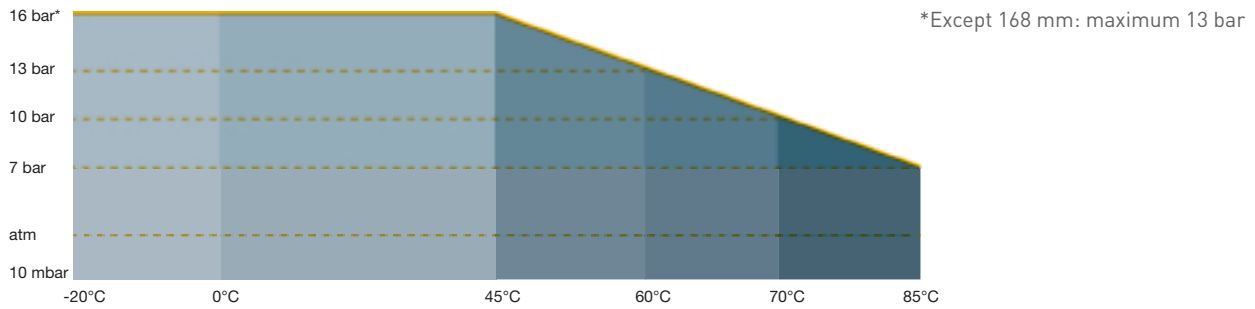
Transair® main features

Gases

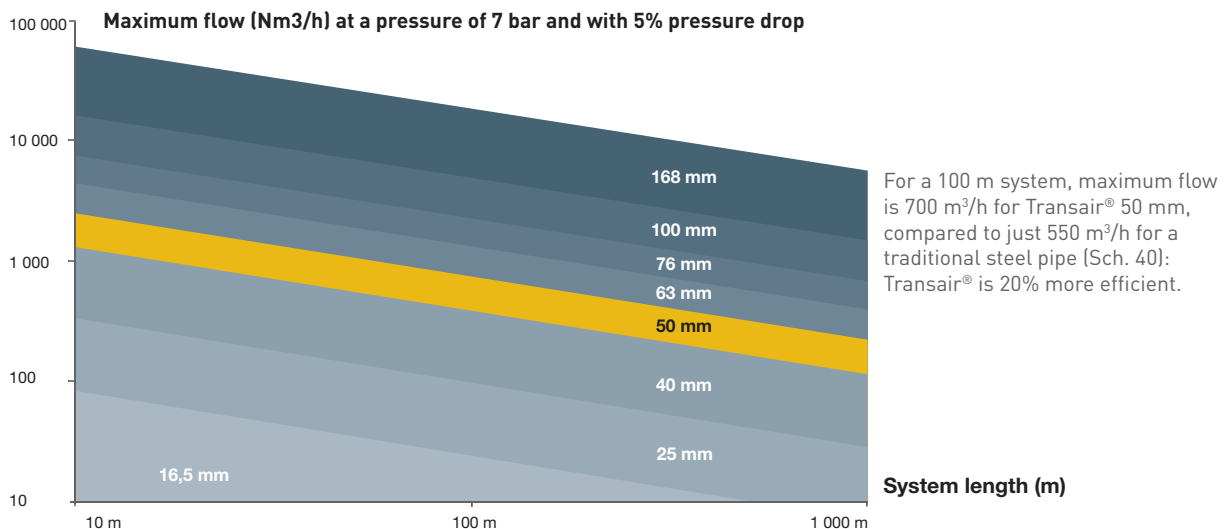
Transair® is suitable for compressed air applications (dry, lubricated or with water condensation), for inert gas applications like nitrogen, argon or CO₂ (for purity up to 99.99%) and for vacuum applications (minimum vacuum level of 10 mbar).

Working pressure and temperature

The maximum working pressure of the Transair® system, versus operating temperature, is according to the diagram below.



Maximum flow



Safety



TÜV Rheinland certifies that Transair® fulfills regulatory requirements for pipes under pressure according to the German AD-2000 Merkblatt technical rules and to the **European Pressure Equipment Directive 97/23/CE**.



Transair® meets the requirements of **ASME B31.3** and **ASME B31.1** for non boiler external piping which stipulates the minimum requirements for the design, materials, fabrication, erection, test and inspection of piping systems for industrial plants.

Air quality



Transair® has been successfully tested to the highest expectation of **ISO 8573 standard for air quality**: class 1-1-1. A Transair® distribution network will not contaminate the fluid with solid particles, water, moisture or oil.



Transair® products are guaranteed **Silicone Free**, which is mandatory for premium air purity applications such as painting.

Please ask your Parker representative for a complete list of Transair® standards and certifications.

Industrial sectors and types of projects

Transair® is adapted to every sector of activity

Recognised for its performance, Transair® is installed in most industrial markets, from the source to the point of use:

- Aerospace
- Automotive
- Construction materials
- Educational
- Electronics
- Energy
- Food & Beverage
- Laboratory / Pharmaceutical
- Metal working
- Mining
- Plastic industry
- Railway / Transportation
- Textile industry
- Tobacco



For all types of projects

Transair® is the best choice for a new installation or extension

As specialist in industrial fluid networks, Transair® offers an innovative solution that meets the needs of demanding users, whether for the energy source, the main network or to feed the points of use:

- High flow performance for all the diameters for **higher efficiency**.
- **Air quality** (ISO 8573-1 class 1.1.1) from the production up to the point of use.
- **Secured connection** regardless of the environment (compressor room, outdoor...).
- Lightweight and compact products to **improve the working conditions** and for **easy integration**.
- Quick and easy installation for easier maintenance and **reduced downtime**.
- Dismountable system and reusable products **for low depreciation** on capital.

Transair® is the best choice to retrofit old networks

Transair® is the economical, reliable and efficient alternative to traditional steel networks. Change your old steel pipe network for Transair® to optimise your operation costs and to benefit from high impacts on your productivity:

- Lower roughness and larger inner diameter: maximum **flow 20% higher** than with steel pipe, **energy savings** in compressor.
- Corrosion free: **reducing the costs** of changing filter elements.
- Constant air quality for **reduction of maintenance costs** for machines and equipments.



Advantages of the Transair® aluminium system

Transair® aluminium is the 1st choice for compressed air, inert gases and vacuum applications



Pressure and flow

- The largest range of diameters from 16.5 mm to 168 mm
- Full flow fittings to lower pressure drops



Air quality

- Transair® meets the **ISO 8573 standard** for air quality class 1-1-1



Safety

- Light-weight piping and reduced tooling **improves the working conditions** of the installers, without the need for a hot works (fire) permit
- Quality assurance according to the highest standards of the industry
- **Safest connection technology** for every diameter



Quick installation for reduced downtime

- **All-in-one fittings** and accessories to satisfy the particular needs of each pipework, and **tailor made products** on customers' requests
- Products **ready-to-use**: installation of a drop to connect a machine in less than 15 minutes
- Easy technology: the **risk of errors** during installation is **minimised**
- Lateral dismantling and interchangeability: **labour reduced** during extension and modification



Services

- Transair® provides **services to support each step of a project**, from technical study to delivery and onsite training



An ecological product design

Transair® has been specifically designed to ensure a lower impact on the environment compared to steel pipe. Life cycle analysis, from production of raw materials to end of product life, show that the use of Transair® is 2 times less harmful to the environment than a traditional steel pipe system.

New 50 mm diameter: innovative design

Transair® continues to simplify the installation work

The new Transair® 50 mm diameter uses the most advanced aluminium technology to meet the dual needs of strength and flexibility:

A proven technology: 10 years experience

Registered and used for more than 10 years, the technology chosen for the 50 mm diameter offers a maximum reliability.

Safety with SnapRing technology

Even in the case of failure on equipment within an installation, there is no possible ejection of the pipe.

Adapted to harsh environments

50 mm diameter is adapted for working in the most demanding environments such as compressor rooms or external use: up to 16 bar, up to 85°C, up to 100% humidity.

Shock resistance

50 mm fittings are tailored to the working conditions of industrial environments: shocks, fall from height, dust...

Aluminium pipes with Qualicoat® painting

Aesthetic and non-flammable painting, available in several colours.



Parker has improved its technology on the 50 mm with the new SnapRing clamp:

- One-piece clamp, can be placed using only one hand.
- Easier to install, from the side of the pipe.
- Best technical performances.



Technical specifications of the 50 mm diameter

- Suitable for use with all **compressed air** applications: dry, lubricated or with water condensation. The maximum operating pressure is 16 bar from -20°C to +45°C, 13 bar at 60°C and 7 bar at 85°C.
- Suitable for **inert gas** applications like nitrogen, argon or CO₂ for the same pressure and with guarantee of the integrity of the gas for **purity up to 99.99%**.
- Suitable for **vacuum** applications up to a vacuum level of **10 mbar**.

New 50 mm diameter: even easier to assemble

Assembly instructions

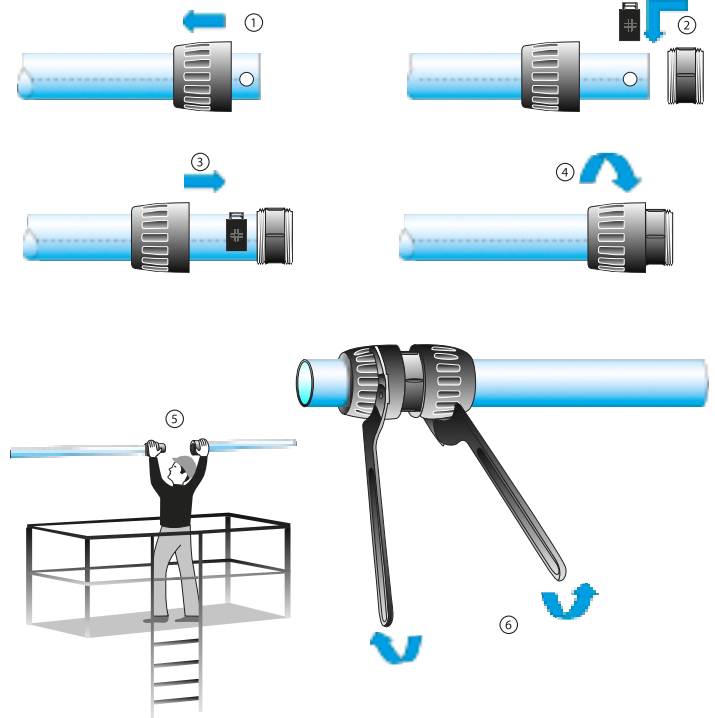
■ To cut and prepare Transair® aluminium pipe:

When it is required to adjust the length, cut the pipe using a manual pipe cutter. Ensure that the pipe is cut at a right angle and deburr the pipe.

Use Transair® drilling jig to create the 2 holes at the extremity required for system assembly.

■ Assembling the 50 mm diameter:

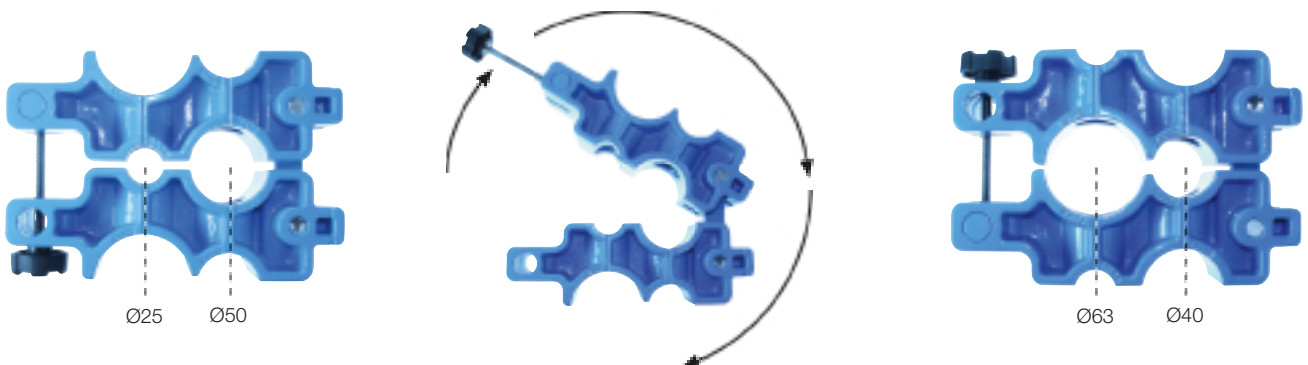
Using the new SnapRing, 50 mm connection is fast and straightforward.



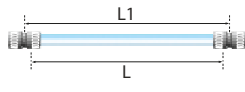
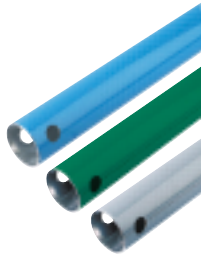
New Transair® drilling jig

Parker has developed a new design to replace the two previous drilling jigs and to simplify the drilling of aluminium pipes.

- Only 1 jig for 4 diameters (25, 40, 50 and 63 mm).
- Patented design.

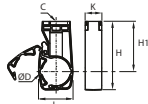


Transair® 50 mm, a complete range of pipe, fittings



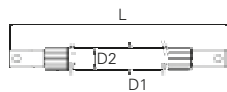
ALUMINIUM PIPE

	Colour	Ø ext.	Ø int.	L1 (m)	L (m)	kg
1003A50 04	blue	50,8	47,4	3	2,950	2,142
1006A50 04	blue	50,8	47,4	6	5,950	4,320
1003A50 06	grey	50,8	47,4	3	2,950	2,142
1006A50 06	grey	50,8	47,4	6	5,950	4,320
1006A50 02	green	50,8	47,4	6	5,950	4,320



FIXING CLIP

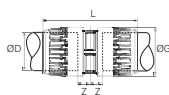
	ØD	C	H1	H	K	L	kg
6697 50 00	50	M10x1,5	90	122	30	61	0,068



FLEXIBLE HOSE

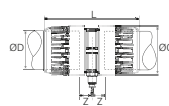
	D1	D2	L (m)	Min. bend radius (mm)	Used with pipe	kg
1001E50 00 09	66	50	1,000	280	Ø 50	2,755
1001E50 00 04	66	50	2,000	280	Ø 50	4,310

6698 99 03: anti whip-lash strap for flexible hose (length 1 m)



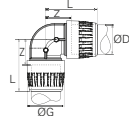
PIPE-TO-PIPE CONNECTOR

	ØD	ØG	L	Z	kg
6606 50 00	50	80	171	25	0,719



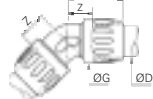
PIPE-TO-PIPE CONNECTOR WITH VENT

	ØD	ØG	L	Z	kg
6676 50 00	50	80	171	25	0,748



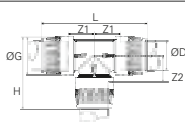
90° ELBOW

	ØD	ØG	L	Z	kg
6602 50 00	50	80	156	56	0,804



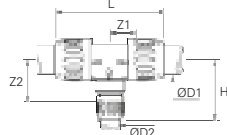
45° ELBOW

	ØD	ØG	L	Z	kg
6612 50 00	50	80	98	38	0,771



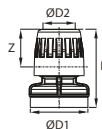
EQUAL TEE

	ØD	ØG	L	Z	Z1	Z2	kg
6604 50 00	50	80	231	156	56	56	1,200



REDUCING TEE

	ØD	ØD2	L	H	Z1	Z2	kg
6604 50 25	50	25	231	138	56	111	1,154
6604 50 40	50	40	231	157	56	107	1,264
6604 63 50	63	50	252	177	61	117	1,644
RX24 L1 50	76	50	240	160	120	210	0,895



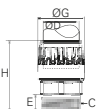
IN-LINE REDUCER

	ØD1	ØD2	L	Z	kg
6666 40 50	50	40	116	103	0,317
6666 50 63	63	50	125	101	0,520
RX64 L1 50	76	50	220	270	0,530



END CAP WITH VENT

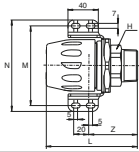
	ØD	ØG	H	L	kg
6625 50 00	50	80	67	107	0,423



MALE STUD FITTING - BSP TAPER

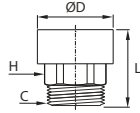
	ØD	C	E	ØG	H	Z	kg
6605 50 49	50	R1"1/2	22,6	80	119	46	1,039
6605 50 48	50	R2"	26,9	80	125	50	1,022

and accessories



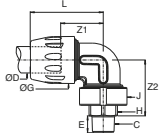
MALE STUD FITTING WITH FIXING PLATE - BSP TAPER

	ØD	C	H (Hex)	L	M	Z	kg
6615 50 49	50	R1"1/2	50	127	116,5	67	1,316
6615 50 48	50	R2"	60	131	116,5	71	1,331



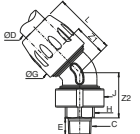
MALE STUD NUT

	ØD	C	H (Hex)	L	kg
6611 50 49	50	R1"1/2	50	79	0,724
6611 50 48	50	R2"	60	81	0,788



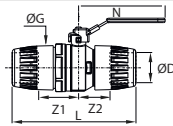
MALE STUD 90° ELBOW - BSP TAPER

	ØD	C	H (Hex)	L	Z1	Z2	kg
6609 50 49	50	R1"1/2	50	116	56	97	1,290
6609 50 48	50	R2"	60	116	56	99	1,355



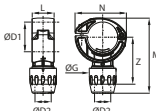
MALE STUD 45° ELBOW - BSP TAPER

	ØD	C	H (Hex)	L	Z1	Z2	kg
6619 50 49	50	R1"1/2	50	98	38	80	1,267
6619 50 48	50	R2"	60	98	38	82	1,312



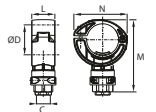
LOCKABLE ALUMINIUM VALVE

	ØD	ØG	L	N	Z1	Z2	kg
4092 50 00	50	80	224	156	60	43	1,690



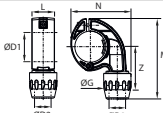
QUICK ASSEMBLY DIRECT FEED BRACKET

	ØD1	ØD2	M	L	N	Z	kg
RA69 50 25	50	25	125	37	86	66	0,143



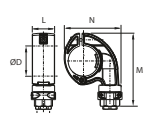
QUICK ASSEMBLY DIRECT FEED BRACKET WITH FEMALE THREAD - BSP PARALLEL

	ØD	C	L	N	M	kg
RA65 50 04	50	G1/2	37	86	115	0,206
RA65 50 08	50	G1"	37	86	129	0,326



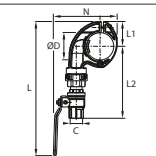
QUICK ASSEMBLY BRACKET

	ØD1	ØD2	M	L	N	Z	kg
6662 50 25	50	25	131,5	37	98	58	0,155



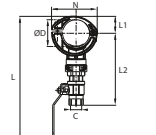
QUICK ASSEMBLY BRACKET WITH FEMALE THREAD - BSP PARALLEL

	ØD	C	M	L	N	kg
6661 50 21	50	G1/2	121	37	96	0,217
6661 50 27	50	G3/4	130	37	96	0,246



QUICK ASSEMBLY BRACKET WITH PRE-ASSEMBLED BALL VALVE - BSP PARALLEL

	ØD	C	L	L1	L2	N	kg
6669 50 21	50	G1/2	249	46	133,5	118,5	0,467
6669 50 27	50	G3/4	282	46	147,5	125,5	0,621



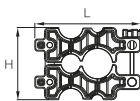
PRESSURISED SYSTEM OUTLET

	ØD	C	L	L1	L2	N	kg
EA98 06 04	50	G1/2	237	31,8	135	86	0,433



TOOL CASE

	H	L	I	Used for Transair® pipe	kg
6698 00 05	315	290	105	Ø 16,5-25-40-50-63	5,300



DRILLING JIG FOR ALUMINIUM PIPE

	L	H	Used for Transair® pipe	kg
6698 01 03	220	150	Ø 25-40-50-63	2,355

Transair®: advanced pipe systems



■ Aluminium range

Calibrated aluminium pipes

Qualicoat painting

Diameters (in mm)

16.5 - 25 - 40 - 50 - 63 - 76 - 100 - 168

Colours

Available in blue - grey - green
Other colours upon request

Maximum working pressure

16 bar (from -20°C to +45°C) up to 100 mm
13 bar (from -20°C to +60°C) for all diameters
7 bar (from -20°C to +85°C) for all diameters

Vacuum level

99% (10 mbar absolute pressure)

Working temperature

-20°C to 85°C

NBR seals

Compatibility

Lubricated or oil-free compressed air,
industrial vacuum, nitrogen (99,99% purity),
inert gases

■ Stainless steel range

Stainless steel pipes

AISI 304 or 316L

Diameters (in mm)

22 - 28 - 42 - 60 - 76 - 100

Maximum working pressure

10 bar (from -10°C to +60°C) for all diameters
7 bar (from -10°C to +90°C) for all diameters

Working temperature

-10°C to 90°C

EPDM or FKM seals

Compatibility

Cooling water, industrial water with additives,
lubricating oil, compressed air, inert gases

Certification



Transair®: tools and services



Transair® Flow Calculator

Defines the recommended diameter for your project, estimates your pressure drops, and gives the maximum flow rate by diameter.



Transair® Vacuum Calculator

Helps you to size and compare vacuum systems quickly and easily.



Transair® Energy Efficiency Calculator

Evaluates the energy cost of your system and return on investment of a Transair® solution.



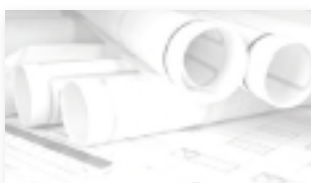
Transair® CAD Drawings

View or download Transair® CAD drawings in real time in 2D or 3D.



Transair® Website: www.parkertransair.com

Gives you access to extensive information about the Transair system, technical data, examples of existing networks and a download centre for catalogues, manuals and brochures.



Transair® quotation service: transair.quotation@parker.com

Gives you a budgeted or detailed quotation for your project and its implementation.

