

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

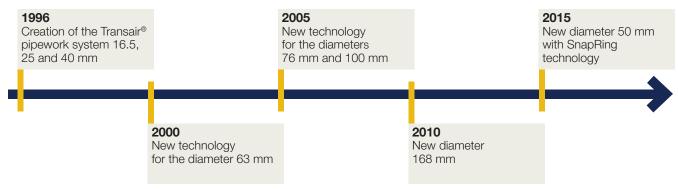


ENGINEERING YOUR SUCCESS.

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	++	+++	SnapRing
	(up to 600 kg)	(every year)	quick-fit connection
Ø 76, 100 & 168 mm	+++++	+	Lug & Clamp
	(up to 3000 kg)	(every 3 years)	quick-fit connection



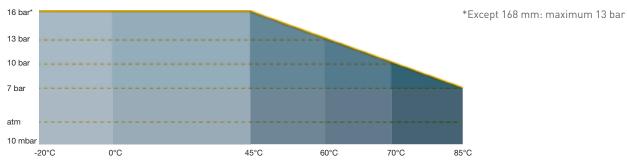
Transair[®] main features

Gases

Transair[®] is suitable for compressed air applications (dry, lubricated or with water condensation), for inert gas applications like nitrogen, argon or CO_2 (for purity up to 99.99%) and for vacuum applications (minimum vacuum level of 10 mbar).

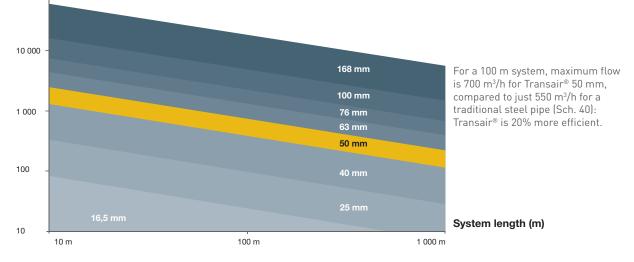
Working pressure and temperature

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



Maximum flow

100 000] Maximum flow (Nm3/h) at a pressure of 7 bar and with 5% pressure drop



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 $1^{\mbox{\tiny st}}$ 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:

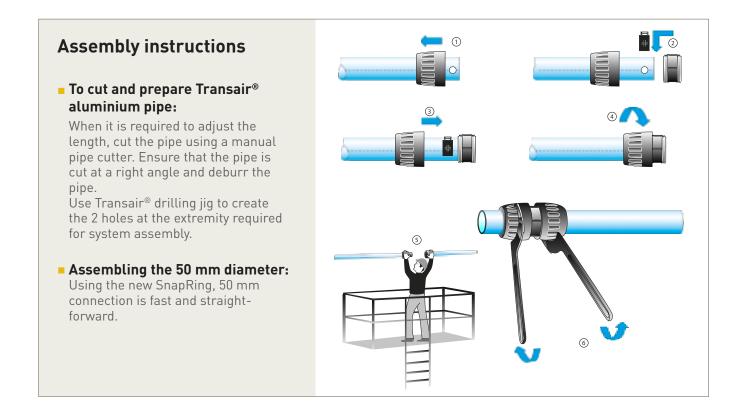
- One-piece clamp, can be placed using only one hand.
- Easier to install, from the side of the pipe.
- Best technical performances.



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**.

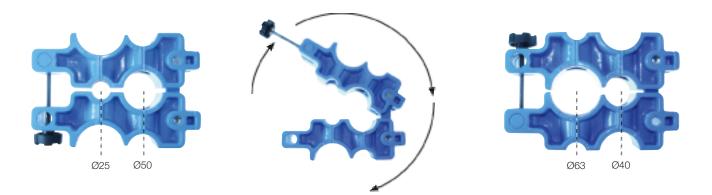
New 50 mm diameter: even easier to assemble



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.



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Transa	ir® 50 mm	n, a com	plet	e ra	nge	of	[;] pip	oe, fi	ttin
		ALUMINIUM PIP	E						
			Colour	Ø ext	. Øin	t.	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,		3	2,950	2,142
		1006A50 06	grey	50,8	47,		6	5,950	4,320
		1006A50 02	green	50,8	47,	4	6	5,950	4,320
		FIXING CLIP							
		6697 50 00	ØD 50	C M10x1,5	H1 90	H 122	К 30	61	kg 0,068
		FLEXIBLE HOSE							
		FLEXIBLE HUSE	D1	D2	L (n	n N	4in. bend	Used with	kg
1	L					ra	dius (mm)	pipe	
	0 D2 0	1001E50 00 09	66	50	1,00		280	Ø 50	2,755
	D1	1001E50 00 04	66	50	2,00		280	Ø 50	4,310
<i>w</i>		6698 99 03: anti whi			hose (leng	th 1 m)			
- Andrews		PIPE-TO-PIPE C							
Harris (∞ <u>⊻E E</u> E0∞		ØD		ØG	L		Z	kg
	Z Z	6606 50 00	50		80	171		25	0,719
		PIPE-TO-PIPE CONNECTOR WITH VENT							
6.00			ØD		ØG	L		Z	kg
	Z Z	6676 50 00	50		80	171		25	0,748
The second		90° ELBOW							
LANS I			ØD		ØG	L		Z	kg
		6602 50 00	50		80	156		56	0,804
5 107 5		45° ELBOW							
			ØD		ØG	L		Z	kg
	ØG ØD	6612 50 00	50		80	98		38	0,771
The second second		EQUAL TEE							
12 200	ØG		ØD	ØG	L L	Z	Z1	Z2	kg
	H	6604 50 00	50	80	231	156	56	56	1,200
	_ L _	REDUCING TEE							
SF- WE	<u>Z1</u>		ØD	ØD2	L	Н	Z1	Z2	kg
-+		6604 50 25	50	25	231	138	56		1,154
	ØD1 H	6604 50 40	50	40	231	157			1,264
	In Indiana	6604 63 50 PX26 L1 50	63 76	50	252	177		117	1,644
		RX24 L1 50		50	240	160	120	210	0,895
	ØD2	IN-LINE REDUC						-	
all -		6666 40 50	ØD1 50		5D2	L 116		Z	kg
1 1		6666 40 50 6666 50 63	63		40 50	116		103 101	0,317 0,520
		RX64 L1 50	76		50	220		270	0,520
		END CAP WITH							
and the second		END CAP WITH			ØG	н		L	kg
	H H CG	6625 50 00	50		80	67		107	vy 0,423
	ØG								,
and the second s		MALE STUD FIT	TING - BS	SP TAPE	RE	ØG	Н	Z	kg
1.41	H	6605 50 49	50	R1"1/2	22,6	80	119		1,039
4.4	<u> </u>	6605 50 48	50	R2"	26.9	80	125		1,007

6605 50 48

50

R2"

26,9

80

125

50

1,022

and accessories



	40								TO YEAR
-		MALE STUD FITTING WITH FIXING PLATE - BSP TAPER							
An other states			ØD	С	H (Hex)	L	М	Z	kg
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		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
	ØD	MALE STUD NUT	-						
Sec.			ØD		С	H (Hex)	L		kg
	╚──╸╴	6611 50 49	50	R	1"1/2	50	79	7	0,724
		6611 50 48	50		R2"	60	8	1	0,788
	L	MALE STUD 90°							
1000	Z1	MALE STOD 70	ØD	C C	H (Hex)	L	Z1	Z2	kg
00.500		6609 50 49	50	R1"1/2	50	116	56	97	1,290
		6609 50 48	50	R2"	60	116	56	99	1,355
•	E	0007 00 40	00	112	00	110	00	,,	1,000
		MALE STUD 45°							
	and the second s		ØD	С	H (Hex)	L L	Z1	Z2	kg
100		6619 50 49	50	R1"1/2	50	98	38	80	1,267
_		6619 50 48	50	R2"	60	98	38	82	1,312
	ØG	LOCKABLE ALUN							
			ØD	ØG	L	N	Z1	Z2	kg
		4092 50 00	50	80	224	156	60		1,690
		4072 50 00	50	00	224	100	00	43	1,070
		QUICK ASSEMBL	Y DIREC	T FEED	BRACKE	T			
			ØD1	ØD2	М	L	N	Z	kg
		RA69 50 25	50	25	125	37	86	66	0,143
•	ØD2 ØD2								
		QUICK ASSEMBLY		ED BRAC) - BSP P	
		RA65 50 04	50	G1/2			86	115	kg 0,206
		RA65 50 08	50	G1"	37		86	129	0,200
	- ,- <u>L_, - N -</u>				0.		00	127	0,020
		QUICK ASSEMBL						-	
			ØD1	ØD2	M	L	N	Z	kg
		6662 50 25	50	25	131,5	37	98	58	0,155
	I N	QUICK ASSEMBL	Y BRACH	KET WIT	H FEMA	LE THRI	EAD - BS	P PARA	LLEL
6			ØD	С	M	l -	L	N	kg
		6661 50 21	50	G1/2	2 12	1	37	96	0,217
		6661 50 27	50	G3/4	13	0	37	96	0,246
	- N , + I								
		QUICK ASSEMBLY		C WITH PR	L L	L1		N N	ARALLEL kg
		6669 50 21	50	G1/2	249	46	133,5	118,5	
1		6669 50 27	50 50	G3/4	249	46	133,5	125,5	0,467 0,621
	C	0007 30 27	50	63/4	282	40	147,3	120,0	0,021
Y		PRESSURISED S							
Ā			ØD	C	L	L1	L2	N	kg
		EA98 06 04	50	G1/2	237	31,8	135	86	0,433
		TOOL CASE							
			Н	L	I.	Used f	or Transai	i r® pipe	kg
	10	6698 00 05	315	290	105		,5-25-40-5		5,300
	V								
*	-	DRILLING JIG FO			PIPF				
at the second second	L					Used for Transair [®] pipe			
		DRILLING JIG FC				Used for	Transair®	nine	ka
Here I		6698 01 03	220		н – 150		Transair® 5-40-50-63		kg 2,355

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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°) 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.



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