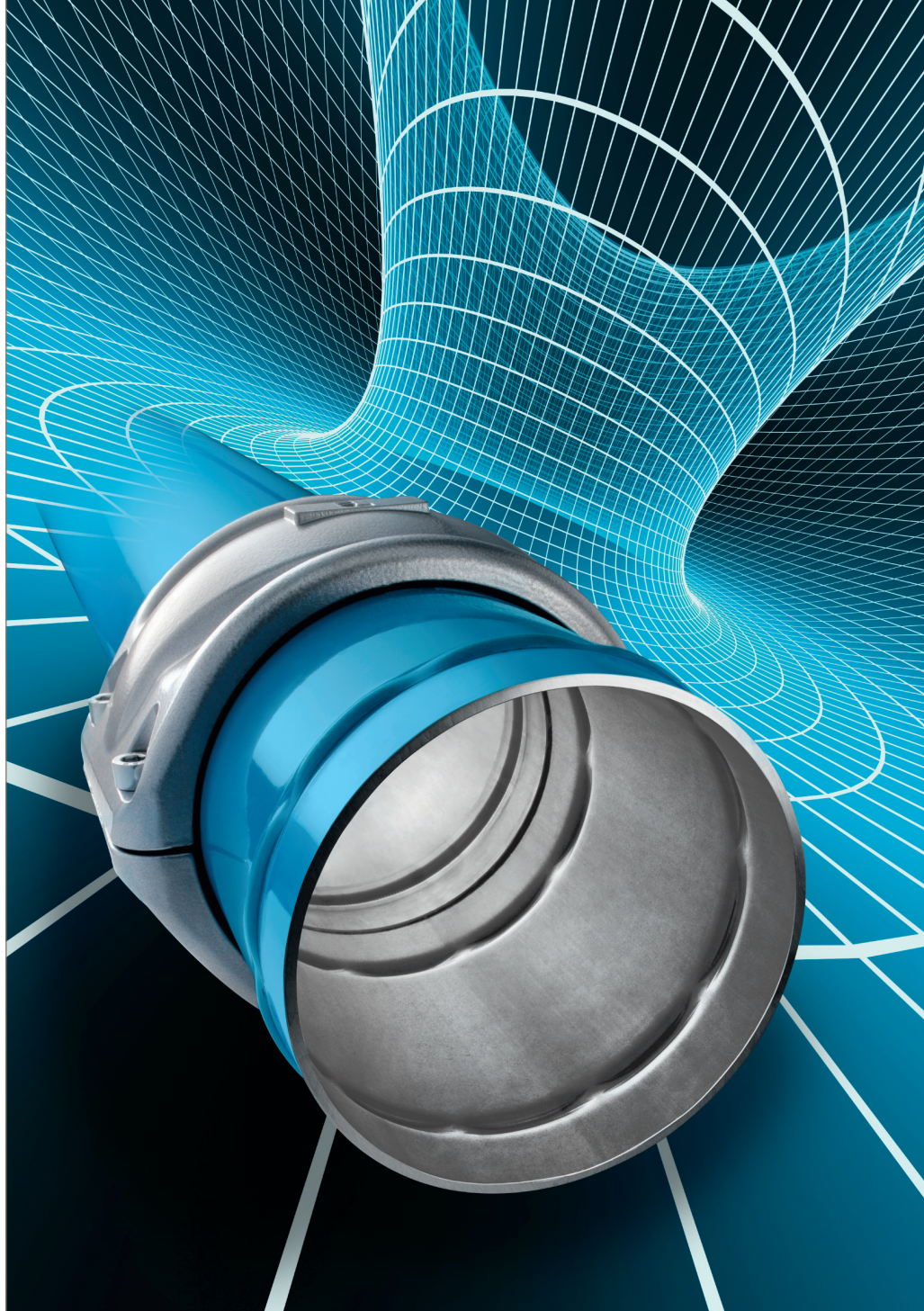




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## Transair: Advanced pipe systems for Industrial Fluids

New 168mm diameter for compressed air – vacuum – neutral gases



ENGINEERING YOUR SUCCESS.



# New - 168mm (DN 150-6") Transair aluminium pipe system for compressed air – vacuum – neutral gases

A complete solution - pipe, connectors and accessories – for large projects, **complementing existing 16.5mm to 100mm pipe sizes**

## A new size to meet market requirements

An increasing number of projects require the use of larger capacity pipe diameters up to 168mm (DN 150-6"):

- **Industrial buildings:** primary networks for compressed air supply above 3000 m<sup>3</sup>/h e.g. automotive industry, aeronautics, food processing, printing works, cement production...
- **Compressor rooms:** connection of receivers or multiple high output compressors.
- **Vacuum systems:** centralised industrial vacuum networks.

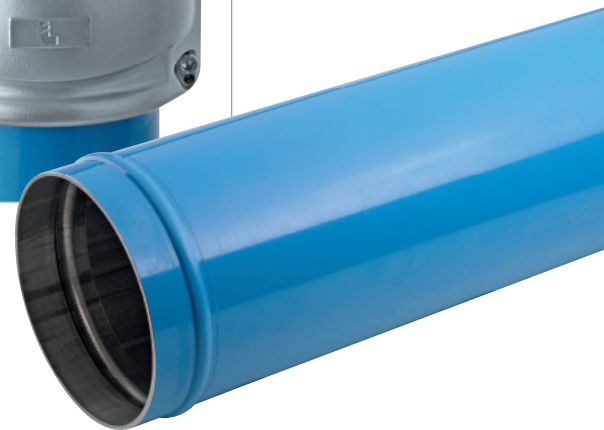
## A technology which combines all Transair advantages

- **A full range in aluminium:** aluminium pipe and aluminium fittings with NBR seals.
- **Easy and reliable assembly:**
  - Pipe and fittings are supplied ready for immediate installation
  - Quick assembly – no need to weld, glue or crimp
  - Easy to install.

- **Completely dismantlable and reusable components for adaptable modular networks.**
- **High resistance to:** corrosion, aggressive environments, mechanical shocks, thermal variations, UV, compressor oil carry over. Suitable for both inside and outside use.
- **High quality pipe and components:** components are guaranteed for 10 years. Transair pipe has a highly resistant protective lacquer coating and is QUALICOAT certified.
- Transair 168mm is guaranteed to be silicone free.



A complete 168mm solution: pipe, fittings and accessories



## Compatibility and specifications

### Working pressure:

Compressed air (dry, wet, lubricated): working pressure 12 bar\*  
Inert gases (argon, nitrogen): working pressure 12\*  
Vacuum level: 97.8% (13mbar absolute pressure)

\* with a minimum safety coefficient of 5

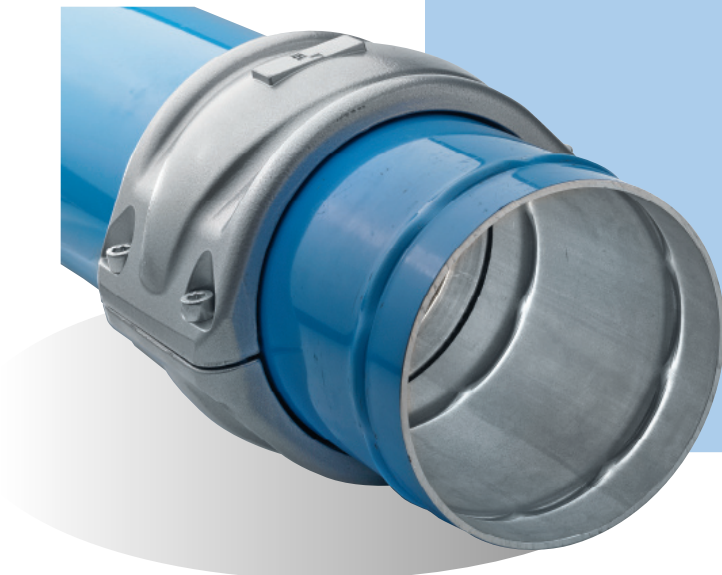
### Working temperature:

-20°C to + 60°C



## Transair 168 mm, an economical, reliable and efficient alternative to traditional steel networks

- **Lightweight:** significantly less heavy for easier handling. A 6m length of Transair aluminium pipe weighs just 30kg. Installation times are reduced and there is less need to employ specialist handling equipment.
- **Improved flow capability:** the combination of a 161.3mm internal diameter and the smooth interior surface of Transair aluminium systems greatly enhance flow rates and reduce expensive pressure drops.
- **No corrosion, no leaks:** the absence of corrosion caused by moisture gives long term protection against pressure drop and leaks.
- **Easier identification:** Transair aluminium pipe is available in either blue or grey for ease of immediate system identification.
- **Reduced assembly time and installation costs:** a system that is rapid to fit and extend, with reduced down time and lower maintenance costs.
- **Greater overall savings:**
  - lower energy costs
  - reduced assembly times
  - easy installation
  - durability
  - maintenance free.





## An ecological product design

A registered system benefitting from new product design and aluminium manufacturing techniques.

168mm Transair has been specifically designed to ensure a lower impact on the environment. Life cycle analyses, from production of raw materials to end of product life, show that the use of 168mm Transair is 5 times less harmful to the environment than a traditional steel pipe system.


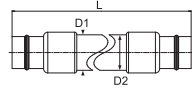


# Transair 168mm, a complete range of pipe, fittings and accessories

### TA06 - Aluminium Pipe


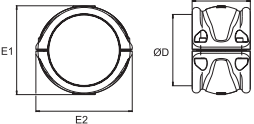
Transair®	ø ext.	ø int.	DN	L(m)	Colour	Kg
TA03 L8 04	168,3	161,3	150	3	blue	14,72
TA06 L8 04	168,3	161,3	150	6	blue	29,41
TA06 L8 06	168,3	161,3	150	6	grey	29,41

### FX01 - Flexible hose in stainless steel

Transair®	D1	D2	L(m)	mini bend radius (mm)	Kg
FX01 L8 02	168	150	3,2	900	42,00


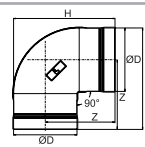
6698 99 07: anti whip-lash strap for flexible hose (length 2m)

### RR01 - Connector


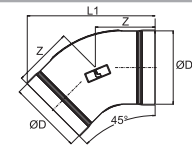
Transair®	øD	L	E1	E2	Kg
RR01 L8 00	168	139	212	230	2,57

Cartridge supplied with NBR seals


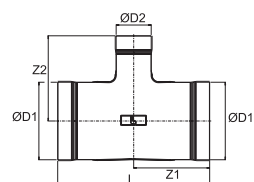
### RA02 - 90° Elbow

Transair®	øD	H	Z	Kg
RA02 L8 00	168	269,2	185,0	3,07


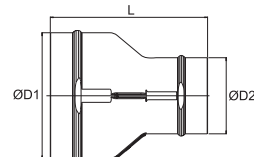
### RA12 - 45° Elbow

Transair®	øD	L1	L2	Z	Kg
RA12 L8 00	168	310,5		147,5	2,37


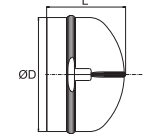
### RA04 - Equal and reducing tee

Transair®	øD1	øD2	L	Z1	Z2	Kg
RA04 L8 00	168	168	360	180	185	4,98
RA04 L8 L3	168	100	330	165	185	3,17
RA04 L8 L1	168	76	330	165	185	3,15
RA04 L8 63	168	63	330	165	220	3,10

### RA66 - Plug-in reducer

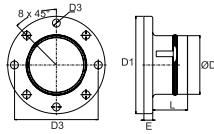
Transair®	øD1	øD2	L	Kg
RA66 L8 L3	168	100	210	1,50
RA66 L8 L1	168	76	210	1,39

### RA25 - End cap

Transair®	øD	L	Kg
RA25 L8 00	168	117	1,17





### RA31 - Flange adapter

Transair®	øD	DN	D1	D2	D3	E	L	Kg
RA31 L8 00	168	150	279	240	22	25	100	3,43

Dimensions of the flange adapter conform to EN 1092 and ANSI B16.5 standards



### EW05 - Flange gasket

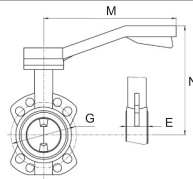
Transair®	DN	D1	D2	E	Kg
EW05 L8 00	150	218	169	3	0,08



### EW06 - Flange bolt kit DN 150

Transair®	C	L	Kg
EW06 00 05	M20	80	2,00

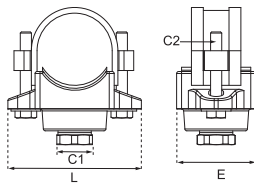
Kit comprises 8 screws and 8 nuts - Torque 250 Nm



### VR02 - Butterfly valve

Transair®	øD	DN	G	M	N	E	Kg
VR02 L8 00	168	150	240	300	290	56	11,30

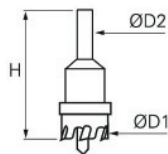
CE marked - NBR gasket - Delivered with 8x M20 bolts kit (bolt length:140mm)  
Silicone free Butterfly valves are available upon request



### RR63 - Quick assembly direct feed bracket

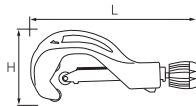
Transair®	øD	C1	C2	E	L	Kg
RR63 L8 12	168	1 1/2"	16	90	235	3,40
RR63 L8 16	168	2"	16	103	235	3,40

To drill the Transair® pipe, use drill EW09



### EW09 - Drilling tool with centring drill

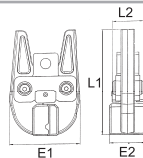
Transair®	øD1	øD2	H	For quick assembly bracket	Kg
EW09 00 51	51	12	110	RR63 L8 12	0,33
EW09 00 64	64	12	110	RR63 L8 16	0,41



### EW08 - Manual rigid pipe cutter

Transair®	øD	L	H	Kg
EW08 00 03	168	600	300,0	2,00

EW08 00 04: spare wheel for pipe cutter EW08 00 03



### EW02 - Jaws set D168 for portable tool

Transair®	øD	E1	E2	L1	L2	Kg
EW02 L8 00	168	103	71	154	46	2,80

EW01 00 01: Portable tool for jaw set EW02 L800



### ER01 - Supporting clip in steel for rigid pipe

Transair®	øD	C	Kg
ER01 L8 00	168	M8/M10	0,54

# Assembly instructions

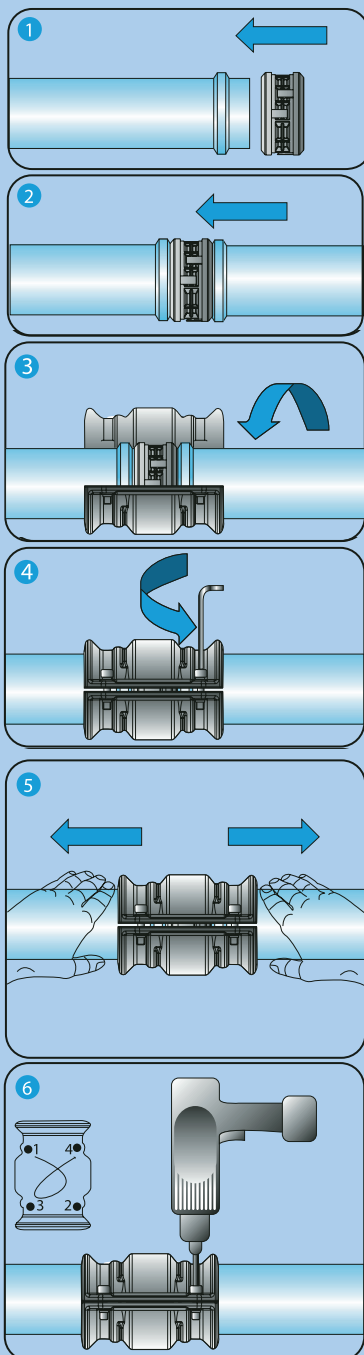
## To cut and form Transair aluminium pipe

To cut the pipe, rotate a manual rigid pipe cutter or use specialist equipment, if available. Ensure that the pipe is cut at a right angle with no more than 1% variation.

De-burr the pipe and use Transair forming jaws EW02 to create the 10 lugs required for system assembly.

## Assembling the system:

Despite the 168mm diameter, connection is fast and straightforward.



# Safety and Certifications

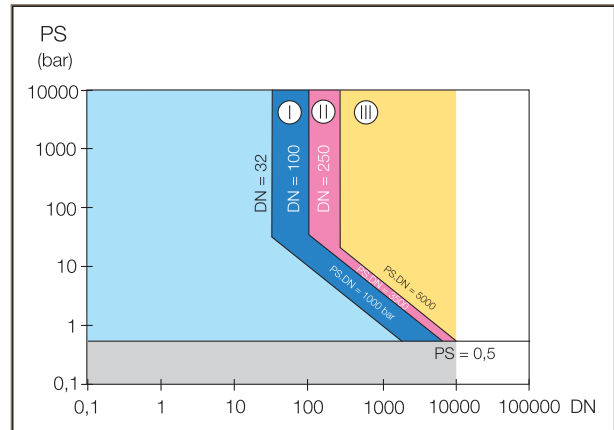


## CE Conformity to European standard 97-23-CE

Product diameter x pressure is < 3500 which puts 168mm Transair in Category I of European standard 97-23-CE (equipment under pressure).

Category I status requires formal documenting of the product design, the tests performed, the production process and associated quality controls.

Technical details are available upon request.



## ISO 9001

Parker Legris is certified ISO 9001 v 2000 and respects the importance of having traceability for all Transair diameters, from 16.5mm up to and including 168mm. All Transair products thus have date marking to ensure the traceability of all production batches.



## TUV Certification

The German TUV organisation has certified the Transair product design and Parker Legris' quality assurance system, in line with European directive 97-23-CE.



Qualicoat certification is a guarantee of the quality of the lacquer finish applied to 168mm Transair aluminium pipe.

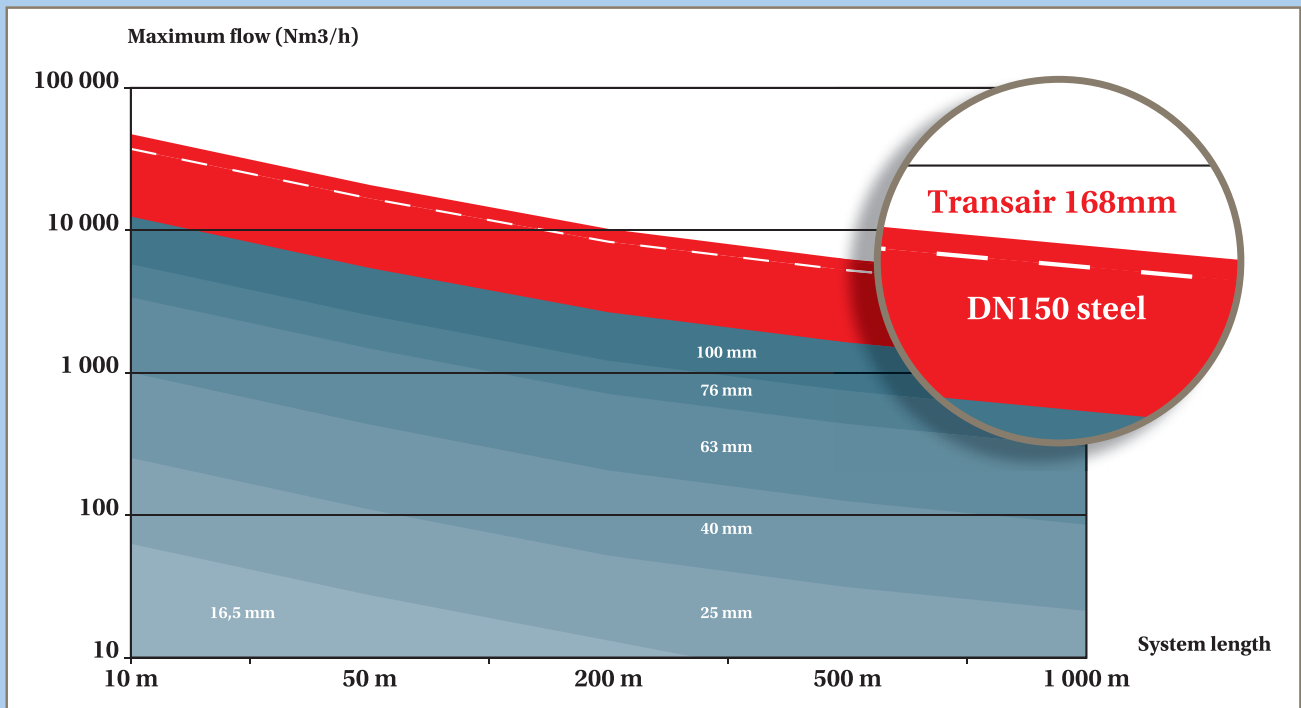




# Transair system flow performance

The smooth interior surface of the Transair aluminium system ( $k=0.01\text{mm}$ ) provides flow performance that is guaranteed to be 15% superior to that of a new traditional steel pipe network ( $k=0.15\text{ mm}$ ) and 30% better than a steel pipe system that is 10 years old ( $k= 1\text{mm}$ ).

The diagram below indicates the maximum flow, at a pressure of 7bar and with 5% pressure drop = 0.35bar. For a 500m system, maximum flow is 6200 m<sup>3</sup>/h for Transair 168mm, compared to just 5200 m<sup>3</sup>/h for traditional steel pipe (Sch. 40).



## The Transair Flow Calculator, a tool to help you to size your networks

The Transair Flow Calculator is an easy and quick sizing aid.

### Enter:

- the flow of your compressor
- the system pressure rating
- the total equivalent length of the system.

### Your network is sized:

- with the most suitable diameter
- with an estimation of the pressure drop
- and with a maximum flow rate.

The screenshot shows the Transair Flow Calculator interface. The input fields are: Project (Mechanical Contractor), Customer Contact (John Smith), Date (October 12, 2010), Gas (Compressed Air), Pressure (7 bar), Flow (3 000 Nm<sup>3</sup>/hr), Length (500 m), Max Pressure Drop (0,35 bar or 5,0%), and Network (Straight line). The Project Results section shows: Sizing (Transair pipe diameter: 168 mm, Transair max flow: 7 145 Nm<sup>3</sup>/hr, Speed of the gas: 5,2 m/s) and Pressure Drop (Transair@aluminum: 0,06 bar, New steel pipe: 0,09 bar, Corroded steel pipe: 0,14 bar). The interface also includes a 'Size Diameter' button and a copyright notice: Copyright 2010 www.parkertransair.com v. Alpha 1.

Available on [www.parkertransair.com](http://www.parkertransair.com)

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