



> A d v a n c e d a i r p i p e s y s t e m s



INTRODUCTION

> Technical specifications

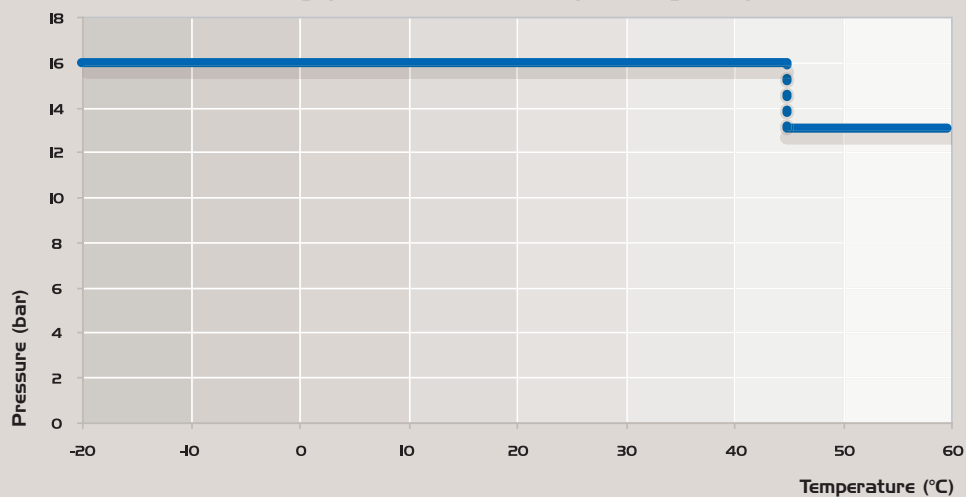
> Fluids

- Compressed air (dry, wet, lubricated)
- Vacuum
- Inert gases (argon, nitrogen)
- Other fluids: please consult us

> Maximum working pressure

13 bar from -20°C to +60°C
16 bar from -20°C to +45°C

Maximum working pressure versus operating temperature



> Vacuum level

98,7 % (13 mbar absolute pressure)

> Working temperature

from -20°C to +60°C

> Storage temperature

from -40°C to +80°C

> Resistance to

- corrosion
- aggressive environments
- mechanical shocks
- thermal variations
- U.V. • compressor oil carry over

> Environment

Materials are 100% recyclable.
For silicone free applications: please consult us.

> Sizing



Select the TRANSAIR® diameter for your application based on required flow against pressure drop.

Estimated values for: a closed loop network, a pressure of 8 bar with 5% pressure drop. Velocity is not taken into account.

Flow rate			Length										Compressor (Kw)
			164ft	328ft	492ft	984ft	1640ft	2460ft	3280ft	4265ft	5249ft	6561ft	
Nm ³ /h	Nl/min	cfm	50m	100m	150m	300m	500m	750m	1000m	1300m	1600m	2000m	
10	167	6	16,5	16,5	16,5	16,5	16,5	16,5	16,5	25	25	25	1,5 - 7,5
30	500	18	16,5	16,5	16,5	25	25	25	25	25	25	40	
50	833	29	16,5	25	25	25	25	25	40	40	40	40	
70	1167	41	25	25	25	25	40	40	40	40	40	40	7,5 - 30
100	1667	59	25	25	25	40	40	40	40	40	40	63	
150	2500	88	25	40	40	40	40	40	40	63	63	63	
250	4167	147	40	40	40	40	63	63	63	63	63	63	30 - 75
350	5833	206	40	40	40	63	63	63	63	63	63	76	
500	8333	294	40	40	63	63	63	63	63	76	76	76	
750	12500	441	40	63	63	63	63	76	76	76	76	100	75 - 315
1000	16667	589	63	63	63	63	63	76	76	100	100	100	
1250	20833	736	63	63	63	63	63	100	100	100	100	100	
1500	25000	883	63	63	63	76	76	100	100	100	100	100*	> 315
1750	29167	1030	63	63	76	76	76	100	100	100	100*	100*	
2000	33333	1177	63	76	76	76	100	100	100	100*	100*	100*	
2500	41667	1471	63	76	76	76	100	100*	100*	100*	100*	100*	> 315
3000	50000	1766	76	76	76	100	100	100*	100*	100*	100*	100*	
3500	58333	2060	76	76	100	100	100*	100*	100*	100*	100*	100*	
4000	66667	2354	76	100	100	100	100*	100*	100*	100*	100*	100*	> 315
4500	75000	2649	76	100	100	100*	100*	100*	100*	100*	100*	100*	
5000	83333	2943	76	100	100	100*	100*	100*	100*	100*	100*	100*	
5500	91667	3237	100	100	100	100*	100*	100*	100*	100*	100*	100*	> 315
6000	100000	3531	100	100	100*	100*	100*	100*	100*	100*	100*	100*	

*Pressure drop >5%

> Example

- Main network length (ring main): 300 metres
- Compressor power: 30 kW
- Required flow rate: 250 Nm³/h (147 cfm)
- Working pressure: 8 bar

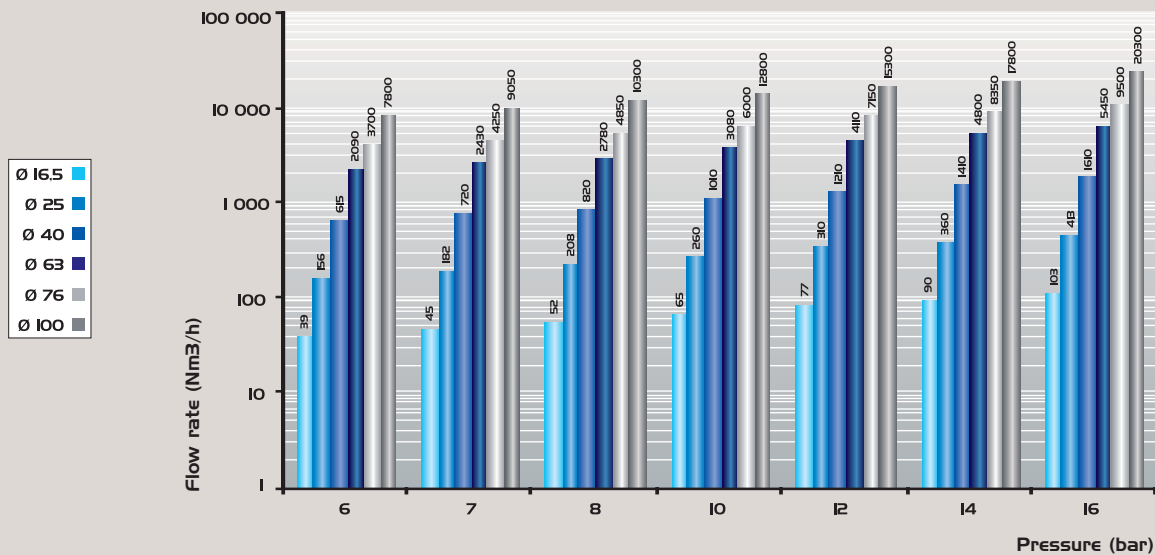
• The most suitable Transair® diameter is: Ø 40.

To size your air pipework system, you can also use the TRANSAIR® FLOW CALCULATOR. For more information, refer to page 4 of this catalogue.

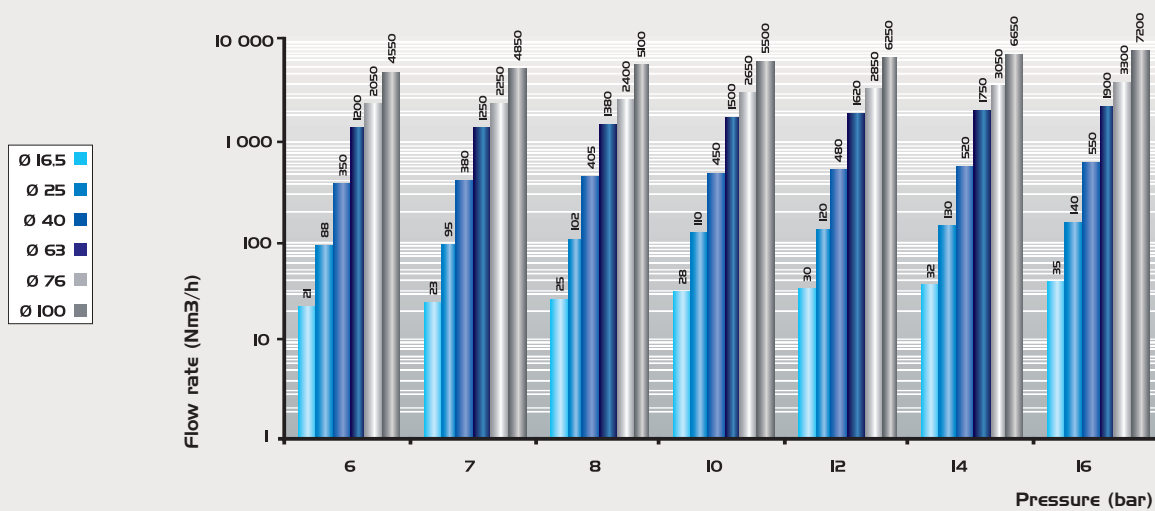
> Flow rates and pressure drop

Measurements provided by the official French testing body CETIM - Centre Technique des Industries Mecaniques. Charts are based on a 30m straight Transair® line.

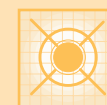
Maximum flow rate with 5% pressure drop (To convert to cfm, use a coefficient of 0.588.)



Maximum flow rate with 0.1 bar pressure drop. (To convert to cfm, use a coefficient of 0.588.)



> Transair® Flow Calculator



The TRANSAIR® FLOW CALCULATOR helps you to choose the most suitable diameter for your installation. Enter the flow of your compressor, the system pressure rating and the total equivalent length of the system. Select ring main or straight line layout, enter your preferred unit of calculation and then click for an immediate indication of the most suitable Transair® diameter (with a pressure drop of less than 5%).



> Example

- > Flow rate: 1 445 Nm³/h (850 cfm) at 7,5 bar (109 psi)
- > Ring main: 545 metres
- > The recommended TRANSAIR® diameter is Ø76mm
(pressure drop of 0,10 bar = less than 5 %)

> Download

The new TRANSAIR® FLOW CALCULATOR from our web site :
www.transair.legris.com

> Safety

> Fire resistance

All TRANSAIR® components are non-flammable with no propagation of flame.

- pipe-to-pipe and stud connectors, ball valves and butterfly valves : conform to UL94HB standard
- fixture clips : conform to UL94V-2 standard
- flexible hoses : conform to ISO 8030 norm for compressed air applications, and to EN 12115 norm for vacuum applications
- pipe lacquer finish classified MO

> Electrical conductivity

In areas of potential risk, the earthing and electrical continuity of metallic components are obligatory. The Transair® system can be used in such environments by undertaking the appropriate precautions. For more information, please consult us.

> CE conformity

Transair® conforms to European standard 97/23 CEE - §3.3 (equipment under pressure).



DECLARATION OF CE CONFORMITY Supplied in conformity with the **DIRECTIVE on EQUIPMENT UNDER PRESSURE** **97/23/CEE**

We hereby declare that all Transair® connectors manufactured by LEGRIS S.A. should be considered as piping components which designed according to sound working practice. "Piping includes in particular a pipe or system of pipes, tubing, fittings, expansion joints, hoses, or other pressure-bearing components as appropriate" – of acceptance by the «pressure working group» dated 28/01/1999 and by the GTP Commission dated 27/11/1998.

Products designed according to the code of practice.

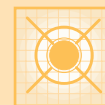
Product description: Transair® connectors Ø 16.5 - Ø 25 - Ø 40 - Ø 63 - Ø 76 - Ø 100

Applicable approvals: AFAQ Certificate of Approval, EN ISO 9001

> Material

	Ø 16,5 - Ø 25 - Ø 40	Ø 63		Ø 76 - Ø 100
1003A	lacquered aluminium	lacquered aluminium	TA03	lacquered aluminium
1006A	lacquered aluminium	lacquered aluminium	TA06	lacquered aluminium
1001E air	hose and coating : black SBR reinforcement : synthetic braiding	hose and coating : black SBR reinforcement : synthetic braiding	EW05	seal: EPDM
1001E vacuum	hose and coating : black SBR / NBR reinforcement : spiral steel wire	hose and coating : black SBR / NBR reinforcement : spiral steel wire	FP01	hose and connector: black SBR/NBR reinforcement : spiral steel wire
4002 - 4012	engineering grade plastic	body: engineering grade plastic nut: treated aluminium	RP01	body and pushing ring : engineering grade plastic - seal: NBR
4089 - 4099 - 4230	body: treated brass nut: engineering grade plastic	-	RR01	clamp : treated steel cartridge : engineering grade plastic seal : NBR
4981	body: plated brass seal: PTFE and nitrile	-	RR05	treated brass
6602 - 6604	engineering grade plastic	treated aluminium	RR61	body: iron (EN 1563) - seal : NBR screw : treated stainless steel lining : elastomer
6605	body : treated brass nut : polymer HR / NBR	body : treated brass nut: treated aluminium / NBR	RX02	stainless steel 304
6606	engineering grade plastic	treated aluminium	RX12	stainless steel 304
6612	engineering grade plastic	treated aluminium	RX04	stainless steel 304
6621	treated aluminium	-	RX23	stainless steel 304
6625	engineering grade plastic	treated aluminium	RX24	stainless steel 304
6651	body : treated brass nut: engineering grade plastic	-	RX64	stainless steel 304
6661	body: engineering grade plastic insert : brass	body : engineering grade plastic insert : brass	RX66	stainless steel 304
6662	engineering grade plastic	polymère HR	RX30	stainless steel 304
6666	body : treated aluminium nut: engineering grade plastic	treated aluminium	VR02	body: iron disc and shaft : stainless steel
6676	engineering grade plastic	body : treated aluminium nut : polymer HR	VR03	nickel-plated brass
6680 - 6681	body: treated brass nut: engineering grade plastic	-	Bracket	zinc steel - rubber EPDM
6685 - 6686	treated brass	-	For all silicone free applications : please consult us.	
EA98	body : treated iron ball valve : plated brass	-		
RA69	engineering grade plastic	-		
RA65	body: engineering grade plastic insert : brass	-		
Clip - Spacer	engineering grade plastic	engineering grade plastic		
Adaptor	brass	-		
Fixture accessories	galvanized steel - brass			
Column	anodized aluminium			
Module	aluminium			
Composite coupler	body : polymer HR / Zamac - sleeve : polymer HR - spring and ball bearings : stainless steel - seal : nitrile - probe : treated steel			
Metal coupler	body : anodized duralumin - sleeve: treated nickel-plated steel - spring : stainless steel - seal : nitrile - probe : treated steel, treated brass			
Hose reel	plastic/metal case - fixing : metal			
Blow gun	reinforced polyamide - treated aluminium - insert brass			
Connections accessories	plated brass			
Anti whip-lash strap	steel			

> Transair® Technology

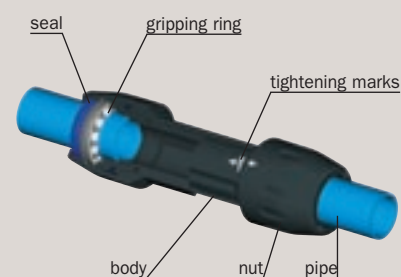


Innovative technology at the heart of TRANSAIR® enables rapid and easy assembly: quick connection of components to the aluminium pipe.

This technology takes into account the specific requirements of each diameter and provides the user with an optimum safety coefficient and easy connection.

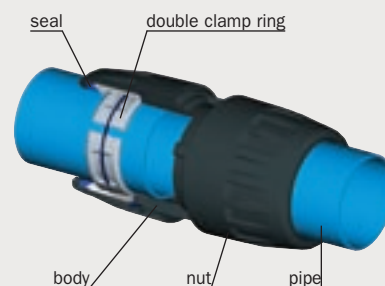
- > Ø 16,5
- > Ø 25
- > Ø 40

Pipe-to-pipe and stud connectors in Ø 16,5, Ø 25 et Ø 40 can be immediately connected to Transair® pipe - simply push the pipe into the connector up to the connection mark. The gripping ring of each fitting is then automatically secured and the connection is safe.



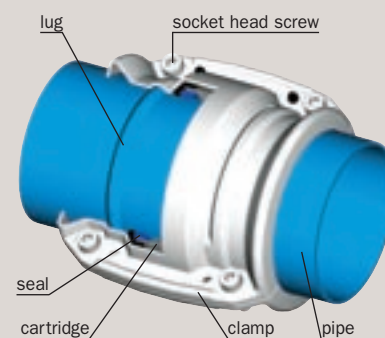
- > Ø 63

Pipe-to-pipe and stud connectors in Ø 63 can be quickly connected to Transair® aluminium pipe by means of a double clamp ring. This secures the connection between the nut and the pipe - tightening of the nuts secures the final assembly.



- > Ø 76
- > Ø 100

Pipe-to-pipe and stud connectors in Ø 76 et Ø 100 can be quickly connected to Transair® aluminium pipe. Position the pipes to be connected within the Transair® cartridge and close/tighten the Transair® clamp.



> Services

A number of additional Transair® services help you throughout your projects.

> Project assistance



Understanding, Proximity, Responsiveness. Field support

TRANSAIR® technical-commercial teams are at your disposal to study and help design your air network. In particular, they assist you in your project with :

- Information on the TRANSAIR® products and services,
- Guidance and training on how to assemble the system,
- Advice on “best practice” in order to reduce your consumption of energy,
- Ongoing assistance and follow-up.
- On-site advisory presence at construction and installation locations.

Internally

Our CUSTOMER SERVICE teams will co-ordinate a quick response to your requirements.

> **Commercial service - France & International**

- Product availability
- Order processing and follow-up
- Delivery time-phasing and modification
- Technical information

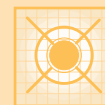
> **Costing service**

- Advice
- Design software

> Wherever you are in the world, you can contact us :

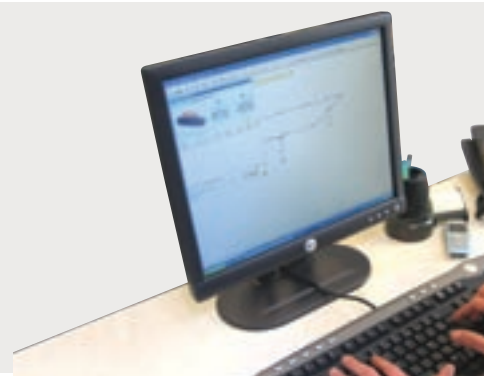
- by phone
- by fax
- by post
- by e-mail

To find the address of your nearest TRANSAIR® contact, please see the INDEX of this catalogue.



> Transair design software

- Installation sizing
- System layout and drawing
- Shopping list
- Available on CDROM



> Web site

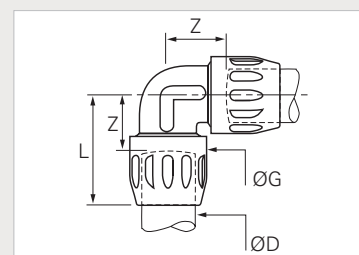
- Practical information
- Downloadable literature files: catalogues, information on new products, introductory leaflet, instruction guidelines, newsletter.

www.transair.legris.com



> CAD drawings

All TRANSAIR® CAD drawings are available on a CDROM - in formats DWG, DXF and PS.



> Specification sheets

Formal technical specifications for the TRANSAIR® system are available in either Word or PDF format and can be directly integrated into your own documents.

> System benefits

COMPLETELY ADAPTABLE

- > Dismountable and reusable components



ENERGY SAVINGS

- Consistent high quality internal surface
- > CLEAN AIR

- Full flow connection and low friction internal surface of the pipe
- > HIGH FLOW RATE PERFORMANCE

- Calibrated pipe diameter
- > OPTIMUM SEALING

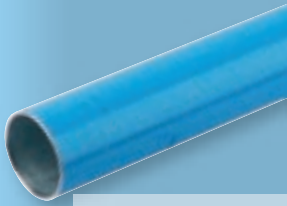
EASIER

HANDLING

- Pipes and fittings are supplied ready for immediate installation
- > NO PREPARATION REQUIRED

- Quick assembly - no need to weld, glue or crimp
- > TIME SAVING

- Easy to assemble
- > NO IN-DEPTH TRAINING REQUIRED



- Lightweight, easy to cut pipe material
- > EASIER WORKING ON SITE

- Immediate Start-up
- > SYSTEM QUICKLY READY FOR TEST AND USE

HIGH RESISTANCE TO

- > corrosion
- > aggressive environments
- > mechanical shocks
- > thermal variations
- > U.V.
- > compressor oil carry over

**COMPONENTS
GUARANTEED
FOR
10 YEARS**

SAFETY

- > non-flammable materials

Legris has a policy of continual product development and, therefore, reserves the right to modify any products shown in this catalogue, without notification. All dimensions are indicative.

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