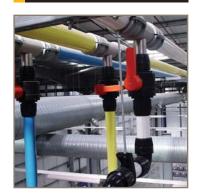




aerospace
climate control
electromechanical
filtration
fluid & gas handling
hydraulics
pneumatics
process control
sealing & shielding





Transair: Advanced Pipe Systems Compressed Air, Vacuum, Inert Gas 1/2" - 6"





Parker Hannifin - the global leader and your partner



With annual sales exceeding \$13 billion, Parker Hannifin is the world's leading diversified manufacturer of motion and control technologies and systems, providing precision-engineered solutions for a wide variety of mobile, industrial and aerospace markets. Our products are vital to virtually everything that moves or requires control, including the manufacture and processing of raw materials, durable goods, infrastructure development and all forms of transport.

Within Parker's eight operating groups, the company's engineering expertise spans the core motion technologies – electromechanical, hydraulic and pneumatic – with a full complement of fluid handling, filtration, sealing and shielding, climate control, process control and aerospace technologies.

The leader in "dry technology" for the fluid power industry, Parker's Fluid Connectors Group is your single source for high-quality tube fittings, hose and hose fittings, thermoplastic tubing, brass fittings and valves, quick-disconnect couplings and assembly tools. The Fluid Connectors Group serves customers in a broad range of markets, including Aerial Lift, Agriculture, Bulk Chemical Handling, Construction Machinery,

Food & Beverage, Fuel & Gas Delivery, Industrial Machinery, Medical, Mining, Mobile, Oil & Gas and Transportation. Products are available for shipment 24 hours a day, supported by 49 manufacturing facilities throughout the world, a global distribution network and 25 company-owned stocking service centers. Our commitment to you is impeccable customer service. To meet your specific requirements, we offer a broad range of programs designed to reduce your overall operating costs, streamline manufacturing, improve productivity, manage inventory, enhance delivery and address safety and environmental issues. For value-added services that generate value-added solutions, team up with Parker!



















Parker Hannifin manufactures a robust piping system with superior operational efficiency perfectly suited for all industrial applications.

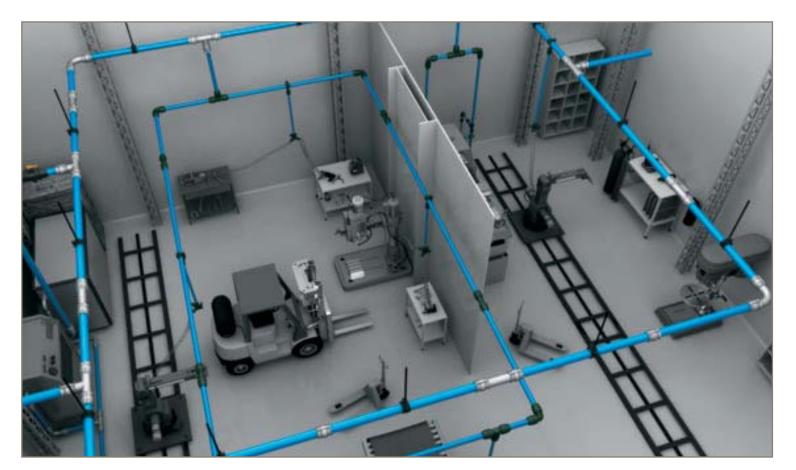
Transair is a fast, flexible and easy to modify aluminum pipe system for compressed air, vacuum and inert gas applications. Transair components are reusable and interchangeable, which enables immediate and easy layout modifications. Unlike the performance of steel or copper, which degrades over time due to corrosion, Transair provides clean air quality with optimum flow rate performance.

Transair also offers significant savings on installation, maintenance and operating costs when compared to traditional pipe. The quick connections eliminate the need to thread, solder or glue pipe. With Transair, labor accounts for only 20 percent of installation costs, but with steel or copper, labor accounts for 50 - 80 percent of the installation cost. Transair's aluminum pipe system significantly reduces plant energy costs by increasing efficiency, reducing pressure drops, and eliminating leaks.

Available in 1/2" to 6" pipe sizes, Transair features quick connect technology that secures connections with a simple push and provides a leak-free guarantee. The aluminum pipe is corrosion resistant, ensuring the longevity of equipment and avoiding frequent changes of filtration elements. Transair can also be integrated into existing copper and steel piping systems without compromising performance, making it perfect for upgrades or expansion projects.

















2012 Transair Catalog

Extra care is taken in the preparation of this literature, but Parker is not responsible for any inadvertent typographical errors or omissions. Information in this catalog is only accurate as of the date of publication. For more current information, please visit:

www.parkertransair.com

Questions about Transair

If you have questions about the products contained in this catalog, or their applications, please contact:

Fluid System Connectors Division Phone: 480-830-7764 Fax: 480-325-3571 www.parkertransair.com

Offer of Sale

The items described in this document and other documents and descriptions provided by Parker Hannifin Corporation, its subsidiaries and its authorized distributors are hereby offered for sale at prices to be established by the seller. This offer and its acceptance are governed by the provision in the "Offer of Sale" detailed on page 90 of this catalog.

! WARNING

FAILURE, IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS AND/OR SYSTEMS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.

This document and other information from Parker Hannifin Corporation, its subsidiaries and authorized distributors provide product and/or system options for further investigation by users having technical expertise. The user, through its own analysis and testing, is solely responsible for making the final selection of the system and components and assuring that all performance, endurance, maintenance, safety and warning requirements of the application are met. The user must analyze all aspects of the application, follow applicable industry standards, and follow the information concerning the product in the current product catalog and in any other materials provided from Parker or its subsidiaries or authorized distributors. To the extent that Parker or its subsidiaries or authorized distributors provide component or system options based upon data or specifications provided by the user, the user is responsible for determining that such data and specifications are suitable and sufficient for all applications and reasonably foreseeable uses of the components or systems.

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>Competitive advantage

A proven technology with impeccable benefits

Transair offers the advantages of being lightweight, strong and resistant to corrosion. And, Transair is an environmentally sustainable and responsible product that reduces the carbon footprint by 80 percent over steel piping installations. The materials used to produce Transair pipe and fittings are 100 percent recyclable and guaranteed silicone free.

Transair's quick connection technology also reduces energy consumption, improves operational efficiencies and minimizes installation and maintenance costs.



Clean air with optimal flow rate

The clean air quality and "full bore" design of Transair provides optimal machine and tool efficiency. Transair's aluminum pipe ensures a total absence of corrosion. The inner pipe surface consistently delivers clean compressed air. Transair prevents problems caused by rust, which affects steel systems.

Transair aluminum pipe ensures higher longevity of equipment and avoids frequent changes of filtration elements due to its consistent clean quality air from compressor outlets to machines.

The "full bore" design of Transair's components, the low friction coefficient of aluminum pipe, and the sealing characteristics of the system ensure optimal and constant flow throughout. Its innovative technology provides better performance in terms of improved flow and reduced pressure drop.

Significant energy savings

Compressed air represents one of the largest opportunities for immediate energy savings. Plant management is often surprised to hear that compressed air can represent 20 - 50 percent of a plant's electric bill. Using a specifically designed and efficient compressed air piping system can reduce your plant's energy bill by 30 - 60 percent within 24 months.

For instance, a large industrial plant recently redesigned its compressed air system with Transair, accounting for 35 percent savings in the plant's monthly energy bill, which paid for the system in 15 months. The plant continues to save by:

- Increased air system reliability
- Reduced maintenance cost and extended equipment life
- Reduced system downtime and increased production rates

Quick connect technology

Easy to install and modify, Transair is the most versatile compressed air piping system available. With Transair, labor accounts for only 20 percent of installation costs, but with steel or copper, labor accounts for 50 - 80 percent of the installation cost.

Transair's components are also reusable and interchangeable and enable manufacturing plant personnel to implement many layout changes within minutes, instead of hours. This ease of use minimizes downtime and increases plant productivity and efficiency.

The connection is simply pushed or bolted together, which enables disassembly when required unlike other connection technologies that are permanently crimped or welded.

Suitable fluids

- compressed air (dry, wet, lubricated)
- vacuum
- inert gases (Please consult us for other fluids)

Max. working pressure

188 psi from -4°F to +140°F 232 psi from -4°F to +115°F (*Max. working pressure for 6" is 188 psi)

Temperature range

Working: -4°F to +140°F Storage: -40°F to +176°F

Resistance to

- corrosion
- aggressive environments
- mechanical shocks
- thermal variations

mineral compressor oils

- synthetic compressor oils
- compressor oil carry over
- ultraviolet (UV)

Vacuum level

98.7% (29.6" Hg)

Eco-friendly product design

Recent trends reveal that the interest in and demand for green building designs, materials, and products has greatly increased - and will only continue to do so in the coming years. Parker understands this growing focus on sustainable buildings, and as a result the material used to manufacture Transair pipe and fittings are 100 percent recyclable and meet the requirements set by the U.S. Green Building Council for Leadership in Energy and Environmental Design (LEED) certification credits.



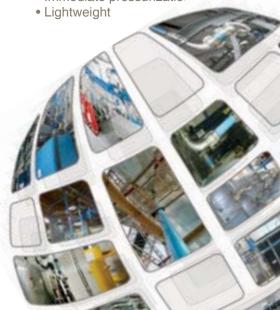
Transair piping systems have been specifically designed to ensure a lower impact on the environment with a low carbon footprint when compared to traditional piping systems. In a life cycle analysis, from production of raw materials to end of product life, the use of a six inch Transair pipe system is five times less harmful to the environment than a traditional steel pipe system.

Ideal for aggressive environments

Dust and outdoor installations widely accelerate the deterioration of compressed air systems. To combat these elements, Transair has specifically powder coated the outside of the pipe to enhance mechanical, physical and chemical properties. Furthermore, aluminum is naturally resistant to corrosion, which ensures extended longevity of equipment and can help to avoid frequent changes of filter elements.

Transair's benefits include:

- Quick connection technology
- Modular and reusable
- No corrosion
- Full-bore design
- Lower installation costs
- Optimum flow rate
- Leak-free guarantee
- Immediate pressurization



>Materials

	Ø 16.5 (1/2") - Ø 25 (7/8") - Ø 40 (1 1/2")	Ø 63 (2 1/2'')		Ø 76 (3'') - Ø 100 (4'') - Ø 168 (6'')
1013A	powder coated alumium	powder coated alumium	TA16	powder coated alumium
1016A	powder coated alumium	powder coated alumium	ER01	zinc steel & rubber
1001E Air	hose & coating: black SBR reinforcement: synthetic braiding	hose & coating: black SBR reinforcement: synthetic braiding	EX01	stainless steel
1001E vacuum	hose & coating: black SBR/NBR reinforcement: spiral steel wire	hose & coating: black SBR/NBR reinforcement: spiral steel wire	EW05	seal: EPDM
4002 - 4012	polyamide with fiberglass	body: polyamide with fiberglass nut: treated aluminum	FP01	hose & connector: black SBR/NBR reinforcement: spiral steel wire
4088 - 4099	body: treated brass nut: engineering grade plastic	-	RA02 - RA04 - RA12	treated aluminum
Anti whip-lash strap		steel		
6602 - 6604	polyamide with fiberglass	treated aluminum	RA25 - RA31 - RA66	treated aluminum
6605	body: treated brass nut: polymer HR / NBR	body: treated brass nut: aluminum HR / NBR	RP01	body & pushing ring: polyamide with fiberglass - seal: NBR
6606	polyamide with fiberglass	treated aluminum	RR01	clamp: treated steel (6" treated aluminum) cartridge: polyamide with fiberglass seal: NBR
6609	body: treated brass nut: polymer HR / NBR	body: treated brass nut: treated aluminum / NBR	RR21	treated brass
6611	treated brass	-	RR63	body: treated iron - seal: NBR
6612	polyamide with fiberglass	treated aluminum	RX02	stainless steel 304
6621	treated aluminum	-	RX04	stainless steel 304
6625	polyamide with fiberglass	treated aluminum	RX12	stainless steel 304
6636 - 6638 - 6640	body: treated brass nut: polymer HR / NBR	-	RX20	stainless steel 304
6642	treated brass	-	RX24	stainless steel 304
6651	body: treated brass nut: polyamide with fiberglass	-	RX25	stainless steel 304
6653	body: treated brass nut: polymer HR	-	RX30	stainless steel 304
6663	body: polyamide with fiberglass insert: brass	body: polyamide with fiberglass insert: brass	RX63	stainless steel 304
6662	polyamide with fiberglass	polymere HR	RX64	stainless steel 304
6666	body: treated brass nut: polyamide with fiberglass	treated aluminum	RX66	stainless steel 304
6675 - 6679 - 6689	body: treated brass nut: polymer HR / NBR	-	VR02	body: iron disc & shaft: stainless steel
6676	polyamide with fiberglass	body: treated aluminum nut: polymer HR	Bracket	zinc steel - rubber EPDM
6684		body: treated brass - nut: polyamide	with fiberglass	
6688 - 6691		treated brass		
6694 - 6696		body: treated brass - nut: polymer F	HR - seal: NBR	
EA98		body: treated iron - ball valve: p	lated brass	
RA68 - RA69		polyamide with fibergla	ss	
Clip - Spacer		polyamide with fibergla	ss	
0169 Adaptor		brass		
Composite coupler	body: polymer HR / Zamac - slee	ve: polymer HR - spring and ball bearing	gs: stainless steel - seal: n	itrile - probe: treated steel
Hose reel		metal case - fixing: me	tal	
Blowgun		reinforced polyamide - treated aluminu	um - insert: brass	

>Connection technology

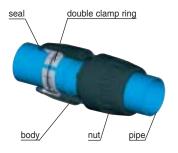
Transair's innovative technology enables rapid and easy assembly with quick connection of components to the aluminum pipe. This technology takes into account the specific requirements of each diameter and provides the user with an optimum safety coefficient and easy connection.



Ø 16.5 (1/2") - Ø 25 (7/8") - Ø 40 (1 1/2")

Pipe-to-pipe and male connectors in \emptyset 16.5, \emptyset 25 and \emptyset 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.

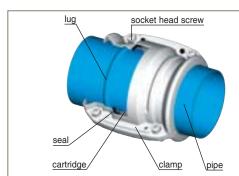




Ø 63 (2 1/2")

Pipe-to-pipe and male connectors in \emptyset 63 can be quickly connected to Transair aluminum 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 (3") - Ø 100 (4") - Ø 168 (6")

Pipe-to-pipe and male connectors in \emptyset 76, \emptyset 100 and \emptyset 168 can be quickly connected to Transair aluminum pipe. Position the pipes to be connected within a Transair cartridge and close/tighten a Transair clamp.



>Certifications and guarantees



ISO 9001 version 2000

Parker Hannifin is certified ISO 9001 version 2000 and operates a Quality Management System in order to ensure the level of quality and service that is expected by its customers.



TÜV certification

A product certified TÜV is a pledge of safety and quality. The Group TÜV thus certifies independent test results – in particular, the properties of the products and the standards whereby they were examined.



ASME B31.1/B31.3 certification

Transair meets the requirement of ASME B31.1 and B31.3 - which stipulates "the minimum requirements for the design, materials, fabrication, erection, test and inspection of power and auxiliary piping systems for industrial institutional plants" as "non boiler external piping".



Qualicoat certification

Qualicoat certification is a guarantee of the quality of the lacquer finish applied to Transair aluminum pipe.



ISO 8573 certification

ISO 8573 is the international standard related to the quality of compressed air. Conformance to the ISO 8573 standard illustrates our commitment to providing clean dry air and the highest quality engineered piping systems.



10 Year guarantee

Parker Hannifin Corporation warrants its Transair products to be free of defects in material and workmanship for a period of ten (10) years from the date of purchase of the products.



Safety certifications

All Transair components are non-flammable with no propagation of flame. Connectors and valves conform to UL94HB standard. Fixing clips conform to UL94V-2 standard. Flexible hoses conform to ISO 8030 / EN 12115 norm. The pipe powder coat finish is classified MO.



CE conformity

Transair connectors manufactured by Parker Hannifin should be considered as piping components, which are designed according to sound working practice and therefore conforms to European standard 97/23 CEE - §3.3 (equipment under pressure).

Electrical conductivity: In areas of potential risk, grounding of metallic components are obligatory. A Transair system can be used in such environments by undertaking the appropriate precautions. For more information, please consult us.

>Services and tools

Services

Transair's technical team is at your disposal to study and help design your air system. In particular, we can assist you with:

- Information on Transair products and services
- · Quotation and drawing services
- Guidance and training on how to assemble the system
- Advice on "best practices" in order to reduce your consumption of energy
- · Ongoing assistance and follow-up
- On-site advisory presence at construction and installation locations

Our customer service representatives will coordinate a quick response for the following:

- Product availability
- · Order processing and follow-up
- Delivery time-phasing and modification
- Technical information / specification sheets



Online tools

Transair Flow Calculator

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

Transair Energy Savings Calculator

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

Transair Value Calculator

Illustrates the typical savings achieved by installing Transair in place of traditional steel or copper pipe systems

CAD Drawings

View or download Transair CAD drawings in 2D or 3D online

>Technical

Sizing: Select the Transair diameter for your application based on required flow against pressure drop. Estimated values for: a closed loop system, a pressure of 115 psi with 5% pressure drop.

	Flow Rate				Main Rir	ng Length	(ft)		Compressor
Nm3/h	NI/min	cfm	500	1000	2000	3000	4000	5000	hp
16.99	283.2	10	16.5	16.5	16.5	25	25	25	
42.475	708	25	25	25	25	25	25	25	<15
84.95	1416	50	25	25	25	40	40	40	
127.43	2124	75	25	40	40	40	40	40	
169.9	2832	100	25	40	40	40	40	40	15 to 40
254.85	4248	150	40	40	40	40	63	63	
424.75	7080	250	40	40	63	63	63	63	
594.65	9912	350	40	63	63	63	63	63	41 to 125
849.5	14160	500	63	63	63	63	76	76	
1274.3	21240	750	63	63	76	76	76	76	126 to 250
1699	28320	1000	76	76	76	100	100	100	120 10 230
2123.8	35400	1250	76	76	100	100	100	100	
2548.5	42480	1500	100	100	100	100	100	100	125 to 500
2973.3	49560	1750	100	100	100	100	100	168	123 10 300
3398	56640	2000	100	100	100	100	168	168	
3822.8	63720	2250	100	100	100	168	168	168	
4247.5	70800	2500	100	100	100	168	168	168	
4672.3	77880	2750	168	168	168	168	168	168	
5097	84960	3000	168	168	168	168	168	168	501 to 1000
5521.8	92040	3250	168	168	168	168	168	168	
5946.5	99120	3500	168	168	168	168	168	168	
6796	113280	4000	168	168	168	168	168	168	1
7645.5	127440	4500	168	168	168	168	168	168	
8495	141600	5000	168	168	168	168	168	168	1001 to 1400
9344.5	155760	5500	168	168	168	168	168	168	

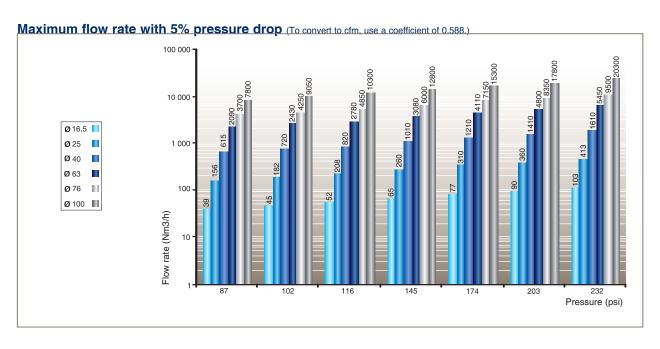


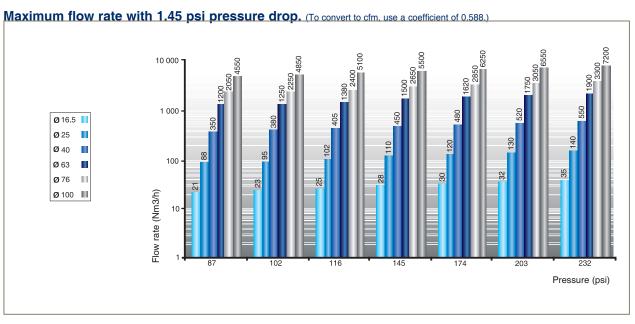
• Main system length (ring main): 2000 ft

Compressor power: 100 hpRequired flow rate: 350 cfmWorking pressure: 115 psi

Result: The most suitable Transair diameter is: Ø 63.

Flow rates and pressure drop: Measurements provided by the official French testing body CETIM - Centre Technique des Industries Mecaniques. Charts are based on a 100' straight Transair line.





> Notes



> Products catalog





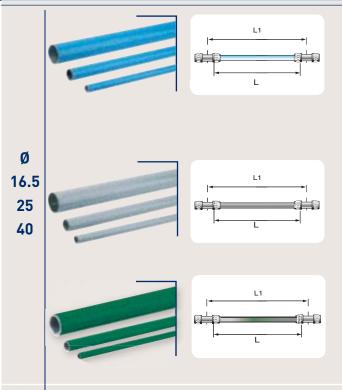
	Rigid aluminum pipe	15
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> Rigid aluminum pipe

- > Clean air
- > Optimum flow rate performance
- > Lightweight
- > QUALICOAT certified surface finish
- > Three colors: blue (RAL 5012/BS1710), grey (RAL 7001), and green (RAL 6029) (other colors: please consult us)
- > Suitable fluids: compressed air, vacuum, nitrogen, argon (other fluids: please consult us)
- > Max. working pressure:
 - 188 psi from -4°F to +140°F
 - 232 psi from -4°F to +115°F

(please consult us for higher temperature requirements)

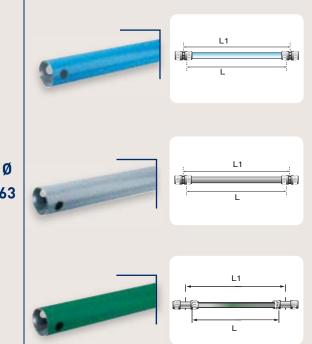
- > Vacuum: 98.7% (29.6" Hg)
- > Working temperature: -4°F to +140°F
- > Extruded pipe (conforms to EN 755.2, EN 755.8 and EN 573.3 standards)



Blue bibe				
Transair	ØOD (mm)	ØOD (in)	L1 (ft)	L (ft)
1013A17 04 00	16.5	1/2	10	9' 9 1/4''
1014A17 04	16.5	1/2	15	14' 9 1/2"
1013A25 04 00	25	7/8	10	9' 9 1/4"
1016A25 04 00	25	7/8	20	19' 9 3/4"
1013A40 04 00	40	1 1/2	10	9' 7 1/2"
1016A40 04 00	40	1 1/2	20	19' 7 1/2"

Grey pipe Transair ØOD (in) ØOD (mm) L1 (ft) L (ft) 1013A17 06 00 16.5 1/2 10 9' 9 1/4" 1016A25 06 00 7/8 20 19' 9 3/4" 1016A40 06 00 40 1 1/2 20 19' 7 1/2"

Oreen pipe				
Transair	ØOD (mm)	ØOD (in)	L1 (ft)	L (ft)
1014A17 02	16.5	1/2	15	14' 9 1/2"
1016A25 02 00	25	7/8	20	19' 9 3/4"
1016A40 02 00	40	1 1/2	20	19' 7 1/2"



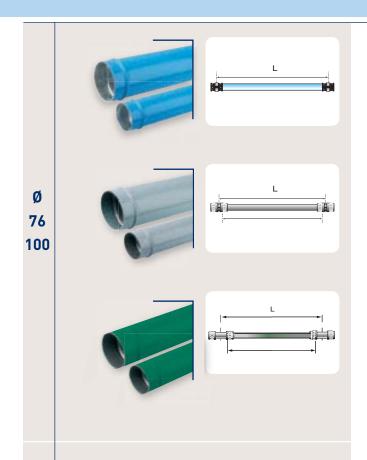
Blue pipe				
Transair	ØOD (mm)	ØOD (in)	L1 (ft)	L (ft)
1013A63 04	63	2 1/2	10	9' 7 1/2"
1016A63 04	63	2 1/2	20	19' 7 1/8''

OD (mm)	ØOD (in)	L1 (ft)	L (ft)
63	2 1/2	20	19' 7 1/8"
	63	63 2 1/2	63 2 1/2 20

Transair	ØOD (mm)	ØOD (in)	L1 (ft)	L (ft)
1016A63 02	63	2 1/2	20	19' 7 1/8''

Green pipe

Groon nine



Blue pipe

Transair	ØOD (mm)	ØOD (in)	L (ft)
TA16 L1 04	76.3	3	20
TA16 L3 04	101.8	4	20

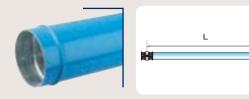
Grey pipe

Transair	ØOD (mm)	ØOD (in)	L (ft)
TA16 L1 06	76.3	3	20
TA16 L3 06	101.8	4	20

Green pipe

Transair	ØOD (mm)	ØOD (in)	L (ft)
TA16 L1 02	76.3	3	20
TA16 L3 02	101.8	4	20

Ø 168



Blue pipe

Transair	ØOD (mm)	ØOD (in)	L (ft)
TA16 L8 04	168.3	6	20

Pipe sizes: 16.5 mm (1/2")
25 mm (7/8")
40 mm (1 1/2")
63 mm (2 1/2")
76.3 mm (3")
101.8 mm (4")
168.3 mm (6")

> Flexible hose

- > Compressor outlets (absorption of vibration)
- > To bypass obstacles and join different levels
- > Expansion loops

Ø 63

- > Max. working pressure for flexible hose used for compressed air:
 - 188 psi from -4°F to +140°F
 - 232 psi from -4°F to +115°F (please consult us for higher temperature requirements)
- > Max. working pressure for flexible hose used for vacuum: 145 psi
- > Vacuum: 98.7% (29.6" Hg)
- > Working temperature: -4°F to +140°F
- > Resistant to mineral and synthetic compressor oils
- > Fire resistant (conforms to ISO 8030 standard for compressed air flexible hose and to EN 12.115 standard for vacuum flexible hose)

ø 25 40	

Flexible hose for compressed air systems For use						
Transair	OD (mm)	OD (in)	L (ft)	Min. bend radius (in)	with Transair pipe diameter	
1001E25 00 0	1 38	7/8	1' 10"	4	25	
1001E25 00 0	38	7/8	5'	4	25	
1001E25 00 0)4 38	7/8	6' 7''	4	25	
1001E40 00 0)2 54	1 1/2	3' 3"	16	40	
1001E40 00 0)4 54	1 1/2	6' 7''	16	40	
1001E40 00 0	54	1 1/2	9' 10"	16	40	

Flexible hose for vacuum systems						
Transair	OE) (mm)	OD (in)	L (ft)	Min. bend radius (in)	with Transair pipe diameter
1001E25V00	01	36	7/8	1'4"	3	25
1001E25V00	03	36	7/8	5'	3	25
1001E25V00	04	36	7/8	6'7"	3	25
1001E40V00	07	52	1 1/2	3'3"	6 1/2	40
1001E40V00	04	52	1 1/2	6'7"	6 1/2	40
1001E40V00	05	52	1 1/2	9'10"	6 1/2	40

Flexible hose for compressed air systems Transair OD (mm) OD (in) L (ft) Min. bend with Transair in adius (in) radius (in) pipe diamet

Transair	OD (mm)	OD (in)	L (ft)	radius (in)	pipe diameter	
1001E63 00 08	79	2 1/2	4'7"	12	63	
1001E63 00 05	79	2 1/2	9'10"	25	63	
1001E63 00 06	79	2 1/2	13'1"	25	63	

10

63

Flexible hose for vacuum systems Transair OD (mm) OD (in) L (ft) Min. bend radius (in) 1001E63V00 05 76 2 1/2 9'10" 10 63

2 1/2

Ø 76 100

Flexible hose for compressed air and vacuum systems

1001E63V00 06

Transair	OD (mm)	OD (in)	L (ft)	Min. bend radius (in)	with Transair pipe diameter	
FP01 L1 01	91	3	4'11"	14	76	
FP01 L1 02	91	3	6'6''	14	76	
FP01 L3 02	116	4	6'6''	20	101	
FP01 L3 03	116	4	9'10''	20	101	

Use two connectors RR01 to connect flexible hoses FP01 to Transair pipe. $\label{eq:connectors}$



Prevents whip-lash should Transair flexible hose be disconnected while under pressure. Conforms to ISO 4414 safety standard.

The range of Transair pipe-to-pipe and stud connectors provides versatility of design and helps to overcome constraints often encountered with the structure of industrial buildings.

- > Quick connection
- > Full bore design*

63

- > Interchangeable and reusable
- > Non-flammable materials (UL94-HB standard)

Model supplied with 1/4" threaded fitting and \varnothing 8 mm push-in connection,

Ζ

33.0

48.0

57.0

Ζ

E2

132

157

230

Ν

51.4

52.7

Ζ

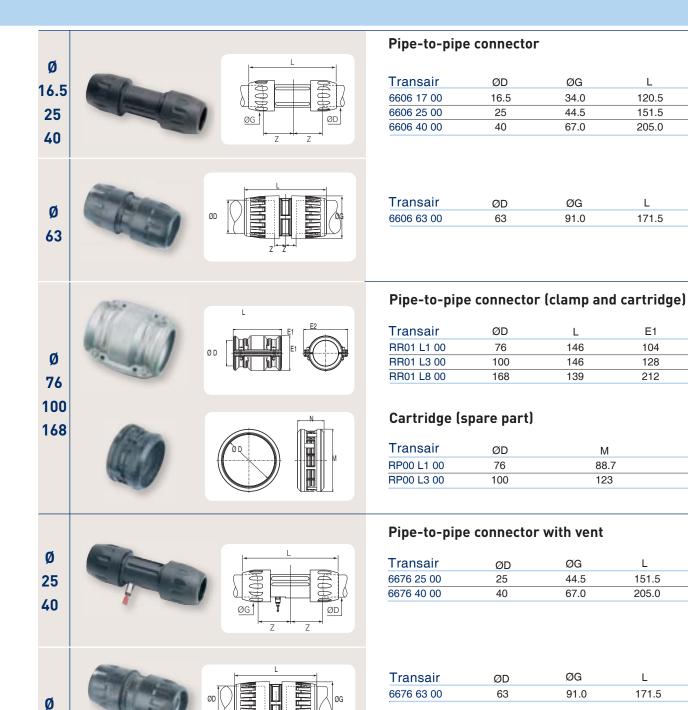
48.0

57.0

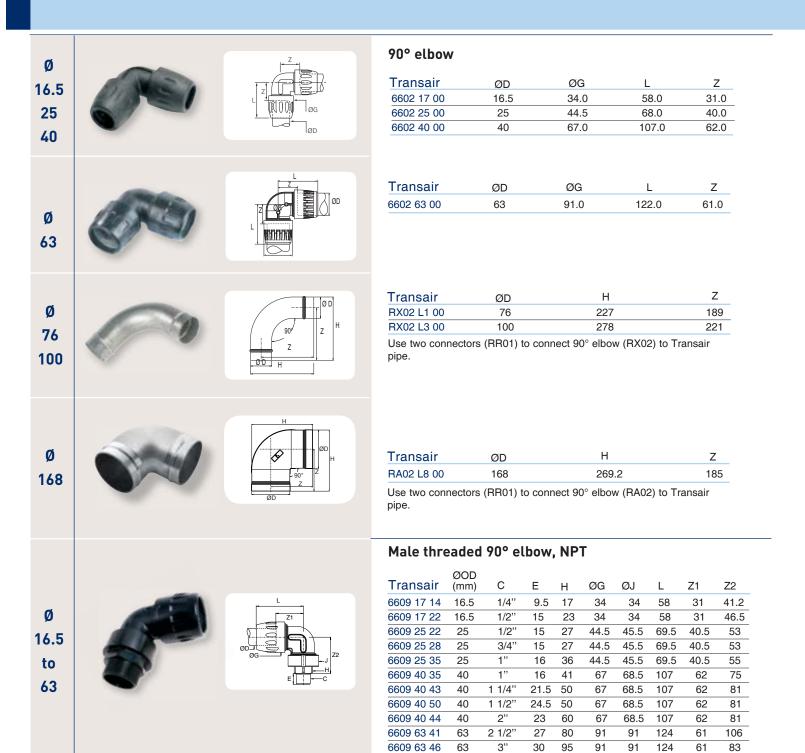
Ζ

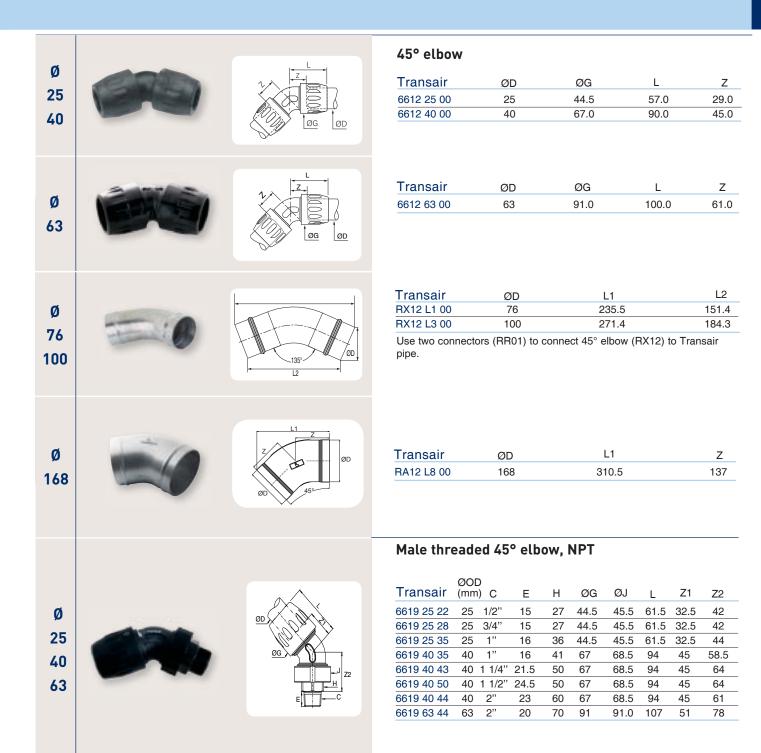
25.0

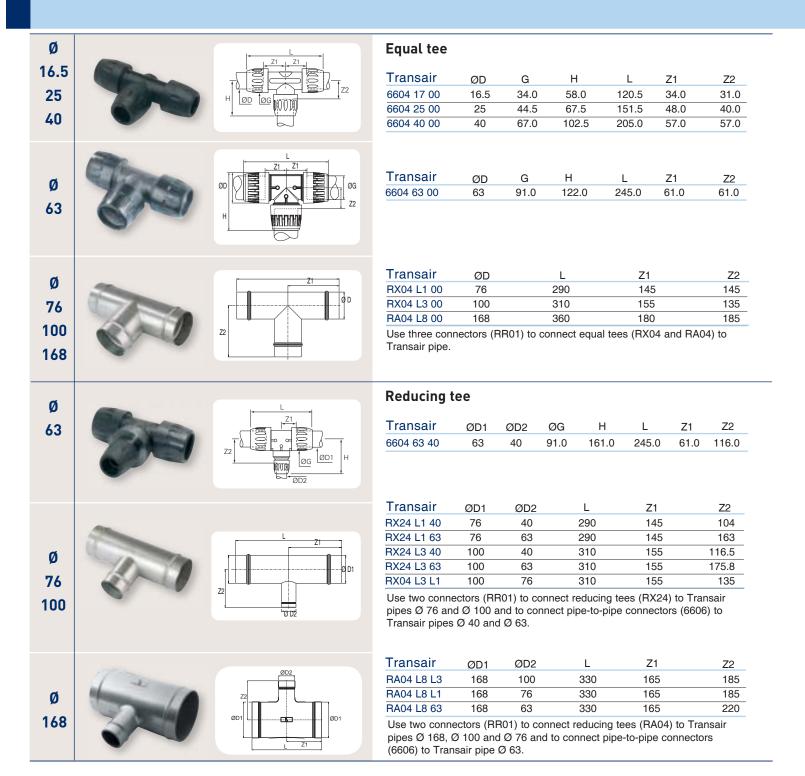
^{*}Consistent inner diameter for both pipe and connectors.

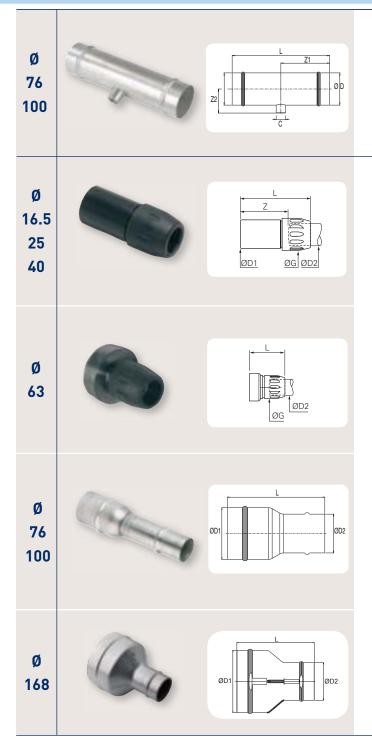


complete with blanking plug.









Threaded tee

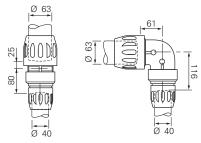
Transair	ØD	C (in)	L	Z1	Z2
RX20 L1N04	76	1/2	290	145	63
RX20 L3N04	100	1/2	310	155	75.8

Use two connectors (RR01) to connect threaded tees (RX20) to Transair pipe.

Plug-in reducer

Transair	ØD1	ØD2	ØG	Z	L
6666 17 25	25	16.5	34.0	50.0	77.0
6666 25 40	40	25	44.5	71.0	99.0

Transair	ØD1	ØD2	ØG	L
6666 40 63	63	40	67.0	112.5

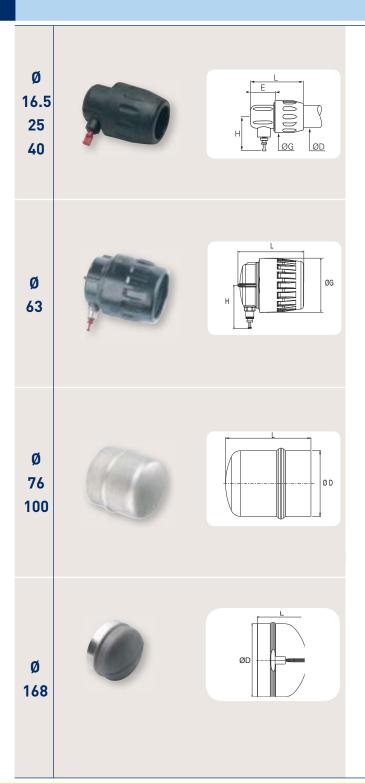


Transair	ØD1		L
RX64 L1 63	76	63	230
RX64 L3 63	100	63	250
RX66 L3 L1	100	76	192.5

Use one connector (RR01) to connect plug-in reducers (RX64) to Transair pipes Ø 76 or Ø 100 and one connector (6606) to connect to Transair pipe Ø 63.

Transair	ØD1	ØD2	L
RA66 L8 L3	168	100	210
RA66 L8 L1	168	76	210

Use one connector (RR01) to connect plug-in reducers (RA66) to Transair pipe.



Vented end cap

Transair	ØD	Е	ØG	Н	L
6625 17 00	16.5	25.5	34.0	45.5	62.5
6625 25 00	25	33.0	44.5	47.0	75.0
6625 40 00	40	34.5	67.0	55.0	98.5

16.5mm: supplied with LF3000 6mm plus. Model Ø 25, Ø 40 and Ø 63: supplied with LF3000 5/16" (8mm) plug.

Transair	ØD	Е	ØG	Н	L
6625 63 00	63	31.0	91.0	74.0	111

16.5mm: supplied with LF3000 6mm plug. Model Ø 25, Ø 40 and Ø 63: supplied with LF3000 5/16" (8mm) plug.

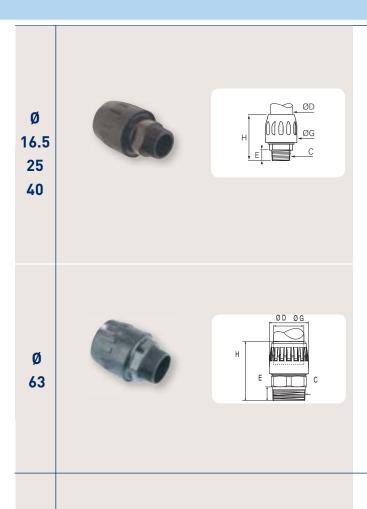
End cap

Transair	ØD	L
RX25 L1 00	76	99.6
RX25 L3 00	100	107.4

Use one connector (RR01) to connect end caps (RX25) to Transair pipe.

Transair	ØD	L	
RA25 L8 00	168	117	

Use one connector (RR01) to connect end caps (RA25) to Transair pipe.



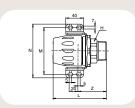
Male threaded connector, NPT thread

Transair	ØD	С	Е	ØG	Н
6605 17 14	16.5	1/4"	9.5	34.0	62.5
6605 17 22	16.5	1/2"	15.0	34.0	68.0
6605 25 22	25	1/2"	15.0	44.5	70,5
6605 25 28	25	3/4"	15.0	44.5	71.5
6605 25 35	25	1"	16.0	44.5	71.5
6605 40 35	40	1"	16.0	67.0	111.5
6605 40 43	40	1 1/4"	21.5	67.0	111.5
6605 40 50	40	1 1/2"	24.5	67.0	114.5
6605 40 44	40	2"	23.0	67.0	111.5

ı ransaır	ØD	С	E	ØG	Н
6605 63 44	63	2"	20.0	91.0	118.5
6605 63 41	63	2 1/2"	25.0	91.0	130.5
6605 63 46	63	3"	27	91.0	140.0

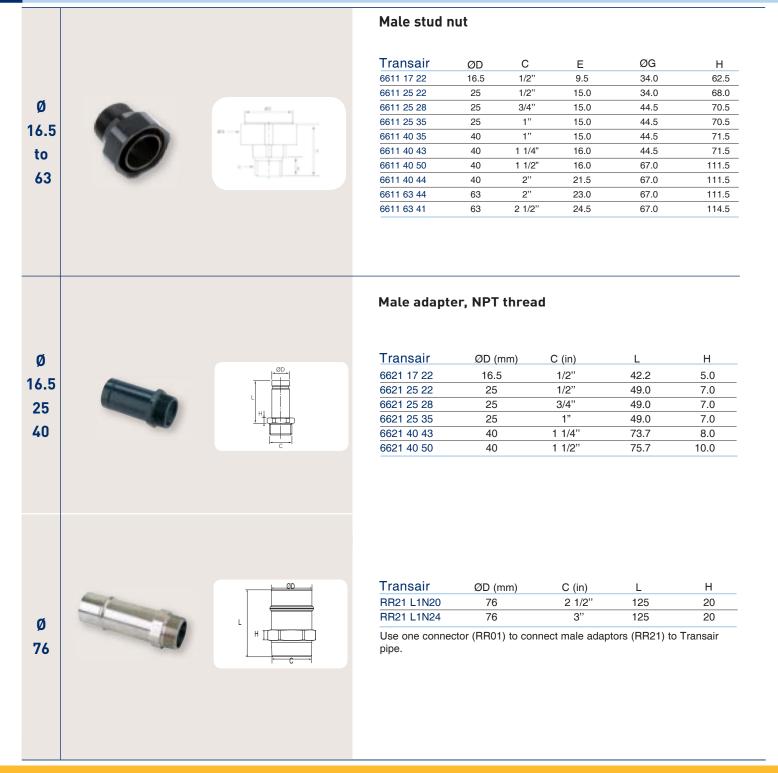
ø 25 40

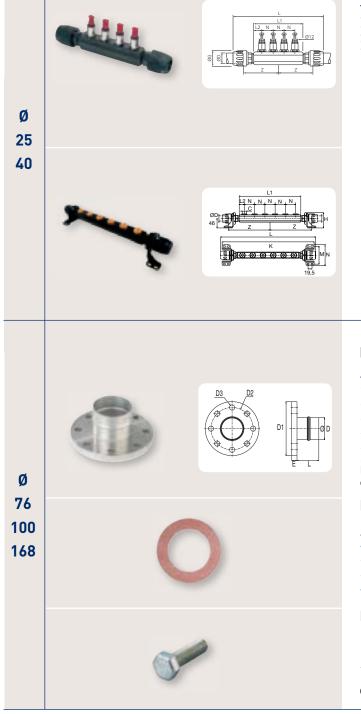




Male threaded connector with fixing plate

ransair	ØD	C	Н	L	IVI	IN	
6615 25 22	25	1/2"	27	76	66.5	82	44
6615 25 28	25	3/4"	27	77	66.5	82	44
6615 25 35	25	1"	36	77	66.5	82	53
6615 40 43	40	1 1/4"	50	121	84	105	75
6615 40 50	40	1 1/2"	50	121	84	105	75





4 port manifold

Transair	ØD	G	L	L1	L2	Ν	Z
6651 25 12 04	25	44.5	271.0	151.0	23.0	35.0	107.0
6651 40 12 04	40	67.0	400.0	204.0	27.0	50.0	150.0

Supplied with four Ø12 mm plugs.

6 port manifold

Transair	ØD	С	L	L1	L2	K	Ν	Z	Н	M
6653 25 22 06	25	1/2"	463	300	25	448	50	204	74	86.5
6653 40 22 06	40	1/2"	526	310	25	469	50	217	83	104.5

Supplied with 1/2" NPT ports.

Flange

Transair	ØD	(DN)	D1	D2	D3	Е	L
RX30 L1 00	76	65	185	145	18	10	75
RX31 L1 00	76	80	200	160	19	12.7	75
RX30 L3 00	100	100	220	180	18	10	75
RX31 L3 00	100	100	228.5	190.5	19	12.7	75
RA31 L8 00	168	150	279	240	22	25	100

RX30 dimensions conform to EN 1092-1 standard and the RX31 dimensions conform to ANSI B16.5 standard.

Flange gasket

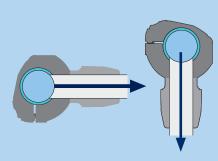
Transair	ØD	For use with flange reference
EW05 L1 00	76	RX30/RX31 L1 00
EW05 L3 00	100	RX30/RX31 L3 00
EW05 L8 00	168	RA31 L8 00

Flange bolt kit

С	L
5/8"	60
M20	80
	-,-

Contains eight bolts and eight nuts.

> Simple reducing brackets



For rigid drops with horizontal take off or for all types of air supply with rigid pipe or flexible hose on an installation which incorporates an efficient air dryer.

- > Optimum flow
- > Compact
- > Well adapted for most original equipment manufacturer (OEM) applications and for use with neutral gases
- > Quick installation without any cutting of pipe

Ø 25 40



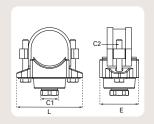
Simple reducing bracket

Transair	ØD1	ØD2	M	G	L	N	Z
RA69 25 17	25	16.5	92	34	37	52	47.5
RA69 40 25	40	25	117	44.5	37	74	61

To drill Transair pipe, use drilling tools 6698 02 01 and 6698 02 02.

Ø 76 100



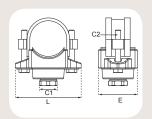


Transair	ØD	C1	C2	E	L
RR63 L1N08	76	1"	M12	50	137
RR63 L3N08	100	1"	M12	80	137

Nitrile Seals. Supplied with Ø 25 - 1" adaptor (6621 25 35). To drill Transair pipe, use drilling tool EW09.

Ø 168

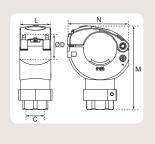




Transair	ØD	C1	C2	E	L
RR63 L8N12	168	1 1/2"	16	90	235
RR63 L8N16	168	2"	16	103	235

ø 25 40



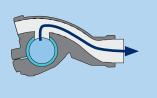


Simple bracket with thread (NPT)

Transair	ØD	С	L	N	М
RA68 25N04	25	1/2"	37	52	86
RA68 40N04	40	1/2"	37	74	100

Supplied with brass plug. To drill Transair pipe, use drilling tools 6698 02 01 and 6698 02 02.

> Quick assembly brackets



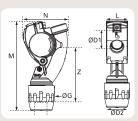


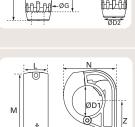
New generation quick assembly brackets are recommended for vertical or horizontal take-offs, using either rigid pipe or flexible hose.

- > Integral water retention device
- > Very high flow
- > Quick installation without any cutting of pipe

Ø 25 40







Quick assembly bracket

Transair	ØD1	ØD2	M	ØG	L	N	Z
6662 25 17	25	16.5	139.5	34	36	63.5	82
6662 25 00	25	25	134	44.5	36	63.5	74
6662 40 17	40	16.5	154	34	37.5	76.5	89
6662 40 25	40	25	149.5	44.5	37.5	76.5	82

To drill Transair pipe, use drilling tools 6698 02 01 and 6698 02 02.

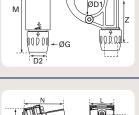
 Transair
 ØD1
 ØD2
 M
 G
 L
 N
 Z

 6662 63 25
 63
 25
 166.5
 44.5
 50
 108.5
 75

To drill Transair pipe, use drilling tool 6698 02 02.

ø 63





Quick assembly mini-bracket with female thread, NPT

Transair	ØD1	С	M	L	Ν
6663 25 22	25	1/2"	117.5	36	63.5
6663 40 22	40	1/2"	132	37.5	76.5

Supplied with brass plug. To drill Transair pipe, use drilling tools 6698 02 01 and 6698 02 02.

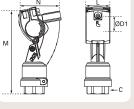
25 40

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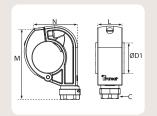
63

Ø









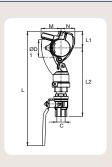
Transair	ØD1	С	M	L	N
6663 63 22	63	1/2"	138.9	50	98.5
6663 63 28	63	3/4"	138.9	50	98.5

Supplied with brass plug. To drill Transair pipe, use drilling tool $6698\ 02\ 01.$

ø 25 40

63





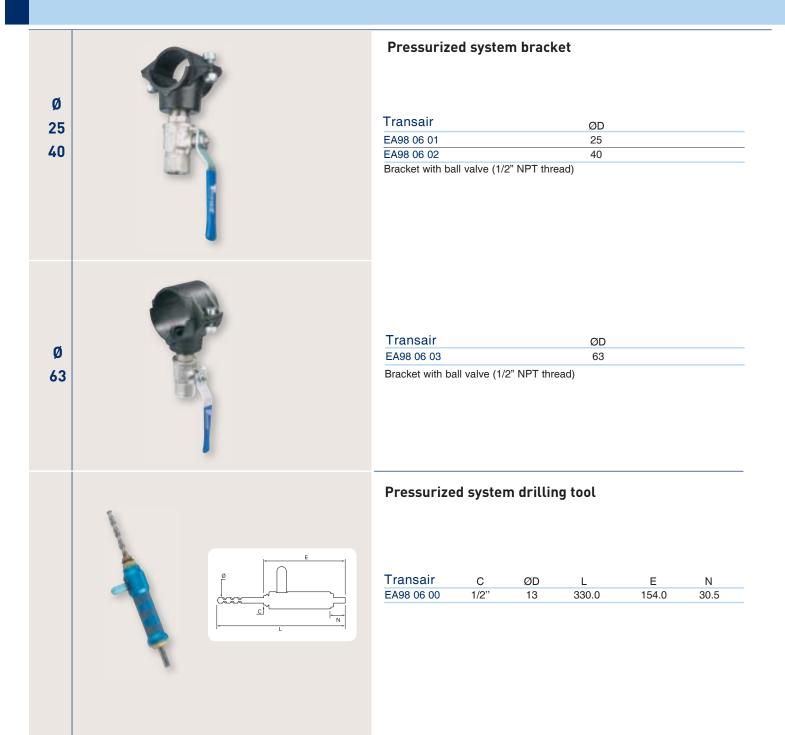
Quick assembly bracket with pre-assembled ball valve, NPT

Transair	ØD1	С	L	L1	L2	M	Ν
6668 25 22	25	1/2"	256	32	155	40	23
6668 40 22	40	1/2"	270	39	162	45	31
6668 63 22	63	1/2"	275	63	142	60	48
6668 63 28	63	3/4"	297	63	146	60	48

> Pressurized system outlets

- > Ideal for fast assembly of new pressurized outlets, without venting the compressed air system.
- > The drilling tool can be used with most standard drills.

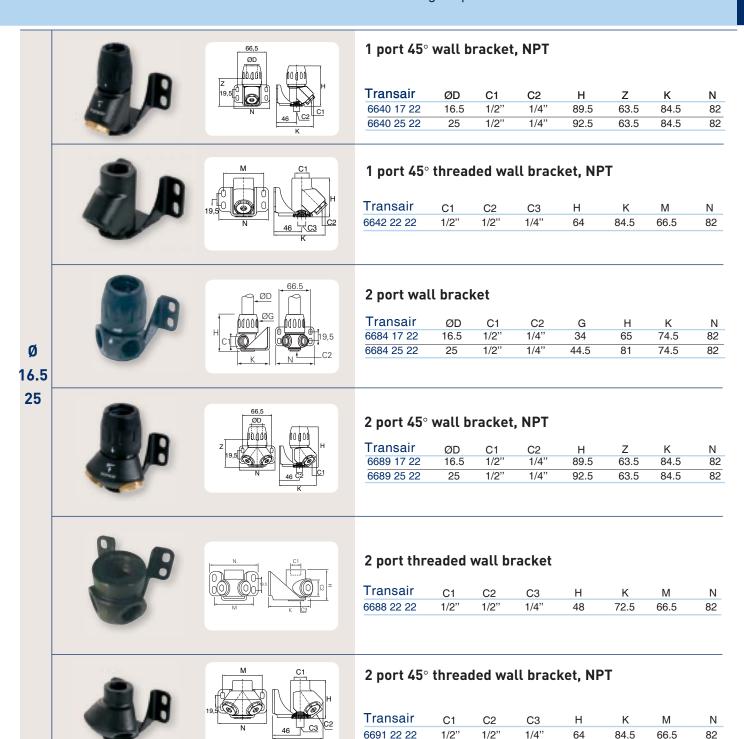
We recommend, however, that the pipe system is vented prior to the addition of an outlet. Thanks to the lateral dismantling capability of Transair pipe and the use of quick assembly brackets, this operation can be completed very quickly (less than seven min. for a new outlet) and guarantees the interior cleanliness of the system.



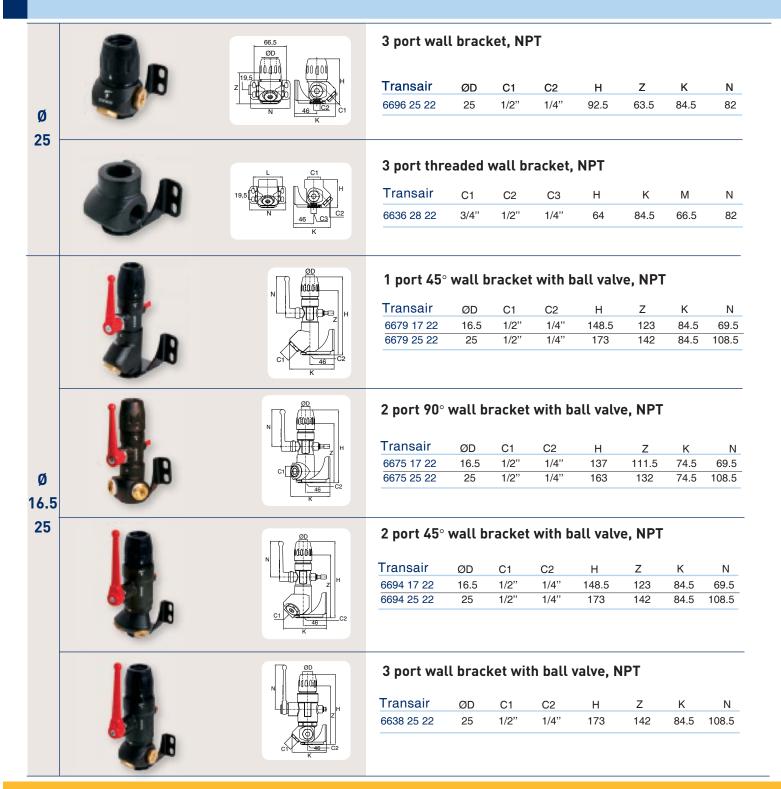
> Wall brackets

- > 1, 2 or 3 ports
- > For wall or machine mounting
- > Supplied with brass plugs
- > Drain outlet 1/4"

- > Working pressure:
 - 188 psi from -4°F to +140°F
 - 232 psi from -4°F to +115°F (please consult us for higher temperature requirements)
- > Non-flammable (conforms to UL94-HB standard)
- > Vacuum: 98.7% (29.6" Hg)
- > Working temperature: -4°F to +140°F



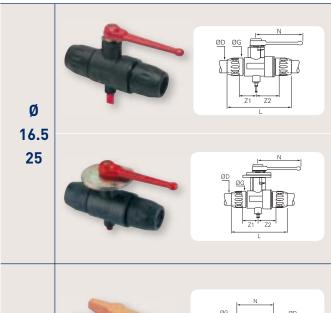
> Wall brackets



> Ball valves

Transair ball valves and butterfly valves placed regularly throughout the system at key locations, such as compressor outlets and upstream of pneumatic tools, allow ease of system isolation and pipe reconfiguration / maintenance.

- > Quick connection
- > Available in lockable version (only in 16.5mm and 25mm)
- > Manual or piloted operation (only in 25mm and 40mm)



Double female, vented

Transair	ØD	G	L	N	Z 1	Z2
4089 17 00	16.5	34.0	120.0	69.5	29.0	42.0
4089 25 00	25	44.5	152.0	108.5	40.0	55.0

Model 4089 17 00: supplied with Ø6 mm plug. Model 4088 25 14: supplied with Ø8 mm plug.

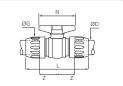
Lockable valve, vented

Transair	ØD	G	L	N	Z1	Z2
4099 17 00	16.5	34.0	121.0	69.0	29.0	42.0
4099 25 00	25	44.5	151.7	108.3	40.0	55.0

Model 4099 17 00: supplied with Ø 6 mm plug. Model 4099 25 00: supplied with Ø 8 mm plug.

Ø 40



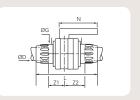


Double female valve

Transair	ØD	G	L	N	Z
4002 40 00	40	67.0	205.0	122.0	57.0

Ø 63

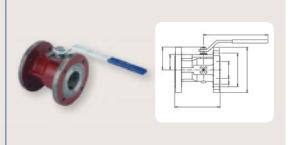




Transair	ØD	G	L	N	Z1	Z2
4002 63 00	63	91.0	278.0	185.0	84.0	98.0
4012 63 00*	63	91.0	278.0	185.0	84.0	98.0

^{*}lockable

Ø 76 100



Ball Valve

Transair	ØD	Α	В	D	L	K	R
VR01 L1 00	76	102	75	185	170	145	320
VR01 L3 00	100	136	104	220	190	180	380

Supplied with fixing bolts. Use flange gasket EW05 when mounting with a flange.

> Valves

- > Max. working pressure:
 - 188 psi from -4°F to +140°F
 - 232 psi from -4°F to +115°F (please consult us for higher temperature requirements)
- > Vacuum: 98.7% (29.6" Hg)
- > Working temperature: -4°F to +140°F

Ø 76 100



Butterfly valve

Transair	ØD (in)	(DN)	G	M	N	Е
VR02 L1 00	3	80	145	300	250	50
VR02 L3 00	4	100	180	270	210	56

Seal cast in one piece (do not use any flange gasket for mounting with a flange). Model has CE marking. Supplied with fixing bolts. Lockable version. Nitrile seal.

Ø 168

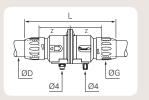


Transair	ØD (in)	DN	G	M	N	Е
VR02 L8 00	6	150	240	300	290	56

Model has CE marking. Supplied with eight M20 bolts kit (bolt length: 140mm) Nitrile seal.

ø 40





Remote control shut-off valve

Transair	ØD	G	L	Z
4230 00 40	40	67	261	85.0

Min. working pressure: 58 psi • Max. working pressure: 235 psi The Transair remote control shut-off valve is supplied with a plugged vent hole. This allows venting of the downstream network, after closing the valve.





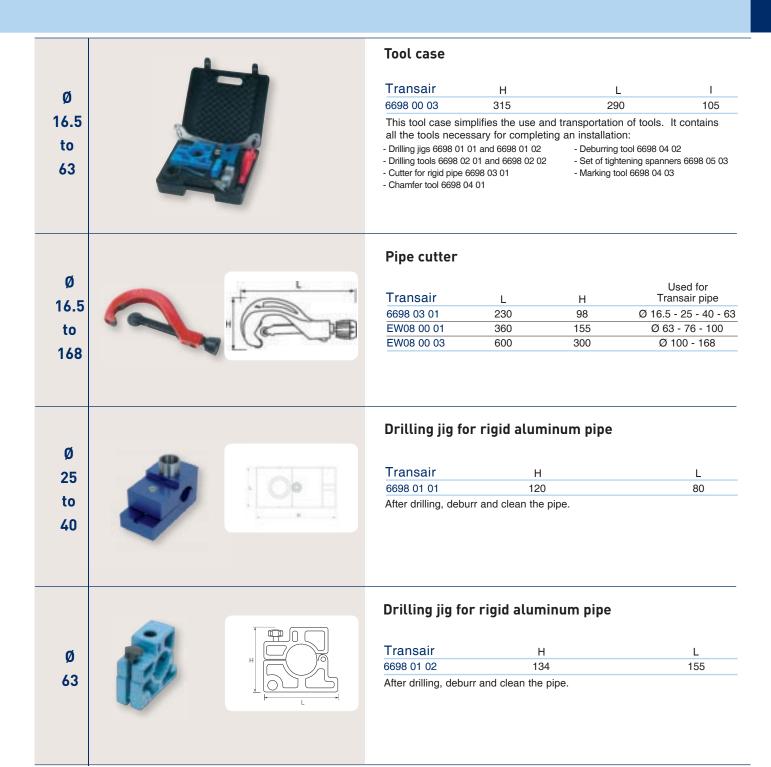
Pilot kit

Transair	Н	K	K1	L
4299 03 01	145	106	70	82

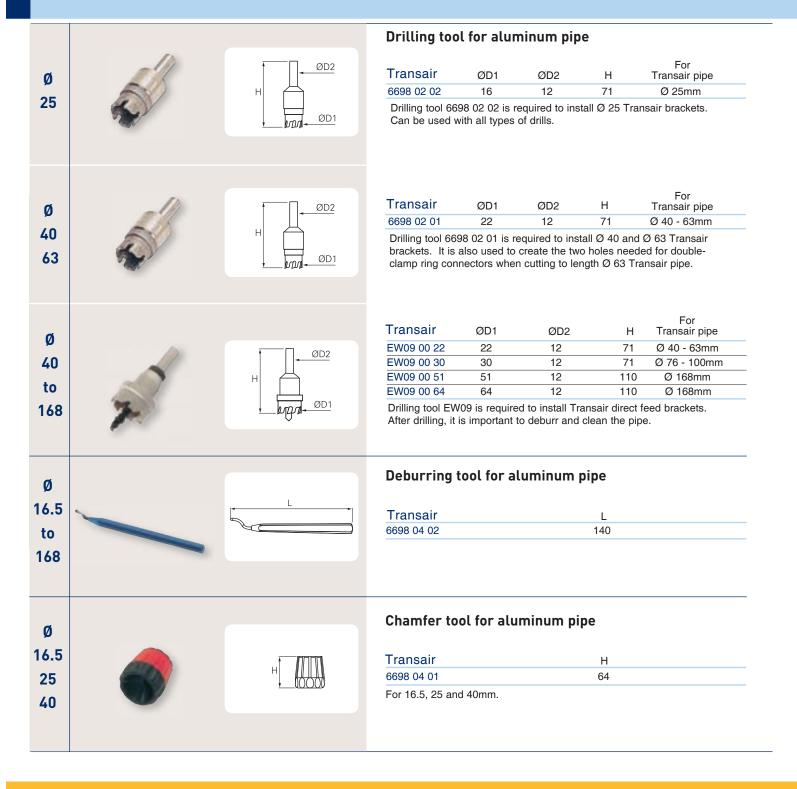
This pilot kit includes: pneumatic ON/OFF switch (maximum 235 psi operating pressure), twin 4 mm OD polyurethane tube (length 10 m) and plastic box.

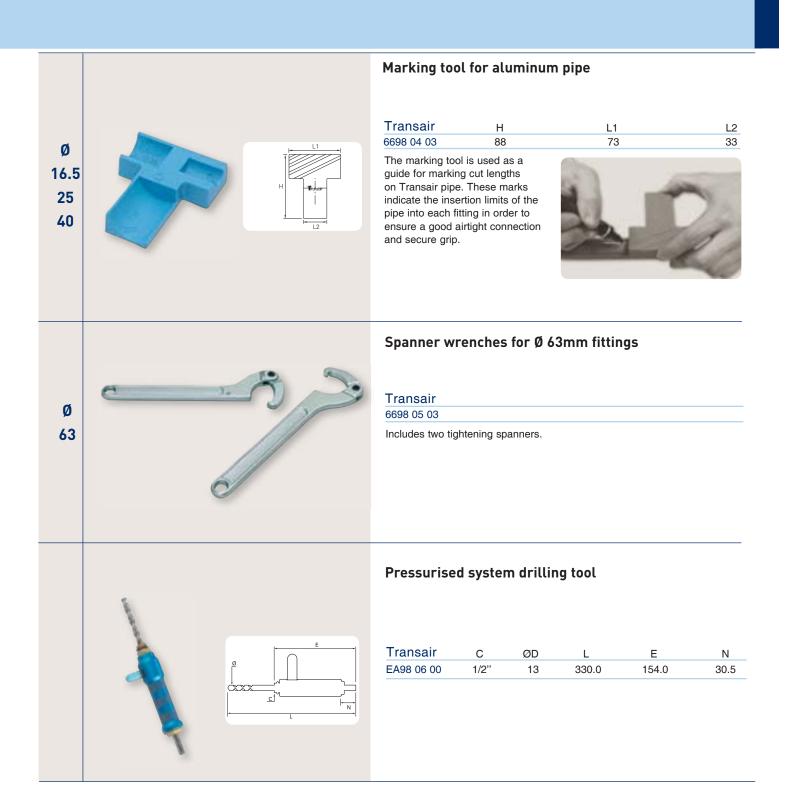
> Tools

- > Practical tools for the installation and extension of Transair air pipe systems.
- > Presented in a carrying case or available as separate parts.

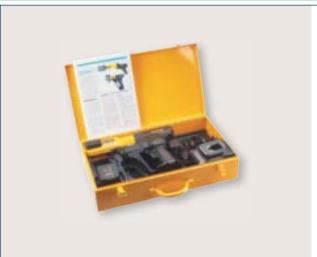


> Tools





> Tools

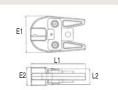


Portable tool kit

Transair	V
EW01 00 02	14

This case contains: one portable tool, one 14V battery and battery charger.





Jaws for portable tool

Transair	ØD	E1	E2	L1	L2
EW02 L1 00	76	103	52	154	46
EW02 L3 00	100	103	71	154	46
EW02 L8 00	168	103	71	154	46



14V battery for portable tool

Transair	V
EW03 00 01	14

> Fixture accessories

- > Easy adaptation for all pipe system configurations
- > For suspension of pipes, from walls, partitions, beams, cable trays, Canalis electrical installations, etc, vertically or horizontally
- > Perfectly suited for use with Transair systems
- > Non-flammable (conforms to UL94V-2 standard)



Fixing clip for rigid pipe

Transair	ØD	С	H1	Н	K	L
6697 17 01	16.5	1/4"	46	61	30	32.5
6697 25 01	25	1/4"	46	65.5	30	38.5
6697 40 01	40	1/4"	46	74.5	30	50

Transair fixing clips are designed to bear a maximum weight of 44lbs. However, to ensure good stability of the system, we recommend the use of at least two clips per pipe i.e.:

- maximum 5 ft space between clips for 10 ft lenghts of pipe
- maximum 10 ft space between clips for 20 ft lenghts of pipe

Use only this clip for fixing Transair rigid pipe, all other type of pipe clips are to be avoided. Fix the clip to a rigid support (U-channel, cable tray) to allow for expansion while retaining the pipe.

Transair	ØD	С	H1	Н	K	L
6697 63 01	63	3/8"	90	127.5	30	73.5

Transair fixing clips are designed to bear a maximum weight of 44lbs. However, to ensure good stability of the system, we recommend the use of at least two clips per pipe i.e.:

- maximum 5 ft space between clips for 10 ft lenghts of pipe
- maximum 10 ft space between clips for 20 ft lenghts of pipe

Use only this clip for fixing Transair rigid pipe, all other type of pipe clips are to be avoided. Fix the clip to a rigid support (U-channel, cable tray) to allow for expansion while retaining the pipe.

Transair	ØD	C
ER01 L1 00	76	3/8"
ER01 L3 00	100	3/8"
ER01 L8 00	168	3/8"

Transair fixing clips are designed to bear a maximum weight of 44lbs. However, to ensure good stability of the system, we recommend the use of at least two clips per pipe i.e.:

- maximum 5 ft space between clips for 10 ft lenghts of pipe
- maximum 10 ft space between clips for 20 ft lenghts of pipe

Use only this clip for fixing Transair rigid pipe, all other type of pipe clips are to be avoided. Fix the clip to a rigid support (U-channel, cable tray) to allow for expansion while retaining the pipe.

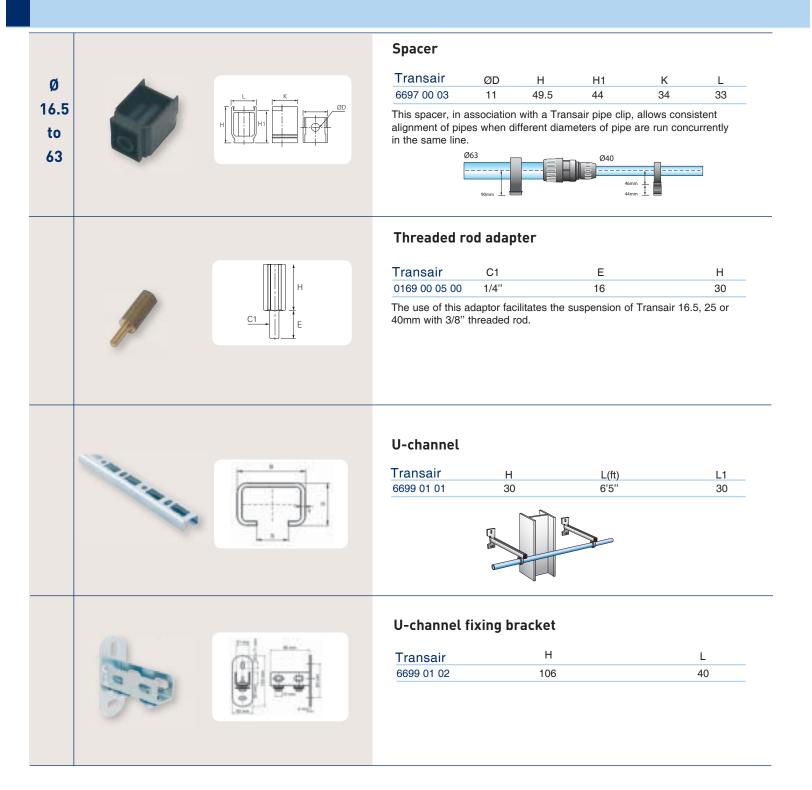
Transair	ØD	С
EX01 L1 00	76	3/8"
EX01 L3 00	100	3/8"

Transair fixing clips are designed to bear a maximum weight of 44lbs. However, to ensure good stability of the system, we recommend the use of at least two clips per pipe i.e.:

- maximum 5 ft space between clips for 10 ft lenghts of pipe
- maximum 10 ft space between clips for 20 ft lenghts of pipe

Use only this clip for fixing Transair rigid pipe, all other type of pipe clips are to be avoided. Fix the clip to a rigid support (U-channel, cable tray) to allow for expansion while retaining the pipe.

> Fixture accessories



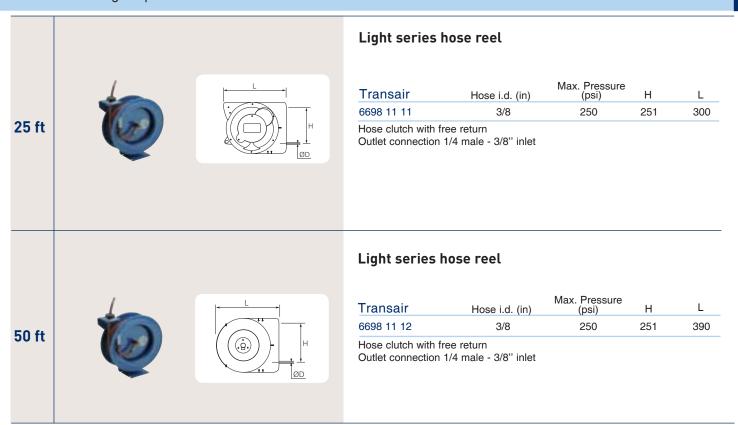
> Hose reels

Hose reels

- > Optimize productivity and the safety of your work area
- > Prevent hose damage occurring on the workshop floor
- > Maximum working pressure, dependant on the model:

6698 11 11: 250 psi6698 11 12: 250 psi

> Working temperature: -4°F to +14°F



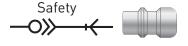


> Composite automatic safety couplers

- > For guick and repetitive connection and disconnection
- > 100% safety ISO 4414 and European EN 983 compliant
- > Very high flow, extremely low pressure loss
- > Lightweight and robust
- > Improved hand grip
- > Fast vent time

- > Male thread with integral seal
- > Suitable fluids: compressed air, argon, nitrogen (please consult us for other fluids)
- > Max. working pressure: 232 psi
- > Working temperature: from -4°F to +140°F

CP05 U1N02	Transair ØD (mm) CP21 U1 06 6 CP21 U1 08 8 CP21 U1 10 10
So B Transair C CP05 U2N02 1/4" CP05 U2N03 3/8" CP05 U2N04 1/2" CP15 U2N04 CP15 U2N04 1/2" CP15 U2N0	
3/8" Safety CP05 U2N02 1/4" CP05 U2N03 3/8" CP05 U2N04 1/2" CP15 U2N03 3/8" CP15 U2N04 1/2"	Coupler with hosetail
	Transair (mm) CP21 U2 08 8 CP21 U2 10 10 CP21 U2 13 13
	Coupler with hosetail
ARO 1/4" Transair C Transair C	Transair ØD
CP15 A1N03 3/8"	CP21 A1 06 6 CP21 A1 08 8 CP21 A1 10 10



ISO B 1/4" ISO 6150 B AFNOR NF 49-053 US.MIL.C4109 CEJN 310 RECTUS 23-24

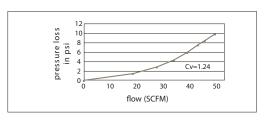


ISO B 3/8"
ISO 6150 B
AFNOR NF 49-053
US.MIL.C4109
CEJN 430
RECTUS 30



ARO 1/4" ARO 210 CEJN 300 ORION 44510 PARKER 50 RECTUS 14-22

Flow curve - pressure loss



Transair composite automatic couplers comply with worldwide ISO 4414 and European EN 983 safety standards. Disconnection is by a double twist of the sleeve.

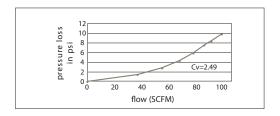
1st rotation in direction of the arrow: pressure rapidly vented out, plug side.





2nd rotation in direction of the arrow: safe disconnection of body and plug.

ISO B		Male plug NPT		Female plug NPT		Plug with hosetail
1/4		Transair C 9084 23 14 1/4" 9084 23 18 3/8"		Transair C 9083 23 14 1/4" 9083 23 18 3/8"		Transair ID 9085 23 56 1/4" 9085 23 08 5/16" 9085 23 60 3/8"
ISO B	Diversity of the second	Male plug NPT		Female plug NPT	Street,	Plug with hosetail
3/8"		Transair C 9084 30 14 1/4" 9084 30 18 3/8"	1	Transair C 9083 30 14 1/4" 9083 30 18 3/8"		Transair ID 9085 30 08 5/16" 9085 30 60 3/8" 9085 30 62 1/2"
ARO		Male plug NPT	Con.	Female plug NPT		
1/4"		Transair C 9084 22 14 1/4" 9084 22 18 3/8"	1	Transair C 9083 22 14 1/4" 9083 22 18 3/8"		



> Notes



> Installation guide



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> Installation

> Installation instructions

> General

Prior to the installation of a Transair compressed air distribution system, the installer should ensure that the installation area complies with any regulations applicable to areas exposed to explosive hazards (in particular the effect of static electricity in a silo area). Transair should be installed downstream of the compressed air receiver, or after the dryer. Flexible Transair hose can be installed at the start of the system in order to eliminate any sources of vibration and to facilitate maintenance operations. When maintaining or modifying a Transair system, the relevant section should be vented prior to the commencement of any work. Installers should use only Transair components and accessories, in particular Transair pipe clips and fixture clamps. The technical properties of the Transair components, as described in the Transair catalog, must be respected.

> Pressurizing the system

Once the Transair installation has been installed and prior to pressurizing, the installer should complete all tests, inspections and compliance checks as stated in any contract and according to sound engineering practice and current local regulations.

> Transair pipe and hoses

Transair pipe should be protected from mechanical impact, particularly if exposed to collision with fork-lift trucks or when sited in an environment with moving overhead loads. Similarly, rotation of the pipe and pipe supports should be avoided. Transair pipe must not be welded. Flexible Transair hoses should be used in accordance with the recommendations of the installation guidelines.

Note: In certain situations, Transair aluminum pipe may be formed with a bend - please contact us for further information.

> Expansion / contraction

Expansion and contraction of the system should be calculated prior to installation. The system designer and installer should calculate the elongation or retraction of each Transair line according to the recommendations in this installation guide.

> Component assembly

Transair components are provided with assembly instructions for their correct use - simply follow the methods and recommendations stated in this document.

> Transair installations - situations to avoid

- > installation within a solid mass (concrete, foam, etc.)
- > the hanging of any external equipment to Transair pipe
- > the use of Transair for grounding, or as a support for electrical equipment
- > exposure to chemicals that are incompatible with Transair components (please contact us for further details)

>	Sound	engineering	practice	for	the	optimization	of	an	air	pipe
	system	1								

> When installing a Transair system, the work should be performed in accordance with good engineering practice.
> Bends and bypasses represent sources of pressure drop. To avoid excessive pressure loss, use modular consoles to offset the network and to bypass obstacles. Keep in-line pipe diameter reductions to a minimum.
> Maintain a consistent level of good quality air by use of adequate filtration at the compressor outlet.
> The diameter of the pipe will influence pressure drop and the operation of point-of-use equipment. Select the diameter according to the required flow rate and acceptable pressure drop at the point of use.
> Position drops should be as close as possible to the point of use.

> Transair aluminum pipe

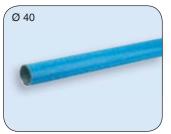
> General

Ø 16.5

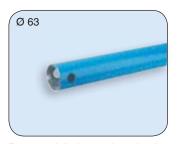
Deburred and chamfered pipe



Deburred and chamfered pipe



Deburred and chamfered pipe



Pipe pre-drilled at each end with two 22mm diameter holes, deburred and chamfered



Pipe lugged at each end, deburred and chamfered



Pipe lugged at each end, deburred and chamfered

Transair aluminum pipe is supplied ready for use. No particular preparation (cutting, deburring, chamfering, etc.) is required.

Thanks to the rigidity of Transair aluminum pipe, temperature-related expansion / contraction is reduced to a minimum. The Transair system retains its straightness, and hence its performance, over time (reduction of pressure drop caused by surface friction).

Transair aluminum pipe is calibrated and fits perfectly with all Transair components. Each connection is automatically secured and the seal is optimized, which minimizes corrosion to the internal surface.

Transair aluminum pipe has a protective powder coating (Qualicoat certified) and is thus protected from external corrosion. Its color allows the system to be immediately identified and gives a clean and aesthetic overall appearance.

Standard colors available:

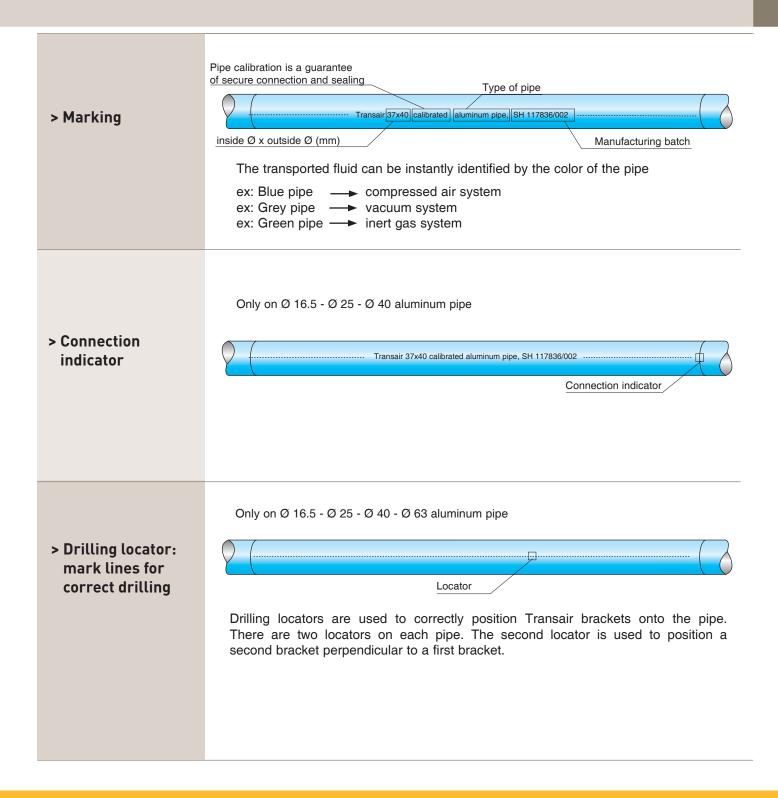
- blue (RAL 5012/BS1710)
- grey (RAL 7001)
- green (RAL 6029)
 (please contact us for other colors)

Transair aluminum pipe is available in seven diameters in 1/2" thru 6".

> Applications

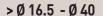
> Presentation

Transair Ø 16.5 - Ø 25 - Ø 40 - Ø 63 - Ø 76 - Ø 100 - Ø 168 aluminum pipe has been specially designed for compressed air, vacuum and inert gases (argon, nitrogen) - please contact us for other fluids.



> Transair aluminum pipe

> Aluminum pipe section



> Procedure

> Tools



Pipe cutter for aluminum pipe ref. 6698 03 01



Chamfer tool for aluminum pipe ref. 6698 04 01

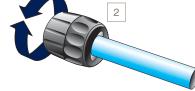


Deburring tool for aluminum pipe ref. 6698 04 02

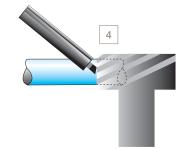


Marking tool for aluminum pipe ref. 6698 04 03













- 1 Cutting the pipe:
 - place the pipe in the pipe cutter
 - position the blade onto the pipe
 - rotate the pipe cutter around the pipe while gently tightening the wheel
- 2 Carefully chamfer the outer edges
- 3 Deburr the inner end of the pipe
- 4 Trace the connection indicator using the marking tool

The insertion lengths for Ø 16.5 - Ø 25 - Ø 40 connectors are 25 mm, 27 mm and 45 mm respectively, with the exception of the end cap (6625), for which the insertion lengths are of 39 mm, 42 mm and 64 mm

respectively.

> Ø 63

> Tools



Pipe cutter for aluminum pipe ref. 6698 03 01



Chamfer ref. 6698 04 01



aluminum pipe ref. 6698 04 02



Drilling jig for aluminum pipe ref. 6698 01 02

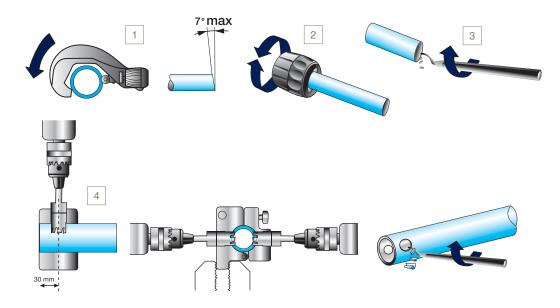


Drilling tool for aluminum pipe ref. 6698 02 01



Drill

> Procedure



- 1 Cutting the pipe: - place the pipe in the pipe cutter
 - position the blade on the pipe
 - rotate the pipe cutter around the pipe while gently tightening the wheel
- 2 Carefully chamfer the outer edges
- 3 Deburr the inner end of the pipe
- 4 Drill the two clamp holes using the drilling jig (6698 01 02) and the Ø 22 mm drilling tool (6698 02 01). Loosen the jig, release the pipe, then deburr both holes. Ensure that all outer and inner surfaces are smooth and clear of burrs and potential sharp edges.

> Transair aluminum pipe

> Aluminum pipe section



> Tools



Pipe cutter for aluminum pipe ref. EW08 00 01 (Ø 76 - Ø 100) or EW08 00 03 (Ø 168)



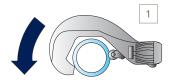
Deburring tool Poref. 6698 04 02 EV



Portable tool kit ref. EW01 00 02



Pipe forming jaw set ref. EW02 L1 00 (Ø 76) or EW02 L3 00 (Ø 100) or EW02 L8 00 (Ø 168)



- 1 Cutting the pipe:
 - place the pipe in the pipe cutter
 - position the blade on the pipe
 - rotate the pipe cutter around the pipe while gently tightening the wheel



2 – Carefully deburr the outer and inner edges of the pipe

> Procedure



Open the retaining pin at the front of the machine by pressing the jaw release button



Place the jaws in the housing



Lock in position by closing the retaining pin

3 - Creating the lugs for Ø 76, Ø 100 or Ø 168 cut pipe





4

Manually open the jaws of the clamp and insert the aluminum pipe into the clamp as far as it will go



Re-open the two jaws to remove the pipe and rotate the pipe slightly



Release the jaws. Press the trigger and crimp the tube until a 'snap' sound is heard



Renew the operation until the required minimum number of lugs for each diameter is achieved

Min. number of lugs	Ø 76	Ø 100	Ø 168
	5	6	10

Important: Do not overlap the lugs!

> Transair connectors

> General

> Ø 16.5 Ø 25 Ø 40 Instant connection by means of a gripping ring



The \varnothing 16.5 - \varnothing 25 - \varnothing 40 connectors instantly connect to Transair aluminum pipe. Simply insert the pipe into the connector up to the connector insertion mark. The internal gripping ring is then automatically secured and the connection is complete.

> Ø 63

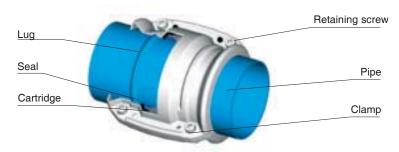
Double clamp quick-fit connection



The \emptyset 63 connectors are quickly secured to Transair aluminum pipe by means of a double clamp, which makes the connector fully integrated with the pipe. Connection is achieved by simply tightening the nut.

Clamp quick-fit connection

> Ø 76 Ø 100 Ø 168

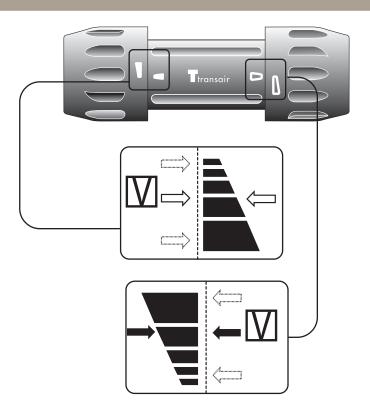


The \emptyset 76 - \emptyset 100 - \emptyset 168 clamps secure instantly to Transair aluminum pipe. Simply position the formed pipe within the Transair cartridge, which acts as a seal. Close the Transair clamp to secure the connection and finally tigten the four retaining screws.

There are important visual markings on the bodies and nuts of Transair Ø 16.5, Ø 25 and Ø 40 connectors. These are represented by solid and empty arrows and indicate the optimum torque. When assembling Transair connectors, the nuts are tightened to a pre-defined torque on the body of the connector. This torque guarantees the seal and safety of each connection.

There is no need to loosen the nuts prior to joining \emptyset 16.5, \emptyset 25 and \emptyset 40 connectors to Transair aluminum pipe.

> Pre-assembled tightening indicators for Ø 16.5, Ø 25 and Ø 40 connectors

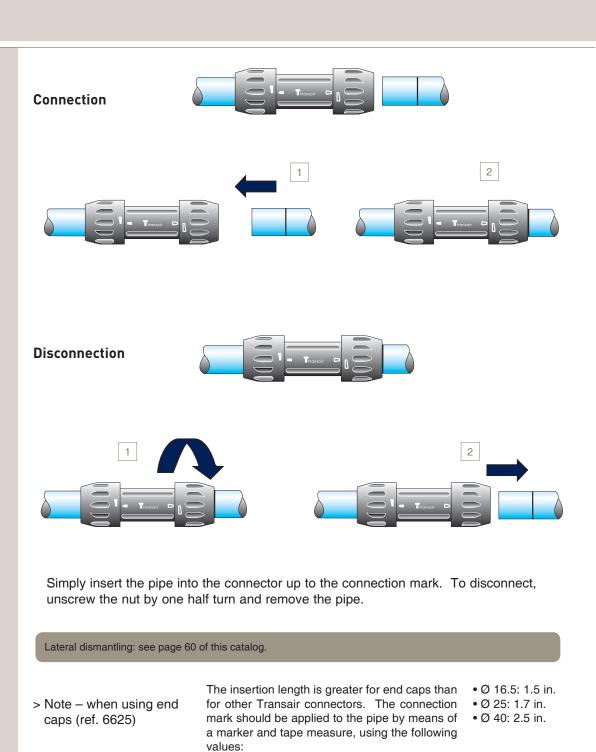


Before using \varnothing 16.5, \varnothing 25 or \varnothing 40 connectors, ensure that the arrow marks are correctly aligned with each other.

> Transair connectors

> Connection / disconnection

> Ø 16.5 Ø 25 Ø 40



Connection 2 3 5 6 **Disconnection** 7

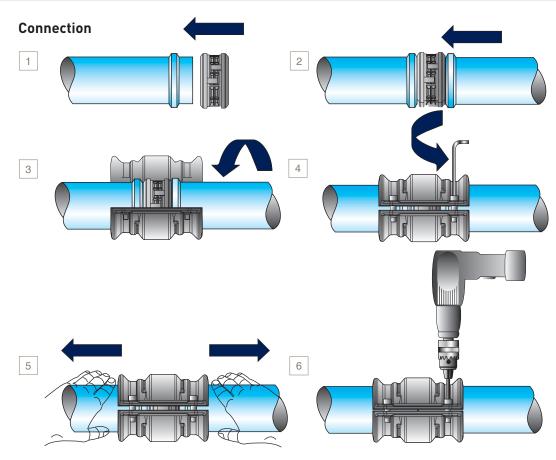
> Ø 63

- 1 Unscrew one of the connector nuts and fit over the pipe
- 2 Position the double clamp ring in the appropriate housings (two holes at the end of the pipe)
- 3 Bring the nut towards the body, which were previously positioned at the end of the pipe, until it stops against the double clamp
- Lateral dismantling: see page 60 of this catalog.

- 4 Tighten the nut by hand
- 5 Bring the two pipes together
- 6 Complete the assembly by 1/2 rotation with Transair tightening spanners ref. 6698 05 03
- 7 To disconnect, perform the same operations in reverse order

> Transair connectors

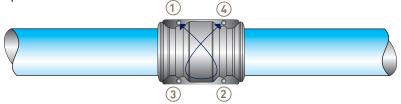
> Connection / disconnection



> Ø 76 Ø 100 Ø 168

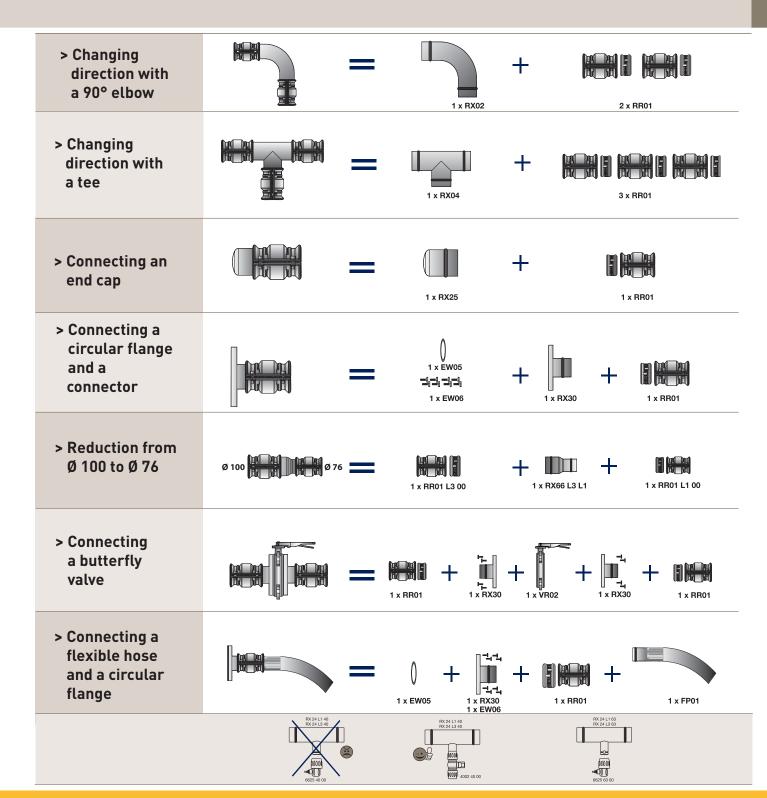
- 1 Slip the cartridge over the end of the first pipe fully up to the shoulder
- 2 Bring the second pipe to the cartridge and slide fully up to the shoulder
- 3 Position the clamp over the cartridge / pipe assembly
- 4 Hand tighten the pre-fitted screws with an Allen key
- 5 Pull the pipes fully back towards the outside of the clamp
- 6 Fully tighten the clamp screws (maximum tightening torque: final closure of clamps)

For effective clamp sealing, screw tightening should be performed on alternate sides of the clamp as shown below:



To disconnect, perform the same operations in reverse order.

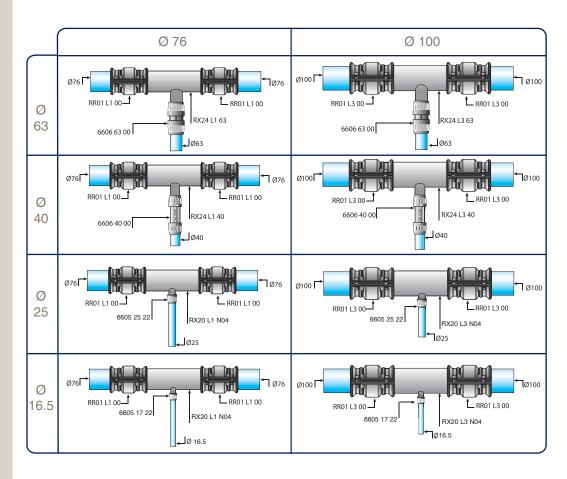
- > Practical examples
 - > Various Ø 76 and Ø 100 configurations

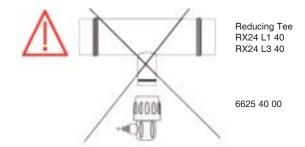


> Transair connectors

> Practical examples

> Connecting a Transair Ø 76 to Ø 100 system to a Transair Ø63, Ø 40, Ø 25 or Ø 16.5 system





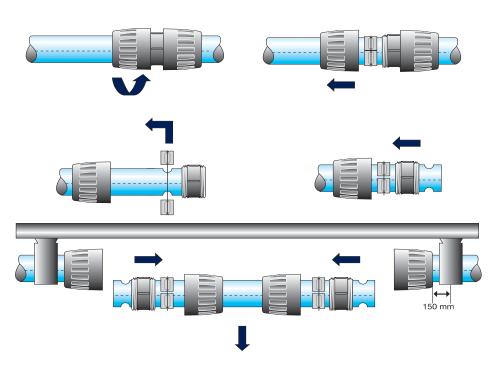
> Lateral dismantling

> Ø 16.5 Ø 25 Ø 40



Loosen the nuts located on the side of the pipe to be removed and slide them along the pipe. Then remove the pipe.

> Ø 63



- 1 Loosen the connector nuts on the ends of the pipe to be removed
- 2 Slide them along the pipe
- 3 Remove the clamp rings from their housings
- 4 Slide the clamps and the connector body along the pipe which is to be removed
- 5 Repeat the operation at the other end of the pipe and laterally remove the pipe, complete with the assembly components

> Transair connectors

> Practical examples

> Transair Ø 40 remote shut-off valve

Remote shut-off valve Polyurethane twin tubing Pneumatic ON - OFF switch

> Application

The Transair \emptyset 40 remote shut-off valve allows network supply to be rapidly and safely opened and closed either at ground level or by remote control.

The Transair remote shut-off valve guarantees:

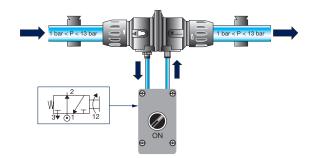
- Personal safety, by eliminating all hazards related to working at heights
- Servicing speed, by removing the need for special access equipment (ladder, platform etc)

> Operating principle

Single acting valve - normally closed.

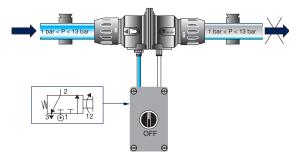
For compressed air systems:

The valve control pressure can be taken upstream of the isolating valve, with no external power supply. Control is performed through the control unit connected to the valve by means of a push-in connector.

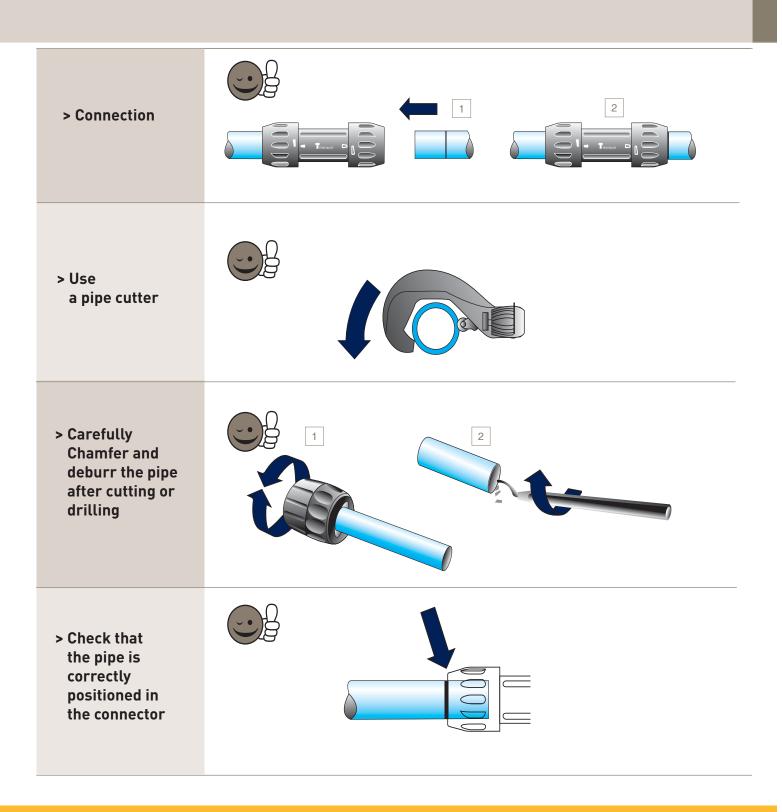


For vacuum systems:

A compressed air supply external to the control unit is required, and the corresponding valve port must be closed in order to prevent loss.

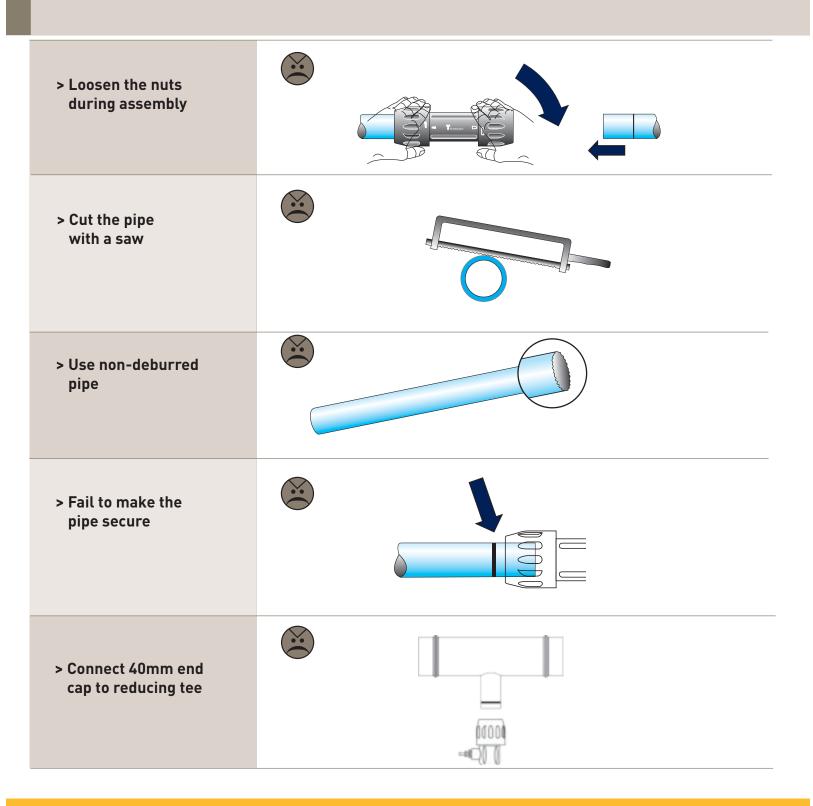


> Do's



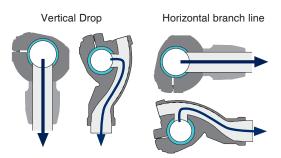
> Transair connectors

> Don'ts



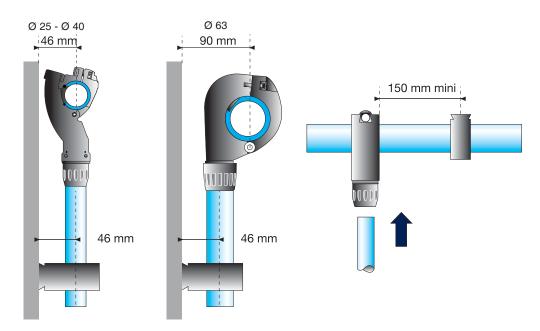
> Transair quick assembly brackets

> General



The easy addition of a new drop or bypass onto an existing length of pipe is an important consideration of any air pipe system. Transair quick assembly brackets are designed for this very purpose, without the need to cut the pipe. A "swan neck" built into the brackets retains condensate water in the main line. Thanks to its small size, the Transair quick assembly bracket facilitates new additions in the tightest places and can be used for connecting horizontal branch lines and vertical drops.

> Specific instructions for installing a bracket



For the Ø 25 and Ø 40 Transair quick assembly brackets, the pipe center to wall distrance is equal to the bracket center to wall distance, i.e. 46mm. For the Ø 63 Transair quick assembly brackets, the pipe center to wall distance is 90mm and the Ø 25 and Ø 40 bracket center distance is 46mm. Furthermore, Transair clips should be fitted at a distance of at least 150mm from a quick assembly bracket in order to allow for the expansion / contraction of aluminum pipe.

> Transair quick assembly brackets

> Installing a quick assembly bracket

> To Ø 25 or Ø 40 pipe

> Tools required



Drilling tool for aluminum pipe ref. 6698 02 02 or 6698 02 01



Drilling jig for aluminum pipe ref. 6698 01 01



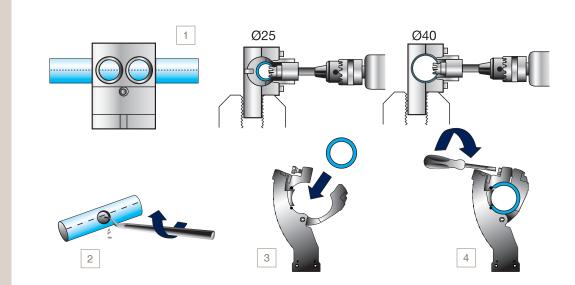
Deburring tool for aluminum pipe ref. 6698 04 02



Permanent marker pen



Allen key / Flat end screwdriver



> Procedure

- 1 Mark the pipe at the desired position for the bracket, using the same locator mark when several take-off points need to be aligned uniformly. Place the drilling jig ref. 6698 01 01 in a vice or on the floor. To drill a hole in Ø 40 pipe, remove the retaining bolt in the jig using an Allen key and place the pipe in the jig. The locator mark on the pipe should be aligned with the appropriate guide marks on the side of the jig. Two guide lines on either side of the jig provide a rapid indication of whether the pipe is correctly positioned (the guide lines match the locator marks on the pipe). Close the jig and drill a hole using the appropriate drilling tool:
 - Ø 25: Ø 16 hole > ref. 6698 02 02 drilling tool
 - Ø 40: Ø 22 hole > ref. 6698 02 01 drilling tool

Recommended rotation speed: 650 rpm

Note: drill without lubrication.

- 2 Release the pipe, remove any chips and deburr the circular hole. Repeat the operation for the number of brackets that you wish to fit.
- 3 Position the quick assembly bracket using its location pin
- 4 Tighten the screw

Note: The jig's second drilling guide corresponds to the minimum distance for fitting two adjacent brackets.

> Installing a bracket

> On Ø 63 pipe

> Tools required



Drill

Drilling tool for aluminum pipe ref. 6698 02 01

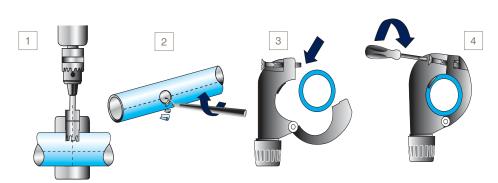


Drilling jig for aluminum pipe ref. 6698 01 02



Deburring tool for aluminum pipe ref. 6698 04 02





> Procedure

- 1 Mark the pipe at the desired position for the bracket. The mark should be placed on one of the locator marks so that multiple brackets are correctly aligned, when several take-off points are required. Place the Ø 63 drilling jig in a vice or on the floor and place the pipe in the jig. Ensure that the line marked on the pipe is centred within the drilling guide: two marks on either side of the jig's upper side provide a rapid indication of the pipe's positioning. Tighten the locking clamp to secure the pipe and drill using the Ø 22 drilling tool. [Recommended rotation speed: 650 rpm] Note: Drill without lubrication.
- 2 Loosen the locking clamp and release the pipe, remove any chips and deburr the hole. Repeat the operation for the number of brackets that you wish to fit.
- 3 Position the quick assembly bracket using its location hole
- 4 Tighten the screw

> Transair quick assembly brackets

> Installing a bracket

> On Ø 76, Ø 100 or Ø 168 pipe

> Tools required

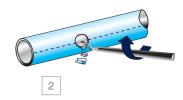


Drilling tool for aluminum pipe, ref. EW09 00 30 (Ø 76 - Ø 100) or EW09 00 64 / EW09 00 64 (Ø 168)

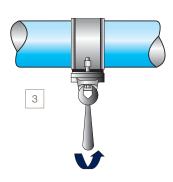
Deburring tool for aluminum pipe ref. 6698 04 02

Drill

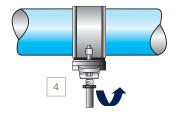




> Procedure



- 1 Drill the aluminum pipe at the desired position using drilling tool ref.
- 2 Carefully deburr the pipe



- 3 Position bracket ref. RR61 and fully tightenthe two screws
- 4 Screw on male adapter

Note: Use adapter ref. 6621 25 35 in combination with bracket ref. RR63 to create a \emptyset 25 take-off point from \emptyset 76 or \emptyset 100 pipe.

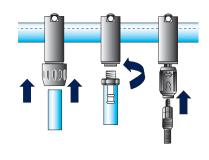
> Practical examples

> Creating vertical and horizontal take-off points

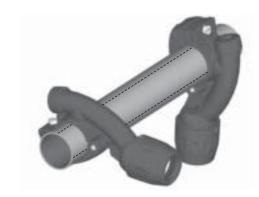
> Adding a vertical bracket

Using the same locator mark

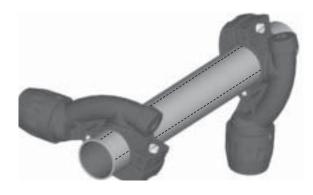




Using two locator marks



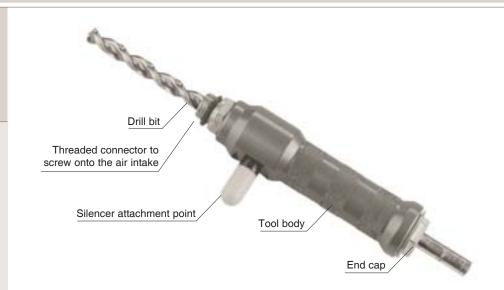
> Adding an off-set bracket



> Transair quick assembly brackets

Installing a bracket to a pressurised system

> Tools required



Use the under pressure drilling tool to fit a bracket to an existing pressurized system. This can be simply done with use of a standard drill.

> Procedure









- 1 Position the pressurized system bracket and fully tighten the two screws
- 2 Screw the assembly onto the ball valve and ensure that the valve is open
- 3 Screw the drilling tool onto the ball valve until complete
- 4 Remove the drill and close the ball valve immediately and dismantle the drilling tool

> Transair flexible hose

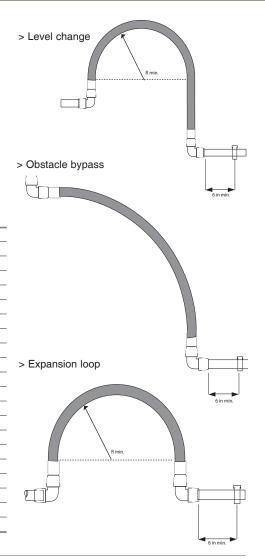
> General

Transair flexible hose can be easily connected to other Transair components and can be rapidly installed without prior preparation or cutting. Thanks to its small bend radius, it requires minimum space and avoids mechanical stress within the system. Transair flexible hose is resistant to both compressor oils and fire.

Ø

> Applications

(mm)	Length (in)	Transair	(in)
25	22	1001E25 00 01	4
25	59	1001E25 00 03	4
25	79	1001E25 00 04	4
25	22	1001E25V00 01	3
25	59	1001E25V00 03	3
25	79	1001E25V00 04	3
40	45	1001E40 00 02	16
40	79	1001E40 00 04	16
40	118	1001E40 00 05	16
40	37	1001E40V00 07	6
40	79	1001E40V00 04	6
40	118	1001E40V00 05	6
63	55	1001E63 00 08	12
63	118	1001E63 00 05	26
63	157	1001E63 00 06	26
63	118	1001E63V00 05	10
63	157	1001E63V00 06	10
76	59	FP01 L1 01	14
76	79	FP01 L1 02	14
100	79	FP01 L3 01	18
100	118	FP01 L3 03	18



> Anti-whiplash straps

> Safety

In order to avoid the risk of whiplash accidents, Transair recommends the use of anti-whiplash straps, which are placed on either side of the connection. If Transair flexible tube is exposed to tear, the anti-whiplash assembly prevents it from snaking (safety device in accordance with ISO 4414 standard).

R min

> Transair flexible hose

> System connection

- > Ø 16.5 Ø 25
 - Ø 40
- > Using a male threaded fitting

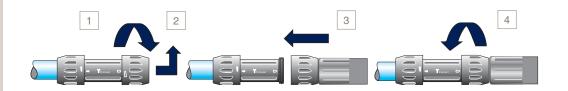




- 1 Loosen the nut on the stud fitting
- 2 Remove it

- 3 Move the swaged end of the hose onto the exposed stud thread
- 4 Tighten the nut

> Using a pipe to pipe connector

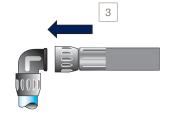


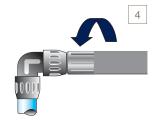
- 1 Loosen the nut on the connector
- 2 Remove it

- 3 Move the swaged end of the hose onto the connector thread
- 4 Tighten the nut

> Using a 90° elbow







- 1 Loosen the nut on the elbow
- 2 Remove it

- 3 Move the swaged end of the hose onto the elbow thread
- 4 Tighten the nut

> Ø 63

> Using a male threaded fitting



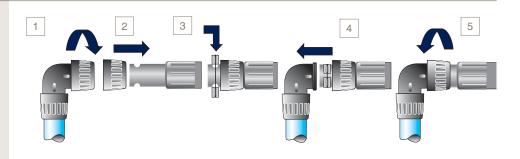
- 1 Loosen the nut on the stud fitting and remove it
- 2 Place the nut over the swaged end of the flexible hose
- 3 Place the pipe connector clamps in the housings on the hose
- 4 Slide the nut forward to the end of the flexible hose and assemble onto the male thread
- 5 Tighten the nut using the \varnothing 63 spanner set

> Using a pipe to pipe connector



- 1 Loosen the nut on the connector and remove it
- 2 Fit it over the swaged end of the flexible hose
- 3 Place the pipe connector clamps in the housings on the hose
- 4 Slide the nut forward to the end of the flexible hose, until it touches the clamps
- 5 Tighten the nut using the Ø 63 spanner set

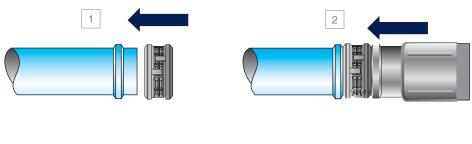
> Using a 90° elbow



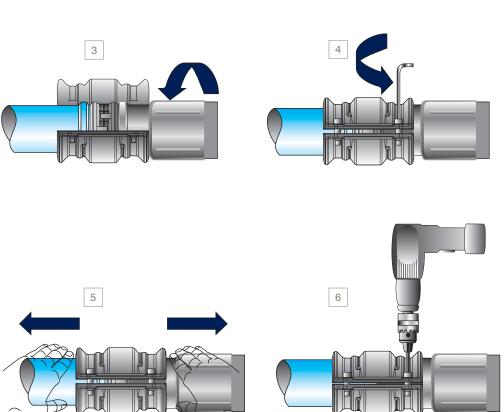
- 1 Loosen the nut on the elbow and remove it
- 2 Fit it over the swaged end of the flexible hose
- 3 Place the elbow clamps in the housings on the hose
- 4 Slide the nut forward to the end of the flexible hose, until it touches the clamps
- 5 Tighten the nut using the \varnothing 63 spanner set

> System connection

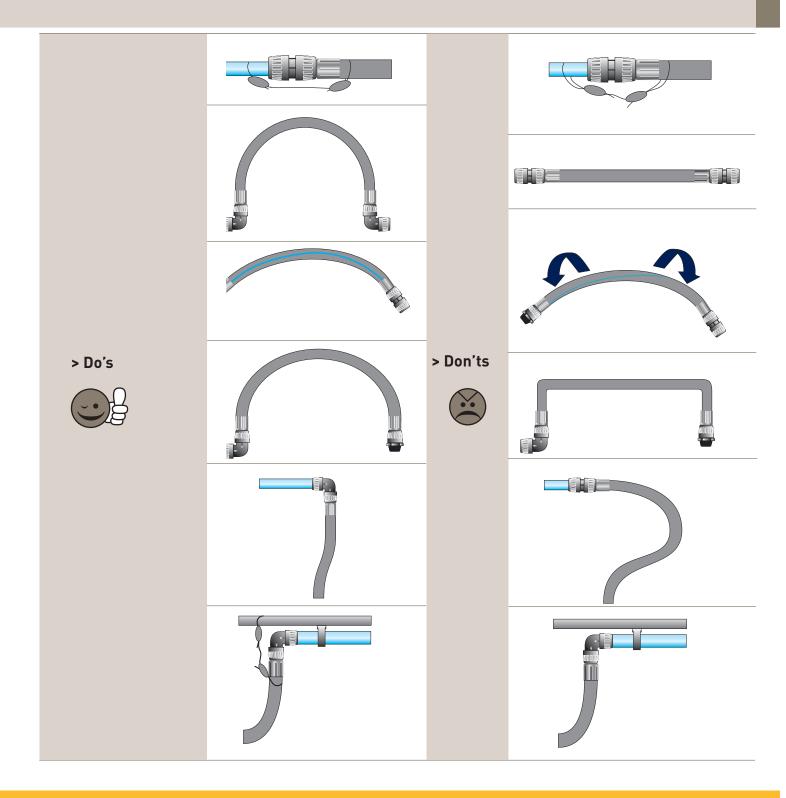
> Ø 76 Ø 100 Ø 168



> Using a steel clamp



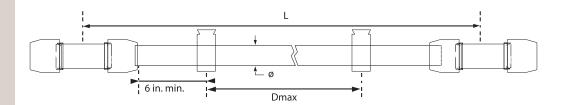
> Do's / don'ts



> Fixture accessories

> Transair attachments

> Transair clip for Ø 16.5, Ø 25, Ø 40 and Ø 63 rigid pipe



The Transair fixing clip is the basic component for mounting pipe when installing a \emptyset 16.5 – \emptyset 25 – \emptyset 40 – \emptyset 63 Transair aluminum system. This clip allows expansion and contraction of the pipe to occur freely.

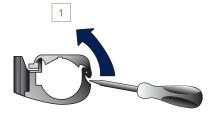
To ensure good system stability, we recommend the use of at least two clips per pipe. Transair aluminum pipe should only be mounted using Transair and should not be substituted by any other type of components.

Ø	L (ft)	Dmax (ft)
16.5	10	8
25	10	8
25	20	10
40	10	8
40	20	10
63	20	10

> Properties

- Transair fixing clips for Ø 16.5 Ø 25 Ø 40: 1/4" nuts
- Transair fixing clips for Ø 63 systems: 3/8" nuts

> Procedure







- 1 Place the clip as required and open it using a screwdriver
- 2 Insert the pipe into the clip
- 3 Close the clip

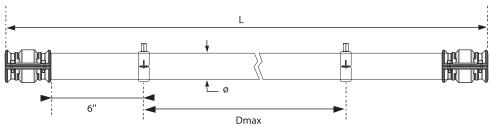
The Transair 6697 00 03 spacer is used for adjusting a run of Transair pipe using different diameters.

Example:

Spacer

Spacer for Transair clip

> Transair fixing clips for Ø 76 - Ø 168 systems

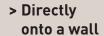


Ø	L (ft)	Dmax (ft)
76	20	16
100	20	16
168	20	16

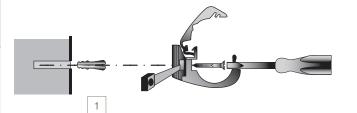
To ensure good system stability, we recommend the use of at least two fixing clips per length of pipe. Transair fixing clips for \emptyset 76 - \emptyset 168 systems: 3/8" thread.

> Fixture accessories

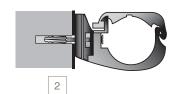
> Supporting a Transair system



> Offset from a wall

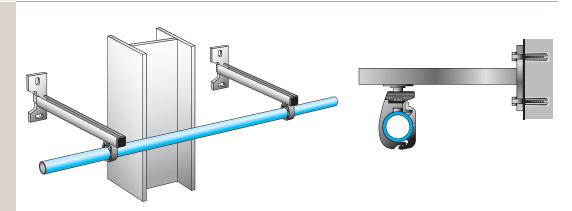


 1 - Remove the nut at the base of the pipe clip using a screwdriver and insert the screw by passing it through the clip



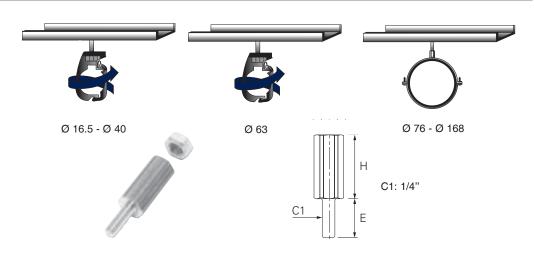
2 - Tighten the screw

> U-channel type mounting bracket



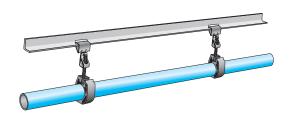
U-channel assemblies are used to offset systems and to bypass obstacles.

> Threaded rod adapter



The Transair threaded rod adaptor allows \varnothing 16.5, \varnothing 25 and \varnothing 40 Transair pipe clips to be easily suspended under 3/8" threaded rod.





Push-on type beam clamps

> Using beam clamps*



Screw type beam clamps

^{*} Beam clamps are not available for purchase through Parker Hannifin

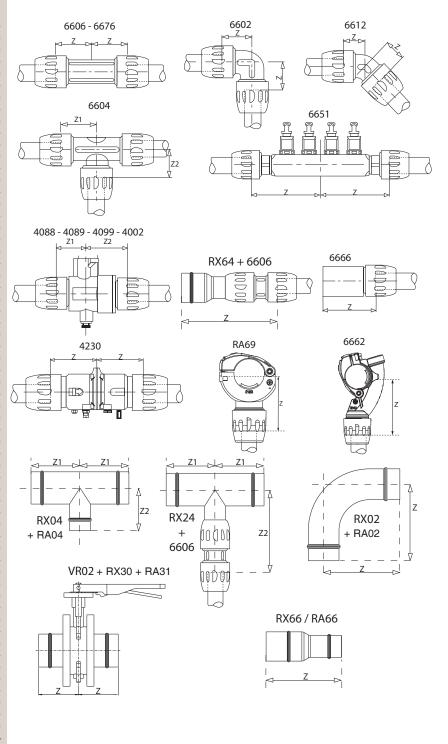




> Practical information

> Z dimensions

Transair	Z (mm)	Z1 (mm)	Z2 (mm)
4002 40 00	-	57	57
4002 63 00	-	84	98
4089 17 00	-	29	42
4088 25 14	_	40	55
4099 17 00	_	29	42
4099 25 00	-		
		40	55
4230 00 40	85		<u>-</u>
6612 25 00	29	•	<u> </u>
6612 40 00	45	-	<u> </u>
6602 17 00	31	-	-
6602 25 00	40	-	-
6602 40 00	62	-	-
6602 63 00	61	-	-
6604 17 00	-	34	31
6604 25 00	-	48	40
6604 40 00	-	57	57
6604 63 00	-	61	61
6604 63 40	-	61	116
6606 17 00	33	-	-
6606 25 00	48	-	
			-
6606 40 00	57	-	<u> </u>
6606 63 00	25	-	-
6651 25 12 04	107	-	-
6651 40 12 04	150	-	<u> </u>
6662 25 00	52	-	-
6662 25 17	59	-	-
6662 40 17	75	-	-
6662 40 25	68	-	-
6662 63 25	75	-	-
6666 17 25	50		-
6666 25 40	71	-	-
6676 17 00	33	-	
6676 25 00	48	-	
6676 40 00	57		
	25	-	
6676 63 00		-	<u>-</u>
RA02 L8 00	185		- 105
RA04 L8 00	-	180	185
RA04 L8 L3	-	165	185
RA04 L8 L1	-	165	185
RA04 L8 63	-	165	220
RA66 L8 L1	210	-	-
RA66 L8 L3	210	-	-
RA69 25 17	47.5	-	-
RA69 40 25	61	-	-
RX02 L1 00	189	-	-
RX02 L3 00	221	-	-
RX04 L1 00	-	145	145
RX04 L3 00	-	155	135
RX04 L3 L1	-	155	135
RX23 L1 04			
	145 155	<u> </u>	<u> </u>
RX23 L3 04		145	
RX24 L1 40	-	145	228
RX24 L1 63	-	145	285
RX24 L3 40	-	155	241
RX24 L3 63	-	155	298
RX64 L1 63	352	-	-
RX64 L3 63	372	-	-
RX66 L3 L1	193	-	-
VR02 L1 00	116	-	-
VR02 L3 00	123	-	-
VR02 L8 00	128		-



> Expansion / contraction

In order to compensate for the effects of expansion and contraction due to variations in temperature, any fluctuations in the length of the Transair aluminum pipe system should be calculated.

L: length of Transair straight line to be installed (in m)

 $\triangle T$: difference between temperature when installing and maximum operating temperature (in $^{\circ}C$)

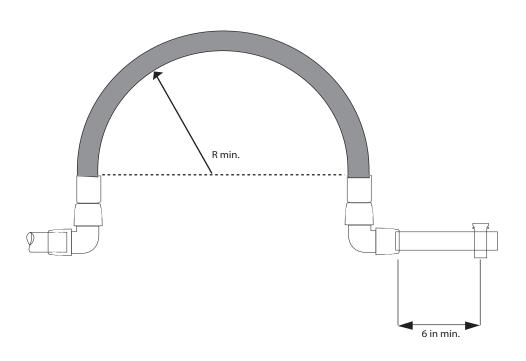
 \triangle L: line length variation (in mm)

For Transair Ø 16.5 - Ø 25 - Ø 40 - Ø 63 - Ø 76 - Ø 100 aluminum pipe systems:

$$\triangle L = \underbrace{(a \times L)}_{1} + \underbrace{(0.024 \times L \times \triangle T)}_{2}$$

- 1 Expansion related to pipe retraction in the connector
- 2 Expansion related to temperature variations

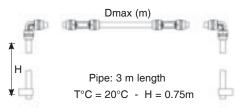
	Ø 16.5	Ø 25	Ø 40	Ø 63	Ø 76	Ø 100
10 ft pipe	a=0.06	a=0.20	a=0.40	a=0.73	a=1.0	a=1.0
20 ft pipe	-	a=0.10	a=0.20	a=0.38	a=0.50	a=0.50



Practical information

> Expansion / contraction

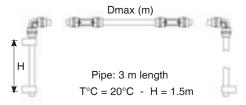
> Example



Case no. 1:

Maximum distance, without expansion loop, from a fixed point dependant on Transair diameter (2 elbows)

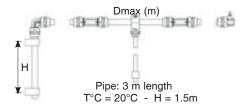
Ø Transair						
Dmax. (m)	50	40	30	24	15	15



Case no. 2:

Maximum distance, without expansion loop, dependant on Transair diameter (2 elbows - 1 fixed point)

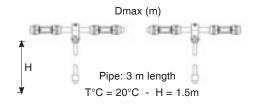
Ø Transair	16.5	25	40	63	76	100
Dmax. (m)	50	40	30	25	15	15



Case no. 3:

Maximum distance for installing a bracket, without expansion loop, dependant on Transair diameter (1 elbow - 1 bracket)

Ø Transair	16.5	25	40	63	76	100
Dmax. (m)	48	38	30	25	7.5	7.5



Case no. 4:

Maximum distance for installing a bracket, without expansion loop, dependant on Transair diameter (2 brackets)

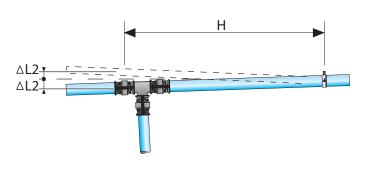
Ø Transair	16.5	25	40	63	76	100	
Dmax (m)	80	70	55	40	15	15	

> Direction Δ L1 Δ L1 In addition to expansion loops, changes of change direction are another method of compensating for expansion and contraction. > For Transair Ø 16.5 - Ø 25 - Ø 40 - Ø 63 aluminum pipe systems H= 29.5" $\Delta L1 = 0.6$ " H= 59.1" △L1= 1.2" > Using an elbow Н > For Transair Ø 76 - Ø 168 aluminum pipe systems H= 29.5" △L1= 3/8" H= 59.1" △L1= 6/8" > For Transair Ø 16.5 - Ø 25 - Ø 40 - Ø 63 aluminum pipe systems > Using a quick assembly bracket **∆**L2 (in) **∆**L3 Ø1 Ø2 16.5 25 1/2 25 25 1/2 16.5 40 1/2 40 25 63

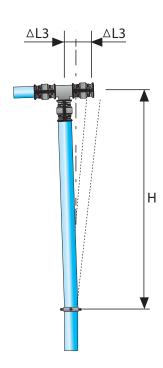
The length variation Δ L, calculated for the Transair line, must always be equal to or less than Δ L2 and Δ L3. If this is not the case, then an expansion loop, using Transair flexible hose, must be added.

> Practical information

> For Transair Ø 76 - Ø 168 aluminum pipe systems



> Changing direction with a tee



Ø	H (ft)	∆ L2 maxi (in)	∆ L3 maxi (in)
76	2 1/2	3/8	3/8
100	2 1/2	3/8	3/8
168	2 1/2	3/8	3/8

> Conversion charts

	millimeter				
		meter	inch	foot	yard
	(mm)	(m)	(in)	(ft)	(yd)
	10	0.01	0.39	0.03	0.01
	20	0.02	0.79	0.07	0.02
	30	0.03	1.18	0.10	0.03
	40	0.04	1.57	0.13	0.04
	50	0.05	1.97	0.16	0.05
	60	0.06	2.36	0.20	0.07
	70	0.07	2.76	0.23	0.08
	80	0.08	3.15	0.26	0.09
	90	0.09	3.54	0.30	0.10
	100	0.10	3.94	0.33	0.11
Langth	150	0.15	5.91	0.49	0.16
> Length	200	0.20	7.87	0.66	0.22
	250	0.25	9.84	0.82	0.27
	300	0.30	11.81	0.98	0.33
	350	0.35	13.78	1.15	0.38
	400	0.40	15.75	1.31	0.44
	450	0.45	17.72	1.48	0.49
	500	0.50	19.69	1.64	0.49
	550	0.55	21.65	1.80	0.60
		0.60		1.97	0.65
	600		23.62		
	700	0.70 0.80	27.56 31.50	2.30	0.76 0.87
	800				
	900	0.90	35.43	2.95	0.98
	1 000	1.00	39 37	3.28	1 09
	1 000	1.00	39.37	3.28	1.09
	1 000	1.00 Kilo Pascal (KPa)	Atmosphere (atm)	PSI	Torr (mm H
	Bar	Kilo Pascal (KPa)	Atmosphere (atm)	PSI	Torr (mm H
	Bar	Kilo Pascal (KPa)	Atmosphere (atm)	PSI 14.50	Torr (mm H 750
	Bar 1 2	Kilo Pascal (KPa) 100 200	Atmosphere (atm) 0.99 1.97	PSI 14.50 29.00	Torr (mm H 750 1 500
	Bar 1 2 3	Kilo Pascal (KPa) 100 200 300	Atmosphere (atm) 0.99 1.97 2.96	PSI 14.50 29.00 43.50	Torr (mm H 750 1 500 2 250
	Bar 1 2 3 4	Kilo Pascal (KPa) 100 200 300 400	Atmosphere (atm) 0.99 1.97 2.96 3.95	PSI 14.50 29.00 43.50 58.00	Torr (mm H 750 1 500 2 250 3 000
	Bar 1 2 3 4 5	Kilo Pascal (KPa) 100 200 300 400 500	Atmosphere (atm) 0.99 1.97 2.96 3.95 4.93	PSI 14.50 29.00 43.50 58.00 72.50	Torr (mm H 750 1 500 2 250 3 000 3 750
> Pressure	Bar 1 2 3 4 5 6	Kilo Pascal (KPa) 100 200 300 400 500 600	Atmosphere (atm) 0.99 1.97 2.96 3.95 4.93 5.92	PSI 14.50 29.00 43.50 58.00 72.50 87.00	Torr (mm H 750 1 500 2 250 3 000 3 750 4 500
> Pressure	Bar 1 2 3 4 5 6 7	Kilo Pascal (KPa) 100 200 300 400 500 600 700	Atmosphere (atm) 0.99 1.97 2.96 3.95 4.93 5.92 6.91	PSI 14.50 29.00 43.50 58.00 72.50 87.00 101.50	Torr (mm H 750 1 500 2 250 3 000 3 750 4 500 5 250
> Pressure	Bar 1 2 3 4 5 6 7 8 9	Kilo Pascal (KPa) 100 200 300 400 500 600 700 800	Atmosphere (atm) 0.99 1.97 2.96 3.95 4.93 5.92 6.91 7.90	PSI 14.50 29.00 43.50 58.00 72.50 87.00 101.50 116.00 130.50	Torr (mm H 750 1 500 2 250 3 000 3 750 4 500 5 250 6 000 6 750
> Pressure	Bar 1 2 3 4 5 6 7 8	Kilo Pascal (KPa) 100 200 300 400 500 600 700 800 900	Atmosphere (atm) 0.99 1.97 2.96 3.95 4.93 5.92 6.91 7.90 8.88	PSI 14.50 29.00 43.50 58.00 72.50 87.00 101.50	Torr (mm H 750 1 500 2 250 3 000 3 750 4 500 5 250 6 000
> Pressure	Bar 1 2 3 4 5 6 7 8 9 10 11	Kilo Pascal (KPa) 100 200 300 400 500 600 700 800 900 1000 1100	Atmosphere (atm) 0.99 1.97 2.96 3.95 4.93 5.92 6.91 7.90 8.88 9.87 10.86	PSI 14.50 29.00 43.50 58.00 72.50 87.00 101.50 116.00 130.50 145.00	Torr (mm H 750 1 500 2 250 3 000 3 750 4 500 5 250 6 000 6 750 7 500 8 250
> Pressure	Bar 1 2 3 4 5 6 7 8 9 10	Kilo Pascal (KPa) 100 200 300 400 500 600 700 800 900 1000	Atmosphere (atm) 0.99 1.97 2.96 3.95 4.93 5.92 6.91 7.90 8.88 9.87 10.86 11.84	PSI 14.50 29.00 43.50 58.00 72.50 87.00 101.50 116.00 130.50	Torr (mm H 750 1 500 2 250 3 000 3 750 4 500 5 250 6 000 6 750 7 500 8 250 9 000
> Pressure	Bar 1 2 3 4 5 6 7 8 9 10 11 12 13	Kilo Pascal (KPa) 100 200 300 400 500 600 700 800 900 1000 1100 1200 1300	Atmosphere (atm) 0.99 1.97 2.96 3.95 4.93 5.92 6.91 7.90 8.88 9.87 10.86 11.84 12.83	PSI 14.50 29.00 43.50 58.00 72.50 87.00 101.50 116.00 130.50 145.00 159.50 174.00 188.50	Torr (mm H 750 1 500 2 250 3 000 3 750 4 500 5 250 6 000 6 750 7 500 8 250
> Pressure	Bar 1 2 3 4 5 6 7 8 9 10 11 12 13 14	Kilo Pascal (KPa) 100 200 300 400 500 600 700 800 900 1000 1100 1200 1300 1400	Atmosphere (atm) 0.99 1.97 2.96 3.95 4.93 5.92 6.91 7.90 8.88 9.87 10.86 11.84 12.83 13.82	PSI 14.50 29.00 43.50 58.00 72.50 87.00 101.50 116.00 130.50 145.00 159.50 174.00 188.50 203.00	Torr (mm H 750 1 500 2 250 3 000 3 750 4 500 5 250 6 000 6 750 7 500 8 250 9 000 9 750 10 500
> Pressure	Bar 1 2 3 4 5 6 7 8 9 10 11 12 13	Kilo Pascal (KPa) 100 200 300 400 500 600 700 800 900 1000 1100 1200 1300	Atmosphere (atm) 0.99 1.97 2.96 3.95 4.93 5.92 6.91 7.90 8.88 9.87 10.86 11.84 12.83	PSI 14.50 29.00 43.50 58.00 72.50 87.00 101.50 116.00 130.50 145.00 159.50 174.00 188.50	Torr (mm H 750 1 500 2 250 3 000 3 750 4 500 5 250 6 000 6 750 7 500 8 250 9 000 9 750

> Practical information

cubic fee per minute (o	cubic meters per hour (m³/h)	cubic meters per minute (m³/min)	liters per minute (l/min)	liters per second (l/s)
21	36	0.60	600	10
42	72	1.20	1 200	20
64	108	1.80	1 800	30
85	144	2.40	2 400	40
106	180	3.00	3 000	50
127	216	3.60	3 600	60
148	252	4.20	4 200	70
169	288	4.80	4 800	80
191	324	5.40	5 400	90
212	360	6.00	6 000	100
318	540	9.00	9 000	150
424	720	12.00	12 000	200
530	900	15.00	15 000	250
635	1 080	18.00	18 000	300
741	1 260	21.00	21 000	350
847	1 440	24.00	24 000	400
953	1 620	27.00	27 000	450
1 059	1 800	30.00	30 000	500
1 165	1 980	33.00	33 000	550
1 271	2 160	36.00	36 000	600
1 483	2 520	42.00	42 000	700
1 694	2 880	48.00	48 000	800
1 906	3 240	54.00	54 000	900
2 118	3 600	60.00	60 000	1 000

> Air consumption values

> Flow rate

	Typical CFM consumption at an operating
Tools	pressure of 87 psi
Small process controls, instrumentation, pneumatic logic units	4
Paint spray gun, small impact wrench, light/medium drill, blowg	un From 5 to 18
Polisher, screwdriver	25
Sheet metal cutter, large impact wrench, automatic plane	28
Small automatic machines, miscellaneous tooling	32
Large tools, power machines and associated equipment	36
Air hoist, grinder	74

> Transair systems in use



Packaging
Transair Ø 40 and Ø 25



Automotive Transair Ø 40



Production workshop Transair Ø 40



Manufacturing Transair Ø 25 to Ø 168



Food and beverage Transair Ø 25



Alternative energy Transair Ø 63 and Ø 76

> Transair systems in use



Waste management Transair Ø 40



Industrial Transair Ø 100





Pharmaceutical Transair Ø 63



Outdoor installation Transair Ø 168



Inert gas Transair Ø 76

> Part numbers index

Part Number	Pg.	Part Number	Pg.	Part Number	Pg.	Part Number	Pg.	Part Number	Pg.
0169 00 05 00	39	6605 63 44	24	6662 25 00	28	9084 30 18	42	FP01 L3 02	17
1001E25 00 01	17	6605 63 46	24	6662 25 17	28	9085 23 08	42	FP01 L3 03	17
1001E25 00 03	17	6606 17 00	18	6662 40 17	28	9085 23 56	42	RA02 L8 00	19
1001E25 00 04	17	6606 25 00	18	6662 40 25	28	9085 23 60	42	RA04 L8 00	21
1001E25V00 01	17	6606 40 00	18	6662 63 25	28	9085 30 08	42	RA04 L8 63	21
1001E25V00 03	17	6606 63 00	18	6663 25 22	28	9085 30 60	42	RA04 L8 L1	21
1001E25V00 04	17	6609 17 14	19	6663 40 22	28	9085 30 62	42	RA04 L8 L3	21
1001E40 00 02	17	6609 17 22	19	6663 63 22	28	CP05 A1N02	41	RA12 L8 00	20
1001E40 00 04	17	6609 25 22	19	6663 63 28	28	CP05 A1N03	41	RA25 L8 00	23
1001E40 00 05	17	6609 25 28	19	6666 17 25	22	CP05 A1N04	41_	RA31 L8 00	26
1001E40V00 04	17	6609 25 35	19	6666 25 40	22	CP05 U1N02	41	RA66 L8 L1	22
1001E40V00 05	17	6609 40 35	19	6666 40 63	22	CP05 U1N03	41_	RA66 L8 L3	22
1001E40V00 07	<u>17</u>	6609 40 43	19	6668 25 22	28	CP05 U1N04	41_	RA68 25N04	27
1001E63 00 05	17	6609 40 44	19	6668 40 22	28	CP05 U2N02	41_	RA68 40N04	27
1001E63 00 06	17	6609 40 50	19	6668 63 22	28	CP05 U2N03	41	RA69 25 17	27
1001E63 00 08	17	6609 63 41	19	6668 63 28	28	CP05 U2N04	41	RA69 40 25	27_
1001E63V00 05	<u>17</u>	6609 63 46	19	6675 17 22	31	CP15 A1N02	41_	RP00 L1 00	18
1001E63V00 06	17	6611 17 22	25	6675 25 22	31	CP15 A1N03	41_	RP00 L3 00	18_
1004A17 02	<u> 15</u>	6611 25 22	25	6676 25 00	18	CP15 A1N04	41_	RR01 L1 00	18_
1004A17 04	15	6611 25 28	25	6676 40 00	18	CP15 U1N02	41_	RR01 L3 00	18_
1013A17 04 00	<u> 15</u>	6611 25 35	25	6676 63 00	18	CP15 U1N03	41_	RR01 L8 00	18_
1013A17 06 00	<u>15</u>	6611 40 35	25	6679 17 22	31	CP15 U1N04	41	RR21 L1N20	25_
1013A25 04 00	<u> 15</u>	6611 40 43	25	6679 25 22	31	CP15 U2N02	41_	RR21 L1N24	25_
1013A40 04 00	<u> 15</u>	6611 40 44	25	6684 17 22	30	CP15 U2N03	41_	RR63 L1N08	27_
1013A63 04	<u> 15</u>	6611 40 50	25	6684 25 22	30	CP15 U2N04	41_	RR63 L3N08	27
1016A25 02 00	<u>15</u>	6611 63 41	25	6688 22 22	30	CP21 A1 06	41_	RR63 L8N12	27_
1016A25 04 00	<u>15</u>	6611 63 44	25	6689 00 03	34	CP21 A1 08	41_	RR63 L8N16	27_
1016A25 06 00	<u> 15</u>	6612 25 00	20	6689 17 22	30	CP21 A1 10	41_	RX02 L1 00	19_
1016A40 02 00	15	6612 40 00	20	6689 25 22	30	CP21 U1 06	41_	RX02 L3 00	19_
1016A40 04 00	15	6612 63 00	20	6691 22 22	30	CP21 U1 08	41_	RX04 L1 00	21_
1016A40 06 00	<u>15</u>	6615 25 22	24	6694 17 22	31	CP21 U1 10	41_	RX04 L3 00	21_
1016A63 02	<u>15</u>	6615 25 28	24	6694 25 22	31	CP21 U2 08	41_	RX04 L3 L1	21_
1016A63 04	<u>15</u>	6615 25 43	24	6696 25 22	31	CP21 U2 10	41_	RX12 L1 00	20_
1016A63 06	<u>15</u>	6615 40 15	24	6697 00 03	39	CP21 U2 13	41_	RX12 L3 00	20_
4002 40 00	32	6615 40 43	24	6697 17 01	38	EA98 06 00	29	RX20 L1N04	22_
4002 63 00	32	6619 25 22	20	6697 25 01	38	EA98 06 00	<u>36</u>	RX20 L3N04	22_
4012 63 00	32	6619 25 28	20	6697 40 01	38_	EA98 06 01	29	RX24 L1 40	21_
4089 17 00	32	6619 25 35	20	6697 63 01	38	EA98 06 02	29	RX24 L1 63	21_
4089 25 00	32	6619 40 35	20	6698 01 01	34	EA98 06 03	29	RX24 L3 40	21_
4099 17 00	32	6619 40 43	20	6698 01 02	34	ER01 L1 00	38_	RX24 L3 63	21_
4099 25 00	32	6619 40 44	20	6698 02 01	<u>35</u>	ER01 L3 00	38_	RX25 L1 00	23
4230 00 40	<u>33</u>	6619 40 50	20	6698 02 02	<u>35</u>	ER01 L8 00	<u>38</u>	RX25 L3 00	23_
4299 03 01	33	6619 63 44	20	6698 03 01	34	EW01 00 02	37_	RX30 L1 00	26_
6602 17 00	<u>19</u>	6621 17 22	25	6698 04 01	<u>35</u>	EW02 L1 00	<u>37</u>	RX30 L3 00	26
6602 25 00	<u>19</u>	6621 25 22	<u>25</u>	6698 04 02	<u>35</u>	EW02 L3 00	37	RX31 L1 00	26_
6602 40 00	<u>19</u>	6621 25 28	<u>25</u>	6698 04 03	<u>36</u>	EW02 L8 00	37	RX31 L3 00	<u> 26</u>
6602 63 00	<u>19</u>	6621 25 35	<u>25</u>	6698 05 03	<u>36</u>	EW03 00 01	37	RX64 L1 63	22
6604 17 00	21	6621 40 43	<u>25</u>	6698 11 11	40	EW05 L1 00	<u>26</u>	RX64 L3 63	22_
6604 25 00	21	6621 40 50	<u>25</u>	6698 11 12	40	EW05 L3 00	<u>26</u>	RX66 L3 L1	22_
6604 40 00	21	6625 17 00	<u>23</u>	6699 01 01	<u>39</u>	EW05 L8 00	<u>26</u>	TA06 L1 06	14_
6604 63 00	21	6625 25 00	23	6699 01 02	39	EW06 00 01	<u>26</u>	TA16 L1 02	16_
6604 63 40	21	6625 40 00	23	9083 22 14	42	EW06 00 05	<u>26</u>	TA16 L1 04	<u>16</u>
6605 17 14	24	6625 63 00	23	9083 22 18	42	EW08 00 01	34	TA16 L3 02	<u>16</u>
6605 17 22	24	6636 28 22	31	9083 23 14	42	EW08 00 03	34	TA16 L3 04	<u>16</u>
6605 25 22 6605 25 28	24	6638 25 22	31	9083 23 18 9083 30 14	42	EW09 00 22	<u>35</u>	TA16 L3 06	<u>16</u>
6605 25 28	24	6640 17 22	30		42	EW09 00 30	35	TA16 L8 04	16_
6605 25 35 6605 40 35	24	6640 25 22	30	9083 30 18	42	EW09 00 51	<u>35</u>	VR01 L1 00	32_
6605 40 43	24	6642 22 22	30	9084 22 14	42	EW09 00 64 EX01 L1 00	<u>35</u>	VR01 L3 00	32_
6605 40 44	24	6651 25 12 04	<u>26</u>	9084 22 18 9084 23 14	42 42	EX01 L1 00	38	VR02 L1 00	33_
6605 40 50	24 24	6651 40 12 04	26	9084 23 18	42	FP01 L1 01	<u>38</u> <u>17</u>	VR02 L3 00	33_
6605 63 41	24	6653 25 22 06 6653 40 22 06	<u>26</u>	9084 30 14		FP01 L1 02	17	VR02 L8 00	33_
0000 00 41	24	6653 40 22 06	26	3004 30 14	42	I FUI LI UZ			

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Aerospace

Key Markets

Aftermarket services Commercial transports Engines General & business aviation Heliconters Launch vehicles Military aircraft Missiles Power generation Regional transports Unmanned aerial vehicles

Key Products

Control systems & actuation products & components Fluid conveyance systems & components Fluid metering, delivery & atomization devices Fuel systems & components Fuel tank inerting systems Hydraulic systems & components Thermal management



Automation

Key Markets

Alternative energy Conveyor & material handling Factory automation Food & beverage Life sciences & medical Machine tools Packaging machinery Paner machinery Plastics machinery Primary metals Safety & security Semiconductor & electronics Transportation & automotive

Key Products

AC/DC drives & systems Air preparation Flectric actuators, gantry robots & slides Human machine interfaces Inverters Manifolds Miniature fluidics Pneumatic actuators & grippers Pneumatic valves & controls Rotary actuators Stepper motors, servo motors, drives & controls Structural extrusions Vacuum generators, cups & sensors



Climate & Industrial **Controls**

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 controls Electronic controllers Filter driers Hand shut-off valves Heat exchangers Hose & fittings Pressure regulating valves Refrigerant distributors Safety relief valves Smart pumps Thermostatic expansion valves



Filtration

Key Markets

Aerospace Food & beverage Industrial plant & equipment Life sciences 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 & Jubrication filters Hydrogen, nitrogen & zero air generators Instrumentation filters Membrane & fiber filters Microfiltration Sterile air filtration Water desalination & purification filters



Fluid Connectors

Key Markets

Agriculture Bulk chemical handling Construction machinery Food & beverage Fuel & gas delivery Industrial machinery Life sciences Marine Minina 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 & nower 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 Industrial machinery Machine tools Marine Material handling Minina Oil & gas Power generation Refuse vehicles Truck hydraulics Turf equipment

Key Products

Accumulators Cartridge valves Electrohydraulic actuators Human machine interfaces Hybrid drives Hydraulic cylinders Hydraulic motors & numns Hydraulic systems Hydraulic valves & controls Hydrostatic steering Integrated hydraulic circuits Power take-offs Power units Rotary actuators



Instrumentation

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,



Seal

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 instrudesign & assembly EMI shielding Extruded & precision-cut, fabricated elastomeric seals High temperature metal seals Homogeneous & inserted elastomeric shapes Medical device fabrication & assembly Metal & plastic retained Shielded optical windows Silicone tubina & extrusions Thermal management Vibration dampening



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