



SimplAir® EPL

20-158 mm Quick-Fit Piping System

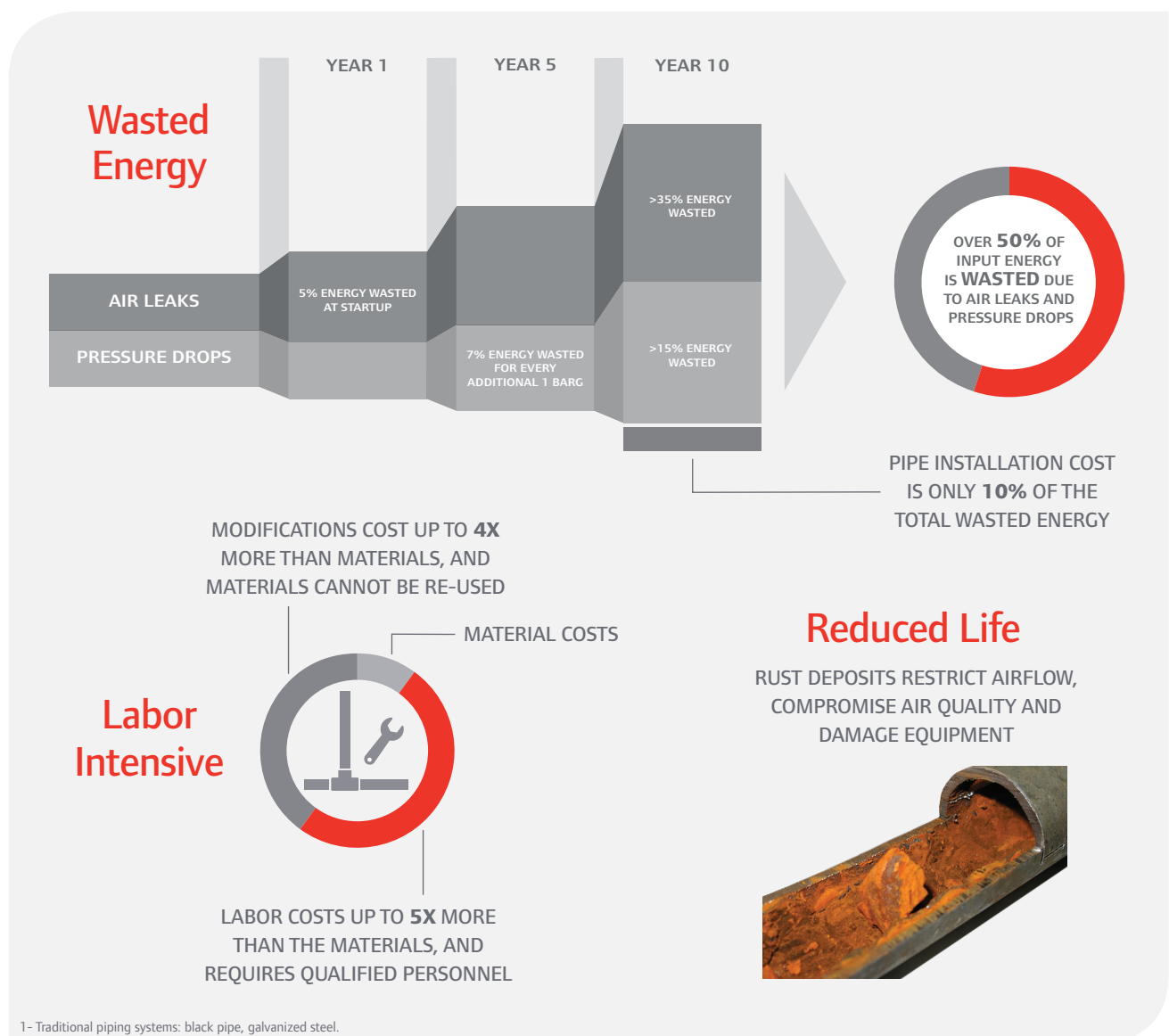
Are you spending too much to transport air?

The total expense of distributing air from your compressors to its point of use involves more than just the cost of piping. It also includes labor-intensive installation (*typically 5 times as much as the material costs*), wasted energy from leak-prone systems (*up to 20% to 30% after 10 years from start up*), and increased energy consumption to compensate for pressure drops (*7% for every 1 barg drop*).

In addition, with subsequent repairs or system upgrades costing 4 times as much as the material costs installation, it is easy to see how such hidden expenses can negatively impact your total cost of ownership.

Choosing the right air distribution system will lower your operating costs.

Traditional¹ piping costs more...



SimplAir® EPL: the efficient alternative to traditional piping

The easy-to-install leak-free Ingersoll Rand SimplAir® EPL (Easy Pipe Line) system is your alternative to costly, labor-intensive steel pipe distribution systems for air, inert gas and vacuum lines. It leverages more than a century of Ingersoll Rand compressed air experience for streamlined installation, uncompromised reliable performance, effortless maintenance, flexibility for future needs, and maximum energy efficiency at the lowest total cost.

Easier installation

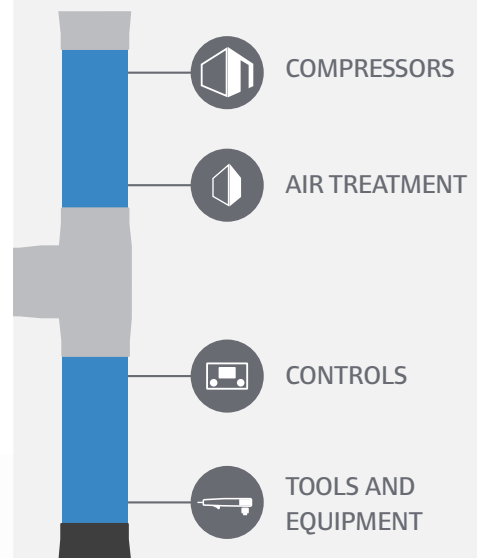
- No special tools needed and specialized labor required
- Easy, safe installation with minimal downtime
- Patented quick-fit locking system provides fast installation and long-term operation
- Up to 60% less assembly time required than traditional piping
- 15% less assembly time required than alternative competitive modular piping systems
- SimplAir® EPL is compatible with existing piping systems and equipment
- Fully tested and certified to 97/23/EC and ASME B31.3 standards

Lower total cost

- Low initial investment
- Fully customizable and great configuration flexibility
- Low energy waste system, due to leak-free and low pressure drop design
- Less maintenance – up to 40% less labor and material costs than steel piping systems
- Corrosion-resistant to prevent contaminants and pressure losses
- Reusable parts for easy updates and modifications
- 10-year warranty protects your investment

The ultimate link to efficiency.

Leak-free SimplAir® EPL distribution systems are your most efficient choice for linking all aspects of Ingersoll Rand air system expertise – from highly efficient air compressor, air treatment, controls and tools and equipment to reliable performance.



No special tools, such as labor-intensive pipe-threading equipment, are required for the SimplAir® EPL system.

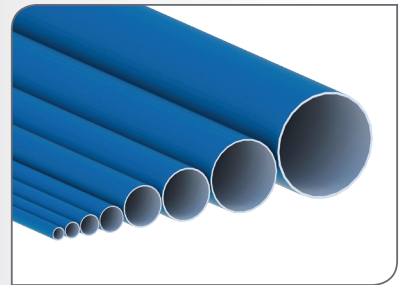
Leak-free design, enhanced energy management

The innovative SimplAir® EPL system offers an airtight design that eliminates wasted energy and improves efficiency and reliability. It provides superior performance, reduces your overall investment and protects your connected equipment. Compatibility with compressor lubrication oil promotes long life.



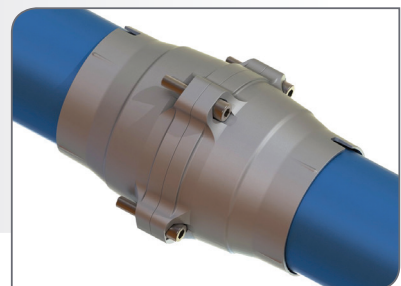
High-quality aluminium pipe

- UV radiation resistant 6060 alloy-hardened aluminium pipe for indoor/outdoor use is significantly lighter than competing steel alternatives, making it easier to handle
- Calibrated extrusion with consistent internal dimensions and smooth internal bore minimizes turbulence, reduces energy costs
- Corrosion-resistant for optimal air flow and air quality, without risk of rust particles or debris affecting sensitive equipment
- Flame-retardant powder coated finish is QUALICOAT® certified
- Standard blue painted in compliance with most industrial standards for compressed air (other colors available on request).
- Ready-to-use piping eliminates need for special labor or special tools at time of assembly



Easy-to-install quick-connect fittings

- Innovative patented locking and tightening system provides quick, secure, trouble-free installation, reducing installation lead time by 60%
- Leak-free fitting designs promote uptime by minimizing routine maintenance and unexpected repairs
- Eliminating neck-downs or obstructions promotes smooth laminar flow, minimizing pressure drop
- Engineered polymer hand-tightened fittings for 20-63 mm diameter systems, and heavy-duty innovative-design aluminium fittings for 80-158 mm diameter systems, both allow for easy installation, removal and reuse



This 3D rendering illustrates a robotic assembly line within a factory environment. The system is composed of a network of blue pipes and various mechanical components. Callout boxes highlight specific parts: a T-junction, a cylindrical component, a flange, a pipe section, an elbow, and a cross-junction. The setup includes two robotic arms, a yellow storage tank, and a control panel.

5

A robust solution that provides long-term productivity

Total cost of ownership is measured by a system's service life. The unique SimplAir® EPL system combines a proprietary Ingersoll Rand design, industry certifications and quality materials to provide system longevity and enhanced productivity.

Design precision for a perfect fit

The robust design of the fitting body, combined with a patented double O-ring and gasket design, ensures perfect alignment between pipe and fitting to ensure an exceptional seal.

Reap the benefits of a unique leak-free design.

The innovative design of SimplAir® EPL fittings uses a series of precision-formed gasket, O-ring and compression components that grip and seal smooth aluminium pipes evenly around their circumference. Customized run lengths without specially grooved or threaded ends eliminate pipe preparation labor and streamline final assembly.



Compliant with the most stringent design codes and certifications

Compliance with PED 97/23/CE, ASME B31.3 and CRN pressure guidelines for structural strength and fitting design assure that SimplAir® EPL solutions will satisfy all relevant standards for your production environment.

Our brand promise of tested-tough reliability

In the lab and in the field, the SimplAir® EPL design has demonstrated the reliability, productivity and efficiency that are the hallmarks of all Ingersoll Rand products.

Innovation. Our investment in R&D has paid off with innovative ways to deliver energy-efficient air distribution systems. The patented SimplAir® EPL design delivers leak-free performance with the convenience of fast and economical assembly and reconfiguration.

Stringent testing. To assure certified testing compliance to the highest industry standards, we designed the SimplAir® EPL system to withstand 10 times the maximum allowable working pressure (MAWP) for the 20-63 mm range, and 5 times for the 80-158 mm range. Lab results show we exceeded that threshold by 20%! This provides you with the peace of mind that SimplAir® EPL is designed to the highest quality, reliability and safety standards for operation and installation.

A 10-year warranty. Our confidence in the proven performance of SimplAir® EPL solutions is expressed in our 10-year warranty, so that you can be equally confident of its reliability in your working environments.

Outstanding customer experience. You can depend on Ingersoll Rand as your one-stop source for complete air solutions – from compressor to point of use. SimplAir® EPL components tailored to specific Ingersoll Rand compressors and air treatment modules are available from stock within 48 hours.

Genuine replacement parts. Our complete range of fittings and accessories assure your confidence in maintaining a reliably efficient, leak-free distribution system.

Design software.

Our investment in a proprietary Ingersoll Rand software tool helps you size, design and implement the most efficient, leak-free air distribution systems possible.



**Exceeds industry standard
MAWP threshold by 20%!**



Safety at the core of our design

With precision tolerances and the highest quality materials and finishes, the SimplAir® EPL system delivers leak-free, corrosion-resistant performance for a variety of industrial applications.



SPECIFICATIONS

SIZE [mm]	20, 25, 32, 40, 63	80, 110, 158
Max working pressure	14 bar	14 bar 12 bar for 158 mm
Max working temperature	-10° C to 60° C	-10° C to 60° C
Pipe material	aluminium EN AW-6060 extruded and calibrated; T6 tempered UV radiation resistant – suitable to indoor/outdoor use	
Paint certification	Qualicoat® powder paint (flame retardant)	
Pipe weight	20mm	0.23 kg/m
	25mm	0.30 kg/m
	32mm	0.39 kg/m
	40mm	0.49 kg/m
	63mm	1.03 kg/m
Fitting material	engineered polymer Ultramid® B3EG6	aluminium EN AB 42100/44100
	O-ring seals NBR 70 standard (-35° C to +110° C) VITON® optional	
Burst test pressure	130 bar	60 bar
Assembly time required	60% less than traditional piping systems 15% less than competitive modular piping systems	
Standard and certification	ASME B31.3 process piping 97/23/CE pressure equipment directive (P.E.D.)	
Application	pipelines for compressed air, vacuum and inert gases (for example nitrogen or argon)	
Threads	BSP and NPT available unique Ingersoll Rand design and patented product	



ASME B31.3
Process Piping



Qualicoat
Certified



Lloyd's Register
Tests Certification



ISO 9001:2008
Certified



Ø 20-63 mm art. 3.3
Ø 80-158 mm Cat I
(Module A)



Adapters available to expand existing legacy piping systems.

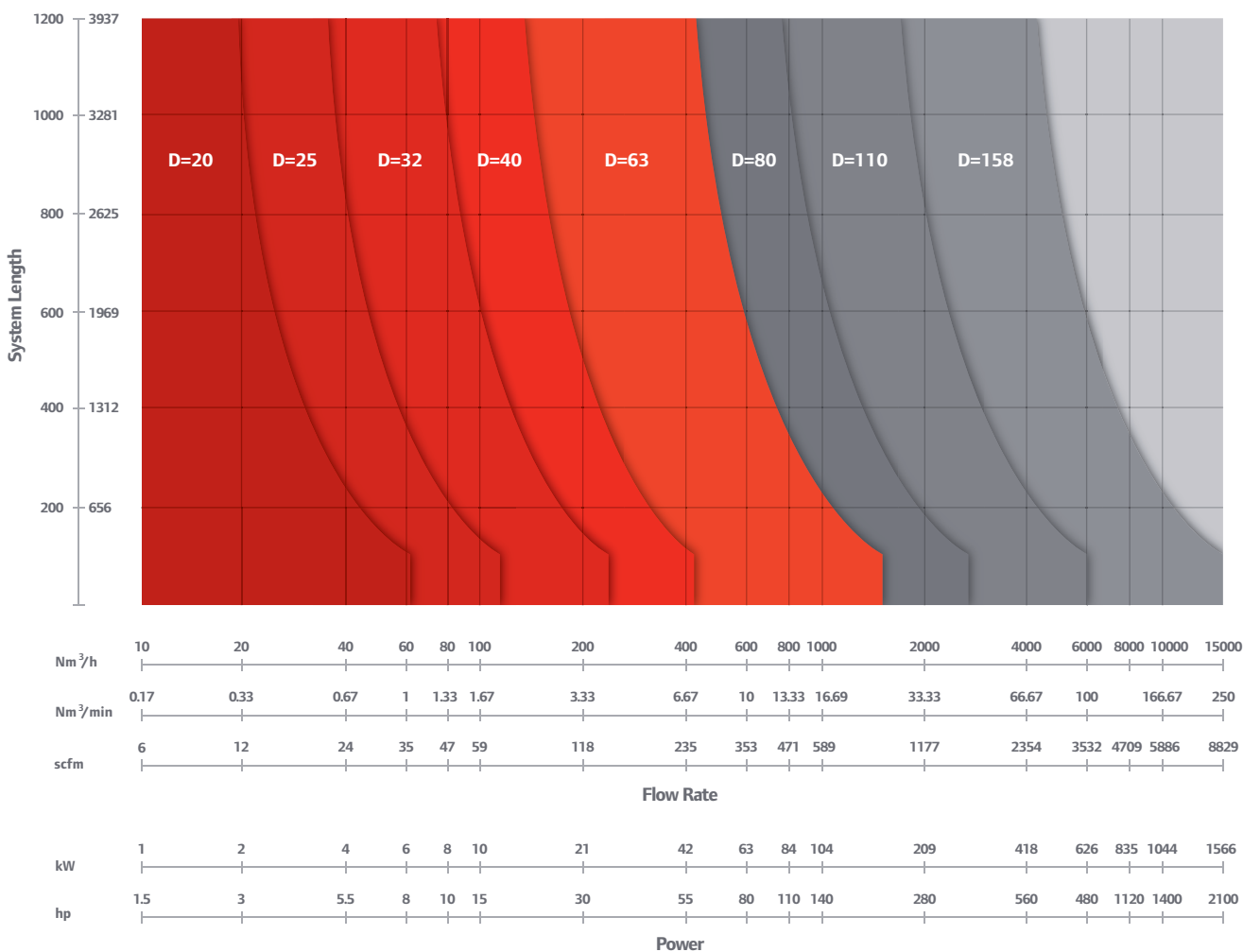
Products are classified as auto-extinguished and completely recyclable, flame-proof and in accordance to all safety and health CE standards.

The flexibility to size any system

SimplAir® EPL piping and fittings are available in eight standard sizes ranging from 20 mm to 158 mm, allowing for total configuration flexibility for your air distribution system.

All SimplAir® EPL pipe diameters accommodate a wide range of system flows, while maintaining a pressure drop of 5% or less.

The charts below can assist you in designing a SimplAir® EPL piping system to meet your application's specific flow-rate needs, with a pressure drop of 5% or less.



For reference only. Assumes 6.9 barg (100 psig) open loop system. Flow rate is doubled for closed loop system.

Make SimplAir® EPL your perfect fit

The SimplAir® EPL system offers a wide range of pipes and fittings to accommodate your unique air distribution requirements.

	Description	Polymer Fitting Diameter					Aluminium Fitting Diameter		
		20 mm	25 mm	32 mm	40 mm	63 mm	80 mm	110 mm	158 mm
	Aluminium Pipe	•	•	•	•	•	•	•	•
	Aluminium Pipe - S Bend	•	•						
	Straight Union	•	•	•	•	•	•	•	•
	Straight Union Pass-through	•	•	•	•	•			
	Straight Reducing		20	25	32	40	40 63	40 63 80	110
	Male Thread Connector	1/2" 3/4"	1/2" 3/4" 1"	1" 1-1/4"	1" 1-1/4" 1-1/2"	1-1/2" 2"			
	Male Thread Connector - Aluminium	1/2"	3/4"	1"	1-1/4"	2"	3"	3"	3"
	Female Thread Connector - Aluminium	1/2"	3/4"	1"	1-1/4"	2"			
	Elbow 90°	•	•	•	•	•	•	•	•
	Elbow 45°	•	•	•	•	•			
	Elbow 90° Reducing						40 63	40 63 80	110
	Elbow 90° Male Thread						3"	3"	3"
	Male Wall Elbow - Brass	1/2" 3/4"	1/2" 3/4"						
	Female Wall Elbow - Brass	1/2"	1/2"						
	End Cap	•	•	•	•	•	•	•	•
	Cap with Terminal						•	•	•
	Pipe Flange Adapter						DN80	DN100	DN150

	Description	Polymer Fitting Diameter					Aluminium Fitting Diameter		
		20 mm	25 mm	32 mm	40 mm	63 mm	80 mm	110 mm	158 mm
	Tee	•	•	•	•	•	•	•	•
	Reducing Tee		20	25	32	40	40 63	40 63 80	110
	Male Threaded Tee						3"	3"	3"
	Ball Valve	•	•	•	•	•			
	Ball Valve - Large	•	•	•	•				
	Ball Valve - Threaded Ends	1/2"	3/4"	1"	1-1/4"	2"	3"		
	Butterfly Valve						•	•	•
	Drop		20	20	20 25	20 25 32	20 25 32	20 25 32	20, 25, 32, 40, 63
	Male Drop	1/2"	1/2"	1/2" 3/4"	1/2" 3/4" 1"				
	Female Drop	1/2"	1/2"	1/2" 3/4"	1/2" 3/4" 1"	1/2" 3/4" 1"	1/2" 3/4" 1"	1/2" 3/4" 1"	1/2", 3/4" 1", 1-1/4", 2"
	2-Port Point of use Manifold Female	1/2"	1/2"						
	3-Port Point of use Manifold Female	1/2"	1/2"						
	3-Port Point of use Manifold Female 3/4" BSP + 3 x 1/2" Female BSP	1/2"	1/2"						
	Flexible Hose Female Thread	1/2"	3/4"	1"	1-1/4"	2"			
	Flexible Hose Quick Coupling						•	•	•
	Expansion Joint						•	•	•
	Plug	•	•						
	Brass Union Socket	1/2"	3/4"	1"	1-1/4"	2"			



A wide range of mounting hardware and installation tools are available.



Have questions or need assistance?
Submit your questions OR quote
at [ingersollrandproducts.com/epl](https://www.ingersollrandproducts.com/epl)





Ingersoll Rand (NYSE:IR) advances the quality of life by creating comfortable, sustainable and efficient environments. Our people and our family of brands—including Club Car®, Ingersoll Rand®, Thermo King® and Trane®—work together to enhance the quality and comfort of air in homes and buildings; transport and protect food and perishables; and increase industrial productivity and efficiency. We are a \$13 billion global business committed to a world of sustainable progress and enduring results.



www.ingersollrandproducts.com

Distributed by:



Member of Pneurop

Ingersoll Rand, IR, the IR logo and SimplAir are trademarks of Ingersoll Rand, its subsidiaries and/or affiliates. All other trademarks are the property of their respective owners.

Nothing contained on these pages is intended to extend any warranty or representation, expressed or implied, regarding the product described herein. Any such warranties or other terms and conditions of sale of products shall be in accordance with Ingersoll Rand's standard terms and conditions of sale for such products, which are available upon request.

Product improvement is a continuing goal at Ingersoll Rand. Designs and specifications are subject to change without notice or obligation.