AIR DISTRIBUTION

CEJN modular Air Distribution System

– Top performance, built-in flexibility and safe operations

Securing capacity, Allowing for change,
Safe-guarding co-workers

Modular
Air Distribution System

– Keep the pressure up and costs down

Today's competitive environment demands a lot from all manufacturing processes – top performance to secure quality and cost levels, flexibility to adjust to different kinds of customers and production volumes, and a safe and ergonomic working environment for skilled co-workers.

CEJN modular air distribution system delivers compressed air with no leakage and minimal pressure drop. Exact dimensioning and synchronized components, including couplings, hoses and FRL units secures top performance. The modular air distribution system also adds built-in flexibility, making it possible to adjust to new setups. The modular approach allows for an easy, low-cost way of adding new workspaces and changing the workflow.

With smart, safe and ergonomic solutions on component level in the modular air distribution system, like noise reducing safety couplings and easy-to-handle hose reels, the working environment can be tailor made for each individual.

Add the high quality and long life span of CEJN components and it is easy to see that the CEJN modular air distribution system contributes to keeping the pressure up and costs down.

04 IN FOCUS – PERFORMANCE

06 IN FOCUS – FLEXIBILITY

08 IN FOCUS – SAFETY AND ERGONOMICS

10 PLAN YOUR PURCHASE

In focus - Performance

– Top flow from piping to tool

For more information about performance go to **www.cejn.com/performance**

Synchronized Pneumatic Components

The CEJN modular air distribution system consists of CEJN components designed to work together and to ensure maximum performance. The features, functions and dimensions of each component are developed with top flow in mind. All components are carefully synchronized to eliminate obstructions in the air flow, making it possible to significantly reduce energy and maintenance costs and securing that tools and equipment get the correct pneumatic power needed for the most efficient output.

The CEJN Multi-Link lets you connect as many outlets as you need at each distribution point to form an efficient air distribution system. The outlets can be positioned at different angles and still assure an unobstructed and high air flow.

CEJN Couplings allow for connection, disconnection and operation without air loss. An air tight design is created through properly aligned mating parts. The aerodynamic, conical-shaped valve allows air to flow into the valve without undue turbulence. Leaks due to side loads and misalignment are avoided with an o-ring inside the valve.

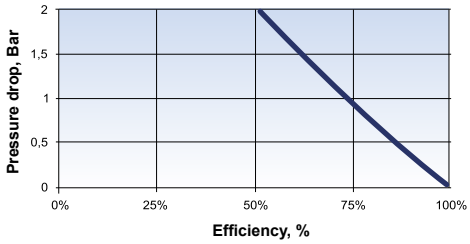
CEJN Polyurethane Hoses also contribute to a high flow rate, as the hose have extremely smooth internal surfaces. The choice of polyurethane makes it possible to use a thin-wall construction that increases the flow rate even more. To deliver performance in the long run, our hoses have excellent resistance to abrasions, oils, solvents, and other non-aqueous solutions and outlasts conventional PVC hoses up to 10 times.

The CEJN FRL range includes filters, regulators and lubricators that provide a maximized flow of clean air and a consistent operating pressure, resulting in better system performance and lower maintenance costs.

CEJN Adapters come in many different sizes and versions to ensure smooth connection between couplings, hoses and FRLs to make all kinds of setups possible.

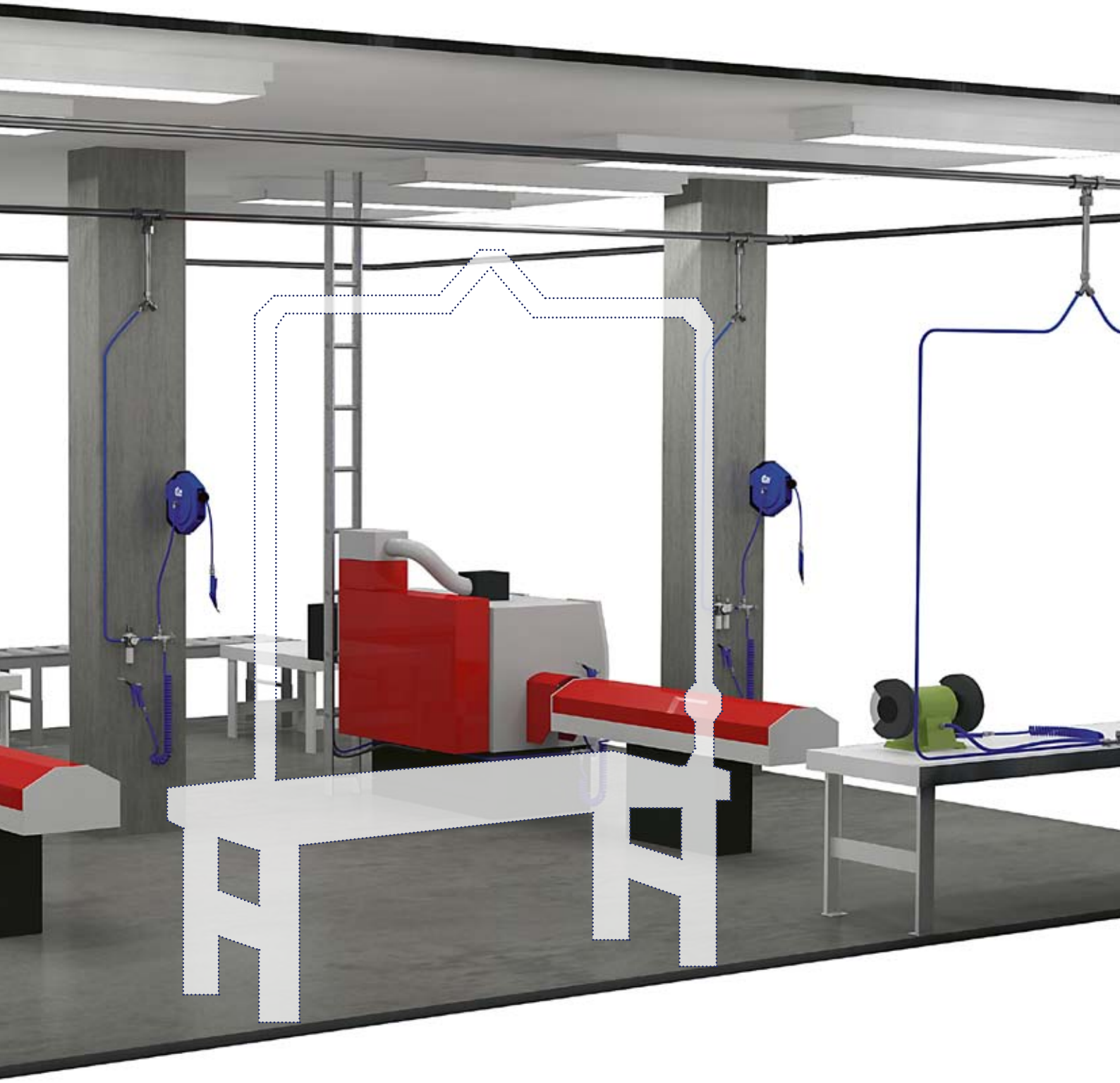
CEJN Hose Reels provide high flow capacity as a result of the cleverly constructed axle and swivel inside. When combining CEJN hose reels, CEJN PUR hoses and CEJN Stream line connections, the flow capacity outperforms most hose and hose reel combinations on the market. That they are abrasion resistant and score high marks in impact strength as well as tensile and tear strength helps maintaining performance over the years.

Performance facts
According to tests performed by a leading power tool manufacturer, an air distribution system with poor performance from piping to tool can cause the pressure level to drop from 6.3 bar to 5.3 bar, leading to pneumatic power tools losing more than 25% of their efficiency!



In focus - Flexibility

– Easy to adapt, expand and install



For more information about flexibility go to **www.cejn.com/flexibility**

Made for change

The CEJN modular air distribution system is developed to meet the need for flexible changes in today's competitive manufacturing environments.

The modular thinking behind the system makes it easy to adjust the workflow and to adapt to differing production volumes and setups, instead of having to go through a complete rebuild. With the CEJN Multi-Link couplings it is easy to add another work station just by replacing the dead end plug with the included 1/2" connection and then continue with more hose. The installation only takes minutes.

Adapted to you

Another benefit with the flexible approach of the CEJN modular air distribution system is the possibility to easily adjust the working environment for each work station and production step.

CEJN Multi-Link makes it easy to unclutter the work space. The design allows you to connect as many outlets as you need in the same spot. As the outlets can be twisted in different directions, it becomes possible to perform work in various positions.

CEJN Pneumatic Couplings allows fast and easy one-hand operation and secure connection and disconnection. There is a wide range of connections available, as well as aluminum couplings with the same high-flow capacity at half the weight. For manufacturing environments where damage to surrounding surfaces must be avoided, CEJN offers non-abrasive soft-line couplings.

CEJN Polyurethane Hoses are easy to cut to the desired length. In addition, they are lightweight and extremely flexible. Available in several sizes and dimensions.

The CEJN FRL range can be top or side mounted to make best use of the space available, keeping gauges and controls within sight and reach. They come in 1/8-inch through 1-inch thread connection sizes.

CEJN Adapters provide maximum flexibility as they offer a variety of connectors; male to male, hose to hose, cross pieces and ball valves.

CEJN Hose Reels can be ceiling or wall-mounted which keeps the reel out of the way but the hose and tool at hand. The reel is easy to swing and place in any angle needed, as it has full 300-degree movement.

Flexibility facts
The modular air system with its synchronized functions and dimensioning makes it easy to add an extra work station. Just order the extra components needed. The setup to the left includes:

Product	Art number	Quantity
Hose	19 958 1600	10 M
Y-piece	19 900 5902	1 pc
Adapter	19 958 1615	6 pcs
Adapter	19 900 1235	1 pc
Multi-Link	19 902 9933	2 pcs
Regulator	19 903 5205	1 pc

EJN
EJN

In focus - Safety and ergonomics

– Improving working environments

For more information about safety and ergonomics go to **www.cejn.com/safety**

Safety first

As compressed air systems are very forceful, all necessary measures to prevent accidents and to create a safe workplace are crucial. The major challenges for creating safe manufacturing environments are reducing noise levels and preventing work injuries. CEJN modular air distribution system includes several features that are designed to face all kinds of safety challenges.

The vented safety couplings with recoil dampening are automatically disconnected in two stages, to minimize the risk of sudden component separation and to avoid damaging noise.

Couplings with extra locking feature prevent unintentional disconnection, securing the connection of critical applications as well as preventing recoil accidents.

The anti-hose whip nipple is another example of preventing recoil accidents. The hose ends are secured to prevent whipping of hose that may occur when disconnecting.

In addition to this, CEJN hose and cable reels can be wall or ceiling mounted to keep hoses and cables off the floor, all to avoid tripping and stumbling.

Increasing comfort

Manufacturing work often means handling heavy equipment, working in awkward positions and performing repetitive tasks. With the use of lightweight and easy-to-handle CEJN components and through smart constructions such as the Multi-Link that makes it possible to keep many tools within easy reach, the CEJN Modular air distribution system creates a more ergonomic working environment.

All our couplings are made for one-hand operation, for fast and easy connection and disconnection. The low connection force eliminates fatigue and the high flow capacity helps improve tool performance. This in turn helps co-workers avoid stress, as each work step takes less time to perform.

CEJN hose reels are easy to maneuvers, wind out and wind up without tangles. No extra force is required to wind out more hose, regardless of hose length. The spring force of the reel can also be adjusted to suit each operator and to compensate for different weight and balance requirements.

Safety and ergonomics facts

A modular air distribution system with CEJN Safety products is an easy way to create a safe and ergonomic working environment. CEJN Safety products comply with international safety standards such as EN, ISO and OSHA. Supported by ISO 9001-certified assembly and testing operations, CEJN products are manufactured to meet stringent functionality and quality requirements and are rigorously tested to ensure they can perform the tasks set before them.

Plan your purchase

The CEJN Multi-Link System makes it easy to add more outlets in an orderly and compact fashion. For use in applications with multiple outlets, the modular air manifold system provides a neatly arranged system without the need for elbows, tees and unions that can result in jumbled piping configurations. The system is ideal for both compressed air supply points in new setups and to clean up existing cluttered areas.

CEJN high-quality hose and cable reels contain an ample length of CEJN polyurethane hose or PVC cable that is neatly wound into place. CEJN hose reels are easy to maneuver. The smooth outer layer of the hose ensures flawless feeding action without tangles. A sturdy exterior housing protects the hose and reel mechanism from dirt and other debris that could alter or damage their function.

The CEJN Filtration, Regulation, and Lubrication (FRL) range offers quality products for ensuring reliable, compressed air performance. The range includes filters, regulators, filter/regulators, lubricators and accessories. CEJN FRL products are offered in 1/8-inch through 1-inch thread connection sizes. They are easy to assemble and maintain and can be top- or side-mounted.

The CEJN hose family offers several styles of polyurethane (PUR) hose, including straight braided, straight non-braided, and spiral non-braided, for specific application requirements. CEJN PUR hose styles are lightweight and extremely flexible and have excellent recoil ability, making them a perfect match for virtually all applications.

CEJN Adapters include a wide range of hose connectors for maximum flexibility in a variety of applications; male-to-male adapters; bushings; plugs; cross, T-, L-, and Y-pieces; and ball valves.

For more technical information about the products and an overview of the complete product range go to **www.cejn.com**

Tips and ideas for top performance

- Make sure to choose a plus size hose and coupling series to reduce pressure drop
- Avoid sharp bends and tees
- Make sure to select flow efficient hose connections such as CEJN Stream-Line

Tips and ideas for increased flexibility

- A smaller dimension of hose makes it easier to handle.
- Fully automatic safety couplings makes changing tools a simple procedure, where no extra force is needed to disconnect the tool as the pressure is released prior to the tool itself.

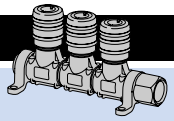
Tips and ideas for a safe and ergonomic working environment

- Make sure to choose safety couplings when downstream compressed air needs to be vented, especially when long hoses are used. This helps preventing whip-accidents as well as keeping the noise level down. Conforms to safety standards ISO 4414 and EN 983.
- CEJN safety products such as the Star-tip blowgun dampen noise to reduce risk of hearing damage and diverts the pressure when dead-ended.

Your modular air distribution system

Combine our quality products to a flexible, high performing and safe air distribution system adjusted to your exacting demands.

MULTI-LINK



All units with female G 1/2" threads for air connections

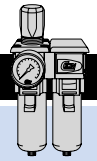
2 outlets with Series 320 Safety couplings
part no: 19 902 9932 — pcs

3 outlets with Series 320 Safety couplings
part no: 19 902 9933 — pcs

2 outlets with Series 320 Standard couplings
part no: 19 902 9912 — pcs

3 outlets with Series 320 Standard couplings
part no: 19 902 9913 — pcs

FRL



Model 112 with female G1/2" threads for air connection

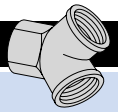
Filter/regulator, 25 µm + Lubricator
part no: 19 903 5605 — pcs

Filter/regulator, 25 µm
part no: 19 903 5405 — pcs

Regulator
part no: 19 903 5205 — pcs

Mounting brackets
part no: 19 903 5510 — pcs

ADAPTER



Hose and thread adapters

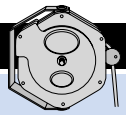
Hose 11x16 mm – Male thread R1/2"
part no: 19 958 1615 — pcs

Hose 13x18 mm – Male thread R1/2"
part no: 19 958 1815 — pcs

Male thread R 1/2" – Male thread R1/2"
part no: 19 958 1235 — pcs

Y-piece with female G1/2" threads
part no: 19 958 5902 — pcs

HOSE REEL

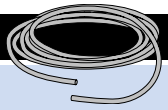


Feeder hose included

Hose dimension 8x12 mm, length 10 m
part no: 19 911 1000 — pcs

Hose dimension 9.5x13.5 mm, length 14 m
part no: 19 911 5120 — pcs

STRAIGHT BRAIDED HOSE



Sold per roll

Dimension 11x16 mm, 100 m per roll
part no: 19 958 1600 — rolls

Dimension 11x16 mm, 50 m per roll
part no: 19 958 1638 — rolls

Dimension 13x18 mm, 50 m per roll
part no: 19 958 1801 — rolls

Your purchase

Qty	Part no.

Practical installation tips

- Before clamping the hose firmly in place, pressurize the system to allow the hose to expand, otherwise it will curl.
- CEJN Straight Braided PUR Hoses are marked each meter to make measuring and cutting easier.
- If more than three outlets are needed in one spot, just use a male/male adapter to join two or more Multi-Link units.

AIR DISTRIBUTION

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